

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD-ARTESIA

MAY 18 2010

FORM APPROVED
B NO. 1004-0136
Expires: November 30, 2000


APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NMNM086024	
1b. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name	
2. Name of Operator OXY USA Inc.		7. Unit or CA Agreement Name and No.	
3a. Address P.O. Box 50250 Midland, TX 79710-0250		8. Lease Name and Well No. Cypress 34 Federal #6H	
3b. Phone No. (include area code) 432-685-5717		9. API Well No. 30-015-38366	
4. Location of Well (Report location clearly and in accordance with any State requirements)* At surface 640 FNL 704 FWL (NWNW(D)) At proposed prod. zone 400 FNL 600 FWL SWSW(M)		10. Field and Pool, or Exploratory Undsg, Nash Draw Delaware, SW	
14. Distance in miles and direction from nearest town or post office* 6 miles northeast from Loving, NM		11. Sec., T., R., M., or Blk. and Survey or Area Sec 34 T23S R29E	
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drg. unit line, if any) 400'		12. County or Parish Eddy	
16. No. of Acres in lease 640		13. State NM	
17. Spacing Unit dedicated to this well 160			
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.		20. BLM/BIA Bond No. on file ES0136	
19. Proposed Depth 10705' M 6687.6' V 10421' M 6687' V			
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3045.6' GL		22. Approximate date work will start* 9/1/10	
		23. Estimated duration 45	

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

- | | |
|---|--|
| 1. Well plat certified by a registered surveyor. | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan | 5. Operator certification. |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be required by the authorized officer. |

25. Signature 	Name (Printed/Typed) David Stewart	Date 5/12/10
Title Sr. Regulatory Analyst		
Approved by (Signautre) /s/ Linda S.C. Rundell	Name (Printed/Typed)	Date NOV 22 2010
Title STATE DIRECTOR		
Office NM STATE OFFICE		

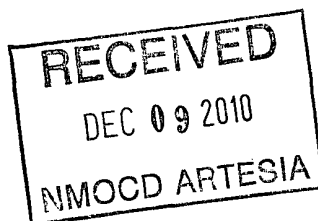
Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

APPROVAL FOR TWO YEARS

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 Reverse)

Carlsbad Controlled Water Basin



SEE ATTACHED FOR
CONDITIONS OF APPROVAL

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS
AND SPECIAL STIPULATIONS
ATTACHED

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD-ARTESIA

ATS-10-568 EA-10-1062
R-111-POTASH

FORM APPROVED
OMB NO. 1004-0135
Expires: November 30, 2000

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 79710-0250

3b. Phone No. (include area code)

432-685-5717

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

SL - 400 FSL 400 FWL SWSW(M) Sec 34 T23S R29E

PBHL-640 FNL 704 FWL NWNW(D) Sec 34 T23S R29E

5. Lease Serial No.

NMNM86024

6. If Indian, Allottee or Tribe Name

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

8. Well Name and No.

Cypress 34 Federal #6H

9. API Well No.

30-015-

10. Field and Pool, or Exploratory Area

Undsg. Nash Draw Delaware, SW

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

☐ Alter Casing

☐ Casing Repair

☒ Change Plans

☐ Convert to Injection

☐ Deepen

☐ Fracture Treat

☐ New Construction

☐ Plug and Abandon

☐ Plug Back

☐ Production (Start/Resume)

☐ Reclamation

☐ Recomplete

☐ Temporarily Abandon

☐ Water Disposal

☐ Water Shut-Off

☐ Well Integrity

☒ Other Move

Surface Location

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 final site is ready for final inspection.)

At the request of the BLM, OXY USA Inc. moved the surface location to the proposed bottomhole location and the proposed bottomhole location to the surface location. The APD was originally filed 5/12/10.

Original Surface Location - 640 FNL 704 FWL NWNW(D)

Original PBHL - 400 FSL 600 FWL SWSW(M)

New Surface Location - 400 FSL 400 FWL SWSW(M)

PBHL - 640 FNL 704 FWL NWNW(D)

RECEIVED

DEC 09 2010

NMOCD ARTESIA

Attachments - Amended Drilling Plan, C-102 Plat, Proposed Directional Plan, Location Plats

14. I hereby certify that the foregoing is true and correct

Name (Printed/Typed)

David Stewart

Title

Sr. Regulatory Analyst

Date

9/27/10

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, makes 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.

Attachment C-103 – Amended APD

OXY USA Inc.

Cypress 34 Federal #6H

SL-400 FSL 400 FWL SWSW(M) Sec 34 T23S R29E

BHL-640 FNL 704 FWL NWNW(D) Sec 34 T23S R29E

Eddy County, NM

- 1.** Directions – From Jal go west on SH 128 for 48.1 miles. Turn south on CR 793 (Rawhide Road) for 4.1 miles. Turn west on lease road for 3.5 miles, turn south for 1.9 miles, turn southwest for 0.3 miles, turn southeast on proposed road for 0.2 miles to location.
- 2.** Blade and water existing road from CR 793 (Rawhide Road) to location and repair any bad areas of the existing road with caliche.
- 3.** Caliche for location and road will come from a caliche pit located in Sec 34 T23S R29E, Eddy County, NM.
- 4.** See attached for the proposed Well Site Layout, proposed facilities, road, flow line, and electric line, Exhibits #1A, 1B, 1C, 1D, 1E.
- 5.** See attached for vicinity and access route to the proposed location, Exhibits #2A, #2B, #2C, #2D.
- 6.** One mile AOR map, see attached for Exhibit #3A, 3B
- 7.** Schematic and description of BOP with required valves and choke lines, expanded view of flex hose routing and clamp location, see attached for Exhibit #4A, 4B, 4C, 4D.

DRILLING PROGRAM

Operator Name/Number:	OXY USA Inc.	16696
Lease Name/Number:	Cypress 34 Federal #6H	304799 Federal Lease No. NMNM086024
Pool Name/Number:	Undesignated Nash Draw Delaware, Southwest	97148
Surface Location:	640 FNL 704 FWL NWNW(D) Sec 34 T23S R29E	
Bottom Hole Location:	400 FSL 600 FWL SWSW(M) Sec 34 T23S R29E	

Proposed TD:	7775' TVD	10630' TMD	Elevation: 3045.6' GL
SL - Lat: 32.2667101	Long: 103.9783969	X=609709.0 Y=460928.3	NAD - 1927
BH - Lat: 32.2550075	Long: 103.9785592	X=609672.9 Y=456671.1	NAD - 1927

1. Geologic Name of Surface Formation:

a. Permian

2. Estimated Tops of Geological Markers & Depths of Anticipated Fresh Water, Oil or Gas:

<u>Geological Marker</u>	<u>Depth</u>	<u>Type</u>
a. Upper Permian Sand	170'	Water
b. Top Salt	550'	
c. Bottom Salt	2840'	
d. Delaware	3064'	Oil
e. Bell Canyon	3100'	Oil
f. Brushy Canyon	6500'	Oil

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"	550'	13-3/8"	48#	STC	H40	New	3.07	6.18	1.96
12-1/4"	2970'	9-5/8"	40#	LTC	J55	New	3.43	1.31	2.13
8-1/2"	10630'M	5-1/2"	17#	LTC	N80	New	1.96	1.21	1.71
	DVT-5000'								
	DVT/ECP-3020'								

Collapse and burst loads calculated using Stress Check with anticipated loads

4. Cement Program

a. 13-3/8" Surface Circulate cement to Surface w/ 610sx PP w/ 4% Bentonite + .125#/sx Poly E Flake + 2% CaCl₂, 13.5 ppg 1.75 yield

If cement is not circulated, the BLM will be notified, a temperature survey will be run and will be immediately followed by top jobs as necessary to circulate cement to surface.

b. 9-5/8" Intermediate Circulate cement to surface w/ 731sx HES light PP w/ 5% salt + .125#/sx Poly E Flake + 5#/sx Gilsonite, 12.4ppg, 2.12 yield followed by 200sx PP w/ 1% CaCl₂, 14.8ppg 1.34 yield

- c. 5-1/2" Production 1st stage-Cement w/ 1570sx Super H w/ .5% LAP-1 + .4% CFR-3 + .25#/sx D-AIR 3000 + .3% HR-601, 13.2ppg 1.59 yield
 2nd stage-Cement w/ 476sx IFC w/ .5% LAP-1 + .25#/sx D-AIR 3000 + .125#/sx Poly E Flake, 11.9ppg 2.43 yield followed by 100sx PP w/ 1% CaCl₂, 14.8ppg 1.34 yield
 3rd stage-Cement w/ 362sx IFC w/ .5% LAP-1 + .25#/sx D-AIR 1 1.9ppg 2.62 yield followed by 100sx PP w/ 2% CaCl₂ 14.8ppg 1.35 yield

*See COA **

2.43 per Attachment

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

5. Pressure Control Equipment:

Surface 0-550'

None

Production 550-10421'

13-5/8" 10M two ram stack w/ 5M annular preventor, 10M Choke Manifold

SEE COA

All BOP's and associated equipment will be tested to 1200psi with a third party BOP testing service before drilling out the 13-3/8" casing shoe. Prior to drilling out the 9-5/8" casing shoe, the BOP's and Annular preventer will be tested in accordance with On-shore Order #2.

Pipe Rams will be operated and checked each 24-hour period and each time the drill pipe is out of the hole. These functional tests will be documented on the daily driller's log. A 2" kill line and 3" choke line will be incorporated in the drilling spool below the ram-type BOP. Other accessory BOP equipment will include a Kelly cock, floor safety valve, choke lines and choke manifold having a 5000 psi WP rating.

OXY requests that the entire system be tested as a 5000psi WP rating.

** See COA*

Request variance to connect BOP choke outlet to the choke manifold a co-flex hose that is manufactured by Contitech Rubber Industrial KFT. It is a 3" ID X 35' flexible hose rated to 10000psi working pressure. It has been tested to 15000psi and is built to API Spec 16C. Once the flex line is installed, it will be tied down with safety clamps, certification attached.

6. Proposed Mud Circulation System

<u>Depth</u>	<u>Mud Wt.</u> ppg	<u>Visc</u> sec	<u>Fluid</u> <u>Loss</u>	<u>Type System</u>
0-550'	8.4-8.9	32-34	NC	Fresh Water/MI Gel Spud Mud
550-3070'	9.8-10.0	28-29	NC	Brine Water
3070-6300'	8.8-9.0	28-29	NC	Fresh Water
6300'-TD	9.0-9.8	32-36	10-15	Duo Vis/Poly Pac R

See COA

Pump high viscosity sweeps as needed for hole cleaning. The mud system will be monitored visually/manually as well as with an electronic PVT. The necessary mud products for additional weight and fluid loss control will be on location at all times.

7. Auxiliary Well Control and Monitoring Equipment:

- A Kelly cock will be in the drill string at all times.
- A full opening drill pipe stabbing valve having the appropriate connections will be on the rig floor at all times.
- Hydrogen Sulfide detection equipment will be in operation after drilling out the surface casing shoe until the production casing is cemented. Breathing equipment will be on location upon drilling the surface casing shoe until total depth is reached.

8. Logging, Coring and Testing Program:

- a. Drill stem tests are not anticipated but if done will be based on geological sample shows.
- b. The open hole logging program will consist of LWD Gamma Ray from kick-off to TD.
- c. No coring program is planned but if done will be sidewall rotary cores.
- d. Mud loggers are currently planned from intermediate casing point to landing point.

9. Potential Hazards:

No abnormal pressures, temperatures or H₂S gas are expected. The highest anticipated pressure gradient would be .47 psi/ft or 3200psi. If H₂S is encountered the operator will comply with the provisions of Onshore Oil & Gas Order No.6. No lost circulation is expected to occur. All personnel will be familiar with all aspects of safe operation of equipment being used to drill this well. Adequate flare lines will be installed off the mud/gas separator where gas may be flared safely.

10. Anticipated Starting Date and Duration of Operations:

Road and location construction will begin after the BLM has approved the APD. Anticipated spud date will be as soon as possible after BLM approval and as soon as a rig will be available. Move in operations and drilling is expected to take 45 days. If production casing is run, then an additional 30 days will be needed to complete the well and construct surface facilities and/or lay flow lines in order to place well on production.

Cypress 34 Federal #6H – Attachment

2. CASING PROGRAM:

** See COA*

Surface Casing: 13.375" casing set at ±550'MD/550'TVD in a 17.5" hole filled with 8.8 ppg mud

Interval	Length	Wt	Gr	Cplg	Coll Rating (psi)	Burst Rating (psi)	Jt Str (M-lbs)	ID (in)	Drift (in)	SF Coll	SF Burst	SF Ten
0'-550'	550'	48#	H-40	ST&C	770	1730	322	12.715	12.559	3.07	6.18	1.96

Surface Casing: 9.625" casing set at ±3070'MD/3070'TVD in a 12.25" hole filled with 10.0 ppg mud

Interval	Length	Wt	Gr	Cplg	Coll Rating (psi)	Burst Rating (psi)	Jt Str (M-lbs)	ID (in)	Drift (in)	SF Coll	SF Burst	SF Ten
0'-3070'	3070'	40#	J-55	LT&C	2570	3950	520	8.835	8.679	3.43	1.31	2.13

Production Casing: 5.5" casing set at ±10421'MD/6687'TVD in a 8.5" hole filled with 9.20 ppg mud.

Interval	Length	Wt	Gr	Cplg	Coll Rating (psi)	Burst Rating (psi)	Jt Str (M-lbs)	ID (in)	Drift (in)	SF Coll	SF Burst	SF Ten
0'-10421'	10,421'	17#	N-80	LT&C	6280	7740	348	4.892	4.767	1.96	1.21	1.71

Collapse and burst loads calculated using StressCheck with actual anticipated loads.

Location Chg Per Sundry

3. CEMENT PROGRAM:

Surface Interval

Interval	Amount sx	Ft of Fill	Type	Gal/Sk	PPG	Ft³/sk	24 Hr Comp
Surface (TOC: 0' – 550')							
Lead: 0' – <i>550</i> (165% Excess)	610	550'	Premium Plus Cement, with 4% Bentonite, 2% Calcium Chloride, & 0.125 lb/sk Poly-E-Flake	9.18	13.5	1.75	985 psi

Intermediate Interval

See COA

Interval	Amount sx	Ft of Fill	Type	Gal/Sk	PPG	Ft³/sk	24 Hr Comp
Intermediate (TOC: 0' – 3070')							
Lead: 0' – 2674' (100% Excess)	731	2674'	Light Premium Plus Cement, with 5% Salt, 5 lb/sk Gilsonite, & 0.125 lb/sk Poly-E-Flake	11.09	12.4	2.10	511 psi
Tail: 2624' – 3070' (100% Excess)	200	396'	Premium Plus cement with 1% Calcium Chloride	6.36	14.8	1.34	2125 psi

Production Interval

See COA - Location Chg Per Sundry

Interval	Amount sx	Ft of Fill	Type	Gal/Sk	PPG	Ft³/sk	24 Hr Comp
Production (TOC: 5000') 1st Stage							
Lead: 5000' – 10,421' (100% Excess)	1570	5421'	Super H Cement with 0.5% LAP-1 (Low Fluid Loss Control), 0.4% CFR-3 (Dispersant), 0.25 lb/sk D-AIR 3000 (Defoamer), & 0.2% HR-601 (Retarder)	8.28	13.2	1.59	1650 psi
DV Tool @ 5,000'							
Production (TOC: 3120') 2nd Stage							
Lead: 3120' – 4806' (200% Excess)	476	1686'	Interfill C with 0.5% LAP-1 (Low Fluid Loss Control), 0.125 lb/sk Poly-E-Flake (Lost Circulation Additive), & 0.25 lb/sk D-AIR 3000 (Defoamer)	13.84	11.9	2.43	290 psi
Tail: 4806' – 5000' (200% Excess)	100	194'	Premium Plus cement with 1% Calcium Chloride	6.36	14.8	1.34	2100 psi
Pack-Off Stage Tool @ 3,120'							
Production (TOC: Surface) 3rd Stage							
Lead: 0' – 2744' (25% Excess of Annular Volume)	362	2744'	Interfill C with 0.5% LAP-1 (Low Fluid Loss Control) & 0.25 lb/sk D-AIR 3000 (Defoamer)	13.86	11.9	2.43	240 psi
Tail: 2744' – 3120' (25% Excess of Annular Volume)	100	376'	Premium Plus cement with 2% Calcium Chloride	6.39	14.8	1.35	1980 psi

New PLAN 10/7/10



OXY Permian

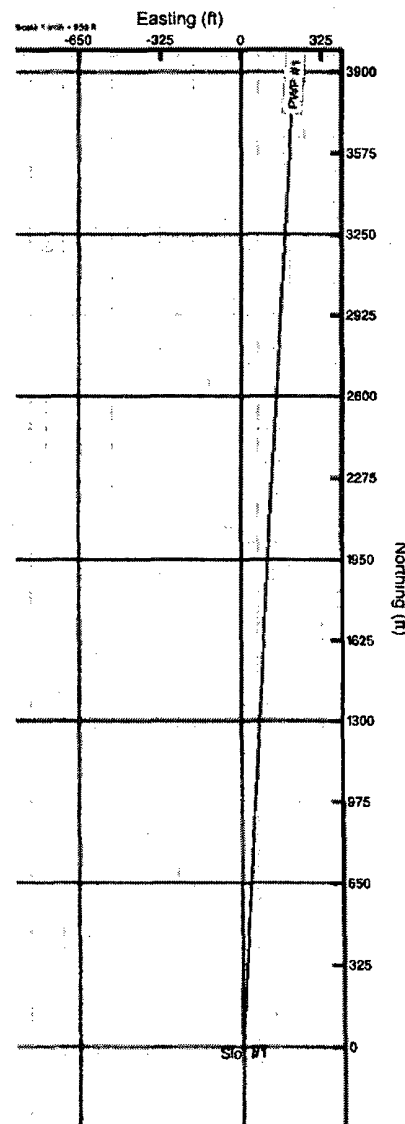
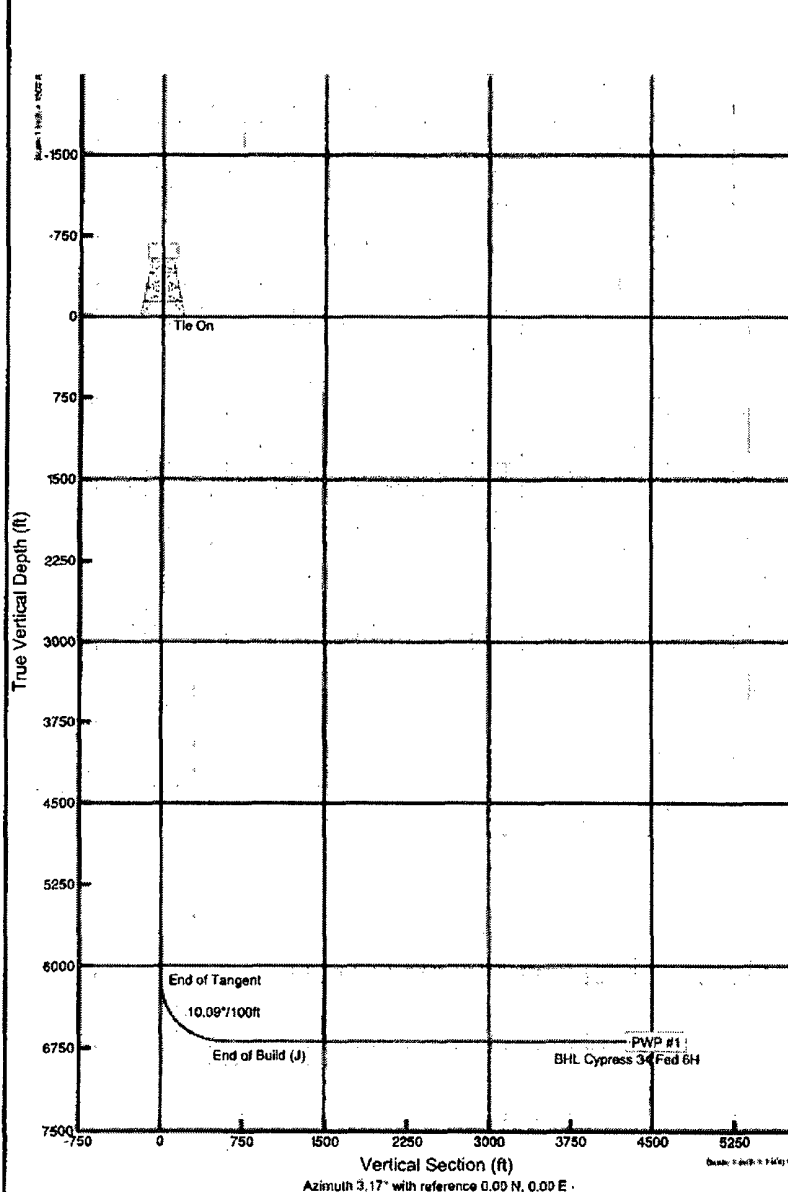
Location: Acadia Parish Slot: Slot #1
Field: (Cypress) Sec 34 Well: Cypress 34 Fed. 6H
Facility: Cypress 34 Fed. 6H Wellbore: PWP #1



Pipe reference wellbore is PWP #1, gwp	
True vertical depths are referenced to Rig on Slot #1 (RT)	Grid System: NAD83 / T11 New Mexico State Plane, Eastern Zone (2001), US feet
Measured depths are referenced to Rig on Slot #1 (RT)	North Reference: Grid north
Rig on Slot #1 (RT) to Mean Sea Level 3061.1 feet	Scale: True distance
Mean Sea Level to Mud line (Facility: Cypress 34 Fed. 6H) - 3034.6 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: curren on 10/1/2010

Well Profile Data

Design Comment	MD (ft)	Inc (")	Az (")	TVD (ft)	Local N (ft)	Local E (ft)	DLS ("/100ft)	VS (ft)
Tie On	0.00	0.000	3.174	0.00	0.00	0.00	0.00	0.00
End of Tangent	6120.00	0.000	3.174	6120.00	0.00	0.00	0.00	0.00
End of Build (J)	7011.58	90.000	3.174	6687.60	566.73	31.43	10.09	567.60
End of Tangent (J)	10708.06	90.000	3.174	6687.60	4257.54	236.12	0.00	4264.08





Planned Wellpath Report

PWP #1_pwp
Page 1 of 4



INTEQ

REFERENCE WELLPAATH IDENTIFICATION

Operator	OXY Permian	Slot	Slot #1
Area	Acadia Parish	Well	Cypress 34 Fed. 6H
Field	(Cypress) Sec 34	Wellbore	PWP #1
Facility	Cypress 34 Fed. 6H		

REPORT SETUP INFORMATION

Projection System	NAD27 / TM New Mexico State Planes, Eastern Zone (3001), US feet	Software System	WellArchitect® 2.0
North Reference	Grid	User	Dumirazi
Scale	0.999923	Report Generated	10/1/2010 at 12:18:36 PM
Convergence at slot	0.19° East	Database/Source file	WellArchitectDB/PWP_#1.xml

WELLPAATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[USft]	Northing[USft]	Latitude	Longitude
Slot Location	0.00	0.00	609472.90	456671.10	32°15'18.034"N	103°58'45.143"W
Facility Reference Pt			609472.90	456671.10	32°15'18.034"N	103°58'45.143"W
Field Reference Pt			609472.90	456671.10	32°15'18.034"N	103°58'45.143"W

WELLPAATH DATUM

Calculation method	Minimum curvature	Rig on Slot #1 (RT) to Facility Vertical Datum	16.50ft
Horizontal Reference Pt	Slot	Rig on Slot #1 (RT) to Mean Sea Level	3051.10ft
Vertical Reference Pt	Rig on Slot #1 (RT)	Facility Vertical Datum to Mud Line (Facility)	0.00ft
MD Reference Pt	Rig on Slot #1 (RT)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	3.17°



Planned Wellpath Report

PWP #1_pwp

Page 2 of 4



INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	OXY Permian	Slot	Slot #1
Area	Acadia Parish	Well	Cypress 34 Fed. 6H
Field	(Cypress) Sec 34	Wellbore	PWP #1
Facility	Cypress 34 Fed. 6H		

WELLPATH DATA (111 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]
0.00	0.000	3.174	0.00	0.00	0.00	0.00	32°15'18.034"N	103°58'45.143"W	0.00
100.00†	0.000	3.174	100.00	0.00	0.00	0.00	32°15'18.034"N	103°58'45.143"W	0.00
200.00†	0.000	3.174	200.00	0.00	0.00	0.00	32°15'18.034"N	103°58'45.143"W	0.00
300.00†	0.000	3.174	300.00	0.00	0.00	0.00	32°15'18.034"N	103°58'45.143"W	0.00
400.00†	0.000	3.174	400.00	0.00	0.00	0.00	32°15'18.034"N	103°58'45.143"W	0.00
500.00†	0.000	3.174	500.00	0.00	0.00	0.00	32°15'18.034"N	103°58'45.143"W	0.00
600.00†	0.000	3.174	600.00	0.00	0.00	0.00	32°15'18.034"N	103°58'45.143"W	0.00
700.00†	0.000	3.174	700.00	0.00	0.00	0.00	32°15'18.034"N	103°58'45.143"W	0.00
800.00†	0.000	3.174	800.00	0.00	0.00	0.00	32°15'18.034"N	103°58'45.143"W	0.00
900.00†	0.000	3.174	900.00	0.00	0.00	0.00	32°15'18.034"N	103°58'45.143"W	0.00
1000.00†	0.000	3.174	1000.00	0.00	0.00	0.00	32°15'18.034"N	103°58'45.143"W	0.00
1100.00†	0.000	3.174	1100.00	0.00	0.00	0.00	32°15'18.034"N	103°58'45.143"W	0.00
1200.00†	0.000	3.174	1200.00	0.00	0.00	0.00	32°15'18.034"N	103°58'45.143"W	0.00
1300.00†	0.000	3.174	1300.00	0.00	0.00	0.00	32°15'18.034"N	103°58'45.143"W	0.00
1400.00†	0.000	3.174	1400.00	0.00	0.00	0.00	32°15'18.034"N	103°58'45.143"W	0.00
1500.00†	0.000	3.174	1500.00	0.00	0.00	0.00	32°15'18.034"N	103°58'45.143"W	0.00
1600.00†	0.000	3.174	1600.00	0.00	0.00	0.00	32°15'18.034"N	103°58'45.143"W	0.00
1700.00†	0.000	3.174	1700.00	0.00	0.00	0.00	32°15'18.034"N	103°58'45.143"W	0.00
1800.00†	0.000	3.174	1800.00	0.00	0.00	0.00	32°15'18.034"N	103°58'45.143"W	0.00
1900.00†	0.000	3.174	1900.00	0.00	0.00	0.00	32°15'18.034"N	103°58'45.143"W	0.00
2000.00†	0.000	3.174	2000.00	0.00	0.00	0.00	32°15'18.034"N	103°58'45.143"W	0.00
2100.00†	0.000	3.174	2100.00	0.00	0.00	0.00	32°15'18.034"N	103°58'45.143"W	0.00
2200.00†	0.000	3.174	2200.00	0.00	0.00	0.00	32°15'18.034"N	103°58'45.143"W	0.00
2300.00†	0.000	3.174	2300.00	0.00	0.00	0.00	32°15'18.034"N	103°58'45.143"W	0.00
2400.00†	0.000	3.174	2400.00	0.00	0.00	0.00	32°15'18.034"N	103°58'45.143"W	0.00
2500.00†	0.000	3.174	2500.00	0.00	0.00	0.00	32°15'18.034"N	103°58'45.143"W	0.00
2600.00†	0.000	3.174	2600.00	0.00	0.00	0.00	32°15'18.034"N	103°58'45.143"W	0.00
2700.00†	0.000	3.174	2700.00	0.00	0.00	0.00	32°15'18.034"N	103°58'45.143"W	0.00
2800.00†	0.000	3.174	2800.00	0.00	0.00	0.00	32°15'18.034"N	103°58'45.143"W	0.00
2900.00†	0.000	3.174	2900.00	0.00	0.00	0.00	32°15'18.034"N	103°58'45.143"W	0.00
3000.00†	0.000	3.174	3000.00	0.00	0.00	0.00	32°15'18.034"N	103°58'45.143"W	0.00
3100.00†	0.000	3.174	3100.00	0.00	0.00	0.00	32°15'18.034"N	103°58'45.143"W	0.00
3200.00†	0.000	3.174	3200.00	0.00	0.00	0.00	32°15'18.034"N	103°58'45.143"W	0.00
3300.00†	0.000	3.174	3300.00	0.00	0.00	0.00	32°15'18.034"N	103°58'45.143"W	0.00
3400.00†	0.000	3.174	3400.00	0.00	0.00	0.00	32°15'18.034"N	103°58'45.143"W	0.00
3500.00†	0.000	3.174	3500.00	0.00	0.00	0.00	32°15'18.034"N	103°58'45.143"W	0.00
3600.00†	0.000	3.174	3600.00	0.00	0.00	0.00	32°15'18.034"N	103°58'45.143"W	0.00
3700.00†	0.000	3.174	3700.00	0.00	0.00	0.00	32°15'18.034"N	103°58'45.143"W	0.00
3800.00†	0.000	3.174	3800.00	0.00	0.00	0.00	32°15'18.034"N	103°58'45.143"W	0.00
3900.00†	0.000	3.174	3900.00	0.00	0.00	0.00	32°15'18.034"N	103°58'45.143"W	0.00
4000.00†	0.000	3.174	4000.00	0.00	0.00	0.00	32°15'18.034"N	103°58'45.143"W	0.00
4100.00†	0.000	3.174	4100.00	0.00	0.00	0.00	32°15'18.034"N	103°58'45.143"W	0.00
4200.00†	0.000	3.174	4200.00	0.00	0.00	0.00	32°15'18.034"N	103°58'45.143"W	0.00
4300.00†	0.000	3.174	4300.00	0.00	0.00	0.00	32°15'18.034"N	103°58'45.143"W	0.00
4400.00†	0.000	3.174	4400.00	0.00	0.00	0.00	32°15'18.034"N	103°58'45.143"W	0.00



Planned Wellpath Report

PWP #1_pwp
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REFERENCE WELLPATH IDENTIFICATION			
Operator	OXY Permian	Slot	Slot #1
Area	Acadia Parish	Well	Cypress 34 Fed. 6H
Field	(Cypress) Sec 34	Wellbore	PWP #1
Facility	Cypress 34 Fed. 6H		

WELLPATH DATA (111 stations) † = interpolated/extrapolated station									
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [%/100ft]
4500.00†	0.000	3.174	4500.00	0.00	0.00	0.00	32°15'18.034"N	103°58'45.143"W	0.00
4600.00†	0.000	3.174	4600.00	0.00	0.00	0.00	32°15'18.034"N	103°58'45.143"W	0.00
4700.00†	0.000	3.174	4700.00	0.00	0.00	0.00	32°15'18.034"N	103°58'45.143"W	0.00
4800.00†	0.000	3.174	4800.00	0.00	0.00	0.00	32°15'18.034"N	103°58'45.143"W	0.00
4900.00†	0.000	3.174	4900.00	0.00	0.00	0.00	32°15'18.034"N	103°58'45.143"W	0.00
5000.00†	0.000	3.174	5000.00	0.00	0.00	0.00	32°15'18.034"N	103°58'45.143"W	0.00
5100.00†	0.000	3.174	5100.00	0.00	0.00	0.00	32°15'18.034"N	103°58'45.143"W	0.00
5200.00†	0.000	3.174	5200.00	0.00	0.00	0.00	32°15'18.034"N	103°58'45.143"W	0.00
5300.00†	0.000	3.174	5300.00	0.00	0.00	0.00	32°15'18.034"N	103°58'45.143"W	0.00
5400.00†	0.000	3.174	5400.00	0.00	0.00	0.00	32°15'18.034"N	103°58'45.143"W	0.00
5500.00†	0.000	3.174	5500.00	0.00	0.00	0.00	32°15'18.034"N	103°58'45.143"W	0.00
5600.00†	0.000	3.174	5600.00	0.00	0.00	0.00	32°15'18.034"N	103°58'45.143"W	0.00
5700.00†	0.000	3.174	5700.00	0.00	0.00	0.00	32°15'18.034"N	103°58'45.143"W	0.00
5800.00†	0.000	3.174	5800.00	0.00	0.00	0.00	32°15'18.034"N	103°58'45.143"W	0.00
5900.00†	0.000	3.174	5900.00	0.00	0.00	0.00	32°15'18.034"N	103°58'45.143"W	0.00
6000.00†	0.000	3.174	6000.00	0.00	0.00	0.00	32°15'18.034"N	103°58'45.143"W	0.00
6100.00†	0.000	3.174	6100.00	0.00	0.00	0.00	32°15'18.034"N	103°58'45.143"W	0.00
6120.00	0.000	3.174	6120.00	0.00	0.00	0.00	32°15'18.034"N	103°58'45.143"W	0.00
6200.00†	8.076	3.174	6199.74	5.63	5.62	0.31	32°15'18.090"N	103°58'45.139"W	10.09
6300.00†	18.170	3.174	6297.00	28.30	28.26	1.57	32°15'18.314"N	103°58'45.123"W	10.09
6400.00†	28.264	3.174	6388.78	67.67	67.57	3.75	32°15'18.703"N	103°58'45.096"W	10.09
6500.00†	38.359	3.174	6472.24	122.52	122.33	6.78	32°15'19.244"N	103°58'45.059"W	10.09
6600.00†	48.453	3.174	6544.80	191.15	190.86	10.58	32°15'19.922"N	103°58'45.012"W	10.09
6700.00†	58.547	3.174	6604.20	271.43	271.01	15.03	32°15'20.715"N	103°58'44.957"W	10.09
6800.00†	68.642	3.174	6648.62	360.88	360.33	19.98	32°15'21.599"N	103°58'44.896"W	10.09
6900.00†	78.736	3.174	6676.67	456.73	456.03	25.29	32°15'22.546"N	103°58'44.831"W	10.09
7000.00†	88.831	3.174	6687.48	556.02	555.16	30.79	32°15'23.527"N	103°58'44.763"W	10.09
7011.58	90.000	3.174	6687.60	567.60	566.73	31.43	32°15'23.641"N	103°58'44.755"W	10.09
7100.00†	90.000	3.174	6687.60	656.02	655.01	36.33	32°15'24.514"N	103°58'44.694"W	0.00
7200.00†	90.000	3.174	6687.60	756.02	754.86	41.86	32°15'25.502"N	103°58'44.626"W	0.00
7300.00†	90.000	3.174	6687.60	856.02	854.70	47.40	32°15'26.490"N	103°58'44.558"W	0.00
7400.00†	90.000	3.174	6687.60	956.02	954.55	52.94	32°15'27.478"N	103°58'44.489"W	0.00
7500.00†	90.000	3.174	6687.60	1056.02	1054.40	58.48	32°15'28.466"N	103°58'44.421"W	0.00
7600.00†	90.000	3.174	6687.60	1156.02	1154.24	64.01	32°15'29.454"N	103°58'44.353"W	0.00
7700.00†	90.000	3.174	6687.60	1256.02	1254.09	69.55	32°15'30.441"N	103°58'44.285"W	0.00
7800.00†	90.000	3.174	6687.60	1356.02	1353.94	75.09	32°15'31.429"N	103°58'44.216"W	0.00
7900.00†	90.000	3.174	6687.60	1456.02	1453.78	80.63	32°15'32.417"N	103°58'44.148"W	0.00
8000.00†	90.000	3.174	6687.60	1556.02	1553.63	86.16	32°15'33.405"N	103°58'44.080"W	0.00
8100.00†	90.000	3.174	6687.60	1656.02	1653.48	91.70	32°15'34.393"N	103°58'44.011"W	0.00
8200.00†	90.000	3.174	6687.60	1756.02	1753.32	97.24	32°15'35.381"N	103°58'43.943"W	0.00
8300.00†	90.000	3.174	6687.60	1856.02	1853.17	102.77	32°15'36.369"N	103°58'43.875"W	0.00
8400.00†	90.000	3.174	6687.60	1956.02	1953.01	108.31	32°15'37.356"N	103°58'43.806"W	0.00
8500.00†	90.000	3.174	6687.60	2056.02	2052.86	113.85	32°15'38.344"N	103°58'43.738"W	0.00
8600.00†	90.000	3.174	6687.60	2156.02	2152.71	119.39	32°15'39.332"N	103°58'43.670"W	0.00
8700.00†	90.000	3.174	6687.60	2256.02	2252.55	124.92	32°15'40.320"N	103°58'43.601"W	0.00



Planned Wellpath Report

PWP #1_pwp
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INTEQ

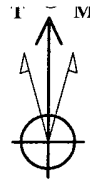
REFERENCE WELLPATH IDENTIFICATION			
Operator	OXY Permian	Slot	Slot #1
Area	Acadia Parish	Well	Cypress 34 Fed. 6H
Field	(Cypress) Sec 34	Wellbore	PWP #1
Facility	Cypress 34 Fed. 6H		

WELLPATH DATA (111 stations) † = interpolated/extrapolated station									
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]
8800.00†	90.000	3.174	6687.60	2356.02	2352.40	130.46	32°15'41.308"N	103°58'43.533"W	0.00
8900.00†	90.000	3.174	6687.60	2456.02	2452.25	136.00	32°15'42.296"N	103°58'43.465"W	0.00
9000.00†	90.000	3.174	6687.60	2556.02	2552.09	141.54	32°15'43.283"N	103°58'43.396"W	0.00
9100.00†	90.000	3.174	6687.60	2656.02	2651.94	147.07	32°15'44.271"N	103°58'43.328"W	0.00
9200.00†	90.000	3.174	6687.60	2756.02	2751.79	152.61	32°15'45.259"N	103°58'43.260"W	0.00
9300.00†	90.000	3.174	6687.60	2856.02	2851.63	158.15	32°15'46.247"N	103°58'43.191"W	0.00
9400.00†	90.000	3.174	6687.60	2956.02	2951.48	163.69	32°15'47.235"N	103°58'43.123"W	0.00
9500.00†	90.000	3.174	6687.60	3056.02	3051.33	169.22	32°15'48.223"N	103°58'43.055"W	0.00
9600.00†	90.000	3.174	6687.60	3156.02	3151.17	174.76	32°15'49.210"N	103°58'42.986"W	0.00
9700.00†	90.000	3.174	6687.60	3256.02	3251.02	180.30	32°15'50.198"N	103°58'42.918"W	0.00
9800.00†	90.000	3.174	6687.60	3356.02	3350.87	185.84	32°15'51.186"N	103°58'42.850"W	0.00
9900.00†	90.000	3.174	6687.60	3456.02	3450.71	191.37	32°15'52.174"N	103°58'42.781"W	0.00
10000.00†	90.000	3.174	6687.60	3556.02	3550.56	196.91	32°15'53.162"N	103°58'42.713"W	0.00
10100.00†	90.000	3.174	6687.60	3656.02	3650.41	202.45	32°15'54.150"N	103°58'42.645"W	0.00
10200.00†	90.000	3.174	6687.60	3756.02	3750.25	207.99	32°15'55.137"N	103°58'42.576"W	0.00
10300.00†	90.000	3.174	6687.60	3856.02	3850.10	213.52	32°15'56.125"N	103°58'42.508"W	0.00
10400.00†	90.000	3.174	6687.60	3956.02	3949.95	219.06	32°15'57.113"N	103°58'42.440"W	0.00
10500.00†	90.000	3.174	6687.60	4056.02	4049.79	224.60	32°15'58.101"N	103°58'42.371"W	0.00
10600.00†	90.000	3.174	6687.60	4156.02	4149.64	230.13	32°15'59.089"N	103°58'42.303"W	0.00
10700.00†	90.000	3.174	6687.60	4256.02	4249.49	235.67	32°16'00.077"N	103°58'42.235"W	0.00
10708.06	90.000	3.174	6687.60	4264.08	4257.54	236.12	32°16'00.156"N	103°58'42.229"W	0.00

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	Shape
1) BHL Cypress 34 Fed 6H	10708.06	6687.60	4257.54	236.12	609709.00	460928.30	32°16'00.156"N	103°58'42.229"W	point



Project: Eddy County, NM
 Site: Cypress 34 Fed.
 Well: Well #6H
 Wellbore: OH
 Plan: Plan #2 (Well #6H/OH)



True North: -0.19°
 Magnetic North: 7.74°

Magnetic Field
 Strength: 48724.4snT
 Dip Angle: 60.18°
 Date: 2010/03/10
 Model: IGRF



WELL DETAILS: Well #6H

Ground Elevation: 3045.60
 RKB Elevation: RKB to MSL @ 3070.60ft (H&P 370)
 Rig Name: H&P 370

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	460928.30	609709.00	32° 16' 0.15621 N	103° 58' 42.22923 W	

PROJECT DETAILS: Eddy County, NM
 Geodetic System: US State Plane 1927 (Exact solution)
 Datum: NAD 1927 (NADCON CONUS)
 Ellipsoid: Clarke 1866
 Zone: New Mexico East 3001
 Magnetic Model: IGRF2010

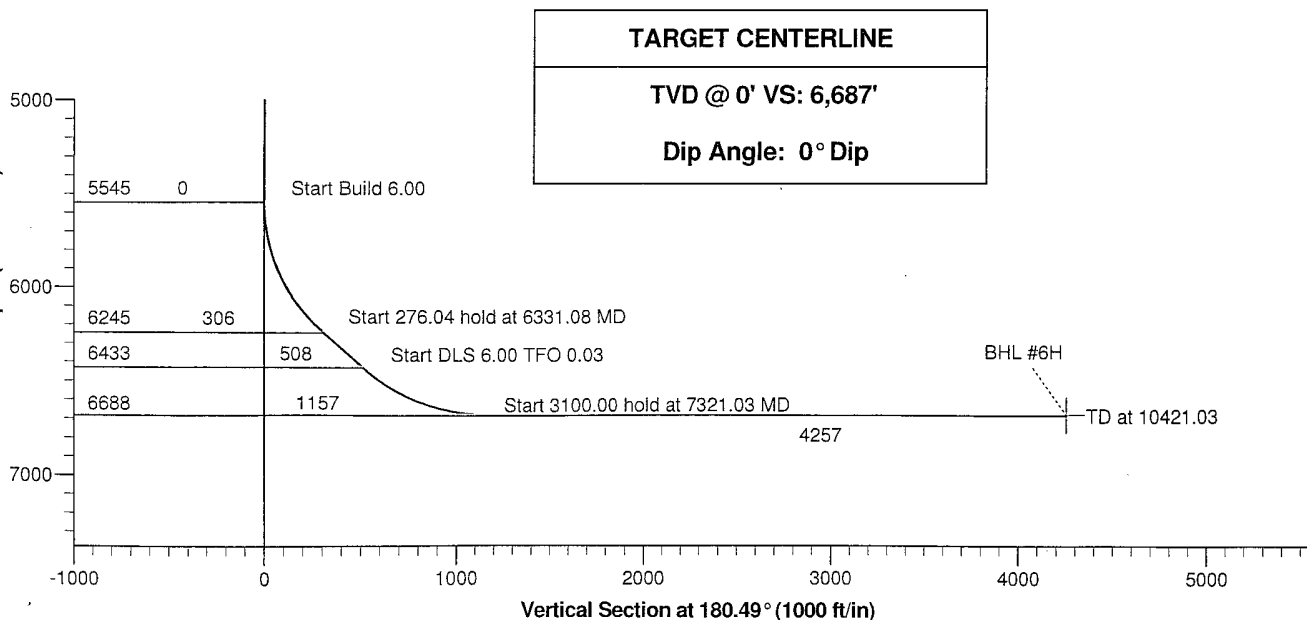
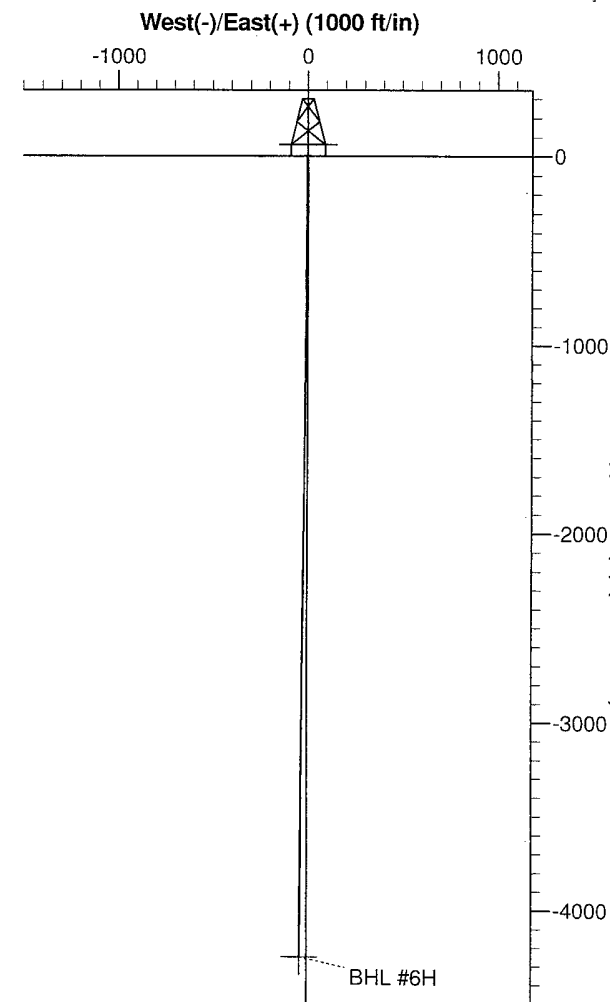
System Datum: Mean Sea Level
 Local North: Grid

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	5545.00	0.00	0.00	5545.00	0.00	0.00	0.00	0.00	0.00	
3	6331.08	47.17	180.47	6245.26	-305.67	-2.49	6.00	180.47	305.68	
4	6607.12	47.17	180.47	6432.94	-508.09	-4.14	0.00	0.00	508.11	
5	7321.03	90.00	180.49	6687.60	-1157.31	-9.59	6.00	0.03	1157.35	
6	10421.03	90.00	180.49	6687.60	-4257.20	-36.10	0.00	0.00	4257.35	BHL #6H

TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
BHL #6H	6687.60	-4257.20	-36.10	456671.10	609672.90	Point



Plan: Plan #2 (Well #6H/OH)
 Created By: Kurt Otto Date: 9:43, March 10 2010



PathFinder Energy Services
PathFinder Standard X&Y Report



Company:	OXY Permian	Local Co-ordinate Reference:	Well Well #6H
Project:	Eddy County, NM	TVD Reference:	RKB to MSL @ 3070.60ft (H&P 370)
Site:	Cypress 34 Fed	MD Reference:	RKB to MSL @ 3070.60ft (H&P 370)
Well:	Well #6H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Plan #2	Database:	Landmark Network DB

Project:	Eddy County, NM		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site:	Cypress 34 Fed		
Site Position:		Northing:	460,928.30 ft
From:	Map	Easting:	609,709.00 ft
Position Uncertainty:	0.00 ft	Slot Radius:	"
		Latitude:	32° 16' 0.15621 N
		Longitude:	103° 58' 42.22923 W
		Grid Convergence:	0.19 °

Well		Well #6H				
Well Position	+N/-S	0.00 ft	Northing:	460,928.30 ft	Latitude:	32° 16' 0.15621 N
	+E/-W	0.00 ft	Easting:	609,709.00 ft	Longitude:	103° 58' 42.22923 W
Position Uncertainty	0.00 ft	Wellhead Elevation:	ft	Ground Level:	3,045.60 ft	

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	2010/03/10	7.93	60.18	48,724

Design	Plan #2			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(ft)	(ft)	(ft)	(°)
	0.00	0.00	0.00	180.49

Survey Tool Program	Date	2010/03/10		
From	To	Survey (Wellbore)	Tool Name	Description
(ft)	(ft)			
0.00	10,421.03	Plan #2 (OH)	MWD	MWD - Standard



PathFinder Energy Services

PathFinder Standard X&Y Report



Company:	OXY Permian	Local Co-ordinate Reference:	Well: Well #6H
Project:	Eddy County, NM	TVD Reference:	RKB to MSL @ 3070.60ft (H&P 370)
Site:	Cypress 34 Fed.	MD Reference:	RKB to MSL @ 3070.60ft (H&P 370)
Well:	Well #6H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Plan #2	Database:	Landmark Network DB

Planned Survey									
MD (ft)	Inc (°)	Azi (°)	TVD (ft)	TVDSS (ft)	V. Sec (ft)	N/S (ft)	E/W (ft)	DLeg (°/100ft)	
5,545.00	0.00	0.00	5,545.00	-2,474.40	0.00	0.00	0.00	0.00	
5,550.00	0.30	180.47	5,550.00	-2,479.40	0.01	-0.01	0.00	6.00	
5,600.00	3.30	180.47	5,599.97	-2,529.37	1.58	-1.58	-0.01	6.00	
5,650.00	6.30	180.47	5,649.79	-2,579.19	5.77	-5.77	-0.05	6.00	
5,700.00	9.30	180.47	5,699.32	-2,628.72	12.55	-12.55	-0.10	6.00	
5,750.00	12.30	180.47	5,748.43	-2,677.83	21.92	-21.92	-0.18	6.00	
5,800.00	15.30	180.47	5,796.98	-2,726.38	33.85	-33.84	-0.28	6.00	
5,850.00	18.30	180.47	5,844.84	-2,774.24	48.30	-48.29	-0.39	6.00	
5,900.00	21.30	180.47	5,891.88	-2,821.28	65.23	-65.23	-0.53	6.00	
5,950.00	24.30	180.47	5,937.97	-2,867.37	84.60	-84.60	-0.69	6.00	
6,000.00	27.30	180.47	5,982.98	-2,912.38	106.36	-106.36	-0.87	6.00	
6,050.00	30.30	180.47	6,026.79	-2,956.19	130.45	-130.44	-1.06	6.00	
6,100.00	33.30	180.47	6,069.28	-2,998.68	156.79	-156.79	-1.28	6.00	
6,150.00	36.30	180.47	6,110.33	-3,039.73	185.33	-185.32	-1.51	6.00	
6,200.00	39.30	180.47	6,149.83	-3,079.23	215.97	-215.96	-1.76	6.00	
6,250.00	42.30	180.47	6,187.68	-3,117.08	248.63	-248.63	-2.03	6.00	
6,300.00	45.30	180.47	6,223.76	-3,153.16	283.24	-283.23	-2.31	6.00	
6,331.08	47.17	180.47	6,245.26	-3,174.66	305.68	-305.67	-2.49	6.00	
6,400.00	47.17	180.47	6,292.12	-3,221.52	356.22	-356.21	-2.91	0.00	
6,500.00	47.17	180.47	6,360.11	-3,289.51	429.55	-429.54	-3.50	0.00	
6,607.12	47.17	180.47	6,432.94	-3,362.34	508.11	-508.09	-4.14	0.00	
6,650.00	49.74	180.47	6,461.37	-3,390.77	540.20	-540.18	-4.41	6.00	
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6,750.00	55.74	180.47	6,521.89	-3,451.29	619.75	-619.73	-5.06	6.00	
6,800.00	58.74	180.48	6,548.95	-3,478.35	661.79	-661.77	-5.41	6.00	
6,850.00	61.74	180.48	6,573.76	-3,503.16	705.19	-705.16	-5.77	6.00	
6,900.00	64.74	180.48	6,596.28	-3,525.68	749.83	-749.80	-6.14	6.00	



PathFinder Energy Services
PathFinder Standard X&Y Report



Company:	OXY Permian	Local Co-ordinate Reference:	Well Well #6H
Project:	Eddy County, NM	TVD Reference:	RKB to MSL @ 3070.60ft (H&P 370)
Site:	Cypress 34 Fed.	MD Reference:	RKB to MSL @ 3070.60ft (H&P 370)
Well:	Well #6H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Plan #2	Database:	Landmark Network DB

Planned Survey									
MD (ft)	Inc (°)	Azi (°)	TVD (ft)	TVDSS (ft)	V. Sec (ft)	N/S (ft)	E/W (ft)	DLeg (°/100ft)	
6,950.00	67.74	180.48	6,616.42	-3,545.82	795.58	-795.56	-6.53	6.00	
7,000.00	70.74	180.48	6,634.14	-3,563.54	842.33	-842.30	-6.92	6.00	
7,050.00	73.74	180.48	6,649.39	-3,578.79	889.94	-889.91	-7.32	6.00	
7,100.00	76.74	180.48	6,662.13	-3,591.53	938.29	-938.25	-7.73	6.00	
7,150.00	79.74	180.49	6,672.32	-3,601.72	987.23	-987.20	-8.14	6.00	
7,200.00	82.74	180.49	6,679.94	-3,609.34	1,036.64	-1,036.61	-8.56	6.00	
7,250.00	85.74	180.49	6,684.96	-3,614.36	1,086.38	-1,086.35	-8.98	6.00	
7,300.00	88.74	180.49	6,687.37	-3,616.77	1,136.32	-1,136.28	-9.41	6.00	
7,321.03	90.00	180.49	6,687.60	-3,617.00	1,157.35	-1,157.31	-9.59	6.00	
7,400.00	90.00	180.49	6,687.60	-3,617.00	1,236.32	-1,236.28	-10.26	0.00	
7,500.00	90.00	180.49	6,687.60	-3,617.00	1,336.32	-1,336.27	-11.12	0.00	
7,600.00	90.00	180.49	6,687.60	-3,617.00	1,436.32	-1,436.27	-11.97	0.00	
7,700.00	90.00	180.49	6,687.60	-3,617.00	1,536.32	-1,536.26	-12.83	0.00	
7,800.00	90.00	180.49	6,687.60	-3,617.00	1,636.32	-1,636.26	-13.68	0.00	
7,900.00	90.00	180.49	6,687.60	-3,617.00	1,736.32	-1,736.26	-14.54	0.00	
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8,400.00	90.00	180.49	6,687.60	-3,617.00	2,236.32	-2,236.24	-18.82	0.00	
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8,900.00	90.00	180.49	6,687.60	-3,617.00	2,736.32	-2,736.22	-23.09	0.00	
9,000.00	90.00	180.49	6,687.60	-3,617.00	2,836.32	-2,836.22	-23.95	0.00	
9,100.00	90.00	180.49	6,687.60	-3,617.00	2,936.32	-2,936.21	-24.80	0.00	



PathFinder Energy Services
PathFinder Standard X&Y Report



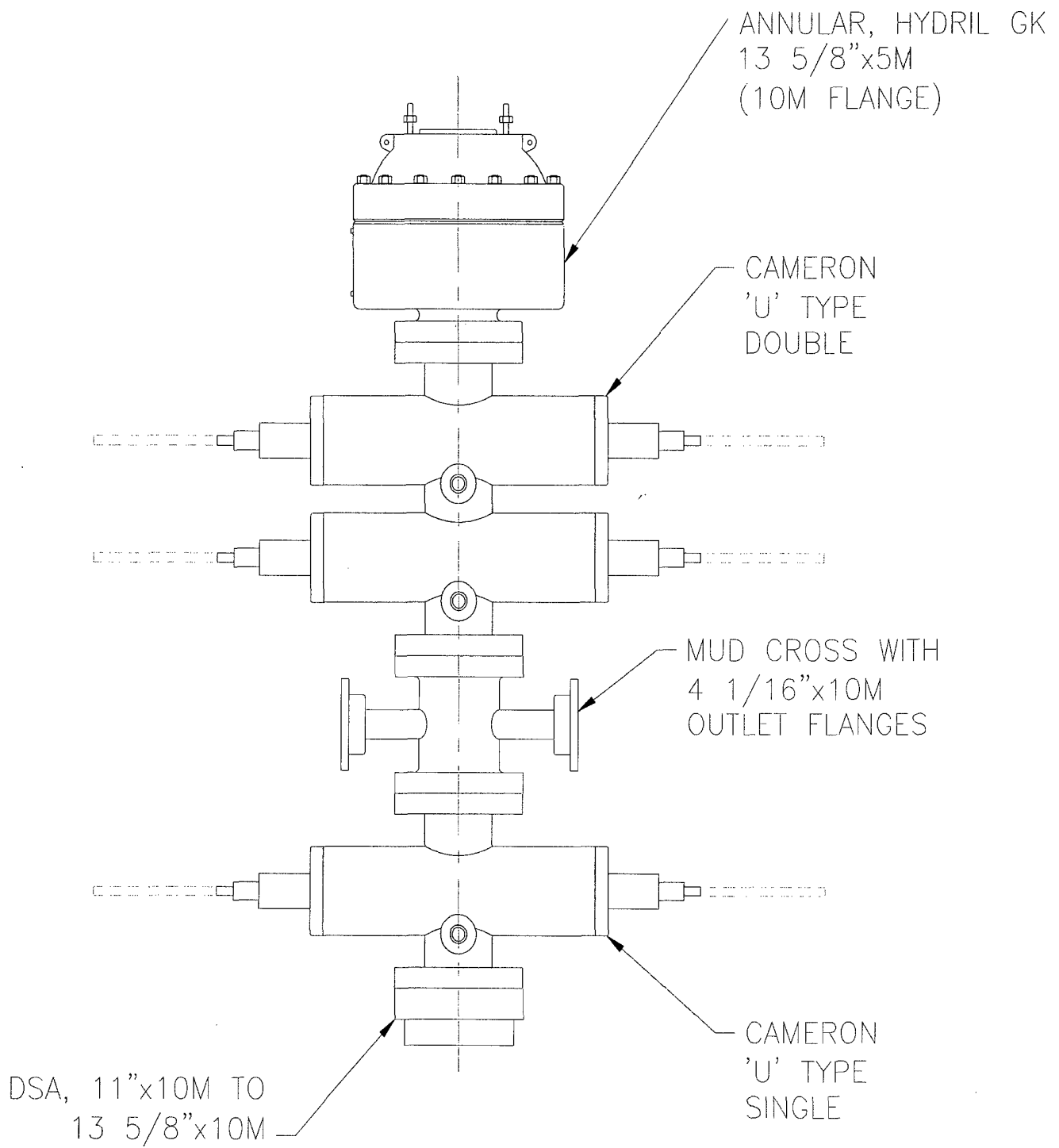
Company:	OXY Permian	Local Co-ordinate Reference:	Well-Well #6H
Project:	Eddy County, NM	TVD Reference:	RKB to MSL @ 3070.60ft (H&P 370)
Site:	Cypress 34 Fed.	MD Reference:	RKB to MSL @ 3070.60ft (H&P 370)
Well:	Well #6H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Plan #2	Database:	Landmark Network DB

Planned Survey									
MD (ft)	Inc (°)	Azi (°)	TVD (ft)	TVDSS (ft)	V. Sec (ft)	N/S (ft)	E/W (ft)	DLeg (°/100ft)	
9,200.00	90.00	180.49	6,687.60	-3,617.00	3,036.32	-3,036.21	-25.66	0.00	
9,300.00	90.00	180.49	6,687.60	-3,617.00	3,136.32	-3,136.21	-26.51	0.00	
9,400.00	90.00	180.49	6,687.60	-3,617.00	3,236.32	-3,236.20	-27.37	0.00	
9,500.00	90.00	180.49	6,687.60	-3,617.00	3,336.32	-3,336.20	-28.22	0.00	
9,600.00	90.00	180.49	6,687.60	-3,617.00	3,436.32	-3,436.20	-29.08	0.00	
9,700.00	90.00	180.49	6,687.60	-3,617.00	3,536.32	-3,536.19	-29.93	0.00	
9,800.00	90.00	180.49	6,687.60	-3,617.00	3,636.32	-3,636.19	-30.79	0.00	
9,900.00	90.00	180.49	6,687.60	-3,617.00	3,736.32	-3,736.18	-31.64	0.00	
10,000.00	90.00	180.49	6,687.60	-3,617.00	3,836.32	-3,836.18	-32.50	0.00	
10,100.00	90.00	180.49	6,687.60	-3,617.00	3,936.32	-3,936.18	-33.35	0.00	
10,200.00	90.00	180.49	6,687.60	-3,617.00	4,036.32	-4,036.17	-34.21	0.00	
10,300.00	90.00	180.49	6,687.60	-3,617.00	4,136.32	-4,136.17	-35.06	0.00	
10,400.00	90.00	180.49	6,687.60	-3,617.00	4,236.32	-4,236.17	-35.92	0.00	
10,421.03	90.00	180.49	6,687.60	-3,617.00	4,257.35	-4,257.20	-36.10	0.00	

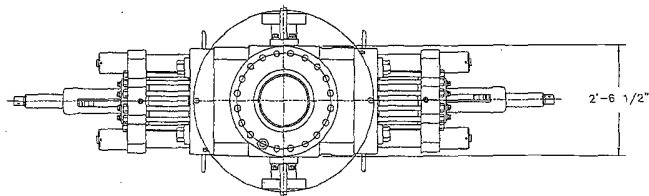
Targets									
Target Name	Dip Angle	Dip Dir	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)		
- Shape									
BHL #6H	0.00	0.00	6,687.60	-4,257.20	-36.10	456,671.10	609,672.90	32° 15' 18.02757 N	03° 58' 42.81356 W
- plan hits target center									
- Point									

Checked By: _____	Approved By: _____	Date: _____
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BOP Diagram



BOP STACK



- LEGEND
- ① 4 1/16"-10M FLANGED END GATE VALVE
 - ② 4 1/16"-10M FLANGED END GATE VALVE WITH DOUBLE ACTING HYDRAULIC ACTUATOR
 - ③ 2 1/16"-10M FLANGED END GATE VALVE
 - ④ 2 1/16"-10M FLANGED END CHECK VALVE
 - ⑤ DOUBLE STUDDED ADAPTER

SEE LIFT LUG DETAIL

SHAFFER BOLTED-COVER SPHERICAL ANNULAR PREVENTER (API 16A MONOGRAMMED, 13 5/8"-10M WP), 10M BOTTOM FLANGE x 5M STUDDED TOP (WEIGHT = 14,300 LBS WITH SHAFFER API 16A HOT OIL RESISTANT ACRYLONITRILE ELEMENT)

CAMERON UM DOUBLE RAM-TYPE PREVENTER (API 16A MONOGRAMMED, 13 5/8"-10M WP), WITH 5" CAMERON PIPE RAMS (CAMRAM FRONT PACKERS & TOP SEALS) IN TOP CAVITY AND CAMERON DS SHEARING BLIND RAMS IN BOTTOM CAVITY, BOTTOM FLANGE x STUDDED TOP (WEIGHT = 21,100 LBS, WITH RAMS)

13 5/8"-10M WP CAMERON DRILLING SPOOL (API 16A MONOGRAMMED), STUDDED TOP x FLANGED BOTTOM, WITH 4 1/16"-10M WP FLANGED OUTLETS (WEIGHT APPROXIMATELY 6,000 LBS)

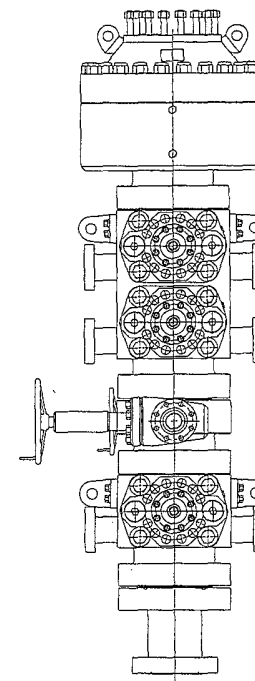
CAMERON UM SINGLE RAM-TYPE PREVENTER (API 16A MONOGRAMMED, 13 5/8"-10M WP), WITH 5" CAMERON PIPE RAMS (CAMRAM FRONT PACKERS & TOP SEALS) BOTTOM FLANGE x STUDDED TOP (WEIGHT = 10,900 LBS)

H&P FURNISHED
13 5/8"-10M x 11"-5M
ADAPTER SPOOL, 2'-0" LONG,
WITH SS RING GROOVES
(MARATHON RIGS 255, 256,
257, 258 & 259 ONLY)

13 5/8-10M STACK

PROPRIETARY

THIS DRAWING AND THE IDEAS AND INFORMATION INCLUDED IN THIS DRAWING ARE PROPRIETARY AND ARE NOT TO BE REPRODUCED, DISTRIBUTED OR DISCLOSED IN ANY MANNER, WITHOUT THE PRIOR WRITTEN CONSENT OF A DULY AUTHORIZED OFFICER OF HELMERICH & PAYNE INT'L DRILLING CO.



CAMERON LIFT EYES,
2 PER PREVENTER, 50
SHORT TON RATED
CAPACITY EACH.

ISSUED FOR
FABRICATION
December-18-2007
DRAFTSMAN
ENGINEER

API 6A MONOGRAMMED CAMERON CHOKE AND KILL WING VALVE ASSEMBLIES ARE NOT SHOWN FOR CLARITY
WEIGHTS DO NOT INCLUDE HOSES, ADAPTER SPOOLS OR QUICK CONNECT FITTINGS

HELMERICH & PAYNE INTERNATIONAL DRILLING CO.	
TITLE: 13 5/8"-10M BOP 3 RAM STACK	
CUSTOMER: H&P	
PROJECT: FLEXRIG3	
DATE: 6-5-02	DWG. NO.: 210-P1-07
SCALE: 3/4"=1'	SHEET: 1 OF 1

ENGINEERING APPROVAL	DATE	BY
12/18/07	ADDED SHEET 03	JAV
4-10-07	ORIGINALLY REISED DOUBLE STUDDED ADAPTER VALVES 1, 2, & 3 AND 16 CHECK VALVE ADDED	JBG
4-04-07	5" ADDED TO SPACER ADAPTER SPOOL	JBG
02-07-07	ADDED ADAPTER SPOOL	MWL
08-13-02	CORRECTED BOP STACK	MWL
REV	DATE	DESCRIPTION

Exhibit 4A

SURFACE USE PLAN OF OPERATIONS

Operator Name/Number:	OXY USA Inc.	16696
Lease Name/Number:	Cypress 34 Federal #6H	304799 Federal Lease No. NMNM086024
Pool Name/Number:	Undesignated Nash Draw Delaware, Southwest	97148
Surface Location:	640 FNL 704 FWL NWNW(D) Sec 34 T23S R29E	
Bottom Hole Location:	400 FSL 600 FWL SWSW(M) Sec 34 T23S R29E	

1. Existing Roads

- a. A copy of a USGS "Remuda Basin, New Mexico" quadrangle map is attached showing the proposed location. The well location is spotted on this map, which shows the existing road system.
- b. The well was staked by Terry J. Asel, Certificate No. 15079 on 10/6/09, certified 11/9/09
- c. At the intersection of Hwy 128 and Hwy 31, go east on Hwy 128 for 4.5 miles. Turn south on CR 793 (Rawhide) for 4.1 miles, turn west on lease road for 3.5 miles. Turn south for 1.4 miles, turn northwest for 0.2 miles to location.

2. New or Reconstructed Access Roads:

- a. No new access road will be built.
- b. Surfacing material: N/A
- c. Maximum Grade: N/A
- d. Turnouts: None needed
- e. Drainage Design: N/A
- f. Culverts: None needed
- g. Cut and fills: N/A
- h. Gates or cattleguards: none required.

3. Location of Existing Wells:

Existing wells within a one mile radius of the proposed well are shown on Exhibit #3.

4. Location of Existing and/or Proposed Production Facilities.

- a. In the event the well is found productive, the Cypress 34 Federal tank battery would be utilized and the necessary production equipment will be installed at the well site and the tank battery. See proposed Production Facilities Layout diagrams, Exhibit #4.
- b. If necessary, electric power poles will be set along side of the access road.
- c. All flowlines will adhere to API Standards, see Exhibit #4.

5. Location and types of Water Supply.

This well will be drilled using a combination of water mud systems. It will be obtained from commercial water stations in the area and will be hauled to location by transport truck using existing and proposed roads.

6. Construction Materials:

All caliche utilized for the drilling pad and proposed access road will be obtained from an existing BLM approved pit or from prevailing deposits found under the location. Will use BLM recommended use of extra caliche from other locations close by for roads, if available.

7. Methods of Handling Waste Material:

- a. A closed loop system will be utilized consisting of above ground steel tanks and haul-off bins. Disposal of liquids, drilling fluids and cuttings will be disposed of at an approved facility, see C-144 CLEZ.
 1. Solids - CRI
 2. Liquids - Laguna
- b. All trash, junk, and other waste material will be contained in trash cages or bins to prevent scattering. When the job is completed, all contents will be removed and disposed of in an approved sanitary landfill.
- c. The supplier, including broken sacks, will pick up slats remaining after completion of well.
- d. A Porto-john will be provided for the rig crews. This equipment will be properly maintained during the drilling and completion operations and will be removed when all operations are complete.
- e. Disposal of fluids to be transported will be by the following companies:
TFH Ltd. - Laguna SWD Facility

8. Ancillary Facilities: None needed

9. Well Site Layout

Exhibit #5 shows the proposed well site layout with dimensions of the pad layout and equipment location.

V-door - ~~Northwest~~ Tanks - Southeast Pad Size - 380' X 280'
 East

10. Plans for Surface Reclamation:

- a. After concluding the drilling and/or completion operations, if the well is found non-commercial, the caliche will be removed from the pad and transported to the original caliche pit or used for other drilling locations. The road will be reclaimed as directed by the BLM. The original top soil will again be returned to the pad and contoured, as close as possible, to the original topography.
- b. If the well is deemed commercially productive, caliche from areas of the pad site not required for operations will be reclaimed. The original top soil will be returned to the area of the drill pad not necessary to operate the well. These unused areas of the drill pad will be contoured, as close as possible, to match the original topography, and the area will be seeded with an approved BLM mixture to re-establish vegetation.

11. Surface Ownership

The surface is owned by the U.S. Government and is administered by the BLM. The surface is multiple use with the primary uses of the region for the grazing of livestock and the production of oil and gas. The surface is leased to: Tyson Mahaffey P.O. Box 161 Loving, NM 88256
They will be notified of our intention to drill prior to any activity.

12. Other Information

- a. The vegetation cover is generally sparse consisting of mesquite, yucca, shinnery oak, sandsage and perennial. native range grass. The topsoil is sandy in nature. Wildlife in the area is also sparse consisting of deer, coyotes, rabbits, rodents, reptiles, dove and quail.
- b. There is no permanent or live water in the general proximity of the location.
- c. There are no dwellings within 2 miles of the proposed well site.
- d. A Cultural Resources Examination - this well is located in the Permian Basin MOA.

Pad + 1/4 mile road	<u>\$1,339.00</u>	\$0.15/ft over 1/4 mile	<u>\$0.00</u>	<u>\$1,339.00</u>
Pipeline - up to 1 mile	<u>\$1,236.00</u>	\$250 per 1/4 mile	<u>\$0.00</u>	<u>\$1,236.00</u>
Electric Line - up to 1 mile	<u>\$618.00</u>	\$0.17/ft over 1 mile	<u>\$0.00</u>	<u>\$618.00</u>
Total	<u><u>\$3,193.00</u></u>		<u><u>\$0.00</u></u>	<u><u>\$3,193.00</u></u>

13. Bond Coverage:

Bond Coverage is Nationwide Bond No. ES0136.

Operators Representatives:

The OXY Permian representatives responsible for ensuring compliance of the surface use plan are listed below.

Marvin McElroy
Production Coordinator
P.O. Box 50250
Midland, TX 79710
Office Phone: 432-652-8607
Cellular: 806-215-6750

Larry Sammons
Production Lead
P.O. Box 50250
Midland, TX 79710
Office Phone: 432-685-5724
Cellular: 432-296-9323

Sergio Abauat
Drilling Superintendent
P.O. Box 4294
Houston, TX 77210
Office Phone: 432-366-5689
Cellular: 432-893-3067

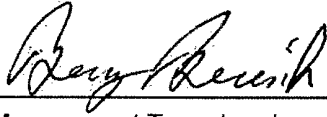
Calvin (Dusty) Weaver
Operation Specialist
P.O. Box 50250
Midland, TX 79710
Office Phone: 432-685-5723
Cellular: 806-893-3067

Camilo Arias
Drilling Engineering Supervisor
P.O. Box 4294
Houston, TX 77210
Office Phone: 713-366-5953
Cellular: 281-468-4652

John Egelston
Sr. Drilling Engineer
P.O. Box 4294
Houston, TX 77210
Office Phone: 713-215-7849
Cellular: 713-303-7298

OPERATOR CERTIFICATION

I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions that presently exist; that I have full knowledge of State and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements. Executed this 10th day of March, 2010.

Name: Barry Beresik 
Position: Reservoir Management Team Leader
Address: 5 Greenway Plaza, Suite 110, Houston, TX 77046
Telephone: 713-366-5016
E-mail: (optional): barry_beresik@oxy.com
Company: OXY USA Inc.
Field Representative (if not above signatory): Marvin McElroy
Address (If different from above): P.O. Box 50250 Midland, TX 79710
Telephone (if different from above): 432-652-8607 - 806-215-6750
E-mail (if different from above): marvin_mcelroy@oxy.com