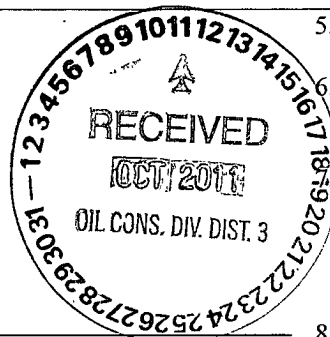


**UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT**

RECEIVED**OCT 06 2011**

Sundry Notices and Reports on Wells

Farmington Field Office
Bureau of Land Management

1. Type of Well
GAS

2. Name of Operator

ConocoPhillips

3. Address & Phone No. of Operator

PO Box 4289, Farmington, NM 87499 (505) 326-9700

4. Location of Well, Footage, Sec., T, R, M

Unit C (NENW), 660' FNL & 2080' FWL, Section 21, T24N, R3W, NMPM

5. Lease Number
SF-078913
6. If Indian, All. or
Tribe Name

Unit Agreement Name
Lindrith B Unit

8. Well Name & Number
Lindrith B Unit 31

9. API Well No.

30-039-23968

10. Field and Pool
W. Lindrith Gallup DK

11. County and State
Rio Arriba, NM

12. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OTHER DATA

Type of Submission	Type of Action		
☒ Notice of Intent	☐ Abandonment	☐ Change of Plans	☒ Other - ☐ Side Track & Core
☐ Subsequent Report	☐ Recompletion	☐ New Construction	
☐ Final Abandonment	☐ Plugging	☐ Non-Routine Fracturing	
	☐ Casing Repair	☐ Water Shut off	
	☐ Altering Casing	☐ Conversion to Injection	

13. Describe Proposed or Completed Operations

ConocoPhillips Company requests permission to sidetrack the subject well for coring purposes per the attached procedure, directional drill plan and plot.

CONFIDENTIAL

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

Signed Crystal Tafoya Crystal Tafoya

Title Staff Regulatory Technician Date 10/5/11

(This space for Federal or State Office use)

APPROVED BY Original Signed: Stephen Mason Title _____

Date OCT 06 2011

CONDITION OF APPROVAL, if any:

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

NMOC

A

**Lindrith B Unit #31
Side Track & Coring Proposal**

Project Scope and Overview

ConocoPhillips proposes to sidetrack out of the currently producing Lindrith B Unit 31 in order to collect reservoir data (logs, cores, etc). Operations will include:

- Preparing the wellbore for sidetrack operations;
- Sidetracking out of 9-5/8" casing in original well.
- Data collection reservoir data; and
- Plugging back the sidetrack and restore the original wellbore to production.

ConocoPhillips requests to keep the sundry, the operations, and the data collected classified as tight hole.

Implementation Overview

A completion (or workover) rig and a drilling rig will be utilized to perform the required work. The work performed will be engineered and implemented with the following overlaying objectives in mind:

- Ensure the safety of personnel involved in the work and protect the environment and surrounding area.
- Create isolation of the sidetrack to the original well bore for subsequent operations: sidetracking, coring, and logging operations. This will minimize operational problems caused by communication between zones/formations.
- Collect quality data that will allow ConocoPhillips to efficiently, effectively, and safely develop possible resources/reserves in the future.
- Abandon (plug back) side track and restore integrity to the original wellbore to allow for continued production out of original wellbore.

Wellbore Prep Work

- Move in completions/workover rig and rig up. Nipple up BOPE.
- Pull tubing.
- Pressure test casing.
- Perform squeeze work as needed to create isolation across the joint of casing the window will be cut.
- Set CBP for whipstock.
- Rig down and move off.

Sidetrack and Data Gathering

Sidetrack

- Move in and rig up. Nipple up BOPE (see BOPE Schematic section for further detail).
- Set whipstock and mill window. Btm of window @ +/- 5735'.
- Circulate WBM with OBM. The WBM may be circulated out of the hole after drilling the sidetrack to create separation of sidetrack and original wellbore before changing out mud systems.
- Directionally drill 8-1/2" side track hole back to vertical (as per directional plan) to top of coring section.
- A FIT (formation integrity test) will be performed prior to circ out WMB to help understand MW requirements for OBM.

Data Collection

- Core formation through desired zones, primary zones of interest are (footages are approximates):
 - Zone 1: 6441' – 6770' (TVD);
 - Zone 2: 7040' – 7192' (TVD); and
 - Zone 3: 7240' – 7369' (TVD).

Depending on coring technique (conventional or wireline recovery) and coring operations, formation between "zones of interest" may be drilled with drill bit or may be cored.

Mud loggers will be on location helping correlate different sections and collecting cuttings for further analysis.

- The sidetrack will be TD'd at +/- 7450' (TVD) to accommodate extra footage for logging tools.
- Run the following logs:
 - Trip Combo

- Di-pole sonic
- FMI
- ECS
- Spectral Gamma Ray

Abandon Sidetrack

- Pull whipstock.
- TIH with bent joint to bottom of sidetrack and circulate out OBM with WBM.
- Abandon sidetrack by pumping a balanced plug 30' below window (in sidetrack) and to cement up sidetrack and window in original well. (Repeat balanced plug operations as required to insure isolation from sidetracked wellbore.
- Set RBP's for barrier (to remove BOPE)
- Nipple down and rig down.

Post Wellbore Work

- Move in completions/workover rig and rig up. Nipple up BOPE.
- Pull RBP's.
- Perform any remedial cement work to abandon sidetrack and isolate original wellbore.
- Run tubing.
- Rig down and move off.

Mud Program.

Both WBM (water based mud) and OBM (oil based mud) will be utilized during the sidetrack/coring operations. OBM will be utilized to ensure "Mancos" formation stays stable (and not react with water) and to improve the success of the core recovery and quality of the core collected.

WBM

Operations: WBM will be utilized to cut window and start sidetrack
 Description: The WBM will be either a LSND or a Gel-based mud.

OBM

Operations: OBM will be utilized to drill the sidetrack, cut the cores, and log the well. The OBM will be circulated out of the hole after coring and logging operations are complete.
 Description: The OBM will be a 90/10 ratio of diesel (90%) and CaCl (Calcium Chloride) (10%).

Pit Program.

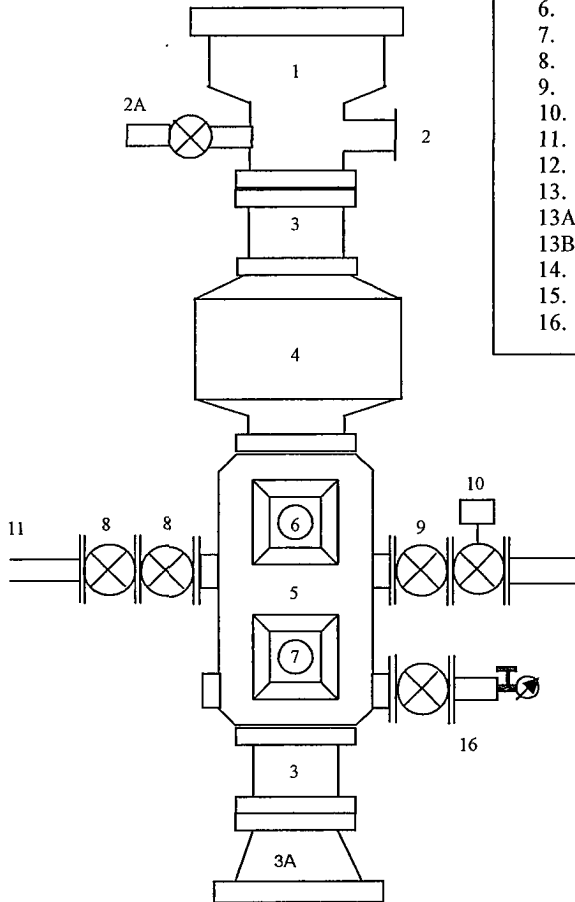
Closed loop equipment will be utilized on surface to handle all fluids. All OBM (diesel and CaCl) will be captured on surface and disposed/transported appropriately. Separate storage tanks (most likely frac tanks) will be utilized to store the WBM and OBM separate from each other.

Directional Program:

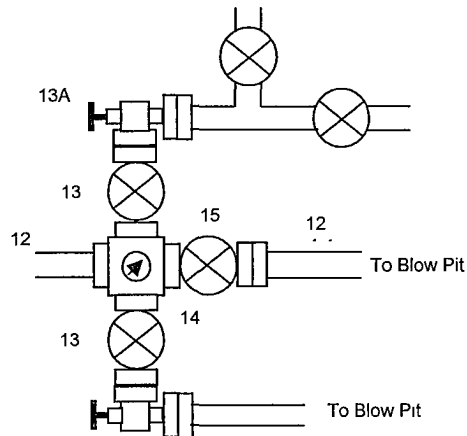
See attached directional program.

BOPE Schematic

Drilling Rig Schematic



1. Rotating Head
2. Flow line
- 2A. Fill up line and valve
3. Spacer Spools (as needed)
- 3A. Adapter Spool (13-5/8" x 11")
4. 11" 3M Annular Preventer
5. 11" 3M Double Ram Preventer
6. Blind Rams
7. Pipe Rams
8. 3M Gate Valves (2")
9. 3M gate Valve (3")
10. 3M HCR Valve (3")
11. Kill Line Connection
12. Choke Line (3" Hardline or Co-Flex)
13. 3M Valve (2")
- 13A. 3M Adjustable Choke (2")
- 13B. 3M Adjustable or Fixed Choke (2")
14. 3M Studded Cross & Manifold gauge
15. 3M Panic Line Valve (3")
16. Secondary outlet with valve, bull plug, needle valve, and pressure gauge



ConocoPhillips SJB

SJB Design Work

Ben Tolman

Sidetrack

Sidetrack

Plan: Design #1

Standard Planning Report

29 September, 2011

ConocoPhillips

Planning Report

Database:	EDM Central Planning TEST	Local Co-ordinate Reference:	Well Sidetrack
Company:	ConocoPhillips SJBU	TVD Reference:	WELL (copy) @ 7151.0usft (Original Well Elev)
Project:	SJBU Design Work	MD Reference:	WELL (copy) @ 7151.0usft (Original Well Elev)
Site:	Ben Tolman	North Reference:	Grid
Well:	Sidetrack	Survey Calculation Method:	Minimum Curvature
Wellbore:	Sidetrack		
Design:	Design #1		

Project	SJBU Design Work, Colorado		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Southern Zone		Using geodetic scale factor

Site	Ben Tolman		
Site Position:		Northing:	0 00 usft
From:	Map	Easting:	0 00 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16"
		Latitude:	33° 29' 20.500 N
		Longitude:	115° 19' 49.008 W
		Grid Convergence:	-6.03 °

Well	Sidetrack		
Well Position	+N/-S	0 0 usft	Northing: 871,312.84 usft
	+E/-W	0.0 usft	Easting: 2,509,745.14 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	usft
		Latitude:	36° 18' 4.637 N
		Longitude:	107° 9' 47.736 W
		Ground Level:	7,136.0 usft

Wellbore	Sidetrack		
Magnetics	Model Name	Sample Date	Declination
	User Defined	9/28/2011	(°)
			0 00
			Dip Angle (°)
			0.00
			Field Strength (nT)
			0

Design	Design #1		
Audit Notes:			
Version:	Phase:	PROTOTYPE	Tie On Depth: 0 0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(usft)	(usft)	(usft)
	0.0	0.0	0.0
			Direction (°)
			270.00

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0 00	0 0	0.0	0 0	0 00	0 00	0 00	0.00	
5,735.0	0.00	270.00	5,735.0	0.0	0.0	0.00	0.00	0 00	270.00	
6,046.1	14.00	270.00	6,043.0	0.0	-37.8	4.50	4.50	0.00	-90.00	
6,136.1	14.00	270.00	6,130.4	0.0	-59.6	0.00	0 00	0 00	0 00	
6,416.1	0 00	270.00	6,407.6	0 0	-93.6	5 00	-5 00	0 00	180.00	
7,458.5	0 00	270.00	7,450.0	0 0	-93.6	0 00	0.00	0.00	270.00	

ConocoPhillips

Planning Report

Database:	EDM Central Planning TEST	Local Co-ordinate Reference:	Well Sidetrack
Company:	ConocoPhillips SJBU	TVD Reference:	WELL (copy) @ 7151 0usft (Original Well Elev)
Project:	SJBU Design Work	MD Reference:	WELL (copy) @ 7151 0usft (Original Well Elev)
Site:	Ben Tolman	North Reference:	Grid
Well:	Sidetrack	Survey Calculation Method:	Minimum Curvature
Wellbore:	Sidetrack		
Design:	Design #1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
5,700.0	0 00	270.00	5,700 0	0 0	0 0	0.0	0.00	0 00	0 00	
5,717.0	0 00	270.00	5,717.0	0.0	0 0	0.0	0 00	0.00	0 00	
Mancos										
5,735.0	0 00	270.00	5,735 0	0.0	0.0	0 0	0.00	0.00	0.00	
BTM OF WINDO										
5,800.0	2 92	270.00	5,800 0	0 0	-1.7	1 7	4.50	4 50	0.00	
5,900.0	7.42	270.00	5,899.5	0 0	-10 7	10 7	4.50	4 50	0.00	
6,000.0	11 92	270.00	5,998 1	0 0	-27 5	27.5	4.50	4.50	0.00	
6,046 1	14 00	270.00	6,043 0	0 0	-37.8	37.8	4 50	4 50	0.00	
6,100.0	14 00	270.00	6,095 3	0 0	-50 9	50.9	0.00	0 00	0.00	
6,136.1	14.00	270 00	6,130 4	0.0	-59 6	59.6	0 00	0.00	0.00	
6,200.0	10.81	270.00	6,192.7	0 0	-73 3	73.3	5 00	-5 00	0.00	
6,300.0	5.81	270 00	6,291 7	0 0	-87 8	87.8	5 00	-5 00	0.00	
6,339.5	3 83	270.00	6,331 0	0 0	-91.1	91.1	5.00	-5 00	0.00	
El Vado										
6,400.0	0 81	270 00	6,391 5	0 0	-93.5	93 5	5.00	-5.00	0 00	
6,416 1	0 00	270.00	6,407.6	0.0	-93.6	93.6	5 00	-5 00	0.00	
6,500 0	0.00	270 00	6,491.5	0.0	-93.6	93.6	0 00	0.00	0.00	
6,600.0	0 00	270.00	6,591.5	0.0	-93.6	93 6	0.00	0 00	0.00	
6,700 0	0 00	270 00	6,691.5	0.0	-93 6	93 6	0 00	0.00	0.00	
6,720.5	0 00	270 00	6,712 0	0 0	-93.6	93.6	0.00	0 00	0.00	
Basal Niobrara										
6,800.0	0 00	270.00	6,791.5	0 0	-93 6	93.6	0 00	0 00	0.00	
6,900 0	0 00	270 00	6,891.5	0 0	-93 6	93.6	0 00	0.00	0.00	
7,000 0	0 00	270.00	6,991.5	0 0	-93 6	93.6	0.00	0 00	0.00	
7,082 5	0 00	270 00	7,074 0	0.0	-93.6	93 6	0 00	0.00	0.00	
Juana Lopez										
7,100 0	0 00	270.00	7,091.5	0.0	-93 6	93 6	0 00	0.00	0.00	
7,200 0	0 00	270 00	7,191.5	0.0	-93 6	93.6	0.00	0.00	0.00	
7,300 0	0.00	270 00	7,291.5	0.0	-93.6	93.6	0.00	0.00	0.00	
7,353 5	0 00	270 00	7,345.0	0.0	-93.6	93.6	0.00	0.00	0.00	
Graneros										
7,400 0	0 00	270 00	7,391.5	0 0	-93.6	93.6	0 00	0.00	0.00	

5,735 0	5,735.0	BTM OF WINDO	8-1/2
---------	---------	--------------	-------

Formations							
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)		
5,360 0	5,360.0	Point Lookout	SAND	0.00			
5,717.0	5,717.0	Mancos		0 00			
4,922 0	4,922.0	Menefee		0 00			
6,720.5	6,712.0	Basal Niobrara		0 00			
7,353.5	7,345.0	Graneros		0.00			
6,339.5	6,331.0	El Vado		0.00			
7,082 5	7,074.0	Juana Lopez		0 00			
4,866 0	4,866.0	Cliffhouse		0 00			

ConocoPhillips

Planning Report

Database:	EDM Central Planning TEST	Local Co-ordinate Reference:	Well Sidetrack
Company:	ConocoPhillips SJB	TVD Reference:	WELL (copy) @ 7151.0usft (Original Well Elev)
Project:	SJB Design Work	MD Reference:	WELL (copy) @ 7151.0usft (Original Well Elev)
Site:	Ben Tolman	North Reference:	Grid
Well:	Sidetrack	Survey Calculation Method:	Minimum Curvature
Wellbore:	Sidetrack		
Design:	Design #1		

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
5,735.0	5,735.0	0.0	0.0	BTM OF WINDOW, KOP

REFERENCE INFORMATION

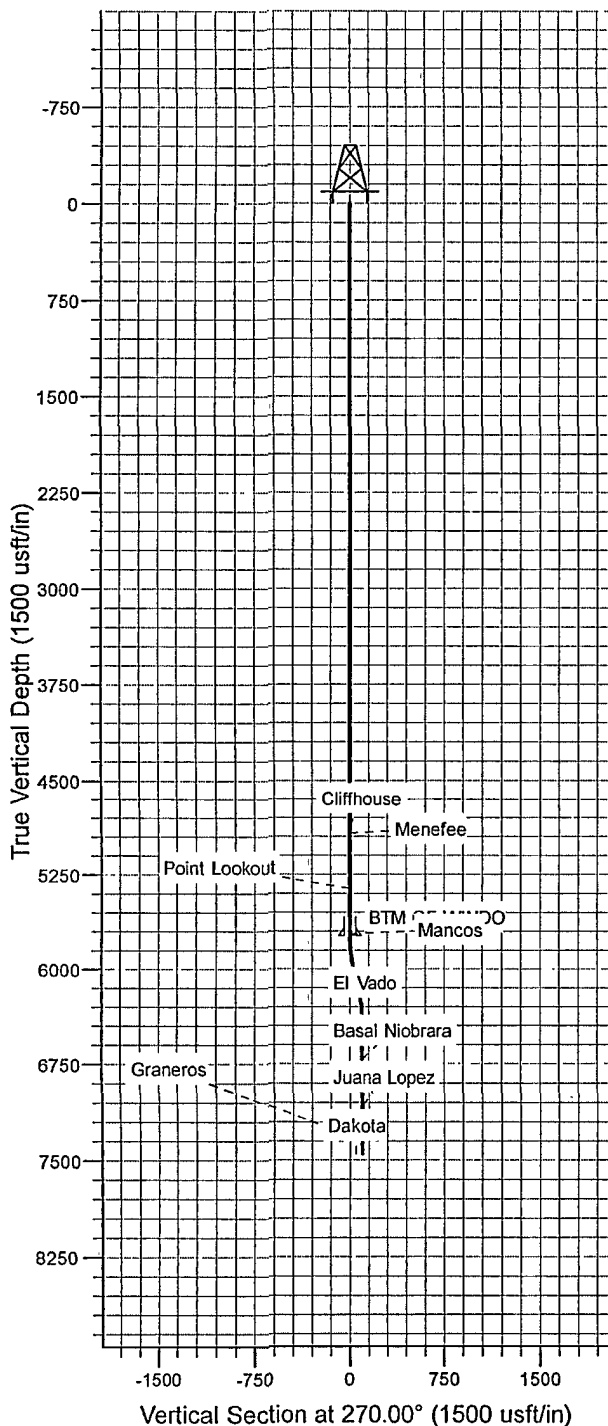
WELL @ (Original Well Elev)
Ground Elevation 7136.0
Reference Lat: 36° 18' 4.637 N
Reference Long: 107° 9' 47.736 W

Project: SJBÜ Design Work
Site: Ben Tolman
Well: Lindrith B Unit #31
Wellbore: Sidetrack
Design: Design #1



SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	5735.0	0.00	270.00	5735.0	0.0	0.0	0.00	270.00	0.0	
3	6046.1	14.00	270.00	6043.0	0.0	-37.8	4.50	-90.00	37.8	
4	6136.1	14.00	270.00	6130.4	0.0	-59.6	0.00	0.00	59.6	
5	6416.1	0.00	270.00	6407.6	0.0	-93.6	5.00	180.00	93.6	
6	7458.5	0.00	270.00	7450.0	0.0	-93.6	0.00	270.00	93.6	



T/M Azimuths to Grid North
True North: 1.02°
Magnetic North: 1.02°

Magnetic Field
Strength: 0.0snT
Dip Angle: 0.00°
Date: 9/28/2011
Model: USER DEFINED

FORMATION TOP DETAILS

TVDPPath	MDPath	Formation	DipAngle	DipDir
4866.0	4866.0	Cliffhouse	0.00	
4922.0	4922.0	Menefee	0.00	
5360.0	5360.0	Point Lookout	0.00	
5717.0	5717.0	Mancos	0.00	
6331.0	6339.5	El Vado	0.00	
6712.0	6720.5	Niobrara	0.00	
7074.0	7082.5	Juana Lopez	0.00	
7345.0	7353.5	Graneros	0.00	

