

Form 3160-3  
(October 2024)FORM APPROVED  
OMB No. 1004-0220  
Expires: October 31, 2027

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
**APPLICATION FOR PERMIT TO DRILL OR REENTER**

1a. Type of work:	<input type="checkbox"/> DRILL	<input type="checkbox"/> REENTER	7. If Unit or CA Agreement, Name and No. <b>30-025-55663</b>	
1b. Type of Well:	<input type="checkbox"/> Oil Well	<input type="checkbox"/> Gas Well	8. Lease Name and Well No.	
1c. Type of Completion:	<input type="checkbox"/> Hydraulic Fracturing	<input type="checkbox"/> Single Zone	<input type="checkbox"/> Multiple Zone	
2. Name of Operator	9. API Well No.			
3a. Address	3b. Phone No. (include area code)		10. Field and Pool, or Exploratory	
4. Location of Well (Report location clearly and in accordance with any State requirements. *)	11. Sec., T. R. M. or Blk. and Survey or Area			
At surface				
At proposed prod. zone				
14. Distance in miles and direction from nearest town or post office*	12. County or Parish		13. State	
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No of acres in lease	17. Spacing Unit dedicated to this well		
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth	20. BLM/BIA Bond No. in file		
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approximate date work will start*	23. Estimated duration		
24. Attachments				

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, and the Hydraulic Fracturing rule per 43 CFR 3162.3-3 (as applicable)

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 must be filed with the appropriate Forest Service Office).	6. Such other site specific information and/or plans as may be requested by the BLM.

25. Signature	Name (Printed/Typed)	Date
---------------	----------------------	------

Title

Approved by (Signature)	Name (Printed/Typed)	Date
-------------------------	----------------------	------

Title	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.

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.

**APPROVED WITH CONDITIONS**

(Continued on page 2)

\*(Instructions on page 2)

## Additional Operator Remarks

### Location of Well

0. SHL: NENE / 482 FNL / 975 FEL / TWSP: 26S / RANGE: 32E / SECTION: 28 / LAT: 32.019537 / LONG: -103.674512 ( TVD: 0 feet, MD: 0 feet )

PPP: NENE / 100 FNL / 1180 FEL / TWSP: 26S / RANGE: 32E / SECTION: 28 / LAT: 32.020588 / LONG: -103.67517 ( TVD: 12033 feet, MD: 12385 feet )

BHL: LOT 1 / 50 FSL / 1180 FEL / TWSP: 26S / RANGE: 32E / SECTION: 33 / LAT: 32.000363 / LONG: -103.675204 ( TVD: 12033 feet, MD: 19742 feet )

### BLM Point of Contact

Name: JANET D ESTES

Title: ADJUDICATOR

Phone: (575) 234-6233

Email: JESTES@BLM.GOV

C-102		State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION				Revised July 9, 2024	
Submit Electronically Via OCD Permitting						Submittal Type:	<input checked="" type="checkbox"/> Initial Submittal <input type="checkbox"/> Amended Report <input type="checkbox"/> As Drilled

## WELL LOCATION INFORMATION

API Number 30-025- <b>55663</b>	Pool Code 98081	Pool Name Zia Hills; Wolfcamp	
Property Code <b>338328</b>	Property Name <b>ZIA HILLS UNIT 2832 WC</b>		Well Number <b>710H</b>
OGRID No. <b>217817</b>	Operator Name <b>CONOCOPHILLIPS COMPANY</b>		Ground Level Elevation <b>3,140.46'</b>
Surface Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input checked="" type="checkbox"/> Federal		Mineral Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input checked="" type="checkbox"/> Federal	

## Surface Location

UL <b>A</b>	Section <b>28</b>	Township <b>26S</b>	Range <b>32E</b>	Lot	Ft. from N/S <b>482' FNL</b>	Ft. from E/W <b>975' FEL</b>	Latitude <b>32.019537°</b>	Longitude <b>-103.674512°</b>	County <b>LEA</b>
----------------	----------------------	------------------------	---------------------	-----	---------------------------------	---------------------------------	-------------------------------	----------------------------------	----------------------

## Bottom Hole Location

UL <b>LOT 1</b>	Section <b>33</b>	Township <b>26S</b>	Range <b>32E</b>	Lot	Ft. from N/S <b>50' FSL</b>	Ft. from E/W <b>1,180' FEL</b>	Latitude <b>32.000363°</b>	Longitude <b>-103.675204°</b>	County <b>LEA</b>
--------------------	----------------------	------------------------	---------------------	-----	--------------------------------	-----------------------------------	-------------------------------	----------------------------------	----------------------

Dedicated Acres 898.92	Infill or Defining Well Defining	Defining Well API Pending 710H	Overlapping Spacing Unit (Y/N)	Consolidation Code Unit	
Order Numbers. R-20080			Well setbacks are under Common Ownership: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		

## Kick Off Point (KOP)

UL <b>P</b>	Section <b>21</b>	Township <b>26S</b>	Range <b>32E</b>	Lot	Ft. from N/S <b>377' FSL</b>	Ft. from E/W <b>1,178' FEL</b>	Latitude <b>32.021900°</b>	Longitude <b>-103.675167°</b>	County <b>LEA</b>
----------------	----------------------	------------------------	---------------------	-----	---------------------------------	-----------------------------------	-------------------------------	----------------------------------	----------------------

## First Take Point (FTP)

UL <b>A</b>	Section <b>28</b>	Township <b>26S</b>	Range <b>32E</b>	Lot	Ft. from N/S <b>100' FNL</b>	Ft. from E/W <b>1,180' FEL</b>	Latitude <b>32.020588°</b>	Longitude <b>-103.675170°</b>	County <b>LEA</b>
----------------	----------------------	------------------------	---------------------	-----	---------------------------------	-----------------------------------	-------------------------------	----------------------------------	----------------------

## Last Take Point (LTP)

UL <b>LOT 1</b>	Section <b>33</b>	Township <b>26S</b>	Range <b>32E</b>	Lot	Ft. from N/S <b>100' FSL</b>	Ft. from E/W <b>1,180' FEL</b>	Latitude <b>32.000500°</b>	Longitude <b>-103.675203°</b>	County <b>LEA</b>
--------------------	----------------------	------------------------	---------------------	-----	---------------------------------	-----------------------------------	-------------------------------	----------------------------------	----------------------

Unitized Area or Area of Uniform Interest	Spacing Unit Type <input checked="" type="checkbox"/> Horizontal <input type="checkbox"/> Vertical	Ground Floor Elevation:
---	--	-------------------------

## OPERATOR CERTIFICATIONS

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and, if the well is a vertical or directional well, that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of a working interest or unleased mineral interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

If this well is a horizontal well, I further certify that this organization has received the consent of at least one lessee or owner of a working interest or unleased mineral interest in each tract (in the target pool or formation) in which any part of the well's completed interval will be located or obtained a compulsory pooling order from the division.

## SURVEYOR CERTIFICATIONS

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.



Date: 1/30/2025

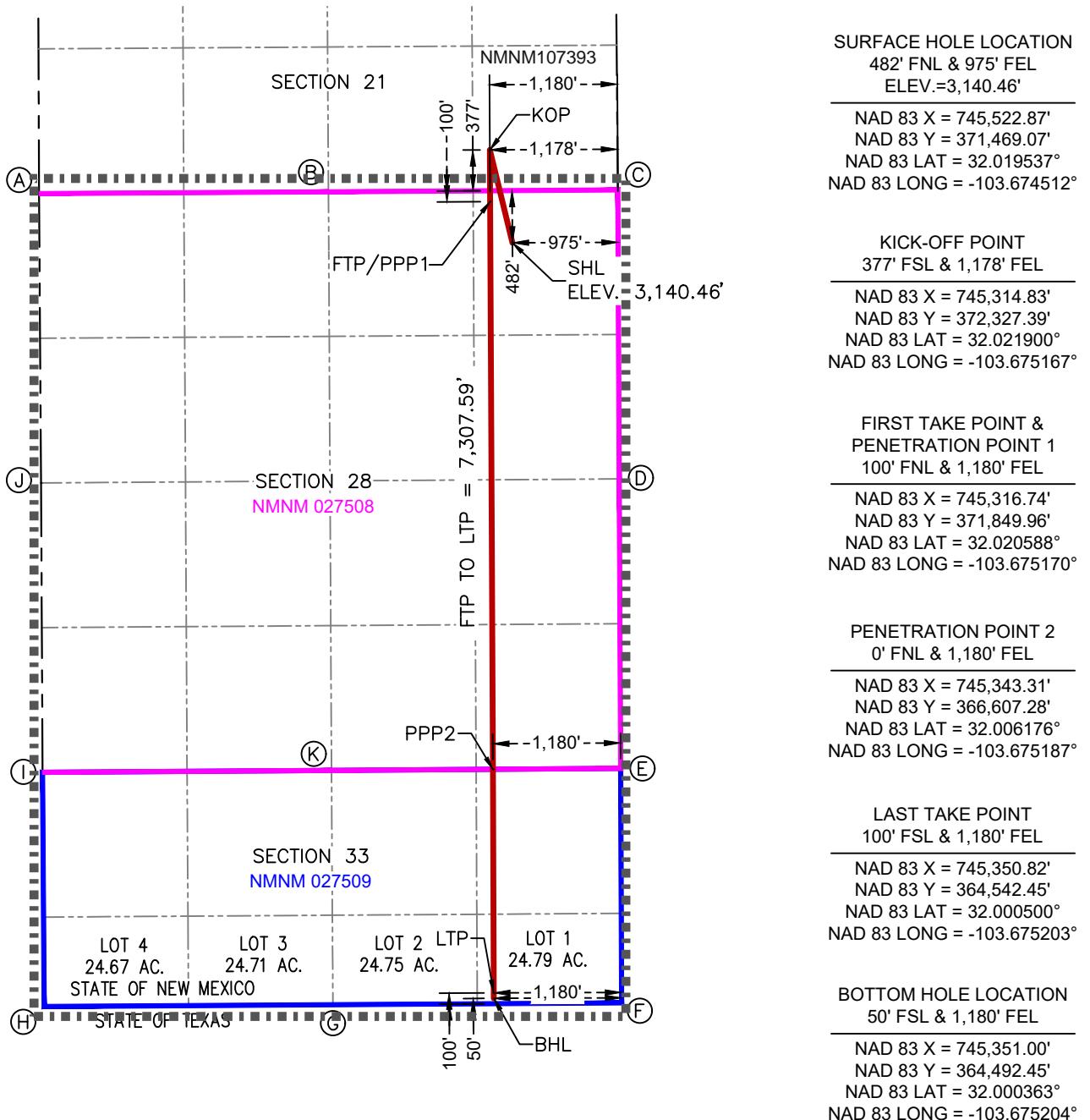
Signature 	Date 5/12/25	Signature and Seal of Professional Surveyor	
Printed Name Stan Wagner	Certificate Number 12177	Date of Survey 1/30/2025	
Email Address			

Note: No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

## ACREAGE DEDICATION PLATS

This grid represents a standard section. You may superimpose a non-standard section, or larger area, over this grid. Operators must outline the dedicated acreage in a red box, clearly show the well surface location and bottom hole location, if it is directionally drilled, with the dimensions from the section lines in the cardinal directions. If this is a horizontal wellbore show on this plat the location of the First Take Point and Last Take Point, and the point within the Completed interval (other than the First Take Point or Last Take Point) that is closest to any outer boundary of the tract.

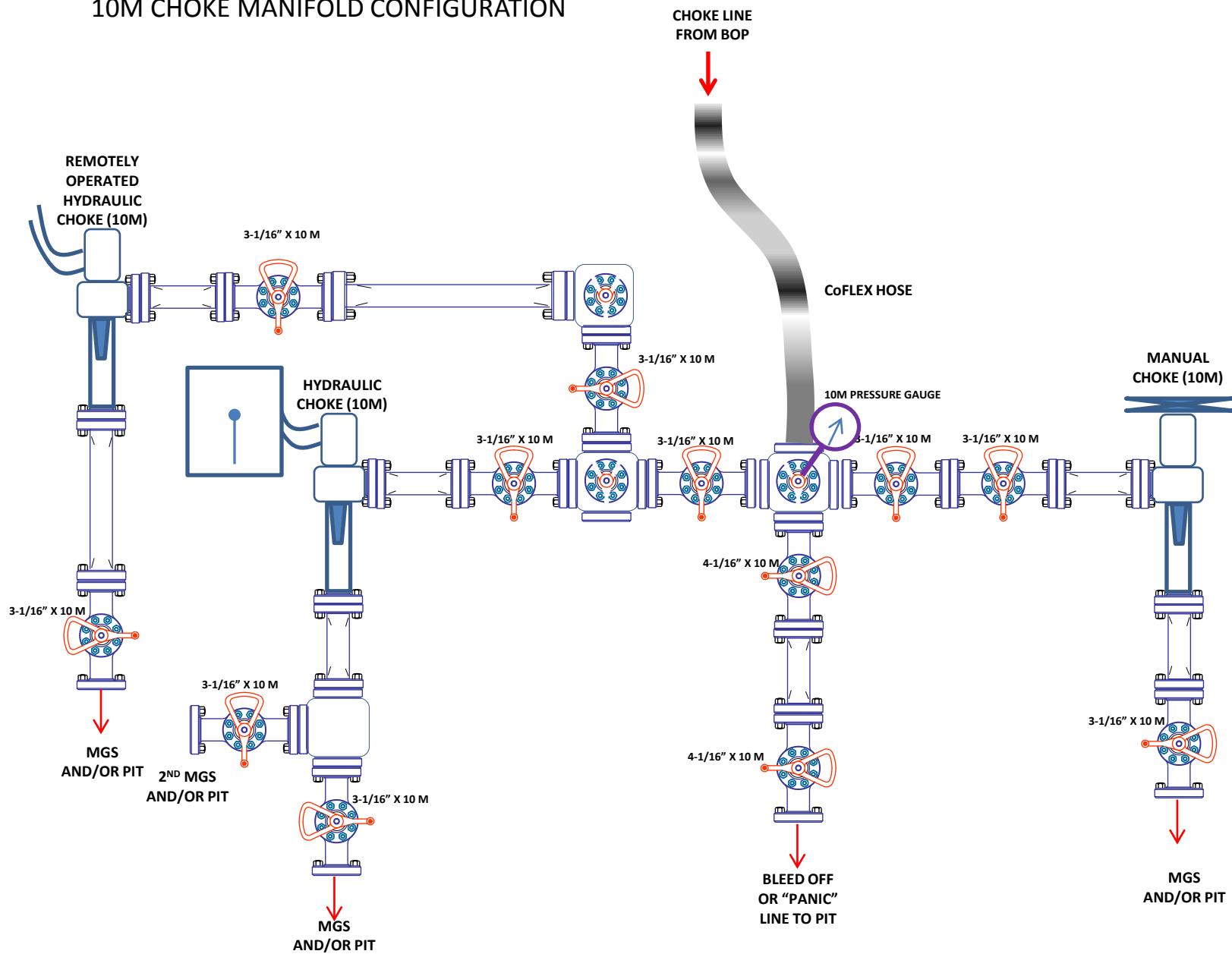
Surveyors shall use the latest United States government survey or dependent resurvey. Well locations will be in reference to the New Mexico Principal Meridian. If the land is not surveyed, contact the OCD Engineering Bureau. Independent subdivision surveys will not be acceptable.



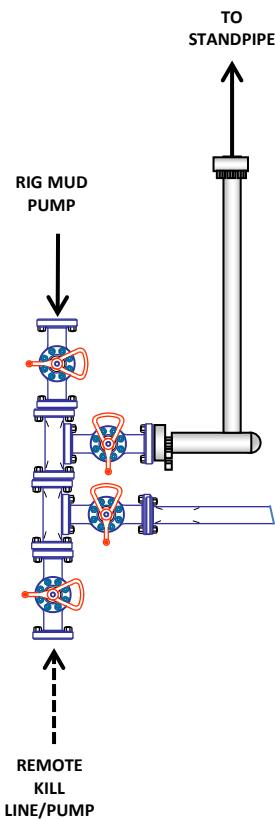
**CORNER COORDINATES**  
NEW MEXICO EAST - NAD 83

A	IRON PIPE W/BRASS CAP N:371,924.06' E:741,150.79'	E	IRON PIPE W/BRASS CAP N:366,615.44' E:746,523.28'	I	IRON PIPE W/BRASS CAP N:366,579.65' E:741,183.39'
B	IRON PIPE W/BRASS CAP N:371,940.66' E:743,823.97'	F	CALCULATED CORNER N:364,449.93' E:746,531.16'	J	IRON PIPE W/BRASS CAP N:369,251.80' E:741,169.27'
C	IRON PIPE W/BRASS CAP N:371,957.31' E:746,496.25'	G	CALCULATED CORNER N:364,433.03' E:743,864.87'	K	CALCULATED CORNER N:366,596.96' E:743,852.02'
D	IRON PIPE W/BRASS CAP N:369,288.55' E:746,508.78'	H	CALCULATED CORNER N:364,416.13' E:741,198.04'		

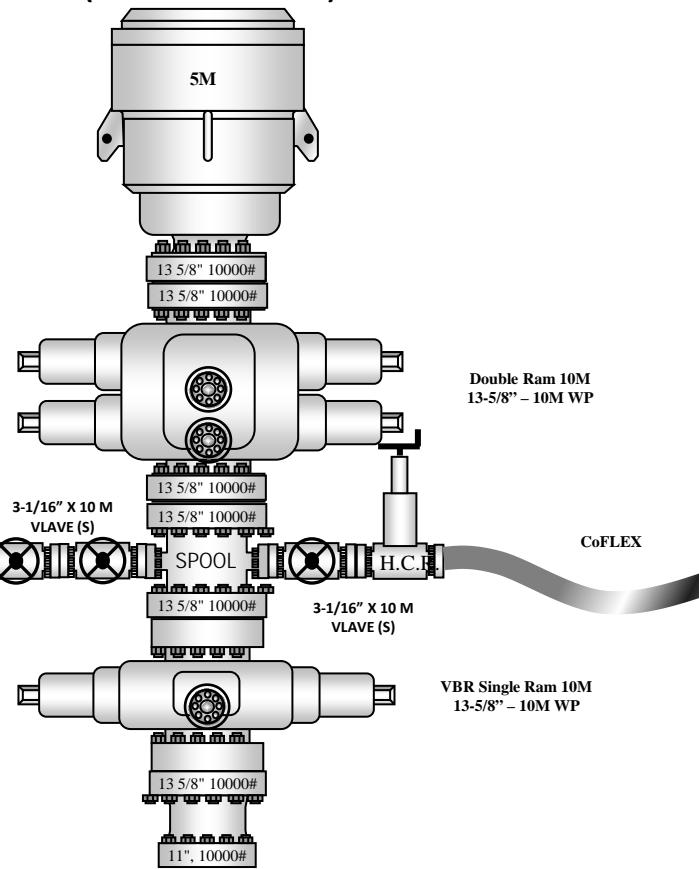
## 10M CHOKE MANIFOLD CONFIGURATION



## 10M REMOTE KILL SCHEMATIC



## 10M BOP Stack (5M Annular)



# ConocoPhillips Company - Zia Hills Unit 2832 WC 710H

## 1. Geologic Formations

TVD of target	12,033' EOL	Pilot hole depth	NA
MD at TD:	19,742'	Deepest expected fresh water:	202'

Formation	Depth (TVD) from KB	Water/Mineral Bearing/Target Zone?	Hazards*
Quaternary Fill	Surface	Water	
Rustler	690	Water	
Top of Salt	964	Salt	
Base of Salt	4196	Salt	
Lamar	4419	Salt Water	
Bell Canyon	4440	Salt Water	
Cherry Canyon	5359	Oil/Gas	
Brushy Canyon	6827	Oil/Gas	
Bone Spring	8507	Oil/Gas	
1st Bone Spring Sand	9474	Oil/Gas	
2nd Bone Spring Sand	10146	Oil/Gas	
3rd Bone Spring Sand	11260	Oil/Gas	
Wolfcamp	11636	Target	
Wolfcamp A	11844	Target	
Wolfcamp B	12177	Not Penetrated	

## 2. Casing Program

Hole Size	Casing Interval		Csg. Size	Weight (lbs)	Grade	Conn.	SF Collapse	SF Burst	SF Body	SF Joint
	From	To								
17.50"	0	820	13.375"	54.5	J55	BTC	3.01	1.50	19.09	20.34
12.25"	0	4320	9.625"	40	L80-IC	BTC	1.72	1.28	5.30	5.48
8.75"	4120	11500	7.625"	29.7	P110-ICY	W513	1.23	1.53	3.13	1.88
6.75"	0	11300	5.5"	23	P110-CY	BTC	1.83	2.14	2.80	2.80
6.75"	11300	19,742	5.5"	23	P110-CY	W441	1.72	2.01	2.63	2.39
				BLM Minimum Safety Factor				1.125	1	1.6 Dry 1.8 Wet

Intermediate casing will be kept at least 1/3 full while running casing to mitigate collapse. Surface burst based on 0.7 frac gradient at the shoe with Gas Gradient 0.1 psi/ft to surface and

All casing strings will be tested in accordance with 43 CFR Part 3170 Subpart 3172

The 5 1/2" W441 casing will be run back 200' into the intermediate casing to ensure the coupling OD clearance is greater than .422" for the cement bond tie in.

## ConocoPhillips Company - Zia Hills Unit 2832 WC 710H

	Y or N
Is casing new? If used, attach certification as required in Onshore Order #1	Y
Does casing meet API specifications? If no, attach casing specification sheet.	Y
Is premium or uncommon casing planned? If yes attach casing specification sheet.	Y
Does the above casing design meet or exceed BLM's minimum standards? If not provide justification (loading assumptions, casing design criteria).	Y
Will the intermediate pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing?	Y
Is well located within Capitan Reef? If yes, does production casing cement tie back a minimum of 50' above the Reef? Is well within the designated 4 string boundary?	N
Is well located in SOPA but not in R-111-P? If yes, are the first 2 strings cemented to surface and 3 <sup>rd</sup> string cement tied back 500' into previous casing?	N
Is well located in R-111-P and SOPA? If yes, are the first three strings cemented to surface? Is 2 <sup>nd</sup> string set 100' to 600' below the base of salt?	N
Is well located in high Cave/Karst? If yes, are there two strings cemented to surface? (For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	N
Is well located in critical Cave/Karst? If yes, are there three strings cemented to surface?	N

## ConocoPhillips Company - Zia Hills Unit 2832 WC 710H

## 3. Cementing Program

Casing	# Skns	Wt. Ib/ gal	Yld ft3/ sack	H <sub>2</sub> O gal/sk	500# Comp. Strength (hours)	Slurry Description
Surf.	490	13.5	1.75	9	12	Lead: Class C + 4% Gel + 1% CaCl <sub>2</sub>
	250	14.8	1.34	6.34	8	Tail: Class C + 2% CaCl <sub>2</sub>
Int. #1	630	12.8	1.75	9.21	12	Lead: Class C + 4% Gel + 1% CaCl <sub>2</sub>
	390	14.8	1.35	6.6	8	Tail: Class C + 2% CaCl <sub>2</sub>
Inter. #2 (Liner)	200	10.5	3.3	22	24	Tuned light
	90	14.8	1.35	6.6	8	Tail: Class H
Prod	810	12.5	1.48	10.7	72	Lead: 50:50:10 H Blend
	640	13.2	1.34	5.7	19	Tail: 50:50:2 Class H Blend

Volumes Subject to Observed Hole Conditions and/or Fluid Caliper Results  
 Lab reports with the 500 psi compressive strength time for the cement will be onsite for review.

Casing String	TOC	% Excess
Surface	0'	50%
1 <sup>st</sup> Intermediate	0'	50%
2 <sup>nd</sup> Intermediate	4,120'	20%
Production	11,000'	20% OH in Lateral (KOP to EOL)

## ConocoPhillips Company - Zia Hills Unit 2832 WC 710H

## 4. Pressure Control Equipment

N	A variance is requested for the use of a diverter on the surface casing. See attached for schematic.				
Y	A variance is requested for the use of BOPE break testing on intermediate skids (in accordance with the 30 day full BOPE test requirements).				

BOP installed and tested before drilling which hole?	Size?	Min. Required WP	Type	x	Tested to:
12-1/4" or 9-7/8"	13-5/8"	5M	Annular	x	2500psi
			Blind Ram	x	5000psi
			Pipe Ram	x	
			Double Ram	x	
			Other*		
6-3/4"	13-5/8"	10M	5M Annular	x	5000psi
			Blind Ram	x	10000psi
			Pipe Ram	x	
			Double Ram	x	
			Other*		

BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure indicated above per 43 CFR Part 3170 Subpart 3172 requirements. The System may be upgraded to a higher pressure but still tested to the working pressure listed in the table above. If the system is upgraded all the components installed will be functional and tested.

Pipe rams will be operationally checked each 24 hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. Other accessories to the BOP equipment will include a Kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold. See attached schematics.

Y	Formation integrity test will be performed per Onshore Order #2.
Y	On Exploratory wells or on that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Will be tested in accordance with 43 CFR Part 3170 Subpart 3172.
Y	A variance is requested for the use of a flexible choke line from the BOP to Choke Manifold. See attached for specs and hydrostatic test chart.
N	Are anchors required by manufacturer?
Y	A multibowl wellhead is being used. The BOP will be tested per 43 CFR Part 3170 Subpart 3172 after installation on the surface casing which will cover testing requirements for a maximum of 30 days. If any seal subject to test pressure is broken the system must be tested.

## ConocoPhillips Company - Zia Hills Unit 2832 WC 710H

## 5. Mud Program

Depth		Type	Weight (ppg)	Viscosity	Water Loss
From	To				
0	Surf. Shoe	FW Gel	8.6 - 8.8	28-34	N/C
Surf csg	9-5/8" Int shoe	Brine	8.4 - 10	28-34	N/C
9-5/8" Int shoe	7-5/8" Int shoe	Brine	8.4 - 10	28-34	N/C
7-5/8" Int shoe	Lateral TD	OBM	9.6 - 13.5	35-45	<20

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept on location at all times.

What will be used to monitor the loss or gain of fluid?	PVT/Pason/Visual Monitoring
---	-----------------------------

## 6. Logging and Testing Procedures

Logging, Coring and Testing.	
Y	Will run GR/CNL from TD to surface (horizontal well – vertical portion of hole). Stated logs run will be in the Completion Report and submitted to the BLM.
Y	No Logs are planned based on well control or offset log information.
N	Drill stem test? If yes, explain.
N	Coring? If yes, explain.

Additional logs planned		Interval
N	Resistivity	Pilot Hole TD to ICP
N	Density	Pilot Hole TD to ICP
N	CBL	Production casing (If cement not circulated to surface)
Y	Mud log	Intermediate shoe to TD
N	PEX	

## ConocoPhillips Company - Zia Hills Unit 2832 WC 710H

## 7. Drilling Conditions

Condition	Specify what type and where?
BH Pressure at deepest TVD	8450 psi at 12033' TVD
Abnormal Temperature	NO 175 Deg. F.

No abnormal pressure or temperature conditions are anticipated. Sufficient mud materials to maintain mud properties and weight increase requirements will be kept on location at all times.

Sufficient supplies of Paper/LCM for periodic sweeps to control seepage and losses will be maintained on location.

Hydrogen Sulfide (H2S) monitors will be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the operator will comply with the provisions of 43 CFR Part 3170 Subpart 3176. If Hydrogen Sulfide is encountered, measured values and formations will be provided to the BLM.

N H2S is present

Y H2S Plan attached

## 8. Other Facets of Operation

Y	Is it a walking operation?
Y	Is casing pre-set?

x	H2S Plan.
x	BOP & Choke Schematics.
x	Directional Plan

**COG OPERATING LLC**  
**HYDROGEN SULFIDE DRILLING OPERATIONS PLAN**

**1. HYDROGEN SULFIDE TRAINING**

All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will receive training from a qualified instructor in the following areas prior to commencing drilling operations on this well:

- a. The hazards and characteristics of hydrogen sulfide (H<sub>2</sub>S).
- b. The proper use and maintenance of personal protective equipment and life support systems.
- c. The proper use of H<sub>2</sub>S detectors, alarms, warning systems, briefing areas, evacuation procedures, and prevailing winds.
- d. The proper techniques for first aid and rescue procedures.

In addition, supervisory personnel will be trained in the following areas:

- a. The effects of H<sub>2</sub>S on metal components. If high tensile tubulars are to be used, personnel will be trained in their special maintenance requirements.
- b. Corrective action and shut-in procedures when drilling or reworking a well and blowout prevention and well control procedures.
- c. The contents and requirements of the H<sub>2</sub>S Drilling Operations Plan and the Public Protection Plan.

There will be an initial training session just prior to encountering a known or probable H<sub>2</sub>S zone (within 3 days or 500 feet) and weekly H<sub>2</sub>S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H<sub>2</sub>S Drilling Operations Plan and the Public Protection Plan. This plan shall be available at the well site. All personnel will be required to carry documentation that they have received the proper training.

**2. H<sub>2</sub>S SAFETY EQUIPMENT AND SYSTEMS**

Note: All H<sub>2</sub>S safety equipment and systems will be installed, tested, and operational when drilling reaches a depth of 500 feet above, or three days prior to penetrating the first zone containing or reasonably expected to contain H<sub>2</sub>S. If H<sub>2</sub>S greater than 100 ppm is encountered in the gas stream we will shut in and install H<sub>2</sub>S equipment.

- a. Well Control Equipment:
  - Flare line.
  - Choke manifold with remotely operated choke.
  - Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit.
  - Auxiliary equipment to include: annular preventer, mud-gas separator, rotating head.

- b. Protective equipment for essential personnel:  
Mark II Surviveair 30-minute units located in the dog house and at briefing areas.
- c. H2S detection and monitoring equipment:  
2 - portable H2S monitor positioned on location for best coverage and response. These units have warning lights and audible sirens when H2S levels of 20 ppm are reached.
- d. Visual warning systems:  
Caution/Danger signs shall be posted on roads providing direct access to location. Signs will be painted a high visibility yellow with black lettering of sufficient size to be readable at a reasonable distance from the immediate location. Bilingual signs will be used, when appropriate. See example attached.
- e. Mud Program:  
The mud program has been designed to minimize the volume of H2S circulated to the surface.
- f. Metallurgy:  
All drill strings, casings, tubing, wellhead, blowout preventers, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H2S service.
- g. Communication:  
Company vehicles equipped with cellular telephone.

COG OPERATING LLC has conducted a review to determine if an H2S contingency plan is required for the above referenced well. We were able to conclude that any potential hazardous volume would be minimal. H2S concentrations of wells in this area from surface to TD are low enough; therefore, we do not believe that an H2S contingency plan is necessary.

# WARNING

**YOU ARE ENTERING AN H<sub>2</sub>S AREA  
AUTHORIZED PERSONNEL ONLY**

- 1. BEARDS OR CONTACT LENSES NOT ALLOWED**
- 2. HARD HATS REQUIRED**
- 3. SMOKING IN DESIGNATED AREAS ONLY**
- 4. BE WIND CONSCIOUS AT ALL TIMES**
- 5. CK WITH COG OPERATING LLC FOREMAN AT MAIN OFFICE**

COG OPERATING LLC

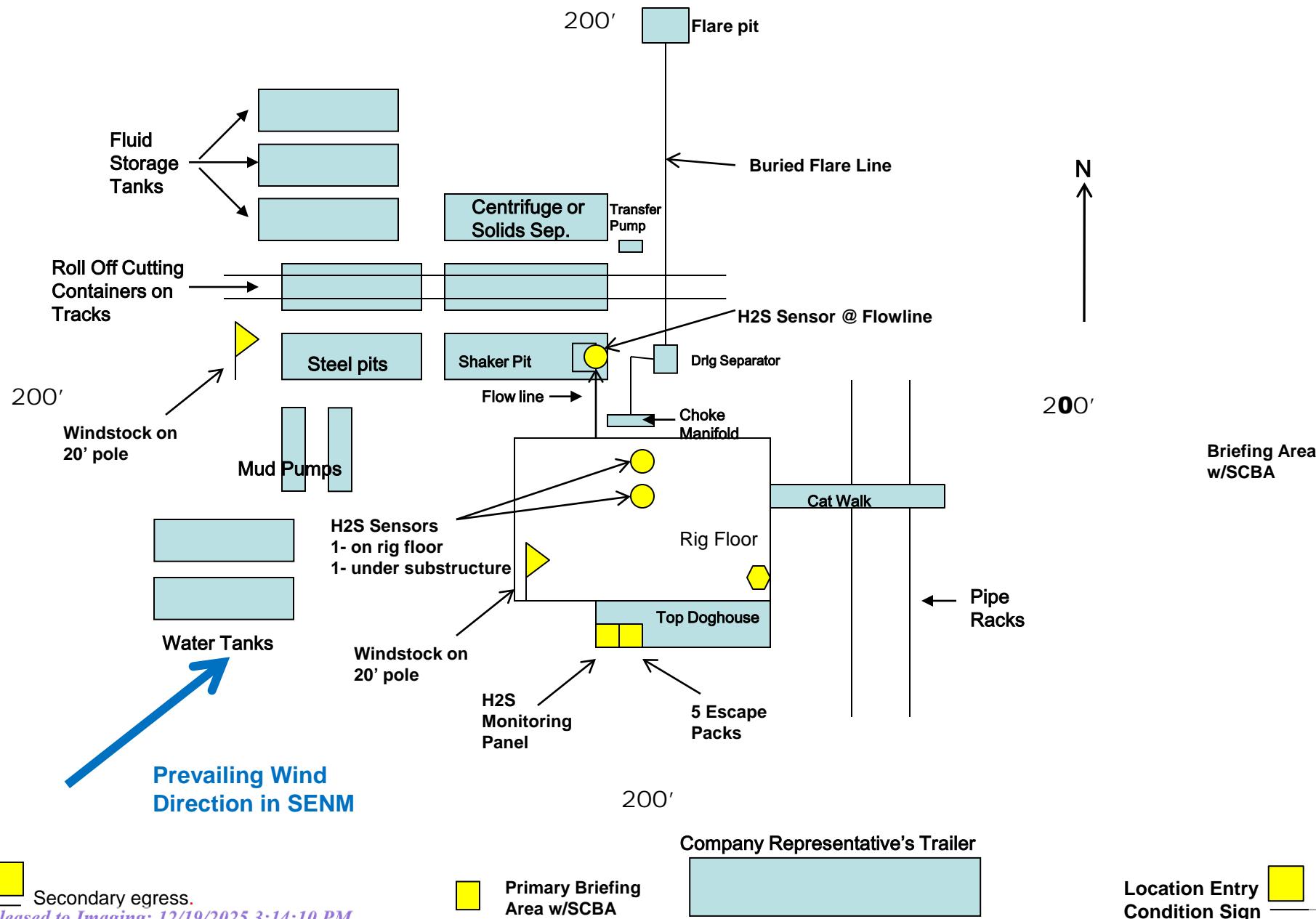
1-575-748-6940

## **EMERGENCY CALL LIST**

	<u>OFFICE</u>	<u>MOBILE</u>
COG OPERATING LLC OFFICE	575-748-6940	
Dallas Daley	432-818-2329	432-631-6977

## **EMERGENCY RESPONSE NUMBERS**

	<u>OFFICE</u>
STATE POLICE	575-748-9718
EDDY COUNTY SHERIFF	575-746-2701
EMERGENCY MEDICAL SERVICES (AMBULANCE)	911 or 575-746-2701
EDDY COUNTY EMERGENCY MANAGEMENT (HARRY BURGESS)	575-887-9511
STATE EMERGENCY RESPONSE CENTER (SERC)	575-476-9620
CARLSBAD POLICE DEPARTMENT	575-885-2111
CARLSBAD FIRE DEPARTMENT	575-885-3125
NEW MEXICO OIL CONSERVATION DIVISION	575-748-1283
INDIAN FIRE & SAFETY	800-530-8693
HALLIBURTON SERVICES	800-844-8451



# **DELAWARE BASIN EAST**

**ZIA HILLS UNIT AREA**

**ZIA HILLS UNIT 2832 PROJECT**

**\_ZIA HILLS UNIT 2832 WC 710H**

**OWB**

**PWP0**

## **Anticollision Report**

**22 April, 2025**

## ConocoPhillips

## Anticollision Report

<b>Company:</b>	DELAWARE BASIN EAST	<b>Local Co-ordinate Reference:</b>	Well_ZIA HILLS UNIT 2832 WC 710H
<b>Project:</b>	ZIA HILLS UNIT AREA	<b>TVD Reference:</b>	KB @ 3170.5usft
<b>Reference Site:</b>	ZIA HILLS UNIT 2832 PROJECT	<b>MD Reference:</b>	KB @ 3170.5usft
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	_ZIA HILLS UNIT 2832 WC 710H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.0 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OWB	<b>Database:</b>	EDT 17 Permian Prod
<b>Reference Design:</b>	PWP0	<b>Offset TVD Reference:</b>	Reference Datum

Reference	PWP0		
<b>Filter type:</b>	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
<b>Interpolation Method:</b>	MD + Stations Interval 100.0usft	<b>Error Model:</b>	ISCWSA
<b>Depth Range:</b>	Unlimited	<b>Scan Method:</b>	Closest Approach 3D
<b>Results Limited by:</b>	Max. Cent. Dist. of 1,000.0usft or Max. Ell. Sep. of 500.0usft	<b>Error Surface:</b>	Combined Pedal Curve
<b>Warning Levels Evaluated at:</b>	2.79 Sigma	<b>Casing Method:</b>	Added to Error Values

Survey Tool Program		Date	4/22/2025	
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.0	19,742.3	PWP0 (OWB)	r.5 MWD+IFR1	OWSG MWD + IFR1 rev.5

Summary							
Site Name	Offset Well - Wellbore - Design	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
ZIA HILLS UNIT 2832 PROJECT							
RED HILLS WEST 21 W0AP FEDERAL COM 003H - OW		11,925.0	16,633.2	189.2	63.1	1.501 Caution - Monitor Closely, ES, SF	
RED HILLS WEST 21 W0AP FEDERAL COM 003H - OW		11,934.4	16,638.5	189.1	63.4	1.505 Caution - Monitor Closely, CC	

Offset Design: ZIA HILLS UNIT 2832 PROJECT - RED HILLS WEST 21 W0AP FEDERAL COM 003H - OWB - AWP												Offset Site Error:	0.0 usft
Survey Program:	99-r.5 MWD											Offset Well Error:	3.0 usft
	Reference Measured Depth (usft)	Vertical Depth (usft)	Offset Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis (usft)	Reference Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N-S (usft)	+E-W (usft)	Rule Assigned: Distance Between Centres (usft)	Distance Between Ellipses (usft)	No-Go Distance (usft)	Separation Factor
11,000.0	10,920.5	16,564.5	11,835.3	28.2	87.0	95.11	841.3	-19.9	934.5	853.3	81.20	11.509	
11,100.0	11,020.5	16,562.3	11,835.4	28.3	87.0	94.44	843.5	-19.9	836.9	754.4	82.45	10.150	
11,200.0	11,120.5	16,560.2	11,835.4	28.3	87.0	93.83	845.6	-19.9	739.8	655.8	84.04	8.803	
11,300.0	11,220.5	16,558.3	11,835.4	28.4	86.9	93.26	847.5	-19.9	643.7	557.6	86.13	7.474	
11,400.0	11,320.5	16,556.6	11,835.4	28.4	86.9	92.73	849.2	-19.8	549.0	460.0	88.99	6.169	
11,500.0	11,420.5	16,554.9	11,835.5	28.5	86.9	92.24	850.9	-19.8	456.5	363.4	93.08	4.905	
11,600.0	11,520.5	16,553.4	11,835.5	28.5	86.9	91.78	852.4	-19.8	368.0	268.8	99.16	3.711	
11,635.0	11,555.5	16,552.9	11,835.5	28.5	86.9	91.62	852.9	-19.8	338.5	236.6	101.95	3.321	
11,650.0	11,570.5	16,552.9	11,835.5	28.5	86.9	-90.50	852.9	-19.8	326.2	222.9	103.27	3.159	
11,675.0	11,595.5	16,554.1	11,835.5	28.4	86.9	-94.11	851.7	-19.8	306.3	200.6	105.68	2.898 Normal Operations	
11,700.0	11,620.3	16,556.7	11,835.4	28.4	86.9	-96.88	849.1	-19.8	287.1	178.8	108.31	2.651 Normal Operations	
11,725.0	11,645.0	16,560.1	11,835.4	28.3	87.0	-99.03	845.7	-19.9	269.1	158.0	111.12	2.422 Caution - Monitor Closely	
11,750.0	11,669.4	16,564.9	11,835.3	28.2	87.0	-100.32	840.9	-19.9	252.3	138.2	114.09	2.211 Caution - Monitor Closely	
11,775.0	11,693.5	16,571.1	11,835.3	28.1	87.1	-100.88	834.7	-20.0	237.0	119.9	117.11	2.024 Caution - Monitor Closely	
11,800.0	11,717.3	16,578.4	11,835.2	28.0	87.2	-100.75	827.4	-20.0	223.4	103.4	120.04	1.861 Caution - Monitor Closely	
11,825.0	11,740.5	16,587.0	11,835.1	27.9	87.4	-99.94	818.8	-20.1	211.9	89.2	122.68	1.727 Caution - Monitor Closely	
11,850.0	11,763.3	16,596.8	11,835.0	27.8	87.5	-98.49	809.0	-20.1	202.6	77.8	124.79	1.624 Caution - Monitor Closely	
11,875.0	11,785.5	16,607.8	11,834.8	27.7	87.7	-96.44	798.0	-20.2	195.7	69.5	126.16	1.551 Caution - Monitor Closely	
11,900.0	11,807.1	16,619.9	11,834.7	27.6	87.9	-93.82	785.9	-20.2	191.2	64.6	126.62	1.510 Caution - Monitor Closely	
11,925.0	11,828.0	16,633.2	11,834.6	27.5	88.1	-90.70	772.6	-20.2	189.2	63.1	126.09	1.501 Caution - Monitor Closely, ES, SF	
11,934.4	11,835.7	16,638.5	11,834.5	27.4	88.2	-89.40	767.3	-20.2	189.1	63.4	125.65	1.505 Caution - Monitor Closely, CC	
11,950.0	11,848.2	16,648.0	11,834.5	27.4	88.3	-87.03	757.8	-20.2	189.5	64.8	124.69	1.520 Caution - Monitor Closely	
11,975.0	11,867.5	16,663.5	11,834.3	27.3	88.5	-83.13	742.3	-20.2	191.8	69.2	122.55	1.565 Caution - Monitor Closely	
12,000.0	11,886.0	16,680.6	11,834.3	27.2	88.8	-78.90	725.2	-20.2	195.7	75.7	119.97	1.631 Caution - Monitor Closely	
12,025.0	11,903.6	16,698.8	11,834.3	27.1	89.1	-74.58	707.0	-20.3	200.9	83.7	117.16	1.714 Caution - Monitor Closely	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

## ConocoPhillips

## Anticollision Report

<b>Company:</b>	DELAWARE BASIN EAST	<b>Local Co-ordinate Reference:</b>	Well_ZIA HILLS UNIT 2832 WC 710H
<b>Project:</b>	ZIA HILLS UNIT AREA	<b>TVD Reference:</b>	KB @ 3170.5usft
<b>Reference Site:</b>	ZIA HILLS UNIT 2832 PROJECT	<b>MD Reference:</b>	KB @ 3170.5usft
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	_ZIA HILLS UNIT 2832 WC 710H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.0 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OWB	<b>Database:</b>	EDT 17 Permian Prod
<b>Reference Design:</b>	PWP0	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design: ZIA HILLS UNIT 2832 PROJECT - RED HILLS WEST 21 W0AP FEDERAL COM 003H - OWB - AWP														Offset Site Error:	0.0 usft	
Survey Program: 99-r.5 MWD														Offset Well Error:	3.0 usft	
Measured Depth (usft)	Reference Vertical Depth (usft)	Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Reference (usft)	Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre		Rule Assigned:			Distance Between Centres (usft)	Distance Between Ellipses (usft)	No-Go Distance (usft)	Separation Factor	Warning
12,050.0	11,920.2	16,718.0	11,834.3	27.0	89.4	-70.32	687.8	-20.4	207.0	92.6	114.34	1.810	Caution - Monitor Closely			
12,075.0	11,935.8	16,738.3	11,834.5	26.9	89.7	-66.23	667.5	-20.5	213.6	102.0	111.65	1.913	Caution - Monitor Closely			
12,100.0	11,950.4	16,761.8	11,834.7	26.8	90.0	-62.08	644.0	-20.8	220.4	111.2	109.24	2.018	Caution - Monitor Closely			
12,125.0	11,963.9	16,783.0	11,835.0	26.8	90.3	-58.68	622.8	-21.2	227.2	120.2	107.00	2.123	Caution - Monitor Closely			
12,150.0	11,976.3	16,804.8	11,835.3	26.7	90.7	-55.62	601.0	-21.6	233.8	128.8	105.04	2.226	Caution - Monitor Closely			
12,175.0	11,987.5	16,820.0	11,835.5	26.6	90.9	-53.53	585.8	-21.9	240.2	137.0	103.23	2.327	Caution - Monitor Closely			
12,200.0	11,997.6	16,820.0	11,835.5	26.6	90.9	-52.77	585.8	-21.9	247.7	146.7	101.07	2.451	Caution - Monitor Closely			
12,225.0	12,006.4	16,820.0	11,835.5	26.5	90.9	-51.85	585.8	-21.9	256.8	158.1	98.75	2.601	Normal Operations			
12,250.0	12,014.0	16,820.0	11,835.5	26.5	90.9	-50.78	585.8	-21.9	267.2	170.9	96.33	2.774	Normal Operations			
12,275.0	12,020.4	16,820.0	11,835.5	26.5	90.9	-49.58	585.8	-21.9	278.7	184.8	93.88	2.969	Normal Operations			
12,300.0	12,025.4	16,820.0	11,835.5	26.4	90.9	-48.28	585.8	-21.9	291.2	199.7	91.46	3.184				
12,325.0	12,029.2	16,820.0	11,835.5	26.4	90.9	-46.88	585.8	-21.9	304.5	215.4	89.09	3.418				
12,350.0	12,031.7	16,820.0	11,835.5	26.4	90.9	-45.41	585.8	-21.9	318.6	231.8	86.80	3.670				
12,375.0	12,032.9	16,820.0	11,835.5	26.4	90.9	-43.90	585.8	-21.9	333.1	248.6	84.59	3.938				
12,385.0	12,033.0	16,820.0	11,835.5	26.4	90.9	-43.29	585.8	-21.9	339.1	255.4	83.73	4.050				
12,400.0	12,033.0	16,820.0	11,835.5	26.4	90.9	-43.28	585.8	-21.9	348.3	265.8	82.47	4.224				
12,500.0	12,033.0	16,820.0	11,835.5	26.4	90.9	-43.28	585.8	-21.9	418.4	343.3	75.05	5.575				
12,600.0	12,033.0	16,820.0	11,835.5	26.4	90.9	-43.27	585.8	-21.9	498.7	429.1	69.62	7.164				
12,700.0	12,033.0	16,820.0	11,835.5	26.4	90.9	-43.27	585.8	-21.9	585.2	519.4	65.85	8.887				
12,800.0	12,033.0	16,820.0	11,835.5	26.4	90.9	-43.25	585.8	-21.9	675.4	612.2	63.23	10.683				
12,900.0	12,033.0	16,820.0	11,835.5	26.5	90.9	-43.24	585.8	-21.9	768.1	706.7	61.37	12.516				
13,000.0	12,033.0	16,820.0	11,835.5	26.5	90.9	-43.23	585.8	-21.9	862.4	802.3	60.03	14.366				
13,100.0	12,033.0	16,820.0	11,835.5	26.5	90.9	-43.21	585.8	-21.9	957.8	898.8	59.03	16.225				

## ConocoPhillips

## Anticollision Report

<b>Company:</b>	DELAWARE BASIN EAST	<b>Local Co-ordinate Reference:</b>	Well_ZIA HILLS UNIT 2832 WC 710H
<b>Project:</b>	ZIA HILLS UNIT AREA	<b>TVD Reference:</b>	KB @ 3170.5usft
<b>Reference Site:</b>	ZIA HILLS UNIT 2832 PROJECT	<b>MD Reference:</b>	KB @ 3170.5usft
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	_ZIA HILLS UNIT 2832 WC 710H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.0 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OWB	<b>Database:</b>	EDT 17 Permian Prod
<b>Reference Design:</b>	PWP0	<b>Offset TVD Reference:</b>	Reference Datum

Reference Depths are relative to KB @ 3170.5usft

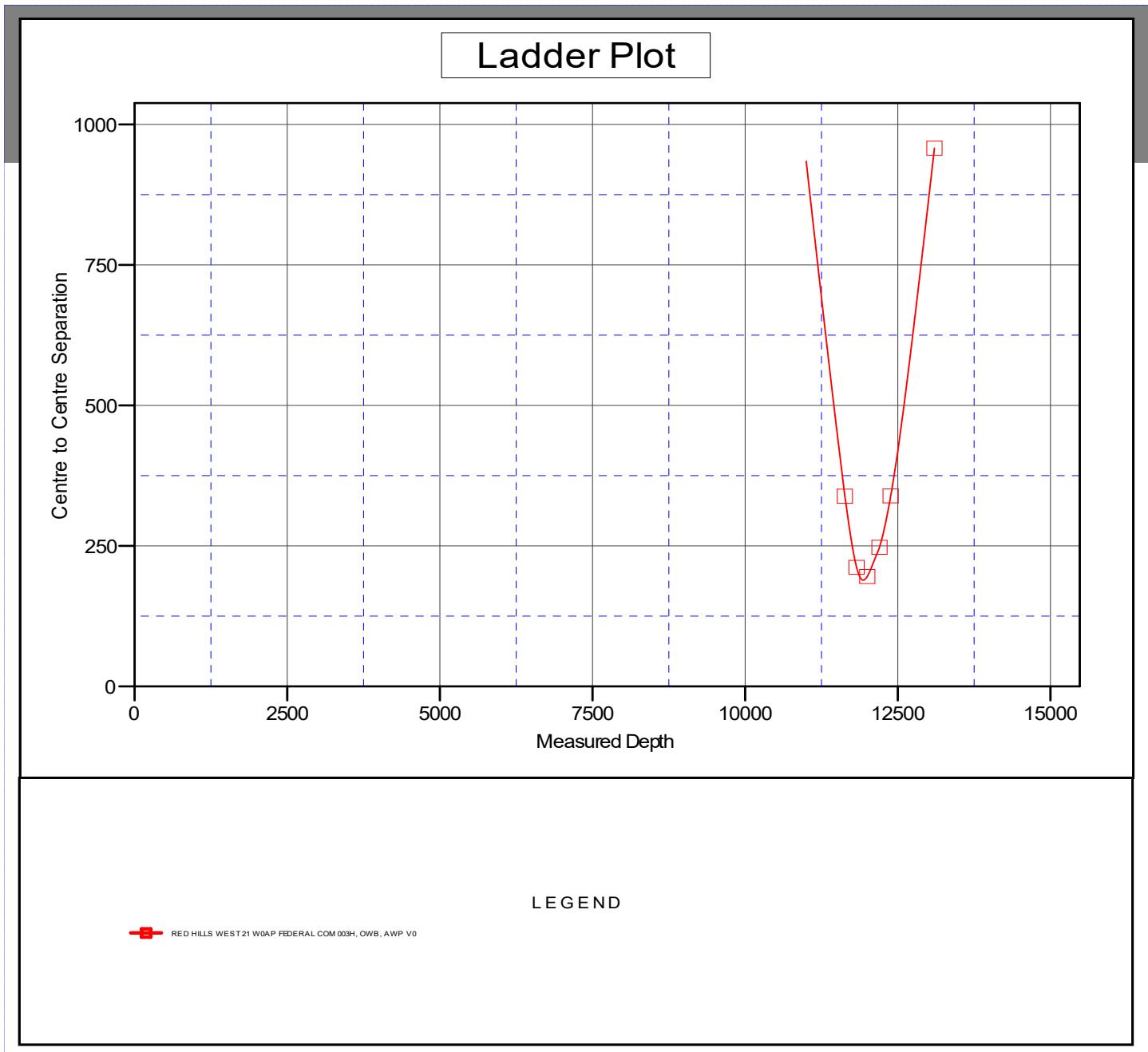
Coordinates are relative to: \_ZIA HILLS UNIT 2832 WC 710H

Offset Depths are relative to Offset Datum

Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 30

Central Meridian is 104° 20' 0.000 W

Grid Convergence at Surface is: 0.35°



## ConocoPhillips

## Anticollision Report

<b>Company:</b>	DELAWARE BASIN EAST	<b>Local Co-ordinate Reference:</b>	Well_ZIA HILLS UNIT 2832 WC 710H
<b>Project:</b>	ZIA HILLS UNIT AREA	<b>TVD Reference:</b>	KB @ 3170.5usft
<b>Reference Site:</b>	ZIA HILLS UNIT 2832 PROJECT	<b>MD Reference:</b>	KB @ 3170.5usft
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	_ZIA HILLS UNIT 2832 WC 710H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.0 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OWB	<b>Database:</b>	EDT 17 Permian Prod
<b>Reference Design:</b>	PWP0	<b>Offset TVD Reference:</b>	Reference Datum

Reference Depths are relative to KB @ 3170.5usft

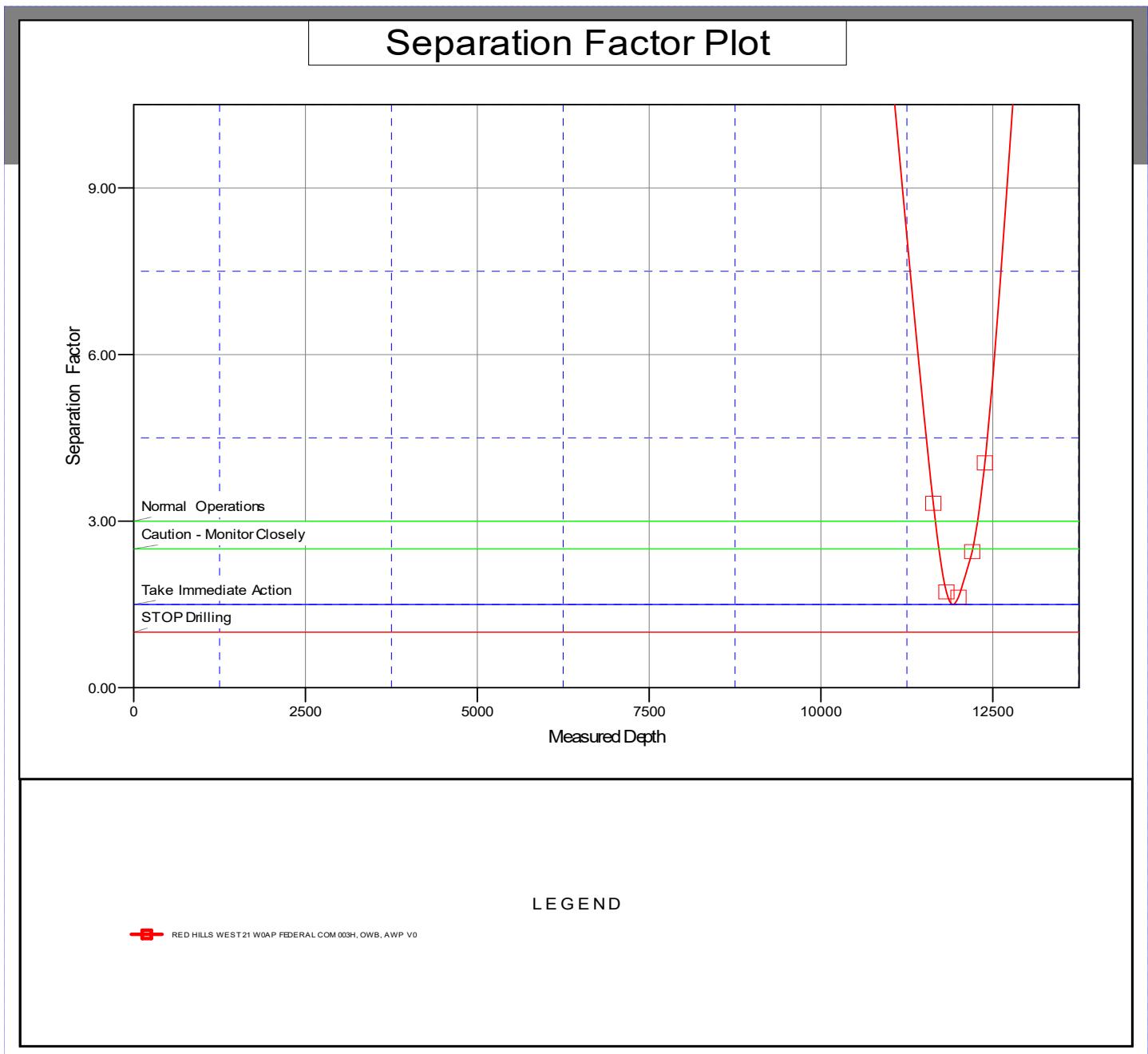
Coordinates are relative to: \_ZIA HILLS UNIT 2832 WC 710H

Offset Depths are relative to Offset Datum

Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 30

Central Meridian is 104° 20' 0.000 W

Grid Convergence at Surface is: 0.35°



# **DELAWARE BASIN EAST**

**ZIA HILLS UNIT AREA**  
**ZIA HILLS UNIT 2832 PROJECT**  
**\_ZIA HILLS UNIT 2832 WC 710H**

**OWB**

**Plan: PWP0**

# **Standard Planning Report**

**26 February, 2025**

## ConocoPhillips

## Planning Report

<b>Database:</b> <b>Company:</b> <b>Project:</b> <b>Site:</b> <b>Well:</b> <b>Wellbore:</b> <b>Design:</b>	EDT 17 Permian Prod DELAWARE BASIN EAST ZIA HILLS UNIT AREA ZIA HILLS UNIT 2832 PROJECT _ZIA HILLS UNIT 2832 WC 710H OWB PWP0	<b>Local Co-ordinate Reference:</b> <b>TVD Reference:</b> <b>MD Reference:</b> <b>North Reference:</b> <b>Survey Calculation Method:</b>	Well _ZIA HILLS UNIT 2832 WC 710H KB @ 3170.5usft KB @ 3170.5usft Grid Minimum Curvature
--	---	--	--

<b>Wellbore</b>	OWB				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination</b> (°)	<b>Dip Angle</b> (°)	<b>Field Strength</b> (nT)
	BGGM2024	10/16/2024	6.26	59.51	47,132.25477719

<b>Design</b>	PWP0			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD)</b> (usft)	<b>+N/S</b> (usft)	<b>+E/W</b> (usft)	<b>Direction</b> (°)
	0.0	0.0	0.0	181.30

<b>Plan Survey Tool Program</b>	<b>Date</b>	2/25/2025
<b>Depth From</b> (usft)	<b>Depth To</b> (usft)	<b>Survey (Wellbore)</b>
1	0.0	19,742.4 PWP0 (OWB)

r.5 MWD+IFR1  
OWSG MWD + IFR1 rev.5

<b>Plan Sections</b>										
<b>Measured Depth</b> (usft)	<b>Inclination</b> (°)	<b>Azimuth</b> (°)	<b>Vertical Depth</b> (usft)	<b>+N/S</b> (usft)	<b>+E/W</b> (usft)	<b>Dogleg Rate</b> (°/100usft)	<b>Build Rate</b> (°/100usft)	<b>Turn Rate</b> (°/100usft)	<b>TFO</b> (°)	<b>Target</b>
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	0.00
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.00	0.00	0.00	0.00	0.00
2,750.0	5.00	35.00	2,749.7	8.9	6.3	2.00	2.00	0.00	0.00	35.00
3,179.7	10.90	344.77	3,175.5	63.6	6.3	2.00	1.37	-11.69	-76.49	
6,989.7	10.90	344.77	6,916.8	758.6	-182.9	0.00	0.00	0.00	0.00	0.00
8,079.5	0.00	0.00	8,000.0	858.3	-210.0	1.00	-1.00	0.00	0.00	180.00
11,635.0	0.00	0.00	11,555.5	858.3	-210.0	0.00	0.00	0.00	0.00	0.00
12,385.0	90.00	179.55	12,033.0	380.8	-206.3	12.00	12.00	0.00	0.00	179.55
13,727.2	90.00	179.64	12,033.0	-961.3	-196.7	0.01	0.00	0.01	0.01	90.19
19,742.4	90.00	179.64	12,033.0	-6,976.4	-158.8	0.00	0.00	0.00	0.00	0.00

## ConocoPhillips

## Planning Report

Database:	EDT 17 Permian Prod	Local Co-ordinate Reference:	Well_ZIA HILLS UNIT 2832 WC 710H
Company:	DELAWARE BASIN EAST	TVD Reference:	KB @ 3170.5usft
Project:	ZIA HILLS UNIT AREA	MD Reference:	KB @ 3170.5usft
Site:	ZIA HILLS UNIT 2832 PROJECT	North Reference:	Grid
Well:	_ZIA HILLS UNIT 2832 WC 710H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

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)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00
2,600.0	2.00	35.00	2,600.0	1.4	1.0	-1.5	2.00	2.00	0.00
2,700.0	4.00	35.00	2,699.8	5.7	4.0	-5.8	2.00	2.00	0.00
2,750.0	5.00	35.00	2,749.7	8.9	6.3	-9.1	2.00	2.00	0.00
2,800.0	5.32	24.46	2,799.5	12.8	8.5	-13.0	2.00	0.65	-21.08
2,900.0	6.40	7.85	2,899.0	22.6	11.1	-22.8	2.00	1.08	-16.61
3,000.0	7.85	356.65	2,998.2	34.9	11.5	-35.2	2.00	1.45	-11.20
3,100.0	9.50	349.11	3,097.0	49.8	9.5	-50.0	2.00	1.65	-7.54
3,179.7	10.90	344.77	3,175.5	63.6	6.3	-63.7	2.00	1.75	-5.44
3,200.0	10.90	344.77	3,195.4	67.3	5.3	-67.4	0.00	0.00	0.00
3,300.0	10.90	344.77	3,293.6	85.5	0.4	-85.5	0.00	0.00	0.00
3,400.0	10.90	344.77	3,391.8	103.8	-4.6	-103.6	0.00	0.00	0.00
3,500.0	10.90	344.77	3,490.0	122.0	-9.6	-121.7	0.00	0.00	0.00
3,600.0	10.90	344.77	3,588.2	140.2	-14.5	-139.9	0.00	0.00	0.00
3,700.0	10.90	344.77	3,686.4	158.5	-19.5	-158.0	0.00	0.00	0.00
3,800.0	10.90	344.77	3,784.6	176.7	-24.5	-176.1	0.00	0.00	0.00
3,900.0	10.90	344.77	3,882.8	195.0	-29.4	-194.2	0.00	0.00	0.00
4,000.0	10.90	344.77	3,981.0	213.2	-34.4	-212.4	0.00	0.00	0.00
4,100.0	10.90	344.77	4,079.2	231.4	-39.4	-230.5	0.00	0.00	0.00
4,200.0	10.90	344.77	4,177.4	249.7	-44.3	-248.6	0.00	0.00	0.00
4,300.0	10.90	344.77	4,275.6	267.9	-49.3	-266.7	0.00	0.00	0.00
4,400.0	10.90	344.77	4,373.8	286.2	-54.3	-284.9	0.00	0.00	0.00
4,500.0	10.90	344.77	4,472.0	304.4	-59.2	-303.0	0.00	0.00	0.00
4,600.0	10.90	344.77	4,570.2	322.7	-64.2	-321.1	0.00	0.00	0.00
4,700.0	10.90	344.77	4,668.4	340.9	-69.2	-339.2	0.00	0.00	0.00
4,800.0	10.90	344.77	4,766.6	359.1	-74.1	-357.4	0.00	0.00	0.00
4,900.0	10.90	344.77	4,864.8	377.4	-79.1	-375.5	0.00	0.00	0.00
5,000.0	10.90	344.77	4,963.0	395.6	-84.1	-393.6	0.00	0.00	0.00
5,100.0	10.90	344.77	5,061.2	413.9	-89.0	-411.7	0.00	0.00	0.00

## ConocoPhillips

## Planning Report

<b>Database:</b> <b>Company:</b> <b>Project:</b> <b>Site:</b> <b>Well:</b> <b>Wellbore:</b> <b>Design:</b>	EDT 17 Permian Prod DELAWARE BASIN EAST ZIA HILLS UNIT AREA ZIA HILLS UNIT 2832 PROJECT _ZIA HILLS UNIT 2832 WC 710H OWB PWP0	<b>Local Co-ordinate Reference:</b> <b>TVD Reference:</b> <b>MD Reference:</b> <b>North Reference:</b> <b>Survey Calculation Method:</b>	Well _ZIA HILLS UNIT 2832 WC 710H KB @ 3170.5usft KB @ 3170.5usft Grid Minimum Curvature
--	---	--	--

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)	
5,200.0	10.90	344.77	5,159.4	432.1	-94.0	-429.9	0.00	0.00	0.00	
5,300.0	10.90	344.77	5,257.6	450.4	-99.0	-448.0	0.00	0.00	0.00	
5,400.0	10.90	344.77	5,355.7	468.6	-103.9	-466.1	0.00	0.00	0.00	
5,500.0	10.90	344.77	5,453.9	486.8	-108.9	-484.2	0.00	0.00	0.00	
5,600.0	10.90	344.77	5,552.1	505.1	-113.9	-502.4	0.00	0.00	0.00	
5,700.0	10.90	344.77	5,650.3	523.3	-118.8	-520.5	0.00	0.00	0.00	
5,800.0	10.90	344.77	5,748.5	541.6	-123.8	-538.6	0.00	0.00	0.00	
5,900.0	10.90	344.77	5,846.7	559.8	-128.8	-556.7	0.00	0.00	0.00	
6,000.0	10.90	344.77	5,944.9	578.1	-133.7	-574.9	0.00	0.00	0.00	
6,100.0	10.90	344.77	6,043.1	596.3	-138.7	-593.0	0.00	0.00	0.00	
6,200.0	10.90	344.77	6,141.3	614.5	-143.6	-611.1	0.00	0.00	0.00	
6,300.0	10.90	344.77	6,239.5	632.8	-148.6	-629.2	0.00	0.00	0.00	
6,400.0	10.90	344.77	6,337.7	651.0	-153.6	-647.4	0.00	0.00	0.00	
6,500.0	10.90	344.77	6,435.9	669.3	-158.5	-665.5	0.00	0.00	0.00	
6,600.0	10.90	344.77	6,534.1	687.5	-163.5	-683.6	0.00	0.00	0.00	
6,700.0	10.90	344.77	6,632.3	705.8	-168.5	-701.7	0.00	0.00	0.00	
6,800.0	10.90	344.77	6,730.5	724.0	-173.4	-719.9	0.00	0.00	0.00	
6,900.0	10.90	344.77	6,828.7	742.2	-178.4	-738.0	0.00	0.00	0.00	
6,989.7	10.90	344.77	6,916.8	758.6	-182.9	-754.2	0.00	0.00	0.00	
7,000.0	10.79	344.77	6,926.9	760.5	-183.4	-756.1	1.00	-1.00	0.00	
7,100.0	9.79	344.77	7,025.3	777.7	-188.1	-773.2	1.00	-1.00	0.00	
7,200.0	8.79	344.77	7,124.0	793.3	-192.3	-788.7	1.00	-1.00	0.00	
7,300.0	7.79	344.77	7,222.9	807.2	-196.1	-802.5	1.00	-1.00	0.00	
7,400.0	6.79	344.77	7,322.1	819.5	-199.4	-814.7	1.00	-1.00	0.00	
7,500.0	5.79	344.77	7,421.5	830.0	-202.3	-825.2	1.00	-1.00	0.00	
7,600.0	4.79	344.77	7,521.1	839.0	-204.7	-834.1	1.00	-1.00	0.00	
7,700.0	3.79	344.77	7,620.8	846.2	-206.7	-841.3	1.00	-1.00	0.00	
7,800.0	2.79	344.77	7,720.6	851.7	-208.2	-846.8	1.00	-1.00	0.00	
7,900.0	1.79	344.77	7,820.5	855.6	-209.3	-850.6	1.00	-1.00	0.00	
8,000.0	0.79	344.77	7,920.5	857.8	-209.9	-852.8	1.00	-1.00	0.00	
8,079.5	0.00	0.00	8,000.0	858.3	-210.0	-853.3	1.00	-1.00	0.00	
8,100.0	0.00	0.00	8,020.5	858.3	-210.0	-853.3	0.00	0.00	0.00	
8,200.0	0.00	0.00	8,120.5	858.3	-210.0	-853.3	0.00	0.00	0.00	
8,300.0	0.00	0.00	8,220.5	858.3	-210.0	-853.3	0.00	0.00	0.00	
8,400.0	0.00	0.00	8,320.5	858.3	-210.0	-853.3	0.00	0.00	0.00	
8,500.0	0.00	0.00	8,420.5	858.3	-210.0	-853.3	0.00	0.00	0.00	
8,600.0	0.00	0.00	8,520.5	858.3	-210.0	-853.3	0.00	0.00	0.00	
8,700.0	0.00	0.00	8,620.5	858.3	-210.0	-853.3	0.00	0.00	0.00	
8,800.0	0.00	0.00	8,720.5	858.3	-210.0	-853.3	0.00	0.00	0.00	
8,900.0	0.00	0.00	8,820.5	858.3	-210.0	-853.3	0.00	0.00	0.00	
9,000.0	0.00	0.00	8,920.5	858.3	-210.0	-853.3	0.00	0.00	0.00	
9,100.0	0.00	0.00	9,020.5	858.3	-210.0	-853.3	0.00	0.00	0.00	
9,200.0	0.00	0.00	9,120.5	858.3	-210.0	-853.3	0.00	0.00	0.00	
9,300.0	0.00	0.00	9,220.5	858.3	-210.0	-853.3	0.00	0.00	0.00	
9,400.0	0.00	0.00	9,320.5	858.3	-210.0	-853.3	0.00	0.00	0.00	
9,500.0	0.00	0.00	9,420.5	858.3	-210.0	-853.3	0.00	0.00	0.00	
9,600.0	0.00	0.00	9,520.5	858.3	-210.0	-853.3	0.00	0.00	0.00	
9,700.0	0.00	0.00	9,620.5	858.3	-210.0	-853.3	0.00	0.00	0.00	
9,800.0	0.00	0.00	9,720.5	858.3	-210.0	-853.3	0.00	0.00	0.00	
9,900.0	0.00	0.00	9,820.5	858.3	-210.0	-853.3	0.00	0.00	0.00	
10,000.0	0.00	0.00	9,920.5	858.3	-210.0	-853.3	0.00	0.00	0.00	
10,100.0	0.00	0.00	10,020.5	858.3	-210.0	-853.3	0.00	0.00	0.00	
10,200.0	0.00	0.00	10,120.5	858.3	-210.0	-853.3	0.00	0.00	0.00	
10,300.0	0.00	0.00	10,220.5	858.3	-210.0	-853.3	0.00	0.00	0.00	

## ConocoPhillips

## Planning Report

<b>Database:</b> <b>Company:</b> <b>Project:</b> <b>Site:</b> <b>Well:</b> <b>Wellbore:</b> <b>Design:</b>	EDT 17 Permian Prod DELAWARE BASIN EAST ZIA HILLS UNIT AREA ZIA HILLS UNIT 2832 PROJECT _ZIA HILLS UNIT 2832 WC 710H OWB PWP0	<b>Local Co-ordinate Reference:</b> <b>TVD Reference:</b> <b>MD Reference:</b> <b>North Reference:</b> <b>Survey Calculation Method:</b>	Well _ZIA HILLS UNIT 2832 WC 710H KB @ 3170.5usft KB @ 3170.5usft Grid Minimum Curvature
--	---	--	--

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)	
10,400.0	0.00	0.00	10,320.5	858.3	-210.0	-853.3	0.00	0.00	0.00	
10,500.0	0.00	0.00	10,420.5	858.3	-210.0	-853.3	0.00	0.00	0.00	
10,600.0	0.00	0.00	10,520.5	858.3	-210.0	-853.3	0.00	0.00	0.00	
10,700.0	0.00	0.00	10,620.5	858.3	-210.0	-853.3	0.00	0.00	0.00	
10,800.0	0.00	0.00	10,720.5	858.3	-210.0	-853.3	0.00	0.00	0.00	
10,900.0	0.00	0.00	10,820.5	858.3	-210.0	-853.3	0.00	0.00	0.00	
11,000.0	0.00	0.00	10,920.5	858.3	-210.0	-853.3	0.00	0.00	0.00	
11,100.0	0.00	0.00	11,020.5	858.3	-210.0	-853.3	0.00	0.00	0.00	
11,200.0	0.00	0.00	11,120.5	858.3	-210.0	-853.3	0.00	0.00	0.00	
11,300.0	0.00	0.00	11,220.5	858.3	-210.0	-853.3	0.00	0.00	0.00	
11,400.0	0.00	0.00	11,320.5	858.3	-210.0	-853.3	0.00	0.00	0.00	
11,500.0	0.00	0.00	11,420.5	858.3	-210.0	-853.3	0.00	0.00	0.00	
11,600.0	0.00	0.00	11,520.5	858.3	-210.0	-853.3	0.00	0.00	0.00	
11,635.0	0.00	0.00	11,555.5	858.3	-210.0	-853.3	0.00	0.00	0.00	
11,700.0	7.80	179.55	11,620.3	853.9	-210.0	-848.9	12.00	12.00	0.00	
11,800.0	19.80	179.55	11,717.3	830.1	-209.8	-825.1	12.00	12.00	0.00	
11,900.0	31.80	179.55	11,807.1	786.6	-209.4	-781.7	12.00	12.00	0.00	
12,000.0	43.80	179.55	11,886.0	725.4	-209.0	-720.5	12.00	12.00	0.00	
12,100.0	55.80	179.55	11,950.4	649.2	-208.4	-644.3	12.00	12.00	0.00	
12,200.0	67.80	179.55	11,997.6	561.2	-207.7	-556.4	12.00	12.00	0.00	
12,300.0	79.80	179.55	12,025.4	465.4	-206.9	-460.6	12.00	12.00	0.00	
12,385.0	90.00	179.55	12,033.0	380.8	-206.3	-376.1	12.00	12.00	0.00	
12,400.0	90.00	179.55	12,033.0	365.8	-206.1	-361.0	0.01	0.00	0.01	
12,500.0	90.00	179.56	12,033.0	265.8	-205.4	-261.1	0.01	0.00	0.01	
12,600.0	90.00	179.56	12,033.0	165.8	-204.6	-161.1	0.01	0.00	0.01	
12,700.0	90.00	179.57	12,033.0	65.8	-203.8	-61.2	0.01	0.00	0.01	
12,800.0	90.00	179.58	12,033.0	-34.2	-203.1	38.8	0.01	0.00	0.01	
12,900.0	90.00	179.58	12,033.0	-134.2	-202.4	138.7	0.01	0.00	0.01	
13,000.0	90.00	179.59	12,033.0	-234.2	-201.6	238.7	0.01	0.00	0.01	
13,100.0	90.00	179.60	12,033.0	-334.1	-200.9	338.6	0.01	0.00	0.01	
13,200.0	90.00	179.60	12,033.0	-434.1	-200.2	438.6	0.01	0.00	0.01	
13,300.0	90.00	179.61	12,033.0	-534.1	-199.5	538.5	0.01	0.00	0.01	
13,400.0	90.00	179.62	12,033.0	-634.1	-198.9	638.5	0.01	0.00	0.01	
13,500.0	90.00	179.62	12,033.0	-734.1	-198.2	738.5	0.01	0.00	0.01	
13,600.0	90.00	179.63	12,033.0	-834.1	-197.6	838.4	0.01	0.00	0.01	
13,700.0	90.00	179.64	12,033.0	-934.1	-196.9	938.4	0.01	0.00	0.01	
13,727.2	90.00	179.64	12,033.0	-961.3	-196.7	965.5	0.01	0.00	0.01	
13,800.0	90.00	179.64	12,033.0	-1,034.1	-196.3	1,038.3	0.00	0.00	0.00	
13,900.0	90.00	179.64	12,033.0	-1,134.1	-195.7	1,138.3	0.00	0.00	0.00	
14,000.0	90.00	179.64	12,033.0	-1,234.1	-195.0	1,238.2	0.00	0.00	0.00	
14,100.0	90.00	179.64	12,033.0	-1,334.1	-194.4	1,338.2	0.00	0.00	0.00	
14,200.0	90.00	179.64	12,033.0	-1,434.1	-193.8	1,438.2	0.00	0.00	0.00	
14,300.0	90.00	179.64	12,033.0	-1,534.1	-193.1	1,538.1	0.00	0.00	0.00	
14,400.0	90.00	179.64	12,033.0	-1,634.1	-192.5	1,638.1	0.00	0.00	0.00	
14,500.0	90.00	179.64	12,033.0	-1,734.1	-191.9	1,738.0	0.00	0.00	0.00	
14,600.0	90.00	179.64	12,033.0	-1,834.1	-191.2	1,838.0	0.00	0.00	0.00	
14,700.0	90.00	179.64	12,033.0	-1,934.1	-190.6	1,938.0	0.00	0.00	0.00	
14,800.0	90.00	179.64	12,033.0	-2,034.1	-190.0	2,037.9	0.00	0.00	0.00	
14,900.0	90.00	179.64	12,033.0	-2,134.1	-189.4	2,137.9	0.00	0.00	0.00	
15,000.0	90.00	179.64	12,033.0	-2,234.1	-188.7	2,237.8	0.00	0.00	0.00	
15,100.0	90.00	179.64	12,033.0	-2,334.1	-188.1	2,337.8	0.00	0.00	0.00	
15,200.0	90.00	179.64	12,033.0	-2,434.1	-187.5	2,437.7	0.00	0.00	0.00	
15,300.0	90.00	179.64	12,033.0	-2,534.1	-186.8	2,537.7	0.00	0.00	0.00	
15,400.0	90.00	179.64	12,033.0	-2,634.1	-186.2	2,637.7	0.00	0.00	0.00	

## ConocoPhillips

## Planning Report

<b>Database:</b> <b>Company:</b> <b>Project:</b> <b>Site:</b> <b>Well:</b> <b>Wellbore:</b> <b>Design:</b>	EDT 17 Permian Prod DELAWARE BASIN EAST ZIA HILLS UNIT AREA ZIA HILLS UNIT 2832 PROJECT _ZIA HILLS UNIT 2832 WC 710H OWB PWP0	<b>Local Co-ordinate Reference:</b> <b>TVD Reference:</b> <b>MD Reference:</b> <b>North Reference:</b> <b>Survey Calculation Method:</b>	Well _ZIA HILLS UNIT 2832 WC 710H KB @ 3170.5usft KB @ 3170.5usft Grid Minimum Curvature
--	---	--	--

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)
15,500.0	90.00	179.64	12,033.0	-2,734.1	-185.6	2,737.6	0.00	0.00	0.00
15,600.0	90.00	179.64	12,033.0	-2,834.1	-184.9	2,837.6	0.00	0.00	0.00
15,700.0	90.00	179.64	12,033.0	-2,934.1	-184.3	2,937.5	0.00	0.00	0.00
15,800.0	90.00	179.64	12,033.0	-3,034.1	-183.7	3,037.5	0.00	0.00	0.00
15,900.0	90.00	179.64	12,033.0	-3,134.1	-183.1	3,137.4	0.00	0.00	0.00
16,000.0	90.00	179.64	12,033.0	-3,234.1	-182.4	3,237.4	0.00	0.00	0.00
16,100.0	90.00	179.64	12,033.0	-3,334.1	-181.8	3,337.4	0.00	0.00	0.00
16,200.0	90.00	179.64	12,033.0	-3,434.1	-181.2	3,437.3	0.00	0.00	0.00
16,300.0	90.00	179.64	12,033.0	-3,534.1	-180.5	3,537.3	0.00	0.00	0.00
16,400.0	90.00	179.64	12,033.0	-3,634.1	-179.9	3,637.2	0.00	0.00	0.00
16,500.0	90.00	179.64	12,033.0	-3,734.1	-179.3	3,737.2	0.00	0.00	0.00
16,600.0	90.00	179.64	12,033.0	-3,834.1	-178.6	3,837.1	0.00	0.00	0.00
16,700.0	90.00	179.64	12,033.0	-3,934.1	-178.0	3,937.1	0.00	0.00	0.00
16,800.0	90.00	179.64	12,033.0	-4,034.1	-177.4	4,037.1	0.00	0.00	0.00
16,900.0	90.00	179.64	12,033.0	-4,134.1	-176.7	4,137.0	0.00	0.00	0.00
17,000.0	90.00	179.64	12,033.0	-4,234.1	-176.1	4,237.0	0.00	0.00	0.00
17,100.0	90.00	179.64	12,033.0	-4,334.1	-175.5	4,336.9	0.00	0.00	0.00
17,200.0	90.00	179.64	12,033.0	-4,434.1	-174.9	4,436.9	0.00	0.00	0.00
17,300.0	90.00	179.64	12,033.0	-4,534.1	-174.2	4,536.9	0.00	0.00	0.00
17,400.0	90.00	179.64	12,033.0	-4,634.1	-173.6	4,636.8	0.00	0.00	0.00
17,500.0	90.00	179.64	12,033.0	-4,734.1	-173.0	4,736.8	0.00	0.00	0.00
17,600.0	90.00	179.64	12,033.0	-4,834.1	-172.3	4,836.7	0.00	0.00	0.00
17,700.0	90.00	179.64	12,033.0	-4,934.1	-171.7	4,936.7	0.00	0.00	0.00
17,800.0	90.00	179.64	12,033.0	-5,034.1	-171.1	5,036.6	0.00	0.00	0.00
17,900.0	90.00	179.64	12,033.0	-5,134.1	-170.4	5,136.6	0.00	0.00	0.00
18,000.0	90.00	179.64	12,033.0	-5,234.0	-169.8	5,236.6	0.00	0.00	0.00
18,100.0	90.00	179.64	12,033.0	-5,334.0	-169.2	5,336.5	0.00	0.00	0.00
18,200.0	90.00	179.64	12,033.0	-5,434.0	-168.6	5,436.5	0.00	0.00	0.00
18,300.0	90.00	179.64	12,033.0	-5,534.0	-167.9	5,536.4	0.00	0.00	0.00
18,400.0	90.00	179.64	12,033.0	-5,634.0	-167.3	5,636.4	0.00	0.00	0.00
18,500.0	90.00	179.64	12,033.0	-5,734.0	-166.7	5,736.3	0.00	0.00	0.00
18,600.0	90.00	179.64	12,033.0	-5,834.0	-166.0	5,836.3	0.00	0.00	0.00
18,700.0	90.00	179.64	12,033.0	-5,934.0	-165.4	5,936.3	0.00	0.00	0.00
18,800.0	90.00	179.64	12,033.0	-6,034.0	-164.8	6,036.2	0.00	0.00	0.00
18,900.0	90.00	179.64	12,033.0	-6,134.0	-164.1	6,136.2	0.00	0.00	0.00
19,000.0	90.00	179.64	12,033.0	-6,234.0	-163.5	6,236.1	0.00	0.00	0.00
19,100.0	90.00	179.64	12,033.0	-6,334.0	-162.9	6,336.1	0.00	0.00	0.00
19,200.0	90.00	179.64	12,033.0	-6,434.0	-162.2	6,436.1	0.00	0.00	0.00
19,300.0	90.00	179.64	12,033.0	-6,534.0	-161.6	6,536.0	0.00	0.00	0.00
19,400.0	90.00	179.64	12,033.0	-6,634.0	-161.0	6,636.0	0.00	0.00	0.00
19,500.0	90.00	179.64	12,033.0	-6,734.0	-160.4	6,735.9	0.00	0.00	0.00
19,600.0	90.00	179.64	12,033.0	-6,834.0	-159.7	6,835.9	0.00	0.00	0.00
19,700.0	90.00	179.64	12,033.0	-6,934.0	-159.1	6,935.8	0.00	0.00	0.00
19,742.4	90.00	179.64	12,033.0	-6,976.4	-158.8	6,978.2	0.00	0.00	0.00

## ConocoPhillips

## Planning Report

<b>Database:</b> <b>Company:</b> <b>Project:</b> <b>Site:</b> <b>Well:</b> <b>Wellbore:</b> <b>Design:</b>	EDT 17 Permian Prod DELAWARE BASIN EAST ZIA HILLS UNIT AREA ZIA HILLS UNIT 2832 PROJECT _ZIA HILLS UNIT 2832 WC 710H OWB PWP0	<b>Local Co-ordinate Reference:</b> <b>TVD Reference:</b> <b>MD Reference:</b> <b>North Reference:</b> <b>Survey Calculation Method:</b>	Well _ZIA HILLS UNIT 2832 WC 710H KB @ 3170.5usft KB @ 3170.5usft Grid Minimum Curvature
--	---	--	--

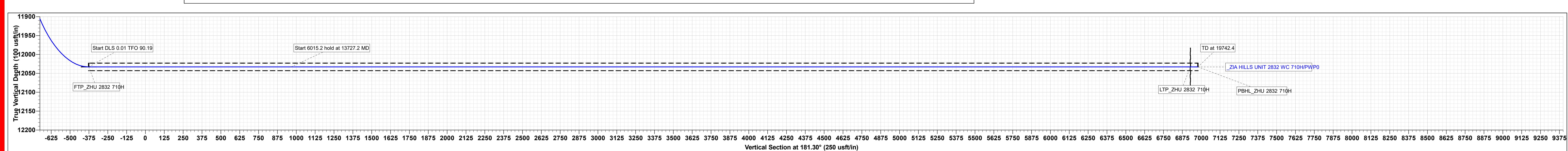
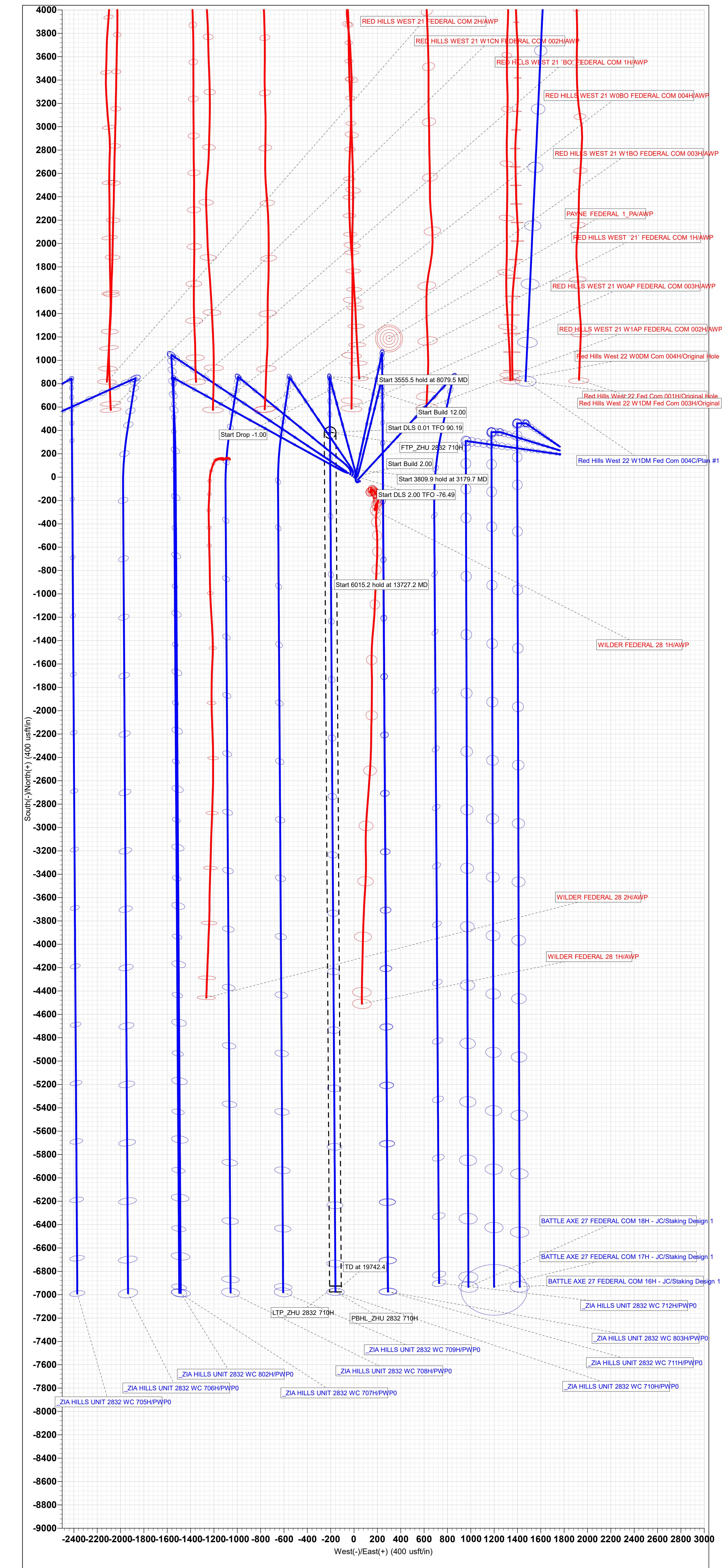
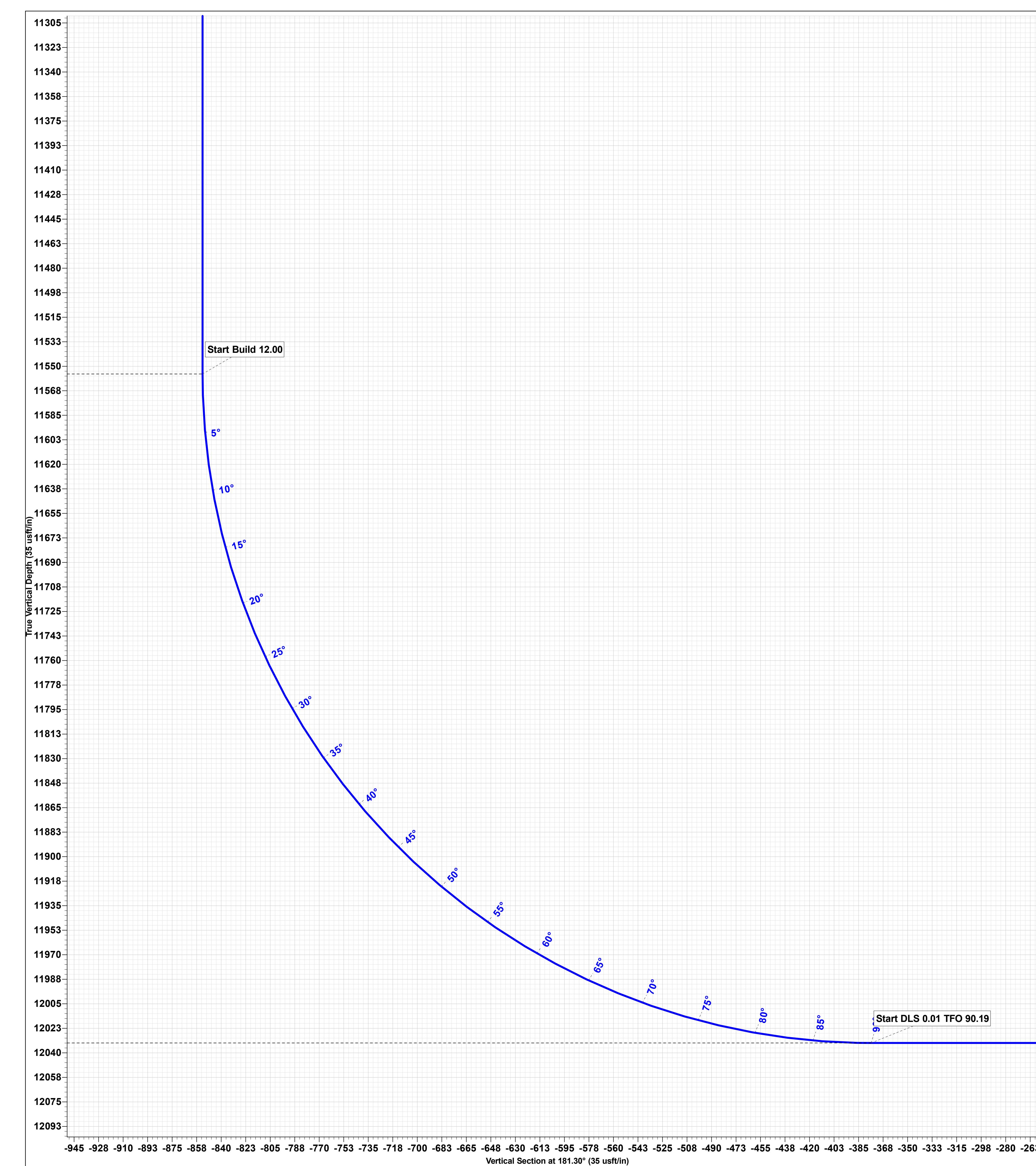
Design Targets										
Target Name	- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/S	+E/W	Northing	Easting	Latitude	Longitude
	- Shape	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
PBHL_ZHU 2832 710H	- hit/miss target	0.00	359.64	12,033.0	-6,976.4	-158.8	364,435.62	704,176.70	32° 0' 0.854 N	103° 40' 28.892 W
	- Shape									
	- plan hits target center									
	- Rectangle (sides W100.0 H7,357.7 D20.0)									
FTP_ZHU 2832 710H	- hit/miss target	0.00	0.00	12,033.0	380.8	-204.6	371,792.78	704,130.96	32° 1' 13.664 N	103° 40' 28.903 W
	- Shape									
	- plan misses target center by 1.7usft at 12385.1usft MD (12033.0 TVD, 380.8 N, -206.2 E)									
	- Circle (radius 50.0)									
LTP_ZHU 2832 710H	- hit/miss target	90.00	0.00	12,033.0	-6,926.4	-158.8	364,485.62	704,176.70	32° 0' 1.349 N	103° 40' 28.888 W
	- Shape									
	- plan misses target center by 0.3usft at 19692.4usft MD (12033.0 TVD, -6926.4 N, -159.1 E)									
	- Circle (radius 50.0)									

Casing Points						
Measured Depth (usft)	Vertical Depth (usft)	Name			Casing Diameter ("")	Hole Diameter ("")
19,742.4	12,033.0	5-1/2" Protective Casing			5-1/2	6



**Project: ZIA HILLS UNIT AREA**  
**Site: ZIA HILLS UNIT 2832 PRO**  
**Well: \_ZIA HILLS UNIT 2832 WO**  
**Wellbore: OWB**  
**Permit: PWRS**

SECTION DETAILS									
MD	Inc	Azi	TVD	+N/S	+E/W	Dleg	TFace	VSect	
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2500.0	0.00	0.00	2500.0	0.0	0.0	0.00	0.00	0.0	
2750.0	5.00	35.00	2749.7	8.9	6.3	2.00	35.00	-9.1	
3179.7	10.90	344.77	3175.5	63.6	6.3	2.00	-76.49	-63.7	
6989.7	10.90	344.77	6916.8	758.6	-182.9	0.00	0.00	-754.2	
8079.5	0.00	0.00	8000.0	858.3	-210.0	1.00	180.00	-853.3	
11635.0	0.00	0.00	11555.5	858.3	-210.0	0.00	0.00	-853.3	
12385.0	90.00	179.55	12033.0	380.8	-206.3	12.00	179.55	-376.1	
13727.2	90.00	179.64	12033.0	-961.3	-196.7	0.01	90.19	965.5	
19742.4	90.00	179.64	12033.0	-6976.4	-158.8	0.00	0.00	6978.2	



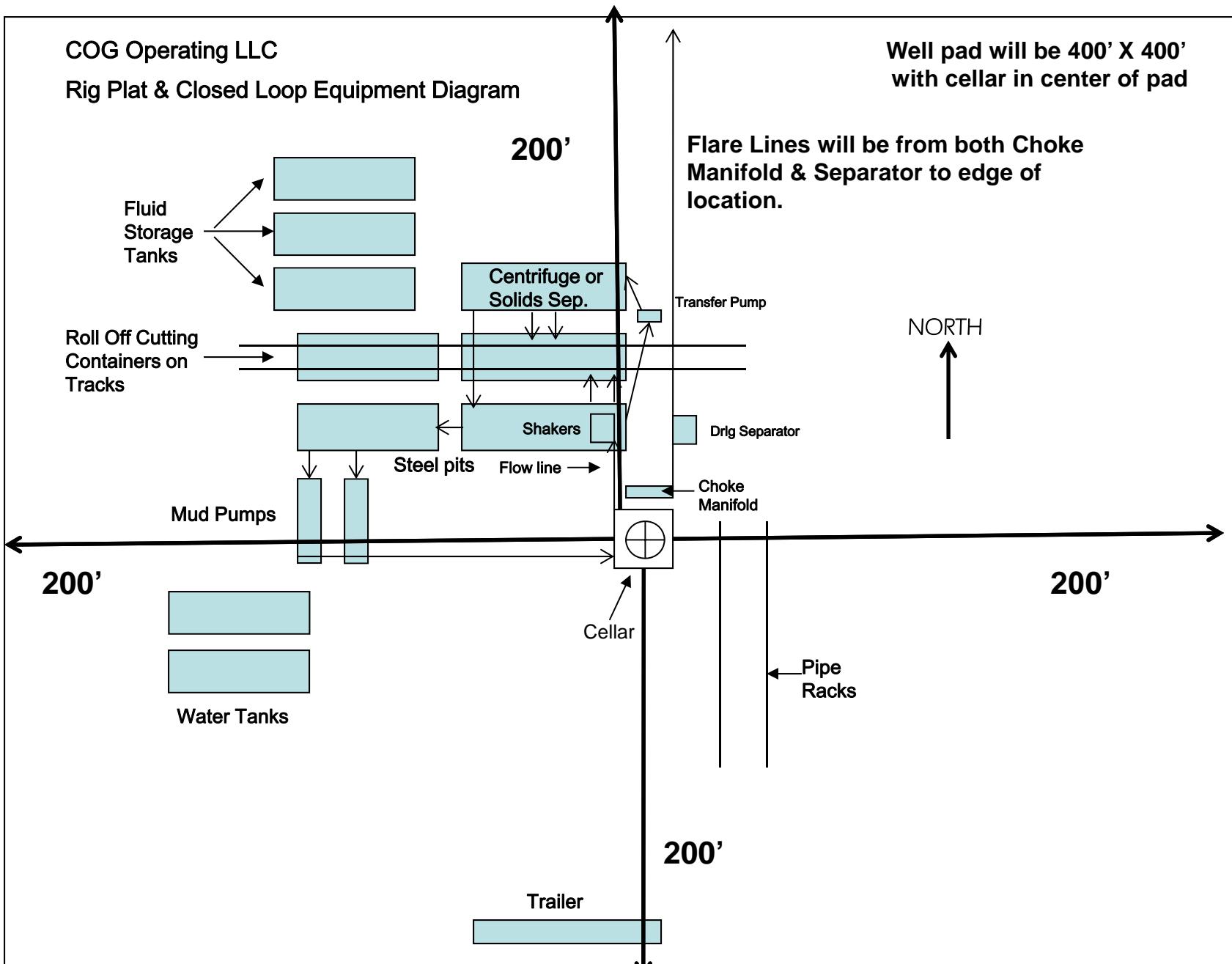


Exhibit 1

"I further certify that COG will comply with Rule 19.15.17 NMAC by using a Closed Loop System."

State of New Mexico  
Energy, Minerals and Natural Resources Department

Submit Electronically  
Via E-permitting

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

## NATURAL GAS MANAGEMENT PLAN

This Natural Gas Management Plan must be submitted with each Application for Permit to Drill (APD) for a new or recompleted well.

### Section 1 – Plan Description Effective May 25, 2021

**I. Operator:** ConocoPhillips Company

**OGRID:** 217817

**Date:** 01/28/2025

**II. Type:**  Original  Amendment due to  19.15.27.9.D(6)(a) NMAC  19.15.27.9.D(6)(b) NMAC  Other.

If Other, please describe: \_\_\_\_\_

**III. Well(s):** Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
Zia Hills Unit 2832 WC 707H	30-025-	A-28-26S-32E	447 FNL & 1024 FEL	± 742	± 1956	± 1707
Zia Hills Unit 2832 WC 708H	30-025-	A-28-26S-32E	458 FNL & 1008 FEL	± 742	± 1956	± 1707
Zia Hills Unit 2832 WC 709H	30-025-	A-28-26S-32E	470 FNL & 991 FEL	± 742	± 1956	± 1707
Zia Hills Unit 2832 WC 710H	30-025-	A-28-26S-32E	482 FNL & 975 FEL	± 742	± 1956	± 1707
Zia Hills Unit 2832 WC 711H	30-025-	A-28-26S-32E	494 FNL & 959 FEL	± 742	± 1956	± 1707
Zia Hills Unit 2832 WC 712H	30-025-	A-28-26S-32E	505 FNL & 943 FEL	± 742	± 1956	± 1707
Zia Hills Unit 2832 WC 802H	30-025-	A-28-26S-32E	435 FNL & 1040 FEL	± 742	± 1956	± 1707
Zia Hills Unit 2832 WC 803H	30-025-	A-28-26S-32E	517 FNL & 927 FEL	± 742	± 1956	± 1707

**IV. Central Delivery Point Name:** Zia Hills Unit CF2 Facility NESW 24-26S-31E [See 19.15.27.9(D)(1) NMAC]

**V. Anticipated Schedule:** Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	Spud Date	TD Reached Date	Completion Commencement Date	Initial Flow Back Date	First Production Date
Zia Hills Unit 2832 WC	Pending	± 2/1/2026	± 25 days from spud	TBD	TBD	TBD
707H, 708H, 709H, 710H, 711H, 712H, 802H, 803H						

**VI. Separation Equipment:**  Attach a complete description of how Operator will size separation equipment to optimize gas capture.

**VII. Operational Practices:**  Attach a complete description of the actions Operator will take to comply with the requirements of Subsection A through F of 19.15.27.8 NMAC.

**VIII. Best Management Practices:**  Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.

**Section 2 – Enhanced Plan**  
**EFFECTIVE APRIL 1, 2022**

Beginning April 1, 2022, an operator that is not in compliance with its statewide natural gas capture requirement for the applicable reporting area must complete this section.

Operator certifies that it is not required to complete this section because Operator is in compliance with its statewide natural gas capture requirement for the applicable reporting area.

**IX. Anticipated Natural Gas Production:**

Well	API	Anticipated Average Natural Gas Rate MCF/D	Anticipated Volume of Natural Gas for the First Year MCF

**X. Natural Gas Gathering System (NGGS):**

Operator	System	ULSTR of Tie-in	Anticipated Gathering Start Date	Available Maximum Daily Capacity of System Segment Tie-in

**XI. Map.**  Attach an accurate and legible map depicting the location of the well(s), the anticipated pipeline route(s) connecting the production operations to the existing or planned interconnect of the natural gas gathering system(s), and the maximum daily capacity of the segment or portion of the natural gas gathering system(s) to which the well(s) will be connected.

**XII. Line Capacity.** The natural gas gathering system  will  will not have capacity to gather 100% of the anticipated natural gas production volume from the well prior to the date of first production.

**XIII. Line Pressure.** Operator  does  does not anticipate that its existing well(s) connected to the same segment, or portion, of the natural gas gathering system(s) described above will continue to meet anticipated increases in line pressure caused by the new well(s).

Attach Operator's plan to manage production in response to the increased line pressure.

**XIV. Confidentiality:**  Operator asserts confidentiality pursuant to Section 71-2-8 NMSA 1978 for the information provided in Section 2 as provided in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and attaches a full description of the specific information for which confidentiality is asserted and the basis for such assertion.

## Section 3 - Certifications

Effective May 25, 2021

Operator certifies that, after reasonable inquiry and based on the available information at the time of submittal:

Operator will be able to connect the well(s) to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system; or

Operator will not be able to connect to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system.

***If Operator checks this box, Operator will select one of the following:***

**Well Shut-In.**  Operator will shut-in and not produce the well until it submits the certification required by Paragraph (4) of Subsection D of 19.15.27.9 NMAC; or

**Venting and Flaring Plan.**  Operator has attached a venting and flaring plan that evaluates and selects one or more of the potential alternative beneficial uses for the natural gas until a natural gas gathering system is available, including:

- (a) power generation on lease;
- (b) power generation for grid;
- (c) compression on lease;
- (d) liquids removal on lease;
- (e) reinjection for underground storage;
- (f) reinjection for temporary storage;
- (g) reinjection for enhanced oil recovery;
- (h) fuel cell production; and
- (i) other alternative beneficial uses approved by the division.

## Section 4 - Notices

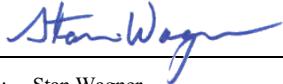
1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:

(a) Operator becomes aware that the natural gas gathering system it planned to connect the well(s) to has become unavailable or will not have capacity to transport one hundred percent of the production from the well(s), no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised venting and flaring plan containing the information specified in Paragraph (5) of Subsection D of 19.15.27.9 NMAC; or

(b) Operator becomes aware that it has, cumulatively for the year, become out of compliance with its baseline natural gas capture rate or natural gas capture requirement, no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised Natural Gas Management Plan for each well it plans to spud during the next 90 days containing the information specified in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and shall file an update for each Natural Gas Management Plan until Operator is back in compliance with its baseline natural gas capture rate or natural gas capture requirement.

2. OCD may deny or conditionally approve an APD if Operator does not make a certification, fails to submit an adequate venting and flaring plan which includes alternative beneficial uses for the anticipated volume of natural gas produced, or if OCD determines that Operator will not have adequate natural gas takeaway capacity at the time a well will be spud.

I certify that, after reasonable inquiry, the statements in and attached to this Natural Gas Management Plan are true and correct to the best of my knowledge and acknowledge that a false statement may be subject to civil and criminal penalties under the Oil and Gas Act.

Signature:	
Printed Name:	Stan Wagner
Title:	Regulatory Advisor
E-mail Address:	stan.s.wagner@conocophillips.com
Date:	01/30/2025
Phone:	432-253-9685
<b>OIL CONSERVATION DIVISION</b> <b>(Only applicable when submitted as a standalone form)</b>	
Approved By:	
Title:	
Approval Date:	
Conditions of Approval:	

## VI. Separation Equipment

How Operator will size separation equipment to optimize gas capture:

All ConocoPhillips production facility equipment will be sized per industry standards (API 12J) with adequate retention time to effectively separate all phases of production. Each project will take into consideration the number of wells and type curves for each formation pool to ensure adequate facility capacity. Design considerations will also include review of all piping, tanks, VRU's and associated equipment to ensure optimized gas capture minimized risk of release.

## VII. Operational Practices

Actions Operator will take to comply with the requirements below:

### B. Drilling Operations

- During drilling, flare stacks will be located a minimum of 100 feet from the nearest surface hole location. All gas is captured or combusted. If an emergency or malfunction occurs, gas will be flared or vented for public health, safety, and the environment and be properly reported to the NMOCD pursuant to 19.15.27.8.G.
- Measure or estimate the volume of natural gas that is vented, flared or beneficially used during drilling, completion and production operations, regardless of the reason or authorization for such venting or flaring.

### C. Completion Operations

- During completion operations, operator does not produce oil or gas but maintains adequate well control through completion operations.
- Individual well test separators will be set to properly separate gas and liquids. A temporary test separator will be utilized initially to process volumes. In addition, separators will be tied into flowback tanks which will be tied into the gas processing equipment for sales down a pipeline.

### D. Venting and flaring during production operations

- During each phase of well life (drilling, completion and production) of a ConocoPhillips well, COP personnel will follow all necessary procedures to ensure both the operation and the equipment are within the NMAC 19.15.27.8 Subsection D guidelines.
- During well operations that require unloading of the well to atmospheric pressure, all reasonable actions will be taken to minimize vented gas
- Through the life of the well all flaring shall be measured, and venting events quantified using the data available and industry best practice.

### E. Performance standards for separation, storage tank and flare equipment

- All storage tanks and separation equipment are designed minimize risk of liquid or vapor release and optimize gas capture. This includes automation for automatic gauging and pressure monitoring.

- All flare stacks are equipped with auto ignition devices and/or continuous pilots and are designed to operate at maximum combustion efficiency pursuant NMAC 19.15.27.8 Subsection E. Flares will follow COP spacing guidelines to ensure they are a safe distance from combustibles and operations equipment.
- COP personnel will conduct routine AVO inspections on a regular basis per NMAC 19.15.27.8 Subsection E guidelines.

F. Measurement of vented and flared natural gas.

- Measurement equipment will be installed to quantify gas flared during drilling, completion and production of the well.
- All measurement devices installed will meet accuracy ratings per AGA and API standards.
- Measurement devices will be installed without manifolds that allow diversion of gas around the metering element, except for the sole purpose of inspection of servicing the measurement device.

**VIII. Best Management Practices**

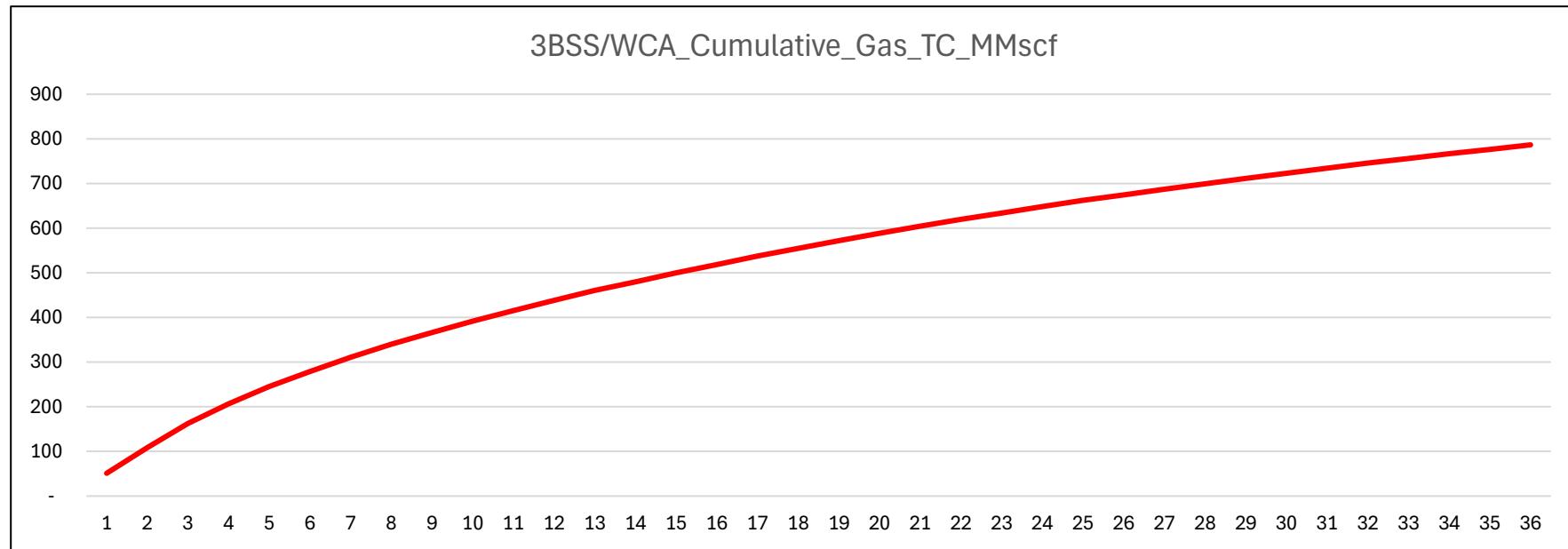
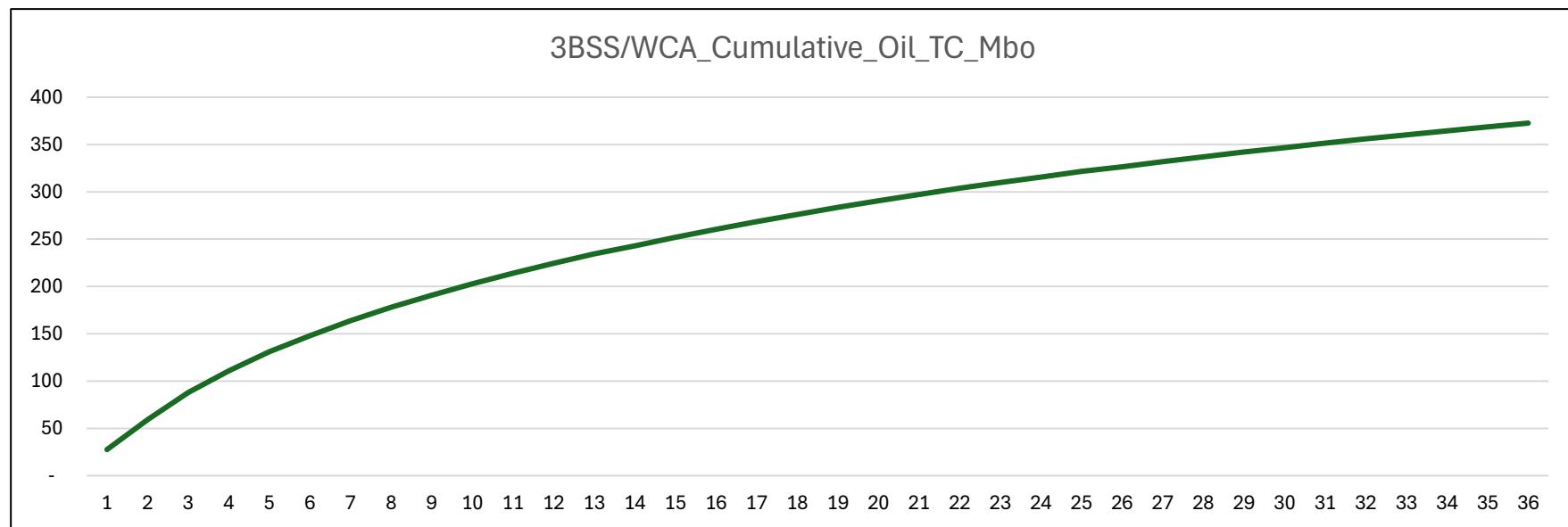
- Operator will curtail or shut in production, within reasonable limits, during upset conditions to minimize venting and flaring.
- When feasible, Operator will use equipment to capture gas that would otherwise be vented or flared.
- During completions and production operations Operator will minimize blowdowns to atmosphere
- When feasible, Operator will use electric or air actuated equipment to reduce bleed emissions

# Waste Minimization Plan

## Per § 3162.3-1 Drilling applications and plans. Part J:

- (1) The anticipated initial oil production rate from the oil well and the anticipated production decline over the first 3 years of production.
  - a. See attached Anticipated Production & Decline Curve
- (2) The anticipated initial oil-well gas production rate from the oil well and the anticipated production decline over the first 3 years of production.
  - a. See attached Anticipated Production & Decline Curve
- (3) Certification that the operator has a valid, executed gas sales contract to sell to a purchaser 100 percent of the produced oil-well gas, less gas anticipated for use on-lease pursuant to 43 CFR subpart 3178.
  - a. See attached NMOCD – Natural Gas Management Plan
- (4) Any other information demonstrating the operator's plans to avoid the waste of gas production from any source, including, as appropriate, from pneumatic equipment, storage tanks, and leaks.
  - a. This location will comply with NSPS OOOOb which will include reduced associated gas flaring, non-emitting pneumatic equipment, storage tanks that are controlled and a rigorous leak detection and repair program. In addition, this facility complies with 20.2.50 NMAC (Ozone Precursor Pollutants) which also imposes standards on pneumatic equipment, tank controls, and leak detection and repair. Finally, this facility must comply with 19.15.27 NMAC (Venting and Flaring of Natural Gas) which significantly reduces instances of flaring.

## Anticipated Production Decline Curve



## PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	CONOCOPHILLIPS COMPANY		
WELL NAME & NO.:	ZIA HILLS UNIT 2832 WC 710H		
LOCATION:	Section 28, T.26 S., R.32 E., NMP		
COUNTY:	Lea County, New Mexico		

COA

<input checked="" type="radio"/> H2S	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Potash	<input checked="" type="radio"/> None	<input type="radio"/> Secretary	<input checked="" type="radio"/> R-111-P
Cave/Karst Potential	<input checked="" type="radio"/> Low	<input checked="" type="radio"/> Medium	<input checked="" type="radio"/> High
Cave/Karst Potential	<input checked="" type="radio"/> Critical		
Variance	<input checked="" type="radio"/> None	<input checked="" type="radio"/> Flex Hose	<input type="radio"/> Other
Wellhead	<input checked="" type="radio"/> Conventional	<input checked="" type="radio"/> Multibowl	<input checked="" type="radio"/> Both
Wellhead Variance	<input checked="" type="radio"/> Diverter		
Other	<input type="checkbox"/> 4 String	<input type="checkbox"/> Capitan Reef	<input type="checkbox"/> WIPP
Other	<input checked="" type="checkbox"/> Fluid Filled	<input type="checkbox"/> Pilot Hole	<input type="checkbox"/> Open Annulus
Cementing	<input type="checkbox"/> Contingency Cement Squeeze	<input type="checkbox"/> EchoMeter	<input type="checkbox"/> Primary Cement Squeeze
Special Requirements	<input type="checkbox"/> Water Disposal	<input type="checkbox"/> COM	<input checked="" type="checkbox"/> Unit
Special Requirements	<input type="checkbox"/> Batch Sundry		
Special Requirements Variance	<input checked="" type="checkbox"/> Break Testing	<input type="checkbox"/> Offline Cementing	<input checked="" type="checkbox"/> Casing Clearance

### A. HYDROGEN SULFIDE

A Hydrogen Sulfide (H2S) Drilling Plan shall be activated AT SPUD. As a result, the Hydrogen Sulfide area must meet 43 CFR part 3170 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.

### B. CASING

#### Primary Casing Design:

1. The **13-3/8** inch surface casing shall be set at approximately **820 feet** (a minimum of 25 feet (Lea County) into the Rustler Anhydrite, above the salt, and below usable fresh water) and cemented to the surface.
  - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature

survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.

- b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8 hours** or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)
- c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
- d. If cement falls back, remedial cementing will be done prior to drilling out that string.

2. The **9-5/8** inch intermediate casing shall be set at approximately **4418 feet per BLM Geologist. Keep casing full during run for collapse safety factor.** The minimum required fill of cement behind the **9-5/8** inch intermediate casing is:
  - Cement to surface. If cement does not circulate see B.1.a, c-d above.  
**Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.**  
**Cement excess is less than 25%, more cement is required if washout occurs. Adjust cement volume and excess based on a fluid caliper or similar method that reflects the as-drilled size of the wellbore.**
  - ❖ In Medium Cave/Karst Areas if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.
3. **Keep casing full during run for collapse safety factor.** The minimum required fill of cement behind the **7-5/8** inch intermediate liner is:
  - Cement should tie-back **100 feet** into the previous casing. Operator shall provide method of verification.  
**Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.**
4. The minimum required fill of cement behind the **5-1/2** inch production casing is:
  - Cement should tie-back at least **200 feet** into previous casing string.  
Operator shall provide method of verification.  
**Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.**

## C. PRESSURE CONTROL

1. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).'
2. Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the **13-3/8** inch surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **10,000 (10M) psi**. **Variance is approved to use a 5000 (5M) Annular which shall be tested to 3500 (70% Working Pressure) psi.**
  - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
  - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
  - c. Manufacturer representative shall install the test plug for the initial BOP test.
  - d. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
  - e. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.

## D. SPECIAL REQUIREMENT (S)

### Unit Wells

The well sign for a unit well shall include the unit number in addition to the surface and bottom hole lease numbers. This also applies to participating area numbers. If a participating area has not been established, the operator can use the general unit designation, but will replace the unit number with the participating area number when the sign is replaced.

### Commercial Well Determination

A commercial well determination shall be submitted after production has been established for at least six months. (This is not necessary for secondary recovery unit wells)

#### (Note: For a minimum 5M BOPE or less (Utilizing a 10M BOPE system)

#### BOPE Break Testing Variance

- BOPE Break Testing is ONLY permitted for 5M BOPE or less. (**Annular preventer must be tested to a minimum of 70% of BOPE working pressure and shall be higher than the MASP**)
- BOPE Break Testing is NOT permitted to drilling the production hole section.
- Variance only pertains to the intermediate hole-sections and no deeper than the Bone Springs formation.

- While in transfer between wells, the BOPE shall be secured by the hydraulic carrier or cradle.
- Any well control event while drilling require notification to the BLM Petroleum Engineer (**575-706-2779**) prior to the commencement of any BOPE Break Testing operations.
- A full BOPE test is required prior to drilling the first deep intermediate hole section. If any subsequent hole interval is deeper than the first, a full BOPE test will be required. (200' TVD tolerance between intermediate shoes is allowable).
- The BLM is to be contacted (575-689-5981 Lea County) 4 hours prior to BOPE tests.
- As a minimum, a full BOPE test shall be performed at 21-day intervals.
- In the event any repairs or replacement of the BOPE is required, the BOPE shall test as per Onshore Oil and Gas Order No. 2.
- If in the event break testing is not utilized, then a full BOPE test would be conducted.

**Casing Clearance:**

- The W441 connection should tie back 500'+ into the W513 intermediate casing for clearance overlap.

Operator shall clean up cycles until wellbore is clear of cuttings and any large debris, ensure cutting sizes are adequate “coffee ground or less” before cementing.

## **GENERAL REQUIREMENTS**

The BLM is to be notified in advance for a representative to witness:

- a. Spudding well (minimum of 24 hours)
- b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
- c. BOPE tests (minimum of 4 hours)

Eddy County

EMAIL or call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220,

**[BLM\\_NM\\_CFO\\_DrillingNotifications@BLM.GOV](mailto:BLM_NM_CFO_DrillingNotifications@BLM.GOV)**

(575) 361-2822

Lea County

Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240,

(575) 689-5981

1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.

- a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
- b. When the operator proposes to set surface casing with Spudder Rig
  - i. Notify the BLM when moving in and removing the Spudder Rig.
  - ii. Notify the BLM when moving in the 2<sup>nd</sup> Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
  - iii. BOP/BOPE test to be conducted per **43 CFR 3172** as soon as 2<sup>nd</sup> Rig is rigged up on well.
2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.
3. For intervals in which cement to surface is required, cement to surface should be verified with a visual check and density or pH check to differentiate cement from spacer and drilling mud. The results should be documented in the driller's log and daily reports.

## A. CASING

1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.
2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends of both lead and tail cement, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.

3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.
5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
7. 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.
8. Whenever a casing string is cemented in the R-111-Q potash area, the NMOCD requirements shall be followed.

## B. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in **43 CFR 3172**.
2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review.

These documents shall be posted in the company man's trailer and on the rig floor.

3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
  - i. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
  - ii. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
  - iii. Manufacturer representative shall install the test plug for the initial BOP test.
  - iv. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172.6(b)(9) must be followed.
  - v. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
  - i. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead cement), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).
  - ii. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the cement plug. The BOPE test can be initiated after bumping the

cement plug with the casing valve open. (only applies to single stage cement jobs, prior to the cement setting up.)

- iii. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer and can be initiated immediately with the casing valve open. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to **43 CFR 3172** with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for 8 hours or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
- iv. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.
- v. The results of the test shall be reported to the appropriate BLM office.
- vi. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
- vii. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.
- viii. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per **43 CFR 3172**.

## C. DRILLING MUD

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the Wolfcamp formation, and shall be used until production casing is run and cemented.

## D. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.)

created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area. Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

**JS** 7/1/2025

Sante Fe Main Office  
Phone: (505) 476-3441

General Information  
Phone: (505) 629-6116

Online Phone Directory  
<https://www.emnrd.nm.gov/ocd/contact-us>

**State of New Mexico**  
**Energy, Minerals and Natural Resources**  
**Oil Conservation Division**  
**1220 S. St Francis Dr.**  
**Santa Fe, NM 87505**

ACKNOWLEDGMENTS

Action 520270

**ACKNOWLEDGMENTS**

Operator: CONOCOPHILLIPS COMPANY 600 W. Illinois Avenue Midland, TX 79701	OGRID: 217817
	Action Number: 520270
	Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

**ACKNOWLEDGMENTS**

<input checked="" type="checkbox"/>	I hereby certify that no additives containing PFAS chemicals will be added to the completion or recompletion of this well.
-------------------------------------	--

Sante Fe Main Office  
Phone: (505) 476-3441

General Information  
Phone: (505) 629-6116

Online Phone Directory  
<https://www.emnrd.nm.gov/ocd/contact-us>

**State of New Mexico**  
**Energy, Minerals and Natural Resources**  
**Oil Conservation Division**  
**1220 S. St Francis Dr.**  
**Santa Fe, NM 87505**

CONDITIONS

Action 520270

**CONDITIONS**

Operator: CONOCOPHILLIPS COMPANY 600 W. Illinois Avenue Midland, TX 79701	OGRID: 217817
	Action Number: 520270
	Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

**CONDITIONS**

Created By	Condition	Condition Date
stanwagner	Cement is required to circulate on both surface and intermediate1 strings of casing.	10/27/2025
stanwagner	If cement does not circulate on any string, a Cement Bond Log (CBL) is required for that string of casing.	10/27/2025
jeffrey.harrison	Prior to production of this well a change to the well name/number is required to comply with the OCD well naming convention.	12/19/2025
jeffrey.harrison	Any string of casing or liner that is not circulated to surface must have a minimum of 200' of cement tie-back into the previous string of casing.	12/19/2025
jeffrey.harrison	Administrative order required for non-standard spacing unit prior to production.	12/19/2025
jeffrey.harrison	File As Drilled C-102 and a directional Survey with C-104 completion packet.	12/19/2025
jeffrey.harrison	Notify the OCD 24 hours prior to casing & cement.	12/19/2025
jeffrey.harrison	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string.	12/19/2025
jeffrey.harrison	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system.	12/19/2025