

State of New Mexico  
Energy, Minerals and Natural Resources Department

Susana Martinez  
Governor

Ken McQueen  
Cabinet Secretary

Matthias Sayer  
Deputy Cabinet Secretary

David R. Catanach, Division Director  
Oil Conservation Division



New Mexico Oil Conservation Division approval and conditions listed below are made in accordance with OCD Rule 19.15.7.11 and are in addition to the actions approved by BLM on the following 3160-3 APD form.

Operator Signature Date: 4/17/2017

Well information:

Operator WPX Energy, Well Name and Number Wescanada Unit 303 H

API# 30-043-21306, Section 17, Township 22 (N/S), Range 07 E/W

Conditions of Approval: (See the below checked and handwritten conditions)

- ☒ Notify Aztec OCD 24hrs prior to casing & cement.
- ☒ Hold C-104 for directional survey & "As Drilled" Plat
- ☒ Hold C-104 for NSL, NSP, DHC
- ☐ Spacing rule violation. Operator must follow up with change of status notification on other well to be shut in or abandoned
- ☐ Regarding the use of a pit, closed loop system or below grade tank, the operator must comply with the following as applicable:
  - A pit requires a complete C-144 be submitted and approved prior to the construction or use of the pit, pursuant to 19.15.17.8.A
  - A closed loop system requires notification prior to use, pursuant to 19.15.17.9.A
  - A below grade tank requires a registration be filed prior to the construction or use of the below grade tank, pursuant to 19.15.17.8.C
- ☐ 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
- ☐ Submit Gas Capture Plan form prior to spudding or initiating recompletion operations
- ☒ Regarding Hydraulic Fracturing, review EPA Underground Injection Control Guidance 84
- ☒ 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.
- ☒ Well-bore communication is regulated under 19.15.29 NMAC. This requires well-bore Communication to be reported in accordance with 19.15.29.8.

Charles X. [Signature]  
NMOCD Approved by Signature

8-17-2017  
Date

1220 South St. Francis Drive • Santa Fe, New Mexico 87503  
Phone (505) 476-3441 • Fax (505) 476-3462 • www.emnrd.state.nm.us/ocd

Held For  
Unit approval  
Rec'd on  
6-5-18

AUG 10 2017

Form 3160-3  
(March 2012)FORM APPROVED  
OMB No. 1004-0137  
Expires October 31, 2014UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

## APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NOG13121807	
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input checked="" type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name EASTERN NAVAJO	
2. Name of Operator WPX ENERGY LLC		7. If Unit or CA Agreement, Name and No. NMNM135218X	
3a. Address 720 S Main Aztec NM 87410		8. Lease Name and Well No. W ESCAVADA UNIT 303H	
3b. Phone No. (include area code) (505)333-1822		9. API Well No. 30-043-21306	
4. Location of Well (Report location clearly and in accordance with any State requirements.)* At surface SESE / 235 FSL / 228 FEL / LAT 36.13277 / LONG -107.59003 At proposed prod. zone NWSE / 2303 FSL / 2487 FEL / LAT 36.153253 / LONG -107.615249		10. Field and Pool, or Exploratory BASIN MANCOS / ESCAVADA MANCO	
11. Sec., T. R. M. or Blk. and Survey or Area SEC 17 / T22N / R7W / NMP		12. County or Parish SANDOVAL	
13. State NM		14. Distance in miles and direction from nearest town or post office* 53.9 miles	
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 20 feet		16. No. of acres in lease 160	
17. Spacing Unit dedicated to this well 440		18. Distance from proposed location* to nearest well, drilling, completed, 228 feet applied for, on this lease, ft.	
19. Proposed Depth 4808 feet / 15632 feet		20. BLM/BIA Bond No. on file FED: UTB000178 / IND: B001576	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 6878 feet		22. Approximate date work will start* 06/01/2017	
23. Estimated duration 30 days		24. Attachments	
The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, must be attached to this form:			
1. Well plat certified by a registered surveyor.		4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).	
2. A Drilling Plan.		5. Operator certification	
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office).		6. Such other site specific information and/or plans as may be required by the BLM.	
25. Signature (Electronic Submission)		Name (Printed/Typed) Lacey Granillo / Ph: (505)333-1816	
Title Permitting Tech III		Date 04/17/2017	
Approved by (Signature) <i>[Signature]</i>		Name (Printed/Typed) AFEN	
Title AFEN		Office FARMINGTON	
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.			

(Continued on page 2)

\*(Instructions on page 2)

This action is subject to technical and procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4

BLM'S APPROVAL OR ACCEPTANCE OF THIS ACTION DOES NOT RELIEVE THE LESSEE AND OPERATOR FROM OBTAINING ANY OTHER AUTHORIZATION REQUIRED FOR OPERATIONS ON FEDERAL AND INDIAN LANDS

DRILLING OPERATIONS AUTHORIZED ARE SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS"

NMOCDAV



District I  
1625 N. French Drive, Hobbs, NM 88240  
Phone: (575) 393-6161 Fax: (575) 393-0720

District II  
811 S. First Street, Artesia, NM 88210  
Phone: (575) 748-1263 Fax: (575) 748-9720

District III  
1000 Rio Brazos Road, Aztec, NM 87410  
Phone: (505) 334-6178 Fax: (505) 334-6170

District IV  
1220 S. St. Francis Drive, Santa Fe, NM 87505  
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico  
Energy, Minerals & Natural Resources Department

Form C-102  
Revised August 1, 2011

Submit one copy to  
Appropriate District Office

OIL CONSERVATION DIVISION  
1220 South St. Francis Drive  
Santa Fe, NM 87505

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number <b>30-043-21306</b>	*Pool Code <b>98225</b>	*Pool Name <b>ESCAVADA w; mancos</b>
*Property Code <b>3171088 321258</b>	*Property Name <b>W ESCAVADA UNIT</b>	*Well Number <b>303H</b>
*GRID No. <b>120782</b>	*Operator Name <b>WPX ENERGY PRODUCTION, LLC</b>	*Elevation <b>6878'</b>

<sup>10</sup> Surface Location

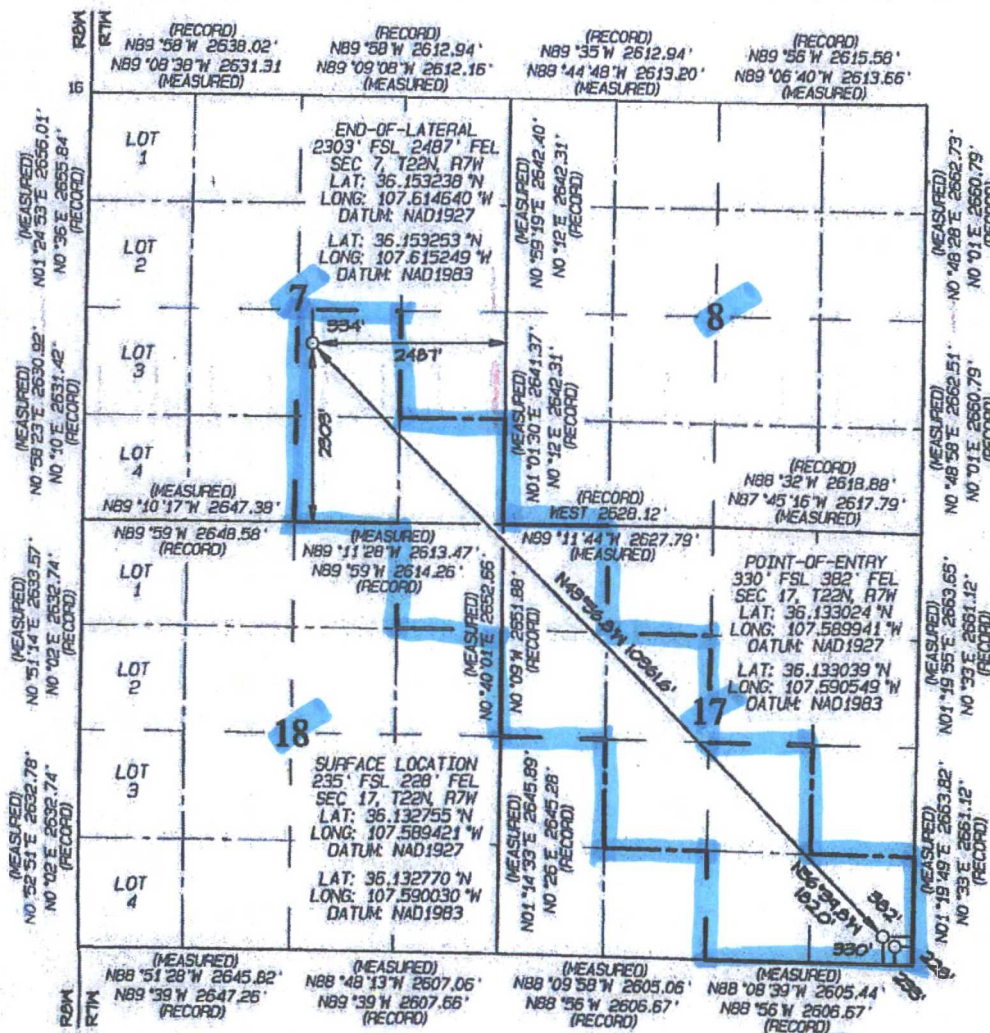
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	17	22N	7W		235	SOUTH	228	EAST	SANDOVAL

<sup>11</sup> Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	7	22N	7W		2303	SOUTH	2487	EAST	SANDOVAL

*Dedicated Acres <b>440.00</b>	<b>NE/4 NE/4 - Section 18 W/2 NW/4, SE/4 NW/4 NE/4 SW/4, W/2 SE/4 SE/4 SE/4 - Section 17 W/2 SE/4, SE/4 SE/4 - Section 7</b>	*Joint or Infill <b></b>	*Consolidation Code <b></b>	*Order No. <b>R-14100</b>
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION  
UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A  
NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



<sup>17</sup> OPERATOR CERTIFICATION

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

Signature **Lacey Granillo** Date **3/21/17**  
Printed Name  
E-mail Address **lacey.granillo@wpxenergy.com**

<sup>18</sup> SURVEYOR CERTIFICATION

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

Date Revised: **MARCH 15, 2017**  
Date of Survey: **MARCH 3, 2016**

Signature and Seal of Professional Surveyor



**JASON C. EDWARDS**  
Certificate Number **15269**

OGRID 372286 - Enduring - Blanket Sundry for op  
change rec'd april 2018.





## **WPX Energy**

### **Operations Plan**

(Note: This procedure will be adjusted onsite based upon actual conditions)

**Date:** April 17, 2017  
**Well Name:** W Escavada UT #303H  
**SH Location:** SESE Sec 17 22N-07W  
**BH Location:** NWSE Sec 7 22N-07W

**Field:** Lybrook Gallup  
**Surface:**  
**Elevation:** 6878' GR  
**Minerals:**

**Measured Depth:** 15,632.36'

## **I. GEOLOGY**

Surface formation - NACIMIENTO

### **A. FORMATION TOPS: (GR)**

NAME	MD	TVD	NAME	MD	TVD
OJO ALAMO	634.00	634.00	POINT LOOKOUT	3,608.00	3,559.00
KIRTLAND	812.00	812.00	MANCOS	3,768.00	3,715.00
PICTURED CLIFFS	1,171.00	1,171.00	GALLUP	4,116.00	4,056.00
LEWIS	1,254.00	1,254.00	KICKOFF POINT	4,049.14	3,998.78
CHACRA	1,553.00	1,550.00	TOP TARGET	5,058.00	4,760.00
CLIFF HOUSE	2,680.00	2,652.00	LANDING POINT	5,272.55	4,808.00
MENEFEE	2,720.00	2,691.00	BASE TARGET	5,272.55	4,808.00
			TD	15,632.36	4,808.00

### **B. MUD LOGGING PROGRAM:**

Mudlogger on location from surface csg to TD.

### **C. LOGGING PROGRAM:**

LWD GR from surface casing to TD.

### **D. NATURAL GAUGES:**

Gauge any noticeable increases in gas flow. Record all gauges in Tour book and on morning reports.

## **II. DRILLING**

### **A. MUD PROGRAM:**

LSND mud (WBM) will be used to drill the 12-1/4" Surface hole, the 8 3/4" Directional Vertical hole, and the curve portion of the wellbore. A LSND (WBM) or (OBM) will be used to drill the lateral portion of well. Treat for lost circulation as necessary. Obtain 100% returns prior to cementing. Notify Engineering of any mud losses.

### **B. BOP TESTING:**

While drill pipe is in use, the pipe rams and the blind rams will be function tested once each trip. The BOPE will be tested to 2,000 psi (High) for 10 minutes and the annular tested to 1,500 psi for 10 minutes. Pressure test surface casing to 1,500 psi for 30 minutes and intermediate casing to 1,500 psi for 30 minutes. Utilize a BOPE Testing Unit with a recording chart and appropriate test plug for testing. All tests and inspections will be recorded in the tour book as to time and results.

### III. MATERIALS

#### A. CASING PROGRAM:

CASING TYPE	OH SIZE (IN)	DEPTH (MD)	CSG SIZE	WEIGHT	GRADE	CONN
SURFACE	12.25"	320.00'	9.625"	36 LBS	J-55 or equiv	STC
INTERMEDIATE	8.75"	5,272.55'	7"	23 LBS	J-55 or equiv	LTC
PRODUCTION	6.125"	5122.55' - 15,632.36'	4.5"	11.6 LBS	P-110 or equiv	LTC
TIE BACK	6.125"	Surf. - 5122.55'	4.5"	11.6 LBS	P-110 or equiv	LTC

#### B. FLOAT EQUIPMENT:

##### 1. SURFACE CASING:

9-5/8" notched regular pattern guide shoe. Run (1) standard centralizer on each of the bottom (4) joints of Surface Casing.

##### 2. INTERMEDIATE CASING:

7" cement nose guide shoe with a self-fill insert float. Place float collar one joint above the shoe. Install (1) centralizer on each of the bottom (3) joints and one standard centralizer every (3) joints to 2,500 ft. Run (1) centralizer at 2,500 ft., 2,300ft., 2,000ft., 1,500 ft., and 1,000 ft. If losses are encountered during the drilling of the intermediate section a DV tool will be utilized and a 2 stage cement job may be planned to ensure cement circ back to surface. The DV tool will be placed 100' above the top of the Chacra formation. If cement is circulated back to surface on the first stage, a cancellation device will be dropped to shift the dv tool closed and the 2nd stage cement job will be aborted at that time, if no cement is seen at surface on the 1st stage the stage tool will be opened and a 2nd stage cement job will be pumped.

##### 3. PRODUCTION LINER:

Run 4-1/2" Liner with cement nose guide Float Shoe + 2jts. of 4-1/2" casing + Landing Collar + 4-1/2" pup joint + 1 RSI (Sliding Sleeve) positioned inside the 330ft Hard line. Centralizer program will be determined by Wellbore condition and when Lateral is evaluated by Geoscientists and Reservoir Engineers. Set seals on Liner Hanger. Test TOL to 1500 psi for 15 minutes.

#### C. CEMENT:

(Note: Volumes may be adjusted onsite due to actual conditions)

##### 1. Surface:

5 bbl Fresh Water Spacer, 100 sx (160 cu.ft.) of 14.5 ppg Type I-II (Neat G) + 20% Fly Ash cement w/ 7.41 gal/sack mix water ratio @ 1.61 cu ft/sx yield. Calculated @ volume + 50% excess. WOC 12 hours. Test csg to 600psi. Total Volume: (160 cu-ft/100 sx/ Bbls).TOC at Surface.

##### 2. Intermediate:

Spacer #1: 20 bbl (112 cuft) Chemwash. Lead Cement: 96 bbls, 275 sks, (541 cuft), 12.3 ppg @ 1.97 cuft/sk yield. Tail Cement: 59 bbls, 254 sks, (331 cuft), 13.5 ppg @ 1.3 cuft/sk yield. Displacement: Displace w/ +/- 208 bbl Drilling mud or water. Total Cement: 155 bbls, 529 sks, (872 cuft)

3. Prod Liner:

Spacer #1: 10 bbl (56 cu-ft) Water Spacer. Spacer #2: 40 bbl 9.5 ppg (224.6 cu-ft) Toned Spacer III. Spacer #3: 10 bbl Water Spacer. Lead Cement: Extencem™ System. Yield 1.36 cuft/sk 13.3 ppg (1030 sx /1401 cuft /249 bbls). Tail Spacer: 20 BBL of MMCR. Displacement: Displace w/ +/-216bbl Fr Water. Total Cement (1030 sx /1401bbls).

**D. COMPLETION:**

Run CCL for perforating

A. PRESSURE TEST:

1. Pressure test 4-1/2" casing to 4500 psi max, hold at 1500 psi for 30 minutes. Increase pressure to Open RSI sleeves.

B. STIMULATION:

1. Stimulate with approximately 2,805,000# 20/40 mesh sand and 340,000# 16/30 mesh sand in 619,113 gallons water with 42,696 mscf N2 for 17 stages.
2. Isolate stages with flow through frac plug.
3. Drill out frac plugs and flowback lateral.

C. RUNNING TUBING:

1. Production Tubing: Run 2-7/8", 6.5#, J-55, EUE tubing with a SN on top of bottom joint. Land tubing near Top of Liner.

If this horizontal well is drilled past the applicable setbacks, an unorthodox location application is not required because the completed interval in this well, as defined by 19.15.16.7 B(1) NMAC, will be entirely within the applicable setbacks. This approach complies with all applicable rules, including 19.15.16.14 A(3) NMAC, 19.15.16.14 B(2) NMAC, 19.15.16.15 B(2) NMAC, and 19.15.16.15. B(4) NMAC.

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**NOTES:**

A 4-1/2" 11.6# P-110 Liner will be run to TD and landed +/- 150 ft. into the 7" 23# J-55 Intermediate casing with a Liner Hanger and pack-off assembly then cemented to top of liner hanger.

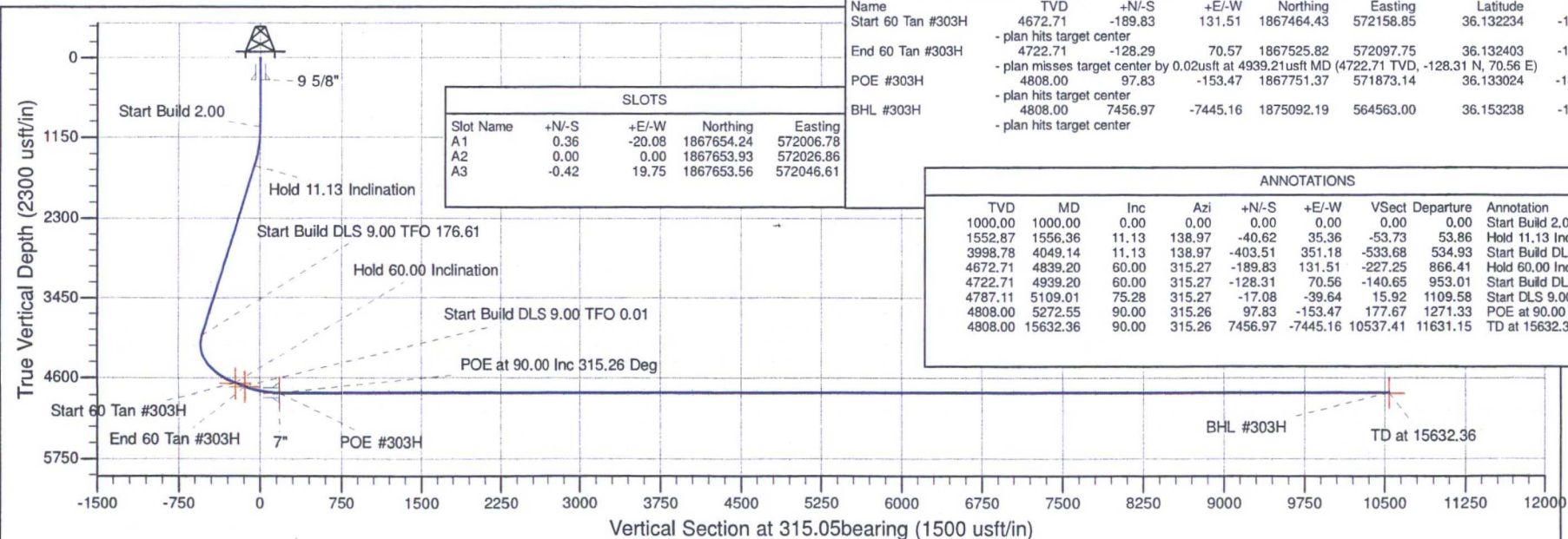
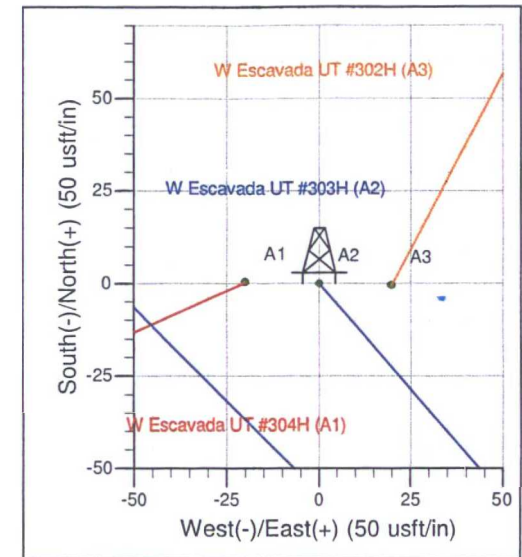
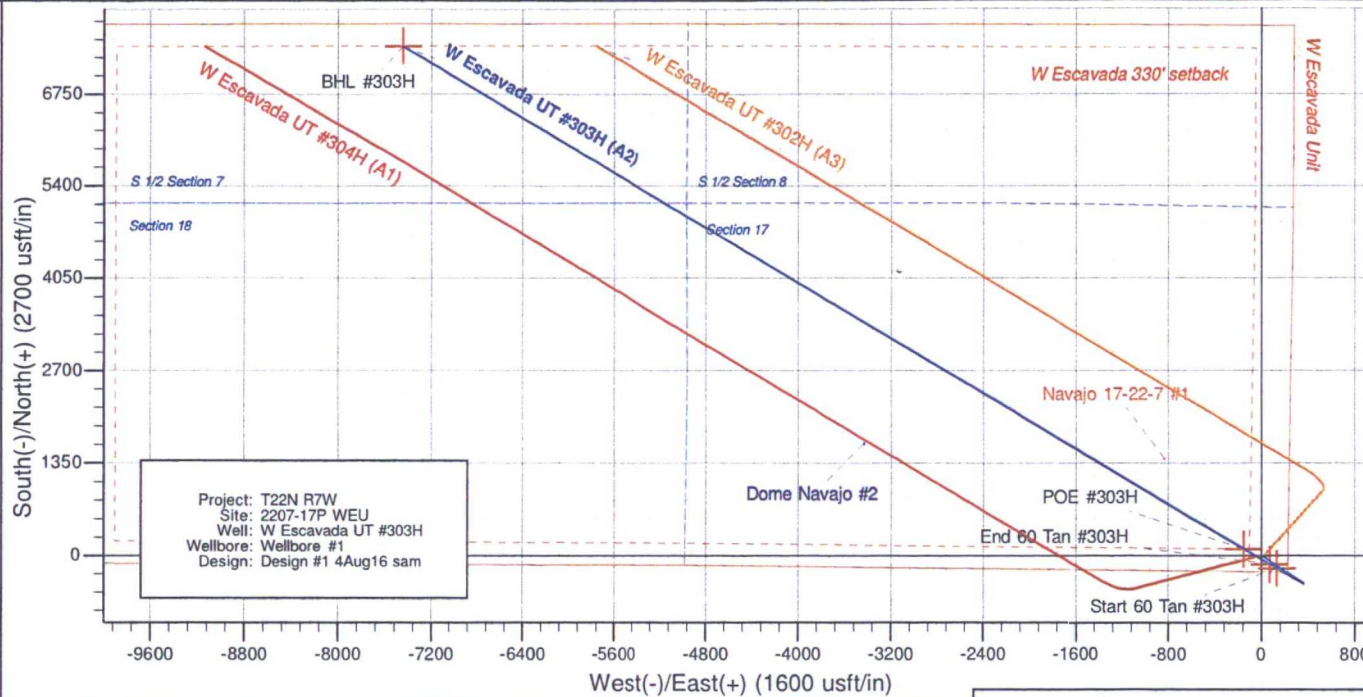
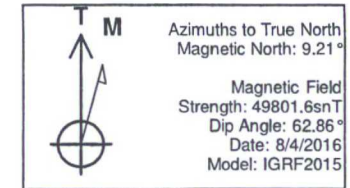
After cementing and TOL clean up operations are complete, the TOL will be tested to 1500 psi (per BLM).





Well Name: W Escavada UT #303H  
Surface Location: 2207-17P WEU  
NAD 1927 (NADCON CONUS) , US State Plane 1927 (Exact solution) New Mexico West 3003  
Ground Elevation: 6878.00  
+N/-S +E/-W Northing Easting Latitude Longitude  
0.00 0.00 1867653.93 572026.86 36.132755 -107.589421  
GL @ 6878.00usft (Original Well Elev)

Slot  
A2



#### DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
Start 60 Tan #303H	4672.71	-189.83	131.51	1867464.43	572158.85	36.132234	-107.588976	Point
End 60 Tan #303H	4722.71	-128.29	70.57	1867525.82	572097.75	36.132403	-107.589182	Point
POE #303H	4808.00	97.83	-153.47	1867751.37	571873.14	36.133024	-107.589941	Point
BHL #303H	4808.00	7456.97	-7445.16	1875092.19	564563.00	36.153238	-107.614640	Point

#### ANNOTATIONS

TVD	MD	Inc	Azi	+N/-S	+E/-W	Vsect	Departure	Annotation
1000.00	1000.00	0.00	0.00	0.00	0.00	0.00	0.00	Start Build 2.00
1552.87	1556.36	11.13	138.97	-40.62	35.36	-53.73	53.86	Hold 11.13 Inclination
3998.78	4049.14	11.13	138.97	-403.51	351.18	-533.68	534.93	Start Build DLS 9.00 TFO 176.61
4672.71	4839.20	60.00	315.27	-189.83	131.51	-227.25	866.41	Hold 60.00 Inclination
4722.71	4939.20	60.00	315.27	-128.31	70.56	-140.65	953.01	Start Build DLS 9.00 TFO 0.01
4787.11	5109.01	75.28	315.27	-17.08	-39.64	15.92	1109.58	Start DLS 9.00 TFO -0.02
4808.00	5272.55	90.00	315.26	97.83	-153.47	177.67	1271.33	POE at 90.00 Inc 315.26 Deg
4808.00	15632.36	90.00	315.26	7456.97	-7445.16	10537.41	11631.15	TD at 15632.36

# **WPX Energy**

**T22N R7W**

**2207-17P WEU**

**W Escavada UT #303H - Slot A2**

**Wellbore #1**

**Plan: Design #1 4Aug16 sam**

## **Standard Planning Report**

**04 August, 2016**



# WPX Planning Report

Database:	COMPASS	Local Co-ordinate Reference:	Well W Escavada UT #303H (A2) - Slot A2
Company:	WPX Energy	TVD Reference:	GL @ 6878.00usft (Original Well Elev)
Project:	T22N R7W	MD Reference:	GL @ 6878.00usft (Original Well Elev)
Site:	2207-17P WEU	North Reference:	True
Well:	W Escavada UT #303H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 4Aug16 sam		

Project	T22N R7W		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico West 3003		

Site	2207-17P WEU				
Site Position:		Northing:	1,867,653.56 usft	Latitude:	36.132754
From:	Map	Easting:	572,046.61 usft	Longitude:	-107.589354
Position Uncertainty:	0.00 usft	Slot Radius:	13.200 in	Grid Convergence:	0.14 °

Well	W Escavada UT #303H - Slot A2					
Well Position	+N/-S	0.42 usft	Northing:	1,867,653.93 usft	Latitude:	36.132755
	+E/-W	-19.75 usft	Easting:	572,026.86 usft	Longitude:	-107.589421
Position Uncertainty		0.00 usft	Wellhead Elevation:	0.00 usft	Ground Level:	6,878.00 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	8/4/2016	9.21	62.86	49,802

Design	Design #1 4Aug16 sam			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (bearing)
	0.00	0.00	0.00	315.05

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (bearing)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,556.36	11.13	138.97	1,552.87	-40.62	35.36	2.00	2.00	0.00	138.97	
4,049.14	11.13	138.97	3,998.78	-403.51	351.18	0.00	0.00	0.00	0.00	
4,839.20	60.00	315.27	4,672.71	-189.83	131.51	9.00	6.19	22.31	176.61	Start 60 Tan #303H
4,939.20	60.00	315.27	4,722.71	-128.31	70.56	0.00	0.00	0.00	0.00	End 60 Tan #303H
5,109.01	75.28	315.27	4,787.11	-17.08	-39.64	9.00	9.00	0.00	0.01	
5,272.55	90.00	315.26	4,808.00	97.83	-153.47	9.00	9.00	0.00	-0.02	POE #303H
15,632.36	90.00	315.26	4,808.00	7,456.97	-7,445.16	0.00	0.00	0.00	0.00	BHL #303H



# WPX Planning Report

Database: COMPASS  
Company: WPX Energy  
Project: T22N R7W  
Site: 2207-17P WEU  
Well: W Escavada UT #303H  
Wellbore: Wellbore #1  
Design: Design #1 4Aug16 sam

Local Co-ordinate Reference: Well W Escavada UT #303H (A2) - Slot A2  
TVD Reference: GL @ 6878.00usft (Original Well Elev)  
MD Reference: GL @ 6878.00usft (Original Well Elev)  
North Reference: True  
Survey Calculation Method: Minimum Curvature

## Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (bearing)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
320.00	0.00	0.00	320.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>9 5/8"</b>									
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Start Build 2.00</b>									
1,500.00	10.00	138.97	1,497.47	-32.83	28.57	-43.42	2.00	2.00	0.00
1,556.36	11.13	138.97	1,552.87	-40.62	35.36	-53.73	2.00	2.00	0.00
<b>Hold 11.13 Inclination</b>									
2,000.00	11.13	138.97	1,988.17	-105.21	91.56	-139.15	0.00	0.00	0.00
2,500.00	11.13	138.97	2,478.77	-178.00	154.91	-235.41	0.00	0.00	0.00
3,000.00	11.13	138.97	2,969.37	-250.78	218.26	-331.68	0.00	0.00	0.00
3,500.00	11.13	138.97	3,459.97	-323.57	281.61	-427.95	0.00	0.00	0.00
4,000.00	11.13	138.97	3,950.57	-396.36	344.96	-524.22	0.00	0.00	0.00
4,049.14	11.13	138.97	3,998.78	-403.51	351.18	-533.68	0.00	0.00	0.00
<b>Start Build DLS 9.00 TFO 176.61</b>									
4,500.00	29.48	314.49	4,434.60	-356.62	298.39	-463.19	9.00	4.07	38.93
4,839.20	60.00	315.27	4,672.71	-189.83	131.51	-227.25	9.00	9.00	0.23
<b>Hold 60.00 Inclination</b>									
4,939.20	60.00	315.27	4,722.71	-128.31	70.56	-140.65	0.00	0.00	0.00
<b>Start Build DLS 9.00 TFO 0.01</b>									
5,000.00	65.47	315.27	4,750.55	-89.93	32.54	-86.63	9.00	9.00	0.00
5,109.01	75.28	315.27	4,787.11	-17.08	-39.64	15.92	9.00	9.00	0.00
<b>Start DLS 9.00 TFO -0.02</b>									
5,272.55	90.00	315.26	4,808.00	97.83	-153.47	177.67	9.00	9.00	0.00
<b>POE at 90.00 Inc 315.26 Deg</b>									
5,273.00	90.00	315.26	4,808.00	98.15	-153.79	178.12	0.00	0.00	0.00
<b>7"</b>									
5,500.00	90.00	315.26	4,808.00	259.40	-313.57	405.12	0.00	0.00	0.00
6,000.00	90.00	315.26	4,808.00	614.58	-665.49	905.11	0.00	0.00	0.00
6,500.00	90.00	315.26	4,808.00	969.75	-1,017.41	1,405.11	0.00	0.00	0.00
7,000.00	90.00	315.26	4,808.00	1,324.93	-1,369.33	1,905.11	0.00	0.00	0.00
7,500.00	90.00	315.26	4,808.00	1,680.11	-1,721.25	2,405.10	0.00	0.00	0.00
8,000.00	90.00	315.26	4,808.00	2,035.29	-2,073.18	2,905.10	0.00	0.00	0.00
8,500.00	90.00	315.26	4,808.00	2,390.46	-2,425.10	3,405.10	0.00	0.00	0.00
9,000.00	90.00	315.26	4,808.00	2,745.64	-2,777.02	3,905.09	0.00	0.00	0.00
9,500.00	90.00	315.26	4,808.00	3,100.82	-3,128.94	4,405.09	0.00	0.00	0.00
10,000.00	90.00	315.26	4,808.00	3,456.00	-3,480.86	4,905.08	0.00	0.00	0.00
10,500.00	90.00	315.26	4,808.00	3,811.17	-3,832.78	5,405.08	0.00	0.00	0.00
11,000.00	90.00	315.26	4,808.00	4,166.35	-4,184.71	5,905.08	0.00	0.00	0.00
11,500.00	90.00	315.26	4,808.00	4,521.53	-4,536.63	6,405.07	0.00	0.00	0.00
12,000.00	90.00	315.26	4,808.00	4,876.71	-4,888.55	6,905.07	0.00	0.00	0.00
12,500.00	90.00	315.26	4,808.00	5,231.88	-5,240.47	7,405.07	0.00	0.00	0.00
13,000.00	90.00	315.26	4,808.00	5,587.06	-5,592.39	7,905.06	0.00	0.00	0.00
13,500.00	90.00	315.26	4,808.00	5,942.24	-5,944.31	8,405.06	0.00	0.00	0.00
14,000.00	90.00	315.26	4,808.00	6,297.42	-6,296.24	8,905.06	0.00	0.00	0.00
14,500.00	90.00	315.26	4,808.00	6,652.59	-6,648.16	9,405.05	0.00	0.00	0.00
15,000.00	90.00	315.26	4,808.00	7,007.77	-7,000.08	9,905.05	0.00	0.00	0.00
15,500.00	90.00	315.26	4,808.00	7,362.95	-7,352.00	10,405.04	0.00	0.00	0.00
15,632.36	90.00	315.26	4,808.00	7,456.97	-7,445.16	10,537.41	0.00	0.00	0.00
<b>TD at 15632.36</b>									



# WPX Planning Report

**Database:** COMPASS  
**Company:** WPX Energy  
**Project:** T22N R7W  
**Site:** 2207-17P WEU  
**Well:** W Escavada UT #303H  
**Wellbore:** Wellbore #1  
**Design:** Design #1 4Aug16 sam

**Local Co-ordinate Reference:** Well W Escavada UT #303H (A2) - Slot A2  
**TVD Reference:** GL @ 6878.00usft (Original Well Elev)  
**MD Reference:** GL @ 6878.00usft (Original Well Elev)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature

## Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (bearing)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
Start 60 Tan #303H - plan hits target center - Point	0.00	0.00	4,672.71	-189.83	131.51	1,867,464.43	572,158.85	36.132234	-107.588976
End 60 Tan #303H - plan misses target center by 0.02usft at 4939.21usft MD (4722.71 TVD, -128.31 N, 70.56 E) - Point	0.00	0.00	4,722.71	-128.29	70.57	1,867,525.82	572,097.75	36.132403	-107.589182
BHL #303H - plan hits target center - Point	0.00	0.00	4,808.00	7,456.97	-7,445.16	1,875,092.19	564,563.00	36.153238	-107.614640
POE #303H - plan hits target center - Point	0.00	0.00	4,808.00	97.83	-153.47	1,867,751.37	571,873.14	36.133024	-107.589941

## Casing Points

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (in)	Hole Diameter (in)
320.00	320.00	9 5/8"	9.625	12.250
5,273.00	4,808.00	7"	7.000	8.750

## Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
1,000.00	1,000.00	0.00	0.00	Start Build 2.00
1,556.36	1,552.87	-40.62	35.36	Hold 11.13 Inclination
4,049.14	3,998.78	-403.51	351.18	Start Build DLS 9.00 TFO 176.61
4,839.20	4,672.71	-189.83	131.51	Hold 60.00 Inclination
4,939.20	4,722.71	-128.31	70.56	Start Build DLS 9.00 TFO 0.01
5,109.01	4,787.11	-17.08	-39.64	Start DLS 9.00 TFO -0.02
5,272.55	4,808.00	97.83	-153.47	POE at 90.00 Inc 315.26 Deg
15,632.36	4,808.00	7,456.97	-7,445.16	TD at 15632.36

The Natural Resources Conservation Service (NRCS) has mapped the soils in the proposed W Escavada 302H/303H/304H Project area. Complete soil information is available in the NRCS's *Soil Survey of Sandoval County, New Mexico, Eastern Part* (USDA/NRCS 2015). The soil map units within the proposed project area footprint are described in the sections below.

A. Blancot – Lybrook association, gently sloping

- 1 Within the project area, this soil map unit is found across the well pad and a small area where the access and pipeline leave the well pad. As such, excavated soils during construction of the well pad, access road, and well-connect pipeline would consist of native borrow and subsoils from the Blancot –Lybrook association, gently sloping soil map unit. A brief description of this soil can be found below.
- 2 The Blancot-Lybrook soil association is composed of 55 percent Blancot and similar soils, 25 percent Lybrook and similar soils, and 20 percent of other minor components. This soil map unit is considered a well-drained soil, with the depth to water table and depth to restrictive layer being more than 80 inches. This soil association has a moderate to high potential for water erosion and low to moderate potential for wind erosion. The Blancot-Lybrook association is typically found ranging in elevation from 6,600 to 7,000 feet in elevation along valley sides, valley floors, stream terraces and ridges (0- to 8-percent slopes) and within loamy and salt flat ecological sites (USDA/NRCS 2015).

B. Blancot – Counselor- Tsosie association, gently sloping

- 1 Within the project area, this soil map unit is found throughout the majority of the access road and well-connect pipeline. As such, excavated soils during construction of the access road and well-connect pipelines would consist of native borrow and subsoils from the Blancot –Counselor-Tsosie association, gently sloping soil map unit. A brief description of this soil can be found below.
- 2 The Blancot-Counselor-Tsosie soil association is composed of 40 percent Blancot and similar soils, 30 percent Counselor and similar soils, 25 percent Tsosie and similar soils, and 5 percent of other minor components. This soil map unit is considered a well-drained soil, with the depth to water table and depth to restrictive layer being more than 80 inches. This soil association has a moderate to high potential for water erosion and low to moderate potential for wind erosion. The Blancot-Counselor-Tsosie association is typically found ranging in elevation from 6,600 to 7,000 feet in elevation along valley sides, ridges, fan remnants, stream terraces, valley floors and alluvial fans (0- to 5-percent slopes) and within loamy, sandy and salt flat ecological sites (USDA/NRCS 2015).

## 7. METHODS FOR HANDLING WASTE

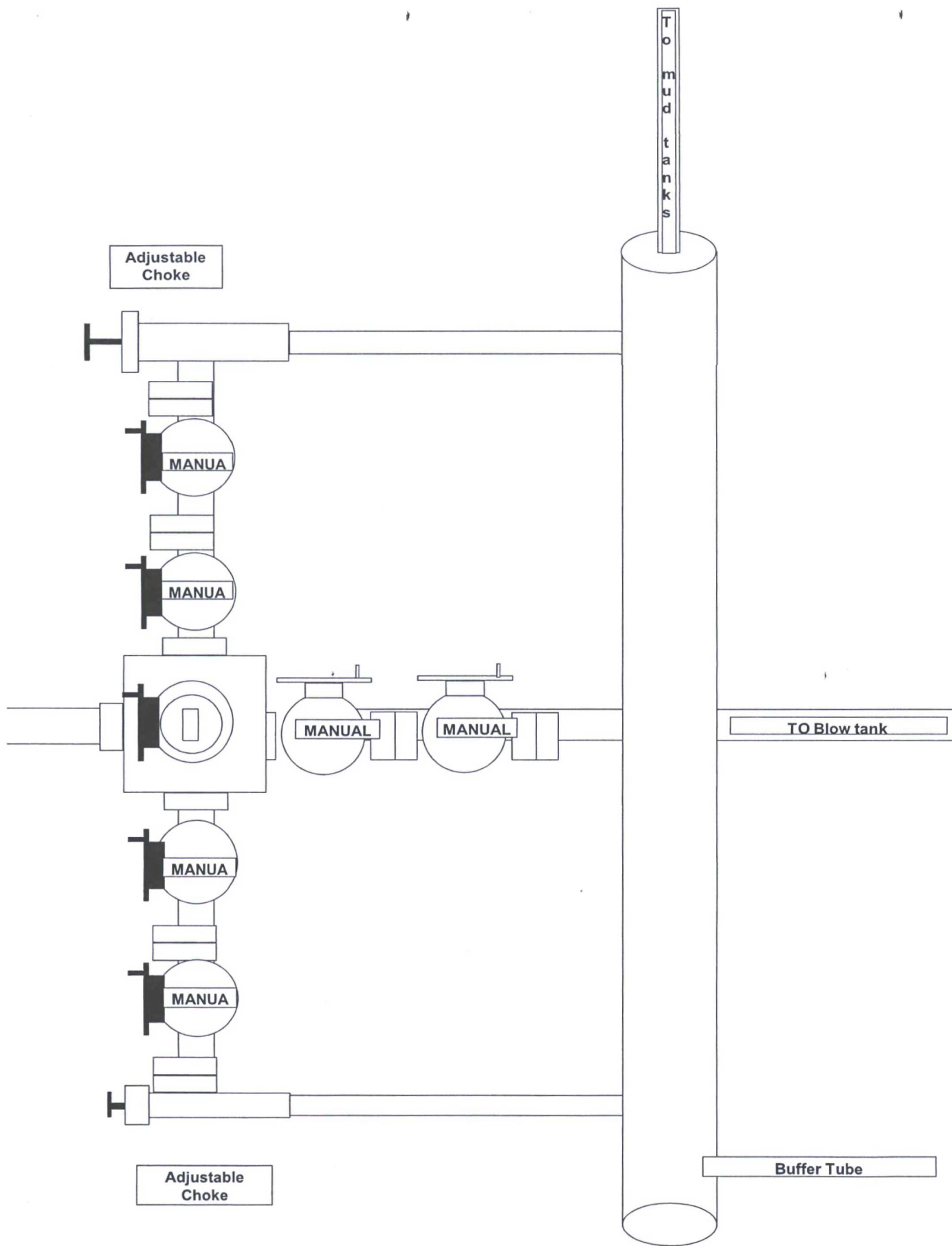
A. Cuttings

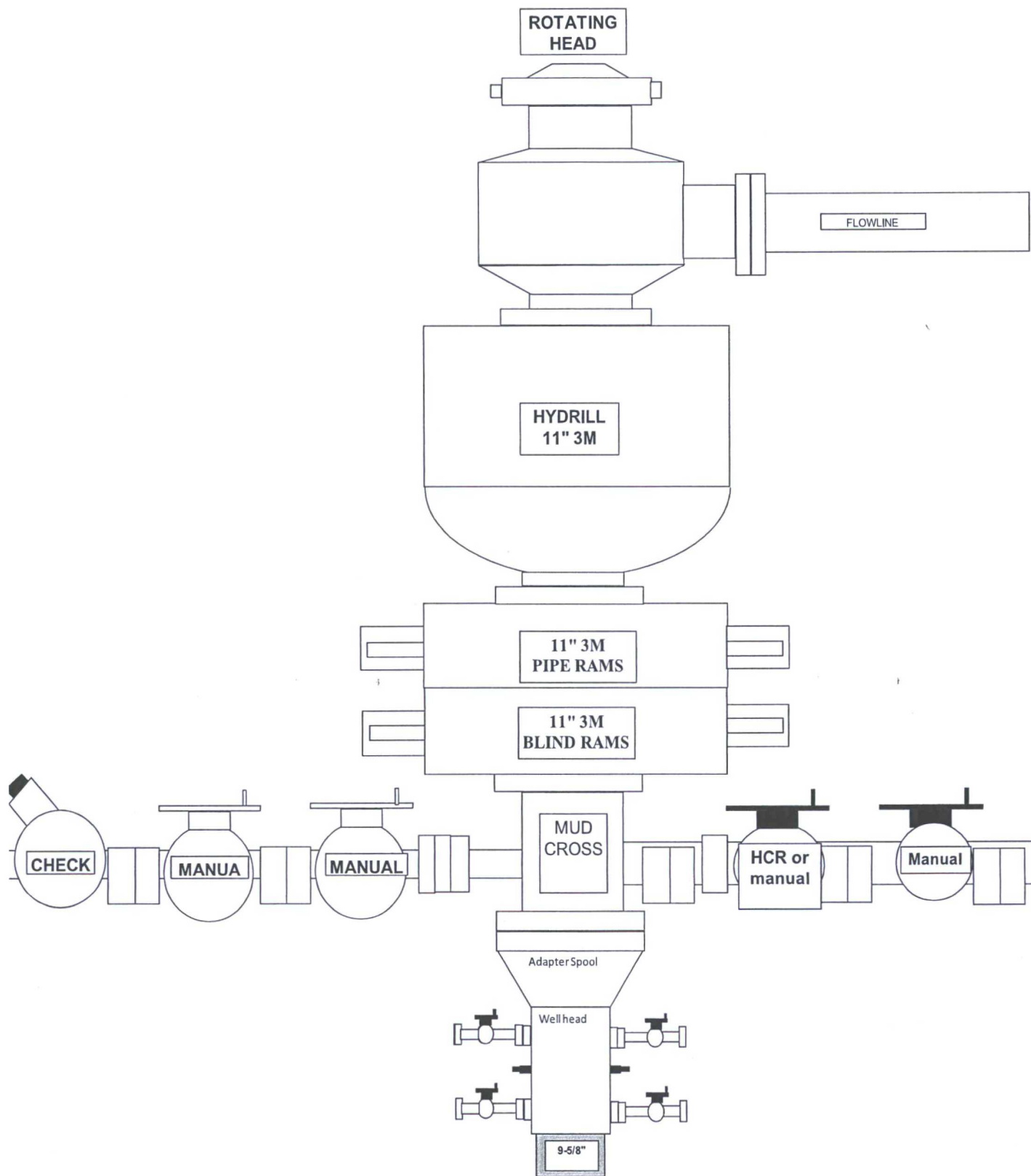
- 1 Drilling operations will utilize a closed-loop system. Drilling of the horizontal laterals will be accomplished with water-based mud. All cuttings will be placed in roll-off bins and hauled to a commercial disposal facility or land farm. WPX will follow Onshore Oil and Gas Order No. 1 regarding the placement, operation, and removal of closed-loop systems. No blow pit will be used.
- 2 Closed-loop tanks will be adequately sized for containment of all fluids.

B. Drilling Fluids

- 1 Drilling fluids will be stored onsite in above-ground storage tanks. Upon termination of drilling operations, the drilling fluids will be recycled and transferred to other permitted closed-loop









**Directions from the Intersection of US Hwy 550 & US Hwy 64**

**in Bloomfield, NM to WPX Energy Production, LLC W Escavada Unit #303H**

**235' FSL & 228' FEL, Section 17, T22N, R7W, N.M.P.M., Sandoval County, NM**

**Latitude: 36.132770°N Longitude: 107.590030°W Datum: NAD1983**

From the intersection of US Hwy 550 & US Hwy 64 in Bloomfield, NM, travel Southerly on US Hwy 550 for 53.6 miles to Mile Marker 97.7;

Go Right (Southerly) on Indian Service Route #474 for 4.9 miles to fork in roadway;

Go Right (Westerly) exiting Indian Service Route #474 for 2.5 miles to fork in roadway;

Go Right (Westerly) which is straight for 0.3 miles to fork in roadway;

Go Right (Westerly) which is straight for 1.0 miles to 4-way intersection;

Go Straight (Westerly) for 1.2 miles to 4-way intersection;

Go Left (Southerly) for 1.7 miles to 4-way intersection;

Go Right (Westerly) for 1.9 miles to begin WPX N Escavada Unit #317H proposed access on left-hand side of existing roadway;

Go Left (South-westerly) which is straight following along WPX N Escavada Unit #317H & WPX W Escavada Unit #300H proposed access's for 2685.0' to fork in proposed roadway;

Go Left (Southerly) which is straight for an additional 4258.6' to staked WPX W Escavada Unit #303H location.