

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: 1/17/2017

Well information;

Operator WPK, Well Name and Number N Escalante Unit 331H

API# 30-043-21298, Section 10, Township 22 N/S, Range 7 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 Kern  
NMOCD Approved by Signature

3-10-2017  
Date

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

**APPLICATION FOR PERMIT TO DRILL OR REENTER**

5. Lease Serial No. NOG13121793	
6. If Indian, Allottee or Tribe Name EASTERN NAVAJO	
7. If Unit or CA Agreement, Name and No. /A/N ESCAVADA UNIT / NMNM135217X	
8. Lease Name and Well No. N ESCAVADA UT 331H	
9. API Well No. 30-043-21298	
1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER	10. Field and Pool, or Exploratory BASIN MANCOS / ESCAVADA N, MANC
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	11. Sec., T. R. M. or Blk. and Survey or Area SEC 10 / T22N / R7W / NMP
2. Name of Operator WPX ENERGY LLC	12. County or Parish SANDOVAL
3a. Address 720 S Main Aztec NM 87410	13. State NM
3b. Phone No. (include area code) (505)333-1822	14. Distance in miles and direction from nearest town or post office* 53.6 miles
4. Location of Well (Report location clearly and in accordance with any State requirements.)* At surface NWSW / 1594 FSL / 192 FWL / LAT 36.151213 / LONG -107.570647 At proposed prod. zone SWNE / 2325 FNL / 1652 FEL / LAT 36.140238 / LONG -107.559299	15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 192 feet
16. No. of acres in lease 160	17. Spacing Unit dedicated to this well 280
18. Distance from proposed location* to nearest well, drilling, completed, 29.4 feet applied for, on this lease, ft.	20. BLM/BIA Bond No. on file IND: B001576
19. Proposed Depth 4864 feet / 10899 feet	21. Elevations (Show whether DF, KDB, RT, GL, etc.) 8660 feet
22. Approximate date work will start* 05/01/2017	23. Estimated duration 48 days

OIL CONS. DIV DIST. 3

MAR 03 2017

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24. Attachments

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

- Well plat certified by a registered surveyor.
- A Drilling Plan.
- A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office).
- Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- Operator certification
- 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	Date 01/17/2017
Title Permitting Tech III		
Approved by (Signature) <i>[Signature]</i>	Name (Printed/Typed) AFM	Date 3/2/17
Title AFM	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

DRILLING OPERATIONS AUTHORIZED ARE SUBJECT TO COMPLIANCE WITH ATTACHED \*GENERAL REQUIREMENTS\*

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

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) 748-1283 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  
OIL CONS. DIV DIST. 3

MAR 03 2017

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number <b>30-043-21298</b>	*Pool Code 98172	*Pool Name ESCAVADA N; MANCOS (OIL)
*Property Code 316006	*Property Name N ESCAVADA UT	*Well Number 331H
*GRID No 120782	*Operator Name WPX ENERGY PRODUCTION, LLC	*Elevation 6860

10 Surface Location

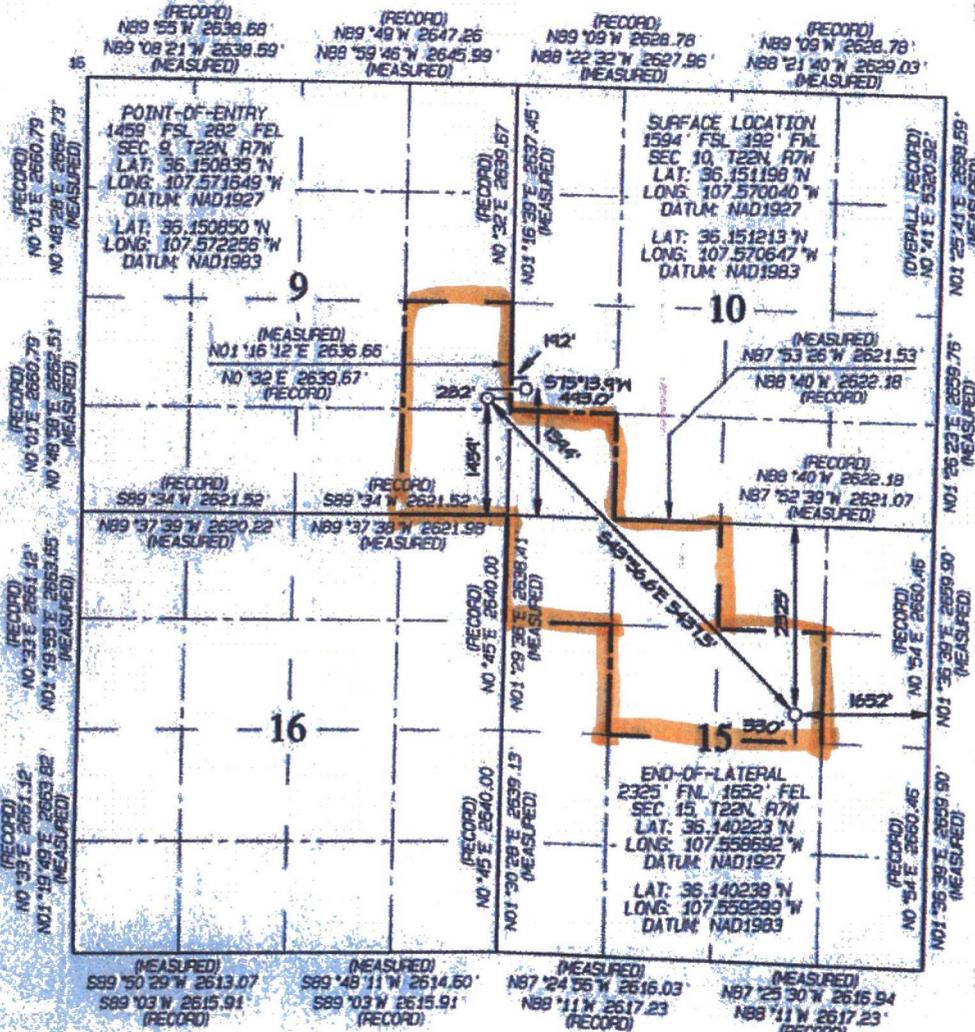
U. or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	10	22N	7W		1594	SOUTH	192	WEST	SANDOVAL

11 Bottom Hole Location If Different From Surface

U. or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	15	22N	7W		2325	NORTH	1652	EAST	SANDOVAL

*Dedicated Area 280.0	E/2 SE/4 - Section 9 SW/4 SW/4 - Section 10 N/2 NW/4, SE/4 NW/4 SW/4 NE/4 - Section 15	*Joint or Infill	*Consolidation Code	*Order No. <b>R-14080</b>
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NO ALLOWANCE WILL BE ASSIGNED  
TO THIS COMPLETION UNTIL ALL  
INTERESTS HAVE BEEN CONSOLIDATED  
OR A NON-STANDARD UNIT HAS  
BEEN APPROVED BY THE DIVISION



17 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 regulatory pooling order heretofore approved by the division.

Signature: *Lacey Granillo* Date: **1-3-17**  
Printed Name: Lacey Granillo  
E-mail Address: lacey.granillo@wpxenergy.com

18 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: JANUARY 10, 2017  
Date of Survey: JULY 28, 2015  
Signature and Seal of Professional Surveyor



**JASON C. EDWARDS**  
Certificate Number 15269



## WPX Energy

### Operations Plan

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

**Date:** January 17, 2017  
**Well Name:** N Escavada UT #331H  
**SH Location:** NWSW Sec 10-22N-07W  
**BH Location:** SWNE Sec 15-22N-07W  
**Field:** Lybrook Gallup  
**Surface:**  
**Elevation:** 6860' GR  
**Minerals:**

**Measured Depth:** 10,899.22'

## **I. GEOLOGY**

Surface formation - NACIMIENTO

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

NAME	MD	TVD	NAME	MD	TVD
OJO ALAMO	704	704	POINT LOOKOUT	3769	3645
KIRTLAND	855	854	MANCOS	3925	3794
PICTURED CLIFFS	1227	1219	GALLUP	4267	4121
LEWIS	1344	1332	KICKOFF POINT	4,215.36	4,071.11
CHACRA	1643	1617	TOP TARGET	5276	4888
CLIFF HOUSE	2774	2696	LANDING POINT	5,462.36	4,913.56
MENEFEE	2813	2733	BASE TARGET	5,462.36	4,913.56
			TD	10,899.22	4,864.00

### **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"	5,462.36'	7"	23 LBS	J-55 or equiv	LTC
PRODUCTION	6.125"	5312.36' - 10,899.22'	4.5"	11.6 LBS	P-110 or equiv	LTC
TIE BACK	6.125"	Surf. - 5312.36'	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 cancelation 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: 102 bbls, 291 sks, (573 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/ +/- 215 bbl Drilling mud or water. Total Cement: 161 bbls, 545 sks, (903 cuft)

3. Prod Liner:

Spacer #1:10 bbl (56.cu-ft) Water Spacer. Spacer #2: 40 bbl 9.5 ppg (224.6 cu-ft) Tuned Spacer III. Spacer #3: 10 bbl Water Spacer. Lead Cement: Extencem™ System. Yield 1.36 cuft/sk 13.3 ppg (547 sx /744 cuft /133 bbls). Tail Spacer: 20 BBL of MMCR. Displacement: Displace w/ +/-142bbl Fr Water. Total Cement (547 sx /744bbls).

**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).



# **WPX Energy**

**T22N R7W**

**2207-10L NEU**

**N Escavada UT #331H - Slot A1**

**Wellbore #1**

**Plan: Design #2 26Feb16 sam**

## **Standard Planning Report**

**26 February, 2016**



# WPX Planning Report

<b>Database:</b> COMPASS	<b>Local Co-ordinate Reference:</b> Well N Escavada UT #331H (A1) - Slot A1
<b>Company:</b> WPX Energy	<b>TVD Reference:</b> GL @ 6860.00usft (Original Well Elev)
<b>Project:</b> T22N R7W	<b>MD Reference:</b> GL @ 6860.00usft (Original Well Elev)
<b>Site:</b> 2207-10L NEU	<b>North Reference:</b> True
<b>Well:</b> N Escavada UT #331H	<b>Survey Calculation Method:</b> Minimum Curvature
<b>Wellbore:</b> Wellbore #1	
<b>Design:</b> Design #2 26Feb16 sam	

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

<b>Site</b> 2207-10L NEU			
<b>Site Position:</b>	<b>Northing:</b> 1,874,369.33 usft	<b>Latitude:</b> 36.151192	
<b>From:</b> Map	<b>Easting:</b> 577,790.34 usft	<b>Longitude:</b> -107.569842	
<b>Position Uncertainty:</b> 0.00 usft	<b>Slot Radius:</b> 13.200 in	<b>Grid Convergence:</b> 0.16 °	

<b>Well</b> N Escavada UT #331H - Slot A1			
<b>Well Position</b>	<b>+N/-S</b> 13.21 usft	<b>Northing:</b> 1,874,382.38 usft	<b>Latitude:</b> 36.151198
	<b>+E/-W</b> -58.49 usft	<b>Easting:</b> 577,731.81 usft	<b>Longitude:</b> -107.570040
<b>Position Uncertainty</b>	0.00 usft	<b>Wellhead Elevation:</b> 0.00 usft	<b>Ground Level:</b> 6,860.00 usft

<b>Wellbore</b> Wellbore #1					
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	1/8/2016	9.19	62.88	49,969

<b>Design</b> Design #2 26Feb16 sam				
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b> PLAN	<b>Tie On Depth:</b> 0.00		
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (bearing)</b>
	0.00	0.00	0.00	140.01

<b>Plan Sections</b>										
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	
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,372.48	17.45	292.98	1,359.06	51.47	-121.37	2.00	2.00	0.00	292.98	
4,215.36	17.45	292.98	4,071.11	384.30	-906.20	0.00	0.00	0.00	0.00	
5,063.22	60.00	135.28	4,798.30	135.10	-739.50	9.00	5.02	-18.60	-160.23	Start 60 Tan #331 24F
5,123.22	60.00	135.28	4,828.30	98.18	-702.94	0.00	0.00	0.00	0.00	End 60 Tan #331H 24
5,296.40	75.59	135.28	4,893.55	-15.39	-590.46	9.00	9.00	0.00	0.00	
5,462.36	90.52	135.28	4,913.56	-132.11	-474.87	9.00	9.00	0.00	0.00	POE #331H 24Feb16
10,899.22	90.52	135.28	4,864.00	-3,995.03	3,350.69	0.00	0.00	0.00	0.00	BHL #331H

**WPX**  
Planning Report

<b>Database:</b>	COMPASS	<b>Local Co-ordinate Reference:</b>	Well N Escavada UT #331H (A1) - Slot A1
<b>Company:</b>	WPX Energy	<b>TVD Reference:</b>	GL @ 6860.00usft (Original Well Elev)
<b>Project:</b>	T22N R7W	<b>MD Reference:</b>	GL @ 6860.00usft (Original Well Elev)
<b>Site:</b>	2207-10L NEU	<b>North Reference:</b>	True
<b>Well:</b>	N Escavada UT #331H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #2 26Feb16 sam		

**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
<b>Start Build 2.00</b>									
1,000.00	10.00	292.98	997.47	16.99	-40.07	-38.77	2.00	2.00	0.00
1,372.48	17.45	292.98	1,359.06	51.47	-121.37	-117.43	2.00	2.00	0.00
<b>Hold 17.45 Inclination</b>									
1,500.00	17.45	292.98	1,480.71	66.40	-156.58	-151.49	0.00	0.00	0.00
2,000.00	17.45	292.98	1,957.70	124.94	-294.61	-285.05	0.00	0.00	0.00
2,500.00	17.45	292.98	2,434.69	183.48	-432.65	-418.60	0.00	0.00	0.00
3,000.00	17.45	292.98	2,911.68	242.01	-570.68	-552.16	0.00	0.00	0.00
3,500.00	17.45	292.98	3,388.67	300.55	-708.71	-685.71	0.00	0.00	0.00
4,000.00	17.45	292.98	3,865.66	359.09	-846.75	-819.26	0.00	0.00	0.00
4,215.36	17.45	292.98	4,071.11	384.30	-906.20	-876.79	0.00	0.00	0.00
<b>Start Build DLS 9.00 TFO -160.23</b>									
4,500.00	10.82	164.13	4,351.35	375.11	-938.73	-890.65	9.00	-2.33	-45.27
5,000.00	54.35	136.10	4,764.04	173.09	-776.61	-631.68	9.00	8.71	-5.61
5,063.22	60.00	135.28	4,798.30	135.10	-739.50	-578.73	9.00	8.93	-1.29
<b>Hold 60.00 Inclination</b>									
5,123.22	60.00	135.28	4,828.30	98.18	-702.94	-526.94	0.00	0.00	0.00
<b>Start Build DLS 9.00 TFO 0.00</b>									
5,296.40	75.59	135.28	4,893.55	-15.39	-590.46	-367.64	9.00	9.00	0.00
<b>Start DLS 9.00 TFO 0.00</b>									
5,462.36	90.52	135.28	4,913.56	-132.12	-474.87	-203.93	9.00	9.00	0.00
<b>POE at 90.52 Inc 135.28 Deg - 7"</b>									
5,500.00	90.52	135.28	4,913.22	-158.86	-448.38	-166.42	0.00	0.00	0.00
6,000.00	90.52	135.28	4,908.66	-514.11	-96.57	331.85	0.00	0.00	0.00
6,500.00	90.52	135.28	4,904.10	-869.36	255.25	830.12	0.00	0.00	0.00
7,000.00	90.52	135.28	4,899.54	-1,224.62	607.07	1,328.40	0.00	0.00	0.00
7,500.00	90.52	135.28	4,894.99	-1,579.87	958.88	1,826.67	0.00	0.00	0.00
8,000.00	90.52	135.28	4,890.43	-1,935.12	1,310.70	2,324.94	0.00	0.00	0.00
8,500.00	90.52	135.28	4,885.87	-2,290.37	1,662.52	2,823.22	0.00	0.00	0.00
9,000.00	90.52	135.28	4,881.31	-2,645.62	2,014.33	3,321.49	0.00	0.00	0.00
9,500.00	90.52	135.28	4,876.75	-3,000.88	2,366.15	3,819.76	0.00	0.00	0.00
10,000.00	90.52	135.28	4,872.20	-3,356.13	2,717.97	4,318.04	0.00	0.00	0.00
10,500.00	90.52	135.28	4,867.64	-3,711.38	3,069.79	4,816.31	0.00	0.00	0.00
10,899.22	90.52	135.28	4,864.00	-3,995.03	3,350.69	5,214.15	0.00	0.00	0.00
<b>TD at 10899.22</b>									

**WPX**  
Planning Report

<b>Database:</b>	COMPASS	<b>Local Co-ordinate Reference:</b>	Well N Escavada UT #331H (A1) - Slot A1
<b>Company:</b>	WPX Energy	<b>TVD Reference:</b>	GL @ 6860.00usft (Original Well Elev)
<b>Project:</b>	T22N R7W	<b>MD Reference:</b>	GL @ 6860.00usft (Original Well Elev)
<b>Site:</b>	2207-10L NEU	<b>North Reference:</b>	True
<b>Well:</b>	N Escavada UT #331H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #2 26Feb16 sam		

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 #331H 24Fet - plan hits target center - Point	0.00	0.00	4,798.30	135.10	-739.50	1,874,515.48	576,991.95	36.151570	-107.572545
End 60 Tan #331H 24Fe - plan hits target center - Point	0.00	0.00	4,828.30	98.18	-702.94	1,874,478.66	577,028.61	36.151468	-107.572421
BHL #331H - plan hits target center - Point	0.00	0.00	4,864.00	-3,995.03	3,350.69	1,870,396.45	581,093.32	36.140223	-107.558693
POE #331H 24Feb16 sa - plan hits target center - Point	0.00	0.00	4,913.56	-132.11	-474.87	1,874,248.98	577,257.30	36.150835	-107.571649

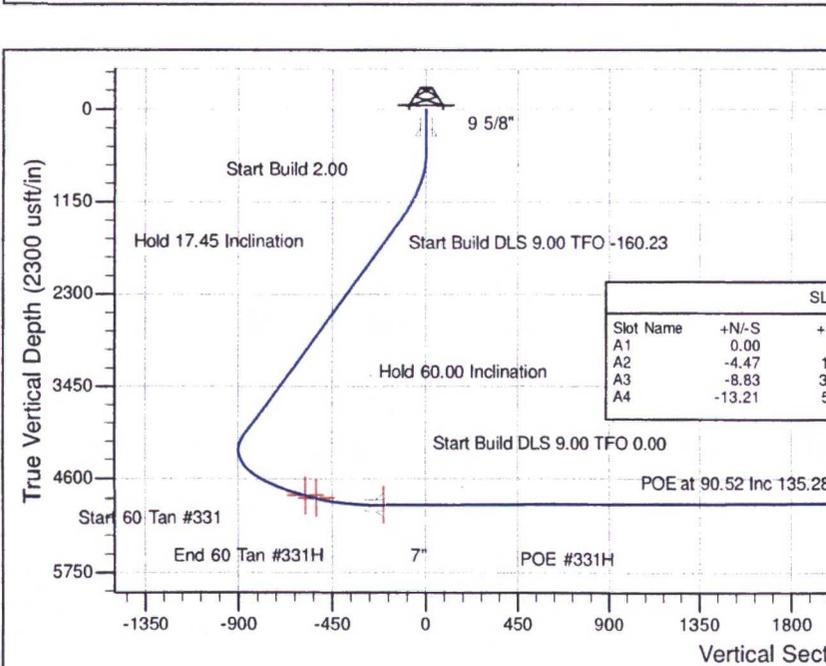
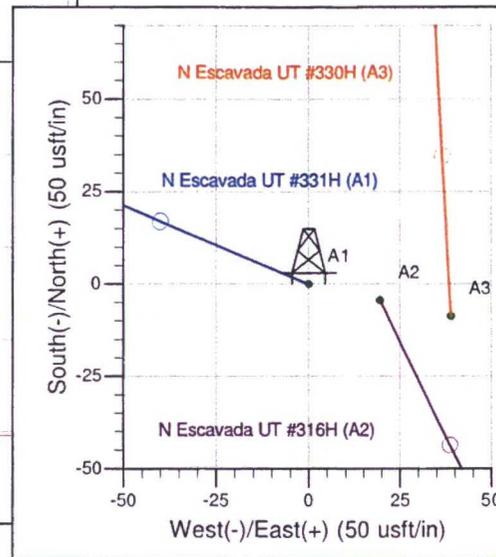
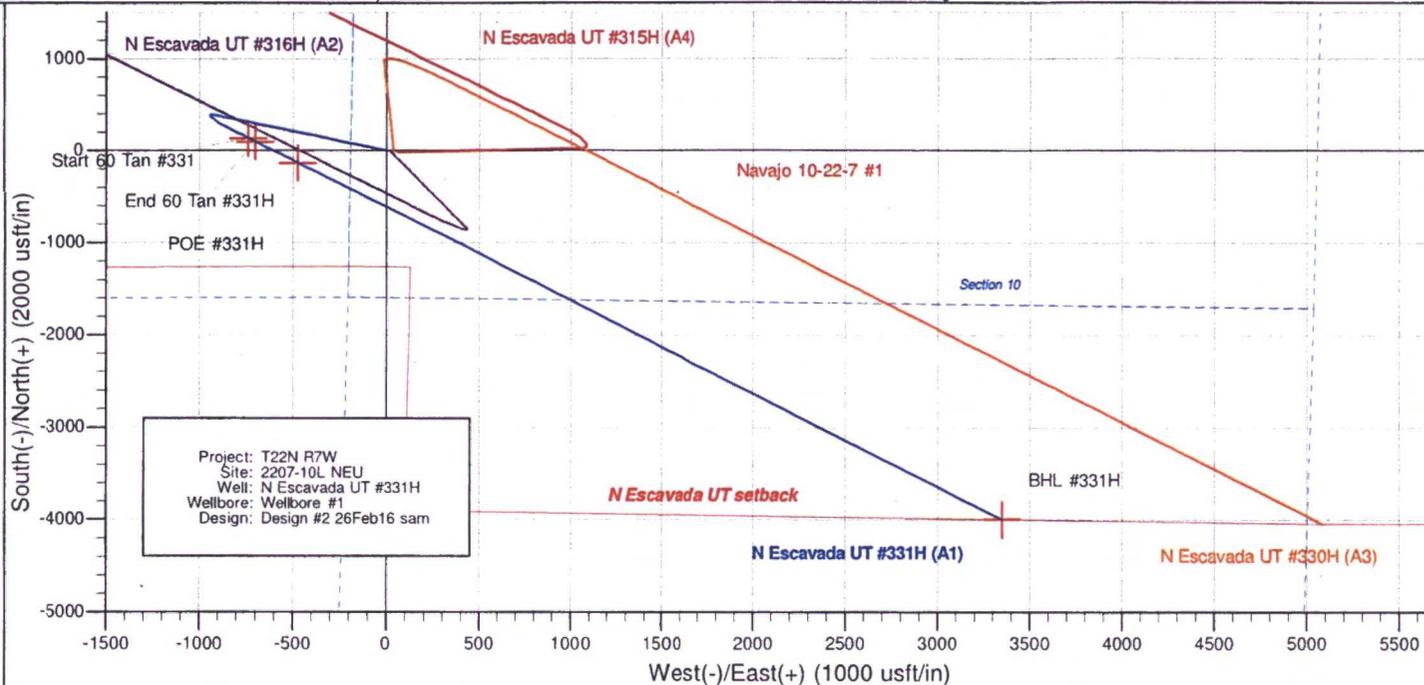
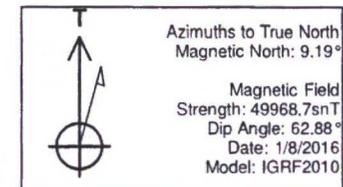
Casing Points						
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (in)	Hole Diameter (in)		
320.00	320.00	9 5/8"	9.625	12.250		
5,462.36	4,913.56	7"	7.000	8.750		

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment	
		+N/-S (usft)	+E/-W (usft)		
500.00	500.00	0.00	0.00	Start Build 2.00	
1,372.48	1,359.06	51.47	-121.37	Hold 17.45 Inclination	
4,215.36	4,071.11	384.30	-906.20	Start Build DLS 9.00 TFO -160.23	
5,063.22	4,798.30	135.10	-739.50	Hold 60.00 Inclination	
5,123.22	4,828.30	98.18	-702.94	Start Build DLS 9.00 TFO 0.00	
5,296.40	4,893.55	-15.39	-590.46	Start DLS 9.00 TFO 0.00	
5,462.36	4,913.56	-132.11	-474.87	POE at 90.52 Inc 135.28 Deg	
10,899.22	4,864.00	-3,995.03	3,350.69	TD at 10899.22	

Well Name: N Escavada UT #331H  
 Surface Location: 2207-10L NEU  
 NAD 1927 (NADCON CONUS) , US State Plane 1927 (Exact solution) New Mexico West 3003  
 Ground Elevation: 6860.00

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	1874382.38	577731.81	36.151198	-107.570040	A1

GL @ 6860.00usft (Original Well Elev)



DESIGN TARGET DETAILS									
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape	
Start 60 Tan #331 24Feb16 sam	4798.30	135.10	-739.50	1874515.47	576991.95	36.151569	-107.572545	Point	- plan hits target center
End 60 Tan #331H 24Feb16 sam	4828.30	98.18	-702.94	1874478.65	577028.61	36.151468	-107.572421	Point	- plan hits target center
POE #331H 24Feb16 sam	4913.56	-132.11	-474.87	1874248.98	577257.30	36.150835	-107.571649	Point	- plan hits target center
BHL #331H	4864.00	-3995.03	3350.69	1870396.45	581093.32	36.140223	-107.558692	Point	- plan hits target center

SLOTS				
Slot Name	+N/-S	+E/-W	Northing	Easting
A1	0.00	0.00	1874382.38	577731.81
A2	-4.47	19.53	1874377.96	577751.35
A3	-8.83	39.01	1874373.66	577770.84
A4	-13.21	58.49	1874369.33	577790.34

ANNOTATIONS									
TVD	MD	Inc	Azi	+N/-S	+E/-W	VSec	Departure	Annotation	
500.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00	Start Build 2.00	
1359.06	1372.48	17.45	292.98	51.47	-121.37	-117.43	131.84	Hold 17.45 Inclination	
4071.11	4215.36	17.45	292.98	384.30	-906.20	-876.79	984.32	Start Build DLS 9.00 TFO -160.23	
4798.30	5063.22	60.00	135.28	135.10	-739.50	-578.73	1345.29	Hold 60.00 Inclination	
4828.30	5123.22	60.00	135.28	98.18	-702.94	-526.94	1397.25	Start Build DLS 9.00 TFO 0.00	
4893.55	5296.40	75.59	135.28	-15.39	-590.46	-367.64	1557.09	Start DLS 9.00 TFO 0.00	
4913.56	5462.36	90.52	135.28	-132.11	-474.87	-203.94	1721.36	POE at 90.52 Inc 135.28 Deg	
4864.00	10899.22	90.52	135.28	-3995.03	3350.69	5214.15	7158.00	TD at 10899.22	

determined during construction and interim reclamation and installed where needed as needed.

- d. Facilities will be painted Juniper Green.
  - e. BLM approved sagebrush seed mix will be used during reclamation.
  - f. Vegetation will be mulched and incorporated into the topsoil.
5. All project activities will be confined to permitted areas only.
  6. Construction equipment may include chain saws, a brush hog, scraper, maintainer, excavator, backhoe, trencher, compact track loader, and a dozer.
  7. If drilling has not been initiated on the well pad within 120 days of the well pad being constructed, the operator will consult with the BLM to address a site-stabilization plan.

D. Production Facilities

1. As practical, access will be a teardrop-shaped road through the production area so that the center may be revegetated.
2. Within 90 days of installation, production facilities would be painted Juniper Green to blend with the natural color of the landscape and would be located, to the extent practical, to reasonably minimize visual impact.
3. Berms will be constructed around all storage facilities sufficient in size to contain the storage capacity of tanks. Berm walls will be compacted with appropriate equipment to assure containment.

After the completion phases and pipeline installation, portions of the project area not needed for operation will be reclaimed. When the well is plugged, final reclamation will occur within the remainder of the project area. Reclamation is described in detail in the Reclamation Plan (Appendix C).

## 7.0 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 systems or returned to the vendor for reuse, as practical. All residual fluids will be hauled to a commercial disposal facility.

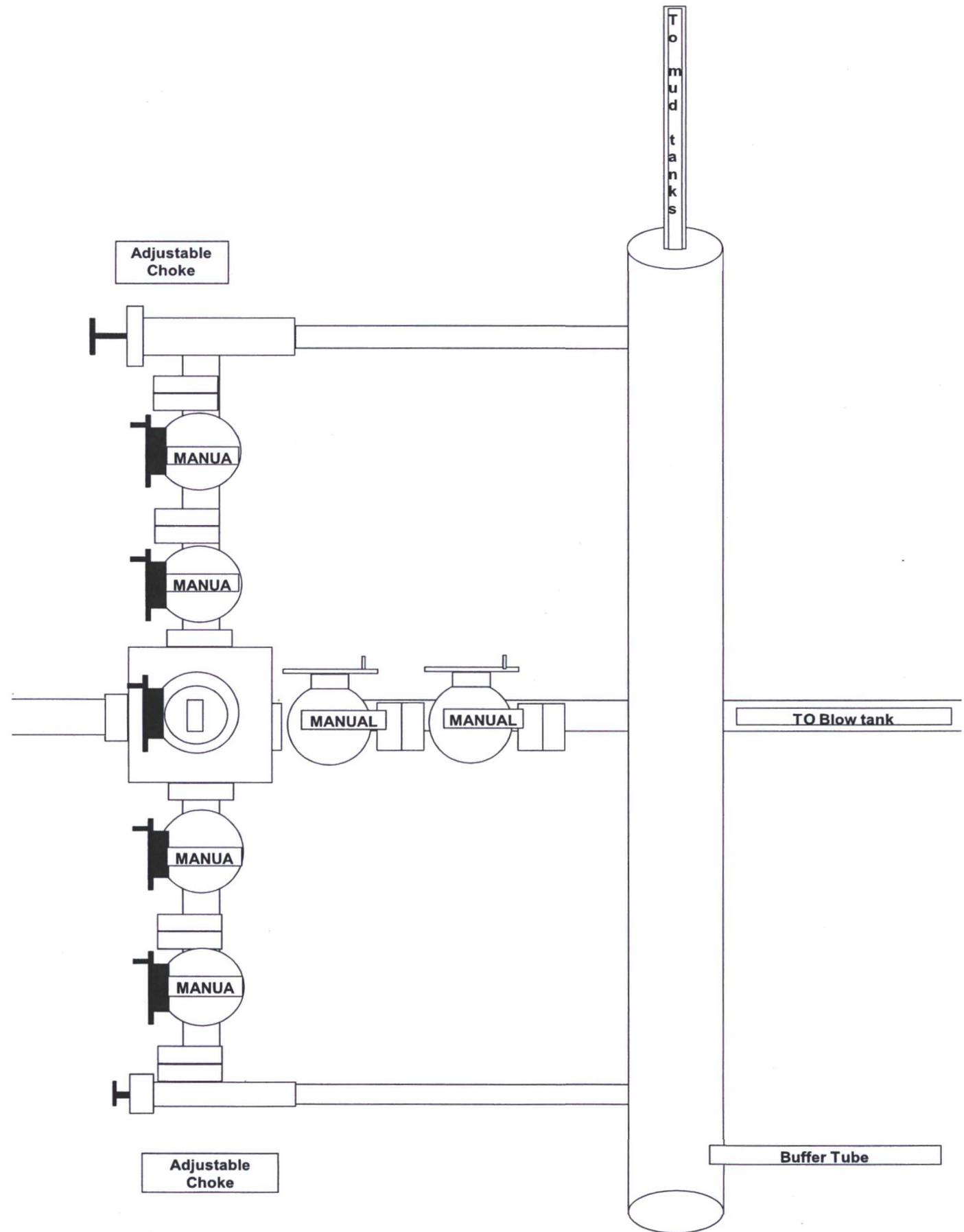
C. Spills

1. Any spills of non-freshwater fluids will be immediately cleaned up and removed to an approved disposal site.

D. Sewage

1. Portable toilets will be provided and maintained during construction, as needed (see Figure 4 in Appendix B for the location of toilets).

E. Garbage and other water material



Adjustable  
Choke

MANUA

MANUA

MANUA

MANUA

TO Blow tank

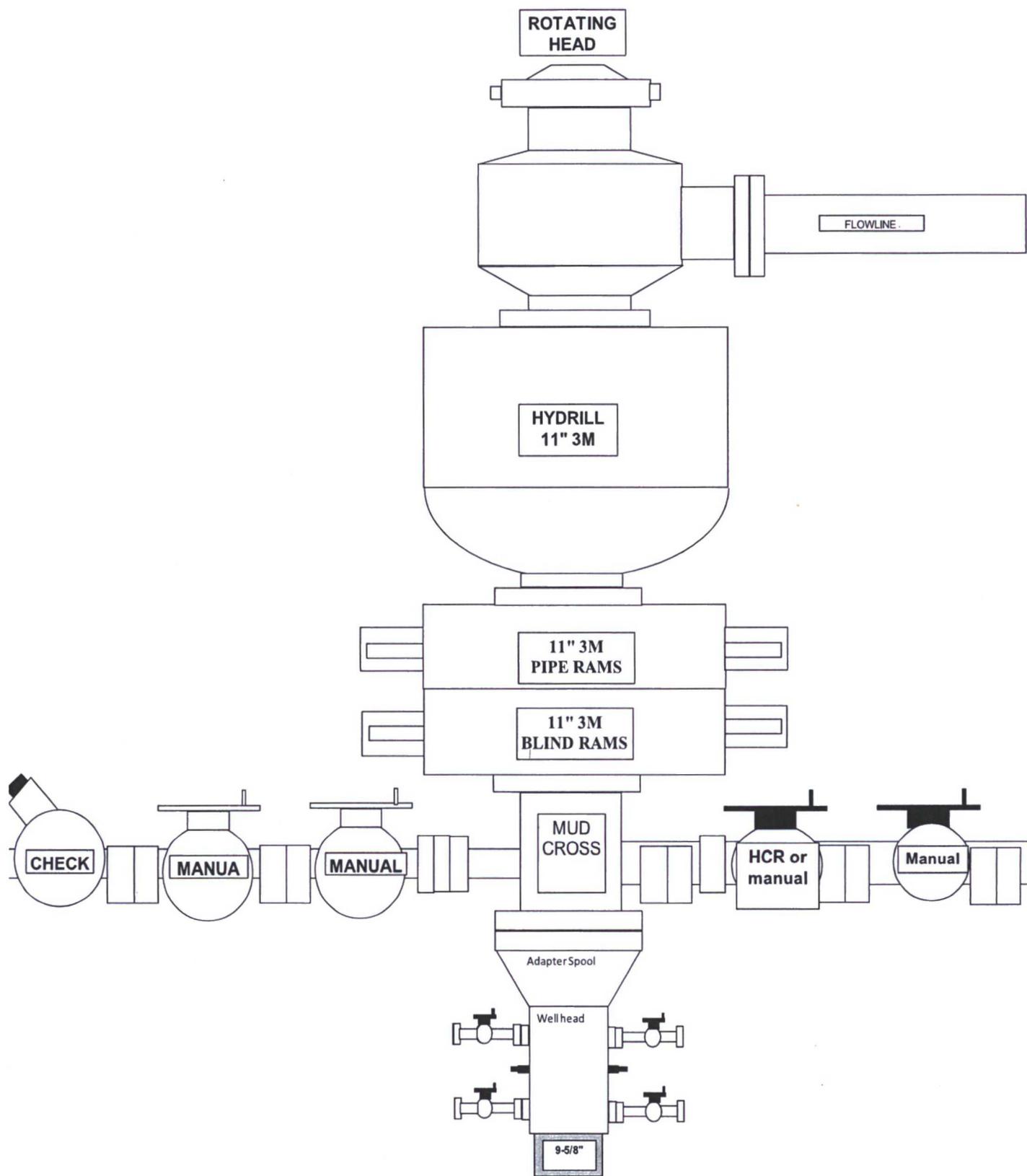
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Buffer Tube



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

**in Bloomfield, NM to WPX Energy Production, LLC N Escavada UT #331H**

**1594' FSL & 192' FWL, Section 10, T22N, R7W, N.M.P.M., Sandoval County, NM**

**Latitude: 36.151213°N Longitude: 107.570647°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 1.1 miles to new access on left-hand side of existing roadway which continues for an additional 29.4' to staked WPX N Escavada UT #331H location.