

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: 7-5-16


Well information;

Operator WXPX, Well Name and Number Kimberto Wash Unit # 775H

API# 30-045-35781, Section 20, Township 23 N/S, Range 9 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.

  
NMOCD Approved by Signature

4-24-2017  
Date

10460002554

note 3/8/16

Form 3160-3  
(March 2012)

NOS: \_\_\_\_\_  
APDP: \_\_\_\_\_  
MP: \_\_\_\_\_  
SMA: \_\_\_\_\_  
BOND: \_\_\_\_\_  
CA/PAC: \_\_\_\_\_

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED  
OMB No. 1004-0137  
Expires October 31, 2014

5. Lease Serial No.  
NOG14031946

6. If Indian, Allottee or Tribe Name  
EASTERN NAVAJO

7. If Unit or CA Agreement, Name and No.  
/1/KIMBETO WASH UNIT / NMNM13525

8. Lease Name and Well No.  
KWU / 775H

9. API Well No.  
30-045-35781

10. Field and Pool, or Exploratory  
BASIN MANCOS

11. Sec., T. R. M. or Blk. and Survey or Area  
SEC 20 / T23N / R9W / NMP

12. County or Parish  
SAN JUAN

13. State  
NM

1a. Type of work: ☒ DRILL ☐ REENTER

1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other ☐ Single Zone ☒ Multiple Zone

2. Name of Operator  
WPX ENERGY LLC

3a. Address  
720 S MAIN AZTEC NM 87410

3b. Phone No. (include area code)  
(505)333-1822

4. Location of Well (Report location clearly and in accordance with any State requirements.)\*

At surface LOT 0 / 797 FNL / 689 FWL / LAT 36.217455 / LONG -107.818818

At proposed prod. zone LOT 0 / 922 FNL / 333 FWL / LAT 36.231671 / LONG -107.837943

14. Distance in miles and direction from nearest town or post office\*

15. Distance from proposed\*  
location to nearest 20 feet  
property or lease line, ft.  
(Also to nearest drig. unit line, if any)

16. No. of acres in lease  
160

17. Spacing Unit dedicated to this well  
1278.98

OIL CONS. DIV DIST. 3

18. Distance from proposed location\*  
to nearest well, drilling, completed, 689 feet  
applied for, on this lease, ft.

19. Proposed Depth  
4445 feet / 12639 feet

20. BLM/BIA Bond No. on file  
IND: B001576

APR 17 2017

21. Elevations (Show whether DF, KDB, RT, GL, etc.)  
6538 feet

22. Approximate date work will start\*  
06/01/2016

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.
2. A Drilling Plan.
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).

4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification
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

Date  
07/05/2016

Title

Permitting Tech III

Approved by (Signature)

Anthony A. Guecos

Name (Printed/Typed)

Anthony A. Guecos

Date

4/10/2017

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"

NMOCD



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-i02  
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 30-045-35781		*Pool Code 97232	*Pool Name BASIN MANCOS
*Property Code 315250 316144	*Property Name Kimbeto wash Unit		*Well Number 775H
*OGRID No. 120782	*Operator Name WPX ENERGY PRODUCTION, LLC		*Elevation 6538'

<sup>10</sup> Surface Location

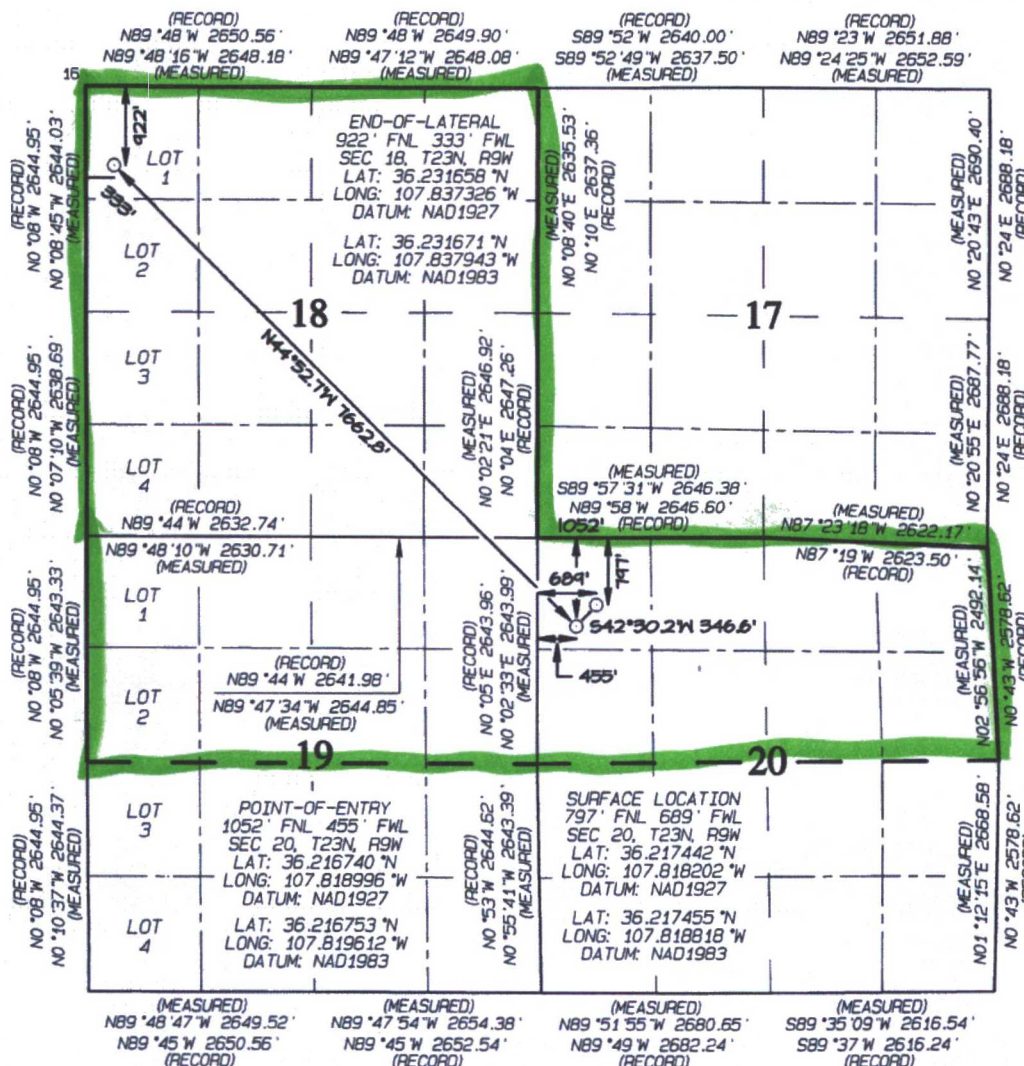
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	20	23N	9W		797	NORTH	689	WEST	SAN JUAN

<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
D	18	23N	9W	1	922	NORTH	333	WEST	SAN JUAN

<sup>12</sup> Dedicated Acres 1278.98	Entire Section 18 N/2 - Section 19 N/2 - Section 20	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No. r14051
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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.

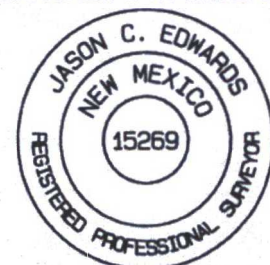
Signature: *Lacey Granillo* Date: 6/27/16  
Printed Name: Lacey Granillo  
E-mail Address: lacey.granillo@wpxenergy.com

<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: MAY 4, 2016  
Date of Survey: JULY 16, 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:** June 27, 2016  
**Well Name:** KWU #775H  
**SH Location:** NWNW Sec 20-23N-09W  
**BH Location:** NWNW Sec 18-23N-09W

**Field:** Basin Mancos  
**Surface:** IA  
**Elevation:** 6538' GR  
**Minerals:** IA

**Measured Depth:** 12,639.05'

## **I. GEOLOGY**

Surface formation - NACIMIENTO

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

NAME	MD	TVD	NAME	MD	TVD
OJO ALAMO	110	110	POINT LOOKOUT	3279	3177
KIRTLAND	272	272	MANCOS	3466	3352
PICTURED CLIFFS	840	840	GALLUP	3822	3691
LEWIS	924	924	KICKOFF POINT	3,662.66	3,536.48
CHACRA	1141	1141	TOP TARGET	4870	4421
CLIFF HOUSE	2286	2248	LANDING POINT	4,976.27	4,430.00
MENEFEE	2305	2265	BASE TARGET	4,976.27	4,430.00
			TD	12,639.05	4,445.00

### **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"	4,976.27'	7"	23 LBS	J-55 or equiv	LTC
PRODUCTION	6.125"	4826.27' - 12,639.05'	4.5"	11.6 LBS	P-110 or equiv	LTC
TIE BACK	6.125"	Surf. - 4826.27'	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.

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

#### C. CEMENT:

##### 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: 88 bbls, 250 sks, (492 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/ +/- 196 bbl Drilling mud or water. Total Cement: 147 bbls, 504 sks, (823 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 (765 sx /1041 cuft /185 bbls). Tail Spacer: 20 BBL of MMCR. Displacement: Displace w/ +/-171bbl Fr Water. Total Cement (765 sx /1041bbls).

**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**

**T23N R9W**

**2309-20D KWU**

**KWU #775H - Slot A2**

**Wellbore #1**

**Plan: Design #1 3May16 sam**

## **Standard Planning Report**

**03 May, 2016**



# WPX

## Planning Report

<b>Database:</b>	COMPASS	<b>Local Co-ordinate Reference:</b>	Well KWU #775H (A2) - Slot A2
<b>Company:</b>	WPX Energy	<b>TVD Reference:</b>	GL @ 6538.00usft (Original Well Elev)
<b>Project:</b>	T23N R9W	<b>MD Reference:</b>	GL @ 6538.00usft (Original Well Elev)
<b>Site:</b>	2309-20D KWU	<b>North Reference:</b>	True
<b>Well:</b>	KWU #775H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1 3May16 sam		

<b>Project</b>	T23N R9W		
<b>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		

Site		2309-20D KWU				
Site Position:		Northing:	1,898,410.74 usft	Latitude:	36.217497	
From:	Map	Easting:	504,461.08 usft	Longitude:	-107.818210	
Position Uncertainty:		0.00 usft	Slot Radius:	13.200 in	Grid Convergence:	0.01 °

Well	KWU #775H - Slot A2					
Well Position	+N/-S	-20.02 usft	Northing:	1,898,390.72 usft	Latitude:	36.217442
	+E/-W	2.37 usft	Easting:	504,463.45 usft	Longitude:	-107.818202
Position Uncertainty		0.00 usft	Wellhead Elevation:	0.00 usft	Ground Level:	6,538.00 usft

<b>Wellbore</b>	Wellbore #1				
<b>etics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2015	5/3/2016	9.34	62.89	49,849

<b>gn</b>	Design #1 3May16 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	312.54

<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	
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,028.73	20.57	156.68	2,006.76	-167.80	72.33	2.00	2.00	0.00	156.68	
3,662.66	20.57	156.68	3,536.48	-695.11	299.63	0.00	0.00	0.00	0.00	
4,544.18	60.00	315.13	4,294.71	-541.45	50.52	9.00	4.47	17.97	161.11	Start 60 tan #775H
4,644.18	60.00	315.13	4,344.71	-480.07	-10.58	0.00	0.00	0.00	0.00	End 60 tan #775H
4,807.16	74.67	315.13	4,407.34	-373.78	-116.39	9.00	9.00	0.00	0.00	
4,976.27	89.89	315.13	4,430.00	-255.36	-234.26	9.00	9.00	0.00	0.00	POE #775H
12,639.05	89.89	315.13	4,445.00	5,175.43	-5,640.23	0.00	0.00	0.00	0.00	BHL #775H



# WPX Planning Report

**Database:** COMPASS  
**Company:** WPX Energy  
**Project:** T23N R9W  
**Site:** 2309-20D KWU  
**Well:** KWU #775H  
**Wellbore:** Wellbore #1  
**Design:** Design #1 3May16 sam

**Local Co-ordinate Reference:** Well KWU #775H (A2) - Slot A2  
**TVD Reference:** GL @ 6538.00usft (Original Well Elev)  
**MD Reference:** GL @ 6538.00usft (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	156.68	1,497.47	-39.97	17.23	-39.72	2.00	2.00	0.00
2,000.00	20.00	156.68	1,979.82	-158.66	68.39	-157.66	2.00	2.00	0.00
2,028.73	20.57	156.68	2,006.76	-167.80	72.33	-166.75	2.00	2.00	0.00
<b>Hold 20.57 Inclination</b>									
2,500.00	20.57	156.68	2,447.97	-319.89	137.89	-317.88	0.00	0.00	0.00
3,000.00	20.57	156.68	2,916.08	-481.25	207.45	-478.22	0.00	0.00	0.00
3,500.00	20.57	156.68	3,384.19	-642.61	277.00	-638.57	0.00	0.00	0.00
3,662.66	20.57	156.68	3,536.48	-695.11	299.63	-690.73	0.00	0.00	0.00
<b>Start Build DLS 9.00 TFO 161.11</b>									
4,000.00	12.61	288.13	3,866.75	-739.12	287.83	-711.79	9.00	-2.36	38.97
4,500.00	56.06	314.50	4,271.32	-567.87	77.10	-440.74	9.00	8.69	5.27
4,544.18	60.00	315.13	4,294.71	-541.45	50.52	-403.30	9.00	8.92	1.42
<b>Hold 60.00 Inclination</b>									
4,644.18	60.00	315.13	4,344.71	-480.07	-10.58	-316.78	0.00	0.00	0.00
<b>Start Build DLS 9.00 TFO 0.00</b>									
4,807.16	74.67	315.13	4,407.34	-373.78	-116.39	-166.95	9.00	9.00	0.00
<b>Start DLS 9.00 TFO 0.00</b>									
4,976.00	89.86	315.13	4,430.00	-255.55	-234.07	-0.31	9.00	9.00	0.00
<b>7"</b>									
4,976.27	89.89	315.13	4,430.00	-255.36	-234.26	-0.04	9.00	9.00	0.00
<b>POE at 89.89 Inc 315.13 Deg</b>									
5,000.00	89.89	315.13	4,430.05	-238.54	-251.00	23.66	0.00	0.00	0.00
5,500.00	89.89	315.13	4,431.03	115.82	-603.74	523.15	0.00	0.00	0.00
6,000.00	89.89	315.13	4,432.00	470.18	-956.49	1,022.64	0.00	0.00	0.00
6,500.00	89.89	315.13	4,432.98	824.54	-1,309.23	1,522.13	0.00	0.00	0.00
7,000.00	89.89	315.13	4,433.96	1,178.90	-1,661.97	2,021.61	0.00	0.00	0.00
7,500.00	89.89	315.13	4,434.94	1,533.26	-2,014.71	2,521.10	0.00	0.00	0.00
8,000.00	89.89	315.13	4,435.92	1,887.63	-2,367.45	3,020.59	0.00	0.00	0.00
8,500.00	89.89	315.13	4,436.90	2,241.99	-2,720.20	3,520.08	0.00	0.00	0.00
9,000.00	89.89	315.13	4,437.88	2,596.35	-3,072.94	4,019.56	0.00	0.00	0.00
9,500.00	89.89	315.13	4,438.86	2,950.71	-3,425.68	4,519.05	0.00	0.00	0.00
10,000.00	89.89	315.13	4,439.83	3,305.07	-3,778.42	5,018.54	0.00	0.00	0.00
10,500.00	89.89	315.13	4,440.81	3,659.43	-4,131.16	5,518.03	0.00	0.00	0.00
11,000.00	89.89	315.13	4,441.79	4,013.79	-4,483.91	6,017.51	0.00	0.00	0.00
11,500.00	89.89	315.13	4,442.77	4,368.16	-4,836.65	6,517.00	0.00	0.00	0.00
12,000.00	89.89	315.13	4,443.75	4,722.52	-5,189.39	7,016.49	0.00	0.00	0.00
12,500.00	89.89	315.13	4,444.73	5,076.88	-5,542.13	7,515.98	0.00	0.00	0.00
12,639.05	89.89	315.13	4,445.00	5,175.43	-5,640.23	7,654.89	0.00	0.00	0.00
<b>TD at 12639.05</b>									

**WPX**  
Planning Report

<b>Database:</b>	COMPASS	<b>Local Co-ordinate Reference:</b>	Well KWU #775H (A2) - Slot A2
<b>Company:</b>	WPX Energy	<b>TVD Reference:</b>	GL @ 6538.00usft (Original Well Elev)
<b>Project:</b>	T23N R9W	<b>MD Reference:</b>	GL @ 6538.00usft (Original Well Elev)
<b>Site:</b>	2309-20D KWU	<b>North Reference:</b>	True
<b>Well:</b>	KWU #775H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1 3May16 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 #775H - plan hits target center - Point	0.00	0.00	4,294.71	-541.45	50.52	1,897,849.28	504,514.06	36.215955	-107.818031
End 60 tan #775H - plan hits target center - Point	0.00	0.00	4,344.71	-480.07	-10.58	1,897,910.65	504,452.95	36.216123	-107.818238
POE #775H - plan hits target center - Point	0.00	0.00	4,430.00	-255.36	-234.26	1,898,135.32	504,229.23	36.216741	-107.818996
BHL #775H - plan hits target center - Point	0.00	0.00	4,445.00	5,175.43	-5,640.23	1,903,565.27	498,822.41	36.231658	-107.837326

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	
4,976.00	4,430.00	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
2,028.73	2,006.76	-167.80	72.33	Hold 20.57 Inclination
3,662.66	3,536.48	-695.11	299.63	Start Build DLS 9.00 TFO 161.11
4,544.18	4,294.71	-541.45	50.52	Hold 60.00 Inclination
4,644.18	4,344.71	-480.07	-10.58	Start Build DLS 9.00 TFO 0.00
4,807.16	4,407.34	-373.78	-116.39	Start DLS 9.00 TFO 0.00
4,976.27	4,430.00	-255.36	-234.26	POE at 89.89 Inc 315.13 Deg
12,639.05	4,445.00	5,175.43	-5,640.23	TD at 12639.05



Construction of all project features associated with KWU Remote #1 will consist of native borrow and subsoils from the Doak-Sheppard-Shiprock association, rolling soil map unit. A brief description of this soil can be found below.

Doak-Sheppard-Shiprock association, rolling soils are found on mesas, fan remnants, stream terraces, and dunes at 5,600 to 6,400 feet in elevation. The unit is composed of 40 percent Doak soils, 30 percent Sheppard soils, and 20 percent Shiprock soils. Doak soils occur on slopes from 0 to 5 percent and are well drained. Doak soils are deep and have a moderately slow permeability. Sheppard soils occur on slopes from 0 to 15 percent and are deep, somewhat excessively drained, and rapidly permeable. Shiprock soils occur on 0 to 5 percent slopes and are deep, well drained, and have a moderately rapid permeability. They formed in eolian material and slope alluvium. Effective rooting depth for this unit is 60 inches or greater. This unit is mainly used for livestock grazing and wildlife habitat. The major limitations of this mapping unit are: (1) the hazard of soil blowing and (2) the hazard of water erosion. (USDA/NRCS 2015).

## 7. METHODS FOR HANDLING WASTE

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### 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

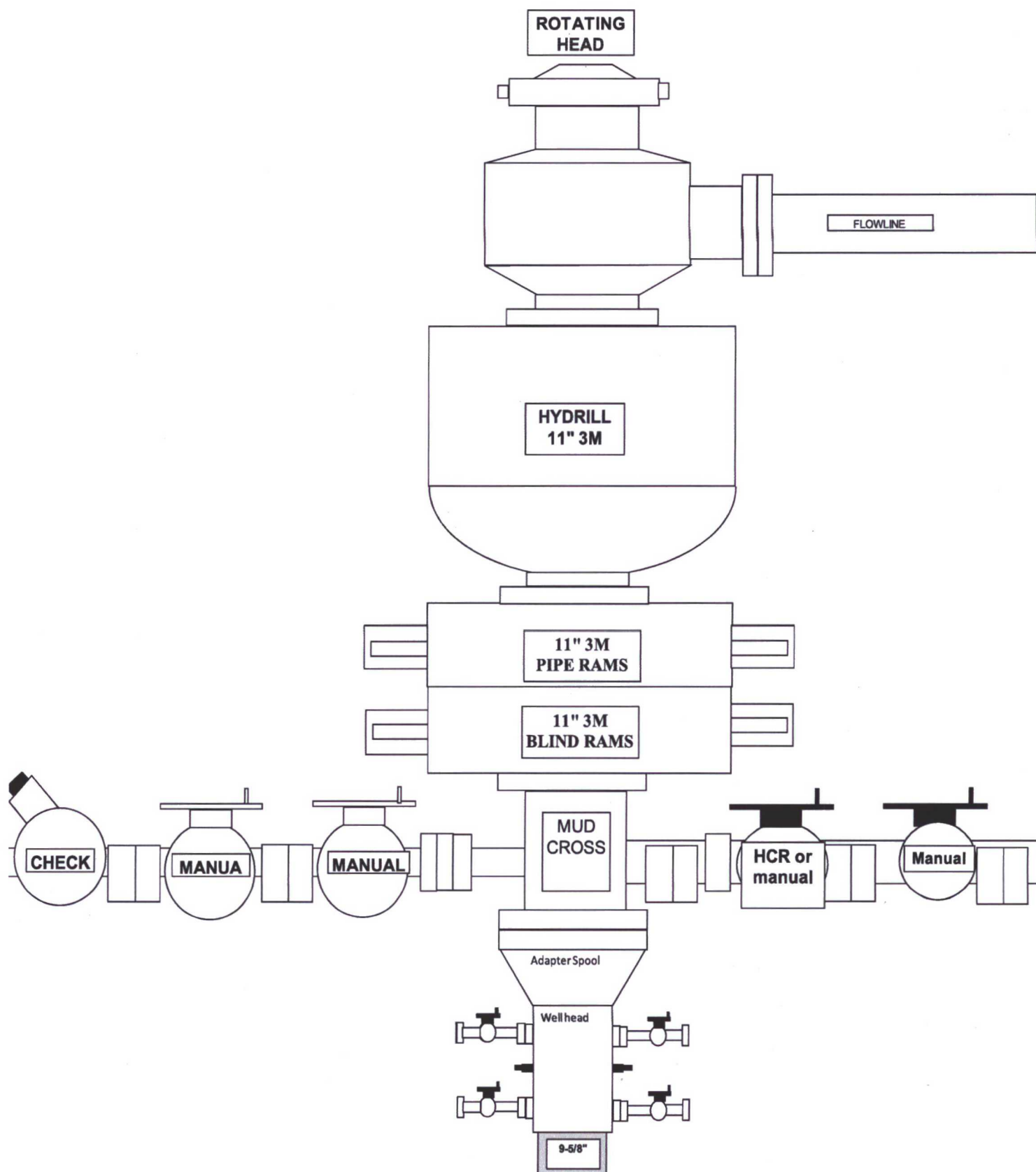
- 1 Portable toilets will be provided and maintained during construction, as needed (see Figures 3, 4, 7, and 8 in Appendix B for the location of toilets per project).

### E. Garbage and other waste material

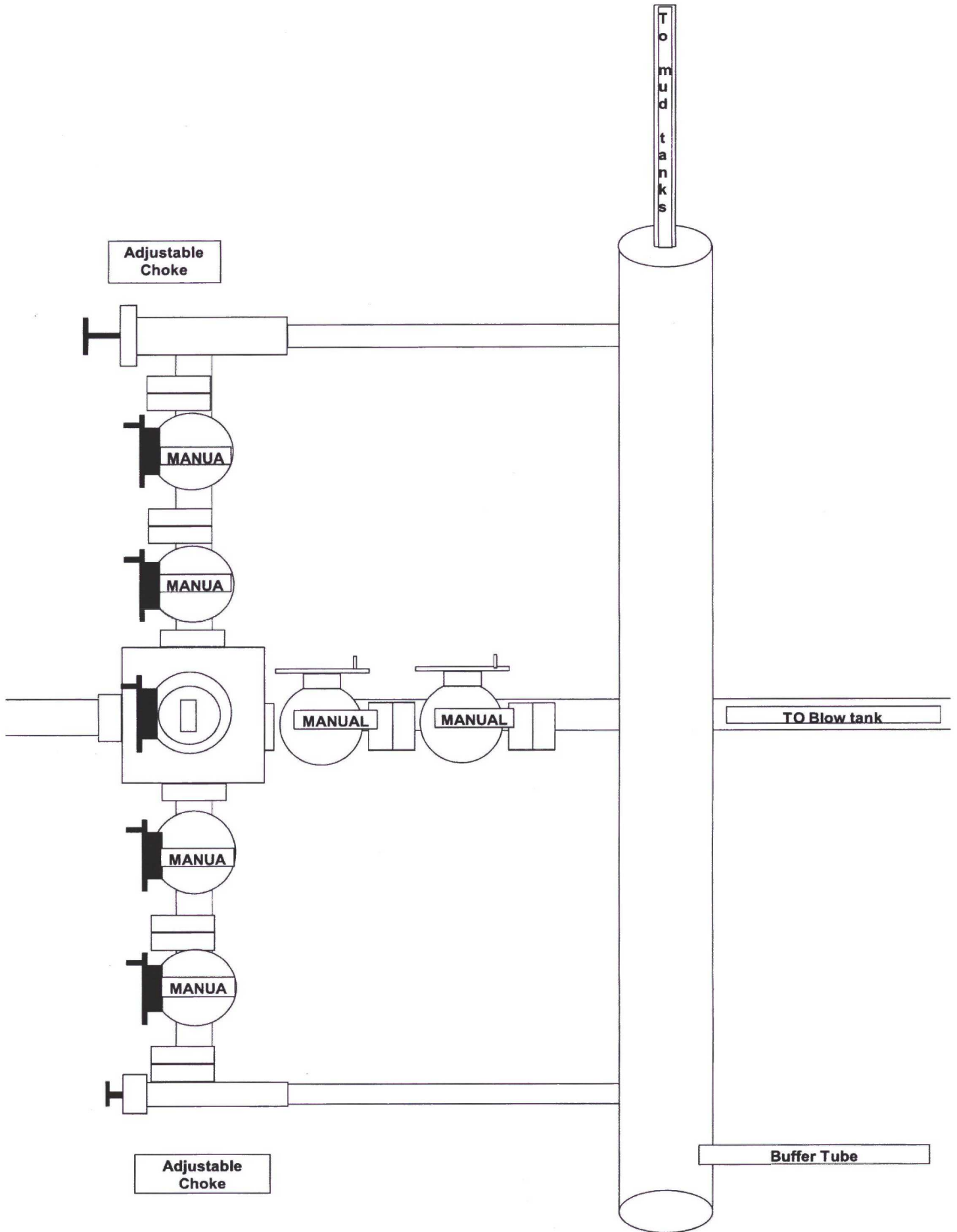
- 1 All garbage and trash will be placed in an enclosed metal trash containment. The trash and garbage will be hauled off site and dumped in an approved landfill, as needed.

### F. Hazardous Waste

- 1 No chemicals subject to reporting under Superfund Amendments and Reauthorization Act Title III in an amount equal to or greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the drilling, testing, or completing of these wells.







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

**in Bloomfield, NM to WPX Energy Production, LLC KWU #775H**

**797' FNL & 689' FWL, Section 20, T23N, R9W, N.M.P.M., San Juan County, NM**

**Latitude: 36.217455°N Longitude: 107.818818°W Datum: NAD1983**

From the intersection of US Hwy 550 & US Hwy 64 in Bloomfield, NM, travel Southerly on US Hwy 550 for 35.9 miles to Mile Marker 115.7;

Go Right (South-westerly) @ Nageezi Post Office on County Road #7800 for 0.4 miles to 4-way intersection;

Go Straight (South-westerly) exiting paved County Road #7800, continuing on County Road #7820 for 0.6 miles to fork in roadway;

Go Right (South-westerly) which is straight remaining on County Road #7820 for 1.1 miles to a 4-way intersection;

Go Straight (South-westerly) remaining on County Road #7820 for 3.2 miles to fork in road;

Go Right (Northerly) for 0.2 miles to begin proposed access on left-hand side of existing roadway which continues for 1534.7' to staked WPX KWU #775H location.