State of New Mexico
Energy, Minerals and Natural Resources Department

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: 1/18/2017
Well information;
Operator WPX, Well Name and Number Kimbeto Wash Unit 780H

API# 30-045-35806, Section 08, Township 23 (N)/S, Range 9 E/(W)

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

- ~~o~~ Notify Aztec OCD 24hrs prior to casing & cement.
- ~~o~~ Hold C-104 for directional survey & "As Drilled" Plat
- o Hold C-104 for NSL, NSP, DHC
- o Spacing rule violation. Operator must follow up with change of status notification on other well to be shut in or abandoned
- o 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
- o 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
- o 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 Perrin
NMOCD Approved by Signature

6-15-2017
Date

1220 South St. Francis Drive • Santa Fe, New Mexico 87505
Phone (505) 476-3441 • Fax (505) 476-3462 • www.emnrd.state.nm.us/ocd

15

Form 3160-3
(March 2012)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.: NMNM136267

6. If Indian, Allotee or Tribe Name:

1a. Type of work: ☑ DRILL ☐ REENTER

7. If Unit or CA Agreement, Name and No.: KIMBETO WASH UNIT / NMNM135255A

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

8. Lease Name and Well No.: KWU 780H

2. Name of Operator: WPX ENERGY LLC

9. API Well No.: 30-045-35826

3a. Address: 720 S Main Aztec NM 87410

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

10. Field and Pool, or Exploratory: BASIN MANCOS / MANCOS

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

At surface: K NESW / 1900 FSL / 2288 FWL / LAT 36.195927 / LONG -107.795332

At proposed prod. zone: H SENE / 2078 FNL / 216 FEL / LAT 36.213936 / LONG -107.821891

11. Sec., T. R. M. or Blk. and Survey or Area: SEC 28 / T23N / R9W / NMP

14. Distance in miles and direction from nearest town or post office*: 37.8 miles

12. County or Parish: SAN JUAN

13. State: NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any): 216 feet

16. No. of acres in lease: 960

17. Spacing Unit dedicated to this well: 20

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.: 1453.8 feet

19. Proposed Depth: 5500 feet / 10000 feet

20. BLM/BIA Bond No. on file: FED: UTB000178

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

22. Approximate date work will start*: 02/20/2017

23. Estimated duration: 48 days

ICP

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	Name *(Printed/Typed)*	Date
(Electronic Submission)	Marie Jaramillo / Ph: (505)533-1808	01/18/2017

Title: Permitting Tech III

Approved by *(Signature)*	Name *(Printed/Typed)*	Date
AFM		6/1/17
Title	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"

OIL CONS. DIV DIST. 3

JUN 02 2017

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

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

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

Form C-102
Revised August 1, 2011

Submit one copy to
Appropriate District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number	2 Pool Code	3 Pool Name
30-045-35826	97232	BASIN MANCOS

4 Property Code	5 Property Name	6 Well Number
316144	KIMBETO WASH UNIT	780H

7 OGRID No.	8 Operator Name	9 Elevation
120782	WPX ENERGY PRODUCTION, LLC	6538'

10 Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
K	28	23N	9W		1900	SOUTH	2288	WEST	SAN JUAN

11 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
H	19	23N	9W		2078	NORTH	216	EAST	SAN JUAN

12 Dedicated Acres		13 Joint or Infill	14 Consolidation Code	15 Order No
1599.53	N/2 - Section 19 Entire Section 20 W/2 - Section 28 N/2 - Section 29		OIL CONS. DIV DIST. 3	R-14084

JUN 14 2017

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

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 compulsory pooling order heretofore entered by the division.

Signature — Date: 6/13/17

Lacey Granillo

Printed Name: lacey.granillo@wpxenergy.com

E-mail Address

18 SURVEYOR CERTIFICATION

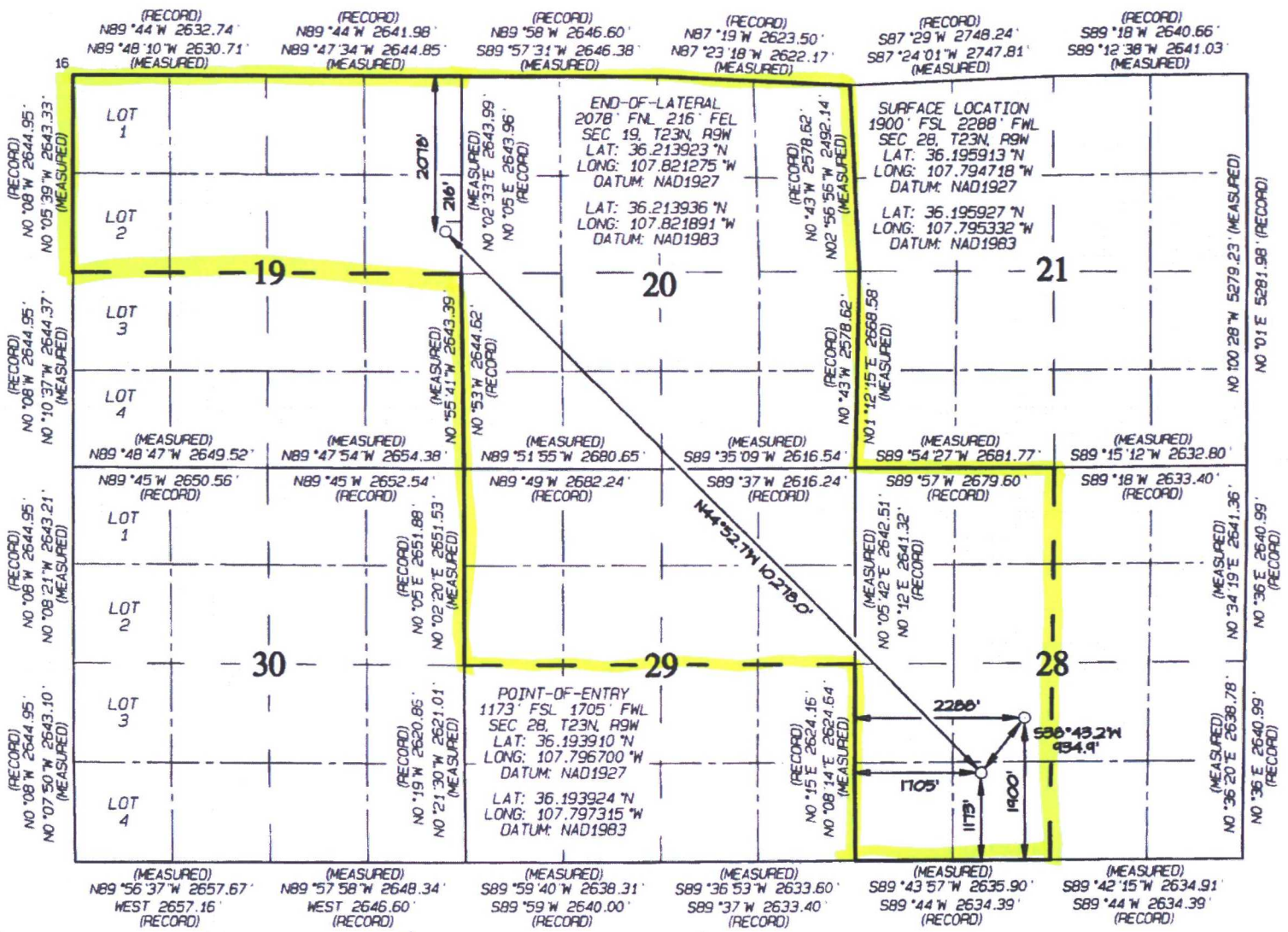
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

Date Revised: JUNE 12, 2017
Survey Date: OCTOBER 2, 2015

Signature and Seal of Professional Surveyor

JASON C. EDWARDS
NEW MEXICO
15269
REGISTERED PROFESSIONAL SURVEYOR

JASON C. EDWARDS
Certificate Number 15269



Navajo Surface Federal Minerals

WPX Energy

Operations Plan

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

Date:	January 17, 2017	**Field:**	Basin Mancos
Well Name:	KWU #780H	**Surface:**	BLM
SH Location:	NESW Sec 28-23N-09W	**Elevation:**	6538' GR
BH Location:	SENE Sec 28-23N-09W	**Minerals:**	FEDERAL

Measured Depth: 15,294.93'

I. GEOLOGY

Surface formation - OJO ALAMO/ NACIMIENTO

A. FORMATION TOPS: (GR)

NAME	MD	TVD	NAME	MD	TVD
OJO ALAMO	27.00	27.00	POINT LOOKOUT	3,283.00	3,094.00
KIRTLAND	189.00	189.00	MANCOS	3,477.00	3,269.00
PICTURED CLIFFS	757.00	757.00	GALLUP	3,848.00	3,608.00
LEWIS	842.00	841.00	KICKOFF POINT	3,703.72	3,473.62
CHACRA	1,062.00	1,058.00	TOP TARGET	4,814.00	4,338.00
CLIFF HOUSE	2,253.00	2,165.00	LANDING POINT	5,016.84	4,351.34
MENEFEE	2,272.00	2,182.00	BASE TARGET	5,016.84	4,351.34
			TD	15,294.93	4,408.00

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 ¾" 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"	5,016.84'	7"	23 LBS	J-55 or equiv	LTC
PRODUCTION	6.125"	4866.84' - 15,294.93'	4.5"	11.6 LBS	P-110 or equiv	LTC
TIE BACK	6.125"	Surf. - 4866.84'	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 utalized 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 opend 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: 89 bbls, 253 sks, (499 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/ +/- 198 bbl Drilling mud or water. Total Cement: 148 bbls, 508 sks, (830 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 (1022 sx /1390 cuft /248 bbls). Tail Spacer: 20 BBL of MMCR. Displacement: Displace w/ +/-212bbl Fr Water. Total Cement (1022 sx /1390bbls).

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.

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
2309-28K WLU-KWU
Kimbeto Wash #780H - Slot A4

Wellbore #1

Plan: Design #1 25May16 sam

Standard Planning Report

31 May, 2016

WPX
Planning Report

Database:	COMPASS	**Local Co-ordinate Reference:**	Well Kimbeto Wash #780H (A4) - Slot A4
Company:	WPX Energy	**TVD Reference:**	GL @ 6538.00usft (Original Well Elev)
Project:	T23N R9W	**MD Reference:**	GL @ 6538.00usft (Original Well Elev)
Site:	2309-28K WLU-KWU	**North Reference:**	True
Well:	Kimbeto Wash #780H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 25May16 sam		

Project	T23N R9W		
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	2309-28K WLU-KWU				
Site Position:		**Northing:**	1,890,595.89 usft	**Latitude:**	36.196023
From:	Map	**Easting:**	511,391.51 usft	**Longitude:**	-107.794726
Position Uncertainty:	0.00 usft	**Slot Radius:**	13.200 in	**Grid Convergence:**	0.02 °

Well	Kimbeto Wash #780H - Slot A4					
Well Position	**+N/-S**	-40.04 usft	**Northing:**	1,890,555.85 usft	**Latitude:**	36.195913
	+E/-W	2.35 usft	**Easting:**	511,393.88 usft	**Longitude:**	-107.794718
Position Uncertainty		0.00 usft	**Wellhead Elevation:**	0.00 usft	**Ground Level:**	6,538.00 usft

Wellbore	Wellbore #1				
Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	IGRF2015	5/24/2016	9.32	62.68	49,834

Design	Design #1 25May16 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	309.93

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	
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,776.84	25.54	179.08	1,734.99	-279.83	4.51	2.00	2.00	0.00	179.08	
3,703.72	25.54	179.08	3,473.62	-1,110.38	17.89	0.00	0.00	0.00	0.00	
4,587.02	60.00	315.14	4,216.06	-1,013.56	-301.83	9.00	3.90	15.40	142.33	Start 60 Tan #780H
4,687.02	60.00	315.14	4,266.06	-952.17	-362.91	0.00	0.00	0.00	0.00	End 60 Tan #780H
4,854.94	75.11	315.14	4,329.98	-842.47	-472.06	9.00	9.00	0.00	0.00	
5,016.84	89.68	315.14	4,351.34	-729.01	-584.95	9.00	9.00	0.00	0.00	POE #780H
15,294.93	89.68	315.14	4,408.00	6,556.93	-7,834.15	0.00	0.00	0.00	0.00	BHL #780H

WPX
Planning Report

Database:	COMPASS	**Local Co-ordinate Reference:**	Well Kimbeto Wash #780H (A4) - Slot A4
Company:	WPX Energy	**TVD Reference:**	GL @ 6538.00usft (Original Well Elev)
Project:	T23N R9W	**MD Reference:**	GL @ 6538.00usft (Original Well Elev)
Site:	2309-28K WLU-KWU	**North Reference:**	True
Well:	Kimbeto Wash #780H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 25May16 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
9 5/8"									
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 2.00									
1,000.00	10.00	179.08	997.47	-43.52	0.70	-28.47	2.00	2.00	0.00
1,500.00	20.00	179.08	1,479.82	-172.75	2.78	-113.01	2.00	2.00	0.00
1,776.84	25.54	179.08	1,734.99	-279.83	4.51	-183.06	2.00	2.00	0.00
Hold 25.54 Inclination									
2,000.00	25.54	179.08	1,936.34	-376.02	6.06	-245.98	0.00	0.00	0.00
2,500.00	25.54	179.08	2,387.50	-591.54	9.53	-386.97	0.00	0.00	0.00
3,000.00	25.54	179.08	2,838.65	-807.05	13.00	-527.96	0.00	0.00	0.00
3,500.00	25.54	179.08	3,289.81	-1,022.57	16.47	-668.95	0.00	0.00	0.00
3,703.72	25.54	179.08	3,473.62	-1,110.38	17.89	-726.39	0.00	0.00	0.00
Start Build DLS 9.00 TFO 142.33									
4,000.00	16.37	255.80	3,754.52	-1,185.84	-22.28	-744.02	9.00	-3.10	25.90
4,500.00	52.57	312.15	4,167.79	-1,063.53	-249.56	-491.23	9.00	7.24	11.27
4,587.02	60.00	315.14	4,216.06	-1,013.56	-301.83	-419.07	9.00	8.54	3.44
Hold 60.00 Inclination									
4,687.02	60.00	315.14	4,266.06	-952.17	-362.91	-332.83	0.00	0.00	0.00
Start Build DLS 9.00 TFO 0.00									
4,854.94	75.11	315.14	4,329.98	-842.47	-472.06	-178.72	9.00	9.00	0.00
Start DLS 9.00 TFO 0.00									
5,000.00	88.17	315.14	4,351.02	-740.95	-573.07	-36.10	9.00	9.00	0.00
5,016.84	89.68	315.14	4,351.34	-729.01	-584.95	-19.33	9.00	9.00	0.00
POE at 89.68 Inc 315.14 Deg - 7"									
5,500.00	89.68	315.14	4,354.00	-386.51	-925.73	461.82	0.00	0.00	0.00
6,000.00	89.68	315.14	4,356.76	-32.07	-1,278.38	959.74	0.00	0.00	0.00
6,500.00	89.68	315.14	4,359.52	322.37	-1,631.03	1,457.66	0.00	0.00	0.00
7,000.00	89.68	315.14	4,362.27	676.81	-1,983.69	1,955.59	0.00	0.00	0.00
7,500.00	89.68	315.14	4,365.03	1,031.25	-2,336.34	2,453.51	0.00	0.00	0.00
8,000.00	89.68	315.14	4,367.79	1,385.70	-2,688.99	2,951.43	0.00	0.00	0.00
8,500.00	89.68	315.14	4,370.54	1,740.14	-3,041.65	3,449.35	0.00	0.00	0.00
9,000.00	89.68	315.14	4,373.30	2,094.58	-3,394.30	3,947.27	0.00	0.00	0.00
9,500.00	89.68	315.14	4,376.05	2,449.02	-3,746.95	4,445.19	0.00	0.00	0.00
10,000.00	89.68	315.14	4,378.81	2,803.46	-4,099.61	4,943.11	0.00	0.00	0.00
10,500.00	89.68	315.14	4,381.57	3,157.90	-4,452.26	5,441.04	0.00	0.00	0.00
11,000.00	89.68	315.14	4,384.32	3,512.34	-4,804.91	5,938.96	0.00	0.00	0.00
11,500.00	89.68	315.14	4,387.08	3,866.78	-5,157.57	6,436.88	0.00	0.00	0.00
12,000.00	89.68	315.14	4,389.84	4,221.22	-5,510.22	6,934.80	0.00	0.00	0.00
12,500.00	89.68	315.14	4,392.59	4,575.66	-5,862.87	7,432.72	0.00	0.00	0.00
13,000.00	89.68	315.14	4,395.35	4,930.10	-6,215.53	7,930.64	0.00	0.00	0.00
13,500.00	89.68	315.14	4,398.11	5,284.54	-6,568.18	8,428.56	0.00	0.00	0.00
14,000.00	89.68	315.14	4,400.86	5,638.98	-6,920.83	8,926.49	0.00	0.00	0.00
14,500.00	89.68	315.14	4,403.62	5,993.42	-7,273.49	9,424.41	0.00	0.00	0.00
15,000.00	89.68	315.14	4,406.37	6,347.86	-7,626.14	9,922.33	0.00	0.00	0.00
15,294.93	89.68	315.14	4,408.00	6,556.93	-7,834.15	10,216.03	0.00	0.00	0.00
TD at 15294.92									

WPX
Planning Report

Database:	COMPASS	**Local Co-ordinate Reference:**	Well Kimbeto Wash #780H (A4) - Slot A4
Company:	WPX Energy	**TVD Reference:**	GL @ 6538.00usft (Original Well Elev)
Project:	T23N R9W	**MD Reference:**	GL @ 6538.00usft (Original Well Elev)
Site:	2309-28K WLU-KWU	**North Reference:**	True
Well:	Kimbeto Wash #780H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 25May16 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 #780H - plan hits target center - Point	0.00	0.00	4,216.06	-1,013.56	-301.83	1,889,542.17	511,092.45	36.193129	-107.795741
End 60 Tan #780H - plan misses target center by 0.01usft at 4687.02usft MD (4266.06 TVD, -952.17 N, -362.92 E) - Point	0.00	0.00	4,266.06	-952.17	-362.92	1,889,603.54	511,031.34	36.193297	-107.795948
POE #780H - plan hits target center - Point	0.00	0.00	4,351.34	-729.01	-584.95	1,889,826.61	510,809.22	36.193910	-107.796701
BHL #780H - plan hits target center - Point	0.00	0.00	4,408.00	6,556.93	-7,834.15	1,897,109.66	503,557.12	36.213923	-107.821275

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
5,016.84	4,351.34	7"	7.000	8.750

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
500.00	500.00	0.00	0.00	Start Build 2.00
1,776.84	1,734.99	-279.83	4.51	Hold 25.54 Inclination
3,703.72	3,473.62	-1,110.38	17.89	Start Build DLS 9.00 TFO 142.33
4,587.02	4,216.06	-1,013.56	-301.83	Hold 60.00 Inclination
4,687.02	4,266.06	-952.17	-362.91	Start Build DLS 9.00 TFO 0.00
4,854.94	4,329.98	-842.47	-472.06	Start DLS 9.00 TFO 0.00
5,016.84	4,351.34	-729.01	-584.95	POE at 89.68 Inc 315.14 Deg
15,294.93	4,408.00	6,556.93	-7,834.15	TD at 15294.92

WPXENERGY

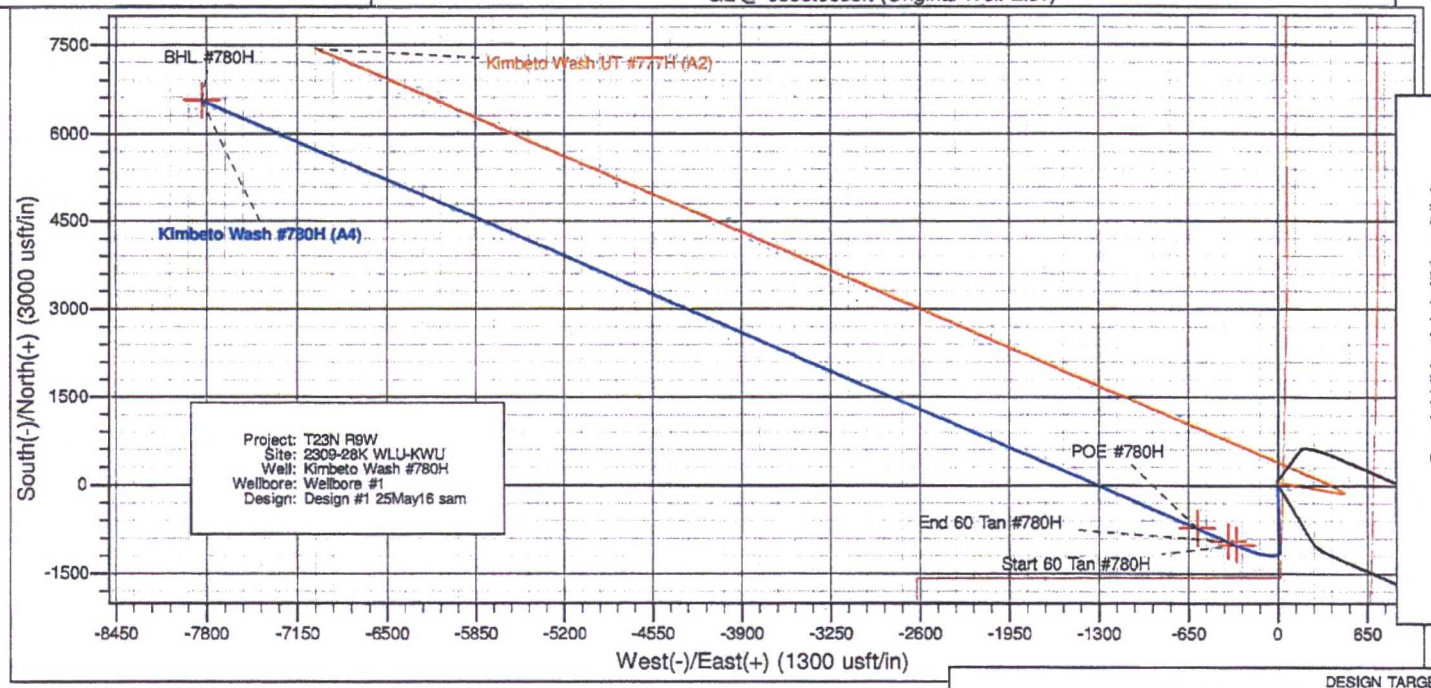
Well Name: Kimbeto Wash #780H
Surface Location: 2309-28K WLU-KWU
NAD 1927 (NADCON CONUS) , US State Plane 1927 (Exact solution) New Mexico West 3003
Ground Elevation: 6538.00

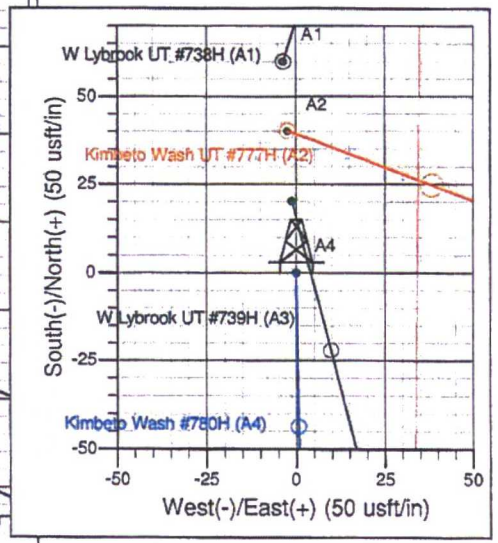
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	1890555.85	511393.88	36.195913	-107.794718	A4

GL @ 6538.00usft (Original Well Elev)

Azimuths to True North
Magnetic North: 9.32°

Magnetic Field
Strength: 49834.1snT
Dip Angle: 62.88°
Date: 5/24/2016
Model: IGRF2015



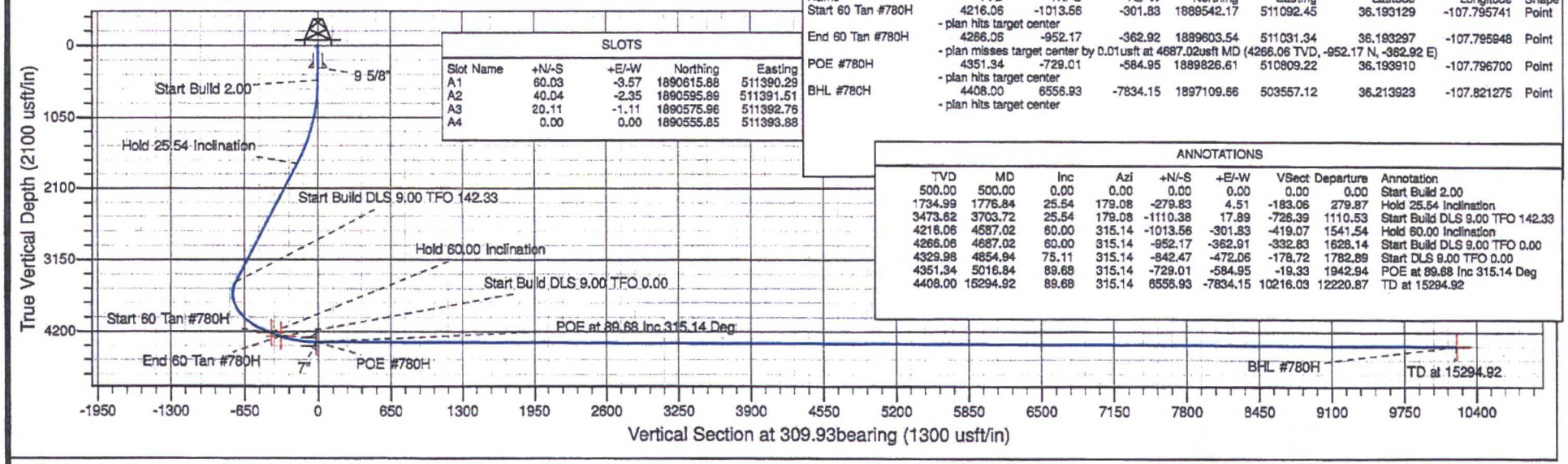


SLOTS

Slot Name	+N/-S	+E/-W	Northing	Easting
A1	60.03	-3.57	1890615.88	511390.29
A2	40.04	-2.35	1890595.89	511391.51
A3	20.11	-1.11	1890575.96	511392.76
A4	0.00	0.00	1890555.85	511393.88

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
Start 60 Tan #780H	4216.06	-1013.56	-301.83	1889542.17	511092.45	36.193129	-107.795741	Point
- plan hits target center								
End 60 Tan #780H	4266.06	-952.17	-362.92	1889603.54	511031.34	36.193297	-107.795948	Point
- plan misses target center by 0.01usft at 4687.02usft MD (4266.06 TVD, -952.17 N, -362.92 E)								
POE #780H	4351.34	-729.01	-584.95	1889826.61	510809.22	36.193910	-107.796700	Point
- plan hits target center								
BHL #780H	4408.00	6556.93	-7834.15	1897109.66	503557.12	36.213923	-107.821275	Point
- plan hits target center								



ANNOTATIONS

TVD	MD	Inc	Azi	+N/-S	+E/-W	VSect	Departure	Annotation
500.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00	Start Build 2.00
1734.99	1776.84	25.54	179.08	-279.83	4.51	-183.06	279.87	Hold 25.54 Inclination
3473.62	3703.72	25.54	179.08	-1110.38	17.89	-726.39	1110.53	Start Build DLS 9.00 TFO 142.33
4216.06	4587.02	60.00	315.14	-1013.56	-301.83	-419.07	1541.54	Hold 60.00 Inclination
4266.06	4687.02	60.00	315.14	-952.17	-362.91	-332.83	1628.14	Start Build DLS 9.00 TFO 0.00
4329.98	4854.94	75.11	315.14	-842.47	-472.06	-178.72	1782.89	Start DLS 9.00 TFO 0.00
4351.34	5016.84	89.68	315.14	-729.01	-584.95	-19.33	1942.94	POE at 89.68 Inc 315.14 Deg
4408.00	15294.92	89.68	315.14	6556.93	-7834.15	10216.03	12220.87	TD at 15294.92

roads, soils, or streams. Surfacing material, such as sandstone, would be used if economically viable and would be obtained from a permitted location.

The Natural Resources Conservation Service (NRCS) has mapped the soils in the proposed KWU 777H/780H and W Lybrook Unit 738H/739H Project area. Complete soil information is available in the NRCS's *Soil Survey of San Juan 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 – Notal association, gently sloping

Within the project area, this soil map unit is found at the northern half of the access road, well-connect pipeline corridor, and TUA.

The Blancot-Notal soil association is composed of 55 percent Blancot and similar soils and 25 percent Notal and similar soils. 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-Notal association is typically found ranging in elevation from 5,600 to 6,400 feet in elevation, along fan remnant and stream terrace landforms (0- to 5-percent slopes) and within loamy and salt flat ecological sites (USDA/NRCS 2015).

B. Badland

Within the project area, this soil map unit is found across the majority of the well pad at the northern end and the southern half of the access, well-connect pipeline corridor, and TUA. Most of the well pad construction within this soil unit would result in fill.

The parent material of the Badland map unit primarily consists of shale. This soil is considered a somewhat excessively drained soil, with the depth to restrictive layer (paralithic bedrock) being zero to two inches. Available water capacity for the Badland soil unit is very low (zero inches). This soil type has a low to moderate potential for water erosion and moderate potential for wind erosion. Badland soils are typically found along the side slopes of break landforms (5- to 80-percent slopes), and are commonly used for wildlife habitat (USDA/NRCS 2015).

C. Fruitland-Persayo-Sheppard complex (hilly)

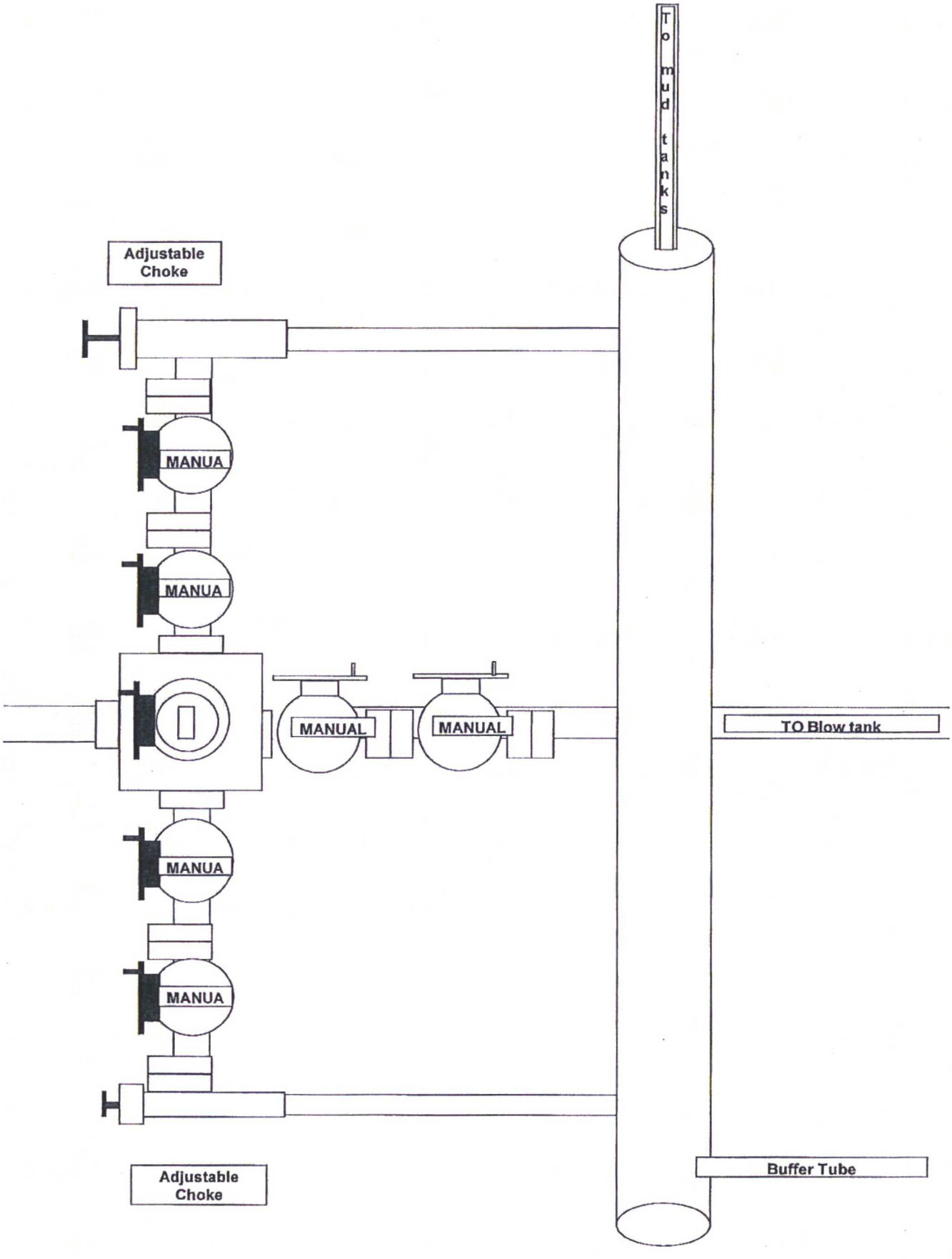
Within the project area, this soil map unit is found at the southern end of the well pad and construction buffer zone. This end of the well pad would require a 2-3 feet of cut. The construction buffer zone was expanded to 75 feet along the south end of the well pad in order to accommodate the necessary room for a silt trap and topsoil storage within these soils.

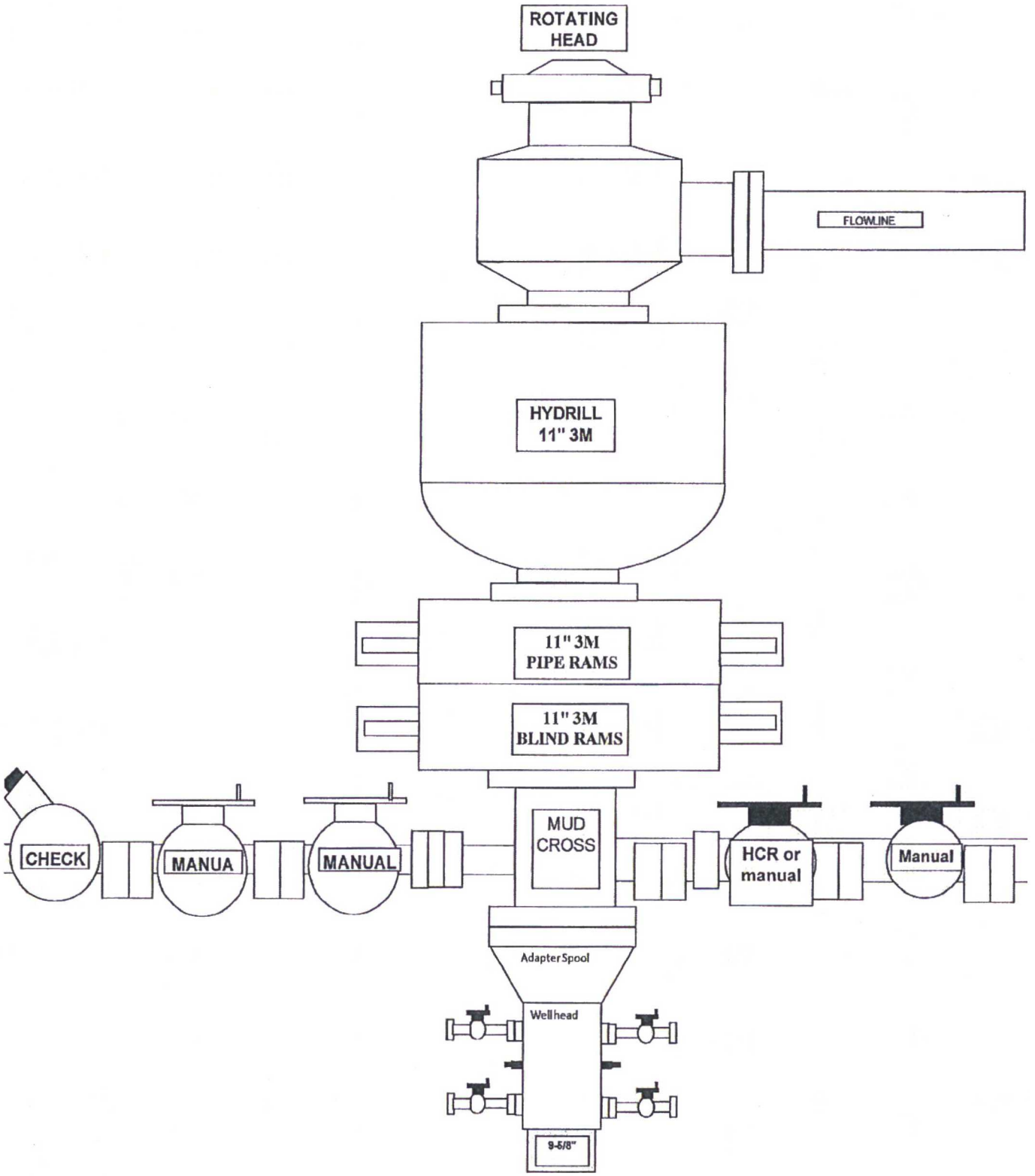
The Fruitland-Persayo-Sheppard complex (hilly) is composed of 40 percent Fruitland and similar soils, 30 percent Persayo and similar soils, and 25 percent Sheppard and similar soils. Fruitland-Persayo-Sheppard complex (hilly) soils are found on alluvial fans, stream terraces, hills, ridges, breaks, and dunes ranging from 4,000 feet to 6,400 feet in elevation. Fruitland soils occur on slopes of 5 to 30 percent, are well drained, and have a high water permeability. Persayo soils occur on slopes of 5 to 30 percent, are well drained, and have low to moderately high water permeability. Sheppard soils occur on slopes of 5 to 30 percent, are excessively drained, and have high to very high water permeability. This soil complex has a low to moderate potential for water erosion and moderate to high potential for wind erosion. The Fruitland-Persayo-Sheppard complex (hilly) is generally found within sandy, shale hills, and deep sand ecological sites (USDA/NRCS 2015).

7. METHODS FOR HANDLING WASTE

A. Cuttings

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


To mud tanks
Adjustable Choke
MANUA
MANUA
MANUAL
MANUAL
TO Blow tank
MANUA
MANUA
Buffer Tube
Adjustable Choke


ROTATING HEAD
FLOWLINE
HYDRILL 11" 3M
11" 3M PIPE RAMS
11" 3M BLIND RAMS
CHECK
MANUA
MANUAL
MUD CROSS
HCR or manual
Manual
Adapter Spool
Wellhead
9-5/8"

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

in Bloomfield, NM to WPX Energy Production, LLC KWU #780H

1900' FSL & 2288' FWL, Section 28, T23N, R9W, N.M.P.M., San Juan County, NM

Latitude: 36.195927°N Longitude: 107.795332°W Datum: NAD1983

From the intersection of US Hwy 550 & US Hwy 64 in Bloomfield, NM, travel Southerly on US Hwy 550 for 37.8 miles to Mile Marker 113.4;

Go Right (South-westerly) on County Road #7890 for 0.8 miles to fork in roadway;

Go Left (Southerly) remaining on County Road #7890 for 1.3 miles to four-way intersection;

Go Left (South-easterly) remaining on County Road #7890 for 0.6 miles to fork in roadway;

Go Right (South-westerly) remaining on County Road #7890 for 0.5 miles to WPX W Lybrook Unit #720H proposed access on right-hand side of County Road;

Go Right (Westerly) exiting County Road #7890 following along WPX W Lybrook Unit #720H proposed access for 3123.1' to fork in proposed access;

Go Left (Westerly) which is straight, following along WPX W Lybrook Unit #726H proposed access for 3937.3' to fork in proposed access;

Go Left (Westerly) which is straight, following along WPX W Lybrook Unit #730H proposed access for 10,164.2' to fork in proposed access at begin WPX W Lybrook Unit #736H new access;

Go Left (South-westerly) which is straight continuing for an additional 1453.8' to staked WPX KWU #780H location.