## State of New Mexico Energy, Minerals and Natural Resources Department

Susana Martinez

Governor

Ken McQueen Cabinet Secretary David R. Catanach, Division Director Oil Conservation Division



Matthias Sayer Deputy Cabinet Secretary

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: 3/23/2017  Well information; Operator WPX, Well Name and Number W Excuss Unit 301H
operator went traine and trumoer we exceeded there some
API# <u>30-043-21364</u> , Section 17, Township <u>32-0</u> 5/S, Range <u>7</u> E
Conditions of Approval: (See the below checked and handwritten conditions)
Notify Aztec OCD 24hrs prior to casing & cement.
Mold C-104 for directional survey & "As Drilled" Plat
Hold C-104 for NSL, NSP, DHC
<ul> <li>Spacing rule violation. Operator must follow up with change of status notification on other well to be shut in or abandoned</li> </ul>
<ul> <li>Regarding the use of a pit, closed loop system or below grade tank, the operator must comply with the following as applicable:</li> </ul>
<ul> <li>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</li> </ul>
<ul> <li>A closed loop system requires notification prior to use, pursuant to 19.15.17.9.A</li> </ul>
<ul> <li>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</li> </ul>
<ul> <li>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</li> </ul>
<ul> <li>Submit Gas Capture Plan form prior to spudding or initiating recompletion operations</li> </ul>
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.
Charle Terri 8-9-2017 HEID FOR
NMOCD Approved by Signature  Date  Date  Date  Date
1220 South St. Francis Drive • Santa He, New Mexico 87505
Phone (505) 476-3441 • Fax (505) 476-3462 • www.emnrd.state.nm.us/ocd
0.0

Form 3160 -3 (March 2012)

#### UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

OMB No. 1004-0137 Expires October 31, 2014

FORM APPROVED

5.	Lease Serial No	
NOG	13111802	

BUREAU OF LAIND MAIN.	AGEMENT			6. If Indian, Allotee	or Tribe Na	me A
APPLICATION FOR PERMIT TO	DRILL OR	REENTER		EASTERN NAVAJO	1	ine
la. Type of work:	ER			7. If Unit or CA Agre	ement, Name	e and No.
lb. Type of Well: Oil Well Gas Well Other	Sin	gle Zone Multip	le Zone	8. Lease Name and V W ESCAVADA UN		
2. Name of Operator WPX ENERGY LLC				9. API Well No.	2130	Υ
	3b. Phone No.	(include area code)		10. Field and Pool, or I	Exploratory	
720 S Main Aztec NM 87410	(505)333-1	822		BASIN MANCOS /	ESCAVAD	DA MANCO:
4. Location of Well (Report location clearly and in accordance with any				11. Sec., T. R. M. or B	lk. and Surve	y or Area
At surface NENE / 1101 FNL / 187 FEL / LAT 36.143737 At proposed prod. zone NWSW / 2304 FSL / 893 FWL / LA			302	SEC 17 / T22N / R	7W / NMP	
14. Distance in miles and direction from nearest town or post office* 53.9 miles				12. County or Parish SANDOVAL		3. State
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 ac	cres in lease	17. Spacin 280	g Unit dedicated to this v	ve@IL CC	ONS. DIV DIST. :
18. Distance from proposed location* to nearest well, drilling, completed, 187 feet applied for, on this lease, ft.	19. Proposed	W. A.		BIA Bond No. on file		G 0 4 2017
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approxim	nate date work will star	rt*	23. Estimated duration	n	
6804 feet	06/01/201	ANN	•	30 days		
	24. Attac	hments				
The following, completed in accordance with the requirements of Onshor	e Oil and Gas	Order No.1, must be at	tached to th	is form:		
Well plat certified by a registered surveyor.     A Drilling Plan.	Ť	4. Bond to cover the Item 20 above).	ne operatio	ns unless covered by an	existing bon	d on file (see
3. A Surface Use Plan (if the location is on National Forest System SUPO must be filed with the appropriate Forest Service Office).	Lands, the	Operator certific     Such other site     BLM.		ormation and/or plans as	may be requ	uired by the
25. Signature		(Printed/Typed)			Date	
(Electronic Submission)	Lacey	Granillo / Ph: (505	5)333-181	6	03/23/20	17
Permitting Tech III	Nome	(Desire to 1/Town of)			Data /	
Approved by (Signature)		(Printed/Typed)			Date //	17
Title		MINGTON				
Application approval does not warrant or certify that the applicant hold: conduct operations thereon.  Conditions of approval, if any, are attached.	s legal or equit	able title to those right	ts in the sub	oject lease which would e	ntitle the app	olicant to
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a cr States any false, fictitious or fraudulent statements or representations as t	rime for any pe to any matter w	erson knowingly and within its jurisdiction.	villfully to n	nake to any department o	or agency of	the United
(Continued on page 2)	I OP AC	CEDTANCE OF	77176	*(Inst	ructions o	on page 2)

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

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"





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

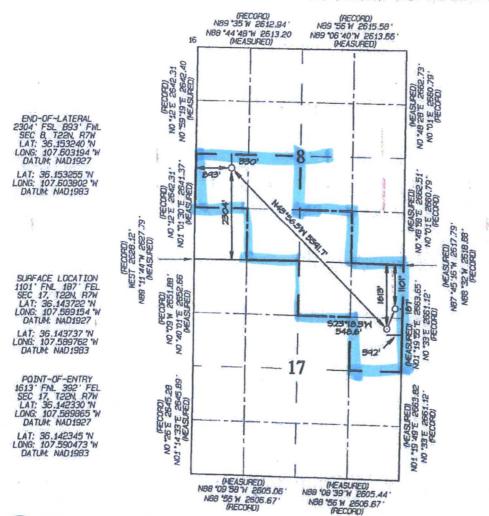
#### OIL CONSERVATION DIVISION 1220 South St. Francis Drive Santa Fe, NM 87505

AMENDED REPORT

#### WELL LOCATION AND ACREAGE DEDICATION PLAT

30-0	API Numbe	1304	19	*Pool Co	de	E	SCAVADA W	; war	icos
31916		2125	58		"Property W ESCAVA	y Name DA UNIT		-J=	Well Number 301H
'0GRID 12078	No.			WPX	*Operator	Name ODUCTION, LL	.c		*Elevation 6804'
					<sup>10</sup> Surface	Location			
UL or lot no.	Section 17	Township 22N	Range 7W	Lat Idn	Feat from the 1101	NORTH	Feat from the 187	East/West 11ms EAST	SANDOVAL
		1	1 Botto	m Hole	Location I	f Different	From Surfac	е	
U or lot no.	Section 8	Township 22N	Range 7W	Lot Idn	Feet from the 2304	North/South Tine SOUTH	Feet from the 893	East/West line WEST	SANDOVAL
Dedicated Acres 280,00	SW/	N/2 SW/ /4 SE/4	- Sect	cion 8	B Joint or Infill	<sup>14</sup> Consolidation Code	order No.	-14100	
N/2 NE/	4. SE/4	4 NE/4	- Sect:	ion 17			DE 100701FD		

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



OPERATOR CERTIFICATION 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 unleast
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 conductory pooling order
interest or to a voluntary pooling agreement or a conductory pooling order
interest or to a voluntary pooling order
interest or to a voluntary pooling order
interest or to a voluntary pooling
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interest or to a voluntary pooling
agreement or a conductory pooling order
interest or to a voluntary pooling
agreement or a conductory pooling order
interest or to a voluntary pooling
agreement or a conductory pooli 3/16/17 Date Lacey Granillo Printed Name lacey.granillo@wpxenergy.com 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 EDWARDS JASON C. MEXICO EN REIS HEAD SPACHOR AUTESSION JASON **DWARDS** Certificate Number

SERTD 372286-Enduing Blanket Sundry for op change reid april 2018.



# **WPX Energy**

#### **Operations Plan**

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

Date:

March 15, 2017

Field:

Lybrook Gallup

Well Name:

W Escavada #301H

Surface:

**SH Location:** 

NENE Sec 17 22N-07W

Elevation:

6804' GR

**BH Location:** 

NWSW Sec 8 22N-07W

Minerals:

Measured Depth: 10,960.58'

#### I. GEOLOGY

Surface formation - NACIMIENTO

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

NAME	MD	TVD	NAME	MD	TVD
OJO ALAMO	609.00	609.00	POINT LOOKOUT	3,682.00	3,534.00
KIRTLAND	787.00	787.00	MANCOS	3,849.00	3,690.00
PICTURED CLIFFS	1,147.00	1,146.00	GALLUP	4,209.00	4,031.00
LEWIS	1,231.00	1,229.00	KICKOFF POINT	4,055.74	3,882.81
CHACRA	1,535.00	1,525.00	TOP TARGET	5,146.00	4,735.00
CLIFF HOUSE	2,711.00	2,627.00	LANDING POINT	5,369.77	4,774.00
MENEFEE	2,752.00	2,666.00	BASE TARGET	5,369.77	4,774.00
			TD	10,960.58	4,774.00

#### **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"	5,369.77'	7"	23 LBS	J-55 or equiv	LTC
PRODUCTION	6.125"	5219.77' - 10,960.58'	4.5"	11.6 LBS	P-110 or equiv	LTC
TIE BACK	6.125"	Surf 5219.77'	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: 99 bbls, 283 sks, (557 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/ +/- 211 bbl Drilling mud or water. Total Cement: 158 bbls, 537 sks, (888 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 (562 sx /765 cuft /136 bbls). Tail Spacer: 20 BBL of MMCR.
Displacement: Displace w/ +/-143bbl Fr Water. Total Cement (562 sx /765bbls).

#### 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:

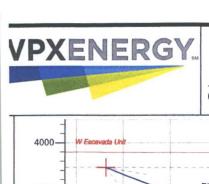
1. <u>Production Tubing:</u> Run 2-7/8", 6.5#, J-55, EUE tubing with a SN on top of bottom joint. Land tubing near Top of Liner.

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).



Well Name: W Escavada UT #301H

Surface Location: 2207-17A WEU

NAD 1927 (NADCON CONUS) , US State Plane 1927 (Exact solution) New Mexico West 3003

Ground Elevation: 6804.00

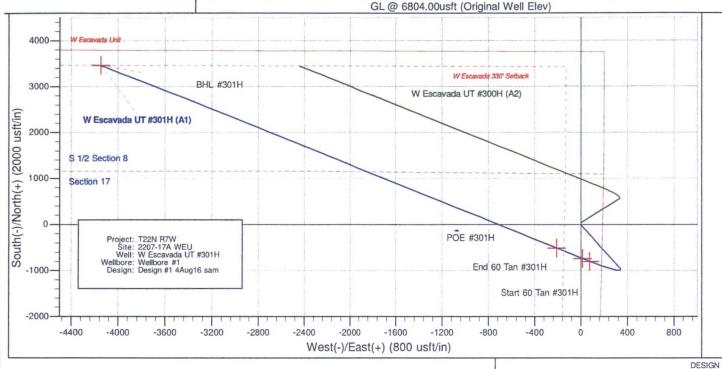
+N/-S +E/-W Northing 0.00 0.00 1871646.20

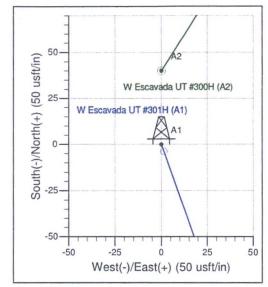
Easting Latitude 572095.67 36.143722

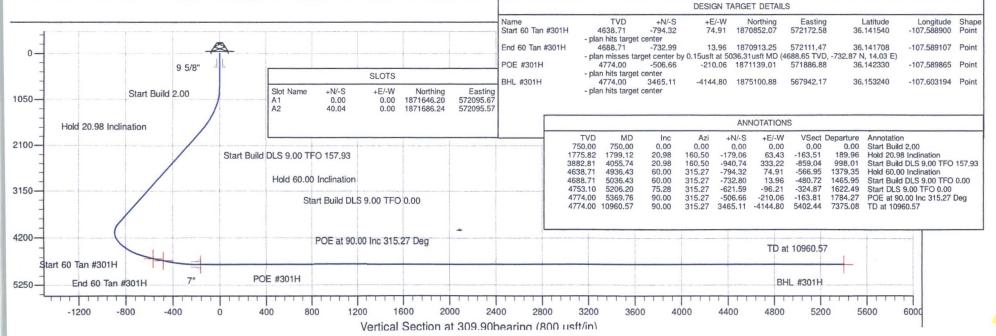
Longitude -107.589154

Slot A1 Azimuths to True North Magnetic North: 9.21°

Magnetic Field Strength: 49808.5snT Dip Angle: 62.87° Date: 8/4/2016 Model: IGRF2015







# **WPX Energy**

T22N R7W 2207-17A WEU W Escavada UT #301H - Slot A1

Wellbore #1

Plan: Design #1 4Aug16 sam

# **Standard Planning Report**

04 August, 2016

#### **WPX**

#### Planning Report

Database: Company: Project: Site:

COMPASS WPX Energy **T22N R7W** 2207-17A WEU

W Escavada UT #301H Wellbore #1

Design #1 4Aug16 sam

Local Co-ordinate Reference: TVD Reference:

MD Reference: North Reference:

**Survey Calculation Method:** 

Well W Escavada UT #301H (A1) - Slot A1

GL @ 6804,00usft (Original Well Elev) GL @ 6804.00usft (Original Well Elev)

Minimum Curvature

Design; Project

Wellbore:

Well:

**T22N R7W** 

Map System: Geo Datum: Map Zone:

US State Plane 1927 (Exact solution) NAD 1927 (NADCON CONUS)

New Mexico West 3003

System Datum:

Mean Sea Level

Site

2207-17A WEU

Site Position:

Мар

Northing:

1,871,686.24 usft

Latitude:

Longitude:

36.143832

From: **Position Uncertainty:** 

Well

Easting: 0.00 usft Slot Radius: 572,095.57 usft 13.200 in

**Grid Convergence:** 

-107.589154 0.14°

W Escavada UT #301H - Slot A1

**Well Position** +N/-S

-40.04 usft

Northing:

Wellhead Elevation:

8/4/2016

1,871,646.20 usft

9.21

Latitude:

36.143722

**Position Uncertainty** 

+E/-W

0.00 usft 0.00 usft

Easting:

572,095.67 usft 0.00 usft Longitude: Ground Level:

-107.589154 6,804.00 usft

Wellbore #1

Magnetics

**Model Name IGRF2015**  Sample Date

Declination (")

Dip Angle (°)

62.87

Field Strength (nT) 49.808

Design

Design #1 4Aug16 sam

**Audit Notes:** 

Version:

Wellbore

Phase:

**PLAN** 

Tie On Depth:

0.00

**Vertical Section:** 

Depth From (TVD) (usft) 0.00

+N/-S (usft) 0.00

+E/-W (usft) 0.00

Direction (bearing) 309.90

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	
750.00	0.00	0.00	750.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,799.12	20.98	160.50	1,775.82	-179.06	63.43	2.00	2.00	0.00	160.50	
4,055.74	20.98	160.50	3,882.81	-940.74	333.22	0.00	0.00	0.00	0.00	
4,936.43	60.00	315.27	4,638.71	-794.32	74.91	9.00	4.43	17.57	157.93	Start 60 Tan #301
5,036.43	60.00	315.27	4,688.71	-732.80	13.96	0.00	0.00	0.00	0.00	End 60 Tan #301h
5,206.20	75.28	315.27	4,753.10	-621.59	-96.21	9.00	9.00	0.00	0.00	
5,369.77	90.00	315.27	4,774.00	-506.66	-210.06	9.00	9.00	0.00	0.00	POE #301H
10,960.58	90.00	315.27	4,774.00	3,465.11	-4,144.80	0.00	0.00	0.00	0.00	BHL#301H

WPX
Planning Report

Database: Company: Project: COMPASS WPX Energy T22N R7W 2207-17A WEU

W Escavada UT #301H Wellbore #1

Wellbore: Design:

Site:

Well:

Design #1 4Aug16 sam

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

North Reference: Survey Calculation Method: Well W Escavada UT #301H (A1) - Slot A1 GL @ 6804.00usft (Original Well Elev)

GL @ 6804.00usft (Original Well Elev)

True

Minimum Curvature

\$\frac{9.56}{8}\$"\$ \$500.00 0.00 0.00 0.00 500.00 0.00 0.00	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)
\$60.00										0.00 0.00
Start Build 2.00	a contract of the contract of the									
Start Build 2.00										0.00
1,000.00			0.00	750.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00							100			
1,799.12	1,000.00	5.00	160.50	999.68	-10.28	3.64	-9.38	2.00	2.00	0.00
Hold 20.98 Inclination	1,500.00	15.00	160.50	1,491.46	-92.01	32.59	-84.02	2.00	2.00	0.00
2,000.00	1,799.12	20.98	160.50	1,775.82	-179.06	63.43	-163.51	2.00	2.00	0.00
2,500.00		nclination								
3,000.00										0.00
3,500.00 20.98 160.50 3,363.92 -763.16 266.78 -687.75 0.00 0.00 (4,000.00 20.98 160.50 3,830.77 -921.93 326.56 -841.86 0.00 0.00 (6,005.74 20.98 160.50 3,882.81 -940.74 333.22 -859.04 0.00 0.00 (7,500.00 21.77 299.90 4,314.14 -976.09 286.43 -845.82 9.00 0.18 33 4,500.00 21.77 299.90 4,314.14 -976.09 286.43 -845.82 9.00 0.18 37 4,936.43 60.00 315.27 4,638.71 -794.32 74.91 -566.95 9.00 8.76 3 4,936.43 60.00 315.27 4,670.50 -755.21 36.16 -512.13 0.00 0.00 (75.036.43 60.00 315.27 4,688.71 -732.80 13.96 480.72 0.00 0.00 (75.036.43 60.00 315.27 4,753.10 -621.59 -96.21 -324.87 9.00 9.00 (75.036.43 60.00 315.27 4,774.00 -506.66 -210.06 -163.81 9.00 9.00 (75.036.77 90.00 315.27 4,774.00 -506.49 -210.23 -163.58 0.00 0.00 (75.036.77 90.00 315.27 4,774.00 -506.49 -210.23 -163.58 0.00 0.00 (75.000.00 90.00 315.27 4,774.00 -506.49 -210.23 -163.58 0.00 0.00 (75.000.00 90.00 315.27 4,774.00 -506.49 -210.23 -163.58 0.00 0.00 (75.000.00 90.00 315.27 4,774.00 -506.49 -210.23 -163.58 0.00 0.00 (75.000.00 90.00 315.27 4,774.00 -506.49 -210.23 -163.58 0.00 0.00 (75.000.00 90.00 315.27 4,774.00 -558.93 -653.61 463.66 0.00 0.00 (75.000.00 90.00 315.27 4,774.00 -558.93 -653.61 463.66 0.00 0.00 (75.000.00 90.00 315.27 4,774.00 -558.93 -653.61 463.66 0.00 0.00 (75.000.00 90.00 315.27 4,774.00 651.48 -1.709.29 1,957.07 0.00 0.00 (75.000.00 90.00 315.27 4,774.00 651.48 -1.709.29 1,957.07 0.00 0.00 (75.000.00 90.00 315.27 4,774.00 1,006.68 -1,709.29 1,957.07 0.00 0.00 (75.000.00 90.00 315.27 4,774.00 1,006.68 -1,709.29 1,957.07 0.00 0.00 (75.000.00 90.00 315.27 4,774.00 1,006.68 -1,709.29 1,957.07 0.00 0.00 (75.000.00 90.00 315.27 4,774.00 1,006.68 -1,709.29 1,957.07 0.00 0.00 (75.000.00 90.00 315.27 4,774.00 1,006.68 -1,709.29 1,957.07 0.00 0.00 (75.000.00 90.00 315.27 4,774.00 1,006.68 -1,709.29 1,957.07 0.00 0.00 (75.000.00 90.00 315.27 4,774.00 1,006.68 -1,709.29 1,957.07 0.00 0.00 (75.000.00 90.00 315.27 4,774.00 1,006.68 -1,709.29 1,957.07 0.00 0.00 (75.000.00 90.00 315.27 4,774.00 1,006.68 -1,709.29 1,957.00 0.00 0.00 (75.000.00 90.0										0.00
4,000.00	3,000.00	20.98	160.50	2,897.08	-584.40	207.00	-533.64	0.00	0.00	0.00
4,055.74	3,500.00	20.98	160.50	3,363.92	-753.16	266.78	-687.75	0.00	0.00	0.00
Start Build DLS 9.00 TFO 157.93	4,000.00	20.98	160.50	3,830.77	-921.93	326.56	-841.86	0.00	0.00	0.00
4,500.00 21.77 299.90 4,314.14 -976.09 286.43 -845.82 9.00 0.18 33 4,936.43 60.00 315.27 4,638.71 -794.32 74.91 -566.95 9.00 8.76 3  Hold 60.00 Inclination  5,000.00 60.00 315.27 4,670.50 -755.21 36.16 -512.13 0.00 0.00 0.00 0.00 5,036.43 60.00 315.27 4,688.71 -732.80 13.96 -480.72 0.00 0.00 0.00 0.00 0.00 0.00 0.00	4,055.74	20.98	160.50	3,882.81	-940.74	333.22	-859.04	0.00	0.00	0.00
4,936.43       60.00       315.27       4,638.71       -794.32       74.91       -566.95       9.00       8.76       3.76         Hold 60.00 Inclination       5,000.00       60.00       315.27       4,670.50       -755.21       36.16       -512.13       0.00       0.	Start Build D	LS 9.00 TFO 15	7.93							
Hold 60.00 Inclination  5,000.00										31.38
5,000.00 60.00 315.27 4,670.50 -755.21 36.16 -512.13 0.00 0.00 0.00 5,036.43 60.00 315.27 4,688.71 -732.80 13.96 -480.72 0.00 0.00 0.00 0.00 5,206.20 75.28 315.27 4,753.10 -621.59 -96.21 -324.87 9.00 9.00 9.00 5,369.77 90.00 315.27 4,774.00 -506.66 -210.06 -163.81 9.00 9.00 9.00 9.00 9.00 9.00 9.00 9.0	of the Atlanta of the Atlanta of the		315.27	4,638.71	-794.32	74.91	-566.95	9.00	8.76	3.52
5,036.43         60.00         315.27         4,688.71         -732.80         13.96         -480.72         0.00         0.00         0.00           Start Build DLS 9.00 TFO 0.00           5,206.20         75.28         315.27         4,753.10         -621.59         -96.21         -324.87         9.00         9.00         0           Start DLS 9.00 TFO 0.00           5,369.77         90.00         315.27         4,774.00         -506.66         -210.06         -163.81         9.00         9.00         0           POE at 90.00 Inc 315.27 Deg           5,370.00         90.00         315.27         4,774.00         -506.49         -210.23         -163.58         0.00         0.00         0           7"           5,500.00         90.00         315.27         4,774.00         -414.14         -301.72         -34.15         0.00         0.00         0           6,000.00         90.00         315.27         4,774.00         -58.93         -653.61         463.66         0.00         0.00         0         0         0         0         0         0         0         0         0         0         0         0         0         0 <td>Hold 60.00 Ir</td> <td>nclination</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	Hold 60.00 Ir	nclination								
5,036.43         60.00         315.27         4,688.71         -732.80         13.96         -480.72         0.00         0.00         0.00           Start Build DLS 9.00 TFO 0.00           5,206.20         75.28         315.27         4,753.10         -621.59         -96.21         -324.87         9.00         9.00         0           Start DLS 9.00 TFO 0.00           5,369.77         90.00         315.27         4,774.00         -506.66         -210.06         -163.81         9.00         9.00         0           POE at 90.00 Inc 315.27 Deg           5,370.00         90.00         315.27         4,774.00         -506.49         -210.23         -163.58         0.00         0.00         0           7"           5,500.00         90.00         315.27         4,774.00         -414.14         -301.72         -34.15         0.00         0.00         0           6,000.00         90.00         315.27         4,774.00         -58.93         -653.61         463.66         0.00         0.00         0         0         0         0         0         0         0         0         0         0         0         0         0         0 <td>5.000.00</td> <td>60.00</td> <td>315.27</td> <td>4.670.50</td> <td>-755.21</td> <td>36.16</td> <td>-512.13</td> <td>0.00</td> <td>0.00</td> <td>0.00</td>	5.000.00	60.00	315.27	4.670.50	-755.21	36.16	-512.13	0.00	0.00	0.00
5,206.20         75.28         315.27         4,753.10         -621.59         -96.21         -324.87         9.00         9.00         6           Start DLS 9.00 TFO 0.00           5,369.77         90.00         315.27         4,774.00         -506.66         -210.06         -163.81         9.00	5,036.43	60.00	315.27							0.00
5,206.20         75.28         315.27         4,753.10         -621.59         -96.21         -324.87         9.00         9.00         6           Start DLS 9.00 TFO 0.00           5,369.77         90.00         315.27         4,774.00         -506.66         -210.06         -163.81         9.00	Start Build D	LS 9.00 TFO 0.0	00 +					ic observed		
Start DLS 9.00 TFO 0.00           5,369.77         90.00         315.27         4,774.00         -506.66         -210.06         -163.81         9.00         9.00         0           POE at 90.00 Inc 315.27 Deg           5,370.00         90.00         315.27         4,774.00         -506.49         -210.23         -163.58         0.00         0.00         0           7"           5,500.00         90.00         315.27         4,774.00         -414.14         -301.72         -34.15         0.00         0.00         0           6,000.00         90.00         315.27         4,774.00         -414.14         -301.72         -34.15         0.00	5,206.20	75.28	315.27	4,753.10	-621.59	-96.21	-324.87	9.00	9.00	0.00
POE at 90,00 Inc 315.27 Deg 5,370.00 90.00 315.27 4,774.00 -506.49 -210.23 -163.58 0.00 0.00 0.00 7"  5,500.00 90.00 315.27 4,774.00 -414.14 -301.72 -34.15 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0	Start DLS 9.0	00 TFO 0.00								
5,370.00       90.00       315.27       4,774.00       -506.49       -210.23       -163.58       0.00       0.00       0         7"         5,500.00       90.00       315.27       4,774.00       -414.14       -301.72       -34.15       0.00       0.00       0         6,000.00       90.00       315.27       4,774.00       -58.93       -653.61       463.66       0.00       0.00       0         7,000.00       90.00       315.27       4,774.00       296.27       -1,005.51       961.46       0.00       0.00       0         7,000.00       90.00       315.27       4,774.00       651.48       -1,357.40       1,459.26       0.00       0.00       0         7,500.00       90.00       315.27       4,774.00       1,066.68       -1,709.29       1,957.07       0.00       0.00       0         8,000.00       90.00       315.27       4,774.00       1,361.89       -2,061.19       2,454.87       0.00       0.00       0         8,500.00       90.00       315.27       4,774.00       1,717.09       -2,413.08       2,952.68       0.00       0.00       0         9,000.00       90.00       315.27       4,774.00 <td>5,369.77</td> <td>90.00</td> <td>315.27</td> <td>4,774.00</td> <td>-506.66</td> <td>-210.06</td> <td>-163.81</td> <td>9.00</td> <td>9.00</td> <td>0.00</td>	5,369.77	90.00	315.27	4,774.00	-506.66	-210.06	-163.81	9.00	9.00	0.00
7"  5,500.00 90.00 315.27 4,774.00 -414.14 -301.72 -34.15 0.00 0.00 0.00 6,000.00 90.00 315.27 4,774.00 -58.93 -653.61 463.66 0.00 0.00 0.00 6,500.00 90.00 315.27 4,774.00 296.27 -1,005.51 961.46 0.00 0.00 0.00 0.00 7,000.00 90.00 315.27 4,774.00 651.48 -1,357.40 1,459.26 0.00 0.00 0.00 7,500.00 90.00 315.27 4,774.00 1,006.68 -1,709.29 1,957.07 0.00 0.00 0.00 0.00 0.00 0.00 0.00	POE at 90.00	Inc 315.27 Deg								
7"  5,500.00 90.00 315.27 4,774.00 -414.14 -301.72 -34.15 0.00 0.00 0.00 6,000.00 90.00 315.27 4,774.00 -58.93 -653.61 463.66 0.00 0.00 0.00 6,500.00 90.00 315.27 4,774.00 296.27 -1,005.51 961.46 0.00 0.00 0.00 0.00 7,000.00 90.00 315.27 4,774.00 651.48 -1,357.40 1,459.26 0.00 0.00 0.00 7,500.00 90.00 315.27 4,774.00 1,006.68 -1,709.29 1,957.07 0.00 0.00 0.00 0.00 0.00 0.00 0.00	5,370.00	90.00	315.27	4,774.00	-506.49	-210.23	-163.58	0.00	0.00	0.00
6,000.00         90.00         315.27         4,774.00         -58.93         -653.61         463.66         0.00         0.00         0           6,500.00         90.00         315.27         4,774.00         296.27         -1,005.51         961.46         0.00         0.00         0           7,000.00         90.00         315.27         4,774.00         651.48         -1,357.40         1,459.26         0.00         0.00         0           8,000.00         90.00         315.27         4,774.00         1,006.68         -1,709.29         1,957.07         0.00         0.00         0           8,000.00         90.00         315.27         4,774.00         1,361.89         -2,061.19         2,454.87         0.00         0.00         0           8,500.00         90.00         315.27         4,774.00         1,717.09         -2,413.08         2,952.68         0.00         0.00         0           9,000.00         90.00         315.27         4,774.00         2,072.30         -2,764.97         3,450.48         0.00         0.00         0           9,500.00         90.00         315.27         4,774.00         2,427.50         -3,116.87         3,948.28         0.00         0.00	7"									
6,000.00         90.00         315.27         4,774.00         -58.93         -653.61         463.66         0.00         0.00         0           6,500.00         90.00         315.27         4,774.00         296.27         -1,005.51         961.46         0.00         0.00         0           7,000.00         90.00         315.27         4,774.00         651.48         -1,357.40         1,459.26         0.00         0.00         0           8,000.00         90.00         315.27         4,774.00         1,006.68         -1,709.29         1,957.07         0.00         0.00         0           8,000.00         90.00         315.27         4,774.00         1,361.89         -2,061.19         2,454.87         0.00         0.00         0           8,500.00         90.00         315.27         4,774.00         1,717.09         -2,413.08         2,952.68         0.00         0.00         0           9,000.00         90.00         315.27         4,774.00         2,072.30         -2,764.97         3,450.48         0.00         0.00         0           9,500.00         90.00         315.27         4,774.00         2,427.50         -3,116.87         3,948.28         0.00         0.00	5 500 00	00.00	315 27	4 774 00	_111 11	-304.72	_24 1E	0.00	0.00	0.00
6,500.00         90.00         315.27         4,774.00         296.27         -1,005.51         961.46         0.00         0.00         0           7,000.00         90.00         315.27         4,774.00         651.48         -1,357.40         1,459.26         0.00         0.00         0           7,500.00         90.00         315.27         4,774.00         1,006.68         -1,709.29         1,957.07         0.00         0.00         0           8,000.00         90.00         315.27         4,774.00         1,361.89         -2,061.19         2,454.87         0.00         0.00         0           8,500.00         90.00         315.27         4,774.00         1,717.09         -2,413.08         2,952.68         0.00         0.00         0           9,000.00         90.00         315.27         4,774.00         2,072.30         -2,764.97         3,450.48         0.00         0.00         0           9,500.00         90.00         315.27         4,774.00         2,427.50         -3,116.87         3,948.28         0.00         0.00         0           10,000.00         90.00         315.27         4,774.00         2,782.71         -3,468.76         4,446.09         0.00         0.00 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>0.00</td>										0.00
7,000.00         90.00         315.27         4,774.00         651.48         -1,357.40         1,459.26         0.00         0.00         0.00           7,500.00         90.00         315.27         4,774.00         1,006.68         -1,709.29         1,957.07         0.00         0.00         0.00           8,000.00         90.00         315.27         4,774.00         1,361.89         -2,061.19         2,454.87         0.00         0.00         0.00           8,500.00         90.00         315.27         4,774.00         1,717.09         -2,413.08         2,952.68         0.00         0.00         0.00           9,000.00         90.00         315.27         4,774.00         2,072.30         -2,764.97         3,450.48         0.00         0.00         0.00           9,500.00         90.00         315.27         4,774.00         2,427.50         -3,116.87         3,948.28         0.00         0.00         0.00           10,000.00         90.00         315.27         4,774.00         2,782.71         -3,468.76         4,446.09         0.00         0.00         0.00										0.00
7,500.00         90.00         315.27         4,774.00         1,006.68         -1,709.29         1,957.07         0.00         0.00         0           8,000.00         90.00         315.27         4,774.00         1,361.89         -2,061.19         2,454.87         0.00         0.00         0           8,500.00         90.00         315.27         4,774.00         1,717.09         -2,413.08         2,952.68         0.00         0.00         0           9,000.00         90.00         315.27         4,774.00         2,072.30         -2,764.97         3,450.48         0.00         0.00         0           9,500.00         90.00         315.27         4,774.00         2,427.50         -3,116.87         3,948.28         0.00         0.00         0           10,000.00         90.00         315.27         4,774.00         2,782.71         -3,468.76         4,446.09         0.00         0.00         0										0.00
8,500.00       90.00       315.27       4,774.00       1,717.09       -2,413.08       2,952.68       0.00       0.00       0         9,000.00       90.00       315.27       4,774.00       2,072.30       -2,764.97       3,450.48       0.00       0.00       0         9,500.00       90.00       315.27       4,774.00       2,427.50       -3,116.87       3,948.28       0.00       0.00       0         10,000.00       90.00       315.27       4,774.00       2,782.71       -3,468.76       4,446.09       0.00       0.00       0										0.00
8,500.00       90.00       315.27       4,774.00       1,717.09       -2,413.08       2,952.68       0.00       0.00       0         9,000.00       90.00       315.27       4,774.00       2,072.30       -2,764.97       3,450.48       0.00       0.00       0         9,500.00       90.00       315.27       4,774.00       2,427.50       -3,116.87       3,948.28       0.00       0.00       0         10,000.00       90.00       315.27       4,774.00       2,782.71       -3,468.76       4,446.09       0.00       0.00       0	8 000 00	90.00	315 27	4 774 00	1 361 89	-2 061 19	2 454 87	0.00	0.00	0.00
9,000.00       90.00       315.27       4,774.00       2,072.30       -2,764.97       3,450.48       0.00       0.00       0         9,500.00       90.00       315.27       4,774.00       2,427.50       -3,116.87       3,948.28       0.00       0.00       0         10,000.00       90.00       315.27       4,774.00       2,782.71       -3,468.76       4,446.09       0.00       0.00       0										0.00
9,500.00     90.00     315.27     4,774.00     2,427.50     -3,116.87     3,948.28     0.00     0.00       10,000.00     90.00     315.27     4,774.00     2,782.71     -3,468.76     4,446.09     0.00     0.00										0.00
10,000.00 90.00 315.27 4,774.00 2,782.71 -3,468.76 4,446.09 0.00 0.00										0.00
10.500.00 00.00 245.27 4.774.00 2.427.04 2.500.00 4.042.00 0.00	10,000.00	90.00								0.00
10.500.00 90.00 515.27 4.74.00 5.157.91 =5.820.00 4.943.89 11.00 11.00	10,500.00	90.00	315.27	4.774.00	3,137.91	-3.820.66	4.943.89	0.00	0.00	0.00
	,									0.00

## **WPX** Planning Report

COMPASS WPX Energy Database: Company: **T22N R7W** Project: 2207-17A WEU Site: Well: W Escavada UT #301H Wellbore: Wellbore #1 Design:

Local Co-ordinate Reference: TVD Reference: MD Reference: North Reference: **Survey Calculation Method:** 

Well W Escavada UT #301H (A1) - Slot A1 GL @ 6804,00usft (Original Well Elev) GL @ 6804.00usft (Original Well Elev) True Minimum Curvature

Design #1 4Aug16 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 #301H - plan hits target ce - Point	0.00 nter	0.00	4,638.71	-794.32	74.91	1,870,852.07	572,172.58	36.141540	-107.588901
End 60 Tan #301H - plan misses target - Point	0.00 t center by 0.15	0.00 Susft at 5036	4,688.71 .31usft MD (	-732.99 (4688.65 TVD,	13.96 -732.87 N, 14	1,870,913.25 4.03 E)	572,111.48	36.141708	-107.589107
BHL #301H - plan hits target ce - Point	0.00 enter	0.00	4,774.00	3,465.11	-4,144.80	1,875,100.88	567,942.17	36.153241	-107.603194
POE #301H - plan hits target ce - Point	0.00 enter	0.00	4,774.00	-506.66	-210.06	1,871,139.02	571,886.89	36.142330	-107.589866

Measured Depth (usft)	Vertical Depth (usft)		Name	Casing Diameter (in)	Hole Diameter (in)
320.00	320.00	9 5/8"		9.625	12.250
5,370.00	4,774.00	7"		7.000	8.750

an Annotations	A LONG TO THE TOTAL PARK	er a skriveret ketêr	actor constraint of the	•
Measured Depth (usft)	Vertical Depth (usft)	Local Coor +N/-S (usft)	dinates +E/-W (usft)	Comment
750.00	750.00	0.00	0.00	Start Build 2.00
	,			
1,799.12	1,775.82	-179.06	63.43	Hold 20.98 Inclination
4,055.74	3,882.81	-940.74	333.22	Start Build DLS 9.00 TFO 157.93
4,936.43	4,638.71	-794.32	74.91	Hold 60.00 Inclination
5,036.43	4,688.71	-732.80	13.96	Start Build DLS 9.00 TFO 0.00
5,206.20	4,753.10	-621.59	-96.21	Start DLS 9.00 TFO 0.00
5,369.77	4,774.00	-506.66	-210.06	POE at 90.00 Inc 315.27 Deg
10,960.58	4,774.00	3,465.11	-4,144.80	TD at 10960.57

Construction and maintenance activities would cease if soil or road surfaces become saturated to the extent that construction equipment is unable to stay within the project area and/or when activities cause irreparable harm to 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 W Escavada UT 300H/301H 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 section below.

#### A. Blancot - Councelor- Tsosie association, gently sloping

- Within the project area, this soil map unit is found throughout the entirety of the project. As such, excavated soils during construction of the well pad, access road, and well-connect pipelines would consist of native borrow and subsoils from the Blancot-Councelor-Tsosie association, gently sloping soil map unit. A brief description of this soil can be found below.
- The Blancot-Councelor-Tsosie soil association is composed of 40 percent Blancot and similar soils, 30 percent Councelor and similar soils, 25 percent Tsosie and similar soils, and 5 percent of 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-Councelor-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

- 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

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.

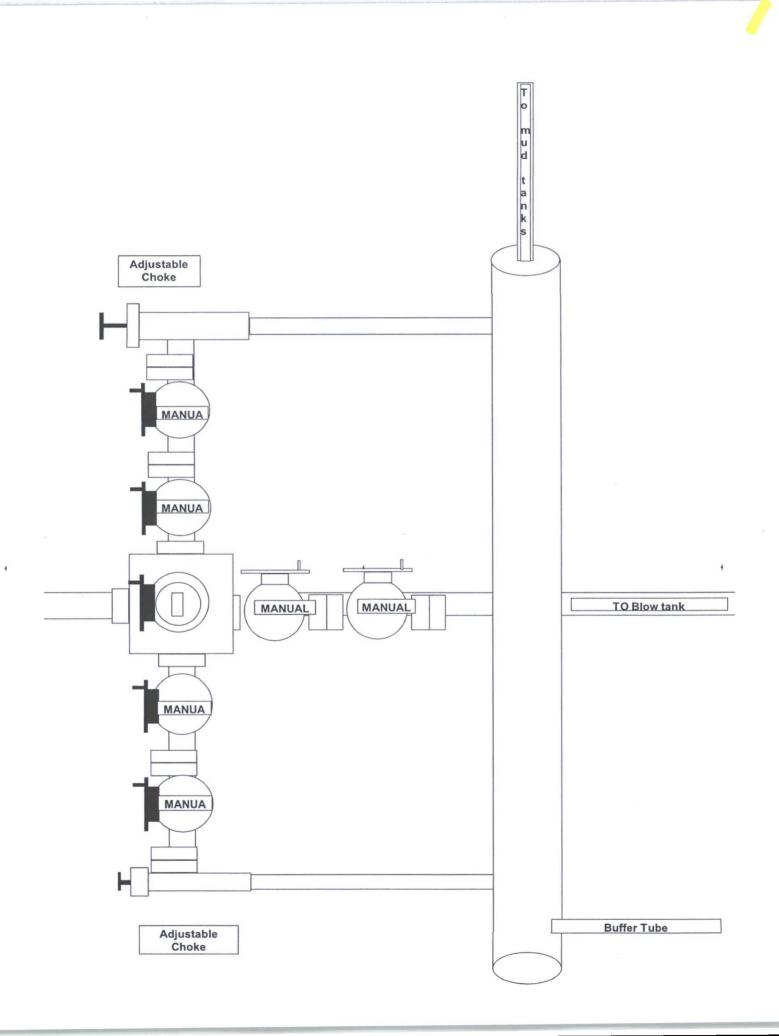
#### D. Sewage

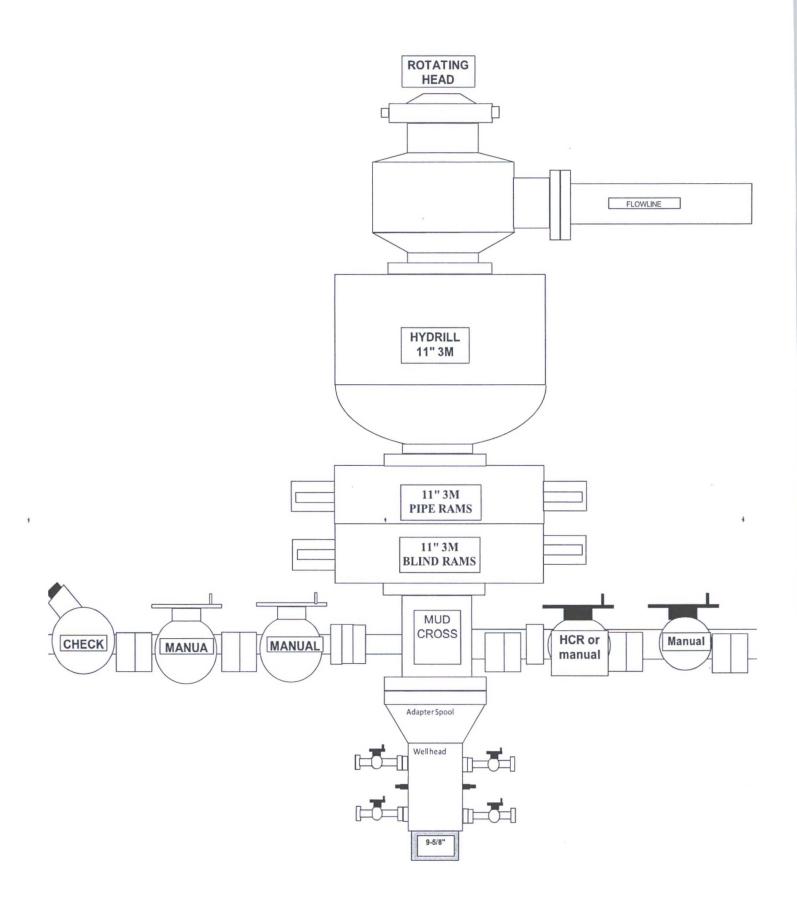
1 Portable toilets will be provided and maintained during construction, as needed (see Figures 2 & 3 in Appendix B for the location of toilets).

#### E. Garbage and other waste material

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

#### F. Hazardous Waste





# <u>Directions from the Intersection of US Hwy 550 & US Hwy 64</u> <u>in Bloomfield, NM to WPX Energy Production, LLC W Escavada Unit #301H</u> 1101' FNL & 187' FEL, Section 17, T22N, R7W, N.M.P.M., Sandoval County, NM

Latitude: 36.143737°N Longitude: 107.589762°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 beginning of WPX N Escavada Unit #317H proposed access on left-hand side of existing roadway;

Go Left (South-westerly) which is straight for 2696.7' to staked WPX W Escavada Unit #301H location.