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 <u>3160-3</u> APD form.

Operator Signature Date: <u>2/7/2017</u> Well information; Operator <u>u)f</u>, Well Name and Number <u>Limber Work Unrt.</u> 78444

API# 30-045-35833, Section 25 Township 33 N/S, Range 9 EW

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.

va NMOCD Approved by Signature

5-201 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

				OMB No. Expires Oct	APPROVED 1004-0137 tober 31, 2014
DEF	UNITED STATES PARTMENT OF THE INTE	ERIOR	5.	Lease Serial No.	51, 2014
BU	REAU OF LAND MANAGE	EMENT	NO	0G14191977	
APPLICATION	N FOR PERMIT TO DRI	LL OR REENTER	EA	If Indian, Allotee of ASTERN NAVAJO	r Tribe Name
la. Type of work:	REENTER		7 KI	If Unit or CA Agreer MBETO WASH UN	nent, Name and No. NIT / NMNM1352
lb. Type of Well: Voil Well	Gas Well Other	Single Zone 🖌 Multip	le Zone	Lease Name and We NU 784H	ell No.
2. Name of Operator WPX ENERG	SY LLC		9	API Well No.	35833
3a. Address 720 S Main Aztec NN	1 87410 3b. F (50)	Phone No. (include area code)	10 KV	Field and Pool, or Ex	ploratory
4. Location of Well (Report location c.	learly and in accordance with any State	e requirements.*)	11.	. Sec., T. R. M. or Blk	and Survey or Area
At surface SWSW / 367 FSL / At proposed prod. zone NENE / 1	145 FWL / LAT 36.191691 / LO	ONG -107.802608	SE	EC 28 / T23N / R9\	W / NMP
14. Distance in miles and direction from 37.8 miles	nearest town or post office*		12 S/	2. County or Parish AN JUAN	13. State NM
 Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any 	() ()	No. of acres in lease	17. Spacing Un 1280	nit dedicated to this we	211
 Distance from proposed location* to nearest well, drilling, completed, applied for on this lease ft 	145 feet	Proposed Depth	20. BLM/BIA	Bond No. on file	1576
applied for, on this lease, it.	43. 2 DT (L ++-) 22	Approximate date work will sta	+* 22	Estimated duration	1570
6540 feet	5, K1, OL, etc.)	/01/2017	3	0 days	
	24	Attachments		OIL	CONS. DIV E
	A2017 100000	1 ATTENDED THE THE			
The following, completed in accordance w	with the requirements of Onshore Oil	and Gas Order No.1, must be a	tached to this fo	om:	UIN 0 1 20
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WPX Energy

Operations Plan

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

 Date:
 February 6, 2017

 Well Name:
 KWU #784H

 SH Location:
 SWSW Sec 28-23N-09W

 BH Location:
 NENE Sec 30 23N-09W

 Field:
 Basin Mancos

 Surface:
 Elevation:

 Kinerals:
 6540' GR

Measured Depth: 12,319.65'

I. GEOLOGY

Surface formation - NACIMIENTO

A. FORMATION TOPS: (GR)

NAME	MD	TVD	NAME	MD	TVD
OJO ALAMO	14.00	14.00	POINT LOOKOUT	3,213.00	3,081.00
KIRTLAND	176.00	176.00	MANCOS	3,403.00	3,256.00
PICTURED CLIFFS	744.00	744.00	GALLUP	3,766.00	3,595.00
LEWIS	828.00	828.00	KICKOFF POINT	3,631.34	3,466.86
CHACRA	1,046.00	1,045.00	TOP TARGET	4,813.00	4,325.00
CLIFF HOUSE	2,206.00	2,152.00	LANDING POINT	4,927.09	4,334.00
MENEFEE	2,225.00	2,169.00	BASE TARGET	4,927.09	4,334.00
			TD	12,319.65	4,373.00

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 %" 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"	4,927.09'	7"	23 LBS	J-55 or equiv	LTC
PRODUCTION	6.125"	4777.09' - 12,319.65'	4.5"	11.6 LBS	P-110 or equiv	LTC
TIE BACK	6.125"	Surf 4777.09'	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 planed 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 cuft/100 sx/ Bbls).TOC at Surface.

2. Intermediate:

Spacer #1: 20 bbl (112 cuft) Chemwash. Lead Cement: 86 bbls, 246 sks, (484 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/ +/- 194 bbl Drilling mud or water. Total Cement: 145 bbls, 500 sks, (815 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 (739 sx /1005 cuft /179 bbls). Tail Spacer: 20 BBL of MMCR. Displacement: Displace w/ +/-166bbl Fr Water. Total Cement (739 sx /1005bbls).

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:

 <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).



WPX Energy

T23N R9W 2309-28M WLU-KWU Kimbeto Wash UT #784H - Slot A4

Wellbore #1

Plan: Design #2 27Sept16 sam

Standard Planning Report

27 September, 2016

WPX

Planning Report

Database: Company: Project: Site: Well: Wellbore: Design:	COMPASS WPX Energy T23N R9W 2309-28M WLU-KWU Kimbeto Wash UT #784H Wellbore #1 Design #2 27Sept16 sam			Local Co-ordinate Reference: Well Kimbeto Wash UT #784H (A4) - Slot A4 TVD Reference: GL @ 6540.00ustt (Original Well Elev) MD Reference: GL @ 6540.00ustt (Original Well Elev) North Reference: True Survey Calculation Method: Minimum Curvature						
Project	T23N	R9W		and the second second			10.25		- 41-42	
Map System: Geo Datum: Map Zone:	US Stat NAD 19 New Me	e Plane 1927 (E 27 (NADCON C xico West 3003	Exact solution) CONUS)		System Dat	tum:	Me	ean Sea Level		
Site	2309-2	8M WLU-KWU	101(0120-010-0213)		and the second secon		4903 (M) 200 (M)			
Site Position: From: Position Uncert	Ma ainty:	p 0.0	Northi Eastin 0 usft Slot R	ng: ig: adius:	1,889 509	,053.53 usft ,247.80 usft 13.200 in	Latitude: Longitude: Grid Converg	ence:		36.191788 -107.801993 0.02 °
Well	Kimbel	o Wash UT #78	H - Slot A4	No. of Concession, Name		All of the second second				
Well Position	+N/-S +E/-W	-40. 0.	15 usft No 01 usft Ea	orthing: sting:		1,889,013.38 509,247.82	usft Lati	itude: ngitude:		36.191678 -107.801993
Position Uncert	ainty	0.	00 usft We	ellhead Elevat	tion:	0.00	usft Gro	und Level:		6,540.00 usft
Wellbore	Wellb	ore #1							1.1.1.1.1.1	
					ar ann ar ar an					
Magnetics	M	odel Name	Sampl	e Date	Declina (°)	ition	Dip A	lingle ")	Field	Strength nT)
		IGRF2015		5/4/2016		9.33		62.88		49,837
Design	Design	#2 27Sept16 s	am							C. C. P. S.
Audit Notes:			Meddy Actol (1975) and 19	riziel Debenele Aux 540	na na si da		burb-the bolitikular titelä	uruundistatnin ahludaa	enny afelerantal	
Version:			Phase	e: f	PLAN	Tie	On Depth:		0.00	
Vertical Section	1		Depth From (T)	/D)	+N/-S	+E	:/-W	Dire	ction	
			(usft) 0.00	an a	(usft) 0.00	(u 0	.00	(bez 30	sring) 9.60	
Dian Sections	E.M.	es to Lossiv	STREET STREET		1.1.1	aler and a second	-		Non-Letters	
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	
750.00	0.00	0.00	750.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,883.92	22.68	176.30	1,854.54	-221.03	14.29	2.00	2.00	0.00	176.30	
3,631.34	22.68	176.30	3,466.86	-893.36	57.75	0.00	0.00	0.00	0.00	
4,496.68	60.00	315.14	4,198.72	-775.50	-243.70	9.00	4.31	16.04	144.34	Start 60 Tan #748H
4,596.68	60.00	315.14	4,248.72	-714.11	-304.79	0.00	0.00	0.00	0.00	End 60 Tan #784H
4,762.88	74.96	315.14	4,312.20	400 55	-412.78	9.00	9.00	0.00	0.00	DOE #794U
12,319.65	89.66	315.14	4,373.00	4,749.47	-5,741.71	0.00	0.00	0.00	-179.39	BHL #784H

COMPASS 5000.1 Build 78

WPX

Planning Report

Datab Comp Projec Site: Well: Wellb Desig	base: COMPASS pany: WPX Energy ect: 723N R9W 2309-28M WLU-KWU : Kimbeto Wash UT #784H bore: Weillbore #1 gn: Design #2 27Sept16 sam			Local TVD R MD Re North Survey	Local Co-ordinate Reference: TVD Reference: MD Reference: North Reference: Survey Calculation Method:			Well Kimbeto Wash UT #784H (A4) - Slot A4 GL @ 6540.00usft (Original Well Elev) GL @ 6540.00usft (Original Well Elev) True Minimum Curvature			
Plann	ned Survey		REGISTER BUT AND A STREET					MageCrayRondGeronies			
	Measured Depth (usft)	Inclination	Azimuth (bearing)	Vertical Depth (usft)	+N/-S (usft)	+E/-W	Vertical Section (usft)	Dogleg Rate (*/100usft)	Build Rate (*/100usft)	Turn Rate (*/100usft)	
20122	Alexandre de la compañía de la comp	All and a second			Editeration)		N				CEAK 1
	320.00 9 5/8"	0.00	0.00	320.00	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	
	750.00	0.00	0.00	750.00	0.00	0.00	0.00	0.00	0.00	0.00	
	Start Build 2	.00	176 30	000 68	10.88	0.70	7 48	2.00	2.00	0.00	
	1,000.00	5.00	170.50	355.00	-10.00	0.70	-7.40	2.00	2.00	0.00	
	1,500.00	15.00	176.30	1,491.46	-97.41	6.30	-66.94	2.00	2.00	0.00	
	Hold 22 68 k	zz.00	170.30	1,004.04	-221.03	14.25	-131.69	2.00	2.00	0.00	
	2.000.00	22.68	176.30	1,961,65	-265.70	17.18	-182.59	0.00	0.00	0.00	
	2,500.00	22.68	176.30	2,422.99	-458.07	29.61	-314.79	0.00	0.00	0.00	
	3,000.00	22.68	176.30	2,884.33	-650.45	42.05	-446.99	0.00	0.00	0.00	
	3,500,00	22.68	176.30	3,345.67	-842.83	54,48	-579.19	0.00	0.00	0.00	
	3,631,34	22.68	176.30	3,466.86	-893.36	57.75	-613.92	0.00	0.00	0.00	
	Start Build D	LS 9.00 TFO 14	4.34								
	4,000.00	19.32	281.65	3,820.83	-953.67	1.01	-608.63	9.00	-0.91	28.58	
	4,496.68	60.00	315.14	4,198.72	-775.50	-243.70	-306.51	9.00	8.19	6.74	
	Hold 60.00 Ir	nclination									
	4,500.00	60.00	315.14	4,200.38	-773.46	-245.73	-303.64	0.00	0.00	0.00	
	4,596.68	60.00	315.14	4,248.72	-714.11	-304.79	-220.31	0.00	0.00	0.00	
	Start Build D	LS 9.00 TFO 0.0	0								
	4,762.88	74,96	315.14	4,312.20	-605.59	-412.78	-67.93	9.00	9.00	0.00	
	Start DLS 9.	00 TFO 0.00									
	4,927.00 7"	89.73	315.14	4,334.00	-490.62	-527.19	93.52	9.00	9.00	0.00	
	4,927.09	89,74	315.14	4,334.00	-490.55	-527.26	93.61	9.00	9.00	0.00	
	POE at 89.74	Inc 315.14 Deg									
	5,000.00	89.74	315.14	4,334.33	-438.87	-578.68	166.17	0.00	0.00	0.00	
	5,500.00	89.73	315.14	4,336.66	-84.45	-931.37	663.83	0.00	0.00	0.00	
	6,000.00	89.73	315.14	4,339.02	269.96	-1,284.05	1,161.49	0.00	0.00	0.00	
	6,500.00	89.72	315.14	4,341.44	624.37	-1,636.73	1,659.14	0.00	0.00	0.00	
	7,000.00	89.72	315.14	4,343.90	978.79	-1,989.41	2,156.80	0.00	0.00	0.00	
	7,500.00	89.71	315.14	4,346.41	1,333.20	-2,342.09	2,654.45	0.00	0.00	0.00	
	8,000.00	89.71	315.14	4,348.97	1,687.62	-2,694,78	3,152.11	0.00	0.00	0.00	
	8,500.00	89.70	315.14	4,351.57	2,042.03	-3,047.46	3,649.76	0.00	0.00	0.00	
	9,000.00	89.69	315.14	4,354.22	2,396.44	-3,400.14	4,147.42	0.00	0.00	0.00	
	9,500.00	89.69	315.14	4,356.92	2,750.85	-3,752.83	4,645.07	0.00	0.00	0.00	
	10,000.00	89.68	315.14	4,359.66	3,105.26	-4,105.51	5,142.73	0.00	0.00	0.00	
	10,500.00	89.68	315.14	4,362.45	3,459.67	-4,458.19	5,640.38	0.00	0.00	0.00	
	11,000.00	89.67	315.14	4,365.29	3,814.08	-4,810.88	6,138.04	0.00	0.00	0.00	
	11,500.00	89.67	315.14	4,368.17	4,168.49	-5,163.56	6,635.69	0.00	0.00	0.00	
	12,000.00	89.66	315.14	4,371.10	4,522.90	-5,516.24	7,133.34	0.00	0.00	0.00	
	12,319.65	89.66	315.14	4,373.00	4,749.47	-5,741.71	7,451.49	0.00	0.00	0.00	
	12319,65 Me	asured depth									

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WPX

Planning Report

Database: Company: Project: Site: Well: Wellbore: Design:	COMPASS WPX Energy T23N R9W 2309-28M WLU-KWU Kimbeto, Wash UT #784H Wellbore #1 Design #2 27Sept16 sam			Local Co-or TVD Referen MD Referen North Refer Survey Calo	dinate Reference: nce: ce: ence: sulation Method:	Well Kimbeto Wash UT #784H (A4) - Slot A4 GL @ 6540.00usft (Original Well Elev) GL @ 6540.00usft (Original Well Elev) True Minimum Curvature			
Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (")	Dip Dir. (bearing	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
Start 60 Tan #748H - plan hits target cer - Point	0.00 nter	0.00	4,198.72	-775.50	-243.70	1,888,237.80	509,004.37	36.189547	-107.802819
End 60 Tan #784H - plan hits target cer - Point	0.00 nter	0.00	4,248.72	-714.11	-304.79	1,888,299.17	508,943.26	36.189716	-107.803026
POE #784H - plan hits target cer - Point	0.00 nter	0.00	4,334.00	-490.55	-527.26	1,888,522.66	508,720.72	36.190330	-107.803780
BHL #784H - plan hits target cer - Point	0.00 nter	0.00	4,373.00	4,749.47	-5,741.71	1,893,761.00	503,504.58	36.204724	-107.821455
Casing Points		enteren al samera an enter	100 6 (Mart 2 107 10 10	100110-20-1192 11	CAN THE STATE				

	Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (in)	Hole Diameter (in)	
CONTRACTOR OF A CONTRACTOR	320.00	320.00	9 5/8"	9.625	12.250	
	4,927.00	4,334.00	7"	7.000	8.750	

Measured	Vertical	Local Coor	dinates	
Depth (usft)	Depth (usft)	+N/-S (usft)	+E/-W (usft)	Comment
750.00	750.00	0.00	0.00	Start Build 2.00
1,883.92	1,854.54	-221.03	14.29	Hold 22.68 Inclination
3,631.34	3,466.86	-893.36	57.75	Start Build DLS 9.00 TFO 144.34
4,496.68	4,198.72	-775.50	-243.70	Hold 60.00 Inclination
4,596.68	4,248.72	-714.11	-304.79	Start Build DLS 9.00 TFO 0.00
4,762.88	4,312.20	-605.59	-412.78	Start DLS 9.00 TFO 0.00
4,927.09	4,334.00	-490.55	-527.26	POE at 89.74 Inc 315.14 Deg
12.319.65	4.373.00	4,749,47	-5.741.71	12319 65 Measured depth

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Surface Use Plan of Operations

Road #7890, and follow along the W Lybrook UT 720H access for 3,123.1 feet to fork in the access. Trucks would take a left and continue westerly, which would be straight, following along WPX's W Lybrook UT 726H access for 3,937.3 feet to a fork in the access road. They would then take a left (westerly), which would be straight, following along the W Lybrook UT 730H planned access for 10,164.2 feet. They would take a left (south-westerly), which is straight, following along WPX's W Lybrook UT #738H planned access for 1,267.1 feet to the beginning of proposed Access Road #1. Trucks would proceed 2,491.4 feet along the newly constructed Access Road corridor #1 to WPX's KWU 782H/784H and W Lybrook Uni 740H/741H well pad.

6. CONSTRUCTION MATERIALS

The construction phase of the project would commence upon receipt of the approved APDs. The BLM-FFO would be notified (505-564-7600) at least 48 hours prior to the start of construction activities associated with the project. The construction phase of the project is anticipated to last approximately 3 to 4 weeks.

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 KWU 782H/784H and W Lybrook Unit 740H/741H 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 unit within the proposed project area footprint is described in the sections below.

A. Fruitland-Persayo-Sheppard complex (hilly)

The entire project area encompasses this soil type. The project would include a moderate to large cut and fill within this soil type in order to construct the well pad. This would entail a maximum cut of 11 feet on the north end and a maximum fill of 9 feet on the northeast corner (corner 5) of the pad.

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 a 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.
- 2 Closed-loop tanks would be adequately sized for containment of all fluids.
- B. Drilling Fluids

1 Drilling fluids would be stored onsite in above-ground storage tanks. Upon termination of drilling operations, the drilling fluids would be recycled and transferred to other permitted closed-loop systems or returned to the vendor for reuse, as practical. All residual fluids would be hauled to a commercial disposal facility.

C. Spills

KWU 782H/784H and W Lybrook Unit 740H/741H Oil & Natural Gas Wells Project December 2016





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

in Bloomfield, NM to WPX Energy Production, LLC KWU #784H

367' FSL & 145' FWL, Section 28, T23N, R9W, N.M.P.M., San Juan County, NM

Latitude: 36.191691°N Longitude: 107.802608°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 begin 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;

Go Left (South-westerly) which is straight, following along WPX W Lybrook Unit #738H proposed access for 1267.1' to fork in proposed access;

Go Right (South-westerly) which is straight continuing for an additional 2491.4' to staked WPX KWU #784H location.