

State of New Mexico
Energy, Minerals and Natural Resources Department

Susana Martinez
Governor

David Martin
Cabinet Secretary

Tony Delfin
Deputy Cabinet Secretary

David R. Catanach, Division Director
Oil Conservation Division



New Mexico Oil Conservation Division approval and conditions listed below are made in accordance with OCD Rule 19.15.7.11 and are in addition to the actions approved by BLM on the following 3160-3 APD form.

Operator Signature Date: 1-26-16

Well information;

Operator WIPX, Well Name and Number Kindle Wash Unit #7714

API# 30-045-35756 Section 17, Township 23 N/S, Range 9 E/W

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

- ☒ Notify Aztec OCD 24hrs prior to casing & cement.
- ☒ Hold C-104 for directional survey & "As Drilled" Plat
- ☐ Hold C-104 for NSL, NSP, DHC
- ☐ Spacing rule violation. Operator must follow up with change of status notification on other well to be shut in or abandoned
- ☐ Regarding the use of a pit, closed loop system or below grade tank, the operator must comply with the following as applicable:
 - A pit requires a complete C-144 be submitted and approved prior to the construction or use of the pit, pursuant to 19.15.17.8.A
 - A closed loop system requires notification prior to use, pursuant to 19.15.17.9.A
 - A below grade tank requires a registration be filed prior to the construction or use of the below grade tank, pursuant to 19.15.17.8.C
- ☒ Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string
- ☒ Submit Gas Capture Plan form prior to spudding or initiating recompletion operations
- ☒ Regarding Hydraulic Fracturing, review EPA Underground Injection Control Guidance 84
- ☒ Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system.
- ☒ Well-bore communication is regulated under 19.15.29 NMAC. This requires well-bore Communication to be reported in accordance with 19.15.29.8.


NMOCD Approved by Signature

5-5-2016
Date KC

RECEIVED

JAN 26 2016

FORM APPROVED
OMB No. 1004-0136
Expires January 31, 2004

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

Earmington Field Office
Bureau of Land Management

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NMNM 057164
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name Kimbeto Wash Unit NMNM-135255X
2. Name of Operator WPX Energy Production, LLC		7. If Unit or CA Agreement, Name and No. KWU #771H
3a. Address P.O. Box 640 Aztec, NM 87410	3b. Phone No. (include area code) (505) 333-1808	8. Lease Name and Well No. KWU #771H
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface 393' FSL & 1128' FEL SEC 17, 23N 9W At proposed prod. zone 330' FNL & 2153' FEL SEC 18 23N 9W		9. API Well No. 30-045-35756
14. Distance in miles and direction from nearest town or post office* From intersection US Hwy & 550 US Hwy 64 in Bloomfield NM, South 35.9 miles to Mile Marker 115.7		10. Field and Pool, or Exploratory Basin Mancos
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 393'	16. No. of Acres in lease 2240.0 Acres	11. Sec., T., R., M., or Blk. and Survey or Area SHL: 17, 23N 9W BHL: 18, 23N 9W
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 20'	19. Proposed Depth 12571' MD / 4511' TVD	12. County or Parish San Juan
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 6561' GR	22. Approximate date work will start* April 1, 2016	13. State NM
23. Estimated duration 1 month		
24. Attachments		

OIL CONS. DIV DIST. 3

APR 28 2016

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

- Well plat certified by a registered surveyor.
- A Drilling Plan.
- A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
- Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- Operator certification.
- Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature 	Name (Printed/Typed) Marie E. Jaramillo	Date 1/26/16
Title Permit Technician III		
Approved by (Signature) 	Name (Printed/Typed) DJ Montie	Date 4/27/16
Title AFM	Office FFO	

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.

*(Instructions on reverse)

WPX Energy Production, LLC, proposes to develop the Basin Mancos formation at the above described location in accordance with the attached drilling and surface use plans.

The well pad surface is under jurisdiction of BLM and is on lease and will be twinned with KWU #768H/769H/770H

This location has been archaeologically surveyed by Western Cultural Resources. Copies of their report have been submitted directly to the BLM.

The new access of 53.9' of BLM is Onlease access road will be built and permitted via the APD.

DRILLING OPERATIONS AUTHORIZED
ARE SUBJECT TO COMPLIANCE WITH
ATTACHED "GENERAL REQUIREMENTS"
This action is subject to
technical and procedural review
pursuant to 43 CFR 3165.3 and
appeal pursuant to 43 CFR 3165.4

NMOCD
AV

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

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

*API Number 30-045-35756	*Pool Code 97232	*Pool Name BASIN MANCOS
*Property Code 316144	*Property Name Kimbeto Wash Unit	*Well Number 771H
*GRID No. 120782	*Operator Name WPX ENERGY PRODUCTION, LLC	*Elevation 6561'

¹⁰ Surface Location

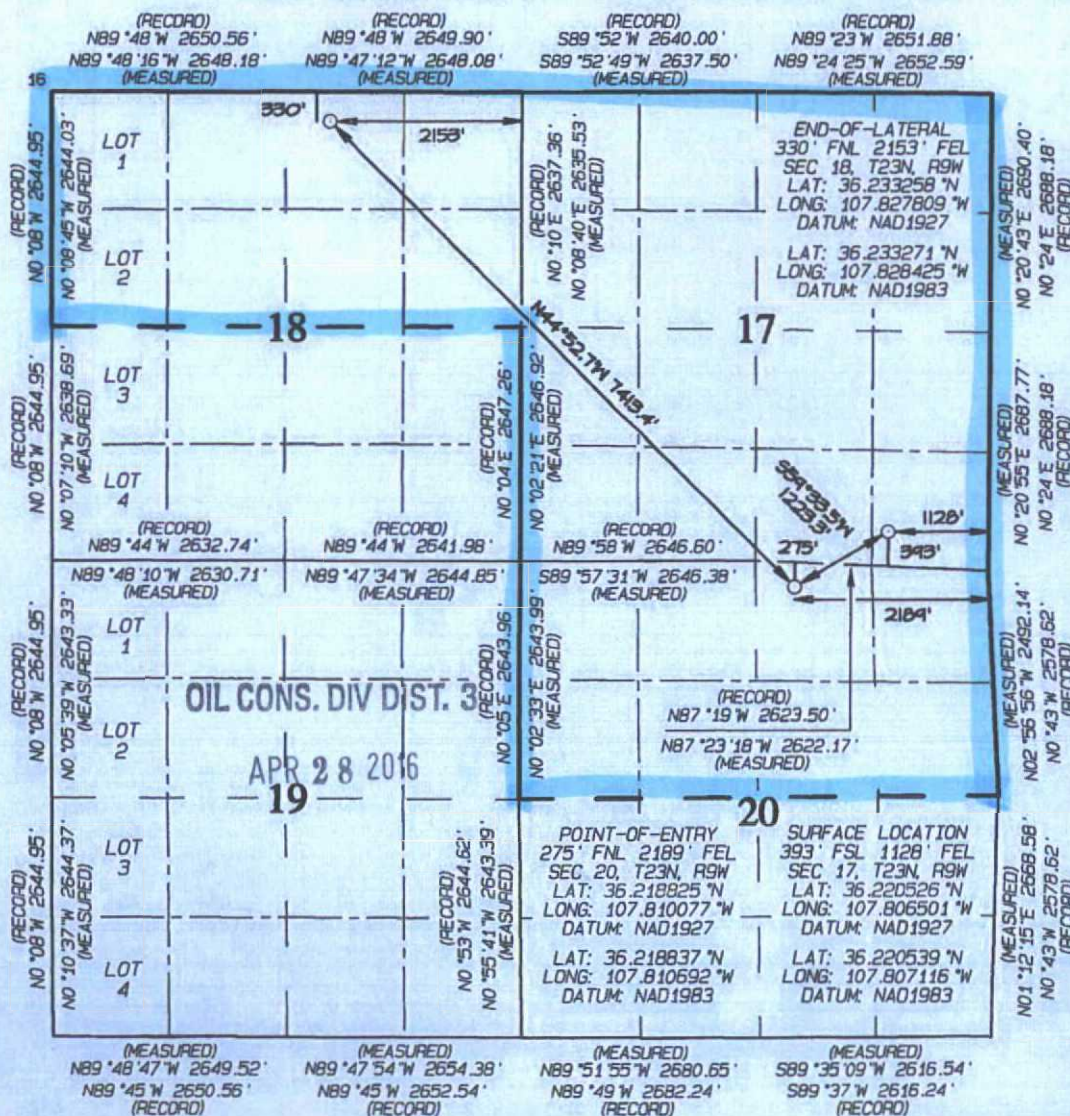
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	17	23N	9W		393	SOUTH	1128	EAST	SAN JUAN

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
B	18	23N	9W		330	NORTH	2153	EAST	SAN JUAN

¹² Dedicated Acres 1279.88	Entire Section 17 N/2 - Section 18 N/2 - Section 20	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No. R-14084
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



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: *Marie F. Jaramillo* Date: *1/21/16*

Printed Name: Marie F. Jaramillo
E-mail Address: marie.jaramillo@wpxenergy.com

¹⁸ SURVEYOR CERTIFICATION

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

Date Revised: DECEMBER 21, 2015
Survey Date: DECEMBER 3, 2015

Signature and Seal of Professional Surveyor



JASON C. EDWARDS
Certificate Number 15269



WPX Energy

Operations Plan

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

Date: January 21, 2016
Well Name: KWU #771H
SH Location: SESE Sec 17 23N-09W
BH Location: NWNE Sec 18 23N-09W

Field: Basin Mancos
Surface: Federal
Elevation: 6561' GR
Minerals: Federal

Measured Depth: 12,571.19'

I. GEOLOGY: SURFACE FORMATION - NACIMIENTO

A. FORMATION TOPS (KB)

NAME	MD	TVD	NAME	MD	TVD
OJO ALAMO	139	139	POINT LOOKOUT	3465	3302
KIRTLAND	259	259	MANCOS	3594	3422
PICTURED CLIFFS	840	839	GALLUP	3967	3767
LEWIS	968	966	KICKOFF POINT	3,987.88	3,786.38
CHACRA	1236	1229	TOP TARGET	4984	4511
CLIFF HOUSE	2361	2280	LANDING POINT	5,157.79	4,534.00
MENEFEE	2375	2293	BASE TARGET	5,157.79	4,534.00
			TD	12,571.19	4,511.00

B. MUD LOGGING PROGRAM: Mudlogger on location from surface csg to TD.

C. LOGGING PROGRAM: LWD GR from surface casing to TD.

D. NATURAL GAUGES: Gauge any noticeable increases in gas flow. Record all gauges in Tour book and on morning reports.

II. DRILLING

A. MUD PROGRAM: LSND mud (WBM) will be used to drill the 12-1/4" Surface hole, the 8 3/4" Directional Vertical hole, and the curve portion of the wellbore. A LSND (WBM) or (OBM) will be used to drill the lateral portion of well. Treat for lost circulation as necessary. Obtain 100% returns prior to cementing. Notify Engineering of any mud losses.

B. BOP TESTING: While drill pipe is in use, the pipe rams and the blind rams will be function tested once each trip. The anticipated reservoir is expected to be less than 1300 psi, so the BOPE will be tested to **250 psi (Low) for 5 minutes** and **1500 psi (High) for 10 minutes**. Pressure test surface casing to **600 psi for 30 minutes** and intermediate casing to **1500 psi for 30 minutes**. Utilize a BOPE Testing Unit with a recording chart and appropriate test plug for testing. The drum brakes will be inspected and tested each tour. **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"	5,157.79'	7"	23 LBS	J-55 or equiv	LTC
PRODUCTION	6.125"	5007.79' - 12,571.19'	4.5"	11.6 LBS	P-110 or equiv	LTC
TIE BACK	6.125"	Surf. - 5007.79'	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. **A 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.**
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. CEMENTING:

(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 STAGE 1: Spacer #1: 20 bbl (112 cuft) Chemwash. Lead Cement: 92 bbls, 263 sks, (519 cuft), 12.3 ppg @ 1.97 cuft/sk yield. Tail Cement: 92 bbls, 396 sks, (514 cuft), 13.5 ppg @ 1.3 cuft/sk yield. Displacement: Displace w/ +/- 203 bbl Drilling mud or water.
Total Cement: 184 bbls, 659 sks, (1033 cuft)
STAGE 2: Spacer #1: 20 bbl (112 cuft) Chemwash. Lead Cement: 20 bbls, 59 sks, (115 cuft), 12.3 ppg @ 1.97 cuft/sk yield. Tail Cement: 16 bbls, 78 sks, (90 cuft), 13.5 ppg @ 1.3 cuft/sk yield. Displacement: Displace w/ +/- 45 bbl Drilling mud or water.
Total Cement: 36 bbls, 137 sks, (205 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 (741 sx /1008 cuft /179 bbls). Tail Spacer: 20 BBL of MMCR.
Displacement: Displace w/ +/- 140 bbl Fr Water. Total Cement (741 sx /1008bbls).

I.
COMPLETION

A. **CBL**

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.

NOTE:

Proposed Operations:

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

2309-17P KWU

2309-17P KWU #771H - Slot A1

Wellbore #1

Plan: Design #1 16Dec15 sam

Standard Planning Report

16 December, 2015

WPX Planning Report

Database:	COMPASS	Local Co-ordinate Reference:	Well 2309-17P KWU #771H (A1) - Slot A1
Company:	WPX Energy	TVD Reference:	KB @ 6586.00usft (Aztec 1000)
Project:	T23N R9W	MD Reference:	KB @ 6586.00usft (Aztec 1000)
Site:	2309-17P KWU	North Reference:	True
Well:	2309-17P KWU #771H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 16Dec15 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	2309-17P KWU				
Site Position:		Northing:	1,899,574.16 usft	Latitude:	36.220691
From:	Map	Easting:	507,967.48 usft	Longitude:	-107.806322
Position Uncertainty:	0.00 usft	Slot Radius:	13.200 in	Grid Convergence:	0.02 °

Well	2309-17P KWU #771H - Slot A1					
Well Position	+N/-S	-60.07 usft	Northing:	1,899,514.08 usft	Latitude:	36.220526
	+E/-W	-52.80 usft	Easting:	507,914.70 usft	Longitude:	-107.806501
Position Uncertainty		0.00 usft	Wellhead Elevation:	0.00 usft	Ground Level:	6,561.00 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	12/15/2015	9.37	62.90	49,893

Design	Design #1 16Dec15 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	306.41

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	
525.00	0.00	0.00	525.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,633.44	22.17	204.28	1,605.99	-193.04	-87.09	2.00	2.00	0.00	204.28	
3,987.88	22.17	204.28	3,786.38	-1,002.85	-452.44	0.00	0.00	0.00	0.00	
4,762.48	60.00	315.14	4,418.71	-883.18	-792.12	9.00	4.88	14.31	120.37	Start 60 Tan #771H
4,822.48	60.00	315.14	4,448.71	-846.35	-828.77	0.00	0.00	0.00	0.00	End 60 Tan #771H
4,986.66	74.78	315.14	4,511.66	-739.22	-935.39	9.00	9.00	0.00	0.00	
5,157.79	90.18	315.14	4,534.00	-619.33	-1,054.70	9.00	9.00	0.00	0.00	POE #771H
12,571.19	90.18	315.14	4,511.00	4,635.36	-6,284.06	0.00	0.00	0.00	0.00	BHL #771H

WPX
Planning Report

Database: COMPASS
Company: WPX Energy
Project: T23N R9W
Site: 2309-17P KWU
Well: 2309-17P KWU #771H
Wellbore: Wellbore #1
Design: Design #1 16Dec15 sam

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

Well 2309-17P KWU #771H (A1) - Slot A1
KB @ 6586.00usft (Aztec 1000)
KB @ 6586.00usft (Aztec 1000)
True
Minimum Curvature

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (bearing)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
345.00	0.00	0.00	345.00	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
525.00	0.00	0.00	525.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 2.00									
1,000.00	9.50	204.28	997.83	-35.81	-16.16	-8.26	2.00	2.00	0.00
1,500.00	19.50	204.28	1,481.29	-149.78	-67.57	-34.53	2.00	2.00	0.00
1,633.44	22.17	204.28	1,605.99	-193.04	-87.09	-44.50	2.00	2.00	0.00
Hold 22.17 Inclination									
2,000.00	22.17	204.28	1,945.45	-319.12	-143.97	-73.57	0.00	0.00	0.00
2,500.00	22.17	204.28	2,408.49	-491.09	-221.56	-113.22	0.00	0.00	0.00
3,000.00	22.17	204.28	2,871.53	-663.07	-299.15	-152.87	0.00	0.00	0.00
3,500.00	22.17	204.28	3,334.57	-835.05	-376.73	-192.52	0.00	0.00	0.00
3,987.88	22.17	204.28	3,786.38	-1,002.85	-452.44	-231.21	0.00	0.00	0.00
Start Build DLS 9.00 TFO 120.37									
4,000.00	21.64	206.84	3,797.63	-1,006.93	-454.39	-232.06	9.00	-4.39	21.07
4,500.00	38.77	301.22	4,248.34	-1,008.11	-639.50	-83.79	9.00	3.43	18.88
4,762.48	60.00	315.14	4,418.71	-883.18	-792.12	113.19	9.00	8.09	5.30
Hold 60.00 Inclination									
4,822.48	60.00	315.14	4,448.71	-846.35	-828.77	164.55	0.00	0.00	0.00
Start Build DLS 9.00 TFO 0.00									
4,986.66	74.78	315.14	4,511.66	-739.22	-935.39	313.94	9.00	9.00	0.00
Start DLS 9.00 TFO 0.00									
5,000.00	75.98	315.14	4,515.03	-730.07	-944.49	326.70	9.00	9.00	0.00
5,157.79	90.18	315.14	4,534.00	-619.33	-1,054.70	481.13	9.00	9.00	0.00
POE at 90.18 Inc 315.14 Deg									
5,158.00	90.18	315.14	4,534.00	-619.18	-1,054.85	481.34	0.00	0.00	0.00
7"									
5,500.00	90.18	315.14	4,532.94	-376.77	-1,296.09	819.38	0.00	0.00	0.00
6,000.00	90.18	315.14	4,531.39	-22.36	-1,648.79	1,313.59	0.00	0.00	0.00
6,500.00	90.18	315.14	4,529.84	332.04	-2,001.49	1,807.80	0.00	0.00	0.00
7,000.00	90.18	315.14	4,528.28	686.45	-2,354.18	2,302.01	0.00	0.00	0.00
7,500.00	90.18	315.14	4,526.73	1,040.85	-2,706.88	2,796.22	0.00	0.00	0.00
8,000.00	90.18	315.14	4,525.18	1,395.26	-3,059.58	3,290.44	0.00	0.00	0.00
8,500.00	90.18	315.14	4,523.63	1,749.66	-3,412.27	3,784.65	0.00	0.00	0.00
9,000.00	90.18	315.14	4,522.08	2,104.07	-3,764.97	4,278.86	0.00	0.00	0.00
9,500.00	90.18	315.14	4,520.53	2,458.47	-4,117.66	4,773.07	0.00	0.00	0.00
10,000.00	90.18	315.14	4,518.98	2,812.88	-4,470.36	5,267.29	0.00	0.00	0.00
10,500.00	90.18	315.14	4,517.43	3,167.28	-4,823.06	5,761.50	0.00	0.00	0.00
11,000.00	90.18	315.14	4,515.87	3,521.69	-5,175.75	6,255.71	0.00	0.00	0.00
11,500.00	90.18	315.14	4,514.32	3,876.09	-5,528.45	6,749.92	0.00	0.00	0.00
12,000.00	90.18	315.14	4,512.77	4,230.50	-5,881.15	7,244.13	0.00	0.00	0.00
12,500.00	90.18	315.14	4,511.22	4,584.90	-6,233.84	7,738.35	0.00	0.00	0.00
12,571.19	90.18	315.14	4,511.00	4,635.36	-6,284.06	7,808.71	0.00	0.00	0.00
TD at 12546.19									

WPX
Planning Report

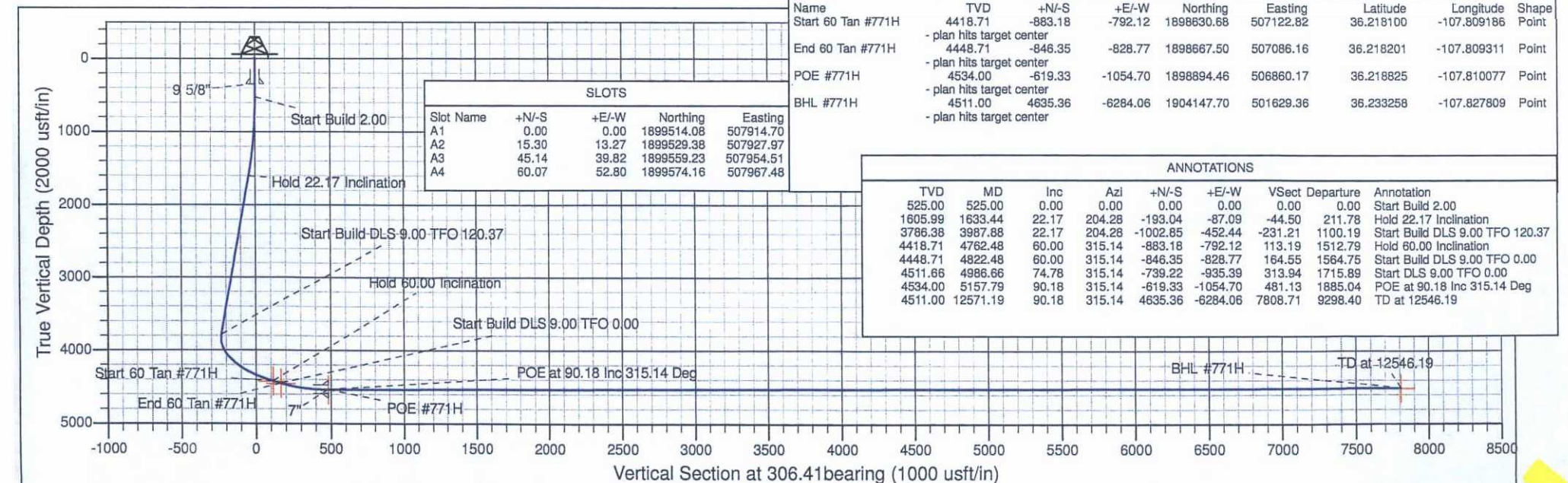
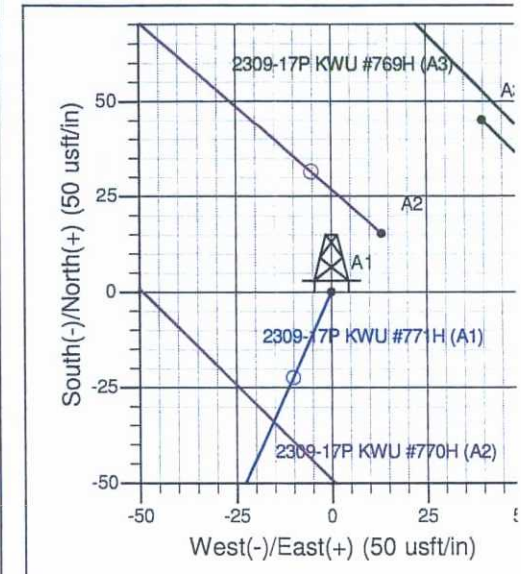
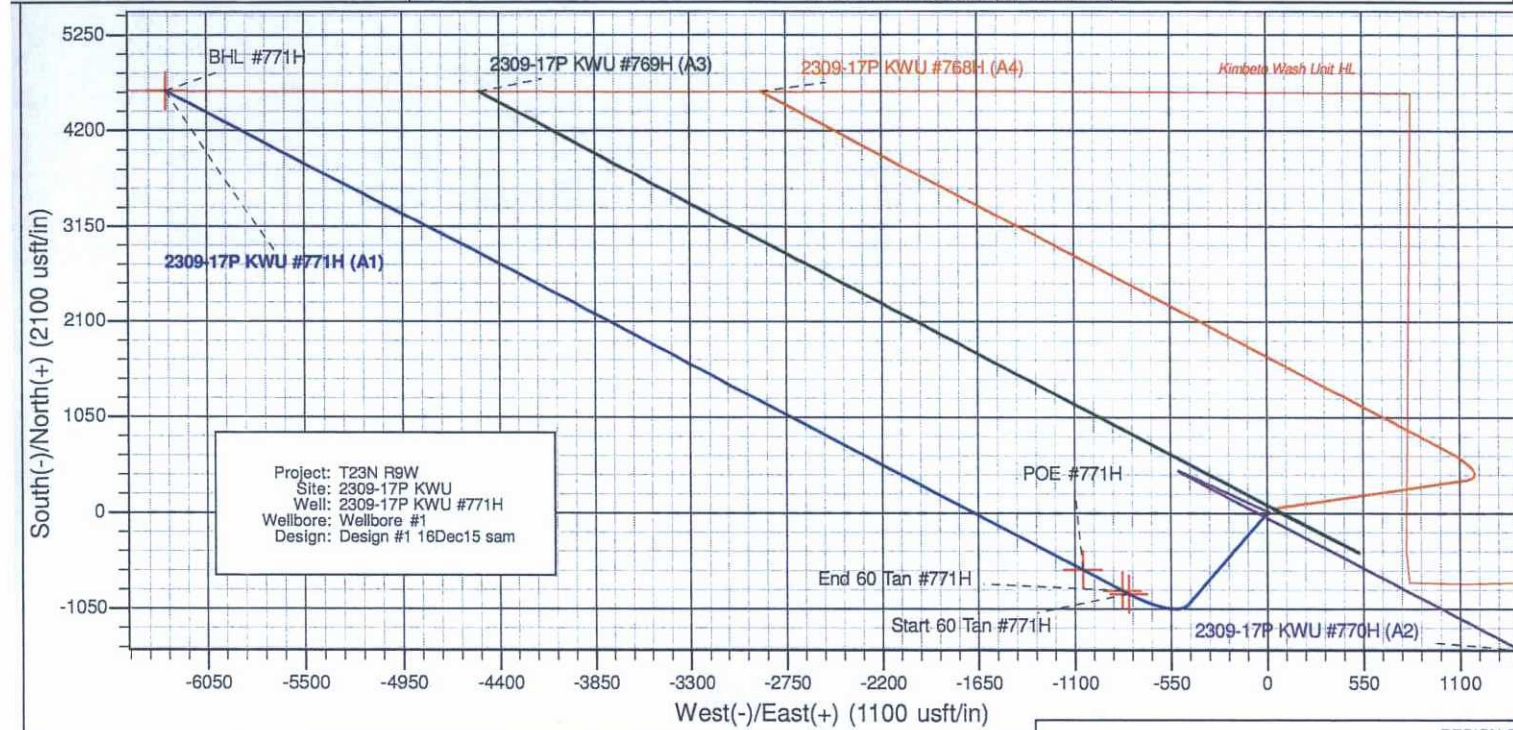
Database:	COMPASS	Local Co-ordinate Reference:	Well 2309-17P KWU #771H (A1) - Slot A1
Company:	WPX Energy	TVD Reference:	KB @ 6586.00usft (Aztec 1000)
Project:	T23N R9W	MD Reference:	KB @ 6586.00usft (Aztec 1000)
Site:	2309-17P KWU	North Reference:	True
Well:	2309-17P KWU #771H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 16Dec15 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 #771H - plan hits target center - Point	0.00	0.00	4,418.71	-883.18	-792.12	1,898,630.68	507,122.83	36.218100	-107.809187
End 60 Tan #771H - plan hits target center - Point	0.00	0.00	4,448.71	-846.35	-828.77	1,898,667.50	507,086.17	36.218201	-107.809311
BHL #771H - plan hits target center - Point	0.00	0.00	4,511.00	4,635.36	-6,284.06	1,904,147.70	501,629.36	36.233258	-107.827809
POE #771H - plan hits target center - Point	0.00	0.00	4,534.00	-619.33	-1,054.70	1,898,894.46	506,860.17	36.218825	-107.810077

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (in)	Hole Diameter (in)	
345.00	345.00	9 5/8"	9.625	12.250	
5,158.00	4,534.00	7"	7.000	8.750	

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
525.00	525.00	0.00	0.00	Start Build 2.00	
1,633.44	1,605.99	-193.04	-87.09	Hold 22.17 Inclination	
3,987.88	3,786.38	-1,002.85	-452.44	Start Build DLS 9.00 TFO 120.37	
4,762.48	4,418.71	-883.18	-792.12	Hold 60.00 Inclination	
4,822.48	4,448.71	-846.35	-828.77	Start Build DLS 9.00 TFO 0.00	
4,986.66	4,511.66	-739.22	-935.39	Start DLS 9.00 TFO 0.00	
5,157.79	4,534.00	-619.33	-1,054.70	POE at 90.18 Inc 315.14 Deg	
12,571.19	4,511.00	4,635.36	-6,284.06	TD at 12546.19	

Surface Location: 2309-17P KWU
 NAD 1927 (NADCON CONUS) , US State Plane 1927 (Exact solution) New Mexico West 3003
 Ground Elevation: 6561.00
 +N/-S +E/-W Northing Easting Latitude Longitude Slot
 0.00 0.00 1899514.08 507914.70 36.220526 -107.806501 A1
 KB @ 6586.00usft (Aztec 1000)



fill of approximately 7-feet on the south corner (corner 2), and a cut of 7-feet on the north-eastern side (between corner 5 & corner 6) to create a level well pad. No additional surfacing materials will be required for construction.

4. As determined during the onsite on December 9, 2015, the following best management practices will be implemented:
 - a. Diversions will be installed upon reclamation.
 - b. A culvert will be installed in the bar ditch of County Road #7820 at the access road take-off.
 - c. Upon interim reclamation, the area would be reseeded with a BLM approved sagebrush seed mix.
 - d. Facilities would be painted Juniper Green.
 - e. Surface vegetation would be mowed and incorporated into topsoil as additional organic matter.
 - f. No additional fill would be required to construct the pad.
5. All project activities will be confined to permitted areas only.
6. Construction equipment may include chain saws, a brush hog, scraper, maintainer, trencher, backhoe, excavator, and a dozer.
7. If drilling has not been initiated on the well pad within 120 days of the well pad being constructed, the operator will consult with the BLM to address a site-stabilization plan.

D. Production Facilities

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

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

7.0 Methods for Handling Waste



A. Cuttings

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

B. Drilling Fluids

1. Drilling fluids will be stored onsite in above-ground storage tanks. Upon termination of drilling operations, the drilling fluids will be recycled and transferred to other permitted

Directions from the Intersection of US Hwy 550 & US Hwy 64
in Bloomfield, NM to WPX Energy Production, LLC KWU #771H
393' FSL & 1128' FEL, Section 17, T23N, R9W, N.M.P.M., San Juan County, NM

Latitude: 36.220539°N Longitude: 107.807116°W Datum: NAD1983

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

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

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

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

Go Straight (South-westerly) for 2.7 miles to begin proposed access on left-hand side of County Road #7820 which continues for 53.9' to staked WPX KWU #771H location.

3,000 PSI rated Choke system

