

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 Kindred 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.

Charles  
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

Albuquerque Field Office  
Bureau of Land Management

5. Lease Serial No. NMNM 057164
6. If Indian, Allottee or Tribe Name Kimbeto Wash Unit NMNM-135255X
7. If Unit or CA Agreement, Name and No. Kimbeto Wash Unit NMNM-135255X
8. Lease Name and Well No. KWU #771H
9. API Well No. 30-045-35756
10. Field and Pool, or Exploratory Basin Mancos
11. Sec., T., R., M., or Blk. and Survey or Area SHL: 17, 23N 9W BHL: 18, 23N 9W
12. County or Parish San Juan
13. State NM
17. Spacing Unit dedicated to this well 1279.88-Acres OIL CONS. DIV DIST. 3
20. BLM/BIA Bond No. on file UTB000178 APR 28 2016
23. Estimated duration 1 month

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER
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
2. Name of Operator WPX Energy Production, LLC
3a. Address P.O. Box 640 Aztec, NM 87410
3b. Phone No. (include area code) (505) 333-1808
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
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
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
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 20'
19. Proposed Depth 12571' MD / 4511' TVD
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 6561' GR
22. Approximate date work will start* April 1, 2016

24. Attachments

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 <i>Marie E. Jaramillo</i>	Name (Printed/Typed) Marie E. Jaramillo	Date 1/26/16
Title Permit Technician III		
Approved by (Signature) <i>D. Monticose</i>	Name (Printed/Typed) D. Monticose	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.

A new 3042' BLM on Lease well connect pipeline 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





### 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:

- SURFACE CASING:** 9-5/8" notched regular pattern guide shoe. Run (1) standard centralizer on each of the bottom (4) joints of Surface Casing.
- 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.**
- 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)*

- 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.
- 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)
- 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.

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**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

<b>Database:</b>	COMPASS	<b>Local Co-ordinate Reference:</b>	Well 2309-17P KWU #771H (A1) - Slot A1
<b>Company:</b>	WPX Energy	<b>TVD Reference:</b>	KB @ 6586.00usft (Aztec 1000)
<b>Project:</b>	T23N R9W	<b>MD Reference:</b>	KB @ 6586.00usft (Aztec 1000)
<b>Site:</b>	2309-17P KWU	<b>North Reference:</b>	True
<b>Well:</b>	2309-17P KWU #771H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1 16Dec15 sam		

<b>Project</b>	T23N R9W		
<b>Map System:</b>	US State Plane 1927 (Exact solution)	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	NAD 1927 (NADCON CONUS)		
<b>Map Zone:</b>	New Mexico West 3003		

<b>Site</b>	2309-17P KWU				
<b>Site Position:</b>		<b>Northing:</b>	1,899,574.16 usft	<b>Latitude:</b>	36.220691
<b>From:</b>	Map	<b>Easting:</b>	507,967.48 usft	<b>Longitude:</b>	-107.806322
<b>Position Uncertainty:</b>	0.00 usft	<b>Slot Radius:</b>	13.200 in	<b>Grid Convergence:</b>	0.02 °

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

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

<b>Design</b>	Design #1 16Dec15 sam			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (bearing)</b>
	0.00	0.00	0.00	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

<b>Database:</b>	COMPASS	<b>Local Co-ordinate Reference:</b>	Well 2309-17P KWU #771H (A1) - Slot A1
<b>Company:</b>	WPX Energy	<b>TVD Reference:</b>	KB @ 6586.00usft (Aztec 1000)
<b>Project:</b>	T23N R9W	<b>MD Reference:</b>	KB @ 6586.00usft (Aztec 1000)
<b>Site:</b>	2309-17P KWU	<b>North Reference:</b>	True
<b>Well:</b>	2309-17P KWU #771H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1 16Dec15 sam		

**Planned Survey**

Measured Depth (usft)	Inclination (°)	Azimuth (bearing)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
345.00	0.00	0.00	345.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>9 5/8"</b>									
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
525.00	0.00	0.00	525.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Start Build 2.00</b>									
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
<b>Hold 22.17 Inclination</b>									
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
<b>Start Build DLS 9.00 TFO 120.37</b>									
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
<b>Hold 60.00 Inclination</b>									
4,822.48	60.00	315.14	4,448.71	-846.35	-828.77	164.55	0.00	0.00	0.00
<b>Start Build DLS 9.00 TFO 0.00</b>									
4,986.66	74.78	315.14	4,511.66	-739.22	-935.39	313.94	9.00	9.00	0.00
<b>Start DLS 9.00 TFO 0.00</b>									
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
<b>POE at 90.18 Inc 315.14 Deg</b>									
5,158.00	90.18	315.14	4,534.00	-619.18	-1,054.85	481.34	0.00	0.00	0.00
<b>7"</b>									
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
<b>TD at 12546.19</b>									

**WPX**  
Planning Report

<b>Database:</b>	COMPASS	<b>Local Co-ordinate Reference:</b>	Well 2309-17P KWU #771H (A1) - Slot A1
<b>Company:</b>	WPX Energy	<b>TVD Reference:</b>	KB @ 6586.00usft (Aztec 1000)
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<b>Site:</b>	2309-17P KWU	<b>North Reference:</b>	True
<b>Well:</b>	2309-17P KWU #771H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1 16Dec15 sam		

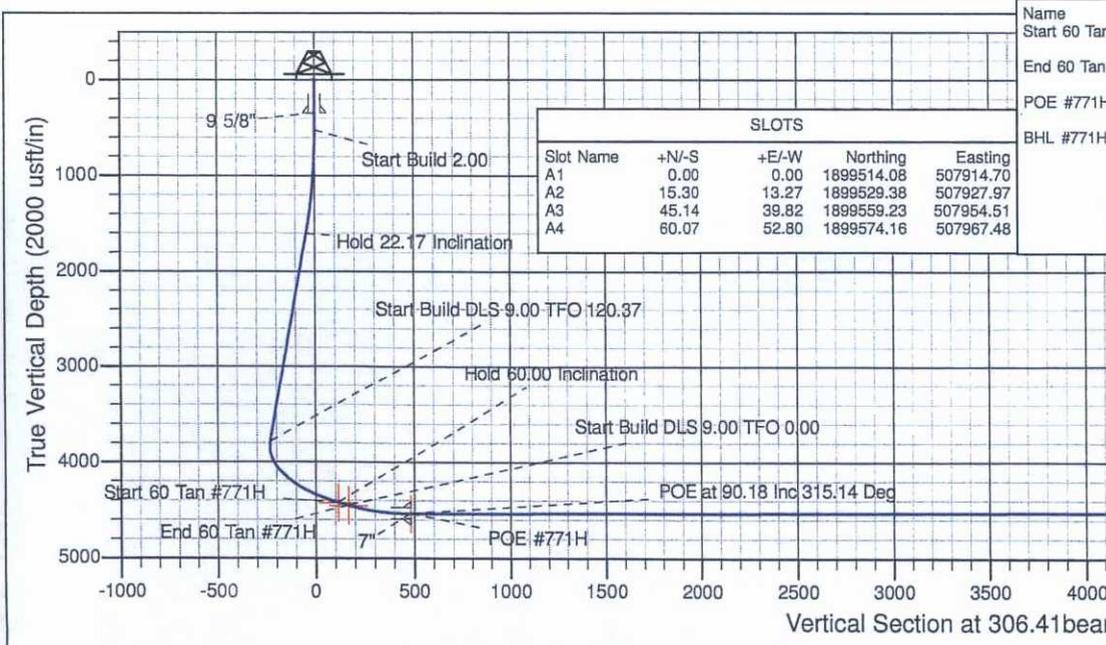
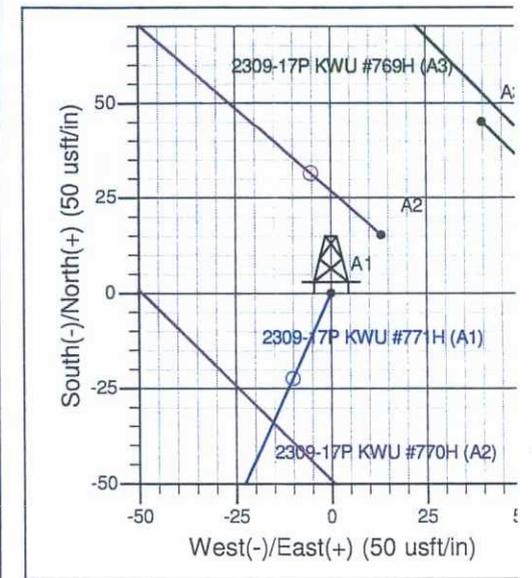
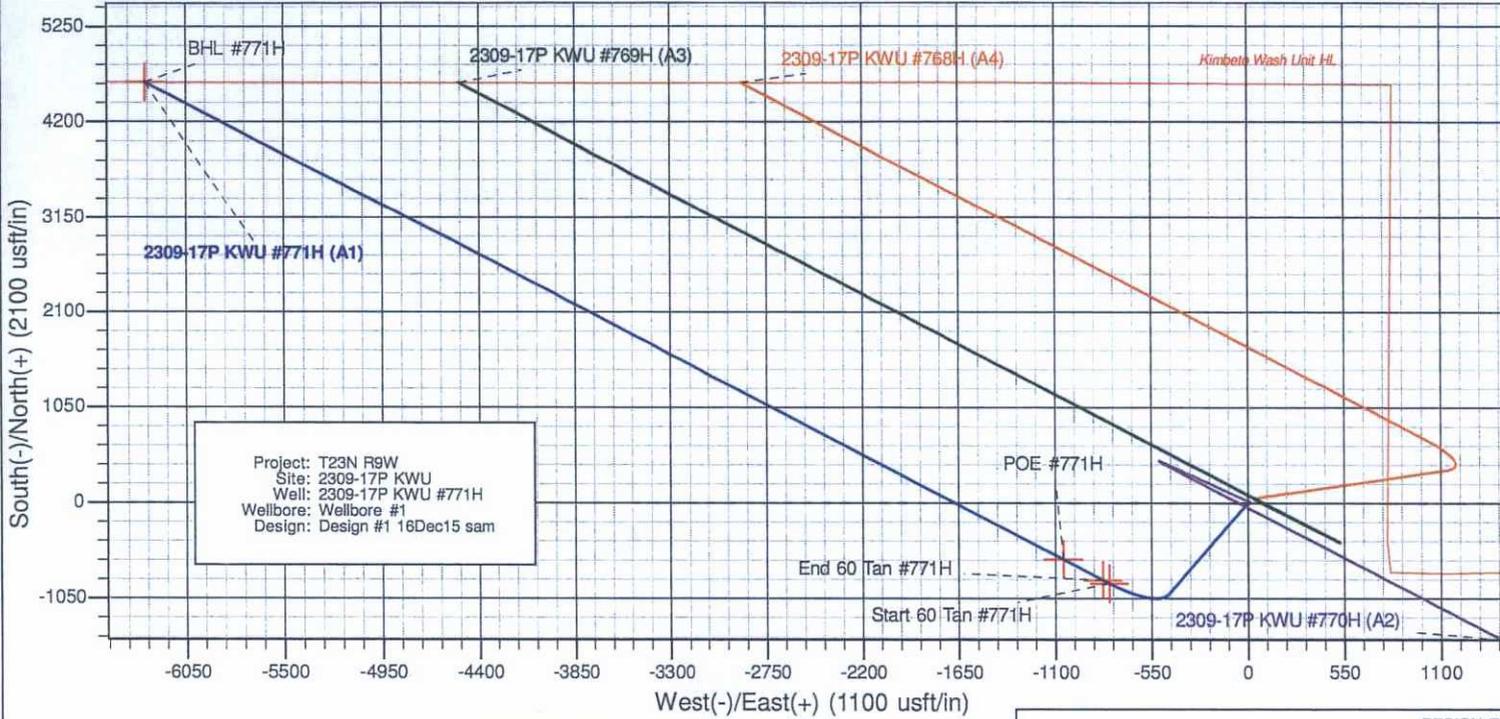
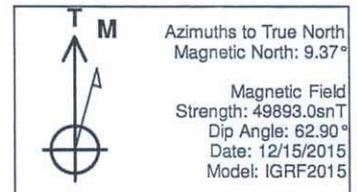
Design Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(bearing	(usft)	(usft)	(usft)	(usft)	(usft)		
- Shape		)							
Start 60 Tan #771H - plan hits target center - Point	0.00	0.00	4,418.71	-883.18	-792.12	1,898,630.68	507,122.83	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	Vertical Depth		Name	Casing Diameter	Hole Diameter
(usft)	(usft)			(in)	(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	Vertical Depth	Local Coordinates		Comment	
(usft)	(usft)	+N/-S	+E/-W		
		(usft)	(usft)		
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)



Slot Name	+N/-S	+E/-W	Northing	Easting
A1	0.00	0.00	1899514.08	507914.70
A2	15.30	13.27	1899529.38	507927.97
A3	45.14	39.82	1899559.23	507954.51
A4	60.07	52.80	1899574.16	507967.48

DESIGN TARGET DETAILS								
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
Start 60 Tan #771H	4418.71	-883.18	-792.12	1898630.68	507122.82	36.218100	-107.809186	Point
End 60 Tan #771H	4448.71	-846.35	-828.77	1898667.50	507086.16	36.218201	-107.809311	Point
POE #771H	4534.00	-619.33	-1054.70	1898894.46	506860.17	36.218825	-107.810077	Point
BHL #771H	4511.00	4635.36	-6284.06	1904147.70	501629.36	36.233258	-107.827809	Point

ANNOTATIONS									
TVD	MD	Inc	Azi	+N/-S	+E/-W	Vsect	Departure	Annotation	
525.00	525.00	0.00	0.00	0.00	0.00	0.00	0.00	Start Build 2.00	
1605.99	1633.44	22.17	204.28	-193.04	-87.09	-44.50	211.78	Hold 22.17 Inclination	
3786.38	3987.88	22.17	204.28	-1002.85	-452.44	-231.21	1100.19	Start Build DLS 9.00 TFO 120.37	
4418.71	4762.48	60.00	315.14	-883.18	-792.12	113.19	1512.79	Hold 60.00 Inclination	
4448.71	4822.48	60.00	315.14	-846.35	-828.77	164.55	1564.75	Start Build DLS 9.00 TFO 0.00	
4511.66	4986.66	74.78	315.14	-739.22	-935.39	313.94	1715.89	Start DLS 9.00 TFO 0.00	
4534.00	5157.79	90.18	315.14	-619.33	-1054.70	481.13	1885.04	POE at 90.18 Inc 315.14 Deg	
4511.00	12571.19	90.18	315.14	4635.36	-6284.06	7808.71	9298.40	TD at 12546.19	

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

