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

Susana Martinez

Governor

David Martin Cabinet Secretary David R. Catanach, Division Director Oil Conservation Division



Tony Delfin Deputy Cabinet Secretary

Operator Signature Date: 1-26-16

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 well information;  Operator well Name and Number timber with the well with the second secon
API#_30-045-35754, 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
<ul> <li>Spacing rule violation. Operator must follow up with change of status notification on other wel 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>
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.
Charle Ser
NMOCD Approved by Signature  Date

1220 South St. Francis Drive • Santa Fe, New Mexico 87505 Phone (505) 476-3460 • Fax (505) 476-3462 • www.emnrd.state.nm.us/ocd

14

### RECEIVED

UNITED STATES DEPARTMENT OF THE INTERIOR

JAN 26 2016

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

5. Lease Serial No.

NMNM 004958

APPLICATION FOR PERMIT TO DRILL OR REENTER TO Field Office Bureau of Land Managemen

BUREAU OF LAND MANAGEMENT

6. If Indian, Allottee or Tribe Name

la, Type of Work: 🛛 DRILL 🔲 REENTE	7. If Unit or CA Agree					
				KIMBETO WASH		
1b. Type of Well: Oil Well Gas Well Other	⊠ S	ingle Zone  Multip	ple Zone	8. Lease Name and We KWU #769H	ell No.	
2. Name of Operator				9. API Well No.	-	
A STATE OF THE STA				30-045-	35754	
WPX Energy Production, LLC  3a. Address	3b. Phone No	. (include area code)		10. Field and Pool, or I	Exploratory	
P.O. Box 640 Aztec, NM 87410	(505) 33			Basin Mancos		
4. Location of Well (Report location clearly and in accordance with an					Blk. and Survey or Area	
At surface 440' FSI & 1089' FEL SEC 17 23N 9W			555	SHL: 17 23N 9W		
At proposed prod. zone 330' FNL & 382' FEL SEC 18 23N 9W			AVAS			
			NEN	BHL: 18 23N 9W	112.5	
14. Distance in miles and direction from nearest town or post office*				12. County or Parish	13. State	
From intersection US Hwy & 550 US Hwy 64 in Bloomfield NM			1	San Juan	NM	
15. Distance from proposed* location to nearest	16. No. of A	Acres in lease	17. Spacing	ng Unit dedicated to this well		
property or lease line, ft. (Also to nearest drig. unit line, if any) 440°	1721.0		959.88-Acr	es OIL (	CONS. DIV DIST.	
<ol> <li>Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.</li> </ol>		19. Proposed Depth 20. BLM/I		IA Bond No. on file	APR 2 8 2016	
21. Elevations (Show whether DF, KDB, RT, GL, etc.)		imate date work will st		23. Estimated duration		
6561' GR	April 1,			1 month		
	24. Atta					
The following, completed in accordance with the requirements of Onshi	ore Oil and Gas	Order No.1, shall be atta	ached 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 SUPO shall be filed with the appropriate Forest Service Office)		Item 20 above). 5. Operator certifica	ation. pecific infor		existing bond on file (see	
25. Signature	Name	(Printed/Typed)			Date	
TO CONTRACT )		ey Granillo			1126116	
Title	: Lace	y Gramiio			1-0/11	
Permit Technician III Approved by (Signature)	Name	(Printed/Typed)			Date 4/27//	
Title AFM	Offic	· F	50			
Application approval does not warrant or certify that the applicant holds operations thereon.  Conditions of approval, if any, are attached.	s legal or equita	ble title to those rights in	the subject l	ease which would entitle	the applicant to conduct	

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 the KWU #768H/770H/771H

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

BLM'S APPROVAL OR ACCEPTANCE OF THIS

The new access of 53.9' of BLM is Onlease access road will be built and permitted via the APPN DOES NOT RELIEVE THE LESSEE AND

A new 351.9' BLM on lease well connect pipeline will be built and permitted via the APDERATOR FROM OBTAINING ANY OTHER

AUTHORIZATION REQUIRED FOR OPERATIONS **AUTHORIZED ARE SUBJECT TO** ON FEDERAL AND INDIAN LANDS This action is subject to technical

COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS"

and procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4



District I
1625 N. French Drive, Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720 E
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

N/2 - Section 18

959.88

State of New Mexico Energy, Minerals & Natural Resources Department

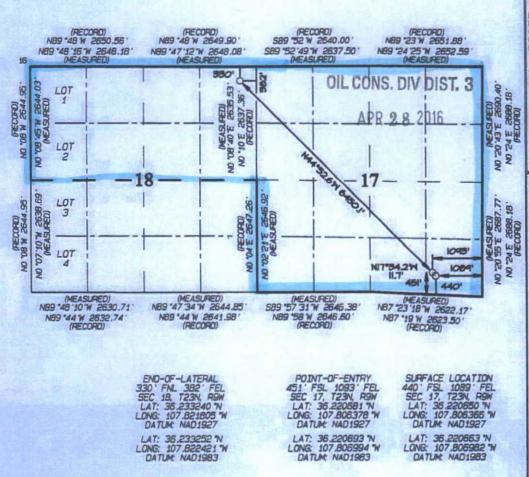
OIL CONSERVATION DIVISION 1220 South St. Francis Drive Santa Fe, NM 87505 Form C-102 Revised August 1, 2011

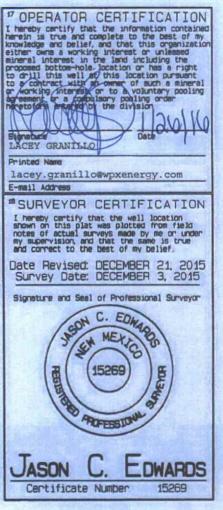
Submit one copy to Appropriate District Office

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT Pool Code 'API Number BASIN MANCOS 97232 045-35 Well Number Property Code Property Name 769H 0140 25h Elevation OGRID No. \*Operator Name WPX ENERGY PRODUCTION, LLC 6561 120782 10 Surface Location Feet from the North/South line East/Most line is or lot on. Sect ion Township Lot Ido Fast from the SOUTH 1089 EAST SAN JUAN P 17 **23N** 9W 440 11 Bottom Hole Location If Different From Surface North/South line Feet from the East/West line UL or lot no. Section Township NORTH 382 EAST SAN JUAN 330 18 **23N** 9W A Sount or Infill M Consolidation Code Dedicated Acres Entire Section 17 R-14084

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







### WPX Energy

### **Operations Plan**

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

Date:

January 19, 2016

Field:

**Basin Mancos** 

Well Name:

KWU #769H

Surface:

BLM

SH Location:

SESE Sec 17 23N-09W

Elevation:

6561' GR

**BH Location:** 

NENE Sec 18 23N-09W

Minerals:

FED

Measured Depth: 11,469.77'

I. GEOLOGY:

SURFACE FORMATION - NACIMIENTO

A. FORMATION TOPS (KB)

NAME	MD	TVD	NAME	MD	TVD
OJO ALAMO	154	154	POINT LOOKOUT	3379	3317
KIRTLAND	274	274	MANCOS	3502	3437
PICTURED CLIFFS	855	854	GALLUP	3856	3782
LEWIS	983	981	KICKOFF POINT	3,812.36	3,739.56
CHACRA	1252	1244	TOP TARGET	4811	4516
CLIFF HOUSE	2330	2295	LANDING POINT	5,019.67	4,549.00
MENEFEE	2343	2308	BASE TARGET	5,019.67	4,549.00
TO THE STATE OF			TD	11,469.77	4,516.00

- B. MUD LOGGING PROGRAM: Mudlogger on location from surface csg to TD.
- C. LOGGING PROGRAM: LWD GR from surface casing to TD.
- D. <u>NATURAL GAUGES</u>: Gauge any noticeable increases in gas flow. Record all gauges in Tour book and on morning reports.

### II. DRILLING

- A. <u>MUD PROGRAM:</u> 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. <u>BOP TESTING</u>: 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"	5,019.67'	7"	23 LBS	J-55 or equiv	LTC
PRODUCTION	6.125"	4869.67' - 11,469.77'	4.5"	11.6 LBS	P-110 or equiv	LTC
TIE BACK	6.125"	Surf 4869.67'	4.5"	11.6 LBS	P-110 or equiv	LTC

### B. FLOAT EQUIPMENT:

- 1. <u>SURFACE CASING:</u> 9-5/8" notched regular pattern guide shoe. Run (1) standard centralizer on each of the bottom (4) joints of Surface Casing.
- 2. <u>INTERMEDIATE CASING:</u> 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. <u>PRODUCTION LINER:</u> 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: 91 bbls, 260 sks, (513 cuft), 12.3 ppg @ 1.97 cuft/sk yield. Tail Cement: 87 bbls, 378 sks, (491 cuft), 13.5 ppg @ 1.3 cuft/sk yield. Displacement: Displace w/ +/- 198 bbl Drilling mud or water.

  Total Cement: 179 bbls, 638 sks, (1004 cuft)

  STAGE 2: Spacer #1: 20 bbl (112 cuft) Chemwash. Lead Cement: 21 bbls, 60 sks, (118 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: 37 bbls, 139 sks, (208 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 (647 sx /879 cuft /157 bbls). Tail Spacer: 20 BBL of MMCR. Displacement: Displace w/ +/- 140 bbl Fr Water. Total Cement (647 sx /879bbls).

## 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. <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.

#### 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 #769H - Slot A3

Wellbore #1

Plan: Design #1 16Dec15 sam

# **Standard Planning Report**

16 December, 2015

### **WPX**

#### Planning Report

COMPASS Database: WPX Energy Company: **T23N R9W** Project: 2309-17P KWU Site: Well: 2309-17P KWU #769H Wellbore: Wellbore #1

Local Co-ordinate Reference: TVD Reference: MD Reference: North Reference:

Well 2309-17P KWU #769H (A3) - Slot A3

KB @ 6586.00usft (Aztec 1000) KB @ 6586.00usft (Aztec 1000)

True

Survey Calculation Method:

Minimum Curvature

Design: Project

**T23N R9W** 

Map System:

US State Plane 1927 (Exact solution) System Datum: Mean Sea Level

Geo Datum:

NAD 1927 (NADCON CONUS)

Design #1 16Dec15 sam

Map Zone:

New Mexico West 3003

2309-17P KWU Site

Site Position: From:

Northing: Easting:

1.899.574.16 usft 507,967.48 usft

Latitude: Longitude:

36,220691 -107.806322

Position Uncertainty:

0.00 usft Slot Radius: 13.200 in

9.37

Grid Convergence:

0.02°

Well 2309-17P KWU #769H - Slot A3

Map

Well Position

+N/-S +E/-W

Design #1 16Dec15 sam

-14.93 usft -12.97 usft Northing: Easting:

1,899,559.23 usft 507,954.51 usft Latitude: Longitude:

36.220650 -107.806366

**Position Uncertainty** 

n no usft

Wellhead Flevation:

0.00 usft

Ground Level:

6,561.00 usft

Wellbore #1 Wellbore

Magnetics **Model Name** 

Sample Date IGRF2015 12/15/2015 Declination

Dip Angle (")

Field Strength (nT)

49,893

Design

Audit Notes:

Version:

Phase:

PLAN

Tie On Depth:

0.00

62.90

Vertical Section:

Depth From (TVD) (usft)

0.00

+N/-S (usft) 0.00

+E/-W (usft) 0.00

Direction (bearing)

315.19

Plan Sections Measured Depth Inclination (usft) (°) 0.00 0.00 0.00 525.00 1,173.26 12.97

Vertical Build Dogleg Turn Azimuth Depth +N/-S +E/-W Rate Rate TFO (°/100usft) (°/100usft) (bearing) (usft) (usft) (usft) (°/100usft) (") Target 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 525.00 0.00 0.00 0.00 0.00 0.00 0.00 134.75 1,167.74 -51.41 51.87 2.00 2.00 0.00 134.75 3,812.36 12.97 134.75 3,739.56 -468.23 472.41 0.00 0.00 0.00 0.00 4,623.08 60.00 315.14 4,433.72 -253.59 259.85 9.00 5.80 -22.15 -179.64 Start 60 Tan #769H 60.00 4,683.08 315.14 4,463.72 -216.76 223.20 0.00 0.00 0.00 0.00 End 60 Tan #769H 4,854.86 75.46 315.14 4,528.62 -104.42 111.41 9.00 9.00 0.00 0.00 90.29 315.14 5,019.67 4,549.00 11,18 -3.63 9.00 9.00 0.00 0.00 POE #769H 11,469,77 90.29 315.14 4.516.00 4,583,16 -4.553.32 0.00 0.00 0.00 0.00 BHL #769H

### WPX

### Planning Report

Database: Company: Project: COMPASS WPX Energy T23N R9W 2309-17P KWU

 Site:
 2309-17P KWU

 Well:
 2309-17P KWU #769H

 Wellbore:
 Wellbore #1

Design: Design #1 16Dec15 sam

Local Co-ordinate Reference:

TVD Reference:

North Reference:

Survey Calculation Method:

Well 2309-17P KWU #769H (A3) - Slot A3

KB @ 6586.00usft (Aztec 1000) KB @ 6586.00usft (Aztec 1000)

True

Minimum Curvature

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"								والمساول	
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.						EQUITATION OF	ALC: UNIVERSITY		
1,000.00	9.50	134.75	997.83	-27.66	27.90	-39.29	2.00	2.00	0.00
1,173.26	12.97	134.75	1,167.74	-51.41	51.87	-73.03	2.00	2.00	0.00
Hold 12.97 In	clination								
1,500.00	12.97	134.75	1,486.15	-103.02	103.94	-146.34	0.00	0.00	0.00
2,000.00	12.97	134.75	1,973.41	-181.99	183.61	-258.51	0.00	0.00	0.00
2,500.00	12.97	134.75	2,460.66	-260.96	263.29	-370.69	0.00	0.00	0.00
3,000.00	12.97	134.75	2,947.91	-339.93	342.96	-482.87	0.00	0.00	0.00
3,500.00	12.97	134.75	3,435.16	-418.90	422.64	-595.04	0.00	0.00	0.00
3,812.36	12.97	134.75	3,739.56	-468.23	472.41	-665.12	0.00	0.00	0.00
	LS 9.00 TFO -17	Determine and	Maria Maria	100.20	11.2.1	550.12	0.00	0.00	0.00
4,000.00	3.92	316.27	3,925.94	-478.48	483.00	-679.86	9.00	-4.82	-95.12
4,500.00	48.92	315.16	4,362.29	-324.49	330.37	-463.04	9.00	9.00	-0.22
4,623.08	60.00	315.14	4,433.72	-253.59	259.85	-363.04	9.00	9.00	-0.02
Hold 60.00 In	clination		arciamete.						
		245.44	4 400 70	040.70	200.00	044.00	0.00	0.00	
4,683.08	60.00	315.14	4,463.72	-216.76	223.20	-311.08	0.00	0.00	0.00
	LS 9.00 TFO 0.0			BESTERO					
4,854.86	75.46	315.14	4,528.62	-104.42	111.41	-152.60	9.00	9.00	0.00
Start DLS 9.0	NAME AND ADDRESS OF THE OWNER, THE PARTY OF THE OWNER, THE OWNER, THE OWNER, THE OWNER, THE OWNER, THE OWNER,		4.740.00	BENEFIT OF THE PERSON					
5,000.00	88.52	315.14	4,548.80	-2.76	10.25	-9.18	9.00	9.00	0.00
5,019.67	90.29	315.14	4,549.00	11.18	-3.63	10.49	9.00	9.00	0.00
	Inc 315.14 Deg	045.44	4.540.00	44.44	0.00	40.00			
5,020.00	90.29	315.14	4,549.00	11.41	-3.86	10.82	0.00	0.00	0.00
7"									The second
5,500.00	90.29	315.14	4,546.54	351.65	-342.43	490.81	0.00	0.00	0.00
6,000.00	90.29	315.14	4,543.98	706.06	-695.12	990.80	0.00	0.00	0.00
6,500.00	90.29	315.14	4,541.43	1,060.47	-1,047.80	1,490.80	0.00	0.00	0.00
7,000.00	90.29	315.14	4,538.87	1,414.88	-1,400.49	1,990.79	0.00	0.00	0.00
7,500.00	90.29	315.14	4,536.31	1,769.29	-1,753.17	2,490.78	0.00	0.00	0.00
8,000.00	90.29	315.14	4,533.75	2,123.71	-2,105.85	2,990.78	0.00	0.00	0.00
8,500.00	90.29	315.14	4,531.19	2,478.12	-2,458.54	3,490.77	0.00	0.00	0.00
9,000.00	90.29	315.14	4,528.64	2,832.53	-2,811.22	3,990.76	0.00	0.00	0.00
9,500.00	90.29	315.14	4,526.08	3,186.94	-3,163.91	4,490.75	0.00	0.00	0.00
10,000.00	90.29	315.14	4,523.52	3,541.35	-3,516.59	4,990.75	0.00	0.00	0.00
10,500.00	90.29	315.14	4,520.96	3,895.76	-3,869.27	5,490.74	0.00	0.00	0.00
11,000.00	90.29	315.14	4,518.40	4,250.17	-4,221.96	5,990.73	0.00	0.00	0.00
11,469,77	90.29	315.14	4,516.00	4,583.16	-4,553.32	6,460.50	0.00	0.00	0.00

### **WPX**

### Planning Report

Database: COMPASS
Company: WPX Energy
Project: T23N R9W
Site: 2309-17P KWU

Well: 2309-17P KWU #769H Wellbore: Wellbore #1

Design: Design #1 16Dec15 sam

Local Co-ordinate Reference:

TVD Reference:

North Reference: Survey Calculation Method: Well 2309-17P KWU #769H (A3) - Slot A3

KB @ 6586.00usft (Aztec 1000) KB @ 6586.00usft (Aztec 1000)

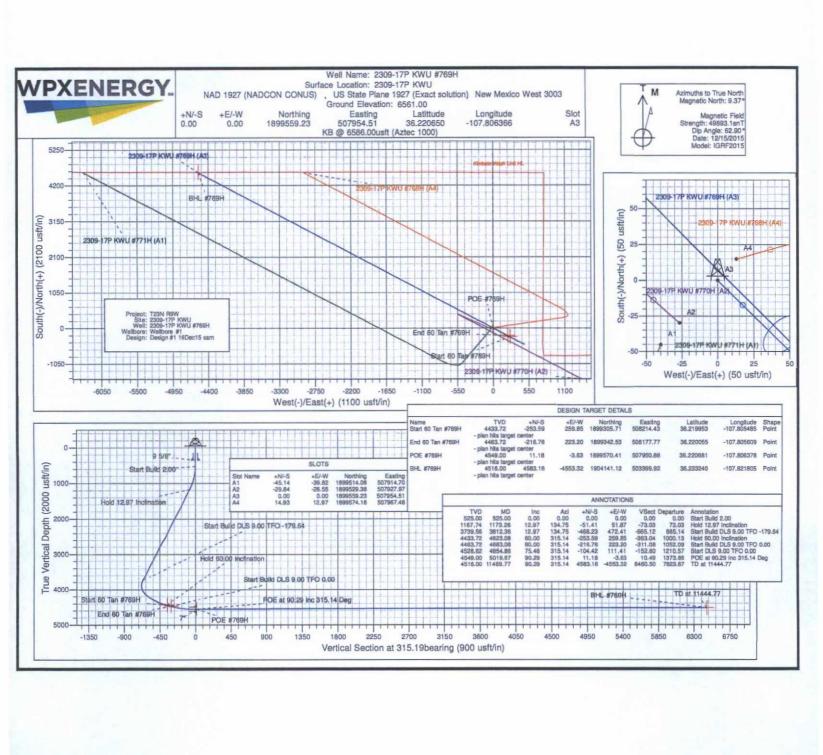
True

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 #769H - plan hits target cente - Point	0.00 er	0.00	4,433.72	-253.59	259.85	1,899,305.71	508,214.43	36.219953	-107.805485
End 60 Tan #769H - plan hits target cente - Point	0.00 er	0.00	4,463.72	-216.76	223.20	1,899,342.53	508,177.77	36.220055	-107.805610
BHL #769H - plan hits target cente - Point	0.00 er	0.00	4,516.00	4,583.16	-4,553.32	1,904,141.12	503,399.92	36.233240	-107.821805
POE #769H - plan hits target cente - Point	0.00 er	0.00	4,549.00	11.18	-3.63	1,899,570.41	507,950.88	36.220681	-107.806379

asing Points							
	Measured Depth (usft)	Vertical Depth (usft)		Name	Casing Dlameter (in)	Hole Diameter (in)	
	345.00	345.00	9 5/8"		9,625	12.250	
	5,020.00	4,549.00	7"		7.000	8.750	

Annotations					
Measu Dept (usft	h	Vertical Depth (usft)	Local Coord +N/-S (usft)	dinates +E/-W (usft)	Comment
52	5.00	525.00	0.00	0.00	Start Build 2.00
	3.26	1,167,74	-51.41	51.87	Hold 12.97 Inclination
3,81	2.36	3,739.56	-468.23	472.41	Start Build DLS 9.00 TFO -179.64
4,62	23.08	4,433.72	-253.59	259.85	Hold 60.00 Inclination
4,68	3.08	4,463.72	-216.76	223.20	Start Build DLS 9.00 TFO 0.00
4,85	4.86	4,528.62	-104.42	111.41	Start DLS 9.00 TFO 0.00
5,01	9.67	4,549.00	11.18	-3.63	POE at 90.29 Inc 315.14 Deg
11,46	9.77	4,516.00	4,583.16	-4,553.32	TD at 11444.77



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.
- 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.
- 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

- 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

# <u>Directions from the Intersection of US Hwy 550 & US Hwy 64</u> in Bloomfield, NM to WPX Energy Production, LLC KWU #769H 440' FSL & 1089' FEL, Section 17, T23N, R9W, N.M.P.M., San Juan County, NM

### Latitude: 36.220663°N Longitude: 107.806982°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 #769H location.

3,000 PSI rated Choke system

