

State of New Mexico
Energy, Minerals and Natural Resources Department

Susana Martinez
Governor

David Martin
Cabinet Secretary-Designate

Brett F. Woods, Ph.D.
Deputy Cabinet Secretary

Jami Bailey, 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: 1/7/14

Well information;

Operator WPX, Well Name and Number Chaco 2308-14E 151H

API# 30-045-35503, Section 14, Township 23 NS, Range 8 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
- ☐ 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

Charlie Herrin
NMOCD Approved by Signature

3-12-2014
Date CA

RECEIVED

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

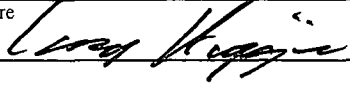
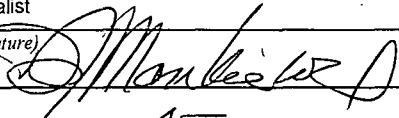
JAN 08 2014

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

5. Lease Serial No.	NMNM-18463
6. If Indian, Allottee or Tribe Name	
7. If Unit or CA Agreement, Name and No.	
8. Lease Name and Well No.	Chaco 2308-14E #151H
9. API Well No.	30-045-35503
10. Field and Pool, or Exploratory	Nageezi Gallup
11. Sec., T., R., M., or Blk. and Survey or Area	14 Section 04, T23N, R8W
12. County or Parish	San Juan County
13. State	NM
14. Distance in miles and direction from nearest town or post office*	Approximately 6 miles northwest of Lybrook, New Mexico
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	312'
16. No. of Acres in lease	2243.16
17. Spacing Unit dedicated to this well	160 acres
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	40'
19. Proposed Depth	10,456' MD / 5,083' TVD
20. BLM/BIA Bond No. on file	UTB000178 RCVD MAR 4 '14
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	6889' GR
22. Approximate date work will start*	March 1, 2014
23. Estimated duration	1 month OIL CONS. DIV.
24. Attachments	DIST. 3

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

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

25. Signature 	Name (Printed/Typed) Larry Higgins	Date 1/7/14
Title Regulatory Specialist		
Approved by (Signature) 	Name (Printed/Typed) D. Monks	Date 2/27/14
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 Nageezi Gallup formation at the above described location in accordance with the attached drilling and surface use plans.

The well pad surface is under jurisdiction of the BLM. The road and location are off lease.

This location has been archaeologically surveyed by La Plata Archaeological Consultants. Copies of their report have been submitted directly to the BLM.

1984' of new access road is needed.

9551' pipeline is needed

DRILLING OPERATIONS AUTHORIZED ARE
SUBJECT TO COMPLIANCE WITH ALL
"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

NMOCDD

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

APD Certification:

I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of state and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

Executed this 7th day of January, 2014.

Name Larry Higgins

Position Title Regulatory Specialist

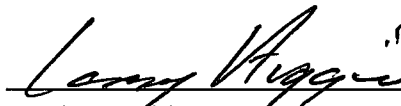
Address P.O. Box 640, Aztec, NM 87410

Telephone (505) 333-1808

Field representative (if not above signatory) _____

E-mail larry.higgins@wpxenergy.com

Date: 01/07/14



Larry Higgins
Regulatory Spec.
WPX Energy Production, LLC

JASON C. EDWARDS
Certificate Number 15269

WPX ENERGY**Operations Plan**

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

DATE: 11/26/2013 **FIELD:** Nageezi (Gallup)

WELL NAME: Chaco 2308-14E #151H **SURFACE:** BLM

SH Location: SWNW Sec 14-23N-8W **ELEVATION:** 6,889' GR

BH Location: NWNW Sec 15-23N-8W **MINERALS:** BLM
San Juan Co, NM

MEASURED DEPTH: 10,456' **LEASE #:** NMNM18463

I. GEOLOGY: Surface formation – Nacimiento

A. FORMATION TOPS: (KB)

Name	MD	TVD	Name	MD	TVD
Ojo Alamo	951	950	Point Lookout	4,014	3,954
Kirtland	1,120	1,116	Mancos	4,204	4,141
Pictured Cliffs	1,571	1,559	Kickoff Point	4,676	4,604
Lewis	1,787	1,770	Target Top	5,268	5,091
Chacra	1,963	1,943	Landing Point	5,802	5,248
Cliff House	3,064	3,023	Target Base	5,802	5,248
Menefee	3,145	3,102			
			TD	10,456	5,083

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

C. LOGGING PROGRAM: LWD GR from surface casing to TD. LWD GR / E- Sonic will be run in Lateral.

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, the curve portion of the wellbore. 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.**

NOTE: Vertical portion of the well (8-3/4 in.) will be directionally drilled as per attached Directional Plan to +/- 4,676' (MD) / 4,604' (TVD). Curve portion of wellbore will be drilled and landed at +/- 90 deg. at +/- 5,802' (MD) / 5,248' (TVD). 7 in. csg will be set at this point. A 6-1/8" Lateral will be drilled as per the attached Directional Plan to +/- 10,456' (MD) / 5,083' (TVD). Will run 4-1/2 in. Production Liner from +/- 5,652 ft. to TD and cemented. Liner will be tied back to surface w / 4-1/2" Casing for stimulation / testing, then removed from the well.

III. MATERIALS**A. CASING PROGRAM:**

CASING TYPE	OH SIZE (IN)	DEPTH (MD) (FT)	CASING SIZE (IN)	WEIGHT(LB)	GRADE
Surface	12.25"	400'+	9 5/8	36#	J-55
Intermediate	8.75"	5,802'	7	23#	K-55
Prod. Liner	6.125"	5,652' - 10,456'	4-1/2"	11.6#	N-80
Tie-Back String	N/A	Surf. - 5,652'	4-1/2"	11.6#	N-80

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 2,700 ft., 2,500 ft., 2,300ft., 2,000ft., 1,500 ft., and 1,000 ft.
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 + (2) RSI (Sliding Sleeves) positioned inside 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.
4. TIE-BACK CASING: None

C. CEMENTING:

(Note: Volumes may be adjusted onsite due to actual conditions)

1. SURFACE: 10 bbl Fr Water Spacer + 190 sx (222.3 cu.ft.) of "Premium Cement" + 2% Calcium Chloride Cement + 0.125# pps of Poly-E-Flake, 15.8 #/gal (1.17 cu ft./sk, Vol 39.58 Bbls.). The 100% excess should circulate cement to the surface. WOC 12 hours. Test csg to 600psi. Total Volume: (222.3 cu-ft/190 sx/39.6 Bbls).
2. INTERMEDIATE: 20 bbl (112 cu-ft) Mud Flush III spacer + Lead: 850 sx Foamed 50/50 Poz Cement. 13.0 ppg + 0.1% Halad 766 + 0.2% Versaset + 1.5% Chem-Foamer 760 (Yield :1.43 cu-ft/ sk. / Vol: 1216 cu-ft / 216.5 Bbls.) + TAIL: 100 sx 13.5 #/gal. + 0.2% Versaset + 0.15% HALAD-766 (Yield: 1.28 cu-ft / sk / Vol: 128 cu-ft / 22.8 Bbls.). + Fresh Water Displacement (1,362 cu-ft / +/- 242 Bbls) + 100 sx Top-Out Cement Premium: Yield: (1.17 cu-ft/ sk / (Vol: 117 cu-ft / 20.8 Bbls). Test Casing to 1500 PSI for 30 minutes. Total Cement Volume: (1050 sx / 1461 cu-ft / 260 bbls). Mix with +/- 84,000 SCF Nitrogen. TOC at surface.
3. PRODUCTION LINER: **STAGE 1**:10 bbl (56.cu-ft) Fr Water Spacer. **STAGE 2**:40 bbl 9.5 ppg (224.6 cu-ft) Tuned Spacer III + 0.5 gal/bbl Musol + 38.75 ppb Barite + 0.5 gal/bbl SEM-7. **STAGE 3**: 10 bbl Fr Water Spacer. **STAGE 4: Lead Cement**: 50 / 50 Poz Premium + 0.2% Versaset + 0.2% Halad -766, Yield 1.43 cu ft/sk, 13.0 ppg, (10 sx / 14.3 cu ft. / 2.5 bbls). **STAGE 5**: 200 sx. Foamed Lead Cement: 50 / 50 Poz Standard + 0.2% Versaset + 0.2% HALAD-766 + 1.5% Chem-Foamer 760. Yield 1.97 cu-ft/sk. 13.0 ppg (200 sx / 394 cu-ft. / 70.2 bbls.). **STAGE 6**: Tail Cement : 100 sx. 50/50 Poz Standard + 0.2% Versaset + 0.05% HALAD-766 + .05% SA-1015, Weight: 13.5 ppg (100 sx / Yield 1.28 cu ft/sk. / 128 cu ft. / 22.8 bbls) **STAGE 7**: Displace w/ +/- 137 bbl Fr Water. Total Cement (563.3 cu ft / 95.5 bbls). Mix Foamed Cement w/ +/- 75,000 SCF Nitrogen. Est. TOC +/- 5,352 ft.

IV. COMPLETION

A. CBL

1. Run CCL for perforating.

B. PRESSURE TEST

1. Pressure test 4-1/2" casing to 4500 psi max, hold at 1500 psi for 30 minutes. Open RSI sleeves.

C. 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.

D. 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 point of curve (~5,650' MD).

- Although this horizontal well will be 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:

Installation of RSI sleeves at Toe of Lateral.

Proposed Operations:

A 4-1/2" 11.6# N-80 Liner will be run to TD and landed +/- 150 ft. into the 7" 23# K-55 Intermediate casing (set at 5,802 ft. MD) with a Liner Hanger and pack-off assembly then cemented to +/- 300 ft above the liner hanger. TOL will be +/- 5,652 ft. (MD) +/- 78 degree angle. TOC: +/- 5,352 ft. (MD).

After cementing and TOL clean up operations are complete, the TOL will be tested to 1500 psi (per BLM).

A 4-1/2" 11.6# N-80 tie-back string with seal assembly will be run and stung into the PBR of the liner hanger, tested to 1500 PSI and hung off at the surface.

The Drilling Rig will be rigged down at this point and Completion operations will begin. After Stimulation and Testing operations are complete the 4-1/2" tie-back string will be removed from the well.

Note: Changes to formation tops, casing landing points, well TD and Directional Plan

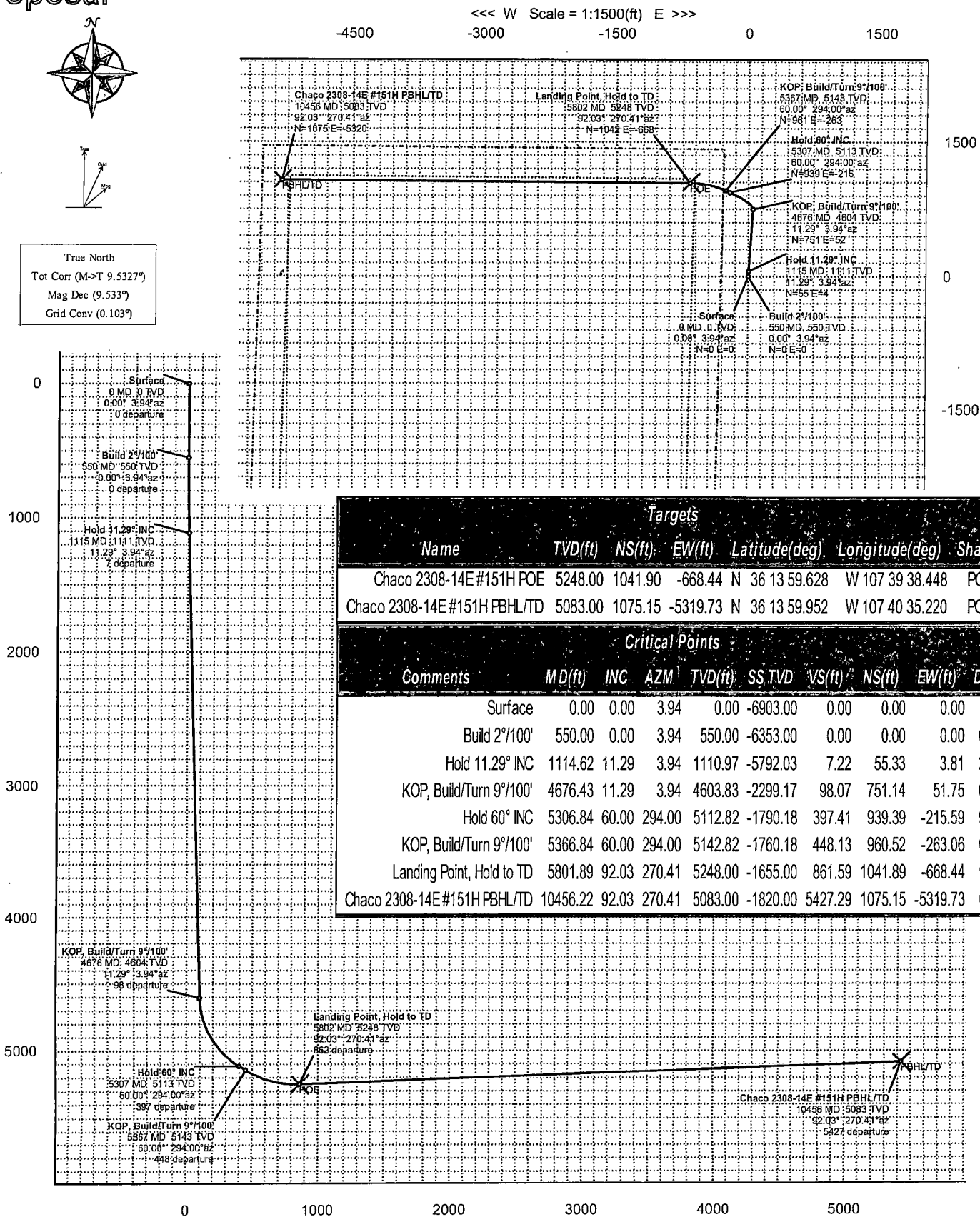
WELL Chaco 2308-14E #151H	FIELD NM San Juan County NAD27	STRUCTURE Sec 14-23N-8W
Magnetic Parameters Model: BGGM 2013 Dip: 62.954° Mag Dec: 9.533° Date: November 22, 2013 FS: 50153.3nT	Surface Location Lat: N 36 13 49.325 Lon: W 107 39 38.289 NAD27 New Mexico State Plane, Western Zone, US Feet Northing: 1903142.14 ftUS Easting: 551589.38 ftUS Grid Conv: 0.103° Scale Fact: 0.99991971	Miscellaneous Site: Chaco 2308-14E #151H Plan: R9 mdy 22Nov13 TVD Ref: RKB(8903h above MSL) Srvy Date: November 22, 2013

Proposal



True North
Tot Corr (M->T) 9.5327°
Mag Dec (9.533°)
Grid Conv (0.103°)

TVD Scale = 1:1000(ft)



Targets						
Name	TVD(ft)	NS(ft)	EW(ft)	Latitude(deg)	Longitude(deg)	Shape
Chaco 2308-14E #151H POE	5248.00	1041.90	-668.44	N 36 13 59.628	W 107 39 38.448	POINT
Chaco 2308-14E #151H PBHL/TD	5083.00	1075.15	-5319.73	N 36 13 59.952	W 107 40 35.220	POINT

Critical Points									
Comments	MD(ft)	INC	AZM	TVD(ft)	SS TVD	VS(ft)	NS(ft)	EW(ft)	DLS
Surface	0.00	0.00	3.94	0.00	-6903.00	0.00	0.00	0.00	
Build 2°/100'	550.00	0.00	3.94	550.00	-6353.00	0.00	0.00	0.00	0.00
Hold 11.29° INC	1114.62	11.29	3.94	1110.97	-5792.03	7.22	55.33	3.81	2.00
KOP, Build/Turn 9°/100'	4676.43	11.29	3.94	4603.83	-2299.17	98.07	751.14	51.75	0.00
Hold 60° INC	5306.84	60.00	294.00	5112.82	-1790.18	397.41	939.39	-215.59	9.00
KOP, Build/Turn 9°/100'	5366.84	60.00	294.00	5142.82	-1760.18	448.13	960.52	-263.06	0.00
Landing Point, Hold to TD	5801.89	92.03	270.41	5248.00	-1655.00	861.59	1041.89	-668.44	9.00
Chaco 2308-14E #151H PBHL/TD	10456.22	92.03	270.41	5083.00	-1820.00	5427.29	1075.15	-5319.73	0.00

Vertical Section (ft) Azim = 281.43° Scale = 1:1000(ft) Origin = 0 N/-S, 0 E/-W

<<< S Scale = 1:1500(ft) N >>>

Chaco 2308-14E #151H R0 mdv 22Nov13 Proposal Geodetic Report

(Def Plan)

Report Date: November 22, 2013 - 03:25 PM
Client: WPX Energy
Field: NM San Juan County NAD27
Structure / Slot: WPX Sec 14-23N-8W (Chaco 2308-14E #151H) / Chaco 2308-14E #151H
Well: Chaco 2308-14E #151H
Borehole: Original Hole
UWI / API#: Unknown / Unknown
Survey Name: Chaco 2308-14E #151H R0 mdv 22Nov13
Survey Date: November 22, 2013
Tort / AHD / DDI / ERD Ratio: 107.187 * / 6208.407 ft / 6.122 / 1.183
Coordinate Reference System: NAD27 New Mexico State Plane, Western Zone, US Feet
Location Lat / Long: N 36° 13' 49.32480", W 107° 39' 30.28932"
Location Grid N/E Y/X: N 1903142.142 ftUS, E 551589.382 ftUS
CRS Grid Convergence Angle: 0.1034 *
Grid Scale Factor: 0.99991971

Survey / DLS Computation: Minimum Curvature / Lubinski
Vertical Section Azimuth: 281.426 * (True North)
Vertical Section Origin: 0.000 ft, 0.000 ft
TVD Reference Datum: RKB
TVD Reference Elevation: 6903.000 ft above MSL
Seabed / Ground Elevation: 6889.000 ft above MSL
Magnetic Declination: 9.533 *
Total Gravity Field Strength: 998.4957mgn (9.80665 Based)
Total Magnetic Field Strength: 50153.291 nT
Magnetic Dip Angle: 62.994 *
Declination Date: November 22, 2013
Magnetic Declination Model: BGGM 2013
North Reference: True North
Grid Convergence Used: 0.0000 *
Total Corr Mag North->True North: 9.5327 *
Local Coord Referenced To: Well Head

Comments	MD (ft)	Incl (°)	Azim True (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
Surface	0.00	0.00	3.94	0.00	0.00	0.00	0.00	0.00	1903142.14	551589.38	N 36 13 49.32	W 107 39 30.29
	100.00	0.00	3.94	100.00	0.00	0.00	0.00	0.00	1903142.14	551589.38	N 36 13 49.32	W 107 39 30.29
	200.00	0.00	3.94	200.00	0.00	0.00	0.00	0.00	1903142.14	551589.38	N 36 13 49.32	W 107 39 30.29
	300.00	0.00	3.94	300.00	0.00	0.00	0.00	0.00	1903142.14	551589.38	N 36 13 49.32	W 107 39 30.29
	400.00	0.00	3.94	400.00	0.00	0.00	0.00	0.00	1903142.14	551589.38	N 36 13 49.32	W 107 39 30.29
	500.00	0.00	3.94	500.00	0.00	0.00	0.00	0.00	1903142.14	551589.38	N 36 13 49.32	W 107 39 30.29
Build 2"/100'	550.00	0.00	3.94	550.00	0.00	0.00	0.00	0.00	1903142.14	551589.38	N 36 13 49.32	W 107 39 30.29
	600.00	1.00	3.94	600.00	0.06	0.44	0.03	2.00	1903142.58	551589.41	N 36 13 49.33	W 107 39 30.29
	700.00	3.00	3.94	699.93	0.51	3.92	0.27	2.00	1903146.06	551589.64	N 36 13 49.36	W 107 39 30.29
	800.00	5.00	3.94	799.68	1.42	10.88	0.75	2.00	1903153.02	551590.11	N 36 13 49.43	W 107 39 30.28
	900.00	7.00	3.94	899.13	2.78	21.30	1.47	2.00	1903163.45	551590.81	N 36 13 49.54	W 107 39 30.27
	1000.00	9.00	3.94	998.15	4.59	35.19	2.42	2.00	1903177.33	551591.74	N 36 13 49.67	W 107 39 30.26
	1100.00	11.00	3.94	1096.63	6.86	52.51	3.62	2.00	1903194.65	551592.90	N 36 13 49.84	W 107 39 30.25
Hold 11.29" INC	1114.62	11.29	3.94	1110.97	7.22	55.33	3.81	2.00	1903197.47	551593.09	N 36 13 49.87	W 107 39 30.24
	1200.00	11.29	3.94	1194.70	9.40	72.01	4.96	0.00	1903214.15	551594.21	N 36 13 50.04	W 107 39 30.23
	1300.00	11.29	3.94	1292.76	11.95	91.54	6.31	0.00	1903233.69	551595.52	N 36 13 50.23	W 107 39 30.21
	1400.00	11.29	3.94	1390.83	14.50	111.08	7.65	0.00	1903253.23	551596.83	N 36 13 50.42	W 107 39 30.20
	1500.00	11.29	3.94	1488.89	17.05	130.61	9.00	0.00	1903272.76	551598.15	N 36 13 50.62	W 107 39 30.18
	1600.00	11.29	3.94	1586.96	19.60	150.15	10.35	0.00	1903292.30	551599.46	N 36 13 50.81	W 107 39 30.16
	1700.00	11.29	3.94	1685.02	22.16	169.69	11.69	0.00	1903311.83	551600.77	N 36 13 51.00	W 107 39 30.15
	1800.00	11.29	3.94	1783.08	24.71	189.22	13.04	0.00	1903331.37	551602.08	N 36 13 51.20	W 107 39 30.13
	1900.00	11.29	3.94	1881.15	27.26	208.76	14.38	0.00	1903350.91	551603.39	N 36 13 51.39	W 107 39 30.11
	2000.00	11.29	3.94	1979.21	29.81	228.29	15.73	0.00	1903370.44	551604.70	N 36 13 51.58	W 107 39 30.10
	2100.00	11.29	3.94	2077.28	32.36	247.83	17.08	0.00	1903389.98	551606.01	N 36 13 51.78	W 107 39 30.08
	2200.00	11.29	3.94	2175.34	34.91	267.36	18.42	0.00	1903409.51	551607.32	N 36 13 51.97	W 107 39 30.06
	2300.00	11.29	3.94	2273.40	37.46	286.90	19.77	0.00	1903429.05	551608.63	N 36 13 52.16	W 107 39 30.05
	2400.00	11.29	3.94	2371.47	40.01	306.43	21.11	0.00	1903448.59	551609.94	N 36 13 52.36	W 107 39 30.03
	2500.00	11.29	3.94	2469.53	42.56	325.97	22.46	0.00	1903468.12	551611.25	N 36 13 52.55	W 107 39 30.02
	2600.00	11.29	3.94	2567.60	45.11	345.50	23.81	0.00	1903487.66	551612.56	N 36 13 52.74	W 107 39 30.00
	2700.00	11.29	3.94	2665.66	47.66	365.04	25.15	0.00	1903507.19	551613.87	N 36 13 52.93	W 107 39 29.98
	2800.00	11.29	3.94	2763.72	50.21	384.57	26.50	0.00	1903526.73	551615.18	N 36 13 53.13	W 107 39 29.97
	2900.00	11.29	3.94	2861.79	52.76	404.11	27.84	0.00	1903546.27	551616.49	N 36 13 53.32	W 107 39 29.95
	3000.00	11.29	3.94	2959.85	55.31	423.64	29.19	0.00	1903565.80	551617.80	N 36 13 53.51	W 107 39 29.93
	3100.00	11.29	3.94	3057.92	57.86	443.18	30.54	0.00	1903585.34	551619.12	N 36 13 53.71	W 107 39 29.92
	3200.00	11.29	3.94	3155.98	60.41	462.71	31.88	0.00	1903604.88	551620.43	N 36 13 53.90	W 107 39 29.90
	3300.00	11.29	3.94	3254.04	62.97	482.25	33.23	0.00	1903624.41	551621.74	N 36 13 54.09	W 107 39 29.88
	3400.00	11.29	3.94	3352.11	65.52	501.79	34.57	0.00	1903643.95	551623.05	N 36 13 54.29	W 107 39 29.87
	3500.00	11.29	3.94	3450.17	68.07	521.32	35.92	0.00	1903663.48	551624.36	N 36 13 54.48	W 107 39 29.85
	3600.00	11.29	3.94	3548.24	70.62	540.86	37.27	0.00	1903683.02	551625.67	N 36 13 54.67	W 107 39 29.83
	3700.00	11.29	3.94	3646.30	73.17	560.39	38.61	0.00	1903702.56	551626.98	N 36 13 54.87	W 107 39 29.82
	3800.00	11.29	3.94	3744.36	75.72	579.93	39.96	0.00	1903722.09	551628.29	N 36 13 55.06	W 107 39 29.80
	3900.00	11.29	3.94	3842.43	78.27	599.46	41.30	0.00	1903741.63	551629.60	N 36 13 55.25	W 107 39 29.79
	4000.00	11.29	3.94	3940.49	80.82	619.00	42.65	0.00	1903761.16	551630.91	N 36 13 55.45	W 107 39 29.77
	4100.00	11.29	3.94	4038.56	83.37	638.53	44.00	0.00	1903780.70	551632.22	N 36 13 55.64	W 107 39 29.75
	4200.00	11.29	3.94	4136.62	85.92	658.07	45.34	0.00	1903800.24	551633.53	N 36 13 55.83	W 107 39 29.74
	4300.00	11.29	3.94	4234.68	88.47	677.60	46.69	0.00	1903819.77	551634.84	N 36 13 56.03	W 107 39 29.72
	4400.00	11.29	3.94	4332.75	91.02	697.14	48.03	0.00	1903839.31	551636.15	N 36 13 56.22	W 107 39 29.70
	4500.00	11.29	3.94	4430.81	93.57	716.67	49.38	0.00	1903858.84	551637.46	N 36 13 56.41	W 107 39 29.69
	4600.00	11.29	3.94	4528.88	96.12	736.21	50.73	0.00	1903878.38	551638.78	N 36 13 56.61	W 107 39 29.67
KOP, Build/Turn 9"/100'	4676.43	11.29	3.94	4603.83	98.07	751.14	51.75	0.00	1903893.31	551639.78	N 36 13 56.75	W 107 39 29.66
	4700.00	11.96	353.93	4626.92	99.11	755.87	51.65	9.00	1903898.04	551639.67	N 36 13 56.80	W 107 39 29.66
	4800.00	17.54	325.44	4723.70	113.09	778.63	41.99	9.00	1903920.78	551629.96	N 36 13 57.02	W 107 39 29.78
	4900.00	25.15	311.98	4816.83	142.29	805.31	17.59	9.00	1903947.42	551605.52	N 36 13 57.29	W 107 39 30.07
	5000.00	33.42	304.67	4904.00	185.98	835.25	-20.93	9.00	1903977.29	551566.95	N 36 13 57.58	W 107 39 30.54
	5100.00	41.97	300.03	4983.07	243.09	867.72	-72.63	9.00	1904009.65	551515.19	N 36 13 57.91	W 107 39 31.18
	5200.00	50.65	296.72	5052.10	312.21	901.91	-136.25	9.00	1904043.73	551451.52	N 36 13 58.24	W 107 39 31.95
	5300.00	59.40	294.16	5109.37	391.65	936.98	-210.20	9.00	1904078.66	551377.51	N 36 13 58.59	W 107 39 32.85
Hold 60" INC KOP, Build/Turn 9"/100'	5306.84	60.00	294.00	5112.82	397.41	939.39	-215.59	9.00	1904081.06	551372.11	N 36 13 58.61	W 107 39 32.92
	5366.84	60.00	294.00	5142.82	448.13	980.52	-263.06	0.00	1904102.11	551324.61	N 36 13 58.82	W 107 39 33.50
	5400.00	62.33	291.87	5158.81	476.59	971.83	-289.81	9.00	1904113.37	551297.84	N 36 13 58.94	W 107 39 33.83
	5500.00	69.52	285.93	5199.62	567.02	1001.24	-378.12	9.00	1904142.62	551211.48	N 36 13 59.23	W 107 39 34.88
	5600.00	76.89	280.53	5228.52	662.60	1023.04	-469.23	9.00	1904164.25	551118.34	N 36 13 59.44	W 107 39 36.02
	5700.00	84.37	275.45	5244.80	760.98	1036.70	-566.84	9.00	1904177.73	551020.72	N 36 13 59.58	W 107 39 37.21
	5800.00	91.89	270.50	5248.07	859.74	1041.87	-666.55	9.00	1904182.73	550921.01	N 36 13 59.83	W 107 39 38.42
Landing Point, Hold to TD	5801.89	92.03	270.41	5248.00	861.59	1041.89	-668.44	9.00	1904182.74	550919.12	N 36 13 59.83	W 107 39 38.45
	5900.00	92.03	270.41	5244.53	957.83	1042.59	-766.49	0.00	1904183.26	550821.08	N 36 13 59.63	W 107 39 39.64
	6000.00	92.03	270.41	5240.99	1055.93	1043.31	-868.42	0.00	1904183.60	550721.15	N 36 13 59.64	W 107 39 40.86
	6100.00	92.03	270.41	5237.44	1154.03	1044.02	-968.36	0.00	1904184.33	550621.22	N 36 13 59.65	W 107 39 42.08
	6200.00	92.03	270.41	5233.90	1252.12	1044.74	-1066.29	0.00	1904184.87	550521.30	N 36 13 59.66	W 107 39 43.30
	6300.00	92.03	270.41	5230.36	1350.22	1045.45	-1166.22	0.00	1904185.40	550421.37	N 36 13 59.66	W 107 39 44.52
	6400.00	92.03	270.41	5226.81	1448.31	1046.17	-1266.16	0.00	1904185.94	550321.44	N 36 13 59.67	W 107 39 45.74

Comments	MD (ft)	Incl (°)	Azim True (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
	7000.00	92.03	270.41	5205.55	2036.89	1050.46	-1865.77	0.00	1904189.14	549721.88	N 36 13 59.71	W 107 39 53.06
	7100.00	92.03	270.41	5202.01	2134.98	1051.17	-1965.70	0.00	1904189.68	549621.95	N 36 13 59.72	W 107 39 54.28
	7200.00	92.03	270.41	5198.47	2233.08	1051.89	-2065.64	0.00	1904190.21	549522.02	N 36 13 59.73	W 107 39 55.50
	7300.00	92.03	270.41	5194.92	2331.17	1052.60	-2165.57	0.00	1904190.75	549422.09	N 36 13 59.73	W 107 39 56.72
	7400.00	92.03	270.41	5191.38	2429.27	1053.32	-2265.51	0.00	1904191.28	549322.17	N 36 13 59.74	W 107 39 57.94
	7500.00	92.03	270.41	5187.83	2527.37	1054.03	-2365.44	0.00	1904191.82	549222.24	N 36 13 59.75	W 107 39 59.16
	7600.00	92.03	270.41	5184.29	2625.46	1054.74	-2465.37	0.00	1904192.35	549122.31	N 36 13 59.75	W 107 40 0.38
	7700.00	92.03	270.41	5180.74	2723.56	1055.46	-2565.31	0.00	1904192.88	549022.38	N 36 13 59.76	W 107 40 1.60
	7800.00	92.03	270.41	5177.20	2821.65	1056.17	-2665.24	0.00	1904193.42	548922.46	N 36 13 59.77	W 107 40 2.82
	7900.00	92.03	270.41	5173.66	2919.75	1056.89	-2765.18	0.00	1904193.95	548822.53	N 36 13 59.77	W 107 40 4.04
	8000.00	92.03	270.41	5170.11	3017.84	1057.60	-2865.11	0.00	1904194.49	548722.60	N 36 13 59.78	W 107 40 5.26
	8100.00	92.03	270.41	5166.57	3115.94	1058.32	-2965.05	0.00	1904195.02	548622.67	N 36 13 59.79	W 107 40 6.48
	8200.00	92.03	270.41	5163.02	3214.03	1059.03	-3064.98	0.00	1904195.56	548522.75	N 36 13 59.80	W 107 40 7.70
	8300.00	92.03	270.41	5159.47	3312.13	1059.75	-3164.92	0.00	1904196.09	548422.82	N 36 13 59.80	W 107 40 8.92
	8400.00	92.03	270.41	5155.93	3410.23	1060.46	-3264.85	0.00	1904196.62	548322.89	N 36 13 59.81	W 107 40 10.14
	8500.00	92.03	270.41	5152.38	3508.32	1061.18	-3364.79	0.00	1904197.16	548222.96	N 36 13 59.82	W 107 40 11.36
	8600.00	92.03	270.41	5148.84	3606.42	1061.89	-3464.72	0.00	1904197.69	548123.04	N 36 13 59.82	W 107 40 12.58
	8700.00	92.03	270.41	5145.29	3704.51	1062.61	-3564.66	0.00	1904198.23	548023.11	N 36 13 59.83	W 107 40 13.80
	8800.00	92.03	270.41	5141.75	3802.61	1063.32	-3664.59	0.00	1904198.76	547923.18	N 36 13 59.84	W 107 40 15.02
	8900.00	92.03	270.41	5138.20	3900.70	1064.03	-3764.52	0.00	1904199.30	547823.25	N 36 13 59.84	W 107 40 16.24
	9000.00	92.03	270.41	5134.65	3998.80	1064.75	-3864.46	0.00	1904199.83	547723.33	N 36 13 59.85	W 107 40 17.46
	9100.00	92.03	270.41	5131.11	4096.90	1065.46	-3964.39	0.00	1904200.36	547623.40	N 36 13 59.86	W 107 40 18.68
	9200.00	92.03	270.41	5127.56	4194.99	1066.18	-4064.33	0.00	1904200.90	547523.47	N 36 13 59.87	W 107 40 19.90
	9300.00	92.03	270.41	5124.01	4293.09	1066.89	-4164.26	0.00	1904201.43	547423.54	N 36 13 59.87	W 107 40 21.12
	9400.00	92.03	270.41	5120.47	4391.18	1067.61	-4264.20	0.00	1904201.97	547323.62	N 36 13 59.88	W 107 40 22.34
	9500.00	92.03	270.41	5116.92	4489.28	1068.32	-4364.13	0.00	1904202.50	547223.69	N 36 13 59.89	W 107 40 23.56
	9600.00	92.03	270.41	5113.37	4587.37	1069.04	-4464.07	0.00	1904203.03	547123.76	N 36 13 59.89	W 107 40 24.78
	9700.00	92.03	270.41	5109.83	4685.47	1069.75	-4564.00	0.00	1904203.57	547023.83	N 36 13 59.90	W 107 40 26.00
	9800.00	92.03	270.41	5106.28	4783.56	1070.46	-4663.94	0.00	1904204.10	546923.91	N 36 13 59.91	W 107 40 27.22
	9900.00	92.03	270.41	5102.73	4881.66	1071.18	-4763.87	0.00	1904204.64	546823.98	N 36 13 59.91	W 107 40 28.44
	10000.00	92.03	270.41	5099.19	4979.75	1071.89	-4863.80	0.00	1904205.17	546724.05	N 36 13 59.92	W 107 40 29.66
	10100.00	92.03	270.41	5095.64	5077.85	1072.61	-4963.74	0.00	1904205.70	546624.12	N 36 13 59.93	W 107 40 30.87
	10200.00	92.03	270.41	5092.09	5175.95	1073.32	-5063.67	-0.00	1904206.24	546524.20	N 36 13 59.93	W 107 40 32.09
	10300.00	92.03	270.41	5088.54	5274.04	1074.04	-5163.61	0.00	1904206.77	546424.27	N 36 13 59.94	W 107 40 33.31
	10400.00	92.03	270.41	5084.99	5372.14	1074.75	-5263.54	0.00	1904207.30	546324.34	N 36 13 59.95	W 107 40 34.53
Chaco 2308-14E #151H PBHL/TD	10456.22	92.03	270.41	5083.00	5427.29	1075.15	-5319.73	0.00	1904207.60	546268.16	N 36 13 59.95	W 107 40 35.22

Survey Type: Def Plan

Survey Error Model: ISCWSA Rev 0 *** 3-D 95.000% Confidence 2.7955 sigma
Survey Program:

Description	MD From (ft)	MD To (ft)	EOU Freq (ft)	Hole Size (in)	Casing Diameter (in)	Survey Tool Type	Borehole / Survey
	0.000	14.000	1/100.000	30.000	30.000	SLB_UNKNOWN-Depth Only	Original Hole / Chaco 2308-14E #151H R0 mdv 22Nov13
	14.000	10456.225	1/100.000	30.000	30.000	SLB_UNKNOWN	Original Hole / Chaco 2308-14E #151H R0 mdv 22Nov13

1. INTRODUCTION

WPX Energy Production, LLC (WPX), is providing this Surface Use Plan of Operations (SUPO)/Plan of Development (POD) to the Bureau of Land Management – Farmington Field Office (BLM-FFO) as part of their Chaco 2308-14E Nos. 151H and 152H (151H/152H) Applications for Permit to Drill (APDs) and Right-of-Way (ROW) Grant Applications. This SUPO/POD is provided per Onshore Oil and Gas Order No. 1, 43 Code of Federal Regulations (CFR) 2804.12, 43 CFR 2884.11, BLM Manual Section 2804 (Applying for Federal Land Policy and Management Act [FLPMA] Grants), and BLM FLPMA ROW Manual Section 2884 (Applying for a Mineral Leasing Act Grant or a Temporary Use Permit).

The 151H and 152H oil and natural gas wells will each be permitted by an approved APD. The associated well pad, pipeline corridor, and two access roads, each of which will be located partially off-lease, will each be permitted under ROW Grants. Three potential temporary use areas (TUAs) associated with the project will also be permitted under a ROW Grant.

A pre-disturbance onsite meeting for the project was held on October 31, 2013. The BLM, WPX, and an environmental consultant (Nelson Consulting, Inc.) attended the meeting.

In addition to the best management practices (BMPs) provided below and in the Surface Reclamation Plan (Reclamation Plan; Appendix A), the general Conditions of Approval/stipulations will be followed, if any are attached to the approved APDs and/or ROW Grants.

2. PROJECT LOCATION AND DESCRIPTION

2.1. Project Location

The proposed project area is located in San Juan County, New Mexico. The proposed project area is located approximately 37 miles south-southeast of the town of Bloomfield, New Mexico. To access the proposed project area, head south on U.S. Highway 550 from the U.S. Highway 550-U.S. Highway 64 intersection for approximately 39 miles, turn right (south) onto County Road 7900 for 1.7 miles, turn left onto an existing road for approximately 0.9 mile, and turn left onto another existing road for approximately 0.2 mile. This point is the start of proposed access road 2. Access road 2 will travel generally eastward for approximately 2,193 feet before reaching an existing access road. Follow this existing access road for approximately 1.7 miles before reaching the start of proposed access road 1. This road travels northeastward for 64 feet before reaching the proposed well pad.

The proposed pipeline corridor will parallel both of the proposed access roads and existing access roads in the area. The pipeline corridor will begin at WPX's existing Chaco 2308-16I Nos. 147H and 148H (147H/148H) well pad and end at the proposed 151H/152H well pad.

The access route from U.S. Highway 550 is depicted on Figure B.1 (Appendix B) and on the construction plats provided in the APD and ROW Grant permit packages.

The legal location of the proposed project area is described in the below table (New Mexico Principal Meridian [NMPM]).

9. METHODS FOR HANDLING WASTE DISPOSAL

- ✓ Drilling operations will utilize a closed-loop system. Drilling of the horizontal lateral may be done with water-based mud. All water-based mud cuttings will be hauled to a commercial disposal facility or land farm.

The drilling operations area will be enclosed by a containment berm and ditches, which will drain to sump areas for spill prevention and control. The containment berm will be ramped to allow access to the solids control area.

WPX will follow New Mexico Oil Conservation Division "Pit Rule" guidelines and Onshore Order Nos. 1 and 7 regarding the placement, operation, and closure of any reserve pits or closed-loop systems. No blow pit will be used.

As stated in the Reclamation Plan (Appendix A), if drilling has not been initiated on the proposed well pad within 120 days of the well pad being constructed, WPX will submit a site-stabilization plan to the BLM-FFO.

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

Portable toilets will be provided and maintained during construction, as needed.

10. ANCILLARY FACILITIES

There will be three potential TUAs associated with the proposed project:

- TUA 1: the 200-foot-by-200-foot (0.92-acre) TUA that will be created for the 147H/148H project. Located adjacent to the proposed 151H/152H pipeline corridor, near station 10+71.6. This TUA will already have been cleared of vegetation as part of the 147H/148H project. This TUA will be used to stage equipment during construction. During interim reclamation, WPX will repair any damage to this TUA and will reseed the TUA.
- TUA 2 (potential): within Elm Ridge Exploration Company's approximately 1.00-acre active Dome Federal 24 No. 21 well pad. This TUA is primarily barren of vegetation. This TUA may be used to stage equipment during construction. During interim reclamation, WPX will repair any damage to this TUA and will reseed the TUA (unless Elm Ridge prefers portions of the location to remain unvegetated).
- TUA 3: A 1,340-foot-long, 40-foot wide (1.23-acre) TUA running parallel to the cross-country portion of the proposed pipeline corridor and proposed access road 2. This TUA is currently undisturbed. During the construction phase, it will be used as extra work space due to the cuts and fills associated with the adjacent proposed access road and pipeline tie. During construction, this TUA will be cleared of vegetation and contoured. During interim reclamation, WPX will recontour and reseed this TUA.

The TUAs are depicted in Appendix B (Figure B.1).

11. WELL SITE LAYOUT

The interim reclamation/long-term disturbance layout is depicted in Figure B.4 (Appendix B) and is described below.

B.2. Existing Wells and Water Features Within One-Mile Radius of Proposed Well Pad

