

State of New Mexico
Energy, Minerals and Natural Resources Department

Susana Martinez
Governor

Tony Delfin
Acting 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: 3-29-16

Well information;

Operator WOPX, Well Name and Number Rosa Unit #665H

API# 30089-3358, Section 30, Township 31 N/S, Range 5 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 NSI, 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.

Chuck Peraz
NMOCD Approved by Signature

12-6-2016
Date

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

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

RECEIVED

5. Lease Serial No. **MAR 29 2016**
NMSF-078764

6. If Indian, Allottee or Tribe Name

7. If Unit or CA Agreement Name and No.
Rosa Unit R-13457

8. Lease Name and Well No.

Rosa UT #665H

9. API Well No.

30-039-31358

10. Field and Pool, or Exploratory

Basin Mancos

11. Sec., T., R., M., or Blk. and Survey or Area

SHL: Section 30, T31N, R5W

BHL: Section 28, T31N, R5W

12. County or Parish

Rio Arriba

13. State

NM

1a. Type of Work: ☒ DRILL ☐ REENTER

1b. Type of Well: ☐ Oil Well ☒ Gas Well ☐ Other ☒ Single Zone ☐ 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) 333-1849

4. Location of Well (Report location clearly and in accordance with any State requirements. *)

At surface 2247' FSL & 973' FWL, sec 30, T31N, R5W

At proposed prod. zone 212' FSL & 2602' FWL, sec 28, T31N, R5W

OIL CONS. DIV DIST. 3

14. Distance in miles and direction from nearest town or post office*

Approximately 58 miles East from Bloomfield NM

SEP 30 2016

15. Distance from proposed*

location to nearest
property or lease line, ft.

(Also to nearest drig. unit line, if any) 973'

16. No. of Acres in lease

2507.3

17. Spacing Unit dedicated to this well

872.79 Acres

18. Distance from proposed location*

to nearest well, drilling, completed,
applied for, on this lease, ft.

15'

19. Proposed Depth

18,527 MD / 7264 TVD

20. BLM/BIA Bond No. on file

UTB000178

21. Elevations (Show whether DF, KDB, RT, GL, etc.)

6394' GR

22. Approximate date work will start*

June 1, 2016

23. Estimated duration

1 month

24. Attachments

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)

Lacey Granillo

Date

3/29/16

Title

Permitting Tech III

Approved by (Signature)

Name (Printed/Typed)

Office

FFO

Date

9/27/16

Title

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 Pool at the above described location in accordance with the attached drilling and surface use plans.

The well pad surface is on lease on BLM surface within the Rosa Unit and will be co-located with the Rosa UT -660-661-662-663-664-658-659, AKA Rosa Unit Pad 30.

This location has been archaeologically surveyed by LaPlata Archeology. Copies of their report have been submitted directly to the BLM.

New access road is approximately 105.7' on lease on BLM surface.

New pipeline is approximately 2913.2' on lease on BLM surface.

ACTION DOES NOT RELIEVE THE LESSEE AND
OPERATOR FROM OBTAINING ANY OTHER
AUTHORIZATION REQUIRED FOR OPERATIONS
ON FEDERAL AND INDIAN LANDS

This action is subject to technical
and procedural review pursuant to
43 CFR 3165.3 and appeal
pursuant to 43 CFR 3165.4

DRILLING OPERATIONS
AUTHORIZED ARE SUBJECT TO
COMPLIANCE WITH ATTACHED
"GENERAL REQUIREMENTS"

NMOCDA

District I
1625 N. French Drive, Hobbs, NM 88240
Phone: (575) 393-6181 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

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: *[Signature]* Date: 3/29/16

Lacey Granillo

Printed Name
Lacey.granillo@wpkenergy.com

E-mail Address

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: FEBRUARY 15, 2016

Survey Date: SEPTEMBER 3, 2015

Signature and Seal of Professional Surveyor



JASON C. EDWARDS

Certificate Number 15269

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-039-31358	*Pool Code 97232	*Pool Name BASIN MANCOS
*Property Code 17033	*Property Name ROSA UNIT	*Well Number 665H
OGRIID No. 120782	*Operator Name WPX ENERGY PRODUCTION, LLC	*Elevation 6394'

10 Surface Location

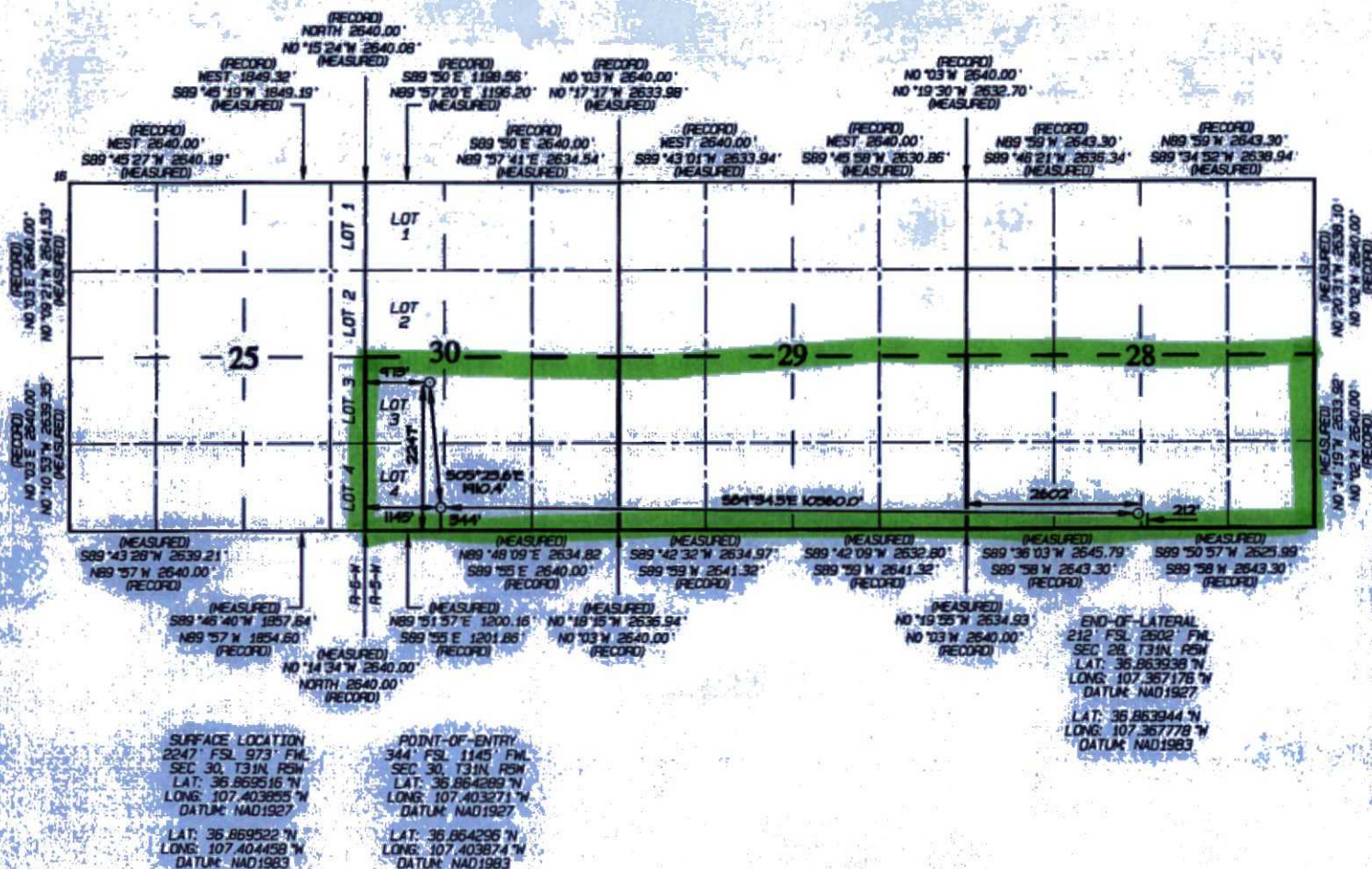
U. or lot no.	Section	Township	Range	Lot No.	Feet from the	North/South line	Feet from the	East/West line	County
K	30	31N	5W	3	2247	SOUTH	973	WEST	RIO ARriba

11 Bottom Hole Location If Different From Surface

U. or lot no.	Section	Township	Range	Lot No.	Feet from the	North/South line	Feet from the	East/West line	County
N	28	31N	5W		212	SOUTH	2602	WEST	RIO ARriba

*Dedicated Acres 872.79	S/2 - Sections 28, 29, 30, T31N, R5W	*Joint or Infill	*Consolidation Code	*Order No. R-13457
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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





WPX Energy

Operations Plan

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

Date: March 18, 2016
Well Name: Rosa Unit #665H
SH Location: NESW Sec 30 31-05W
BH Location: SESW Sec 28 31N-05W

Field: Basin Mancos
Surface: BLM
Elevation: 6394' GR
Minerals: FED

Measured Depth: 18,527.45'

I. **GEOLOGY:** SURFACE FORMATION - NACIMIENTO

A. FORMATION TOPS (KB)

NAME	MD	TVD	NAME	MD	TVD
OJO ALAMO	2576	2509	MENEFEE	5697	5493
KIRTLAND	2721	2648	POINT LOOKOUT	5890	5677
FRUITLAND	3212	3117	MANCOS	6399	6164
PICTURED CLIFFS	3355	3254	KICKOFF POINT	6,917.24	6,658.87
LEWIS	3771	3652	TOP TARGET	7684	7256
CHACRA	4787	4623	LANDING POINT	7,967.36	7,314.00
CLIFF HOUSE	5650	5448	BASE TARGET	7,967.36	726
			TD	18,527.45	7,264.00

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. A LSND (WBM) or (OBM) will be used to drill the curve and lateral portion of well. Treat for lost circulation as necessary. Obtain 100% returns prior to cementing. Notify Engineering of any mud losses.

B. **BOP TESTING:** While drill pipe is in use, the pipe rams and the blind rams will be function tested once each trip. The BOPE will be tested to 5000 psi (High) for 10 minutes. Annular preventor will be tested to 50% of rated working pressure. Pressure test surface casing to 1500 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 test 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, equiv or <	STC
INTERMEDIATE	8.75"	6817'	7"	23 LBS	J-55, equiv or <	LTC
PRODUCTION	6.125"	6667.24' - 18,527.45'	4.5"	11.6 LBS	P-110, equiv or <	LTC
TIE BACK	6.125"	Surf. - 7817.36'	4.5"	11.6 LBS	P-110, equiv or <	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.**
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). 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, (517 cuft), 12.3 ppg @ 1.97 cuft/sk yield. Tail Cement: 17 bbls, 75 sks, (98 cuft), 13.5 ppg @ 1.3 cuft/sk yield. Displacement: Displace w/ +/- 268 bbl Drilling mud or water. Total Cement: 110 bbls, 338 sks, (615 cuft)
STAGE 2: Spacer #1: 20 bbl (112 cuft) Chemwash. Lead Cement: 110 bbls, 318 sks, (620 cuft), 12.3 ppg @ 1.97 cuft/sk yield. Tail Cement: 17 bbls, 85 sks, (98 cuft), 13.5 ppg @ 1.3 cuft/sk yield. Displacement: Displace w/ +/- 145 bbl Drilling mud or water. Total Cement: 128 bbls, 403 sks, (717 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 (1050 sx /1428 cuft /254 bbls). Tail Spacer: 20 BBL of MMCR. Displacement: Displace w/ +/- 140 bbl Fr Water. Total Cement (1050 sx /1428bbls).

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.

- 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:

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

T31N R5W Rosa Unit

Pad 30

Rosa Unit #665H - Slot B6

Wellbore #1

Plan: Design #1 22Dec15 sam

Standard Planning Report

22 December, 2015

WPX Planning Report

Database:	COMPASS	Local Co-ordinate Reference:	Well Rosa Unit #665H (B6) - Slot B6
Company:	WPX Energy	TVD Reference:	KB @ 6419.00usft (Aztec 1000)
Project:	T31N R5W Rosa Unit	MD Reference:	KB @ 6419.00usft (Aztec 1000)
Site:	Pad 30	North Reference:	True
Well:	Rosa Unit #665H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 22Dec15 sam		

Project	T31N R5W Rosa Unit		
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	Pad 30		
Site Position:		Northing:	2,136,114.76 usft
From:	Lat/Long	Easting:	625,593.42 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13.200 in
		Latitude:	36.869698
		Longitude:	-107.403974
		Grid Convergence:	0.26 °

Well	Rosa Unit #665H - Slot B6		
Well Position	+N/-S	-66.22 usft	Northing:
	+E/-W	34.79 usft	Easting:
Position Uncertainty	0.00 usft	Wellhead Elevation:	0.00 usft
		Latitude:	36.869516
		Longitude:	-107.403855
		Ground Level:	6,394.00 usft

Wellbore	Wellbore #1		
Magnetics	Model Name	Sample Date	Declination
			(°)
	IGRF2010	9/9/2015	9.24
			Dip Angle
			(°)
			63.54
			Field Strength
			(nT)
			50,436

Design	Design #1 22Dec15 sam		
Audit Notes:			
Version:	Phase:	PLAN	Tie On Depth:
			0.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(usft)	(usft)	(usft)
	0.00	0.00	0.00
			Direction
			(bearing)
			100.71

Plan Sections										
Measured	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Dogleg	Build	Turn	TFO	Target
Depth	(°)	(bearing)	Depth	(usft)	(usft)	Rate	Rate	Rate	(°)	
(usft)			(usft)			(°/100usft)	(°/100usft)	(°/100usft)		
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,354.72	17.09	195.29	1,342.10	-122.08	-33.37	2.00	2.00	0.00	195.29	
6,917.24	17.09	195.29	6,658.87	-1,699.31	-464.49	0.00	0.00	0.00	0.00	
7,967.36	90.27	90.68	7,314.00	-1,902.83	170.89	9.00	6.97	-9.96	-103.91	POE #665H
18,527.45	90.27	90.68	7,264.00	-2,028.73	10,730.11	0.00	0.00	0.00	0.00	BHL #665H

WPX Planning Report

Database:	COMPASS	Local Co-ordinate Reference:	Well Rosa Unit #665H (B6) - Slot B6
Company:	WPX Energy	TVD Reference:	KB @ 6419.00usft (Aztec 1000)
Project:	T31N R5W Rosa Unit	MD Reference:	KB @ 6419.00usft (Aztec 1000)
Site:	Pad 30	North Reference:	True
Well:	Rosa Unit #665H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 22Dec15 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
320.00	0.00	0.00	320.00	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
Start Build 2.00									
1,000.00	10.00	195.29	997.47	-41.98	-11.48	-3.48	2.00	2.00	0.00
1,354.72	17.09	195.29	1,342.10	-122.08	-33.37	-10.11	2.00	2.00	0.00
Hold 17.09 Inclination									
1,500.00	17.09	195.29	1,480.96	-163.28	-44.63	-13.52	0.00	0.00	0.00
2,000.00	17.09	195.29	1,958.87	-305.05	-83.38	-25.26	0.00	0.00	0.00
2,500.00	17.09	195.29	2,436.78	-446.82	-122.13	-37.00	0.00	0.00	0.00
3,000.00	17.09	195.29	2,914.69	-588.59	-160.89	-48.74	0.00	0.00	0.00
3,500.00	17.09	195.29	3,392.60	-730.37	-199.64	-60.48	0.00	0.00	0.00
4,000.00	17.09	195.29	3,870.51	-872.14	-238.39	-72.22	0.00	0.00	0.00
4,500.00	17.09	195.29	4,348.42	-1,013.91	-277.14	-83.95	0.00	0.00	0.00
5,000.00	17.09	195.29	4,826.33	-1,155.69	-315.89	-95.69	0.00	0.00	0.00
5,500.00	17.09	195.29	5,304.24	-1,297.46	-354.65	-107.43	0.00	0.00	0.00
6,000.00	17.09	195.29	5,782.16	-1,439.23	-393.40	-119.17	0.00	0.00	0.00
6,500.00	17.09	195.29	6,260.07	-1,581.00	-432.15	-130.91	0.00	0.00	0.00
6,817.00	17.09	195.29	6,563.06	-1,670.89	-456.72	-138.35	0.00	0.00	0.00
7"									
6,917.24	17.09	195.29	6,658.87	-1,699.31	-464.49	-140.71	0.00	0.00	0.00
Start Build DLS 9.00 TFO -103.91									
7,000.00	16.88	169.61	6,738.13	-1,722.90	-465.53	-137.35	9.00	-0.26	-31.03
7,500.00	50.32	105.07	7,158.86	-1,850.95	-255.76	92.56	9.00	6.69	-12.91
7,967.36	90.27	90.68	7,314.00	-1,902.83	170.89	521.42	9.00	8.55	-3.08
POE at 90.27 Inc 90.68 Deg									
8,000.00	90.27	90.68	7,313.85	-1,903.22	203.53	553.56	0.00	0.00	0.00
8,500.00	90.27	90.68	7,311.48	-1,909.18	703.49	1,045.92	0.00	0.00	0.00
9,000.00	90.27	90.68	7,309.11	-1,915.14	1,203.45	1,538.29	0.00	0.00	0.00
9,500.00	90.27	90.68	7,306.74	-1,921.10	1,703.41	2,030.65	0.00	0.00	0.00
10,000.00	90.27	90.68	7,304.38	-1,927.06	2,203.36	2,523.01	0.00	0.00	0.00
10,500.00	90.27	90.68	7,302.01	-1,933.03	2,703.32	3,015.38	0.00	0.00	0.00
11,000.00	90.27	90.68	7,299.64	-1,938.99	3,203.28	3,507.74	0.00	0.00	0.00
11,500.00	90.27	90.68	7,297.27	-1,944.95	3,703.24	4,000.10	0.00	0.00	0.00
12,000.00	90.27	90.68	7,294.91	-1,950.91	4,203.20	4,492.46	0.00	0.00	0.00
12,500.00	90.27	90.68	7,292.54	-1,956.87	4,703.16	4,984.83	0.00	0.00	0.00
13,000.00	90.27	90.68	7,290.17	-1,962.83	5,203.12	5,477.19	0.00	0.00	0.00
13,500.00	90.27	90.68	7,287.80	-1,968.79	5,703.08	5,969.55	0.00	0.00	0.00
14,000.00	90.27	90.68	7,285.44	-1,974.75	6,203.04	6,461.92	0.00	0.00	0.00
14,500.00	90.27	90.68	7,283.07	-1,980.71	6,702.99	6,954.28	0.00	0.00	0.00
15,000.00	90.27	90.68	7,280.70	-1,986.67	7,202.95	7,446.64	0.00	0.00	0.00
15,500.00	90.27	90.68	7,278.33	-1,992.63	7,702.91	7,939.00	0.00	0.00	0.00
16,000.00	90.27	90.68	7,275.97	-1,998.59	8,202.87	8,431.37	0.00	0.00	0.00
16,500.00	90.27	90.68	7,273.60	-2,004.55	8,702.83	8,923.73	0.00	0.00	0.00
17,000.00	90.27	90.68	7,271.23	-2,010.51	9,202.79	9,416.09	0.00	0.00	0.00
17,500.00	90.27	90.68	7,268.86	-2,016.47	9,702.75	9,908.46	0.00	0.00	0.00
18,000.00	90.27	90.68	7,266.50	-2,022.43	10,202.71	10,400.82	0.00	0.00	0.00
18,500.00	90.27	90.68	7,264.13	-2,028.39	10,702.67	10,893.18	0.00	0.00	0.00
18,527.45	90.27	90.68	7,264.00	-2,028.73	10,730.11	10,920.22	0.00	0.00	0.00
TD at 18527.45									

WPX Planning Report

Database:	COMPASS	Local Co-ordinate Reference:	Well Rosa Unit #665H (B6) - Slot B6
Company:	WPX Energy	TVD Reference:	KB @ 6419.00usft (Aztec 1000)
Project:	T31N R5W Rosa Unit	MD Reference:	KB @ 6419.00usft (Aztec 1000)
Site:	Pad 30	North Reference:	True
Well:	Rosa Unit #665H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 22Dec15 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
BHL #665H - plan hits target center - Point	0.00	0.00	7,264.00	-2,028.73	10,730.11	2,134,068.25	636,367.63	36.863938	-107.367176
POE #665H - plan hits target center - Point	0.00	0.00	7,314.00	-1,902.83	170.89	2,134,146.65	625,807.95	36.864289	-107.403271

Casing Points				
Measured Depth (usft)	Vertical Depth (usft)		Name	
320.00	320.00	9 5/8"		9.625
6,817.00	6,563.06	7"		7.000
				12.250
				8.750

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
500.00	500.00	0.00	0.00	Start Build 2.00
1,354.72	1,342.10	-122.08	-33.37	Hold 17.09 Inclination
6,917.24	6,658.87	-1,699.31	-464.49	Start Build DLS 9.00 TFO -103.91
7,967.36	7,314.00	-1,902.83	170.89	POE at 90.27 Inc 90.68 Deg
18,527.45	7,264.00	-2,028.73	10,730.11	TD at 18527.45



Well Name: Rosa Unit #865H

Surface Location: Pad 30

NAD 1927 (NADCON CONUS) - US State Plane 1927 (Exact solution) New Mexico West 3003

Ground Elevation: 6394.00

Ground Elevation: 6354.00
Easting Latitude

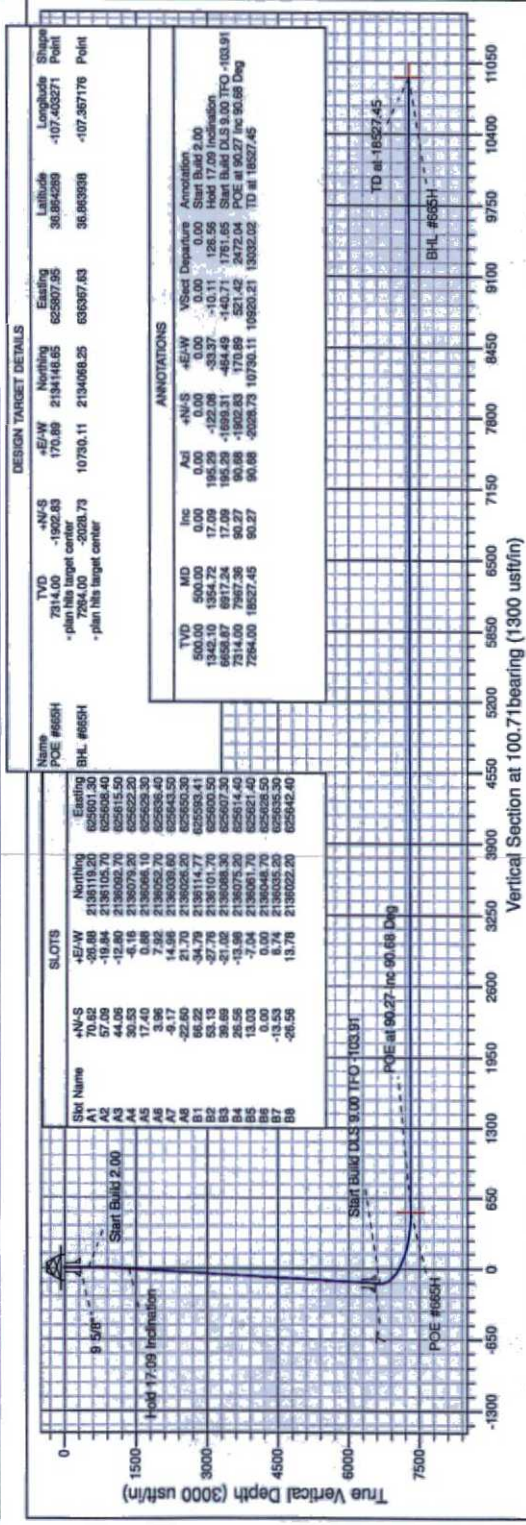
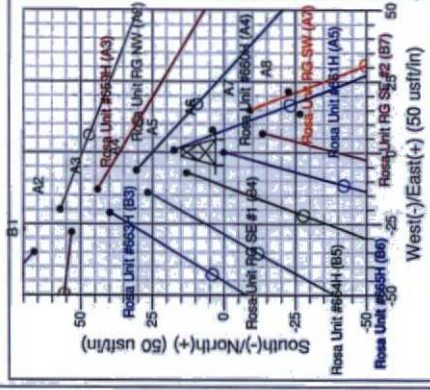
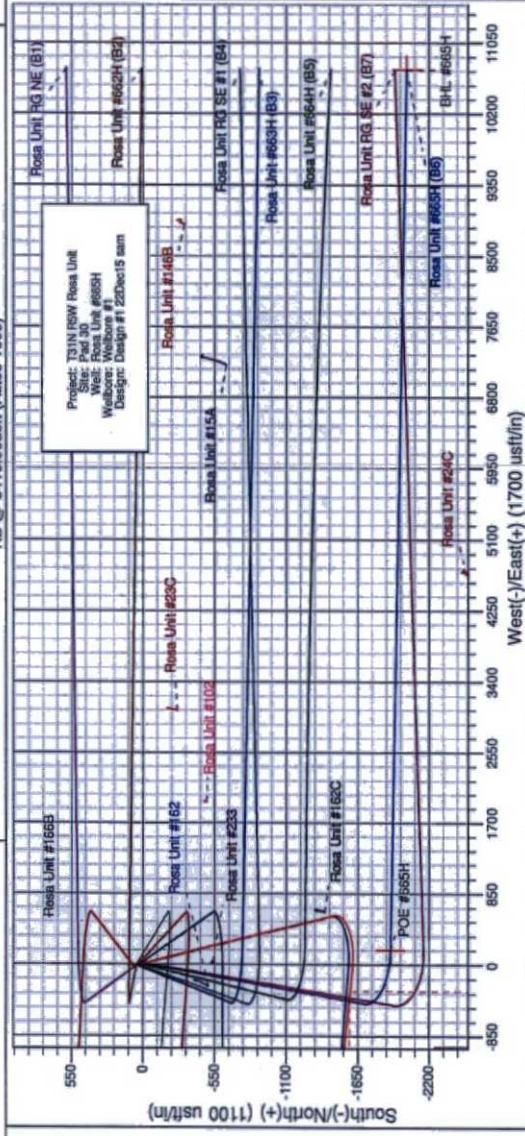
1019 B6

Ground Elevation: 6354.00
Easting Latitude

1019 B6

88

88



✓ A. Cuttings

1. Drilling operations will utilize a closed-loop system. Drilling of the horizontal lateral will be accomplished with water-based mud. All cuttings will be placed in roll-off bins and hauled to Section 23 cuttings disposal recycling containment. No blow pit will be used. 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. If oil-based mud drilling is used, a closed-loop system will be used to minimize potential impacts to surface and groundwater quality. A 30-mil reinforced liner will be placed under the drill rig mats and all drilling machinery. This 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.
3. 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 closed-loop systems or returned to the vendor for reuse, as practical. All residual fluids will be hauled to a commercial disposal facility.

C. Spills

1. Any spills of non-freshwater fluids will be immediately cleaned up and removed to an approved disposal site.

D. Sewage

1. Portable toilets will be provided and maintained during construction, as needed (see Figure 4 in Appendix B for the location of toilets).

E. Garbage and other water material

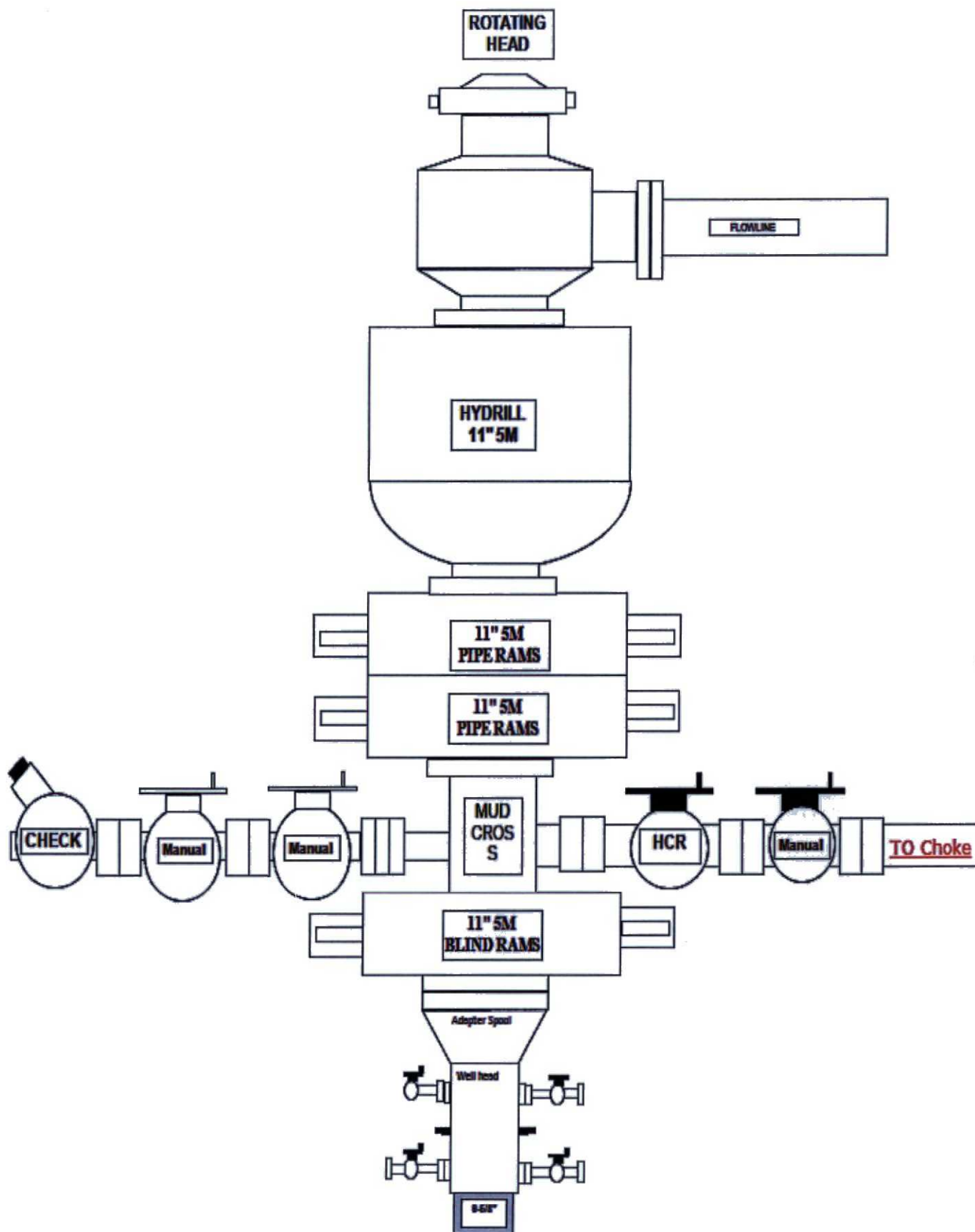
1. All garbage and trash will be placed in a metal trash containment. The trash and garbage will be hauled off site and dumped in an approved landfill, as needed.

F. Hazardous Waste

1. No chemicals subject to reporting under Superfund Amendments and Reauthorization Act Title III in an amount equal to or greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the drilling, testing, or completing of these wells.
2. No extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities will be used, produced, stored, transported, or disposed of annually in association with the drilling, testing, or completing of these wells.
3. All fluids (i.e., scrubber cleaners) used during washing of production equipment will be properly disposed of to avoid ground contamination or hazard to livestock or wildlife.

G. Produced Water:

1. WPX will recycle and reuse all produced water from the wells to complete subsequent wells in the area during completion operations. Produced water will be filtered, treated and stored in holding ponds at the recycling containments.
2. Once drilling is complete, WPX Energy will dispose of produced water from these wells at one of the following facilities:
 - a. Lybrook Yard WDW #1, API #30-039-27533, NMOCD permit #SWD-907, operated by Elm Ridge Resources, located in NE $\frac{1}{4}$, Section 14, Township 23 North, Range 7 West
 - b. Jillson Federal #1, NMOCD order #R-10168, operated by ConocoPhillips, located in NW $\frac{1}{4}$, Section 8, Township 24 North, Range 3 West



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

in Bloomfield, NM to WPX Energy Production, LLC Rosa Unit #665H

2247' FSL & 973' FWL, Section 30, T31N, R5W, N.M.P.M., Rio Arriba County, NM

Latitude: 36.869522°N Longitude: 107.404458°W Datum: NAD1983

From the intersection of US Hwy 550 & US Hwy 64 in Bloomfield, NM, travel Easterly on US Hwy 64 for 38.0 miles to Mile Marker 102.3 to State Hwy 527 (Simms Hwy);

Go Left (North-westerly) on State Hwy 527 (Simms Hwy) for 7.9 miles to Rosa Road @ La Jara Station;

Go Right (Northerly) on Rosa Road for 6.5 miles to fork in roadway;

Go Left (Northerly) which is straight remaining on Rosa Road for 2.4 miles to fork in roadway;

Go Right (Easterly) exiting Rosa Road for 0.2 miles to fork in roadway;

Go Left (North-easterly) for 1.0 mile to fork in roadway;

Go Left (North westerly) for 0.4 miles to fork in roadway;

Go Left (Westerly) which is straight for 0.3 miles to existing WPX Rosa Unit #162 location from which new access on north-east corner of pad continues for 105.7' to staked WPX Rosa Unit #665H location.

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 29 day of March, 2016.

Name Lacey Granillo

Position Title Permitting Tech III


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

Telephone (505) 333-1816

Field representative (if not above signatory) _____

E-mail lacey.granillo@wpxenergy.com

Date: March 29, 2016



Lacey Granillo
Permitting Tech III
WPX Energy Production, LLC