

State of New Mexico  
Energy, Minerals and Natural Resources Department

Susana Martinez  
Governor

David Martin  
Cabinet Secretary

Brett F. Woods, Ph.D.  
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: 9-28-15

Well information:

Operator WIPX, Well Name and Number W. Alamo Unit #464H

API# 30-045-35717, Section 12, Township 22 N/S, Range 08 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
- 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 Horn  
NMOCD Approved by Signature

2-12-2016  
Date JC

RECEIVED  
SEP 28 2015

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FEB 02 2016

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.  
NOG 1419-1984

6. If Indian, Allottee or Tribe Name  
W Alamo Unit NMNM-158613X

7. If Unit or CA Agreement, Name and No.  
W Alamo Unit NMNM-158613X

8. Lease Name and Well No.  
W Alamo UT #464H

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 2,091' ENL & 1,046' FEL, sec 12, T22N, R8W  
At proposed prod. zone 330' FSL & 550' FEL, sec 13, T22N, R8W

9. API Well No.  
30-045-35717

10. Field and Pool, or Exploratory  
Alamito Mancos W

11. Sec., T., R., M., or Blk. and Survey or Area  
SHL: Sec 12, T22N, R8W  
BHL: Sec 13, T22N, R8W

14. Distance in miles and direction from nearest town or post office\*  
approximately 7 miles southwest of Lybrook, New Mexico

12. County or Parish  
San Juan County

13. State  
NM

15. Distance from proposed\* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 550'

16. No. of Acres in lease  
160 acres

17. Spacing Unit dedicated to this well  
240.00 acres (E/2 SE/4 Section 12, T22N, R8W  
E/2 E/2 Section 13, T22N, R8W)

18. Distance from proposed location\* to nearest well, drilling, completed, applied for, on this lease, ft. 40'

19. Proposed Depth  
13,017' MD / 4,607' TVD

20. BLM/BIA Bond No. on file  
B001576

21. Elevations (Show whether DF, KDB, RT, GL, etc.)  
6,803' GR

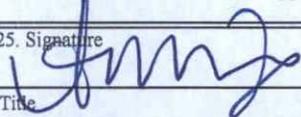
22. Approximate date work will start\*  
October 30, 2015

23. Estimated duration  
1 month

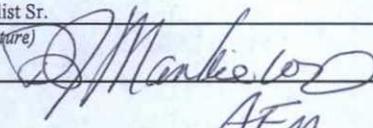
24. Attachments

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

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

25. Signature  Name (Printed/Typed) Andrea Felix Date 09/28/2015

Title Regulatory Specialist Sr.

Approved by (Signature)  Name (Printed/Typed) AFM Date 1/29/16

Title 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 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 and is on lease and will be twinned with the W Alamo #465H.

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

A new 7,715.7 foot on lease access road will be built to access the location.

A new 8,009.0 foot on lease pipeline will be built.

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

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

NMOCD 

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

1625 N. French Drive, Hobbs, NM 88240  
 Phone: (575) 393-6161 Fax: (575) 393-0720  
 District II  
 811 S. First Street, Artesia, NM 88210  
 Phone: (575) 748-1283 Fax: (575) 748-9720  
 District III  
 1000 Rio Brazos Road, Aztec, NM 87410  
 Phone: (505) 334-6178 Fax: (505) 334-6170  
 District IV  
 1220 S. St. Francis Drive, Santa Fe, NM 87505  
 Phone: (505) 476-3460 Fax: (505) 476-3462

Energy, Minerals & Natural Resources Department

Revised August 1, 2011

Submit one copy to  
 Appropriate District Office

**OIL CONSERVATION DIVISION**  
 1220 South St. Francis Drive  
 Santa Fe, NM 87505

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number <b>30-045-35717</b>		2 Pool Code <b>98163</b>		3 Pool Name ALAMITO MANCOS W	
4 Property Code <b>315082</b>		5 Property Name W ALAMITO UNIT			6 Well Number 464H
7 OGRID No. 120782		8 Operator Name WPX ENERGY PRODUCTION, LLC			9 Elevation 6803'

10 Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	12	22N	8W		2091	NORTH	1046	EAST	SAN JUAN

11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	13	22N	8W		330	SOUTH	550	EAST	SAN JUAN

12 Dedicated Acres 240.00	E/2 SE/4 - Section 12 E/2 E/2 - Section 13	13 Joint or Infill	14 Consolidation Code	15 Order No. R-14002 / 1,922.40 Acres
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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

**SURFACE LOCATION**  
 2091' FNL 1046' FEL  
 SECTION 12, T22N, R8W  
 LAT: 36.155691°N  
 LONG: 107.627560°W  
 DATUM: NAD1927

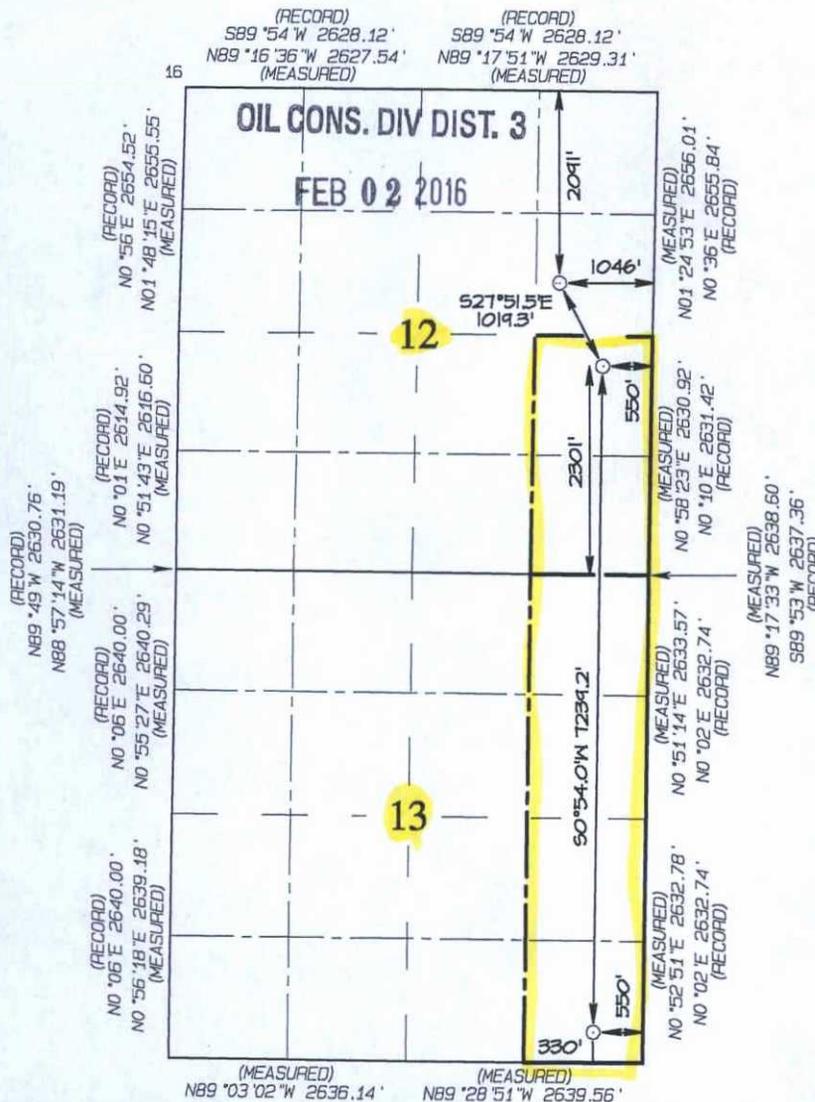
LAT: 36.155705°N  
 LONG: 107.628169°W  
 DATUM: NAD1983

**POINT-OF-ENTRY**  
 2301' FSL 550' FEL  
 SECTION 13, T22N, R8W  
 LAT: 36.153234°N  
 LONG: 107.625904°W  
 DATUM: NAD1927

LAT: 36.153249°N  
 LONG: 107.626513°W  
 DATUM: NAD1983

**END-OF-LATERAL**  
 330' FSL 550' FEL  
 SECTION 13, T22N, R8W  
 LAT: 36.133350°N  
 LONG: 107.625942°W  
 DATUM: NAD1927

LAT: 36.133365°N  
 LONG: 107.626551°W  
 DATUM: NAD1983



**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.

*Andrea Felix* 9/28/2015  
 Signature Date  
 Printed Name  
 andrea.felix@wpenergy.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: SEPTEMBER 23, 2015  
 Date of Survey: JUNE 16, 2015

Signature and Seal of Professional Surveyor



**JASON C. EDWARDS**  
 Certificate Number 15269



### III. MATERIALS

#### A. CASING PROGRAM:

CASING TYPE	OH SIZE (IN)	DEPTH (MD)	CSG SIZE	WEIGHT	GRADE
SURFACE	12.25"	365'	9.625"	36 LBS	J-55
INTERMEDIATE	8.75"	5,217.94	7"	26 LBS	J-55
PRODUCTION	6.125"	13,023.10	4.5"	11.6 LBS	P-110
TIE BACK	6.125		4.5"	11.6 LBS	P-110

#### 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 + 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** 20 bbl (112 cu-ft) Mud Flush III spacer + Lead: +/- 700 sx Foamed 50/50 Poz Cement. 13.1 ppg + 0.1% Halad 766 + 0.2% Versaset + 1.5% Chem-Foamer 760 (Yield :1.43 cu-ft/ sk. / Vol: 1001 cu-ft / 178.3 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). WOC 12 hrs. Test Casing to 1500 PSI for 30 minutes. Total Cement Volume: (900 sx / 1246 cu-ft / 222 bbls). Mix with +/- 84,000 SCF Nitrogen. TOC at surface.
- 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 (745 sx /1014 cuft /181 bbls). Tail Spacer: 20 BBL of MMCR. Displacement: Displace w/ +/- 140 bbl Fr Water. Total Cement (745 sx /1014bbls).

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.

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**NOTE:**

**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 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).

No Tie back string will be ran in this well. All stimulation will be performed down the 7" casing.



# **WPX Energy**

**T22N R8W**

**W Alamito UT 12 H**

**W Alamito UT #464H - Slot A1**

**Wellbore #1**

**Plan: Design #1 1Sept15 sam**

## **Standard Planning Report**

**01 September, 2015**

**WPX**  
Planning Report

<b>Database:</b>	San Juan	<b>Local Co-ordinate Reference:</b>	Well W Alamito UT #464H (A1) - Slot A1
<b>Company:</b>	WPX Energy	<b>TVD Reference:</b>	KB @ 6817.00usft (Aztec 920)
<b>Project:</b>	T22N R8W	<b>MD Reference:</b>	KB @ 6817.00usft (Aztec 920)
<b>Site:</b>	W Alamito UT 12 H	<b>North Reference:</b>	True
<b>Well:</b>	W Alamito UT #464H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1 1Sept15 sam		

<b>Project</b>	T22N R8W		
<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>	W Alamito UT 12 H				
<b>Site Position:</b>		<b>Northing:</b>	1,875,976.76 usft	<b>Latitude:</b>	36.1556910
<b>From:</b>	Lat/Long	<b>Easting:</b>	560,746.79 usft	<b>Longitude:</b>	-107.6275600
<b>Position Uncertainty:</b>	0.00 usft	<b>Slot Radius:</b>	13.20 in	<b>Grid Convergence:</b>	0.12 °

<b>Well</b>	W Alamito UT #464H - Slot A1					
<b>Well Position</b>	<b>+N/-S</b>	0.00 usft	<b>Northing:</b>	1,875,976.76 usft	<b>Latitude:</b>	36.1556910
	<b>+E/-W</b>	0.00 usft	<b>Easting:</b>	560,746.79 usft	<b>Longitude:</b>	-107.6275600
<b>Position Uncertainty</b>		0.00 usft	<b>Wellhead Elevation:</b>	0.00 usft	<b>Ground Level:</b>	6,803.00 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>
	IGRF2010	9/1/2015	9.25	62.89	49,999

<b>Design</b>	Design #1 1Sept15 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 (°)</b>	
	0.00	0.00	0.00	176.90	

<b>Plan Sections</b>											
Measured Depth (usft)	Inclination (°)	Azimuth (°)	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		
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00		
1,024.75	10.49	52.09	1,021.82	29.44	37.81	2.00	2.00	0.00	52.09		
4,064.51	10.49	52.09	4,010.73	369.62	474.68	0.00	0.00	0.00	0.00		
4,807.15	60.00	180.64	4,633.81	52.86	531.01	9.00	6.67	17.31	132.55	Start 60 tan #464H	
4,867.15	60.00	180.64	4,663.81	0.90	530.43	0.00	0.00	0.00	0.00	End 60 tan #464H	
5,036.20	75.21	180.64	4,728.02	-154.94	528.70	9.00	9.00	0.00	0.00		
5,212.07	91.04	180.64	4,749.00	-328.97	526.77	9.00	9.00	0.00	0.00	POE #464H	
13,017.23	91.04	180.64	4,607.00	-8,132.36	440.18	0.00	0.00	0.00	0.00	BHL #464H	

**WPX**  
Planning Report

<b>Database:</b>	San Juan	<b>Local Co-ordinate Reference:</b>	Well W Alamito UT #464H (A1) - Slot A1
<b>Company:</b>	WPX Energy	<b>TVD Reference:</b>	KB @ 6817.00usft (Aztec 920)
<b>Project:</b>	T22N R8W	<b>MD Reference:</b>	KB @ 6817.00usft (Aztec 920)
<b>Site:</b>	W Alamito UT 12 H	<b>North Reference:</b>	True
<b>Well:</b>	W Alamito UT #464H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1 1Sept15 sam		

**Planned Survey**

Measured Depth (usft)	Inclination (°)	Azimuth (°)	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
<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
<b>Start Build 2.00</b>									
1,000.00	10.00	52.09	997.47	26.74	34.34	-24.84	2.00	2.00	0.00
1,024.75	10.49	52.09	1,021.82	29.44	37.81	-27.36	2.00	2.00	0.00
<b>Hold 10.49 Inclination</b>									
1,500.00	10.49	52.09	1,489.12	82.63	106.11	-76.77	0.00	0.00	0.00
2,000.00	10.49	52.09	1,980.76	138.58	177.97	-128.76	0.00	0.00	0.00
2,500.00	10.49	52.09	2,472.39	194.54	249.83	-180.75	0.00	0.00	0.00
3,000.00	10.49	52.09	2,964.03	250.49	321.69	-232.74	0.00	0.00	0.00
3,500.00	10.49	52.09	3,455.66	306.45	393.55	-284.73	0.00	0.00	0.00
4,000.00	10.49	52.09	3,947.30	362.40	465.41	-336.72	0.00	0.00	0.00
4,064.51	10.49	52.09	4,010.73	369.62	474.68	-343.42	0.00	0.00	0.00
<b>Start Build DLS 9.00 TFO 132.55</b>									
4,500.00	32.87	173.02	4,423.95	272.87	522.19	-244.25	9.00	5.14	27.77
4,807.15	60.00	180.64	4,633.81	52.86	531.01	-24.08	9.00	8.83	2.48
<b>Hold 60.00 Inclination</b>									
4,867.15	60.00	180.64	4,663.81	0.90	530.43	27.77	0.00	0.00	0.00
<b>Start Build DLS 9.00 TFO 0.00</b>									
5,000.00	71.96	180.64	4,717.79	-120.22	529.09	148.64	9.00	9.00	0.00
5,036.20	75.21	180.64	4,728.02	-154.94	528.70	183.29	9.00	9.00	0.00
<b>Start DLS 9.00 TFO 0.00</b>									
5,212.00	91.04	180.64	4,749.00	-328.90	526.77	356.89	9.00	9.00	0.00
<b>7"</b>									
5,212.07	91.04	180.64	4,749.00	-328.97	526.77	356.96	9.00	9.00	0.00
<b>POE at 91.04 Inc 180.64 deg</b>									
5,500.00	91.04	180.64	4,743.76	-616.84	523.58	644.23	0.00	0.00	0.00
6,000.00	91.04	180.64	4,734.67	-1,116.72	518.03	1,143.09	0.00	0.00	0.00
6,500.00	91.04	180.64	4,725.57	-1,616.61	512.48	1,641.95	0.00	0.00	0.00
7,000.00	91.04	180.64	4,716.47	-2,116.50	506.93	2,140.80	0.00	0.00	0.00
7,500.00	91.04	180.64	4,707.38	-2,616.38	501.39	2,639.66	0.00	0.00	0.00
8,000.00	91.04	180.64	4,698.28	-3,116.27	495.84	3,138.51	0.00	0.00	0.00
8,500.00	91.04	180.64	4,689.18	-3,616.16	490.29	3,637.37	0.00	0.00	0.00
9,000.00	91.04	180.64	4,680.09	-4,116.04	484.75	4,136.23	0.00	0.00	0.00
9,500.00	91.04	180.64	4,670.99	-4,615.93	479.20	4,635.08	0.00	0.00	0.00
10,000.00	91.04	180.64	4,661.89	-5,115.82	473.65	5,133.94	0.00	0.00	0.00
10,500.00	91.04	180.64	4,652.80	-5,615.70	468.10	5,632.79	0.00	0.00	0.00
11,000.00	91.04	180.64	4,643.70	-6,115.59	462.56	6,131.65	0.00	0.00	0.00
11,500.00	91.04	180.64	4,634.60	-6,615.48	457.01	6,630.51	0.00	0.00	0.00
12,000.00	91.04	180.64	4,625.51	-7,115.36	451.46	7,129.36	0.00	0.00	0.00
12,500.00	91.04	180.64	4,616.41	-7,615.25	445.91	7,628.22	0.00	0.00	0.00
13,000.00	91.04	180.64	4,607.31	-8,115.14	440.37	8,127.07	0.00	0.00	0.00
13,017.23	91.04	180.64	4,607.00	-8,132.36	440.18	8,144.26	0.00	0.00	0.00
<b>TD at 13017.23</b>									

**WPX**  
Planning Report

<b>Database:</b>	San Juan	<b>Local Co-ordinate Reference:</b>	Well W Alamito UT #464H (A1) - Slot A1
<b>Company:</b>	WPX Energy	<b>TVD Reference:</b>	KB @ 6817.00usft (Aztec 920)
<b>Project:</b>	T22N R8W	<b>MD Reference:</b>	KB @ 6817.00usft (Aztec 920)
<b>Site:</b>	W Alamito UT 12 H	<b>North Reference:</b>	True
<b>Well:</b>	W Alamito UT #464H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1 1Sept15 sam		

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
BHL #464H - plan hits target center - Point	0.00	0.00	4,607.00	-8,132.36	440.18	1,867,845.35	561,204.19	36.1333499	-107.6260694
Start 60 tan #464H - plan hits target center - Point	0.00	0.00	4,633.81	52.86	531.01	1,876,030.74	561,277.68	36.1558362	-107.6257613
End 60 tan #464H - plan hits target center - Point	0.00	0.00	4,663.81	0.90	530.43	1,875,978.78	561,277.21	36.1556934	-107.6257633
POE #464H - plan hits target center - Point	0.00	0.00	4,749.00	-328.97	526.77	1,875,648.90	561,274.25	36.1547872	-107.6257757

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (in)	Hole Diameter (in)	
320.00	320.00	9 5/8"	9.62	12.25	
5,212.00	4,749.00	7"	7.00	8.75	

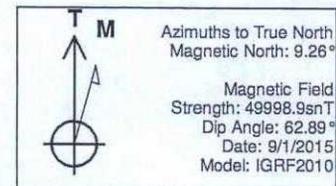
Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment	
		+N/-S (usft)	+E/-W (usft)		
500.00	500.00	0.00	0.00	Start Build 2.00	
1,024.75	1,021.82	29.44	37.81	Hold 10.49 Inclination	
4,064.51	4,010.73	369.62	474.68	Start Build DLS 9.00 TFO 132.55	
4,807.15	4,633.81	52.86	531.01	Hold 60.00 Inclination	
4,867.15	4,663.81	0.90	530.43	Start Build DLS 9.00 TFO 0.00	
5,036.20	4,728.02	-154.94	528.70	Start DLS 9.00 TFO 0.00	
5,212.07	4,749.00	-328.97	526.77	POE at 91.04 Inc 180.64 deg	
13,017.23	4,607.00	-8,132.36	440.18	TD at 13017.23	



Well Name: W Alamito UT #464H  
 Surface Location: W Alamito UT 12 H  
 NAD 1927 (NADCON CONUS) , US State Plane 1927 (Exact solution) New Mexico West 3003  
 Ground Elevation: 6803.00

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	1875976.76	560746.78	36.1556910	-107.6275600	A1

KB @ 6817.00usft (Aztec 920)



DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
BHL #464H	4607.00	-8132.36	440.18	1867845.35	561204.19	36.1333499	-107.6260694	Point
Start 60 tan #464H	4633.81	52.86	531.01	1876030.74	561277.68	36.1558362	-107.6257613	Point
End 60 tan #464H	4663.81	0.90	530.43	1875978.78	561277.21	36.1556935	-107.6257632	Point
POE #464H	4749.00	-328.97	526.77	1875648.90	561274.25	36.1547872	-107.6257756	Point

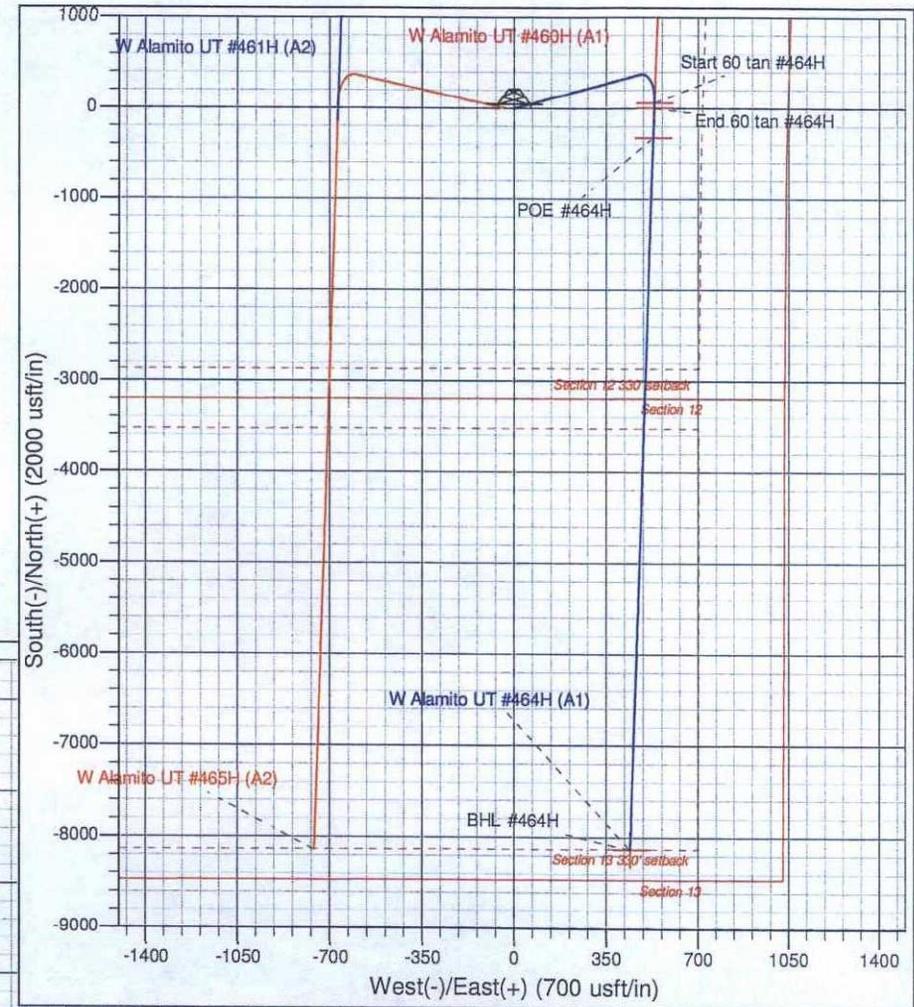
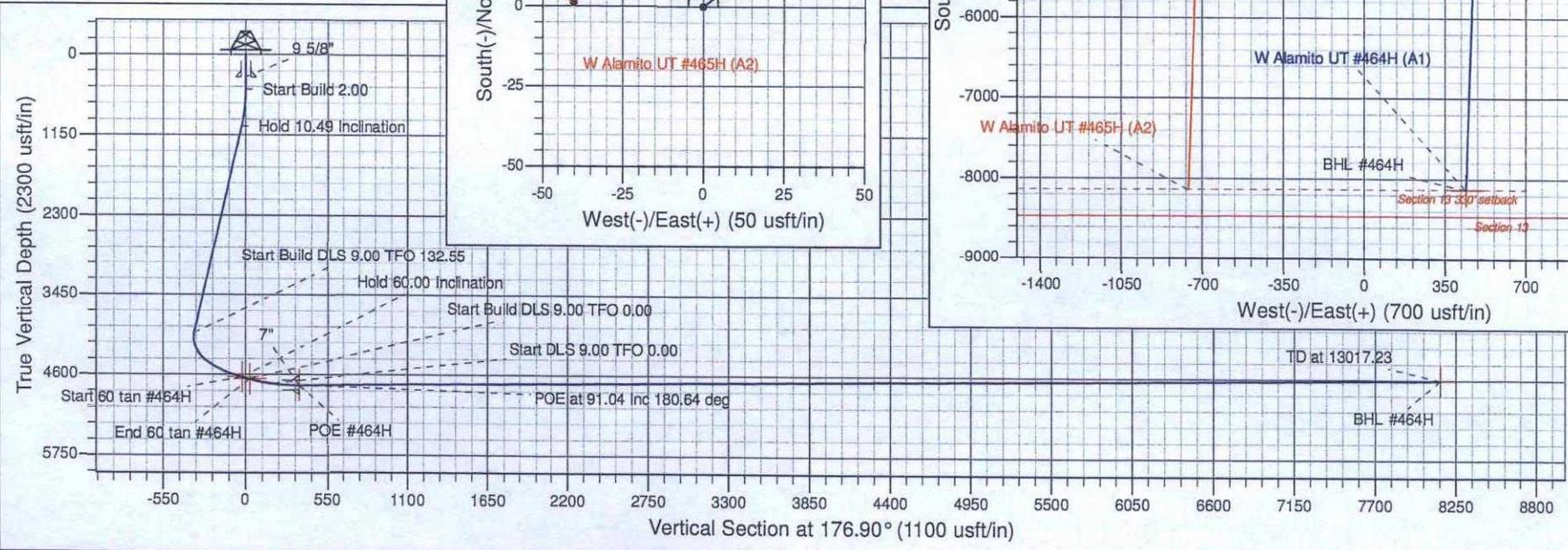
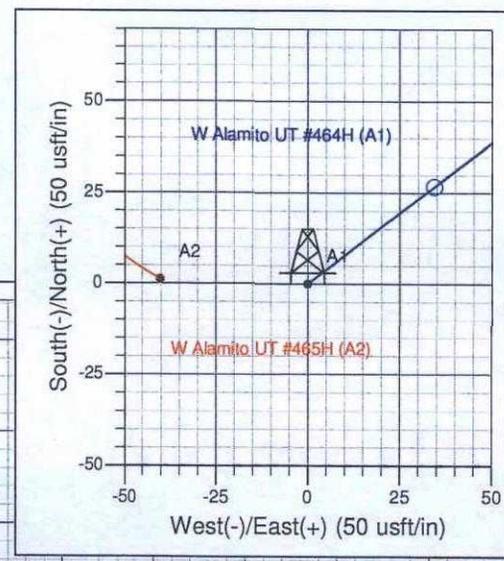
ANNOTATIONS

TVD	MD	Inc	Azi	+N/-S	+E/-W	VSec	Departure	Annotation
500.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00	Start Build 2.00
1021.82	1024.75	10.49	52.09	29.44	37.81	-27.36	47.92	Hold 10.49 Inclination
4010.73	4064.51	10.49	52.09	369.62	474.68	-343.42	601.61	Start Build DLS 9.00 TFO 132.55
4633.81	4807.15	60.00	180.64	52.86	531.01	-24.08	945.90	Hold 60.00 Inclination
4663.81	4867.15	60.00	180.64	0.90	530.43	27.77	997.87	Start Build DLS 9.00 TFO 0.00
4728.02	5036.20	75.21	180.64	-154.94	528.70	183.29	1153.71	Start DLS 9.00 TFO 0.00
4749.00	5212.07	91.04	180.64	-328.97	526.77	356.96	1327.76	POE at 91.04 Inc 180.64 deg
4607.00	13017.23	91.04	180.64	-8132.36	440.18	8144.26	9131.63	TD at 13017.23

Project: T22N R8W  
 Site: W Alamito UT 12 H  
 Well: W Alamito UT #464H  
 Wellbore: Wellbore #1  
 Design: Design #1 1Sept15 sam

SLOTS

Slot Name	+N/-S	+E/-W	Northing	Easting
A1	0.00	0.00	1875976.76	560746.78
A2	1.09	-40.15	1875977.76	560706.83



driving surface; the tear drop would be used to access the proposed wellheads and other facilities.

2. As practical, access will be a teardrop-shaped road through the production areas so that the center may be revegetated.
3. 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.
4. 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 areas not needed for operation will be reclaimed. When the wells are plugged, final reclamation will occur within the remainder of the project areas. Reclamation is described in detail in the Reclamation Plan (Appendix A).

## **7.0 Methods for Handling Waste**

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### **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 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 basket. 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.

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

**in Bloomfield, NM to WPX Energy Production, LLC W Alamito UT #464H**

**2091' FNL & 1046' FEL, Section 12, T22N, R8W, N.M.P.M., San Juan County, NM**

**Latitude: 36.155705°N Longitude: 107.628169°W Datum: NAD1983**

From the intersection of US Hwy 550 & US Hwy 64 in Bloomfield, NM, travel Southerly on US Hwy 550 for 38.7 miles to Mile Marker 112.7;

Go Right (Southerly) on County Road #7900 for 4.9 miles to fork in road;

Go Straight (South-easterly) remaining on County Road #7900 for 0.2 miles to fork in road;

Go Left (Easterly) exiting County Road #7900 for 2.8 miles to new access on right-hand side of existing roadway which continues for 7715.7' to staked WPX W Alamito UT #464H location.

**3000 PSI BOP Schematic**

