

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

AUG 11 2015

FORM APPROVED
OMB No. 1004-0137
Expires: March 31, 2007

SUNDRY NOTICES AND REPORTS ON WELLS
**Do not use this form for proposals to drill or to re-enter an
abandoned well. Use Form 3160-3 (APD) for such proposals.**

SUBMIT IN TRIPLICATE – Other instructions on page 2.

5. Lease Serial No.

SP-078769

6. If Indian, Allottee or Tribe Name

7. If Unit of CA/Agreement, Name and/or No.

NMNM78407E

8. Well Name and No.

Rosa Unit #645H

9. API Well No.

30-039-31322

10. Field and Pool or Exploratory Area
Basin Mancos

11. Country or Parish, State

Rio Arriba, NM

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator

WPX Energy Production, LLC

3a. Address

PO Box 640 Aztec, NM 87410

3b. Phone No. (include area code)

505-333-1808

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

SHL: 953' FNL & 468' FWLFWL, Sec 19, T31N, R5W

BHL: 73' FNL & 1930' FEL, Sec 21, T31N, R5W

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other <u>LATERAL CHANGE</u>
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

WPX Energy requests to change the planning of the lateral on the above mentioned well. Attached is the updated C102, OPS plan and directional plan.

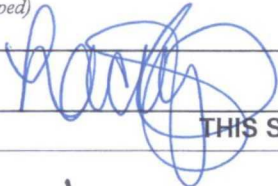
OIL CONS. DIV DIST. 3

AUG 18 2015

CONDITIONS OF APPROVAL

Adhere to previously issued stipulations.

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

14. I hereby certify that the foregoing is true and correct.	
Name (Printed/Typed) Lacey Granillo	Title Permit Tech III
Signature 	Date 8/11/15

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by <u>Tray Salazar</u>	Title PE	Date 8/13/2015
Conditions of approval, if any, are attached. Approval of this notice 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.	Office FFO	

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 page 2)

ADHERE TO PREVIOUS NMOC
CONDITIONS OF APPROVAL NMOC

District I
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

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

☐ RECEIVED
AMENDED REPORT

AUG 11 2015

WELL LOCATION AND ACREAGE DEDICATION PLAT

Farmington Field Office

*API Number 30-039-31382		*Pool Code 97232	*Pool Name BASIN MANCOS
*Property Code	*Property Name ROSA UNIT		*Well Number 645H
*OGRID No. 120782	*Operator Name WPX ENERGY PRODUCTION, LLC		*Elevation 6305'

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
C	19	31N	5W	1	953	NORTH	468	WEST	RIO ARriba

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
C	21	31N	5W		73	NORTH	1930	WEST	RIO ARriba

¹² Dedicated Acres 872.01	N/2 - Sections 19, 20, 21	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ 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

SURFACE LOCATION
953' FNL 468' FWL
SECTION 19, T31N, R5W
LAT: 36.889706°N
LONG: 107.405576°W
DATUM: NAD1927

POINT-OF-ENTRY
52' FNL 457' FWL
SECTION 19, T31N, R5W
LAT: 36.892181°N
LONG: 107.405612°W
DATUM: NAD1927

END-OF-LATERAL
73' FNL 1930' FWL
SECTION 21, T31N, R5W
LAT: 36.892113°N
LONG: 107.369501°W
DATUM: NAD1927

(RECORD)
NORTH 2640.00'
NO *14°27'W 2642.13'
(MEASURED)

(RECORD)
LAT: 36.889712°N
LONG: 107.406179°W
DATUM: NAD1983

(RECORD)
LAT: 36.892186°N
LONG: 107.406215°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.

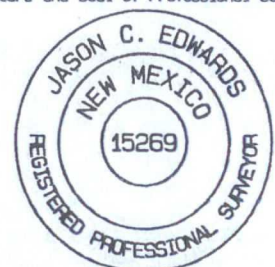
Signature: *[Signature]* Date: 8/11/15
Printed Name: *[Name]*
E-mail Address: *[Email]*

¹⁸ SURVEYOR CERTIFICATION

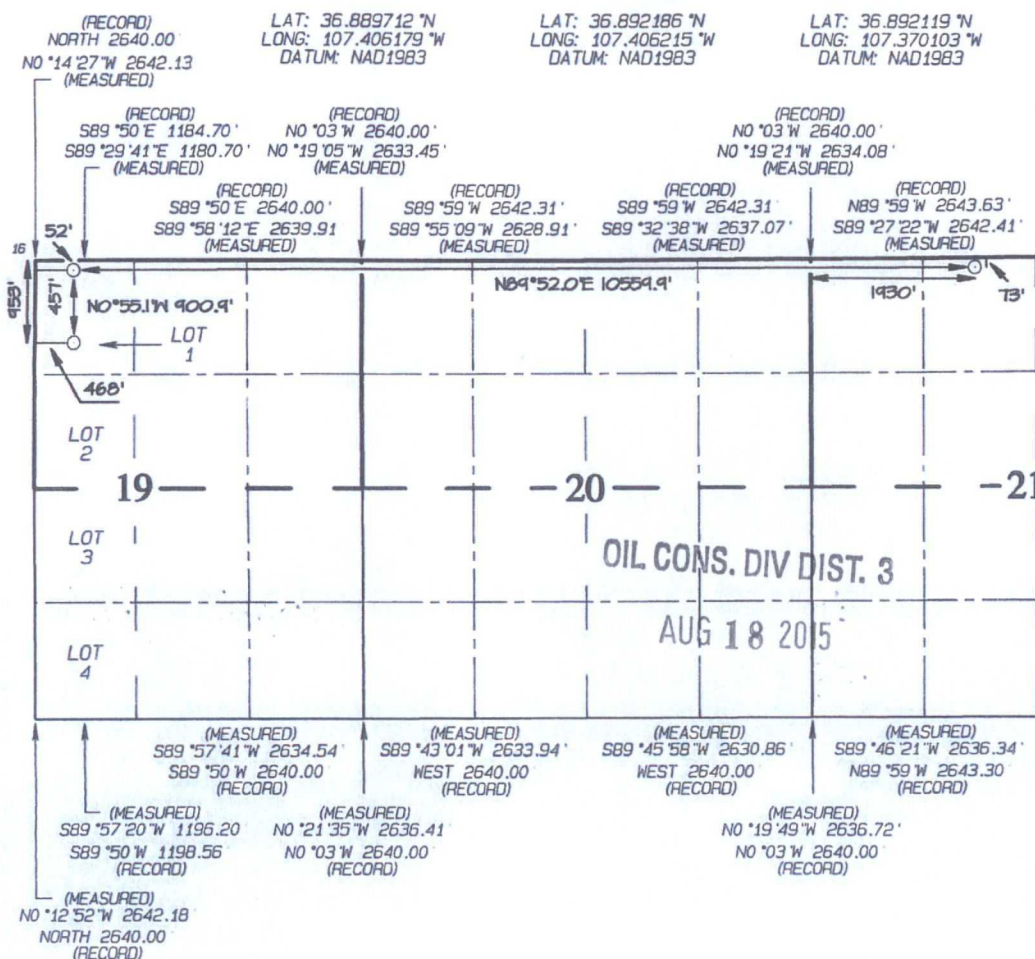
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

Date Revised: AUGUST 4, 2015
Date of Survey: JANUARY 2, 2015

Signature and Seal of Professional Surveyor



JASON C. EDWARDS
Certificate Number 15269





WPX ENERGY

Operations Plan

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

DATE: 8/11/15 **FIELD:** Basin Mancos
WELL NAME: Rosa Unit #645H **SURFACE:** BLM
SH Location: NENW Sec 19-31N-05W **ELEVATION:** 6305' GR
BH Location: NENW Sec 21-31N-05W **MINERALS:** BLM
Rio Arriba, NM
MEASURED DEPTH: 18121'

I. GEOLOGY: Surface formation – San Jose

A. FORMATION TOPS: (KB)

Name	MD	TVD	Name	MD	TVD
Ojo Alamo	2464	2432	Point Lookout	5732	5642
Kirtland	2563	2529	Mancos	6043	5948
Picture Cliffs	3403	3354	Kickoff Point	6336	6236
Lewis	3678	3625	Top Target	6968	6812
Chacra	4648	4577	Landing Point	7560	7035
Cliff House	5455	5370	Base Target	7546	7035
Menefee	5501	5415			
			TD	18121	6920

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 and the 8 3/4" Directional Vertical hole of the wellbore. A LSND (WBM) or (OBM) will be used to drill the curve portion and 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 5000 psi, so the BOPE will be tested to **250 psi (Low) for 5 minutes** and **5000 psi (High) for 10 minutes**. Pressure test surface casing to **1500psi 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. **All tests and inspections will be recorded in the tour book as to time and results.**

III. MATERIALS

A. CASING PROGRAM:

<u>CASING TYPE</u>	<u>OH SIZE (IN)</u>	<u>DEPTH (MD) (FT)</u>	<u>CASING SIZE (IN)</u>	<u>WEIGHT(LB)</u>	<u>GRADE</u>
Surface	12.25"	320'+	9.625"	36#	J-55
Intermediate	8.75"	6336'	7"	23#	N-80
Prod. Liner	6.125"	6186'-18121'	4-1/2"	11.6#	P-110
Tie-Back String	N/A	Surf. -6181'	4-1/2"	11.6#	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). 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: Please see Notes below.

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. 13.0 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. PRODUCTION 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 TM System. Yield 1.36 cu ft/sk, 13.5 ppg, (950 sx / 1294 cu ft. / 230 bbls). **Tail Spacer:** 20 BBL of MMCR. **Displacement:** Displace w/ +/- 252 bbl Fr Water. Total Cement (1294 cu ft / 230 bbls).

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. Increase pressure to Open RSI sleeves.

C. STIMULATION

1. Stimulate with approximately 131,250# 100 mesh sand and 6,930,000# 40/70 mesh sand in 9,282,000 gallons water for 21 stages.
2. Isolate stages with flow through frac plug.
3. Drill out frac plugs and flowback lateral.

D. RUNNING TUBING

1. Production Tubing: Run 2-3/8", 4.7#, J-55, EUE tubing with a SN on top of bottom joint. Land tubing in the curve.

- 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# P-110 Liner will be run to TD and landed +/- 150 ft. into the 7" 23# N-80 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).

A 4-1/2" 11.6# P-110 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.

WPX Energy

T31N R5W Rosa Unit

Pad 27

ROSA UT 27 #645H - Slot B05

Wellbore #1

Plan: Design #2 16Mar15 sam

OIL CONS. DIV DIST. 3

AUG 18 2015

Standard Planning Report

30 July, 2015

WPX Planning Report

Database:	San Juan	Local Co-ordinate Reference:	Well ROSA UT 27 #645H (B05) - Slot B05
Company:	WPX Energy	TVD Reference:	KB @ 6330.00usft (Aztec 1000)
Project:	T31N R5W Rosa Unit	MD Reference:	KB @ 6330.00usft (Aztec 1000)
Site:	Pad 27	North Reference:	True
Well:	ROSA UT 27 #645H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2 16Mar15 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 27		
Site Position:		Northing:	2,143,400.02 usft
From:	Lat/Long	Easting:	625,077.55 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13.20 in
		Latitude:	36.8897153
		Longitude:	-107.4056260
		Grid Convergence:	0.26 °

Well	ROSA UT 27 #645H - Slot B05		
Well Position	+N/-S	-3.33 usft	Northing:
	+E/-W	14.63 usft	Easting:
Position Uncertainty	0.00 usft	Wellhead Elevation:	0.00 usft
		Latitude:	36.8897062
		Longitude:	-107.4055760
		Ground Level:	6,305.00 usft

Wellbore	Wellbore #1		
Magnetics	Model Name	Sample Date	Declination (°)
	IGRF2010	12/18/2014	9.33
			Dip Angle (°)
			63.57
			Field Strength (nT)
			50,520

Design	Design #2 16Mar15 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 (°)
			90.07

Plan Sections										
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	
420.00	0.00	0.00	420.00	0.00	0.00	0.00	0.00	0.00	0.00	
779.78	10.79	317.29	777.66	24.83	-22.92	3.00	3.00	0.00	317.29	
6,336.02	10.79	317.29	6,235.60	789.34	-728.74	0.00	0.00	0.00	0.00	
7,560.18	90.62	90.12	7,035.00	900.80	-10.40	8.00	6.52	10.85	132.24	PP Rosa 27 #645H
18,120.69	90.62	90.12	6,920.00	878.07	10,549.45	0.00	0.00	0.00	0.00	TD / PBHL Rosa 27 #

WPX Planning Report

Database:	San Juan	Local Co-ordinate Reference:	Well ROSA UT 27 #645H (B05) - Slot B05
Company:	WPX Energy	TVD Reference:	KB @ 6330.00usft (Aztec 1000)
Project:	T31N R5W Rosa Unit	MD Reference:	KB @ 6330.00usft (Aztec 1000)
Site:	Pad 27	North Reference:	True
Well:	ROSA UT 27 #645H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2 16Mar15 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
9 5/8" 36# J-55									
420.00	0.00	0.00	420.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 3.00									
500.00	2.40	317.29	499.98	1.23	-1.14	-1.14	3.00	3.00	0.00
779.78	10.79	317.29	777.66	24.83	-22.92	-22.95	3.00	3.00	0.00
Hold 10.79 Inclination									
1,000.00	10.79	317.29	993.98	55.13	-50.89	-50.96	0.00	0.00	0.00
1,500.00	10.79	317.29	1,485.13	123.92	-114.41	-114.56	0.00	0.00	0.00
2,000.00	10.79	317.29	1,976.29	192.72	-177.93	-178.16	0.00	0.00	0.00
2,500.00	10.79	317.29	2,467.44	261.52	-241.44	-241.76	0.00	0.00	0.00
3,000.00	10.79	317.29	2,958.60	330.32	-304.96	-305.36	0.00	0.00	0.00
3,500.00	10.79	317.29	3,449.75	399.11	-368.47	-368.96	0.00	0.00	0.00
4,000.00	10.79	317.29	3,940.91	467.91	-431.99	-432.56	0.00	0.00	0.00
4,500.00	10.79	317.29	4,432.06	536.71	-495.50	-496.16	0.00	0.00	0.00
5,000.00	10.79	317.29	4,923.22	605.51	-559.02	-559.76	0.00	0.00	0.00
5,500.00	10.79	317.29	5,414.37	674.30	-622.53	-623.36	0.00	0.00	0.00
6,000.00	10.79	317.29	5,905.52	743.10	-686.05	-686.96	0.00	0.00	0.00
6,236.00	10.79	317.29	6,137.35	775.57	-716.03	-716.98	0.00	0.00	0.00
7" 26# J-55									
6,336.02	10.79	317.29	6,235.60	789.34	-728.74	-729.70	0.00	0.00	0.00
Start Build DLS 8.00 TFO 132.24									
6,500.00	9.85	36.34	6,397.63	812.02	-730.85	-731.84	8.00	-0.57	48.21
7,000.00	46.35	82.36	6,834.39	873.03	-517.47	-518.53	8.00	7.30	9.20
7,500.00	85.86	89.45	7,033.15	900.57	-70.54	-71.64	8.00	7.90	1.42
7,560.18	90.62	90.12	7,035.00	900.80	-10.40	-11.50	8.00	7.92	1.11
POE at 90.62 Inc 90.12 deg									
8,000.00	90.62	90.12	7,030.21	899.85	429.39	428.29	0.00	0.00	0.00
8,500.00	90.62	90.12	7,024.77	898.77	929.35	928.26	0.00	0.00	0.00
9,000.00	90.62	90.12	7,019.32	897.70	1,429.32	1,428.23	0.00	0.00	0.00
9,500.00	90.62	90.12	7,013.88	896.62	1,929.29	1,928.20	0.00	0.00	0.00
10,000.00	90.62	90.12	7,008.43	895.54	2,429.26	2,428.17	0.00	0.00	0.00
10,500.00	90.62	90.12	7,002.99	894.47	2,929.23	2,928.14	0.00	0.00	0.00
11,000.00	90.62	90.12	6,997.54	893.39	3,429.20	3,428.11	0.00	0.00	0.00
11,500.00	90.62	90.12	6,992.10	892.32	3,929.17	3,928.08	0.00	0.00	0.00
12,000.00	90.62	90.12	6,986.65	891.24	4,429.14	4,428.05	0.00	0.00	0.00
12,500.00	90.62	90.12	6,981.21	890.16	4,929.11	4,928.02	0.00	0.00	0.00
13,000.00	90.62	90.12	6,975.76	889.09	5,429.08	5,427.99	0.00	0.00	0.00
13,500.00	90.62	90.12	6,970.32	888.01	5,929.05	5,927.96	0.00	0.00	0.00
14,000.00	90.62	90.12	6,964.87	886.94	6,429.02	6,427.93	0.00	0.00	0.00
14,500.00	90.62	90.12	6,959.43	885.86	6,928.99	6,927.90	0.00	0.00	0.00
15,000.00	90.62	90.12	6,953.98	884.78	7,428.95	7,427.87	0.00	0.00	0.00
15,500.00	90.62	90.12	6,948.54	883.71	7,928.92	7,927.84	0.00	0.00	0.00
16,000.00	90.62	90.12	6,943.09	882.63	8,428.89	8,427.81	0.00	0.00	0.00
16,500.00	90.62	90.12	6,937.65	881.56	8,928.86	8,927.78	0.00	0.00	0.00
17,000.00	90.62	90.12	6,932.20	880.48	9,428.83	9,427.75	0.00	0.00	0.00
17,500.00	90.62	90.12	6,926.76	879.40	9,928.80	9,927.72	0.00	0.00	0.00
18,000.00	90.62	90.12	6,921.31	878.33	10,428.77	10,427.69	0.00	0.00	0.00
18,120.69	90.62	90.12	6,920.00	878.07	10,549.45	10,548.37	0.00	0.00	0.00
TD at 18120.69									

WPX Planning Report

Database:	San Juan	Local Co-ordinate Reference:	Well ROSA UT 27 #645H (B05) - Slot B05
Company:	WPX Energy	TVD Reference:	KB @ 6330.00usft (Aztec 1000)
Project:	T31N R5W Rosa Unit	MD Reference:	KB @ 6330.00usft (Aztec 1000)
Site:	Pad 27	North Reference:	True
Well:	ROSA UT 27 #645H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2 16Mar15 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
TD / PBHL Rosa 27 #64- - plan hits target center - Point	0.00	0.00	6,920.00	878.07	10,549.45	2,144,322.10	635,637.60	36.8921126	-107.3695012
PP Rosa 27 #645H - plan hits target center - Point	0.00	0.00	7,035.00	900.80	-10.40	2,144,297.50	625,077.75	36.8921805	-107.4056115

Casing Points

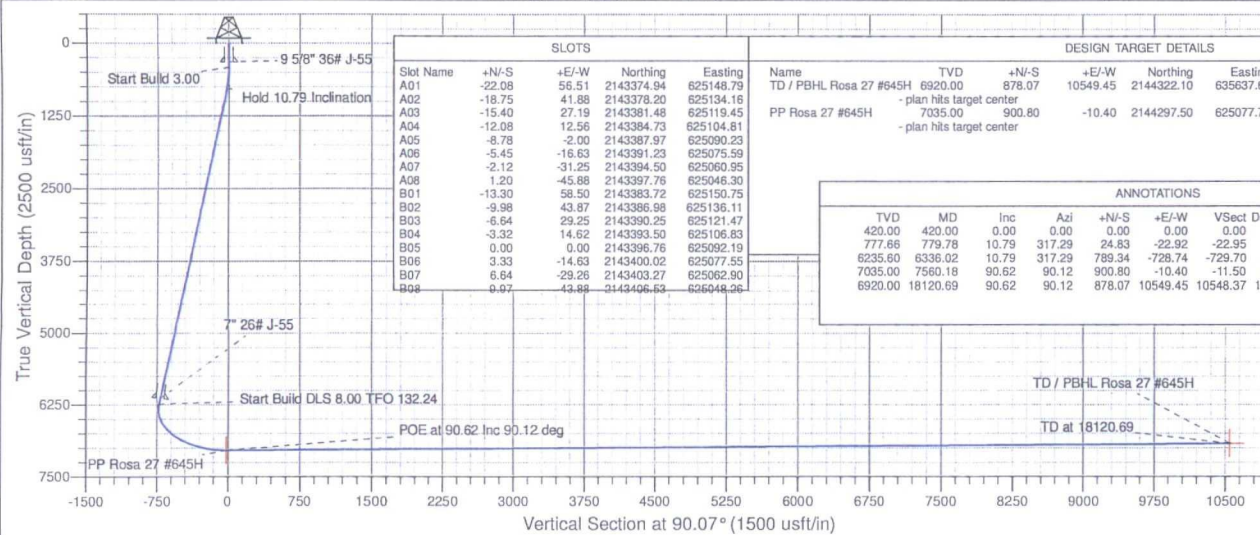
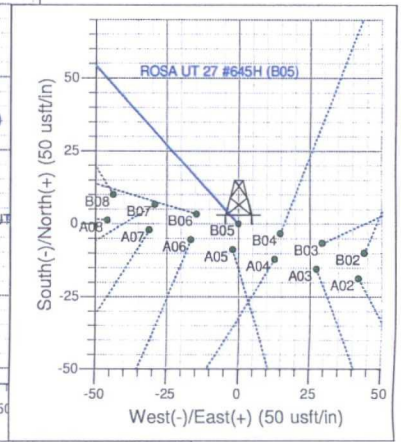
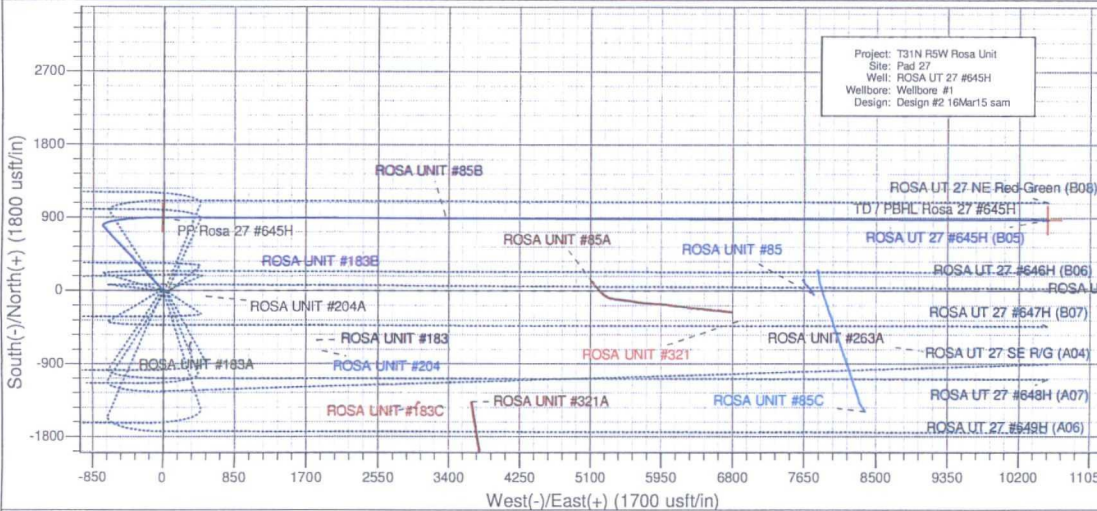
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (in)	Hole Diameter (in)
320.00	320.00	9 5/8" 36# J-55	9.62	12.25
6,236.00	6,137.35	7" 26# J-55	7.00	8.75

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
420.00	420.00	0.00	0.00	Start Build 3.00
779.78	777.66	24.83	-22.92	Hold 10.79 Inclination
6,336.02	6,235.60	789.34	-728.74	Start Build DLS 8.00 TFO 132.24
7,560.18	7,035.00	900.80	-10.40	POE at 90.62 Inc 90.12 deg
18,120.69	6,920.00	878.07	10,549.45	TD at 18120.69



Well Name: ROSA UT 27 #645H
Surface Location: Pad 27
NAD 1927 (NADCON CONUS) , US State Plane 1927 (Exact solution) New Mexico West 3003
Ground Elevation: 6305.00
+N/-S +E/-W Northing Easting Latitude Longitude Slot
0.00 0.00 2143396.76 625092.19 36.8897062 -107.4055759 B05
KB @ 6330.00usft (Aztec 1000)



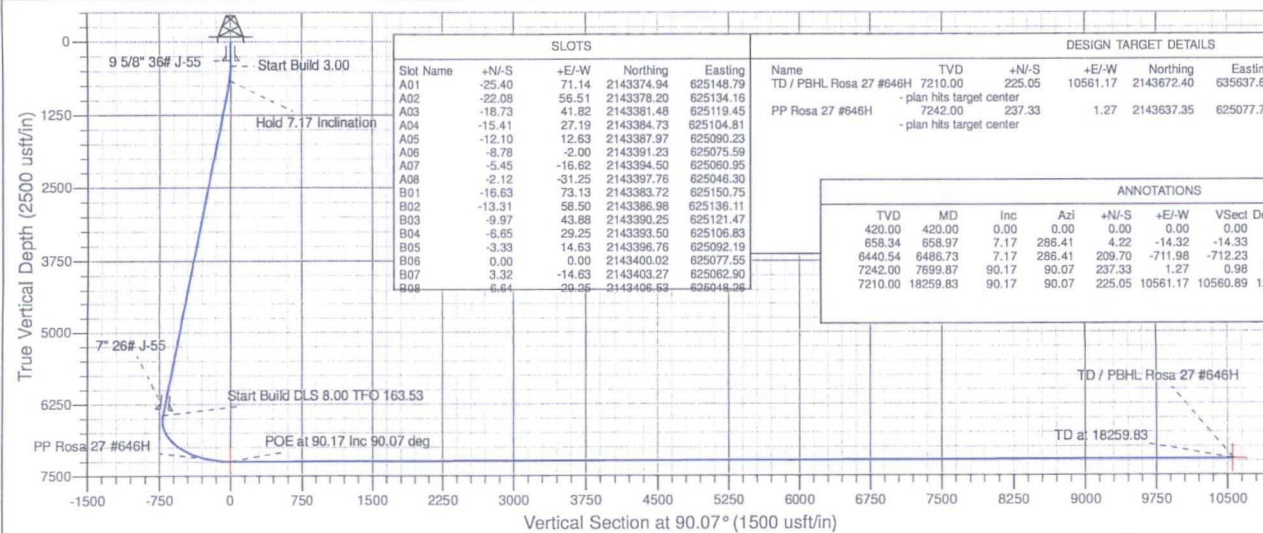
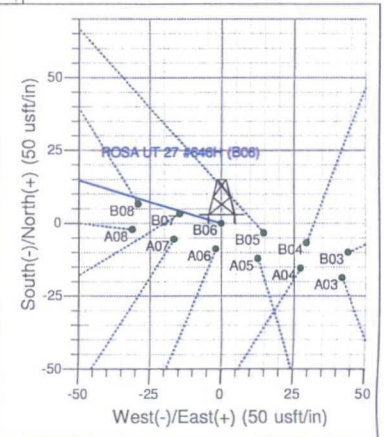
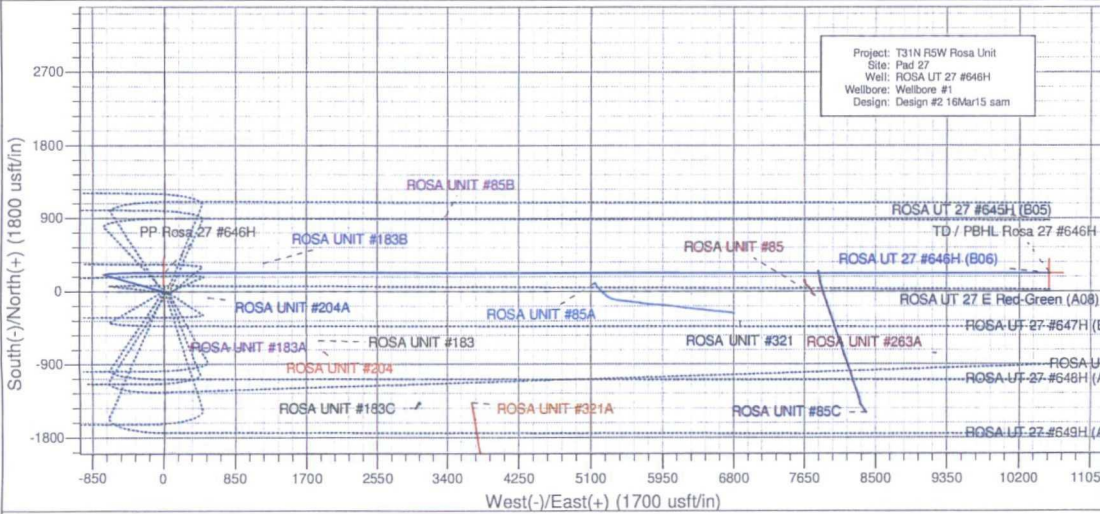
SLOTS				
Slot Name	+N/-S	+E/-W	Northing	Easting
A01	-22.08	56.51	2143374.94	625148.79
A02	-18.75	41.88	2143378.20	625134.16
A03	-15.40	27.19	2143381.48	625119.45
A04	-12.08	12.56	2143384.73	625104.81
A05	-8.78	-2.00	2143387.97	625090.23
A06	-5.45	-16.63	2143391.23	625075.59
A07	-2.12	-31.25	2143394.50	625060.95
A08	1.20	-45.88	2143397.76	625046.30
B01	-13.30	58.50	2143383.72	625150.75
B02	-9.98	43.87	2143386.98	625136.11
B03	-6.64	29.25	2143390.25	625121.47
B04	-3.32	14.62	2143393.50	625106.83
B05	0.00	0.00	2143396.76	625092.19
B06	3.33	-14.63	2143400.02	625077.55
B07	6.64	-29.26	2143403.27	625062.90
B08	9.97	-43.89	2143406.53	625048.26

DESIGN TARGET DETAILS							
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
TD / PBHL Rosa 27 #645H	6920.00	878.07	10549.45	2144322.10	635637.60	36.8921126	-107.3695011
PP Rosa 27 #645H	7035.00	900.80	-10.40	2144297.50	625077.75	36.8921805	-107.4056115

ANNOTATIONS							
TVD	MD	Inc	Azi	+N/-S	+E/-W	V Sect	Departure
420.00	420.00	0.00	0.00	0.00	0.00	0.00	0.00
777.66	779.78	10.79	317.29	24.83	-22.92	-22.95	33.79
6235.60	6336.02	10.79	317.29	789.34	-728.74	-729.70	1074.29
7035.00	7560.18	90.62	90.12	900.80	-11.50	1832.87	POE at 90.62 Inc 90.12 deg
6920.00	18120.69	90.62	90.12	878.07	10549.45	10548.37	12392.75 TD at 18120.69



Well Name: ROSA UT 27 #646H
Surface Location: Pad 27
NAD 1927 (NADCON CONUS) , US State Plane 1927 (Exact solution) New Mexico West 3003
Ground Elevation: 6305.00
+N/-S +E/-W Northing Easting Latitude Longitude Slot
0.00 0.00 2143400.02 625077.55 36.8897153 -107.4056259 B06
KB @ 6330.00usft (Aztec 1000)



SLOTS				
Slot Name	+N/-S	+E/-W	Northing	Easting
A01	-25.40	71.14	2143374.94	625148.79
A02	-22.08	56.51	2143378.20	625134.16
A03	-18.73	41.82	2143381.48	625119.45
A04	-15.41	27.19	2143384.73	625104.81
A05	-12.10	12.53	2143387.97	625090.23
A06	-8.78	-2.00	2143391.23	625075.59
A07	-5.45	-16.62	2143394.50	625060.95
A08	-2.12	-31.25	2143397.76	625046.30
B01	-16.63	73.13	2143383.72	625150.75
B02	-13.31	58.50	2143386.98	625136.11
B03	-9.97	43.88	2143390.25	625121.47
B04	-6.65	29.25	2143393.50	625106.83
B05	-3.33	14.63	2143396.76	625092.19
B06	0.00	0.00	2143400.02	625077.55
B07	3.32	-14.63	2143403.27	625062.90
B08	6.64	-29.25	2143406.52	625048.26

DESIGN TARGET DETAILS									
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape	
TD / PBHL Rosa 27 #646H	7210.00	225.05	10561.17	2143672.40	635637.60	36.8903280	-107.3695119	Point	
PP Rosa 27 #646H	7242.00	237.33	1.27	2143637.35	625077.75	36.8903672	-107.4056216	Point	

ANNOTATIONS									
TVD	MD	Inc	Azi	+N/-S	+E/-W	Vsect	Departure	Annotation	
420.00	420.00	0.00	0.00	0.00	0.00	0.00	0.00	Start Build 3.00	
658.34	658.97	7.17	286.41	4.22	-14.32	-14.33	14.93	Hold 7.17 Inclination	
6440.54	6486.73	7.17	286.41	209.70	-711.98	-712.23	742.22	Start Build DLS 8.00 TFO 163.53	
7242.00	7699.87	90.17	90.07	237.33	1.27	0.98	1469.32	POE at 90.17 Inc 90.07 deg	
7210.00	18259.83	90.17	90.07	225.05	10561.17	10560.89	12029.23	TD at 18259.83	