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

**Susana Martinez** Governor

Ken McQueen Cabinet Secretary

**Matthias Sayer 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 3160-5 form.

Operator Signature Date: Original APD 5/18/2012 Sundry Date 3/29/2017

NOI	Char	S	of Plans	4.	M	an	e elu	CU	25	گ		
API WELL#	Well Name	Well	Operator Name	Туре	Stat	County	Surf_Owner	UL	Sec	Twp	N/S	Rng W/E
30-045-35377-00- 00	ROSA UNIT 5	014H	WPX ENERGY PRODUCTION, LLC	G	N	San Juan	F	С	9	31	N	6 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,

O 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 recompletions operations.

Regarding Hydraulic Fracturing, review EPA Underground Injection Control Guidance 84

		1
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7	,	

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.

Comply with current regulations at time of spud

Prior to production operator needs to be in compliance with RULE 19.15.5.9

Johnie Parkel

NMOCD Approved by Signature

4/11/17

Date

#### RECEIVED

Form 3160-5 (February 2005)

**UNITED STATES** DEPARTMENT OF THE INTERIOR MAR 2 9 2017

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

BUREAU OF LAND MANAGEMENT Farmington Field Office

SUNDRY NOTIC	ES AND REPORT	rs on W	reau of Land Manage ELLS re-enter an	NMSF-078	al No. 3765 / FEE
Do not use this form to abandoned well. Use F	or proposars to a	0, 10	o ontor an	6. If Indian, A	Allottee or Tribe Name
	RIPLICATE - Other in			7. If Unit of C	CA/Agreement, Name and/or No.
1. Type of Well					
				8. Well Name	and No.
Oil Well Gas Well	Other			Rosa Unit	05 014H
Name of Operator     WPX Energy Production, LLC				9. API Well N 30-045-353	
3a. Address		No. (include	area code)	6 62	Pool or Exploratory Area
PO Box 640 Aztec, NM 87410 4. Location of Well (Footage, Sec., T.,R.,I	505-333-			Basin Manc 11. Country or	
SHL: 1031' FNL & 1862' FWL, Sec 9, BHL: 2458'FSL & 1745' FEL, Sec 10 T	T31N, R6W	/		San Juan, N	
12. CHECK THE APP	ROPRIATE BOX(ES) TO	O INDICATE	NATURE OF NOTICE, I	REPORT OR O	THER DATA
TYPE OF SUBMISSION			TYPE OF ACTION		
Acid	dize Deep	nen	Production (Sta	rt/Resume)	Water Shut-Off
Notice of Intent	= .	ture Treat	Reclamation	a d a coodine)	Well Integrity
		Construction	Recomplete		Other
Subsequent Report		and Abandon	Temporarily Al	oandon	Name Change & Change in Plans
Final Abandonment Notice Con Injection	vert to Plug	Back	Water Disposal		
13. Describe Proposed or Completed Oper duration thereof. If the proposal is to of all pertinent markers and zones. At subsequent reports must be filed with recompletion in a new interval, a Forr requirements, including reclamation, leading to the complete of the com	deepen directionally or rectach the Bond under which in 30 days following composition 3160-4 must be filed on	complete hori th the work we pletion of the ace testing has	zontally, give subsurface leads to be performed or provide involved operations. If the been completed. Final Ab	ocations and me the Bond No. o operation result andonment Not	easured and true vertical depths on file with BLM/BIA. Required ts in a multiple completion or ices must be filed only after all
WPX Energy request a name of bottom-hole location and interv				rill plans & (	
				Δ	APR 0 6 2017
14. I hereby certify that the foregoing is true a Name (Printed/Typed)	nd correct.				1
Marie E. Jaramillo	11	Titl	e Permit Tech III		
Signature WWW W	aulle	Da			
UTH.	IS SPACE FOR F	EDERAL.	OR STATE OFFICE	E USE	
Approved by	49		Title PE		Date 4/3/17
Conditions of approval, if any, are attached. A or certify that the applicant holds legal or equilease which would entitle the applicant to con-	table title to those rights in	not warrant the subject	Office FFO		
V 11			110		

(Instructions on page 2)

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.

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

LADT M. --

State of New Mexico Energy, Minerals & Natural Resources Department Form C-102 Revised August 1, 2011

Submit one copy to Appropriate District Office

× AMENDED REPORT

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

	AP1 Numbe 5-35377	er .		97232			BASIN MAN		
Property 1703					*Propert ROSA			•	Well Number 552H
'OGRID 12078				WPX	*Operator	r Name RODUCTION, LLO	2		Elevation 6429
					<sup>10</sup> Surface	Location			
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
С	9	31N	6W		1031	NORTH	1862	WEST	SAN JUAN

			11 Botto	m Hole	Location I	f Different	From Surface	2	
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	8	31N	6W		1165	NORTH	250	WEST	SAN JUAN
Dedicated Acres 640.00	11	,	ection ection	8	13 Jaint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.	457	

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

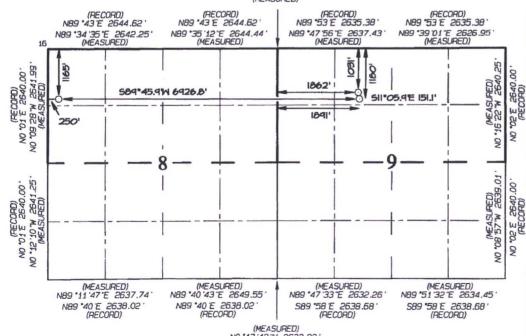
END OF LATERAL 1165 'FNL 250 'FWL SECTION 8, 1731N, R6N LAT: 36.918061 'N LONG: 107.493820 'W DATUM: NAD1927

LAT: 36.918066 \*N LONG: 107.494425 \*W DATUM: NAD1983 POINT OF ENTRY 1180' FNL 1891' FWL SECTION 9, T31N, R6W LAT: 36.918069'N LONG: 107.470125'W DATUM: NAD1927

LAT: 36.918074\*N LONG: 107.470730\*W DATUM: NAD1983 SURFACE LOCATION 1031' FNL 1862' FWL SECTION 9, T31N, R65 LAT: 36.918476N LONG: 107.470222'W DATUM: NAD1927

LAT: 36.918482 N LONG: 107.470827 W DATUM: NAD1983

(RECORO) NO \*01'E 2640.00' NO \*08'34"W 2637.78' (MEASURED)



(MEASURED) NO \*13 '42"W 2632.22' NO \*01'E 2540.00' (RECORD) 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 wolking interest or working interest, or to a wolking interest, or to a wolking interest or working interest or working interest. Signature Date Marie E. Jaramillo Printed Name marie.jaramillo@wpxenergy.com E-mail Address \*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: JANUARY 24, 2017 Survey Date: JANUARY 13, 2012 Signature and Seal of Professional Surveyor SON C. EDWARD MEXICO **JEW** PER STANDARD POPESSION SANEYOR **DWARDS** Certificate Number 15269



#### WPX Energy

#### **Operations Plan**

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

Date:

March 29, 2017

Field:

**Basin Mancos** 

Well Name:

Rosa UT #552H

Surface:

BLM

SH Location:

NENW Sec 09 31N-06W

Elevation:

6429' GR

**BH Location:** 

NWNW Sec 08 31N-06W

Minerals:

FED

Measured Depth: 14,398.57'

I. GEOLOGY:

SURFACE FORMATION - San Jose

A. FORMATION TOPS (GL)

NAME	MD	TVD	NAME	MD	TVD
OJO ALAMO	2,364.00	2,341.00	MENEFEE	5,491.00	5,430.00
KIRTLAND	2,474.00	2,449.00	POINT LOOKOUT	5,719.00	5,658.00
FRUITLAND	3,151.00	3,114.00	MANCOS	6,222.00	6,161.00
PICTURED CLIFFS	3,242.00	3,203.00	KICKOFF POINT	6,473.13	6,412.38
LEWIS	3,680.00	3,633.00	TOP TARGET	7,165.00	6,976.00
CHACRA	3,877.00	4,364.00	LANDING POINT	7,471.76	7,049.00
CLIFF HOUSE	5,447.00	5,386.00	BASE TARGET	4,819.01	7,049.00
			TD	14,398.57	7,064.00

- 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. <u>MUD PROGRAM:</u> LSND mud (WBM) will be used to drill the 12-1/4" Surface hole, the 8 ¾" 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. <u>BOP TESTING:</u> While drill pipe is in use, the pipe rams and the blind rams will be function tested once each trip. The 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. All tests and inspections will be recorded in the tour book as to time and results.

#### III. MATERIALS

#### A. CASING PROGRAM:

CASING TYPE	OH SIZE (IN)	DEPTH (MD)	CSG SIZE	WEIGHT	GRADE	CONN
SURFACE	12.25"	320.00'	9.625"	36 LBS	J-55, equiv or <	STC
INTERMEDIATE	8.75"	6373'	7"	23 LBS	J-55, equiv or <	LTC
PRODUCTION	6.125"	6223.13' - 14,398.57'	4.5"	11.6 LBS	P-110, equiv or <	LTC
TIE BACK	6.125"	Surf 6223.13'	4.5"	11.6 LBS	P-110, equiv or <	LTC

#### B. FLOAT EQUIPMENT:

- 1. <u>SURFACE CASING:</u> 9-5/8" notched regular pattern guide shoe. Run (1) standard centralizer on each of the bottom (4) joints of Surface Casing.
- 2. <u>INTERMEDIATE CASING:</u> 7" cement nose guide shoe with a self-fill insert float. Place float collar one joint above the shoe. Install (1) centralizer on each of the bottom (3) joints and one standard centralizer every (3) joints to 2,500 ft. Run (1) centralizer at 2,500 ft., 2,300ft., 2,000ft., 1,500 ft., and 1,000 ft. **A DV tool will be placed 100' above the top of the Chacra formation.**
- 3. <u>PRODUCTION LINER:</u> Run 4-1/2" Liner with cement nose guide Float Shoe + 2jts. of 4-1/2" casing + Landing Collar + 4-1/2" pup joint + 1 RSI (Sliding Sleeve). 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)

- 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 min. 12 hours. Total Volume: (160 cu-ft/100 sx/ Bbls).TOC at Surface.
- 2.Intermediate

  STAGE 1: Spacer #1: 20 bbl (112 cuft) Chemwash. Lead Cement: 80 bbls, 227 sks, (448 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/ +/- 251 bbl Drilling mud or water.

  Total Cement: 97 bbls, 303 sks, (546 cuft)

  STAGE 2: Spacer #1: 20 bbl (112 cuft) Chemwash. Lead Cement: 107 bbls, 309 sks, (602 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/ +/- 141 bbl Drilling mud or water.

  Total Cement: 125 bbls, 394 sks, (700 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 (693 sx /943 cuft /168 bbls). Tail Spacer: 20 BBL of MMCR. Displacement: Displace w/ +/- 187bbl Fr Water. Total Cement (693 sx /943bbls).

#### I.

#### COMPLETION

#### A. CBL

Run CCL for perforating

#### A. PRESSURE TEST

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

#### B. STIMULATION

- 1. Stimulate with approximately 2,805,000# 20/40 mesh sand and 340,000# 16/30 mesh sand in 619,113 gallons water with 42,696 mscf N2 for 17 stages.
- 2. Isolate stages with flow through frac plug.
- 3. Drill out frac plugs and flowback lateral.

#### C. RUNNING TUBING

- 1. <u>Production Tubing:</u> Run 2-7/8", 6.5#, J-55, EUE tubing with a SN on top of bottom joint. Land tubing near Top of Liner.
- 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 R6W Rosa Unit Pad 5 ROSA UT #552H - Slot B8

Wellbore #1

Plan: Design #4 2Feb17 sam

### **Standard Planning Report**

06 February, 2017

#### **WPX**

#### Planning Report

Database: COMPASS Company: WPX Energy

T31N R6W Rosa Unit

Project: Site: Well:

Pad 5 ROSA UT #552H

Wellbore: Wellbore #1 Design: Design #4 2Feb17 sam **Local Co-ordinate Reference:** 

TVD Reference: MD Reference: **North Reference:** 

**Survey Calculation Method:** 

Well ROSA UT #552H (B8) - Slot B8

GL @ 6429.00usft GL @ 6429.00usft

True

Minimum Curvature

Project T31N R6W Rosa Unit

Map System: Geo Datum:

Map Zone:

US State Plane 1927 (Exact solution) NAD 1927 (NADCON CONUS)

New Mexico West 3003

System Datum:

Mean Sea Level

Pad 5 Site

Site Position: From:

**Position Uncertainty** 

Мар

Northing: Easting:

2,153,886.62 usft 606,203.61 usft

Latitude:

Longitude:

36.918735 -107.470029

Slot Radius: Position Uncertainty: 0.00 usft 13.200 in **Grid Convergence:** 0.22 9

Well ROSA UT #552H - Slot B8

**Well Position** +N/-S +E/-W

-94.05 usft -56.75 usft

0.00 usft

Northing: Easting:

2,153,792.35 usft 606,147.22 usft Wellhead Elevation:

0.00 usft Ground Level:

Latitude: Longitude:

-107.470223 6,429.00 usft

36.918476

Wellbore #1 Wellbore Declination **Field Strength Magnetics Model Name** Sample Date **Dip Angle** (°) (°) (nT) IGRF2015 9.21 63.55 50,228 12/13/2016

Design Design #4 2Feb17 sam **Audit Notes:** Version: Phase: **PLAN** Tie On Depth: 0.00 **Vertical Section:** Depth From (TVD) +N/-S +E/-W Direction (usft) (usft) (usft) (bearing) 0.00 0.00 0.00 268.75

lan Sections											
Measured Depth (usft)	Inclination (°)	Azimuth (bearing)	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		
600.00	2.00	102.53	599.98	-0.38	1.70	2.00	2.00	0.00	102.53		
800.00	2.00	102.53	799.86	-1.89	8.52	0.00	0.00	0.00	0.00		
1,242.08	10.84	102.58	1,238.73	-12.65	56.72	2.00	2.00	0.01	0.06		
4,276.93	10.84	102.58	4,219.41	-137.00	613.85	0.00	0.00	0.00	0.00		
4,819.01	0.00	0.00	4,758.26	-148.14	663.76	2.00	-2.00	0.00	180.00	VP #552H	
6,473.13	0.00	0.00	6,412.38	-148.14	663.76	0.00	0.00	0.00	0.00	KOP #552H	
7,471.76	89.88	269.98	7,049.00	-148.33	28.52	9.00	9.00	-9.01	269.98	POE 2 #552H	
14,398.57	89.88	269.98	7,064.00	-150.38	-6,898.28	0.00	0.00	0.00	0.00	BHL 2 #552H	

#### **WPX**

#### Planning Report

Database: Company: Project:

COMPASS WPX Energy T31N R6W Rosa Unit

Pad 5

Site: ROSA UT #552H Well: Wellbore #1 Wellbore: Design:

Design #4 2Feb17 sam

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

**Survey Calculation Method:** 

Well ROSA UT #552H (B8) - Slot B8

GL @ 6429.00usft GL @ 6429.00usft

True

Minimum Curvature

Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Vertical Section	Dogleg Rate	Build Rate	Turn Rate
(usft)	(°)	(bearing)	(usft)	(usft)	(usft)	(usft)	(°/100usft)	(°/100usft)	(°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
320.00	0.00	0.00	320.00	0.00	0.00	0.00	0.00	0.00	0.0
9 5/8"									
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.0
		0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.0
Start Build 2.		400.50	E00.00	-0.38	4.70	4.60	2.00	2.00	0.0
600.00	2.00	102.53	599.98	-0.36	1.70	-1.69	2.00	2.00	0.0
Hold 2.00 Inc		100.50	700.00	4.00	0.50	0.47	0.00	0.00	0.0
800.00	2.00	102.53	799.86	-1.89	8.52	-8.47	0.00	0.00	0.0
Start Build D	LS 2.00 TFO 0.0	16							
1,000.00	6.00	102.57	999.33	-4.93	22.13	-22.02	2.00	2.00	0.0
1,242.08	10.84	102.58	1,238.73	-12.65	56.72	-56.43	2.00	2.00	0.0
Hold 10.84 In			ALCOHOL:					Company of the Company	
1,500.00	10.84	102.58	1,492.05	-23.21	104.07	-103.54	0.00	0.00	0.0
2,000.00	10.84	102.58	1,983.12	-43.70	195.86	-194.86	0.00	0.00	0.0
2,500.00	10.84	102.58	2,474.20	-64.19	287.65	-286.18	0.00	0.00	0.0
			• • • • • • • • • • • • • • • • • • • •						
3,000.00	10.84	102.58	2,965.27	-84.68	379.44	-377.50	0.00	0.00	0.0
3,500.00	10.84	102.58	3,456.35	-105.17	471.23	-468.82	0.00	0.00	0.0
4,000.00	10.84	102.58	3,947.42	-125.65	563.02	-560.14	0.00	0.00	0.0
4,276.93	10.84	102.58	4,219.41	-137.00	613.85	-610.72	0.00	0.00	0.0
Start Drop -2.									
4,500.00	6.38	102.58	4,439.91	-144.27	646.44	-643.14	2.00	-2.00	0.0
4,819.01	0.00	0.00	4,758.26	-148.14	663.76	-660.37	2.00	-2.00	-32.1
Vertical									
5,000.00	0.00	0.00	4,939.25	-148.14	663.76	-660.37	0.00	0.00	0.0
5,500.00	0.00	0.00	5,439.25	-148.14	663.76	-660.37	0.00	0.00	0.0
6,000.00	0.00	0.00	5,939.25	-148.14	663.76	-660.37	0.00	0.00	0.0
6,373.00	0.00	0.00	6,312.25	-148.14	663.76	-660.37	0.00	0.00	0.0
7"									
0.470.40	0.00	0.00	0.440.00	440.44	000 70	202.07	0.00	0.00	0.0
6,473.13	0.00	0.00	6,412.38	-148.14	663.76	-660.37	0.00	0.00	0.0
KOP DLS 9.00									
6,500.00	2.42	269.98	6,439.24	-148.14	663.19	-659.81	9.00	9.00	0.0
7,000.00	47.42	269.98	6,881.13	-148.20	457.90	-454.56	9.00	9.00	0.0
7,471.76	89.88	269.98	7,049.00	-148.33	28.52	-25.28	9.00	9.00	0.0
POE 89.88 Inc		000.00	704000	440.01					
7,500.00	89.88	269.98	7,049.06	-148.34	0.27	2.96	0.00	0.00	0.0
8,000.00	89.88	269.98	7,050.14	-148.49	-499.73	502.84	0.00	0.00	0.00
8,500.00	89.88	269.98	7,051.22	-148.64	-999.73	1,002.73	0.00	0.00	0.00
9,000.00	89.88	269.98	7,052.31	-148.79	-1,499.73	1,502.61	0.00	0.00	0.00
9,500.00	89.88	269.98	7,053.39	-148.94	-1,999.72	2,002.49	0.00	0.00	0.00
10,000.00	89.88	269.98	7,054.47	-149.08	-2,499.72	2,502.38	0.00	0.00	0.00
10,500.00	89.88	269.98	7,055.55	-149.23	-2,999.72	3,002.26	0.00	0.00	0.00
11,000.00	89.88	269.98	7,056.63	-149.23	-3,499.72	3,502.14	0.00	0.00	0.00
11,500.00	89.88	269.98	7,050.05	-149.53	-3,999.72	4,002.03	0.00	0.00	0.00
12,000.00	89.88	269.98	7,058.79	-149.68	-4,499.72	4,501.91	0.00	0.00	0.00
12,500.00	89.88	269.98	7,059.88	-149.83	-4,999.72	5,001.79	0.00	0.00	0.00
			,						
13,000.00	89.88	269.98	7,060.96	-149.98	-5,499.72	5,501.68	0.00	0.00	0.00
13,500.00	89.88	269.98	7,062.04	-150.13	-5,999.71	6,001.56	0.00	0.00	0.00
14,000.00	89.88	269.98	7,063.12	-150.28	-6,499.71	6,501.44	0.00	0.00	0.00
14,398.57	89.88	269.98	7,063.98	-150.40	-6,898.28	6,899.92	0.00	0.00	0.00

#### **WPX**

#### Planning Report

Database: Company: Project:

Site:

COMPASS

WPX Energy

T31N R6W Rosa Unit Pad 5

ROSA UT #552H

Well: Wellbore: Design:

Wellbore #1 Design #4 2Feb17 sam Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

**Survey Calculation Method:** 

Well ROSA UT #552H (B8) - Slot B8

GL @ 6429.00usft GL @ 6429.00usft

True

Minimum Curvature

Design Targets	a di	Contract of the	Same Service		# ** ·	. With the law way to			
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
VP #552H - plan hits target cent - Point	0.00 er	0.00	4,758.26	-148.14	663.76	2,153,646.74	606,811.54	36.918069	-107.467952
KOP #552H - plan hits target cent - Point	0.00 er	0.00	6,412.38	-148.14	663.76	2,153,646.74	606,811.54	36.918069	-107.467952
POE 2 #552H - plan hits target cente - Point	0.00 er	0.00	7,049.00	-148.33	28.52	2,153,644.13	606,176.30	36.918069	-107.470125
BHL 2 #552H - plan misses target c - Point	0.00 enter by 0.03	0.00 usft at 1439	7,064.00 8.57usft MD	-150.38 (7063.98 TVD	-6,898.28 , -150.40 N,	2,153,615.71 -6898.28 E)	599,249.56	36.918061	-107.493820

Casing Points	and the	* * * * * * * * * * * * * * * * * * * *		· · · · · · · · · · · · · · · · · · ·		
	Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (in)	Hole Diameter (in)	
	320.00	320.00	9 5/8"	9.620	12.250	
	6,373.00	6,312.25	7"	7.000	8.500	

Measured	Vertical	Local Coor	dinates		
Depth (usft)	Depth (usft)	+N/-S (usft)	+E/-W (usft)	Comment	
500.0	500.00	0.00	0.00	Start Build 2.00	
600.0	599.98	-0.38	1.70	Hold 2.00 Inclination	
800.0	799.86	-1.89	8.52	Start Build DLS 2.00 TFO 0.06	
1,242.0	1,238.73	-12.65	56.72	Hold 10.84 Inclination	
4,276.9	4,219.41	-137.00	613.85	Start Drop -2.00	
4,819.0	4,758.26	-148.14	663.76	Vertical	
6,473.1	6,412.38	-148.14	663.76	KOP DLS 9.00 TFO 269.98	
7,471.7	7,049.00	-148.33	28.52	POE 89.88 Inclination	
14,398.5	7,063,98	-150.40	-6,898.28	TD at 14398.57	



Well Name: ROSA UT #552H

Surface Location: Pad 5

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

Ground Elevation: 6429.00

+N/-S +E/-W Northing 0.00 0.00 2153792.35

Easting Latittude 606147.22 36.918476

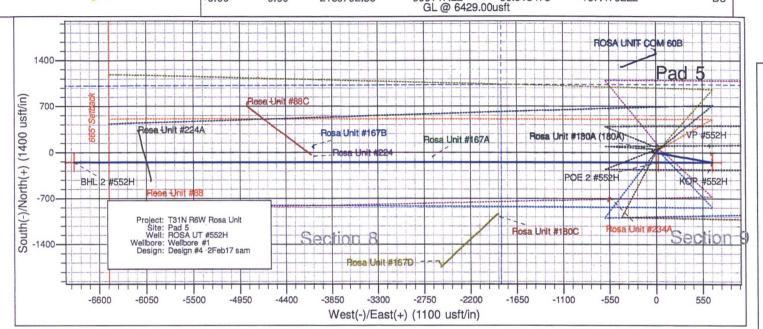
Longitude -107,470222

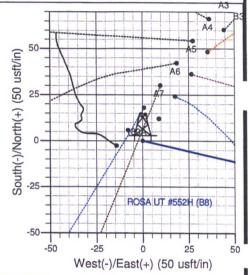
Slot B8

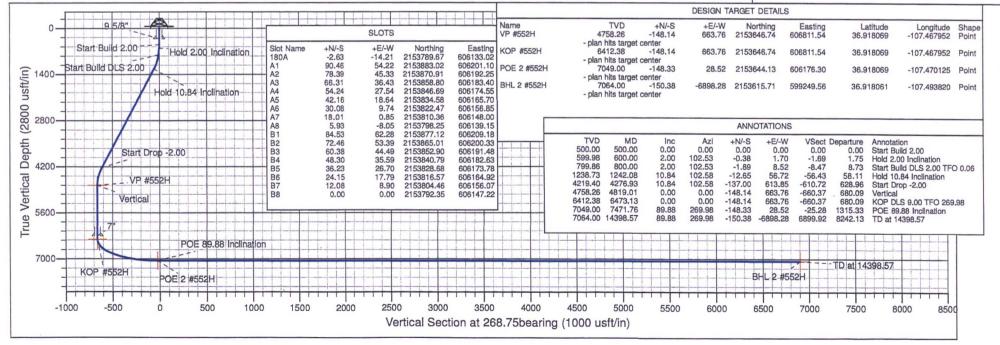


Azimuths to True North Magnetic North: 9.21

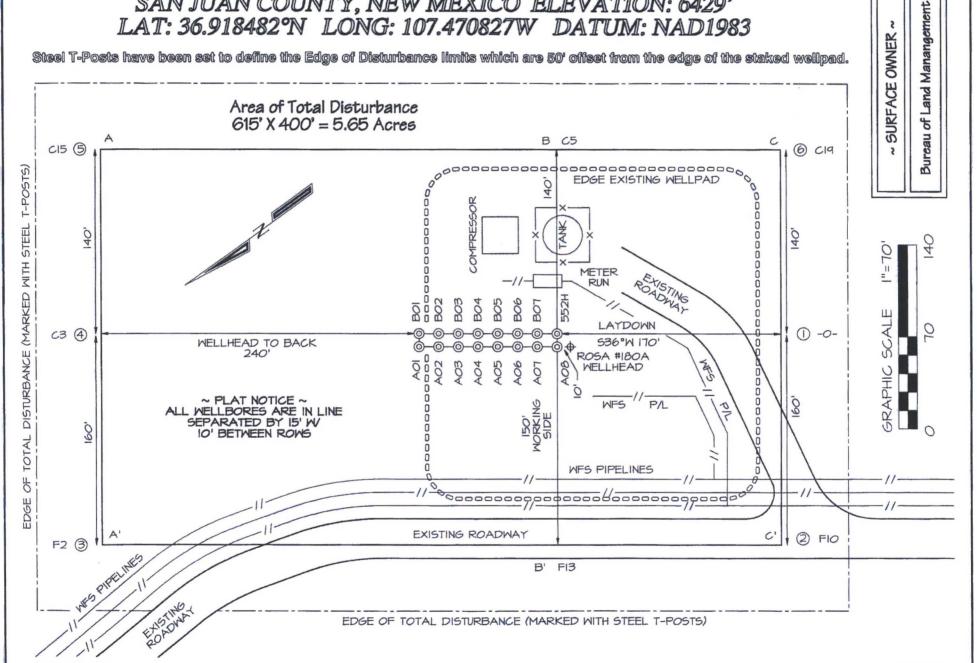
Magnetic Field Strength: 50227.9snT Dip Angle: 63.55° Date: 12/13/2016 Model: IGRF2015







# WPX ENERGY PRODUCTION, LLC ROSA UNIT #552H 1031' FNL & 1862' FWL, SECTION 9, T31N, R6W, NMPM SAN JUAN COUNTY, NEW MEXICO ELEVATION: 6429' LAT: 36.918482'N LONG: 107.470827W DATUM: NAD1983



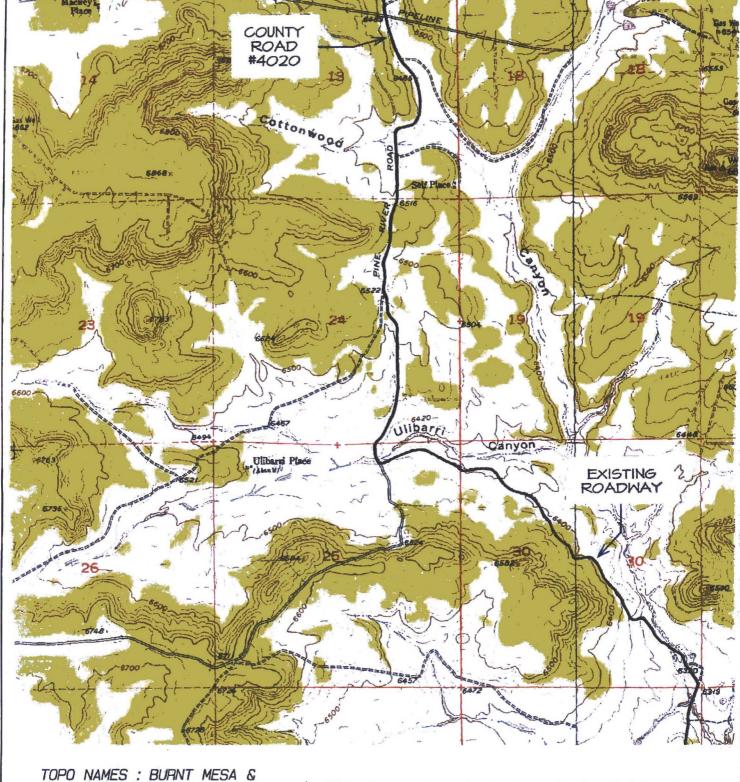
#### WPX ENERGY PRODUCTION, LLC ROSA UNIT #552H 1031' FNL & 1862' FWL, SECTION 9, T31N, R6W, NMPM SAN JUAN COUNTY, NEW MEXICO ELEVATION: 6429'

	HORIZONTAL SCALE 1"=40'		C/L				VERTICAL SCALE 1"=30'	
A-A'								
6439'								
6429'		/				/		= \
6419'								
				C	/L			
B-B'								
6439'								
6429'							- ~	~\
64191								1
				C	/L			
C-C'								
6439'								
6429'							- ~ 0	~ \
64191								1

NCE SURVEYS IS NOT LIABLE FOR LOCATION OF UNDERGROUND UTILITIES OR PIPELINES.

CONTRACTOR SHOULD CONTACT ONE-CALL FOR LOCATION OF ANY MARKED OR UNMARKED UNDERGROUND UTILITIES OR PIPELINES ON WELLPAD AND/OR ACCESS ROAD AT LEAST TWO WORKING DAYS PRIOR TO CONSTRUCTION.

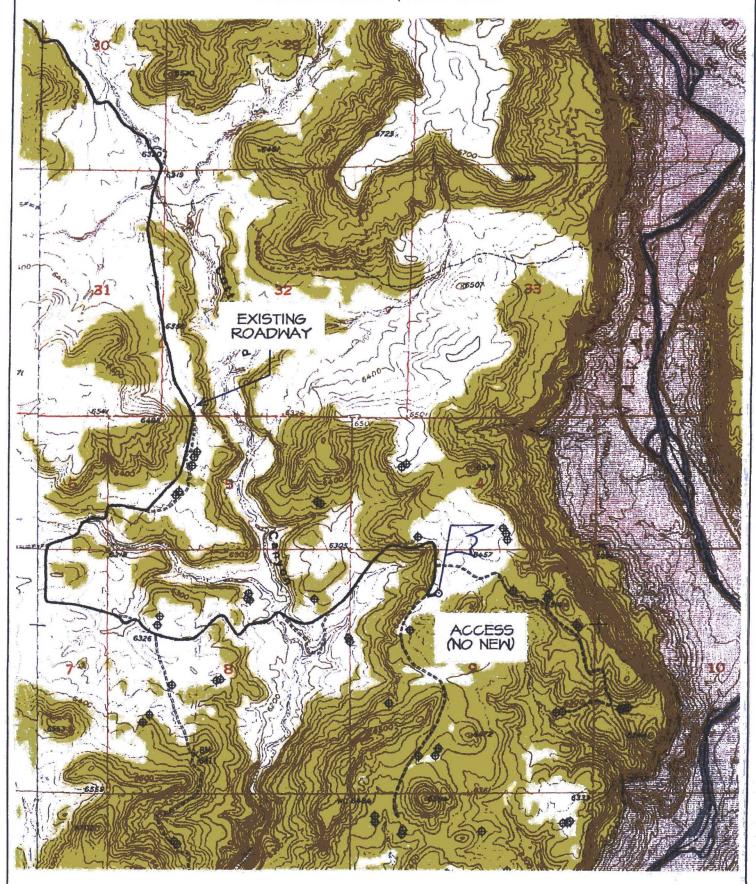
# WPX ENERGY PRODUCTION, LLC ROSA UNIT #552H 1031' FNL & 1862' FWL, SECTION 9, T3IN, R6W, N.M.P.M. SAN JUAN COUNTY, NEW MEXICO 662 COUNTY ROAD #4020 Cottonwood



TOPO NAMES : BURNT MESA & BANCOS MESA NW

#### WPX ENERGY PRODUCTION, LLC ROSA UNIT #552H

1031' FNL & 1862' FWL, SECTION 9, T3IN, R6W, N.M.P.M. SAN JUAN COUNTY, NEW MEXICO



TOPO NAMES : BURNT MESA & BANCOS MESA NW

♦ PRODUCING WELL ⊗ PLUGGED & ABANDONED WELL

# Directions from the Intersection of State Hwy 172 & State Hwy 151 in Ignacio, CO to WPX Energy Production, LLC Rosa Unit #552H

#### 1031' FNL & 1862' FWL, Section 9, T31N, R6W, N.M.P.M., San Juan County, NM

<u>Latitude: 36.918482°N Longitude: 107.470827°W Datum: NAD1983</u>

From the intersection of State Hwy 172 & State Hwy 151 in Ignacio, CO, travel Easterly on State Hwy 151 for 12.0 miles to County Road #330;

Go Right (Southerly) on County Road #330 for 1.9 miles to County Road #4020;

Go Right (Westerly) on County Road #4020 for 3.9 miles to fork in roadway;

Go Left (Easterly) exiting County Road #4020 for 1.7 miles to fork in roadway;

Go Right (Southerly) which is straight for 2.0 miles to fork in roadway;

Go Left (Southerly) for 0.2 miles to fork in roadway;

Go Left (Easterly) for 0.5 miles to 4-way intersection;

Go Straight (Easterly) for 1.4 miles to fork in roadway;

Go Right (Southerly) which is straight for 0.1 miles to fork in roadway;

Go Left (Easterly) to staked WPX Rosa Unit #552H proposed location, which overlaps the existing WPX Rosa #180A location.