RECEIVED

Form 3160-5
(February 2005)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

MAY 01 2013

Farmington Field Office
Bureau of Land Management

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.
SF-078773

6. If Indian, Allottee or Tribe Name

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

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other

8. Well Name and No.
Rosa Unit #271

2. Name of Operator
WPX Energy Production, LLC

9. API Well No.
30-039-24911

3a. Address
PO Box 640 Aztec, NM 87410

3b. Phone No. *(include area code)*
505-333-1808

10. Field and Pool or Exploratory Area
Basin Fruitland Coal

4. Location of Well *(Footage, Sec., T.,R.,M., or Survey Description)*
Sur: 1805' FNL & 1836' FEL, Sec 35 – BHL: 1850' FSL & 50' FEL, Sec 26, T31N, R5W

11. Country or Parish, State
Rio Arriba, NM

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
	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Subsequent Report	☐ Casing Repair	☐ New Construction	☒ Recomplete	☐ Other
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
☐ Final Abandonment Notice	☐ 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 recomplete 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 recompletion 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 plans to re enter this existing wellbore and convert this well from a vertical cavitation to a horizontal completion as per attached plat, operation plan and directional plan. All disturbance will be on permitted location.

NOTE: Due to resurveyed data and advancements in technology the SHL from the existing C-102 is inconsistent with the attached. It is our belief that the more accurate C-102 is the most recent of the two and would like provide the attached for record.

RCVD MAY 23 '13
OIL CONS. DIV.
DIST. 3

Hold C104
for Directional Survey
and "As Drilled" plat

14. I hereby certify that the foregoing is true and correct.
Name *(Printed/Typed)*
Larry Higgins

Title Permit Supervisor

Signature

Date 05/01/13

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title Petr. Eng. Date 5/20/13

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

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)

NMOCD

Hold C104
for Directional Survey
and "As Drilled" plat

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

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

Form C-102
Revised August 1, 2011

Submit one copy to
Appropriate District Office

☐ AMENDED REPORT

MAY 01 2013

Farmington Field Office
Bureau of Land Management

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
30-039-24911	71629	BASIN FRUITLAND COAL

[4] Property Code	[5] Property Name	[6] Well Number
	ROSA UNIT	271

[7] OGRID No.	[8] Operator Name	[9] Elevation
120782	WPX ENERGY PRODUCTION, LLC	6738'

[10] Surface Location

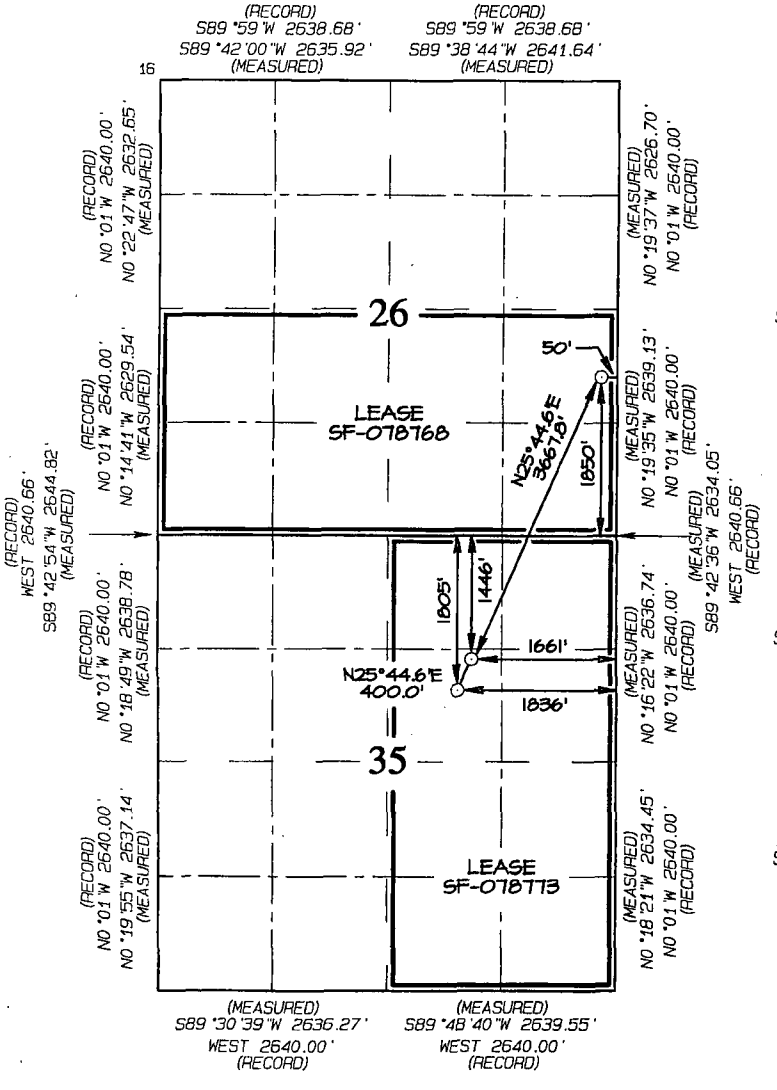
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	35	31N	5W		1805	NORTH	1836	EAST	RIO ARRIBA

[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
I	26	31N	5W		1850	SOUTH	50	EAST	RIO ARRIBA

[12] Dedicated Acres		[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
640.0 Acres	S/2 of Section 26 E/2 of Section 35			R-13491

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
1850' FSL 50' FEL
SECTION 26, T31N, R5W
LAT: 36.86844 °N
LONG: 107.32215 °W
DATUM: NAD1927

LAT: 36.86845 °N
LONG: 107.32275 °W
DATUM: NAD1983

POINT-OF-ENTRY
1446' FNL 1661' FEL
SECTION 12, T23N, R7W
LAT: 36.85939 °N
LONG: 107.32765 °W
DATUM: NAD1927

LAT: 36.85940 °N
LONG: 107.32825 °W
DATUM: NAD1983

SURFACE LOCATION
1805' FNL 1836' FEL
SECTION 35, T31N, R5W
LAT: 36.85840 °N
LONG: 107.32825 °W
DATUM: NAD1927

LAT: 36.85841 °N
LONG: 107.32885 °W
DATUM: NAD1983

RCVD MAY 23 '13
OIL CONS. DIV.
DIST. 3

[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 05/01/13 Date

Larry Higgins
Printed Name

larry.higgins@wpxenergy.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 of Survey: APRIL 29, 2013

Signature and Seal of Professional Surveyor

JASON C. EDWARDS
NEW MEXICO
15269
REGISTERED PROFESSIONAL SURVEYOR

JASON C. EDWARDS
Certificate Number 15269

WPXENERGY

WPX ENERGY

Operations Plan

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

DATE:	4/30/2013		
WELLNAME:	Rosa Unit #271	**FIELD:**	Basin Fruitland Coal
SHL: 1805' FNL & 1836' FEL Sec 35, T31N, R5W		**SURFACE:**	USFS
BHL: 1850' FSL & 50' FEL, Sec 26, T31N, R5W		**COUNTY:**	Rio Arriba, NM
ELEVATION:	6,738' GR	**MINERALS:**	BLM
TOTAL DEPTH:	7,459'	**LEASE #**	SF-078773
API#:	30-039-24911		

I. GEOLOGY: Surface formation - San Jose

A. FORMATION TOPS: (6,752' KB)

NAME		MD	TVD		NAME		MD	TVD
San Jose		Surface	Surface		Top Target Coal		3,703	3,540
Nacimiento		1,652	1,652		Base Coal			3,577
Ojo Alamo		2,890	2,890		Picture Cliffs			3578
Kirtland		3,080	3,080		**KO Point**		3,253	3,253
Fruitland		3,345	3,344		**Landing Point**		3,703	3540
					TD		**7,459**	**3,540**

B. LOGGING PROGRAM: None

C. NATURAL GAUGES: Gauge any noticeable increases in gas flow. Record all gauges in Tour book and on morning reports.

D. MUD LOGGING PRORAM: Mud logger will be on location from mill out to TD.

II. PREPARATORY WORK

A. MIRU w/ workover rig
B. POOH/LD rods and pump
C. POOH/LD production tbg
D. Set retrievable bridge plug at +/- 3,273' inside 7" casing.
E. Top of Window +/- 3,250 ft. Hole size 6.25 in.
F. Pressure test 7" csg and bridge plug to 1,500 psi for 30 minutes
G. RDMO

III. DRILLING

A. MUD PROGRAM: LSND mud during mill out and while drilling curve. Treat for lost circulation as necessary. Notify Engineering of any mud losses.

B. **DRILLING FLUID**: Horizontal section will be drilled with Polymer mud system and produced water.

C. **BOP TESTING:** While drill pipe is in use, the pipe rams and the blind rams will be function tested once each trip. The anticipated reservoir is expected to be less than 1300 psi, so the BOPE will be tested to **250 psi (Low) for 5 minutes** and **1500 psi (High) for 10 minutes**. Utilize a BOPE Testing Unit with a recording chart and appropriate test plug for testing. The drum brakes will be inspected and tested each tour. **All tests and inspections will be recorded in the tour book as to time and results.**

IV. MATERIALS

A. CASING PROGRAM (as is):

CASING TYPE	HOLE SIZE	DEPTH (MD)	CASING SIZE	WT. & GRADE
Surface	12-1/4"	223'	9-5/8"	36# K-55
Intermediate	8-3/4"	3,420'	7"	20# K-55
Prod. Liner	6-1/4"	3,346'- 3,570'	5-1/2"	15.5# K-55

B. CASING PROGRAM (after sidetrack):

CASING TYPE	HOLE SIZE	DEPTH (MD)	CASING SIZE	WT. & GRADE
Surface	12-1/4"	223'	9-5/8"	36# K-55
Intermediate	8-3/4"	3,420'	7"	20# K-55
Prod. Liner (motherbore)	6-1/4"	3,346'- 3,570'	5-1/2"	15.5# K-55
Prod. Liner (sidetrack)	6-1/4"	~3,253'- 7,459'	4-1/2"	11.6# J-55

- Sidetrack production liner is pre-perforated below top of fruitland with blank pipe from window to top of fruitland and will be dropped off with top of liner in open hole 3-10' outside of window.

C. FLOAT EQUIPMENT:

1. PRODUCTION LINER (sidetrack): No centralization

D. CEMENTING:

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

1. PRODUCTION LINER (sidetrack): Open hole completion. No cement.

V. COMPLETION

A. STIMULATION

1. No stimulation

B. RUNNING TUBING

1. *Fruitland Coal:* Run 2-7/8", 6.5#, J-55, EUE tubing with a SN on top of bottom joint. Land tubing at approximately 3,500' MD inside of motherbore.

WPXENERGY

WPX Energy

KB: 14'

ST1 Rev0

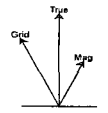
PATHFINDER
A Schlumberger Company

WELL	FIELD	STRUCTURE
Rosa Unit 271	NM Rio Arriba County NAD27	AWS #980

Magnetic Parameters				Surface Location				Miscellaneous			
Model: BGGM 2012	Dip: 63.583°	Date: April 11, 2013		Lat: N 36 51 30.254	Northing: 2133465.86 FUS	Grid Conv: -0.647°		Slot: Rosa Unit 271	TVD Ref: RKB(6752ft above MSL)		
	Mag Dec: 9.548°	FS: 50607.0nT		Lon: W 107 19 41.704	Easting: 1845514.40 FUS	Scale Fact: 1.00001385		Plan: ST1 Rev0 JBE 11Apr13	Srvy Date: April 11, 2013		

Targets

Name	TVD (ft)	NS (ft)	EW (ft)	Latitude (deg)	Longitude (deg)	Shape
Rosa Unit 271 PBHL	3540.00	3632.51	1772.23	N 36 52 6.172	W 107 19 19.895	POINT



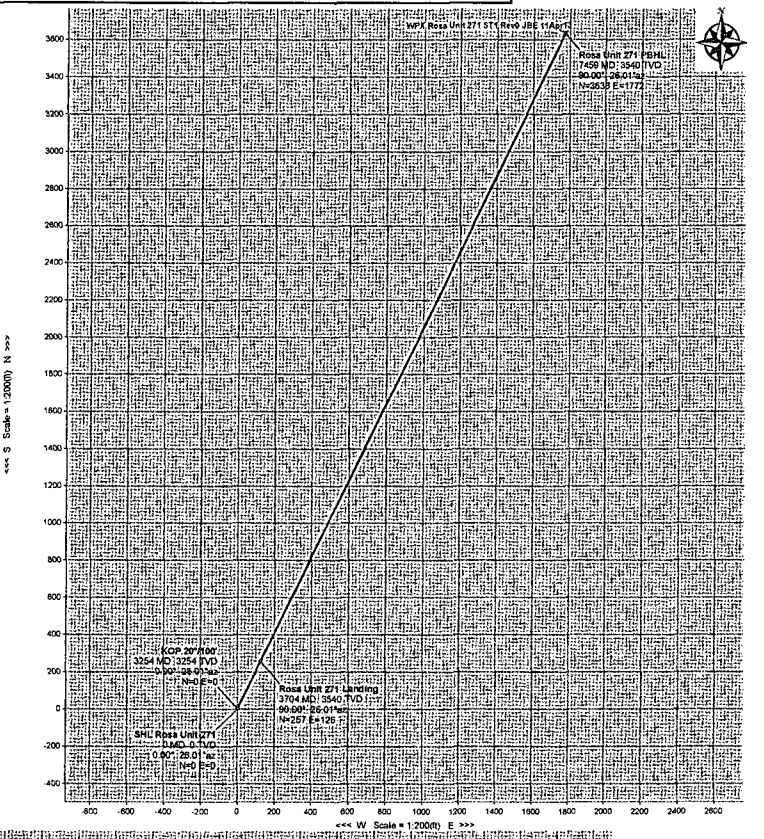
True North
Tot Corr (M->T 9.5481°)
Mag Dec (9.548°)
Grid Conv (-0.647°)

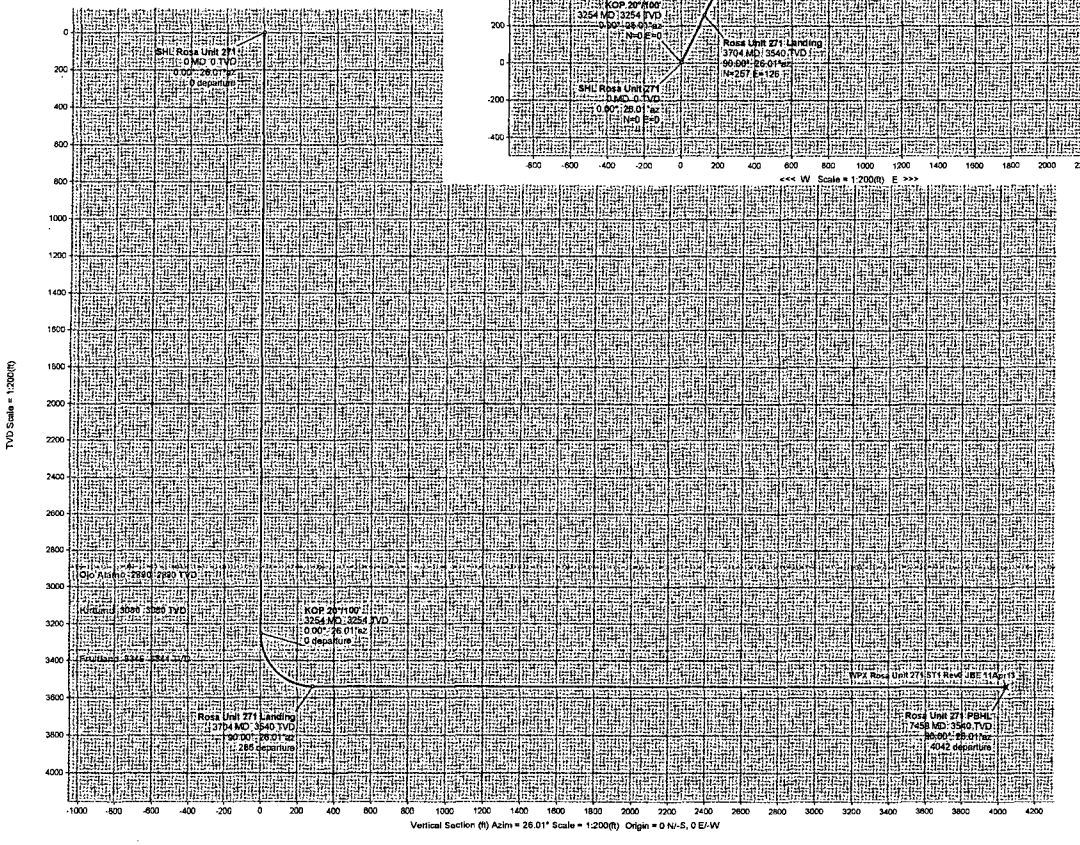
Formation Tops

Comments	Survey MD (ft)	TVD (ft)
Ojo Alamo	2890.00	2890.00
Kirtland	3080.00	3080.00
Fruitland	3345.58	3344.00

Legend

Rosa Unit 271 PBHL
WPX Rosa Unit 271 ST1 Rev0 JBE 11Apr13





Critical Points

Comments	Survey MD (ft)	Inclination (deg)	Azimuth (deg)	TVD (ft)	VS (ft)	NS (ft)	EW (ft)	Closure (ft)	Closure Azimuth (deg)	DLS (°/100ft)
SHL Rosa Unit 271	0.00	0.00	26.01	0.00	0.00	0.00	0.00	0.00	0.00	
KOP 20°/100'	3253.52	0.00	26.01	3253.52	0.00	0.00	0.00	0.00	0.00	0.00
Rosa Unit 271 Landing	3703.52	90.00	26.01	3540.00	286.48	257.47	125.61	286.48	26.01	20.00
Rosa Unit 271 PBHL	7458.81	90.00	26.01	3540.00	4041.77	3632.51	1772.23	4041.77	26.01	0.00

Drawn By:	Brack Ertach
Date Created	April 11, 2013 09:32:51 AM
Checked By	
Checked Date	
Approved By	
Approved Date	

PATHFINDER
A Schlumberger Company

API #30-039-24911

WPX Rosa Unit 271 ST1 Rev0 JBE 11Apr13 Proposal Geodetic Report

(Non-Def Plan)

WPXENERGY

Report Date:	April 11, 2013 - 09:50 AM	**Survey / DLS Computation:**	Minimum Curvature / Lubinski
Client:	WPX Energy	**Vertical Section Azimuth:**	26.007 ° (True North)
Field:	NM Rio Arriba County NAD27	**Vertical Section Origin:**	0.000 ft, 0.000 ft
Structure / Slot:	WPX Rosa Unit 271 / Rosa Unit 271	**TVD Reference Datum:**	RKB
Well:	Rosa Unit 271	**TVD Reference Elevation:**	6752.000 ft above MSL
Borehole:	ST1	**Seabed / Ground Elevation:**	6738.000 ft above MSL
UWI / API#:	Unknown / 30-039-24911	**Magnetic Declination:**	9.548 °
Survey Name:	WPX Rosa Unit 271 ST1 Rev0 JBE 11Apr13	**Total Gravity Field Strength:**	999.2431 mgn (9.8 based)
Survey Date:	April 11, 2013	**Total Magnetic Field Strength:**	50607.010 nT
Tort / AHD / DDI / ERD Ratio:	90.000 ° / 4041.768 ft / 5.884 / 1.142	**Magnetic Dip Angle:**	63.583 °
Coordinate Reference System:	NAD27 New Mexico State Plane, Central Zone, US Feet	**Declination Date:**	April 11, 2013
Location Lat / Long:	N 36° 51' 30.25440", W 107° 19' 41.70360"	**Magnetic Declination Model:**	BGGM 2012
Location Grid N/E Y/X:	N 2133465.858 ftUS, E 184551.401 ftUS	**North Reference:**	True North
CRS Grid Convergence Angle:	-0.6468 °	**Grid Convergence Used:**	0.0000 °
Grid Scale Factor:	1.00001385	**Total Corr Mag North->True North:**	9.5481 °
		Local Coord Referenced To:	Structure Reference Point

Comments	MD (ft)	Incl (°)	Azim True (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
SHL Rosa Unit 271	0.00	0.00	26.01	0.00	0.00	0.00	0.00	N/A	2133465.86	184551.40	N 36 51 30.25	W 107 19 41.70
Ojo Alamo	*2890.00*	*0.00*	*26.01*	*2890.00*	*0.00*	*0.00*	*0.00*	*0.00*	*2133465.86*	*184551.40*	*N 36 51 30.25*	*W 107 19 41.70*
Kirtland	*3080.00*	*0.00*	*26.01*	*3080.00*	*0.00*	*0.00*	*0.00*	*0.00*	*2133465.86*	*184551.40*	*N 36 51 30.25*	*W 107 19 41.70*
KOP 20°/100'	3253.52	0.00	26.01	3253.52	0.00	0.00	0.00	0.00	2133465.86	184551.40	N 36 51 30.25	W 107 19 41.70
Fruitland	*3345.58*	*18.41*	*26.01*	*3344.00*	*14.66*	*13.18*	*6.43*	*20.00*	*2133478.96*	*184557.98*	*N 36 51 30.38*	*W 107 19 41.62*
Rosa Unit 271 Landing	3703.52	90.00	26.01	3540.00	286.48	257.47	125.61	20.00	2133721.90	184679.92	N 36 51 32.80	W 107 19 40.16
Rosa Unit 271 PBHL	7458.81	90.00	26.01	3540.00	4041.77	3632.51	1772.23	0.00	2137078.17	186364.54	N 36 52 6.17	W 107 19 19.89

Survey Type: Non-Def Plan

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

Survey Program:

Description	MD From (ft)	MD To (ft)	EOU Freq (ft)	Hole Size (in)	Casing Diameter (in)	Survey Tool Type	Borehole / Survey
	0.000	14.000	1/100.000	30.000	30.000	SLB_MWD-STD-Depth Only	ST1 / WPX Rosa Unit 271 ST1 Rev0 JBE 11Apr13
	14.000	7458.811	1/100.000	30.000	30.000	SLB_MWD-STD	ST1 / WPX Rosa Unit 271 ST1 Rev0 JBE 11Apr13

WPX Rosa Unit 271 ST1 Rev0 JBE 11Apr13 Proposal Geodetic Report

(Non-Def Plan)

Report Date:	April 11, 2013 - 09:51 AM	**Survey / DLS Computation:**	Minimum Curvature / Lubinski
Client:	WPX Energy	**Vertical Section Azimuth:**	26.007 ° (True North)
Field:	NM Rio Arriba County NAD27	**Vertical Section Origin:**	0.000 ft, 0.000 ft
Structure / Slot:	WPX Rosa Unit 271 / Rosa Unit 271	**TVD Reference Datum:**	RKB
Well:	Rosa Unit 271	**TVD Reference Elevation:**	6752.000 ft above MSL
Borehole:	ST1	**Seabed / Ground Elevation:**	6738.000 ft above MSL
UWI / API#:	Unknown / 30-039-24911	**Magnetic Declination:**	9.548 °
Survey Name:	WPX Rosa Unit 271 ST1 Rev0 JBE 11Apr13	**Total Gravity Field Strength:**	999.2431 mgn (9.8 based)
Survey Date:	April 11, 2013	**Total Magnetic Field Strength:**	50607.010 nT
Tort / AHD / DDI / ERD Ratio:	90.000 ° / 4041.768 ft / 5.884 / 1.142	**Magnetic Dip Angle:**	63.583 °
Coordinate Reference System:	NAD27 New Mexico State Plane, Central Zone, US Feet	**Declination Date:**	April 11, 2013
Location Lat / Long:	N 36° 51' 30.25440", W 107° 19' 41.70360"	**Magnetic Declination Model:**	BGGM 2012
Location Grid N/E Y/X:	N 2133465.858 ftUS, E 184551.401 ftUS	**North Reference:**	True North
CRS Grid Convergence Angle:	-0.6468 °	**Grid Convergence Used:**	0.0000 °
Grid Scale Factor:	1.00001385	**Total Corr Mag North->True North:**	9.5481 °
		Local Coord Referenced To:	Structure Reference Point

Comments	MD (ft)	Incl (°)	Azim True (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
SHL Rosa Unit 271	0.00	0.00	26.01	0.00	0.00	0.00	0.00	N/A	2133465.86	184551.40	N 36 51 30.25	W 107 19 41.70
	100.00	0.00	26.01	100.00	0.00	0.00	0.00	0.00	2133465.86	184551.40	N 36 51 30.25	W 107 19 41.70
	200.00	0.00	26.01	200.00	0.00	0.00	0.00	0.00	2133465.86	184551.40	N 36 51 30.25	W 107 19 41.70
	300.00	0.00	26.01	300.00	0.00	0.00	0.00	0.00	2133465.86	184551.40	N 36 51 30.25	W 107 19 41.70
	400.00	0.00	26.01	400.00	0.00	0.00	0.00	0.00	2133465.86	184551.40	N 36 51 30.25	W 107 19 41.70
	500.00	0.00	26.01	500.00	0.00	0.00	0.00	0.00	2133465.86	184551.40	N 36 51 30.25	W 107 19 41.70
	600.00	0.00	26.01	600.00	0.00	0.00	0.00	0.00	2133465.86	184551.40	N 36 51 30.25	W 107 19 41.70
	700.00	0.00	26.01	700.00	0.00	0.00	0.00	0.00	2133465.86	184551.40	N 36 51 30.25	W 107 19 41.70
	800.00	0.00	26.01	800.00	0.00	0.00	0.00	0.00	2133465.86	184551.40	N 36 51 30.25	W 107 19 41.70
	900.00	0.00	26.01	900.00	0.00	0.00	0.00	0.00	2133465.86	184551.40	N 36 51 30.25	W 107 19 41.70
	1000.00	0.00	26.01	1000.00	0.00	0.00	0.00	0.00	2133465.86	184551.40	N 36 51 30.25	W 107 19 41.70
	1100.00	0.00	26.01	1100.00	0.00	0.00	0.00	0.00	2133465.86	184551.40	N 36 51 30.25	W 107 19 41.70
	1200.00	0.00	26.01	1200.00	0.00	0.00	0.00	0.00	2133465.86	184551.40	N 36 51 30.25	W 107 19 41.70
	1300.00	0.00	26.01	1300.00	0.00	0.00	0.00	0.00	2133465.86	184551.40	N 36 51 30.25	W 107 19 41.70
	1400.00	0.00	26.01	1400.00	0.00	0.00	0.00	0.00	2133465.86	184551.40	N 36 51 30.25	W 107 19 41.70
	1500.00	0.00	26.01	1500.00	0.00	0.00	0.00	0.00	2133465.86	184551.40	N 36 51 30.25	W 107 19 41.70
	1600.00	0.00	26.01	1600.00	0.00	0.00	0.00	0.00	2133465.86	184551.40	N 36 51 30.25	W 107 19 41.70
	1700.00	0.00	26.01	1700.00	0.00	0.00	0.00	0.00	2133465.86	184551.40	N 36 51 30.25	W 107 19 41.70
	1800.00	0.00	26.01	1800.00	0.00	0.00	0.00	0.00	2133465.86	184551.40	N 36 51 30.25	W 107 19 41.70
	1900.00	0.00	26.01	1900.00	0.00	0.00	0.00	0.00	2133465.86	184551.40	N 36 51 30.25	W 107 19 41.70
	2000.00	0.00	26.01	2000.00	0.00	0.00	0.00	0.00	2133465.86	184551.40	N 36 51 30.25	W 107 19 41.70
	2100.00	0.00	26.01	2100.00	0.00	0.00	0.00	0.00	2133465.86	184551.40	N 36 51 30.25	W 107 19 41.70
	2200.00	0.00	26.01	2200.00	0.00	0.00	0.00	0.00	2133465.86	184551.40	N 36 51 30.25	W 107 19 41.70
	2300.00	0.00	26.01	2300.00	0.00	0.00	0.00	0.00	2133465.86	184551.40	N 36 51 30.25	W 107 19 41.70
	2400.00	0.00	26.01	2400.00	0.00	0.00	0.00	0.00	2133465.86	184551.40	N 36 51 30.25	W 107 19 41.70
	2500.00	0.00	26.01	2500.00	0.00	0.00	0.00	0.00	2133465.86	184551.40	N 36 51 30.25	W 107 19 41.70
	2600.00	0.00	26.01	2600.00	0.00	0.00	0.00	0.00	2133465.86	184551.40	N 36 51 30.25	W 107 19 41.70
	2700.00	0.00	26.01	2700.00	0.00	0.00	0.00	0.00	2133465.86	184551.40	N 36 51 30.25	W 107 19 41.70
	2800.00	0.00	26.01	2800.00	0.00	0.00	0.00	0.00	2133465.86	184551.40	N 36 51 30.25	W 107 19 41.70
Ojo Alamo	*2890.00*	*0.00*	*26.01*	*2890.00*	*0.00*	*0.00*	*0.00*	*0.00*	*2133465.86*	*184551.40*	*N 36 51 30.25*	*W 107 19 41.70*

Comments	MD (ft)	Incl (°)	Azim True (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
	2900.00	0.00	26.01	2900.00	0.00	0.00	0.00	0.00	2133465.86	184551.40	N 36 51 30.25	W 107 19 41.70
	3000.00	0.00	26.01	3000.00	0.00	0.00	0.00	0.00	2133465.86	184551.40	N 36 51 30.25	W 107 19 41.70
Kirtland	*3080.00*	*0.00*	*26.01*	*3080.00*	*0.00*	*0.00*	*0.00*	*0.00*	*2133465.86*	*184551.40*	*N 36 51 30.25*	*W 107 19 41.70*
	3100.00	0.00	26.01	3100.00	0.00	0.00	0.00	0.00	2133465.86	184551.40	N 36 51 30.25	W 107 19 41.70
	3200.00	0.00	26.01	3200.00	0.00	0.00	0.00	0.00	2133465.86	184551.40	N 36 51 30.25	W 107 19 41.70
KOP 20°/100'	3253.52	0.00	26.01	3253.52	0.00	0.00	0.00	0.00	2133465.86	184551.40	N 36 51 30.25	W 107 19 41.70
	3300.00	9.30	26.01	3299.80	3.76	3.38	1.65	20.00	2133469.22	184553.09	N 36 51 30.29	W 107 19 41.68
Fruitland	*3345.58*	*18.41*	*26.01*	*3344.00*	*14.66*	*13.18*	*6.43*	*20.00*	*2133478.96*	*184557.98*	*N 36 51 30.38*	*W 107 19 41.62*
	3400.00	29.30	26.01	3393.70	36.64	32.93	16.07	20.00	2133498.60	184567.84	N 36 51 30.58	W 107 19 41.51
	3500.00	49.30	26.01	3470.70	99.65	89.56	43.69	20.00	2133554.92	184596.10	N 36 51 31.14	W 107 19 41.17
	3600.00	69.30	26.01	3521.50	185.20	166.44	81.20	20.00	2133631.38	184634.48	N 36 51 31.90	W 107 19 40.70
	3700.00	89.30	26.01	3539.98	282.96	254.31	124.07	20.00	2133718.75	184678.34	N 36 51 32.77	W 107 19 40.18
Rosa Unit 271 Landing	3703.52	90.00	26.01	3540.00	286.48	257.47	125.61	20.00	2133721.90	184679.92	N 36 51 32.80	W 107 19 40.16
	3800.00	90.00	26.01	3540.00	382.96	344.18	167.92	0.00	2133808.13	184723.20	N 36 51 33.66	W 107 19 39.64
	3900.00	90.00	26.01	3540.00	482.96	434.05	211.77	0.00	2133897.50	184768.06	N 36 51 34.55	W 107 19 39.10
	4000.00	90.00	26.01	3540.00	582.96	523.93	255.61	0.00	2133986.87	184812.92	N 36 51 35.43	W 107 19 38.56
	4100.00	90.00	26.01	3540.00	682.96	613.80	299.46	0.00	2134076.25	184857.78	N 36 51 36.32	W 107 19 38.02
	4200.00	90.00	26.01	3540.00	782.96	703.68	343.31	0.00	2134165.62	184902.64	N 36 51 37.21	W 107 19 37.48
	4300.00	90.00	26.01	3540.00	882.96	793.55	387.16	0.00	2134255.00	184947.50	N 36 51 38.10	W 107 19 36.94
	4400.00	90.00	26.01	3540.00	982.96	883.43	431.01	0.00	2134344.37	184992.36	N 36 51 38.99	W 107 19 36.40
	4500.00	90.00	26.01	3540.00	1082.96	973.30	474.85	0.00	2134433.75	185037.22	N 36 51 39.88	W 107 19 35.86
	4600.00	90.00	26.01	3540.00	1182.96	1063.17	518.70	0.00	2134523.12	185082.08	N 36 51 40.77	W 107 19 35.32
	4700.00	90.00	26.01	3540.00	1282.96	1153.05	562.55	0.00	2134612.50	185126.94	N 36 51 41.66	W 107 19 34.78
	4800.00	90.00	26.01	3540.00	1382.96	1242.92	606.40	0.00	2134701.87	185171.80	N 36 51 42.54	W 107 19 34.24
	4900.00	90.00	26.01	3540.00	1482.96	1332.80	650.24	0.00	2134791.24	185216.66	N 36 51 43.43	W 107 19 33.70
	5000.00	90.00	26.01	3540.00	1582.96	1422.67	694.09	0.00	2134880.62	185261.52	N 36 51 44.32	W 107 19 33.16
	5100.00	90.00	26.01	3540.00	1682.96	1512.54	737.94	0.00	2134969.99	185306.38	N 36 51 45.21	W 107 19 32.62
	5200.00	90.00	26.01	3540.00	1782.96	1602.42	781.79	0.00	2135059.37	185351.24	N 36 51 46.10	W 107 19 32.08
	5300.00	90.00	26.01	3540.00	1882.96	1692.29	825.64	0.00	2135148.74	185396.10	N 36 51 46.99	W 107 19 31.54
	5400.00	90.00	26.01	3540.00	1982.96	1782.17	869.48	0.00	2135238.12	185440.96	N 36 51 47.88	W 107 19 31.00
	5500.00	90.00	26.01	3540.00	2082.96	1872.04	913.33	0.00	2135327.49	185485.82	N 36 51 48.76	W 107 19 30.46
	5600.00	90.00	26.01	3540.00	2182.96	1961.92	957.18	0.00	2135416.87	185530.68	N 36 51 49.65	W 107 19 29.93
	5700.00	90.00	26.01	3540.00	2282.96	2051.79	1001.03	0.00	2135506.24	185575.54	N 36 51 50.54	W 107 19 29.39
	5800.00	90.00	26.01	3540.00	2382.96	2141.66	1044.88	0.00	2135595.62	185620.40	N 36 51 51.43	W 107 19 28.85
	5900.00	90.00	26.01	3540.00	2482.96	2231.54	1088.72	0.00	2135684.99	185665.26	N 36 51 52.32	W 107 19 28.31
	6000.00	90.00	26.01	3540.00	2582.96	2321.41	1132.57	0.00	2135774.36	185710.12	N 36 51 53.21	W 107 19 27.77
	6100.00	90.00	26.01	3540.00	2682.96	2411.29	1176.42	0.00	2135863.74	185754.98	N 36 51 54.10	W 107 19 27.23
	6200.00	90.00	26.01	3540.00	2782.96	2501.16	1220.27	0.00	2135953.11	185799.84	N 36 51 54.99	W 107 19 26.69
	6300.00	90.00	26.01	3540.00	2882.96	2591.03	1264.11	0.00	2136042.49	185844.70	N 36 51 55.87	W 107 19 26.15
	6400.00	90.00	26.01	3540.00	2982.96	2680.91	1307.96	0.00	2136131.86	185889.56	N 36 51 56.76	W 107 19 25.61
	6500.00	90.00	26.01	3540.00	3082.96	2770.78	1351.81	0.00	2136221.24	185934.42	N 36 51 57.65	W 107 19 25.07
	6600.00	90.00	26.01	3540.00	3182.96	2860.66	1395.66	0.00	2136310.61	185979.28	N 36 51 58.54	W 107 19 24.53
	6700.00	90.00	26.01	3540.00	3282.96	2950.53	1439.51	0.00	2136399.99	186024.14	N 36 51 59.43	W 107 19 23.99
	6800.00	90.00	26.01	3540.00	3382.96	3040.41	1483.35	0.00	2136489.36	186069.00	N 36 52 0.32	W 107 19 23.45
	6900.00	90.00	26.01	3540.00	3482.96	3130.28	1527.20	0.00	2136578.74	186113.86	N 36 52 1.21	W 107 19 22.91
	7000.00	90.00	26.01	3540.00	3582.96	3220.15	1571.05	0.00	2136668.11	186158.72	N 36 52 2.09	W 107 19 22.37
	7100.00	90.00	26.01	3540.00	3682.96	3310.03	1614.90	0.00	2136757.48	186203.58	N 36 52 2.98	W 107 19 21.83
	7200.00	90.00	26.01	3540.00	3782.96	3399.90	1658.74	0.00	2136846.86	186248.44	N 36 52 3.87	W 107 19 21.29
	7300.00	90.00	26.01	3540.00	3882.96	3489.78	1702.59	0.00	2136936.23	186293.30	N 36 52 4.76	W 107 19 20.75
	7400.00	90.00	26.01	3540.00	3982.96	3579.65	1746.44	0.00	2137025.61	186338.16	N 36 52 5.65	W 107 19 20.21
Rosa Unit 271 PBHL	7458.81	90.00	26.01	3540.00	4041.77	3632.51	1772.23	0.00	2137078.17	186364.54	N 36 52 6.17	W 107 19 19.89

Survey Type: Non-Def Plan

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

Comments	MD (ft)	Incl (°)	Azim True (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")

Survey Program:

Description	MD From (ft)	MD To (ft)	EOU Freq (ft)	Hole Size (in)	Casing Diameter (in)	Survey Tool Type	Borehole / Survey
	0.000	14.000	1/100.000	30.000	30.000	SLB_MWD-STD-Depth Only	ST1 / WPX Rosa Unit 271 ST1 Rev0 JBE 11Apr13
	14.000	7458.811	1/100.000	30.000	30.000	SLB_MWD-STD	ST1 / WPX Rosa Unit 271 ST1 Rev0 JBE 11Apr13