

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCC, Artesia

FORM APPROVED
OMB NO. 1004-0135
Expires: July 31, 2010**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 reverse side.**

1. Type of Well ☐ Oil Well ☒ Gas Well ☐ Other		5. Lease Serial No. NMNM54290
2. Name of Operator RKI EXPLORATION & PROD LLC		6. If Indian, Allottee or Tribe Name
Contact: CHARLES K AHN E-Mail: charles.ahn@wpenergy.com		7. If Unit or CA/Agreement, Name and/or No.
3a. Address 210 PARK AVE SUITE 900 OKLAHOMA CITY, OK 73102	3b. Phone No. (include area code) Ph: 405.996.5771 Fx: 405.996.5772	8. Well Name and No. NORTH BRUSHY DRAW FEDERAL 35 12H
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 35 T25S R29E SWSE 275FSL 1550FEL		9. API Well No. 30-015-43603-00-X1
		10. Field and Pool, or Exploratory UNDESIGNATED
		11. County or Parish, and State EDDY COUNTY, NM

12. CHECK 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 Drilling Operations
	☐ 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 recomple 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 shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recomple in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

RKI Exploration & Production, LLC requests authorization to make the following changes to the drilling & casing program for the subject well:

1. Use 9-5/8 inch intermediate casing with revised weight/grade (54.5#/J-55) as well as new setting depth (3229 feet)
2. Use additional 7-inch intermediate casing to be set at base of the curve
3. Lateral hole size 6-1/8 inch and a 4-1/2 inch production liner will be run and cemented from TD to KOP

Revised drilling & casing program, showing the requested changes in further detail has been

Accepted for record
NMOCD

Accepted for record
NMOCD

NM OIL CONSERVATION
ARTESIA DISTRICT

MAR 21 2016

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

14. I hereby certify that the foregoing is true and correct. Electronic Submission #333010 verified by the BLM Well Information System For RKI EXPLORATION & PROD LLC, sent to the Carlsbad Committed to AFMSS for processing by PRISCILLA PEREZ on 03/07/2016 (16PP0663SE)	
Name (Printed/Typed) CHARLES K AHN	Title HS&E/REGULATORY MANAGER
Signature (Electronic Submission)	Date 03/07/2016

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

APPROVED

Approved By _____	Title _____	Date _____
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 _____	MAR 16 2016 [Signature]	

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 a false statement or representation to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED **

Additional data for EC transaction #333010 that would not fit on the form

32. Additional remarks, continued

attached for reference.

RKI Exploration & Production, LLC

Well North Brushy Draw Federal 35-12H

Location Surface: 275 FSL 1,550 FEL Sec 35-25S-29E
Bottom Hole: 230 FSL 330 FEL Sec 35-25S-29E

County Eddy

State New Mexico

1) The elevation of the unprepared ground is 3,011 feet above sea level.

2) The geologic name of the surface formation is Quaternary - Alluvium.

3) A rotary rig will be utilized to drill the well to 15,305 feet and run casing and cement.
This equipment will then be rigged down and the well will be completed with a workover rig.

4) Proposed depth is 15,305 feet MD

5) Estimated tops:

	MD	TVD	
Rustler	950	950	
Salado	1,100	1,100	BHP = .44 psi/ft x depth
Bell Canyon Sand	3,113	3,113	1,370 psi
Delaware Top	3,293	3,220	1,449 psi
Cherry Canyon Sand	4,244	4,230	Oil 1,867 psi
Brushy Canyon Sand	5,337	5,303	Oil 2,348 psi
Bone Spring Lime	6,988	6,923	Oil 3,075 psi
1st Bone Spring Sand	7,912	7,830	3,481 psi
2nd Bone Spring Sand	8,816	8,718	Oil 3,879 psi
KOP	9,920	9,808	4,365 psi
Landing Point (Wolfcamp)	10,920	10,452	Oil 4,805 psi
TD	15,305	10,452	6,734 psi

6) Casing program:

Hole Size	Top	Bottom	OD Csg	Wt/Grade	Connection	Collapse Design Factor	Burst Design Factor	Tension Design Factor
17 1/2"	0	680	13 3/8"	54.5#/J-55	ST&C	3.78	18.25	13.87
12 1/4"	0	3,220 3,220	9 5/8" 9 5/8"	40#/J-55	LT&C	1.42	5.56	4.03
8 3/4"	0	10,958	7"	29#/HCP-110	BT&C	1.29	1.99	2.80
6 1/8"	9,920	15,305	4 1/2"	13.5#/HCP-110	CDC-HTC	2.32	1.24	6.09
Collapse	1.125							
Burst	1.0							
Tension	2.0							

7) Cement program:

Surface	17 1/2" hole	
Pipe OD	13 3/8"	
Setting Depth	680 ft	
Annular Volume	0.69462 cf/ft	
Excess	1	100 %

Lead	540 sx	1.75 cf/sk	9.13 gal/sk	13.5 ppg
Tail	200 sx	1.33 cf/sk	6.32 gal/sk	14.8 ppg

Lead: "C" + 4% PF20 (gel) + 2% PF1 (CC) + .125 pps PF29 (CelloFlake) + .4 pps PF46 (antifoam)

Tail: "C" + 1% PF1 (CC)

Top of cement: Surface

Intermediate	12 1/4" hole	
Pipe OD	9 5/8"	
Setting Depth	3,229 ft	
Annular Volume	0.31318 cf/ft	0.3627 cf/ft
Excess	0.5	50 %

Lead	678 sx	1.92 cf/sk	9.95 gal/sk	12.6 ppg
Tail	200 sx	1.33 cf/sk	6.32 gal/sk	14.8 ppg

Lead: 35/65 Poz "C" + 5% PF44 + 6% PF20 + 1% PF1 _ .125 pps PF29 + .4 pps PF46 + 3 pps PF42

Tail: "C" + .2% PF13 (retarder)

Top of cement: Surface

Intermediate	8 3/4" hole	
Pipe OD	7"	
Setting Depth	10,958 ft	
Annular Volume	0.15033 cf/ft	0.1585 cf/ft
Excess	0.35	35 %

Stage 2

Lead:	763 sx	1.89 cf/sk	10.06 gal/sk	12.9 ppg
Tail:	175 sx	1.33 cf/sk	6.32 gal/sk	14.8 ppg

Lead: 35/65 Poz "C" + 5% PF44 + 6% PF20 + .2% PF13 + .125 ps PF29 + .4 pps PF46

Tail: "C" + .2% PF13

Top of cement: 2,729 ft

Production	6 1/8" hole	
Pipe OD (in OH)	4 1/2"	
Setting Depth	15,305 ft	
Annular Volume	0.0942	
Excess	0.50	

Lead:	407 sx	1.87 cf/sk	9.52 gal/sk	13.0 ppg
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Lead: AcidSolid PVL + 5% PF174 + .7% PF606 + .2% PF153 + .5% PF13 + 30% PF151 + .4 pps PF46

Top of cement: 9,920 ft

8) Pressure control equipment:

The blowout preventer equipment (BOP) shown in Exhibit #1 will consist of a double ram type (5,000 psi WP) preventer, a bag-type annular preventer (5,000 psi WP), and rotating head. Both units will be hydraulically operated and the ram type preventer will be equipped with blind rams on top and pipe rams (sized to accommodate the drill pipe size being utilized) on bottom. A 13 3/8" SOW x 13 5/8" 5M casing head will be installed on the 13 3/8" casing and utilized until total depth is reached. All BOP and associated equipment will be tested to 5,000 psi and the annular will be tested to 1,500 psi after setting 13-3/8" casing string & 7" casing string. The 13 3/8" and 9 5/8" casing will be tested to .22 psi per ft of casing string length or 1500 psi whichever is greater, but not to exceed 70% of the minimum yield.

The 9 5/8" casing will be hung in the casing head and the stack will not be nipped down at this point.

The stack will not be isolated and tested after running the 9 5/8" casing, but will be tested along with the 9 5/8" casing. Pipe rams will be operated and checked each 24 hour period and each time the drill string is out of the hole. These function test will be documented on the daily driller's log.

A drilling spool or blowout preventer with 2 side outlets (choke side shall be 3" minimum diameter, kill side shall be at least 2" diameter).

2 kill line valves, one of which will be a check valve.

2 chokes on the manifold along with a pressure gauge.

Upper kelly cock valve with handle available.

Safety valve and subs to fit all drill string connections in use.

All BOP equipment connections subjected to pressure will be flanged, welded, or clamped.

Fill up line above the upper most preventer.

9) Mud program:

Top	Bottom	Mud Wt.	Vis	PV	YP	Fluid Loss	Type System	
	0	680	8.5 to 8.9	32 to 36	1 - 6	1 - 6	NC	Fresh Water
	680	3,229	9.8 to 10.0	28 to 30	1 - 3	1 - 3	NC	Brine
3,200	3,229	10,958	8.9 to 9.1	28 to 36	1 - 3	1 - 3	NC	Cut Brine
	10,958	15,305	10.5 to 12.5	50 to 55	20-22	8 - 10	8 - 10	Cut Brine/ Polymer

10) Logging, coring, and testing program:

No drill stem test are planned

KOP to intermediate: No logs planned

Intermediate to surface: No logs planned

No coring is planned

11) Potential hazards:

No abnormal pressure or temperature is expected. No H2S is known to exist in the area.

Lost circulation can occur in, lost circulation material will be on location and readily available if needed.

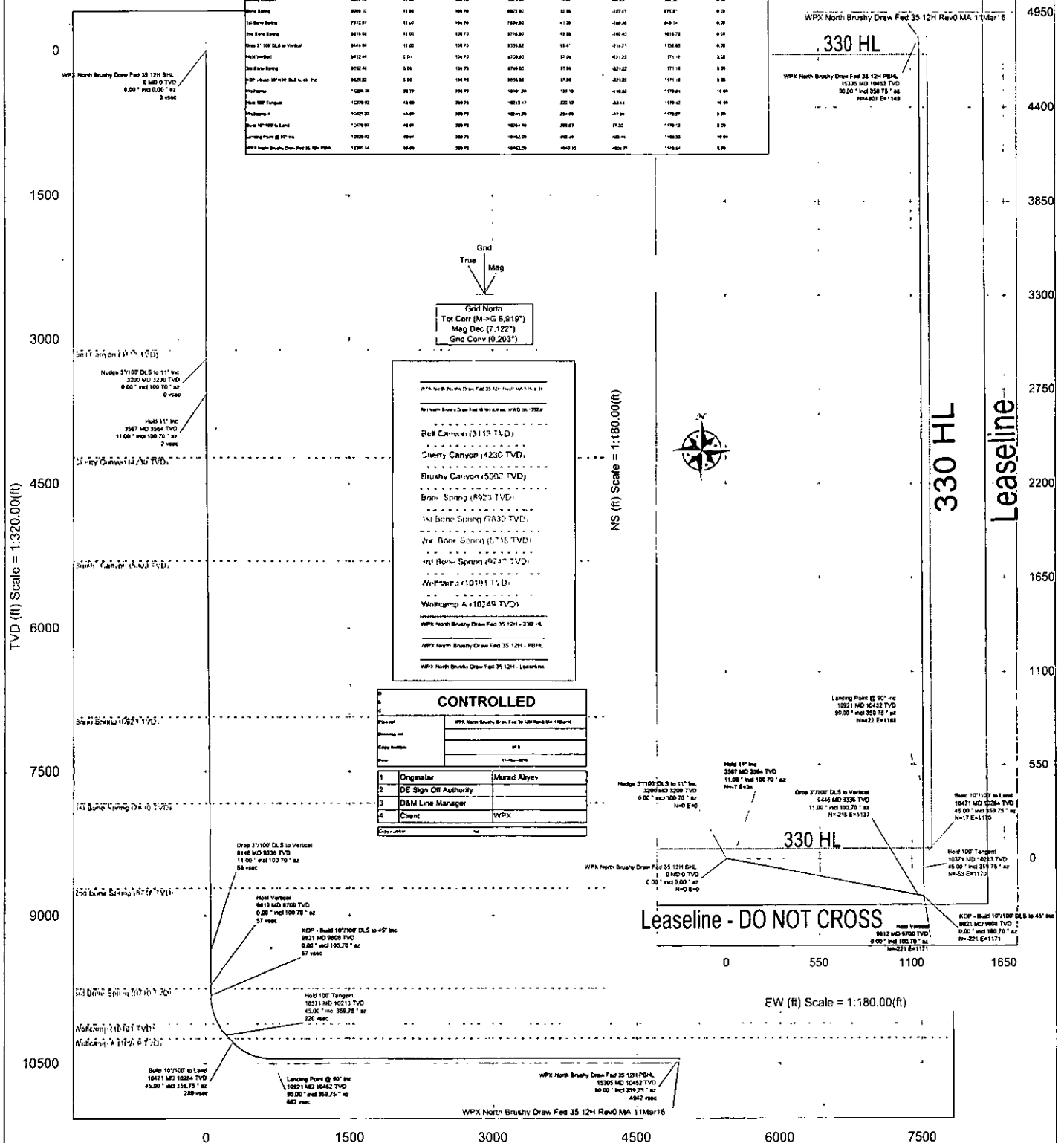
12) Anticipated start date

ASAP

Duration

40 days

Borehole:		Well:		Field:		Structure:	
Original Borehole		North Brushy Draw Fed 35 12H		NM Eddy County (NAD 27)		Orion Pegasus	
Gravity & Magnetic Parameters				Surface Location		State/Province	
Model: HDGM 2015 Dip: 89.854° Date: 11-Mar-2018 MagDec: 7.122° FB: 48187.342m Gravity FB: 998.65mg (8.00685 Based)				NAD27 New Mexico State Plane, Eastern Zone, US Foot Loc: N 52 4 46.0 Northing: 392882.9M Grid Conv: 8.2631° Lon: W 103 87 3.90 Easting: 618427.7M Scale Fact: 8.99992515		State: North Brushy Sloc: Draw Fed 35 12H Plan: Rev'd MA 11Mar18 TYD Ref: RKB(3533H above MSL)	

[illegible]

Vertical Section (ft) Azim = 13.442° Scale = 1:320.00(ft) Origin = 0N/-S, 0E/-W

WPX North Brushy Draw Fed 35 12H Rev0 MA 11Mar16 Proposal Geodetic Report (Non-Def Plan)

Report Date:	March 11, 2016 - 03:13 PM	Survey / DLS Computation:	Minimum Curvature / Lubinski
Client:	WPX	Vertical Section Azimuth:	13.442 ° (Gnd North)
Field:	NM Eddy County (NAD 27)	Vertical Section Origin:	0.000 ft, 0.000 ft
Structure / Slot:	WPX North Brushy Draw Fed 35 12H / WPX North Brushy Draw Fed 35 12H	TVD Reference Datum:	RKB
Well:	WPX North Brushy Draw Fed 35 12H	TVD Reference Elevation:	3033.000 ft above MSL
Borehole:	Original Borehole	Seabed / Ground Elevation:	3011.000 ft above MSL
UWI / API#:	Unknown / Unknown	Magnetic Declination:	7.122 °
Survey Name:	WPX North Brushy Draw Fed 35 12H Rev0 MA 11Mar16	Total Gravity Field Strength:	998.4495mgm (9.80665 Based)
Survey Date:	March 11, 2016	Gravity Model:	GARM
Tort / AHD / DDI / ERD Ratio:	111.998 ° / 6219.849 ft / 6.009 / 0.595	Total Magnetic Field Strength:	48187.242 nT
Coordinate Reference System:	NAD27 New Mexico State Plane, Eastern Zone, US Feet	Magnetic Dip Angle:	59.858 °
Location Lat / Long:	N 32° 4' 46.56471", W 103° 57' 3.50097"	Declination Date:	March 11, 2016
Location Grid N/E Y/X:	N 392892.900 ftUS, E 618427.700 ftUS	Magnetic Declination Model:	HDGM 2015
CRS Grid Convergence Angle:	0.2031 °	North Reference:	Grid North
Grid Scale Factor:	0.99992515	Grid Convergence Used:	0.2031 °
Version / Patch:	2.9.365.0	Total Corr Mag North->Grid North:	6.9186 °
		Local Coord Referenced To:	Structure Reference Point

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
WPX North Brushy Draw Fed 35 12H SHL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	392892.90	618427.70	N 32 4 46.56	W 103 57 3.50
	100.00	0.00	100.70	100.00	0.00	0.00	0.00	0.00	392892.90	618427.70	N 32 4 46.56	W 103 57 3.50
	200.00	0.00	100.70	200.00	0.00	0.00	0.00	0.00	392892.90	618427.70	N 32 4 46.56	W 103 57 3.50
	300.00	0.00	100.70	300.00	0.00	0.00	0.00	0.00	392892.90	618427.70	N 32 4 46.56	W 103 57 3.50
	400.00	0.00	100.70	400.00	0.00	0.00	0.00	0.00	392892.90	618427.70	N 32 4 46.56	W 103 57 3.50
	500.00	0.00	100.70	500.00	0.00	0.00	0.00	0.00	392892.90	618427.70	N 32 4 46.56	W 103 57 3.50
	600.00	0.00	100.70	600.00	0.00	0.00	0.00	0.00	392892.90	618427.70	N 32 4 46.56	W 103 57 3.50
	700.00	0.00	100.70	700.00	0.00	0.00	0.00	0.00	392892.90	618427.70	N 32 4 46.56	W 103 57 3.50
	800.00	0.00	100.70	800.00	0.00	0.00	0.00	0.00	392892.90	618427.70	N 32 4 46.56	W 103 57 3.50
	900.00	0.00	100.70	900.00	0.00	0.00	0.00	0.00	392892.90	618427.70	N 32 4 46.56	W 103 57 3.50
	1000.00	0.00	100.70	1000.00	0.00	0.00	0.00	0.00	392892.90	618427.70	N 32 4 46.56	W 103 57 3.50
	1100.00	0.00	100.70	1100.00	0.00	0.00	0.00	0.00	392892.90	618427.70	N 32 4 46.56	W 103 57 3.50
	1200.00	0.00	100.70	1200.00	0.00	0.00	0.00	0.00	392892.90	618427.70	N 32 4 46.56	W 103 57 3.50
	1300.00	0.00	100.70	1300.00	0.00	0.00	0.00	0.00	392892.90	618427.70	N 32 4 46.56	W 103 57 3.50
	1400.00	0.00	100.70	1400.00	0.00	0.00	0.00	0.00	392892.90	618427.70	N 32 4 46.56	W 103 57 3.50
	1500.00	0.00	100.70	1500.00	0.00	0.00	0.00	0.00	392892.90	618427.70	N 32 4 46.56	W 103 57 3.50
	1600.00	0.00	100.70	1600.00	0.00	0.00	0.00	0.00	392892.90	618427.70	N 32 4 46.56	W 103 57 3.50
	1700.00	0.00	100.70	1700.00	0.00	0.00	0.00	0.00	392892.90	618427.70	N 32 4 46.56	W 103 57 3.50
	1800.00	0.00	100.70	1800.00	0.00	0.00	0.00	0.00	392892.90	618427.70	N 32 4 46.56	W 103 57 3.50
	1900.00	0.00	100.70	1900.00	0.00	0.00	0.00	0.00	392892.90	618427.70	N 32 4 46.56	W 103 57 3.50
	2000.00	0.00	100.70	2000.00	0.00	0.00	0.00	0.00	392892.90	618427.70	N 32 4 46.56	W 103 57 3.50
	2100.00	0.00	100.70	2100.00	0.00	0.00	0.00	0.00	392892.90	618427.70	N 32 4 46.56	W 103 57 3.50
	2200.00	0.00	100.70	2200.00	0.00	0.00	0.00	0.00	392892.90	618427.70	N 32 4 46.56	W 103 57 3.50
	2300.00	0.00	100.70	2300.00	0.00	0.00	0.00	0.00	392892.90	618427.70	N 32 4 46.56	W 103 57 3.50
	2400.00	0.00	100.70	2400.00	0.00	0.00	0.00	0.00	392892.90	618427.70	N 32 4 46.56	W 103 57 3.50
	2500.00	0.00	100.70	2500.00	0.00	0.00	0.00	0.00	392892.90	618427.70	N 32 4 46.56	W 103 57 3.50
	2600.00	0.00	100.70	2600.00	0.00	0.00	0.00	0.00	392892.90	618427.70	N 32 4 46.56	W 103 57 3.50
	2700.00	0.00	100.70	2700.00	0.00	0.00	0.00	0.00	392892.90	618427.70	N 32 4 46.56	W 103 57 3.50
	2800.00	0.00	100.70	2800.00	0.00	0.00	0.00	0.00	392892.90	618427.70	N 32 4 46.56	W 103 57 3.50
	2900.00	0.00	100.70	2900.00	0.00	0.00	0.00	0.00	392892.90	618427.70	N 32 4 46.56	W 103 57 3.50
	3000.00	0.00	100.70	3000.00	0.00	0.00	0.00	0.00	392892.90	618427.70	N 32 4 46.56	W 103 57 3.50
	3100.00	0.00	100.70	3100.00	0.00	0.00	0.00	0.00	392892.90	618427.70	N 32 4 46.56	W 103 57 3.50
	3113.00	0.00	100.70	3113.00	0.00	0.00	0.00	0.00	392892.90	618427.70	N 32 4 46.56	W 103 57 3.50
Bell Canyon Nudge 3"/100° DLS to 11" Inc	3200.00	0.00	100.70	3200.00	0.00	0.00	0.00	0.00	392892.90	618427.70	N 32 4 46.56	W 103 57 3.50
	3300.00	3.00	100.70	3299.95	0.13	-0.49	2.57	3.00	392892.41	618430.27	N 32 4 46.56	W 103 57 3.47
	3400.00	6.00	100.70	3399.63	0.50	-1.94	10.28	3.00	392890.96	618437.98	N 32 4 46.55	W 103 57 3.38
	3500.00	9.00	100.70	3498.77	1.13	-4.36	23.10	3.00	392888.54	618450.00	N 32 4 46.52	W 103 57 3.23
Hold 11" Inc	3566.63	11.00	100.70	3564.38	1.68	-6.51	34.47	3.00	392886.39	618462.17	N 32 4 46.50	W 103 57 3.10
	3600.00	11.00	100.70	3597.14	1.99	-7.69	40.73	0.00	392885.21	618468.43	N 32 4 46.49	W 103 57 3.03
	3700.00	11.00	100.70	3695.30	2.90	-11.23	59.48	0.00	392881.67	618487.17	N 32 4 46.45	W 103 57 2.81
	3800.00	11.00	100.70	3793.47	3.81	-14.78	78.22	0.00	392878.13	618505.92	N 32 4 46.42	W 103 57 2.59
	3900.00	11.00	100.70	3891.63	4.73	-18.32	96.97	0.00	392874.58	618524.66	N 32 4 46.38	W 103 57 2.37
	4000.00	11.00	100.70	3989.79	5.64	-21.86	115.72	0.00	392871.04	618543.41	N 32 4 46.34	W 103 57 2.16
	4100.00	11.00	100.70	4087.95	6.55	-25.40	134.47	0.00	392867.50	618562.16	N 32 4 46.31	W 103 57 1.94
	4200.00	11.00	100.70	4186.12	7.47	-28.94	153.21	0.00	392863.96	618580.90	N 32 4 46.27	W 103 57 1.72
Cherry Canyon	4244.70	11.00	100.70	4230.00	7.88	-30.52	161.59	0.00	392862.38	618589.28	N 32 4 46.26	W 103 57 1.62
	4300.00	11.00	100.70	4284.28	8.38	-32.48	171.96	0.00	392860.42	618599.65	N 32 4 46.24	W 103 57 1.50
	4400.00	11.00	100.70	4382.44	9.30	-36.02	190.71	0.00	392856.88	618618.39	N 32 4 46.20	W 103 57 1.29
	4500.00	11.00	100.70	4480.61	10.21	-39.56	209.46	0.00	392853.34	618637.14	N 32 4 46.17	W 103 57 1.07
	4600.00	11.00	100.70	4578.77	11.12	-43.11	228.20	0.00	392849.80	618655.89	N 32 4 46.13	W 103 57 0.85
	4700.00	11.00	100.70	4676.93	12.04	-46.65	246.95	0.00	392846.26	618674.63	N 32 4 46.09	W 103 57 0.63
	4800.00	11.00	100.70	4775.10	12.95	-50.19	265.70	0.00	392842.72	618693.38	N 32 4 46.06	W 103 57 0.42
	4900.00	11.00	100.70	4873.26	13.87	-53.73	284.45	0.00	392839.17	618712.12	N 32 4 46.02	W 103 57 0.20
	5000.00	11.00	100.70	4971.42	14.78	-57.27	303.19	0.00	392835.63	618730.87	N 32 4 45.99	W 103 56 59.98
	5100.00	11.00	100.70	5069.59	15.69	-60.81	321.94	0.00	392832.09	618749.62	N 32 4 45.95	W 103 56 59.76
	5200.00	11.00	100.70	5167.75	16.61	-64.35	340.69	0.00	392828.55	618768.36	N 32 4 45.92	W 103 56 59.54
	5300.00	11.00	100.70	5265.91	17.52	-67.89	359.44	0.00	392825.01	618787.11	N 32 4 45.88	W 103 56 59.33
Brushy Canyon	5337.78	11.00	100.70	5303.00	17.87	-69.23	366.52	0.00	392823.67	618794.19	N 32 4 45.87	W 103 56 59.24
	5400.00	11.00	100.70	5364.07	18.43	-71.44	378.18	0.00	392821.47	618805.86	N 32 4 45.84	W 103 56 59.11
	5500.00	11.00	100.70	5462.24	19.35	-74.98	396.93	0.00	392817.93	618824.60	N 32 4 45.81	W 103 56 58.89
	5600.00	11.00	100.70	5560.40	20.26	-78.52	415.68	0.00	392814.39	618843.35	N 32 4 45.77	W 103 56 58.67
	5700.00	11.00	100.70	5658.56	21.18	-82.06	434.43	0.00	392810.85	618862.09	N 32 4 45.74	W 103 56 58.45
	5800.00	11.00	100.70	5756.73	22.09	-85.60	453.17	0.00	392807.31	618880.84	N 32 4 45.70	W 103 56 58.24
	5900.00	11.00	100.70	5854.89	23.00	-89.14	471.92	0.00	392803.76	618899.59	N 32 4 45.67	W 103 56 58.02
	6000.00	11.00	100.70	5953.05	23.92	-92.68	490.67	0.00	392800.22	618918.33	N 32 4 45.63	W 103 56 57.80

Comments	MD (ft)	Incl (°)	Azin Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (ft/100ft)	Northing (NUS)	Easting (EUS)	Latitude (N/S ° ' '')	Longitude (E/W ° ' '')
	6100.00	11.00	100.70	6051.22	24.83	-96.22	509.42	0.00	392796.68	618937.08	N 32 4 45.59 W	103 56 57.58
	6200.00	11.00	100.70	6149.38	25.74	-99.77	528.16	0.00	392793.14	618955.22	N 32 4 45.56 W	103 56 57.37
	6300.00	11.00	100.70	6247.54	26.66	-103.31	546.91	0.00	392789.60	618974.57	N 32 4 45.52 W	103 56 57.15
	6400.00	11.00	100.70	6345.71	27.57	-106.85	565.66	0.00	392786.06	618993.32	N 32 4 45.49 W	103 56 56.93
	6500.00	11.00	100.70	6443.87	28.49	-110.39	584.41	0.00	392782.52	619012.06	N 32 4 45.45 W	103 56 56.71
	6600.00	11.00	100.70	6542.03	29.40	-113.93	603.15	0.00	392778.98	619030.81	N 32 4 45.42 W	103 56 56.50
	6700.00	11.00	100.70	6640.19	30.31	-117.47	621.90	0.00	392775.44	619049.55	N 32 4 45.38 W	103 56 56.28
	6800.00	11.00	100.70	6738.35	31.23	-121.01	640.65	0.00	392771.90	619068.30	N 32 4 45.34 W	103 56 56.06
	6900.00	11.00	100.70	6836.52	32.14	-124.55	659.40	0.00	392768.36	619087.05	N 32 4 45.31 W	103 56 55.84
Bone Spring	6988.10	11.00	100.70	6923.00	32.95	-127.67	675.91	0.00	392765.24	619103.56	N 32 4 45.28 W	103 56 55.65
	7000.00	11.00	100.70	6934.68	33.06	-128.10	678.14	0.00	392764.81	619105.79	N 32 4 45.27 W	103 56 55.62
	7100.00	11.00	100.70	7032.85	33.97	-131.64	696.89	0.00	392761.27	619124.54	N 32 4 45.24 W	103 56 55.41
	7200.00	11.00	100.70	7131.01	34.88	-135.18	715.64	0.00	392757.73	619143.28	N 32 4 45.20 W	103 56 55.19
	7300.00	11.00	100.70	7229.17	35.80	-138.72	734.39	0.00	392754.19	619162.03	N 32 4 45.17 W	103 56 54.97
	7400.00	11.00	100.70	7327.34	36.71	-142.26	753.13	0.00	392750.65	619180.78	N 32 4 45.13 W	103 56 54.75
	7500.00	11.00	100.70	7425.50	37.62	-145.80	771.88	0.00	392747.11	619199.52	N 32 4 45.09 W	103 56 54.54
	7600.00	11.00	100.70	7523.66	38.54	-149.34	790.63	0.00	392743.57	619218.27	N 32 4 45.06 W	103 56 54.32
	7700.00	11.00	100.70	7621.83	39.45	-152.88	809.38	0.00	392740.03	619237.02	N 32 4 45.02 W	103 56 54.10
	7800.00	11.00	100.70	7719.99	40.37	-156.43	828.13	0.00	392736.49	619255.76	N 32 4 44.99 W	103 56 53.88
	7900.00	11.00	100.70	7818.15	41.28	-159.97	846.87	0.00	392732.95	619274.51	N 32 4 44.95 W	103 56 53.67
1st Bone Spring	7912.07	11.00	100.70	7830.00	41.39	-160.39	849.14	0.00	392732.52	619276.77	N 32 4 44.95 W	103 56 53.64
	8000.00	11.00	100.70	7916.31	42.19	-163.51	865.62	0.00	392729.40	619293.25	N 32 4 44.92 W	103 56 53.45
	8100.00	11.00	100.70	8014.48	43.11	-167.05	884.37	0.00	392725.86	619312.00	N 32 4 44.88 W	103 56 53.23
	8200.00	11.00	100.70	8112.64	44.02	-170.59	903.12	0.00	392722.32	619330.75	N 32 4 44.84 W	103 56 53.01
	8300.00	11.00	100.70	8210.80	44.94	-174.13	921.86	0.00	392718.78	619349.49	N 32 4 44.81 W	103 56 52.79
	8400.00	11.00	100.70	8308.97	45.85	-177.67	940.61	0.00	392715.24	619368.24	N 32 4 44.77 W	103 56 52.58
	8500.00	11.00	100.70	8407.13	46.76	-181.21	959.36	0.00	392711.70	619386.98	N 32 4 44.74 W	103 56 52.36
	8600.00	11.00	100.70	8505.29	47.68	-184.76	978.11	0.00	392708.16	619405.73	N 32 4 44.70 W	103 56 52.14
	8700.00	11.00	100.70	8603.45	48.59	-188.30	996.85	0.00	392704.62	619424.48	N 32 4 44.67 W	103 56 51.92
	8800.00	11.00	100.70	8701.62	49.50	-191.84	1015.60	0.00	392701.08	619443.22	N 32 4 44.63 W	103 56 51.71
2nd Bone Spring	8816.69	11.00	100.70	8718.00	49.66	-192.43	1018.73	0.00	392700.49	619446.35	N 32 4 44.62 W	103 56 51.67
	8900.00	11.00	100.70	8799.78	50.42	-195.38	1034.35	0.00	392697.54	619461.97	N 32 4 44.59 W	103 56 51.49
	9000.00	11.00	100.70	8887.95	51.33	-198.92	1053.10	0.00	392693.99	619480.71	N 32 4 44.56 W	103 56 51.27
	9100.00	11.00	100.70	8986.11	52.25	-202.46	1071.84	0.00	392690.45	619499.45	N 32 4 44.52 W	103 56 51.05
	9200.00	11.00	100.70	9094.27	53.16	-206.00	1090.59	0.00	392686.91	619518.21	N 32 4 44.49 W	103 56 50.83
	9300.00	11.00	100.70	9192.43	54.07	-209.54	1109.34	0.00	392683.37	619536.95	N 32 4 44.45 W	103 56 50.62
	9400.00	11.00	100.70	9290.60	54.99	-213.09	1128.09	0.00	392679.83	619555.70	N 32 4 44.42 W	103 56 50.40
Drop 3"/100'	9445.86	11.00	100.70	9335.62	55.41	-214.71	1136.68	0.00	392678.21	619564.30	N 32 4 44.40 W	103 56 50.30
DLS to Vertical	9500.00	9.37	100.70	9388.90	55.86	-216.49	1146.09	3.00	392676.43	619573.70	N 32 4 44.38 W	103 56 50.19
	9600.00	6.37	100.70	9487.95	56.52	-219.03	1159.55	3.00	392673.89	619587.16	N 32 4 44.36 W	103 56 50.03
	9700.00	3.37	100.70	9587.57	56.93	-220.61	1167.90	3.00	392672.31	619595.51	N 32 4 44.34 W	103 56 49.94
	9800.00	0.37	100.70	9687.51	57.08	-221.21	1171.12	3.00	392671.70	619598.73	N 32 4 44.33 W	103 56 49.90
Hold Vertical	9812.49	0.00	100.70	9700.00	57.09	-221.22	1171.16	3.00	392671.70	619598.77	N 32 4 44.33 W	103 56 49.90
3rd Bone Spring	9852.49	0.00	100.70	9740.00	57.09	-221.22	1171.16	0.00	392671.70	619598.77	N 32 4 44.33 W	103 56 49.90
	9900.00	0.00	100.70	9787.51	57.09	-221.22	1171.16	0.00	392671.70	619598.77	N 32 4 44.33 W	103 56 49.90
KOP - Build 10"/100' DLS to 45° Inc	9920.82	0.00	100.70	9808.33	57.09	-221.22	1171.16	0.00	392671.70	619598.77	N 32 4 44.33 W	103 56 49.90
	10000.00	7.92	359.75	9887.26	62.39	-215.76	1171.13	10.00	392677.16	619598.74	N 32 4 44.33 W	103 56 49.90
	10100.00	17.92	359.75	9984.60	84.09	-193.43	1171.04	10.00	392599.48	619598.65	N 32 4 44.61 W	103 56 49.90
	10200.00	27.92	359.75	10076.59	121.87	-154.54	1170.87	10.00	392738.37	619598.48	N 32 4 44.99 W	103 56 49.90
Walcamp	10228.00	30.72	359.75	10107.00	135.19	-140.83	1170.81	10.00	392752.08	619598.42	N 32 4 45.13 W	103 56 49.90
	10300.00	37.92	359.75	10160.43	174.80	-100.27	1170.63	10.00	392782.64	619598.24	N 32 4 45.53 W	103 56 49.90
Hold 100' Tangent	10370.82	45.00	359.75	10213.47	220.13	-53.41	1170.42	10.00	392839.50	619598.03	N 32 4 45.99 W	103 56 49.90
	10400.00	45.00	359.75	10234.10	240.18	-32.78	1170.33	0.00	392860.13	619597.94	N 32 4 46.20 W	103 56 49.90
Walcamp A Build 10"/100' to Land	10421.07	45.00	359.75	10249.00	254.65	-17.88	1170.27	0.00	392875.02	619597.88	N 32 4 46.35 W	103 56 49.90
	10470.82	45.00	359.75	10284.18	288.83	17.30	1170.12	0.00	392910.20	619597.73	N 32 4 46.69 W	103 56 49.90
	10500.00	47.92	359.75	10304.28	309.38	38.45	1170.02	10.00	392931.35	619597.63	N 32 4 46.90 W	103 56 49.90
	10600.00	57.92	359.75	10364.50	386.76	118.13	1169.67	10.00	393011.02	619597.28	N 32 4 47.68 W	103 56 49.90
	10700.00	67.92	359.75	10409.97	473.19	207.05	1169.28	10.00	393099.93	619596.89	N 32 4 48.57 W	103 56 49.90
	10800.00	77.92	359.75	10439.31	565.94	302.51	1168.86	10.00	393195.39	619596.47	N 32 4 49.52 W	103 56 49.90
	10900.00	87.92	359.75	10451.62	662.23	401.62	1168.42	10.00	393294.49	619596.03	N 32 4 50.50 W	103 56 49.90
Landing Point @ 90° Inc	10920.82	90.00	359.75	10452.00	682.46	422.44	1168.33	10.00	393315.31	619595.94	N 32 4 50.70 W	103 56 49.91
	11000.00	90.00	359.75	10452.00	759.39	501.62	1167.98	0.00	393394.48	619595.59	N 32 4 51.49 W	103 56 49.91
	11100.00	90.00	359.75	10452.00	856.54	601.62	1167.53	0.00	393494.47	619595.14	N 32 4 52.48 W	103 56 49.91
	11200.00	90.00	359.75	10452.00	953.70	701.62	1167.09	0.00	393594.46	619594.70	N 32 4 53.47 W	103 56 49.91
	11300.00	90.00	359.75	10452.00	1050.85	801.61	1166.64	0.00	393694.45	619594.25	N 32 4 54.46 W	103 56 49.91
	11400.00	90.00	359.75	10452.00	1148.01	901.61	1166.20	0.00	393794.44	619593.81	N 32 4 55.45 W	103 56 49.91
	11500.00	90.00	359.75	10452.00	1245.17	1001.61	1165.75	0.00	393894.44	619593.36	N 32 4 56.44 W	103 56 49.91
	11600.00	90.00	359.75	10452.00	1342.32	1101.61	1165.31	0.00	393994.43	619592.92	N 32 4 57.42 W	103 56 49.91
	11700.00	90.00	359.75	10452.00	1439.48	1201.61	1164.87	0.00	394094.42	619592.48	N 32 4 58.41 W	103 56 49.91
	11800.00	90.00	359.75	10452.00	1536.64	1301.61	1164.42	0.00	394194.41	619592.03	N 32 4 59.40 W	103 56 49.91
	11900.00	90.00	359.75	10452.00	1633.79	1401.61	1163.98	0.00	394294.40	619591.59	N 32 5 0.39 W	103 56 49.91
	12000.00	90.00	359.75	10452.00	1730.95	1501.61	1163.53	0.00	394394.39	619591.14	N 32 5 1.38 W	103 56 49.92
	12100.00	90.00	359.75	10452.00	1828.10	1601.61	1163.09	0.00	394494.38	619590.70	N 32 5 2.37 W	103 56 49.92
	12200.00	90.00	359.75	10452.00	1925.26	1701.61	1162.64	0.00	394594.38	619590.25	N 32 5 3.36 W	103 56 49.92
	12300.00	90.00	359.75	10452.00	2022.42	1801.61	1162.20	0.00	394694.37	619589.81	N 32 5 4.35 W	103 56 49.92
	12400.00	90.00	359.75	10452.00	2119.57	1901.60	1161.75	0.00	394794.36	619589.37	N 32 5 5.34 W	103 56 49.92
	12500.00	90.00										

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
	13900.00	90.00	359.75	10452.00	3576.92	3401.59	1155.09	0.00	396294.23	619582.70	N 32 5 20.18	W 103 56 49.94
	14000.00	90.00	359.75	10452.00	3874.07	3501.59	1154.64	0.00	396394.22	619582.25	N 32 5 21.17	W 103 56 49.94
	14100.00	90.00	359.75	10452.00	3771.23	3601.59	1154.20	0.00	396494.21	619581.81	N 32 5 22.16	W 103 56 49.94
	14200.00	90.00	359.75	10452.00	3888.39	3701.59	1153.75	0.00	396594.20	619581.37	N 32 5 23.15	W 103 56 49.94
	14300.00	90.00	359.75	10452.00	3965.54	3801.59	1153.31	0.00	396694.19	619580.92	N 32 5 24.14	W 103 56 49.94
	14400.00	90.00	359.75	10452.00	4082.70	3901.58	1152.87	0.00	396794.18	619580.48	N 32 5 25.13	W 103 56 49.94
	14500.00	90.00	359.75	10452.00	4159.86	4001.58	1152.42	0.00	396894.18	619580.03	N 32 5 26.12	W 103 56 49.94
	14600.00	90.00	359.75	10452.00	4257.01	4101.58	1151.98	0.00	396994.17	619579.59	N 32 5 27.11	W 103 56 49.94
	14700.00	90.00	359.75	10452.00	4354.17	4201.58	1151.53	0.00	397094.16	619579.14	N 32 5 28.10	W 103 56 49.94
	14800.00	90.00	359.75	10452.00	4451.32	4301.58	1151.09	0.00	397194.15	619578.70	N 32 5 29.09	W 103 56 49.94
	14900.00	90.00	359.75	10452.00	4548.48	4401.58	1150.64	0.00	397294.14	619578.25	N 32 5 30.08	W 103 56 49.95
	15000.00	90.00	359.75	10452.00	4645.64	4501.58	1150.20	0.00	397394.13	619577.81	N 32 5 31.07	W 103 56 49.95
	15100.00	90.00	359.75	10452.00	4742.79	4601.58	1149.75	0.00	397494.12	619577.37	N 32 5 32.06	W 103 56 49.95
	15200.00	90.00	359.75	10452.00	4839.95	4701.58	1149.31	0.00	397594.12	619576.92	N 32 5 33.05	W 103 56 49.95
	15300.00	90.00	359.75	10452.00	4937.11	4801.58	1148.87	0.00	397694.11	619576.48	N 32 5 34.04	W 103 56 49.95
WPX North Brushy Draw Fed 35 12H PBL	15305.14	90.00	359.75	10452.00	4942.10	4806.71	1148.84	0.00	397699.24	619576.45	N 32 5 34.09	W 103 56 49.95

Survey Type: Non-Def Plan

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

Survey Program:

Description	Part	MD From (ft)	MD To (ft)	EOU Freq (ft)	Hole Size (in)	Casing Diameter (in)	Expected Max Inclination (deg)	Survey Tool Type	Borehole / Survey
	1	0.000	22.000	1/100.000	30.000	30.000		NAL_MWD_HDGM-Depth Only	Original Borehole / WPX North Brushy Draw Fed 35 12H Rev0
	1	22.000	15305.136	1/100.000	30.000	30.000		NAL_MWD_HDGM	Original Borehole / WPX North Brushy Draw Fed 35 12H Rev0

Conditions of Approval
North Brushy Draw Fed 35 12H
3001543603

The minimum required fill of cement behind the 7 inch production casing is:

- ☒ Cement should tie-back at least 500 feet into previous casing string. Operator shall provide method of verification.

The minimum required fill of cement behind the 4-1/2 inch production liner is:

- ☒ Cement should tie-back to the top of the liner. Operator shall provide method of verification.