Form 3160-5 (June 2015)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

OCD Artesia

FORM APPROVED OMB NO. 1004-0137 Expires: January 31, 2018

SUNDRY Do not use thi abandoned wei	NMNM102917 6. If Indian, Allottee or Tribe Name						
SUBMIT IN	TRIPLICATE - Other ins	tructions on	page 2		7. If Unit or CA/Agre	ement, Name	and/or No.
Type of Well	8. Well Name and No. RDX FEDERAL 2						
Name of Operator RKI EXPLORATION & PROD	Contact:	CRYSTAL Flon@wpxenergy			9. API Well No. 30-015-40849-0)0-S1	
3a. Address 3500 ONE WILLIAMS CENTE TULSA, OK 74172	ER MD 35	3b. Phone No Ph: 539-57	. (include area code 3-0218)	10. Field and Pool or WILDCAT	Exploratory	Area
4. Location of Well (Footage, Sec., T	., R., M., or Survey Description	i)			11. County or Parish,	State	
Sec 21 T26S R30E SESW 33	0FSL 1500FWL				EDDY COUNTY	Y, NM	
12. CHECK THE AF	PPROPRIATE BOX(ES)	TO INDICA	TE NATURE C	F NOTICE	, REPORT, OR OTI	HER DAT	A
TYPE OF SUBMISSION			ТҮРЕ О	F ACTION			
Notice of Intent ■ Notice of Intent Notice of	☐ Acidize	☐ Dee	pen	☐ Produc	etion (Start/Resume)	☐ Wate	r Shut-Off
_	☐ Alter Casing	☐ Hyd	raulic Fracturing	Reclan	nation	□ Well	Integrity
☐ Subsequent Report	□ Casing Repair	□ New	v Construction	Recom	plete	Other	r
☐ Final Abandonment Notice	☐ Change Plans	🔀 Plug	g and Abandon	Tempo	orarily Abandon		
	☐ Convert to Injection ☐ Plug Back		☐ Water Disposal				
13. Describe Proposed or Completed Op If the proposal is to deepen direction: Attach the Bond under which the wor following completion of the involved testing has been completed. Final Al determined that the site is ready for f Please be advised RKI Explor attached.	ally or recomplete horizontally, rk will be performed or provide doperations. If the operation re bandonment Notices must be fil inal inspection.	give subsurface the Bond No. or sults in a multipl led only after all	locations and meas in file with BLM/BI le completion or rec requirements, inclu	ured and true v A. Required so completion in a ding reclamation	vertical depths of all perti- ubsequent reports must be new interval, a Form 310 on, have been completed	nent markers e filed within 50-4 must be	and zones. 30 days filed once
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FEE 182	₽1.				LE ATTACHE	ט בטם)
	RECLAM.	ATION PROCI	EDURE				
, cardhiva	<u>.</u>	ATTACHED		<u> </u>	CONDITIONS	OF API	PROVA
14. I hereby certify that the foregoing is	Electronic Submission #	363695 verifie	d by the BLM We	ell Informatio	on System		~~~~ Х
Con	For RKI EXPLO nmitted to AFMSS for proc	RATION & PR	DD LLC, sent to	the Carlsbac	d 7 (17PP0100SF)	·oco/	U.
Name (Printed/Typed) CRYSTAL	·	g cy		ITTING TEC	CHI	1160	\
Signature (Electronic S	Submission)		Date 01/12/2	2017	on System d (17PP0100SE) CH I CCCP NINC	CB	
	THIS SPACE FO	OR FEDERA	L OR STATE	OFFICE L	JSE 1	1	
	70				-		971

Approved By 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. Title

Citle 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 and false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Office



RDX 21-1H Plug and Abandon Procedure

Stateline

Section 21 T-26S, R-30E Eddy Co., New Mexico

API # 30-015-40849 Property # 154230

Spud Date: 01/24/13 TD Date: 02/19/13 **Producing Formations:**

Upper Avalon: 8120' -12,100'

KB Elev: 3039' **GL Elev:** 3021' **TD:** 12,149'

PBTD: 12,105' (stuck pkr @ 7560') - KOP 7249'

Marker Joint: N/A

CASING SUMMARY:

Safety Factor = 80% of new applied to burst, collapse and tension parameters in table.

Size	Depth (ft)	Weight (#/ft)	Grade psi	Connecti on Type	Capacity (bbls/ft)	ID (in)	Drift (in)	Burst (psi)	Collapse (psi)	Tension (lbs)
13 3/8"	720'	54.5	J-55	ST&C	0.1545	12.615	12.459	2,184	905	437,600
9 ⁵ / ₈ "	3,365'	40	J-55	LT&C	0.0758	8.835	8.679	3,160	2,050	416,000
5½"	12,149'	17	HCP-110	BT&C	0.0232	4.892	4.767	8,512	5,984	454,400

Surface:

13 3/8": 0'-720'- TOC @ surface

Production:

9 5/8" 0'- 3,365' - TOC @ surface

Production

5 1/2": 0'-12,149' - TOC @ 4998' per CBL

COMPLETION HISTORY TO DATE:

OBJECTIVE: Plug and abandon.

WPX REQUIRES THAT HARD HATS, STEEL TOE BOOTS, FIRE RETARDANT CLOTHING, AND SAFETY GLASSES BE WORN ON LOCATION.

HOLD SAFETY MEETING PRIOR TO COMMENCING PERFORATING, WIRE LINE AND PUMPING OPERATIONS

NO IGNITION SOURCES WITHIN 100 FT OF THE WELLHEAD, FLOWBACK TANKS OR MANIFOLD.

PROCEDURE:

- 1) Test safety anchors and replace as necessary. Set 1 clean frac tank and fill with 480 BFW. Set working pit.
- 2) MIRU Service Unit. Deliver, unload and tally 7,500' 2-3/8" 4.7# J-55 EUE work string.
- 3) Blow well down to pit.
- 4) Pump 160 bbls. 12# mud dn. 5 ½" csg.
- 5) RU WL & attempt to RIH w- 5 ½" GR. Note csg. patch @ 308' & tight spot potential @ 388'. If GR ran successfully, RIH w- 5 1/2" CIBP & set CIBP @ 7,200'.
- 6) If GR Run unsuccessful, Attempt to RIH w- 2 3/8" tbg. & spot 65 sxs cmt. from top of stuck pkr @ 7500' 6900'. WOC Tag
- 7) If unable to RIH w- tbg. RU reverse unit, & RIH w- 4 34" bit w- 6 DC & tbg. & drill out.
- 8) RIH & spot 65 sxs. cmt. plug from 7500; 6900'.
- 9) Circulate well with mud.
- 10) PU & LD tbg. to 5100'
- 11) Spot 25 sxs. over DV Tool (4,998') from 5100' -4850'. Wolf Tay

 12) PU& LD tbg. to 2850'. Spot 25 sxs. from 2850' 2600'.

 Not Required

 13) TOOH & stand back 500' in derrick & LD rest of tbg.

 14) RUWL-RIH & perf @ 770'.

 15) RIH w-Pkr & sqz. 140 sxs cmt. from 770' 570'.

 16) WOC & Tag.

 17) Spot 25 sxs. over DV Tool (4,998') from 5100' -4850'.

 18) Woc & Tag.

 18) LD tbg. to 2850'. Spot 25 sxs. from 2850' 2600'.

 19 PU& LD tbg. to 2850'. Spot 25 sxs. from 2850' 2600'.

 11 All plug (25 sxmin) from 70'.

 12 Symin (25 sxmin) from 70'.

 13) TOOH & stand back 500' in derrick & LD rest of tbg.

 14) RUWL-RIH & perf @ 770'.

 15) RIH w-Pkr & sqz. 140 sxs cmt. from 770' 570'.

 16) WOC & Tag.

 17) Woc & Tag.

 18) Salt Note: Can

 18) Woc & Tag.
 - 17) RUWL RIH & perf @ 360'.
 - 18) RU pump & establish circulation & circulate 40 bbls. mud. Sqz. 160 sxs. cmt. from 360' to surface.
 - 19) RDMO Service Unit. RDMO Cementers.
 - 20) MIRU Welder. Cut-off casing head. WO cap with well name and number, operator name, and date.
 - 21) Pull safety anchors, dress, and reclaim surface location if necessary.

RKI Contact List:

WPX	Title	Office	Cell
Danny Emerson	Production Superintendent	575-885-1313	505-614-4867
Scott Armstrong	Permian Production Engineer	539-573-0162	918-557-9944
Brad Ballinger	Permian Production Engineer	539-573-0135	303-928-0799
Glenn Griffin	Permian Production Engineer	539-573-7547	405-437-9557
Heather Stephens	Permian Production Engineer	539-573-8961	303-898-3918
Josh Walker	Regulatory Specialist	539-573-0108	580-716-0330
Les Peeler	Plugging Consultant	405-454-0008	405-659-5185

Emergency Contacts - New Mexico:

Hospital:

Carlsbad Medical Center

(575) 887-4100

2430 W. Pierce St., Carlsbad, NM 88220

Sheriff's Office:

Lea County Sheriff Dept

(575) 396-3611

Eddy County Sheriff Dept

(575) 887-7551

Emergency Contacts - Texas:

Hospital:

Reeves County Hospital

(432) 447-3551

2323 Texas St, Pecos TX 79772

Sheriff's Office:

Reeves County Sheriff Dept

(432) 445-4901

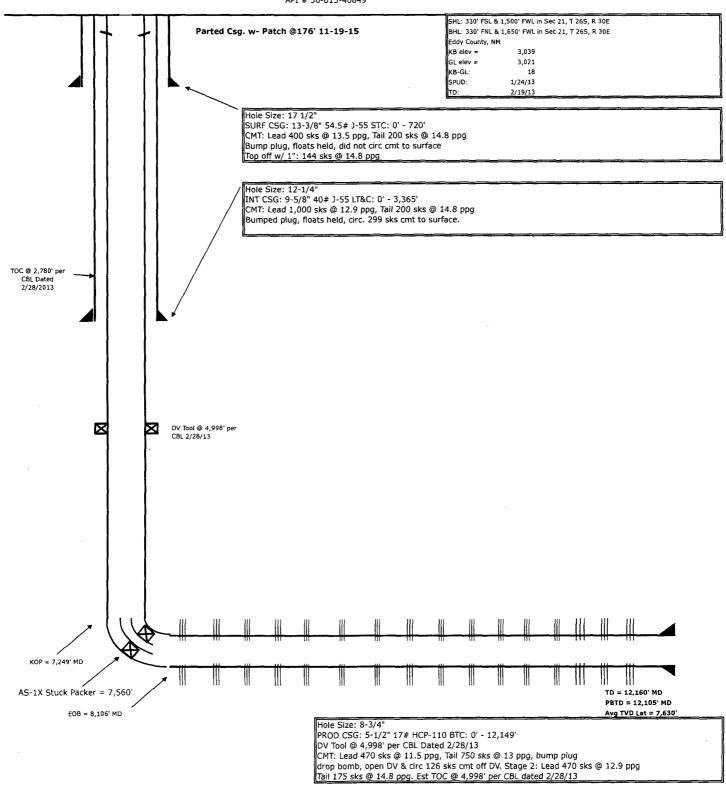
Loving County Sheriff Dept

(432) 377-2411

RDX 21-1H Wellbore Diagram

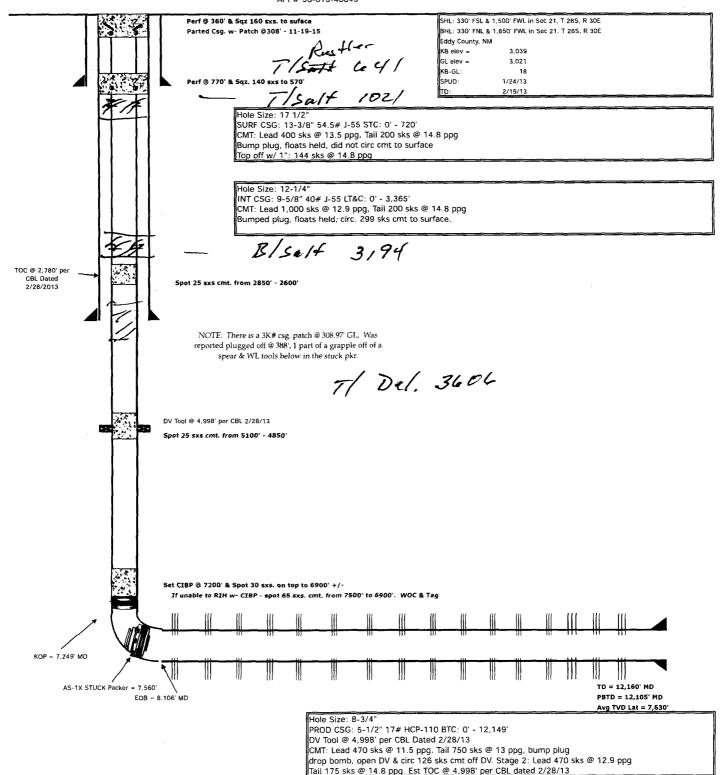
Upper Avalon Eddy County, NM API # 30-015-40849

Current WBD



RDX 21-1H Wellbore Diagram

Upper Avalon Eddy County, NM API # 30-015-40849 **Proposed Plugged WBD**



BUREAU OF LAND MANAGEMENT Carlsbad Field Office 620 East Greene Street Carlsbad, New Mexico 88220 575-234-5972

Permanent Abandonment of Federal Wells Conditions of Approval

Failure to comply with the following Conditions of Approval may result in a Notice of Incidents of Noncompliance (INC) in accordance with 43 CFR 3163.1.

1. Plugging operations shall commence within <u>ninety (90)</u> days from the approval date of this Notice of Intent to Abandon.

If you are unable to plug the well by the 90th day provide this office, prior to the 90th day, with the reason for not meeting the deadline and a date when we can expect the well to be plugged. Failure to do so will result in enforcement action.

The rig used for the plugging procedure cannot be released and moved off without the prior approval of the authorized officer. Failure to do so may result in enforcement action.

- 2. <u>Notification</u>: Contact the appropriate BLM office at least 24 hours prior to the commencing of any plugging operations. For wells in Chaves and Roosevelt County, call 575-627-0272; Eddy County, call 575-361-2822; Lea County, call 575-393-3612.
- 3. <u>Blowout Preventers</u>: A blowout preventer (BOP), as appropriate, shall be installed before commencing any plugging operation. The BOP must be installed and maintained as per API and manufacturer recommendations. The minimum BOP requirement is a 2M system for a well not deeper than 9,090 feet; a 3M system for a well not deeper than 13,636 feet; and a 5M system for a well not deeper than 22,727 feet.
- 4. <u>Mud Requirement:</u> Mud shall be placed between all plugs. Minimum consistency of plugging mud shall be obtained by mixing at the rate of 25 sacks (50 pounds each) of gel per 100 barrels of **brine** water. Minimum nine (9) pounds per gallon.
- 5. <u>Cement Requirement</u>: Sufficient cement shall be used to bring any required plug to the specified depth and length. Any given cement volumes on the proposed plugging procedure are merely estimates and are not final. Unless specific approval is received, no plug except the surface plug shall be less than 25 sacks of cement. Any plug that requires a tag will have a minimum WOC time of 4 hours.

In lieu of a cement plug across perforations in a cased hole (not for any other plugs), a bridge plug set within 50 feet to 100 feet above the perforations shall be capped with 25 sacks of cement. If a bailer is used to cap this plug, 35 feet of cement shall be sufficient. Before pumping or bailing cement on top of CIBP, tag will be required to verify depth. Based on depth, a tag of the cement may be deemed necessary.

Unless otherwise specified in the approved procedure, the cement plug shall consist of either Neat Class "C", for up to 7,500 feet of depth or Neat Class "H", for deeper than 7,500 feet plugs.

6. <u>Dry Hole Marker</u>: All casing shall be cut-off at the base of the cellar or 3 feet below final restored ground level (whichever is deeper). The BLM is to be notified a minimum of 4 hours prior to the wellhead being cut off to verify that cement is to surface in the casing and all annuluses. Wellhead cut off shall commence within ten (10) calendar days of the well being plugged. If the cut off cannot be done by the 10th day, the BLM is to be contacted with justification to receive an extension for completing the cut off.

The well bore shall then be capped with a 4-inch pipe, 10-feet in length, 4 feet above ground and embedded in cement, unless otherwise noted in COA (requirements will be attached). The following information shall be permanently inscribed on the dry hole marker: well name and number, name of the operator, lease serial number, surveyed location (quarter-quarter section, section, township and range or other authorized survey designation acceptable to the authorized officer such as metes and bounds).

- 7. <u>Subsequent Plugging Reporting:</u> Within 30 days after plugging work is completed, file one original and three copies of the Subsequent Report of Abandonment, Form 3160-5 to BLM. The report should give in detail the manner in which the plugging work was carried out, the extent (by depths) of cement plugs placed, and the size and location (by depths) of casing left in the well. **Show date well was plugged.**
- 8. <u>Trash:</u> All trash, junk and other waste material shall be contained in trash cages or bins to prevent scattering and will be removed and deposited in an approved sanitary landfill. Burial on site is not permitted.

Following the submission and approval of the Subsequent Report of Abandonment, surface restoration will be required. See attached reclamation objectives.



BUREAU OF LAND MANAGEMENT

Carlsbad Field Office 620 E. Greene St. Carlsbad, New Mexico 88220-6292 www.blm.gov/nm



In Reply Refer To: 1310

Reclamation Objectives and Procedures

Reclamation Objective: Oil and gas development is one of many uses of the public lands and resources. While development may have a short- or long-term effect on the land, successful reclamation can ensure the effect is not permanent. During the life of the development, all disturbed areas not needed for active support of production operations should undergo "interim" reclamation in order to minimize the environmental impacts of development on other resources and uses. At final abandonment, well locations, production facilities, and access roads must undergo "final" reclamation so that the character and productivity of the land and water are restored.

The long-term objective of final reclamation is to set the course for eventual ecosystem restoration, including the restoration of the natural vegetation community, hydrology, and wildlife habitats. In most cases this means returning the land to a condition approximating or equal to that which existed prior to the disturbance. The final goal of reclamation is to restore the character of the land and water to its predisturbance condition. The operator is generally not responsible for achieving full ecological restoration of the site. Instead, the operator must achieve the short-term stability, visual, hydrological, and productivity objectives of the surface management agency and take steps necessary to ensure that long-term objectives will be reached through natural processes.

To achieve these objectives, remove any and all contaminants, scrap/trash, equipment, pipelines and powerlines. Strip and remove caliche, contour the location to blend with the surrounding landscape, redistribute the native soils, provide erosion control as needed, rip and seed as specified in the original APD COA. This will apply to well pads, facilities, and access roads. Barricade access road at the starting point. If reserve pits have not reclaimed due to salts or other contaminants, submit a plan for approval, as to how you propose to provide adequate restoration of the pit area.

- The Application for Permit to Drill or Reenter (APD, Form 3160-3), Surface Use Plan of
 Operations must include adequate measures for stabilization and reclamation of disturbed lands.
 Oil and Gas operators must plan for reclamation, both interim and final, up front in the APD
 process as per Onshore Oil and Gas Order No. 1.
- 2. For wells and/or access roads not having an approved plan, or an inadequate plan for surface reclamation (either interim or final reclamation), the operator must submit a proposal describing the procedures for reclamation. For interim reclamation, the appropriate time for submittal would be when filing the Well Completion or Recompletion Report and Log (Form 3160-4). For final reclamation, the appropriate time for submittal would be when filing the Notice of Intent, or the Subsequent Report of Abandonment, Sundry Notices and Reports on Wells (Form 3160-5). Interim reclamation is to be completed within 6 months of well completion, and final reclamation is to be completed within 6 months of well abandonment.
- 3. The operator must file a Subsequent Report Plug and Abandonment (Form 3160-5) following the plugging of a well.
- 4. Previous instruction had you waiting for a BLM specialist to inspect the location and provide you with reclamation requirements. If you have an approved Surface Use Plan of Operation and/or an approved Sundry Notice, you are free to proceed with reclamation as per approved APD. If you have issues or concerns, contact a BLM specialist to assist you. It would be in your interest to have a BLM specialist look at the location and access road prior to the removal of reclamation

equipment to ensure that it meets BLM objectives. Upon conclusion submit a Form 3160-5, Subsequent Report of Reclamation. This will prompt a specialist to inspect the location to verify work was completed as per approved plans.

- 5. The approved Subsequent Report of Reclamation will be your notice that the native soils, contour and seedbed have been reestablished. If the BLM objectives have not been met the operator will be notified and corrective actions may be required.
- 6. It is the responsibility of the operator to monitor these locations and/or access roads until such time as the operator feels that the BLM objective has been met. If after two growing seasons the location and/or access roads are not showing the potential for successful revegetation, additional actions may be needed. When you feel the BLM objectives have been met submit a Final Abandonment Notice (FAN), Form 3160-5, stating that all reclamation requirements have been achieved and the location and/or access road is ready for a final abandonment inspection.
- 7. At this time the BLM specialist will inspect the location and/or access road. If the native soils and contour have been restored, and the revegetation is successful, the FAN will be approved, releasing the operator of any further liability of the location and/or access road. If the location and/or access road have not achieved the objective, you will be notified as to additional work needed or additional time being needed to achieve the objective.

If there are any questions, please feel free to contact any of the following specialists:

Jim Amos Supervisory Petroleum Engineering Tech 575-234-5909, 575-361-2648 (Cell)

Arthur Arias Environmental Protection Specialist 575-234-6230

Linda Denniston Environmental Protection Specialist 575-234-5974

Henryetta Price Environmental Protection Specialist 575-234-5951

Dara Glass Environmental Protection Specialist 575-234-5924

Shelly Tucker Environmental Protection Specialist 575-234-5979