Form 3160-5
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

SUNDRY NOTICES AND REPORTS ON WELLS

Carlsbad Field Office
Operator Copy

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.

5. Lease Serial No.
NMNM91978

6. If Indian, Allottee or Tribe Name

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

1. Type of Well
☒ Oil Well ☐ Gas Well ☐ Other

8. Well Name and No.
LONGVIEW FEDERAL 1-44

2. Name of Operator
RKI EXPLORATION & PROD LLC
Contact: ASHLEE FECHINO
E-Mail: ashlee.fechino@wpxenergy.com

9. API Well No.
30-015-38070

3a. Address
3500 ONE WILLIAMS CENTER MD 35
TULSA, OK 74172

3b. Phone No. (include area code)
Ph: 539-573-0212

10. Field and Pool, or Exploratory
~~BRUSH DRAW~~ WOLFCAMP GAS
(98117)

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
Sec 1 T23S R28E 360FSL 330FEL

11. County or Parish, and State
EDDY COUNTY 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
	☐ 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 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 shall 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 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.)

Attn: Mr. Chris Walls

Follow up from 8/19/2016 phone conversation

Current WBD and recompletion procedure for the Longview Federal 1-44 attached for post recompletion 9-16-16 thru 10-31-16

2795'
7737'
7424-7452

14. I hereby certify that the foregoing is true and correct.

Electronic Submission #349023 verified by the BLM Well Information System
For RKI EXPLORATION & PROD LLC, sent to the Carlsbad
Committed to AFMSS for processing by DEBORAH MCKINNEY on 08/31/2016 ()

Name *(Printed/Typed)* ASHLEE FECHINO — Title REGULATORY SPECIALIST STAFF

Signature (Electronic Submission) — Date 08/25/2016

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

ACCEPTED FOR RECORD
SEP 7 2016
BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE

Approved By mustafa Hague — Title PETROLEUM ENGINEER — Date 09-07-2016

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.

**** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ****

Prepared By: Jaime McAlpine, PE
Email: jmcalpine@rkixp.com

RKI Exploration & Production, LLC
Longview #1-44

Recompletion Procedure

Delaware sands
East Herradura Bend Field

Section 1-T23S-R28E
Eddy County, New Mexico

API # 30-015-38070
Property No. 210730

Spud Date: 8/22/10
Comp Date: 3/16/11

Producing Formation: 1st Bone Spring 7,424'-7,452'

KB Elev: 3,059'
GL Elev: 3,042'

TD: 7,737'
PBTD: 7,691'

Marker Joint: DV Tool @ 4,968' per CBL

CASING SUMMARY:

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

Size	Depth (ft)	Weight (#/ft)	Grade psi	Connection Type	Capacity (bbls/ft)	ID (in)	Drift (in)	Burst (psi)	Collapse (psi)	Tension (lbs)
13 3/8"	299'	54.5	J-55	STC	0.1546	12.615	12.459	2,185	905	411,000
9 5/8"	2,715'	40	J-55	STC	0.0758	8.835	8.679	3,160	2,055	389,000
5½"	7,737'	17	N-80	LTC	0.0233	4.892	4.767	6,190	5,025	278,400

Surface: **13 3/8" 54.5# J-55 STC: 0-299' –** TOC @ surface
Intermediate: **9 5/8" 40# J-55 STC:** 0' – **2,715'**- TOC @ surface
Production: **5 1/2" 17# N-80 LTC:** 0' – 7,737' - DV Tool @ 4,968'; **TOC @ 125' per CBL**

COMPLETION HISTORY TO DATE: **1st Bone Spring (7,424'-7,452')** perforated and fracture stimulated 2/11. Well on rod pump production.

OBJECTIVE: Perforate, fracture stimulate and test the **Avalon and Delaware sands**

NOTE: **Maximum allowable surface pressure for Delaware sand treatments down 5½" 17# N-80 is 6,150 psi. Test surface lines & frac pumps to 6,500 psi.**

Make sure frac company installs a pressure transducer and a manual gauge on the annulus line so that the annulus pressure is monitored and recorded during the fracs.

RKI 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. SI flowline. Pressure test tubing to 400 psi using PU to pressure up tubing. Open flowline. Set clean frac tank and lay metal flowline.

2) MI RU Service Unit. Deliver 5 jts. new 2 7/8" 6.5# N-80 tubing. Deliver and set flowback frac tank. HU flowline. Set twenty four frac tanks and fill each with 480 BFW.

3) HO PU. Unseat pump. MI RU Hot oiler. Hot oil tubing with 40 BO. RD MO Hot Oiler.

4) ROH w/ pump. Load pump with diesel when get to surface.

5) ND WH and NU 5M# Hydraulic BOP.

6) Release TA. TIH w/ 5 jts tubing and tag PBTD. LD 5 jts. new tubing.

7) MI RU wireline and RU 5K# lubricator. Test lubricator 250 psi low and 4,000 psi high. RIH w/ JB/GR to 6,750'. RIH w/ wireline set 10K# Composite BP and set @ 6,665'.

8) MI RU HP Pump Truck. Load casing with 2% KCL water and test casing & plug to 3,500 psi for 15 minutes. RD MO HP Pump Truck.

9) MI RU Tuboscope. TOH and inspect tubing. RD MO Tuboscope. LD bad joints and replace w/ new 2 7/8" 6.5# N-80 tubing as required.

10) RIH with 3 1/8" HSC gun loaded with 22.7 gram Titan EXP 3323-301T charges, 0.40 EHD, 35.60" pen and 60° phasing and perforate Avalon sand as listed below. **(NOTE: Perforations correlated to Halliburton DS Neutron/ Spectral Density dated 9/13/10)** POOH, ensure all shots fired.

Avalon sand (6,470'-6,482') Perforations

Set	Upper	Lower	Feet	SPF	Shots	Phasing
1	6,468'	6,482'	14	3	42	60°
TOTAL			14		42	60°

11) MI RU Frac company. Install 10K# WHIT. Pressure test lines/pumps to 6,500 psi. Fracture stimulate Avalon sand with 2,000 gals 15% NE FE acid + 60 ct. B.S. (1.3 SG) + 47,350 gals. 30# linear gel/x-link gel + 50,000# 16/30 Ottawa sand + 15,000# RC 16/30 Ottawa sand @ 45-55 BPM @ 2,800 psi **(6,150 psi maximum STP)** in the following stages:

Avalon sand Fracture Treatment Schedule

Stage	Fluid Type	Stage Vol (gal)	Cum Vol (gal)	Prop. Conc. (ppg)	Proppant/Fluid Type	Stage (lbs)	Cum Prop. (lbs)	Rate (BPM)
1	Linear (30#)	2,772	2,772		Load/Bkdn Well			5
2	Acid	1,512	4,284		15% HCL Acid/60 BS			15.1
3*	Linear (30#)	9,618	13,902		Acid Flush			15.5
4	X-Link (30#)	4,998	18,900		Pad			54.5
5	X-Link (30#)	5,208	24,108	1.0	16/30	5,000	5,000	55.3
6	X-Link (30#)	5,460	29,568	2.0	16/30	10,000	15,000	53.8
7	X-Link (30#)	5,418	34,986	3.0	16/30	15,000	30,000	55.3
8	X-Link (30#)	5,796	40,782	4.0	16/30	20,000	50,000	54.9
9	X-Link (30#)	3,696	44,478	5.0	16/30 RC	15,000	65,000	54.4
10	Acid	504	44,982		Spot Acid			45
11	Linear (30#)	5,502	50,484		Flush			53.6

***(NOTE: SD, Surge (5 seconds) ball sealers after pump Stage 3, Wait 15 minutes, start Stage 4. If necessary RIH w/ JB/GR and knock balls off perforations)**

SD, Record ISIP, 5 min SIP, 10 SIP, 15 min SIP.

12) RU 5K# lubricator. Test lubricator 250 psi low and 4,000 psi high. RIH w/ JB/GR to 6,425'. RIH w/ wireline set 10K# Composite frac plug w/ built in ball and set @ 6,425'.

13) Load casing with 2% KCL water and test casing & plug to 3,500 psi for 10 minutes.

14) RIH with 3 1/8" HSC gun loaded with 22.7 gram Titan EXP 3323-301T charges, 0.40 EHD, 35.60" pen and 60° phasing and perforate Pinnacle A1 (Lentini) sand as listed below. **(NOTE: Perforations correlated to Halliburton DS Neutron/ Spectral Density dated 9/13/10).** POOH, ensure all shots fired.

Pinnacle A1 (Lentini) sand (6,266'-6,320' OA) Perforations

Set	Upper	Lower	Feet	SPF	Shots	Phasing
1	6,313'	6,320'	7	1	7	60°
2	6,297'	6,310'	13	2	26	
3	6,266'	6,291'	25	1	25	60°
TOTAL			45		58	60°

15) Pressure test lines/pumps to 6,500 psi. Fracture stimulate Pinnacle A1 (Lentini) sand with 4,000 gals 15% NE FE acid + 85 ct. B.S. (1.3 SG) + 112,150 gals. 30# linear gel/x-link gel + 160,000# 16/30 Ottawa sand + 20,000# RC 16/30 Ottawa sand @ 70-80 BPM @ 3,200 psi **(6,150 psi maximum STP)** in the following stages:

Pinnacle A1 (Lentini) sand Fracture Treatment Schedule

Stage	Fluid Type	Stage Vol (gal)	Cum Vol (gal)	Prop. Conc. (ppg)	Proppant/Fluid Type	Stage (lbs)	Cum Prop. (lbs)	Rate (BPM)
1	Linear (30#)	2,520	2,520		Load/Bkdn Well			15
2	Acid	3,486	6,006		15% HCL Acid/85 BS			15.1
3*	Linear (30#)	6,510	12,516		Acid Flush			15.4
4	Linear (30#)	6,510	19,026		Pad			78.8
5	X-Link (30#)	22,008	41,034		Pad			76.2
6	X-Link (30#)	16,716	57,750	1.0	16/30	16,000	16,000	75.5
7	X-Link (30#)	17,430	75,180	2.0	16/30	32,000	48,000	75.3
8	X-Link (30#)	18,186	93,366	3.0	16/30	48,000	96,000	76.4
9	X-Link (30#)	27,888	121,254	4.0	16/30	64,000	160,000	76.6
10	Linear (30#)	9,114	130,368		Flush			62

***(NOTE: SD, Surge (5 seconds) ball sealers after pump Stage 3, Wait 15 minutes, start Stage 4. If necessary RIH w/ JB/GR and knock balls off perforations)**

SD, Record ISIP, 5 min SIP, 10 SIP, 15 min SIP.

16) RU 5K# lubricator. Test lubricator 250 psi low and 4,000 psi high. RIH w/ JB/GR to 6,240'. RIH w/ wireline set 10K# Composite frac plug w/ built in ball and set @ 6,225'.

17) Load casing with 2% KCL water and test casing & plug to 3,500 psi for 10 minutes.

18) RIH with 3 1/8" HSC gun loaded with 22.7 gram Titan EXP 3323-301T charges, 0.40 EHD, 35.60" pen and 60° phasing and perforate Pinnacle A2 and B sands as listed below. **(NOTE: Perforations correlated to Halliburton DS Neutron/ Spectral Density dated 9/13/10).** POOH, ensure all shots fired.

Pinnacle A2 and B sands (6,092'-6,190' OA) Perforations

Set	Upper	Lower	Feet	SPF	Shots	Phasing
1	6,187'	6,190'	3	2	6	60°
2	6,172'	6,180'	8	1	8	60°
3	6,147'	6,158'	11	2	22	60°
4	6,109'	6,129'	20	1	20	60°
5	6,092'	6,102'	10	2	20	60°
TOTAL			52		76	60°

19) Pressure test lines/pumps to 6,500 psi. Fracture stimulate Pinnacle A2 and B sands with 5,000 gals 15% NE FE acid + 115 ct. B.S. (1.3 SG) + 137,000 gals. 30# linear gel/x-link gel + 200,000# 16/30 Ottawa sand + 25,000# RC 16/30 Ottawa sand @ 75-80 BPM @ 3,200 psi **(6,150 psi maximum STP)** in the following stages:

Pinnacle A2 B sands Fracture Treatment Schedule

Stage	Fluid Type	Stage Vol (gal)	Cum Vol (gal)	Prop. Conc. (ppg)	Proppant/Fluid Type	Stage (lbs)	Cum Prop. (lbs)	Rate (BPM)
1	Linear (30#)	1,638	1,638		Load/Bkdn Well			14.4
2	Acid	5,376	7,014		15% HCL Acid/115 BS			15.1
3*	Linear (30#)	6,510	13,524		Acid Flush			15.5
4	Linear (30#)	6,510	20,034		Pad			79.2
5	X-Link (30#)	29,988	50,022		Pad			79
6	X-Link (30#)	28,224	78,246	1.0	16/30	20,000	20,000	79.2
7	X-Link (30#)	21,798	100,044	2.0	16/30	40,000	60,000	78.8
8	X-Link (30#)	22,722	122,766	3.0	16/30	60,000	120,000	79
9	X-Link (30#)	19,950	142,716	4.0	16/30	80,000	200,000	79
10	X-Link (30#)	11,340	154,056	5.0	16/30 RC	25,000	225,000	79.3
11	Linear (30#)	5,880	159,936		Flush			79.2

***(NOTE: SD, Surge (5 seconds) ball sealers after pump Stage 3, Wait 15 minutes, start Stage 4. If necessary, RIH w/ JB/GR and knock balls off perforations.)**

20) SD, Record ISIP, 5 min SIP, 10 SIP, 15 min SIP.

21) RU 5K# lubricator. Test lubricator 250 psi low and 4,000 psi high. RIH w/ JB/GR to 6,075'. RIH w/ wireline set 10K# Composite frac plug w/ built in ball and set @ 6,075'.

22) Load casing with 2% KCL water and test casing & plug to 3,500 psi for 10 minutes.

23) RIH with 3 1/8" HSC gun loaded with 22.7 gram Titan EXP 3323-301T charges, 0.40 EHD, 35.60" pen and 60° phasing and perforate Pinnacle C sand as listed below. **(NOTE: Perforations correlated to Halliburton DS Neutron/ Spectral Density dated 9/13/10).** POOH, ensure all shots fired. RD MO wireline.

Pinnacle C sand (5,972'-6,052' OA) Perforations

Set	Upper	Lower	Feet	SPF	Shots	Phasing
1	6,042'	6,052'	10	1	10	60°
2	6,024'	6,038'	14	1	14	60°
3	6,012'	6,017'	5	1	5	60°
4	5,994'	6,008'	14	2	28	60°
5	5,984'	5,991'	7	1	7	60°
6	5,972'	5,981'	9	1	9	60°

TOTAL			59		73	60°

24) Pressure test lines/pumps to 6,500 psi. Fracture stimulate Pinnacle C sand with 3,000 gals 15% NE FE acid + 110 ct. B.S. (1.3 SG) + 134,850 gals. 30# linear gel/x-link gel + 200,000# 16/30 Ottawa sand + 20,000# RC 16/30 Ottawa sand @ 75-80 BPM @ 3,200 psi (**6,150 psi maximum STP**) in the following stages:

Pinnacle C sand Fracture Treatment Schedule

Stage	Fluid Type	Stage Vol (gal)	Cum Vol (gal)	Prop. Conc. (ppg)	Proppant/Fluid Type	Stage (lbs)	Cum Prop. (lbs)	Rate (BPM)
1	Linear (30#)	2,562	2,562		Load/Bkdn Well			3
2	Acid	5,376	7,938		15% HCL Acid/110 BS			15
3*	Linear (30#)	6,006	13,944		Acid Flush			15.5
4	Linear (30#)	6,006	19,950		Pad			79.2
5	X-Link (30#)	35,994	55,944		Pad			81.1
6	X-Link (30#)	25,074	81,018	1.0	16/30	24,000	24,000	79.7
7	X-Link (30#)	26,166	107,184	2.0	16/30	48,000	72,000	78.6
8	X-Link (30#)	27,258	134,442	3.0	16/30	72,000	144,000	79.5
9	X-Link (30#)	20,958	155,400	4.0	16/30	96,000	240,000	80
10	X-Link (30#)	12,978	168,378	5.0	16/30 RC	20,000	260,000	79.2
11	Linear (30#)	6,006	174,384		Flush			80

***(NOTE: SD, Surge (5 seconds) ball sealers after pump Stage 3, Wait 15 minutes, start Stage 4. If necessary, RIH w/ JB/GR and knock balls off perforations.)**

25) SD, Record ISIP, 5 min SIP, 10 SIP, 15 min SIP. RD MO wireline unit. RD WHIT. RD MO frac company. SI well overnight.

26) Install flow valve/choke w/ carbide seat/stem. Open well, flow back and test.

27) **IF NECESSARY,** MI RU pump truck. Pump 120 bbls. 10.2 ppg brine water down caing to kill well. Feed in brine water as necessary to keep well dead.

28) MI RU pump, tank, and swivel.

29) TIH w/ 4¾" bit, 4 DC, XO, tubing. Clean out sand and DO Comp frac plugs and push to CP. Circulate hole clean.

30) TOH, LD BHA. RD MO pump, tank, swivel.

31) Feed in brine water as necessary to keep well dead. TIH w/ purge valve, 2 jts tubing, D-2705-G Cavins combination GA/desander, SSN, 16 jts tubing, TAC, 175 jts. 2 7/8" 6.5# L-80 EUE. EOMA @ 5,983'+/-, SN @ 5,921'+/-, TAC @ 5,425'+/-.

32) ND BOP. Set TAC w/ 10K# tension @ 5,425'. NU B-1 flange. RD MO pump truck. Install pumping tee.

33) Load downhole pump with diesel. RIH w/ 2½" x 1½" x 20' RHBC pump, on/off tool, 1' 7/8" lift sub, 160 ct. ¾" Norris 97 rods, 80 ct. 7/8" Norris 97 rods, 26' x 16' polished rod/liner. Space and seat pump. Load tubing and pressure pump to 400 psi. HO PU set @ 168" stroke @ 6.2 spm.

34) RD MO Service Unit. Start PU.

35) Produce well for a while

36) MIRU pulling unit and drill out CP at 6,665' and cleanout well to PBTD

37) TOOH laying down tubing

38) RIH with wireline and set CP at 6,393' (in between Avalon and Pinnacle AT perfs)

39) RIH with tubing and set TAC – 5,740', SN – 6,290', and EOT – 6,359'

40) RIH with rods and pump

41) RDMO

Emergency Contacts – New Mexico:

Hospital:	Carlsbad Medical Center 2430 W. Pierce St., Carlsbad, NM 88220	(575) 887-4100
Sheriff's Office:	Lea County Sheriff Dept Eddy County Sheriff Dept	(575) 396-3611 (575) 887-7551

Emergency Contacts – Texas:

Hospital:	Reeves County Hospital 2323 Texas St, Pecos TX 79772	(432) 447-3551
Sheriff's Office:	Reeves County Sheriff Dept Loving County Sheriff Dept	(432) 445-4901 (432) 377-2411