

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
811 S. First St., Artesia, NM 88210  
District III  
1000 Rio Brazos Rd., Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals & Natural Resources

Form C-104  
Revised August 1, 2011

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Submit one copy to appropriate District Office

☐ AMENDED REPORT

**I. REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT**

<sup>1</sup> Operator name and Address <b>RKI Exploration &amp; Production</b> <b>210 Park Ave., suite 900</b> <b>Oklahoma City, OK 73102</b>		<sup>2</sup> OGRID Number <b>246289</b>	
<sup>4</sup> API Number <b>30 - 015-27030</b>		<sup>3</sup> Reason for Filing Code/ Effective Date <b>Recomplete/ 3/23/2104</b> <i>2014</i>	
<sup>5</sup> Pool Name <b>Herradura Bend, Delaware East</b>	<sup>6</sup> Pool Code <b>30670</b>		
<sup>7</sup> Property Code <b>306217</b>	<sup>8</sup> Property Name <b>Santa Fe Federal</b>	<sup>9</sup> Well Number <b>4</b>	

**II. <sup>10</sup> Surface Location**

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South Line	Feet from the	East/West line	County
<b>H</b>	<b>35</b>	<b>22S</b>	<b>28E</b>		<b>1730</b>	<b>NORTH</b>	<b>910</b>	<b>EAST</b>	<b>EDDY</b>

**<sup>11</sup> Bottom Hole Location**

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

<sup>12</sup> Lse Code <b>F</b>	<sup>13</sup> Producing Method Code ESP	<sup>14</sup> Gas Connection Date 3/23/2014	<sup>15</sup> C-129 Permit Number	<sup>16</sup> C-129 Effective Date	<sup>17</sup> C-129 Expiration Date
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**III. Oil and Gas Transporters**

<sup>18</sup> Transporter OGRID	<sup>19</sup> Transporter Name and Address	<sup>20</sup> O/G/W
<b>35246</b>	SHELL TRADING US COMPANY PO BOX 4604 HOUSTON, TX 77010	<b>O</b>
<b>151618</b>	ENTERPRISE FIELD SERVICES 614 Reilly Ave. Farmington, NM 87401	<b>G</b>

RECEIVED

MAY 08 2014

NMOCD ARTESIA

**IV. Well Completion Data** ORIGINAL/RECOMPLETE

<sup>21</sup> Spud Date 7/9/92 / 12/24/2013	<sup>22</sup> Ready Date 7/24/92 / 3/9/2014	<sup>23</sup> TD 6370' / 5,800'	<sup>24</sup> PBTD 6,348' / 5,800'	<sup>25</sup> Perforations 5,967' - 6,233' / 5,611' - 5,685'	<sup>26</sup> DHC, MC
<sup>27</sup> Hole Size 5 1/2" (existing casing)	<sup>28</sup> Casing & Tubing Size 2.875" tubing	<sup>29</sup> Depth Set 5,671'	<sup>30</sup> Sacks Cement		
	CIBP	5,800'	3		
	CIBP	5,900'	3		

**V. Well Test Data**

<sup>31</sup> Date New Oil 3/23/2014	<sup>32</sup> Gas Delivery Date 3/23/2014	<sup>33</sup> Test Date 3/29/2104	<sup>34</sup> Test Length 24 hours	<sup>35</sup> Tbg. Pressure 150 flowing	<sup>36</sup> Csg. Pressure 40
<sup>37</sup> Choke Size 64/64	<sup>38</sup> Oil 3	<sup>39</sup> Water 324	<sup>40</sup> Gas 4	<sup>41</sup> Test Method ESP	

<sup>42</sup> I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

Signature: *Jody Noerdlinger*  
Printed name: Jody Noerdlinger

Title: Regulatory Analyst

E-mail Address: jnoerdlinger@rkxp.com

Date: 5/5/2014

Phone: 405-996-5774

OIL CONSERVATION DIVISION

Approved by:

Title:

Approval Date:

*J. C. Shigand*  
**"Geologist"**

*5-20-2014*

Pending BLM approvals will  
subsequently be reviewed  
and scanned

*3160-4*  
*3160-5*

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENTFORM 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.*5. Lease Serial No.  
NMNM67980

6. If Indian, Allottee or Tribe Name

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

**SUBMIT IN TRIPLICATE - Other instructions on reverse side.**

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

8. Well Name and No.

SANTA FE FEDERAL 4

2. Name of Operator

Contact: JODY NOERDLINGER

RKI EXPLORATION &amp; PRODUCTION E-Mail: jnoerdlinger@rkixp.com

9. API Well No.

30-015-27030

3a. Address

210 PARK AVE SUITE 900  
OKLAHOMA CITY, OK 73102

3b. Phone No. (include area code)

Ph: 405-996-5774

10. Field and Pool, or Exploratory

EAST HERRADURA BEND DELAW

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

Sec 35 T22S R28E Mer NMP SENE 1730FNL 910FEL

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			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input checked="" type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

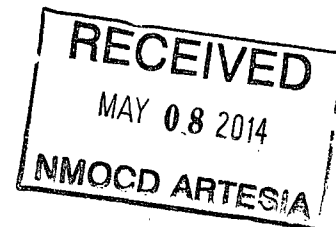
13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths 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 recompleat 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 seeks approval for the recompleat procedure conducted on the subject well.

Frac prep began on 2/17/2014 and recompleat equipment was removed on 3/8/2014.

RIH with 10K CIBP, set at 5,900 feet. Dumped 3 sacks cement on CIBP, estimated TOC at 5,865 feet. Tested casing and annulus. Set CIBP at 5,800 feet. Dumped 3 sacks cement on CIBP.

Perfed Brushy Canyon Sands from 5,611 to 5,685 feet. Fracked with 1,495 BBLS fluid including slick water, HCL acid, 20 lbs X link gel and 113,110 LBS proppant including 16/30 Ottawa sand, 16/30 SLC sand.



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

**Electronic Submission #238767 verified by the BLM Well Information System  
For RKI EXPLORATION & PRODUCTION, sent to the Carlsbad**

Name (Printed/Typed) JODY NOERDLINGER

Title REGULATORY ANALYST

Signature (Electronic Submission)

Date 03/13/2014

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved By

Title

Pending BLM approvals will  
subsequently be reviewed  
and scanned

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 an States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Bureau of the United

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

**Additional data for EC transaction #238767 that would not fit on the form**

**32. Additional remarks, continued**

Seated pump. TAC at 5,368 feet, SN at 5,600 feet, EOT at 5,671 feet.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Operator Copy

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 <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		5. Lease Serial No. NMNM67980
2. Name of Operator RKI EXPLORATION & PRODUCTION		6. If Indian, Allottee or Tribe Name
Contact: JODY NOERDLINGER E-Mail: jnoerdlinger@rkixp.com		7. If Unit or CA/Agreement, Name and/or No.
3a. Address 210 PARK AVENUE, SUITE 900 OKLAHOMA CITY, OK 73102	3b. Phone No. (include area code) Ph: 405-996-5774 Fx: 405-996-5772	8. Well Name and No. SANTA FE FEDERAL 4
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 35 T22S R28E Mer NMP SENE 1730FNL 910FEL		9. API Well No. 30-015-27030
		10. Field and Pool, or Exploratory EAST HERRADURA BEND, DELA
		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			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input checked="" type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

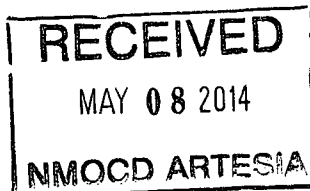
13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths 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.)

*Add Day*  
RKI Exploration and Production seeks approval to ~~recomplete~~ the subject well in the Delaware formation on the approximate date of February 15, 2014.

A CIBP will be set at 5,900 feet, with a 35 foot cement plug.

These intervals will be perferd and completed:

3,403 ? 3,408 feet  
3,638 ? 3,648 feet  
5,621 ? 5,623 feet  
5,665 ? 5,685 feet

SEE ATTACHED FOR  
CONDITIONS OF APPROVAL

14. I hereby certify that the foregoing is true and correct. Electronic Submission #231631 verified by the BLM Well Information System For RKI EXPLORATION & PRODUCTION, sent to the Carlsbad Committed to AFMSS for processing by DEBORAH HAM on 01/27/2014 ()	
Name (Printed/Typed) JODY NOERDLINGER	Title REGULATORY ANALYST
Signature (Electronic Submission)	Date 01/09/2014
THIS SPACE FOR FEDERAL OR STATE OFFICE USE	
Approved By _____	Title _____
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 \*\****Handwritten signature and date 1/28/14*

**Santa Fe Federal 4  
30-015-27030  
Apache Corporation  
January 28, 2014  
Conditions of Approval**

**Work to be completed by April 28, 2014.**

**Notify BLM at 575-361-2822 a minimum of 24 hours prior to commencing work.**

- 1. Must conduct a casing integrity test to max treating pressure before any perforating or fracturing can be done. Submit results to BLM. Contact the BLM if test fails.**
- 2. Before casing or a liner is added or replaced, prior BLM approval of the design is required. Use notice of intent Form 3160-5.**
- 3. Surface disturbance beyond the originally approved pad must have prior approval.**
- 4. Closed loop system required.**
- 5. All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of work over operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area. Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.**
- 6. Operator to have H2S monitoring equipment on location.**
- 7. A minimum of a 2000 (2M) BOP to be used. All blowout preventer (BOP) and related equipment (BOPE) shall comply with reasonable well control requirements. A two ram system with a blind ram and a pipe ram designed for the size of the work string shall be adequate. Tapered work strings will require an additional pipe ram. The manifold shall comply with Onshore Oil and Gas Order #2 Attachment I (2M Diagrams of Choke Manifold Equipment). The accumulator system shall have an immediately available power source to close the rams and retain 200 psi above pre-charge. The pre-charge test shall follow requirements in Onshore Order #2.**
- 8. Subsequent sundry required detailing work done and completion report for the new formation. Operator to include well bore schematic of current well condition when work is complete.**

**JAM 012814**

# RKI Exploration and Production, LLC

Santa Fe Federal 4  
Section 35 T22S R28E  
Eddy County, New Mexico  
API No. 30-015-27030

**PROPOSED**

KB - 3,108'  
GL - 3,100'

2/11/14; JLM

*Tubing top to btm: 162 jts 2 7/8" 6.5# J-55 EUE tbg, TAC, 8 jts. 2 7/8" tbg, SN, PS, 2 jts. 2 7/8" tubing, BP. TAC @ 5,350', SN @ 5,600', EOMA @ 5,670'.*

*Rod string top to btm: 1 1/4"x1 1/2"x24'x28' PR/lmr, 80 ct (2,000') 1" Tenaris KD rods, 84 ct (2,100') 7/8" Tenaris KD rods, 48 ct (1,200') 3/4" Tenaris KD rods, 12 ct (300') 1.5" Class C sinker bars, 1' lift sub, 2 1/2"x1 3/4"x24' pump (see procedure for pump details.)*

8 5/8" 24# J-55 STC @ 450'

TOC @ 2,725' per CBL

DV Tool @ 5,124' per CBL

*Tubing anchor @ 5350'*

Brushy Canyon 5,611'-5,623' OA

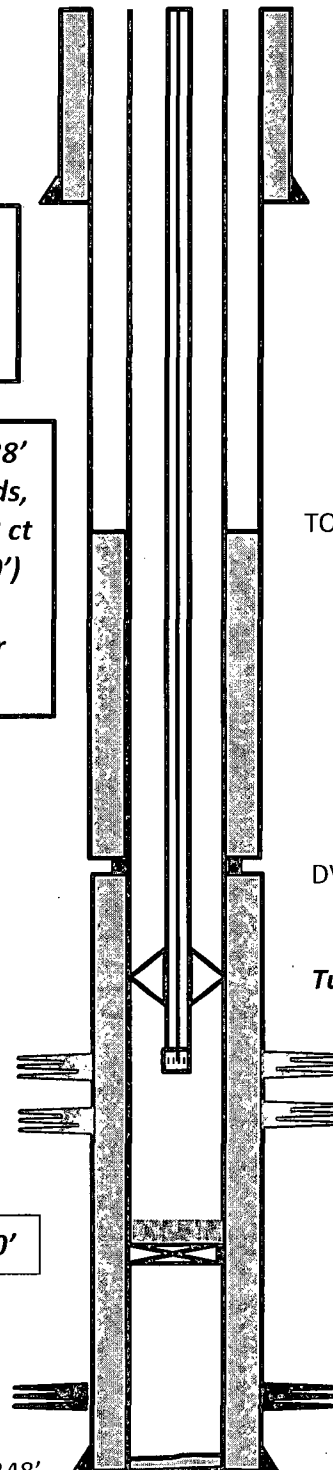
Brushy Canyon 5,665'-5,685' OA

*CIBP w/ 35' (3 sx) cmt cap @ 5,900'*

Delaware 5,967'-6,233' OA

PBTD 6,348'  
TD 6,370'

5 1/2" 15.5# J-55 @ 6,370'



# RKI Exploration and Production, LLC

Santa Fe Federal 4  
Section 35 T22S R28E  
Eddy County, New Mexico  
API No. 30-015-27030

**CURRENT**

KB - 3,108'  
GL - 3,100'

1/08/14; JLM

TOC @ 2,725' per CBL

8 5/8" 24# J-55 STC @ 450'

Tubing top to btm: 190 jts 2 7/8" 6.5#  
J-55 EUE tbg, 2 7/8" tbg, SN @ 6,273'.

DV Tool @ 5,124' per CBL

Delaware 5,967'-6,233' OA

PBTD 6,348'  
TD 6,370'

5 1/2" 15.5# J-55 @ 6,370'

