

Form 3160-5
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

ARTESIA DISTRICT
DEC 15 2014

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.

5. Lease Serial No.
NMNM18626

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.

8. Well Name and No.
SPITFIRE 25 1

9. API Well No.
30-015-25450

10. Field and Pool, or Exploratory
ROSS DRAW; BRUSHY CANYON

11. County or Parish, and State
EDDY COUNTY, NM

1. Type of Well
 Oil Well Gas Well Other

2. Name of Operator
RKI EXPLORATION AND PRODUCTION
Contact: JODY NOERDLINGER
Email: JNOERDLINGER@RKIXP.COM

3a. Address
210 PARK AVE. SUITE 900
OKLAHOMA CITY, OK 73102

3b. Phone No. (include area code)
Ph: 405-996-0577

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
Sec 25 T26S R30E Mer NMP SWNE 1980FNL 1980FEL

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 type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input checked="" 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 recompletable 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.)

RKI Exploration & Production seeks approval to P&A the subject well. Work is tentatively scheduled for January, 2015.

Set 7 in 10K lb CIBP at 6,320 ft. Spot 40 sks Class C cement. Determine 7 in free point at estimated 6,020 ft. Set CIBP 50 ft below free point. Cut off 7 in casing at free point. Spot 75 sks cement at 6,060 ft. Spot 100 sks cement at 3,715 ft. Tag plug at maximum depth of 3,620 ft. Spot 75 sks cement at 1,750 ft. Tag plug at maximum depth of 1,650 ft. Spot 35 sks cement from 70 ft to surface.

Tag CIBP + 1sx cnt. 6575. Cap w/35' cnt. Dump Bail or spo 25' sx.
7" stub plug. 50' in/ou (160' plug). woc 7

Add plug: 1240' - 900' woc Tag.

Please see attached detailed procedure and well bore diagram.

Accepted for record
URS NMCD 12/19/14

RECLAMATION PROCEDURE
ATTACHED

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

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

Electronic Submission #267211 verified by the BLM Well Information System
For RKI EXPLORATION AND PRODUCTION, sent to the Carlsbad
Committed to AFMSS for processing by LINDA DENNISTON on 12/02/2014 ()

Name (Printed/Typed) JODY NOERDLINGER

Title REGULATORY ANALYST

Signature (Electronic Submission)

Date 09/30/2014

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By *James A. Parks*

Title *SPET*

Date *12-6-14*

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 *CFO*

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.

RKI Exploration & Production, LLC

Spitfire 25-1

Plugging and Abandonment Procedure

Ross Draw Field

Section 25-T26S-R30E
Eddy County, New Mexico

API # 30-015-25450
Property No. 157100

Spud Date: 11/14/85
Comp Date: 1/12/86

Producing Formation: Cougar 6,360'6,468' OA

KB Elev: 3,093'
GL Elev: 3,076'

TD: 12,804'
PBTD: 6,560'

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	Connection Type	Capacity (bbls/ft)	ID (in)	Drift (in)	Burst (psi)	Collapse (psi)	Tension (lbs)
13 3/8"	950'	48	H-40	STC	0.1571	12.715	12.559	1,385	600	258,000
9 5/8"	3,670'	36	K-55/S-80	STC	0.0773	8.921	8.767	2,820	1,620	315,200
7"	12,008'	26/29	S-95	LTC	0.0383	6.184	6.059	6,880	4,700	475,000
4 1/2"	12,804'	11.6	N-80/S-95	BTC/LTC	.01550	4.000	3.875	7,400	5,600	187,200

Surface: 13 3/8" 48# H-40 STC: 0-950' - TOC @ surface
Intermediate: 9 5/8" 36# K-55/S-80 STC: 0-3,670' - TOC @ surface per report
Intermediate: 7" 26/29# N-80/S-95 LTC: 0' - 12,008' - TOC @ 9,050' per report.
Production: 4 1/2" 11.6# N-80/S-95 BTC/LTC: 0'-12,804' - TOC @ 9,050 per report (TS).

COMPLETION HISTORY TO DATE: Wolfcamp (12,227'-12,651') perforated and acid/N2 stimulated, plugged off 6/2014. Costello (6,594'-6,610') tested water, plugged off 7/2014. Cougar (6,360'-6,468') tested water w/ small amount gas TSTM, 7/2014.

OBJECTIVE: Plug and abandoned wellbore.

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) MI RU Service Unit. Set flowback tank and lay flowline. Set 1 clean frac tank and fill with 480 BFW.
- 2) MI RU pump truck. Pump 60 bbls heavy salt water down casing to kill well. ND WH. NU 3K# BOP.
- 3) MI RU wireline unit. RIH w/ JB/GR to 6,350'. RIH and set 7" 10K# CIBP @ 6,320' (NOTE: Do not set CIBP in casing collar).

- 4) Deliver, unload, and tally 6,350' 2 7/8" 6.5# L-80 tubing work string.
- 5) TIH w/ tubing to 6,315'.
- 6) MI RU cementers. Pump 180 bbls heavy mud, Spot 40 sx Class C cement (14.8 ppg, 6.3 gps, 1.32 cfs yield), flush with 35 bbls heavy mud.
- 7) TOH w/ tubing.
- 8) ND BOP. Remove tubinghead. MI RU welder. WO lift sub on 7" casing. Lift casing, remove casing slips, determine free point (estimated 6,020'). NU 9 5/8" BOP w/ 7" pipe rams. RIH w/ JB/GR to 6,100'. RIH and set CIBP @ 6,070'. RIH and cut-off 7" casing at free point. RD MO wireline unit.
- 9) MI RU casing crew. TOH, LD 7" casing. RD MO casing crew.
- 10) TIH w/ tubing to 6,060'.
- 11) Spot 75 sx Class C cement (14.8 ppg, 6.3 gps, 1.32 cfs yield), flush with 34 bbls heavy mud.
- 12) POH, LD tubing to 3,715'. Spot 100 sx Class C cement (14.8 ppg, 6.3 gps, 1.32 cfs yield), flush with 20 bbls heavy mud. POH w/ 10 stds tubing. WOCT. Tag plug (**maximum tag depth @ 3,620'**).
- 13) POH, LD tubing to 1,750'. Spot 75 sx Class C cement (14.8 ppg, 6.3 gps, 1.32 cfs yield), flush with 9 bbls heavy mud. POH w/ 10 stds tubing. WOCT. Tag plug (**maximum tag depth @ 1,650'**).
- 14) POH, LD tubing to 70'. Spot 35 sx Class C cement (14.8 ppg, 6.3 gps, 1.32 cfs yield). POH, LD tubing.
- 15) ND BOP. RD MO service unit.
- 16) Cut-off casinghead. WO cap with well name/number, operator name, date. Set from top of casing to minimum 4' above ground level, install a minimum 4" in diameter marker with WO cap with operator, well name/number and date.
- 17) Remove all equipment, safety anchors, clean up and reclaim surface location.

RKI Contact List:

RKI	Title	Office	Cell
Ken Fairchild	Production Manager	405-996-5764	469-693-6051
Gene Thompson	Production Superintendent	575-885-1313	817-908-9219
Paul Munding	Senior Production Engineer	405-996-2140	405-820-2825
Jaime McAlpine	Engineering Consultant	405-996-5741	405-850-6685

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

RKI Exploration and Production, LLC

Spitfire 25-1
 Section 25 T26S R30E
 Eddy County, New Mexico
 API No. 30-015-25450

PROPOSED

9/22/14; JLM

KB - 3,093'
 GL - 3,076'

Spot 35 sx cmt @ 60'-surface

Spot 75 sx cmt @ 1,750'-1,650'

Spot 100 sx cmt plug from 3,715'-3,615'

Set CIBP @ 6,070' (50' below Casing cut-off w/ 75 sx cmt)

Set CIBP @ 6,320' w/ 40 sx cmt

CIBP @ 6,575' w/ 1 sx cmt

4½" cut-off stub @ 6,850' w/ 40 sx cmt, dress TOC to 6,700'

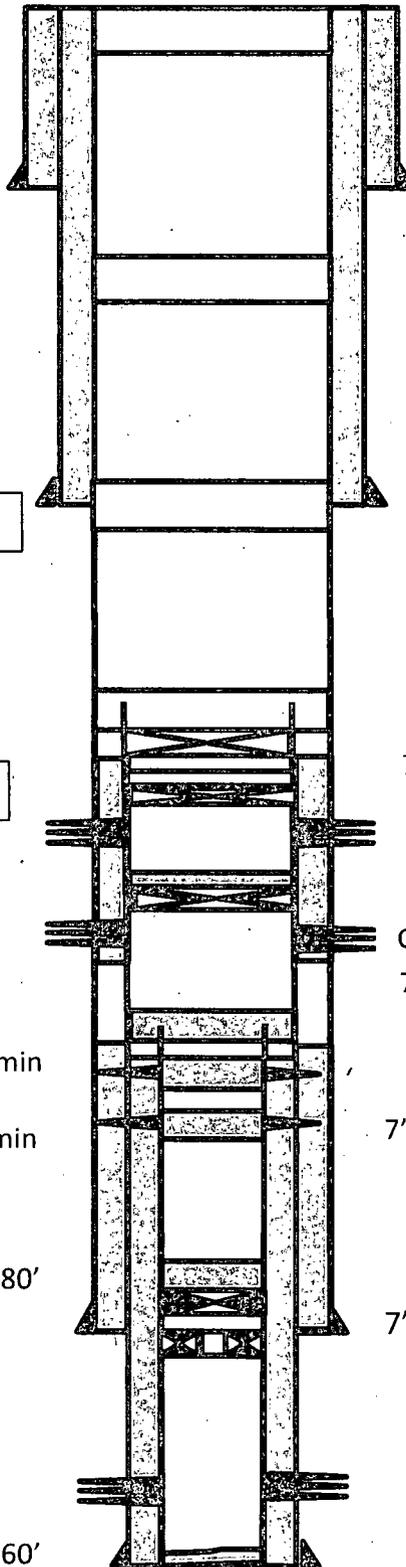
Perforate 7,700', tested 2,500 psi for 15 min w/ 30 sx cmt 7,456'-7,750'

Perforate 9,125', tested 2,500 psi for 10 min w/ 40 sx cmt 8,868-9,175'

CIBP @ 12,027' w/28 sx cmt. TOC @ 11,680'

Packer (type unknown) @ 12,034'

PBTD 12,760'
 TD 12,804'



13 3/8" 48# H-40 ST&C @ 950'

9 5/8" 36# K-55/S-80 ST&C @ 3,670'

7" TOC @ 6,050' per CBL

Cougar sand 6,360'-6,468' OA

Costello 6,594'- 6,610' OA
 7" BOC @ 6,652' per CBL

7" TOC @ 9,050' per report

7" 26/29# S-95 LTC @ 12,008'

Wolfcamp 12,227'-12,651' OA

4½" 11.6# N80/S95 BTC/LTC @ 12,804'

RKI Exploration and Production, LLC

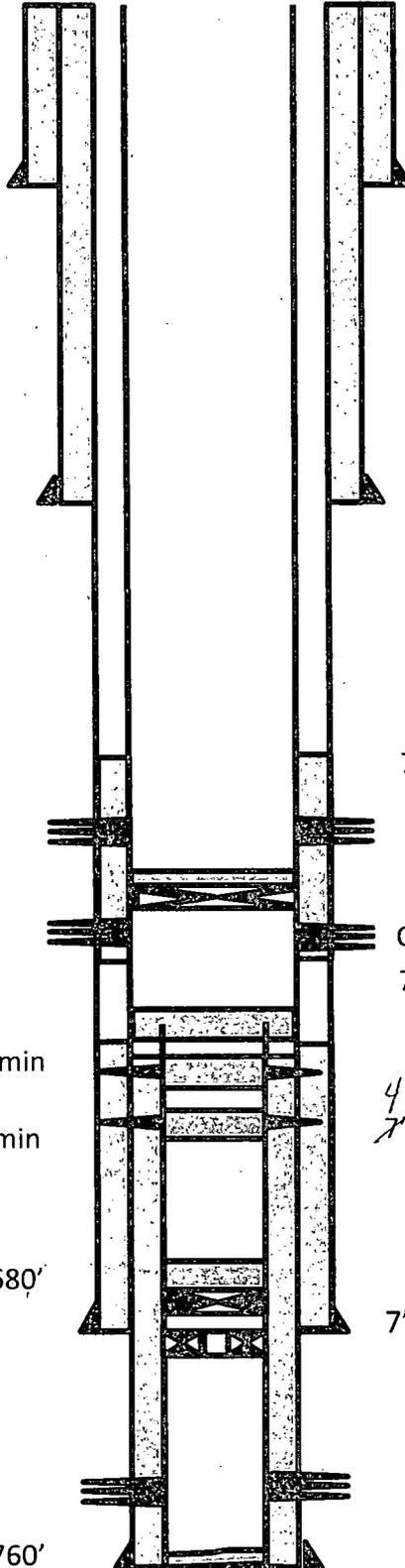
Spitfire 25-1

Section 25 T26S R30E
Eddy County, New Mexico
API No. 30-015-25450

CURRENT

KB - 3,093'
GL - 3,076'

9/22/14; JLM



13 3/8" 48# H-40 ST&C @ 950' ✓
1050 sx C/c
T/Salt 1190
B/Salt 3529

9 5/8" 36# K-55/S-80 ST&C @ 3,670' ✓
2700 sx C/c
Del. lime 365
Cherry Lin 4611
Brushing C/c 580
7" TOC @ 6,050' per CBL
Cougar sand 6,360'-6,468' OA *BS 7592*
WC 11000

CIBP @ 6,575' w/ 1 sx cmt

4 1/2" cut-off stub @ 6,850' w/ 40 sx cmt,
dress TOC to 6,700'
Perforate 7,700', tested 2,500 psi for 15 min
w/ 30 sx cmt 7,456'-7,750'
Perforate 9,125', tested 2,500 psi for 10 min
w/ 40 sx cmt 8,868-9,175'

Costello 6,594'-6,610' OA
7" BOC @ 6,652' per CBL
4 1/2 T/S
7" TOC @ 9,050' per report ✓

CIBP @ 12,027' w/28 sx cmt. TOC @ 11,680'
Packer (type unknown) @ 12,034'

7" 26/29# S-95 LTC @ 12,008' ✓
1st stage 830 sx
Wolfcamp 12,227'-12,651' OA ✓

PBDT 12,760'
TD 12,804'

4 1/2" 11.6# N80/S95 BTC/LTC @ 12,804' *12813*

RKI Exploration and Production, LLC

Spitfire 25-1

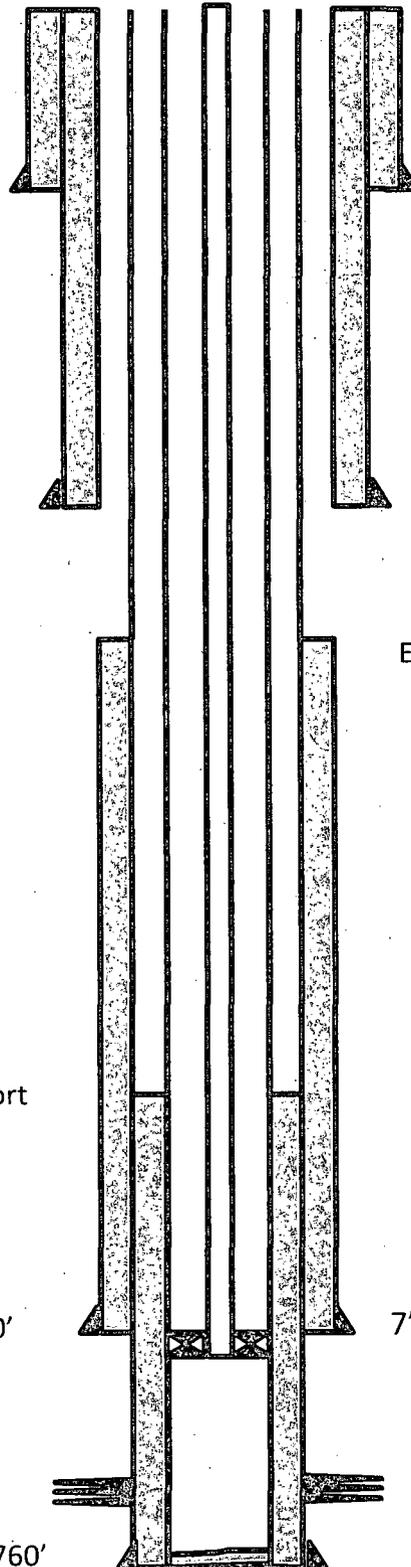
Section 25 T26S R30E
Eddy County, New Mexico
API No. 30-015-25450



4/4/14; JLM

KB - 3,093'
GL - 3,076'

Tubing Top to Bottom: 2-3/8"
4.7# grade(?) EUE 8rd @ 12,030',
packer @ 12,030'



13 3/8" 48# H-40 ST&C @ 950'

9 5/8" 36# K-55/S-80 ST&C @ 3,670'

Est TOC @ 5,500' per calculation

TOC @ 9,050' per report

Packer (type unknown) @ 12,030'

7" 26/29# S-95 LTC @ 12,008'

Wolfcamp 12,227'-12,651' OA

PBD 12,760'
TD 12,804'

4 1/2" 11.6# N80/S95 BTC/LTC @ 12,804'

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 **ninety (90)** 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. **Notification:** 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. **Blowout Preventers:** 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. **Mud Requirement:** 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. **Cement Requirement:** 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. Dry Hole Marker: 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. Subsequent Plugging Reporting: 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. Trash: 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 procedure.

J. Amos 3/6/11



United States Department of the Interior

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 pre-disturbance 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, re-distribute 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.

1. 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)

Cody Layton
Supervisory Multi Resources
575-234-5959

Solomon Hughes
Natural Resource Specialist
575-234-5951

Trishia Bad Bear
Natural Resource Specialist
575-393-3612

Jeffery Robertson
Natural Resource Specialist
575-234-2230

Duncan Whitlock
Environmental Protection Specialist
575-234-5926

Linda Denniston
Environmental Protection Specialist
575-234-5974

Douglas Hoag
Civil Engineering Tech
575-234-5979