

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

HOBBS OCD  
OCD Hobbs

FORM APPROVED  
OMB No. 1004-0137  
Expires: October 31, 2014

APR 11 2013

**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.  
NM63763

6. If Indian, Allottee or Tribe Name

**SUBMIT IN TRIPLICATE – Other instructions on page 2.**

7. If Unit of CA/Agreement, Name and/or No.  
SAPPHIRE FEDERAL UNIT

1. Type of Well

☐ Oil Well ☐ Gas Well ☒ Other SWD

8. Well Name and No.  
SAPPHIRE FEDERAL UNIT #1

2. Name of Operator

LEGACY RESERVES OPERATING LP

9. API Well No.  
30-025-31491

3a. Address

PO BOX 10848  
MIDLAND, TX 79702

3b. Phone No. (include area code)

432-689-5200

10. Field and Pool or Exploratory Area  
QUEEN

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

1750' FEL & 1600' FSL, UNIT LETTER J, SEC 23, T19S, R33E

11. County or Parish, State  
LEA COUNTY, NM

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OF SUBMISSION

TYPE OF ACTION

☒ Notice of Intent

☐ Subsequent Report

☐ Final Abandonment Notice

☐ Acidize

☐ Alter Casing

☐ Casing Repair

☐ Change Plans

☐ Convert to Injection

☐ Deepen

☐ Fracture Treat

☐ New Construction

☒ Plug and Abandon

☐ Plug Back

☐ Production (Start/Resume)

☐ Reclamation

☐ Recomplete

☐ Temporarily Abandon

☐ Water Disposal

☐ Water Shut-Off

☐ Well Integrity

☐ Other

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 must 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 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

---SEE ATTACHMENTS---

R-111-P

RECLAMATION PROCEDURE  
ATTACHED

SEE ATTACHED FOR  
CONDITIONS OF APPROVAL

LPC Timing area.  
would like to hold off plugging  
until after 6-15-13

Ground Level Dry Hole Marker Required

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)

CRAIG SPARKMAN

Title PETROLEUM ENGINEER

Signature

Craig Sparkman

Date 03/11/2013

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

James R. Cima

Title

SEPS

Date

4-6-13

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 48 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

(Instructions on page 2)

MAY 21 2013



## Sapphire Federal Unit #1 – P&A Procedure

Est'd start date: 4/15/13

### Well Info:

Spudded 1/1992

TD 4820', 5-1/2" csg set at 4324' (cemented w/513sx – TOC @ Surface).

8-5/8" csg set @ 520' (cemented w/300 sx – TOC @ Surface).

OH: 4324'-4820'.

1. MIRU plugging company. NU BOP.

2. Plug 1 (5-1/2" csg): Set CIBP @ +/-4274'. Spot 35' cmt plug (class C) fr/4239'-4274'. *Temp bail on spot 25 ex min.*

\* 3. Pressure test possible holes in casing @ +/-563'-595'. Attempt to obtain successful MIT by testing to 300 psi for 1 hour.

3A. If MIT is unsuccessful SQZ holes in casing @ +/-563'-595' w/class C cmt. Add sqz perforation if necessary to establish adequate injection rate to help insure successful sqz. Pressure test casing (Do not exceed final sqz pressure).

4. Circ hole w/plugging mud.

5. Plug 2 (5-1/2" csg): Set 100' cmt plug (class C) fr/470'-570'. Across 8-5/8" csg shoe. *WOC Tag.*

6. Plug 3 (5-1/2" csg): Perf & sqz 60' cmt plug (class C) inside and outside the 5-1/2" csg fr/60'-surf.

7. Cut off well head. Weld on dry hole marker. Clean location.

-Notify appropriate agency 48 hrs. prior to commencing operation.

(BLM-Carlsbad (575- 234-5972) or NMOC-D-Hobbs (575-393-6161))

\* *Add Plug - R-111-P requires solid plug thru Salt section. From 3350' - 1500'. WOC Tag.*

Craig Sparkman  
Petr. Eng.



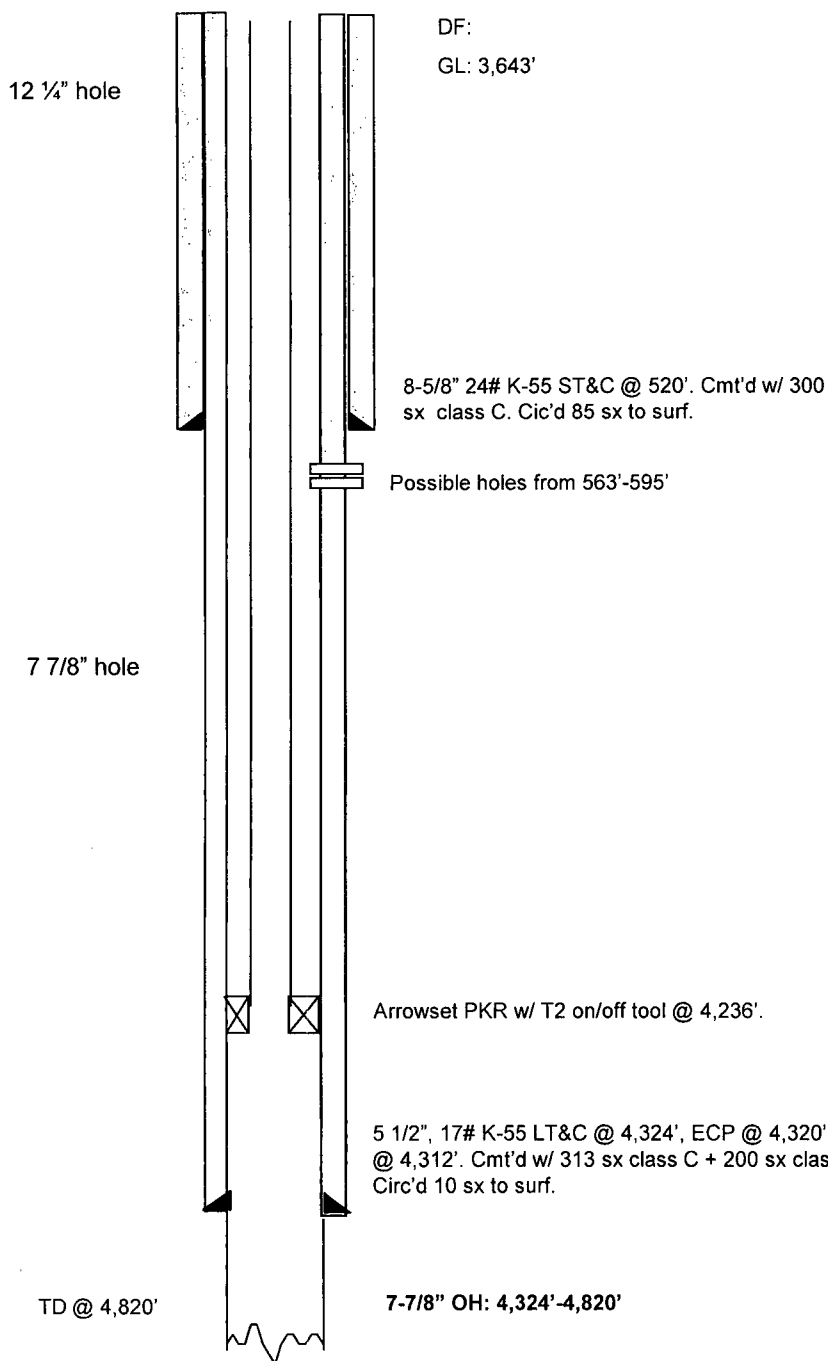
## SAPPHIRE FED UNIT #1

Current Wellbore

Queen Field

Lea County, NM

1750' FEL & 1600' FSL, Sec. 23, T19S, R33E



### Misc Info:

API #: 30-025-31491

Spudded: 1-11-92

Tbg: 136 jts 2 7/8"

Rods: None

### History (Major work):

1/92: Acidized OH w/ 8,800 gals 15% HCl

6/06: Failed MIT, P/T.

9/08: Failed MIT

9/08: Replace PKR. Possible small holes @ 565'-598'.

Updated by: CAS

Updated: 4/23/12



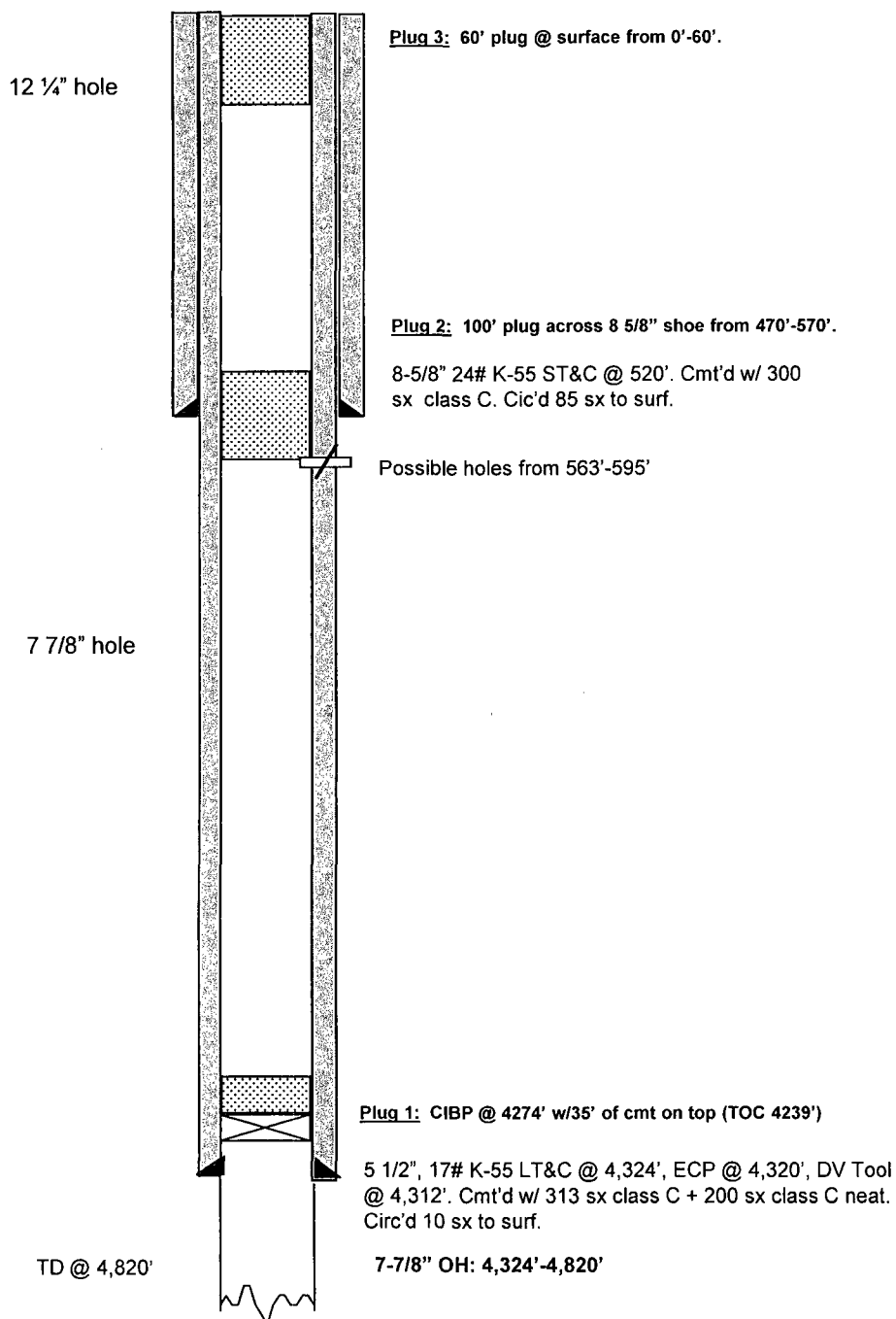
## SAPPHIRE FED UNIT #1

### Proposed Wellbore Configuration

Queen Field

Lea County, NM

1750' FEL & 1600' FSL, Sec. 23, T19S, R33E



Plug 3: 60' plug @ surface from 0'-60'.

Plug 2: 100' plug across 8 5/8" shoe from 470'-570'.

8-5/8" 24# K-55 ST&C @ 520'. Cmt'd w/ 300  
sx class C. Circ'd 85 sx to surf.

Possible holes from 563'-595'

Plug 1: CIBP @ 4274' w/35' of cmt on top (TOC 4239')

5 1/2", 17# K-55 LT&C @ 4,324', ECP @ 4,320', DV Tool  
@ 4,312'. Cmt'd w/ 313 sx class C + 200 sx class C neat.  
Circ'd 10 sx to surf.

7-7/8" OH: 4,324'-4,820'

### Misc Info:

API #: 30-025-31491

Spudded: 1-11-92

GL: 3,643'

TD @ 4,820'

Updated by: CAS

Updated: 3/7/13

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 90<sup>th</sup> day provide this office, prior to the 90<sup>th</sup> 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 10<sup>th</sup> 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

Requirements for ground level dry hole markers  
Well Identification Markers  
Conditions of Approval (COA)

The BLM Carlsbad Field Office (CFO) Conditions of Approval (COA) Requires that ground level dry hole markers be placed on well within the Lesser Prairie Chicken habitat area. The dry hole markers will be to the following specifications. The operator will construct the markers as follows:

1. An 8 inch X 8 inch steel plate 1/8 to 3/16 of an inch thick is to be placed on the old dry hole marker stand pipe 2 inches from ground level, in the Lesser Prairie Chicken habitat area.
2. Steel plate may be welded or bolted approximately 2 inches from ground level on the stand pipes. If plates are bolted to the stand pipe, the person installing the plate will be required to weld a pipe collar on the plate and place a minimum of two set screws/bolt on each collar. Aluminum data plates may be bolted with minimum 1/4 inch bolt and locking nuts or self tapping fine threaded screws. A minimum of one in each corner is to be installed on each plate.
3. An 8 inch x 8 inch aluminum plate, which is 12 gauge or .080 sign material (1/8 inch aluminum plate may be used in place of the .080 plate) with the required information for that well stamped or engraved in a minimum 3/8 inch tall letter or number.
4. The following information will be stamped or engraved on the 8 inch X 8 inch aluminum plate in the following order.
  - a. First row: Operators name
  - b. Second row: Well name and number
  - c. Third row: Legal location to include 1/4 1/4, Section, Township, and range. If the legal location cannot be placed on one row it can be split into two rows with the 1/4 1/4 (example: 1980 FNL 1980 FWL) being on the top row.
  - d. Fourth row: Lease Number and API number.
    - i. Example marker plate: (attached)

NMOCD Order No. R-12965 also required the operator to notify NMOCD when this type of dry hole marker is used. This can be done on the subsequent report of abandonment which is submitted to the BLM after the well is plugged. State that a ground level dry hole marker was installed as required in the COA's from the BLM.



# 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](http://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:

**Inspection & Enforcement**

Jim Amos  
Supervisory Environmental Protection Specialist  
575-234-5909, 575-361-2648 (Cell)

Mike Burton  
Environmental Protection Specialist  
575-234-2226

Jeffery Robertson  
Natural Resource Specialist  
575-234-2230

Jennifer Van Curen  
Environmental Protection Specialist  
575-234-5905

Doug Hoag  
Civil Engineering Technician  
575-234-5979

Linda Denniston  
Environmental Protection Specialist  
575-234-5974

**Permitting**

Cody Layton  
Natural Resource Specialist  
575-234-5959

Trishia Bad Bear  
Natural Resource Specialist  
575-393-3612

Todd Suter  
Surface Protection Specialist  
575-234-5987

Tanner Nygren  
Natural Resource Specialist  
575-234-5975

Amanda Lynch  
Natural Resource Specialist  
575-234-5922

Leglon Brumley  
Environmental Protection Specialist  
575-234-5957

**Realty, Compliance**

Randy Pair  
Environmental Protection Specialist  
575-234-6240