

Form 3160-5
(August 2007)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.***SUBMIT IN TRIPLICATE - Other instructions on reverse side.**

1. Type of Well <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other: INJECTION		5. Lease Serial No. NMNM99018
2. Name of Operator COG OPERATING LLC Contact: STORMI DAVIS E-Mail: sdavis@concho.com		6. If Indian, Allottee or Tribe Name
3a. Address 2208 W MAIN ST ARTESIA, NM 88210	3b. Phone No. (include area code) Ph: 575-748-6946	7. If Unit or CA/Agreement, Name and/or No.
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 7 T21S R25E SENW 1980FNL 1980FWL		8. Well Name and No. ZEBRA FF FEDERAL SWD 1
		9. API Well No. 30-015-32056
		10. Field and Pool, or Exploratory SWD; CANYON
		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 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 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.)

COG Operating LLC respectfully requests approval to plug and abandon this well. Procedure, schematics and a copy of the CBL are attached.

RECLAMATION PROCEDURE
ATTACHEDNM OIL CONSERVATION
ARTESIA DISTRICT

AUG 28 2014

SEE ATTACHED FOR
CONDITIONS OF APPROVALRD 9-3-2014
Accepted for record
WJBCD

RECEIVED

14. I hereby certify that the foregoing is true and correct. Electronic Submission #250721 verified by the BLM Well Information System For COG OPERATING LLC, sent to the Carlsbad Committed to AFMSS for processing by JAMES AMOS on 08/12/2014 ()	
Name (Printed/Typed) STORMI DAVIS	Title PREPARER
Signature (Electronic Submission)	Date 06/25/2014

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By <u>James C. Amos</u>	Title <u>SPE</u>	Date <u>8-26-14</u>
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 <u>CFD</u>

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 **

Zebra FF Fed 1 SWD
1980' fnl, 1980' fwl
F-7-21s-25e
Eddy Co., NM

SWD Plugging Procedure
23 Jun 14

Basic Data:

8-5/8" @ 1505', Circ. Cmt. (1" to surface)
7" FJ Scab Liner @ 0-1020' Circ. Cmt. (Covered casing leak in 8-5/8" casing @ 406')
4-1/2" @ 10390', TOC @ 6310' CBL.

Injection Perfs: 8320-8340' (79)
CIBP @ 8276'

Sqzd Perfs: 6970-7167' Bone Spring, 7847-7849' Wolfcamp These perfs tested OK to 600 psi.

Casing Leak: 4180-4196'

Formation Tops:

Delaware: 1523'
Bone Spring: 2735'
Wolfcamp: 7240'

Class C Cement: 14.8 ppg, 1.32 cfps, 6.3 gwps
Capacity 4-1/2"/11.6ppg = .0872 CF/F, 7"/23 ppg = .2210 CF/F, 8-5/8"/24 ppg = .3575 CF/F

Objective: Plug and abandon well. See wellbore schematic. Notify BLM at least 24 hrs. before starting plugging operations.

Procedure:

1. Notify BLM Carlsbad at least 24 hrs before starting plugging operations.
2. MIRU WSU, couple frac tanks, open-top steel pit and NU double ram BOP (2-3/8" pipe, blind rams).
3. Lower work string to CIBP at 8276' and spot ^{adequate cmt 8276'-7797'} 25 sx Class C neat on top of plug. Pull 20 stands, WOC for 3-4 hrs and tag plug. If plug tagged deeper than 8086', re-spot plug. This plug covers the Canyon injection perfs 8320-8340'. Plug calculates 379' long and should occupy ^{7896-8276'} inside casing. *Cover Wolfcamp Perfs. 7797'*
4. With open-ended tubing at 7290' and spot 30 sx Class C neat. Pull 20 stands, WOC for 3-4 hrs and tag plug. If plug tagged deeper than 6920', re-spot plug. This plug covers the top of the Wolfcamp 7240' and squeezed Bone Spring perfs 6970-7167'. Plug calculates 455' long and should occupy 6835-7920' inside casing.
5. Weld extension onto 4-1/2" with collar on top, remove slips outside the 4-1/2" casing, remove casing head, NU BOP onto lower casing head, install 4-1/2" pipe rams, RU wireline, pull tension

in 4-1/2" and cut casing at approx. 6000'. TOC is 6310' CBL, but CBL shows evidence that casing may not be completely free until 6000'.

6. RU casing handling equipment and lay down 4-1/2" casing. Change rams to 2-3/8".
7. RIH with open-ended tubing to 6050' and spot 35 sx Class C neat. Pull 15 stands, WOC for 3-4 hrs and tag plug. If plug tagged deeper than 5950', re-spot plug. This plug covers 50' in/out of the casing stub at 6000'. *+ 10% Per 1000' (150' plug)*
8. After tagging plug, spot 230 bbls mud laden fluid at top of plug (9 ppg brine with 25 sx salt gel per 100 bbls of brine).
9. With end of tubing at 4350', spot 50 sx Class C neat. Pull 15 stands, WOC for 3-4 hrs and tag plug. If plug tagged deeper than 4250', re-spot plug. This plug fulfills requirement for the gap between plugs in the open hole to be less than 2000'. *140' plug.*
10. With end of tubing at 2785', spot 60 sx Class C with 2% CaCl₂. Pull 15 stands, WOC for 3-4 hrs and tag plug. If plug tagged deeper than 2685', re-spot plug. This plug covers the top of the Bone Spring 2735'. *130' plug*
11. After tagging plug, spot 150 bbls mud laden fluid at top of plug (9 ppg brine with 25 sx salt gel per 100 bbls of brine).
12. With end of tubing at 1575', spot 75 sx Class C with 2% CaCl₂. Pull 15 stands, WOC for 3-4 hrs and tag plug. If plug tagged deeper than 1455', re-spot plug. This plug covers the top of the Delaware 1523' and the 8-5/8" shoe 1505'.
13. With end of tubing at 1070', spot 30 sx Class C with 2% CaCl₂. Pull 10 stands, WOC for 3-4 hrs and tag plug. If plug tagged deeper than 970', re-spot plug. This plug covers the 7" scab liner shoe 1020'.
14. With end of tubing at 400', spot 75 sx Class C with 2% CaCl₂ from 400' to surface. Top casing off after pulling tubing OOH.
15. Weld plate onto 8-5/8" stub. Weld a 4" diameter dry hole marker that extends 4' above ground level. The following information needs to be placed on the marker:

COG Operating LLC
Zebra FF Fed 1 SWD
1980' fnl, 1980' fwl
Unit F, Sec. 7, T21S, R25E
NM-99018, API 30-015-32056

16. Cut off anchors, and reclaim location per BLM specs.

Kbc/zebra ff fed 1 swd p&a proc 23 jun 14

Well: Zebra FF Fed. 1 SWD

Zero: 21' AGL

Location: 1980' FNL, 1980' FWL
F-7-215-252
Eddy NM

K8: 3512'
GL: 3491'

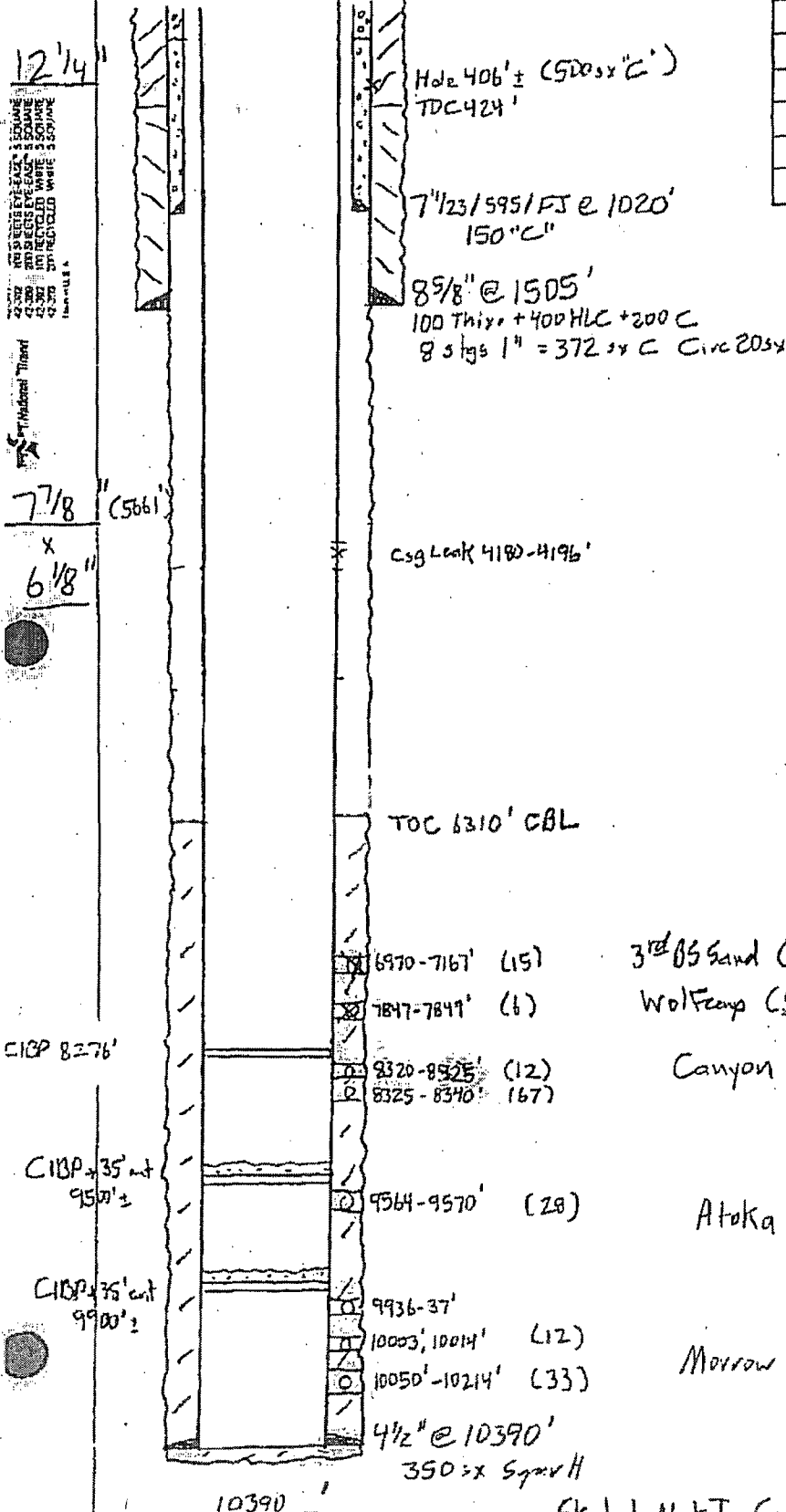
API: 30-015-32056, NM-99018

Casing Program:

Size	Wt.	Grade	Conn.	Depth
8 5/8"	24	J55	STC	1505'
7"	23	S95	FJ	1020'
4 1/2"	11.6	M95-110		8871' ±
	11.6	N80		9503' ±
	11.6	M95-110		10390'
2 3/8"	4.7	J55	EVE	---

Plastic Coated

SWD-869
8320-8400'
1664 psi Max



"BEFORE"

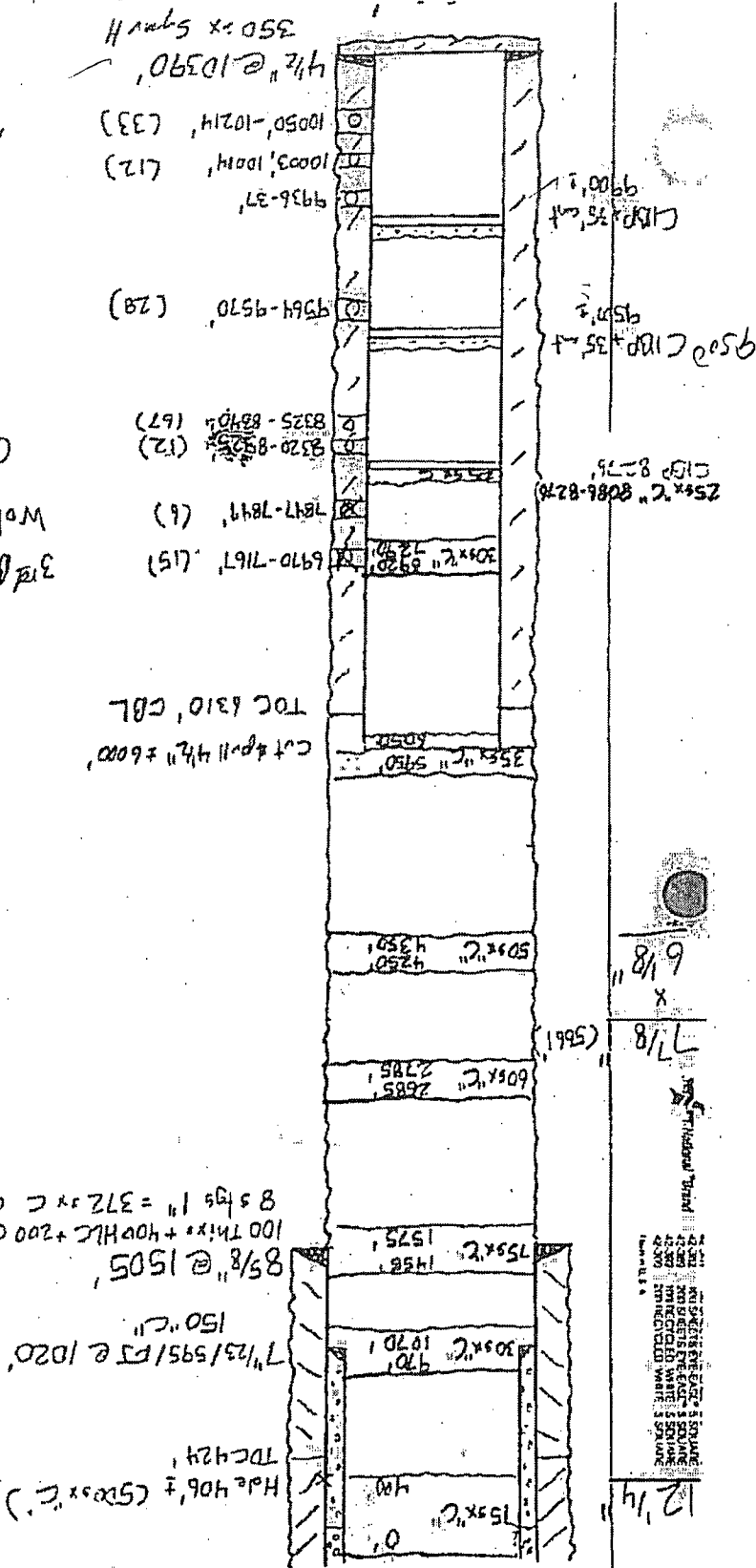
- C. L. L. H. L. T. C. J. -

Well: Zedora FF Fed. 1 SWD

Location: 1980 FNL 1980 FNL

F-7-215-252
Edley NM

APR: 30-015-32056, WN, 81066



morrow

AtoKq

Canyon

3rd SS Band (SSgt)
Wolfcamp (SSgt)

AFTER

9499	MR
9528	HT
9818	ST
8320	CLSD
7200	WC
2735	BS
1523	DEL
1111	SA
457	Qa

5WD-869
8320-8400
1664 PSI Max

236"	4.7	TSS	EVE
	11.6	M95.110	10390
	11.6	N8N	9503.7
	11.6	M95.110	11688.7
246"	2.3	S55	10201
7"	24	S55	15051
858"			

Plastic Coated

Casting Program!

3512 : 79
7648 : 84

Zero: 21 AGL

CASEDHOLE SOLUTIONS

A C&J ENERGY SERVICES COMPANY

Radial Cement Bond Gamma Ray CCL Log

Company Concho (COG)
Well Zebra FF Fed 1 SWD
Field Wildcat
County Eddy
State New Mexico

Company Concho (COG)
Well Zebra FF Fed 1 SWD
Field Wildcat
County Eddy State New Mexico

Location: API #: N/A
1980' FNL & 1980' FWL
F-7-21S-25E
Other Services N/A
Elevation
Permanent Datum Ground Level Elevation 3491'
Log Measured From KB 21' above GL
Drilling Measured From Kelly Bushing
KB 3512'
D.F. 3511'
G.L. 3491'

Date 13 June 2014
Run Number One
Depth Driller 10380'
Depth Logger 6850'
Bottom Logged Interval 6850'
Top Log Interval 3500'
Open Hole Size 7"
Type Fluid Fresh Water
Density / Viscosity N/A
Max. Recorded Temp. 130 degF
Estimated Cement Top 6312'
Time Well Ready ROA
Time Logger on Bottom 10:45 AM
Equipment Number 100139
Location Hobbs, NM
Recorded By Chris Hawthorne
Witnessed By Tito Aguirre

Borehole Record				Tubing Record			
Run Number	Bit	From	To	Size	Weight	From	To

Logging Record	Size	Wgt/Ft	Top	Bottom
Surface String	8.625"	24#	Surface	1505'
Rot. String	7"	23#	Surface	1020'
Production String	4.5"	11.6#	Surface	10380'
Trier				

<<< Fold Here >>>

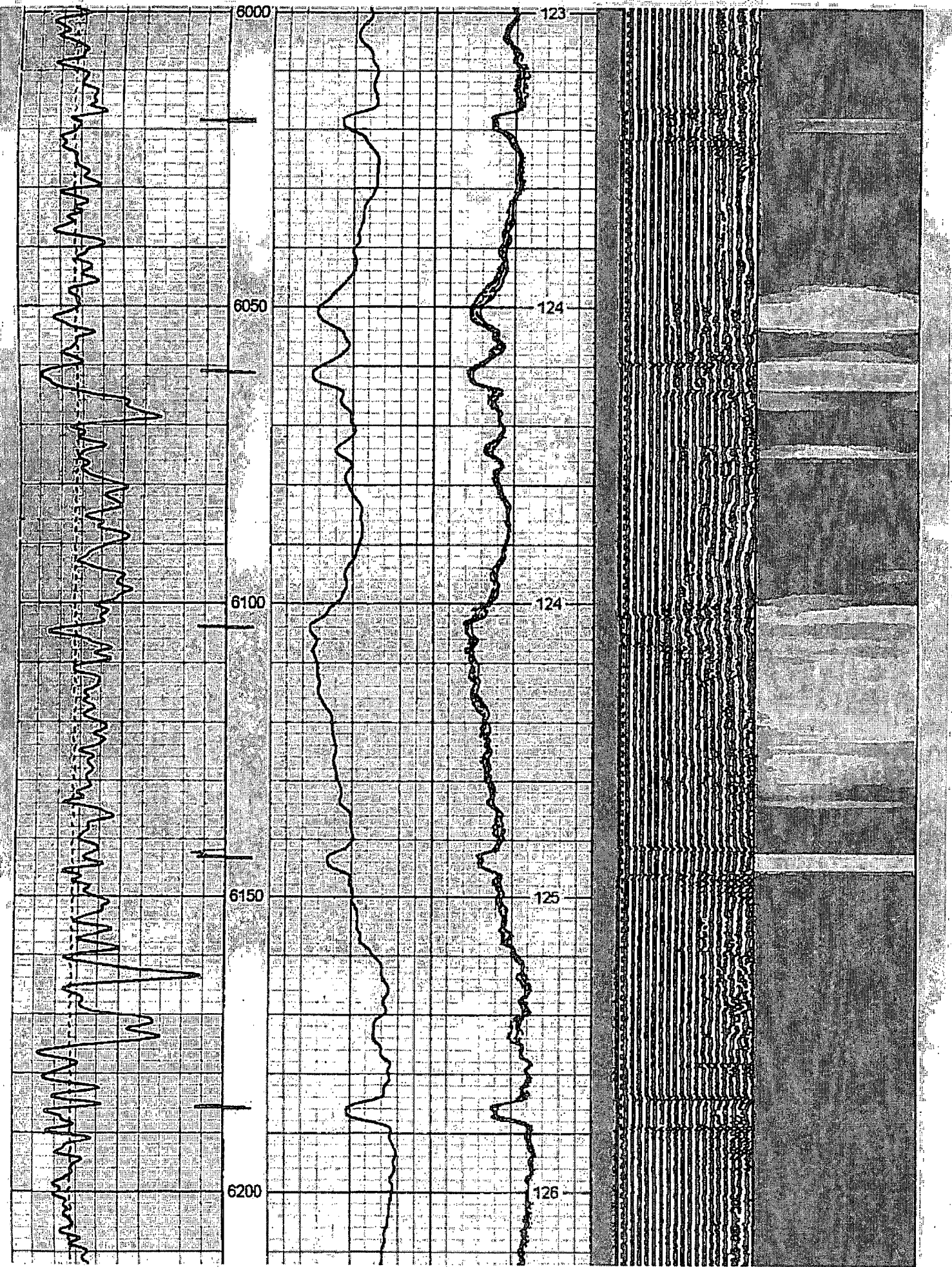
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages, or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to our general terms and conditions set out in our current Price Schedule.

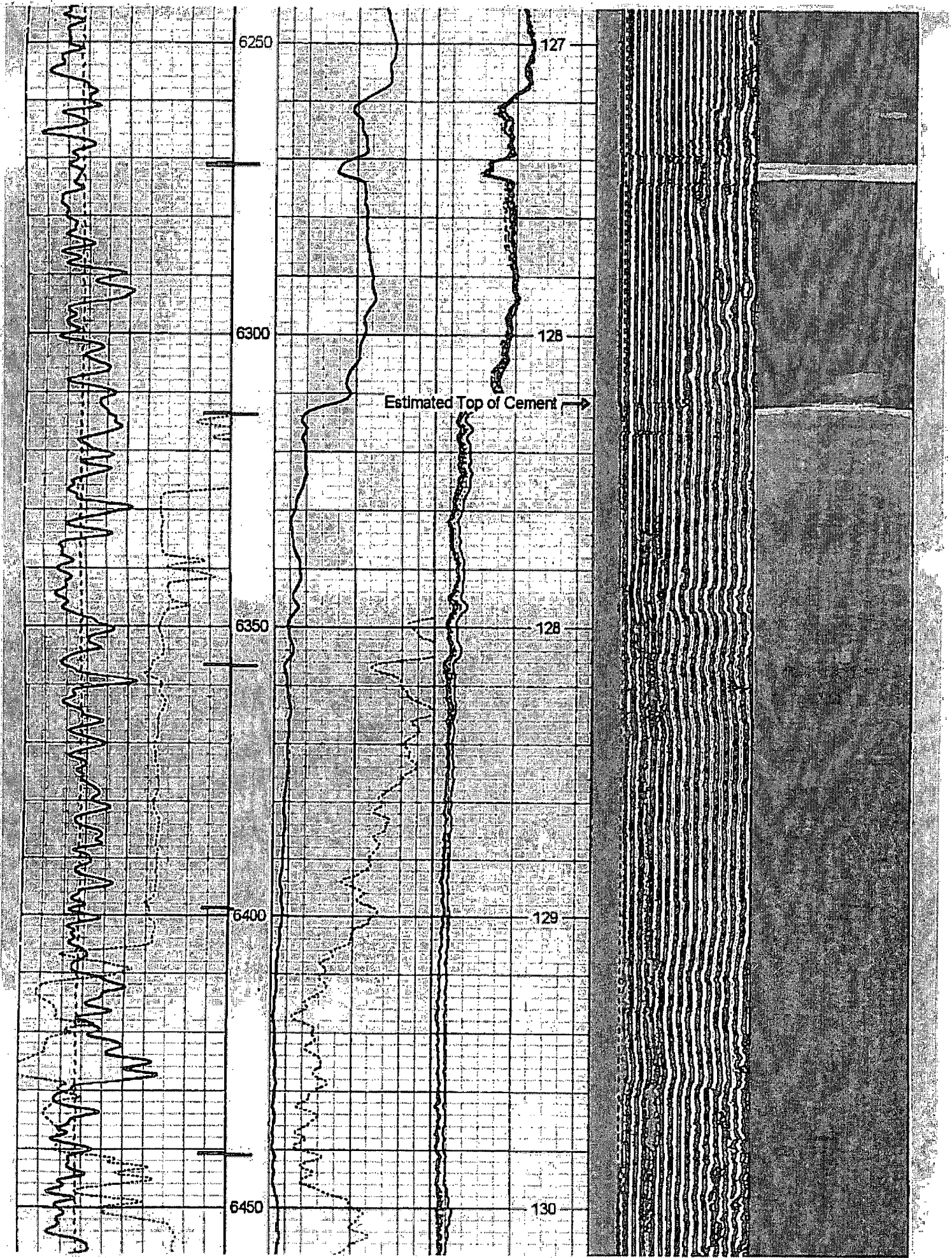
Comments

Log correlated to Haliburton's Spectral Density
Dual Spaced Neutron Log dated 29 December 2001

CASEDHOLE SOLUTIONS

Main Pass 0 PSI





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.

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 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 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. In lieu of a cement plug in a cased hole, 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.

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 well bore shall then be capped with a 4-inch pipe, 10-feet in length, 4 feet above ground and embedded in cement. 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 five 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 conditions of approval will be developed and furnished to you.



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, 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.

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

Amanda Lynch
Natural Resource Specialist
575-234-5922

Duncan Whitlock
Environmental Protection Specialist
575-234-5926

Jessie Rice
Natural Resource Specialist
575-234-5913

Linda Denniston
Environmental Protection Specialist
575-234-5974

Indra Dahal
Natural Resource Specialist
575-234-5996