Form 3160-5
(April 2004)

OCD-ARTESIA

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OM B No. 1004-0137
Expires: March 31, 2007

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.

5. Lease Serial No.
NMLC028793A C

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.
NMNM88525X

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

OCT 31 2007
OCD-ARTESIA

8. Well Name and No.
Burch Keely Unit #102 WIW

2. Name of Operator **Marbob Energy Corporation**

9. API Well No.
30-015-04212

3a. Address
PO Box 227, Artesia, NM 88211-0227

3b. Phone No. *(include area code)*
575-748-3303

10. Field and Pool, or Exploratory Area
Grbg Jackson SR Q Grbg SA

4. Location of Well *(Footage, Sec., T., R., M, or Survey Description)*
990 FSL 2310 FEL, Sec. 19-T17S-R30E, Unit O

11. County or Parish, State
Eddy Co., 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.)

Marbob Energy Corporation proposes to plug & abandon this well as follows:

Notify BLM 24 hrs before starting plugging procedure.
POOH w/ pkr &tbg. Set CIBP + 35' cmt @ 2500'. Shoot 4 sqz holes @ 980' (50' below base salt @ 930'), 4 sqz holes @ 610' (50' below 8 5/8" shoe) & 4 sqz holes @ 200'. Set rtnr @ 930'. If injection can be established, pump 50 sx Class "C" neat cmt (40 sx below & 10 sx on top of rtnr). If injection can't be established, spot 10 sx cmt on top of rtnr. Set rtnr @ 560'. If injection can be established, pump 100 sx Class "C" neat cmt (90 sx below & 10 sx on top of rtnr). If injection can't be established, spot 10 sx cmt on top of rtnr. Set rtnr @ 150'. If circulation or injection can be established, pump 200 sx Class "C" + 2% CaCl2 to fill well from 200' to surface w/ cmt outside 4 1/2" & 7" csg. Sting out of rtnr & fill 4 1/2" csg from 150' to surface w/ 15 sx Class "C" + 2% CaCl2. If neither circulation nor injection can be established, fill 4 1/2" csg from 150' to surface w/ 15 sx Class "C" + 2% CaCl2. Cut off wellhead & install dry hole marker. Reclaim location per BLM specs.

(See attached procedure & well bore schematics)

SEE ATTACHED FOR CONDITIONS OF APPROVAL

Accepted for NMOCD

14. I hereby certify that the foregoing is true and correct
Name *(Printed/Typed)* **Diana J. Briggs** Title **Production Analyst**

Signature Diana J. Briggs Date **10/15/2007**

APPROVED

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by _____ Title _____ Date OCT 24 2007

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

WESLEY W. INGRAM
PETROLEUM ENGINEER

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.

(Instructions on page 2)

BKU 102
990' fsl, 2310' fel
Unit O, Sec. 19, T17S, R30E
Eddy Co., NM
LC-028793-C

Plug and Abandonment Procedure
5 May 2007

Basic Data:

8-5/8" @ 560' 50 sx. Calc TOC 440' assuming 13" hole.
7" @ 2701' 100 sx. Calc. TOC 1675' assuming 8-1/2" hole.
4-1/2" @ 2698' 725 sx. Circulated cement to surface.

Note: Notify BLM inspectors in Carlsbad (887-6544) at least 24 hrs. before starting plugging operation.

Procedure:

1. Circulate 40 bbls of 9 ppg brine mixed with 25 sx per 100 bbls of salt gel into well. POOH with packer and tubing. If tubing in good shape, can use it for plugging. If in bad or questionable condition, lay injection tubing down and pick up a work string. Run bit and scraper to 2600'. Knock out tight spot near the surface.

2. Install packoff, run gauge ring to 2500' if necessary and set CIBP + 35' cement at 2500'. Shoot 4 squeeze holes at 980' (50' below base salt at 930'), 4 squeeze holes at 610' (50' below 8-5/8" shoe) and 4 squeeze holes at 200'.

3. Set retainer at 930'. RIH with tubing and attempt to establish injection into perfs at 980'. If injection can be established, pump 50 sx Class "C" neat cement. Put 40 sx. below retainer, sting out and spot 10 sx on top of retainer. If injection can't be established, spot 10 sx. Class "C" neat cement (14.8 ppg, 1.32 cfps, 6.3 gwps) on top of retainer.

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Note: 10 sx. Class "C" neat will occupy 150' inside 4-1/2" casing. If we spot 25 sx per guidelines, cement will cover up squeeze holes at 610'. There is no need to tag cement since it is being spotted on top of a retainer and can't migrate downhole.

4. Set retainer at 560'. RIH with tubing and attempt to establish injection into perfs at 610'. If injection can be established, pump 100 sx Class "C" neat cement. Put 90 sx. below retainer, sting out and spot 10 sx on top of retainer. If injection can't be established, spot 10 sx. Class "C" neat cement (14.8 ppg, 1.32 cfps, 6.3 gwps) on top of retainer.

Note: 10 sx. Class "C" neat will occupy 150' inside 4-1/2" casing. If we spot 25 sx per guidelines, top of cement might cover up squeeze holes at 200'. There is no need to tag cement since it is being spotted on top of a retainer and can't migrate downhole.

5. Set retainer at 150', RIH with tubing and attempt to establish circulation to surface up the 8-5/8" x 7" annulus and outside the 8-5/8". If circulation can't be established, attempt to establish injection into squeeze holes at 200'. If circulation or injection can be established, pump 200 sx. Class "C" + 2% CaCl2 (14.8 ppg, 1.32 cfps, 6.3 gwps) to fill the well from 200' to surface with cement outside the 4-

1/2"/7" casing. Pump more cement if necessary to achieve circulation to surface (if in circulation scenario). Sting out of retainer and fill 4-1/2" casing from 150' to surface with 15 sx. Class "C" + 2% CaCl2. If neither circulation nor injection could be established, fill 4-1/2" casing from 150' to surface with 15 sx. Class "C" + 2% CaCl2.

6. Cut wellhead and casings off 3' below ground level and remove. Weld plate onto 8-5/8" stub. Weld a 4" diameter dry hole marker onto plate such that 4' of it is above ground level. The following information needs to be placed on the marker:

   Marbob Energy, BKU 102, 990' fsl, 2310' fel, Unit O, Sec. 19, T17S, R30E, LC-028793-C
   Date well plugged

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

Kbc/bku 102 plug

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Well: [illegible]
([illegible])

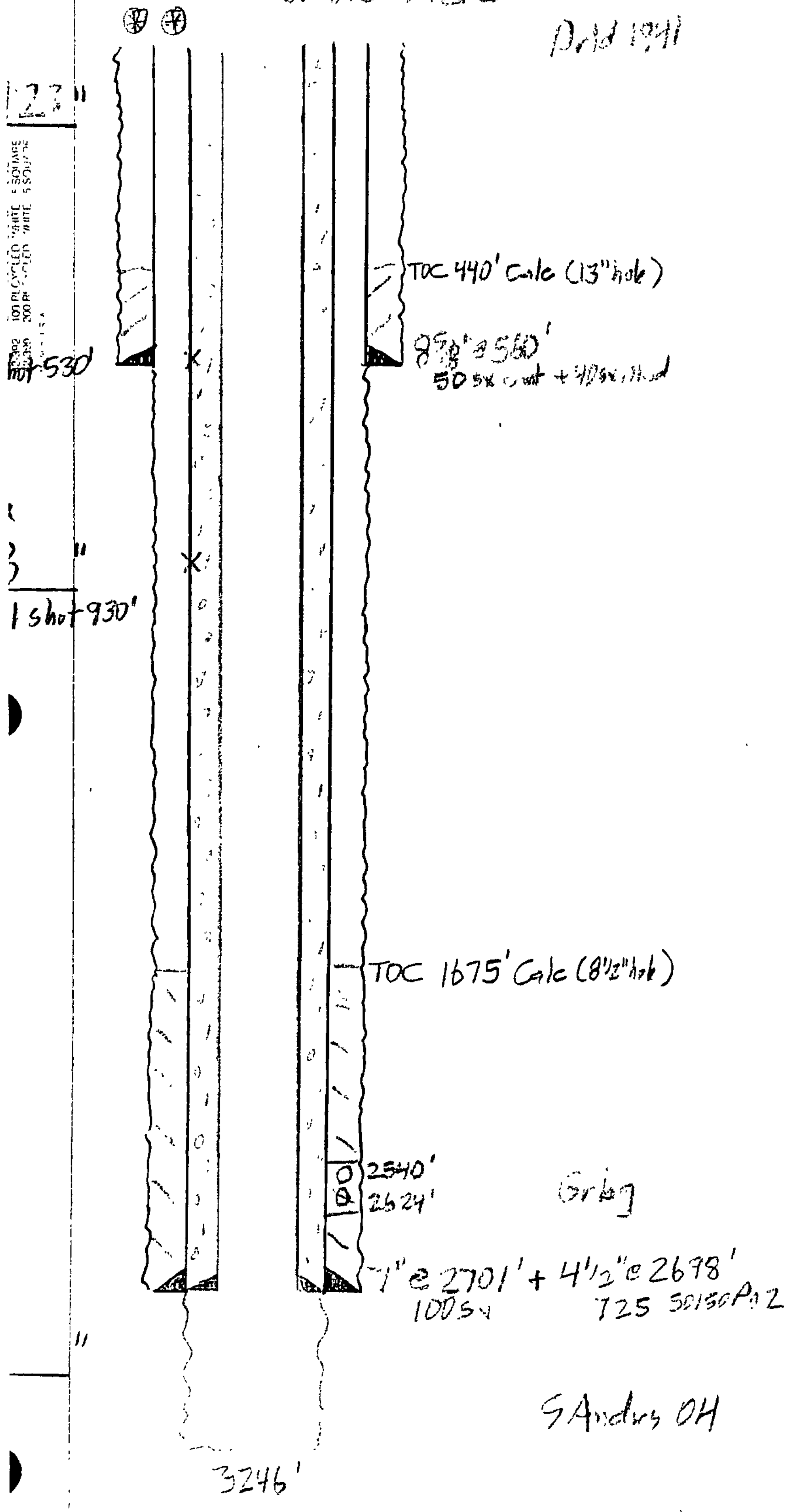
Location: [illegible] 2310' [illegible]
[illegible]-17S-[illegible]
[illegible], NM
30-015-04212

Zero: GL
KB:
GL:

Casing Program:

Size	Wt.	Grade	Conn.	Depth
8 5/8"	24	[illegible]		560'
7"	20	H40	STC	2701'
4 1/2"	11.6	J55	LTC	2698'

[illegible]: Perf Top Salt 530', Base Salt 930' 1 shot



Ran 2700' 4 1/2" csg.
725 sx 50/50 POZ. Circ cmt out of 7" & 8 5/8". Sqz 125 sx into perfs 2540-2624'. Circ 150 sx to pit.

⊛ Probably some cement in 8 5/8" & 7" annuli since cement circulated out of both when cementing 4 1/2" csg.

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BEFORE

3246'

Well: BKU 102
(Burnett)

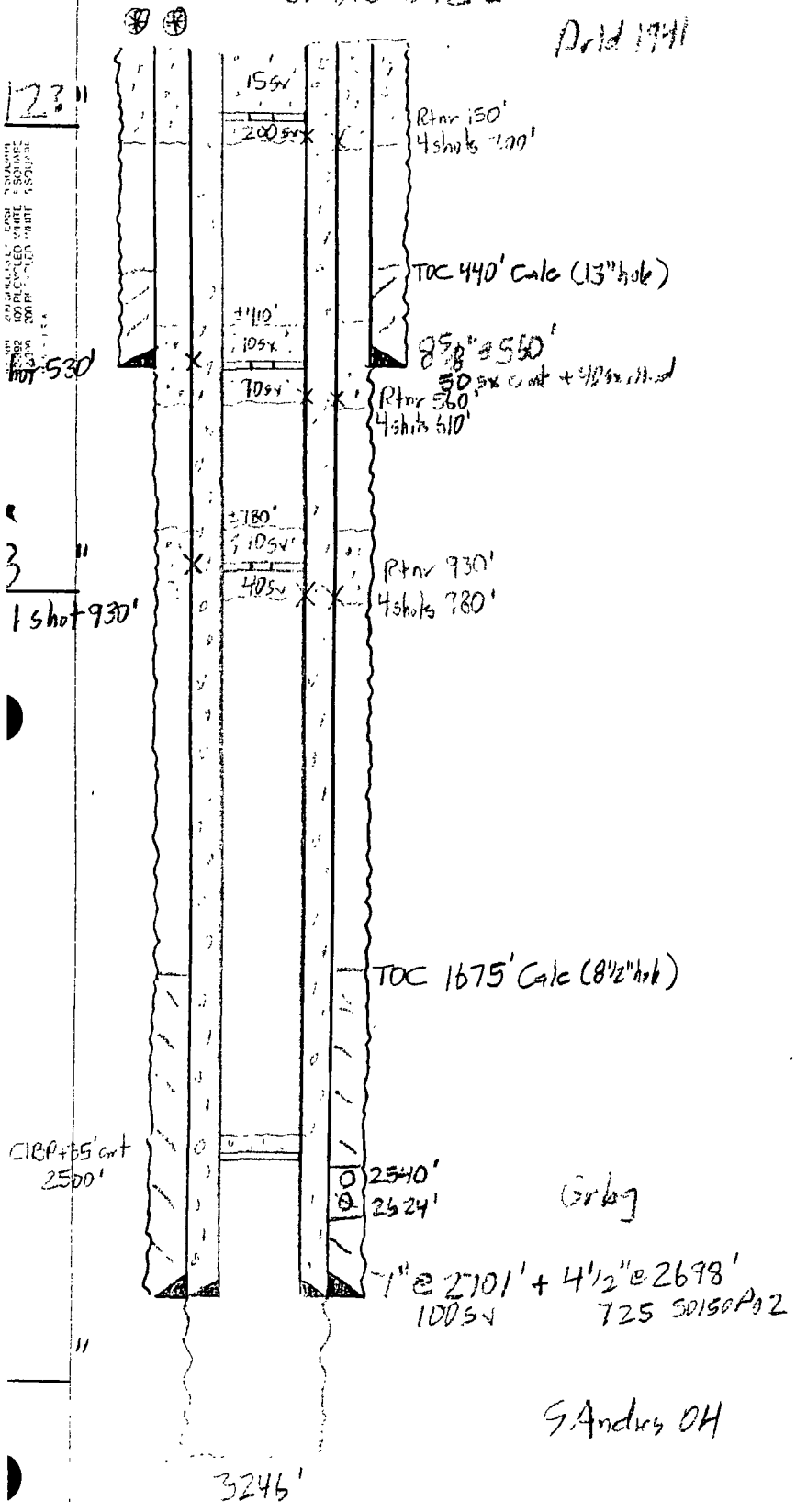
Location: 990' FSL 2310' FEL
O-19-17S-30E
Eddy NM
30-015-04212

Zero: GL
KB :
GL :

Casing Program:

Size	Wt.	Grade	Conn.	Depth
8 5/8"	24	Lowell		560'
7"	20	H40	STC	2701'
4 1/2"	11.6	J55	LTC	2698'

Drld 1941



3198: Rstr Top Salt 530', Base Salt 930' 1 shot

Ran 2700' 4"2 csg.
725 sx 50/50 Poz. Circ cmt out of 7" & 8 5/8". Sqz 125 sx into perfs 2500-2624'. Circ 150 sx to pit.

(*) Probably some cement in 8 5/8" & 7" annuli since cement circulated out of both when cementing 4 1/2" csg.

Accepted for record
NMOCD

AFTER

3246'

Burch Keely Unit #102
Marbob Energy Corporation
October 24, 2007
Plug and Abandonment
Conditions of Approval

Procedure modifications

1. **Ok**
2. **Setting CIBP at 2500' is okay. Cement on top to be 25 sacks if pumped and 35' if bailed. REMAINDER OF PROCEDURE MODIFIED**
3. **Perforate holes at 1025', set packer above perforations and attempt to establish injection. If injection can be established, pump a minimum of a 25 sack plug. Plug to be tagged at 880' or shallower. If injection cannot be established, pump 25 sack plug. Tag should occur at approximately 650'.**
4. **Perforate holes at 610', set packer above perforations and attempt to establish injection. If injection can be established, pump a minimum of a 25 sack plug. Plug to be tagged at 500' or shallower. If injection cannot be established, pump 25 sack plug and tag at 232' or shallower.**
5. **Perforate holes at 150', set packer above perforations and attempt to establish circulation in the 7"x8-5/8" and the 8-5/8" x formation annuli. Pump sufficient cement to fill both annuli and fill the 4-1/2" casing.**
6. **If circulation is not established up the annuli, submit proposal describing how annuli will be filled to the surface to meet BLM and NMOCD requirements.**
7. **Use step 6 of original procedure.**
8. **Use step 7 of original procedure.**

WWI 102407

Accepted for record
NMOCD

BUREAU OF LAND MANAGEMENT
Carlsbad Field Office
620 East Greene Street
Carlsbad, New Mexico 88220
505-234-5972

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 505-627-0272; Eddy County, call 505-361-2822; Lea County, call 505-393-3612.

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 class "C", for up to 7,500 feet of depth, mixed at 14.8 lbs/gal with 6.3 gallons of fresh water per sack or class "H", for deeper than 7,500 feet plugs, mixed at 16.4 lbs/gal with 4.3 gallons of fresh water per sack.

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.

Accepted for record
NMOCD

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
Carlsbad Field Office
620 E. Greene St.
Carlsbad, NM 88220

Interim Reclamation Procedures for Permanently Abandoned Federal Wells

1. After Subsequent Report of Abandonment, Form 3160-5, is filed and approved by the BLM the surface protection specialist (SPS) will conduct a surface inspection of the abandonment. The SPS will establish the reclamation requirements the operator will need to complete. **DO NOT START RECLAMATION UNTIL THE SPS HAS INSPECTED THE LOCATION.**

2. The reclamation requirements will be given to an environmental protection specialist (EPS). The EPS will issue the operator a Notice of Written Order outlining the reclamation requirements. **DO NOT START RECLAMATION UNTIL A NOTICE OF WRITTEN ORDER FOR RECLAMATION HAS BEEN RECEIVED.** The EPS will be responsible for all further abandonment work and inspections.

3. **Notification: CONTACT THE EPS 3 DAYS PRIOR TO RECLAMATION WORK.** This notification gives the EPS an opportunity to discuss by phone or on location the reclamation requirements, any special concerns and the timeframes. It also allows the EPS an opportunity to witness various aspects of the reclamation work to determine if an adequate seedbed has been prepared and all reclamation requirements have been completed. **CONTACT THE EPS AT LEAST 3 DAYS PRIOR TO SEEDING.** This allows the EPS to witness the seeding operation to make sure the location is seeded properly and with the appropriate seed mixture. **DO NOT START RECLAMATION UNTIL THE EPS HAS BEEN NOTIFIED.**

4. After reclamation work has been completed, submit the **I & E copy of the Notice of Written Order** to the BLM. It will need to be signed by a company representative and dated. Also submit one original and five copies of the **Final Abandonment Notice, Form 3160-5**. The report should state that all reclamation work has been completed, and the location is ready for a final abandonment inspection.

5. The BLM will continue to monitor the location to ensure the location vegetates successfully, and salts from the reserve pit do not leach to the surface. The location will be monitored until such time as vegetation (20%) is established evenly across the location (including the reserve pit and access road). Once EPS determines that vegetation (20%) is evenly spread across the location, final abandonment will be authorized.

If there are any questions please feel free to contact any of the following:

Jim Amos
Supervisory Environmental Protection Specialist
(505) 234-5909

Barry Hunt
Surface Protection Specialist
(505) 234-5965

Todd Suter
Surface Protection Specialist
(505) 234-5987

Trishia Bad Bear
Natural Resource Specialist – Lea County
(505) 393-3612

Cody Layton
Natural Resource Specialist
(505) 234-5959

Paul Evans
Environmental Protection Specialist
(505) 234-5977

Terry Gregston
Environmental Protection Specialist
(505) 234-5958

10/18/2006