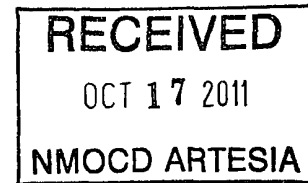
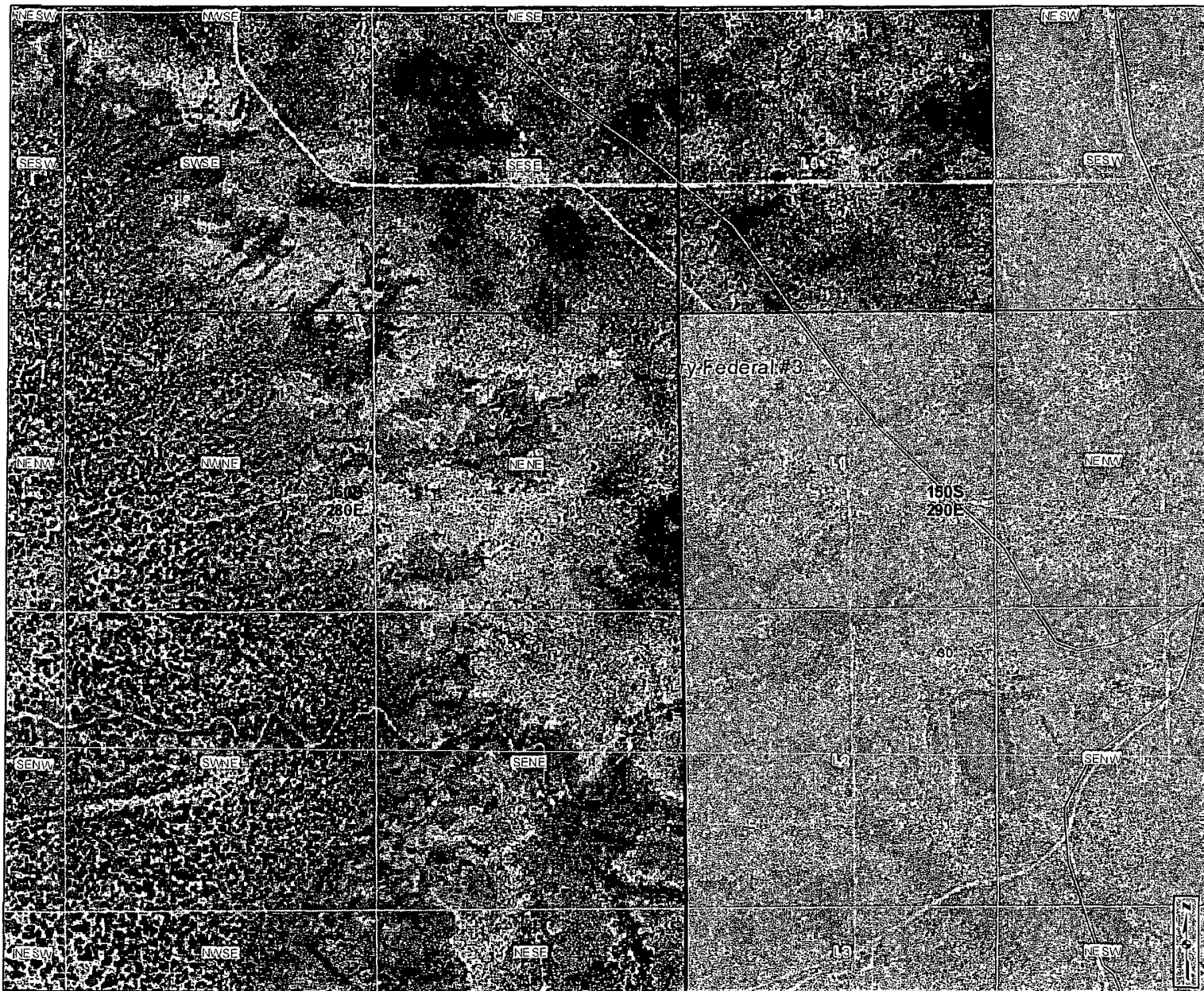


## SURFACE USE AND OPERATING PLAN

### 1. Existing Access Roads

- A. All roads to the location are shown in Exhibit #6. The existing lease roads are illustrated and are adequate for travel during drilling and production operations. Upgrading existing roads prior to drilling well will be done where necessary.
- B. Directions to Location: From the intersection of Co. Rd #217 and Hwy #82, go north on Co. Rd #217, 1.1 miles, turn left and go west 4.8 miles, veer right, go northwest 0.4 miles, turn left and go west 0.6 miles and go west 347 feet to location.
- C. Routine grading and maintenance of existing roads will be conducted as necessary to maintain their condition as long as any operations continue on this lease.





### Cartographic Features

- City, Town or Village
- County Seat
- County Boundary
- SLO District Office
- SLO District Boundary
- Land Grant
- Interstate Highway
- US Highway
- NM Highway
- Local Road or Street

### Federal Surface Management

- Bureau of Land Management
- Bureau of Reclamation
- Department of Agriculture
- Department of Defense
- Department of Energy
- USDA Forest Service
- Fish and Wildlife Service
- Bureau Indian Affairs
- National Park Service
- Valles Caldera National Preserve

### State Trust Lands

- Surface Estate
- Subsurface Estate
- Surface and Subsurface Estate

### Lease Types

- Oil and Gas Lease
- Agricultural Lease
- Commercial Lease
- Minerals Lease

## New Mexico State Land Office Trust Land Status

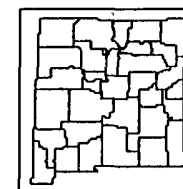
0 0.025 0.05 0.1 0.15 0.2 Miles

Universal Transverse Mercator Projection, Zone 13  
1983 North American Datum

The New Mexico State Land Office assumes no responsibility or liability for, or in connection with, the accuracy, reliability or use of the information provided here, in State Land Office data layers or any other data layer.

Land Office Geographic Information Center  
log@c@slo.state.nm.us

Created On 8/17/2011 11:10:08 AM



www.nmstatelands.org



### **1. Proposed Access Road:**

Exhibit #6 shows the 347' of new access road to be constructed. Proposed upgrade of existing road will be done along staked centerline survey. Necessary maintenance will be done to insure traffic stays within proposed ROW. The road will be constructed as follows:

- A. The Maximum width of the running surface will be 14'. The road will be crowned and ditched and constructed of 6" rolled and compacted caliche. Ditches will be at 3:1 slope and 3 feet wide. Water will be diverted where necessary to avoid ponding, prevent erosion, maintain good drainage, and to be consistent with local drainage patterns.
- B. The average grade will be less than 1%.
- C. No turnouts are planned.
- D. No culverts, cattleguard, gates, low water crossings or fence cuts are necessary.
- E. Surfacing material will consist of native caliche. Caliche will be obtained from the nearest BLM approved caliche pit.
- F. The proposed access road as shown in Exhibit #6 has been centerline flagged by John West Engineering, Hobbs, New Mexico.

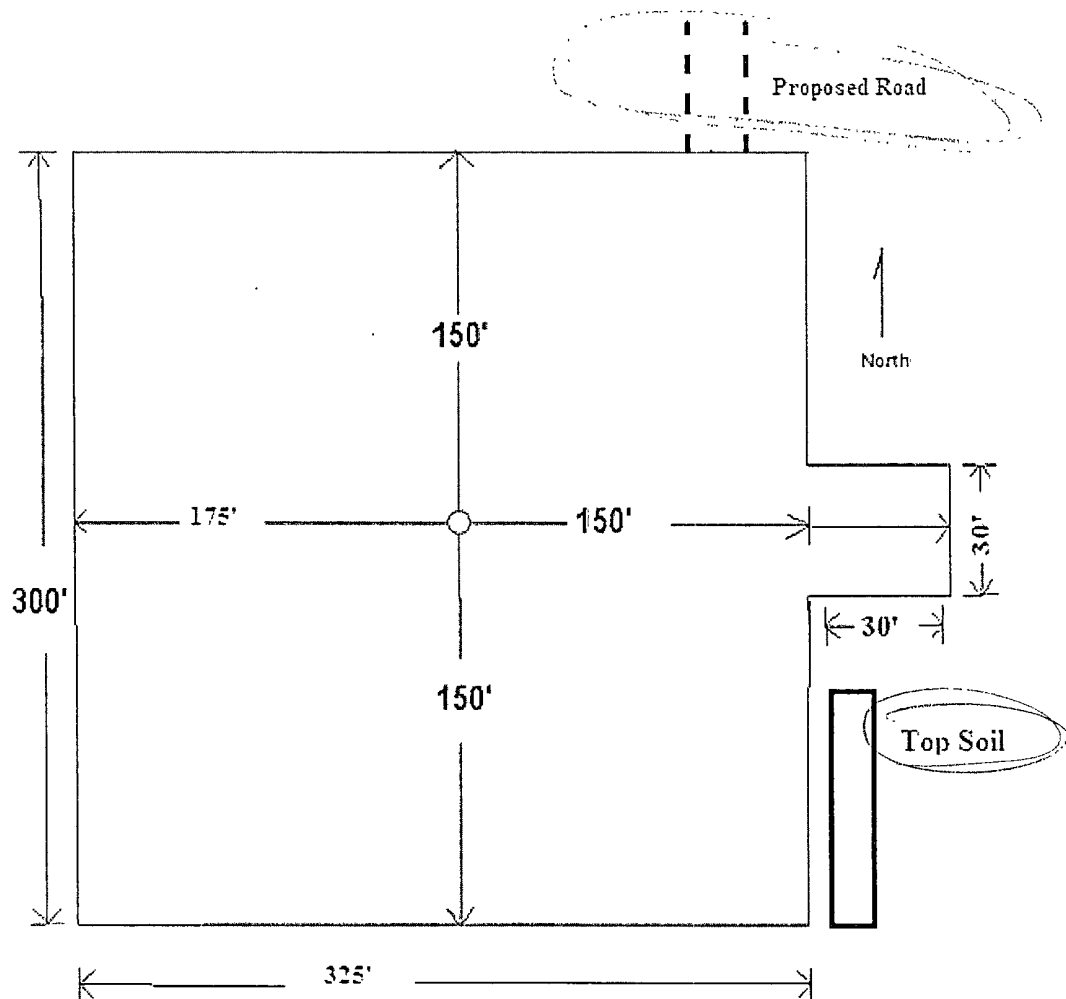
### **2. Location of Existing Wells:**

Exhibit #6 shows all existing wells within a one-mile radius of this well.

### **3. Location of Existing and/or Proposed Facilities:**

- A. Mack Energy Corporation does not operate a production facility on this lease.
- B. If the well is productive, contemplated facilities will be as follows:
  - 1) Maljamar Yeso Completion: Will be sent to the Calgary Federal TB located at the #3 well. The Facility is shown in Exhibit #13.
  - 2) The tank battery and facilities including all flow lines and piping will be installed according to API specifications.
  - 3) Any additional caliche will be obtained from a BLM approved caliche pit. Any additional construction materials will be purchased from contractors.
  - 4) It will be necessary to run electric power if this well is productive. Power will be run by CVE and they will send in a separate plan for power.
- C. Proposed flow lines, will stay on location, TB at the #1 well.





Exhibit# 14

#### 9. Plans for Restoration of the Surface:

- A. Upon completion of the proposed operations, if the well is completed, any additional caliche required for facilities will be obtained from a BLM approved caliche pit.
- B. In the event of a dry hole. Topsoil removed from the drill site will be used to recontour the area to its original natural level and reseeded as per BLM specifications.
- C. If the well is productive, rehabilitation plans are as follows:
  - 1) Topsoil removed from the drill site will be used to recontour the surrounding area to the original natural level and reseeded as per BLM specifications.

- D. Exhibit #15 below shows the proposed downsized well site after Interim Reclamation. Dimensions are estimates on present conditions and are subject to change.

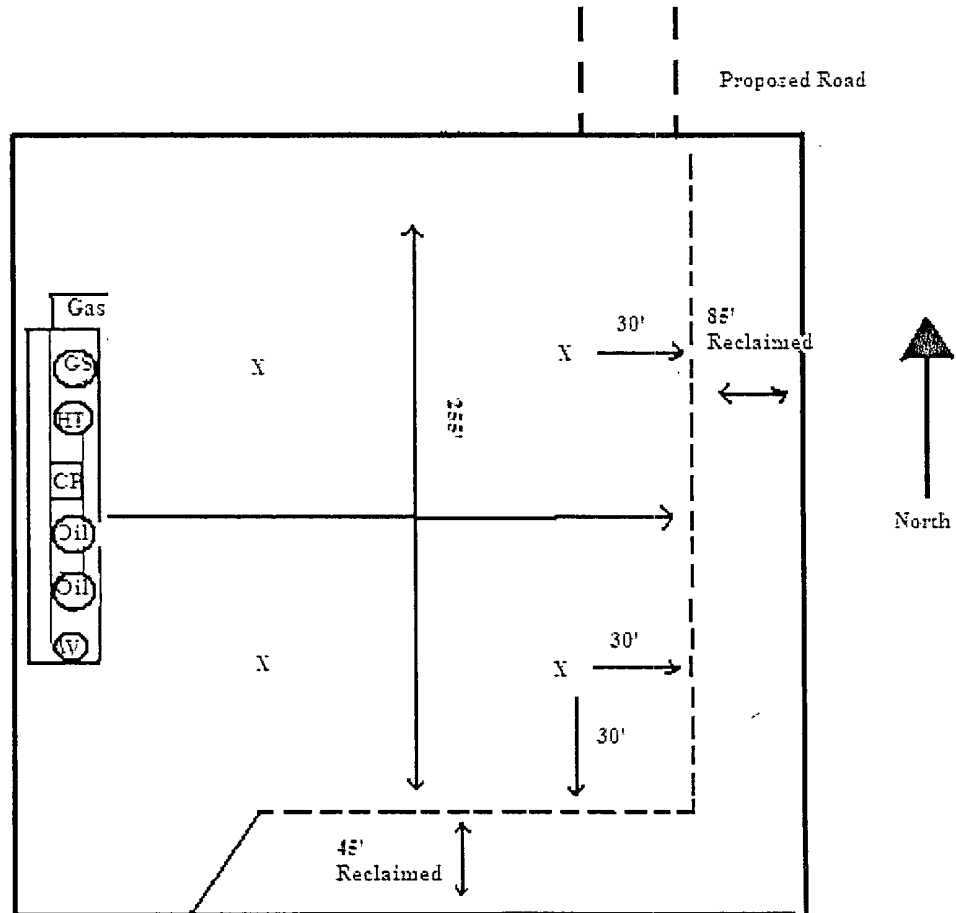


Exhibit #15

#### 10. Surface Ownership:

The well site and lease is located entirely on Fee surface. We have notified the surface owner of the impending operations and a Surface Use Agreement has been reached. According to BLM the leasee is Bogrl Limited Company, P.O. Box 460, Dexter, NM 88230 (575)365-2996.

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**6. Methods of Handling Waste:**

- A. Drill cuttings not retained for evaluation purposes will be disposed into the steel tanks and hauled to an approved facility.
- B. Drilling fluids will be contained in steel tanks using a closed loop system Exhibit #12.
- C. Water produced from the well during completion may be disposed into a steel tank. After the well is permanently placed on production, produced water will be collected in tanks (fiberglass) until pumped to an approved disposal system; produced oil will be collected in steel tanks until sold.
- D. Garbage and trash produced during drilling or completion operations will be collected in a trash bin and hauled to an approved landfill. All water and fluids will be disposed of into an approved facility. No toxic waste or hazardous chemicals will be produced by this operation.
- E. After the rig is moved out and the well is either completed or abandoned, all waste materials will be cleaned up within 30 days. In the event of a dry hole only a dry hole marker will remain.
- F. Sewage and Gray Water will be place in container and hauled to a approved facility.

**7. Ancillary Facilities:**

No airstrip, campsite or other facilities will be built as a result of the operation on this well.



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## 8. Well Site Layout:

- A. The well site and elevation plat for the proposed well is shown in Exhibit #1. It was staked by John West Engineering, Hobbs, NM.
- B. The drill pad layout, is shown in Exhibit #14. Dimensions of the pad are shown. Topsoil, if available, will be stockpiled per BLM specifications. Because the pad is almost level no major cuts will be required.
- C. Diagram below shows the proposed orientation of the location. No permanent living facilities are planned, but a temporary foreman/toolpusher's trailer will be on location during the drilling operations.

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**11. Other Information:**

- A. The area around the well site is grassland and the topsoil is sandy. The vegetation is native scrub grass with sagebrush.
- B. There is no permanent or live water in the immediate area.
- C. A Cultural Resources Examination has been requested and will be forwarded to your office in the near future.

**12. Lessee's and Operator's Representative:**

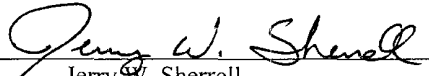
The Mack Energy Corporation representative responsible for assuring compliance with the surface use plan is as follows:

Jerry W. Sherrell  
Mack Energy Corporation  
P.O. Box 960  
Artesia, NM 88211-0960  
Phone (575) 748-1288 (office)

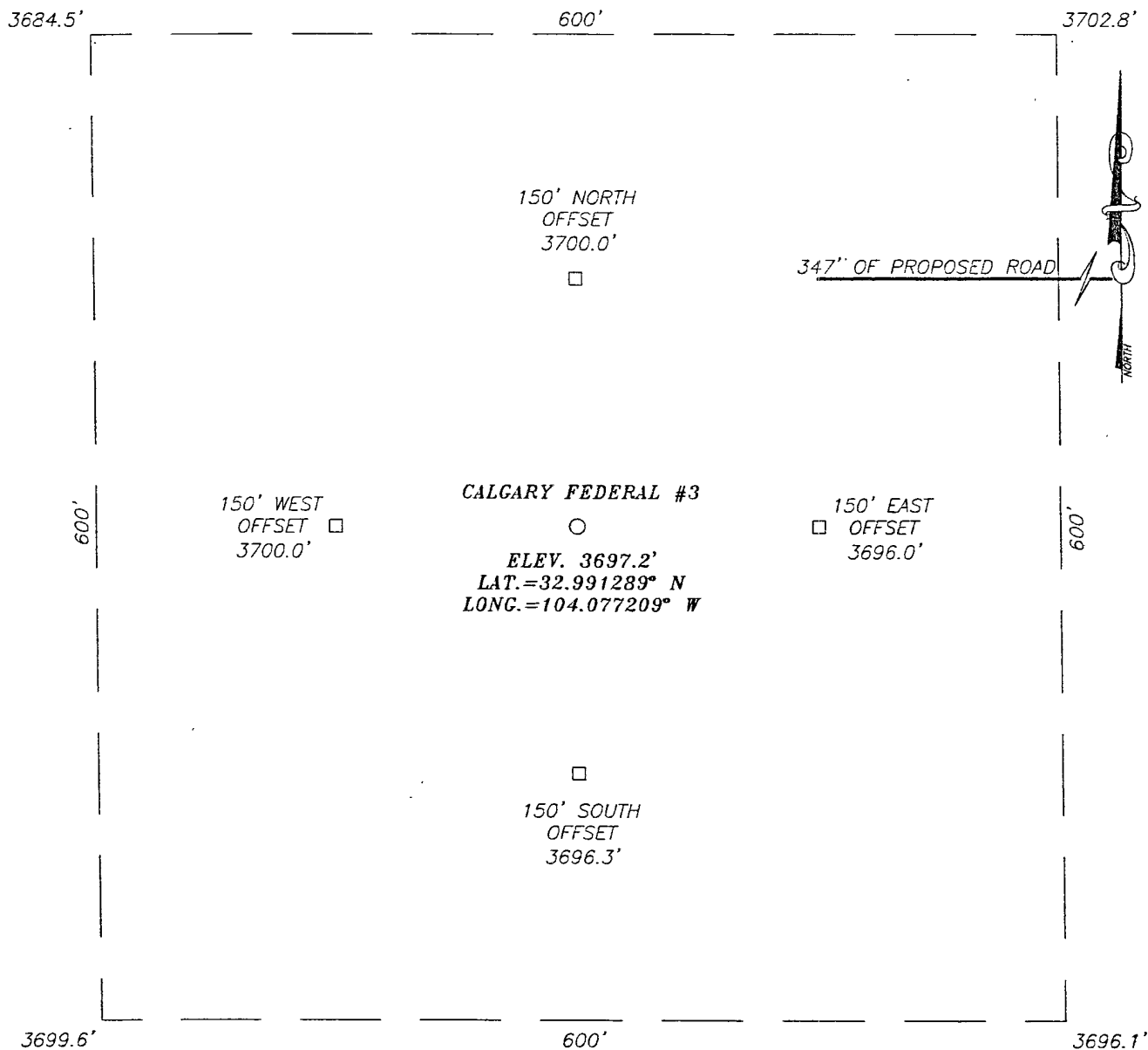
# APD CERTIFICATION

I hereby certify that I, or person under my direct supervision, have inspected the proposed drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of State and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed in conformity with this APD package and terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

Date: 8-18-2011

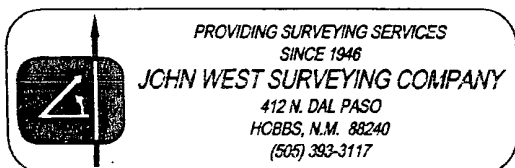
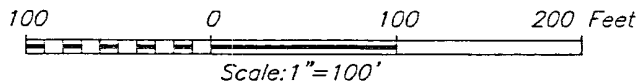
Signed:   
Jerry W. Sherrell

SECTION 25, TOWNSHIP 15 SOUTH, RANGE 28 EAST, N.M.P.M.,  
CHAVES COUNTY, NEW MEXICO



DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF U.S. HWY. #82 AND  
CO. RD. #217, GO NORTH ON CO. RD. #217  
APPROX. 11.0 MILES. TURN LEFT AND GO WEST  
APPROX. 4.8 MILES. VEER RIGHT AND GO  
NORTHWEST APPROX. 0.4 MILES. TURN LEFT AND GO  
WEST APPROX. 0.6 MILES TO EXISTING ESKIMO #7  
WELL AND PROPOSED ROAD SURVEY. FOLLOW ROAD  
SURVEY WEST APPROX. 347 FEET TO THIS LOCATION.



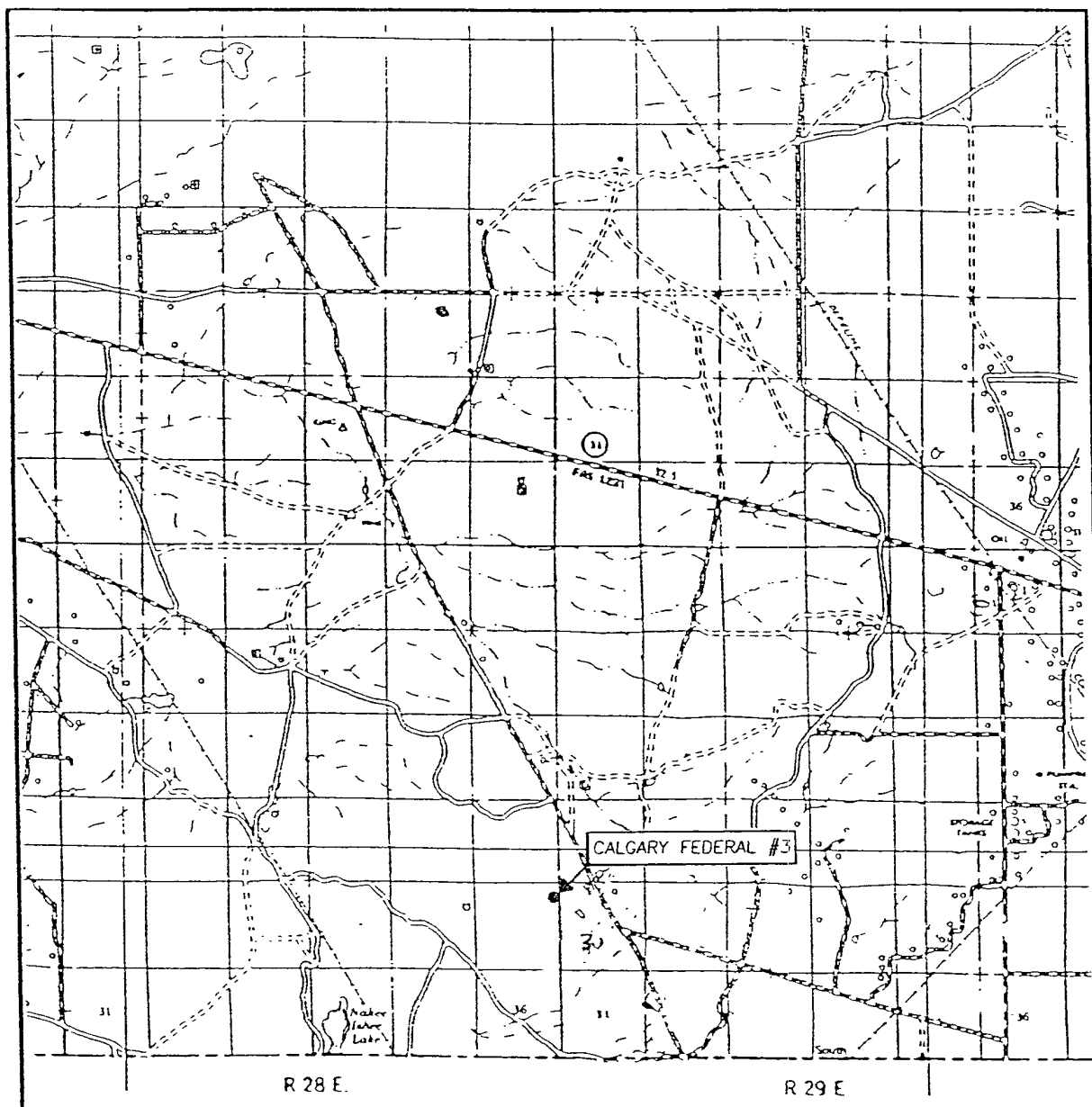
**MACK ENERGY CORPORATION**

CALGARY FEDERAL #3 WELL  
LOCATED 990 FEET FROM THE NORTH LINE  
AND 330 FEET FROM THE EAST LINE OF SECTION 25,  
TOWNSHIP 15 SOUTH, RANGE 28 EAST, N.M.P.M.,  
CHAVES COUNTY, NEW MEXICO.

Survey Date: 10/24/08	Sheet 1 of 1 Sheets
W.O. Number: 08.11.1830	Dr By: AR
Date: 10/31/08	Disk: 08111830 - - Scale: 1"=100'

08111830

# VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 25 TWP. 15-S RGE. 28-E

SURVEY N.M.P.M.

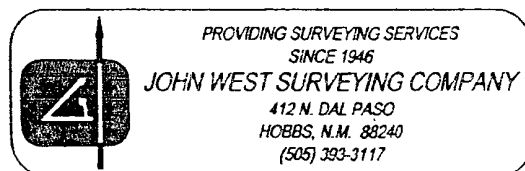
COUNTY CHAVES STATE NEW MEXICO

DESCRIPTION 990' FNL & 330' FEL

ELEVATION 3697'

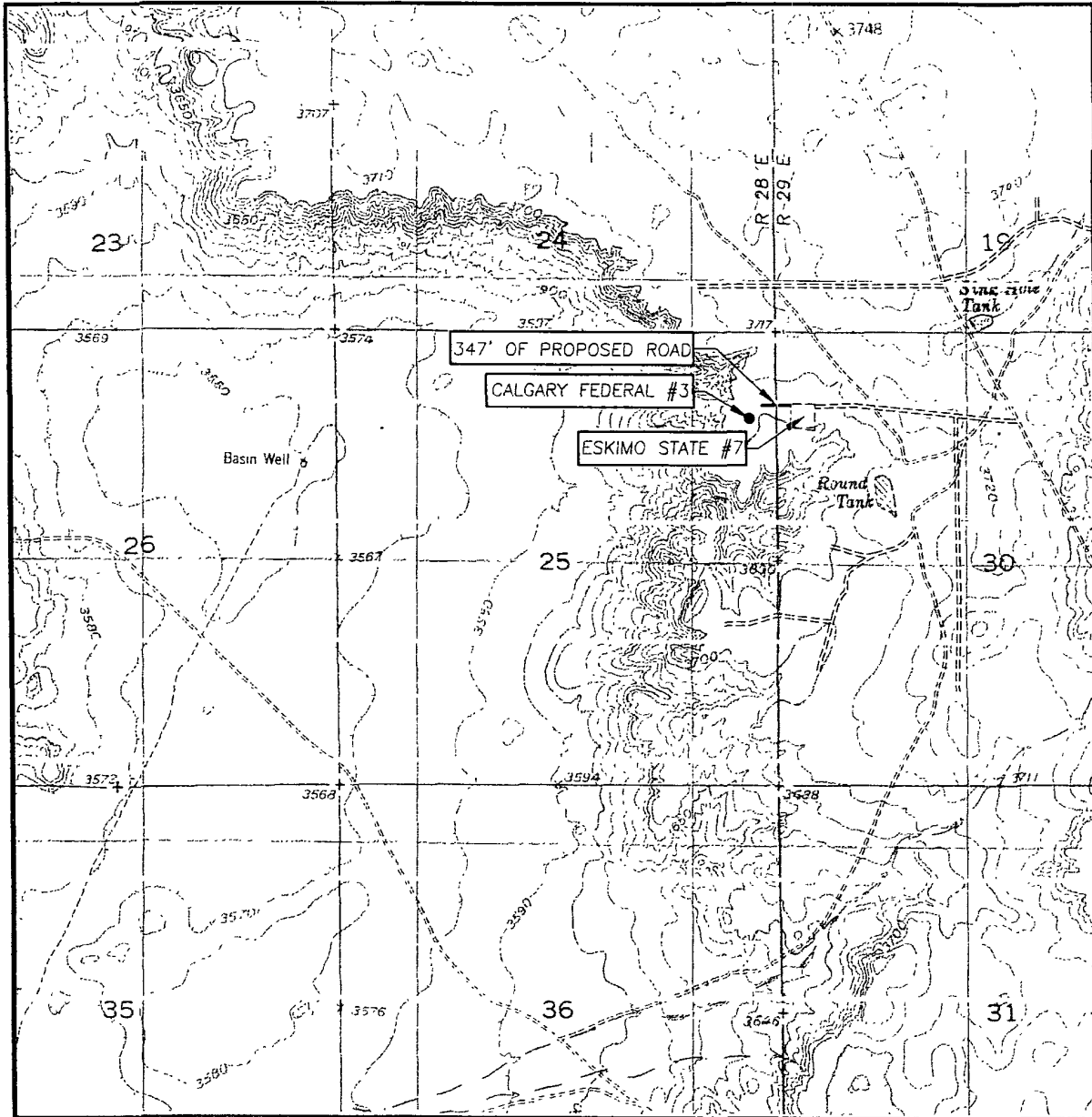
OPERATOR MACK ENERGY CORPORATION

LEASE CALGARY FEDERAL



CLAYTON, N.M. (210)

# LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:  
BASIN WELL, N.M. - 10'  
KING CAMP, N.M. - 10'

SEC. 25 TWP. 15-S RGE. 28-E

SURVEY N.M.P.M.

COUNTY CHAVES STATE NEW MEXICO

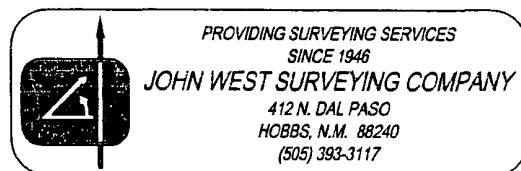
DESCRIPTION 990' FNL & 330' FEL

ELEVATION 3697'

OPERATOR MACK ENERGY CORPORATION

LEASE CALGARY FEDERAL

U.S.G.S. TOPOGRAPHIC MAP  
BASIN WELL, N.M.



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