Form 3160-5 FORM APPROVED (June 1990) Budget Bureau No. 1004-0135 Expires: March 31, 1993 UNITED STATES 5. Lease Designation and Serial No. DEPARTMENT OF THE INTERIOR 14-20-600-3531 -**BUREAU OF LAND MANAGEMENT** 6. If Indian, Allottee or Tribe Name SUNDRY NOTICES AND REPORTS ON WELLS Navaio Do not use this form for proposals to drill or to deepen or reentry to a different reservoir, 7. If Unit or CA. Agreement Designation Use "APPLICATION FOR PERMIT-" for such proposals SUBMIT IN TRIPLICATE Horseshoe Gallup Unit 1. Type of Well 8. Well Name and No. **HGU #111** Oil Well Gas Well Vulcun Minerals & Energy 9. API Well No. 2. Name of Operator 30-045-10507 Central Resources, Inc. c/o Playa Minerals & Energy 3. Address and Telephone No. 10. Field and Pool, or Exploratory Area 650 N. Sam Houston Pkwy. E. Suite 500 Houston, Tx. 77060 (281) 931-3800 Horseshoe Gallup Unit 4. Location of Well (Footage, Sec., T., R., M., or Survey Description) 11. County or Parish, State 601' FSL, 2002' FWL, Sec. 19, T31N, R16W San Juan County, NM CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA TYPE OF SUBMISSION TYPE OF ACTION Change of Plans Abandonment X Notice of Intent Recompletion New Construction Plugging Back Non-Routine Fracturing Subsequent Report Casing Repair Water Shut-Off Altering Casing Conversion to Injection Final Abandonment Notice Dispose Water Other (Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.) 13. Describe Proposed or Completed Operations (Clearly state all pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\* Vulcan plans to plug and abandon this well per the attached procedures. SEE ATTACHED FOR motions of approval

| N 0 01   |            |                                       |     |
|--|------------|---------------------------------------|-----|
|  |            |                                       | 2~~ |
| 14. I hereby certify that the foregoing is true and correct  |            |                                       |     |
| Signed Level Title Regulatory Compliance   | Date       | 08/14/01                              |     |
| Ken Jackson  |            |                                       |     |
| (This space for Federal or State office use)   |            |                                       |     |
| Approved by Title Title  | Date       | 9/7/01                                |     |
| Conditions of approval, if any:  | -          | <del></del>                           |     |
| Copproved by: June Malke US EPA Kegion 9   | ,          | 1/22/04                               |     |
| Title 18 U.S.C. Section 1001/makes it a crime for any person knowingly and willfully to make to any depart | tment or a | ngency of the United States any false |     |
| fictitious or fraudulent statements or representations as to any manner within its jurisdiction.           |            |                                       | ,   |

\*See Instruction on Reverse Side

## Plugging and Abandonment Procedure Horseshoe Gallup Unit No. 111 Attachment "A"

Well Data:

Location:

601' FSL, 2002' FWL, Section 19 T31N, R16W

San Juan County New Mexico

TD:

1585'

PBTD:

1545'

**Surface Casing:** 

8-5/8", 24 #/ft, J-55 set @ 102' with 125 sacks

**Production Casing:** 

5-1/2", 14 #/ft, H-40 set @ 1577' with 150 sacks

Perforations:

1500' - 1514' with 2SPF

1378' - 1404' with 2SPF

#### Procedure:

Release packer and TOH w/tubing.

Trip in hole with cement retainer and set at 1325'. Circulate hole and pressure test casing.

Mix and pump 70 sacks of cement below retainer. Pull out of retainer and set 2 sack plug on top of retainer. Estimated top of cement @ 1475.

Trip out of hole and lay down tubing.

Perforate squeeze holes 150'

Establish circulation down casing, through annulus and out bradenhead.

Mix and pump 50 sacks of cement down casing through perforations, into annulus and out through bradenhead. Leave casing and annulus full of cement.

Cut off casing wellhead and install regulation dry hole marker.

Reclaim location as per BLM regulations.

# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT FARMINGTON FIELD OFFICE

1235 LA PLATA HIGHWAY FARMINGTON, NEW MEXICO 87401

Attachment to notice of

Re: Permanent Abandonment

Intention to Abandon:

Well: 111 Horseshoe Gallup Unit

### **CONDITIONS OF APPROVAL**

- 1. Plugging operations authorized are subject to the attached "General Requirements for Permanent Abandonment of Wells on Federal and Indian Lease."
- 2. Mike Flanikan with the Farmington Office is to be notified at least 24 hours before the plugging operations commence (505) 599-8907.
- 3. The following modifications to your plugging program are to be made:
- a) Bring the top of the Gallup plug to 1114'.
- b) Place the Surface plug from 152' to surface inside and outside the 5 1/2" casing.

You are also required to place cement excesses per 4.4 of the attached General Requirements.

Office Hours: 7:45 a.m. to 4:30 p.m.

WELL NAME III HGU SEC, TWN., RNG. 19-31N-16W

| •              | ,     |   |  |
|----------------|-------|---|--|
| P.L. (Mesuverd | 60    |   | 85/2 24 #  |
|                |       |   | 152-50, full w 50 sks<br>(52/7.299(1.18) = 188  ks<br>50/5.7719(1.18) = 7  sks<br>102/5.192(1.18) = 17  sks<br>42  sks |
|                |       |   | Toc = 752' 75% .H.   |
|                |       |   | (1325-1114) +50/7.199(1.18) = 30 Sxs or great  |
| Sallup         | 1164' |   | Pert @ 1325' squeeze w/ 23 5x4   |
|                |       | , | 1577'  |

| - DURFACE      | CASING     |
|----------------|------------|
| SIZE HOLE      | t          |
| SIZE CASING    | <u> </u>   |
| Annilar Volume | f+3/r:     |
| Cement         | /++.<br>SK |
| Volume         | ft3        |

| INTERMEDIATE CASINE                        |
|--|
| SIZE HOLE " SIZE CASING " Annulur Volume f |
| Cements<br>Volumef                         |

## BLM FLUID MINERALS Geologic Report

| Date Completed: 8/31/01 |
|-------------------------|
|-------------------------|

| Well No.       | Horseshoe Gallup Unit # 111   |            | Location     | 601'        | FSL | &     | 2002'      | FWL  |
|----------------|-------------------------------|------------|--------------|-------------|-----|-------|------------|------|
| Lease No.      | 14 - 20 - 600                 | ) - 3531   | Sec. 19      | Т           | 31N |       |            | R16W |
| Operator       | Vulcan Mineral & Energy, Inc. |            | County       | San Juan    |     | State | New Mexico |      |
| Total Depth    | 1585'                         | PBTD 1549' | Formation    | Gallup (WIW | 7)  |       |            |      |
| Elevation (GL) | 5675'                         |            | Elevation (k | (B) 5682'   |     |       |            |      |

| Geologic Formations | Est. Top | Est. Bottom | Log Top | Log Bottom | Remarks                               |
|---------------------|----------|-------------|---------|------------|---------------------------------------|
| San Jose Fm         |          |             |         |            |                                       |
| Nacimiento Fm       |          |             |         |            |                                       |
| Ojo Alamo Ss        |          |             |         |            |                                       |
| Kirtland Shale      |          |             |         |            |                                       |
| Fruitland Fm        |          |             |         |            |                                       |
| Pictured Cliffs Ss  |          |             |         |            |                                       |
| Lewis Shale         |          |             |         |            |                                       |
| Chacra              |          |             |         |            |                                       |
| Cliff House Ss      |          |             |         |            |                                       |
| Menefee Fm          |          |             |         |            |                                       |
| Point Lookout Ss    |          | 60          | Surface |            | Surface/Potential useable water sands |
| Mancos Shale        | 60       |             |         | 1164       |                                       |
| Gallup              |          |             | 1164    | PBTD       | Oil & Gas/Water                       |
| Dakota Ss           |          |             |         |            |                                       |
| Morrison            |          |             |         |            |                                       |

Remarks:

P & A

Reference Well: Same

- BLM geologist's pick for the top of the Gallup fm. reflects the top of the transitional Tocito interval in this well. This top varies from operator's pick in this well.
- Potential useable water sands in the Point Lookout fm. are behind S.C.
- It is recommended that the Gallup plug be extended upward to adequately isolate the Gallup top identified in this report.

| Prepared by: | Chip Harraden | CEH |
|--------------|---------------|-----|
|--------------|---------------|-----|

ENTERED AFMSS

AUG 31 2001

BY\_OEU