

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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.

FORM APPROVED
OMB No. 1004-0135
Expires November 30, 2000

SUBMIT IN TRIPLICATE - Other Instructions on reverse side.

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator *Vulcan Minerals & Energy*

% NMOC

3a. Address *1000 Rio Brazos Rd.*

Aztec, NM 87410

3b. Phone No. (include area code)

334-6178

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

Sec. 4, T. 30N., R. 16W.,

2220/N & 880/E

5. Lease Serial No.

SF-081226

6. If Indian, Allottee or Tribe Name

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

Horseshoe Gallup

8. Well Name and No.

234 HGU

9. API Well No.

3004509930

10. Field and Pool, or Exploratory Area

Horseshoe Gallup

11. County or Parish, State

San Juan, NM

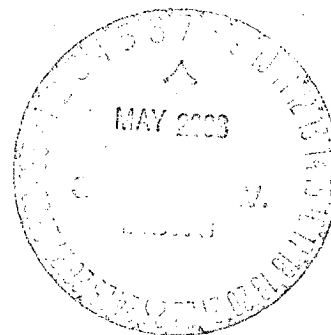
12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

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.)

See attached plugging procedure

SEE ATTACHED FOR
CONDITIONS OF APPROVAL



14. I hereby certify that the foregoing is true and correct

Name (Printed/Typed)

NMOC Contract Plugging

Title

Signature

NMOC

Date

5/1/03

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Stephen M. Man

Title

PE

Date

MAY 06 2003

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

FFO

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

API WELL # Well Name Well # Operator Name Type Stat County Surf_Owner UL Sec Twp N/S Rng W/E Feet NS Ft EW

Order_No 30-045-09930 HORSESHOE GALLUP UNIT 234 PLAYA MINERALS & ENERGY INC O A San Juan H 4 30 N 16 W

2220 N 880 E

CO 8 5/8 100 75S 5 1/2 1340 75S 2 1340 1300-1340

Procedure

MIRU, NUBOPE,

POOH Lay Down Rods & Tubing if present,

RIH with Gauge ring,

Pick up work string, Run Scraper if required,

RIH Set CIBP 1100 ', cap with 214 'cement .

Test casing.

POOH lay down tubing.

RU wire line RIH, perforate @ 150 ' + - 50' under surface casing shoe or Mesa Verde base whichever is lower..

Establish Circulation; circulate cement to surface inside and outside casing

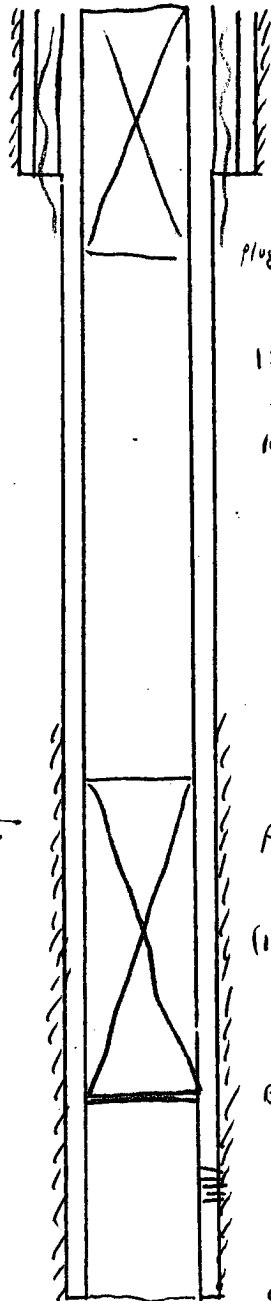
Cut off well head and install P&A marker

Cut off anchors 2' below ground

Clean and level location

WELL NAME 234 HGU
 SEC, TWN, RNG. 4-30 N-16 W

Manco



8 5/8 24 #

100'

plug 150 - surface

$$150 / 7.299 (1.18) = 17 \text{ SKS}$$

$$50 / 5.7719 (1.18) = 7 \text{ SKS}$$

$$100 / 5.192 (1.18) = 16 \text{ SKS}$$

$$40 \text{ SKS}$$

$$TOC \approx 859 \text{ 75\% eff}$$

plug 1100 - 886'

$$(1100 - 886) + 50 / 7.299 (1.18) = 31 \text{ SKS}$$

BP @ 1100'

Pert @ 1188' - 1231'
 1300' - 1336'

5 1/2" 14 #
 1370'

SURFACE CASING

SIZE HOLE _____"

SIZE CASING _____"

Annular Volume _____ ft³/ft.

Cement _____ SK

Volume _____ ft³

INTERMEDIATE CASING

SIZE HOLE _____"

SIZE CASING _____"

Annular Volume _____ f

Cement _____ S

Volume _____ f

Gallup

936'

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: 234 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. 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:

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