

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

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

☒ 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. 24 - T. 31 N., R. 17 W.

1972/N - 736/W

5. Lease Serial No.

14-20-603 - 2022

6. If Indian, Allottee or Tribe Name

Navajo

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

Horseshoe Gallup

8. Well Name and No.

90 HGU

9. API Well No.

3004510631

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 :

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

Name (Printed/Typed)

NMOC Contract Plugging

Title

Signature *NMOC*

Date

4/24/03

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Original Signed: Stephen Mason

Title

Date

4/25/03

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

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.

NMOC

API WELL # Well Name Well # Operator Name Type Stat County UL Sec Twp N/S Rng W/E Feet NS Ft EW Order_No
30-045-10631 HORSESHOE GALLUP UNIT 090 PLAYA MINERALS & ENERGY INC O A San Juan E 24 31 N 17 W 1972 N 736
W

api_number status csg_1 csg_1q csg_1d csg_2 csg_2q csg_2d csg_3 csg_3q csg_3d
liner_size liner QUAN tubing t_set_dept csg_perf 30-045-10631 CO 8 5/8 113 70 5 1/2
1581 100 2 1534 1394-1529

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 1300 ', cap with 201 'cement .

Test casing.

POOH lay down tubing.

RU wire line RIH, perforate @ 163 ' + - 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

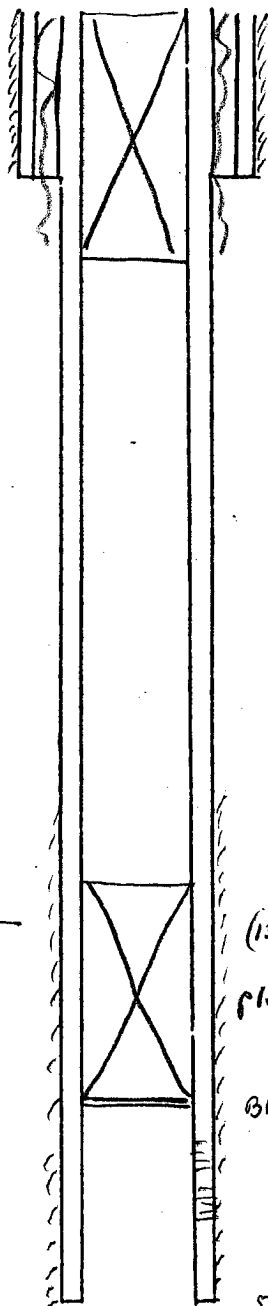
Clean and level location

WELL NAME 90 HGU
 SEC, TWN, RNG. 24-31N-17W

Mesquite

Point Lookout

Muncos 101'



8 5/8" 29#

113'

plug 163 - surface

$$163 / 7.299 (1.18) = 19 \text{ SKS}$$

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

$$113 / 5.389 (1.18) = \frac{18}{44} \text{ SKS}$$

TOC \approx 1033 75% cH.

$$(1300 - 1099) + 50 / 7.299 (1.18) = 29 \text{ SKS}$$

plug 1300' - 1099'

BP @ 1300'

1394' - 1424'

Perf @ 1494' - 1509'

5 1/2" 14#

1581'

Gallup 1149'

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