

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 <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other Inj		Horseshoe Gallup
2. Name of Operator Vulcan Minerals & Energy % NMOCN		8. Well Name and No. 93 HGU
3a. Address 1000 Rio Brazos Rd. Aztec, Nm 87410	3b. Phone No. (include area code) 334-6178	9. API Well No. 3004510627
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec. 24 -T. 31N., R. 17W. 1998/No 702/E		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 recompleate 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 recompleation 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) Nmoco Contract Plugging		Title
Signature Nmoco	Date	4/24/03

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by	Original Signed: Stephen Mason	Title	Date 4/24/03
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	Approved by: James Orndorff US EPA Region 9 1/22/04

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.

EPA

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

30-045-10627 HORSESHOE GALLUP UNIT 093 PLAYA MINERALS & ENERGY INC I A San Juan H 24 31 N 17 W 1998 N 702 E

R-2210

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 30-045-10627 WI 8 5/8 115 50 5 1/2
1565 100 1397-1515

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 218 'cement .

Test casing.

POOH lay down tubing.

RU wire line RIH, perforate @ 165 ' + - 50' under surface casing shoe or Mesa Verde base whichever is lower..

Establish Circulation; circulate cement to surface inside and outside casing

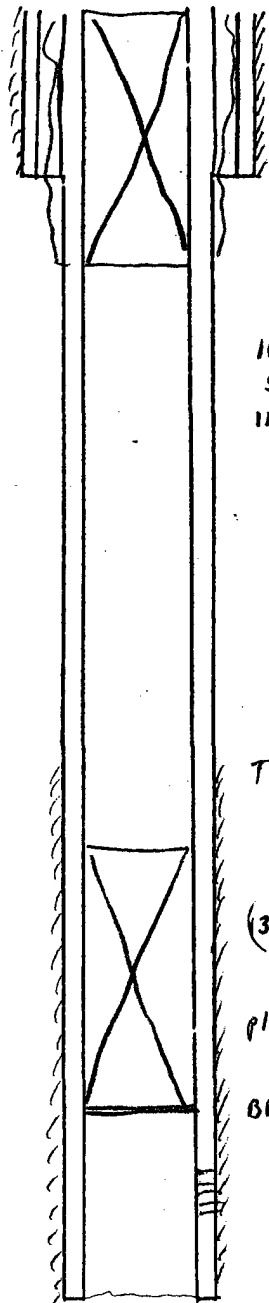
Cut off well head and install P&A marker

Cut off anchors 2' below ground

Clean and level location

WELL NAME 93 HCU
 SEC, TWN, RNG. 24-31N-17W

Measurede
 Point Lookout
 Mancos 84'



8 5/8" 29#
 115'

plug 165 - surface

$$165 / 7.299 (1.18) = 19 \text{ sks}$$

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

$$115 / 5.389 (1.18) = 18 \text{ sks}$$

44 sks

TOC \approx 1017' 75% eff.

$$(300 - 1082) + 50 / 7.299 (1.18) = 31 \text{ sks}$$

plug 1300 - 1082

BP @ 1300'

perf. 1397 - 1515'

5 1/2" 14#
 1565'

Gallup 1132'

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