Form 3160-5
(June 1990)

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

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 deepen or reentry to a different reservoir,
Use "APPLICATION FOR PERMIT--" for such proposals

SUBMIT IN TRIPLICATE

1. Type of Well: [ ] Oil Well [ ] Gas Well [X] Other WIW	8. Well Name and No.: HGU #9
2. Name of Operator: Vulcan Minerals & Energy, Inc.	9. API Well No.: 30-045-10423
3. Address and Telephone No.: 650 N. Sam Houston Pkwy E. Suite 500 Houston, Tx. 77060 (281) 931-3800	10. Field and Pool, or Exploratory Area: Horseshoe Gallup Unit
4. Location of Well (Footage, Sec., T., R., M., or Survey Description): 660' FNL, 1980' FEL, Sec. 30, T31N, R16W	11. County or Parish, State: San Juan County, NM

5. Lease Designation and Serial No.: 14-20-603-734
6. If Indian, Allottee or Tribe Name: Navajo
7. If Unit or CA. Agreement Designation: Horseshoe Gallup Unit

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

TYPE OF SUBMISSION	TYPE OF ACTION	
[X] Notice of Intent	[X] Abandonment	[ ] Change of Plans
[ ] Subsequent Report	[ ] Recompletion	[ ] New Construction
[ ] Final Abandonment Notice	[ ] Plugging Back	[ ] Non-Routine Fracturing
	[ ] Casing Repair	[ ] Water Shut-Off
	[ ] Altering Casing	[ ] Conversion to Injection
	[ ] Other _____	[ ] Dispose Water

(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.

RECEIVED
2001 AUG 16 PM 5:13
070 FARMINGTON NM

ENTERED
AFMSS

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

SEP 07 2001

BY Sam

FEB 2004

14. I hereby certify that the foregoing is true and correct
Signed Ken Jackson Title Regulatory Compliance Date 08/14/01

(This space for Federal or State office use)
Approved by _____ Title PE Date 9/7/01
Conditions of approval, if any:
Approved by James D Walker US EPA Region 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 department or agency of the United States any false, fictitious or fraudulent statements or representations as to any manner within its jurisdiction.

*See Instruction on Reverse Side

FARMINGTON COPY

Plugging and Abandonment Procedure
Horseshoe Gallup Unit No. 9
Attachment "A"

Well Data:

Location:	660' FNL, 1980' FEL, Section 30 T31N, R16W San Juan County New Mexico
TD:	1454'
PBTD:	1407'
CmtRet:	1325'
Surface Casing:	8-5/8", 24 #/ft, J-55 set @ 102' with 125 sacks
Production Casing:	5-1/2", 14 #/ft, H-40 set @ 1447'
Perforations:	1389' – 1403' with 2SPF Closed by CmtRet 1/22/93 1269' – 1297' with 2SPF

Procedure:

Release packer and TOH w/tubing.

Trip in hole with cement retainer and set at 1210'. Circulate hole and pressure test casing.

Mix and pump 33 sacks of cement below retainer. Pull out of retainer and set ~~25~~ 35 sack plug on top of retainer. Estimated top of cement @ ~~1085'~~ 960.

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.

BLM CONDITIONS OF APPROVAL

The following surface rehabilitation Conditions of Approval must be complied with as applicable, before this well can be approved for final abandonment (see 43 CFR 3162.3-4). **Surface rehabilitation work shall be completed within one year of the actual plugging date. Notification for completion of this work can be submitted with a Sundry Notice.**

1. All fences, production equipment, purchaser's equipment, concrete slabs, deadman (anchors), flowlines, risers, debris and trash must be removed from the location.

2. Production pits will be closed according to the Unlined Surface Impoundment Closure Guidelines, as approved in the Environmental Assessment of December 1993. Any oil stained soils may be remediated on-site according to these guidelines or disposed of in an approved disposal facility.

3. The well pad will be shaped to the natural terrain and left as rough as possible. All compacted areas and areas devoid of vegetation shall be ripped to a minimum of 12" before seeding.

4. Access roads will be shaped to conform to the natural terrain and left as rough as possible to detour vehicular travel. Access will be ripped to a minimum of 12" in depth and waterbarred prior to seeding. All erosion problems created by the development must be corrected prior to acceptance of release. Waterbars should be spaced as shown below:

% Slopes	**Spacing Interval**
Less than 20%	200'
2 to 5%	150'
6 to 9%	100'
10 to 15%	50'
Greater than 15%	30'

All water bars should divert to the downhill side of the road.

5. All disturbed areas will be seeded with the prescribed certified seed mix (reseeding may be required).

6. Notify Surfacing Managing Agency seven (7) days prior to seeding so that they may be present for that option.

7. The period of liability under the bond of record will not be terminated until the lease is inspected and the surface rehabilitation approved.

Other SMA's may vary slightly in their restoration requirements. It is your responsibility, as the operator, to obtain surface restoration requirements from other SMA's. We need to be provided with a copy of these requirements. Any problems concerning stipulations received from other SMA's should be brought to us.

On private land, we should be provided with a letter from the fee owner stating that the surface restoration is satisfactory.

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: 9 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 960'.

b) Place the Surface plug from 152' to surface inside and outside the 5 ½" 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.

(August 1996 Rev)

GENERAL REQUIREMENTS FOR PERMANENT ABANDONMENT OF WELLS ON FEDERAL AND INDIAN LEASES FARMINGTON DISTRICT OFFICE

1.0 The approved plugging plans may contain variances from the following minimum general requirements.

1.1 Modification of the approved plugging procedure is allowed only with the prior approval of the Farmington District office, *Branch of Drilling & Production.*

1.2 Requirements may be added to address specific well conditions.

2.0 Materials used must be accurately measured.

3.0 A tank or approved pit must be used for containment of any fluids from the wellbore during plugging operations and all unattended pits are to be fenced with woven wire. These pits will be fenced on three sides and once the rig leaves location, the fourth side will be fenced.

3.1 Pits are not to be used for disposal of any constituent*(s)* of concern.

4.0 All cement plugs are to be placed through a work string. Cement may be bull-headed down the casing with prior approval. Cement caps on top of bridge plugs or cement retainers may be placed by dump bailer.

4.1 The cement shall be as specified in the approved plugging plan.

4.2 All cement plugs placed inside casing shall have sufficient volume to fill a minimum of 100' of the casing, *or annular void(s) between casings*, plus an excess volume sufficient to provide for 50 linear feet of fill above the plug.

4.3 Surface plugs may be no less than 50' in length.

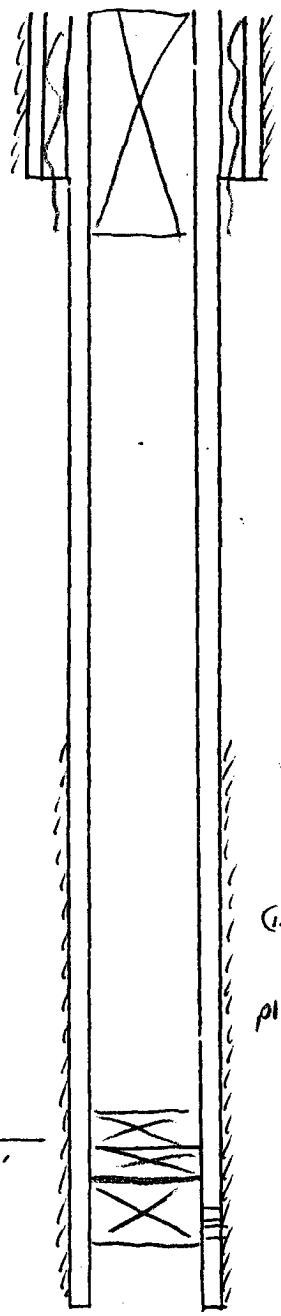
4.4 All cement plugs placed to fill annular void*(s)* between casing and the formation shall be of sufficient volume to fill a minimum of 100' of the annular space plus 100% excess, *calculated using the bit size*, or 100' of annular capacity, *determined from a caliper log*, plus an excess volume sufficient to provide for 50 *linear* feet of fill above the plug.

4.5 All cement plugs placed to fill an open hole shall be of sufficient volume to fill a minimum of 100' of hole, *as calculated from a caliper log*, plus an excess volume sufficient to provide for 50 *linear* feet of fill above the plug. In the absence of a caliper log, an excess of 100% shall be required.

5.0 All cement plugs spotted across, *or above,* any exposed zone*(s)*, when; the wellbore is not full of fluid or the fluid level will not remain static, *and in the case of lost circulation or partial returns during cement placement,* shall be tested by: *(1)* tagging with the work string, or: *(2) for cased holes only;* pressuring to a minimum surface pressure of 500 PSI, *with no more than a 10% drop during a 15-minute period.*

5.1 The top of any cement plug verified by tagging must be at or above the depth specified in the approved plan, *without regard to any excess.*

WELL NAME 9 Horseshoe Gallup Unit
SEC., TWN., RNG. 30-31N-16W



Mancos

8 5/8" 24#
102'

152 - Surface w 50 sks

152 / 7.299 (1.18) = 18 sks
50 / 5.7719 (1.18) = 7 sks
102 / 5.192 (1.18) = 17 sks
42 sks

TOC ± 705' 75% eff.

(1210 - 960) + 50 / 7.299 (1.18) = 35 sks or greater

plug 1210 - 960

Gallup 1010'

Retainer @ 1210 squeeze w/ 33
Perf @ 1269' - 1403'

5 1/2" 14#
1447'

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

BLM FLUID MINERALS
Geologic Report

Date Completed: 8/31/01

Well No.	Horseshoe Gallup Unit # 9		Location	660'	FNL &	1980'	FEL
Lease No.	14 - 20 - 603 - 734		Sec. 30	T31N			R16W
Operator	Vulcan Mineral & Energy, Inc.		County	San Juan	State	New Mexico	
Total Depth	1454'	PBTD 1407'	Formation	Gallup (WIW)			
Elevation (GL)	5539'		Elevation (KB)	5546'			

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					
Mancos Shale			Surface	1010	Surface
Gallup			1010	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.

- It is recommended that the Gallup plug be extended upward to adequately isolate the Gallup top identified in this report.

Prepared by: *Chip Harraden*

ENTERED
AFMSS

AUG 31 2001

BY