

**RECEIVED**

JUN 03 2008

**UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT**  
Sundry Notices and Reports on Wells

Bureau of Land Management  
Farmington Field Office

1. Type of Well Oil

5. Lease Number  
NM-66816. If Indian, All. or  
Tribe Name7. Unit Agreement Name  
Federal C8. Well Name & Number  
#39. API Well No.  
30-043-2082610. Field and Pool  
Alamito Gallup11. County & State  
Sandoval County, NM2. Name of Operator  
Questar Exploration & Production Company3. Address & Phone No. of Operator  
1050 17<sup>th</sup> Street, Suite 500, Denver, CO 80265

Location of Well, Footage, Sec., T, R, M

400' FSL and 2240' FWL, Section 31, T-23-N, R-7-W, Unit N

## 12. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OTHER DATA

## Type of Submission

☒ Notice of Intent☐ Subsequent Report☐ Final Abandonment

## Type of Action

☒ Abandonment☐ Recompletion☐ Plugging Back☐ Casing Repair☐ Altering Casing☐ Other -☐ Change of Plans☐ New Construction☐ Non-Routine Fracturing☐ Water Shut off☐ Conversion to Injection

RCVD JUN 4 '08

## 13. Describe Proposed or Completed Operations

OIL CONS. DIV.

DIST. 3

Questar Exploration & Production Company proposes to plug and abandon this well  
per the attached procedure.

**SEE ATTACHED FOR  
CONDITIONS OF APPROVAL**

**H<sub>2</sub>S POTENTIAL EXIST**

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

Signed

Kirby Sanchez

Title

Production Foreman

Date

6/02/08

(This space for Federal or State Office use)

APPROVED BY

Title

P.C. Fry

Date

6/3/08

CONDITION OF APPROVAL, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly 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**

# PLUG AND ABANDONMENT PROCEDURE

June 2, 2008

## Federal C #3

Alamito Gallup  
400' FSL & 2240' FWL, SW, Section 31, T23N, R7W  
Sandoval County, New Mexico, API #30-043-20826

Note: All cement volumes use 100% excess outside pipe and 50' excess inside pipe. The stabilizing wellbore fluid will be 8.3 ppg, sufficient to balance all exposed formation pressures. All cement will be Class G, mixed at 15.8 ppg with a 1.15 cf/sx yield.

1. Project will require a Pit Permit (C103) from the NMOCD.
2. Install and test location rig anchors. Prepare and line a waste fluid pit. Comply with all NMOCD, BLM, and Operator safety regulations. MOL and RU daylight pulling unit. Conduct safety meeting for all personnel on location. Record casing, tubing and bradenhead pressures. NU relief line and blow down well. Kill well with water as necessary and at least pump tubing capacity of water down the tubing. ND wellhead and NU BOP. Function test BOP.
3. Rods: Yes ☐, No ☒, Unknown ☐  
Tubing: Yes ☒, No ☐, Unknown ☐, Size 2.375", Length 4935'  
Packer: Yes ☐, No ☒, Unknown ☐, Type   
If well has rods or a packer, then modify the work sequence in Step #2 as appropriate.
4. **Plug #1 (Gallup perforations and top, 4636' - <sup>4936'</sup>4475')**: TIH and set 4.5" cement retainer at 4636'. Pressure test tubing to 1000#. Load casing with water and circulate well clean. Pressure test casing to 800#. *If casing does not test, then spot or tag subsequent plugs as appropriate.* Mix <sup>19</sup>~~46~~ sxs Class G cement and spot a balanced plug inside casing above CR to isolate the Gallup perforations and top. PUH.
5. **Plug #2 (Mesaverde top, <sup>2083' - 1983'</sup>2892' - 2702')**: Mix 12 sxs Class G cement and spot a balanced plug inside casing to cover the Mesaverde top. PUH. (Note: increase cement to 20 sxs if casing leaks.)
6. **Plug #3 (Chacra top, 1712' - 1612')**: Mix 12 sxs cement and spot a balanced plug inside casing to cover the Chacra top. PUH. (Note: increase cement to 20 sxs if casing leaks.)
7. **Plug #4 (Pictured Cliffs, Fruitland, Kirtland and Ojo Alamo tops, 1328' - <sup>670'</sup>660')**: Mix 55 sxs cement and spot a balanced plug inside casing to cover through the Ojo Alamo top. PUH. (Note: increase cement to 70 sxs if casing leaks.)
8. **Plug #5 (8.625" Surface casing shoe, 271' - 0')**: Attempt to pressure test the bradenhead annulus to 300#. If the BH annulus holds pressure, then establish circulation out casing valve with water. Mix approximately 25 sxs cement and spot a balanced plug from 271' to surface, circulate good cement out casing valve. TOH and LD tubing. Shut well in and WOC. If the BH annulus does not test, then perforate at the appropriate depth and attempt to circulate cement to surface filling the casing and the annulus.
9. ND BOP and cut off casing below surface casing flange. Install P&A marker with cement to comply with regulations. RD, move off location, cut off anchors and restore location.

# Federal C #3

## Current

Alamito Gallup

400' FSL & 2240' FWL, Section 31, T-23-N, R-7-W  
Sandoval County, NM / API #30-043-20826

Today's Date: 6/2/08

Spud: 7/12/88

Comp: 8/9/88

Elevation: 6830' GL

6842' KB

12.25" Hole

Top of Cmt @ surface, circ 31 bbls

8.625" 23# Casing set @ 221'  
155 sxs cement, circulated to surface

Ojo Alamo @ 710'

Kirtland @ 818'

Fruitland @ 1006'

Pictured Cliffs @ 1278'

Chacra @ 1662'

Mesaverde 2752'

Gallup @ 4525'

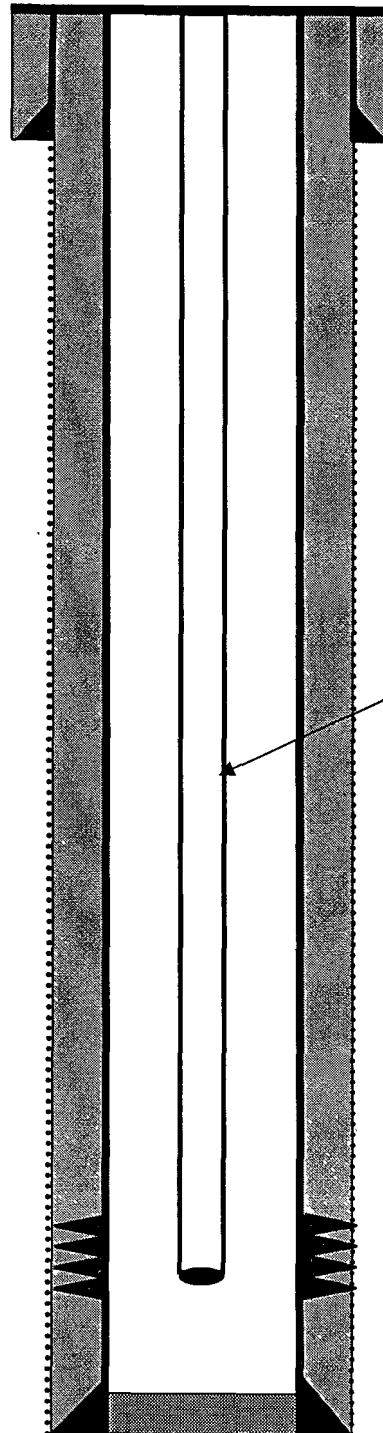
2.375", 4.7# tubing at 4935'

Gallup Perforations.  
4686'- 4940'

7.875" Hole

4.5" 11.6#, Casing @ 5047'  
Cemented with 900 sxs (1541 cf)

TD 5060'  
PBTD 5008'



# Federal C #3

## Proposed P&A

Alamito Gallup

400' FSL & 2240' FWL, Section 31, T-23-N, R-7-W  
Sandoval County, NM / API #30-043-20826

Today's Date: 6/2/08

Spud. 7/12/88

Comp. 8/9/88

Elevation: 6830' GL

6842' KB

12.25" Hole

Ojo Alamo @ 710'

Kirtland @ 818'

Fruitland @ 1006'

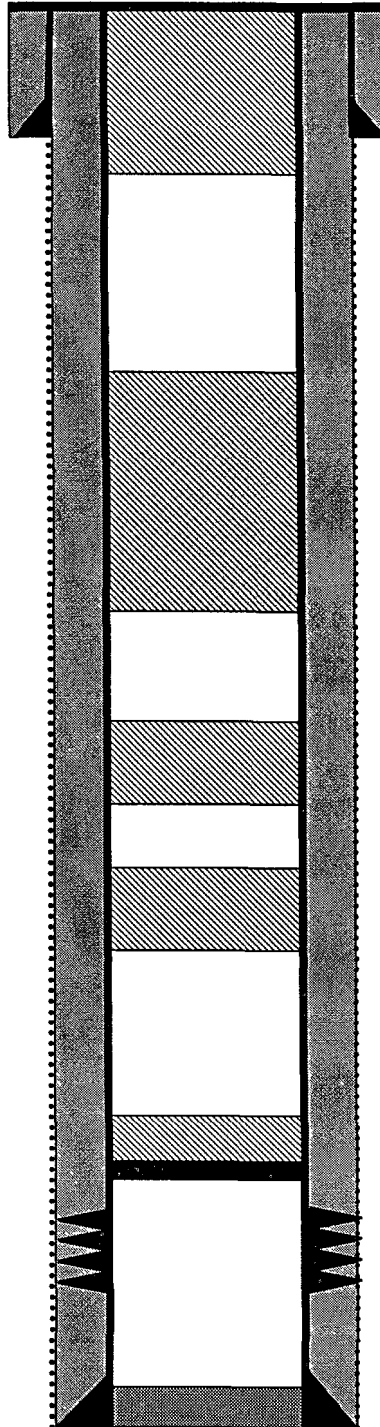
Pictured Cliffs @ 1278'

Chacra @ 1662'

Mesaverde 2752'

Gallup @ 4525'

7.875" Hole



Top of Cmt @ surface, circ 31 bbls

8.625" 23# Casing set @ 221'  
155 sxs cement, circulated to surface

Plug #5: 271'- 0'  
Class G cement, 25 sxs

Plug #4: 1328'- 660'  
Class G cement, 55 sxs

Plug #3: 1712'- 1612'  
Class G cement, 12 sxs

Plug #2: 2802'- 2702'  
Class G cement, 12 sxs

Plug #1: 4636'- 4475'  
Class G cement, 16 sxs

Set CR @ 4636'

Gallup Perforations:  
4686'- 4940'

4.5" 11.6#, Casing @ 5047'  
Cemented with 900 sxs (1541 cf)

TD 5060'  
PBD 5008'



# United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

Farmington Field Office  
1235 La Plata Highway, Suite A  
Farmington, New Mexico 87401

Attachment to Notice of Intent for Permanent Abandonment:

**Well: Federal C #3**

### **CONDITIONS OF APPROVAL:**

- 1.) Plugging operations authorized are subject to the attached "General Requirements for Permanent Abandonment of Wells on Federal and Indian Leases."
- 2.) Farmington Field 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.) Extend the Gallup Plug #1 from 4636' to 4436'.
  - B.) Move the Mesaverde Plug#2 to 2083' - 1983'.
  - C.) Extend the Pictured Cliffs to Ojo Alamo Plug #4 from 1328' to 640'.

**Note: H2S has been reported in a well in the offset section. (Section 36, T23N, R8W)**

**GENERAL REQUIREMENTS FOR  
PERMANENT ABANDONMENT OF WELLS ON FEDERAL AND INDIAN LEASES  
FARMINGTON FIELD 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 Authorized Officer, Farmington Field Office.

1.2 Requirements may be added to address specific well conditions.

2.0 Materials used must be accurately measured. (densimeter/scales)

3.0 A tank or lined pit must be used for containment of any fluids from the wellbore during plugging operations and all 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 hydrocarbons. If hydrocarbons are present in the pit, the fluids must be removed prior to filling in.

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 tagging with the work string.

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.

- 5.2 Testing will not be required for any cement plug that is mechanically contained by use of a bridge plug and/or cement retainer, if casing integrity has been established.
- 5.3 Any cement plug which is the only isolating medium, for a fresh water interval or a zone containing a prospectively valuable deposit of minerals, shall be tested by tagging.
- 6.0 Before setting any cement plugs the hole needs to be rolled. All wells are to be controlled by means of a fluid that is to be of a weight and consistency necessary to stabilize the wellbore. This fluid shall be left in place as filler between all plugs.
- 6.1 Drilling mud may be used as the wellbore fluid in open hole plugging operations.
- 6.2 The wellbore fluid used in cased holes shall be of sufficient weight to balance known pore pressures in all exposed formations.
- 7.0 A blowout preventer and related equipment (BOPE) shall be installed and tested prior to working in a wellbore with any exposed zone(s); (1) that are over pressured, (2) where the pressures are unknown, or (3) known to contain H<sub>2</sub>S.
- 8.0 Within 30 days after plugging work is completed, file a Sundry Notice, Subsequent Report of Abandonment (Form 3160-5), five copies, with the Field Manager, Bureau of Land Management, 1235 La Plata Highway, Suite A, Farmington, NM 87401. The report should show the manner in which the plugging work was carried out, the extent, by depth(s), of cement plugs placed, and the size and location, by depth(s), of casing left in the well. Show date well was plugged.
- 9.0 All permanently abandoned wells are to be marked with a permanent monument as specified in 43 CFR 3162.6(d). Unless otherwise approved.
- 10.0 If this well is located in a Specially Designated Area (SDA), compliance with the appropriate seasonal closure requirements will be necessary.

All of the above are minimum requirements. Failure to comply with the above conditions of approval may result in an assessment for noncompliance and/or a Shut-in Order being issued pursuant to 43 CFR 3163.1. You are further advised that any instructions, orders or decisions issued by the Bureau of Land Management are subject to administrative review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4 and 43 CFR 4.700.

## 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.