| Form 3160-5 (June 1990)  DEPARTME BUREAU OF  SUNDRY NOTICES  DO not use this form for proposals to d Use "APPLICATION FO  SUBMIT  1. Type of Well Oil Well Well Other  2. Name of Operator APA Development % NMOCO 3. Address and Telephone No. 1000 Ris Brass RJ. Azrec  4. Location of Well (Footage, Sec., T., R., M., or Survey E | FORM APPROVED Budget Bureau No. 1004-0135 Expires: March 31, 1993  5. Lease Designation and Serial No. 14-20-603-5013  6. If Indian, Allottee or Tribe Name  Navajo Tribe  7. If Unit or CA, Agreement Designation  8. Well Name and No. 8 Navajo M  9. API Well No. 30045 11193  |   |  |  |
|---|---|---|--|--|
| 34-32N-17W 1980/N-  | 10. Field and Pool, or Exploratory Area  11. County or Parish, State  San Juan , NM   |   |  |  |
| 12. CHECK APPROPRIATE BOX   | s) TO INDICATE NATURE OF NOTICE, REPOR  | RT. OR OTHER DATA   |  |  |
| TYPE OF SUBMISSION  | TYPE OF ACTION  |   |  |  |
|   | Abandonment Recompletion Plugging Back Casing Repair Altering Casing Other  I pertinent details, and give pertinent dates, including estimated date of starting all depths for all markers and zones pertinent to this work.)*  Plugging Back Casing Repair Altering Casing Other  I pertinent details, and give pertinent dates, including estimated date of starting all depths for all markers and zones pertinent to this work.)* | Change of Plans  New Construction  Non-Routine Fracturing  Water Shut-Off  Conversion to Injection  Dispose Water (Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)  any proposed work. If well is directionally drilled, |  |  |
|   | SEE ATTACMED FOR CONDITIONS OF AFFROYAL   |   |  |  |
| 14. I hereby certify that the foregoing is true and correct  Signed NMOCD CONTIACT  (This space for Federal or State office use)  Approved by Sylvanian State office use)  Conditions of approval of any:   | Plugarie 28   | Date 8/11/00  |  |  |

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 matter within its jurisdiction.

| OPERATOR NAME PROPERTY NAME PROPERTY NAME SECTION 34  TOWNSHIP 32N  FOOTAGE  1980 FNL 775 FEL UL "H"  SUR CSG OD NA HOLE SUR CSG WT TOP OF CMT ACTUAL CACULATED PROD CSG OD 7 7/8 PROD CSG TD TOP OF CMT TOP OF C |               |                         |       |     |          |    | •        |   |
|--|---------------|-------------------------|-------|-----|----------|----|----------|---|
| PROPERTY NAME PROPERTY NAME SECTION 34  TOWNSHIP 32N  FOOTAGE  1980 FNL 775 FEL UL "H"  SUR CSG DD  SUR CSG TD  SUR CSG WT  ACTUAL  CACULATED  PROD CSG OD 7 7/8  PROD CSG WT  TOP OF CMT  ACTUAL  CACULATED  PROD CSG WT  TOP OF CMT  TOP | API NUMBER    |                         | 20 11 | 71  | 1: 25    |    |          |   |
| SECTION 34   TOWNSHIP 32N   RANGE 17W  | OPERATOR NAME | APA DEVELOPMENT CORP    |       |     |          | 1  | B        |   |
| FOOTAGE  1980 FNL 775 FEL UL "H"  Sur Csg OD NA HOLE 8 5/8 XX SUR CSG TD 31 XX SUR CSG WT 32 XX TOP OF CMT 0 XX ACTUAL CIRC XX CACULATED 10SX XX PROD CSG OD 7 7/8 5 1/2 XX PROD CSG TD 1775 XX PROD CSG WT 14/17 XX TOP OF CMT 1264 XX FORMATION TOP ACTUAL EST GALLUP 1598' CACULATED 75SX MANCOS 280' PERF TOP 1732 XX PACKER TYPE OF PLUG CIBP & CMT CMT  XX X  | PROPERTY NAME | NAVAJO M                |       |     | ,        | ·  |          |   |
| Sur Csg OD NA HOLE   | SECTION 34    | TOWNSHIP 32N            | RANGE | 17W |          |    |          |   |
| SUR CSG TD 31 XX XX XX XX TOP OF CMT 0 XX ACTUAL CIRC XX CACULATED 10SX XX PROD CSG OD 7 7/8 5 1/2 XX PROD CSG TD 1775 XX PROD CSG WT 14/17 XX TOP OF CMT 1264 XX XX XX XX XX FORMATION TOP GALLUP 1593' CACULATED 75SX MANCOS 280' PERF TOP 1732 XX XX XX PACKER TYPE OF PLUG CIBP & CMT XX   | FOOTAGE       | 1980 FNL 775 FEL UL "H" |       |     |          |    |          |   |
| SUR CSG WT TOP OF CMT O XX ACTUAL CIRC CACULATED 10SX XX PROD CSG OD 7 7/8 PROD CSG TD 1775 XX PROD CSG WT 14/17 TOP OF CMT 1264 XX  |               | Sur Csg OD NA HOLE      | 8 5/8 | XX  |          | 1  | XX       |   |
| TOP OF CMT   |               | SUR CSG TD              | 31    | XX  |          |    | XX       |   |
| TOP OF CMT ACTUAL CIRC XX CACULATED 10SX XX PROD CSG OD 7 7/8 5 1/2 XX PROD CSG TD 1775 XX PROD CSG WT 14/17 TOP OF CMT 1264 XX  |               | SUR CSG WT              | 32    | XX  |          |    | XX       |   |
| CACULATED 10SX XX X   |               | TOP OF CMT              | 0     | XX  |          |    | 1        |   |
| PROD CSG OD 7 7/8 5 1/2 XX PROD CSG TD 1775 XX PROD CSG WT 14/17 XX TOP OF CMT 1264 XX  FORMATION TOP ACTUAL EST GALLUP 1598' CACULATED 75SX MANCOS 280' PERF TOP 1732 XX PACKER TYPE OF PLUG CIBP & CMT CMT   XX   |               | ACTUAL                  | CIRC  | XX  |          | İ  | XX       |   |
| PROD CSG TD 1775 XX  |               | CACULATED               | 10SX  | XX  |          |    | XX       |   |
| PROD CSG WT TOP OF CMT 1264 XX  FORMATION TOP GALLUP 1598' CACULATED 75SX MANCOS 280' PERF TOP 1732 PERF BOTTOM 1738 XX  PACKER TYPE OF PLUG CIBP & CMT XX  XX  XX  XX  XX  XX  XX  XX  XX  X  |               | PROD CSG OD 77/8        | 5 1/2 | XX  | <b>.</b> |    | XX       |   |
| TOP OF CMT  1264 XX  FORMATION TOP ACTUAL  GALLUP 1598'  CACULATED  75SX  MANCOS 280'  PERF TOP  1732 XX  PERF BOTTOM  1738 XX  XX  PACKER  TYPE OF PLUG  CIBP & CMT  CMT  TOP OF CMT  1264 XX   |               | PROD CSG TD             | 1775  | XX  |          |    | XX       |   |
| FORMATION TOP ACTUAL EST GALLUP 1598' CACULATED 75SX  MANCOS 280' PERF TOP 1732 XX XX  PERF BOTTOM 1738 XX XX  PACKER XX XX  TYPE OF PLUG CIBP & CMT CMT  TORMATION TOP ACTUAL EST  75SX  XX  XX  XX  XX  XX  XX  XX  XX  XX   |               | PROD CSG WT             | 14/17 | XX  |          |    | XX       |   |
| FORMATION TOP ACTUAL EST GALLUP 1598' CACULATED 75SX  MANCOS 280' PERF TOP 1732 XX XX  PERF BOTTOM 1738 XX XX  PACKER XX XX  TYPE OF PLUG CIBP & CMT CMT  EST  75SX  XX XX  |               | TOP OF CMT              | 1264  | XX  |          |    | XX       |   |
| GALLUP 1598'         CACULATED         75SX           MANCOS 280'         PERF TOP         1732         XX         XX           PERF BOTTOM         1738         XX         XX           PACKER         XX         XX         XX           TYPE OF PLUG         XX         XX         XX           CIBP & CMT         XX         XX         XX           CMT         XX         XX         XX  | FORMATION TOP | ACTUAL                  | EST   |     |          |    | <u>'</u> | ! |
| PERF BOTTOM 1738 XX XX XX PACKER XX XX XX XX XX XX XX XX XX CIBP & CMT XX  |               | CACULATED               | 75SX  |     |          |    |          |   |
| PACKER         XX         XX           TYPE OF PLUG         XX         XX           CIBP & CMT         XX         XX           CMT         XX         XX   | MANCOS 280'   | PERF TOP                | 1732  |     | XX       | XX |          |   |
| TYPE OF PLUG         XX         XX           CIBP & CMT         XX         XX           CMT         XX         XX  |               | PERF BOTTOM             | 1738  |     | XX       | XX |          |   |
| CIBP & CMT XX XX XX  |               | PACKER                  |       |     | XX       | XX |          |   |
| CIBP & CMT XX XX XX XX   |               | TYPE OF PLUG            |       |     | XX       | XX | ļ        |   |
| CMT XX XX  |               | CIBP & CMT              |       |     | XX       |    |          |   |
|  |               | CMT                     |       |     | XX       |    |          |   |
|  |               |                         |       |     | XX       | XX |          |   |

## PROPOSED PLUGGING OPERATION

MIRU PU, BOPE, TOOH W/TUBING, PICK UP WORK STRING, CIRC HOLE SPOT 18 SX PLUG 1643-1493 WOC, TAG, FILL AS REQUIRED PERF @ 330' PUMP 47 SX ,330-230' 30 OUTSIDE CSG, 17 INSIDE PERF @ 81' CIRC CEMENT TO SURFACE, EST 23 SX CUT OFF WELLHEAD, INSTALL P&A MARKER, DIG AND CUT ANCHORS Close pits according to guidelines: Clean and level location

1775

## 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: 8 Navajo M

## **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) Place the Gallup plug from 1455' 1305'.

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

## 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.

- 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.
- 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 All wells are to be controlled by means of a wellbore fluid that is to be of a weight and consistency necessary to stabilize the wellbore. Wellbore 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.
- 5.2 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  $H_2S$ .
- 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 District Manager, Bureau of Land Management, 1235 La Plata Highway, 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.
- 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.