Form 3160-5

### UNITED STATES DEPARTMENT OF THE INTERIOR

FORM APPROVED					
Budget Bureau No. 1004-0135 Expires: March 31, 1993					
V C D'Expires: March 31, 1993					
6. Lease Designation and Serial No.					

(June 1990) BUREAU OF LAND MANAGEMENT NM-12235 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 7. If Unit of CA, Agreement Designation SUBMIT IN TRIPLICATE 1. Type of Well 8. Well Name and No. Oil Weli X Gas Weil Southland #4 2. Name of Operator 9. API Well No. Merrion Oil & Gas Corporation 3. Address and Telephone No. 10. Field and Pool, or Exploratory Area 505 327-9801 P. O. Box 840, Farmington, NM 87499 WAW Fruitland Pic Cliffs 4. Location of Well (Footage, Sec., T., R., M., or Survey Description) 11. County or Parish, State 790' FNL & 790' FEL San Juan, NM SEC 9, T26N, R13W CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA 12. TYPE OF ACTION TYPE OF SUBMISSION Abandonment Change of Plans X Notice of Intent Recompletion Non-Rossine Fracturing Plugging Back Subsequent Report Water Shut-Off Casing Repair Conversion to Injection Altering Casing Final Abandonment Notice Dispose Water Other (Note: Report results of n or Recompletion Report and Log form.) 13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give 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.)\*

The subject well is uneconomic and has no recompletion potential. Attached for your approval is a P&A procedure. We plan to complete the P&A by year end.

OIL CON. DIV.

14. I hereby certify that the foregoing is true and correct		Date 6/12/91/50
Signed Konaye	TitleEngineer	
(This space for Federal or State office use)		AS PART WALLEY
Approved by	Title	Date
Conditions of approval, if any:		JUN 14 1991

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 and List Lighthous or fraudulem statements or representations as to any matter within its jurisdiction

## **SOUTHLAND 4**Plug and Abandonment Procedure

Prep	ared By:	George F	. Snarpe		Date	e: 6-11-91
1.)	MIRU cer Mix and bottom.	ment company pump 50 s	1/4" to to 2 <del>-7/8"</del> k neat "G"	<del>casing</del> . Es	stablish p p casing	ump-in rate. from top to
3.)	Cut off	wellhead.	Install Pa	A marker.	Reclaim	location.
Appr	oval:			r	)z+o	
	Name				ate	

#### SOUTHLAND NO. 4

#### Wellbore Schematic

GFS 4-5-90

Elevation: 6253' GL

Location: 790' FNL & 790' FEL Section 9, T26N, R13W San Juan, New Mexico

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9-3/4" Hole

7", 23# csg @ 97'
Cmt w/35 sx Class "H" w/3%
CaCl<sub>2</sub> to surface.

Perf 1320'-24' with 2-1/8" guns at 2 SPF. Frac w/2500# sand.

Perf 1360'-70' with 2-1/8" guns at 2 SPF N<sub>2</sub>. Frac w/15000# sand.

5" hole

2-7/8", 6.5# csg at 1449'
Cmt w/100 sx Class "H" w/2% D-79
& 50 sx neat H. Circ to surface.

PBTD: 1420'

TD: 1465'

2-7/8" Capacity: .00592 Bb1/ft

#### UNITED STATES DEPARTMENT OF THE INTERIOR

BUREAU OF LAND MANAGEMENT FARMINGTON RESOURCE AREA 1235 LA PLATA HIGHWAY FARMINGTON, NEW MEXICO 87401

Attachment to Notice of

Re: Permanent Abandonment

Intention to Abandon

Well: 4 Southland

#### CONDITIONS OF APPROVAL

- 1. Plugging operations authorized are subject to the attached "General Requirements for Permanent Abandonment of Wells on Federal Leases."
- 2. Mark Kelly with the Farmington Office is to be notified at least 24 hours before the plugging operations commence (505) 326-6201.
- 3. Blowout prevention equipment is required.
- 4. The following modifications to your plugging program are to be made (when applicable):

You are required to use tubing to plug the subject well due to questionable casing integrity encountered during recent workevers.

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

# GENERAL REQUIREMENTS FOR PERMANENT ABANDONMENT OF WELLS ON FEDERAL AND INDIAN LEASES FARMINGTON RESOURCE AREA

- 1. Secure prior approval either on a Sundry Notice (Form 3160-5) or verbally from the Fluids Drilling & Production Section at this office before changing the approved plugging program.
- 2. Plugging equipment used shall have separate mixing and displacement pumps and a calibrated tank to assure proper displacement of plugs. The Operator is responsible for providing all measuring devices needed to assure proper measurement of materials being used.
- 3. A proper tank or pit will be used to contain all fluids pumped from the well during plugging operations. Unattended pits are to be fenced.
- 4. All cement plugs are to be placed through tubing (or drillpipe) and shall be a minimum of 100 feet in length with 50% excess inside casing or 100% excess when plug is set in open hole or squeezed into perforations. 15.6%/gal slurry weight is to be used when using class B neat cement or when CaCl<sub>2</sub> is used. Use the recommended slurry weight of other type cements when they are used (Class C, Pozzolan etc.).
- 5. Any cement plugs placed when well is not full of fluid, or when well may be taking fluid, (i.e. across perfs-unless bridge plug or retainer is used, across bad csg., or fresh water formations) will be tagged (touched) after cement has set to verify proper location.
  - 5a. Testing The first plug below the surface plug shall generally be tested by either tagging the plug with the working pipe string, or pressuring to a minimum pump (surface) pressure of 1000 psig, with no more than a 10 percent drop during a 15-minute period (cased hole only). If the integrity of any other plug is questioned, it must be tested in the same manner. Also, any cement plug which is the only isolating medium for a fresh water interval or a zone containing a valuable mineral deposit should be tested by tagging with the drill string.
- 6. Mud must be placed between plugs. Plugging mud is to be made up with a minimum of 15 lbs/bbl of sodium bentonite, and a nonfermenting polymer.

  Minimum consistency of plugging mud must be 9 lbs/gal and with a minimum viscosity of 50 sec/qt. Fresh water is to be utilized for mixing mud.
- 7. Following the placement of a cement plug, the withdrawl rate for at least the length of the cement plug shall not exceed 30 ft/min, in order to minimize the contamination of the plug.

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- 8. Within 30 days after plugging work is completed, file a Sundry Notice (Subsequent Report of Abandonment, Form 3160-5), in quintuplicate with Area Manager, Bureau of Land Management, 1235 La Plata Highway, Farmington, NM 87401. The report should give in detail the manner in which the plugging work was carried out, the extent (by depths) of cement plugs placed, and the size and location (by depths) of casing left in the well. Show date well was plugged.
- 9. All permanently abandoned wells are to be marked with a regulation marker (4" pipe extending 4' above the ground line) containing the information as specified in 43 CFR 3162.6(d). Unless otherwise approved.
- 10. After plugging work is completed the surface is to be rehabilitated in accord with instructions from the Fluids Surface Management Section of the Farmington Resource Area Office.

All above are minimum requirements. The period of liability under the bond of record will not be terminated until the lease is inspected and surface work approved.

Please advise this office when the well location is ready for final inspection.

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.