Form 3160-5
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: July 31, 2010

RECEIVED
MAY 18 2016
Farmington Field Office
Bureau of Land Management

5. Lease Serial No. **NM-021446**

6. If Indian, Allottee or Tribe Name

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 page 2.*

7. If Unit of CA/Agreement, Name and/or No.

1. Type of Well
☐ Oil Well ☒ Gas Well ☐ Other

8. Well Name and No. **Redfern 4**

2. Name of Operator **ConocoPhillips Company**

9. API Well No. **30-045-07441**

3a. Address **PO Box 4289, Farmington, NM 87499**

3b. Phone No. (include area code) **(505) 326-9700**

10. Field and Pool or Exploratory Area **Basin Dakota**

4. Location of Well *(Footage, Sec., T.,R.,M., or Survey Description)*
Surface Unit I (NESE), 1580' FSL & 1010' FEL, Sec. 16, T28N, R11W

11. Country or Parish, State **San Juan , New Mexico**

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

TYPE OF SUBMISSION	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Subsequent Report	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other
	☐ Change Plans	☒ Plug and Abandon	☐ Temporarily Abandon	
☐ Final Abandonment Notice	☐ Convert to Injection	☐ Plug Back	☐ 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 recomplete 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 must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once Testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

The subject well is part of the proposed Mangum SRC 1C P&A program agreed to with the NMOCD. The attached revised procedure replaces the procedure filed with the P&A NOI submitted on 3/31/2016.

Notify NMOCD 24 hrs prior to beginning operations

OIL CONS. DIV DIST. 3
JUN 01 2016

BLM'S APPROVAL OR ACCEPTANCE OF THIS ACTION DOES NOT RELIEVE THE LESSEE AND OPERATOR FROM OBTAINING ANY OTHER AUTHORIZATION REQUIRED FOR OPERATIONS ON FEDERAL AND INDIAN LANDS

SEE ATTACHED FOR CONDITIONS OF APPROVAL

14. I hereby certify that the foregoing is true and correct. Name *(Printed/Typed)*
Dollie L. Busse Title **Regulatory Technician**

Signature Dollie L Busse Date 5/16/16

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by Title PE Date 5/31/16

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 FFO

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.

(Instruction on page 2)

NMOCD

ConocoPhillips
REDFERN 4
Expense - P&A

Lat 36° 39' 33.156" N Long 108° 0' 11.088" W

PROCEDURE

This project requires the use of an A-Plus steel tank to handle waste fluids circulated from the well and cement wash up.

Prior to commencing abandonment operations, ensure that the bradenhead valve is dug out and properly plumbed to the surface. Record the casing, intermediate and bradenhead pressures with an appropriately ranged gauge. Contact the Engineer if bradenhead pressure is present (per Exhibit "A-3").

1. Hold pre-job safety meeting. Comply with all NMOCD, BLM, and COP safety and environmental regulations. Test rig anchors prior to moving in rig. **Before RU, run slickline to remove downhole equipment. If an obstruction is found, set a locking-3-slip-stop in the tubing.**

2. MIRU workover rig. Check casing, tubing, and bradenhead pressures and record them in WellView. **If there is pressure on the BH, contact the Wells Engineer.**

3. Remove existing piping on casing valve. RU blow lines from casing valves and begin blowing down casing pressure. Kill well as necessary. Ensure well is dead or on a vacuum.

4. ND wellhead and NU BOPE. Pressure and function test BOP to 250 psi low and 1000 psi over SICP high to a maximum of 2000 psi held and charted for 10 minutes per COP Well Control Manual. PU and remove tubing hanger.

5. TOOH with tubing (per pertinent data sheet).
Tubing size: 2-3/8" 4.7# J-55 EUE **Set Depth:** 6,062' **KB:** 10'

6. PU 4-3/4" bit and watermelon mill and round trip as deep as possible above top perforation at 6013'.

7. PU 5-1/2" CR on tubing, and set at 5,982'. Pressure test tubing to 1000 psi. Sting out of CR. Load hole, and pressure test casing to 800 psi. If casing does not test, spot or tag subsequent plugs as appropriate. POOH with tubing.

8. RU wireline and run CBL with 500 psi on casing from CR at 5,982' to surface to identify TOC. Adjust plugs as necessary for new TOC. *Email log copy to Wells Engineer, Troy Salyers (BLM) at tsalyers@blm.gov, and Brandon Powell (NMOCD) at brandon.powell@state.nm.us upon completion of logging operations.*

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 ASTM Class B mixed at 15.6 ppg with a 1.18 cf/sk yield.

9. Plug 1 - Dakota Perforations and Graneros Formation Top, 5882' - 5982', 17 Sacks Class B Cement
Mix 17 sx Class B cement and spot a balanced plug inside the casing to cover the Dakota Perforations and Graneros Formation top. PUH.

10. Roll the hole with water and ensure that the wellbore is in a stabilized condition with no flow of gas and/or water before spotting the next plug. If flow occurs, the fluid weight must be increased until a stabilized condition is established (per Exhibit "A-3").

11. Plug 2 - Gallup Formation Top, 5101' - 5201', 17 Sacks Class B Cement
Mix 17 sx Class B cement and spot a balanced plug inside the casing to cover the Gallup Formation top. PUH.

12. Plug 3 - Mancos Formation Top, 4224' - 4324', 17 Sacks Class B Cement
Mix 17 sx Class B cement and spot a balanced plug inside the casing to cover the Mancos Formation top. PUH.

13. Plug 4 - Mesa Verde Formation Top, 3090' - 3190', 66 Sacks Class B Cement
Contact Wells Engineer and review the CBL on the 5-1/2" CSG and pick a depth to cut and pull the 5-1/2" CSG. Estimate cutting/pulling the 5-1/2" CSG at 4,136'. RIH with 6-3/4" Bit to top of 5-1/2" CSG. RU wireline and run CBL with 500 psi on casing from the 5-1/2" CSG top to surface to identify TOC on the 7-5/8" CSG. Pressure test casing to 800 psi. If casing does not test, spot or tag subsequent plugs as appropriate. RIH and perforate 3 squeeze holes at 3,190'. Establish injection rate into squeeze holes. RIH with a 7-5/8" CR and set at 3,140'. Mix 66 sx Class B cement. Squeeze 32 sx outside the casing, leaving 34 sx inside the casing to cover the Mesa Verde Formation top. POOH.

14. Plug 5 - Pictured Cliffs Formation Top, 1532' - 1632', 34 Sacks Class B Cement
Mix 34 sx Class B cement and spot a balanced plug inside the casing to cover the Pictured Cliffs Formation top. PUH.

15. Plug 6 - Fruitland Formation Top, 1051' - 1151', 34 Sacks Class B Cement
Mix 34 sx Class B cement and spot a balanced plug inside the casing to cover the Fruitland Formation top. PUH.

16. Cease operations for 30 minutes allowing the bradenhead to be observed for pressure build. Record pressures with crystal gauge for accuracy. If pressures are observed, notify Wells Engineer and Production Engineering for path-forward discussion with NMOCD (per Exhibit "A-3").

17. Plug 7 - Kirtland and Ojo Formation Tops, 301' - 590', 170 Sacks Class B Cement
RIH and perforate 3 squeeze holes at 590'. Establish injection rate into squeeze holes. RIH with a 7-5/8" CR and set at 540'. Mix 170 sx Class B cement. Squeeze 93 sx outside the casing, leaving 77 sx inside the casing to cover the Kirtland and Ojo Formation tops. POOH.

18. Plug 8 - Surface Plug , 0' - 222', 133 Sacks Class B Cement
RU WL and perforate 4 big hole charge (if available) squeeze holes at 222'. TOOH and RD wireline. Observe well for 30 minutes per BLM regulations. RU pump, close blind rams and establish circulation out bradenhead with water. Circulate BH clean. TIH with 7-5/8" CR and set at 172'. Mix 71 sx Class B cement and squeeze until good cement returns to surface out BH valve. Shut BH valve and squeeze to max 200 psi. Sting out of CR and reverse circulate cement out of tubing. TOOH and LD stinger. TIH with open ended tubing to 172'. Mix 62 sx Class B cement and pump inside plug. TOOH and LD Tubing. SI well and WOC.

19. Nipple down BOP and cut off casing below the casing flange. Install P&A marker with cement to comply with regulations. RDMO.

ConocoPhillips

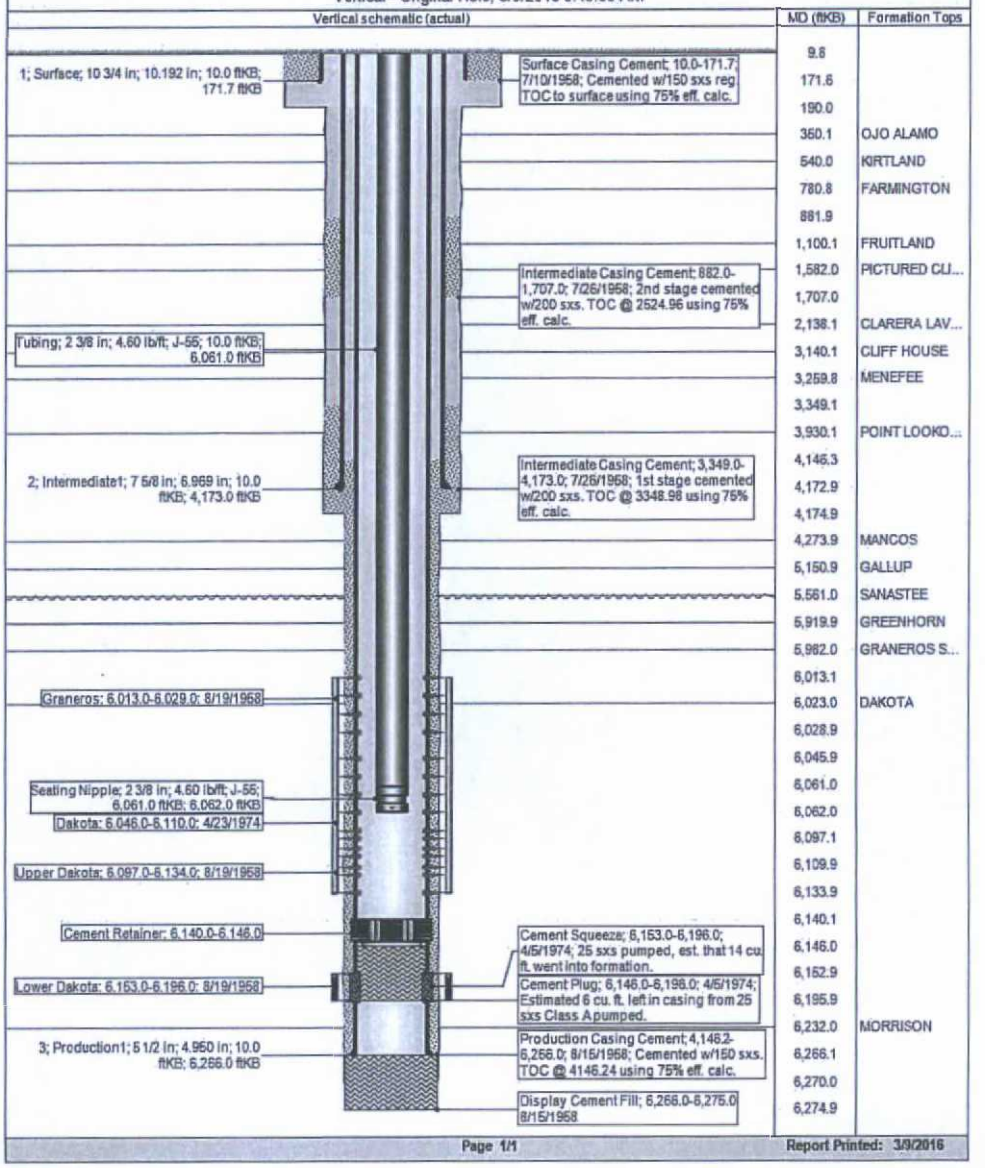
Schematic - Current

REDFERN #4

District	Field Name	API / UWI	County	State/Province
NORTH	DK	3004507441	SAN JUAN	NEW MEXICO

Original Spud Date	Surface Legal Location	East/West Distance (ft)	East/West Reference	North/South Distance (ft)	North/South Reference
7/10/1958	016-028N-011W-I	1,010.00	FEL	1,580.00	FSL

Vertical - Original Hole, 3/9/2016 9:13:08 AM



Report Printed: 3/9/2016

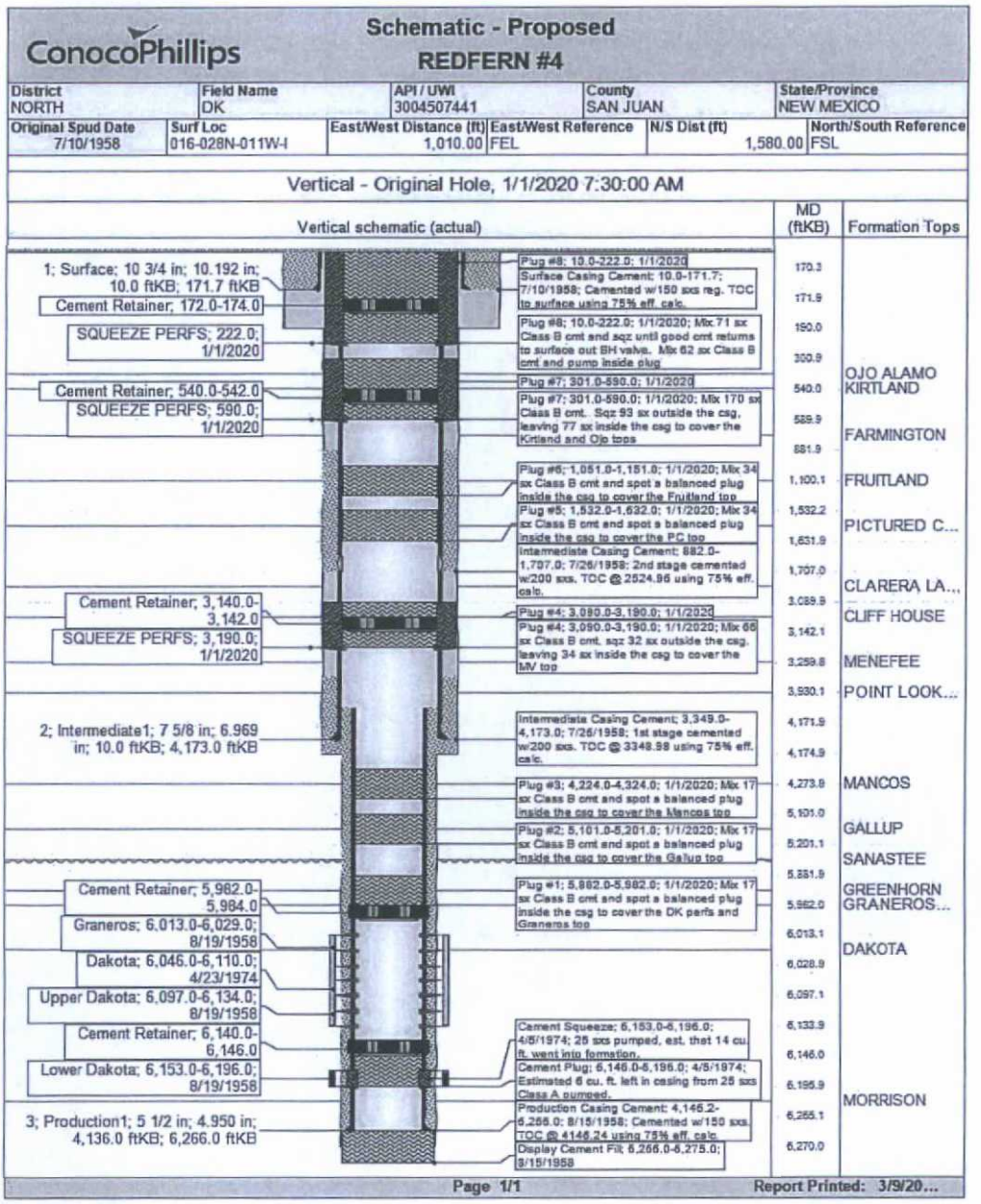

ConocoPhillips
Schematic - Proposed
REDFERN #4
District: NORTH
Field Name: DK
API / UWI: 3004507441
County: SAN JUAN
State/Province: NEW MEXICO
Original Spud Date: 7/10/1958
Surf Loc: 016-028N-011W-I
East/West Distance (ft): 1,010.00
East/West Reference: FEL
N/S Dist (ft): 1,580.00
North/South Reference: FSL
Vertical - Original Hole, 1/1/2020 7:30:00 AM
Vertical schematic (actual)
MD (ftKB)
Formation Tops
1; Surface; 10 3/4 in; 10.192 in; 10.0 ftKB; 171.7 ftKB
Cement Retainer; 172.0-174.0
SQUEEZE PERFS; 222.0; 1/1/2020
Cement Retainer; 540.0-542.0
SQUEEZE PERFS; 590.0; 1/1/2020
Cement Retainer; 3,140.0-3,142.0
SQUEEZE PERFS; 3,190.0; 1/1/2020
2; Intermediate1; 7 5/8 in; 6.969 in; 10.0 ftKB; 4,173.0 ftKB
Cement Retainer; 5,962.0-5,984.0
Graneros; 6,013.0-6,029.0; 8/19/1958
Dakota; 6,046.0-6,110.0; 4/23/1974
Upper Dakota; 6,097.0-6,134.0; 8/19/1958
Cement Retainer; 6,140.0-6,146.0
Lower Dakota; 6,153.0-6,196.0; 8/19/1958
3; Production1; 5 1/2 in; 4.950 in; 4,136.0 ftKB; 6,266.0 ftKB
Plug #8; 10.0-222.0; 1/1/2020
Surface Casing Cement; 10.0-171.7; 7/10/1958; Cemented w/150 sxs reg. TOC to surface using 75% eff. calc.
Plug #8; 10.0-222.0; 1/1/2020; Mix 71 sx Class B cmt and sqz until good cmt returns to surface out BH valve. Mix 62 sx Class B cmt and pump inside plug
Plug #7; 301.0-590.0; 1/1/2020
Plug #7; 301.0-590.0; 1/1/2020; Mix 170 sx Class B cmt. Sqz 93 sx outside the csg, leaving 77 sx inside the csg to cover the Kirtland and Ojo tops
Plug #6; 1,051.0-1,151.0; 1/1/2020; Mix 34 sx Class B cmt and spot a balanced plug inside the csg to cover the Fruitland top
Plug #5; 1,532.0-1,632.0; 1/1/2020; Mix 34 sx Class B cmt and spot a balanced plug inside the csg to cover the PC top
Intermediate Casing Cement; 682.0-1,707.0; 7/26/1958; 2nd stage cemented w/200 sxs. TOC @ 2524.96 using 75% eff. calc.
Plug #4; 3,090.0-3,190.0; 1/1/2020
Plug #4; 3,090.0-3,190.0; 1/1/2020; Mix 66 sx Class B cmt. sqz 32 sx outside the csg, leaving 34 sx inside the csg to cover the MV top
Intermediate Casing Cement; 3,349.0-4,173.0; 7/26/1958; 1st stage cemented w/200 sxs. TOC @ 3348.98 using 75% eff. calc.
Plug #3; 4,224.0-4,324.0; 1/1/2020; Mix 17 sx Class B cmt and spot a balanced plug inside the csg to cover the Mancos top
Plug #2; 5,101.0-5,201.0; 1/1/2020; Mix 17 sx Class B cmt and spot a balanced plug inside the csg to cover the Gallup top
Plug #1; 5,962.0-5,982.0; 1/1/2020; Mix 17 sx Class B cmt and spot a balanced plug inside the csg to cover the DK perfs and Graneros top
Cement Squeeze; 6,153.0-6,196.0; 4/5/1974; 25 sxs pumped, est. that 14 cu. ft. went into formation.
Cement Plug; 6,146.0-6,196.0; 4/5/1974; Estimated 6 cu. ft. left in casing from 25 sxs Class A pumped.
Production Casing Cement; 4,146.2-6,266.0; 8/15/1958; Cemented w/150 sxs. TOC @ 4146.24 using 75% eff. calc.
Display Cement Fill; 6,266.0-6,275.0; 8/15/1958
170.3
171.9
190.0
300.9
540.0
589.9
681.9
1,100.1
1,532.2
1,631.9
1,707.0
3,089.9
3,142.1
3,259.8
3,930.1
4,171.9
4,174.9
4,273.9
5,101.0
5,201.1
5,331.9
5,962.0
6,013.1
6,028.9
6,097.1
6,133.9
6,146.0
6,195.9
6,265.1
6,270.0
OJO ALAMO
KIRTLAND
FARMINGTON
FRUITLAND
PICTURED C...
CLARERA LA...
CLIFF HOUSE
MENEFEE
POINT LOOK...
MANCOS
GALLUP
SANASTEE
GREENHORN
GRANEROS...
DAKOTA
MORRISON
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Exhibit "A-3"

To Final Agreement - Withdrawal of Notice of Violation (3-15-02)
dated May 4, 2016 from ConocoPhillips Company to NMOCD

Updated Abandonment Procedures

The following procedural changes will be required for the P&A Program:

1) Prior to commencing abandonment operations, ensure that the bradenhead valve is dug out and properly plumbed to the surface. Record the casing, intermediate and bradenhead pressures with an appropriately ranged gauge. Contact the Engineer if bradenhead pressure is present. After the last set of completion perforations are abandoned with cement, roll the hole with water and ensure that the wellbore is in a stabilized condition with no flow of gas and/or water before spotting the next plug. If flow occurs, the fluid weight must be increased until a stabilized condition is established.

2) Following the plug over the Fruitland Formation Top, and prior to the plug over the Kirtland and Ojo Alamo Tops:

   a. Operations will cease for 30 minutes allowing the Bradenhead to be observed for pressure build.

   b. Pressures will be recorded with a crystal gauge for accuracy.

   c. If pressures are observed, notify Wells Engineer and Production Engineering for path-forward discussion with NMOCD.

3) Within 24 hours of the abandonment and after two weeks, BLM will check for the presence of gas at the base of the dry hole marker and at the weep hole. Note ambient weather conditions when recording the results. If gas is detected, contact the Engineer.

4) If a Cathodic Protection well is on the well pad, check for the presence of gas at the vent cap. If gas is present, record results in AFMSS and contact the Engineer.

Note: when checking any sample point for the presence of gas, please be prepared for the possibility of anomalous pressure and the H2S gas.

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
FARMINGTON DISTRICT OFFICE
6251 COLLEGE BLVD.
FARMINGTON, NEW MEXICO 87402

Attachment to notice of
Intention to Abandon:

Re: Permanent Abandonment
Well: Redfern 4

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. Farmington Office is to be notified at least 24 hours before the plugging operations commence (505) 564-7750.

3. The following modifications to your plugging program are to be made:

a) Set plug #1 (5963-5863) ft. to cover the Dakota Perforations and Graneros Formation top. BLM picks top of perforations at 6013 ft.

b) Set plug #3 (4304-4204) ft. to cover the Mancos Formation top. BLM picks top of Mancos at 4254 ft.

c) Set plug #4 (3150-3050) ft. inside/outside to cover the Mesa Verde Formation top. BLM picks top of Cliff House at 3100 ft.

d) Set plug #6 (1331-1231) ft. to cover the Fruitland Formation top. BLM picks top of Fruitland at 1281 ft.

Operator will run CBL from CR @ 5,963 ft. to surface to identify TOC.

You are also required to place cement excesses per 4.2 and 4.4 of the attached General Requirements.

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