The state of the s	ITED STATES NT OF THE INTERIOR	ECE	VED	OMB N	APPROVED 0 1604-0137
BUREAU OF LAND MANAGEMENT			Expires July 31, 2010		
` \C				5. Lease Serial No	
			Managemen	NMM-03153 6. If Indian, Aliotte	a or Tribe Name
Do not use this form for abandoned well. Use For	proposals to drill or to d m 3160-3 (APD) for such	e-entamilington F proposais:	ield Office	o, ir muan, zasone	e or trave remine
SUBMIT IN TRIPLICA	TE - Other instructions on	paga 2		7 If Umt or CA/A	reement, Name and/or
1 Type of Well Oil Well X Gas Well Other			8 Well Name and No OH RANDEL #11		
2. Name of Operator					
XIO ENERGY INC. 3a. Address	1 ib P	hone his lanchala are	a code)	9. API Well No	
	•			30-045-26438 10 Field and Pool, or Exploratory Area	
382 CR 3100 AZIEC, NM 87410 505~333-3100 4 Location of Well (Footage, Sec., T., R. M., or Survey Description)				BASIN FRUITLA	•
1650' FSL & 1980' FEL NWSE Sec. 10(J)-T26N-R11W N.M.P.M.			11. County or Pari		
				NAUT, NAS	NM
12 CHECK APPROPRIATI	E BOX(ES) TO INDICAT	E NATURE OF N	OTICE, REPO	RT, OR OTHER L	ATA
TYPE OF SUBMISSION		TYP	F OF ACTION		
X Notice of intent	Acidize	Doepen	Production	on (Start Resume) Water Shut-Off	
Subsequent Report	After Casing	Fracture freat	Reclamatic	n 📙	Well Integrity
	Casing Repair	New Construction	Recomplet	e 📋	Other
Final Abandonment Notice	Change Plans X	Plug flack	Temporaril Water Disp		
Attach the Bond under which the work will be perfollowing completion of the involved operations, testing has been completed. Final Abandonment determined that the final site is ready for final inspection. The Emergy Inc. received varibal at Hayden w/NMCCD @ 11:38 a.m., 03/3 Please see the attached procedure.	If the operation results in a mult Notices shall be filed only after retion.) sportoval from Steve M 10/2009 to P & A this	iple completion or recall requirements, included with the second will be about 1 and	completion in a nuding reclamation:	new interval, a Form in have been comple 03/09/2009 and	3160-4 shall be filed o ted, and the operator from Steve
XTO also received verbal approvation 03/09/2009.	l for the C144-CIEZ p	ennit from Cha	rlie Perrin	w/NMOCD @ 11	:00 a.m.,
				oru	DAPRS OS
					CONS. DIV.
		•			oums. Div. Dist. 3
				·	فلأشباه وا
14 1 hereby certify that the foregoing is true and correct Name (Printed Typed) DOLENA JUNION		tle present			
Signature		one 03/10/200		NCE TECHNICIA	N
1 solan (Jahrena)	S SPACE FOR FEDERAL				
		Title		Daie	MAR 1 0 2009
Conditions of approval, if any, are attached. Approval of the not the approval that approve the approve that approve the approve that approve the second to the second that approve the second to the second the second to the second that approve the second to the second	lice does not warrant or certify that	(AFE as	<u>νε</u> ≥α		MUII 1 O TOLA
Table 18 U.S.C. Section 1001, and Table 43 U.S.C. Section 1212.	inakes if a criote for any nerson know	<u> </u>		nt or agency of the Una	d States any folse
figurations of frauduletu statements of representations as to any na		and a many to ma		alberta t ne trea et tier	

Approved	
----------	--

O,H. Randel # 11 1,650' FLS & 1,980' FEL Unit J, Sec 10, T 26 N, R 11 W San Juan County, New Mexico

P&A

Surf csg: 8-5/8", 24#, K-55, ST&C csg @ 309'. Circ cmt to surf.

Prod csg: 4-1/2", 10.5#, K-55 csg @ 5,704'. PBTD @ 5,662'. DVT @ 4,538'. Capacity = 0.0159

Burst = 4380 psi (Treating @ 80% = 3504 psi).

Cement: 1st cmt stg, 300 sx with good returns. 2nd cmt stg, 1,500 sx + 100 Class B cmt. Circ 25 bbls cmt to surf.

Tubing: 2-3/8" X 30' OEMA w/1/4" weep hole & pin, SN & 54 JTS 2-3/8", 4.7#, J-55, EUE 8RD tbg; SN @ 1,789'; EOT @ 1,819'.

Rods: 2" X 1-1/2" X 10' RWAC-Z (DV) PMP & 1" X 1' STNR NIP RHBO TL, spiral rod guides, 1" X 1' LS, 3 - 1-1/4" HF SBS, 3 - 3/4" Norris GR "D" rods w/5 molded guides, 64 - 3/4" Norris GR "D" rods, 4 - 3/4" GR "D" Norris rod subs (8', 6', 4' & 2') & 1-1/4" X 16' PR W/8' LNR.

Perfs: GP: 5,368' - 5,640'w/1 JSPF (36 HOLES)

FC: 1,734' - 1,745', 1,607', 1,589' & 1,587' w/3 JSPF (45 HOLES)

Neat Cmt: Type III or II cmt mixed to 15.5 ppg w/1.18 cuft/sx

Formation: Fruitland Coal (well # 70875)

P&A Procedure

- 1. Notify BLM and NMOCD of plugging operations 24 hours in advance
- 2. MIRU PU.
- 3. BD well, ND wellhead and NU BOP.
- 4. PU on rods and then re-seat pump. PT tubing to 1,500 psi
- 5. TOH w/rods and pump. Lay down rods.
- 6. TOH w/tbg. Tally tubing as it comes out of the hole.
- 7. TIH w/tbg to 2,440. MIRU cmt trk. Mix 11 sx of neat cmt down tbg and spot cmt on CIBP to isolate the lower zones. Circ tbg clean while TOH.
- 8. TIH w/4-1/2" CR and set @ 1,265' (1,215' to top of the Fruitland Coal formation).
- 9. Load well with water and PT csg to 800 psi.
- 10. Mix 12 sx of neat cmt. Pump cmt down the and spot cmt on CR to isolate the Fruitland Coal from 1,265' to 1,165'.

 157 (1254)

5-8 - (2-6)

868.663 +50/11.167 (118): 1954

OH Randel #11 Procedure.DOC

3/6/2009

- 11. TOH and lay down tog to 359'.
- 12. Mix 28 sx of neat cmt. Pump cmt down thg and circ cmt to surf. TOH and land thg.
- 13. RDMO cmt trks.
- 14. Shut well in and WOC for 12 hrs
- 15. TIH w/tbg and tag TOC.
- ND BOP and cut off wellhead below surface casing flange. Fill 4-1/2" and 4-1/2" x 8-5/8" annulus to surface. RDMO PU
- 17. Install P&A marker w/10 sx cmt to comply with regulations.
- 18. Cut off anchors.

359/11/47 (1.18): 2754

O. H. RANDEL #11

Wellbore Diagram

KB: 6.3741 JENSEN 80B-133-54 GL: 6.360 WARROW C-66 GAS ENG **CORR: 14** 12-1/4" HOLE 8-5/8", 24#, K-55, STC CSG @ 309'. CMTD w/225 SX CMT. CIRC CMT TO SURF. TBG: 2-3/8" X 30" OBMA W/1/4" WEEP HOLE & PIN 7-7/8" HOLE SN & 54 JTS 2-3/8", 4.7#, J-55, EUE 8RD TBG, SN @ 1.789': EOT (\$) 1.819' FC: 1,734" - 1,745', 1,607', 1,589" & 1,587" W3 JSPF (45 HOLES) CIBP @ 2,440 CMT PLUG FR/2.48/7-2.680* DV TOOL 62 4,538 CMT PLUG FR/5,115'-5,315' CIBP @ 5,315' GP: 5.368' - 5,640' w/1 JSPF (36 HOLES). 4-1/Z, 10,5#, K-55 CSG (Q.5,704', CMTD STG 1 w/300 SX CMT HAD GOOD RTNS CMTD STG 2 w11,600 SX PBTD: 5,662" CMT. CIRC OMT TO SURF. TD: 5,704

S:\Ant HillNM Workovers\AFE\OH Randel #11\OH Randel #11.DOC

RBH 02/06/07

DATA

LOCATION: 1,850' FSL & 1,980' FEL, UNIT J, SEC 10, T28N, R11W

COUNTY/STATE: SAN JUAN COUNTY, NEW MEXICO

FIELD; GALLEGOS, BASIN

FORMATION: GALLUP, FRUITLAND COAL

FED LEASE #: NMNM-03153 API #: 30-045-26438 XTO WELL #: 70875

SPUD DATE: 7/19/85 COMPLETION DATE: 8/23/85

IP: P. 12 BO, 46 MCF, 24 HRS.

TUBING: 161 JTS 2-3/8", 4.7", J-55, EUE, 8RD TBG, TAC, 10 JTS 2-3/8", 4.7", J-55, EUE, 8RD TBG, SN, PS & OPMA, TAC @ 5,298", SN @ 5,614', EOT @ 5,633'.

PERFS: GP: 5,368' - 5,640'w/1 JSPF (36 HOLES)

FC: 1,734' - 1,745', 1,607', 1,589' & 1,587' W/3 JSPF (45 HOLES)

PROD METHOD: PUMPING.

HISTORY

<u>D7/19/85:</u> SPUDDED 12-1/4" HOLE. SET 8-5/8", 24⁸, K-55, STC @ 309'. CMTD w/225 SX CLASS "B" CMT w/2% GaCl₂ & 1/4 #/SX CELLOFLAKE. CIRC & BBLS CMT TO SURF

97/26/85; TD 7-7/8" HOLE @ 5,704'. RAN OH LOGS. SET 4-1/2", 10.5", K-55 CSG @ 5,704'.

DV TOOL @ 4,538'. CMTD STG 1 w/300 SX 50/50 POZMIX w/2% GEL, 10% SALT & 10% CAL-SEAL. HAD GOOD RTNS. CMTD STG 2 w/1,500 SX 65/35 POZMIX w/6% GEL & 10% SALT + 100 SX CLASS "B" CMT, CIRC 25 BBLS CMT TO SURF.

08/13/85: DO CMT & DV TOOL

08/14/85: DO TO PBTD @ 5,662'. RAN GR/CCL LOG. PERF'D GP @ 5,640', 38', 36', 34', 32', 30', 28', 5,592', 90', 86', 84', 76', 74', 40', 38', 23', 20', 14' & 12' w/1 JSPF (19 HOLES).

08/15/85: TIH WPPI TOOL WSPOT CONTROL VLV (RFC). COULD NOT BD ANY PERFS.

SPOTTED 7-1/2% HCI ACID ACROSS PERFS. SET PPI PKR ACROSS BTM PERF.

BD ALL BUT 2 PERFS W50 GALS 7-1/2% HCI ACID PER PERF.

<u>08/16/85:</u> F. GP PERFS 5,512' - 5,640' w/50,200 GALS 70Q, N₂ FOAM & 50,000° 10/20 SD @ 25 BPM & 2,675 PSIG. ISIP 2,200 PSIG. 15" SIP 2,000 PSIG. 1 HR SIP 1,750 PSIG. OWU THRU 3/4" CK. F. 140 BLW, FCP 50 PSIG. 14.25 HRS.

08/17/85; TIH W/BAILER, TGD SD @ 5,822', CO SD TO 5,662',

08/18/85; SET RBP @ 5,645'. S. 32 BF (5% OIL). FFL @ 5,204'. REC BRACKISH WTR.

08/20/85; RESET RBP @ 5,485'. TSTD RBP TO 2,000 PSIG. HELD OK. PERF'D GP @ 5,468', 56', 64', 54', 50', 48', 46', 44', 42', 40', 38', 32', 30', 5,387', 83', 72' 8 68' w/1 JSPF (17 HOLES).

<u>08/21/86;</u> A. PERFS 5,368' - 5,468' w/50 GALS 7-1/2% HCI ACID PER PERF w/BAKER SAP TOOL FRAC'D w/50,000 GALS, 70Q, № FOAM & 50,000' 10/20 SD @ 25 BPM & 2,800 PSIG. ISIP 2,280 PSIG. 15" SIP 1,890 PSIG. 100" SIP 1,800 PSIG. OWU ON 3/4" CK. F. 95 BLW, FCP 80 PSIG. 11 HRS.

08/22/85; TGD SD @ 5,360', CO SD wBAILER TO 5,421', PULLED RBP @ 5,485'.

DB/29/85; TIH W/BAILER. TGD SD @ 5,630'. CO SD TO 5,662'. TIH W/TBG & TAC. LANDED TBG @ 5,621'. S 40 BF, TR OIL. BFL @ 3,600'.

08/24/85; SWBD WELL, WELL KO FLWG, F. 28 BF, FTP 60 PSIG, 3/8" CK, 5 HRS. WH CUT 10% OIL, F. 35 BF (10% OIL), WELL DIED.

08/26/85: SWBD WELL, WELL KO FLWG. F. 15 BF (10% OIL). WELL DIED.

08/26/85: TIH W/PMP & RODS

08/30/85: P. 15 BO, 8 BW, 92 MCFPD.

09/02/85: P. 13 BO, 0 BW, 92 MCFPD.

09/04/85: P. 8 BO, 0 BW, GAS TSTM.

99/05/85; P. 10 BO, GAS TSTM. SHOT FL @ 4,945; FL 630 ASN. INCR SPEED ON PPG. UT.

09/10/85: P. 12 BOPD, 46 MCFPD.

99/21/85; POH w/RODS, PMP & TBG. CO SD fr/5,635' - 5,662'. TIH w/TBG, PMP & RODS. LANDED TBG @ 5,648'.

Page 1 of 2

O. H. RANDEL #11

Wellbore Diagram

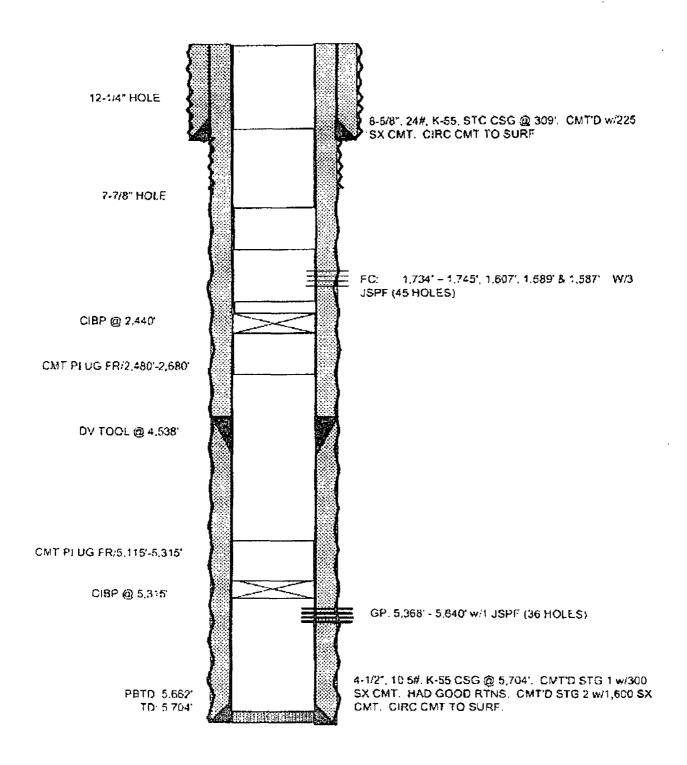
- 08/25/88: COULD NOT PULL PMP. PULLED OUT OF PMP. POH W/TBG & PMP. REC PMP. TIH w/TBG. TIH w/PMP & RODS.
- 06/10/91: HO TBG W/30 BBLS.
- 08/07/91: HO DWN TBG. POH W/RODS & PMP. TGD SD @ 5,663'. TIH W/TBG & TAC. TIH W/PMP & RODS.
- 01/11/93: REPLACED PMP.
- DB/03/93: POH W/PMP & RODS, TGD FILL @ 5,645', BAILED SD fr/5,645' 5,662', TIH W/PROD TBG, TIH W/PMP & RODS,
- 05/30/96: CHANGED PMP.
- 01/01/98: CTOC ASSUMED OPERATIONS.
- 03/26/98; PPD 27 BBLS 2% KCI WTR. TBG WENT ON STRONG VAC.
- 05/28/98: SITP 0 PSIG, SICP 50 PSIG. POH w/RODS & PMP. TGD FILL @ 5,649'. PT TBG TO 1,100 PSIG. HELD OK. TOH w/160 JTS, TAC, 10 JTS TBG, SN & 21' TP JT.
- 05/29/98: TIH W/BAILER & CO FILL TO 5,660', TOH W/BAILER. TIH W/PROD TBG.
- 06/30/IBS: SITP & SICP VAC. TIH WPMP & RODS. WELL PPG @ 2.5 SPM x 46" SL NOTE: REPL 38 ~ 3/4" ROD CPLGS DUE TO WEAR.
- 06/04/98: CHG'D fr/2.5 TO 5.5 SPM.
- 07/22/99: TOH W/RODS & PMP. MOD AMT OF PARAFFIN ON RODS. TGD FILL @ 5,655.
- 07/23/99: TOH W/TBG. FOUND HOLE IN 1³¹ JT ABOVE TAC. TIH W/BAILER. CO SD TO 5,662'. TIH W/PROD TBG. BROACHED TBG TO SN. SET TAC @ 5,298'. SN @ 5,614'. EOT @ 5,633'.
- 07/24/99: TIH W/PMP & RODS. HWO.
- 05/12/00: PPD 40 BC DWN CSG.
- 12/30/00: TOH W/RODS & PMP, RODS HAD HVY PARAFFIN.
- 01/03/01; PPD 60 BC DWN TBG TO TREAT FOR PARAFFIN. TBG ON VAC. TIH W/RODS & PMP. REPL'D 62 3/4" ROD BOXES DUE TO WEAR. PPG 5 x 48" SPM.
- 09/30/01: TOH w/ROD SUBS. HO TBG & RODS w/40 BO. CHG'D PMP. PPG 4.5 x 46" SPM.
- 08/28/02: SWI DUE TO ECONOMICS.
- 08/08/03: RWTP.
- 09/23/03: SWI DUE TO ECONOMICS.
- 02/16/05; RWTP THRU O H RANDEL COP.
- 08/27/05: PMP CHG, TAC @ 5,308' W/13K TEN. SN @ 5,640', EOT @ 5,656'.
- 01/14/08: MIRU PU, TOH W/BHA.
- 01/15/06; TIH W/4-1/2" CICR & 162 JTS TBG. SET CICR @ 5,315'.
- <u>01/17/06:</u> MIRU CMT EQUIP, PMP CMT PLUG W/17 SKS, 3.6 BBLS CLASS "B" CMT W/3% CACL2 (MIKED @15.6 PPG & 1.18 CU FT/SX YIELD). CMT FR/5,315" − 5,115". TOH & LD W/80 JTS TBG. PMP CMT PLG W/17 SXS, 3.6 BBLS CLASS "B" CMT W/3% CACL2 (MIXED @ 15.6 PPG & 1.18 CU FT/SX). CMT FR/2,680" − 2,480". RDMO CMT TRK. TOH & LD TBG. RDMO PU
- 01/19/06: MIRU WL RIH W/4-1/2" CIBP & SET @ 2,440". POH W/WL. RAN GR/CCU/CBL FR/2,000" SURF. PERF'D FC @ 1,734" 1,745", 1,507", 1,589" & 1,587" W/3 JSPF. POH W/WL. MIRU AC EQUIP. A. W/750 GAL 15% NEFE HCL & 59 7/8" 1.1 SG BS @ 7 BPM & 1,020 PSIG. ISIP 1.017 PSIG. 5" SIP 459 PSIG. 10" SIP 175 PSIG. 15" SIP 44 PSIG. RDMO AC EQUIP. RIH W/JB. KNOCKED OFF BS. POH W/W-L ROMO WLU.
- 01/20/05; MIRU FRAC EQUIP. PPD 3,273 GALS 30# LIN GEL FOR STEP RATE TEST. ISIP 590 PSIG 5" SIP 596 PSIG. 10" SIP 546 PSIG. 15" SIP 525 PSIG. FRAC'D FC PERFS FR1,587" 1,745' DWN 4-1/2" CSG W/79,141 GAL 650 CO2 PURGEL III LT CO2 FOAM FRAC FLD (ZIRCONIUM XL, 25# GUAR GEL, 2% KCL WTR) CARRYING 115,800# 20/40 SD (2,000# 20/40 BRADY SD COATED W/SANDWEDGE & 113,800# 20/40 BRADY SD COATED W/SANDWEDGE & 113,800# 20/40 BRADY SD COATED W/SANDWEDGE NT). ISIP 926 PSIG. 5" SIP 938 PSIG. 10" SIP 890 PSIG. 15" SIP 855, RDMO FRAC EQUIP
- 02/07/06: MIRU PU. TIH W/2-3/8" X 30' OEMA W/1/4" WEEP HOLE & PIN, SN & 54 JTS 2-3/8", 4,7#, J-55, EUE 8RD TBG: SN & 1,789; EOT & 1,819'. TIH W/2" X 1-1/2" X 10' RWAC-Z (DV) PMP & 1" X 1' STNR NIP RHBO TL, SPIRAL ROD GUIDE, 1" X 1' LS, 3 = 1-1/4" HF SBS, 3 = 3/4" NORRIS GR "D" RODS W/5 MOLDED GUIDES, 64 = 3/4"

NORRIS GR "D" RODS, 4 – 3/4" GR "D" NORRIS ROD SUBS (8', 6', 4' & 2') & 1-1/4" X 16' PR W/8' LNR, RDMO PU PPG & 5 X 42" SPM

- 02/22/06: 1ST DELV FC GAS SALES TO ENTERPRISE THROUGH THE RANDEL CDP @ 12:45 P.M., 02/21/06. INIT RATE 50 MCFPD.
- 02/23/06; DISCONN & MOVED 3 PEN DRY-FLW BARTON CHART RECORDER (XTO MTR #22167) TO XTO STOCK, INST USED AMOCAM EFM/RTU (XTO #8047) ON MTR RUN FRXTO STOCK, INST BTRY, SOLAR PANEL, RADIO & ANTENNA, INST & CONN AUTO CK VLV, WH PRESS XMTRS, PIT TNK FLT SW, TERMIN CBL IN EFM/RTU, FUNCTION TST UN, INST COMPL.

Proposed P&A Wellbore

KB: 6,374' GL: 6,360' CORR: 14'



BLM CONDITIONS OF APPROVAL

经存储 医乳腺性病

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 DISTRICT OFFICE

1235 LA PLATA HIGHWAY FARMINGTON, NEW MEXICO 87401

Attachment to notice of Intention to Abandon:

Re: Permanent Abandonment Well: 11 O.H. Randel

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) 599-8907.
- 3. The following modifications to your plugging program are to be made:
- a) Place the Fruitland CR @ 1500' place 12 sx of neat cmt on top of the CR.
- b) Place a plug from 868' 663' to cover the Kirtland and the Ojo Alamo.

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.

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 H₂S.
- 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.