Form 3160-5 (August 2007)

DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

J 1	FORM APPROVED
. /	OMB NO. 1004-0135
	Expires: July 31, 2010

5. Lease Serial No.

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.					NMLC029392B			
					6. If Indian, Allottee of	or Tribe Name		
SUBMIT IN TRI	7. If Unit or CA/Agreement, Name and/or No. SRM1403							
Type of Well Oil Well	8. Well-Name and No. GREENWOOD P	RE-GRAYBURG FED COM						
2. Name of Operator Contact: DENISE PINKERTON CHEVRON USA INCORPORATED E-Mail: leakejd@chevron.com					9. API Well No. 30-015-22601-0	00-S1		
3a. Address 3b. Phone No. (include area code) 15 SMITH ROAD Ph: 432-687-7375 MIDLAND, TX 79705 Ph: 432-687-7375					10. Field and Pool, or SHUGART	Exploratory		
4. Location of Well (Footage, Sec., 7	., R., M., or Survey Description	}			11. County or Parish,	and State		
Sec 27 T18S R31E NWSW 19	980FSL 660FWL				EDDY COUNTY	/, NM .		
12. CHECK APP	ROPRIATE BOX(ES) TO	INDICATE	NATURE OF	NOTICE, RE	PORT, OR OTHE	R DATA		
TYPE OF SUBMISSION			ТҮРЕ С	F ACTION				
Notice of Intent	☐ Acidize	☐ Dee	pen	☐ Producti	on (Start/Resume)	■ Water Shut-Off		
_	☐ Alter Casing	☐ Frac	ture Treat	☐ Reclama	ation	■ Well Integrity		
☐ Subsequent Report	Casing Repair	□ New	Construction	□ Recomp	lete `	□ Other		
☐ Final Abandonment Notice	Change Plans	Plug	and Abandon	Tempora	arily Abandon			
	☐ Convert to Injection	Plug	Back	Back				
If the proposal is to deepen direction Attach the Bond under which the wo following completion of the involved testing has been completed. Final A determined that the site is ready for for CHEVRON INTENDS TO TENGRAYBURG OR WOLFCAMI	rk will be performed or provide toperations. If the operation re bandonment Notices shall be fil inal inspection.) MPORARILY ABANDON	the Bond No. or sults in a multipled only after all	n file with BLM/BI e completion or re- requirements, inclu	A. Required sub completion in a rading reclamation	sequent reports shall be sew interval, a Form 316 a, have been completed,	filed within 30 days 0-4 shall be filed once and the operator has		
PLEASE FIND ATTACHMEN GEO-PROPOSAL.	TS SHOWING THE INTE	NDED PROC	EDURE, CURF	RENT & PROI	POSED WELLBOR	E DIAGRAM & THE		
CONVERSATION WAS HELD				CHEVRON.		,		
AD 106	ALC NM OI	L CONSEF RTESIA DISTI		055	ATTAOLER			
Accepted for the				2FF	ATTACHED	FOR '		
NMOCD		OCT 0 5 2	כוט	CON	DITIONS OF	APPROVAL		
14. I hereby certify that the foregoing i	s true and correct. Electronic Submission # For CHEVRON to the committed to AFMSS for pro-	JSA INCORPC	d by the BLM W RATED, sent to	the Carlsbad				
Name(Printed/Typed) DENISE PINKERTON				LATORY SPI				
Signature (Electronic	Submission)		Date 11/20/	2014				
	THIS SPACE FO	OR FEDERA			SE			
Approved By James C	1. ams		Title 9	CRET		9.28-15 Date		
Conditions of approval, if any, are attached certify that the applicant holds legal or equivilent would entitle the applicant to conditions.	uitable title to those rights in the	not warrant or e subject lease	Office	rFO.				

The 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.



Geological Assessment Greenwood Pre-Grayburg Unit 1-C

Well Name: Greenwood Pre-Grayburg Unit API#:

3001522601

1-C

Location:

T18S, R31E, Sec. 27

Geologist:

Walt Harston

County:

Eddy

Engineer:

Abdul Sule

State:

MM

FMT:

Eunice

EXECUTIVE SUMMARY

There is an opportunity to recomplete the Grayburg or Wolfcamp in this well. Given the risks inherent with each reservoir, I recommend completing the Wolfcamp first and then moving uphole to the Grayburg if the Wolfcamp is not productive.

WELL HISTORY

This well was originally completed in the Morrow and has produced 1.7 bcf from that zone. It has also been completed in the Atoka from which it has produced 350,000 mcf.

The Hinkle F #8 is the closest offset Grayburg producer 600 ft away. The Hinkle F #8 produced from 1966 until 1987 when it was P&A'd.

JUSTIFICATION

Grayburg:

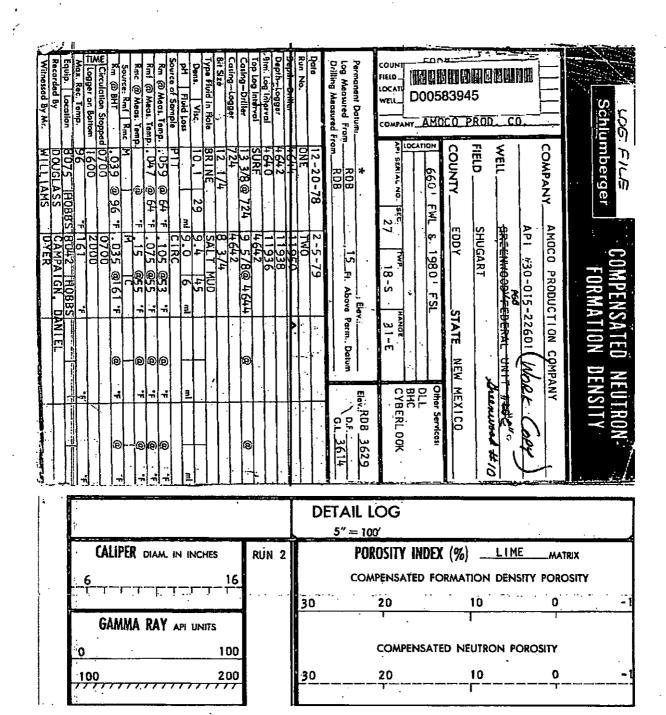
There is significant Grayburg production in the area around this well. ¼ mile to the east and on structural trend with the subject well, the Hinkle F #6 (3001510607) has cumulative production of 239,378 BO; 70,031 MCF; and 789,576 BW from the lowermost proposed zone. Also, 600 ft to the northeast, the Hinkle F #8 (3001510760) produced from the Grayburg and cum'd 123,234 BO; 63,726 MCF; and 315,702 BW.

Wolfcamp:

The uppermost Wolfcamp was completed in several wells approximately 5 miles eastward. The two closest Wolfcamp producers are the Tyke Federal #1 (3002531041) and the Inca Federal #12 (3002531756). The Tyke Federal #1 cum'd 380,719 BO, 450,692 MCF, and 1,841,547 BW. The Inca Federal #12 cum'd 513,225 BO, 762,185 MCF, and 1,456,880 BW. This well is on trend (slightly updip) of those two producers.

ISSUES

Grayburg:



Formation: Wolfcamp

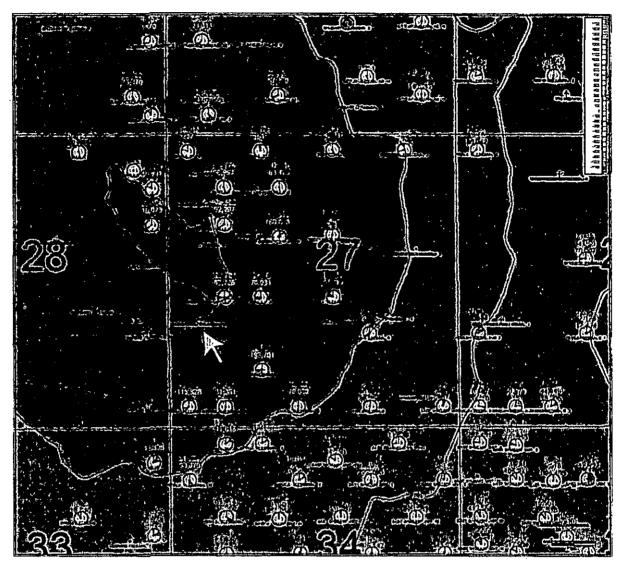
The proposed perforations are shown by a red box in the depth track.

3.74 3.74 ALT MUD ALT MUD 1.0 6.4 1.5 1.0 6.75 @53 *F @ *F 1075 @55 *F @ *F 1075 @55 *F @ *F 1075 @55 *F @ *F 1075 @161 *F @ *F 1000 100 100 100 100 100 100 100 100 1	119 14642 119 14640 119 1508F 464	urad from RDB ,15_f; Abova P	D0058394	COMPANY AMOCO PRODUCTION COMPANY API #30-015-22601 MORE COMPANY API #30-015-22601 MORE COMPANY WELL GREENHOODY FEBERAL UNIT #400" FIELD SHUGART	Schlumberger COMPENSATED NEUTRON-		
	DETAIL LOG						
		5″ = 10		· · · · · · · · · · · · · · · · · · ·			
· CALIPER DIAM. IN INCHES	CALIPER DIAM. IN INCHES RUN 2 POROSITY INDEX (%) LIME MATRIX						
6 16	16 COMPENSATED FORMATION DENSITY POROSITY						
	30 20 10 0			-1			
GAMMA RAY API UNITS	API UNITS						
0 100	0 100			EUTRON POROSITY			
100 200		30	20	10 0			
		(, T		r			

Structure: Grayburg

CI 100'

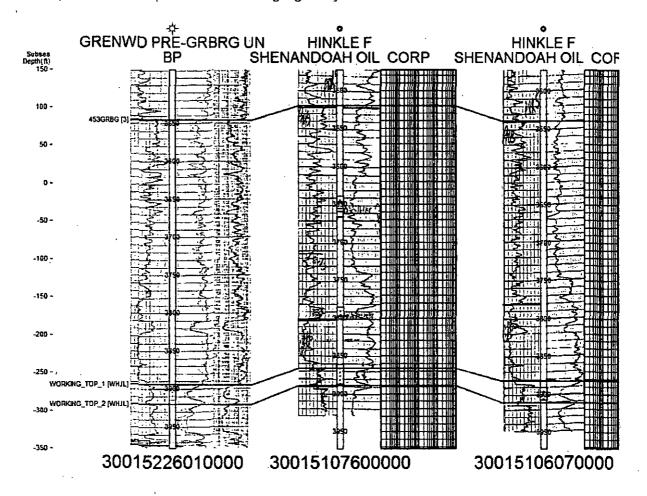
The contour map below has pie charts illustrating production from the Grayburg. Cumulative production is noted above each well. The yellow arrow indicates the position of the subject well. The blue line shows the orientation of the cross section in the next exhibit.



Cross Section:

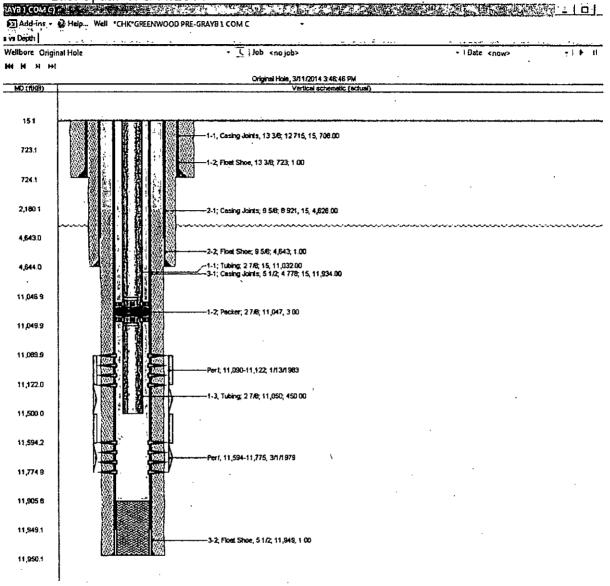
Grayburg

The cross section below shows the structural position of the proposed interval to its closest offset producers. Proposed interval is highlighted yellow.



Well Bore Diagram:

Last Updated: 3/11/2014





RWW Job Plan





		AT 17 7 7 1 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1	الماء سيانان				
Tubing Detail	Counts	Footage		Size	Туре		
(Please provide detail	14	450'		2 7/8"	J-55?		
in order of	1	3'		2 7/8" x 5 ½'	Seal Assy		
installation.)							
	350	11,032'		2 7/8"	J-55 Tubing		
Current			_				
Pump Detail	Type – (Curre			Diameter)	Length		
(Please provide all	N/A		N/A	Diameter	N/A		
essential info and	10/0	·	11/7		N/A		
Pump Provider Info		name at the same and the	· Services				
as needed.)	Pump Provide	Pr:		· · · · · · · · · · · · · · · · · · ·			
	N/A						
Contacts (Please provide contacts as needed ALCR, PS, Planner, Chem Rep, ESP / Rod Pump Reps, Service	Kelly Walsh ALCR- (575) 394-1247 Justin Hobbs Maintenance Planner (575) 631-4228						
Provider Contact	James Ragland – Baker Petrolite Rep – (575) 441-3093						
Info.)	And the second s						
Notes (As needed)	Anchors are good – Set & Tested 8/4/2014 – No variance needed – No lines						
	and the company of the contract of the contrac	the Annable and the Annable and Annable an		and the second s	المراجعة ال المراجعة المراجعة ال		

PROPOSED WELLBORE DIAGRAM

Chevro	n U.S.A. In	c. Wellbore Diagram :	GNWD P-G	1C		
Lease: OEU EUNICE FMT						
Location: 1980FSL660FWL						
County: Eddy St.: New Me		Refno: EQ2569 API: 3001522601 Cost Center: t				
Section: E031	ction: E031 Township: 27 Range: 5018					
Current Status: ACTIVE			Dead Kan Ancho	ors Test Date: 08/04/201		
Directions:						
11321 11321 11321 11321 11321 1242 771 0	10 10 10 10 10 10 10 10	Spud Date: 12/06/1978 Spud Date: 12/06/1978	nd Short 12.375 ID 1 Desc and Short 8.921 ID 8 Desc DD- hknown Thread 4.775 mpletion)-	3.764 Drift- 8 IO 4.653 Orift-		
Well Depth Datum: Kelly	ชนรทเกฎ	Elevation (MSL): 3629.00	Correction Fa	ctor: 15.00		
Last Updated by: trij		Date: 09/08/2014		•		

CURRENT WELLBORE DIAGRAM

Chevron U.S.A. Inc. Wellbore Diagram: GNWD P-G 1C

Lease: OEU EUNICE FMT	Se: OEU EUNICE FMT Well No.: GREENWOOD PRE-GRAYB 1 COM C 1 Field: SHUGART				
Location: 1980FSL660FWL	Sec.: N/A		Bik:	Survey: N/A	
County: Eddy St.: New Mexico	Refno: EQ256	9 -	API: 3001522601	Cost Center: UCR110700	
Section: E031	Township: 27			Range: S018	
Current Status: ACTIVE			Dead Man Ancho	rs Test Date: 08/04/2014	
Directions:					
Control 1000	350 @(11) 14 @(11) 14 @(15) 15 (15) 15 (15) 16 (15) 16 (15) 16 (15) 16 (16) 16	String Quantity (Top-Bottom Dep (15-11047) J-55 2.875 OD/ 6.50# (047-11050) J-55 2.875 OD/ 6.56 (1050-11500) Cement (behind Casing)- (1050-11050) Wellbore Hole OD-12.2500 (1050-11050) Wellbore Hole OD-12.2500 (1050-11050) Cement (behind Casing)- (11950) Cement (behind Casing) (11950) N-80 5.500 OD/ 20.00# Ur (11950) N-80 5.500 OD/ 20.00# Ur (11950) Perforations-Open (11950) Perforations-Open (11950) Plug - Cement-	T&C External Upset is OD- 0# T&C External Upset is OD- 0# T&C External Upset in Control of the C	et 2.441 ID 2.347 2.219 Drift- 2.764 Drift- 3 ID 4.653 Drift-	
Well Depth Datum: Kelly Bush		Elevation (MSL): 3629.00			
Last Updated by: trij		Date: 09/08/2014			
op		PBCC. 03/00/2014			



RWW Job Plan

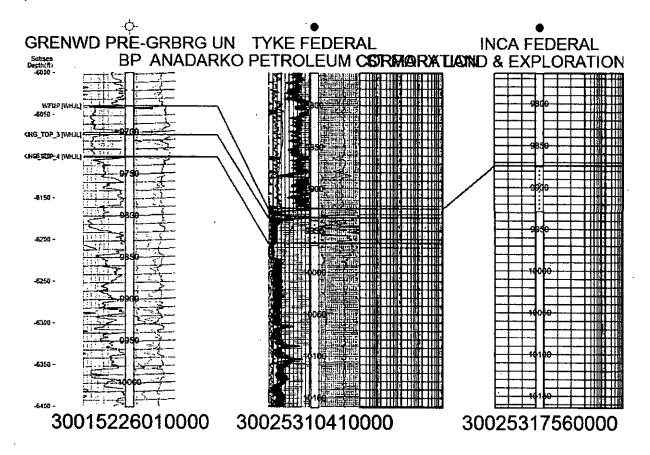




Date Failed	Not down							
Well Information	Well Name	GNWD P-G1C	API#	30015226	01			
	Cost Center	UCRJ10700	Company	0064				
			Code					
	WBS#	N/A	SEL	\$25,000				
	***************************************		71-6	Oil	0			
	Plant Code	UWTN	Well Test	1	0			
				Gas	5			
Job Scope	Give NM OCD a	t least 24 hours notic	e.					
(Please include	T/A Well - Nee	d to Pull packer & Tu	bing & T/A Well. PO	OH w/Tubir	ng & packer			
appropriate Information such as	1	own – RU wireline &	-	•	-			
failure type,		-test well – Make su						
description of work		r fluid – POOH w/Tub			OCD to			
to be performed, etc.)		iet good chart – Turn	in chart and all pap	erwork.				
ett.)	Secure well and RDMO.							
	Leave well with	B-1 WH flange, tapped BP, needle valve, and gauge.						
, ,			Cost Estimate					
Previous Failures		A STATE OF THE PARTY OF THE PAR		and the second second second				
(Please provide								
appropriate previous	None Shown							
failure history and								
related information.)								
)	and the second s	program a gram a maragan.				
Tubing Detail	Tubing Type	?	Tubing Size	2.875"	a Principles and Ambres a			
	Packer Depth	11047′	Packer Size	5.50"				
	racker Depth	11047	FOCKEI SIZE	3.30				
	SN Depth	N/A	SN Type	N/A				
ВНА	14 – 2 7/8" J-55	? Tubing, packer sea	l assembly		a management in week a			
(Please provide		-	-					
component detail								
In order of install)	<u> </u>	**************************************						
•								
	1							

Wolfcamp

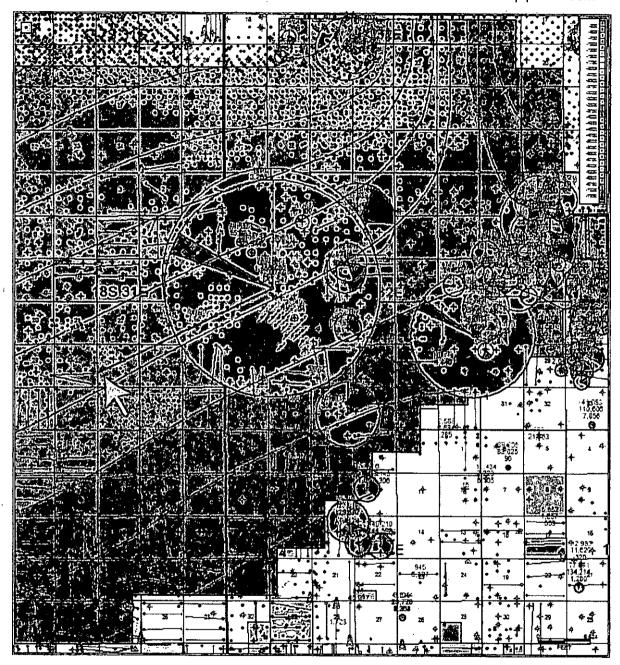
The cross section below correlates a limestone at the top of the Wolfcamp to the two closest producers 5 miles east.

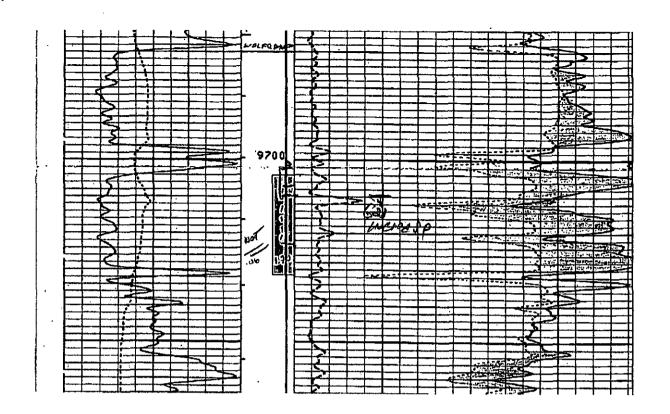


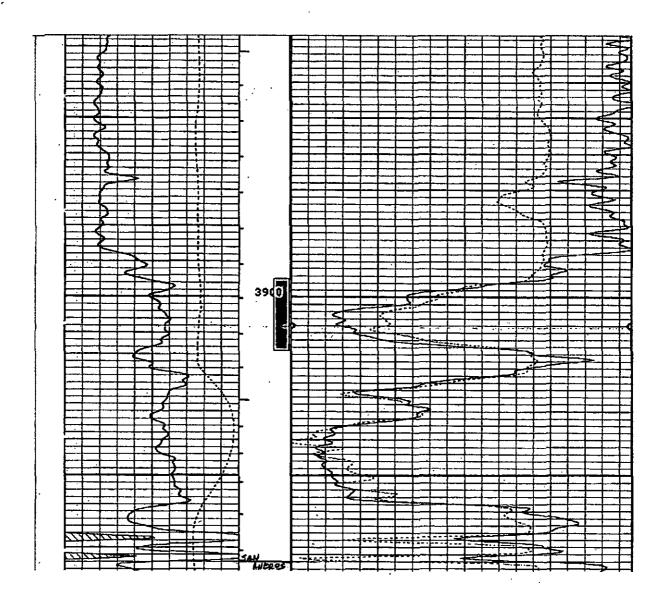
Structure: Wolfcamp

CI 250'

The map below shows structure on the top of the Wolfcamp and the pie charts indicate production from the Wolfcamp with cumulative production noted above each well. The subject well has a yellow arrow pointing at it. The blue line shows the position of the cross section in the next exhibit. Note that our well is 5 miles westward from the bulk of Wolfcamp production.







The Hinkle F #8 produced for 12 years from the Grayburg only 600 ft away. The Grayburg reservoir may be depleted. However, the Hinkle F #8 has been P&A'd since 1987 and the Grayburg reservoir may have recovered to some degree in that time.

Wolfcamp:

The closest Wolfcamp production is 5 miles eastward. However, this well is on structural trend with Wolfcamp producers.

Proposed Perf Interval: Grayburg, Bone Spring, and Wolfcamp

Top (md)	Base (md)	Net (ft)	Avg. Porosity	<u>Rt</u>	<u>Rw</u>	<u>Sw</u>	Gas Effect	GR (API)	Additional Comments
3895	3915	20	20%	4.5	.035	0.44	Yes	55	GRAYBURG No resistivity logs in offset producers but there are notes of 150 bopd (Hinkle F8) and 90 bopd (Hinkle F6) from this zone on offset porosity logs
9704	9730	26	6.5%	110	.065	0.37	No	25	WOLFCAMP Offset porosity logs show significant washout over this interval making Sw calculations impossible. However, the mudlog from the subject well shows significant increase in total gas, notes gas and oil to surface in 80 minutes, and describes a very weak cut over this interval

EXHIBITS

Wireline Logs:

Formation: Grayburg

The well log below shows the proposed perforations with a red box in the depth track.

BUREAU OF LAND MANAGEMENT Carlsbad Field Office 620 East Greene Street Carlsbad, New Mexico 88220 575-234-5972

Temporary Abandonment of Wells on Federal Lands Conditions of Approval

A temporarily abandoned well is defined as a completion that is not capable of production in paying quantities but which may have value as a service well. Pursuant to 43 CFR 3162.3-4 (c), no well may be temporarily abandoned for more than 30 days without the prior approval of the authorized officer.

Temporary Abandonment (TA) status approval requires a successful mechanical or casing integrity test as follows:

- 1. A Notice of Intent (NOI) Sundry Notice (Form 3160-5) requesting approval to run a mechanical integrity test (MIT) or casing integrity test (CIT).
- A description of the temporary abandonment procedure.
 - a. A bridge plug or packer must be installed as close to 50 feet above any open perforations or open hole as possible. If a cement plug is used, the top of the cement must be verified by tagging.
 - b. The wellbore must be filled with corrosion inhibited fluid and pressure tested to 500 psi. The casing shall be capable of holding this pressure for at least 30 minutes with a 10% allowable leakoff.
 - c. All downhole production/injection equipment (tubing, rods, etc.) shall be removed from the casing if they are not isolated by a packer.
 - d. A bradenhead test must be conducted. If the test indicates a problem exists, a remedial plan and time frame for remediation shall be submitted within ninety (90) days of the test.
 - e: Contact the appropriate BLM office at least 24 hours prior to the scheduled Casing Integrity. Test For wells in: Eddy County 575-361-2822; Lea County 575-393-3612!
- 3. Provides justification why the well should be temporarily abandoned rather than permanently plugged and abandoned and an estimated date that the well will be returned to beneficial use or plugged and abandoned!

Wells that successfully pass the casing integrity test may be approved for Temporary Abandonment (TA) status provided that the operator:

- 1. Submits a subsequent Sundry Notice (Form 3160-5) requesting TA approval with well bore diagram with alliperforations and CIBP s and tops of cement on CIBP s.
- Describes the temporary abandonment procedure.
- Attaches a clear copy or the original of the pressure test chart.
- 4. Give justification to allow well to be place in TA status and plan for future use of well with time frame that well will be place back on line or plans to P&A well will be submitted.

If the well does not pass the casing integrity test, then the operator shall within 30 days submit to BLM for approval one of the following:

- 1. A procedure to repair the casing so that a TA approval can be granted.
- A procedure to plug and abandon the well.