Form 3160-5 (April 2004)

UNITED STATES DEPARTMENT OF THE INTERIOR

FORM APPROVED

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ense Ser	al No	45/	Commence of the second	

SUNDRY NOTICES AND Do not use this form for propose abandoned well. Use Form 3160	REPORTS ON WELLSington Field sals to drill or to re-enter an	5 Lease Serial No. Officent-10875						
SUBMIT IN TRIPLICATE- Other	7 If Unit or CA/Agreement, Name and/or No 8 Well Name and No Centennial Com #91							
1 Type of Well Gas Well G								
Dugan Production, c/o Westmorela Address PO Box 561, Water Flow, NM 87421	3b. Phone No. (include area code) 505-598-2000	9 API Well No. 30-045-30718 10 Field and Pool, or Exploratory Area Basin Fruitiand Coal 11 County or Farish, State San Juan, NM						
 Location of Well (Footage, Sec., T., R. M. or Survey Descr 1250' FNL and 1500' FEL, Sec. 24, T-30-N, R-15-W Lat: 36.8034 N, Lon: -108.3648 W 	iption) OIL CONS. DIV DIST. 3							
12. CHECK APPROPRIATE BOX(E	ES) TO INDICATE NATURE OF NOTICE, I	REPORT, OR OTHER DATA						
TYPE OF SUBMISSION	TYPE OF ACTION							
Acidize Alter Casing Casing Repair Change Plans Convert to Injectic	Deepen Production (State Production Prod	Well Integrity Other						

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 shall 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 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Dugan as the operator, desires Westmoreland, San Juan Coal Mine to plug and abandon this well per the attached procedure.

Also request approval to set an underground plate instead of a 4' above ground marker to prevent stray electrical currents from entering the underground coal mine.

Notify NMOCD 24 hrs prior to beginning operations

Surface reclimation will be in accordance with the BLM approved plan for the San Juan Coal Mine

A closed loop system will be utilized for waste fluid.

SEE ATTACHED FOR CONDITIONS OF APPROVAL

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

 14. Thereby certify that the foregoing is true and correct Name (Printed/T) ped) 									
Eric Herth	Title	Mine	Geologist						
Signature () Al	Date			12/27/2016					
THIS SPACE FOR FEDERAL OR STATE OFFICE USE									
Approved by AG Elmodon.		Title	PE	од от над доверх об до точно в оборожения до точно об	Date	1/10/	17		
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		FFU					
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any	person l	nowing	v and will	fully to make to	any dena	riment or agency	of the United		

States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction

(Instructions on page 2)

A-PLUS WELL SERVICE, INC.

P.O. BOX 1979 Farmington, New Mexico 87499 505-325-2627 * fax: 505-325-1211

PLUG AND ABANDONMENT PROCEDURE

December 27, 2016

Centennial Com #91

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Basin Fruitland Coal 1250' FNL and 1500' FEL, Section 24, T30N, R15W San Juan County, New Mexico / API 30-045-30718

Note: All cement volumes use 100% excess outside pipe and 50' excess inside. The stabilizing wellbore fluid will be water or drilling mud with sufficient weight to balance all exposed formation pressures. Cement is <u>Class B mixed at 15.6 ppg with 1.18 cf/sxs</u> yield or <u>Class B with 18% salt</u> by weight of water (for expansion, MSHA requirement through the Fruitland Coal zone).

1. This project will use a closed system to handle waste fluids circulated from the well.

MILL OUT CASING AND PLUGGING PROCEDURE:

Test BOP. Pull rod and tubing from well if present.

- 2. Comply with all applicable MSHA, NMOCD, BLM and San Juan Coal safety regulations. Conduct safety meeting for all personnel on location. MOL and RU daylight pulling unit. Lay relief line to the waste pit and blow well down, kill well with water as necessary. ND wellhead and NU BOP.
- Rods: Yes_____, No____, Unknown____.
 Tubing: Yes _X_, No ____, Unknown_____, Size ____2.375"____, Length ____787'__.
 Packer: Yes_____, No _X___, Unknown_____, Type _____.
 If this well has rods or a packer, then modify the work sequence in step #2 as appropriate. TOH and LD tubing. Prepare a 2.375" tubing workstring.
- 4. PU a 3.875" bit, 6 3.125" drill collars and 2.375" tubing or equivalent workstring. TIH and tag PBTD at 846'. Rig up drilling equipment and clean out / drill out to 869' (drill on the rubber plugs to be sure as deep as possible). Circulate well clean with water. TOH with bit.
- 5. Rig up A-Plus wireline truck and run a CBL from clean out depth to surface; if the existing Fruitland Coal perforations are affecting the CBL quality, then continuously pump water into to the perfs to stop the gas flow while logging.
- 6. Rig up Jet West wireline and run a Gamma Neutron log and a directional survey log. Adjust the milling intervals as appropriate from these logs.
- 7. Perforate the 4.5" casing with 3 SPF at: 870' to 868', 851' to 849', and 801' to 799'. This is to isolate below Coal Seam #8 and the depths should be modified as appropriate from the logs run in step #6.

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Procedure Continued:

- 8. Plug #1 (Picture Cliffs top and Fruitland perforations, 871' 766'): TIH with open ended workstring to 869'. Load the well with water. Mix 40 sxs cement with 18% salt (by weight of water) and spot a balanced plug inside the 4.5" casing to cover the Pictured Cliffs zone and Fruitland perforations (up to 434'). TOH with the workstring, load the casing with water, shut in well and then hesitation squeeze approximately 10 sxs (2 bbls cement) into the perforations; squeeze the TOC down to approximately 566'. (Note: This is not the final abandonment of the Fruitland interval; the intent is to abandon the PC interval and fill the FtC perforations with cement to help the milling operations.) WOC overnight.
- 9. TIH with a 3.875" mill tooth bit, 6 3.125" drill collars and tag cement. Drill out the cement inside the casing down to 766' (Note: TOC must be 10 to 15' below the bottom of the planned milled interval (756') to allow for the nose of the section mill tool). TOH with this BHA and LD the bit.
- 10. PU a flat bottom mill, the 3.875" section milling tool and the 6 3.125" drill collars (this is the under reaming bottom hole assembly, BHA). TIH with BHA and workstring to 731'. Rig up drilling equipment and establish circulation with a low solids, high viscosity mud.
- 11. Note: The intervals to be milled out below are from ground level not KB.
- 12. **Mill out the 4.5" casing from 731' to 756'.** Start milling out the 4.5" casing from 731' to 756'. Mill per the tool hands instructions for weight on mill, circulation rate and RPM. Circulate well clean with mud. TOH with 2.375" tubing and the drill collars. TIH with open ended pipe and clean out to 766' or as deep as possible.
- 13. Rig up a wireline truck and run a caliper log through the milled interval to insure all the 4.5" casing from the planned milling depths (731' to 756') has been removed. Re-mill as appropriate. Re-log as necessary.
- 14. Perforate the 4.5" casing with 3 SPF from 688' to 686' and 638' to 636'. This is 50' and 100' above Coal Seam #8, depths should be modified as appropriate from the logs run in step #6.
- 15. Plug #2 (Fruitland Coal interval, 766' to 312'): TIH with 2.375" workstring to 766' (or drill out depth in step #9.) and circulate the mud from the well. Then pump a 5 bbl fresh water spacer ahead of the cement. Mix 49 sxs cement with 18% salt (by weight of water) and spot a balanced plug from 766' to 120' to fill the milled interval and to cover the Fruitland top. Displace cement with water. TOH with tubing and then hesitate squeeze approximately 10 sxs (2 bbl cement) into the perforations; squeeze TOC to 262' inside the 4.5" casing.
- 16. WOC overnight. Then TIH with tubing and tag cement. Pressure test the 4.5" casing to 800#.

PLUG AND ABANDONMENT PROCEDURE

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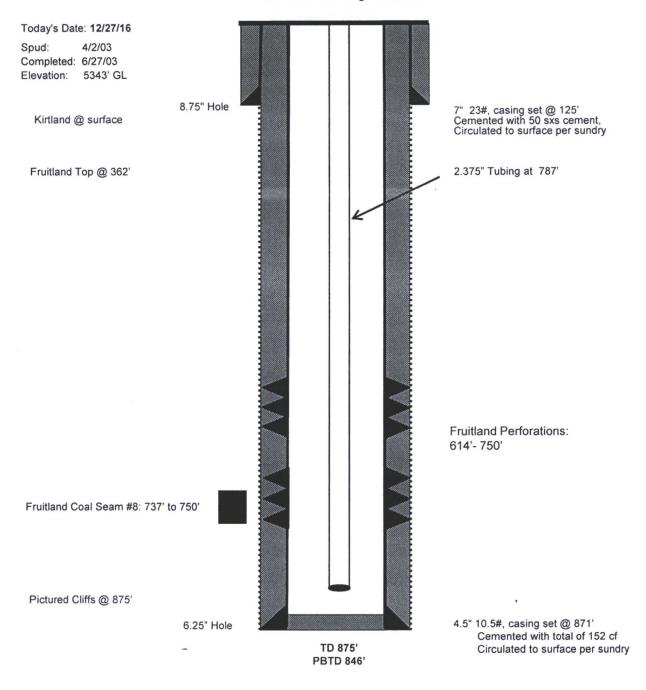
Procedure Continued:

- 17. Plug #3 (7" Surface casing shoe, 175' to Surface): Connect the pump line to the bradenhead valve. Pressure test the BH annulus to 300#; note the fluid volume to load. If the BH annulus tests, then mix approximately 20 sxs cement with or without 18% salt cement and spot a balanced plug inside the 4.5" casing from 175' (or at tag depth) to surface to cover the 7" surface casing shoe. TOH and LD the tubing. If the BH annulus does not test, then perforate at the appropriate depth and fill the bradenhead annulus and 4.5" casing with cement to surface. TOH and LD tubing. Shut in well and WOC.
- 18. ND BOP and cut off wellhead below surface. Install P&A marker with cement to comply with regulations. Record GPS coordinate for P&A marker on tower report. Photograph P&A marker in place. RD, MOL. Cut off anchors and clean up location.

Centennial Com #91 Proposed

Basin Fruitland Coal 1250' FNL & 1500' FEL, Section 24, T-30-N, R-15-W San Juan County, NM / API #30-045-30718

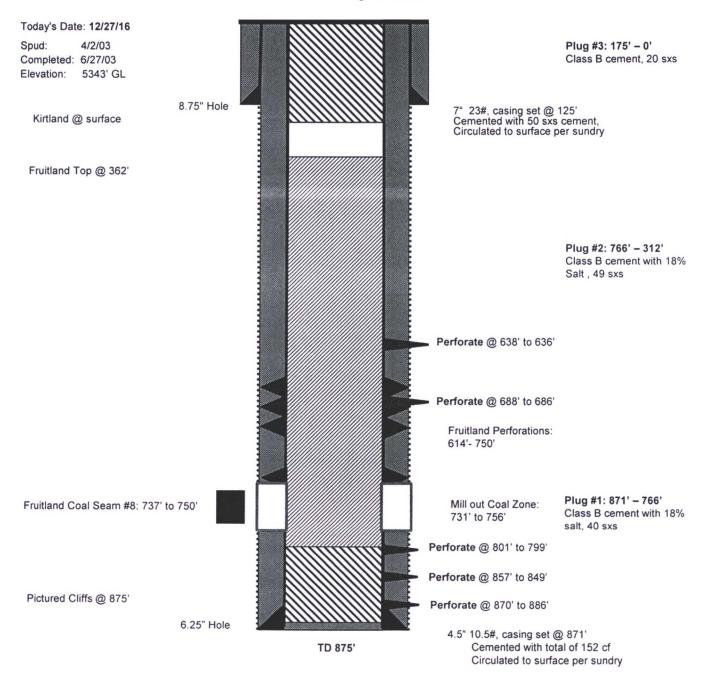
Lat: 36.8034 / Long: -108.3648



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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: Centennial Com #91

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.

Operator will run a CBL to verify cement top. Submit the electronic copy of the log for verification to the following addresses: aelmadani@blm.gov Brandon.Powell@state.nm.us

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.