

Form 3160-5 (June 2015)

JUL 0 1 2019 **UNITED STATES** 

DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT Farmington Field Office FORM APPROVED OMB No. 1004-0137

Expires: January 31, 2018

5.	Lease	Serial	No.
	NMN	V16876	4

SUNDRY NOTICES AND REPORTS ON WELLS and Manageme 16. If Indian, Allottee or Tribe Name

Do not use this form for proposals to drill or to re-enter an

**NAVAJO** 

	abandoned we	ell. Use Form 3160-3 (A	APD) for such proposal	ls.			
	SUBMI	T IN TRIPLICATE - Other insti	ructions on page 2		7. If Unit of CA/Agreemen	ent, Name and/or No.	_
1. T	ype of Well						_
	□Oil Well	⊠Gas Well □Other			8. Well Name and No. BETTIN ON BISTI 30 001	1	
	ame of Operator uring Resources IV LLC				9. API Well No. <b>30-045-27122</b>		
3a. Address 200 Energy Court Farmington NM 87401			3b. Phone No. (include area co. 505-636-9743	de)	10. Field and Pool or Exploratory Area Bisti- Lower Galup		
	ocation of Well (Footage, Sec. : 660' FNL & 660' FEL Sec	, T.,R.,M., or Survey Description, 30 T25N R11W Unit: A	)		11. Country or Parish, Stat San Juan, NM	te	_
	12.	CHECK THE APPROPRIATE I	BOX(ES) TO INDICATE NATUR	RE OF NOTI	CE, REPORT OR OTHER	DATA	_
	TYPE OF SUBMISSION		TY	PE OF ACT	ION		
	Notice of Intent	Acidize	Deepen	Pro	duction (Start/Resume)	☐Water ShutOff	
	Monet of filent	☐Alter Casing	☐ Hydraulic Fracturing	Rec	lamation	■Well Integrity	
	Subsequent Report	Casing Repair	■ New Construction	□Rec	omplete	Other Plug and Abandon	
	□Final Abandonment Notice	Change Plans	☑ Plug and Abandon	Ter	nporarily Abandon		
	Trinal Abandonment Notice	Convert to Injection	☐Plug Back	□Wat	er Disposal		

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed worybk 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 perfonned 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 detennined that the site is ready for final inspection.)

Enduring Resources IV LLC requests to plug and abandon the BETTIN ON BISTI 30 001 per the attached procedure, current and proposed wellbore diagram and reclamation plan. MMOCD

Approved as to plugging of the well bore. Liability under bond is retained until

AUG 1 6 2019

CONDITIONS OF APPROVAL

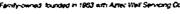
Adhere to previously issued stipulations

surface restoration is completed.	The second of th	orottodory rootade on parametric
14. I hereby certify that the foregoing is true and correct. Name (Printed/Taped) TRIC	T 111	
Lacey Granillo		
Title	:: Permit Specialist	
Signature Date THE SPACE FOR FEDERA	:: 7/1/19	ACCEPTED FOR RECORD
Approved by		AUG 14 2019
	Title	Date
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	FARMINGTON FIELD OFFICE

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.

















## **Enduring Resources** Plug & Abandon Procedure May 21, 2019

Well:

Bettin on Bisti 30 #1

API:

30-45-27122

Location:

660' FNL & 660' FEL

Field:

Bisti lower Gallup

Sec.T. R:

Sec 30, T25N, 11W

Elevation:

GL: 6422'

Cnty/State: Lat/Long:

San Juan, New Mexico

36.3775711,-108.0383759

By:

Aztec Well Servicing

### Objective:

Permanently plug & abandon the well from 4712' to surface containing 7 cement plugs.

## Prior to Rig:

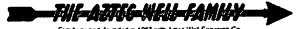
1. Notify BLM & NMOCD

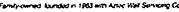
2. Note: verify all cement volumes based on actual slurry to be pumped.

3. See attached COA's from BLM & NMOCD.

## Procedure:

- 1. MIRU well servicing rig and cement equipment.
- 2. LD rods.
- 3. ND WH, NU BOPE, RU rig floor and 2-7/8" handling tools.
- 4. Release TAC, LD production string.
- 5. Tally and PU 2-3/8" workstring with 5-1/2" casing scraper to 4730'.
- 6. TOOH and LD casing scraper.
- 7. TIH with 5-1/2" CR and set @ 4712'.
- 8. Pressure test tubing to 1000psi, roll well, and close pipe rams and pressure test casing to 800psi. (WOC to be determined if test holds).
- 9. Plug #1, 4712'-4510' (Gallup Perfs &Top: 4560') Mix & pump 30 sxs of Class G cement (or equivalent) on top of CR to cover Gallup perfs and top. Pull up and reverse circulate tubing clean.
- 10. TOOH and LD setting tool and TIH open ended.
- 11. Plug #2, 3875'-3775' (Mancos Top: 3825') Mix 18 sxs of Class G cement (or equivalent) and pump a balance plug to cover the Mancos top. Pull up and reverse circulate tubing clean.
- 12. LD tubing to 2727'.
- 13. Plug #3, 2727'-2627' (Mesaverde Top: 2677') Mix 18 sxs of Class G cement (or equivalent) and pump a balance plug to cover the Mesaverde top. Pull up and reverse circulate tubing clean.
- 14. LD tubing to 1630'.
- 15. Plug #4, 1630'-1530' (Chacra Top: 1580') Mix 18 sxs of Class G cement (or equivalent) and pump a balance plug to cover the Chacra top. Pull up and reverse circulate tubing clean.















## **Enduring Resources** Plug & Abandon Procedure May 21, 2019

Well:

Bettin on Bisti 30 #1

660' FNL & 660' FEL Sec 30, T25N, 11W

Sec,T, R: Cnty/State:

Location:

San Juan, New Mexico

Lat/Long:

36.3775711,-108.0383759

Field:

API:

30-45-27122

Bisti lower Gallup

GL: 6422' Elevation:

By:

Aztec Well Servicing

- 16. LD tubing to 1286'.
- 17. Plug #5, 1286'-1140' (Pictured Cliffs Top: 1236'-Fruitland Top: 1190') Mix 23 sxs of Class G cement (or equivalent) and pump a balance plug to cover the Pictured Cliffs and Fruitland tops. Pull up and reverse circulate tubing clean.
- 18. LD tubing to 760'.
- 19. Plug #6, 760'- 460' (Kirtland Top: 710'-Ojo Alamo Top: 510') Mix 35 sxs of Class G cement (or equivalent) and pump a balanced plug to cover Kirtland and Ojo Alamo tops.
- 20. LD tubing to 320'.
- 21. Plug #7, 320'-0' (Surface Casing Shoe to 0') Mix and pump 45 sxs of Class G cement (or equivalent) to good cement returns to surface.
- 22. ND BOP and cut off wellhead below surface casing flange per regulation. Top off w/cement if needed. Install P&A marker with cement to comply with regulations. RD, MOL and cut off anchors. Restore location per BLM stipulations.













## **Enduring Resources** Plug & Abandon Procedure May 21, 2019

Well:

Bettin on Bisti 30 #1

Location:

660' FNL & 660' FEL Sec 30, T25N, 11W

Sec,T, R: Cnty/State:

San Juan, New Mexico

Lat/Long:

36.3775711,-108.0383759

API: Field: 30-45-27122

Bisti lower Gallup

**Elevation:** 

GL: 6422'

By:

**Aztec Well Servicing** 

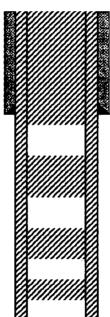
#### Bettin on Bisti 30 #1

Proposed P&A

Bisti Lower Gailup SEC 30, T25N, R11W API 30-045-27122 Procedure Date: 5/21/2019

#### Proposed P&A

Surface Plug: 320'-0' 45 sxs Class G



12-1/2" hole Surface Casing 8-5/8" 24# Set @ 270'

Surface shoe @ 270'

Ojo Alamo @ 510'

Plug 6: 760'-460' 35 sxs, class G

Kirtland Top @ 710'

Fruitland Top @ 1190'

Plug 5: 1286'-1140' 23 sxs, class G

Pictured Cliffs @ 1236

Chacra Top @ 1580'

Plug 4: 1630'-1530'

18 sxs. class G

Mesaverde Top @ 2677\*

Plug 3: 2727'-2627'

18 sxs, class G

Mancos Top @ 3825'

Plug 2: 3875'-3775'

18 axs, class G

Gallup Top @ 4560\*

Plug 1: 4712'-4510'

CR @ 4712' 30 sxs, class G

Gallup Perfs @4762' to 4945'

7-7/8" hole

5-1/2" 15.5# Production Casing set @5005' Stage 1, and 2: 755 axs, circ to surface.

CNTY: San Juan FTG: 660' FNL, 660' FEL 72 12 IP OIL: OPERATOR: ENDURING RESOURCES IP GAS: WELL: Bettin on Bisti 30 #1 STATE: NM Q-Q: NENE SPUD: 04/16/90 SEC.: 30 FIELD: Bisti Lower Gallup IP WTR: 24 API# 30-045-27122 COMP: 05/25/90 TWS: 25N **CUM GAS:** 39,200 \_ RGE: 11W LEASE #: NM 68764 Navajo Trust STATUS: SIOW CUM OIL: 25,839 WI/NRI: WBD DATE: 04/12/19 BY: JTC **CUM WTR:** 8,562 LAST PROD: Aug-17 **CURRENT WELLBORE DIAGRAM** KB: CASING RECORD HOLE (in) SIZE (in) WT (lb/ft) GRADE TOP (ft)

12 1/4 8 5/8 24

7 7/8 5 1/2 15%/17 J-55

5 1/2 DV Tool 5005 PBTD (ft): 129 its TUBING RECORD COND: DATE: 10-Mar-14 WT (lb/ft) GRADE 6.4 J-55 TOP (ft) TALLY (ft) 121/4" Hole 8-5/8", 24# Csg @ 270 ' MAKE/MODEL SIZE (In) TALLY (ft) DEPTH (ft)
12 00 Cemented w/ 175 sxs ITEM TBG HNGR 2 7/8 2272 2677 3667 Top Cliff House @ Top Mesaverde @
Top Point Lookout @
Top Mancos @ 3825 Top Mancos @ PERFORATION RECORD SPF TOP (ft) BTM (ft) \_STAGE STATUS VOL / PROP Original TOC @ ???? SW Frac 122,880 122.880 WELLWORK HISTORY Drilling 04/16/90 - 04/20/90 Spud well and drill 12½" hole to 273°. Run and cement surface casing w/ cement to surface. Dril 7-7/8" hole to 5005°. Run prod casing and cement thru DV tool @ 3037' in two stages. Cement to surace on second stage. Drill out DV tool and test casing to 3500 psig. OK. Perforate Gallup gross interval 4762-4945'. Acidize w/ 1000 gals 15% Hcl and slickwater frac w/ 122,880# 20/40 sand. Swab and IP well @ 72 BOPD, 12 Mcfpd and 24 BWpd. DV TOOL @ 3037 Last Workover 06/18/2015 Pump change and last workover reported. EOT @ 4948', SN @ 4915' and TAC @ 4657'. 72 TAC @ 4657 4762'-4794' 4851'-4860 4913'-4925' Gallup SN @ 4915 4941'-4945' EOT @ 4948 ORIG PBTD @ 5%" Csq @Q TD @Q 5005

## 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: Bettin on Bisti 30 001

## **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. If casing fails pressure test, CBL required after setting CR from 4670' to surface to confirm cement. Submit electronic copy of the log for verification to the following addresses: <a href="mailto:jkillina@blm.gov">jkillina@blm.gov</a> and <a href="mailto:Brandon.Powell@state.nm.us">Brandon.Powell@state.nm.us</a>. Based on CBL results inside/outside plugs and volumes will be adjusted accordingly. Please review the Genereal Requirements document to ensure volumes meet required excess inside and outside casing.
- 4. Add additional volume to plug #6 to ensure 50' excess (approx. 41 sx total)

# 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 <u>minimum general</u> 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. (densometer/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.
  - 4.6 A cement bond log or other accepted cement evaluation tool is required to be run if one had not been previously ran or cement did not circulate to surface during the original casing cementing job or subsequent cementing jobs.

- 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.
  - 5.4 If perforations are required below the surface casing shoe, a 30 minute minimum wait time will be required to determine if gas and/or water flows are present. If flow is present, the well will be shut-in for a minimum of one hour and the pressure recorded. Short or long term venting may be necessary to evacuate trapped gas. If only a water flow occurs with no associated gas, shut well in and record the pressures. Contact the Engineer as it may be necessary to change the cement weight and additives.
- 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 H<sub>2</sub>S.
- 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, 6251 College Blvd., Suite A, Farmington, NM 87402. 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.