Form 3160-5 (August 2007)

\* Ground Level Doy Hole

# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

OCD Hobbs

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

Expires: July 3
Lease Serial No.
NMLC068848

JUI 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

6. If Indian, Allottee or Tribe Name

abandoneu we	en. Ose form 5100-5 (Ar	D) IOI SUCII				1				
SUBMIT IN TRIPLICATE - Other instructions on reverse side.							7. If Unit or CA/Agreement, Name and/or No.			
l. Type of Well  ☑ Oil Well ☐ Gas Well ☐ Other						8. Well Name and No. MARSHALL FEDERAL 1				
Name of Operator     ENDURANCE RESOURCES	SON esilc.com			9. API W 30-02	ell No. 5-08358	/				
3a. Address 11382 LOVINGTON HIGHWA ARTESIA, NM 88211	o. (include area 14-3355 <b>/10</b>	SSC OC	Ð	10. Field and Pool, or Exploratory CRUZ; DELAWARE			_			
4. Location of Well (Footage, Sec., 7	T., R., M., or Survey Description	1)	0.11	A 5 29	การ	11. Count	y or Parish	i, and St	ate	/
Sec 19 T23S R33E 660FSL 6		JUL 0 5 2013		LEA COUNTY, NM						
12 CHECK ADD	ROPRIATE BOX(ES) TO		NATURE	OF NOT	ice bi	EDORT C	D OTH	ED DA	Т.	
	T	JINDICATI	<del></del>			EPOKI, C		EK DA		<del></del>
TYPE OF SUBMISSION	TYPE OF SUBMISSION			E OF AC	TION					
Notice of Intent     ■     Notice of Intent     Notice of Inten	☐ Acidize	☐ Deepen ☐ Pro				uction (Start/Resume)				
	☐ Alter Casing	☐ Fra	cture Treat		Reclam	ration			Well Integri	ity
☐ Subsequent Report	☐ Casing Repair	□ Nev	v Construction	ı 🗆	Recomp	plete				
☐ Final Abandonment Notice	☐ Change Plans	🔀 Plu	g and Abandor	n 🗖	Tempor	arily Aband	don			
	☐ Convert to Injection	Plu	g Back		Water D	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 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.)  PROPOSED P&A PROCEDURE  RECLAMATION PROCEDURE  ATTACHED  SEE ATTACHED FOR										
1) MIRU PU. POOH WITH PC PUMP.						CONDITIONS OF APPROVAL				
2) SET CIBP @ 5,040' (ISOLA		).				COMDI	HOIA'	3 UF	APPRI	UVAL
3) RIH W/ TBG & TAG TO VERIFY CIBP IS SET. SPOT 60 SKS OF CMT ON TOP (CALCULATED PBTD @ 4,165'). CMT COVERS DELAWARE TOP & BASE OF SALT. WOC & TAG.										
4) MIX & SPOT 9.5# MUD FROM TOC TO 1,282'.										
5) SPOT-66-SK-CMT-PLUG-@-1,282' (CALCULATED TOC IS 319'), CMT-PLUG-IS-PLACED 50' BELOW TOP OF SALT										
Perforate 4/2"es	5851 @ , 22	attemo		<u> </u>	<u> </u>	mt	to	1182	2 200	<u> </u>
14. I hereby certify that the foregoing is  Name(Printed/Typed) KALE JAC	Electronic Submission #2 For ENDURAN Committed to AFMSS for p	CE RESOUR	JOHNNY DIC	nt to the H	łobbs	•				
. Signature (Electronic S	Submission)		Date 06/0	02/2012						
Signature (Electronic C	THIS SPACE FO	R FEDERA		03/2013 TE OFF	ICE US	SF			<del></del>	
			T T		-					<del></del>
Approved By ames	a. Como_		Title 5	61	<u></u>				Date Date	/3 
Conditions of approval, if any, are attache ertify that the applicant holds legal or equal which would entitle the applicant to condu-	nitable title to those rights in the act operations thereon.	subject lease	Office 🧷							<del></del>
itle 18 U.S.C. Section 1001 and Fitte 43 States any false, fictitious or translutent	U.S.C. Section 1212, make it a parements or representational	crime for any pe to any platter w	rson knowingly ithin its jurisdic	and willfu tion.	ully to ma	ke to any de	partment o	r agency	of the Unite	d ———
** OPERAT	OR-SUBMITTED ** O	PERATOR-	SUBMITTE	D ** OF	PERAT	OR-SUB	MITT/EC	) **		

## Additional data for EC transaction #209313 that would not fit on the form

32. Additional remarks, continued

TO 62' OVER CSG SHOE, WOC & TAG.

6) MIX & SPOT 9.5# MUD FROM 319' TO 250'.

ord show for 710-331. WOC Tog (covers sope Jub 9/14/72)

7) PERF SQUEEZE HOLES @ 250'. ATTEMPT TO SQUEEZE. PUMP CEMENT TO SURFACE ON ANNULUS & INSIDE CASING. (CALCULATED 64 SK SURFACE PLUG  $\sim$ 47 SKS OUT/17 SKS IN).

8) CUT OFF WH & SET DRY HOLE MARKER.

CURRENT SCHEMATIC & PROPOSED P&A SCHEMATIC ATTACHED.

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# **ENDURANCE RESOURCES LLC** Well Name: Marshall Federal #1 Field: Cruz; Delaware Location: SEC 19- 235-33E; 660' FSL & 660' FWL County: Lea State: NM Elevation: 3,707 KB: 3720 (13ft) Spud Date: 09/05/61 Compl Date: 9/17/61 **ENDURANCE** API#: 30-025-08358 | Prepared by: KALE JACKSON Date: 5/31/13 RESOURCES, LLC Rev: CURRENT SCHEMATIC BHA ASSEMBLY 155 JTS 2-3/8 TBG PC PUMP TOP @ 4975' TAC @ 5048 2 JTS 2-3/8 TBG @ 5112 HOESS OCD HOLE SIZE CASING SIZE DEPTH SET | CMT TOP JUL 0 5 2013 11" 8-5/8" 381' SURFACE 24# CSG ; CMT'D W/ 2005KS RECEIVED CSG LEAK @ 660'. CMT W/ 150 SKS CLASS C CMT TOC UNKNOWN FROM SQUEEZE IN 9/14/72 TOC @ 4,500' (REPORTED 9-17-61) DELAWARE PERFS: 5090-5100 (RE-PERF 7/8/10) HOLE SIZE CASING SIZE DEPTH SET | CMT TOP 6-1/8" 4-1/2" 5,237' 4,500' 9.5# CSG ; CMT'D W/ 150 SKS PBTD @ 5,160 7/07/10

# **ENDURANCE RESOURCES LLC** Well Name: Marshall Federal #1 Field: Cruz: Delaware County: Location: SEC 19-235-33E; 660' FSL & 660' FWL State: NM Lea Elevation: 3,707' KB: 3720 (13f+) Spud Date: 09/05/61 Compl Date: 9/17/61 **ENDURANCE** API#: 30-025-08358 | Prepared by: KALE JACKSON Date: 5/31/13 Rev: RESOURCES, LLC PROPOSED P&A PROPOSED: 1) PERF FOR SQZ @ 250' & ATTEMPT TO SQUEEZE 2) PUMP CMT TO SURF ON ANNULUS & INSIDE CSG (CALC 64 SK SURF PLUG ~47 SKS OUT/17 SKS IN) FORMATION TOPS 3) CUT OFF WELLHEAD & SET DRY HOLE MARKER RUSTLER @ 900' TOP OF SALT @ 1232' BASE OF SALT @ 4773' 9.5# MUD LAMAR LIME @ 5028' DELAWARE SAND @ 5085' HOLE SIZE CASING SIZE DEPTH SET | CMT TOP 11" 8-5/8" 381' SURFACE 24# CSG ; CMT'D W/ 2005KS CSG LEAK @ 660'. CMT W/ 150 SKS CLASS C CMT TOC UNKNOWN FROM SQUEEZE IN 9/14/72 PROPOSED: 1) SPOT 66 SX CMT PLUG @ 1282. 50' BELOW TOP OF SALT TO 62 ' OVER SURFACE CSG SHOE. HOESS OCD **CALC TOC @ 319'** 2) WOC & TAG CMT JUL 0 5 2013 9.5# MUD RECEIVED TOC @ 4,500' (REPORTED 9-17-61) 1) SET CIBP @ 5040' (ISOLATE DELAWARE PERFS) 2) SPOT 60 SK CMT ON TOP (CALC. PBTD @ 4165') 3) CMT COVERS DELWARE TOP & BASE OF SALT 4) WOC & TAG CMT DELAWARE PERFS: 5090-5100 (RE-PERF 7/8/10)

<b>HOLE SIZE</b>	<b>CASING SIZE</b>	DEPTH SET	CMT TOP			
6-1/8"	4-1/2"	5,237'	4,500'			
9.5# CSG ; CMT'D W/ 150 SKS						

PBTD @ 5,160 7/07/10

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

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# Permanent Abandonment of Federal Wells Conditions of Approval

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Failure to comply with the following Conditions of Approval may result in a Notice of Incidents of Noncompliance (INC) in accordance with 43 CFR 3163.1.

1. Plugging operations shall commence within <u>ninety (90)</u> days from the approval date of this Notice of Intent to Abandon.

If you are unable to plug the well by the 90<sup>th</sup> day provide this office, prior to the 90<sup>th</sup> day, with the reason for not meeting the deadline and a date when we can expect the well to be plugged. Failure to do so will result in enforcement action.

The rig used for the plugging procedure cannot be released and moved off without the prior approval of the authorized officer. Failure to do so may result in enforcement action.

- 2. <u>Notification</u>: Contact the appropriate BLM office at least 24 hours prior to the commencing of any plugging operations. For wells in Chaves and Roosevelt County, call 575-627-0272; Eddy County, call 575-361-2822; Lea County, call 575-393-3612.
- 3. <u>Blowout Preventers</u>: A blowout preventer (BOP), as appropriate, shall be installed before commencing any plugging operation. The BOP must be installed and maintained as per API and manufacturer recommendations. The minimum BOP requirement is a 2M system for a well not deeper than 9,090 feet; a 3M system for a well not deeper than 13,636 feet; and a 5M system for a well not deeper than 22,727 feet.
- 4. <u>Mud Requirement:</u> Mud shall be placed between all plugs. Minimum consistency of plugging mud shall be obtained by mixing at the rate of 25 sacks (50 pounds each) of gel per 100 barrels of **brine** water. Minimum nine (9) pounds per gallon.
- 5. <u>Cement Requirement</u>: Sufficient cement shall be used to bring any required plug to the specified depth and length. Any given cement volumes on the proposed plugging procedure are merely estimates and are not final. Unless specific approval is received, no plug except the surface plug shall be less than 25 sacks of cement. Any plug that requires a tag will have a minimum WOC time of 4 hours.

In lieu of a cement plug across perforations in a cased hole (not for any other plugs), a bridge plug set within 50 feet to 100 feet above the perforations shall be capped with 25 sacks of cement. If a bailer is used to cap this plug, 35 feet of cement shall be sufficient. Before pumping or bailing cement on top of CIBP, tag will be required to verify depth. Based on depth, a tag of the cement may be deemed necessary.

Unless otherwise specified in the approved procedure, the cement plug shall consist of either Neat Class "C", for up to 7,500 feet of depth or Neat Class "H", for deeper than 7,500 feet plugs.

6. Dry Hole Marker: All casing shall be cut-off at the base of the cellar or 3 feet below final restored ground level (whichever is deeper). The BLM is to be notified a minimum of 4 hours prior to the wellhead being cut off to verify that cement is to surface in the casing and all annuluses. Wellhead cut off shall commence within ten (10) calendar days of the well being plugged. If the cut off cannot be done by the 10<sup>th</sup> day, the BLM is to be contacted with justification to receive an extension for completing the cut off.

The well bore shall then be capped with a 4-inch pipe, 10-feet in length, 4 feet above ground and embedded in cement, unless otherwise noted in COA (requirements will be attached). The following information shall be permanently inscribed on the dry hole marker: well name and number, name of the operator, lease serial number, surveyed location (quarter-quarter section, section, township and range or other authorized survey designation acceptable to the authorized officer such as metes and bounds).

- 7. <u>Subsequent Plugging Reporting</u>: Within 30 days after plugging work is completed, file one original and three copies of the Subsequent Report of Abandonment, Form 3160-5 to BLM. The report should give in detail the manner in which the plugging work was carried out, the extent (by depths) of cement plugs placed, and the size and location (by depths) of casing left in the well. **Show date well was plugged.**
- 8. <u>Trash</u>: All trash, junk and other waste material shall be contained in trash cages or bins to prevent scattering and will be removed and deposited in an approved sanitary landfill. Burial on site is not permitted.

Following the submission and approval of the Subsequent Report of Abandonment, surface restoration will be required. See attached reclamation procedure.

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# Requirements for ground level dry hole markers <u>Well Identification Markers</u> Conditions of Approval (COA)

The BLM Carlsbad Field Office (CFO) Conditions of Approval (COA) Requires that ground level dry hole markers be placed on well within the Lesser Prairie Chicken habitat area. The dry hole markers will be to the following specifications. The operator will construct the markers as follows:

- 1. An 8 inch X 8 inch steel plate 1/8 to 3/16 of an inch thick is to be placed on the old dry hole marker stand pipe 2 inches from ground level, in the Lesser Prairie Chicken habitat area.
- 2. Steel plate may be welded or bolted approximately 2 inches from ground level on the stand pipes. If plates are bolted to the stand pipe, the person installing the plate will be required to weld a pipe collar on the plate and place a minimum of two set screws/bolt on each collar. Aluminum data plates may be bolted with minimum ¼ inch bolt and locking nuts or self tapping fine threaded screws. A minimum of one in each corner is to be installed on each plate.
- 3. An 8 inch x 8 inch aluminum plate, which is 12 gauge or .080 sign material (1/8 inch aluminum plate may be used in place of the .080 plate) with the required information for that well stamped or engraved in a minimum 3/8 inch tall letter or number.
- 4. The following information will be stamped or engraved on the 8 inch X 8 inch aluminum plate in the following order.
  - a. First row: Operators name
  - b. Second row: Well name and number
  - c. Third row: Legal location to include ½ ½, Section, Township, and range. If the legal location cannot be placed on one row it can be split into two rows with the ½ ½ (example: 1980 FNL 1980 FWL) being possible top row.
  - d. Fourth row: Lease Number and API number.

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i. Example marker plate: (attached)

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NMOCD Order No. R-12965 also required the operator to notify NMOCD when this type of dry hole marker is used. This can be done on the subsequent report of abandonment which is submitted to the BLM after the well is plugged. State that a ground level dry hole marker was installed as required in the COA's from the BLM.



# United States Department of the Interior

### BUREAU OF LAND MANAGEMENT

Carlsbad Field Office 620 E. Greene St. Carlsbad, New Mexico 88220-6292 www.blm.gov/nm



In Reply Refer To: 1310

#### Reclamation Objectives and Procedures

Reclamation Objective: Oil and gas development is one of many uses of the public lands and resources. While development may have a short- or long-term effect on the land, successful reclamation can ensure the effect is not permanent. During the life of the development, all disturbed areas not needed for active support of production operations should undergo "interim" reclamation in order to minimize the environmental impacts of development on other resources and uses. At final abandonment, well locations, production facilities, and access roads must undergo "final" reclamation so that the character and productivity of the land and water are restored.

The long-term objective of final reclamation is to set the course for eventual ecosystem restoration, including the restoration of the natural vegetation community, hydrology, and wildlife habitats. In most cases this means returning the land to a condition approximating or equal to that which existed prior to the disturbance. The final goal of reclamation is to restore the character of the land and water to its predisturbance condition. The operator is generally not responsible for achieving full ecological restoration of the site. Instead, the operator must achieve the short-term stability, visual, hydrological, and productivity objectives of the surface management agency and take steps necessary to ensure that long-term objectives will be reached through natural processes.

To achieve these objectives, remove any and all contaminants, scrap/trash, equipment, pipelines and powerlines. Strip and remove caliche, contour the location to blend with the surrounding landscape, redistribute the native soils, provide erosion control as needed, rip and seed as specified in the original APD COA. This will apply to well pads, facilities, and access roads. Barricade access road at the starting point. If reserve pits have not reclaimed due to salts or other contaminants, submit a plan for approval, as to how you propose to provide adequate restoration of the pit area.

- 1. The Application for Permit to Drill or Reenter (APD, Form 3160-3), Surface Use Plan of Operations must include adequate measures for stabilization and reclamation of disturbed lands. Oil and Gas operators must plan for reclamation, both interim and final, up front in the APD process as per Onshore Oil and Gas Order No. 1.
- 2. For wells and/or access roads not having an approved plan, or an inadequate plan for surface reclamation (either interim or final reclamation), the operator must submit a proposal describing the procedures for reclamation. For interim reclamation, the appropriate time for submittal would be when filing the Well Completion or Recompletion Report and Log (Form 3160-4). For final reclamation, the appropriate time for submittal would be when filing the Notice of Intent, or the Subsequent Report of Abandonment, Sundry Notices and Reports on Wells (Form 3160-5). Interim reclamation is to be completed within 6 months of well completion, and final reclamation is to be completed within 6 months of well abandonment.
- 3. The operator must file a Subsequent Report Plug and Abandonment (Form 3160-5) following the plugging of a well.
- 4. Previous instruction had you waiting for a BLM specialist to inspect the location and provide you with reclamation requirements. If you have an approved Surface Use Plan of Operation and/or an approved Sundry Notice, you are free to proceed with reclamation as per approved APD. If you have issues or concerns, contact a BLM specialist to assist you. It would be in your interest to have a BLM specialist look at the location and access road prior to the removal of reclamation

equipment to ensure that it meets BLM objectives. Upon conclusion submit a Form 3160-5, Subsequent Report of Reclamation. This will prompt a specialist to inspect the location to verify work was completed as per approved plans.

- 5. The approved Subsequent Report of Reclamation will be your notice that the native soils, contour and seedbed have been reestablished. If the BLM objectives have not been met the operator will be notified and corrective actions may be required.
- 6. It is the responsibility of the operator to monitor these locations and/or access roads until such time as the operator feels that the BLM objective has been met. If after two growing seasons the location and/or access roads are not showing the potential for successful revegetation, additional actions may be needed. When you feel the BLM objectives have been met submit a Final Abandonment Notice (FAN), Form 3160-5, stating that all reclamation requirements have been achieved and the location and/or access road is ready for a final abandonment inspection.
- 7. At this time the BLM specialist will inspect the location and/or access road. If the native soils and contour have been restored, and the revegetation is successful, the FAN will be approved, releasing the operator of any further liability of the location and/or access road. If the location and/or access road have not achieved the objective, you will be notified as to additional work needed or additional time being needed to achieve the objective.

If there are any questions, please feel free to contact any of the following specialists:

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## Inspection & Enforcement

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Jim Amos Supervisory Environmental Protection Specialist 575-234-5909, 575-361-2648 (Cell)

Mike Burton Environmental Protection Specialist 575-234-2226

Jeffery Robertson Natural Resource Specialist 575-234-2230

Jennifer Van Curen Environmental Protection Specialist 575-234-5905

Doug Hoag Civil Engineering Technician 575-234-5979

Linda Denniston Environmental Protection Specialist 575-234-5974

#### Realty, Compliance

Randy Pair Environmental Protection Specialist 575-234-6240

### Permitting

Cody Layton Natural Resource Specialist 575-234-5959

Trishia Bad Bear Natural Resource Specialist 575-393-3612

Todd Suter Surface Protection Specialist 575-234-5987

Tanner Nygren Natural Resource Specialist 575-234-5975

Amanda Lynch Natural Resource Specialist 575-234-5922

Leg1on Brumley Environmental Protection Specialist 575-234-5957

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