Form 3160-5 (August 2007)

(Instructions on page 2)

OCD-ARTESIA UNITED STATES

DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED OMB No 1004-0137 Expires July 31, 2010

5 Lease Serial No LC-029435B

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 of Tribe Name			
				s. 	7 If Unit of CA/Agree	unant N	lame and/or No
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Type of Well Oil Well Gas W	Vell				8 Well Name and No Arco 6 Federal #1		
2 Name of Operator Marbob Energy Corporation		,			9 API Well No 30-015-28714		
3a Address		3b Phone No	(ınclude area cod	le)	10 Field and Pool or E	Explorat	ory Aiea
P O Box 227, Artesia, NM 88211-0227		575-748-330	3		Wildcat		······································
4 Location of Well (Footage, Sec., T., 1800' FSL & 1410' FWL, Sec 6, T17S-R31E	R ,M , or Survey Description,)			11 Country or Parish, Eddy County, NM	State	
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	Casing Repair		Construction		omplete		Other P & A Procedure
Subsequent Report	Change Plans		and Abandon		porauly Abandon		
Final Abandonment Notice	Convert to Injection	Plug	Back	☐ Wate	er Disposal		
·	r final inspection) and Dustin Winkler this mo	orning, 9/24/10	, please approve	e the attac	hed emergency P & A HED FOR IS OF APPR	OVA	dure Plan to rig up the wel
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14 I hereby certify that the foregoing is t	rue and correct Name (Printe	d/Typed)			1		
Nancy T Agnew	<u> </u>		Title Land Dep	partment			
Signature OMU	T. ame	W	Date 09/24/20	10			
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Conditions of approval, if any, are attached that the applicant holds legal or equatible tentiale the applicant to conduct operations Title 18 U S C Section 1001 and Title 43	itle to those rights in the subjective the subjective con	ct lease which wo	ould Office		SEP 2 4 2010 Dustin Winkl	er	gry of the United States any fal
fictitious or fraudulent statements or repre	esentations as to any matter with	thin its jurisdictio	1	BUR	EAU OF CAND WANA	GEWEN FICE	IF Comment of the country falls

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Arco 6 Fed 1 1800' fsl, 1410' fwl Unit K, Sec. 6, T17S, R31E Eddy Co., NM 30-015-28714

OCT 0 5 2010 HOBBSOCD

Remedy Water Flow and Plug and Abandonment Procedure 24 Sept 10

Basic Data:

20" @ 97' Circ. 50 sx. Cmt. 13-3/8" @ 615' TOC 88', 3 yds redimix to surface 9-5/8" @ 4553' Circ. 28 sx. Cmt. 5-1/2" @ 4557-12250' TOC 5900' CBL. See attached wellbore schematics for more detail

<u>Note:</u> Notify BLM inspectors in Carlsbad (575-361-2822) at least 24 hrs. before starting plugging operation. Class "C" cement will be used (14.8 ppg, 1.32 cfps, 6.3 gwps).

Well was plugged in 1999. Well developed brine water flow to surface in 13-3/8" x 9-5/8" annulus. Will drill out surface plug (possibly other plugs) and pump cement into channel from approx. 400' to surface to seal off water flow. This procedure is subject to change depending on actual well conditions encountered when cleaning out 9-5/8"—discuss with BLM field representative if changes need to be made. This outline was reviewed with Dustin Winkler (BLM Petroleum Engineer) on 24 Sept 2010.

Procedure:

- 1. Break up concrete in bottom of cellar and expose 13-3/8" casing stub. Weld 9-5/8" extension onto 9-5/8" stub. Install wellhead onto 13-3/8" and packoff against 9-5/8". Close valve on water flow and record shut in pressure. NU double ram BOP onto 9-5/8" and test to 300 psi then 2000 psi for 30 minutes. RU WSU, reverse unit and other reentry/drilling equipment.
- 2. Pick up 8-3/4" bit and drill surface plug 0-60' with fresh water. Be prepared for water flow up 9-5/8" while drilling out plug.
- 3. RIH and tag plug at approx. 555'. If plug not present at 13-3/8" shoe (555'), RIH and tag plug at 1282'. If this plug isn't present, RIH until tag next plug—let's discuss if this happens. Assuming plugs present downhole, but plug at base of salt not present or in proper position, spot 75 sx. Class "C" with 2% CaCl2 at 1350', pull uphole 600', WOC couple of hours and tag plug. Respot plug if tag deeper than 1200'. If plug tags OK at approx. 555', Step 3 will be skipped.
- 4. If no water flow encountered in cleanout, test casing to 500 psi. If casing won't test, RIH with packer and isolate leaks.
- 5. If casing tested OK to 500 psi, shoot 8-12 squeeze holes at approx. 400', RIH with packer, attempt to establish circulation through squeeze holes and up channel outside 9-5/8". POOH with packer, set cement retainer at approx. 375', establish circulation to surface outside 9-5/8", pump Class "C" with 2% CaCl2 until circulate cement to surface, close casing valve, pump additional Class "C" with 3-4% CaCl2 until running squeeze obtained below retainer. Recommend having 500-600 sx. "C" on location and

mixing CaCl2 on the fly. Let cement cure couple of hours then open casing valve to verify that there is no flow to surface. If flow is still present, shoot 8-12 squeeze holes at approx. 350' and repeat process above. Let's discuss if this doesn't stop flow. When flow is stopped, spot approx. 130 sx. "C" with 2% CaCl2 from retainer to surface. Weld plate(s) onto casing and reinstall dryhole marker.

- 6. If casing didn't test and casing leaks are present, RIH with packer, set above top leak, attempt to establish circulation through leaks and up channel outside 9-5/8". POOH with packer, set cement retainer approx. 50' above top leak, establish circulation to surface outside 9-5/8", pump Class "C" with 2% CaCl2 until circulate cement to surface, close casing valve, pump additional Class "C" with 3-4% CaCl2 until running squeeze obtained below retainer. Recommend having 500-600 sx. "C" on location and mixing CaCl2 on the fly. Let cement cure couple of hours then open casing valve to verify that there is no flow to surface. If flow is still present, shoot 8-12 squeeze holes at approx. 25' above retainer and repeat process above. Let's discuss if this doesn't stop flow. When flow is stopped, spot approx. 130 sx. "C" with 2% CaCl2 from retainer to surface. Weld plate(s) onto casing and reinstall dryhole marker.
- 7. Cut off anchors, and reclaim location per BLM specs after doing any remediation required by NMOCD/BLM.

Kbc/arco 6 fed 1 replug

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	Arco "6" Fed, 1 1800'FSL, 1410'FML K-6-175-31e Eddy NM	30-015- 2.8714 Spud: 12195 P\$A: 9/99 GL: 3735'	
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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 ¼, 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 on the top row.
 - d. Fourth row: Lease Number and API number.
 - i. Example marker plate: (attached)

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.

BUREAU OF LAND MANAGEMENT

Carlsbad Field Office 620 East Greene Street Carlsbad, New Mexico 88220 575-234-5972

Permanent Abandonment of Federal Wells Conditions of Approval

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 90th day provide this office, prior to the 90th 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. Cement Requirement: 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. In lieu of a cement plug in a cased hole, 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. Any plug that requires a tag will have a minimum WOC time of 4 hours.

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 when the wellhead is cut off to verify that cement is to surface in the casing and all annuluses. The well bore shall then be capped with a 4-inch pipe, 10-feet in length, 4 feet above ground and embedded in cement. 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 five 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.

DHW 112309



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 pre-disturbance 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, re-distribute 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:

Jim Amos

Supervisory Environmental Protection Specialist

575-234-5909, 575-361-2648 (Cell)

Terry Gregston

Environmental Protection Specialist

575-234-5958

Bobby Ballard

Environmental Protection Specialist

575-234-2230

Randy Rust

Natural Resource Specialist

575-234-5943

Linda Denniston

Environmental Protection Specialist

575-234-5974

Jennifer Van Curen

Environmental Protection Specialist

575-234-5905

Justin Frye

Environmental Protection Specialist

575-234-5922

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

Doug Hoag

Civil Engineering Technician

575-234-5979

Tanner Nygren

Natural Resource Specialist

575-234-5975

John Fast

Natural Resource Specialist

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