Michelle Lujan Grisham Governor

Sarah Cottrell Propst Cabinet Secretary

Todd E. Leahy, JD, PhD Deputy Secretary Adrienne Sandoval, Division Director Oil Conservation Division



New Mexico Oil Conservation Division approval and conditions listed below are made in accordance with OCD Rule 19.15.7.11 and are in addition to the actions approved by BLM on the following <u>3160-4 or 3160-5</u> form.

Operator Signature Date: 11/12/2019 Well information:

30-045-25234 GALLEGOS CANYON UNIT #133E

BP AMERICA PRODUCTION COMPANY

Application Type:

P&A Drilling/Casing Change Location Change

Recomplete/DHC (For hydraulic fracturing operations review EPA Underground injection control Guidance #84; Submit Gas Capture Plan form prior to spudding or initiating recompletion operations)

Other:

Conditions of Approval:

• Notify NMOCD 24hrs prior to beginning operations.

In addition to the plugs approved by BLM:

• Add a Chacra plug 2270'- 2170.' OCD Chacra top pick @ 2220.'

NMOCD Approved by Signature

2/25/20 Date

Form 3160-5 June 2015) DE B	OMB	NMSF078370 6. If Indian, Allottee or Tribe Name			
SUNDRY Do not use thi abandoned we	6. If Indian, Allottee				
	TRIPLICATE - Other ins	1917-1	7. If Unit or CA/Age	reement, Name and/or No.	
		autono on puge 2	892000844F		
1. Type of Well Oil Well Gas Well Ott				o. NYON UNIT 133E	
2. Name of Operator BP AMERICA PRODUCTION	CO E-Mail: patti.camp		9. API Well No. 30-045-25234		
3a. Address 1199 MAIN AVE SUITE 101 DURANGO, CO 81301		3b. Phone No. (include area code) Ph: 970-712-5997	10. Field and Pool o BASIN DAKO	r Exploratory Area TA	
4. Location of Well (Footage, Sec., 7	., R., M., or Survey Description		11. County or Parish	1, State	
Sec 17 T29N R12W NENW 0 36.731720 N Lat, 108.124820		FEB 2 n 2020	SAN JUAN CO	DUNTY, NM	
12. CHECK THE AI	PPROPRIATE BOX(ES)	TO INDICATE NATURE O	F NOTICE, REPORT, OR OT	THER DATA	
TYPE OF SUBMISSION	TYPE OF ACTION				
	☐ Acidize	Deepen	□ Production (Start/Resume)	□ Water Shut-Off	
Notice of Intent	Alter Casing	Hydraulic Fracturing	□ Reclamation	Well Integrity	
Subsequent Report	Casing Repair	□ New Construction	Recomplete	□ Other	
□ Final Abandonment Notice	Change Plans	Plug and Abandon	Temporarily Abandon	-	
	Convert to Injection	□ Plug Back	Water Disposal		
BP requests to P&A the subje BLM required reclamation pla In accordance with NMOCD F operations.	n documents.				
14. I hereby certify that the foregoing is	s true and correct.	492162 verified by the BLM We	II Information System		
Co	For BP AMERIC	A PRODUCTION CO, sent to th cessing by JOHN HOFFMAN or	e Farmington		
Name (Printed/Typed) PATTI CA	in the second		ATORY ANALYST		
Signature (Electronic	Submission)	Date 11/12/2			
	THIS SPACE F	OR FEDERAL OR STATE	OFFICE USE		
Approved By JOHN HOEFMAN _	ed. Approval of this notice doe		UM ENGINEER	Date 02/19/202	
ertify that the applicant holds legal or eq which would entitle the applicant to cond	uitable title to those rights in th uct operations thereon.	e subject lease Office Farming			
itle 18 U.S.C. Section 1001 and Title 43 States any false, fictitious or fraudulent	U.S.C. Section 1212, make it a	a crime for any person knowingly and	d willfully to make to any department	or agency of the United	
nstructions on nage 2)	summeries of representations a	my maner what to jurioutefor			

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** BLM REVISED **

Plug and Abandonment Procedure – GCU 133E 850 FNL & 1550 FWL, Section 17, T29N, R12W San Juan County, NM / API 3004525234

- 1. Hold pre-job safety meeting. Comply with all NMOCD, BLM safety and environmental regulations. Test rig anchors prior to moving in rig if not rigged to base beam.
- 2. Check casing, tubing, and bradenhead pressures.

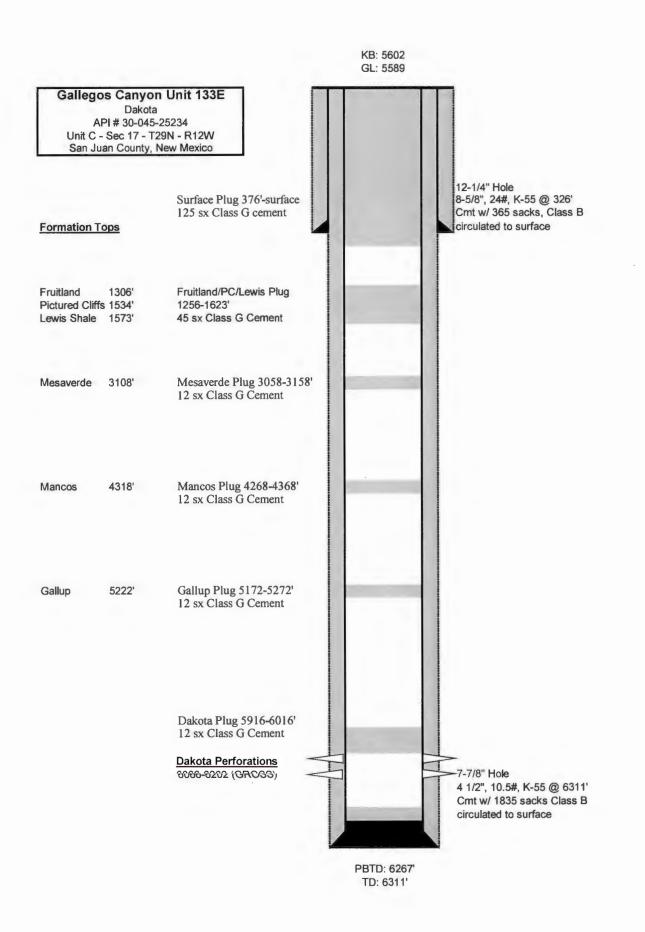
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- 3. Removed existing piping on casing valve. RU blow lines from casing valves and begin blowing down casing pressure. Kill well as necessary. Ensure well is dead or on a vacuum.
- 4. ND wellhead and NU BOP. Function test BOP.
- 5. P/U 4 1/2" bit or casing scraper on 2 3/8" string and round trip as deep as possible above top perforation.
- 6. P/U 4 1/2" CR, TIH and set CR 50' above top perforation. Pressure test tubing to 1000 psi. Sting out of CR. Load hole, and pressure test casing to 800 psi. If casing does not test, then spot or tag subsequent plugs as appropriate. POOH w/ tubing.
- RU wireline and run CBL with 500 psi on casing from CR to surface to identify TOC. Adjust plugs as necessary for new TOC. Email log copy to Jack Savage (BLM) at <u>jwsavage@blm.gov</u> and Brandon Powell at <u>Brandon.powell@state.nm.us</u> upon completion of logging operations.
- 8. Rig up to pump cement down tubing. Pump water to establish rate down tubing.
- 9. Plug 1 (Dakota Perforation and Dakota Formation Top 5916-6016', 12 sacks Class G Cement)
 - a. Mix 12 sacks Class G cement and spot a balanced plug inside casing to cover the Dakota perforations and formation top.
- 10. Plug 2 (Gallup Formation top 5172-5272', 12 sacks Class G cement)
 - a. Mix 12 sacks Class G cement and spot a balanced plug inside casing to cover the Gallup formation top.
- 11. Plug 3 (Mancos Formation top 4268-4368', 12 sacks Class G cement)
 - a. Mix 12 sacks Class G cement and spot a balanced plug inside casing to cover the Mancos formation top.
- 12. Plug 4 (Mesaverde Formation top 3058-3158', 12 sacks Class G cement)
 - a. Mix 12 sacks Class G cement and spot a balanced plug inside casing to cover the Mesaverde formation top.
- 13. Plug 5 (Lewis, Pictured Cliffs, Fruitland Formation top 1256-1623', 45 sacks Class G cement)
 - a. Mix 45 sacks Class G cement and spot a balanced plug inside casing to cover the Fruitland formation top.
- 14. Plug 6 (Surface shoe and surface 376'-surface, 125 sacks Class G cement)
 - a. Attempt to pressure test the bradenhead annulus to 300 psi; note the volume to load. If BH annulus holds pressure, then establish circulation out casing valve with water. Mix approximately 125 sx cement and spot a balanced plug from 376' to surface, circulate good cement out of casing valve. TOH and LD tubing. Shut well in and WOC. If BH annulus does not test, then perforate at the appropriate depth and attempt to circulate cement to surface filling in the casing from 376' and the annulus from the squeeze holes to surface. Shut in well and WOC.
- 15. ND cement valves and cut off wellhead. Fill annuli with cement as necessary. Install P&A marker to comply with regulations. Record GPS coordinate for P&A marker on tower

report. Photograph P&A marker in place. RD, MOL and restore location per BLM stipulations.

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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:

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Re: Permanent Abandonment Well: GCU 133E API: 30-045-25234

CONDITIONS OF APPROVAL

1. Plugging operations authorized are subject to the "General Requirements for Permanent Abandonment of Wells on Federal and Indian Lease."

2. Forward CBL to John Hoffman <u>ihoffman@blm.gov</u> and Brandon Powell <u>brandon.powell@state.nm.us</u>.

3. Farmington Office is to be notified at least 24 hours before the plugging operations commence (505) 564-7750.

4. BLM picks formation tops as indicated in Geo Report attachment for use in determining TOC for all plugs. Please adjust plugs according to BLM tops.

5. Surface plug: perforate and circulate cement.

BLM FLUID MINERALS Geologic Report

Date Completed: 2/19/2020

Well No. Galleg	os Canyon Unit #13	3E (AP1# 30-045-25234)	Location	850	FNL	&	1550	FWL
Lease No.			Sec. 17	T29N			R12W	
Operator	BP America Prod	uction Company	County	San Jua	in	State	New M	lexico
Total Depth	6311	PBTD 6267	Formation	Dakota				
Elevation (GL)	5589		Elevation (KE	3) 5602				

Geologic Formations	Est. Top	Est. Bottom	Log Top	Log Bottom	Remarks
San Jose Fm					
Nacimiento Fm	Surface	120			Fresh water sands (probable)
Ojo Alamo Ss	120	251			Aquifer (fresh water probable)
Kirtland Shale	251			1306	
Fruitland Fm			1306	1534	Coal/Gas/Possible water
Pictured Cliffs Ss			1534	1695	Gas
Lewis Shale			1695	3104	
Chacra					
Cliff House Ss			3104	3252	Water/Possible gas
Menefee Fm			3252	3971	Coal/Ss/Water/Possible O&G
Point Lookout Ss			3971	4318	Probable water/Possible O&G
Mancos Shale			4318	5224	
Gallup			5224	6026	O&G/Water
Graneros Shale			6026	6064	
Dakota Ss			6064	PBTD	O&G/Water

<u>Remarks:</u> P & A

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- BLM geologist's pick for the top of the Lewis Shale varies from operator's pick. No revision to Plug 5 (as submitted) is recommended as the formation is not productive.
- Log analysis of reference well #2 (attached worksheet) indicates the Nacimiento and Ojo Alamo sands investigated contain fresh water (≤5,000 ppm TDS). These fresh water sands are protected behind the surface casing and are adequately covered by the proposed surface plug (376'-Surface).

<u>Reference Well:</u> 1) Same

Fm. Tops

3) BP America Prod. Co. Water GCU #151 Analysis 1745' FNL, 1565' FWL Sec. 21, T29N, R12W GL 5627' KB 5639'

Prepared by: Chris Wenman

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.

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- 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_2S .

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 <u>date</u> 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.