Form 3160-5 (August 2007)

UNITED STATES DEPARTMENT OF THE INTERIOR

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

		BUKEAU OF LAND MANA	GEMENI				* Y O :-1\);	
		RY NOTICES AND REPO					5. Lease Serial No. NMNM29234	
	Do not us abandoned	e this form for proposals to I well. Use form 3160-3 (AP	odrill or to re PD) for such	e-enter a proposa	an als.	.	6. If Indian, Allottee of	or Tribe Name
	SUBMIT IN	TRIPLICATE - Other instruc	ctions on re	verse si	de.		7. If Unit or CA/Agre	ement, Name and/or No.
1.	Type of Well ☐ Gas Well ☐ Gas Well	Other					8. Well Name and No. LOTOS FEDERA	
2.	Name of Operator CHESAPEAKE OPERAT	Contact:	LINDA GOC i@chk.com	DD			9. API Well No. 30-015-27593	
	. Address P.O. BOX 18496 OKLAHOMA CITY, OK 7	3154-0496	3b. Phone N Ph: 405-9				10. Field and Pool, or SAND DUNES	Exploratory
4.	Location of Well (Footage, S	Sec., T., R., M., or Survey Descriptio	n) .				11. County or Parish,	and State
	Sec 9 T24S R31E NWSE	2310FSL 2310FEL					EDDY COUNT	Y, NM
	12. CHECK A	APPROPRIATE BOX(ES) TO	O INDICATI	E NATU	IRE OF NO	TICE, RI	EPORT, OR OTHE	R DATA
	TYPE OF SUBMISSION				TYPE OF A	ACTION	-	*
	□ Notice of Intent	☐ Acidize	□ De	epen		□ Product	ion (Start/Resume)	☐ Water Shut-Off
	- ·	☐ Alter Casing	□ Fra	cture Tre	at	Reclam:	ation	☐ Well Integrity
	Subsequent Report ■ Compare Temperature Compare Temperatu	Casing Repair	□ Ne	w Constr	uction	□ Recomp	olete	Other Surface Comminglin
	☐ Final Abandonment Noti	ce Change Plans	□ Plu	ig and Ab	andon	☐ Tempor	arily Abandon	Surface Comminglin
		Convert to Injection	□ Plu	g Back		— Water □) Disposal	
•	If the proposal is to deepen dire Attach the Bond under which the following completion of the invitesting has been completed. Find determined that the site is ready	ed Operation (clearly state all pertine ectionally or recomplete horizontally he work will be performed or provide volved operations. If the operation renal Abandonment Notices shall be find for final inspection.) S ARE COMMINGLED AT The complete of the pertine renal state of the pertine r	give subsurface the Bond No. esults in a multip iled only after al	e locations on file wit ple comple l requirem	and measure h BLM/BIA. etion or recom ents, includin	d and true von Required sun pletion in and greclamation	ertical depths of all perti bsequent reports shall be new interval, a Form 31 on, have been completed	nent markers and zones. e filed within 30 days 60-4 shall be filed once , and the operator has
	LEASE #NMNM29234:				54		177ACHEN	
	LOTOS 10 FEDERAL 3 LOTOS C FEDERAL 905	30-015-27593 NWSE 9-24 30-015-29798 NENE 10-2 30-015-32558 SESE 9-2 30-015-35356 SWSE 9-2	24S-31E 4S-31E				n ples + 66	\wedge
	LEASE #NMNM63757:							
U	villNOT APP.	rove FEDERAL	157471	Ewa	ELLITE	COM	mingle	CAN THE PARTY
14	I hereby certify that the forego	oing is true and correct. Electronic Submission # For CHESAPEA		ed by the	BLM Well I sent to the	nformation Carlsbad	n System	WENCO REFERENCE
	Name (Printed/Typed) LIND	A GOOD		Title	SR. REGI	ULATORY	COMPLIANCESP	561
	Signature (Electr	onic Submission)		Date	02/17/201	11		V
		THIS SPACE F	OR FEDER	AL OR	STATE O	FFICE U	SE	

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.

Title

(FO 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.

- Additional data for EC transaction #102757 that would not fit on the form

32. Additional remarks, continued

LOTOS C FEDERAL 907 30-015-34945 NWNE 9-24S-31E LOTOS C FEDERAL 911 30-015-35357 SWNE 9-24S-31E LOTOS C FEDERAL 901 30-015-28700 NENE 9-24S-31E LOTOS C FEDERAL 903 30-015-30043 SENE 9-24S-31E

LEASE NMNM56741:

LOTOS A FEDERAL 1 30-015-26174 NENW 15-24S-31E

THE 2 FOLLOWING STATE WELLS ARE COMMINGLING GAS ONLY:

CACTUS 16 STATE 2 30-015-30064 SESE 16-24S-31E CACTUS 16 STATE 1 30-015-27008 NENW 16-24S-31E

ATTACHMENTS: GUIDELINES FOR OFF-LEASE MEASUREMENT ESTIMATED MONTHLY PRODUCTION LOTOS FEDERAL 4 CENTRAL TANK BATTERY DIAGRAM MAP SHOWING LEASE NUMBERS & LOCATIONS OF ALL LEASES

(CHK PN 890478)

Bureau of Land Management

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

Guidelines for Off-Lease Measurement,

Storage, and Surface Commingling Approvals

CHESAPEAKE OPERATING, INC.

LOTOS FEDERAL 4

The following information must be included with any application to combine, store, or measure production off-lease:

1. 3160-5 Sundry Notice Submitted

reeds to be poil petailed see Attached Attached example 3. A map showing the lease numbers and location of all leases and wells that will contribute production to the proposed commingling, off-lease measurement, and/or storage facility. All lease numbers, unitized or communitized areas, producing zones or pools must be clearly illustrated or detailed by suitable means. Any wells or leases proposed to be added to an approved commingling and off-lease storage and or measurement facility must be approved by the Authorized Officer prior to their being included in the facility. ATTACHED

- A schematic diagram which clearly identifies and places all equipment that will be utilized. **ATTACHED**
- 4. Estimated monthly production from each contributing well, including type of product, gravity, and/or BTU content. (See attached Spread Sheet)
- Details of the proposed method for measuring and allocating production for each lease involved.

 Acceptable

 Include calculated "beneficial use" volumes both on and off-lease. See page 2.

EACH Lease Needs Sejerate Allocation Not well test

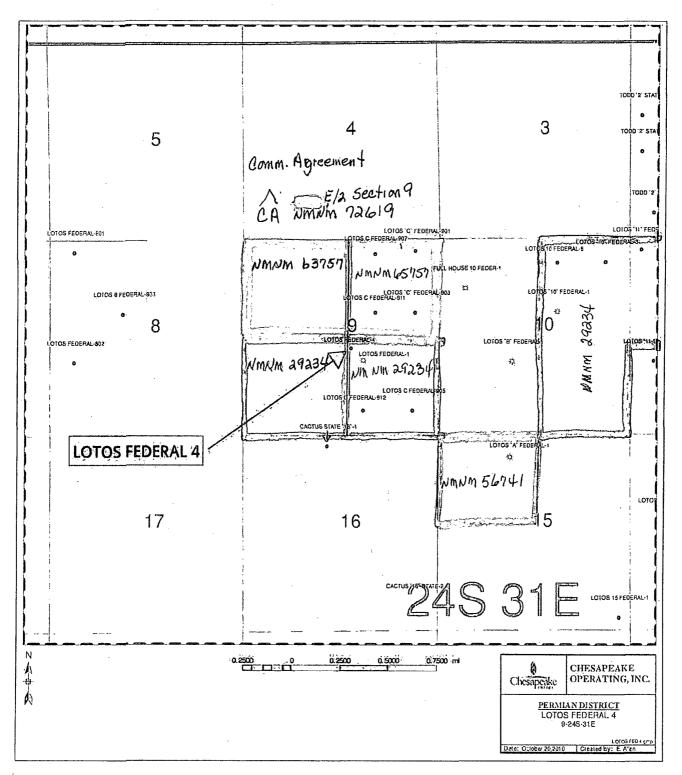
- 6. A statement that all interest owners have been notified of the proposal. All interest owners have been notified of this proposal.
- 7. Evidence that Federal or Indian royalties will not be reduced through approval of the application. Federal royalties will not be reduced by this commingling, but rather increased. This is due to the economic savings caused by this commingling, which will extend the productive life of each of the wells.
- Detailed economic justification, The wells in this commingling application are nearing their economic limit. Several of the tanks associated with these wells are corroded and need to be replaced. Combining the wells into one central tank battery will reduce the cost to produce these wells and will extend the life of each well. This extended life will result in more production, and therefore more revenue for both Chesapeake Energy and the Federal Government

CHESAPEAKE OPERATING, INC. (Operator's Name) is requesting approval for surface commingling and off-lease storage and measurement of hydrocarbon production from the following formation(s) and well(s):

 F	Lease# NMNM29234						5 7413	7.5 THIS COLLECT FOR EACH Well
	Well Name	API No.	Loc NA/SE 9-24S.	Formation	BOPD	Gravity	MCFD	Comment
	Lotos Federal 4	27593 30.015	31E	Delaware	~	40	ß	07, 25 CHS
	Loto C Federal 905 Loto C Federal	32558	SESE 9-24S-31E	Delaware	თ	40	32	01201000
- 0,	Lotos o receial 912	35356 35356	SWSE 9-24S-31E	Delaware	10	40	22	1001 113/60
	Lotos 10 Federal 3	29798	NEINE 10-24S- 31E	Delaware	. 7	40	21	
	Lease # NMNM56741							
-	Lotos Federal A 1	30-015- 26174	NENW 15-24S- 31E	Delaware	4	40	12	
£	Lease # NMNM63757	·						
0,	Lotos C Federal 901	30-015- 28700	NENE 9-24S-31E	Delaware	ო	40	9	
(Lotos C Federal	30-015-	11 N 1 O 1 O 1 O 1 O 1 O 1 O 1 O 1 O 1 O	Brushy	•	Ç	Ş	
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tu	907 1 ofton C Enders	34945	31E SMINE 0 24S	Delaware	22	40	38	
., 0,	911	35357	31E	Canyon	7	40	32	
0,	STATE LEASES							
•	Cactus 16 State 2	30-015- 30064	SESE 16-24S- 31E	Brushy Canyon	0	N A	7	Only the gas is commingled
Fō	Cactus 16 State 1 27008 31E The storage and measuring facility is located at one), New Mexico. BLM will be notified if there is	27008 27008 suring facility i	31E s located at <u>NWSE</u> filed if there is any fut.	NWSE 1/4, Sec. 9 , T 24 S, R is any future change in the facility location.	T 24 Sine facility loca	2	T/ E, on Lease No	TA'D v. <u>NMNM29234</u> , Lea/Eddy (circle

#5 Details of the proposed method for allocating production to contributing sources are as follows: The tank battery has a test separator and each well is tested monthly. The production is then allocated based on well tests.

#2



Need to SHOW Flow Line See ATTACHED

example

need to SHOW SALE Meter Line + Location WITH

Och Meter Number

*3

CHESAPEAKE OPERATING, INC.

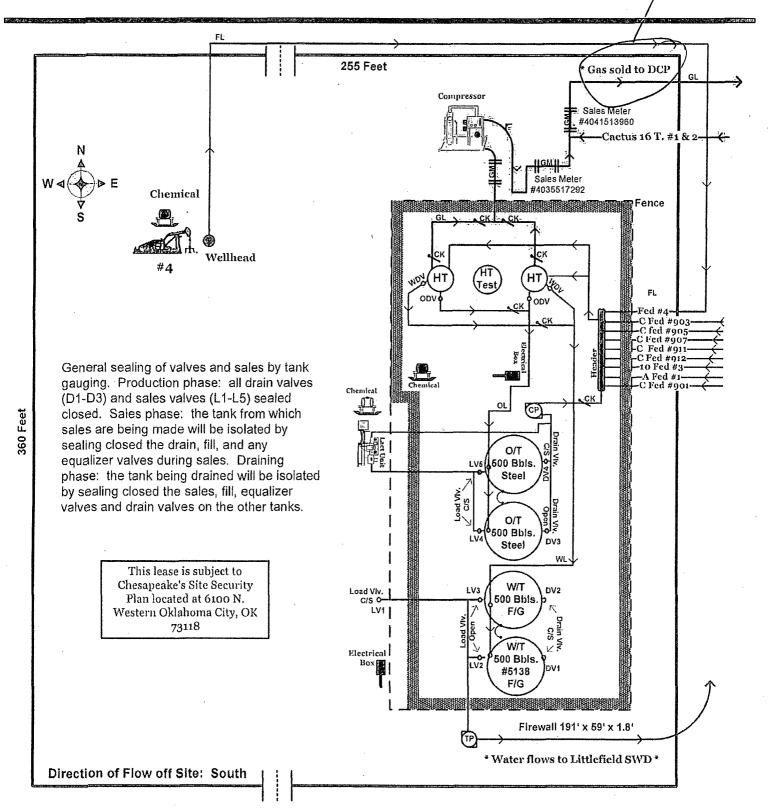
Site Name: Lotos Federal #4

Propoerty Number: 890478

Inspected By: Rodney Acosta

Date: 3-1-2010

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Prepared by: Jackie Reynolds

Date: 3-1-2010

Approved by: Date:

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Bureau of Land Management Carlsbad Field Office 620 East Greene Street Carlsbad, New Mexico 88220 575-234-5972

Guidelines for Off-Lease Measurement, Storage and Surface Commingling Approvals

At a minimum the following information must be included with any application to combine, store or measure production off-lease:

- 1. A formal request (Sundry Notice Form 3160-5 or letter) for approval to combine, store, or measure production off-lease with an appropriate explanation and diagram(s) describing the proposed operation in detail.
- 2. A map showing the lease numbers and location of all leases and wells that will contribute production to the proposed commingling, off-lease measurement, and/or storage facility. All lease numbers, unitized or communitized areas, producing zones or pools must be clearly illustrated or detailed by suitable means. Any wells or leases proposed to be added to an approved commingling and off-lease storage and or measurement facility must be approved by the Authorized Officer prior to their being included in the facility.
- 3. An updated facility diagram which clearly identifies and places all equipment that will be utilized. This diagram should identify all flow lines, sales points and give location of gas sales (transfer point) meter if it is not at this facility. Include gas sales meter station name and number and location of meter to include ¼ ¼, Section, Township and Range.
- 4. Estimated monthly production from each contributing well, including type of product, gravity, and/or BTU content.
- 5. Details of the proposed method for measuring and allocating production for each lease involved. Include calculated "beneficial use" volumes both on and off-lease.
- 6. A statement that all interest owners have been notified of the proposal.
- 7. Evidence that Federal or Indian royalties will not be reduced through approval of the application, and the proposed commingling of production is in the interest of conservation and will not result in improper measurement of production.
- 8. Detailed economic justification, when the application to combine production is based on economic necessity, i.e., that approval is necessary to extend the economic life of the Federal or Indian Lease(s). Commingling with State or Fee wells will be on a very limited basis and will have to prove this is the only economical way to keep that well/lease from being plugged.

Approval for combining production from various sources is a privilege which is granted to lessees for the purpose of aiding conservation and extending the economic life of leases. Applicants should be cognizant that failure to operate in accordance with the provisions outlined in the Authorized Officer's conditions of approval and/or subsequent stipulations or modifications will subject such approval to revocation.

(Operator's Name) is request hydrocarbon production from the following formation(s) and well(s):	Operato	(Operator's Name) is requesting approval for surface commingling and off-lease storage and measurement of wing formation(s) and well(s):	Il for surface com	ımingling and o	ff-lease storage a	nd measureme	int of
Federal Lease No.							
Well Name	API No.	Loc: 14 14 Sec. Twp. Rng.	Formation	BOPD	Oil Gravity	MCFPD	BTU
4-Deep Pockets 16 Federal	30015xxxx	SWSW,Sec.15,T16S,R30E	Delaware	12	45.2/@60°	102	1315
			77 870				
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With hydrocarbon production from:	from:						
Federal Lease No.							
Well Name	API No.	Loc: 14 14 Sec. Twp. Rng.	Formation	BOPD	Oil Gravity	MCFPD	BTU
4-Deep Pockets 16 Federal	30015xxxx	SWSW,Sec.15,T16S,R30E	Delaware	. 27	45.2/@60°	102	1315
		·					

The storage and measuring facility is located at _______¼, Sec. _____, T _____S, R _____ E, on Lease No. Lea/Eddy (circle one), New Mexico. BLM will be notified if there is any future change in the facility location.

Details of the proposed method for allocating production to contributing sources are as follows: