New Ma	dco Oll Conservation Divisio	n, District I	
Form 3160-5 UNITED STA ² (April 2004) DEPARTMENT OF TI	3160-5 UNITED STATES 1625 N. French Drive		
SUNDRY NOTICES AND R	5. Lease Serial No. NMNM16835		
Do not use this form for proposal abandoned well. Use Form 3160-3	6. If Indian, Allottee or Tribe Name		
SUBMIT IN TRIPLICATE- Other in	structions on reverse side.	7. If Unit or CA/Agreement, Name and/or No.	
1. Type of Well ✓ Oil Well Gas Well Othe			
2. Name of Operator CHESAPEAKE OPERATING, INC.	8. Well Name and No. NEUHAUS 14 FEDERAL 5		
CHESAPEAKE OPERATING, INC.	9. API Well No. 30-025-37351		
P.O. BOX 18496, OKLAHOMA CITY, OK 73154-0496	10. Field and Pool, or Exploratory Area		
4. Location of Well (Footage, Sec., T., R., M., or Survey Description	OSUDO WEST (MORROW) 11. County or Parish, State		
1090 FNL 330 FEL NE NE SEC 14 T20S R 35E	LEA COUNTY, NEW MEXICO		
12. CHECK APPROPRIATE BOX(ES)	TO INDICATE NATURE OF NOTICE, F	REPORT, OR OTHER DATA	
TYPE OF SUBMISSION	TYPE OF ACTION		
Notice of Intent	Deepen Production (St Fracture Treat Reclamation	Well Integrity	
Subsequent Report Casing Repair	New Construction Recomplete	bandon ORIGINAL APD	
Final Abandonment Notice	Plug and Abandon Temporarily A Plug Back Water Disposal		
testing has been completed. Final Abandonment Notices shal determined that the site is ready for final inspection.) CHESAPEAKE OPERATING, INC. PLANS TO DI PLEASE NOTE NEW CASING PROGRAM, MUD PLEASE FIND ATTACHED DRILLING PROGNO	ULL THIS WELL DEEPER TO 13,300 FT () PROGRAM AND NEW FORMATIONS WI	MORROW).	
BLM NATIONWIDE BOND #NM2634.		545678820	
(CHK PN 819566)		ALE MED	
 I hereby certify that the foregoing is true and correct Name (Printed/Typed) 		6-10513553 54 58	
LINDA GOOD	Title PERMITTING AGE	NT 1 .	
Signature Sinda Good	Date	07/26/2005	
	R FEDERAL OR STATE OFFICE	USE	
Approved by Conditions of approval, if any, are attached. Approval of this no certify that the applicant holds legal or equitable title to those rigit which would entitle the applicant to conduct operations thereon.	ice does not warrant or	EER Date AUG 0 1 2005 •	
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make States any false, fictitious or fraudulent statements or representation	it a crime for any person knowingly and willfully ons as to any matter within its jurisdiction.	to make to any department or agency of the United	
(Instructions on page 2)	SEE ATTA CONDITIONS	CHED FOR REVISED OF APPROVAL-DRILLING	

CHESAPEAKE OPERATING INC DRILLING PROGNOSIS

		DRILLING	<u>G PROGNOSIS</u>	·	ß
WELL	: Neuhaus	s 14 Federal #5			ALLE COLO
SHL	: Section	14-20S-35E (1090' FN	L & 330' FEL);		New New
COUNTY	: Lea	STATE			
FIELD	: Feathers	stone East (Bone Spr	ing); Osudo Wes	t (Morrow)	2020
			3,670'		
ARGET				lorrow BHL Hard line : 6	60'FEL
OLE		FORMATION TOPS	LOGGING PROGRAM	CASING & CEMENT	MUD WT
1 7 1/2"		TOC on 13-3/8" @ surfac	e	<u>13-3/8" Surface Casing:</u> Lead: 150 sks 35:65 Poz:C + 6% D20 Bentonite + 2% S1 CaCl2 + 0.25 pps D29 12.7 ppg, 1.94 yield Tall: 200 Sks C + 2% S1 14.8 ppg, 1.34 yield	Surface to 400' 8.6 – 9.0 ppg Vis: 36-40 FL: N/C Drill Solids: <5%
	400'				400' - 3,750'
12-1/4"	2,035'	TOC on 9-5/8" @ surface Rustler		<u>9-5/8" Intermediate Casino:</u> Lead: 705 sks 50:50 Poz:C + 10% D20 Dentonite + 1.5% D44 salt + .2% D65 TIC + .2% D46 AF + .25 pps D29 11.8 ppg, 2.45 yield	8.4-10.2 ppg Vis: 32-34 FL: N/C Drill Solids: <5% (FW until a depth Of 1,800' is reached- then brine)
		TOC on 7" @ 5,600'	muchista Caping	Tail: 210 sks C + 1% S1 14.8 ppg, 1.34 yield	v
	3,750' 3,805'	9-5/8" 40# J-55 LTC Inte Yates	rmediate Casing		3,750' - 9,800' 8.4 – 9.5 ppg
	4,230'	Seven Rivers Sand *(second	lary objective)		Vis: 28-29 FL: N/C
8-3/4"	4,725'	Queen	Two Man Mudloggers		Drill Solids: <5% MU at 7,500
	5,070'	Grayburg	on location @ 3,750' to TD		
	5,605'	Delaware			
	7,990'	Bone Spring			
	8,500' 9,265'	DV Tool 1 st Bone Spring Sand 2 nd Bone Spring Carbonate		<u>7" Intermediate Casing:</u> 1st Stage Lead : 426 sks 50:50 Poz:H + 2% D20 +1% D174EA +0.3% D112 FLAC + 0.1 D800 retarder +0.15% D65 TIC +	
	9,540 9,940'	2 nd Bone Spring Sand		0.25pps D29 Cello-flake 14.6 ppg, 1.26 vield	9,800' - 11,200'
	10,080'	*Bone Spring "Neuhaus Zone	"(Primary objective)	2nd Stage Lead: 365 sks 50:50 Poz:H + 10% D20 Bentonite + 0.1% D112 FLAC + 0.2% D46	9.5 – 9.6 ppg Vis: 32-34
	10,350 11,000	3 rd Bone Spring Carbonate 3 rd Bone Spring Sand		AnitFoam 12.0 ppg, 2.27 yield 2nd Stano Tolly, 170 sks 50:50	FL: 10-8 Drill Solids: <5%
	11,135'	Wolfcamp limestone		2nd Stage Tail: 170 sks 50:50 Poz:h +2% D20 +1% D174Ea + .2% D65	1
	11,200'	7" 26# P110 LTC 2 nd Interr	nediate Casing	14.6 ppg, 1.25 yield	
Î .					11,200' - 13,300 9.8 – 12.0 ppg
	11,300'	Wolfcamp Osudo Zone (secor	ndary objective)		Vis: 36-40 FL: <8cc/30min
	11,620'	Penn Shale R	un 1: Triple Combo from		Drill Solids: <5% Mud = Dynazan
6 1/8"	11,990'	Strawn R	GR, Neu to surface un 2: Triple Combo from		Starch
	12,155	Atoka			
	12,620'	Morrow Clastics			
	12,805'	Middle Morrow Sands (Primar	y Objective)	<u>4-1/2" Liner:</u> Tail: 255 sxs Class H = 0.4%	
	13,055 13,190'	Lower Morrow Sands (Second Morrow(Lower)	lary Objective)	D167 UniFlac + 0.3% D65 TIC Dispersant + 0.2% D46 AF + 0.3% D800 retarder	
		⊿ 4-1/2" 13.50# P-110 LTC Pr	oduction Casing	16.2ppg 1.10 yield	↓ •

PREPARED BY: ______DFD/CBM

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APPROVED BY:

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DATE: 7/25/04 DATE:_____

