

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD Artesia

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

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.

SUBMIT IN TRIPLICATE - Other instructions on reverse side.

1. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		5. Lease Serial No. NMNM02862
2. Name of Operator CHESAPEAKE OPERATING INC		6. If Indian, Allottee or Tribe Name
Contact: LINDA GOOD E-Mail: linda.good@chk.com		7. If Unit or CA/Agreement, Name and/or No. NMNM71016X
3a. Address OKLAHOMA CITY, OK 73154-0496	3b. Phone No. (include area code) Ph: 405-935-4275	8. Well Name and No. PLU BIG SINKS 22 FEDERAL 1H
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 22 T24S R30E SESE Lot P 175FSL 400FEL		9. API Well No. 30-015-37838-00-X1
		10. Field and Pool, or Exploratory UNDESIGNATED
		11. County or Parish, and State EDDY COUNTY, NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	Change to Original PD
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water 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 recompleat 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 recompleat 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.)

Chris Walls

Chesapeake, respectfully, requests permission to make the following changes to the casing program.

We changed our 9-5/8" casing (12-1/4" hole) to 8-5/8" casing (11" hole). We also changed some depths to reflect an updated assessment from geology. We will have a mudlogger on location from spud to confirm our formation tops so that we can still follow BLM requirements.

We need to have an approved sundry reflecting this before we begin drilling our 11" hole section which could happen as early as Sunday.

Operator changed
Surf. CSS - depth,
Int. CSS design, and
Cement program. (see
Wellbore diagram)

**SEE ATTACHED FOR
CONDITIONS OF APPROVAL**

RECEIVED

DEC 02 2010

NMOCD ARTESIA

14. Thereby certify that the foregoing is true and correct. Electronic Submission #98127 verified by the BLM Well Information System For CHESAPEAKE OPERATING INC, sent to the Carlsbad Committed to AFMSS for processing by KURT SIMMONS on 11/26/2010 (11KMS0291SE)	
Name (Printed/Typed) LINDA GOOD	Title SR. REGULATORY COMPLIANCE SPEC
Signature (Electronic Submission)	Date 11/24/2010

THIS SPACE FOR FEDERAL OR STATE OFFICE USE ONLY

Approved By (BLM Approver Not Specified)	Title	Date 11/26/2010
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.	Office Carlsbad	Is/Chris Walls
BUREAU OF LAND MANAGEMENT		

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.

**** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ****

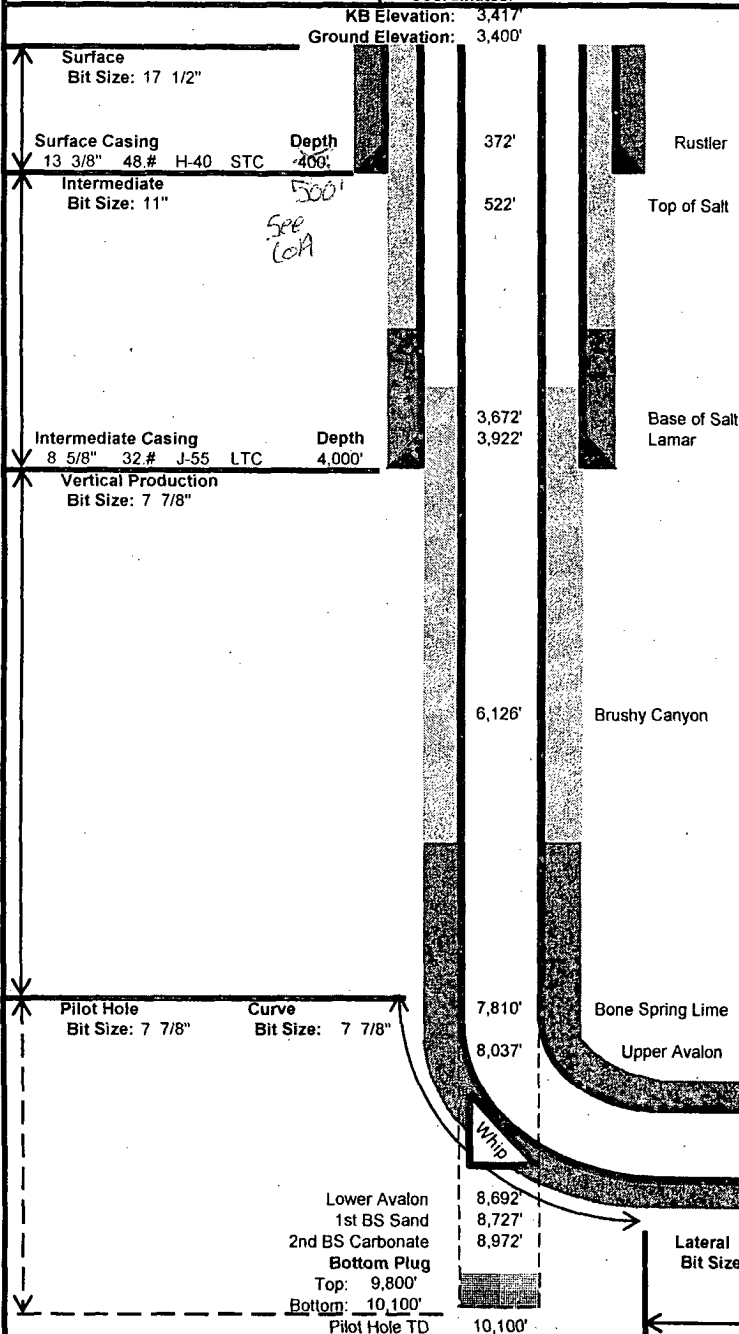
DW



Drilling Engineer: Chris Gray
Superintendent: Cecil Luttrull
Geologist: Robert martin

Well Name: PLU Big Sinks 22 Federal 1H
County, State: Eddy County, NM
Surface Location: 175' FSL 400' FEL, Section 22, Township 24S, Range 30E
BH Location: 330' FNL 400' FEL, Section 22, Township 24S, Range 30E
SHL Latitude: 32.196601 SHL North: 435578
SHL Longitude: -103.861596 SHL East: 687258
BHL Latitude: 32.20869243 BHL North: 440340
BHL Longitude: -103.8615745 BHL East: 687244
Coordinates: NAD 83 Coordinates: NMSPCE

Drilling Rig: Patterson 62
Dir. Drilling: Phoenix
Drilling Mud: Nova
Cement: Schlumberger
Wellhead: Sunbelt
Property Number: 631298
AFE Number: 152353



Wellhead Equipment	
Casing Head	13-3/8" x 13-5/8" 5K SOW
Casing Spool	13-5/8" 5K x 11" 5K
Tubing Spool	11" 5K x 7-1/16" 10K
Required BOP Stack	
13-5/8" 5K- Double, Annular, Rot Head w/Orbit Valve	

Mud					
Depth	Type	Weight	F. Vis	FL	
0' - 400'	Spud Mud	8.4-8.7	32-34	NC-NC	
400' - 4,000'	Brine	9.8-10.1	28-29	NC-NC	
4,000' - 7,758'	KCl Water	8.7-8.9	28-29	NC-NC	
7,758' - 10,100'	KCl Water	8.7-8.9	28-29	NC-NC	
7,758' - 8,403'	KCl Water	8.7-8.9	28-29	NC-NC	
8,403' - 12,753'	KCl Water	8.7-8.9	28-32	NC-NC	

Cement						
Slurry	Top	Btm	Wt	Yld	%Exc	Bbl
Surface						
Lead	0'	400'	13.5	1.73	150	131
Intermediate						
Lead	0'	2,750'	12.0	2.4	150	300
Tail	2,750'	4,000'	14.2	1.37	150	147
Production						
1st Stage Lead	3,500'	7,250'	12.0	1.83	60	201
1st Stage Tail	7,250'	12,710'	13.2	1.74	60	272

Notes:

Directional Plan						
Target Line:	8169' TVD at 0°VS w/0.3 deg up dip					
Target Window:	20' above and 20' below					
	MD	INC	AZM	TVD	VS	DLS
KOP	7,758'	0.00	0.00	7,758'	0'	0.00
EOB	8,403'	90.30	359.83	8,167'	411'	14.00
TD	12,753'	90.30	359.83	8,144'	4,762'	0.00
Hardlines:	Lateral- 330' from all lease lines.					
	Vertical- Actual Lease Lines					
Notes:	SHL is 175' FSL and 400' FEL BHL is 330' FEL and 400' FEL					

Production Casing
5 1/2" 20# L-80 LTC
Depth
12,753'

Type	Logs	Interval	Timing	Vendor
L	Mudlog	Mudlogging	Surface to TD	Suttles
O	OH	Triple Combo with Spectral Gamma	Pilot TD to 4000'	TBD
G	OH	Laterolog and Spectral Gamma	Pilot TD to 7800'	TBD
S	OH	Dual Induction	7900' to 4000'	TBD
	OH	Gamma/Neutron	4000' to Surface	TBD
	LWD	Gamma/MWD	Curve and Lateral	Phoenix

PECOS DISTRICT CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Chesapeake Operating, Inc.
LEASE NO.:	NMNM02862
WELL NAME & NO.:	PLU Big Sinks 22 Federal Com 1H
SURFACE HOLE FOOTAGE:	175' FSL & 400' FEL
BOTTOM HOLE FOOTAGE	330' FNL & 400' FEL
LOCATION:	Section 22, T. 24 S., R 30 E., NMPM
COUNTY:	Eddy County, New Mexico

A. CASING

Changes to the approved APD casing and cement program require submitting a sundry and receiving approval prior to work. Failure to obtain approval prior to work will result in an Incident of Non-Compliance being issued.

Centralizers required on surface casing per Onshore Order 2.III.B.1.f.

Wait on cement (WOC) time prior to drilling out for a primary cement job will be a minimum 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compressive strength, whichever is greater for all casing strings. **DURING THIS WOC TIME, NO DRILL PIPE, ETC. SHALL BE RUN IN THE HOLE.** Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. See individual casing strings for details regarding lead cement slurry requirements.

No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.

Medium cave/karst

Possible lost circulation in the Delaware Mountain and Bone Spring Groups

1. The 13-3/8 inch surface casing shall be set at approximately 500 feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt) and cemented to the surface. **If the salt is encountered at a shallower depth, the casing must be set 25 feet above the top of the salt.**
 - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.

- b. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry.**
- c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
- d. If cement falls back, remedial cementing will be done prior to drilling out that string.

2. The minimum required fill of cement behind the **8-5/8** inch intermediate casing is:

- ☒ Cement to surface. If cement does not circulate see B.1.a, c-d above. **Casing to be set in the Lamar Limestone. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst.**

If 75% or greater lost circulation occurs while drilling the intermediate casing hole, the cement on the production casing must come to surface.

Centralizers required on horizontal leg, must be type for horizontal service and minimum of one every other joint.

3. The minimum required fill of cement behind the **5-1/2** inch production casing is:

- ☒ Cement should tie-back at least 500 feet into previous casing string. Operator shall provide method of verification.

- 4. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

CRW 112610