

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. NMNM17224
2. Name of Operator CHESAPEAKE OPERATING INC ✓ Contact: LYNDEE SONGER E-Mail: lyndee.songer@chk.com		6. If Indian, Allottee or Tribe Name
3a. Address OKLAHOMA CITY, OK 73154-0496	3b. Phone No. (include area code) Ph: 405-935-2411	7. If Unit or CA/Agreement, Name and/or No.
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 19 T24S R29E SWNE 1950FNL 1980FEL ✓ UL C		8. Well Name and No. QUEEN LAKE 19 FEDERAL 1 ✓
		9. API Well No. 30-015-24292-00-S3
		10. Field and Pool, or Exploratory MALAGA
		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 type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input checked="" 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 recomple 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 recomple 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.)

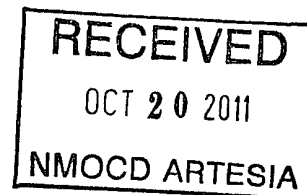
CHESAPEAKE, RESPECTFULLY, ASKS TO CONVERT THE QUEEN FEDERAL 1 WELL TO A SALT WATER DISPOSAL WELL. ATTACHED IS THE SWD CONVERSION PROCEDURE ALONG WITH A WELL BORE SCHEMATIC.

(CHK PN 891238)

NO SWD APPLICATION RECEIVED BY DATE
OCD. PERMIT MUST BE APPROVED BEFORE
COMMENCING
CONVERSION.
RE NMOPD
10/20/11

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

Accepted for record



14. I hereby certify that the foregoing is true and correct	
Electronic Submission #113463 verified by the BLM Well Information System For CHESAPEAKE OPERATING INC, sent to the Carlsbad Committed to AFMS for processing by KURT SIMMONS on 07/25/2011 (11KMS2129SE)	
Name (Printed/Typed) LYNDEE SONGER	Title REGULATORY COMPLIANCE ANALYST
Signature (Electronic Submission)	Date 07/21/2011

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By CHRISTOPHER WALLS	Title PETROLEUM ENGINEER	Date 10/14/2011
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

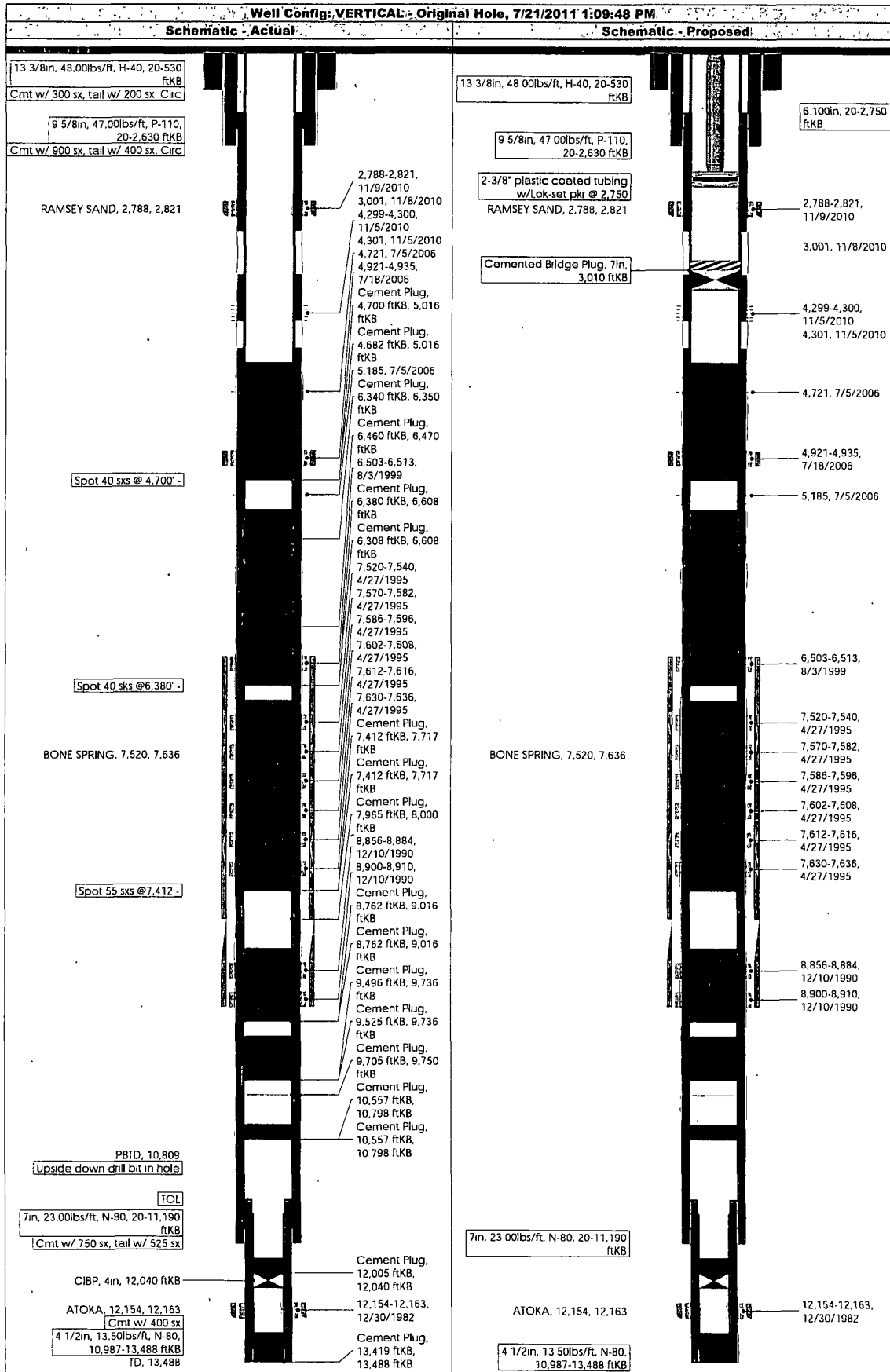
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction

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



Proposal Schematic

QUEEN LAKE 19 FED 1



**Chesapeake Operating, Inc.
Queen Lake 19 Fed 1 (891238)
SWD Conversion Procedure
Section 19-24S-29E
1950 FNL & 1980 FEL
Eddy County, New Mexico**

June 30, 2011

Status: Shut in
Perforations: 2,788'- 2,821' (Ramsey Sand); 4,299'- 4,301' (Ramsey Sand) (SQZ HOLES); 4,721', 4,921'- 4,935', 5,185' (Bone Spring) (ALL SQZD); 6,503'- 6,513', 7,520'- 7,636', 8,856'- 8,910' (Bone Spring) (ALL SQZD); 12,154'- 12,163' (Atoka) (BELOW CIBP)
TD: 13,488'
PBTD: 4,700'
KB/KB Height: 2,976'/20'
Fluid in Well: Production Fluid

Casing Details

OD (in)	Weight (lb/ft)	Grade	Depth (ft)	ID (in)	Drift (in)	Capacity (bbls/ft)	Burst (100%/80% psi)	Collapse (100%/80% psi)
4 1/2	13.5	N-80	10,987-13,488	3.92	3.795	.0149	9,020/7,216	8,540/6,832
7	23.0	N-80	0-11,190	6.366	6.241	.0393	6,430/5,144	3,830/3,064
9 5/8	47.0	P-110	0-2,630	8.681	8.525	.0732	9,440/7,552	5,310/4,248
13 3/8	48.0	H-40	0-530	12.715	12.559	.1570	1,730/1,384	770/616

Production Tubing Details

OD (in)	Weight (lb/ft)	Grade	Depth (ft)	ID (in)	Drift (in)	Capacity (bbls/ft)	Burst (100%/70% psi)	Collapse (100%/70% psi)
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

PROCEDURE:

1. MIRU PU. ND WH NU BOP. Test BOP. RU WL & lubricator. RIH w/CIBP & set @3,050'. Dump bail 35' cmt onto CIBP. RD WL.
2. RIH w/ packer on 3 1/2" tbg to 2,650'. Frac Ramsey Sand (2,788'- 2,821') down 3 1/2" tbg inside 7" N-80 23# prod. csg per frac recommendation. (anticipate 50,000# sand in X-linked fluid at 30 BPM). POH w/ packer.
3. TIH w/ tbg & bit to PBTD and check for fill. TOOH w/ tbg & bit.
4. TIH w/2 3/8" plastic coated tbg & Loc-set pkr & set @2,750'. Load backside w/ pkr fluid. Run MIT test.
5. ND BOP NU WH. RDMO.

Conditions of Approval: Wells with Packers

Chesapeake Operating , Inc.

Queen Lake 19 Fed 1

API 3001524292

October 13, 2011

1. **Modify Step 1** of the 06/30/2011 notice of intent procedure to:
RIH w/open ended tbg plug set 11/04/2010 from 5016 at about 4700. Set a balanced plug from tagged depth to 3000 with about 100sx C neat cmt. POH, SDWOC 4hrs. Tag top of balanced plug. Proceed with NOI procedure.
2. Surface disturbance beyond the existing pad must have prior approval.
3. Closed loop system required.
4. 2000 2M BOP to be used. All blowout preventer (BOP) and related equipment (BOPE) shall comply with reasonable well control requirements. A two ram system with a blind ram and a pipe ram designed for the workstring shall be adequate. Tapered work strings will require an additional pipe ram. The manifold shall comply with Onshore Oil and Gas Order #2 (attachment 1, 2M diagrams of choke manifold equipment). The accumulator system shall have an immediately available power source to close the rams and retain 200 psi above pre-charge. The pre-charge test shall follow requirements in Onshore Order #2.
5. The operator is required to tag fracture material with a tracer and run a tracer survey to verify that the fracture material is not placed out of zone. Results of the tracer to be reported on a workover subsequent sundry Form 3160-5.
6. Workover approval is good for 90 days (completion to be within 90 days).
7. One year after the fracture stimulation run a SWD tracer survey and submit the survey report in a subsequent sundry Form 3160-5.
8. Conduct a Mechanical Integrity Test of the tubing/casing annulus after a tubing, packer or casing seal is established. Repair that seal any time more than five barrels of packer fluid is replaced within 30 days.
 - a. The minimum test pressure should be 500 psig for 30 minutes or 300 psig for 60 minutes, with 200 psig differentials between tubing and casing pressure (at test time) but no more than 70% of casing burst pressure as described by Onshore Order 2.III.B.1.h. (The tubing or reservoir pressure may need to be reduced). An alternate method for a BLM approved MIT is to have the fluid filled system open to atmospheric pressure and have a loss of less than five barrels in 30 days witnessed by a BLM authorized officer.
 - b. Document the pressure test on a calibrated recorder chart registering within 25 to 85 per cent of its full range. Greater than 10% pressure leakoff will be viewed as a failed MIT. Less than 10% pressure leakoff will be evaluated site specifically and may restrict injection approval.
 - c. Notify Paul R. Swartz at 575-234-5985 and/or 575-200-7902 at least 24 hours before the test. If there is no response, notify the BLM on call drilling phone, 575-361-2822. In Lea County call 575-393-3612.

- d. Submit a subsequent Sundry Form 3160-5 relating the MIT activity. Include a copy of the recorded MIT pressure chart. List the name of the BLM witness, or the notified person and date of notification. NMOCD is to retain the original recorded MIT chart.
 - e. Use of tubing internal protection, on/off tubing equipment just above the packer, and a profile nipple installation is required. The setting depths and descriptions of each are to be included in the subsequent sundry. List (by date) descriptions of daily activity of any previously unreported wellbore work.
 - f. **Submit the original subsequent sundry with three copies to BLM Carlsbad.**
9. Compliance with a NMOCD Administrative Order is required, submit documentation of that authorization.
- a. Approved injection pressure compliance is required.
 - b. If injection pressure exceeds the approved pressure you are required to reduce that pressure and notify the BLM within 24 hours.
 - c. When injection pressure is within 50 psig of the maximum pressure, install automation equipment that will prevent exceeding that maximum.
 - i. Submit a subsequent report (Sundry Form 3160-5) describing the installed automation equipment within 30 days.
 - e. Other unexplained significant variations of rate or pressure to be reported within 5 days of notice.
10. The casing/tubing annulus is required to be monitored for communication with injection fluid or loss of casing integrity.
- a. The annulus is to be maintained full of packer fluid at atmospheric pressure. Installation of equipment that will display on site, continuous open to the air fluid level is required. A BLM inspector may request verification of this fluid level at any time.
 - b. **Submit a subsequent report (Sundry Form 3160-5)** describing the installation of packer fluid level monitoring equipment within 30 days of this approval.
 - c. The operator shall keep monthly records documenting that the casing annulus is fluid filled. A suggested format for these records is available from the BLM Carlsbad Field Office. Copies of those records shall be furnished at the request of a BLM authorized officer.
 - d. Loss of packer fluid above five barrels per month requires notification of the BLM authorized officer within 5 days.
 - a. Gain of annular fluid requires notification within 24 hours. Cease injection and maintain a production casing pressure of Opsia. Notify the BLM's authorized officer (Paul R. Swartz at 575-200-7902). If there is no response, notify the BLM on call drilling phone, 575-361-2822. In Lea County call 575-393-3612.
 - e. Also submit to this office a (Sundry Form 3160-5) Notice of Intent (NOI) for approval by BLM and NMOCD with a detailed plan for correction and the anticipated date of correction. Verbal approval for the plan may be given by a BLM authorized officer, with the NOI filed within five business days.
 - f. After the repairs submit a (Sundry Form 3160-5) Subsequent report, describing the repair(s) and Mechanical Integrity Test as per item 8 above.