

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

RECEIVED
State of New Mexico
Energy Minerals and Natural Resources

Form C-101
June 16, 2008

JUN 16 2009
Oil Conservation Division
HOBBS 620 South St. Francis Dr.
Santa Fe, NM 87505

Submit to appropriate District Office

☐ AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

¹ Operator Name and Address Chesapeake Operating, Inc. P.O. Box 18496 Oklahoma City, OK 73154-0496		² OGRID Number 147179
³ Property Code 33704	⁴ Property Name Pennzoil State	⁵ API Number 30-025-22841
⁹ Proposed Pool 1 SWD: Queen (Quail-Queen Unit)		¹⁰ Proposed Pool 2 96117

⁷ Surface Location									
UL or lot no	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	11	19S	34E		1980'		1980'		Lea

⁸ Proposed Bottom Hole Location If Different From Surface									
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

Additional Well Information				
¹¹ Work Type Code E	¹² Well Type Code I	¹³ Cable/Rotary R	¹⁴ Lease Type Code S	¹⁵ Ground Level Elevation 3973'
¹⁶ Multiple N	¹⁷ Proposed Depth 5297'	¹⁸ Formation Queen	¹⁹ Contractor	²⁰ Spud Date ASAP

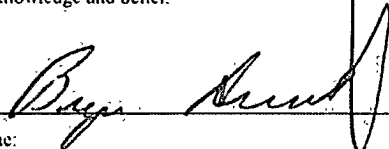
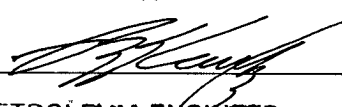
²¹ Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
11"	8 5/8"	24#	307'	150 sxs	Surface
7 7/8"	5 1/2"	17 #	5300'	250 sxs	4000'
		Original	Well bore		

²² Describe the proposed program: If this application is to DEEPEN or PLUG BACK, give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary. Please find the procedure to convert this well to an injection well for the Quail Queen Unit. Also included is NMOC's C-102 and C-144(CLEZ) pit permit.

R-12952, R-12952-A, R-12952-B

**Permit Expires 2 Years From Approval
Date Unless Drilling Underway
Plugback**

²³ I hereby certify that the information given above is true and complete to the best of my knowledge and belief.		OIL CONSERVATION DIVISION	
Signature: 		Approved by: 	
Printed name: Bryan Arrant		Title: PETROLEUM ENGINEER	
Title: Senior Regulatory Compliance Specialist		Approval Date:	Expiration Date:
E-mail Address: bryan.arrant@chk.com		JUN 17 2009	
Date: 6/25/2009	Phone: 405-935-3787	Conditions of Approval Attached <input type="checkbox"/>	



**Pennzoil State 1
Convert to Injection
Lea County, New Mexico**

Well Information

Location: 1,980' FNL & 1,980' FEL Sec. 11-T19S-R34E
CHK Prop Num: 891040
API Num: 3002522841
PBTD/TD: 5,297' / 5,300'

Casing and Tubular Data:

STRING	OD (in)	WEIGHT (lb/ft)	GRADE	ID (in)	DRIFT (in)	BURST (psi)	DEPTH (ft)	TOC
Surface	8.625	24		8.097	7.972	2,950	397'	Surf
Production	5.500	17		4.892	4.767	7,740	5,297'	4,000' (Calc.)
Tubing	2.375	4.7		1.995	1.901	7,700	5,201'	N/A

Perforation Data:

FORMATION	TOP	BOTTOM	HEIGHT	SHOT DENSITY	HOLES	PHASING	COMMENTS
Queen	4,993'	5,235'	242'	??	??		Producing

For further detail, please see attached wellbore schematic.

Procedure

1. MIRU workover rig. TOH w/7/8" and 3/4" rods and 1-1/2" pump and BHA. ND WH. NU BOP. TOH w/2-3/8" production tubing.
2. RIH w/ bit and scraper on tubing to 5,200. POH w/ bit.
3. MIRU wireline unit. PU 5-1/2" CIBP, RIH and set at ~5,170'. Tag plug to verify, POH. PU bailer and RIH and bail 35' cmt on top of CIBP set at 5,150'. POH.

4. RIH and perforate Queen as follows:

FORMATION	TOP	BOTTOM	HEIGHT	SHOT DENSITY	HOLES	PHASING	COMMENTS
Queen	4,991'	5,006'	15'	3 SPF	45	60	
Queen	5,014'	5,028'	14'	3 SPF	42	60	
Queen	5,046'	5,058'	12'	3 SPF	36	60	
Queen	5,076'	5,084'	12'	3 SPF	36	60	
Total	4,991'	5,084'	53'	3 SPF	159	60	

Correlate to Density log from 12/7/68. RDMO Wireline unit.

5. PU 5-1/2" x 2-3/8" treating packer and 2-3/8" tubing and TIH to 5,180' and spot 15% HCl acid across Queen interval (4,991' – 5,084'). PUH and set packer at ~4,900'.
6. MIRU acid service and acidize Queen (4,991' – 5,084') with 5,000 gals of 15% NEFE acid using rock salt as diversion. Shut down and record ISIP, 5 min, 10 min and 15 min pressures. RDMO acid service.
7. Flow back well to recover spent acid. Once well is dead, unset treating packer and TOH.
8. TIH w/5-1/2" x 2-3/8" injection packer and 2-3/8" TK-99 plastic coated tubing to ~4,925'. Circulate packer fluid and set packer. Test backside to 500 psi for 15 minutes.
9. ND BOP. NU WH. RDMO workover rig.

Contact Information

Workover Superintendent:	Lynard Barerra	Office 575-391-1462 Cell 575-631-4942
Production Superintendent:	Curtis Blake	Office 575-391-1462 Cell 575-631-9936
Production Foreman:	Ralph Skinner	Office 575-391-1462 Cell 575-441-4921
Asset Manager:	Jeff Finnell	Office 405-935-4347 Cell 405-919-3305

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State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102

Revised October 12, 2005

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

☐ AMENDED REPORT**WELL LOCATION AND ACREAGE DEDICATION PLAT**

API Number 30-025-22841	Pool Code 96117	Pool Name SWD; Queen	
Property Code 33704	Property Name Pennzoil State		Well Number 1
OGRID No. 147179	Operator Name Chesapeake Operating, Inc.		Elevation 3973' GR

10 Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	11	19S	34E		1980'	North	1980'	East	Lea

11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres		Joint or Infill		Consolidation Code		Order No. R-12952			

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

16		17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or undivided mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. <div style="text-align: right;"> Signature Date 05/22/2009 </div> <div style="text-align: right;"> Bryan Arrant Printed Name </div>
		18 SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. <div style="text-align: right;"> Date of Survey Signature and Seal of Professional Surveyor: Please refer to original plat. </div>
		Certificate Number