

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

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MAY 28 2009

HOBBSOCD

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-101
June 16, 2008

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 API Number 30 - 025-26221
⁵ Property Code 33707	⁴ Property Name Quail State	⁶ Well No. 3Y
⁹ Proposed Pool 1 SWD, Queen (Quail Queen Unit)		¹⁰ Proposed Pool 2

⁷ Surface Location

UL or lot no. 1	Section 11	Township 19S	Range 34E	Lot Idn	Feet from the 1841'	North/South South	Feet from the 759'	East/West line East	County Lea
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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
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Additional Well Information

¹¹ Work Type Code P	¹² Well Type Code I	¹³ Cable/Rotary	¹⁴ Lease Type Code S	¹⁵ Ground Level Elevation 3960' GL
¹⁶ Multiple N	¹⁷ Proposed Depth 5600'	¹⁸ Formation Queen	¹⁹ Contractor	²⁰ Spud Date ASAP

²¹ Proposed Casing and Cement Program-Original Well Bore

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
11"	8 5/8"	24#	1850'	375 sxs	0'
7 7/8"	4 1/2"	10.5#	5600'	575 sxs	3426'

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.

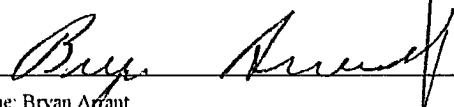

Please find the following information to re-enter this well: Current Wellbore Schematic, Convert to Injection Procedure, Compensated Neutron Log section of proposed injection interval, NMOC's C-102 Land Plat & C-144(CLEZ) Pit Permit.

For more information, please refer to R-12952

Permit Expires 2 Years From Approval
Date Unless Drilling Underway
Plugback

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R-12952-B sup

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			
Date 5/28/2009	Phone: (405) 935-3782	JUN 23 2009 Conditions of Approval Attached <input type="checkbox"/>	



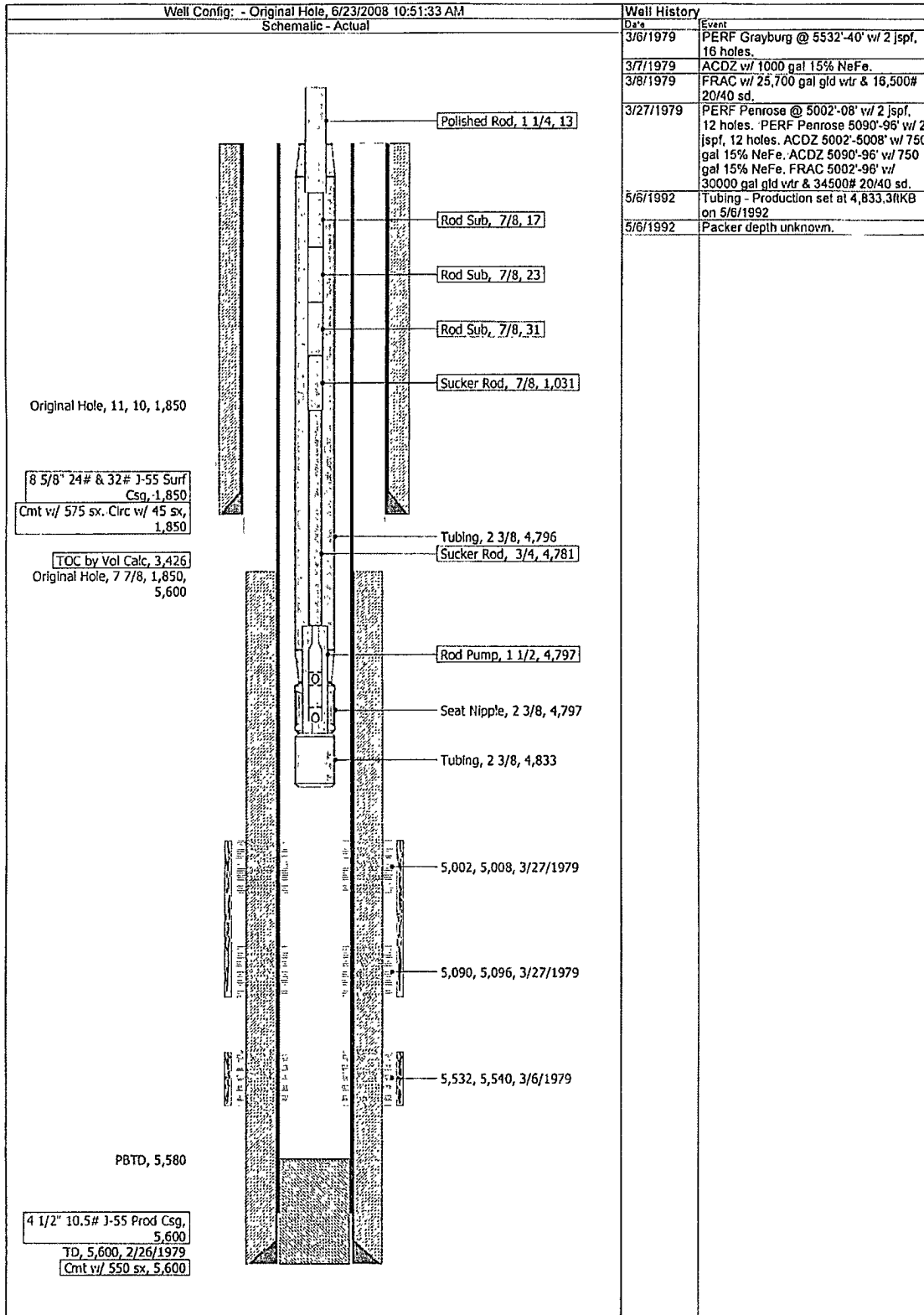
Current Wellbore Schematic

QUAIL STATE 3Y

Field: QUAIL QUEEN
County: LEA
State: NEW MEXICO
Elevation: GL 3,960.00 KB 3,970.00
KB Height: 10.00

Location: SEC 11, 19S-34E, 1841 FSL & 759 FEL

Spud Date: 2/14/1979
Initial Compl. Date:
API #: 3002526221
CHK Property #: 891045
1st Prod Date:
PBDT: Original Hole - 5580.0
TD: 5,600.0





**Quail State 3Y
Convert to Injection
Lea County, New Mexico**

Well Information

Location: 1,841' FSL & 759' FEL Sec. 11-T19S-R34E
 CHK Prop Num: 891045
 API Num: 3002526221
 PBTD/TD: 5,580' / 5,600'

Casing and Tubular Data:

STRING	OD (in)	WEIGHT (lb/ft)	GRADE	ID (in)	DRIFT (in)	BURST (psi)	DEPTH (ft)	TOC
Surface	8.625	24 & 32	J-55	8.097	7.972	2,950	1,850'	Surf
Production	4.500	10.5	J-55	4.052	3.927	4,790	5,600'	3,426' (Calc.)
Tubing	2.375	4.7		1.995	1.901	7,700	4,833'	N/A

Perforation Data:

FORMATION	TOP	BOTTOM	HEIGHT	SHOT DENSITY	HOLES	PHASING	COMMENTS
Queen	5,002'	5,008'	6'	??	??		Producing
Queen	5,090'	5,096'	6'	??	??		Producing
Queen	5,532'	5,540'	8'	??	??		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. MIRU wireline unit. PU 5-1/2" CIBP, RIH and set at ~5,500'. Tag plug to verify, POH. PU bailer and RIH and bail 35' cmt on top of CIBP set at 5,500'. POH.
3. RIH and perforate Queen as follows:

FORMATION	TOP	BOTTOM	HEIGHT	SHOT DENSITY	HOLES	PHASING	COMMENTS
Queen	5,002'	5,008'	6'	3 SPF	18	60	
Queen	5,012'	5,034'	22'	3 SPF	66	60	
Queen	5,042'	5,050'	8'	3 SPF	24	60	

Queen	5,058'	5,060'	2'	3 SPF	6	60
Queen	5,070'	5,080'	10'	3 SPF	30	60
Queen	5,090'	5,096'	6'	3 SPF	18	60
Total	5,002'	5,096'	52'	3 SPF	156	60

Correlate to CD/CN log from 2/27/79. RDMO Wireline unit.

4. PU 5-1/2" x 2-3/8" treating packer and 2-3/8" tubing and TIH to 5,100' and spot 15% HCl acid across Queen (5,002' – 5,096'). PUH and set packer at ~4,950'.
5. MIRU acid service and acidize Queen (5,002' – 5,096') with 5,000 gals of 15% HCl acid using rock salt as diversion. Shut down and record ISIP, 5 min, 10 min and 15 min pressures. RDMO acid service.
6. Flow back well to recover spent acid. Once well is dead, unset treating packer and TOH.
7. TIH w/5-1/2" x 2-3/8" injection packer and 2-3/8" TK-99 plastic coated tubing to ~4,930'. Circulate packer fluid and set packer. Test backside to 500 psi for 15 minutes.
8. ND BOP. NU WH. RDMO workover rig.
9. Once injection permit is received, begin injection.

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:	Charlie Robinson	Office 405-879-8522 Cell 405-213-5343



Combination Logging Systems

DRESSER

Compensated **Densilog**
Compensated **Neutron**

FILE NO.

COMPANY READ AND STEVENS, INC.WELL QUAIL STATE #3-YFIELD QUAIL QUEENCOUNTY LEA STATE NEW MEXICOLOCATION: 1841' FSL
759' FELOther Services
DLL/MLL/GRSEC 11 TWP 19-S RGE 34-E

Permanent Datum

GLElev. 3960

Elevations:

Log Measured from

KB10

Fl. Above Permanent Datum

DF

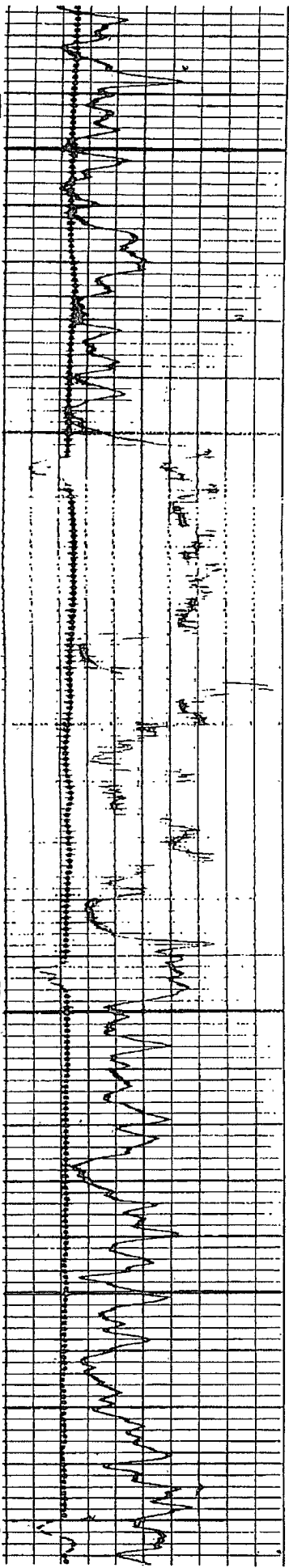
Drilling Measured from

KB

GL

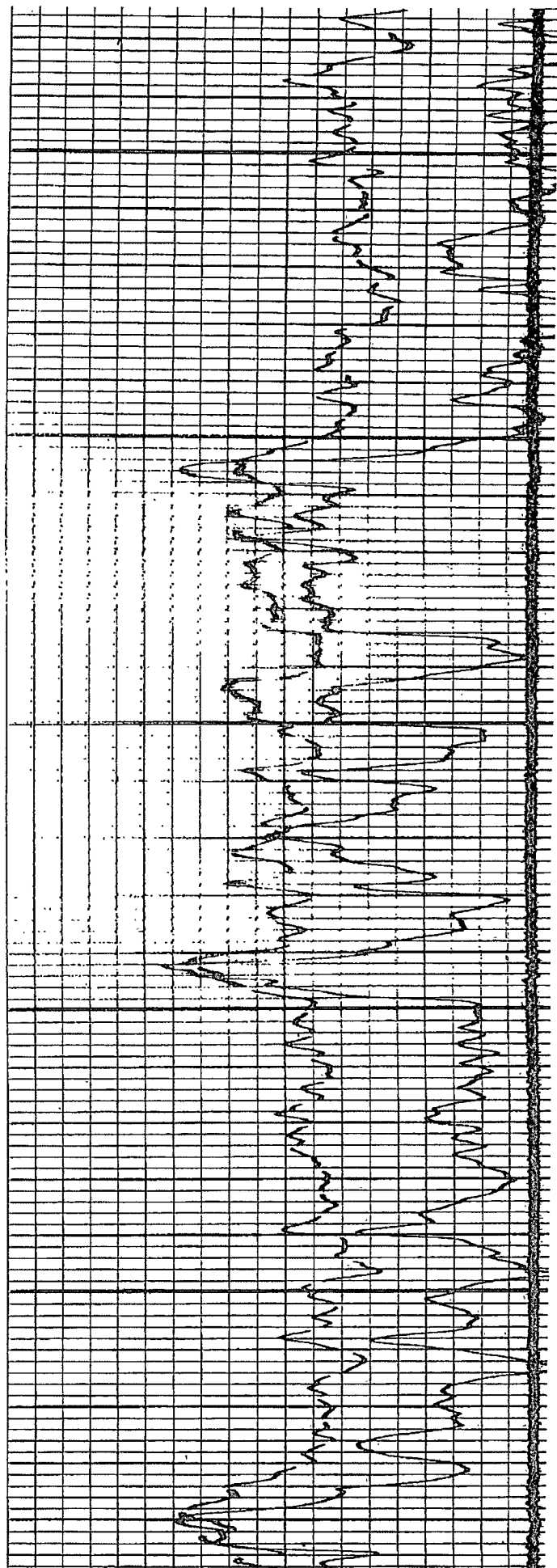
3960

Date	<u>2/27/79</u>				
Run No.	<u>ONE</u>				
Service Order	<u>26405</u>				
Depth—Driller	<u>5600</u>				
Depth—Logger	<u>5594</u>				
Bottom Logged Interval	<u>5592</u>				
Top Logged Interval	<u>SURFACE</u>				
Casing—Driller	<u>8 3/8 @ 1900</u>	@	@	@	@
Casing—Logger	<u>NOT LOGGED</u>				
Bit Size	<u>7 7/8</u>				
Type Fluid in Hole	<u>SALT GEL</u>				
Density and Viscosity	<u>10.3 35</u>				
pH and Fluid Loss	<u>7.5</u> — cc		cc		cc
Source of Sample	<u>CIRC</u>				
Rm @ Meas. Temp.	<u>.055 @ 60 °F</u>	@	°F	@	°F
RmI @ Meas. Temp.	<u>.05 @ 60 °F</u>	@	°F	@	°F
Rmc @ Meas. Temp.	<u>— @ — °F</u>	@	°F	@	°F
Source of RmI and Rmc	<u>M</u> —				
Rm @ BHT	<u>.03 @ 110 °F</u>	@	°F	@	°F
Time Since Circ.	<u>4 HOURS</u>				
Max. Rec. Temp. Deg. F.	<u>110</u> °F		°F		°F
Equip. No. and Location	<u>6136 HOBBS</u>				
Recorded By	<u>FRANKLIN</u>				
10530d By	<u>REDDY</u>				



5000

5100



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State of New Mexico

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Minerals & Natural Resources Department

OIL CONSERVATION DIVISION

MAY 28 2009

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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

¹ API Number 30-025-26221		² Pool Code 96117	³ Pool Name SVD; Queen (Quail Queen Unit)
⁴ Property Code 33702	⁵ Property Name Quail State		⁶ Well Number 3Y
⁷ OGRID No. 147179	⁸ Operator Name Chesapeake Operating, Inc.		⁹ Elevation 3960' G.L.

¹⁰ Surface Location

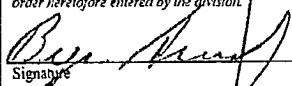
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	11	19 S	34E		1841'	South	790'	East	Lea

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

¹² Dedicated Acres	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No. R-12952
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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 unleased 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.  Signature _____ Date 5/28/2009 Bryan Arrant Printed Name _____
				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. Date of Survey _____ Signature and Seal of Professional Surveyor: _____ Please Refer to Original Plat Certificate Number _____

759' FEL

1841' FSL