

## 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

State of New Mexico  
Energy Minerals and Natural Resources

Form C-101

May 27, 2004

Oil Conservation Division  
1220 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

<sup>1</sup> Operator Name and Address Chesapeake Operating Inc. 2010 Rankin Hwy Midland, TX 79701		<sup>2</sup> OGRID Number 147179
<sup>3</sup> Property Code <del>24784</del> 33703		<sup>4</sup> API Number 30 025-04862
<sup>5</sup> Property Name Pech State		<sup>6</sup> Well No 3
<sup>9</sup> Proposed Pool 1 Eunice Monument; Grayburg-San Andres		<sup>10</sup> Proposed Pool 2

<sup>7</sup> Surface Location

UL or lot no	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/Westline	County
L	32	21S	36E		2310	SOUTH	990	WEST	LEA

<sup>8</sup> 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/Westline	County
L	32	21S	36E		2310	SOUTH	990	WEST	LEA

## Additional Well Information

<sup>11</sup> Work Type Code P	<sup>12</sup> Well Type Code O	<sup>13</sup> Cable/Rotary	<sup>14</sup> Lease Type Code S	<sup>15</sup> Ground Level Elevation 3615.7 GR
<sup>16</sup> Multiple N	<sup>17</sup> Proposed Depth 3929	<sup>18</sup> Formation Grayburg-San Andres	<sup>19</sup> Contractor	<sup>20</sup> Spud Date 12/15/2007
Depth to Groundwater		Distance from nearest fresh water well		Distance from nearest surface water
Pit <input type="checkbox"/> Liner Synthetic <input type="checkbox"/> milst thick Clay <input type="checkbox"/> Pit Volume: _____ bbls Drilling Method: _____ Closed-Loop System <input type="checkbox"/> Fresh Water <input type="checkbox"/> Brine <input type="checkbox"/> Diesel/Oil-based <input type="checkbox"/> Gas/Air <input type="checkbox"/>				

<sup>21</sup> Proposed Casing and Cement Program

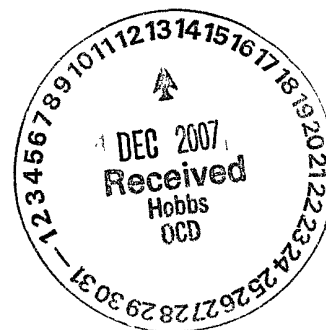
Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
11	8 5/8	32#	335	175 sx	
7 7/8	5 1/2	15.5#	3929	800 sx	

<sup>22</sup> 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.

Chesapeake, respectfully, request permission to re-enter this well per the attached procedure.

NO PIT.

Permit Expires 1 Year From Approval  
Date Unless Drilling Underway  
Plugback



<sup>23</sup> I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify that the drilling pit will be constructed according to NMOCD guidelines ☒, a general permit ☐, or an (attached) alternative OCD-approved plan ☐.

## OIL CONSERVATION DIVISION

Printed name: Shay Stricklin

Title: Regulatory Tech.

E-mail Address: sstricklin@chkenergy.com

Date: 12/11/2007

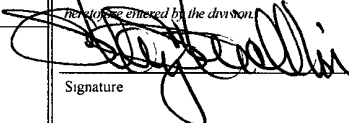
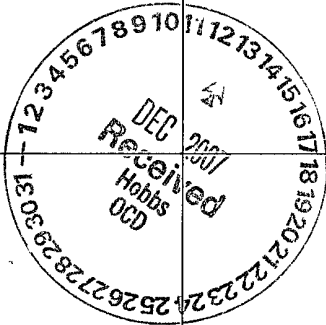
Phone: (432)687-2992

Approved by:

Title: OC FIELD REPRESENTATIVE II / STAFF MANAGER

Approval Date: DEC 14 2007 Expiration Date:

Conditions of Approval Attached ☐

16				<p>17</p> <p><b>OPERATOR CERTIFICATION</b></p> <p><i>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.</i></p> <p></p> <p>Signature _____ Date <u>12/11/2007</u></p> <p><u>Shay Stricklin</u></p> <p>Printed Name _____</p>
990 2310				<p>18</p> <p><b>SURVEYOR CERTIFICATION</b></p> <p><i>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.</i></p> <p>Date of Survey _____</p> <p>Signature and Seal of Professional Surveyor _____</p> <p>Certificate Number _____</p>

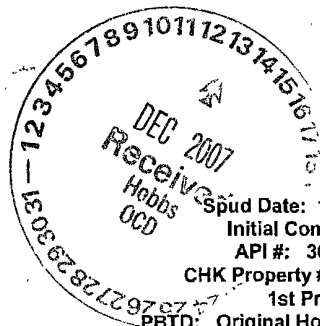


Current Wellbore Schematic

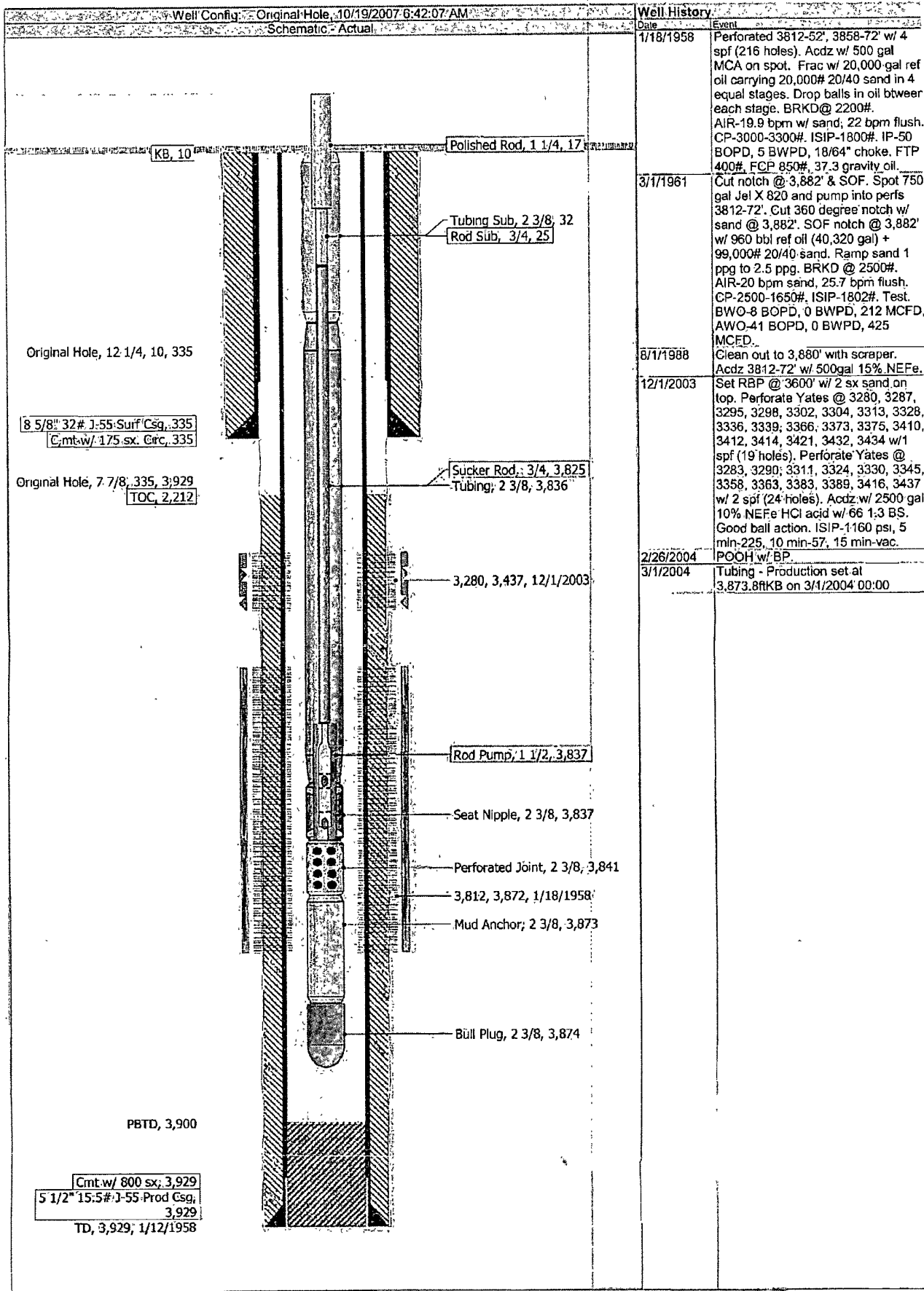
PECH STATE 3

Field: EUNICE, SOUTH (7 RIVERS QUEEN)  
County: LEA  
State: NEW MEXICO  
Elevation: GL 3,616.00 KB 3,626.00  
KB Height: 10.00

Location: SEC 32, 21S-36E, 2310 FSL & 990 FWL



Spud Date: 12/31/1957  
Initial Compl. Date:  
API #: 3002504862  
CHK Property #: 891039  
1st Prod Date:  
PBTD: Original Hole - 3900.0  
TD: 3,929.0





**Pech State #3  
Seven Rivers & Grayburg Recompletion & Drill Deeper  
Lea County, NM**

**Current Wellbore Information**

**Surface Casing:** 8 5/8" 32# J-55 set @ 335'. TOC: Circ to surface

**Production Casing:** 5 1/2" 15.5# J-55 set @ 3,929'. TOC: 3,929'

**Tubing:** 2 3/8" set @ 3,836'

**Rods:** 153-3/4" rods, 1.25" X 16' Polish Rod, 1.5" X 6' Polish Rod Liner, 1.5" X 12' RWBC pump

**Existing Perforations**

Formation	Interval
Yates	3280-3434
Yates	3812-3852 3858-3872

**Recommended Procedure**

1. Set flowback pit, frac tank and rack 5,000' of 2 3/8" N-80 Workstring.
2. MIRU pulling unit. POOH w/ rods, tbg, and pump. NDWH NU BOP.
3. RU wireline. RIH w/ gauge ring and junk basket. Tag PBTD @ 3,900'.
4. MU bit, bit stub, and 6 drill collars on 2 3/8" workstring. RU power swivel and foam air unit.
5. Drill to +/- 4,600'. If possible circulate wellbore clean. RD Power swivel and POOH w/ workstring and LD drill assembly. RU wireline, correlate depth to existing logs and MU GR/CCL/CNL. RIH and correlate to attached log.
6. MU Treating Packer w/ 391' of tailpipe on workstring (+/- 300' based on log interpretation). TIH and set packer at 3,909' +/- . RU acidizers and use 2,000 gals of 15% NEFE at ARO 4-6 BPM. Overflush w/ 25 bbls of 2% KCL. SI for minimum of 3 hrs. RD acidizers and release.
7. RU swab. Swab back load. Evaluate for signs of hydrocarbon. Record and report swab test to engineer.
8. If swab tests are acceptable, RD swab. Release packer and POOH. LD Workstring & Treating Packer. Prep to run liner.
9. PU & TIH w/ 4 1/2" flush joint to 4,700' (Actual depth TBD).
10. RU Cementing Services and Cement Liner per recommendation. RD Cementers, Clean Location and Release.
11. RIH w/ bit and collars on workstring to PBTD.
12. Run GR/CCL. Perforate Grayburg based on log picks.
13. Anticipate acid and frac based on logs.
14. Set CBP above perfs.

15. Perforate Seven Rivers:

Formation	Interval	Shot
Seven Rivers	3517	1
Seven Rivers	3519	1
Seven Rivers	3521	1
Seven Rivers	3523	1
Seven Rivers	3537	1
Seven Rivers	3539	1
Seven Rivers	3541	1
Seven Rivers	3543	1
Seven Rivers	3545	1
Seven Rivers	3547	1
Seven Rivers	3549	1
Seven Rivers	3575	1
Seven Rivers	3577	1
Seven Rivers	3579	1
Seven Rivers	3581	1
Seven Rivers	3595	1
Seven Rivers	3597	1
Seven Rivers	3599	1
Seven Rivers	3605	1
Seven Rivers	3613	1
Seven Rivers	3615	1
Seven Rivers	3617	1
Seven Rivers	3619	1
Seven Rivers	3621	1
Seven Rivers	3623	1
Seven Rivers	3625	1
Seven Rivers	3627	1
Seven Rivers	3629	1
Seven Rivers	3631	1
Seven Rivers	3643	1
Seven Rivers	3649	1
Seven Rivers	3655	1
Seven Rivers	3657	1
Seven Rivers	3659	1
Seven Rivers	3661	1
Seven Rivers	3663	1
Seven Rivers	3665	1
Seven Rivers	3671	1
Seven Rivers	3673	1
Seven Rivers	3679	1
Seven Rivers	3681	1
Seven Rivers	3709	1
Seven Rivers	3711	1
Seven Rivers	3713	1
Seven Rivers	3737	1
Seven Rivers	3739	1
Seven Rivers	3741	1
Seven Rivers	3743	1
Seven Rivers	3755	1
Seven Rivers	3757	1
Seven Rivers	3759	1
Seven Rivers	3761	1
Seven Rivers	3763	1
Seven Rivers	3765	1
Seven Rivers	3767	1
Seven Rivers	3769	1

Total Shots 56

16. RIH w/ packer on 2 3/8" to 3,770'. Spot acid to packer. Pull packer up to 3,400' and set.

17. Acidize Seven Rivers w/ 5,000 gal 15% NE FE @ 5-6 BPM dropping 75 perf balls throughout job. Displace acid to top perf. SI 30 mins. Swab back acid and test.

18. If necessary to frac. POH w/ packer. Frac Seven Rivers per frac design. Anticipate 100 bpm and 200,000# sand.
19. RIH w/ bit and collars. Drill out CBP and clean out to PBTD.
20. RIH w/ 2 3/8" tbg and BHA to 3,500'. RIH w/ pump and rods. POP from Seven Rivers and Grayburg.
21. RD.

### **Contacts**

#### **Workover Foreman**

Lynard Barrera  
Office: 505-391-1462  
Cell: 505-631-4942

#### **Production Foreman**

Melvin Harper  
Office: 505-391-1462  
Cell: 505-631-5348

#### **Asset Manager**

Kim Henderson  
Office: 405-879-8583  
Cell: 405-312-1840

#### **Field Engineer**

Doug Rubick  
Office: 505-391-1462  
Cell: 505-441-7326