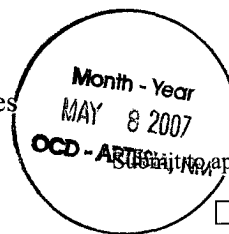


District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

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



Form C-101
May 27, 2004

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. 2010 Rankin Hwy Midland, TX 79701		² OGRID Number 147179
³ Property Code		⁴ API Number 30-015-23523
⁵ Property Name State IX Gas Com		⁶ Well No. 001
⁹ Proposed Pool 1 Mosley Canyon; Strawn		¹⁰ Proposed Pool 2

7 Surface Location

UL or lot no H	Section 6	Township 24S	Range 25E	Lot Idn	Feet from the 2030	North/South line North	Feet from the 890	East/Westline East	County Eddy
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8 Proposed Bottom Hole Location If Different From Surface

UL or lot no. H	Section 6	Township 24S	Range 25E	Lot Idn	Feet from the 2030	North/South line North	Feet from the 890	East/Westline East	County Eddy
--------------------	--------------	-----------------	--------------	---------	-----------------------	---------------------------	----------------------	-----------------------	----------------

Additional Well Information

¹¹ Work Type Code P	¹² Well Type Code G	¹³ Cable/Rotary R	¹⁴ Lease Type Code S	¹⁵ Ground Level Elevation 3894 GR
¹⁶ Multiple No	¹⁷ Proposed Depth 11046	¹⁸ Formation Strawn	¹⁹ Contractor	²⁰ Spud Date 02/16/2007
Depth to Groundwater 800		Distance from nearest fresh water well 1000		Distance from nearest surface water 1000
Pit: Liner: Synthetic <input checked="" type="checkbox"/> 12 mil thick Clay <input type="checkbox"/> Pit Volume: 12129 bbls Drilling Method: Fresh Water <input checked="" type="checkbox"/> Brine <input type="checkbox"/> Diesel/Oil-based <input type="checkbox"/> Gas/Air <input type="checkbox"/>				
Closed-Loop System <input type="checkbox"/>				

21 Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
17 1/2	13 3/8	48#	437	370 sx CL C	
12 1/4	9 5/8	28/24#	2785	1550 sx CI C	
7 7/8	5 1/2	17#	11046	1820 sx CI H	

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.
Chesapeake, respectfully, request permission to recomplete this well to the Strawn zone per the attached procedure.

NSL - Required to Produce

²³ 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 ☐.

Printed name: Shay Stricklin

Title: Regulatory Tech.

E-mail Address: sstricklin@chkenegy.com

Date: 05/04/2007

Phone: (432)687-2992

OIL CONSERVATION DIVISION

Approved by:

BRYAN G. ARANT

DISTRICT II GEOLOGIST

Title:

Approval Date: DEC 18 2007

Expiration Date: DEC 18 2008

Conditions of Approval Attached ☒

District I

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District II

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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

¹ API Number 30-015-23523		² Pool Code 81470	³ Pool Name Mosley Canyon; Strawn
⁴ Property Code	⁵ Property Name State IX Gas Com		⁶ Well Number 001
⁷ OGRID No. 147179	⁸ Operator Name Chesapeake Operating Inc.		⁹ Elevation 3894 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
H	6	24S	25E		2030	North	890	East	Eddy

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
H	6	24S	25E		2030	North	890	East	Eddy

¹² Dedicated Acres	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
320			

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 hereof entered by the division Signature <u>Shay Stricklin</u> Date <u>05/04/2007</u> Printed Name <u>Shay Stricklin</u>
			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: _____ Certificate Number _____

**State IX Com #1
Re-Completion Procedure
Eddy County, New Mexico**

GENERAL INFORMATION

Location: 890' FEL & 2030' FNL, Sec 6 -- T24S -- R25E
API No.: 30-015-23202

WELL INFORMATION

<u>String OD</u>	<u>Weight & Grade</u>	<u>Depth</u>	<u>ID</u>	<u>Drift</u>	<u>Burst</u>	<u>TOC</u>
13-3/8"	48# H40 STC	0' - 437'	12.715"	12.559"	1730	0'
8-5/8"	28/24# K55 LTC	0' - 2785'	8.017"	7.892"	1340	0'
5-1/2"	17# K/N80 LTC	0' - 11046'	4.892"	4.767"	5320	2600'

Morrow Perforations: 10471 -- 10882' (OA)

TD/PBTD: 11046'/10886'

Recommended Perforations

Strawn 9442 -- 9606' (OA)
Brushy Canyon (Delaware) 4696 -- 4716'

Re-Completion Procedure

1. MIRU Service Rig and requisite equipment. Kill well if required with 2% KCL. NDWH, NU BOP. Release Uni Packer and POOH with 2-3/8" tubing.
2. MIRU Wireline Service Unit. Run a strip log and correlate depth with Neutron/Density log dated 12/19/80 to set a 5-1/2" CIBP at 10425'. Pull correlation strip from ~10000' to 9200' and from 5000 -- 4500'. Bail 2 sx of cement on 5-1/2" plug.
3. Load hole with 2% KCL and pressure test to 1000#.
4. RIH w/ casing gun. Perforate the Strawn Lime w/ 2 SPF, 23 gram charge, .37" holes, 60 deg. phasing, from 9598' - 9606' (17 holes) and 9442 -- 9468' (53 holes).
5. RIH w/ 5-1/2" treating packer and SN on 2-3/8" tubing as follows: Re-entry guide, 4' sub, 'XN' nipple, 10' sub, Arrow Set packer, on/off tool w/ 'X' profile nipple. Space out with the EOT at 9606'. Pressure test tubing in hole.
6. RU Acid Service Company. Spot 200 gal of 15% HCL Acid containing 4 gpt of iron control, 1 gpt each of corrosion inhibitor, surface tension reducer, and non-emulsifier. Pull packer to 9390'. Reverse circulate to ensure packer is clear of acid, set packer. Pressure test annulus to 1000#.
7. ND BOP. NU tree. Pressure annulus to 1000 psi. Displace spot acid, establish rate of 4 to 5 BPM w/ 2% KCL. (Keep KCL water usage to a minimum). Acidize w/ 1,300

gal of same acid. Displace w/ 2% KCL. Do not over-displace. Pump at 4 to 5 BPM max. Launch 80 ball sealers during job. Note rates and pressures. Note ISIP. Max pressure 6000#.

8. Flow/swab back job. Swab/flow test zone.
9. Re-treat as warranted. Pressure backside to 1000# and retreat as follows:
 - a) 1500 gal 20% NeFe Acid.
 - b) 3000 gal of 20% Ultragel.
 - c) 1000 gal 20% gelled NeFe.
 - d) 4000 gal of 20% Ultragel.
 - e) 500 gal of 20% gelled NeFe. Overdisplace by 35 bbl of 2% KCL.

Treat via 2-3/8" production tubing at 5 - 6 BPM.

10. Flow back job. Swab to clean up and test.
11. Put well to sales if zone proves commercial. RDMO. If zone is not commercial, proceed with Brushy Canyon test.
12. Set a CIBP at 9400'. Bail 2 sx of cement on plug. Load hole with 2% KCL and pressure test to 2500#.
13. RIH w/ casing gun. Perforate the Brushy Canyon w/ 4 SPF, 23 gram charge, .37" holes, 90 deg. phasing, from 4696' - 4716' (81 holes).
14. RIH w/ 5-1/2" treating packer and SN on 2-3/8" tubing as follows: Re-entry guide, 4' sub, 'XN' nipple, 10' sub, Arrow Set packer, on/off tool w/ 'X' profile nipple. Space out with the EOT at 4716'.
15. RU Acid Service Company. Spot 200 gal of 15% HCL Acid containing 4 gpt of iron control, 1 gpt each of corrosion inhibitor, surface tension reducer, and non-emulsifier. Pull packer to 9390. Reverse circulate to ensure packer is clear of acid, set packer. Pressure test annulus to 1000#.
16. ND BOP. NU tree. Pressure annulus to 1000 psi. Displace spot acid, establish rate of 4 to 5 BPM w/ 2% KCL. (Keep KCL water usage to a minimum). Acidize w/ 1,300 gal of same acid. Displace w/ 2% KCL. Do not over-displace. Pump at 4 to 5 BPM max. Launch 95 ball sealers during job. Note rates and pressures. Note ISIP. Max pressure 6000#.
17. Flow/swab back job. Swab/flow test zone.
18. Prep to frac as warranted. Kill well with 2% KCL if required. ND tree, NU BOP. Release packer. Lower through perms to clear of ball sealers. POOH w/ tubing and packer. NU frac valve. MIRU Frac Service Company. Tie on to casing and establish rate w/ 15,000 gal of 30# XL gel pad containing additives per frac schedule. Pump an additional 4000 gal of pad containing 1/4 lb/gal 16/30 Ottawa as a scour. Frac per frac schedule ramping 75,000# of 16/30 Ottawa from 1 lb/gal to 4 #/gal in 35,000 gal of 30# linear gel. Tail in with 20,000# of 16/30 resin coat at 5 #/gal in 4000 gal of linear gel at

tail of job. Total sand 76,000 lb of 16/30, 20,000 lb of resin coat. Obtain rates of 35 to 40 BPM, max pr 4250#. Cut resin activator in last tub of sand. Displace to top perf with 2% KCL. Anticipated treating pressure ~1500#. Obtain 5, 10, and 15 min SI data.

19. Wait on frac overnight. Flow back frac.
20. As well loads and dies, RIH w/ MA, PS, SN, TAC (at ~ 4500') and 2-3/8" tubing. Space out and land SN ~4725'. Swab to clean up and test zone.
21. Set 320-256-120 PU. RIH w/ 1-1/2" pump and API Grade D 76 tapered rod string. Run pump, 350' of 1-1/4" sinker bars, 99 – 3/4", and 76 – 7/8" (SH Couplings). Space out/seat pump. Load and test. PWOP at 6 SPM, 120" SL. RDMO.

CURRENT WELLBORE SCHEMATIC

CHESAPEAKE OPERATING INC.

WELL STATE "IX" COMM # 1
 FIELD Baldridge Canyon
 COUNTY : EDDY STATE: NM
 LOCATION : 890' FEL & 2030' FNL, UNIT H, SEC. 6-T24S-R25E
 ELEVATION : 3894' GL 3908' KB



API #: 30-015-23523
 SPUD DATE: 11/15/80
 COMPLE. DATE: 12/22/80
 CHK PROP # 891274

Hole Size

17 1/2"

12 1/4"

1 7/8"

13-3/8" 48# H-40 ST&C Csg. @ 437'
 Cmt w/ 370 sx Class C & 2% CaCl. Circ to 10
 sx to surf.

Well History:

11/15/80: Spud well
4/16/81: Perf Morrow @ 10965'-971', 10960'63',
 10864'-882'. Put well to sales.
1/16/92: Set CIBP @ 10,900' w/2 sx cmt (14')
 Set Pkr @ 10,388'.
1/19/92: Perf Morrow @ 10471'-492' w/ strip gun
 Acdz w/3500 gal 7.5% Howco acid & N2 pad.
8/19/93: SI for pressure build up.
8/20/94: Swab dry to 10,000'. No fluid entry
 Minimal gas.

SI 1996.

TOC @ 2,600' by Temp Survey

9-5/8" 28# & 24# K-55 LT&C Csg. @ 2,785'
 Cmt w/400 sx Dowell Thixset Class C cmt w/
 1/2# Flocele/sx and 10# Gilsomite/sx. Follow w/
 850 sxs Dowell Lite cmt w/1/2# Flocele/sx and
 10# Gilsomite/sx and 300 sxs Class C Neat
 cmt. Follow w/570 sxs Class C. Circ to 20 sx to
 surf.

DV Tool @ 8,339' w/1210 sx

Tubing Details as of 1/17/92:
 2-3/8" lbg
 On/Off Tool w/ Nipple
 Guiberson 5-1/2" Uni VI Packer @
 10,388'.

Morrow @ 10,471' - 492' w/ 4 jpf

Morrow @ 10,864'-82' w/ 2 jpf

CIBP @ 10,900' w/ 2 sx 12' cmt

Morrow @ 10960'-963', 10965'-971', 10972'-985' w/ 2 jpf

5-1/2" 17# K-55 N-80 LT&C Csg. @ 11,046'
 Cmt w/610 sxs Class H w/0.75% CFR2, 0.5% Halad
 22-A and 2% KCL. 2nd Stage w/1135 sxs Trinity Lite w/
 5% CFR-2, 0.4% Halad 22-A and 1/2# Flocele /sx and
 tail in w/75 sxs Class H neat cmt.

PBTD @ 10,886'
 TD @ 11,046'

PREPARED BY: Myo Htoon

DATE: 9/7/06

UPDATED BY: AM

DATE: 11/1/06

Arrant, Bryan, EMNRD

From: Arrant, Bryan, EMNRD
Sent: Tuesday, May 08, 2007 9:10 AM
To: 'Shay Stricklin'
Subject: State IX Gas Com. #1

Dear Shay,

I need to have you resubmit an amended C-102 that shows the correct dedicated acreage for the above noted well providing this is a proposed gas well completion as noted on your C-101 form.
In addition, please let me know when Chesapeake Operating, Inc. obtains a NSL from Santa Fe for the proposed completion to the Mosley Canyon; Strawn Gas Pool.

Yours truly,
Bryan G. Arrant
District II Geologist
New Mexico Oil Conservation Division
1310 West Grand Ave.
Artesia, NM 88210
505-748-1283 Ext. 103

CC: Well file

5/8/2007