

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

¹ Operator Name and Address Chesapeake Operating Inc. 2010 Rankin Hwy Midland, TX 79701		² OGRID Number 147179
³ Property Code 36838	⁴ Property Name Langley Greer Com	⁵ API Number 30 - 025-38612 ⁶ Well No 3H
⁹ Proposed Pool 1 Langley; Devonian (Gas)		¹⁰ Proposed Pool 2

⁷ Surface Location

UL or lot no L	Section 21	Township 22S	Range 36E	Lot Idn	Feet from the 2440	North/South line SOUTH	Feet from the 660	East/Westline WEST	County LEA
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⁸ Proposed Bottom Hole Location If Different From Surface

UL or lot no D	Section 21	Township 22S	Range 36E	Lot Idn	Feet from the 660	North/South line NORTH	Feet from the 660	East/Westline WEST	County LEA
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Additional Well Information

¹¹ Work Type Code New Well	¹² Well Type Code Gas	¹³ Cable/Rotary R	¹⁴ Lease Type Code Fee	¹⁵ Ground Level Elevation 3543 GR
¹⁶ Multiple No	¹⁷ Proposed Depth 14380	¹⁸ Formation Devonian	¹⁹ Contractor	²⁰ Spud Date 11/15/2007
Depth to Groundwater 22		Distance from nearest fresh water well 1000		Distance from nearest surface water 1000
Pit: Liner Synthetic ☒ 12 mil thick Clay ☐ Pit Volume 12129 bbls Drilling Method Closed-Loop System ☐ Fresh Water ☒ Brine ☐ Diesel/Oil-based ☐ Gas/Air ☐				

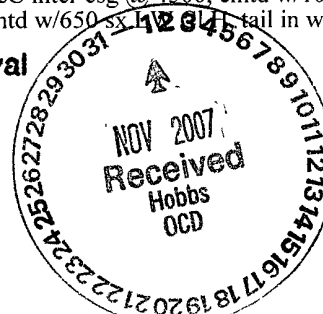
²¹ Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
17 1/2	13 3/8	48	400	450 sx Cl C	surface
12 1/4	9 5/8	40	4500	1500 sx Cl C	400
8 3/4	7	26	12164	900 sx Cl H	12160

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.
 13 3/8 48# H-40 ST&C surf csg @ 400, cmted w/450 sx Cl C, 1.34 yld. 9 5/8 40# J-55 LT&C inter csg @ 4500, cmted w/1000 sx 50:50 Poz C, tail in w/500 sx Cl C, 2.03 yld. 7 26# HCP-110 LT&C prod csg @ 12164, cmted w/650 sx 12 1/4 tail in w/250 sx Cl H, 2.30 yld.

Permit Expires 1 Year From Approval
Date Unless Drilling Underway

Conditions of Approval -- Approval for Drilling only Cannot produce until Non-Standard location is approved by the OCD Santa Fe office. Also cannot penetrate the Devonian in the South half of the Section.



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@chkenergy.com

Date. 10/31/2007

Phone. (432)687-2992

OIL CONSERVATION DIVISION

Approved by.

Chris Williams

Title: OC DISTRICT SUPERVISOR/GENERAL MANAGER

Approval Date: NOV 16 2007

Expiration Date:

Conditions of Approval Attached ☒

Pit contents and liner must be disposed of in OCD approved landfill.

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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 30-025-38612		² Pool Code 79936	³ Pool Name Langley; Devonian (Gas)
⁴ Property Code 36838	⁵ Property Name Langley Greer Com		⁶ Well Number 1
⁷ OGRID No. 147179	⁸ Operator Name Chesapeake Operating Inc.		⁹ Elevation 3543 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
L	21	22S	36E		2440	SOUTH	660	WEST	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
D	21	22S	36E		660	NORTH	660	WEST	LEA
¹² Dedicated Acres 320		¹³ Joint or Infill		¹⁴ Consolidation Code		¹⁵ Order No.			

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.

	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: <i>[Signature]</i> Date: 10/30/2007 Printed Name: Shay Stricklin			
	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			

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State of New Mexico

Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION
1220 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505

Form C-102

Revised October 12, 2005

Submit to Appropriate District Office

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Fee Lease - 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-025-38612		Pool Code	Pool Name
Property Code	Property Name LANGLEY GREER COM		Well Number 3H
OGRID No.	Operator Name CHESAPEAKE OPERATING, INC.		Elevation 3543'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	21	22-S	36-E		2440	SOUTH	660	WEST	LEA

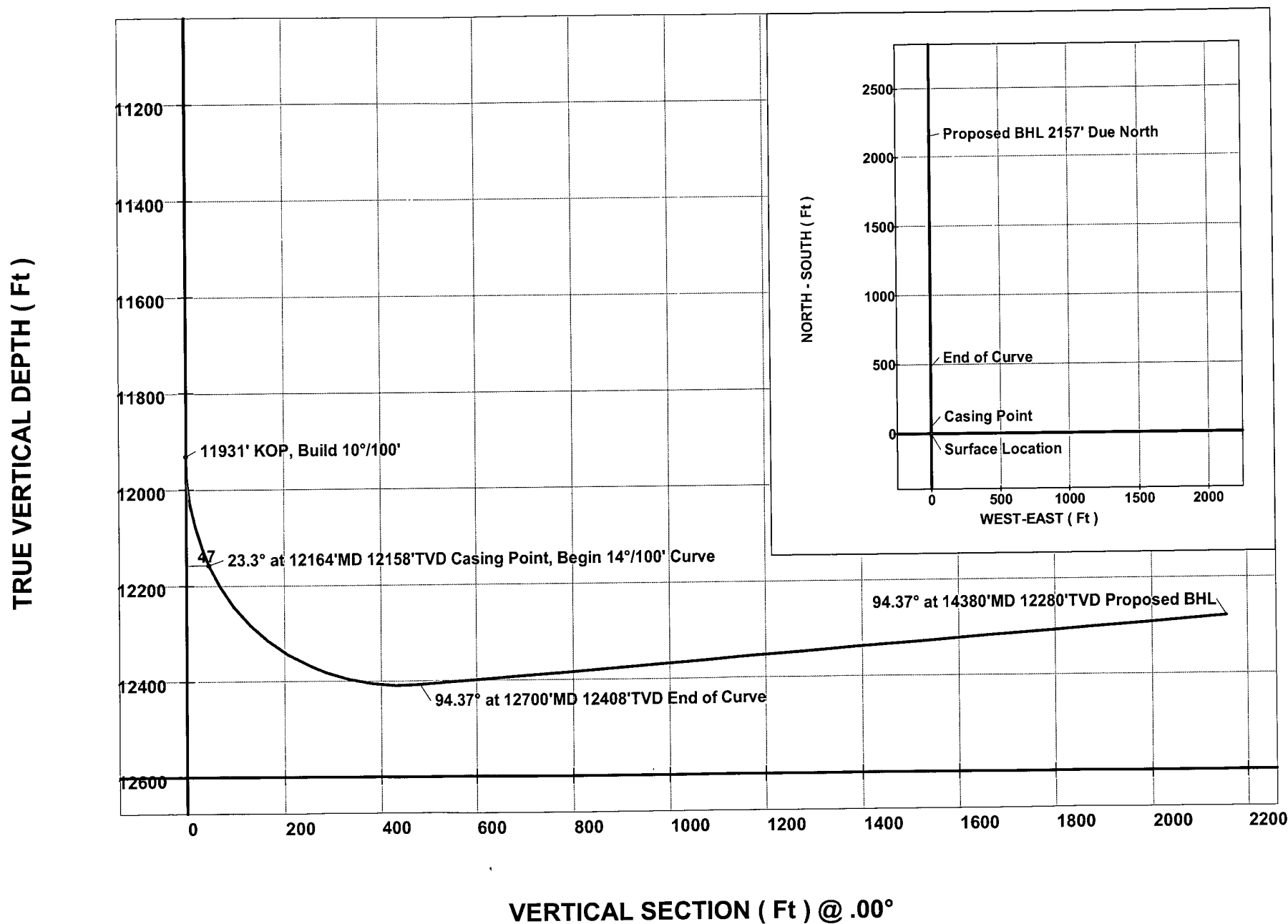
Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	21	22-S	36-E		660	NORTH	660	WEST	LEA
Dedicated Acres	Joint or Infill	Consolidation Code	Order No.						

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

		OPERATOR CERTIFICATION I hereby certify that the information 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 mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. Signature _____ Date _____ Printed Name _____
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. SEPTEMBER 10, 2007 Date Surveyed _____ REV. 10/24/07 AR Signature & Seal of Professional Surveyor 3239 GARY EIDSON Certificate No. GARY EIDSON 12841		

Company: Chesapeake Operating, Inc.
Lease/Well: Langley Greer Com #3H
Location: Lea County
State/Country: New Mexico



Well Name **Langley Greer Com 3H horiz Devonian**
County **Lea Co , NM**

Rig **Latshaw 6**
Survey Co.

Surface Location:
2840' FNL & 660' FWL
Est. BHL Point:
680' FNL & 660' FWL
Hard Line:
660' FNL and 660' FWL

Target #1 0.00 KBTVD -4.37 Dip(- Up) 0.00 Section Plane
Target #2 0.00 KBTVD 0.00 Dip(- Up) Section Plane
Target #3 0.00 KBTVD 0.00 Dip(- Up) Section Plane

Comments	Measured Depth	Inclination	Azimuth	Course Length	TVD	North (+) South (-)	East (+) West (-)	VS	BUR	DLS	FNL	FWL
Staked Surface Location	0	0.00	0.00	0	0	0	0.0	0.0			2840.0	660.0
Surface Casing Point	400	0.00	0.00	400	400	0.0	0.0	0.0	0.00	0.00	2840.0	660.0
	1,000	0.00	0.00	600	1000	0.0	0.0	0.0	0.00	0.00	2840.0	660.0
	2,000	0.00	0.00	1000	2000	0.0	0.0	0.0	0.00	0.00	2840.0	660.0
	3,000	0.00	0.00	1000	3000	0.0	0.0	0.0	0.00	0.00	2840.0	660.0
	4,000	0.00	0.00	1000	4000	0.0	0.0	0.0	0.00	0.00	2840.0	660.0
Intermediate Casing Point	4,600	0.00	0.00	600	4600	0.0	0.0	0.0	0.00	0.00	2840.0	660.0
	5,000	0.00	0.00	400	5000	0.0	0.0	0.0	0.00	0.00	2840.0	660.0
	6,000	0.00	0.00	1000	6000	0.0	0.0	0.0	0.00	0.00	2840.0	660.0
	7,000	0.00	0.00	1000	7000	0.0	0.0	0.0	0.00	0.00	2840.0	660.0
	8,000	0.00	0.00	1000	8000	0.0	0.0	0.0	0.00	0.00	2840.0	660.0
	9,000	0.00	0.00	1000	9000	0.0	0.0	0.0	0.00	0.00	2840.0	660.0
	10,000	0.00	0.00	1000	10000	0.0	0.0	0.0	0.00	0.00	2840.0	660.0
	11,000	0.00	0.00	1000	11000	0.0	0.0	0.0	0.00	0.00	2840.0	660.0
KOP: 10°/100' build rate (until reaching 23.3° @ 12,164' MD)	11,931	0.00	0.00	931	11931	0.0	0.0	0.0	0.00	0.00	2840.0	660.0
	12,000	6.90	0.00	69	12000	4.1	0.0	4.1	10.00	10.00	2835.9	660.0
	12,100	16.90	0.00	100	12098	24.7	0.0	24.7	10.00	10.00	2815.3	660.0
7" Casing Point (50' vertical into Devonian)	12,164	23.30	0.00	64	12158	46.7	0.0	46.7	10.00	10.00	2793.3	660.0
	12,200	28.34	0.00	36	12190	62.4	0.0	62.4	14.00	14.00	2777.6	660.0
	12,300	42.34	0.00	100	12271	120.1	0.0	120.1	14.00	14.00	2719.9	660.0
	12,400	56.34	0.00	100	12336	195.8	0.0	195.8	14.00	14.00	2644.2	660.0
	12,500	70.34	0.00	100	12381	284.9	0.0	284.9	14.00	14.00	2555.1	660.0
	12,600	82.34	0.00	100	12405	381.9	0.0	381.9	12.00	12.00	2458.1	660.0
Reach 90° inclination (maximum TVD)	12,664	90.00	0.00	64	12409	445.5	0.0	445.5	12.00	12.00	2394.5	660.0
End build, land curve; hold inclination to TD	12,700	94.37	0.00	36	12408	481.9	0.0	481.9	12.00	12.00	2358.1	660.0
	12,900	94.37	0.00	200	12392	681.1	0.0	681.1	0.00	0.00	2158.9	660.0
	13,000	94.37	0.00	100	12385	780.8	0.0	780.8	0.00	0.00	2059.2	660.0
	13,100	94.37	0.00	100	12377	880.5	0.0	880.5	0.00	0.00	1959.5	660.0
	13,200	94.37	0.00	100	12370	980.2	0.0	980.2	0.00	0.00	1859.8	660.0
	13,300	94.37	0.00	100	12362	1079.9	0.0	1079.9	0.00	0.00	1760.1	660.0
	13,400	94.37	0.00	100	12354	1179.7	0.0	1179.7	0.00	0.00	1660.3	660.0
	13,500	94.37	0.00	100	12347	1279.4	0.0	1279.4	0.00	0.00	1560.6	660.0
	13,600	94.37	0.00	100	12339	1379.1	0.0	1379.1	0.00	0.00	1460.9	660.0
	13,700	94.37	0.00	100	12331	1478.8	0.0	1478.8	0.00	0.00	1361.2	660.0
	13,800	94.37	0.00	100	12324	1578.5	0.0	1578.5	0.00	0.00	1261.5	660.0
	13,900	94.37	0.00	100	12316	1678.2	0.0	1678.2	0.00	0.00	1161.8	660.0
	14,000	94.37	0.00	100	12309	1777.9	0.0	1777.9	0.00	0.00	1062.1	660.0
	14,100	94.37	0.00	100	12301	1877.6	0.0	1877.6	0.00	0.00	962.4	660.0
	14,200	94.37	0.00	100	12293	1977.3	0.0	1977.3	0.00	0.00	862.7	660.0
	14,300	94.37	0.00	100	12286	2077.0	0.0	2077.0	0.00	0.00	763.0	660.0
Est. Total Depth; run 4-1/2" cemented casing or liner	14,380	94.37	0.00	80	12280	2156.8	0.0	2156.8	0.00	0.00	683.2	660.0

CHESAPEAKE OPERATING INC

Proposed Well Schematic (drilling)



WELL : Langley Greer Com 3H
 SHL : Section 21 - 22S - 36E, 2440' FSL & 662' FWL (2840' FNL)
 BHL : Section 21 - 22S - 36E, 660' FNL & 660' FWL; Hard Lines
 COUNTY : Lea
 STATE : New Mexico
 FIELD : Langley (Devonian)
 ELEVATION : GL - 3543' RKB - 3566' (based on est. 23' KB)

