

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. P. O. Box 11050 Midland, TX 79702-8050		² OGRID Number 147179
³ Property Code 34721		⁴ Property Name Ogden 15
⁵ Proposed Pool 1 Wildcat, Upper Penn		⁶ Well No. 1
⁷ Surface Location		⁸ Proposed Pool 2

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/Westline	County
O	15	23S	27E		990	South	660	East	Eddy

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/Westline	County

¹¹ Work Type Code PB	¹² Well Type Code Gas	¹³ Cable/Rotary	¹⁴ Lease Type Code P	¹⁵ Ground Level Elevation 3131
¹⁶ Multiple	¹⁷ Proposed Depth	¹⁸ Formation	¹⁹ Contractor	²⁰ Spud Date 01/26/2006
Depth to Groundwater 100		Distance from nearest fresh water well 100+		Distance from nearest surface water 1000+
Pit: Liner: Synthetic <input type="checkbox"/> mil thick Clay <input type="checkbox"/>		Pit Volume: _____ bbls		
Closed-Loop System <input type="checkbox"/>		Drilling Method: _____		
		Fresh Water <input type="checkbox"/> Brine <input type="checkbox"/> Diesel/Oil-based <input type="checkbox"/> Gas/Air <input type="checkbox"/>		

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
17 1/2	13 3/8	48	428	385	0
11	8 5/8	32	2060	665	0
7 7/8	5 1/2	20 & 17	12447	1845	0

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.
See the attached procedure:

THERE WILL BE NO PIT USED.

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 <input type="checkbox"/> , a general permit <input type="checkbox"/> , or an (attached) alternative OCD-approved plan <input type="checkbox"/> .		OIL CONSERVATION DIVISION	
Printed name: Brenda Coffman		Approved by: <i>Jim W. Gurn</i>	
Title: Regulatory Analyst		Title: District II Supervisor	
E-mail Address: bcoffman@chkenegy.com		Approval Date: FEB 02 2006	
Date: 01/25/2006		Expiration Date: FEB 02 2007	
Phone: (432)687-2992		Condition of Approval Attached <input type="checkbox"/>	

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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 30-015-34032	Pool Code 96072	Pool Name Wildcat, Upper Penn
Property Code 34721	Property Name Ogden 15	Well Number 1
OGRID No. 147179	Operator Name Chesapeake Operating Inc.	Elevation 3131 GR


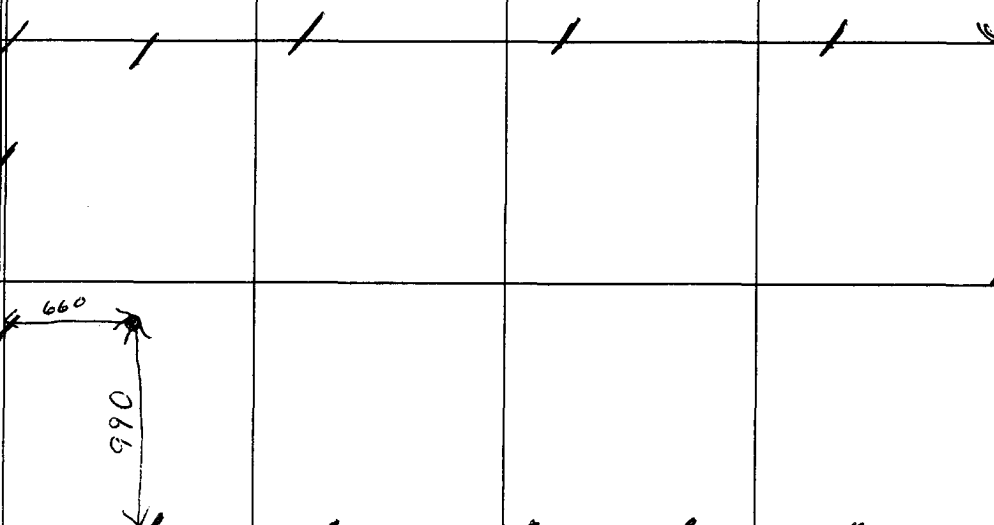
¹⁰ Surface Location

UL or lot no. O	Section 15	Township 23S	Range 27E	Lot Idn	Feet from the 990	North/South line South	Feet from the 660	East/West line East	County
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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 320	" 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.

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 01/25/2006 Date Brenda Coffman 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: Certificate Number

Ogden 15 #1
Eddy County, New Mexico

Canyon Shale Re-Completion – January 17, 2006

GENERAL INFORMATION

Location: 990' FSL & 660' FWL, S15 – T23S – R27E

API No.: 35-015-34032

Drilling & Completion Cost to Date: \$2,916,641

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' – 428'	12.715"	12.559"	1730	0'
8-5/8"	32# J55 LTC	0' - 2060'	7.921"	7.796"	3930	0'
5-1/2"	20&17# L80 LTC	0' - 12447'	4.778"	4.653"	7740	0'

Upper Morrow "A" perfs: 11756 – 67'

Morrow "C" perfs: 11657 – 67'

TD/PBTD: 12450' / 11845'

Proposed Canyon Shale Perfs: 10586 – 94', 10568 – 76', 10480 – 85', 10440 – 43', 10422 – 24'

Procedure

1. Kill well as required with 2% KCL. POOH with 2-3/8" tubing and packer.
2. Set a CIBP @ 11620'. Bail 2 sx of cement on plug. *35' of cement min.*
3. Load hole with 2% KCL. Test casing and plug to 5000#.
4. RU lubricator and RIH w/ 3-1/8" HSD casing gun. Perforate the Canyon Shale w/ 3 SPF, 120 degree phasing, 22.7 gram charge, .41" holes from 10586 – 94' (24 holes), 10568 – 76' (24 holes), 10480 – 85' (15 holes), 10440 – 43' (9 holes), 10422 – 24' (6 holes). Correlate to OH Density/Neutron log dated 10/02/05.
5. RIH w/ 5-1/2" PPI packer on 2-3/8" tubing. Make up PPI packer as to allow isolating an 8' interval. MIRU Schlumberger Set PPI at ~ 10650'. Test tool to 3000#. Pull and swing tool at 10594'. Displace 1350 gallons of 15% NeFe Acid down tubing. Displace with 2% KCL. Displace the leading volume of acid past the EOT by 150 gallons to cover entire perforated interval.
6. Straddle and isolate the interval 10586 – 94'. Drop injection control valve. Break down interval with 200 gal of acid at 1/2 BPM. Monitor annulus for communication. Breakdown remaining four intervals likewise with 200 gal of acid per zone. After breaking down the top interval 10422 – 24', release PPI tool and circulate the wellbore bottoms up to clear of any unspent acid.
7. Straddle lower interval 10586 – 94' as before. Perform pre-frac stress test. Pump ~ 1/2 bbl of 2% KCL water into zone at 1/4 BPM. SI and monitor pressure for 5 minutes. Repeat two more times. Bleed off pressure in 100 psi increments re-initiating injection at each 100 psi increment for several seconds. Repeat as necessary. Bleed off pressure and move PPI tool to next interval above. Repeat this same procedure on each perforated interval.

8. Swing PPI tool at ~10380'. Pull injection control valve. Set packer. Pressure annulus to 1000#. Pump ~ 50 bbl of 2% KCL at rates approaching 5 to 7 BPM (as pressure allows) to initiate a fracture. Max pressure 7700#. SI to obtain ISIP and 5, 10, and 15 minute data.
9. POOH laying down tubing. NU frac valve. RDMO.
10. Prep to frac. Move in frac tanks. Load with fresh water.
11. MIRU Schlumberger and frac equipment. NU casing saver. Hold pre-frac safety and planning meeting. Frac Canyon Shale per frac schedule with 130,000 gal 20# linear gel pad followed by slickwater ramping 30/70 Ottawa sand from .2 ppg to .5 ppg. Pump .75 ppg to 2.0 ppg stages with 20# linear gel. Tail in with 20/40 resin coat beginning with the 1.25 ppg stage. Flush to perfs with 2% KCL water. Pump at rates approaching 60 BPM, maximum pressure 9000#. Anticipated treating pressure 5300#. Total fluid with flush 438,092 gallons, total proppant 167,000#.
12. Rig down frac equipment. Strip out casing saver. Flow back frac at rates which minimize sand flow back. Flow test well.
13. As well loads and dies, prep to run tubing. Check PBTD with slick line.
14. MIRU service rig. RIH with bit and tubing as required to clean out sand. As dictated by well performance, packer well up to swab in and flow. Run tubing as follows: Re-entry guide, 4' sub, 'XN' nipple, 10' sub, 'X' nipple, 4' sub, Arrow Set packer, on/off tool w/ 'X' profile nipple. Space out with the EOT at ~10350'.
15. If required, prep to put well on pump and de-water zone. Set 640 PU. Run production tubing as follows:

<u>Item</u>	<u>Depth (+/-)</u>
2-3/8" Tbg	
2-3/8" x 7" TAC	~10000'
2-3/8" Tbg	
SN	10366'
2-3/8" x 3' PS	10367'
1 Jt 2-3/8" Tbg w/BP (Mud Anchor)	10370'
EOT @	~10400'

16. Land TAC w/ 15K tension. Swab to clean up hole of any additional frac sand.
17. RIH w/ 1-1/4" pump and 76 tapered high strength rods. Run 12 – 7/8", 260 – 3/4", and 142 – 7/8" rods (slim hole couplings required on 7/8"). Seat pump. Hang well off. Place well on production at 6 SPM, 144" SL. RDMO.