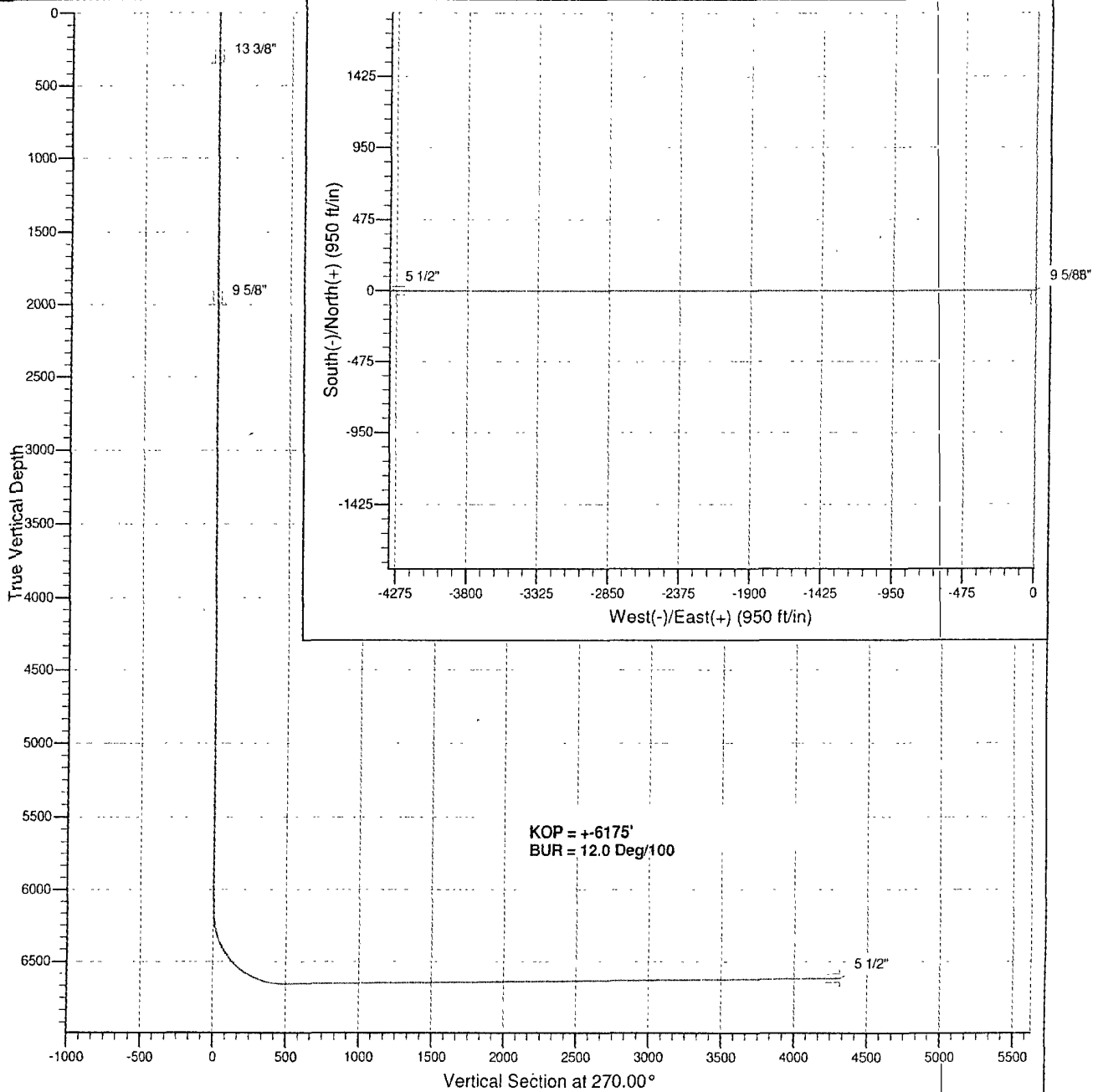


30-015-36349

Chesapeake Operating Inc.Crow Flats 14 Federal 2H

County: Eddy, NM

Section 14-16S-28E

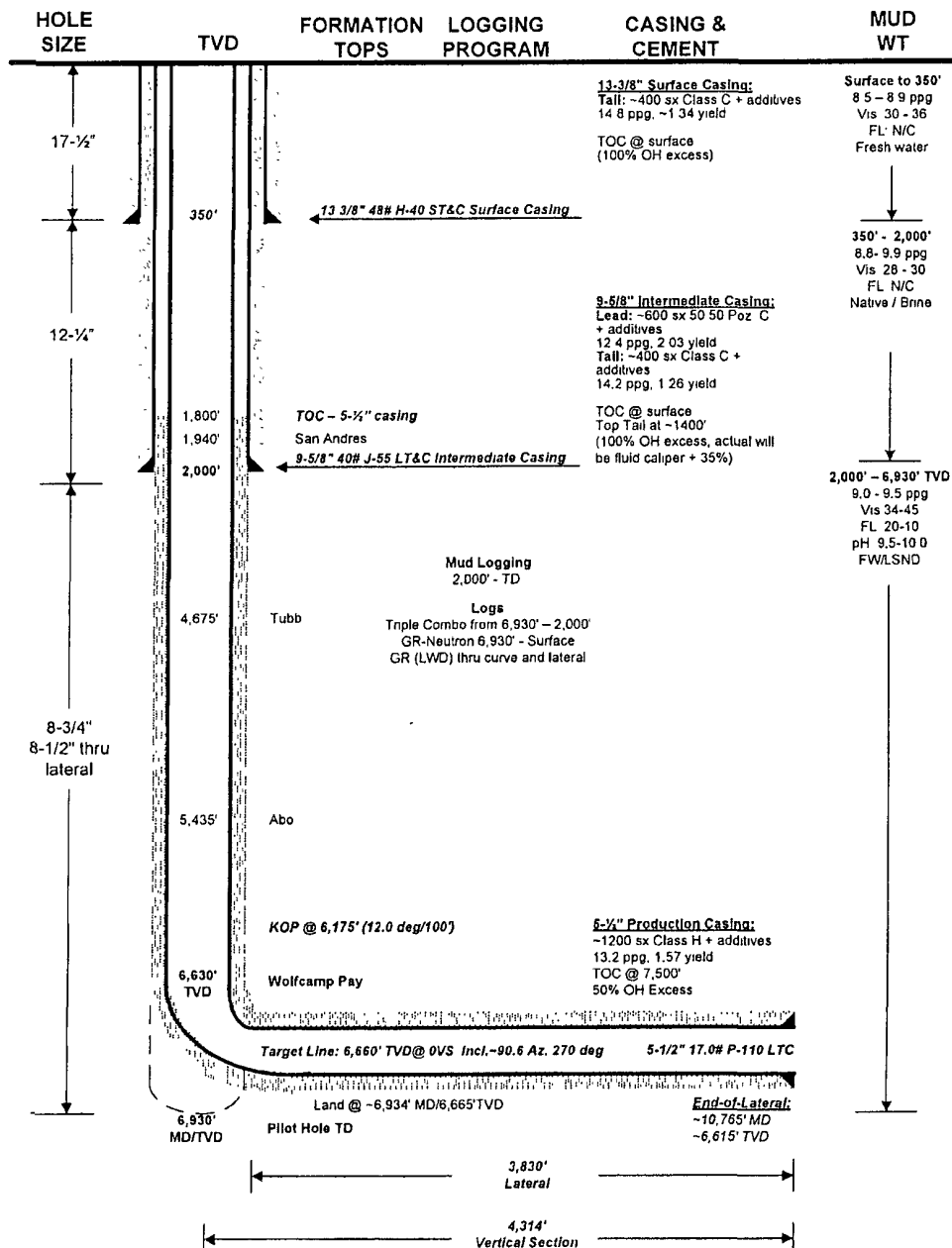


SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	6175.0	0.00	0.00	6175.0	0.0	0.0	0.00	0.00	0.0	
3	6934.1	90.60	270.00	6655.0	0.0	-485.1	11.94	270.00	485.1	
4	10764.0	90.60	270.00	6614.9	0.0	-4314.8	0.00	0.00	4314.8	

Proposed Well Schematic (drilling)

WELL : Crow Flats 14 Federal #2H
SHL : Section 14 - 16S - 28E, 1,980' FNL & 200' FEL
BHL : Section 14 - 16S - 28E, 1,980' FNL & 700' FWL
COUNTY : Eddy
STATE : New Mexico
FIELD : Pioneer Wolfcamp
ELEVATION : GL - 3,547' RKB - 3,565'



PREPARED BY: TAN

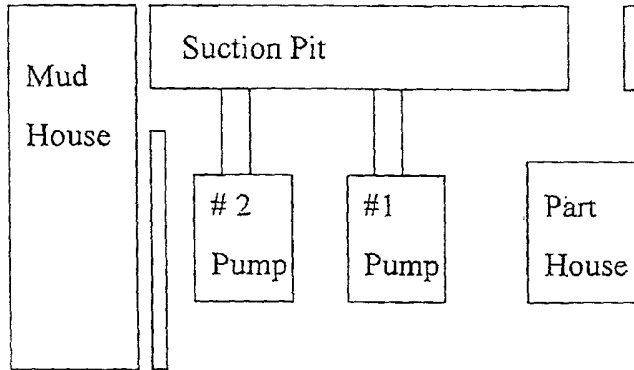
DATE: 1/24/08

APPROVED BY: _____

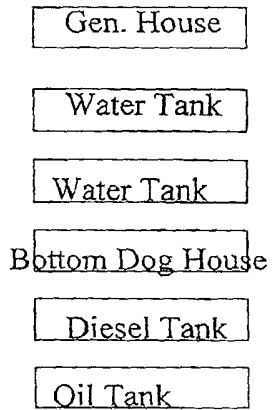
DATE: _____

RIG 142

Closed Loop System



165'



CELLAR 8' X 8' X 6'

Bunk House

Water
Trailer

100' Lay Down Rack

Sub
Box

Pipe
Rack

Pipe
Rack

150'

Pipe
Rack

Pipe
Rack

Top
Dog
House

75'

Accumulator

40'

30'

EXHIBIT

ONSHORE ORDER NO. 1
Chesapeake Operating, Inc.
Crow Flats 14 Federal 2H
SL: 1980' FNL & 200' FEL
BL: 1980' FNL & 700' FWL
of Section 14-16S-28E
Eddy Co., New Mexico

CONFIDENTIAL – TIGHT HOLE
Lease Contract No. NMNM 095630

DRILLING PROGRAM

5. Cementing Program

<u>Interval</u>	<u>Type</u>	<u>Amount</u>	<u>Yield</u>	<u>Top of CMT</u>	<u>Excess</u>
Surface	Class C 2% CaCl ₂ (Accelerator)	400 sks	1.34	Surface	100%
Intermediate	Lead: 50/50 Poz/Class C 1% CaCl ₂ (Accelerator)	600 sks	2.03	Surface	100%
	Tail: Class C Neat	400 sks	1.26		100%
Production	Class H 0.5% LAP-1 (Fluid Loss Control) 0.4% CFR-3 (Dispersant) 1 lbm/sk Salt 0.3% HR-7 (Retarder) 0.25 lbm D-AIR 3000 (Defoamer)	1600 sks	1.57	1,800'	50%

6. MUD PROGRAM

a. The proposed circulating mediums to be used in drilling are as follows:

<u>Interval</u>	<u>Mud Type</u>	<u>Mud Weight</u>	<u>Viscosity</u>	<u>Fluid Loss</u>
0' – 350'	FW/Gel	8.5 – 8.9	30-36	NC
350' – 2,000'	Native/Brine	8.8 – 9.9	28-30	NC
2,000' - TD	FW/LSND	9.0 – 9.5	34-45	20-10

A closed system will be utilized consisting of above ground steel tanks. All wastes accumulated during drilling operations will be contained in a portable trash cage and removed from location and deposited in an approved sanitary landfill.

A mud test shall be performed every 24 hours after mudding up to determine, as applicable: density, viscosity, gel strength, filtration, and pH.

6. TESTING, LOGGING AND CORING

The anticipated type and amount of testing, logging and coring are as follows:

- Drill stem tests are not planned.
- The logging program will consist of Natural GR, Density-Neutron, PE & Dual Laterolog from TD to surface casing; Neutron-GR surface casing to surface.

ONSHORE ORDER NO. 1
Chesapeake Operating, Inc.
Crow Flats 14 Federal 2H
SL: 1980' FNL & 200' FEL
BL: 1980' FNL & 700' FWL
of Section 14-16S-28E
Eddy Co., New Mexico

CONFIDENTIAL – TIGHT HOLE
Lease Contract No. NMNM 095630

DRILLING PROGRAM

ONSHORE OIL & GAS ORDER NO. 1
Approval of Operations on Onshore
Federal and Indian Oil and Gas Leases

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (CFR 43, Part 3160) and the approved Application for Permit to Drill. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling and completion operations.

Approval of this application does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease, which would entitle the applicant to conduct operations thereon.

1. FORMATION TOPS

The estimated tops of important geologic markers are as follows:

Formation	Subsea	Depth
San Andres	1695	1897
Tubb	-1015	4607
Abo	-1775	5667
*Wolfcamp "Pay"	-2935	6527
TD (vertical)		6830
TVD at BHL		Approx. 6867
MD		Approx. 10,680

2. ESTIMATED DEPTH OF WATER, OIL, GAS & OTHER MINERAL BEARING FORMATIONS

The estimated depths at which the top and bottom of the anticipated water, oil, gas or other mineral bearing formations are expected to be encountered are as follows:

Substance	Formation	Depth
Oil/Gas	Wolfcamp	6527

All shows of fresh water and minerals will be reported and protected.

DISTRICT I
1625 N. FRENCH DR., HOBBS, NM 88240

DISTRICT II
1301 W. GRAND AVENUE, ARTESIA, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV
1220 S. ST. FRANCIS DR., SANTA FE, NM 87505

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
State Lease - 4 Copies
Fee Lease - 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code	Pool Name
	97102	Undes. Crow Flats; Wolfcamp Oil
Property Code	Property Name	Well Number
	CROW FLATS 14 FEDERAL	2H
OGRID No.	Operator Name	Elevation
147179	CHESAPEAKE OPERATING, INC.	3547'

Surface Location

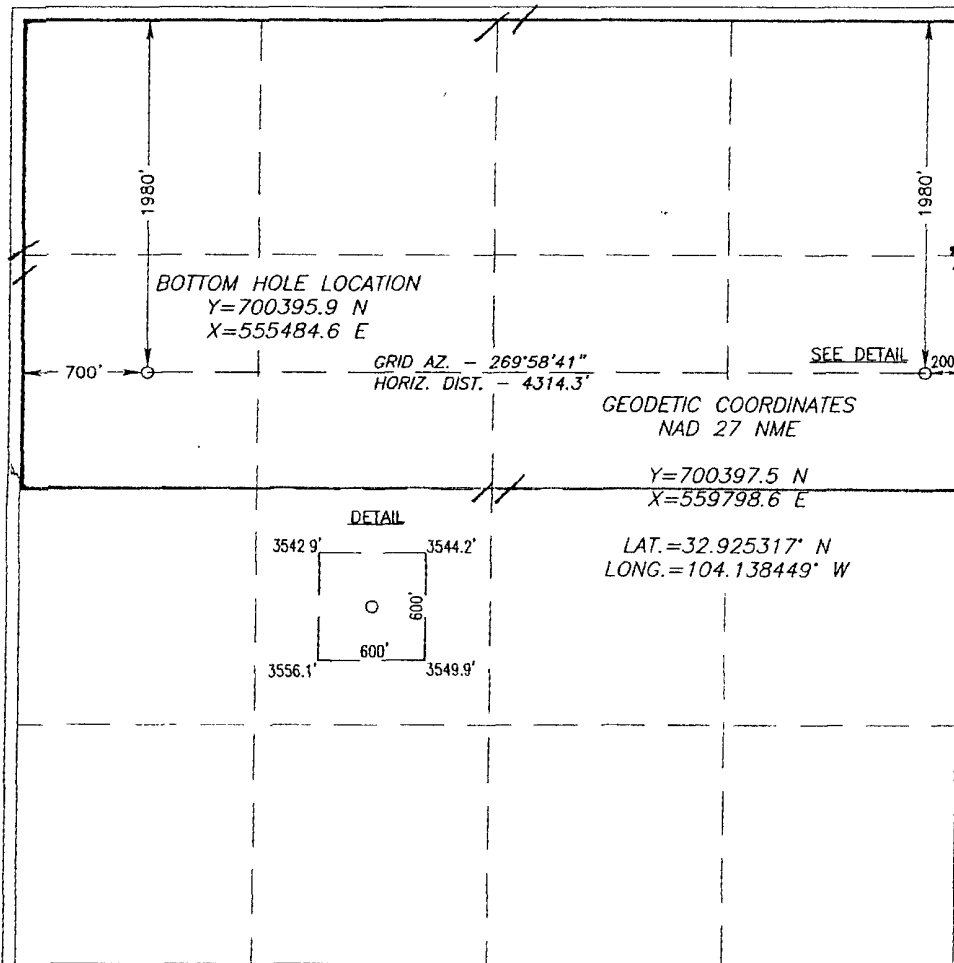
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	14	16-S	28-E		1980	NORTH	200	EAST	EDDY

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
E	14	16-S	28-E		1980	NORTH	700	WEST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	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



OPERATOR CERTIFICATION

I hereby certify that the informs 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 the owner of such mineral or working interest or to a voluntary pooling agreement or compulsory pooling order heretofore approved by the division.

Lynda F. Townsend
Signature Date
Lynda F. Townsend
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.

DATE SURVEYED: AUGUST 7, 2007
SIGNATURE & SEAL OF PROFESSIONAL SURVEYOR: *Ronald J. Eidson*
Certificate No. GARY EIDSON 12841
RONALD EIDSON 3239

EXHIBIT A-1