

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

POTASH
FORM APPROVED
OMB No. 1004-0136
Expires November 30, 2000

EC

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NMNM24683
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator CHESAPEAKE OPERATING INC		7. If Unit or CA Agreement, Name and No.
Contact: SHARON E. DRIES E-Mail: sdries@chkenenergy.com		8. Lease Name and Well No. MERCHANT FEDERAL #1
3a. Address P O BOX 18496 OKLAHOMA CITY, OK 73154	3b. Phone No. (include area code) Ph: 405.879.7985 Fx: 405.879.9583	9. API Well No. 30-025-36318
4. Location of Well (Report location clearly and in accordance with any State requirements.) At surface SESW 880FSL 1760FWL 32.24050 N Lat, 103.35488 W Lon At proposed prod. zone N Secretary's Potash		10. Field and Pool, or Exploratory PERMIAN UNDESIGNATED Bootleg Ridge Morrow
14. Distance in miles and direction from nearest town or post o 67 MILES FROM HOBBS		11. Sec., T, R, M., or Bk. and Survey or Area Sec 8 T22S R33E Mer NMP SME: BLM
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 880		12. County or Parish LEA
16. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft. UNKNOWN		13. State NM
21. Elevations (Show whether DF, KB, RT, GL, etc.) 3571 GL		17. Spacing Unit dedicated to this well 320.00
22. Approximate date work will start		20. BLM/BIA Bond No. on file
23. Estimated duration		

24. Attachments **Carlsbad Controlled Water Basin**

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification
6. Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature (Electronic Submission)	Name (Printed/Typed) SHARON E. DRIES	Date 05/02/2003
Title AUTHORIZED REPRESENTATIVE		
Approved by (Signature) /S/ RICHARD A. WHITLEY	Name (Printed/Typed) /S/ RICHARD A. WHITLEY	Date JUN 30 2003
Title STATE DIRECTOR		
Office NM STATE OFFICE		

Application approval does not warrant or certify the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

APPROVAL FOR 1 YEAR

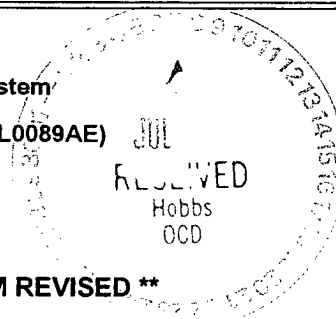
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Additional Operator Remarks (see next page)

Electronic Submission #21268 verified by the BLM Well Information System
For CHESAPEAKE OPERATING INC, sent to the Hobbs
Committed to AFMSS for processing by Armando Lopez on 05/02/2003 (03AL0089AE)

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS
ATTACHED

** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED **



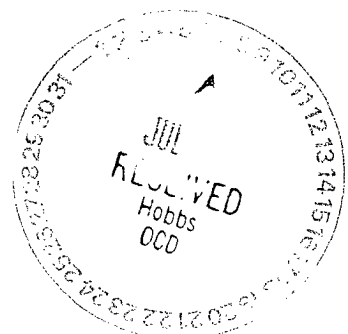
Additional Operator Remarks:

Chesapeake Operating, Inc. proposes to drill a well to 5400' to test the Bell Canyon, Basal Brushy Canyon Sd, Upper Bone Springs Pay, First Bone Springs, Atoka, and Morrow formations. If productive, casing will be run and the well will be completed. If dry, the well will be plugged and abandoned as per BLM and New Mexico Oil Conservation Division requirements.

Attached please find the Surface Use Plan, Drilling Plan, and attachments as required by Onshore Order No. 1. A generic rig layout is attached as Exhibit F.
A final rig layout will be submitted prior to spud once a rig is assigned.

Please be advised that Chesapeake Operating, Inc. is considered to be the Operator of the above mentioned well. Chesapeake Operating, Inc. agrees to be responsible under the terms and conditions of the lease for the operations conducted upon the lease lands.

Bond coverage for this well is provided by Chesapeake Operating, Inc. under Nationwide Bond No. NM2634.



DISTRICT I
P.O. Box 1266, Hobbs, NM 88241-1266

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised February 10, 1994
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

DISTRICT II
P.O. Drawer 88, Artesia, NM 88211-0719

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

DISTRICT III
1003 His Brazos Rd., Artesia, NM 87410

DISTRICT IV
P.O. Box 2088, Santa Fe, N.M. 87504-2088

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-025-36318	Pool Code 72.650	Pool Name 'Bootleg Ridge,' Morrow
Property Code 32532	Property Name MERCHANT & FEDERAL #	Well Number 1
OGED No. 147179	Operator Name CHESAPEAKE OPERATING, INC.	Elevation 3571'

Surface Location

UL or lot No.	Section	Township	Range	Lot 16n	Feet from the	North/South line	Feet from the	East/West line	County
N	8	22-S	33-E		880'	SOUTH	1760'	WEST	LEA

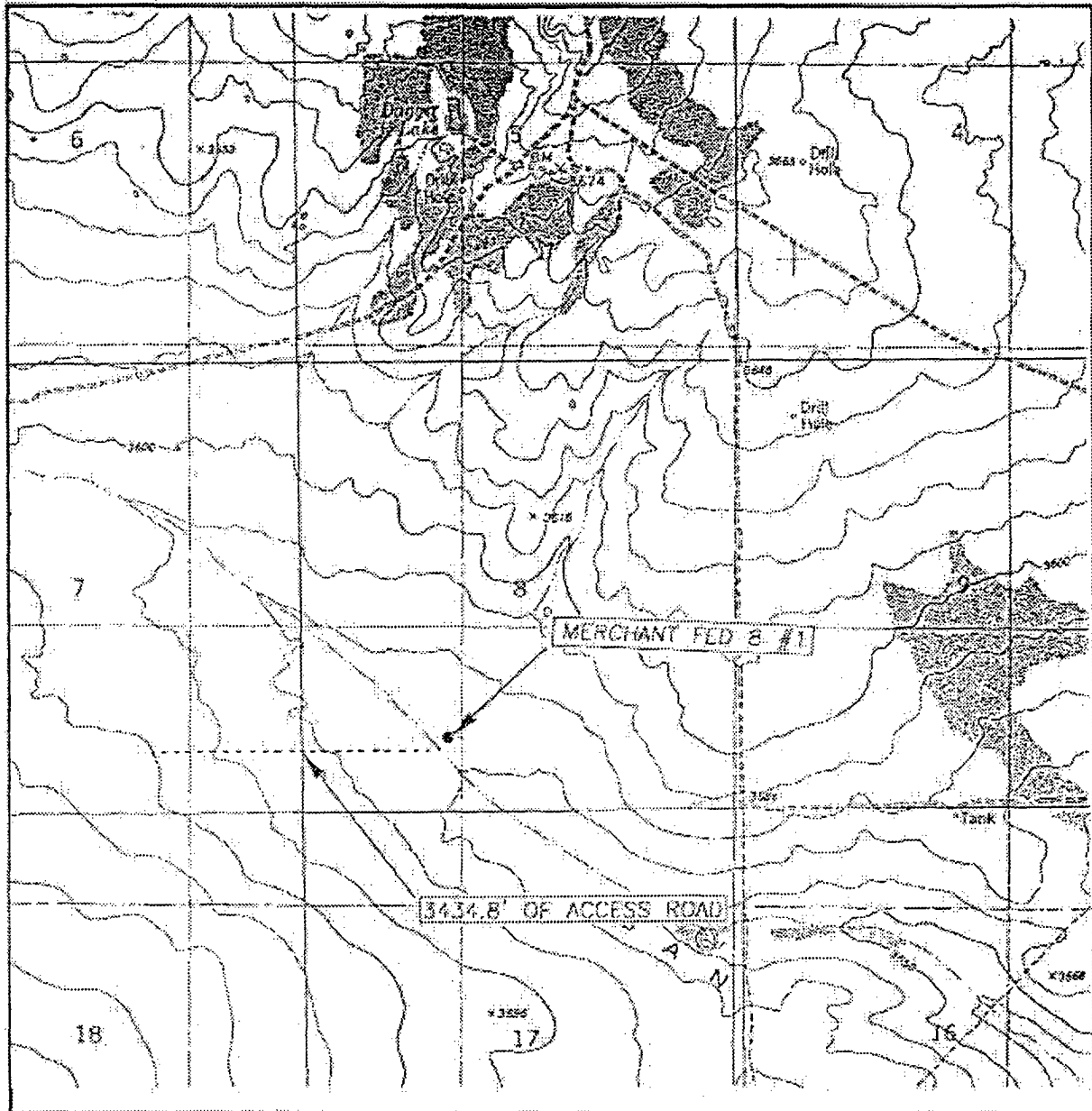
Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot 16n	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

<p>GEODETIC COORDINATE NAD 1983 NME Y = 510524.3 X = 727293.3 LAT. 32°24'05.02"N LONG. 103°35'45.84"W</p>	<p>OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief. <i>Lynnda F. Townsend</i> Signature Lynnda F. Townsend Printed Name Landman Title 4-1-03 Date</p>
<p>RESERVED Hobbs OCD</p>	<p>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. MARCH 26, 2003 Date Surveyed Signature & Seal of Professional Surveyor <i>Larry E. Simson</i> 3/27/03 03.14.03500 Certificate No. RAYMOND J. SIMSON 5250 LARRY SIMSON 12641</p>

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL: 10'
GRAMA RIDGE, N.M.

SEC. 8 TWP. 22-S RGE. 33-E

SURVEY N.M.P.M.

COUNTY LEA

DESCRIPTION 880' FSL & 1760' FWL

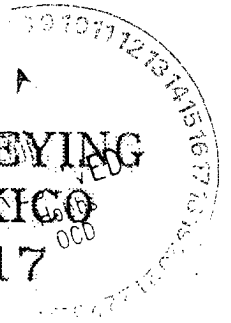
ELEVATION 3571'

OPERATOR CHESAPEAKE OPERATING, INC.

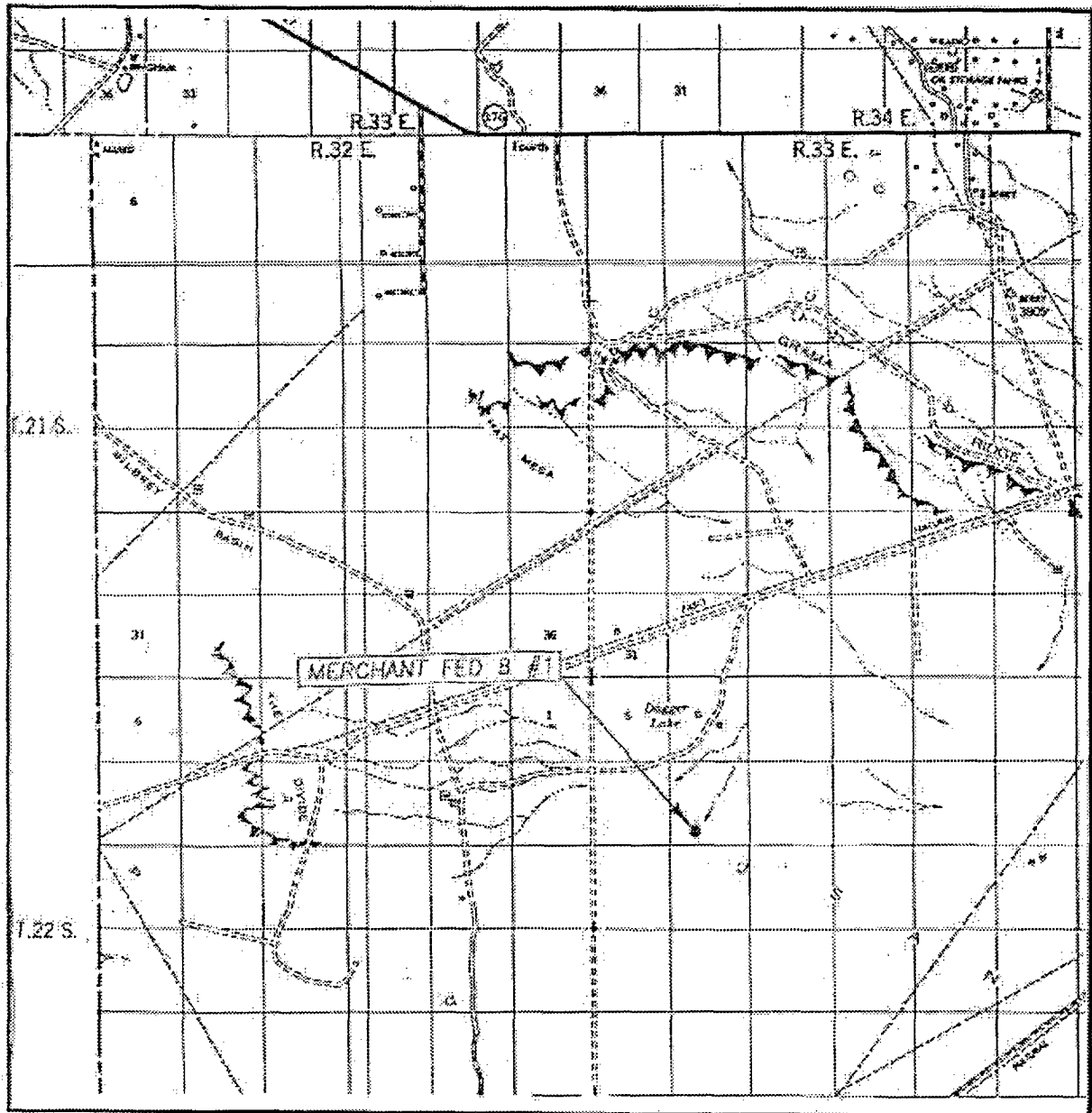
LEASE MERCHANT FEDERAL 8

U.S.G.S. TOPOGRAPHIC MAP
GRAMA RIDGE, N.M.

JOHN WEST SURVEYING
HOBBS, NEW MEXICO
(505) 393-3117



VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 8 TWP. 22-S RGE. 33-E

SURVEY N.M.P.M.

COUNTY LEA

DESCRIPTION 880' FSL & 1760' FWL

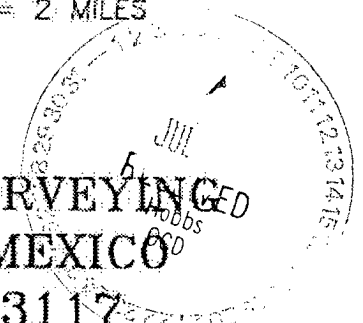
ELEVATION 3571'

OPERATOR CHESAPEAKE OPERATING, INC.

LEASE MERCHANT FEDERAL B

JOHN WEST SURVEYING
HOBBS, NEW MEXICO

(505) 393-3117



ONSHORE ORDER NO. 1
Chesapeake Operating, Inc.
MERCHANT FEDERAL 1-8
880' FSL & 1,760' FWL
SE SW of Section 8-22S-33E
Lea County, NM

CONFIDENTIAL – TIGHT HOLE
Lease Contract No. NMNM 096244

DRILLING PROGRAM

Page 1

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

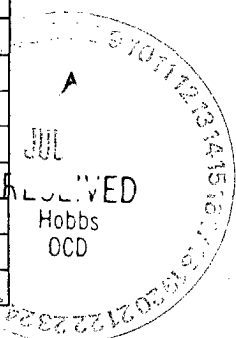
All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (CFR 43, Part 3160) and the approved Application for Permit to Drill. The operator is considered fully responsible for the actions of his subcontractors. A copy of 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	Depth	Subsea
Rustler	890	2705
Delaware	4770	-1175
Bell canyon	4900	-1350
Cherry Canyon	5690	-2095
Cherry Canyon Marker	5910	-2315
Brushy Canyon	6900	-3305
Basal Brushy Canyon Sd	8430	-4835
Bone Springs Lime	8610	-5015
Upper Bone Springs Pay	8820	-5225
First Bone Springs	9820	-6225
Second Bone Springs	10470	-6875
Third Bone Springs	11640	-8045
Wolfcamp	11870	-8275
Cisco	12790	-9195
Canyon	13260	-9665
Strawn	13420	-9825
Atoka	13620	-10025
Atoka Sand	13710	-10115
Atoka Bank	13760	-10165
Upper Morrow Marker	14310	-10715
U Morrow Red Tank Sand	14390	-10795
Morrow Clastic	14500	-10905



DRILLING PROGRAM

Page 2

Middle Morrow Marker	14550	-10955
Morrow B Sand	14600	-11005
Morrow C Sand	14730	-11135
Lower Morrow	14960	-11365
Upper Lower Morrow Sand	14990	-11395
Barnett Shale	15120	-11525
Total Depth	5400	-11805

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:

<u>Substance</u>	<u>Formation</u>	<u>Depth</u>
Oil	Bell Canyon	4900
Oil	Basal Brushy Canyon Sand	8430
Oil	Upper Bone Springs Pay	8820
Oil	First Bone Springs	9820
Gas	Atoka Sand	13710
Gas	U Morrow Red Tank Sand	14390
Gas	Morrow B Sand	14600
Gas	Morrow C Sand	14730
Gas	Upper Lower Morrow Sand	14990

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

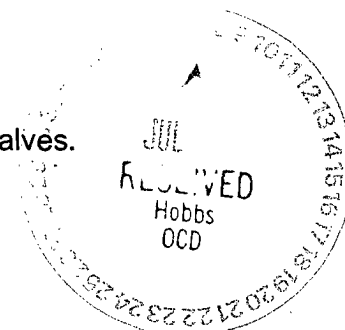
3. BOP EQUIPMENT: 10,000# System

Chesapeake Operating, Inc.'s minimum specifications for pressure control equipment are as follows:

I. BOP, Annular, Choke Manifold, Pressure Test

A. Equipment

1. The equipment to be tested includes all of the following that is installed on the well. See Exhibit H and I.
 - (a) Ram-type and annular preventers,
 - (b) Choke manifolds and valves,
 - (c) Kill lines and valves, and
 - (d) Upper and lower kelly cock valves, inside BOP's and safety valves.



B. Test Frequency

1. All tests should be performed with clear water,
 - (a) when installed,
 - (b) before drilling out each casing string,
 - (c) at any time that there is a repair requiring a pressure seal to be broken in the assembly, and
 - (d) at least once every 30 days while drilling.

C. Test Pressure

1. In some drilling operations, the pressures to be used for low and high-pressure testing of preventers and casing may be different from those given below due to governmental regulations, or approved local practices.
2. If an individual component does not test at the low pressure, **do not**, test to the high pressure and then drop back down to the low pressure.
3. All valves located downstream of a valve being tested must be placed in the open position.
4. All equipment will be tested with an initial "low pressure" test at 250 psi.
5. The subsequent "high pressure" test will be conducted at the rated working pressure of the equipment for all equipment except the annular preventer.
6. The "high pressure" test for the annular preventer will be conducted at 70% of the rated working pressure.
7. A record of all pressures will be made on a pressure-recording chart.

D. Test Duration

1. In each case, the individual components should be monitored for leaks for 5 minutes, with no observable pressure decline, once the test pressure has been applied.

II. Accumulator Performance Test

A. Scope

1. The purpose of this test is to check the capabilities of the BOP control systems, and to detect deficiencies in the hydraulic oil volume and recharge time.

B. Test Frequency

1. The accumulator is to be tested each time the BOP's are tested, or any time a major repair is performed.

C. Minimum Requirements

1. The accumulator should be of sufficient volume to supply 1.5 times the volume to close and hold all BOP equipment in sequence, **without recharging and the pump turned off**, and have remaining pressures of **200 PSI above the precharge pressure**.

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OCD

DRILLING PROGRAM

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2. Minimum precharge pressures for the various accumulator systems per manufacturers recommended specifications are as follows:

<u>System Operating Pressures</u>	<u>Precharge Pressure</u>
1,500 PSI	750 PSI
2,000 PSI	1,000 PSI
3,000 PSI	1,000 PSI

3. Closing times for the Hydril should be less than 20 seconds, and for the ram-type preventers less than 10 seconds.

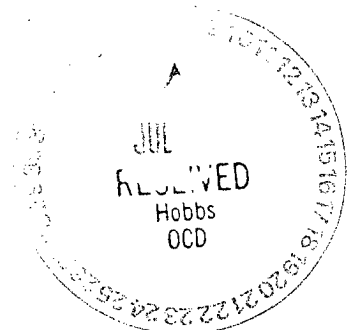
4. System Recharge time should not exceed 10 minutes.

D. Test Procedure

1. Shut accumulator pumps off and record accumulator pressure.
2. In sequence, close the annular and one set of properly sized pipe rams, and open the HCR valve.
3. Record time to close or open each element and the remaining accumulator pressure after each operation.
4. Record the remaining accumulator pressure at the end of the test sequence. Per the previous requirement, this pressure should not be less than the following pressures:

<u>System Pressure</u>	<u>Remaining Pressure At Conclusion of Test</u>
1,500 PSI	950 PSI
2,000 PSI	1,200 PSI
3,000 PSI	1,200 PSI

5. Turn the accumulator pumps on and record the recharge time. This time should not exceed 10 minutes.
6. Open annular and ram-type preventers. Close HCR valve.
7. Place all 4-way control valves in full open or full closed position. Do not leave in neutral position.



4. CASING AND CEMENTING PROGRAM

a. The proposed casing program will be as follows:

<u>Purpose</u>	<u>Interval</u>	<u>Hole Size</u>	<u>Casing Size</u>	<u>Weight</u>	<u>Grade</u>	<u>Thread</u>	<u>Condition</u>
Surface	0'-775'	17-1/2	13-3/8	54.5	J-55	STC	New
Intermediate	0'-4,600'	12-1/4"	9-5/8	40	J-55	LTC	New
Production	0'-12,100'	8-3/4	7	29	L-80	LTC	New
Prod Liner	11,900'-15,400'	6-1/8"	4-1/2"	13.5	P-110	LTC	New

b. Casing design subject to revision based on geologic conditions encountered.

c. The cementing program will be as follows:

<u>Interval</u>	<u>Type</u>	<u>Amount</u>	<u>Yield</u>	<u>Washout</u>	<u>Excess</u>
0'-775'	Class C	500	1.34	50%	100%
0'-4,600'	Class C 50/50 Poz	800	2.37	50%	100%
0'-12,100'	Class H	300	1.07	25%	40%
11,900'-15,400'	Class H	400	1.07	5%	10%

5. 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'-775'	Fresh Water	8.4-8.9	34-36	NC
775'-4,600'	Salt	9.9-10.1	32-34	NC
4600'-12,100'	Fresh Water	8.4-8.5	28-29	NC
12,100'-15,400'	Fresh water polymer	9.8-12.8	36-40	10-12

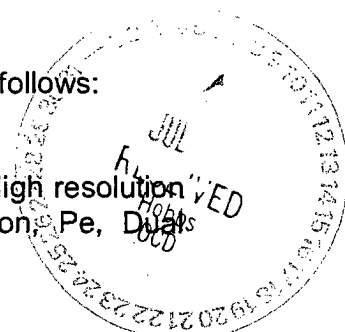
A lined earthen pit will be utilized during the drilling of this well. All fluids and cuttings will be disposed of in accordance with New Mexico Oil Conversation Division rules and regulations.

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 GR, Density, Neutron Pe & High resolution Induction, Sonic from 4800-12,100. Then GR, Density, Neutron, Pe, Dual laterolog, Sonic 12,100 to TD.



ONSHORE ORDER NO. 1
Chesapeake Operating, Inc.
MERCHANT FEDERAL 1-8
880' FSL & 1,760' FWL
SE SW of Section 8-22S-33E
Lea County, NM

CONFIDENTIAL – TIGHT HOLE
Lease Contract No. NMNM 096244

DRILLING PROGRAM

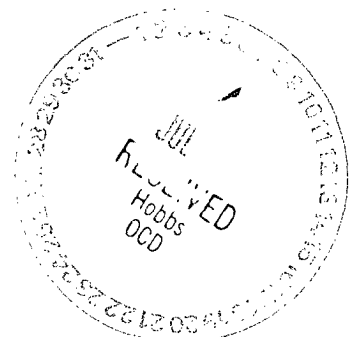
Page 6

c. Cores samples are not planned.

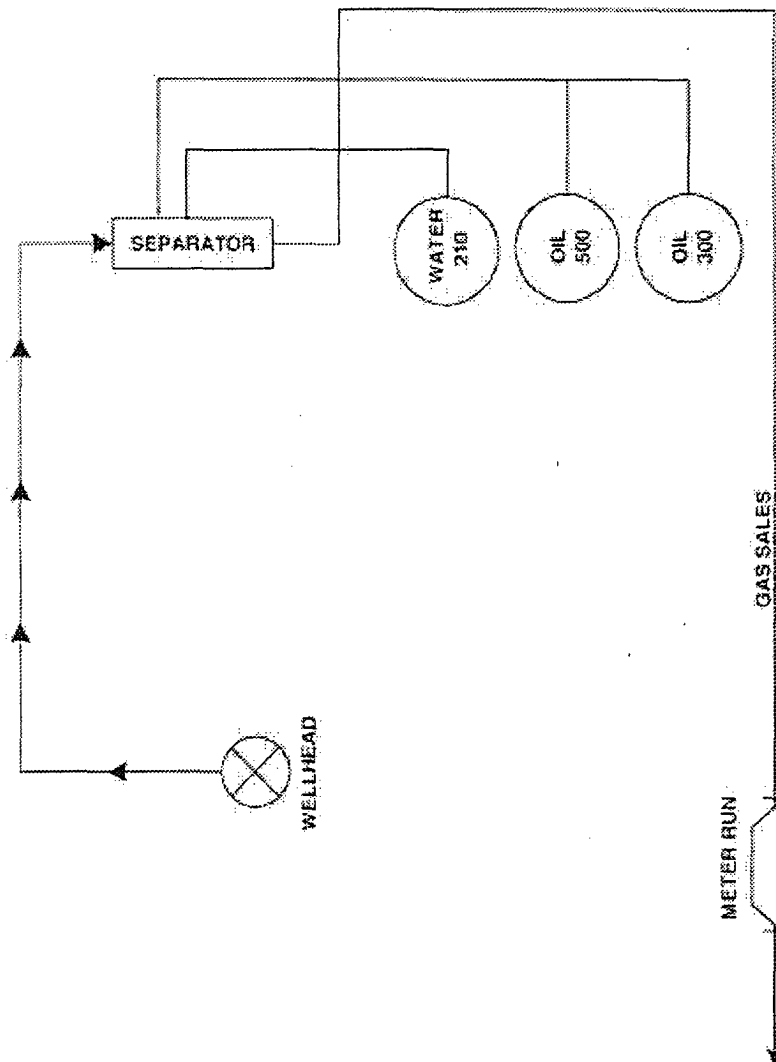
7. ABNORMAL PRESSURES AND HYDROGEN SULFIDE

- a. The estimated bottom hole pressures is 9000 psi. No abnormal pressures or temperatures are anticipated.
- b. Low levels of Hydrogen sulfide gas are expected to be encountered.

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RESERVE PIT AREA



CHESAPEAKE OPERATING, INC.

OKLAHOMA CITY, OK

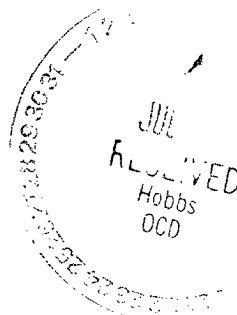
Chesapeake

MERCHANT FEDERAL 8-1

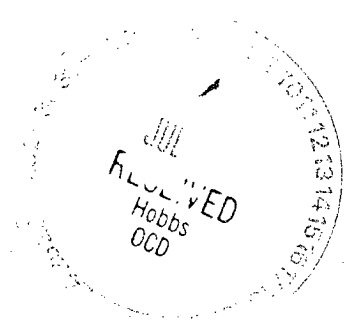
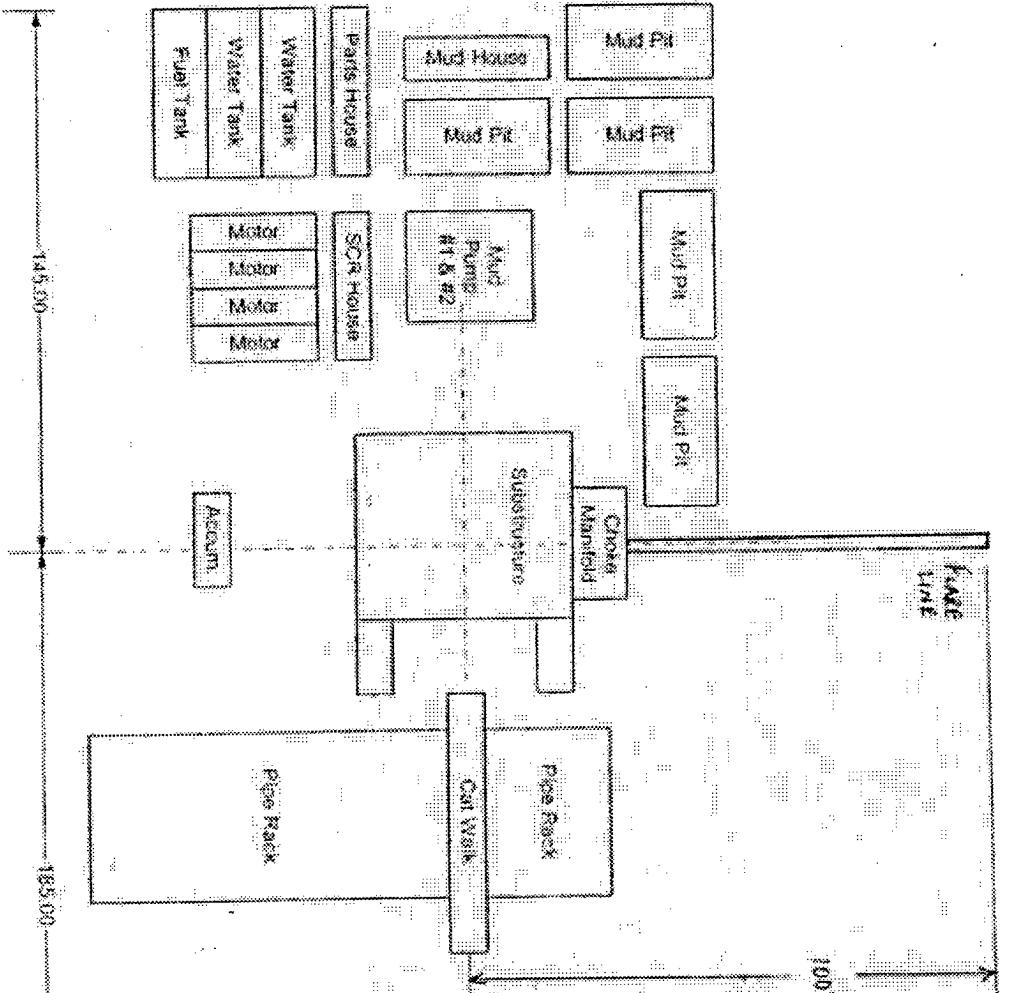
SECTION 8-22S-38E

LEA COUNTY, NEW MEXICO

DATE: 4/24/03
DRAWN BY: GAK
NOT TO SCALE



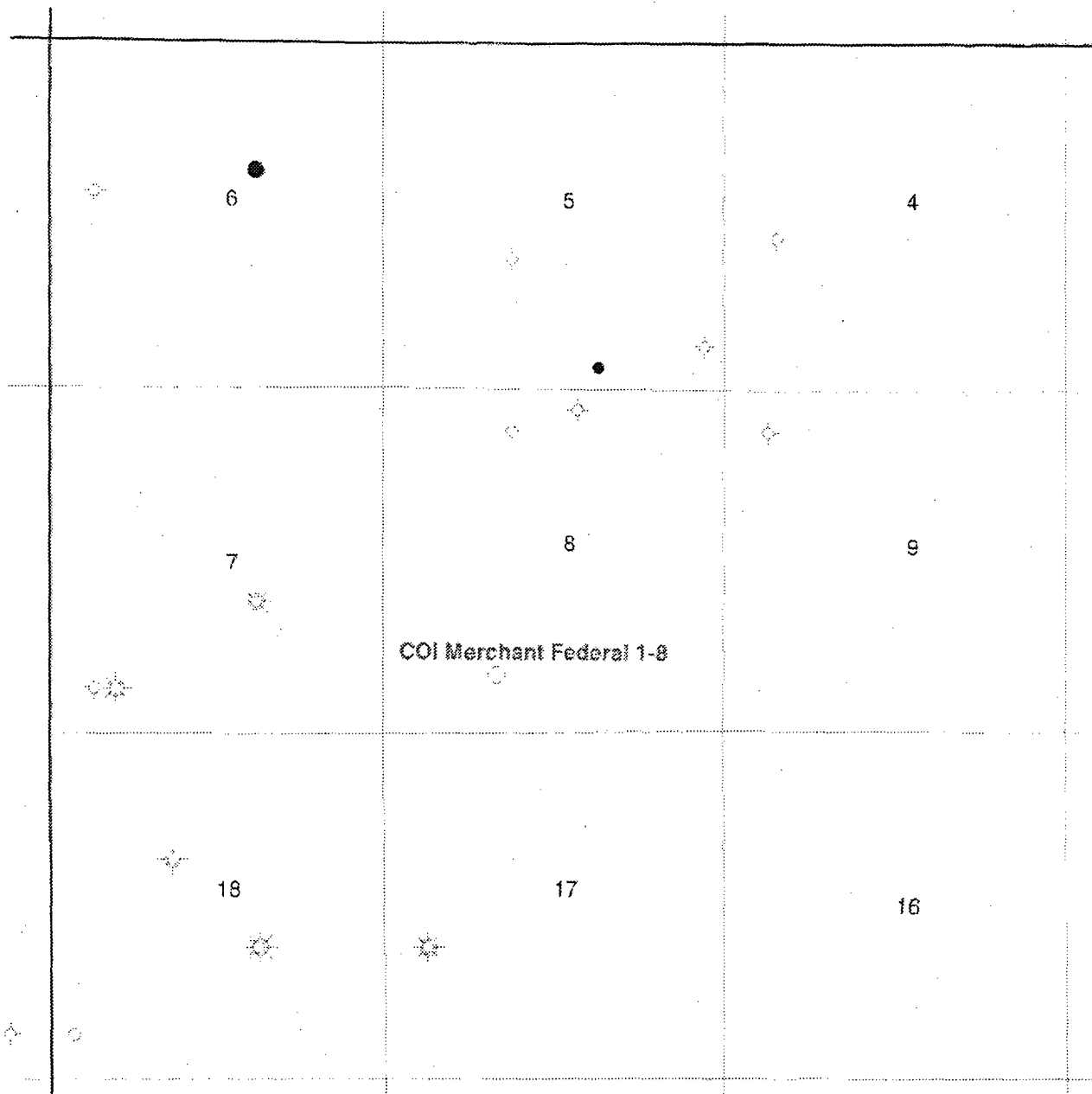
70.00
85.00




Chesapeake Operating, Inc

General Rig Layout

SIZE	FSCM NO	DWG NO	REV
		Generic	



 Chesapeake <small>Natural Gas Pipelines</small>	CHESAPEAKE OPERATING, INC.
Merchant Federal 1-8 880 FSL 1760 FEL Section 8 Township 22 South Range 33 East	
1" = 2420 feet	
Date: 11 April, 2003	Geologist: Doug Bellis

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Hobbs
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BLOWOUT PREVENTOR SCHEMATIC

CHESAPEAKE OPERATING INC

WELL : Merchant Federal 1-8

FIELD :

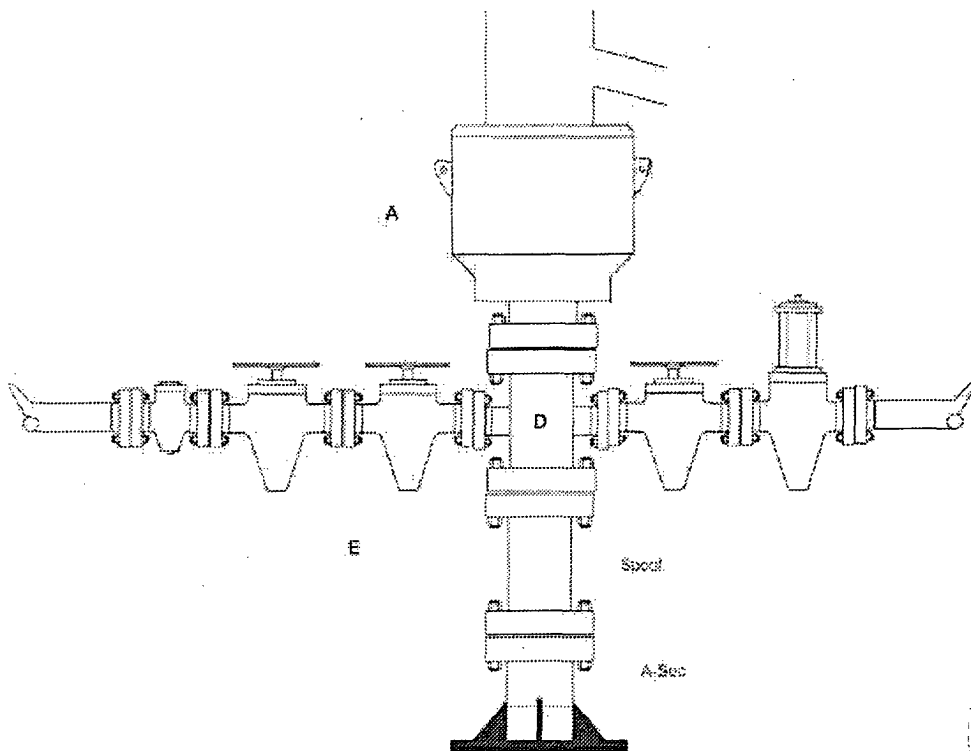
RIG : Unknown

COUNTY : Lea

STATE: New Mexico

OPERATION: Drill out below 13-5/8" Casing

	SIZE	PRESSURE	DESCRIPTION
A	13-5/8"	5,000#	Annular
D	13-5/8"	10,000#	Mud Cross
Spool	13-5/8" 2M x 13-5/8" 10M		
A-Sub	13-5/8" SOW x 13-5/8" 3M		

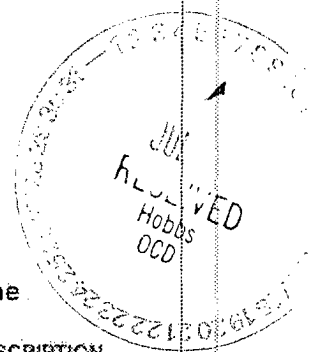


Kill Line

	SIZE	PRESSURE	DESCRIPTION
	2"	10,000#	Check Valve
	2"	10,000#	Gate Valve
	2"	10,000#	Gate Valve

Choke Line

	SIZE	PRESSURE	DESCRIPTION
	4"	10,000#	Gate Valve
	4"	10,000#	HCR Valve



BLOWOUT PREVENTOR SCHEMATIC

CHESAPEAKE OPERATING INC

WELL : Merchant Federal 1-8

FIELD :

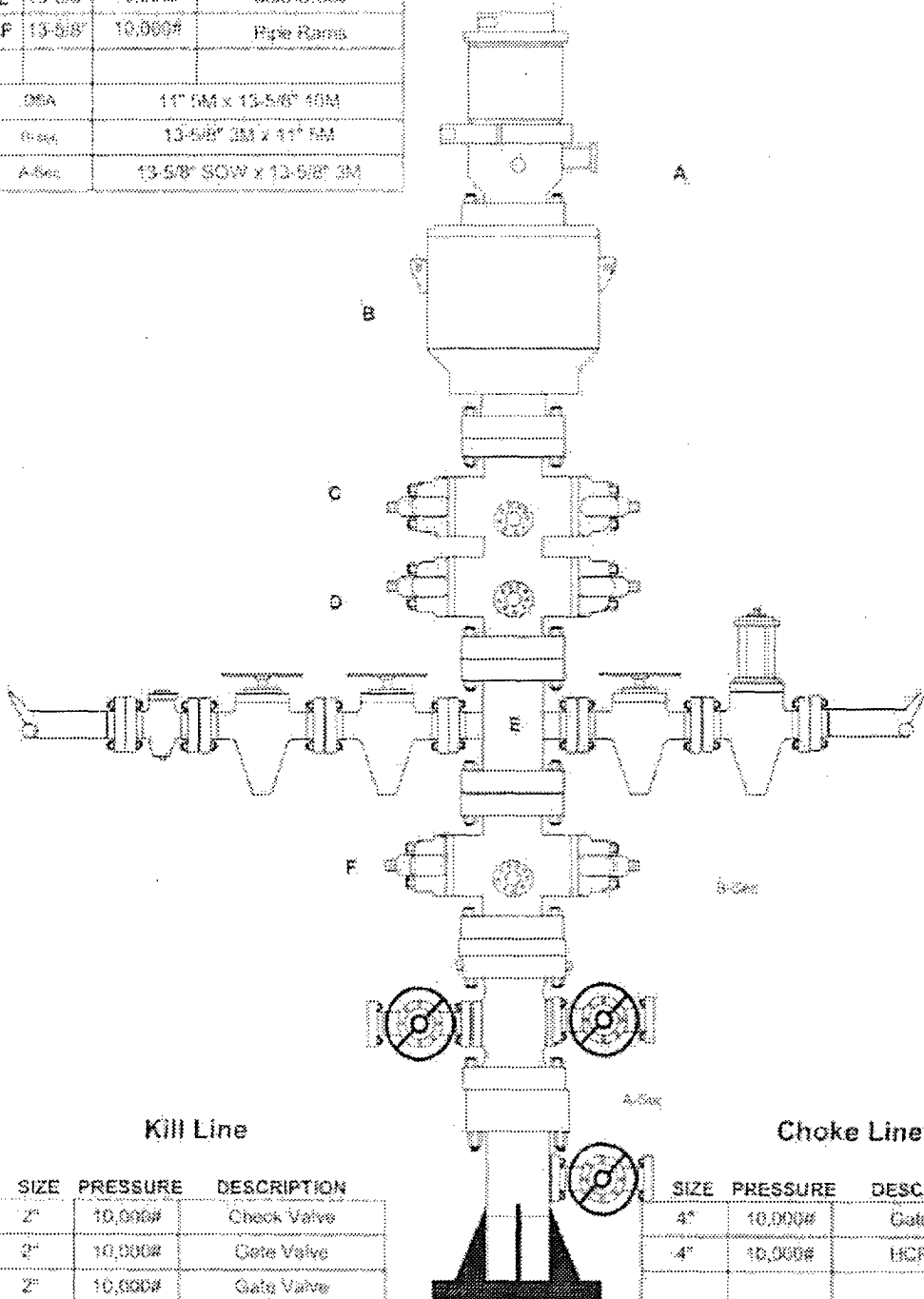
RIG : Unknown

COUNTY : Lea

STATE: New Mexico

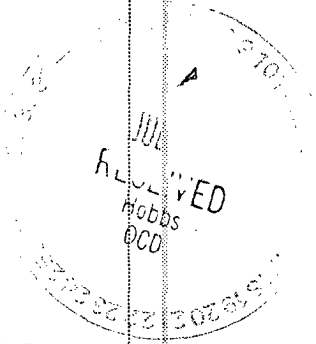
OPERATION: Drill out below 9-5/8" Casing

	SIZE	PRESSURE	DESCRIPTION
A	13-5/8"	500#	Roi Head
B	13-5/8"	5,000#	Annular
C	13-5/8"	10,000#	Pipe Rams
D	13-5/8"	10,000#	Blind Rams
E	13-5/8"	10,000#	Mud Cross
F	13-5/8"	10,000#	Pipe Rams
OSA	11" NM x 13-5/8" 10M		
It-sec	13-5/8" 3M x 11" NM		
A-Bec	13-5/8" SOW x 13-5/8" 3M		



SIZE	PRESSURE	DESCRIPTION
2"	10,000#	Check Valve
2"	10,000#	Gate Valve
2"	10,000#	Gate Valve

SIZE	PRESSURE	DESCRIPTION
4"	10,000#	Gate Valve
4"	10,000#	HCR Valve



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

1. EXISTING ROADS

- a. Existing county road 29 and access roads to the Conoco Boot Leg Compress Station will be used to enter the proposed well location access road. The Merchant Federal 1-8 is located approximately 1 mile north of the Conoco Boot Leg Compressor site. The total mileage from Hobbs will be approximately 67 miles.
- b. Location, access and vicinity plats attached hereto. See Exhibit A, B, and C.

2. PLANNED ACCESS ROADS

- a. A new access road 3434.8' in length and 14' in travel way width with a maximum disturbance area of 30' will be built coming off an existing access road in a easterly direction. See Exhibit C. The road will be built in accordance with guidelines set forth in the BLM Onshore Orders.
- b. No turnouts are expected.
- c. A locking gate will be installed at the site entrance.
- d. Any fences cut will be repaired. Cattle guards will be installed, if needed.
- e. Surface disturbance and vehicular travel will be limited to the approved location and approved access route. Any additional area needed will be approved in advance.

3. LOCATION OF EXISTING WELLS WITHIN A 1-MILE RADIUS OF THE PROPOSED LOCATION – see Exhibit D.

4. LOCATION OF PRODUCTION FACILITIES

Production facilities will be located on location. See Exhibit E.

5. LOCATION AND TYPE OF WATER SUPPLY

JUL
RECEIVED
Hobbs
OCD

Water will be obtained from a private water source. Chesapeake Operating, Inc. will ensure all proper notifications and filings are made with the state.

6. CONSTRUCTION MATERIALS

All other material (i.e. shale) will be acquired from private or commercial sources.

7. METHODS FOR HANDLING WASTE DISPOSAL

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. Sanitary wastes will be contained in a chemical porta-toilet and then hauled to an approved sanitary landfill.

8. ANCILLARY FACILITIES

None.

9. WELLSITE LAYOUT

The proposed site layout plat is attached showing rig orientation and equipment location. See Exhibit F.

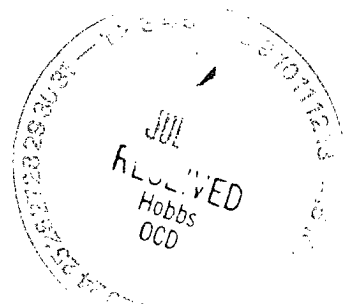
10. PLANS FOR RECLAMATION OF THE SURFACE

The location will be restored to as near as original condition as possible. Reclamation of the surface shall be done in strict compliance with the existing New Mexico Oil Conservation Division regulations.

Backfilling leveling, and contouring are planned as soon as the drilling rig and steel tanks are removed. Wastes and spoils materials will be buried immediately after drilling is completed. If production is obtained, the unused area will be restored as soon as possible. The rehabilitation will begin after the drilling rig is removed.

11. SURFACE AND MINERAL OWNERSHIP

United States of America
Department of Interior
Bureau of Land Management



ONSHORE ORDER NO. 1
Chesapeake Operating, Inc.
Merchant Federal 1-8
880' FSL & 1,760' FWL
SESW of Section 8-22S-33E
Lea County, NM

CONFIDENTIAL – TIGHT HOLE

Lease No. NMNM 96244

SURFACE USE PLAN
Page 3

12. ADDITIONAL INFORMATION

A Class III cultural resource inventory report was prepared by Danny Boone of Boone Archaeological Services, LLC, for the proposed location and new access road. Clearance has been recommended. See Exhibit G.

13. OPERATOR'S REPRESENTATIVES

Drilling and Completion Operations

Colley Andrews
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P.O. Box 18496
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Drilling Engineer

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(405) 650-6399 (MOBILE)
rjones@chkenergy.com

Production Operations

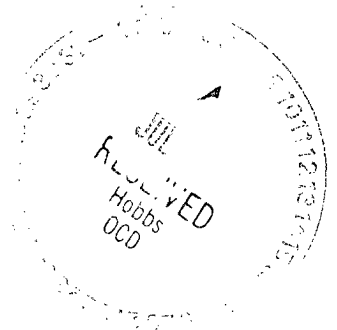
Mark Mabe
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Regulatory Compliance

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SURFACE USE PLAN

Page 4

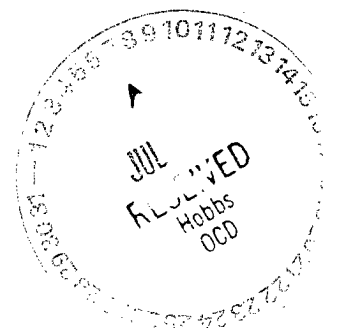
14. CERTIFICATION

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which presently exist; that the statements made in this surface use plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed will be performed by operator (including contractors and subcontractors) submitting the APD, in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

By: J. Mark Lester

Date: 5/2/03

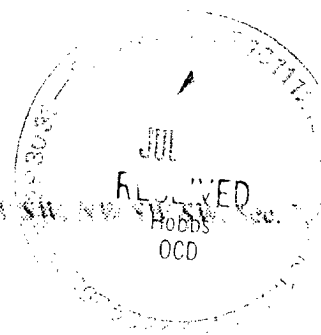
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**TITLE PAGE/ABSTRACT/
NEGATIVE SITE REPORT
CFO/RFO**

1/03

1. BLM Report No.		2. Reviewer's Initials/Date ACCEPTED () REJECTED ()		3. NMCRIS No.: 82900	
4. Type of Report: Negative(X) Positive ()					
5. Title of Report: Class III archaeological survey of a pad and access road for the Merchant Pad, "8" well No. 1. Author(s): Ann Boone				6. Fieldwork Date(s) from 3 April, 2003 to	
				7. Report Date: 3 April, 2003	
8. Consultant Name & Address: Boone Archaeological Services 2030 North Canal Carlsbad, NM 88220 Direct Charge: Danny Boone Field Personnel Names: Danny Boone Phone: (505) 558-1352				9. Cultural Resource Permit No.: 100-7920-03-6	
				10. Consultant Region No.: BAS 04-04-05	
11. Customer Name: Chesapeake Operating, Inc. Responsible Individual: Sharon Dries Address: P.O. Box 18496 Oklahoma City, Oklahoma 73154-0496 Phone: (405) 848-8000				12. Customer Project No.:	
13. Land Status	BLM	STATE	PRIVATE	OTHER	TOTAL
a. Area Surveyed (acres)	11.6	0	0	0	11.6
b. Area of Effect (acres)	7.6	0	0	0	7.6
14. Linear: Length: 3434.8' Width: 100' Well Pad: Pad 400' x 400'					
15. Location: (Maps Attached if Negative Survey)					
a. State: New Mexico					
b. County: Lea					
c. BLM Office: Carlsbad					
d. Nearest City or Town: Loving, NM					
e. Legal Location: T 22S, R 33E, Sec. 8, Pad. SE SW; Access Road, NW SE SW, NE SW SW, NW SW SW, NW SE SE, NE SE SE, NE SW SE					
f. Well Pad Footages: 880' ESL, 1760' FWL					
g. USGS 7.5 Map Name(s) and Code Number(s): Grama Ridge, NM (1984) 32103-D5					



16. Project Data:

a. Records Search: Date(s) of BLM File Review: 2 April, 2003
Date(s) of ARMS Data Review: 8 April, 2003

Name of Reviewer(s): Ann Hobbs
Name of Reviewer(s): Ann Hobbs

Findings (see Field Office requirements to determine area to be reviewed during record search):

LA 49821 may or may not be within 500' to the south of the pad, this is an order recording placed on a 13 Series Map. It is not within the project survey area.

b. Description of Undertaking:

The access road begins at an existing lease road and trends east to a point approximately 50' into the south east portion of the pad survey area. Exact construction methods are unknown, probably bulldozers, backhoes, dump trucks, graders, etc. Survey acres were estimated by adding the access road (7.97 ac.) and pad (3.67) survey areas together. Impact for the road is estimated at 50' ft. in width (3.94 ac.), impact for the pad is unknown but assumed to be within the survey area of 400 ft. by 400 ft. This project was in progress prior to 1 April.

c. Environmental Setting (NRC's soil designation; vegetative community; etc.):

Topography: Sandy plain of coppice dunes

Vegetation: Ground cover is approximately 40%, mesquite, yucca cactus, broom snakeweed, iron cholla, various grasses and other flora.

NRC's: Simona-Ponue association; Nearly level and gently undulating, bumpy and sandy soils that are shallow to indurated caliche

d. Field Methods: (transect intervals; crew size; time in field, etc.):

Transects: A grid of parallel transects spaced up to 15 meters apart for the pad and for the access road, parallel zig-zag transects spaced up to 15 meters on each side of staked centerline

Crew Size: One

Time in Field: 3.5 hrs.

e. Artifacts Collected (?): None

17. Cultural Resource Findings:

a. Identification and description: None

b. Evaluation of significance of each resource: NA

18. Management Summary (Recommendations):

No cultural resources were encountered during this survey, therefore archaeological clearance of a pad and access road for the Merchant Fed. "8" well No. 1 as presently staked is recommended. If cultural resources are encountered at any time all activity should cease and the BLM Archaeologist notified immediately.

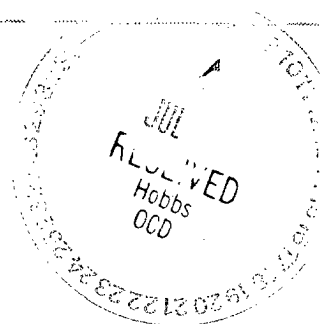
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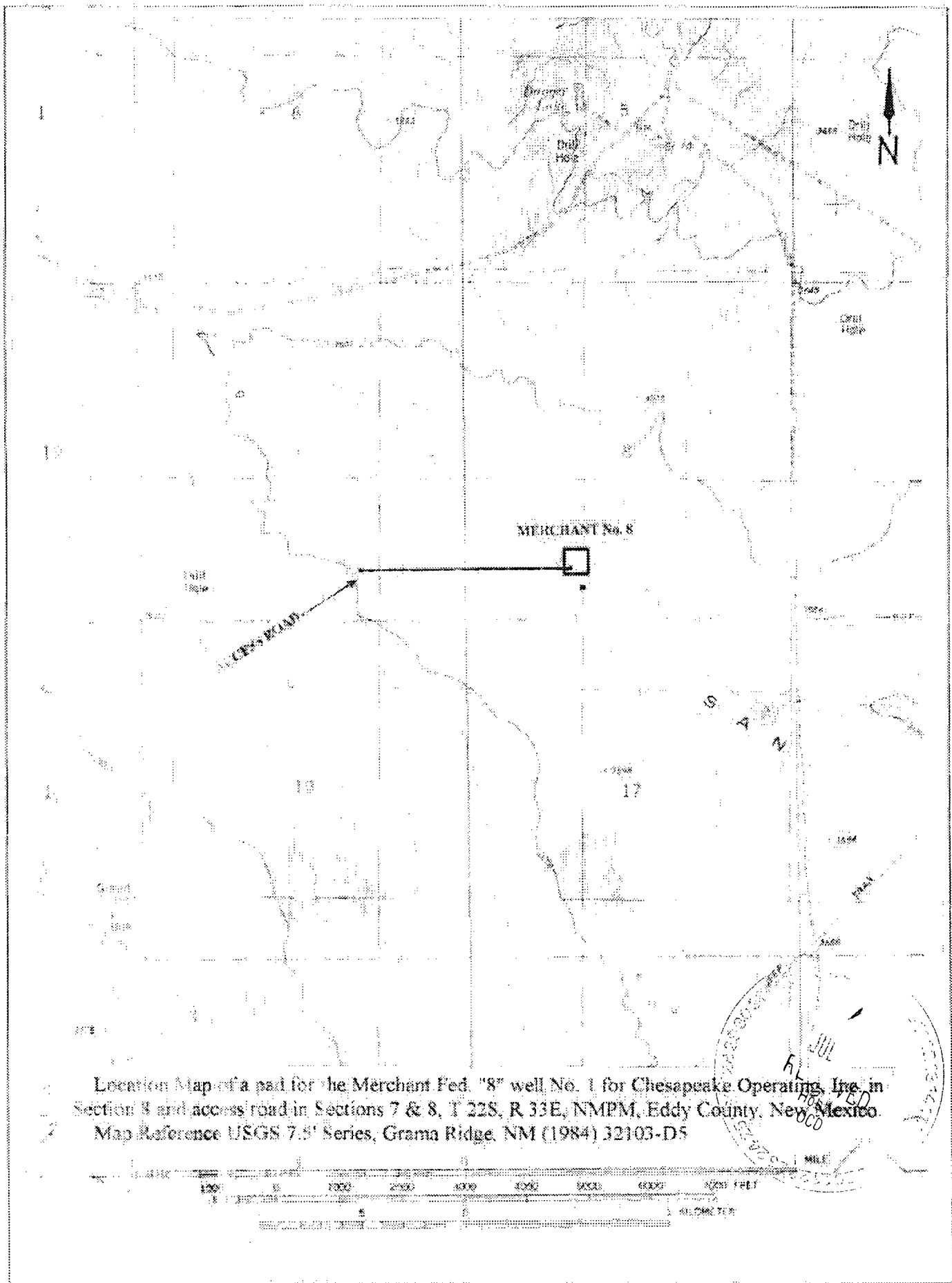
I certify that the information provided above is correct and accurate and meets all applicable BLM standards.

Responsible Archaeologist

Signature

Date





Location Map of a pad for the Merchant Fed. "8" well No. 1 for Chesapeake Operating, Inc. in Section 8 and access road in Sections 7 & 8, T 22S, R 33E, NMPM, Eddy County, New Mexico. Map Reference USGS 7.5' Series, Gama Ridge, NM (1984) 32103-D5