

OCD-HOBBS

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



UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

K-04-76

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.
NMNM54882

6. If Indian, Allottee or Tribe Name

7. If Unit or CA Agreement, Name and No.

8. Lease Name and Well No.
WYNELL FEDERAL 5 300117

9. API Well No.
30.025.37065

10. Field and Pool, or Exploratory
TONTON; Seven Rivers

11. Sec., T., R., M., or Blk. and Survey or Area
59470

Sec 15 T19S R33E Mer NMP
SME: BLM

12. County or Parish
LEA

13. State
NM

17. Spacing Unit dedicated to this well
40.00

20. BLM/BIA Bond No. on file

23. Estimated duration
2005

24. Attachments
Cactus 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)
LINDA GOOD

Title
AUTHORIZED REPRESENTATIVE

Approved by (Signature)
/s/ Joe G. Lara

Name (Printed/Typed)
/s/ Joe G. Lara

Title
FIELD MANAGER

Office
CARLSBAD FIELD OFFICE

Date
JAN 19 2005

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 #35470 verified by the BLM Well Information System

For CHESAPEAKE OPERATING INC, sent to the Hobbs

Committed to AFMSS for processing by LINDA ASKWIG on 08/31/2004 (04LA0329AE)

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS
ATTACHED

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

30.025.37065

Additional Operator Remarks:

Chesapeake Operating, Inc. proposes to drill a well to 3900' to test the Seven Rivers. 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 general rig plat is attached as Exhibit D. A final rig plat 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.

DISTRICT I
1625 N. French Dr., Noble, NM 88240

DISTRICT II
811 South First, Artesia, NM 88210

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

DISTRICT IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised March 17, 1999

Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

OIL CONSERVATION DIVISION

2040 South Pacheco
Santa Fe, New Mexico 87504-2088

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number <i>30.025.37065</i>	Pool Code <i>59470</i>	Pool Name <i>Ints; Seven Rivers</i>
Property Code <i>300117</i>	Property Name WYNELL "15" FEDERAL	
OGRID No. <i>147179</i>	Operator Name CHESAPEAKE OPERATING INC.	Well Number 5
		Elevation 3667'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	15	19 S	33 E		1800	NORTH	2010	EAST	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
Dedicated Acres <i>40</i>		Joint or Infill	Consolidation Code	Order No.					

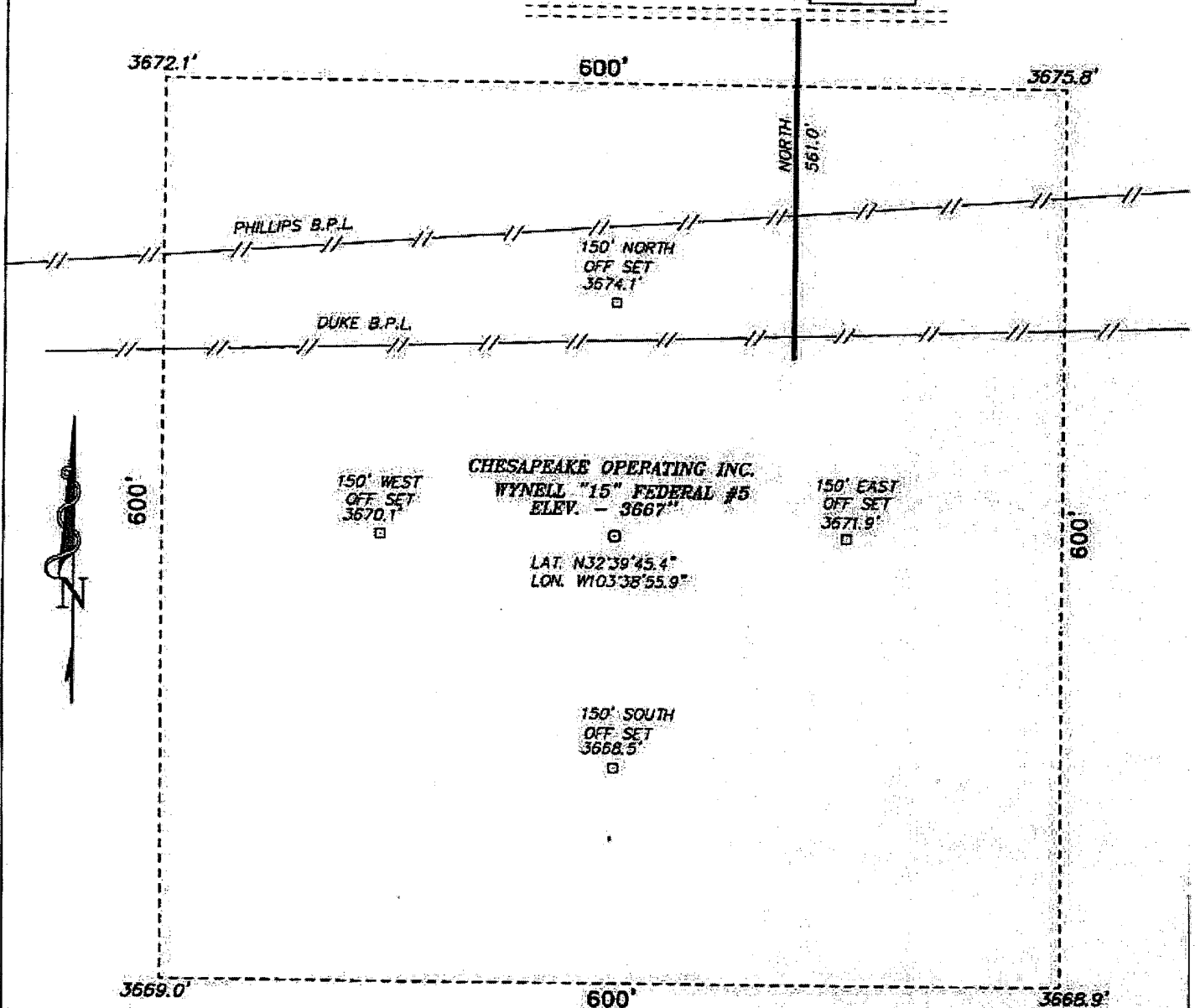
NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	<p>OPERATOR CERTIFICATION</p> <p>I hereby certify the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>Lynnda F. Townsend</i> Signature</p> <p>Lynnda F. Townsend Printed Name</p> <p>Senior Landman Title</p> <p>7-22-04 Date</p>
	<p>SURVEYOR CERTIFICATION</p> <p>I hereby certify that the well location shown on this plat was plotted from field notes of actual survey made by me or under my supervision and that the same is true and correct to the best of my belief.</p> <p>JULY 09, 2004</p> <p>Date Surveyed</p> <p>MARY L JONES Signature of Professional</p> <p>7977 Professional No.</p> <p>7977 Certification No.</p> <p>JLP BASIN SURVEYS</p>

Exhibit A-1

SECTION 15, TOWNSHIP 19 SOUTH, RANGE 33 EAST, N.M.P.M.,
LEA COUNTY, NEW MEXICO.

WYNELL
FED. #3



Directions to Location:

FROM THE JUNCTION OF US HWY 62 & 180 AND SMITS RANCH ROAD GO NORTH ON THE SMITH RANCH ROAD 2.1 MILES TO A "Y" GO LEFT 1.6 MILES NE TO A "Y" GO RT. 0.2 MILES NE, THEN EAST 0.1 MILES, THEN NORTH 1.4 MILES, THEN 0.3 MILES WEST ON LEASE ROAD TO WYNELL #3 AND PROPOSED ROAD TO LOCATION.

100 0 100 200 FEET

SCALE: 1" = 100'

CHESAPEAKE OPERATING INC.

REF: WYNELL "15" FEDERAL #5 / Well Pod Topo

WYNELL "15" FEDERAL #5 LOCATED 1800' FROM THE NORTH LINE AND 2010' FROM THE EAST LINE OF SECTION 15, TOWNSHIP 19 SOUTH, RANGE 33 EAST, N.M.P.M., LEA COUNTY, NEW MEXICO.

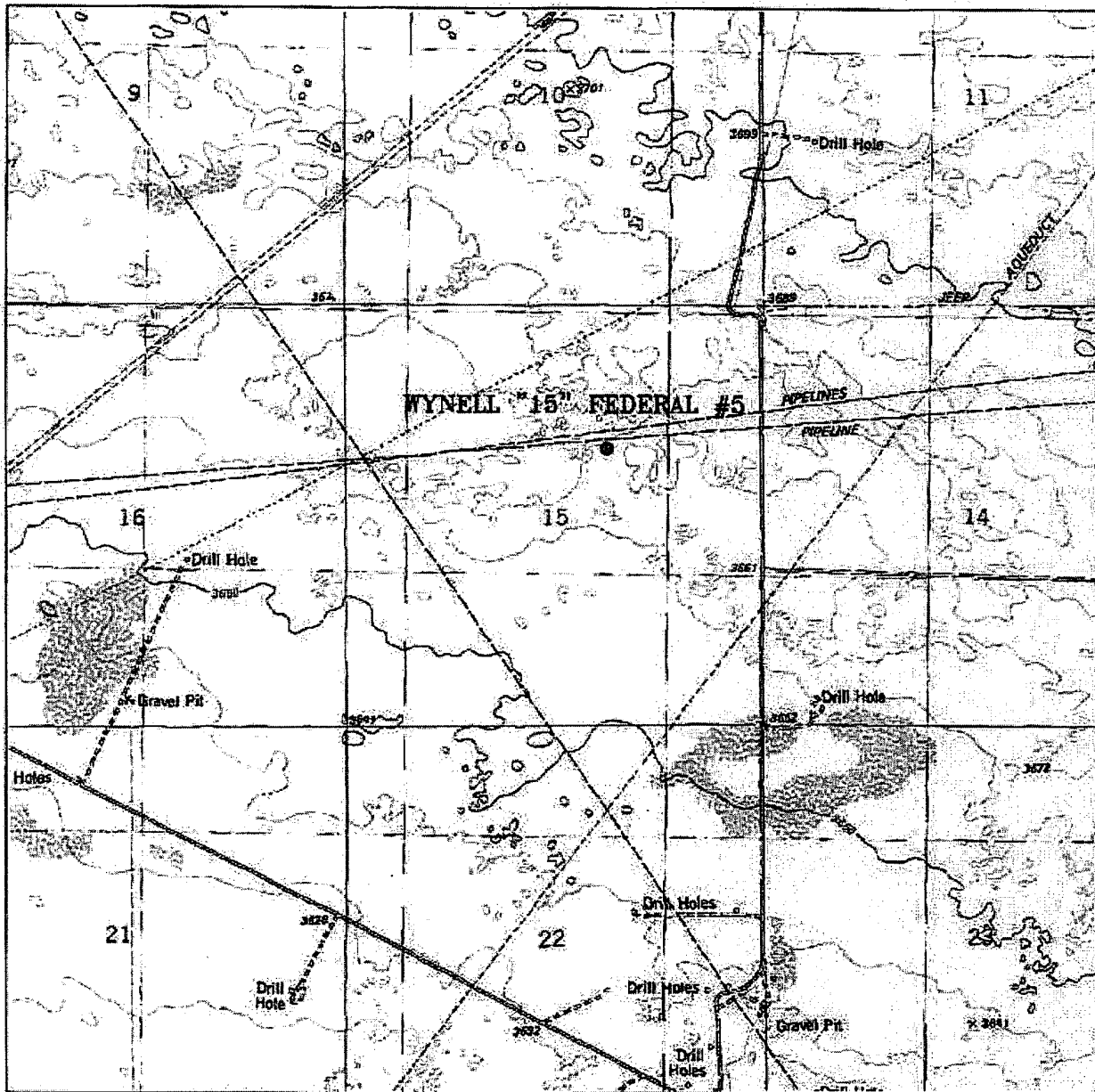
BASIN SURVEYS P.O. BOX 1786-HOBBS, NEW MEXICO

W.D. Number: 4443 Drawn By: JAMES PRESLEY

Date: 07/12/04 Disk: JLP #1 - 4443A

Survey Date: 07/09/04 Sheet 1 of 1 Sheets

Exhibit A-2



WYNELL "15" FEDERAL #5

Located at 1800' FNL and 2010' FEL
 Section 15, Township 19 South, Range 15 East,
 N.M.P.M., Lea County, New Mexico.



focused on excellence
 in the oilfield

P.O. Box 1786
 1120 N. West County Rd.
 Hobbs, New Mexico 88241
 (505) 393-7315 - Office
 (505) 392-3074 - Fax
 basinsurveys.com

W.O. Number: 44454A - JLP #1

Survey Date: 07/09/04

Scale: 1" = 2000'

Date: 07/12/04

**CHESAPEAKE
 OPERATING
 INC.**

Exhibit A-3

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

1. EXISTING ROADS

- a. Existing county roads will be used to enter proposed access road.
- b. Location, access, and vicinity plats attached hereto. See Exhibits A-1 through A-4.

2. PLANNED ACCESS ROADS

- a. A new access road 561' in length and 14' in travel way width with a maximum disturbance area of 30' will be built in accordance with guidelines set forth in the BLM Onshore Orders.
- b. No turnouts are expected.
- c. In order to level the location, cut and fill will be required. Please see attached Well Location and Acreage Dedication Plat – Exhibit A1-A4.
- d. A locking gate will be installed at the site entrance.
- e. Any fences cut will be repaired. Cattle guards will be installed, if needed.
- f. 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.
- g. Driving directions are from the Jct. of US Hwy 62 and 180 and Smith Ranch road, go North on the Smith Ranch road 2.1 miles to a "Y", go Left 1.6 miles NE to a "Y", go right 0.2 miles NE, then East 0.1 miles, then North 1.4 miles, then 0.3 miles West on Lease road to Wynell #3 and proposed road to location.

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

4. LOCATION OF PRODUCTION FACILITIES

It is anticipated that production facilities will be located on the well pad as product will be sold at the wellhead and/or tank battery. It is anticipated to hook to the Duke or Phillips Pipeline which runs on the north end of the well pad. – See Exhibit C

5. LOCATION AND TYPE OF WATER SUPPLY

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

No construction materials will be used from Section 4-20S-33E. All 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 a generic rig plat with rig orientation and equipment location. See Exhibit D.

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 Oklahoma Corporation Commission 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 & MINERAL OWNERSHIP

United States of America
Department of Interior
Bureau of Land Management

ONSHORE ORDER NO. 1
Chesapeake Operating, Inc.
WYNELL 15 FEDERAL 5
1800 FNL 2010 FEL
SWNE of Section 15-19S-33E
Lea County, NM

CONFIDENTIAL – TIGHT HOLE

Lease No. NMNM 54882

SURFACE USE PLAN
Page 3

GRAZING LEASE HELD BY:

Kenneth Smith, Inc.
P.O. Box 764
Carlsbad, NM 88220

12. ADDITIONAL INFORMATION

A Class III cultural resource inventory report was prepared by Boone Archaeological Services, Carlsbad, New Mexico for the proposed location. A copy of the report has been sent to the BLM office under separate cover and is also attached for reference. See Exhibit E.

13. OPERATOR'S REPRESENTATIVES

Drilling and Completion Operations

Rob Jones
District Manager
P.O. Box 18496
Oklahoma City, OK 73154
(405) 810-2694 (OFFICE)
(405) 879-9573 (FAX)
rjones@chkenergy.com

Drilling Engineer

David DeLaO
P.O. Box 18496
Oklahoma City, OK 73154
(405) 767-4339 (OFFICE)
(405) 879-9573 (FAX)
(405) 990-8182 (MOBILE)

Field Representative

Mike Whitefield
550 West Texas Ave.
Midland, TX 79701
432-683-7443 (OFFICE)
432-685-4399 (FAX)
mwhitefield@chkenergy.com

Asset Manager

Andrew McCalmont
P.O. Box 18496
Oklahoma City, OK 73154-0496
405-879-7852 (OFFICE)
405-879-7930 (FAX)
amccalmont@chkenergy.com

Regulatory Compliance

Linda Good
Regulatory Compliance Analyst
P.O. Box 11050
Oklahoma City, OK 73154
(405) 767-4275 (OFFICE)
(405) 879-9583 (FAX)
lgood@chkenergy.com

ONSHORE ORDER NO. 1
Chesapeake Operating, Inc.
WYNELL 15 FEDERAL 5
1800 FNL 2010 FEL
SWNE of Section 15-19S-33E
Lea County, NM

CONFIDENTIAL – TIGHT HOLE

Lease No. NMNM 54882

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: 8/31/04

ONSHORE ORDER NO. 1
Chesapeake Operating, Inc.
Wynell 15 Federal 5
1800 FNL 2010 FEL
SW NE of Section 15-19S-33E
Lea County, New Mexico

CONFIDENTIAL – TIGHT HOLE
Lease Contract No. NM 54882

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 Anhydrite	1460	2222
Tansill	3130	553
Yates	3252	431
Seven Rivers Sand	3567	116
Seven Rivers Main Pay	3642	40
TOTAL DEPTH	3900	

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/Gas	Seven Rivers	3567-3680

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

3. BOP EQUIPMENT: 3,000# System

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

I. BOP, Annular, Choke Manifold, Pressure Test - See Exhibit F-1 and F-2.

A. Equipment

1. The equipment to be tested includes all of the following that is installed on the well:
 - (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.
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>
1500 PSI	750 PSI
2000 PSI	1,000 PSI
3000 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	0-1,500'	11"	8-5/8"	24#	J-55	ST &C	New
Production	0-3,900'	7-7/8"	5-1/2"	15.5#	J-55	LT &C	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>
Surface	Lead 65:35:6 + 6# Salt + 1/4#	300sx	2.1	50%	100%
	Flo-cel	200sx	1.3		
	Tail: c + 2% CaCl				
Production	50 :50 Poz H + additives	200sx	1.3	20%	30%

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>
0-1,500'	Water	8.4 – 9.0	28-40	NC
1,500' – 3,900'	Cut Brine	9.4 – 10.0	35-46	5 - 10

A steel 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:

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

7. ABNORMAL PRESSURES AND HYDROGEN SULFIDE

- a. The estimated bottom hole pressure is 1200 psi. No abnormal pressures or temperatures are anticipated.
- b. Hydrogen sulfide gas is not anticipated.

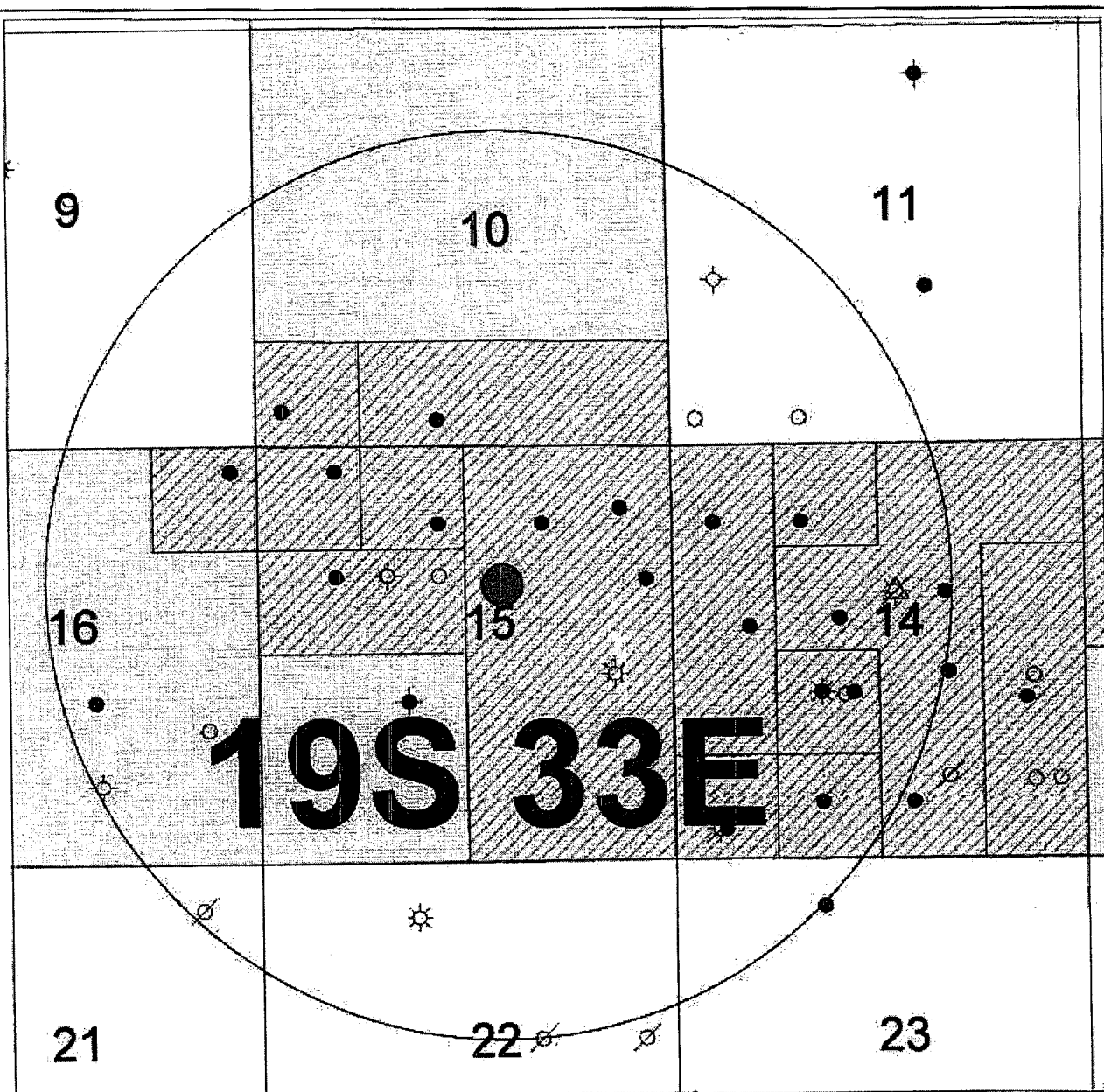



Exhibit B

	CHESAPEAKE OPERATING, INC.
<p>Wynell 15 Federal 5 1 mile radius TONTO FIELD Lea, NM T19S-R33E</p>	
<p>Date: 13 August, 2004 Geologist: DAG</p>	

BLOWOUT PREVENTOR SCHEMATIC

CHESAPEAKE OPERATING INC

WELL : Wynell 15 Federal 5

FIELD :

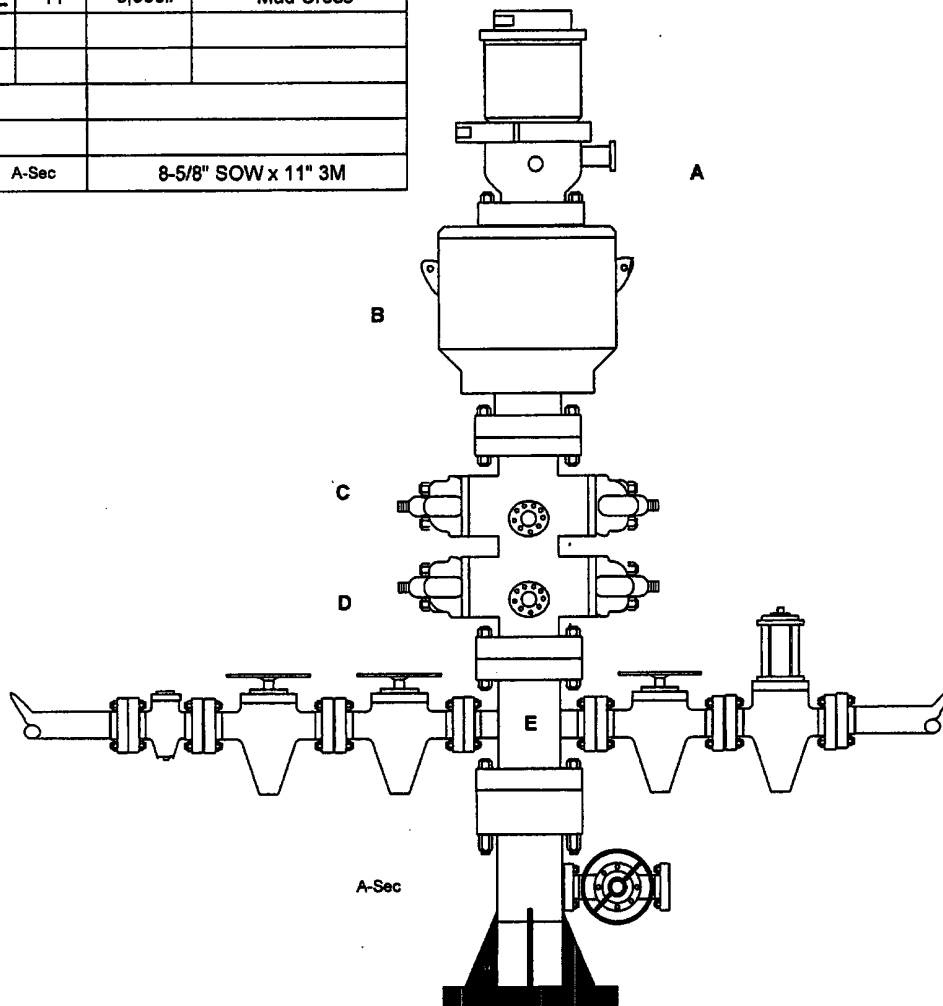
RIG : Unknown

COUNTY : Lea

STATE: New Mexico

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

	SIZE	PRESSURE	DESCRIPTION
	11"	500#	Rot Head
B	11"	3,000#	Annular
C	11"	3,000#	Pipe Rams
D	11"	3,000#	Blind Rams
E	11"	3,000#	Mud Cross
A-Sec	8-5/8" SOW x 11" 3M		



Kill Line

SIZE	PRESSURE	DESCRIPTION
2"	3,000#	Check Valve
2"	3,000#	Gate Valve
2"	3,000#	Gate Valve

Choke Line

SIZE	PRESSURE	DESCRIPTION
3"	3,000#	Gate Valve
3"	3,000#	HCR Valve

Exhibit F-1

CHOKE MANIFOLD SCHEMATIC

CHESAPEAKE OPERATING INC

WELL : Wynnell 15 Federal 5

FIELD :

RIG : Unknown

COUNTY : Lea

STATE: NM

OPERATION: 3M CHOKE MANIFOLD

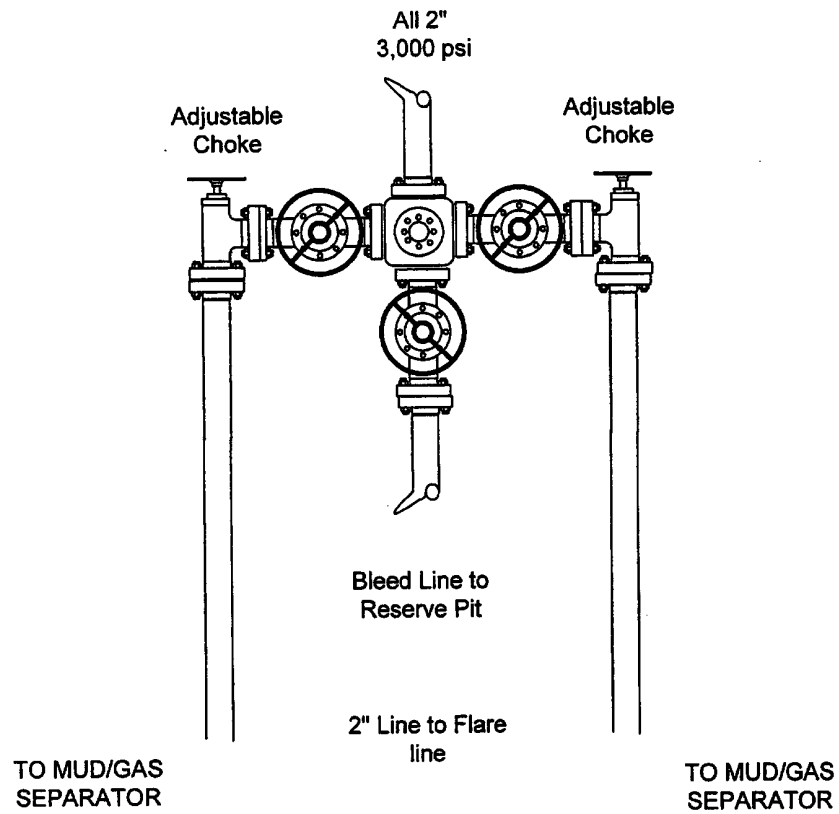
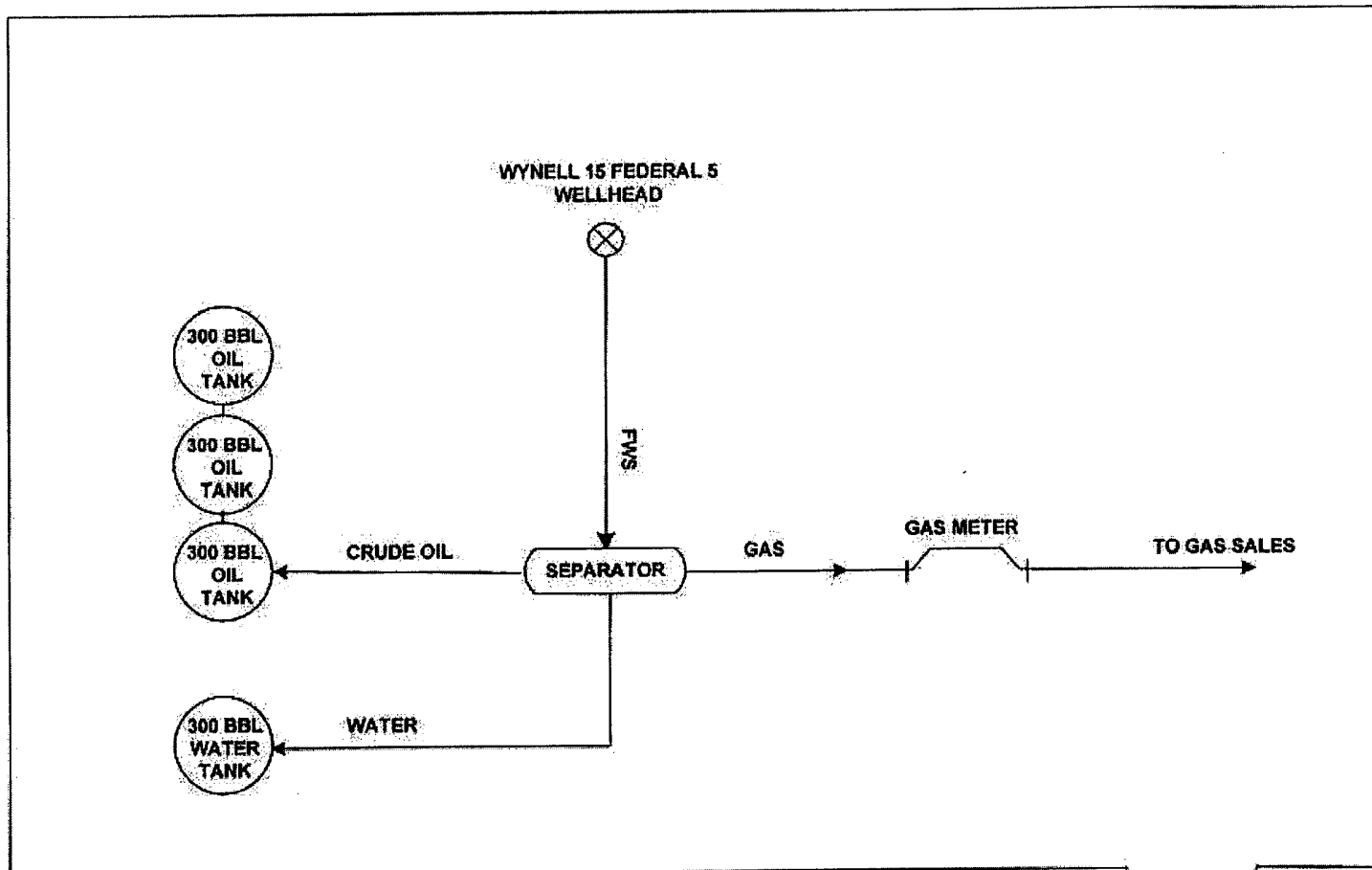


Exhibit F-2



CHESAPEAKE OPERATING, INC.
OKLAHOMA CITY, OK

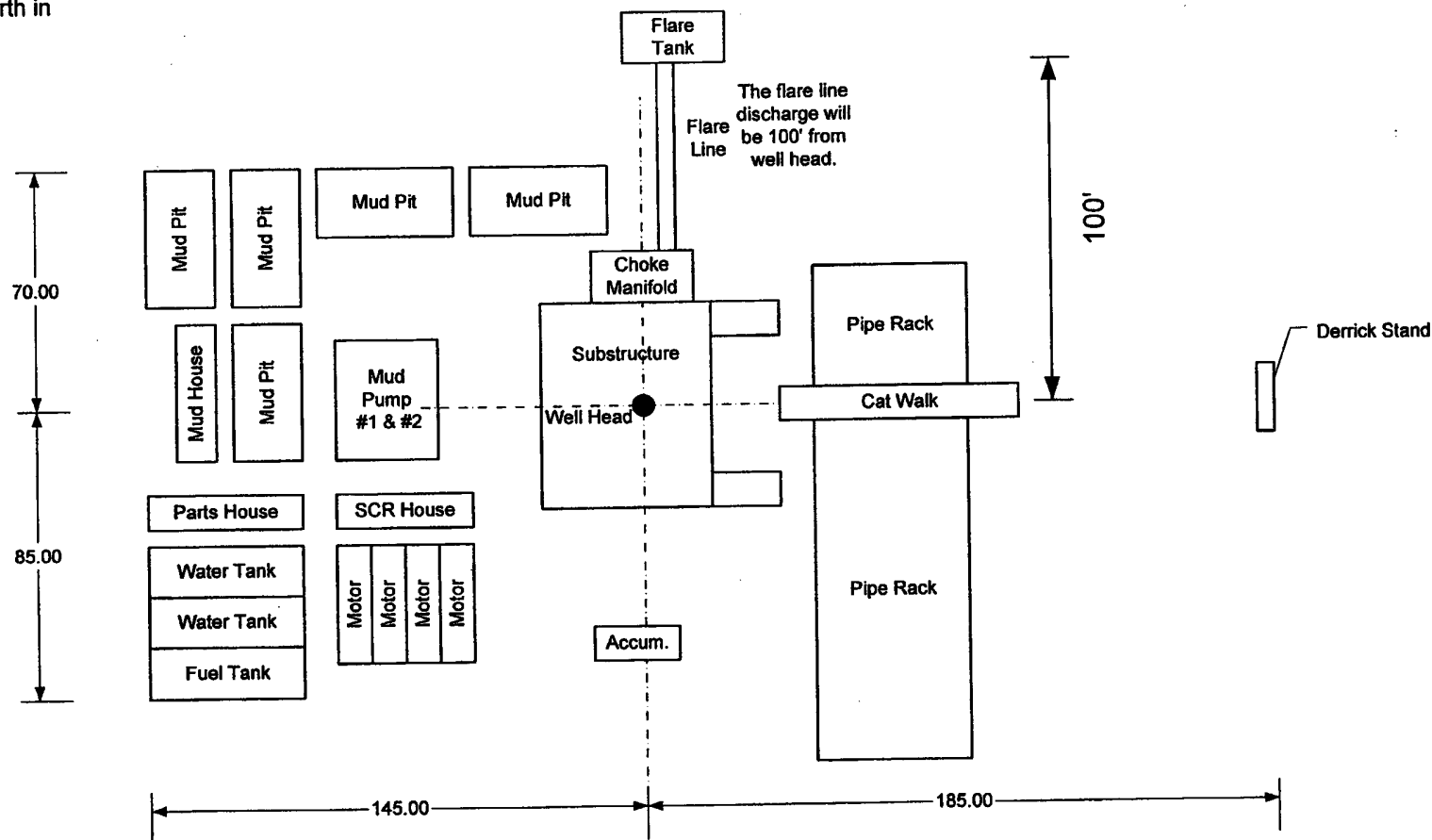


WYNELL 15, FEDERAL 5
SECTION 15-19S-33E
LEA COUNTY, NEW MEXICO

DATE: 8/16/04
DRAWN BY: JGF
Not To Scale

EXHIBIT C

Prevailing Winds from the North in Winter and from the South in Summer.



Exhibit

D

Chesapeake Operating, Inc			
General Rig Layout			
SIZE	FSCM NO	DWG NO	REV
SCALE	Not to Scale	SHEET	1 OF 1

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

1/03

1. BLM Report No.		2. Reviewer's Initials/Date _____ ACCEPTED () REJECTED ()		3. NMCRIS No.: 89694	
4. Type of Report: Negative(X) Positive ()					
5. Title of Report: Class III archaeological survey of a pad and access road serving the Wynnell "15" Federal well No. 5. Author(s): Ann Boone				6. Fieldwork Date(s) from 12 August 2004 to	
				7. Report Date: 16 August 2004	
8. Consultant Name & Address: Boone Archaeological Services 2030 North Canal Carlsbad, NM 88220 Direct Charge: Danny Boone Field Personnel Names: Danny Boone Phone: (505) 885-1352				9. Cultural Resource Permit No. BLM 190-2920-03-E State Permit No.: NM-04-157	
				10. Consultant Report No. BAS 08-04-13	
11. Customer Name: Chesapeake Operating, Inc. Responsible Individual: Linda Good Address: P.O. Box 18496 Oklahoma City, Oklahoma 73154-0496 Phone: (405) 848-8000				12. Customer Project No.: None	
13. Land Status	BLM	STATE	PRIVATE	OTHER	TOTAL
a. Area Surveyed (acres)	3.47 (+/-)	0	0	0	3.47 (+/-)
b. Area of Effect (acres)	4.05 (+/-)	0	0	0	4.05 (+/-)
14. Linear: Length: 311' (+/-) Width: 100' Block: 600' x 600'					
15. Location: (Maps Attached if Negative Survey) a. State: New Mexico b. County: Lea c. BLM Office: Carlsbad d. Nearest City or Town: Maljamar, NM e. Legal Location: T 19, R 33, Sec. 15; Pad SW NE, Access Road SW NE, NW NE. f. Well Pad Footages: 1800' FNL, 2010' FEL g. USGS 7.5 Map Name(s) and Code Number(s): LAGUNA GATUNA NW, NM (1984) 32103-F6					

Exhibit E

16. Project Data:

a. Records Search: Date(s) of BLM File Review: 11 August, 2004

Name of Reviewer (s): Ann Boone

Date(s) of ARMS Data Review: 11 August, 2004

Name of Reviewer (s): Ann Boone

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

LA 135251, LA 1207183 are within 1.0 mile.

b. Description of Undertaking:

This project has two previous surveys, BLM No. 02-629 and 02-629.1 within the current pad survey area. The current survey expands areas on the north and south boundaries 600' x 100'. The access road is different from the previous surveys and begins approximately 100' inside of the southwestern portion of the pad survey area for BLM No. 01-897 and trends south for 561' to a point approximately 150' inside of the current pad expansion. Survey acres were estimated on this basis. Impact acres are unknown and are estimated. A plat is attached to this report.

c. Environmental Setting (NRCS soil designation; vegetative community; etc.):

Topography: North and west portion of pad survey and access road is a dune ridge with deflation basins ranging in size up to 60 meters long, 30 meters wide and 4 meters deep.

Vegetation: Approximately 40% ground cover, mesquite, soapberry trees, sunflowers, sage brush, prickly pear cactus, various grasses and other flora.

NRCS: Peyote-Maljamar-Kermi association; Gently undulating and rolling, deep, sandy soils.

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

Transects: For the pad two parallel zig-zag on the north and south portions spaced 15 meters or less and for the road one zig-zag spaced up to 15 meters on each side of staked centerline.

Crew Size: One

Time in Field: 2.0 hours.

e. Artifacts Collected (?): None

17. Cultural Resource Findings: None

a. Identification and description:

b. Evaluation of significance of Each Resource:

18. Management Summary (Recommendations):

Archaeological clearance of the pad and access road serving Wynnell "15" Federal well No 5 for Chesapeake Operating, Inc. as presently staked is recommended. If cultural resources are encountered at any time all activity should cease and the BLM Archaeologist notified immediately.

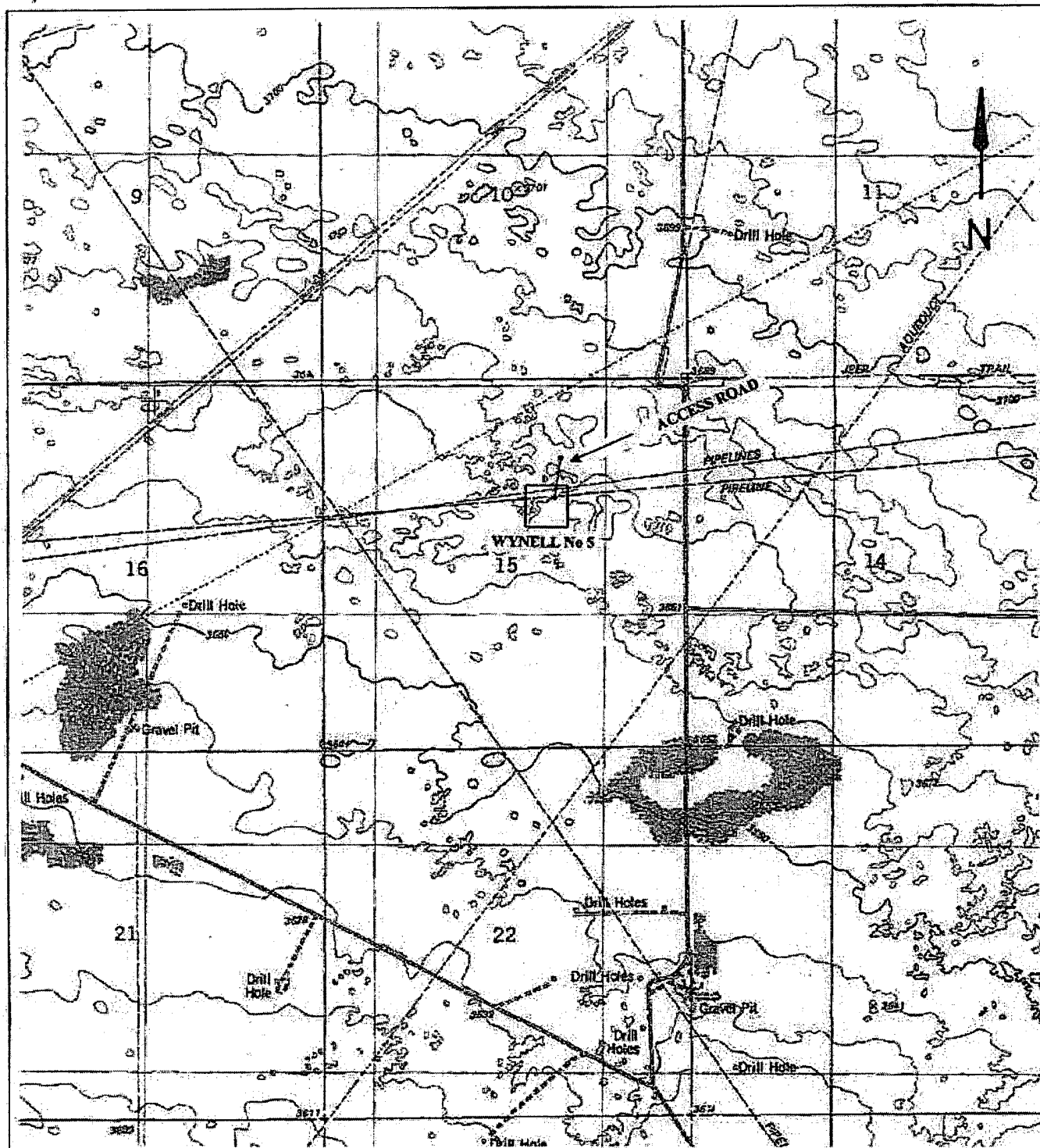
19.

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

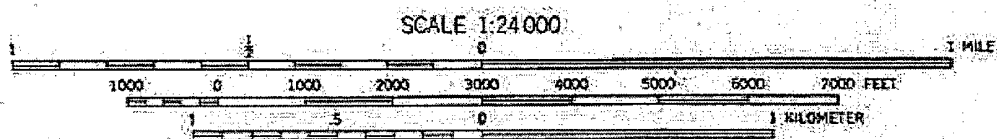
Responsible Archaeologist

W. J. Boone
Signature

15 Aug. 2004
Date



Location Map of a pad and access road serving the Wynell "15" Federal well No 5 for Chesapeake Operating, Inc. Section 15, T 19S, R 33E, NMPM, Lea County, New Mexico.
 Map Reference USGS 7.5' Series: LAGUNA GATUNA NW, NM (1984) 32103-F6



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-144
March 12, 2004

For drilling and production facilities, submit to appropriate NMOCD District Office.
For downstream facilities, submit to Santa Fe office

Pit or Below-Grade Tank Registration or Closure

Is pit or below-grade tank covered by a "general plan"? Yes ☐ No ☐

Type of action: Registration of a pit or below-grade tank ☐ Closure of a pit or below-grade tank ☐

Operator: Chesapeake 432 Telephone: 683-7443 e-mail address: mwhitefield@chkenergy.com
Address: 550 W. Texas Ave. #1300 Midland, Texas 79701
Facility or well name: Wynell Refed 5 API #: 30-025-37065 U/L or Qtr/Qtr 6 Sec 15 T 19 R 33
County: Lea Latitude N32°39'45.4 Longitude W103°38'55.9 NAD: 1927 ☐ 1983 ☐ Surface Owner Federal ☒ State ☐ Private ☐ Indian ☐

Pit Type: Drilling <input checked="" type="checkbox"/> Production <input type="checkbox"/> Disposal <input type="checkbox"/> Workover <input type="checkbox"/> Emergency <input type="checkbox"/> Lined <input checked="" type="checkbox"/> Unlined <input type="checkbox"/> Liner type: Synthetic <input checked="" type="checkbox"/> Thickness <u>12</u> mil Clay <input type="checkbox"/> Volume <u>6085</u> bbl	Below-grade tank Volume: _____ bbl Type of fluid: _____ Construction material: _____ Double-walled, with leak detection? Yes <input type="checkbox"/> If not, explain why not: _____	
Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.)	Less than 50 feet 50 feet or more, but less than 100 feet <u>100 feet or more</u>	(20 points) (10 points) (8 points) <u>0</u>
Wellhead protection area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources.)	Yes <u>No</u>	(20 points) (0 points) <u>0</u>
Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)	Less than 200 feet 200 feet or more, but less than 1000 feet <u>1000 feet or more</u>	(20 points) (10 points) (0 points) <u>0</u>
	Ranking Score (Total Points)	<u>0</u>

If this is a pit closure: (1) attach a diagram of the facility showing the pit's relationship to other equipment and tanks. (2) Indicate disposal location:

onsite ☐ offsite ☐ If offsite, name of facility: _____ (3) Attach a general description of remedial action taken including remediation start date and end date. (4) Groundwater encountered: No ☐ Yes ☐ If yes, show depth below ground surface _____ ft. and attach sample results. (5) Attach soil sample results and a diagram of sample locations and excavations.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that the above-described pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☒ a general permit ☐ or an (attached) alternative OCD-approved plan ☐.

Date: 8-30-04

Printed Name/Title: Mike Whitefield Field Rep.

Signature: Mike Whitefield

Your certification and NMOCD approval of this application/closure does not relieve the operator of liability should the contents of the pit or tank contaminate ground water or otherwise endanger public health or the environment. Nor does it relieve the operator of its responsibility for compliance with any other federal, state, or local laws and/or regulations.

Approval:

Date:

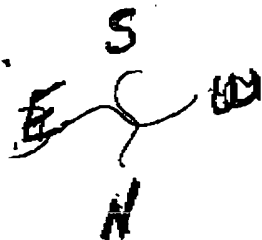
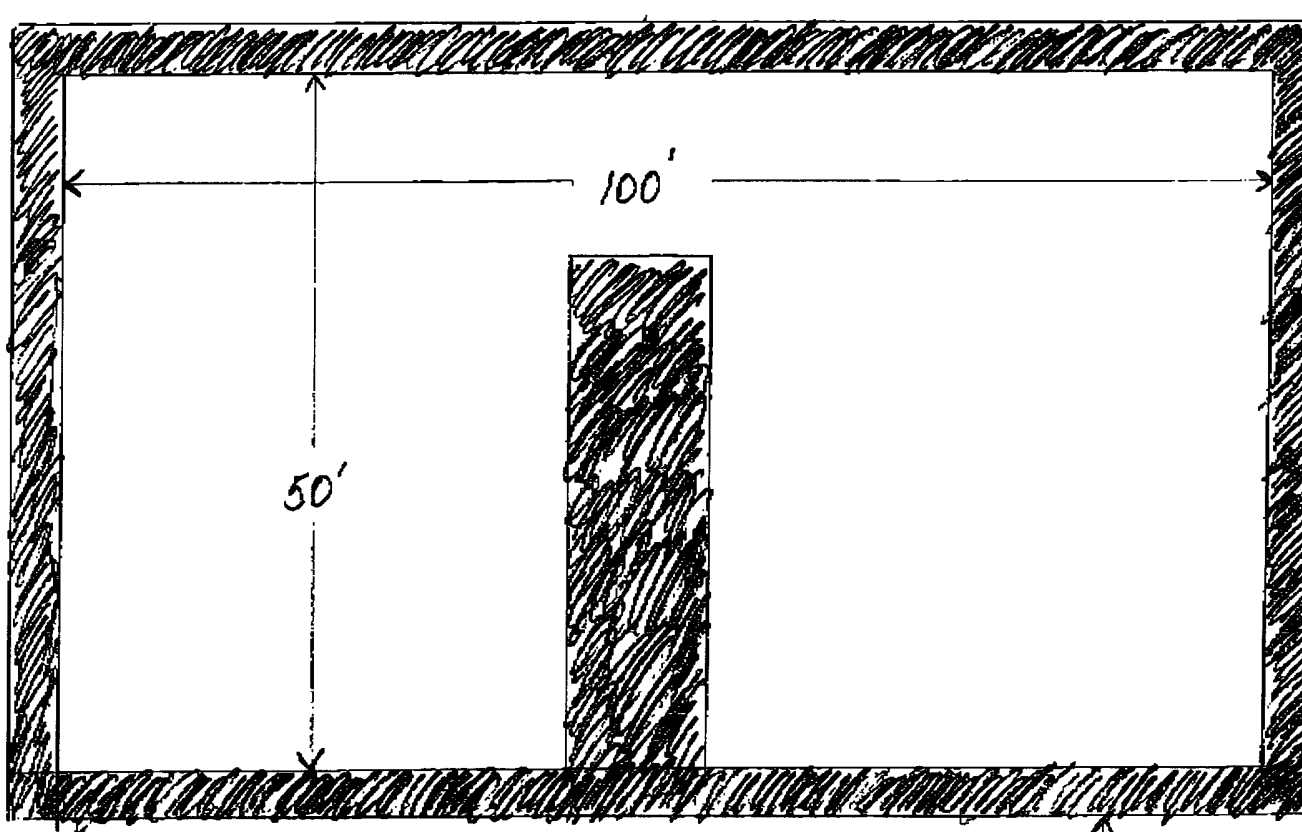
Printed Name/Title:

JAN 25 2005

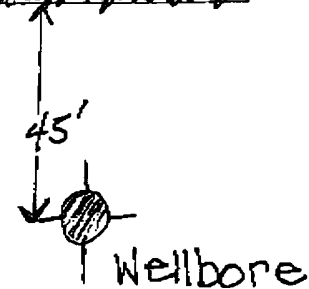
Signature: [Signature]

PETROLEUM ENGINEER

RESERVE (#3 design) single horse shoe
Wynell 15 Fed. S



APPROX 6085 Bbls.



WALL BERMS design #3

Wynell 15 Fed. 5

CHESAPEAKE MIDLAND

01/25/2005 08:59 FAX 432 687 3675

