

OCD-ARTESIA

FORM APPROVED
OMB No. 1004-0136
Expires November 30, 2000UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: ☒ DRILL ☐ REENTER

SECRETARY'S POTASH

CONFIDENTIAL

1b. Type of Well: ☐ Oil Well ☒ Gas Well ☐ Other ☒ Single Zone ☐ Multiple Zone2. Name of Operator
CHESAPEAKE OPERATING, INC.Contact: SHARON E. DRIES
E-Mail: sdries@chkenergy.com3a. Address
OKLAHOMA CITY, OK 73154-04963b. Phone No. (include area code)
Ph: 405.879.7985
Fx: 405.879.9583

4. Location of Well (Report location clearly and in accordance with any State requirements. *)

At surface

SWNE 1480 FNL 1980FEL per SN dated 8/25/04

At proposed prod. zone

G

14. Distance in miles and direction from nearest town or post office*

16 MILES SOUTHEAST OF LOVING

RECEIVED

15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)

16. No. of Acres in Lease

800.00

SEP 29 2004

18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft.

19. Proposed Depth

15500 MD

21. Elevations (Show whether DF, KB, RT, GL, etc.)
3529 GL

22. Approximate date work will start

5. Lease Serial No.
NMNM111960

6. If Indian, Allottee or Tribe Name

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

8. Lease Name and Well No.
ROYAL FLUSH FEDERAL 1

9. API Well No.

30-015-33736

10. Field and Pool, or Exploratory

SOUTH SAND DUNES
Lower Penn

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

Sec 15 T24S R31E Mer NMP
SME: BLM12. County or Parish
EDDY13. State
NM

17. Spacing Unit dedicated to this well

320.00

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. DRIESDate
07/15/2004Title
AUTHORIZED REPRESENTATIVE

Approved by (Signature)

William S. Condit

Name (Printed/Typed)

William S. Condit

Date
21 SEP 2004

ACTING 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 #33030 verified by the BLM Well Information System

For CHESAPEAKE OPERATING, INC., sent to the Carlsbad

Committed to AFMSS for processing by LINDA ASKWIG on 07/15/2004 (04LA0547AE)

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS
AND SPECIAL STIPULATIONS
ATTACHEDWitness Surface &
Intermediate Casings

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

Additional Operator Remarks:

Chesapeake Operating, Inc. proposes to drill a this well to 15500' to test the Lower Pennsylvanian. 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.

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 opertions conducted upon the lease lands.

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Ave., Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Federal Well

WELL API NO.

5. Indicate Type of Lease

STATE ☐ FEE ☐

6. State Oil & Gas Lease No.

7. Lease Name or Unit Agreement Name
Royal Flush Federal

8. Well Number 1

9. OGRID Number 147179

10. Pool name or Wildcat
South Sand Dunes-Delaware

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well: Oil Well ☐ Gas Well ☒ Other

RECEIVED

2. Name of Operator

Chesapeake Operating, Inc.

NOV 16 2004

3. Address of Operator P. O. Box 11050
Midland, TX 79702-8050

OOD-ARTESIA

4. Well Location

Unit Letter G : 1480 feet from the North line and 1980 feet from the East line
Section 15 Township 24S Range 31E NMPM County Eddy

11. Elevation (Show whether DR, RKB, RT, GR, etc.)
3528 GR

Pit or Below-grade Tank Application ☒ or Closure ☐

Pit type Drilling Depth to Groundwater 100+ Distance from nearest fresh water well 1000+ Distance from nearest surface water 1000+

Pit Liner Thickness: 12 mil Below-Grade Tank: Volume 6085 bbls; Construction Material Synthetic

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐

TEMPORARILY ABANDON ☐ CHANGE PLANS ☐

PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐

OTHER: Pit Approval ☒

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐

COMMENCE DRILLING OPNS. ☐ P AND A ☐

CASING/CEMENT JOB ☐

OTHER: ☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Chesapeake, respectfully, requests that the attached procedure be approved for the drilling pit for this well. Chesapeake, hereby, agrees to close the pit according to NMOCD guidelines per item #3 ~~Regulation~~ *Rule*

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any 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 ☐.

SIGNATURE

Brenda Coffman

TITLE Regulatory Analyst

DATE 11/15/2004

Type or print name Brenda Coffman

E-mail address: bcoffman@chkenergy.com

Telephone No. (432)685-4310

For State Use Only

TIM W. GUM

APPROVED BY:

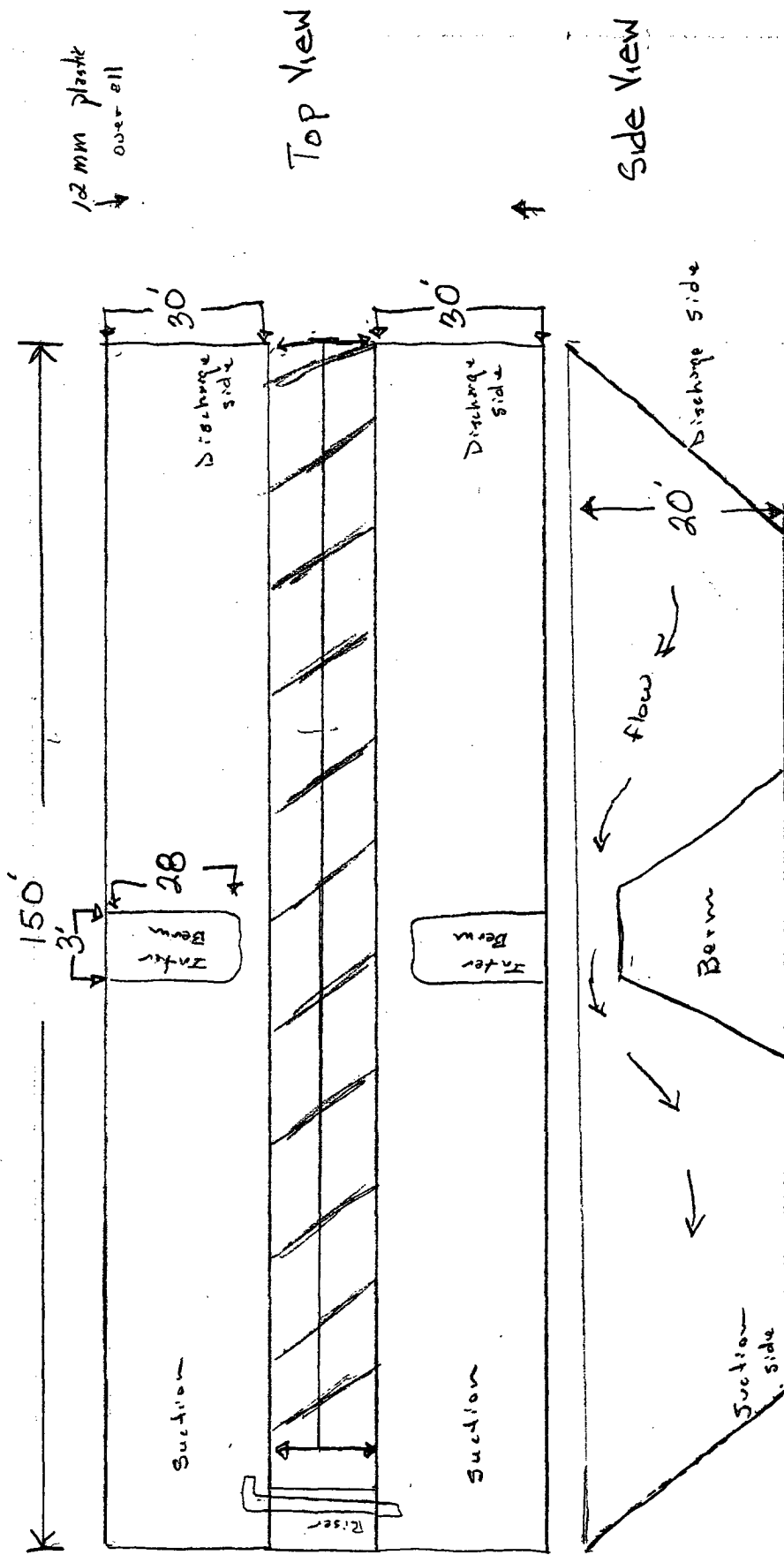
DISTRICT II SUPERVISOR

DATE

NOV 24 2004

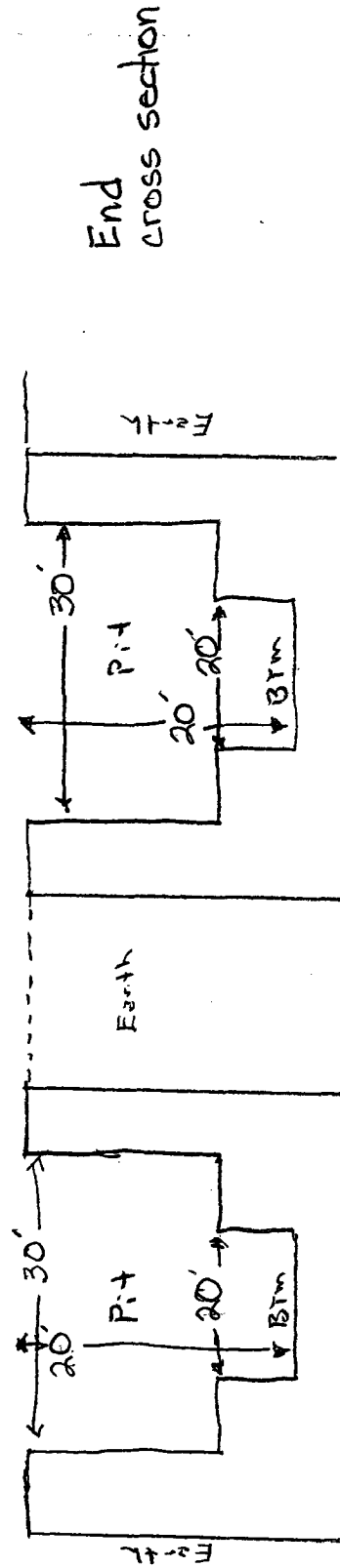
Conditions of Approval (if any):

BGA for VD



18' x 30' x 140' = 75600 ft³ ÷ 5.6146 = 13464.8 bbls x 2 = 26929.7 bbls, with 18' of fluid cuttings in pits.

20' x 30' x 140' = 90000 ft³ ÷ 5.6146 = 16029.6 bbls x 2 = 32059.2 bbls with 20'



UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD-ARTESIA

FORM APPROVED
OMB NO. 1004-0135
Expires: November 30, 2000

EC

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on reverse side.

SECRETARY'S POTASH

1. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other		5. Lease Serial No. NMNM111960
2. Name of Operator CHESAPEAKE OPERATING, INC.		6. If Indian, Allottee or Tribe Name
3a. Address OKLAHOMA CITY, OK 73154-0496		7. If Unit or CA/Agreement, Name and/or No.
3b. Phone No. (include area code) Ph: 405.767.4275 Fx: 405.879.9583		8. Well Name and No. ROYAL FLUSH FEDERAL 1
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 15 T24S R31E SWNE 1980FNL 1980FEL		9. API Well No.
		10. Field and Pool, or Exploratory SOUTH SAND DUNES-DELAWARE UNKNOWN
		11. County or Parish, and State EDDY COUNTY, NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	Change to Original A
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	PD

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Per request of BLM the location was moved from 1980 FNL 1980 FEL to 1480 FNL 1980 FEL.

Attached are the new survey plats.

(PN 819524)

14. I hereby certify that the foregoing is true and correct. Electronic Submission #35070 verified by the BLM Well Information System For CHESAPEAKE OPERATING, INC., sent to the Carlsbad Committed to AFMSS for processing by LINDA ASKWIG on 08/25/2004 (04LA0770SE)	
Name (Printed/Typed) LINDA GOOD	Title AUTHORIZED REPRESENTATIVE
Signature (Electronic Submission)	Date 08/25/2004

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By <u>William S. Condit</u>	STATE DIRECTOR	21 SEP 2004
Conditions of approval, if any, are attached. Approval of this notice 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.		Date
Office NM STATE OFFICE		

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.

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

DISTRICT I

1625 N. French Dr., Hobbs, NM 88240

DISTRICT II

811 South First, Artesia, NM 88210

DISTRICT III

1000 Rio Brazos Rd., Artec, 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	Pool Code	Pool Name
Property Code	Property Name ROYAL FLUSH FEDERAL	Well Number 1
OGED No.	Operator Name CHESAPEAKE OPERATING INC.	Elevation 3528'

Surface Location

UL or lot No.	Section	Township	Range	Lot 1dn	Feet from the	North/South line	Feet from the	East/West line	County
G	15	24 S	31 E		1480	NORTH	1980	EAST	EDDY

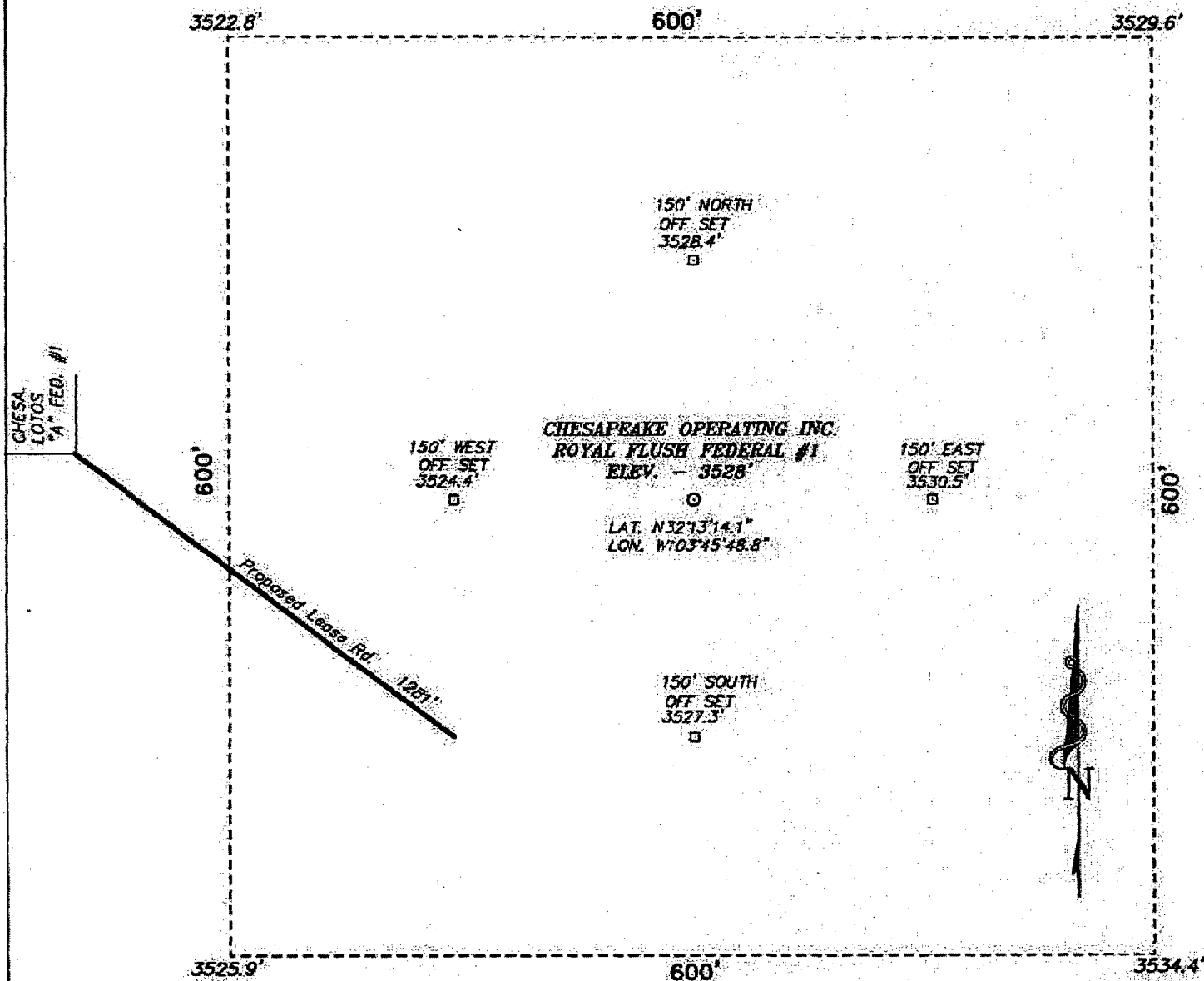
Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot 1dn	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>Lat.: N32°13'14.1"</p> <p>Long.: W103°45'48.8"</p>		<p>OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p> <p></p> <p>Signature</p> <p>JIM BALL</p> <p>Printed Name</p> <p>SENIOR LANDMAN</p> <p>Title</p> <p>8/23/04</p> <p>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 surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</p> <p>AUGUST 13, 2004</p> <p>Date Surveyed</p> <p></p> <p>Signature</p> <p>GARY L. JONES</p> <p>Professional Surveyor</p> <p>7977</p> <p>Certification No.</p>
		<p>7977</p> <p>No. 7977</p>
		<p>7977</p> <p>7977</p>

SECTION 15, TOWNSHIP 24 SOUTH, RANGE 31 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.



FROM THE JCT. STATE HWY. 128 & CO. RD. 798 GO
MW. ON 128 FOR 3.1 MILES TO A LEASE ROAD LT. (MM13.7)
GO SOUTH ON LEASE RD. FOR 2.7 MILES TO A L.S. RD.
LT., GO EAST 0.3 MILES TO A LEASE ROAD RT. GO
SOUTH FOR 1.3 MILES TO JCT. OF 4 LEASE ROADS TAKE
THE EAST LEASE RD. FOR 0.3 MILES TO A L.S. RD. LT.
GO NORTH 0.3 MILES TO PROP. LEASE RD. RIGHT.

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

W.O. Number: 4555

Drawn By: K. GOAD

Date: 08-16-2004

Disk: KJG #1 - 4555A.DWG

CHESAPEAKE OPERATING INC.

REF: ROYAL FLUSH FEDERAL #1 / Well Pad Tops

ROYAL FLUSH FEDERAL #1 LOCATED 1480' FROM THE
NORTH LINE AND 1980' FROM THE EAST LINE OF
SECTION 15, TOWNSHIP 24 SOUTH, RANGE 31 EAST,
N.M.P.M., EDDY COUNTY, NEW MEXICO.

Survey Date: 08-13-2004

Sheet 1 of 1 Sheets

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

1. EXISTING ROADS

- a. Existing county and lease 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 1634' 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 State Hwy 128 & Co. Rd 798 go NW on 182 for 3.1 miles to a lease road, left (MM13.7) go south on lease rd for 2.7 miles to a lease road, left go east 0.3 miles to a lease road, right go south for 1.3 miles to Jct. of 4 lease roads take the east lease road for 0.3 miles to a lease road, left go north 0.3 miles to proposed lease road right.

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. – 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 10-24S-31E. All material (i.e. shale) will be acquired from private or commercial sources.

7. METHODS FOR HANDLING WASTE DISPOSAL

Drill cuttings will be contained and buried in an earthen reserve pit after the drilling fluids have evaporated. 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 D. Also see Exhibit A for the size of the pad.

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.
Royal Flush Federal 1
1980 FNL 1980 FEL
C SWNE of Section 15-24S-31E
Eddy County, NM

CONFIDENTIAL – TIGHT HOLE

Lease No. NMNM 111960

SURFACE USE PLAN
Page 3

GRAZING LEASE HELD BY:

Richardson Cattle
P.O. Box 487
Carlsbad, NM 88221

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 14896
Oklahoma City, OK 73154
(405) 767-4339 (OFFICE)
(405) 879-9573 (FAX)
(405) 990-8182 (MOBILE)
ddelao@chkenergy.com

Regulatory Compliance

Linda Good
Regulatory Compliance Analyst
P.O. Box 18496
Oklahoma City, OK 73154
(405) 767-4275 (OFFICE)
(405) 879-9583 (FAX)
lgood@chkenergy.com

Field Representative

Curtis Blake
Production Superintendent
5014 Carlsbad Hwy
Hobbs, NM 88240
505-391-1462 Ext. 12 (OFFICE)
505-391-6679 (FAX)
505-631-9936 (MOBILE)
cblake@chkenergy.com

ONSHORE ORDER NO. 1
Chesapeake Operating, Inc.
Royal Flush Federal 1
1980 FNL 1980 FEL
C SWNE of Section 15-24S-31E
Eddy County, NM

CONFIDENTIAL – TIGHT HOLE

Lease No. NMNM 111960

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.

J. Mark Lester
7/14/04

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	580	2900
Lamar	4380	-900
Bell Canyon	4420	-940
Cherry Canyon	5310	-1830
Brushy Canyon	6560	-3080
L Brushy Canyon	7080	-3600
Bone Springs Lime	8200	-4720
1 st Bone Springs	9170	-5790
2 nd Bone Springs	9870	-6390
3 rd Bone Springs	11110	-7630
Wolfcamp	11570	-8090
Basal Wolfcamp Carbonate	12760	-9280
Cisco	13070	-9590
Strawn	13480	-10000
Atoka	13690	-10210
Atoka Bank	13820	-10340
Atoka Datum	13900	-10420
Morrow Poker Lake Sand	14480	-11000
Morrow Clastic	14690	-11210
Morrow B Sand	14780	-11300
Morrow B Lower	14830	-11350
Morrow C Sand	14940	-11460
Morrow D Sand	15050	-11570
Lower Morrow	15190	-11710
Barnett	15340	-11860
Total Depth	15500	-12020

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>
Gas	Pennsylvanian Lower	14850
Gas	Pennsylvanian Lower	15050

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 - See Exhibit F-1, F-2, and F-3.

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:

3.

System Operating Pressures

Precharge Pressure

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.

ONSHORE ORDER NO. 1
Chesapeake Operating, Inc.
Royal Flush Federal 1
1980 FNL 1980 FEL
C SW NE of Section 15-24S-31E
Eddy County, New Mexico

CONFIDENTIAL – TIGHT HOLE
Lease Contract No. NM 111960

DRILLING PROGRAM

Page 4

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</u> <u>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> ^{J55}	<u>Hole Size</u>	<u>Casing Size</u>	<u>Weight</u>	<u>Grade</u>	<u>Thread</u>	<u>Condition</u>
Surface	0-680' ^{915'}	17-1/2	13-3/8	48	H40	STC	New
Intermediate	680' - 4,500'	12-1/4	9-5/8	40	J55	LTC	New
Production	4500' - 11,850'	8-3/4	7	23/26	L80	LTC	New
Liner	11,550'-15,600'	6-1/8	4-1/2	13.5	P110	LTC	New

- b. Casing design subject to revision based on geologic conditions encountered.
- c. The cementing program will be as follows:

<u>Interval</u> ^{J55}	<u>Type</u>	<u>Amount</u>	<u>Yield</u>	<u>Washout</u>	<u>Excess</u>
0'-680' ^{915'}	Class C + Additives	705	1.34	75	100
680' - 4,500'	Class C 50/50 Poz + Additives	1000+200	2.23/1.34	50	75
4,500' - 11,850'	Class H + Additives	460+400	2.38/1.22	10	30
11,850'-15,600'	Class H + additives	125+200	2.22/1.22	10	30

DRILLING PROGRAM

Page 5

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>
0-680' ^{915'}	FW	8.7	29-38	NC
^{915'} 680'-4,500'	Brine	10	29	NC
4,500'-11,850'	FW/Brine	8.5 – 10	29-32	NC
11,850'-15,600'	Brine/XCD	10-11.3	29-38	NC-15

An in-ground, lined pit will be utilized during the drilling of this well. All fluids and cuttings will be disposed of in accordance with New Mexico Oil Conservation 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.

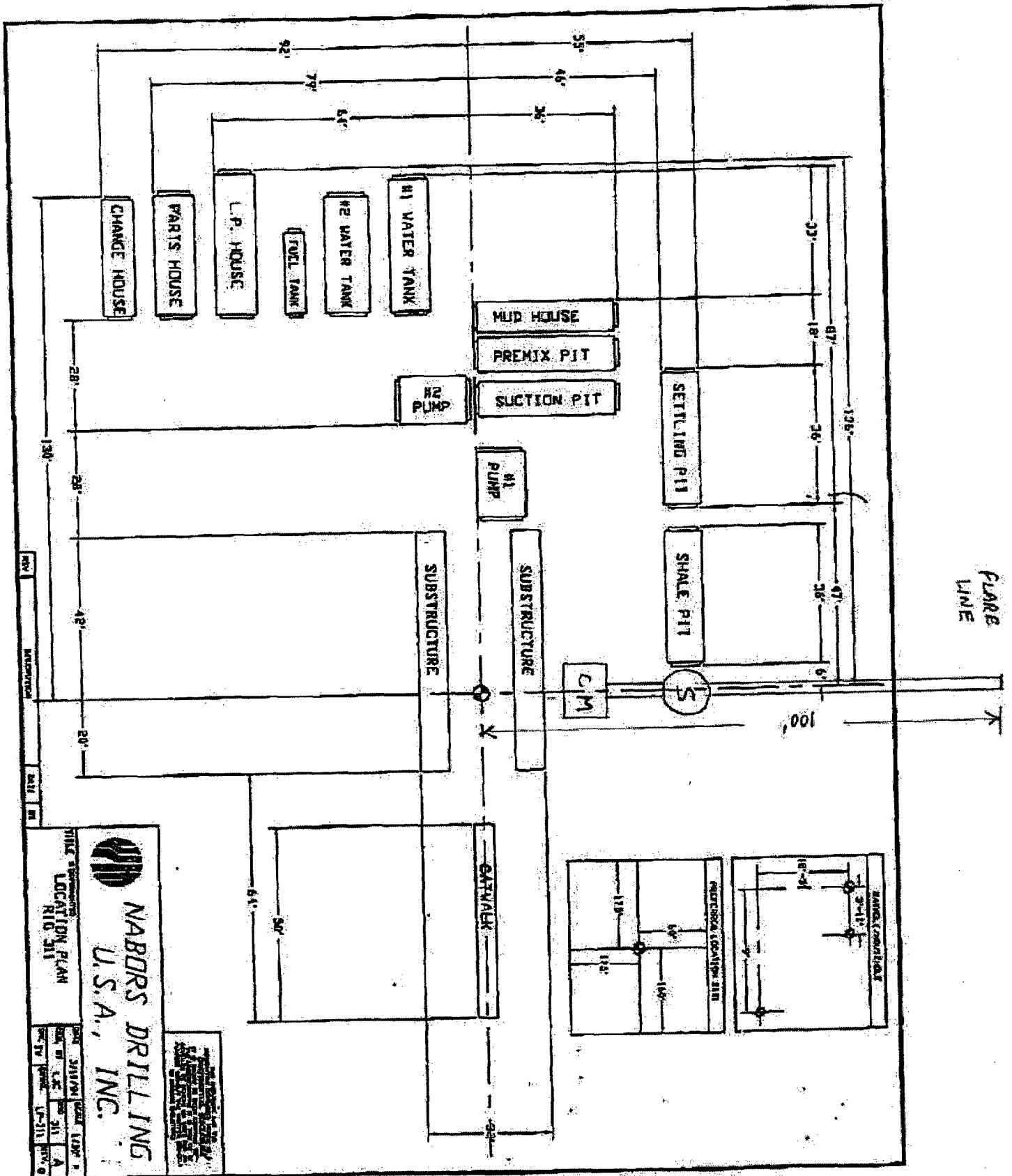
6. TESTING, LOGGING AND CORING

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 Natural GR, Density-Neutron, PE & Dual Laterolog from TD to surface casing; Neutron-GR surface casing to surface.
- Cores samples are not planned.

7. ABNORMAL PRESSURES AND HYDROGEN SULFIDE

- The estimated bottom hole pressure is 8500 psi. No abnormal pressures or temperatures are anticipated.
- Hydrogen sulfide gas is not anticipated.



NABORS DRILLING
U.S.A., INC.
 TITLE: LOCATION PLAN
 R10.311

DATE: 03/26/04
 BY: [Signature]
 CHECKED: [Signature]
 APPROVED: [Signature]

BLOWOUT PREVENTOR SCHEMATIC

CHESAPEAKE OPERATING INC

WELL : Royal Flush 15 Federal #1

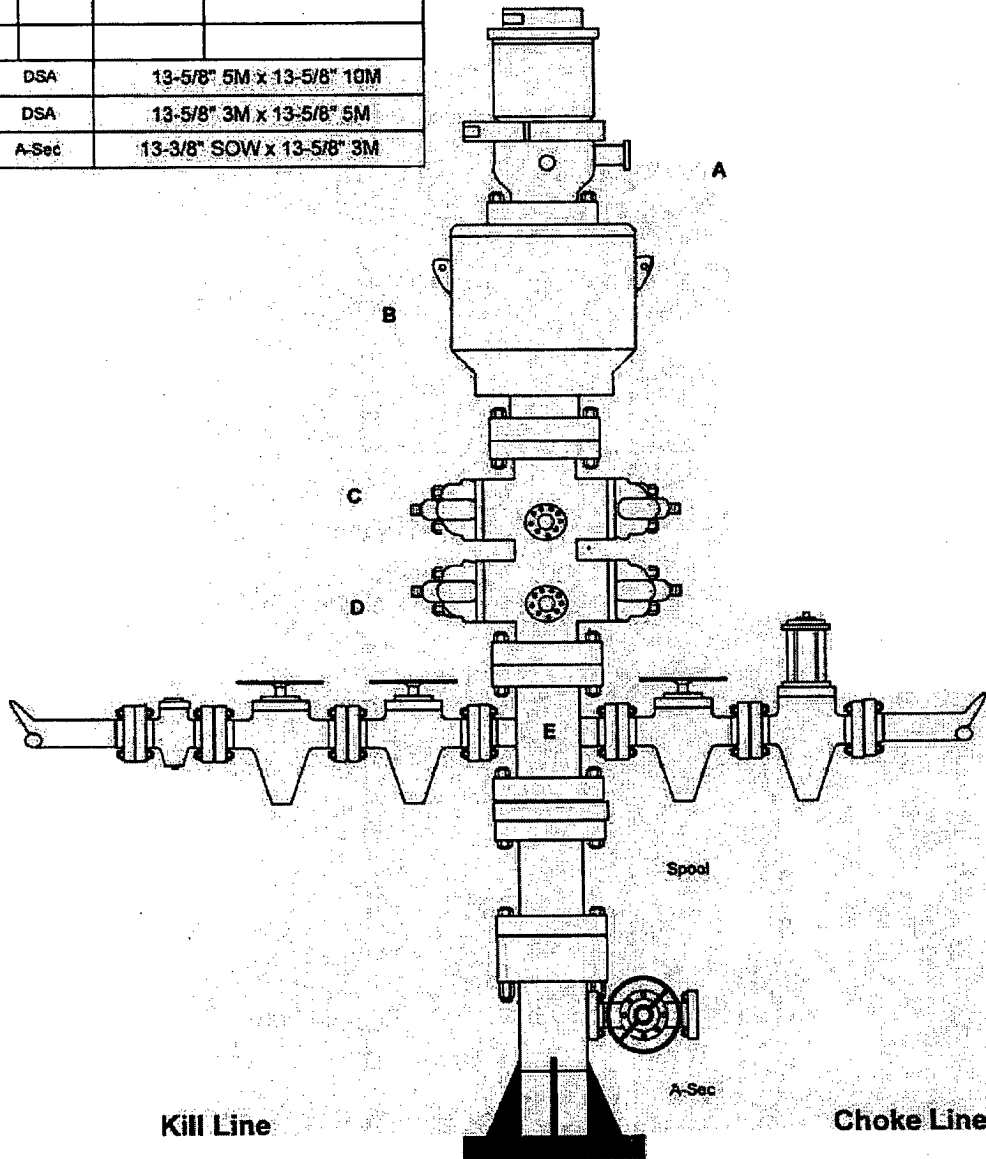
RIG : Nabors #311

COUNTY : Eddy

STATE: New Mexico

OPERATION: Drill out below 13-3/8" Casing

	SIZE	PRESSURE	DESCRIPTION
A	13-5/8"	500#	Rot 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
DSA	13-5/8" 5M x 13-5/8" 10M		
DSA	13-5/8" 3M x 13-5/8" 5M		
A-Sec	13-3/8" 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

BLOWOUT PREVENTOR SCHEMATIC

CHESAPEAKE OPERATING INC

WELL : Royal Flush 15 Federal #1

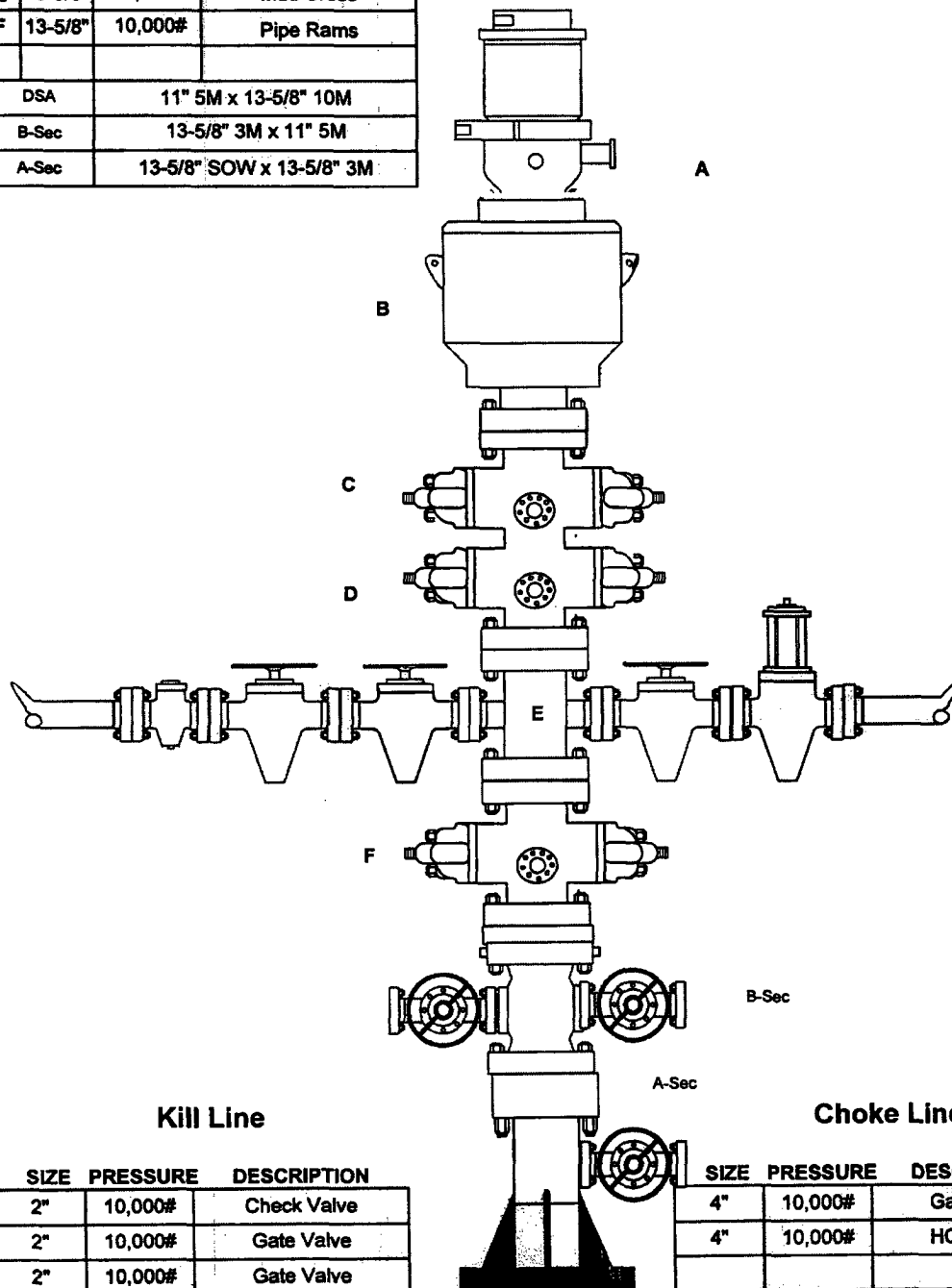
RIG : Nabors 311

COUNTY : Eddy

STATE: New Mexico

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

	SIZE	PRESSURE	DESCRIPTION
A	13-5/8"	500#	Rot 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
DSA	11" 5M x 13-5/8" 10M		
B-Sec	13-5/8" 3M x 11" 5M		
A-Sec	13-5/8" SOW x 13-5/8" 3M		



BLOWOUT PREVENTOR SCHEMATIC

CHESAPEAKE OPERATING INC

WELL : Royal Flush 15 Federal #1

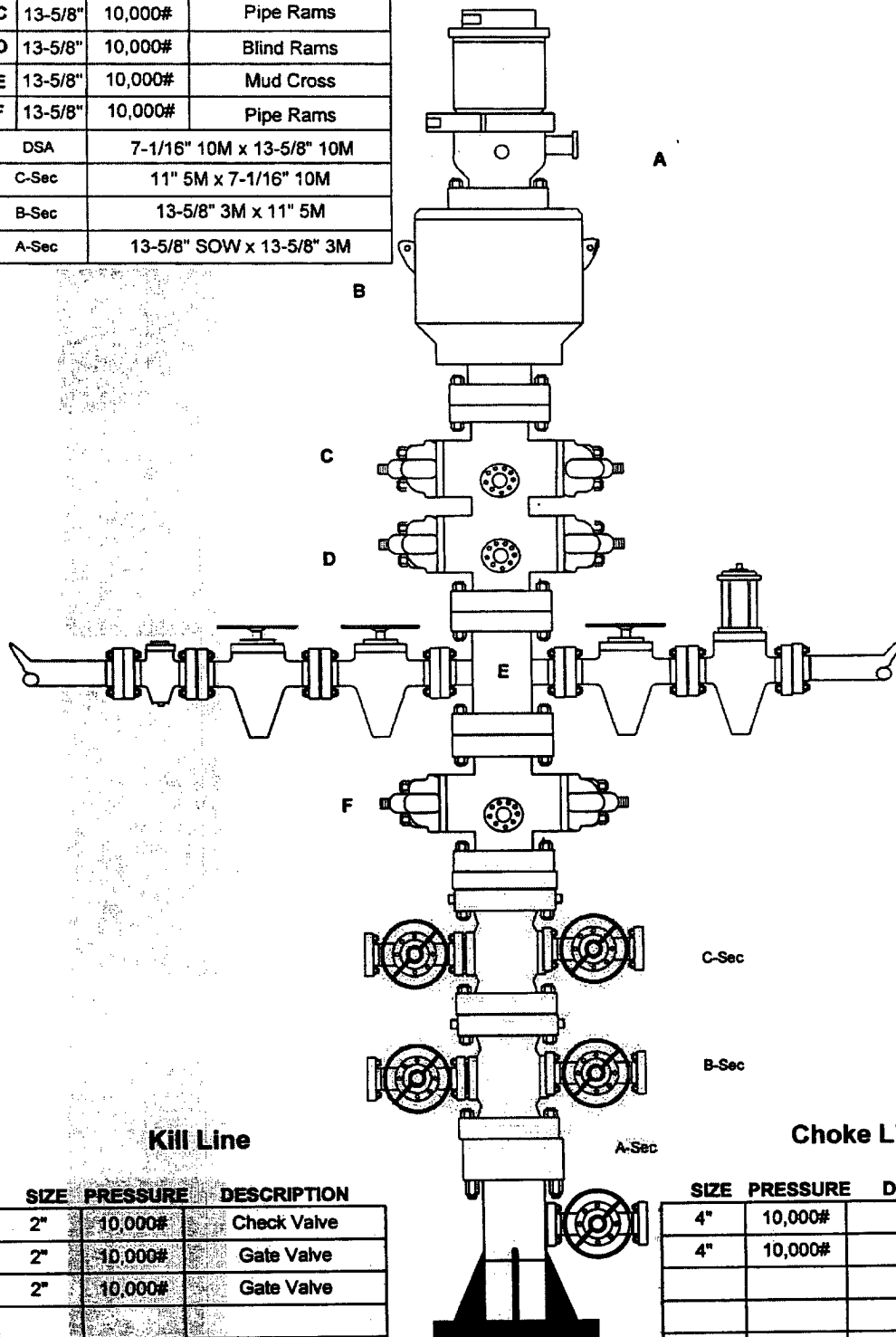
RIG : Nabors 311

COUNTY : Eddy

STATE: New Mexico

OPERATION: Drill out below 7" Casing

SIZE	PRESSURE	DESCRIPTION
A 13-5/8"	500#	Rot 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
DSA	7-1/16" 10M x 13-5/8" 10M	
C-Sec	11" 5M x 7-1/16" 10M	
B-Sec	13-5/8" 3M x 11" 5M	
A-Sec	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