

OCD-HOBBS

**CONFIDENTIAL**

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

**APPLICATION FOR PERMIT TO DRILL OR REENTER**

FORM APPROVED  
OMB No. 1004-0137  
Expires March 31, 2007

5. Lease Serial No.  
NMLC-67715

6. If Indian, Allottee or Tribe Name

1a. Type of work: ☒ DRILL ☐ REENTER

1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other ☐ Single Zone ☐ Multiple Zone

2. Name of Operator  
CHESAPEAKE OPERATING, INC. ATTN: LINDA GOOD

3a. Address P.O. BOX 18496, OKLAHOMA CITY, OK  
73154-0496

3b. Phone No. (include area code)  
405-767-4275

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

8. Lease Name and Well No.  
KELLER 28 FEDERAL 2

9. API Well No.

10. Field and Pool, or Exploratory

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

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

At surface 1740 FNL & 340 FEL, SENE  
At proposed prod. zone SAME **CAPTAN CONTROLLED WATER BASIN**

14. Distance in miles and direction from nearest town or post office\*  
18 MILES NW OF JAL, NEW MEXICO.

12. County or Parish  
LEA COUNTY

13. State  
NM

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  
640

17. Spacing Unit dedicated to this well  
40

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

19. Proposed Depth  
8800

20. BLM/BIA Bond No.  
NM2634

21. Elevations (Show whether DF, KDB, RT, GL, etc.)  
ESTIMATED 3425 GR / 3443 KB

22. Approximate date work will start\*

23. Estimated duration

24. Attachments

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 (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

Name (Printed/Typed)  
Henry Hood

Date

Title

Sr. Vice President - Land & Legal & General Counsel

Approved by (Signature) */s/ James Stovall*

Name (Printed/Typed)  
*/s/ James Stovall*

Date

**ACTING FIELD MANAGER**

Office  
**CARLSBAD FIELD OFFICE**

Application approval 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.  
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.

\*(Instructions on page 2)

SEE ATTACHED FOR  
CONDITIONS OF APPROVAL

APPROVAL SUBJECT TO  
GENERAL REQUIREMENTS  
AND SPECIAL STIPULATIONS  
ATTACHED

**CONFIDENTIAL**Form 3160-3  
(April 2004)UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT**APPLICATION FOR PERMIT TO DRILL OR REENTER**FORM APPROVED  
OMB No. 1004-0137  
Expires March 31, 2007

5. Lease Serial No.

~~NMLC 67715~~

NMLC 066715

6. If Indian, Allottee or Tribe Name

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

8. Lease Name and Well No.

KELLER 28 FEDERAL 2

9. API Well No.

10. Field and Pool, or Exploratory

WEST ANTELOPE RIDGE

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

28-23S-34E

12. County or Parish

LEA COUNTY

13. State

NM

1a. Type of work: ☒ DRILL ☐ REENTER1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other ☐ Single Zone ☐ Multiple Zone

2. Name of Operator

CHESAPEAKE OPERATING, INC. ATTN: LINDA GOOD

3a. Address P.O. BOX 18496, OKLAHOMA CITY, OK  
73154-04963b. Phone No. (include area code)  
405-767-4275

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

At surface 1740 FNL &amp; 670 FEL, SENE

At proposed prod. zone SAME 340' FEL C.L. 01/29/07

14. Distance in miles and direction from nearest town or post office\*  
18 MILES NW OF JAL, NEW MEXICO.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

640

17. Spacing Unit dedicated to this well

40

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to nearest well, drilling, completed,  
applied for, on this lease, ft.

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

ESTIMATED 3425 GR / 3443 KB

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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

Name (Printed/Typed)

Henry Hood

Date

11/7/06

Title

Sr. Vice President - Land &amp; Legal &amp; General Counsel

Approved by (Signature)

Name (Printed/Typed)

Date

Title

Office

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States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

\*(Instructions on page 2)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

OCD-HOBBS

FORM APPROVED  
OMB No. 1004-0137  
Expires: March 31, 2007

**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.**

5. Lease Serial No.  
NMLC 067715

6. If Indian, Allottee or Tribe Name

**SUBMIT IN TRIPLICATE – Other instructions on page 2.**

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator  
CHESAPEAKE OPERATING, INC.

ATTN: LINDA GOOD

3a. Address  
P. O. BOX 18496  
OKLAHOMA CITY, OK 73154-0496

3b. Phone No. (include area code)  
405-767-4275

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

8. Well Name and No.  
KELLER 28 FEDERAL 2

9. API Well No.  
NA

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

1740' FNL & 340' FEL, SENE, SECTION 28, T23S, R34E

10. Field and Pool or Exploratory Area  
WEST ANTELOPE RIDGE; BONE SPRING

11. Country or Parish, State  
LEA COUNTY, NEW MEXICO

**12. CHECK THE 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 checked="" 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 <u>Change to</u>
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	<u>Original APD</u>
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

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 must 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 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

Chesapeake has changed the proposed location from 1740' FNL & 670' FEL TO 1740' FNL & 340' FEL per request by the BLM. Attached are the new survey plats.

Chesapeake plans to lay 4224' of 2" SDR 11 poly pipe from the Keller 28 Federal 2 to the Southern Union Keller CDP meter. Attached is the revised Production Facility (Exhibit C-1 & C-2).

(CHK PN 613220)

14. I hereby certify that the foregoing is true and correct.

Name (Printed/Typed)  
LINDA GOOD

Title FEDERAL REGULATORY ANALYST

Signature

*Linda Good*

Date 01/19/2007

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by

*/s/ James Stovall*

**ACTING FIELD MANAGER**

Date **FEB 26 2007**

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.

Office

**CARLSBAD FIELD 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.

(Instructions on page 2)

DISTRICT I  
1625 N. FRENCH DR., ROBERTS, NM 86240

DISTRICT II  
1301 W. GRAND AVENUE, ARTESIA, NM 86210

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

DISTRICT IV  
1625 S. ST. FRANCIS DR., SANTA FE, NM 87505

State of New Mexico  
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION  
1220 SOUTH ST. FRANCIS DR.  
Santa Fe, New Mexico 87505

Form C-102  
Revised October 12, 2005  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code 2209	Pool Name West Antelope Ridge; Bone Spring
Property Code	Property Name KELLER 28 FEDERAL	Well Number 2
OGRID No. 147179	Operator Name CHESAPEAKE OPERATING, INC.	Elevation 3479'

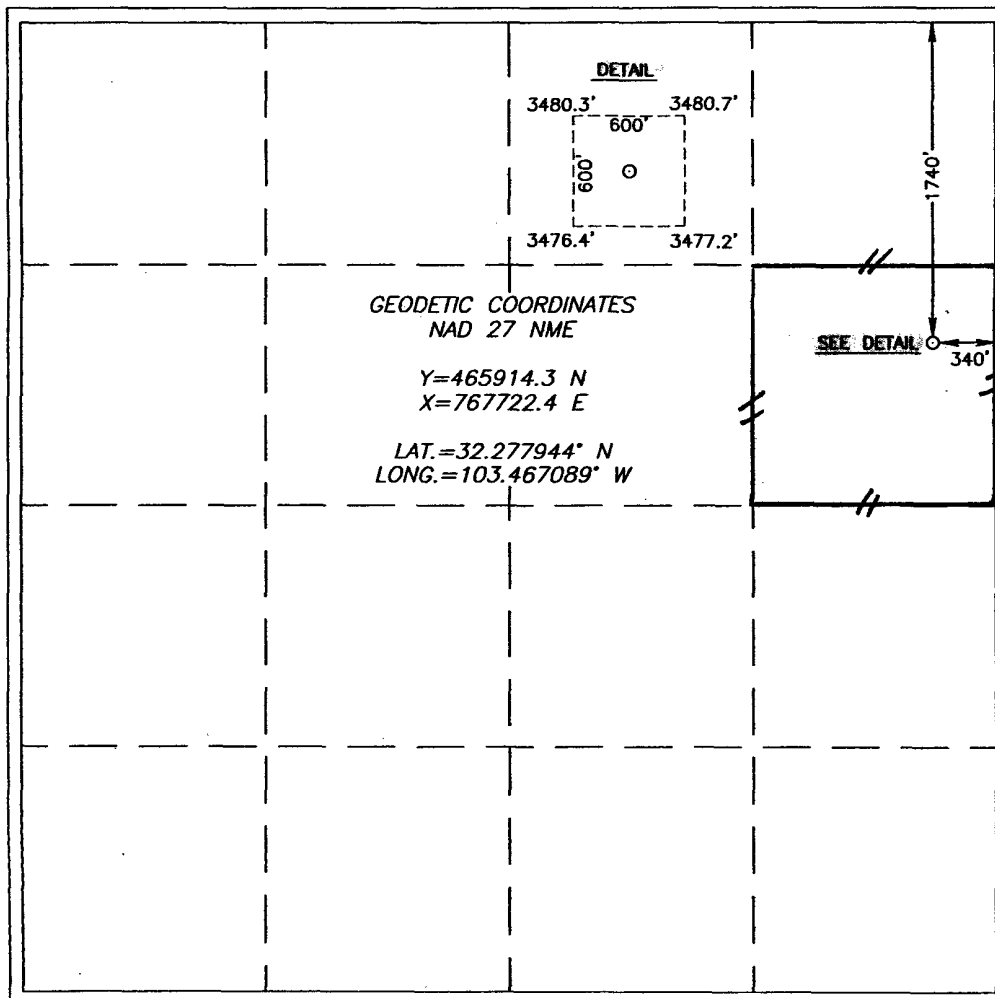
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	28	23-S	34-E		1740	NORTH	340	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 40		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><b>OPERATOR CERTIFICATION</b></p> <p>I hereby certify that the information herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p>Signature: <i>Lynda F. Townsend</i> Date: <i>1-19-07</i></p> <p>Printed Name: <i>Lynda F. Townsend</i></p>
	<p><b>SURVEYOR CERTIFICATION</b></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>JANUARY 4, 2007</p> <p>Date Surveyed: <i>1/4/07</i> AR</p> <p>Signature &amp; Seal of Professional Surveyor: <i>GARY EIDSON</i></p> <p>Certificate No.: <i>12641</i> 12641</p> <p><i>RONALD EIDSON</i> 3239</p>

Revised  
EXHIBIT A-1

# BLOWOUT PREVENTOR SCHEMATIC

CHESAPEAKE OPERATING INC

WELL : Keller 28 Federal 2

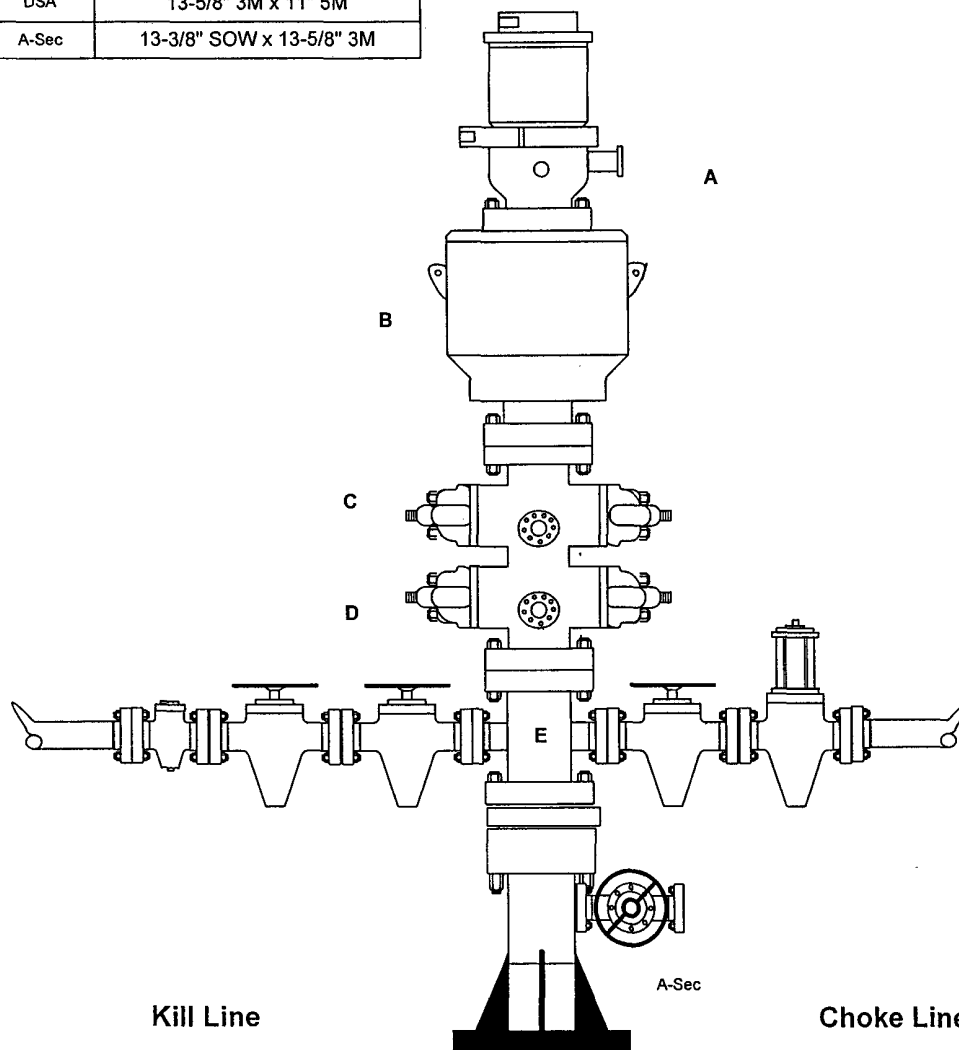
RIG : Forster Rig 15

COUNTY : Lea

STATE: New Mexico

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

	SIZE	PRESSURE	DESCRIPTION
A	11"	500 psi	Rot Head
B	11"	5000 psi	Annular
C	11"	5000 psi	Pipe Rams
D	11"	5000 psi	Blind Rams
E	11"	5000 psi	Mud Cross
DSA	13-5/8" 3M x 11" 5M		
A-Sec	13-3/8" SOW x 13-5/8" 3M		



SIZE	PRESSURE	DESCRIPTION
2"	5000 psi	Check Valve
2"	5000 psi	Gate Valve
2"	5000 psi	Gate Valve

SIZE	PRESSURE	DESCRIPTION
4"	5000 psi	Gate Valve
4"	5000 psi	HCR Valve

EXHIBIT F-1

# BLOWOUT PREVENTOR SCHEMATIC

CHESAPEAKE OPERATING INC

WELL : Keller 28 Federal 2

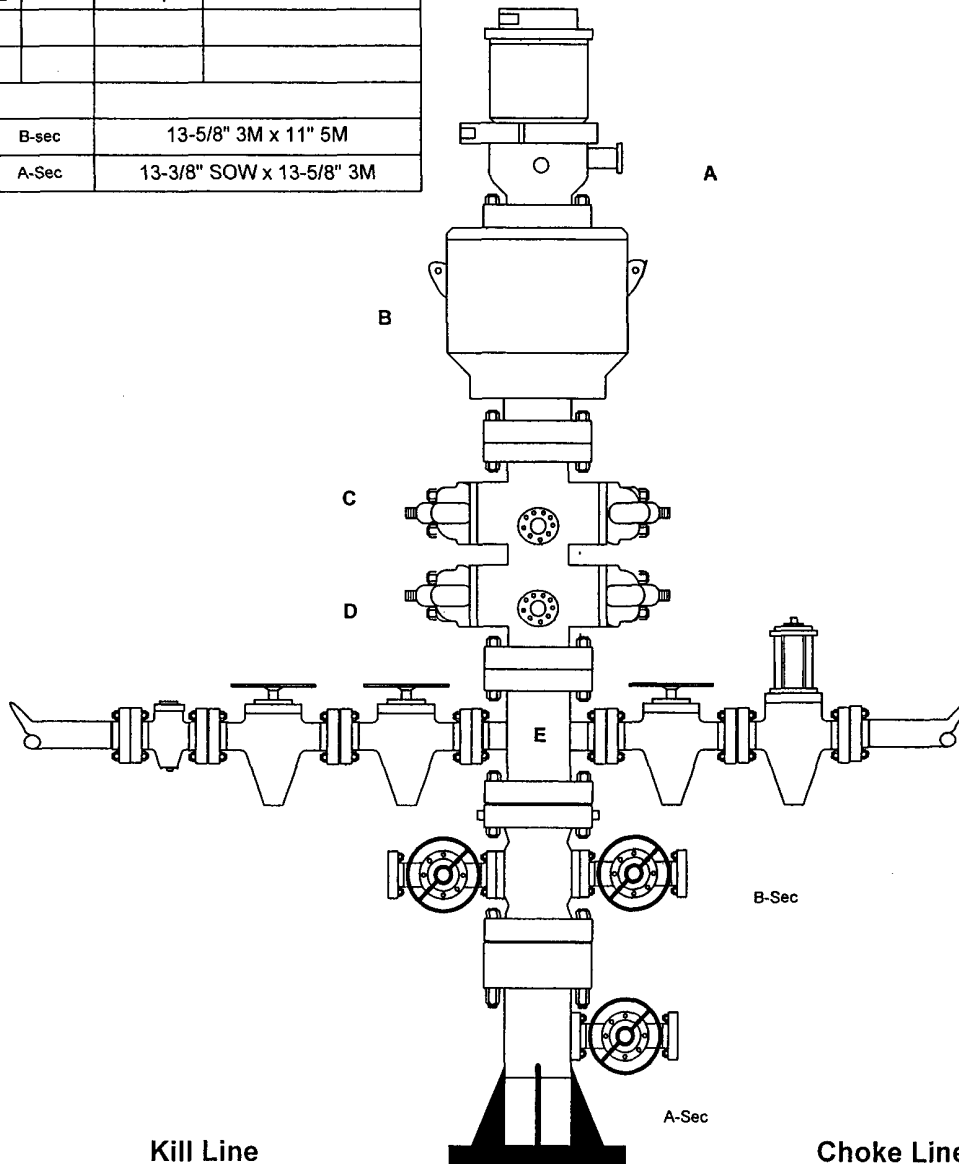
RIG Forster Rig 15

COUNTY : Lea

STATE: New Mexico

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

	SIZE	PRESSURE	DESCRIPTION
A	11"	500 psi	Rot Head
B	11"	5000 psi	Annular
C	11"	5000 psi	Pipe Rams
D	11"	5000 psi	Blind Rams
E	11"	5000 psi	Mud Cross
B-sec	13-5/8" 3M x 11" 5M		
A-Sec	13-3/8" SOW x 13-5/8" 3M		



Kill Line

Choke Line

SIZE	PRESSURE	DESCRIPTION
2"	5000 psi	Check Valve
2"	5000 psi	Gate Valve
2"	5000 psi	Gate Valve

SIZE	PRESSURE	DESCRIPTION
4"	5000 psi	Gate Valve
4"	5000 psi	HCR Valve

EXHIBIT E-2

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

State of New Mexico  
Energy Minerals and Natural Resources

Form C-144  
June 1, 2004

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

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 Operating Inc. Telephone: (432)687-2992 e-mail address: sstricklin@chkenergy.com

Address: 2010 Rankin Hwy Midland, TX 79701

Facility or well name: KELLER 28 FEDERAL API#: \_\_\_\_\_ U/l or Qtr/ Qtr H Sec 28 T 23S R 34E

County: LEA Latitude 32.277944°N Longitude 103.467089°W NAD: 1927 ☒ 1983 ☐ Surface Owner Federal ☒ State ☐ Private ☐ Indian ☐

**Pit**

Type: Drilling ☒ Production ☐ Disposal ☐

Workover ☐ Emergency ☐

Lined ☒ Unlined ☐

Liner type: Synthetic ☒ Thickness 12 mil Clay ☐

Pit Volume 12129 bbl

**Below-grade tank**

Volume: \_\_\_\_\_ bbl Type of fluid: \_\_\_\_\_

Construction material: \_\_\_\_\_

Double-walled, with leak detection? Yes ☐ If not, explain why not. \_\_\_\_\_

Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.) 400 ft

Less than 50 feet	(20 points)
50 feet or more, but less than 100 feet	(10 points)
100 feet or more	(0 points)

Wellhead protection area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources.)

Yes	(20 points)
<u>No</u>	(0 points)

Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)

Less than 200 feet	(20 points)
200 feet or more, but less than 1000 feet	(10 points)
<u>1000 feet or more</u>	(0 points)

Ranking Score (Total Points)

0

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: (check the onsite box if you are burying in place) 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.

Additional Comments:

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: 03/09/2007

Printed Name/Title Shay Stricklin Regulatory Tech.

Signature [Signature]

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:

Printed Name/Title CARIS WILLIAMS / DIST SURV

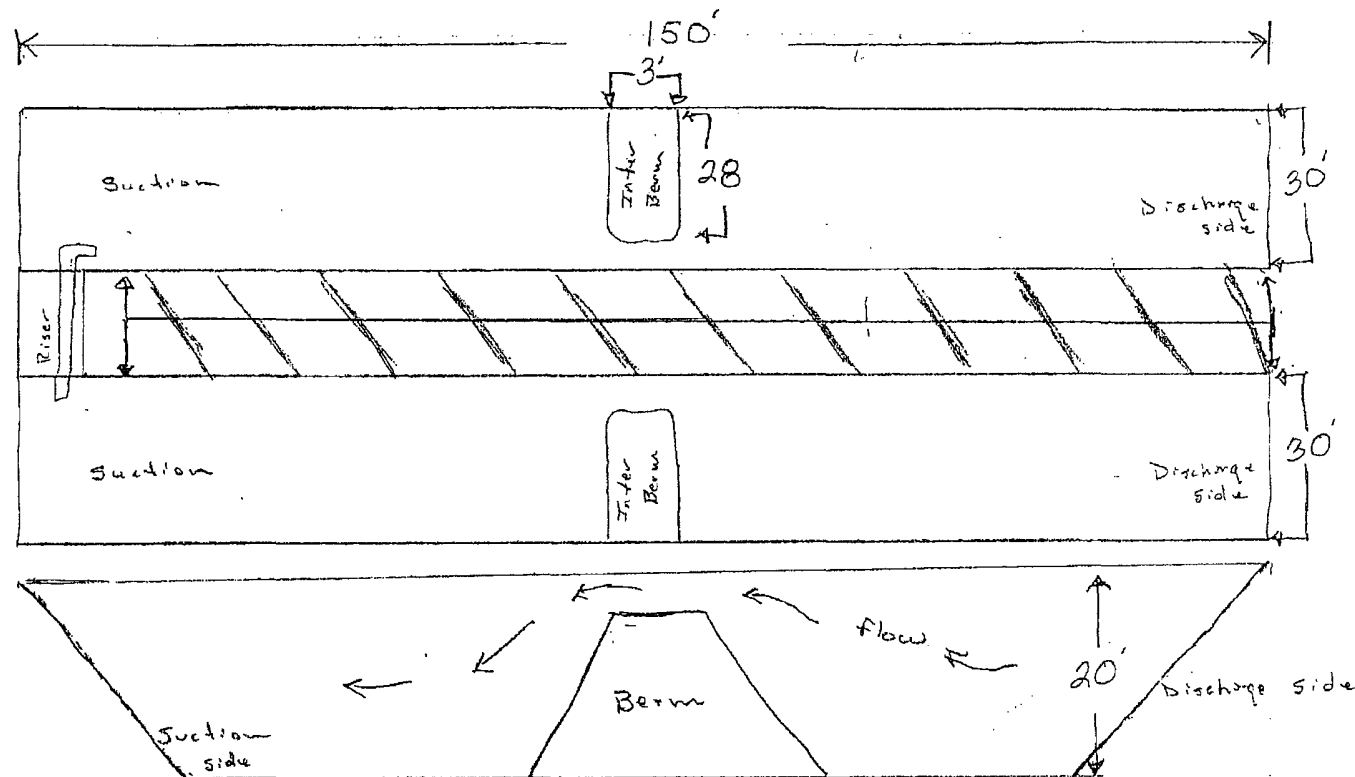
Signature [Signature]

Date: 3/9/07

Chesapeake Energy

Double Pit

Guideline 3A



12 mm plate  
over all

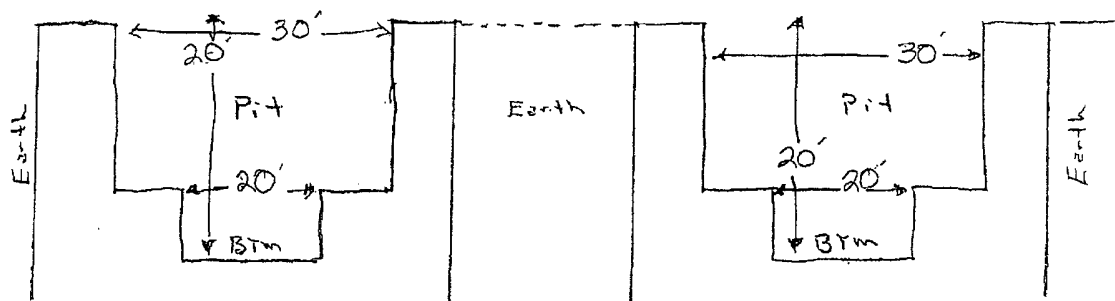
Top View

↑

Side View

$$18' \times 30' \times 140' = 75600 \text{ ft}^3 \div 5.6146 = 13464.8 \text{ bbls} \times 2 = 26929.7 \text{ bbls, with 18' of fluid \& cuttings in pits.}$$

$$20' \times 30' \times 140' = 90000 \text{ ft}^3 \div 5.6146 = 16029.6 \text{ bbls} \times 2 = 32059.2 \text{ bbls with 20'}$$



End  
cross section