FEB - 2 2009

Oil Cons. N.M. DIV-Dist. 2
1301 W. Grand Avenue
Artesia, NM 88210

Form 3160-3
(August 2007)

FORM APPROVED
OMB No. 1004-0136
Expires July 31, 2010

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

5. Lease Serial No.
NMNM111408

## APPLICATION FOR PERMIT TO DRILL OR REENTER

6. If Indian, Allottee or Tribe Name

1a. Type of Work: ☐ DRILL ☐ REENTER

CONFIDENTIAL

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

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

8. Lease Name and Well No.
MCMASTER TRUST 3 FEDERAL COM 1

2. Name of Operator
CHESAPEAKE OERATING INC
Contact: LINDA GOOD
E-Mail: linda.good@chk.com

147179

9. API Well No.
30-005-64091

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

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

10. Field and Pool, or Exploratory
UNDESIGNATED ABO
Sand Draw; ABO 97418

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

At surface SENE 2310FNL 810FEL

At proposed prod. zone

11. Sec., T., R., M., or Blk. and Survey or Area
Sec 3 T12S R26E Mer NMP
SME: BLM

14. Distance in miles and direction from nearest town or post office*
APPROX. 20 MILES SE OF ROSWELL, NEW MEXICO.

12. County or Parish
CHAVES

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
400.00

17. Spacing Unit dedicated to this well
160.00

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

19. Proposed Depth
5150 MD

20. BLM/BIA Bond No. on file

21. Elevations (Show whether DF, KB, RT, GL, etc.
3605 GL

22. Approximate date work will start

23. Estimated duration

24. Attachments ROSWELL 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 | Name (Printed/Typed) | Date |
|---|---|---|
| (Electronic Submission) | LINDA GOOD Ph: 405-767-4275 | 11/03/2008 |

Title
REGULATORY COMPLIANCE SPEC.

| Approved by (Signature) | Name (Printed/Typed) | Date |
|---|---|---|
| /S/ Angel Mayes | /S/ Angel Mayes | JAN 28 2009 |
| Title: Assistant Field Manager, Lands And Minerals | Office: ROSWELL FIELD OFFICE | APPROVED FOR 2 YEARS |

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.

Assistant Field Manager, Lands And Minerals

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 #64355 verified by the BLM Well Information System**
**For CHESAPEAKE OERATING INC, sent to the Roswell**
**Committed to AFMSS for processing by DAVID GLASS on 11/03/2008 (09DG0029AE)**

DECLARED WATER BASIN

CEMENT BEHIND THE 8 5/8" CASING MUST BE CIRCULATED

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

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

WITNESS

**Additional Operator Remarks:**

CHESAPEAKE OPERATING, INC. RESPECTFULLY REQUESTS PERMISSION TO DRILL A WELL TO 5150' TO TEST THE ABO FORMATION. IF PRODUCTIVE, CASING WILL BE RUN AND THE WELL COMPLETED. IF DRY, THE WELL WILL BE PLUGGED AND ABANDONED AS PER BLM AND NEW MEXICO OIL CONSERVATION DIVISION REQUIREMENTS.

PLEASE FIND THE SURFACE USE PLAN AND DRILLING PLAN AS REQUIRED BY ONSHORE ORDER NO. 1.

ATTACHED ARE THE EXHIBIT A-1 TO A-4 SURVEY PLATS, EXHIBIT B 1 MILE RADIUS PLAT, EXHIBIT C PRODUCTION FACILITY, EXHIBIT D NABORS RIG #311 LAYOUT, EXHIBIT_E ARCH. SURVEY AND EXHIBIT F-1 TO F-2 BOP & CHOKE MANIFOLD.

CHESAPEAKE OPERATING, INC. HAS AN AGREEMENT WITH THE SURFACE OWNER.

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.

(CHK PN 618295)

## Revisions to Operator-Submitted EC Data for APD #64355

| | Operator Submitted | BLM Revised (AFMSS) |
|---|---|---|
| Lease: | NMNM111408 | NMNM111408 |
| Agreement: | | |
| Operator: | CHESAPEAKE OPERATING, INC.<br>P.O. BOX 18496<br>OKLAHOMA CITY, OK 73154-0496<br>Ph: 405-767-4275 | CHESAPEAKE OERATING INC<br>P O BOX 18496<br>OKLAHOMA CITY, OK 73154-0496<br>Ph: 405.767.4275 |
| Admin Contact: | LINDA GOOD<br>REGULATORY COMPLIANCE SPEC.<br>P.O. BOX 18496<br>OKLAHOMA CITY, OK 73154-0496<br>Ph: 405-767-4275<br><br>E-Mail: linda.good@chk.com | LINDA GOOD<br>REGULATORY COMPLIANCE SPEC.<br>P O BOX 18496<br>OKLAHOMA CITY, OK 73154-0496<br>Ph: 405-767-4275<br><br>E-Mail: linda.good@chk.com |
| Tech Contact: | LINDA GOOD<br>REGULATORY COMPLIANCE SPEC.<br>P.O. BOX 18496<br>OKLAHOMA CITY, OK 73154-0496 | LINDA GOOD<br>REGULATORY COMPLIANCE SPEC.<br>P O BOX 18496<br>OKLAHOMA CITY, OK 73154-0496 |
| Well Name:<br>Number: | MCMASTER TRUST 3 FEDERAL COM<br>1 | MCMASTER TRUST 3 FEDERAL COM<br>1 |
| Location:<br>State:<br>County:<br>S/T/R:<br>Surf Loc: | <br>NM<br>CHAVES<br>Sec 3 T12S R26E Mer NMP<br>SENE 2310FNL 810FEL | <br>NM<br>CHAVES<br>Sec 3 T12S R26E Mer NMP<br>SENE 2310FNL 810FEL |
| Field/Pool: | UND. SAND DRAW; ABO, GAS | UNDESIGNATED ABO |
| Bond: | NM2634 | |

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

DISTRICT II
1301 W. Grand Avenue, Artesia, NM 88210

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

DISTRICT IV
1220 S. St. Fransis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

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

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

## WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

| API Number | Pool Code | Pool Name |
|---|---|---|
| 30-005-64091 | 97418 | Und. Sand Draw; Abo, gas |

| Property Code | Property Name | Well Number |
|---|---|---|
| 37585 | McMASTER TRUST 3 FEDERAL COM | 1 |

| OGRID No. | Operator Name | Elevation |
|---|---|---|
| 147179 | CHESAPEAKE OPERATING, INC. | 3608' |

Surface Location

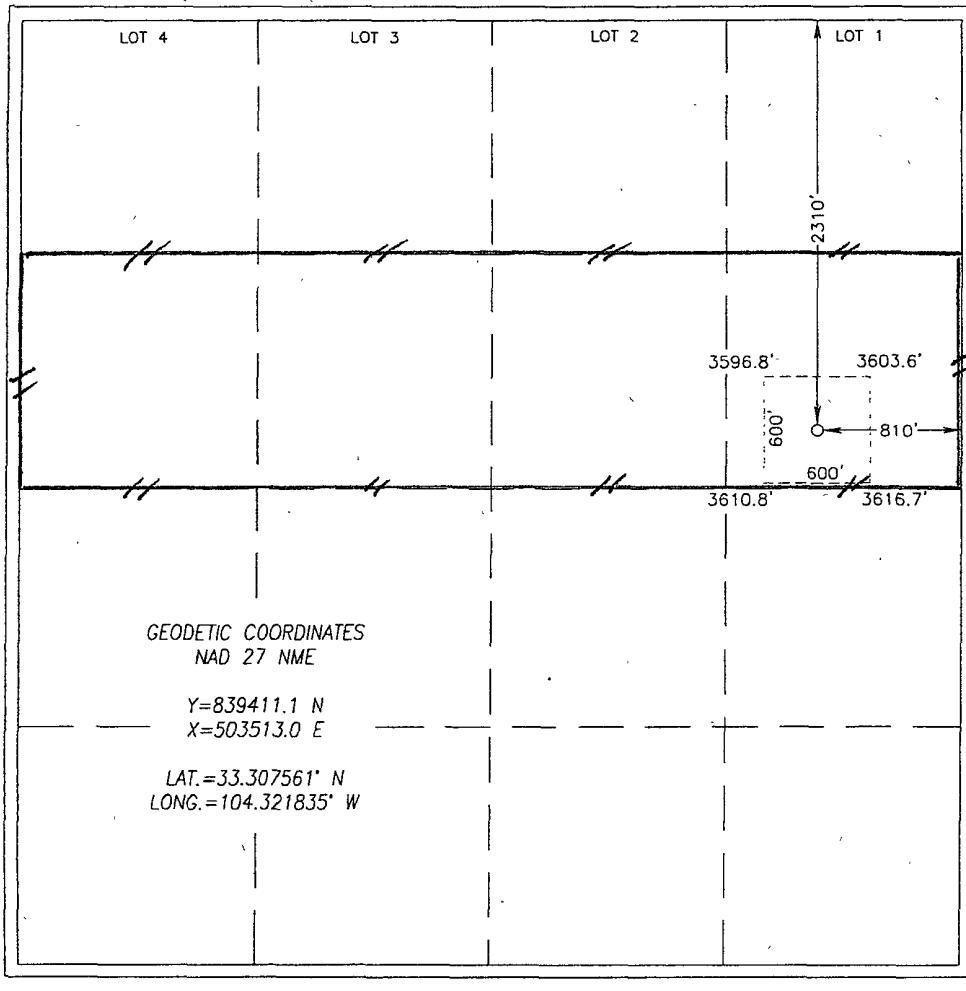
| UL or lot No. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---|---|---|---|---|---|---|---|---|---|
| H | 3 | 12-S | 26-E | | 2310 | NORTH | 810 | EAST | CHAVES |

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 | Joint or Infill | Consolidation Code | Order No. |
|---|---|---|---|
| 160 | | | |

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




### OPERATOR CERTIFICATION

I hereby certify that the 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.

Kevin Pfister 10/27/08
Signature Date

KEVIN PFISTER
Printed Name

### SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

RONALD J. EIDSON
NEW MEXICO
3239
REGISTERED PROFESSIONAL SURVEYOR

OCTOBER 23, 2008
Date Surveyed JC

Signature & Seal of Professional Surveyor

08.11.0986

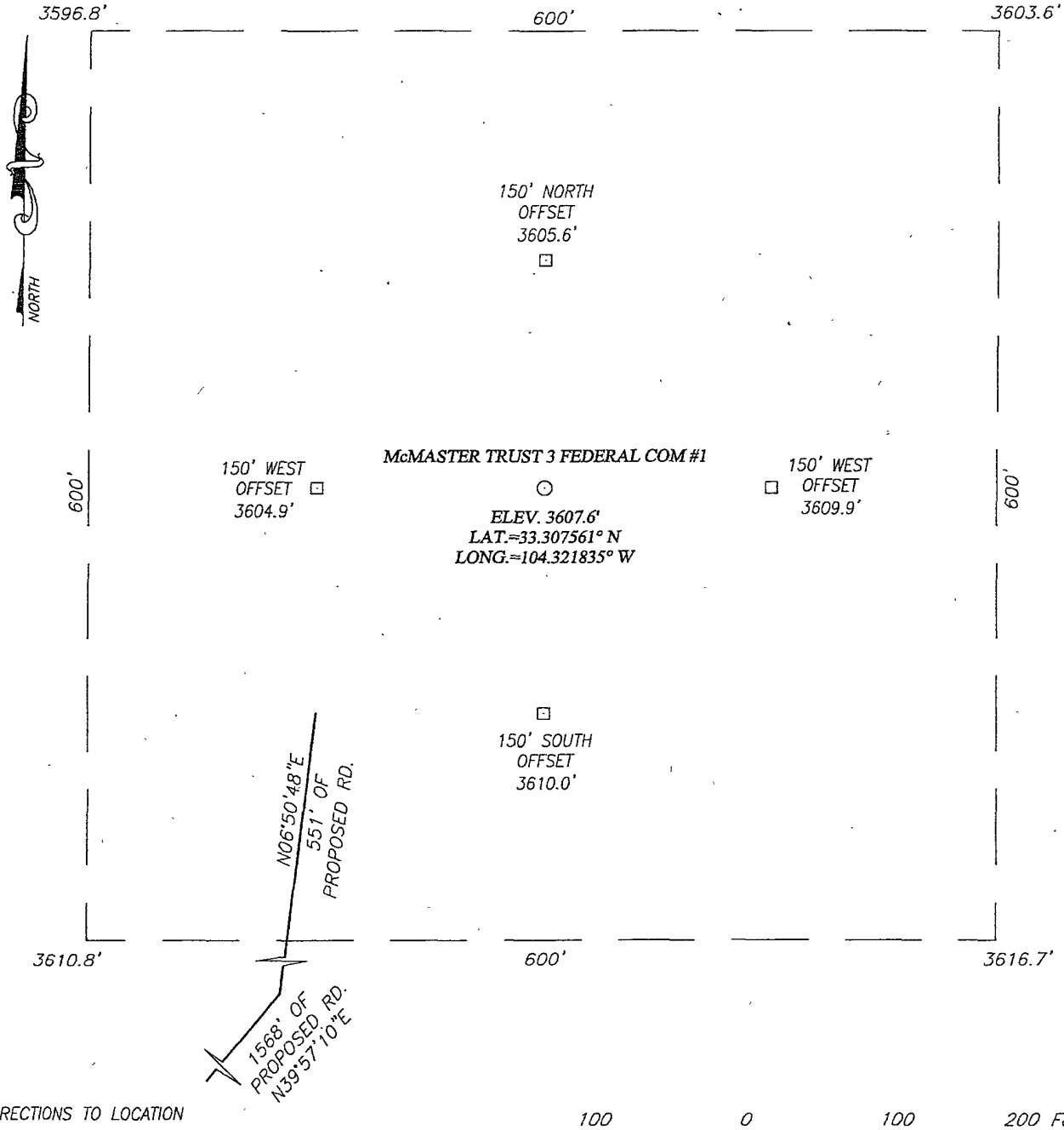
10/24/08

Certificate No. GARY G. EIDSON 12641
RONALD J. EIDSON 3239

EXHIBIT A-1

# SECTION 3, TOWNSHIP 12 SOUTH, RANGE 26 EAST, N.M.P.M.

CHAVES COUNTY NEW MEXICO




DIRECTIONS TO LOCATION

FROM THE INTERSECTION U.S. HIGHWAY 380 AND STATE HIGHWAY 409, GO SOUTH ON STATE HIGHWAY 409 AND WICHITA RD. APPROX. 6.5 MILES TO A PROPOSED ROAD SURVEY. FOLLOW ROAD SURVEY NORTHEAST APPROX. 2119 FEET OR 0.4 MILES TO THIS LOCATION.

100 0 100 200 Feet

Scale:1"=100'


PROVIDING SURVEYING SERVICES
SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(505) 393-3117

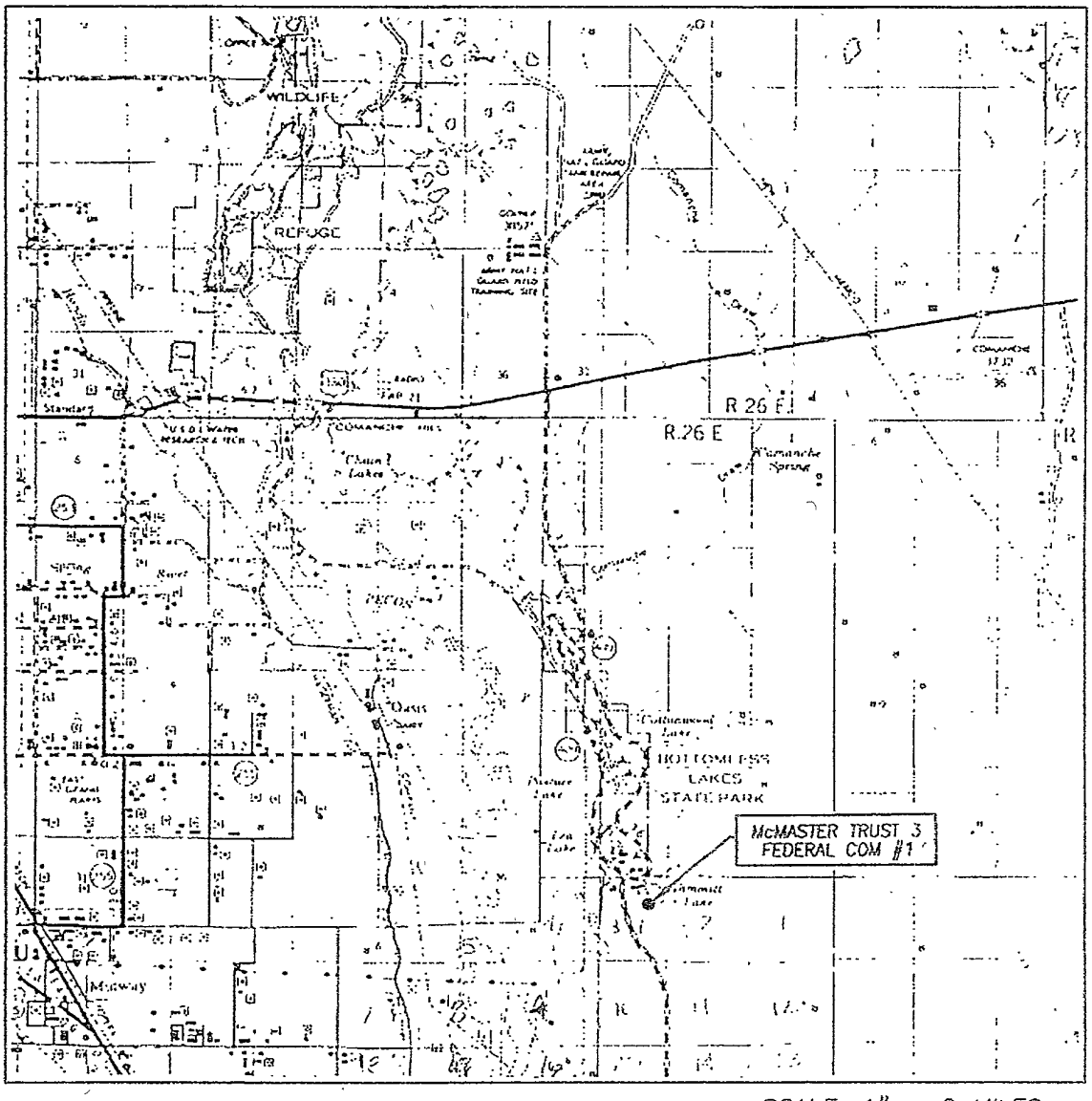

## CHESAPEAKE OPERATING, INC.

McMASTER TRUST 3 FEDERAL COM #1 WELL
LOCATED 2310 FEET FROM THE NORTH LINE
AND 810 FEET FROM THE EAST LINE OF SECTION 3,
TOWNSHIP 12 SOUTH, RANGE 26 EAST, N.M.P.M.,
CHAVES COUNTY, NEW MEXICO

| | | | |
|---|---|---|---|
| Survey Date: 10/23/08 | Sheet 1 of 1 Sheets | | |
| W.O. Number: 08.11.1864 | Dr By: JC | | Rev 1:N/A |
| Date: 10/24/08 | | 08111864 | Scale:1"=100' |

EXHIBIT A-2

# VICINITY MAP




SCALE: 1" = 2 MILES

SEC. 3 TWP. 12-S RGE. 26-E

SURVEY N.M.P.M.

COUNTY CHAVES STATE NEW MEXICO

DESCRIPTION 2310' FNL & 810' FEL

ELEVATION 3608'

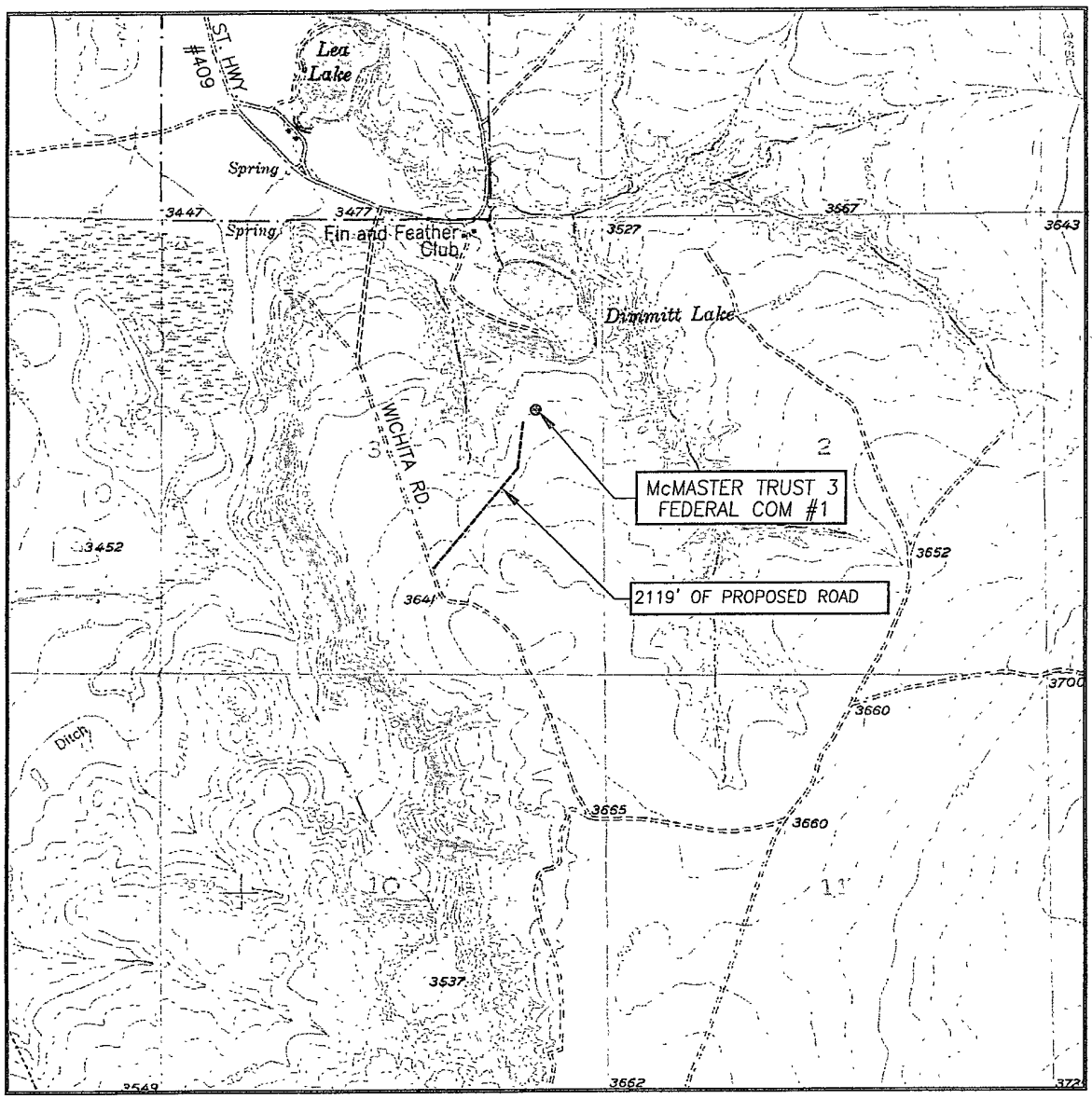
OPERATOR CHESAPEAKE OPERATING, INC.

LEASE McMASTER TRUST 3 FEDERAL COM

PROVIDING SURVEYING SERVICES
SINCE 1945
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(505) 393-3117

EXHIBIT A-3

# LOCATION VERIFICATION MAP




SCALE: 1" = 2000'

CONTOUR INTERVAL:
BOTTOMLESS LAKES, N.M. – 10'

SEC. 3 TWP. 12-S RGE. 26-E

SURVEY N.M.P.M.

COUNTY CHAVES STATE NEW MEXICO

DESCRIPTION 2310' FNL & 810' FEL

ELEVATION 3608'

OPERATOR CHESAPEAKE OPERATING, INC.

LEASE McMASTER TRUST 3 FEDERAL COM

U.S.G.S. TOPOGRAPHIC MAP
BOTTOMLESS LAKES, N.M.

PROVIDING SURVEYING SERVICES
SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(505) 393-3117

EXHIBIT A-4

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 Exhibit A-1 through A-4.

2. PLANNED ACCESS ROADS

   a. A new access road 2119' in length and 14' in travel width with a maximum disturbance area of 30' will be built coming off the existing county road in an easterly direction. See Exhibit A-2. The road 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 A-1 & A-2.
   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: From the intersection US HWY 380 and State Hwy 409, go South on State HWY 409 and Wichita Rd approx. 6.5 miles to a proposed road survey. Follow road survey Northeast approx. 2119 feet or 0.4 miles to this 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. Agave will lay pipeline to well site. – 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 3-12S-26E. 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-toliet and then hauled to an approved sanitary landfill.

8. ANCILLARY FACILITIES - None.

9. WELLSITE LAYOUT
The proposed site layout plat is attached showing the Nabors #311 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 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. MINERAL OWNERSHIP
United States of America
Department of Interior
Roswell, NM 88201

SURFACE OWNERSHIP
McMaster Trust 575-772-5633
Elliott and Evelyn McMaster
P.O. Box 176
Datill, NM 87821
**(Chesapeake has an agreement with the surface owners.)**

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.

**Chesapeake Operating, Inc. agrees to be responsible under the terms and conditions of the lease for the operations conducted upon the lease lands.**

12. OPERATOR'S REPRESENTATIVES

**Drilling and Completion Operations**
Dave Bert
District Manager
P.O. Box 18496
Oklahoma City, OK 73154
(405) 879-6882 (OFFICE)
(405) 761-4699 (Cell)
dave.bert@chk.com

**Sr. Drilling Engineer**
Todd Nance
P.O. Box 14896
Oklahoma City, OK 73154
(405) 879-9301 (OFFICE)
(405) 810-2795 (FAX)
(405) 919-9148 (MOBILE)
todd.nance@chk.com

**Field Representative**
Blake Knight
2010 Rankin Hwy
Midland, TX
432-687-2992 (OFFICE)
432-301-3401 (Cell)
blake.knight@chk.com

**Assett Manager**
Jeff Finnell
P.O. Box 18496
Oklahoma City, OK 73154-0496
405-767-4347 (OFFICE)
405-879-7930 (FAX)
jeff.finnell@chk.com

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

**Geoscience Manager**
David Godsey
P.O. Box 14896
Oklahoma City, OK 73154
405-879-7995 (OFFICE)
405-810-2660 (FAX)
david.godsey@chk.com

## CERTIFICATION

I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of state and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

Executed this 3rd day of November, 2008.

Name: William M. Fowler, Director - Regulatory Compliance

Address: P.O. Box 18496, Oklahoma City, OK 73154-0496

Telephone: 405-848-8000

Field Representative: Blake Knight

Telephone: 432-301-3410

E-mail: blake.knight@chk.com

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 | Sub Sea Depth | Drill Depth |
|---|---|---|
| *San Andres | 2800' | 825' |
| Glorieta | 1520' | 2105' |
| Tubb | 105' | 3520' |
| Abo | -655' | 4280' |
| *Abo dolomite | -1075 | 4700' |
| Wolfcamp Lime | -1420' | 5045' |
| TD | | 5150' |
| *Potential Pay Zones | | |

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

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

| Substance | Formation | Depth |
|---|---|---|
| Oil | San Andres | 2800 |
| Gas | Abo | 4700 |

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

3. BOP EQUIPMENT:

Will have a minimum of 3000 psi rental stack (see proposed schematic) for drill out below surface casing; this system will be tested to 2000 psi working pressure.

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

I. BOP, Annular, Choke Manifold, Pressure Test – (See Exhibit F1& F2).

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 as 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:

| System Operating Pressures | Precharge Pressure |
|---|---|
| 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:

| System Pressure | Remaining Pressure At Conclusion of Test |
|---|---|
| 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:

| Purpose | Interval | Hole Size | Casing Size | Weight | Grade | Thread | Condition |
|---|---|---|---|---|---|---|---|
| Surface Casing | 0' – ~~1050'~~ 600' | 11" | 8-5/8" | 24 ppf | J-55 | ST&C | New |
| Production Casing | 0' – 5,150' | 7-7/8" | 4-1/2" | 11.6 ppf | J-55 | LT&C | New |

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

c. Casing Safety Factors:

8-5/8" Intermediate Casing: SFb = 2.95, SFc = 3.66 and SFt = 7.63
4-1/2" Production Casing: SFb = 1.7, SFc = 2.06 and SFt = 2.08

d. The cementing program will be as follows:

5. Cementing Program

| Interval | Type | Amount | Yield | Top of CMT | Excess |
|---|---|---|---|---|---|
| Surface | **Lead**: (65:35) Fly Ash: Class C + 0.25 pps Flocele + 2% Calcium Chloride<br><br>**Tail**: Class C + 2% CaCl | 350 sks<br><br>100 sks | 1.98<br><br>1.34 | Surf | 100% |
| Production | **Lead**: (35:65) Poz (Fly Ash):Class C + 6% bwoc Bentonite + 5% bwow Sodium Chloride + 0.25 lbs/sack Cello Flake<br><br>**Tail**: Class C + 2% bwow Sodium Chloride + 0.8% bwoc BA-10 + 0.3% bwoc CD-32 | 650 sks<br><br>100 sks | 2.04<br><br>1.35 | Surf | 20% |

6. MUD PROGRAM

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

| Interval | Mud Type | Mud Weight | Viscosity | Fluid Loss |
|---|---|---|---|---|
| 0' – 1050' | Water | 8.4 – 9.0 ppg | 32-34 | N/C |
| 800' – 5,150' | Cut Brine/Brine | 9.4 – 10.0 ppg | 28-40 | 10-12 |

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-toliet and then hauled to an approved sanitary landfill.

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

6. TESTING, LOGGING AND CORING

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

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

7. ABNORMAL PRESSURES AND HYDROGEN SULFIDE

a. The estimated bottom hole pressures is 2250 psi. No abnormal pressures or temperatures are anticipated.
b. Hydrogen sulfide gas is not anticipated.

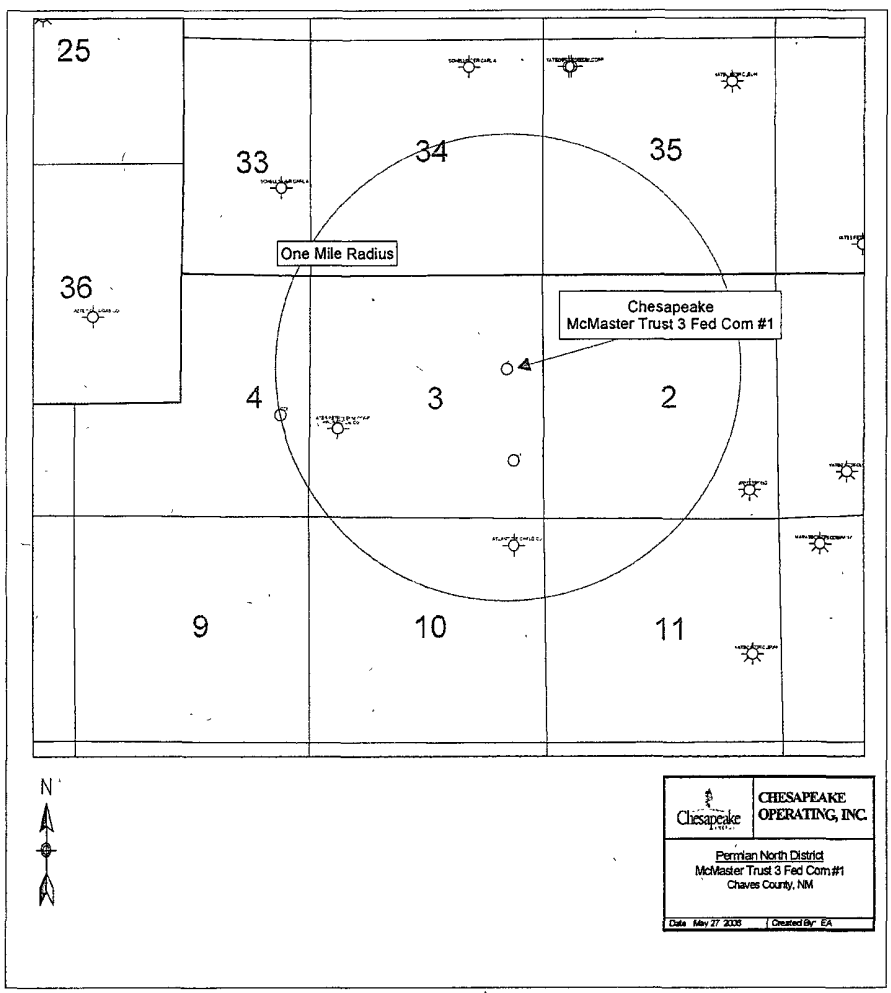
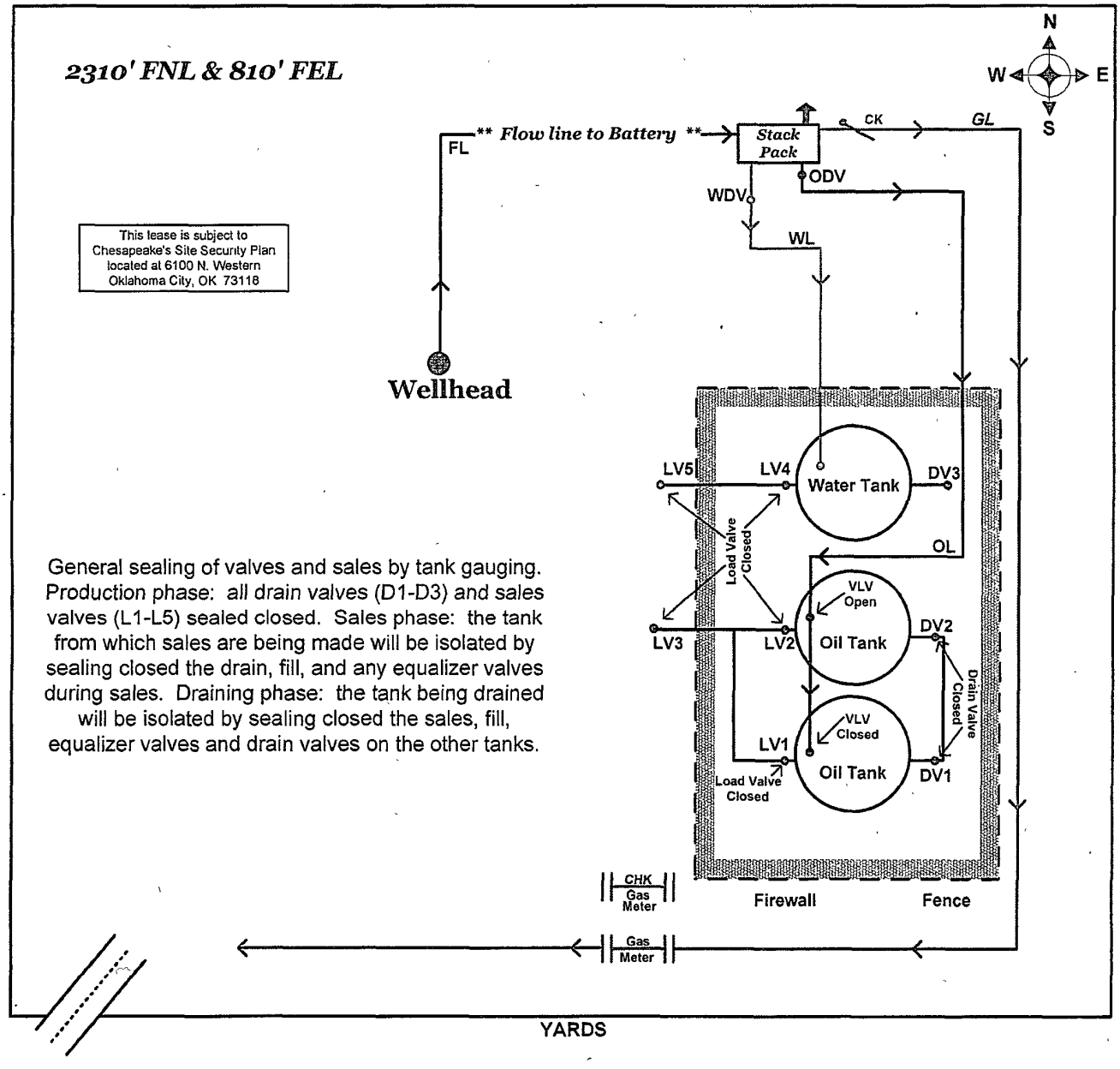

25
33
34
35
36
One Mile Radius
Chesapeake
McMaster Trust 3 Fed Com #1
4
3
2
9
10
11
N
Chesapeake
CHESAPEAKE
OPERATING, INC.
Permian North District
McMaster Trust 3 Fed Com #1
Chaves County, NM
Date May 27 2008
Created By: EA

EXHIBIT B

# CHESAPEAKE OPERATING, INC.

# MCMASTER TRUST 3 FEDERAL COM 1
# 3-12S-26E
# CHAVES CO., NEW MEXICO

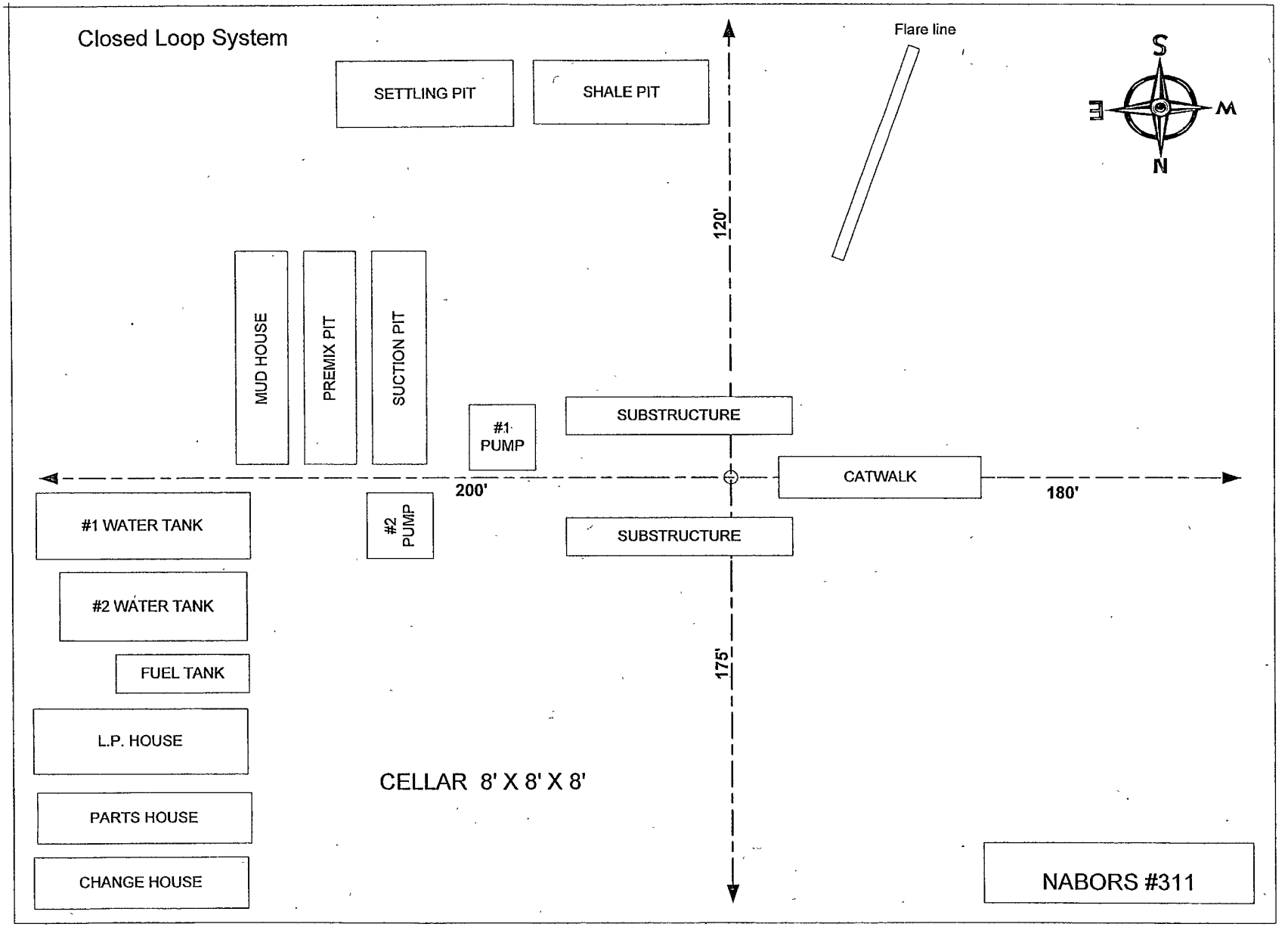



General sealing of valves and sales by tank gauging. Production phase: all drain valves (D1-D3) and sales valves (L1-L5) sealed closed. Sales phase: the tank from which sales are being made will be isolated by sealing closed the drain, fill, and any equalizer valves during sales. Draining phase: the tank being drained will be isolated by sealing closed the sales, fill, equalizer valves and drain valves on the other tanks.

**Prepared by:** Jackie Reynolds
**Date:** 6/24/2008

**Approved by:**
**Date:**

EXHIBIT C




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

Exhibit_D

# NMCRIS INVESTIGATION ABSTRACT FORM (NIAF)

| 1. NMCRIS Activity No.: | 2a. Lead (Sponsoring) Agency: | 2b. Other Permitting Agency(ies): | 3. Lead Agency Report No.: |
|---|---|---|---|
| 110704 | BLM, RFO | | |

4. Title of Report: McMaster Trust "3" Federal com well No. 1.

Author(s) Ann and Danny Boone

5. Type of Report ☒ Negative ☐ Positive

6. Investigation Type

☐ Research Design ☒ Survey/Inventory ☐ Test Excavation ☐ Excavation ☐ Collections/Non-Field Study

☐ Overview/Lit Review ☐ Monitoring ☐ Ethnographic study ☐ Site specific visit ☐ Other

7. Description of Undertaking (what does the project entail?): The project is a pad and access road for a petroleum well. Begining at Chaves Country Wichita Road the proposed access road trends northeast to a point approximately 150 feet into the southwest quadrant of the 600 by 600 feet pad survey area. Exact construction methods are unknown but it is assumed that machines capable of grading, vegetation removal and placing a caliche cap over the impact area will be used.

8. . Dates of Investigation: (from: 6/30/2008 to: )

9. Report Date: 1 July 08

10. Performing Agency/Consultant: Boone Archaeological Services, LLC
Principal Investigator: Danny Boone
Field Supervisor: Danny Boone
*Field Personnel Names: Danny Boone*

11. Performing Agency/Consultant Report No.: BAS 06-08-14

12. Applicable Cultural Resource Permit No(s):
BLM: 190-2920-06-J
STATE: NM-08-157

13. Client/Customer (project proponent): Chesapeake Operating, Inc.
Contact: Linda Good
Address: P.O. Box 18496
Oklahoma City, Oklahoma 73154-0496
Phone: (405) 848-8000

14. Client/Customer Project No.:

15. Land Ownership Status *(Must be indicated on project map):*

| Land Owner | Acres Surveyed | Acres in APE |
|---|---|---|
| Private (Fed. Minerals) | 12.63 (+/-) | 5.09 (-/+) |
| | | |
| | | |
| | | |
| | | |
| TOTALS | 12.63 (-/+) | 5.09 (+/-) |

16. Records Search(es):

| | | |
|---|---|---|
| Date(s) of ARMS File Review: 26 June 08 | Name of Reviewer(s): Ann Boone | |
| Date(s) of NR/SR File Review: | Name of Reviewer(s): | |
| Date(s) of Other Agency File Review: 30 June 08 | Name of Reviewer(s): Danny Boone | Agency: BLM, RFO |

Findings: LA 18349, 18400, 149411, 159105 and possible others are within 1.0 mile.

17. Survey Data:

a. Source Graphics ☒ NAD 27 ☐ NAD 83

☒ USGS 7.5' (1:24,000) topo map ☐ Other topo map, Scale:

☒ GPS Unit Accuracy ☐<1.0m ☒ 1-10m ☐ 10-100m ☐>100m

b. USGS 7.5' Topographic Map Name

| | USGS Quad Code |
|---|---|
| Bottomless Lakes, NM (1950) | 33104-C3 |
| | |
| | |
| | |
| | |
| | |
| | |
| | |

c. County(ies): Chaves

RECEIVED

JUL 08 2008

BY:

17. Survey Data (continued):
d. Nearest City or Town: Roswell, NM
e. Legal Description:

| Township (N/S) | Range (E/W) | Section | ¼ ¼ ¼ |
|---|---|---|---|
| 12S | 26E | 3 | se ne, ne se, ne se, sw se. |
| | | | , , . |
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| | | | , , . |

Projected legal description? Yes [x] No [ ] Unplatted [ ]
f. Other Description (e.g. well pad footages, mile markers, plats, land grant name, etc.): Drill Hole; 2310' FNL, 810' FEL

18. Survey Field Methods:
Intensity: ☒ 100% coverage ☐ <100% coverage
Configuration: ☒ block survey units ☒ linear survey units (l x w): 100 by 1,903 feet ☐ other survey units (specify):
Scope: ☒ non-selective (all sites recorded) ☐ selective/thematic (selected sites recorded)
Coverage Method: ☒ systematic pedestrian coverage ☐ other method (describe)
Survey Interval (m): 15 Crew Size: 1 Fieldwork Dates: 30 June 08
Survey Person Hours: 3.25 Recording Person Hours: 0 Total Hours: 3.25
Additional Narrative: A 600 by 600 feet pad survey area. Total length of the road is 2,053 feet of which 150 (+/-) feet is within the pad survey area. Impact acres are unknown but were estimated on a 400 by 400 feet pad plus 2,053 by 30 feet of access road.

19. Environmental Setting (NRCS soil designation; vegetative community; elevation; etc.):
Topography: Northerly sloping sheetwash surface with frequent areas of exposed Gypsum.
Vegetative community: Various grasses, mesquite, prickly pear cactus, salt bush, feather dalai and assorted other flora.
NRCS: Holloman-Gypsum land-Reeves association: Level to gently sloping loams that are very shallow and shallow over gypsum; Gypsum land; and deep, level to nearly level loams.
Elevation: 3,608 ft. at the Drill Hole.

20.a. Percent Ground Visibility: 65 overall b. Condition of Survey Area (grazed, bladed, undisturbed, etc.): Grazed

21. CULTURAL RESOURCE FINDINGS ☐ Yes, See Page 3 ☒No, Discuss Why: Unknown

22. Required Attachments (check all appropriate boxes):
☒ USGS 7.5 Topographic Map with sites, isolates, and survey area clearly drawn
☒ Copy of NMCRIS Mapserver Map Check
☐ LA Site Forms - new sites (*with sketch map & topographic map*)
☐ LA Site Forms (update) - previously recorded & un-relocated sites (*first 2 pages minimum*)
☐ Historic Cultural Property Inventory Forms
☐ List and Description of isolates, if applicable
☐ List and Description of Collections, if applicable

23. Other Attachments:
☐ Photographs and Log
☒ Other Attachments
*(Describe)*: OCD Form C-102 and pad diagram

24. I certify the information provided above is correct and accurate and meets all applicable agency standards.

Principal Investigator/Responsible Archaeologist: Danny Boone

Signature Danny Boone Date: 1 July 08 Title (if not PI):

25. Reviewing Agency:
Reviewer's Name/Date

Accepted ( ) Rejected ( )

Tribal Consultation (if applicable): ☐ Yes ☐No

26. SHPO
Reviewer's Name/Date:

HPD Log #:
SHPO File Location:
Date sent to ARMS:

# CULTURAL RESOURCE FINDINGS

*[fill in appropriate section(s)]*

| 1. NMCRIS Activity No.: 110704 | 2. Lead (Sponsoring) Agency: BLM, RFO | 3. Lead Agency Report No.: |
|---|---|---|

SURVEY RESULTS:
Sites discovered and registered: 0
Sites discovered and NOT registered: 0
Previously recorded sites revisited *(site update form required)*: 0
Previously recorded sites not relocated *(site update form required):* 0
TOTAL SITES VISITED: 0
Total isolates recorded: 0 Non-selective isolate recording? ☒
Total structures recorded *(new and previously recorded, including acequias)*: 0

MANAGEMENT SUMMARY: No cultural resources were encountered therefore clearance of a pad and access road for the McMaster Trust "3" Federal Com well No. 1 for Chesapeake Operating, INC. is recommended as presently staked. If cultural resources are encountered at any time all activity should cease and the BLM Archaeologist notified immeditially.

IF REPORT IS NEGATIVE YOU ARE DONE AT THIS POINT.

SURVEY LA NUMBER LOG
Sites Discovered:

| LA No. | Field/Agency No. | Eligible? (Y/N, applicable criteria) |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |

Previously recorded revisited sites:

| LA No. | Field/Agency No. | Eligible? (Y/N, applicable criteria) |
|---|---|---|
| | | |
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| | | |

MONITORING LA NUMBER LOG *(site form required)*

Sites Discovered *(site form required)*: Previously recorded sites *(Site update form required):*

| LA No. | Field/Agency No. | LA No. | Field/Agency No. |
|---|---|---|---|
| | | | |
| | | | |
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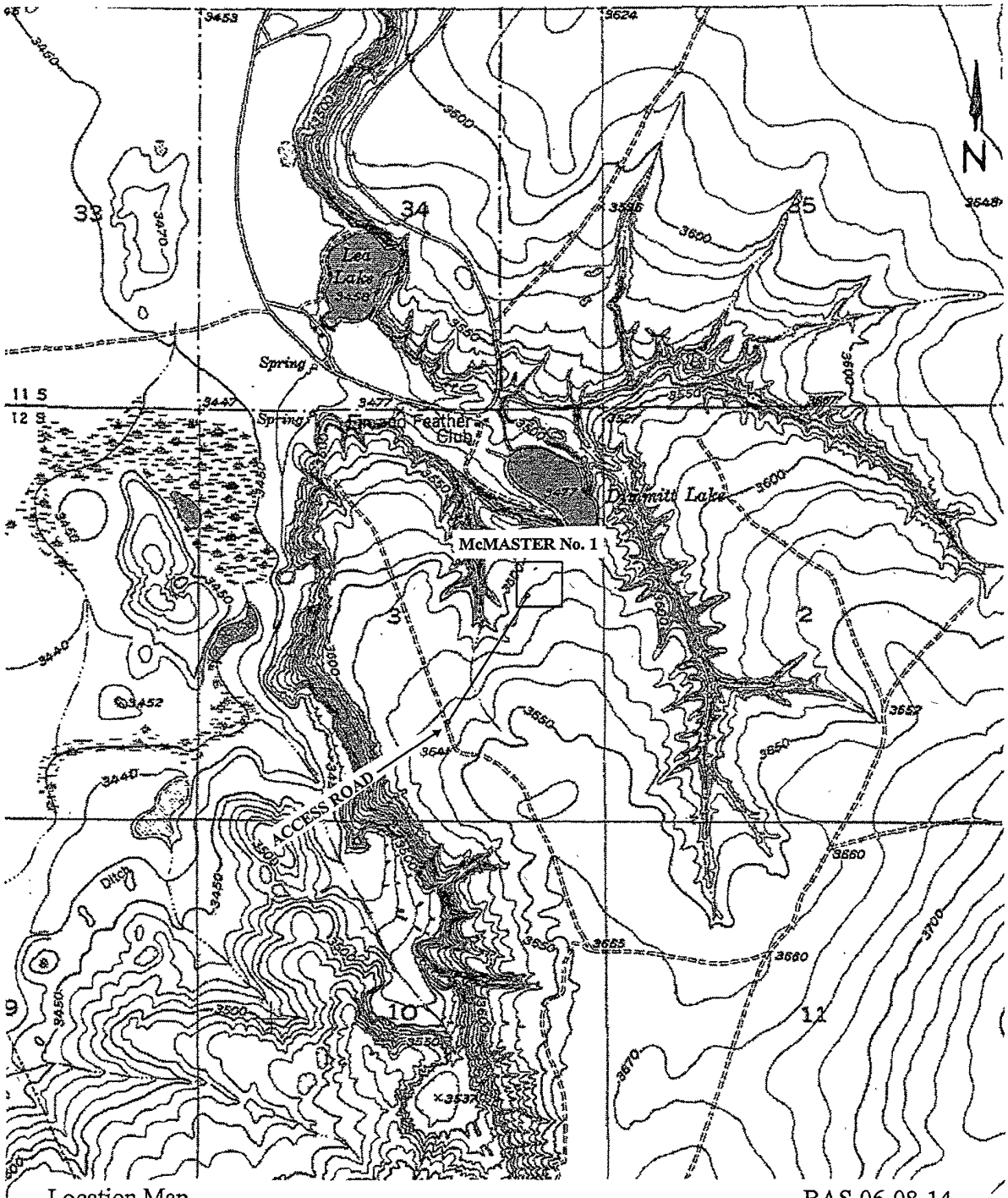
| | | | |
| | | | |

Areas outside known nearby site boundaries monitored? Yes ☐, No ☐ If no explain why:

TESTING & EXCAVATION LA NUMBER LOG *(site form required)*

| Tested LA number(s) | Excavated LA number(s) |
|---|---|
| | |
| | |
| | |
| | |
| | |




Location Map BAS 06-08-14

Pad and access road for the McMaster Trust "3" Federal Com well No. 1 for Chesapeake Operating, INC. in Section 3, T 12S, R 26E, NMPM, Chaves County, New Mexico.

Map Reference: USGS 7.5' Series; Bottomless Lakes, NM (1950) 33104-C3

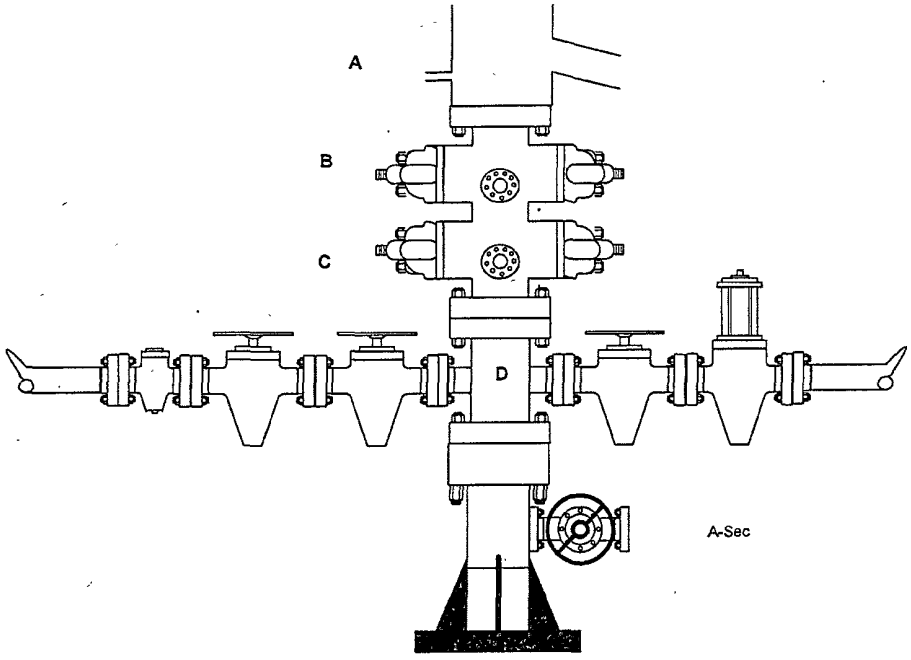
BAS

# BLOWOUT PREVENTOR SCHEMATIC

## CHESAPEAKE OPERATING INC

WELL : McMaster Trust 3 Federal Com 1
FIELD : Pecos Slope
RIG :
COUNTY : Chaves STATE: New Mexico
OPERATION: Drill out below 8-5/8" Casing

| | SIZE | PRESSURE | DESCRIPTION |
|---|---|---|---|
| A | | | Flow Line |
| | | | |
| B | 11" | 3,000# | Pipe Rams |
| C | 11" | 3,000# | Blind Rams |
| D | 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

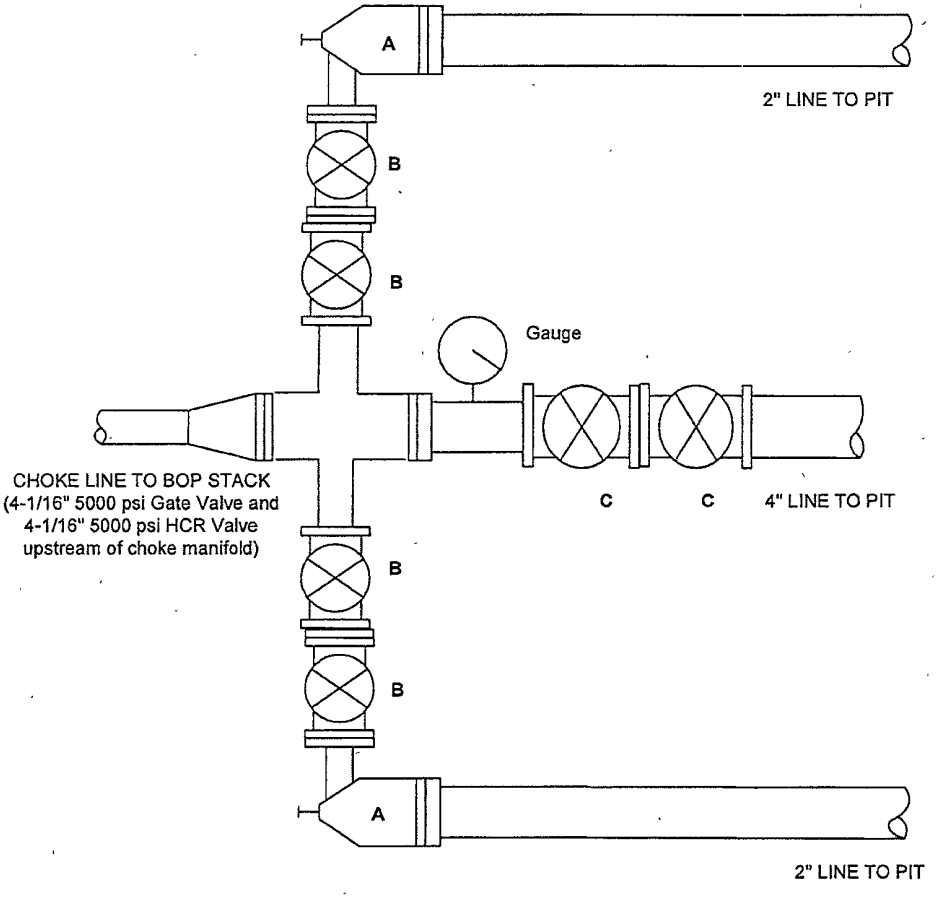
| SIZE | PRESSURE | DESCRIPTION |
|---|---|---|
| 2" | 3,000# | Gate Valve |
| 2" | 3,000# | HCR Valve |
| | | |
| | | |
| | | |

EXHIBIT F-1

# CHOKE MANIFOLD SCHEMATIC

## CHESAPEAKE OPERATING, INC.

**WELL** : McMaster Trust 3 Federal Com 1
**RIG** : Patterson #142
**COUNTY** : Chaves **STATE** : New Mexico
**OPERATION**: Drilling below/beyond 11" surface casing




| | SIZE | PRESSURE | DESCRIPTION |
|---|---|---|---|
| A | 2-1/16" | 5000 psi | Manual Choke |
| B | 2-1/16" | 5000 psi | Gate Valve |
| C | 4-1/16" | 5000 psi | Gate Valve |
| | | | |
| | | | |
| | | | |

EXHIBIT F-2

EXHIBIT A

# GENERAL LOCATION MAP

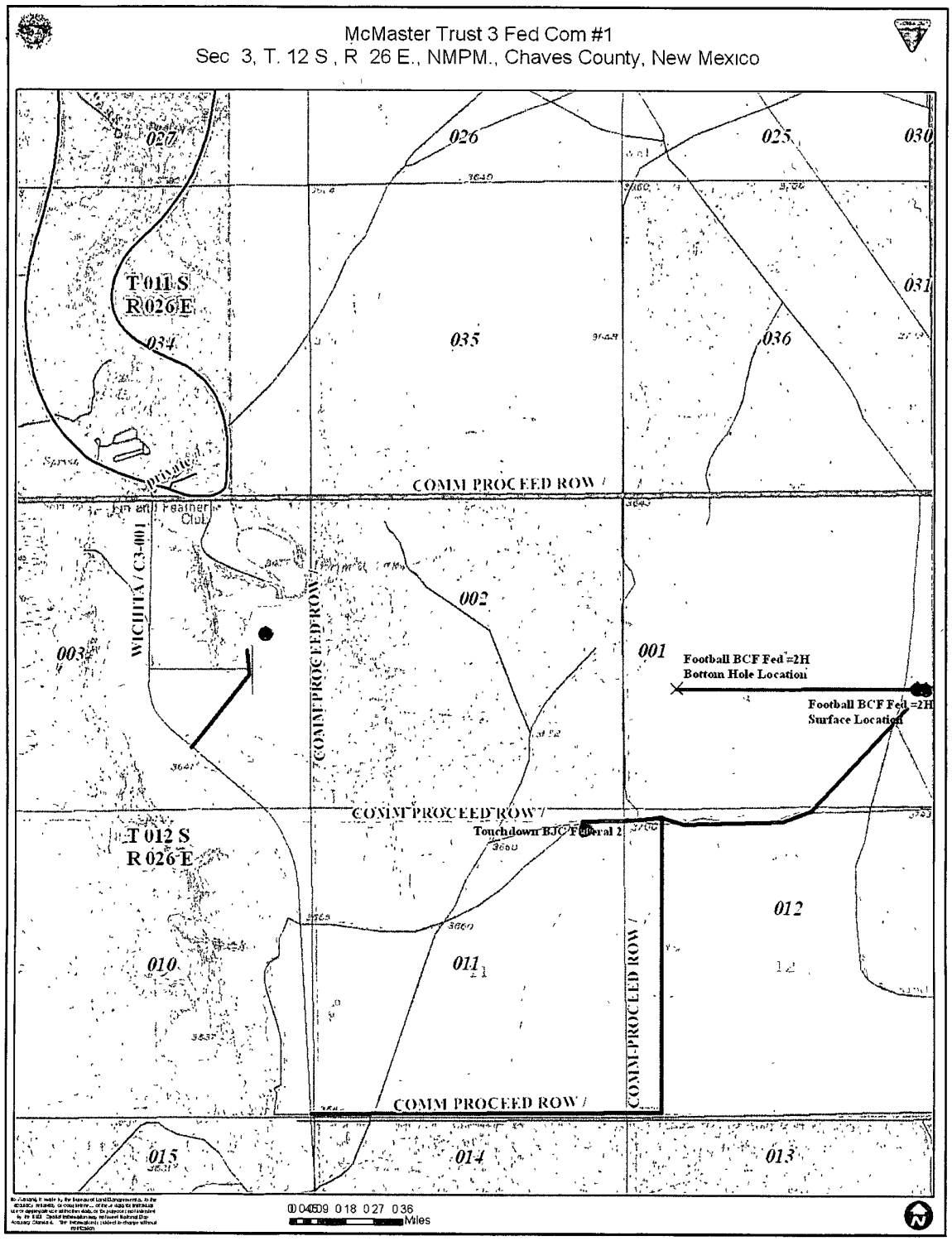


**EXHIBIT B**
**PECOS DISTRICT**
**ROSWELL FIELD OFFICE**
**CONDITIONS OF APPROVAL**

**January 9, 2009**

McMaster Trust 3 Federal Com #1
2310' FNL & 810' FEL,
Section 3, T. 12 S., R. 26 E.
Chaves County, New Mexico, NMPM

## GENERAL PROVISIONS

The approval of the Application For Permit To Drill (APD) is in compliance with all applicable laws and regulations: 43 Code of Federal Regulations 3160, the lease terms, Onshore Oil and Gas Orders, Notices To Lessees, New Mexico Oil Conservation Division (NMOCD) Rules, National Historical Preservation Act As Amended, and instructions and orders of the Authorized Officer. Any request for a variance shall be submitted to the Authorized Officer on Form 3160-5, Sundry Notices and Report on Wells.

## I. PERMIT EXPIRATION

If the permit terminates prior to drilling and drilling cannot be commenced within 60 days after expiration, an operator is required to submit Form 3160-5, Sundry Notices and Reports on Wells, requesting surface reclamation requirements for any surface disturbance. However, if the operator will be able to initiate drilling within 60 days after the expiration of the permit, the operator must have set the conductor pipe in order to allow for an extension of 60 days beyond the expiration date of the APD (Filing of a Sundry Notice is required for this 60 day extension).

## II. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES

Any cultural and/or Paleontological resource discovered by the operator or by any person working on the operator's behalf shall immediately report such findings to the Authorized Officer. The operator is fully accountable for the actions of their contractors and subcontractors. The operator shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery shall be made by the Authorized Officer to determine the appropriate actions that shall be required to prevent the loss of significant cultural or scientific values of the discovery. The operator shall be held responsible for the cost of the proper mitigation measures that the Authorized Officer assesses after consultation with the operator on the evaluation and decisions of the discovery. Any unauthorized collection or disturbance of cultural or Paleontological resources may result in a shutdown order by the Authorized Officer.

## III. NOXIOUS WEEDS

The operator shall be held responsible if noxious weeds become established within the areas of operations (access road and/or well pad). Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, pads, associated pipeline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

## IV. CONSTRUCTION

### A. NOTIFICATION:

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the Roswell Field Office at (505) 627-0247 at least 3 working days prior to commencing construction of the access road and/or well pad.

When construction operations are being conducted on this well, the operator shall have the approved Application for Permit to Drill and Conditions of Approval on the well site and they shall be made available upon request by the Authorized Officer.

### B. TOPSOIL:

The operator shall stockpile the topsoil of the well pad. The topsoil to be stripped to approximately 6 inches in depth. The topsoil shall not be used to backfill the reserve pit and shall be used for interim and final reclamation of the well pad. The topsoil shall be stockpiled in the side of the well pad.

### C. CLOSED SYSTEM or STEEL TANKS: No reserve pit will be used.

### D. FEDERAL MINERAL MATERIALS PIT:

If the operator elects to surface the access road and/or well pad, mineral materials extracted during construction of the reserve pit may be used for surfacing the well pad and access road and other facilities on the lease.

Payment shall be made to the BLM prior to removal of any additional federal mineral materials from any site other than the reserve pit. Call the Roswell Field Office at (505) 627-0236.

### E. WELL PAD SURFACING:

Surfacing of the well pad is not required.

If the operator elects to surface the well pad, the surfacing material may be required to be removed at the time of reclamation.

The well pad shall be constructed in a manner which creates the smallest possible surface disturbance, consistent with safety and operational need.

## F. ON LEASE ACCESS ROADS:

### Road Width

The access road shall have a driving surface that creates the smallest possible surface disturbance and does not exceed fourteen (14) feet in width. The maximum width of surface disturbance, when constructing the access road, shall not exceed thirty (30) feet.

### Surfacing

Surfacing material is not required on the new access road driving surface. If the operator elects to surface the new access road or pad, the surfacing material may be required to be removed at the time of reclamation.

The Volleyball, McMaster 1is located in a VRM Class II. The surfacing material on the pad would be a dark gray gravel or base course material to blend into the landscape. Cliché could be used as the foundational base with the dark gray material covering the cliché base. Any other color pad material would conflict with the landscape and texture of this area.

Where possible, no improvements should be made on the unsurfaced access road other than to remove vegetation as necessary, road irregularities, safety issues, or to fill low areas that may sustain standing water.

The Authorized Officer reserves the right to require surfacing of any portion of the access road at any time deemed necessary. Surfacing may be required in the event the road deteriorates, erodes, road traffic increases, or it is determined to be beneficial for future field development. The surfacing depth and type of material will be determined at the time of notification.

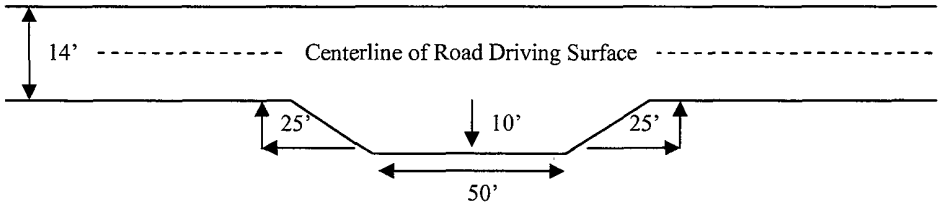
### Crowning

Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

### Turnouts

Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall be constructed on all blind curves. Turnouts shall conform to the following diagram:

**Standard Turnout – Plan View**

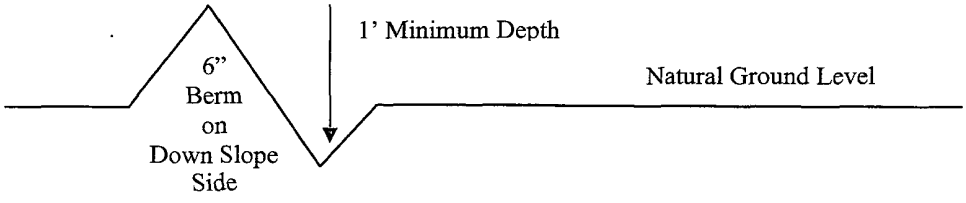



## Drainage

Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill outsloping and insloping, lead-off ditches, culvert installation, and low water crossings).

A typical lead-off ditch has a minimum depth of 1 foot below and a berm of 6 inches above natural ground level. The berm shall be on the down-slope side of the lead-off ditch.

**Cross Section Of Typical Lead-off Ditch**




All lead-off ditches shall be graded to drain water with a 1 percent minimum to 3 percent maximum ditch slope. The spacing interval are variable for lead-off ditches and shall be determined according to the formula for spacing intervals of lead-off ditches, but may be amended depending upon existing soil types and centerline road slope (in %);

**Formula For Spacing Interval Of Lead-off Ditches**

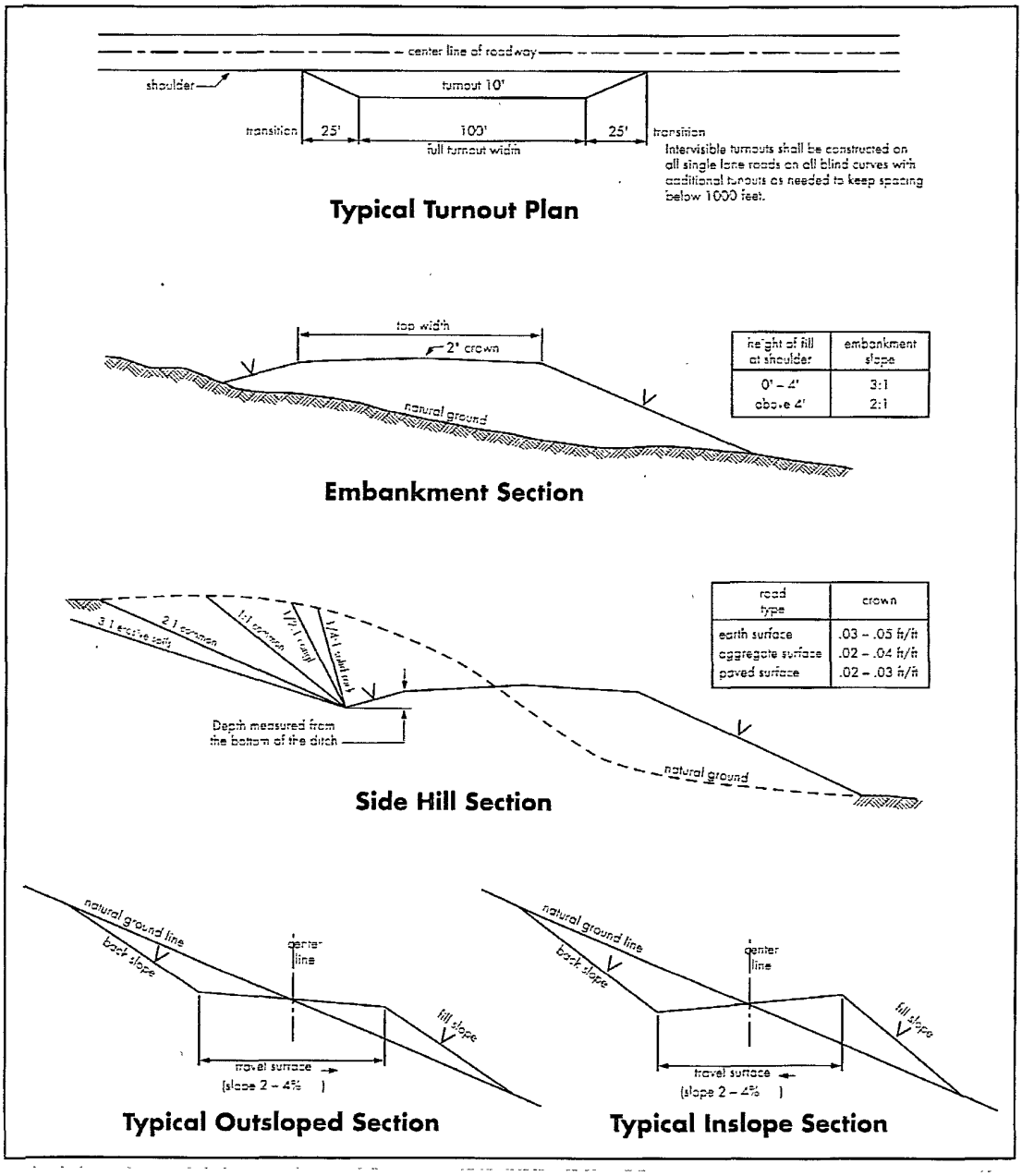
Example - On a 4% road slope that is 400 feet long, the water flow shall drain water into a lead-off ditch. Spacing interval shall be determined by the following formula:

400 foot road with 4% road slope: $\frac{400'}{4\%} + 100' = 200'$ lead-off ditch interval

## Public Access

Public access on this road shall not be restricted by the operator without specific written approval granted by the Authorized Officer.

## Figure 1 – Cross Sections and Plans For Typical Road Sections



## V. DRILLING

### A. DRILLING OPERATIONS REQUIREMENTS

1. Call the Roswell Field Office, 2909 West Second St., Roswell, NM 88201. During office hours call (575) 627-0258. After office hours call (575) 627-0205. Engineer on call phone (after hours): (575) 626-5749.

2. The Roswell Field Office is to be notified a minimum of 4 hours in advance for a representative to witness:

a. Spudding

b. Cementing casing: **8-5/8** inch **4-1/2** inch

3. A Communitization Agreement covering the acreage dedicated to this well must be filed for approval with the BLM. The effective date of the agreement shall be prior to any sales.

4. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.

5. Include the API No. assigned to well by NMOCD on the subsequent report of setting the first casing string.

### B. CASING:

1. The **8-5/8** inch surface casing shall be set **at approximately 950 feet** and cemented to the surface.

a. If cement does not circulate to the surface, the Roswell Field Office shall be notified and a temperature survey utilizing an electronic type temperature survey with a surface log readout will be used or a cement bond log shall be run to verify the top of the cement.

b. Wait on cement (WOC) time for a primary cement job will be a minimum 18 hours for a water basin or 500 pounds compression strength, whichever is greater. (This is to include the lead cement).

c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compression strength, whichever is greater.

d. If cement falls back, remedial action will be done prior to drilling out that string.

2. The minimum required fill of cement behind the **4-1/2** inch production casing is **sufficient to tie back 500 feet above the uppermost perforation in the pay zone.** If cement does not circulate, a temperature survey utilizing an electronic type temperature survey with a surface log readout will be used or a cement bond log shall be run to verify the top of the cement.

3. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

## C. PRESSURE CONTROL:

1. Before drilling below the **8-5/8** inch surface casing shoe, the blowout preventer assembly shall consist of a minimum of One Annular Preventer or Two Ram-Type Preventers and a Kelly Cock/Stabbing Valve.

2. Before drilling below the **8-5/8** inch surface casing shoe, minimum working pressure of the blowout preventer and related equipment (BOPE) shall be **2000** psi.

3. The BOPE shall be installed before drilling below the **8-5/8** inch surface casing shoe and shall be tested as described in Onshore Order No. 2. Any equipment failing to test satisfactorily shall be repaired or replaced.

a. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug.

b. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the BLM Roswell Field Office at 2909 West Second Street, Roswell, New Mexico 88201.

c. Testing fluid must be water or an appropriate clear liquid suitable for sub-freezing temperatures. Use of drilling mud for testing is not permitted since it can mask small leaks.

d. Testing must be done in a safe workman like manner. Hard line connections shall be required.

# VI. PRODUCTION

## A. WELL STRUCTURES & FACILITIES

### Placement of Production Facilities

Production facilities should be placed on the well pad to allow for maximum interim re-contouring and re-vegetation of the well location.

### Containment Structures

The containment structure shall be constructed to hold the capacity of the entire contents of the largest tank, plus 24 hour production, unless more stringent protective requirements are deemed necessary by the Authorized Officer.

Another containment structure or earthen dike shall be constructed and maintained around all sides of the outside boundary of the well pad. The containment structure or earthen dike shall be constructed two (2) feet high (the containment structure or earthen dike can be constructed higher than the two (2) feet high minimum). The containment structure or earthen dike is required so that if oilfield waste contaminant or product contaminant were leaked, spilled, and or released upon the well pad the oilfield waste contaminant or product contaminant shall be contained on the well pad. If the well pad is constructed into a cut on a slope then the uphill side of the well pad will not require the construction of the containment structure or earthen dike, but the construction of the containment structure or dike will be required on the remaining three sides of the well pad which will extend into the uphill portion of the well pad.

**Painting Requirement**

All above-ground structures including meter housing that are not subject to safety requirements shall be painted a flat color Juniper Green from the Standard environmental colors, June 2008

**VRM Facility Requirement**

Since the Volleyball McMaster 1is located in a Class II VRM Zone, Low-profile tanks not greater than eight-feet-high shall be used.

## VII. INTERIM RECLAMATION

If the well is a producer, interim reclamation shall be conducted on the well site in accordance with the orders of the Authorized Officer. The operator shall submit a Sundry Notices and Reports on Wells (Notice of Intent), Form 3160-5, prior to conducting interim reclamation.

During the life of the development, all disturbed areas not needed for active support of production operations should undergo "interim" reclamation in order to minimize the environmental impacts of development on other resources and uses.

During reclamation, the removal of caliche is important to increasing the success of re-vegetating the site. Removed caliche may be used in road repairs, fire walls or for building other roads and locations. In addition, in order to operate the well or complete workover operations, it may be necessary to drive, park and operate on restored interim vegetation within the previously disturbed area. Disturbing re-vegetated areas for production or workover operations will be allowed. If there is significant disturbance and loss of vegetation, the area will need to be re-vegetated. Communicate with the appropriate BLM office for any exceptions/exemptions if needed.

**SEED MIXTURE**
**Gyp Upland, SD-3 Ecological Site**

| Common Name and Preferred Variety | Scientific Name | Pounds of Pure Live Seed Per Acre |
|---|---|---|
| Blue grama, | (Bou*teloua gracilis)* | 1.0 |
| Sand dropseed | *(Sporobolus cryptandrus)* | 1.0 |
| Plains bristlegrass | *(Setaria macrostachya)* | 1.0 |
| Alkali sacaton | *(Sporobolus airoides )* | 3.0 |
| Buckwheat | *(Eriogonum fasiculatum)* | 1.0 |
| Four-wing saltbush | *(Atriplex canescens)* | 1.0 |
| Desert or Scarlet Globemallow | *(Sphaeralcea ambigua) (S. coccinea)* | 1.0 |
| | | 9.00 |

TOTAL POUNDS PURE LIVE SEED (pls) PER ACRE 9.00
Certified Weed Free Seed

If one species is not available
Increase ALL others proportionately
Use No Less than 4 species, including one forb.
No less than 9.00 pounds pls per acre shall be applied

## VIII. FINAL ABANDONMENT & REHABILITATION REQUIREMENTS

a. Upon abandonment of the well and/or when the access road is no longer in service, a Notice of Intent for Final Abandonment with the proposed surface restoration procedure must be submitted for approval.

b. Upon abandonment of the well, all casing shall be cut-off at the base of the cellar or 3-feet below final restored ground level (whichever is deeper). A 4-inch pipe, 10 feet in length, shall be installed 4 feet above ground and embedded in cement. The following information shall be permanently inscribed on the dry hole marker: Well name and number, the name of the operator, the lease serial number, the surveyed location (the quarter-quarter section, section, township and range or other authorized survey designation acceptable to the authorized officer; such as metes and bounds).

c. Surface Reclamation must be completed within 6 months of well plugging. If the operator proposes to modify the plans for surface reclamation approved on the APD, the operator must attach these modifications to the Subsequent Report of Plug and Abandon using Sundry Notices and Reports on Wells, Form 3160-5.

FEB – 4 2009

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

DISTRICT II
1301 W. Grand Avenue, Artesia, NM 88210

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

DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

# State of New Mexico
Energy, Minerals and Natural Resources Department

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

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

## WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

| API Number | Pool Code | Pool Name |
|---|---|---|
| 30-005-64091 | ~~97869~~ | Wildcat; Wolfcamp, Gas |

| Property Code | Property Name | Well Number |
|---|---|---|
| 37585 | McMASTER TRUST 3 FEDERAL COM | 1 |

| OGRID No. | Operator Name | Elevation |
|---|---|---|
| 147179 | CHESAPEAKE OPERATING, INC. | 3608' |

### Surface Location

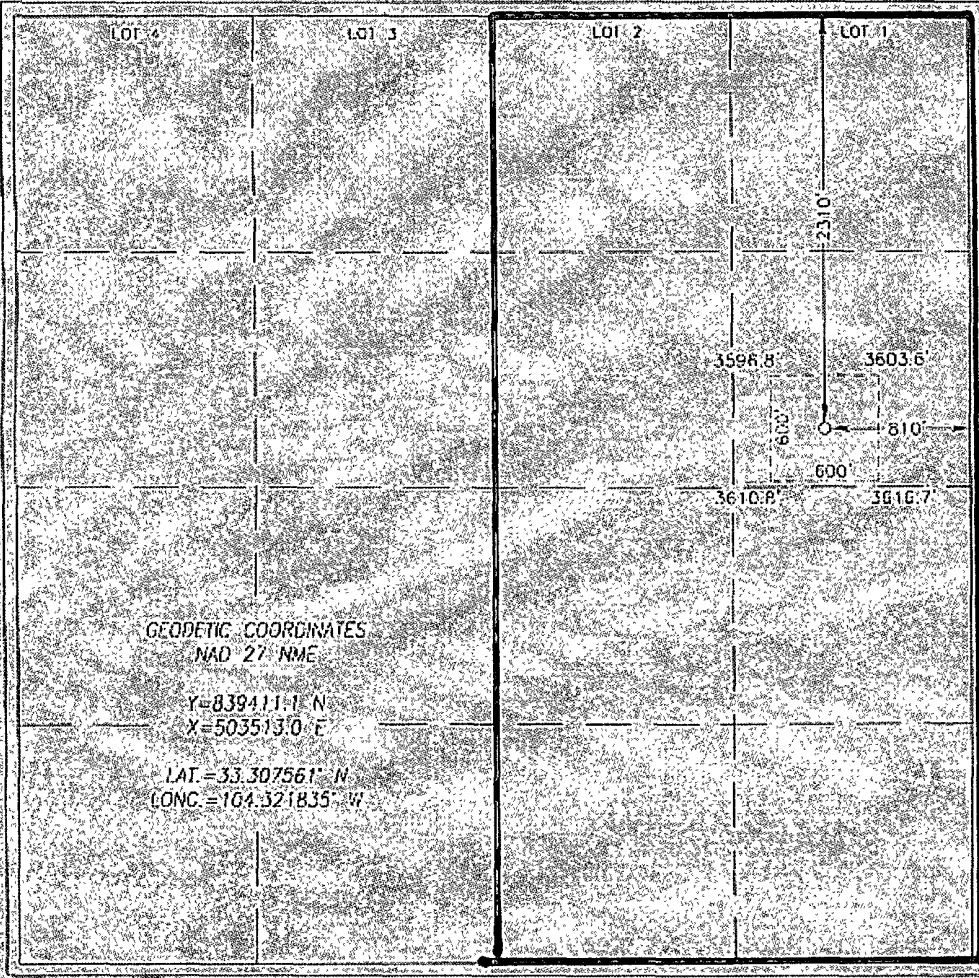
| UL or lot No. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---|---|---|---|---|---|---|---|---|---|
| H | 3 | 12-S | 26-E | | 2310 | NORTH | 810 | EAST | CHAVES |

### 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 | Joint or Infill | Consolidation Code | Order No. |
|---|---|---|---|
| 321.85 | | | NSL-5968 |

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




### OPERATOR CERTIFICATION

I hereby certify that the 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.

2/3/2009
Signature Date

Linda Good
Printed Name

### SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

DECEMBER 9, 2008
Date Surveyed JC
Signature & Seal of Professional Surveyor

10/24/08

Certificate No. GARY C. EIDSON 12641
RONALD J. EIDSON 3239

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

## WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

| API Number | Pool Code | Pool Name |
|---|---|---|
| | 97418 | Und. Sand Draw; Abo, Gas |

| Property Code | Property Name | Well Number |
|---|---|---|
| | McMASTER TRUST 3 FEDERAL COM | 1 |

| OGRID No. | Operator Name | Elevation |
|---|---|---|
| 147179 | CHESAPEAKE OPERATING, INC. | 3608' |

**Surface Location**

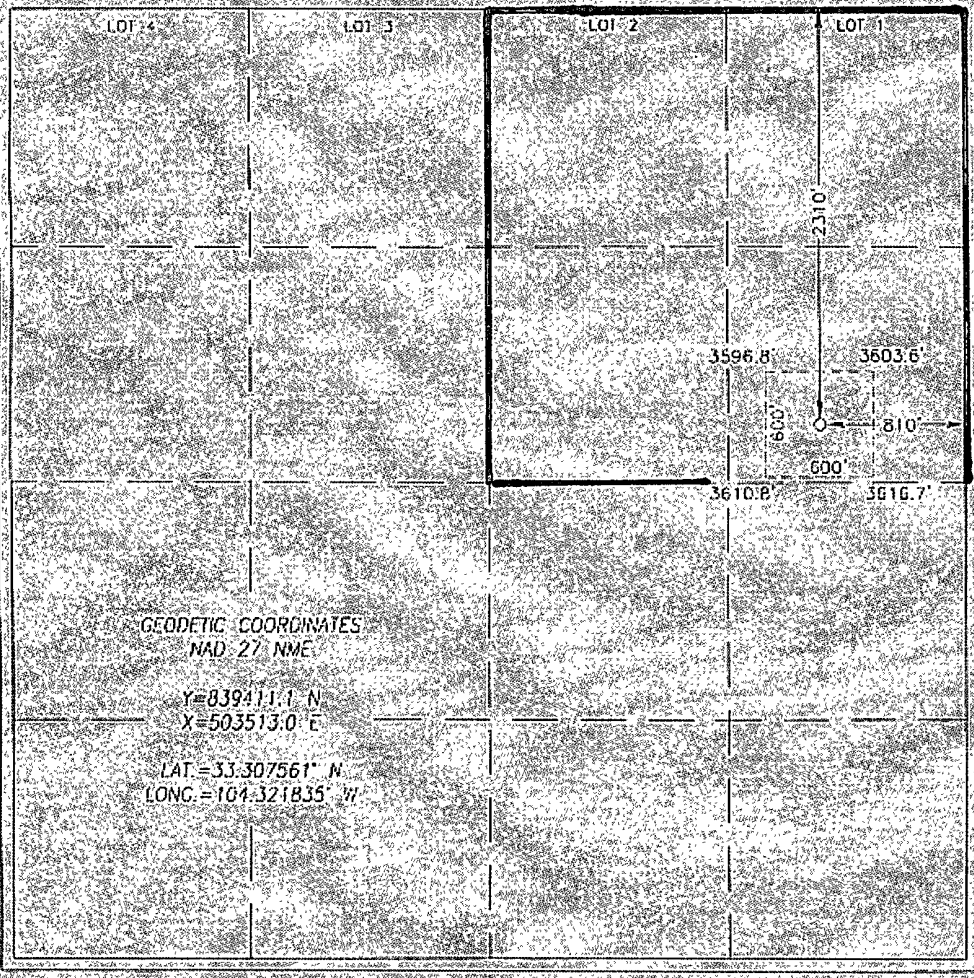
| UL or lot No. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---|---|---|---|---|---|---|---|---|---|
| H | 3 | 12-S | 26-E | | 2310' | NORTH | 810' | EAST | CHAVES |

**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 | Joint or Infill | Consolidation Code | Order No. |
|---|---|---|---|
| 161.85 | | | NSL-5968 |

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

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Linda Good 2/3/2009
Signature Date

Linda Good
Printed Name

## SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

OCTOBER 29, 2008
Date Surveyed JC

Signature & Seal of Professional Surveyor

Ronald J. Eidson 10/24/08

Certificate No. GARY L. EIDSON 12641
RONALD J. EIDSON 3239