

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

State of New Mexico  
Energy, Minerals and Natural Resources  
Oil Conservation Division  
1220 S. St Francis Dr.  
Santa Fe, NM 87505

Form C-101  
Permit 1162

### APPLICATION FOR PERMIT TO DRILL

|   |                              |                            |
|---|------------------------------|----------------------------|
| Operator Name and Address<br>CHESAPEAKE OPERATING, INC.<br>PO Box 18496<br>Oklahoma City, OK 73154-0496 |                              | OGRID Number<br>147179     |
|   |                              | API Number<br>30-015-33504 |
| Property Code<br>300166   | Property Name<br>TELEDYNE 20 | Well No.<br>005            |

### Surface Location

| UL or Lot | Section | Township | Range | Lot Idn | Feet From | N/S Line | Feet From | E/W Line | County |
|-----------|---------|----------|-------|---------|-----------|----------|-----------|----------|--------|
| J         | 20      | 23S      | 29E   | J       | 1980      | S        | 2310      | E        | Eddy   |

### Proposed Pools

|                                  |                        |                       |                       |                                |
|----------------------------------|------------------------|-----------------------|-----------------------|--------------------------------|
| HARROUN RANCH;DELAWARE, NE 96878 |                        |                       |                       |                                |
| Work Type<br>New Well            | Well Type<br>OIL       | Cable/Rotary          | Lease Type<br>Private | Ground Level Elevation<br>2959 |
| Multiple<br>N                    | Proposed Depth<br>6800 | Formation<br>Delaware | Contractor            | Spud Date<br>08/15/2004        |

### Proposed Casing and Cement Program

| Type | Hole Size | Casing Size | Casing Weight/ft | Setting Depth | Sacks of Cement | Estimated TOC |
|------|-----------|-------------|------------------|---------------|-----------------|---------------|
| Surf | 17.5      | 13.375      | 48               | 400           | 350             | 0             |
| Int1 | 11        | 8.625       | 32               | 2800          | 600             | 0             |
| Prod | 7.875     | 5.5         | 17               | 6800          | 900             | 2700          |

### Casing/Cement Program: Additional Comments

Drill 17 1/2 hole to 400 w/fr wtr. NU annular prevento and test to 1000# w/rig pump. Drill 11 hole to 2800 w/cut brine. NU 3000# BOP & test to 3000#. Drill 7 7/8 hole w/cut brine, starch & gel to 6800.

### Proposed Blowout Prevention Program

| Type    | Working Pressure | Test Pressure | Manufacturer |
|---------|------------------|---------------|--------------|
| Annular | 2000             | 1000          |              |
| Annular | 3000             | 3000          |              |

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

Electronically Signed By: Mark Mabe

Title: Manager

Date: 06/30/2004

Phone: 432-685-4339

### OIL CONSERVATION DIVISION

Electronically Approved By: Bryan Arrant

Title: Geologist

Approval Date: 07/16/2004

Expiration Date: 07/16/2005

Conditions of Approval:

There are conditions. See Attached.

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State of New Mexico  
Energy Minerals and Natural Resources

Form C-144  
March 12, 2004

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

For drilling and production facilities, submit to appropriate NMOC 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: <u>Chesapeake</u> 432<br>Telephone: <u>683-7443</u> e-mail address: <u>mwhitefield@chkenergy.com</u><br>Address: <u>550 W. Texas Ave. #1300 Midland, Texas 79701</u><br>Facility or well name: <u>Teledyne 20 * 5</u> API #: <u>U/L or Qw/Qr J Sec 20 T23 R29</u><br>County: <u>Eddy</u> Latitude: <u>N32°17'19.2"</u> Longitude: <u>W104°00'31.3"</u> NAD: 1927 <input type="checkbox"/> 1983 <input checked="" type="checkbox"/> Surface Owner Federal <input type="checkbox"/> State <input type="checkbox"/> Private <input type="checkbox"/> Indian <input type="checkbox"/> |   |  |
| <p><b>Pit</b><br/>Type: Drilling <input checked="" type="checkbox"/> Production <input type="checkbox"/> Disposal <input type="checkbox"/><br/>Workover <input type="checkbox"/> Emergency <input type="checkbox"/><br/>Lined <input checked="" type="checkbox"/> Unlined <input type="checkbox"/><br/>Liner type: Synthetic <input checked="" type="checkbox"/> Thickness <u>12</u> mil Clay <input type="checkbox"/> Volume <u>15948</u> bbl</p>  |   |  |
| <p><b>Below-grade tank</b><br/>Volume: _____ bbl Type of fluid: _____<br/>Construction material: _____<br/>Double-walled, with leak detection? Yes <input type="checkbox"/> If not, explain why not: _____</p>  |   |  |
| Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.)  | Less than 50 feet (20 points)<br>50 feet or more, but less than 100 feet (10 points)<br><u>100 feet or more</u> (0 points) <u>0</u>     |  |
| Wellhead protection area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources.)   | Yes (20 points)<br><u>No</u> (0 points) <u>0</u>  |  |
| Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)   | Less than 200 feet (20 points)<br>200 feet or more, but less than 1000 feet (10 points)<br><u>1000 feet or more</u> (0 points) <u>0</u> |  |
| Ranking Score (Total Points)  |   |  |

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:

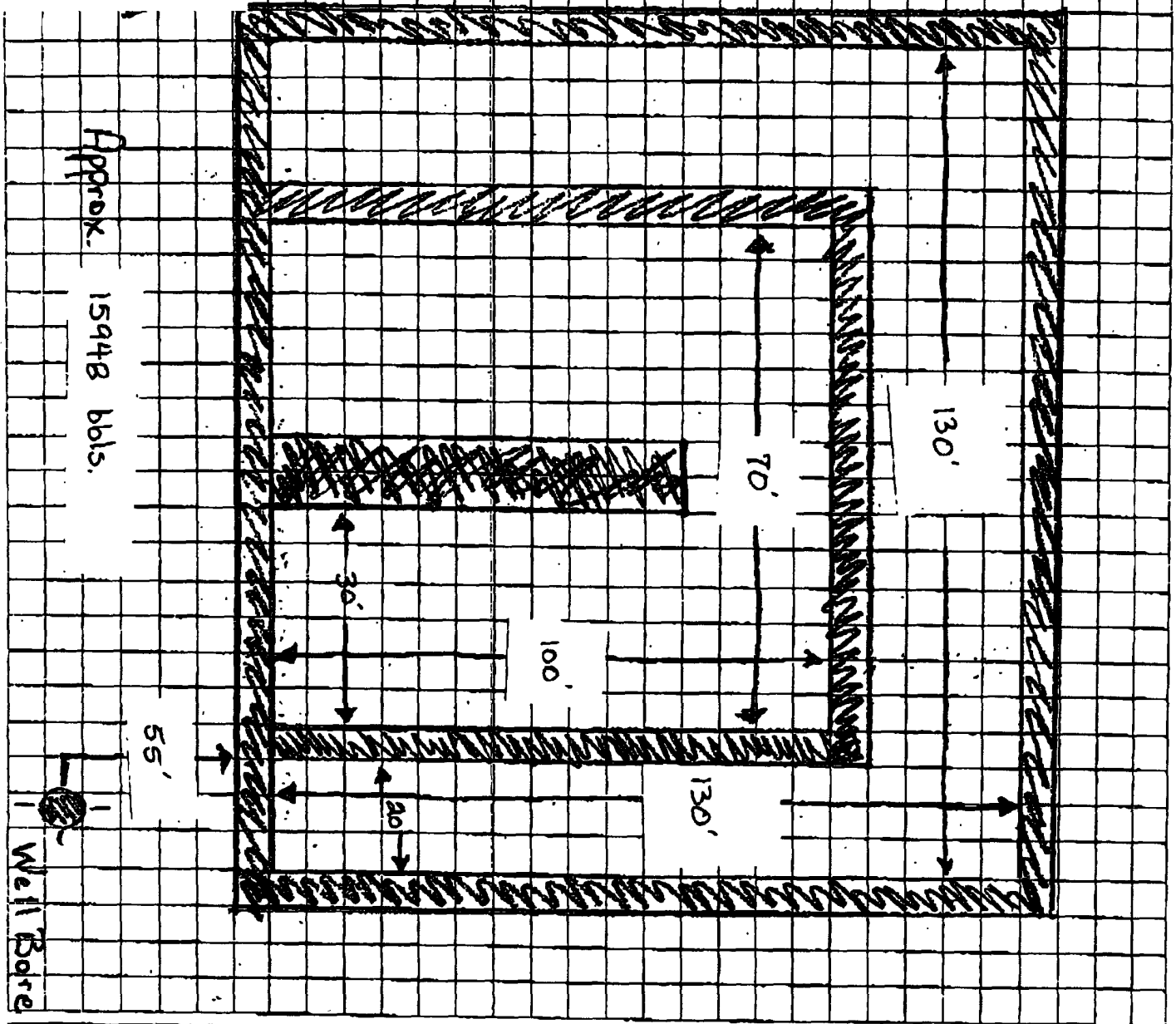
on-site ☐ off-site ☐ If off-site, name of facility: \_\_\_\_\_ (3) Attach a general description of remedial action taken including remediation start date and end date. (4) Groundwater encountered: No ☐ Yes ☐ If yes, show depth below ground surface \_\_\_\_\_ ft. and attach sample results. (5) Attach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

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

Date: 6-22-04  
Printed Name/Title: Mike Whitefield Field Rep. Signature: Mike Whitefield

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

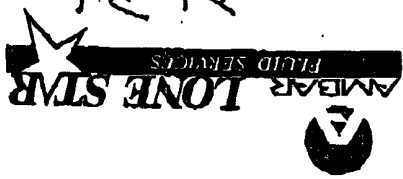
Approval:  
Date: 7/6/04  
Printed Name/Title: Mike Bratton Compliance Officer Signature: Mike Bratton



Approx. 15948 bbls.

Well Bore

|          |                            |
|----------|----------------------------|
| Subject  | Chesapeake Operating, Inc. |
| File     |                            |
| Page No. | By M. Newland              |
| Date     |                            |



HOUSTON, TX  
LAFAYETTE, LA  
NEW ORLEANS, LA  
(281) 877-1200  
(337) 237-5300  
(504) 566-0411

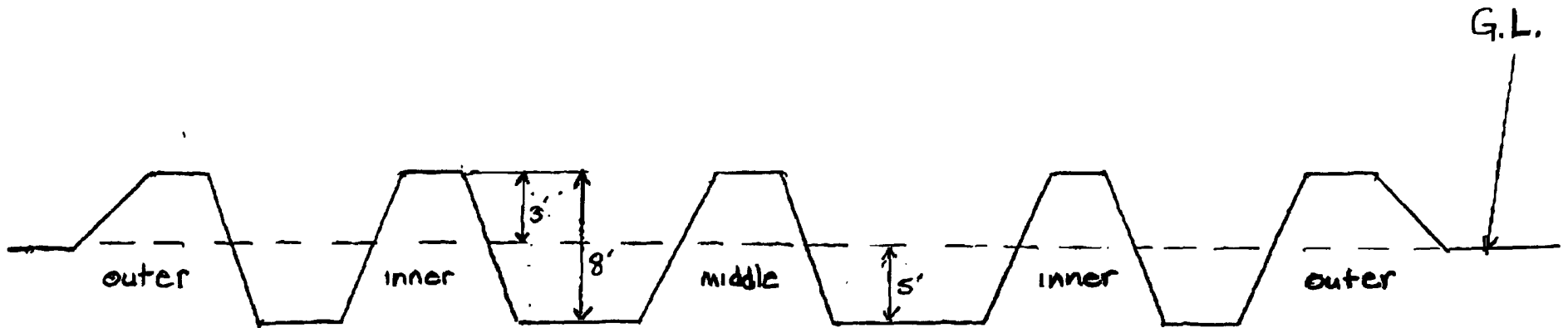
MIDLAND, TX  
OKLAHOMA CITY, OK  
VICTORIA, TX  
(915) 884-7446  
(405) 810-0021  
(961) 576-5297

# WALL BERM DRG PIT

004/004

CHESAPEAKE

06/30/2004 17:48 FAX 432 685 4399



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Form C-102

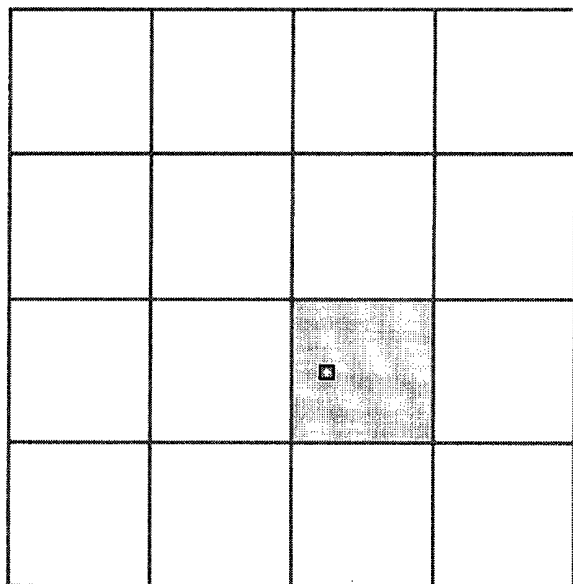
Permit 1162

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

|                            |   |                    |
|----------------------------|---|--------------------|
| API Number<br>30-015-33504 | Pool Name<br>HARROUN RANCH;DELAWARE, NE     | Pool Code<br>96878 |
| Property Code<br>300166    | Property Name<br>TELEDYNE 20                | Well No.<br>005    |
| OGRID No.<br>147179        | Operator Name<br>CHESAPEAKE OPERATING, INC. | Elevation<br>2959  |

**Surface And Bottom Hole Location**

|                       |                 |                    |              |              |                   |               |                   |               |                |
|-----------------------|-----------------|--------------------|--------------|--------------|-------------------|---------------|-------------------|---------------|----------------|
| UL or Lot<br>J        | Section<br>20   | Township<br>23S    | Range<br>29E | Lot Idn<br>J | Feet From<br>1980 | N/S Line<br>S | Feet From<br>2310 | E/W Line<br>E | County<br>Eddy |
| Dedicated Acres<br>40 | Joint or Infill | Consolidation Code | Order No.    |              |                   |               |                   |               |                |

**OPERATOR CERTIFICATION**

*I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.*

Electronically Signed By: Mark Mabe

Title: Manager

Date: 06/30/2004

**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.*

Surveyed By: Gary L. Jones

Date of Survey: 06/06/2004

Certificate Number: 7977

Permit Comments

Operator: CHESAPEAKE OPERATING, INC. , 147179

Well: TELEDYNE 20 #005

| User Name | Comment  | Comment Date |
|-----------|--|--------------|
| BARRANT   | Operator to submit h2s contingecy plan if area meets requirements of Rule 118. | 7/1/2004     |

## Permit Conditions Of Approval

### C-101, Permit 1162

**Operator:** CHESAPEAKE OPERATING, INC. , 147179

**Well:** TELEDYNE 20 #005

| OCD Reviewer | Condition   |
|--------------|---|
| BARRANT      | Operator to set surface casing above Salado formation. 400-425. Please refer to offset logs for more information. |



Chesapeake Operating, Inc.  
P. O. Box 11050  
Midland, Texas 79702-8050

July 14, 2004

Oil Conservation Commission  
State of New Mexico  
1301 W. Grand Avenue  
Artesia, New Mexico 88210

Attention: Mr. Bryan Aarant

RE: Teledyne 20, Well #5  
1980' FSL & 2310' FEL  
Section 20, T23S, R29E  
Eddy County, New Mexico

30-015-33504

Dear Bryan:

Per your request, this letter is in reference to the OCD's requirements for H2S contingency plan for the above captioned well. No H2S, abnormal pressures or temperatures are expected in the drilling of the above captioned well. H2S detection equipment will be installed prior to the top of the Delaware formation as a precautionary measure.

Yours truly,



Brenda Coffman  
Regulatory Analyst

BC

## Hydrogen Sulfide Drilling Operations Plan

- 1 All Company and Contract personnel admitted on location must be trained by a qualified H<sub>2</sub>S safety instructor to the following:

- A. Characteristics of H<sub>2</sub>S
- B. Physical effects and hazards
- C. Proper use of safety equipment and life support systems.
- D. Principle and operation of H<sub>2</sub>S detectors, warning system and briefing
- E. Evacuation procedure, routes and first aid.
- F. Proper use of 30 minute pressure demand air pack.

2 H<sub>2</sub>S Detection and Alarm Systems

- A. H<sub>2</sub>S detectors and audio alarm system to be located at bell nipple, end of bleed line (mud pit) and on derrick floor or doghouse.

3 Windsack and/or wind streamers

- A. Windsack at mudpit area should be high enough to be visible.
- B. Windsack at briefing area should be high enough to be visible.
- C. There should be a windsack at entrance to location.

4 Condition Flags and Signs

- A. Warning sign on access road to location.
- B. Flags to be displayed on sign at entrance to location. Green flag, normal safe condition. Yellow flag indicates potential pressure and danger. Red flag, danger, H<sub>2</sub>S present in dangerous concentration. Only emergency personnel admitted to location.

5 Well control equipment

- A. See exhibit "E"

6 Communication

- A. While working under masks chalkboards will be used for communication.
- B. Hand signals will be used where chalk board is inappropriate.
- C. Two way radio will be used to communicate off location in case of emergency help is required. In most cases cellular telephones will be available at most drilling foreman's trailer or living quarters.

7 Drillstem Testing

- A. Exhausts will be watered.
- B. Flare line will be equipped with an electric ignitor or a propane pilot light in case gas reaches the surface.
- C. If location is near any dwelling a closed DST will be performed.

## **Hydrogen sulfide Drilling Operations Plan**

- 8 Drilling contractor supervisor will be required to be familiar with the effects H<sub>2</sub>S has on tubular goods and other mechanical equipment.
- 9 If H<sub>2</sub>S is encountered, mud system will be altered if necessary to maintain control of formation. A mud gas separator will be brought into service along with H<sub>2</sub>S scavengers if