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-

## APPLICATION FOR PERMIT TO DRILL

CHESAPEAKE OP	OGRID Number 147179	
PO Box 18496 Oklahoma City, OK	API Number 30-015-33323	
Property Code	Property Name	Well No.
33616	Teledyne 20	004

#### **Surface Location**

UL or Lo	t Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
K	20	23S	29E	K	1980	S	1650	w	Eddy

## **Proposed Pools**

## HARROUN RANCH; DELAWARE, NE 96878

Work Type	Well Type	Cable/Rotary	Lease Type	Ground Level Elevation
New Well	OIL		Private	2971
Multiple	Proposed Depth	Formation	Contractor	Spud Date
N	6800	Delaware		03/22/2004

**Proposed Casing and Cement Program** 

Туре	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surf	17.5	13.375	48	440	350	0
Intl	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**

Туре	Working Pressure	Test Pressure	Manufacturer	
 Annular	2000	1000		
Double Ram	3000	3000 .		

I hereby certify that the information given above is true and	OIL CONSERVATION DIVISION  Electronically Approved By: Bryan Arrant		
complete to the best of my knowledge and belief.			
Electronically Signed By: Colley Andrews	Title: Geologist		
Title: Manager	Approval Date: 03/25/2004 Expiration Date: 03/25/2005		
Date: 03/19/2004 Phone: 405-848-8000	Conditions of Approval:		
	There are conditions. See Attached.		

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## WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Name	Pool Code
30-015-33323	HARROUN RANCH;DELAWARE, NE	96878
Property Code	Property Name	Well No.
33616	Teledyne 20	004
OGRID No. 147179	Operator Name CHESAPEAKE OPERATING, INC.	Elevation 2971

## **Surface And Bottom Hole Location**

UL or Lot K	Section 20	Township 23S	Range 29E	Lot Idn K	Feet From 1980	N/S Line S	Feet From 1650	E/W Line W	County Eddy
Dedicated Acres		Joint or	Infill	Consoli	dation Code		Order 1	٧o.	
4	0				D. Carlos V. Land				

	MacCollege (Control of Control of

## **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: Colley Andrews

Title: Manager
Date: 03/19/2004

## 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: 03/15/2004
Certificate Number: 7977

# **Permit Conditions Of Approval**

Operator: CHESAPEAKE OPERATING, INC., 147179

Well: Teledyne 20 #004

 OCD Reviewer	Condition	
BARRANT	Notify OCD time of spud and time to witness the cementing of the surface casing.	
BARRANT	Operator to set surface casing directly above the Salado formation. Refer to offset wells for more information.	1



March 25, 2004

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

Attention: Mr. Brian Aarant

RE: Teledyne 20, Well #4

1980' FSL & 1650' FWL Section 20, T23S, R29E Eddy County, New Mexico

Dear Mr. Aarant:

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,

Erick W. Nelson

Engineer

bc

# Hydrogen Sul ? 3 Drilling Operations Plan

- 1 All Company and Contract personnel admitted on location must be trained by a qualified H2S safety instructor to the following:
  - A. Characteristics of H2S
  - B. Physical effects and hazards
  - C. Proper use of safety equipment and life support systems.
  - D. Principle and operation of H2S detectors, warning system and briefing
  - E. Evacuation procedure, routes and first aid.
  - F. Proper use of 30 minute pressure demand air pack.

## 2 H2S Detection and Alarm Systems

- A. H2S detectors and audio alarm system to be located at bell nipple, end of blooie line (mud pit) and on derrick floor or doghouse.
- 3 Windsock and/or wind streamers
  - A. Windsock at mudpit area should be high enough to be visible.
  - B. Windsock at briefing area should be high enough to be visible.
  - C. There should be a windsock at entrance to location.
- 4 Condition Flags and Signs
  - 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, H2S present in dangerous concentration. Only emergency nersonnel 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 foremen's trailer or living quarters.
- 7 Drillstem Testing
  - 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 H2S has on tubular goods and other mechanical equipment.
- 9 If H2S is encountered, mud system will be altered if necessary to maintain control of formation. A mud gas seperator will be brought into service along with H2S scavengers if