- APD Form

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

| | DEVON ENERGY | OGRID Number 6137 | |
|-----|-------------------------------------|---|----------|
| : 3 | 20 N. Broadway Oklahoma City, Ol | 20 N. Broadway Oklahoma City, OK 73102 | |
| | Property Code | Property Name | Well No. |
| | 32437 | H B 2 STATE | 008 |

Surface Location

| UL or Lot | Section | Township | Range | Lot Idn | Feet From | N/S Line | Feet From | E/W Line | County | |
|-----------|---------|----------|-------|---------|-----------|----------|-----------|----------|--------|--|
| L | 2 | 24S | 29E | L | 1830 | S | 710 | W | Eddy | |

Proposed Pools

CEDAR CANYON; BONE SPRING 11520

| Work Type New Well | Well Type OIL | Cable/Rotary | Lease Type State | Ground Level Elevation 3057 |
|-----------------------|------------------|--------------|------------------|-----------------------------|
| Multiple | Proposed Depth | Formation | Contractor | Spud Date |
| N | 8300 | Bone Spring | | 01/15/2004 |

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 | 500 | 400 | 0 |
| Intl | 11 | 8.625 | 32 | 2900 | 1025 | 0 |
| Prod | 7.875 | 5.5 | 15.5 | 8300 | 1900 | 0 |

Casing/Cement Program: Additional Comments

13 3/8 Cmt lead w/260sx 35:65:6 Poz C & tail w/250sx Class C Neat, circ 100 sx to pit 8 5/8 cmt lead w/725 sx 35:65 Poz Class C & tail w/300 sx 60:40 Poz C, circ 100 sx to pit 5 1/2 cmt lead w/700 sx 35:65 Poz Class C & tail w/500 sx 60:40 Poz Class C. Circ Cmt off DV tool @4000, pump 500 sx 60:40 Poz thru DV to surface. No Hydrogen sulfide or other hazardous gases or fluids have been encountered, reported or are known to exist at this depth in this area

Proposed Blowout Prevention Program

| Туре | Working Pressure | Test Pressure | Manufacturer |
|---------|------------------|---------------|--------------|
| Annular | 3000 | | |

- APD Form Page 2 of 2

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

Electronically Signed By: Karen Cottom

Title: Operations Technician

Date: 01/27/2004

Phone: 405-228-7512

OIL CONSERVATION DIVISION

Electronically Approved By: Bryan Arrant

Title: Geologist

Approval Date: 02/02/2004 Expiration Date: 02/02/2005

Conditions of Approval:

No Conditions

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Form C-

WELL LOCATION AND ACREAGE DEDICATION PLAT

| API Number 30-015-33218 | Pool Name CEDAR CANYON;BONE SPRING | Pool Code 11520 |
|----------------------------|---|--------------------|
| Property Code 32437 | Property Name H B 2 STATE | Well No. 008 |
| OGRID No. 6137 | Operator Name DEVON ENERGY PRODUCTION COMPANY, LP | Elevation 3057 |

Surface And Bottom Hole Location

| UL or Lot Section L 2 | Township 24S | Range 29E | Lot Idn L | Feet From 1830 | N/S Line S | Feet From 710 | E/W Line W | County Eddy |
|-----------------------|--------------|--------------|--------------|-------------------|---------------|------------------|---------------|-----------------|
| Dedicated Acres | Joint | or Infill | Consoli | dation Code | | Order | No. | - - - |

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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: Karen Cottom

Title: Operations Technician

Date: 01/27/2004

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 Eidson
Date of Survey: 01/13/2004
Certificate Number: 12641

Arrant, Bryan

From:

Cottom, Karen [Karen.Cottom@dvn.com] Tuesday, January 27, 2004 2:08 PM Bryan Arrant (E-mail)

Sent: To:

Subject:

HB2 State 2



HB 2-2 gas wtr analysis.PDF

I jsut submitted the HB2 State 8 APD. Here is a gas analysis for back up. There is no H2S.

<<HB 2-2 gas wtr analysis.PDF>>

Karen Cottom Operations Technician 405-228-7512 MAT 11.50F

MAY-21-03 WED 15:44 Laboratory Services

Laboratory Services, Inc.

4016 Fiesta Drive Hobbs, New Mexico 88240

Telephone: (505) 397-3713

FOR:

Devon · Energy

P. O. Box 250

Artesia, New Mexico 88220

SAMPLE:

IDENTIFICATION: H. B. "2" State #2

COMPANY: Devon Energy

LEASE: PLANT:

SAMPLE DATA: DATE SAMPLED: ANALYSIS DATE: 5/21/03

5/21/03 200

GAS (XX) SAMPLED BY: LIQUID ()
Merv Buecker-Pro Well

PRESSURE - PSIG SAMPLE TEMP. °F ATMOS. TEMP. °F

ANALYSIS BY:

Vickie Biggs

REMARKS:

Crude Oil API Gravity @ 60° F = 43.9

COMPONENT ANALYSIS

| COMPONENT | | MOL PERCENT | GPM |
|------------------|-------|----------------|-------|
| Hydrogen Sulfide | (H2S) | | |
| Nitrogen | (N2) | 2.417 | |
| Carbon Dioxide | (CO2) | 2.360 | |
| Methane | (C1) | 78.456 | |
| Ethane | (C2) | 9.891 | 2.639 |
| Propane | (C3) | 4.274 | 1.175 |
| I-Butane | (IC4) | 0.486 | 0.159 |
| N-Butane | (NC4) | 1.208 | 0.380 |
| I-Pentane | (IC5) | 0.261 | 0.095 |
| N-Pentane | (NC5) | 0.293 | 0.106 |
| Hexane Plus | (C6+) | 0.354 | 0.154 |
| | | 100.000 | 4.708 |

BTU/CU.FT. - DRY 1169 AT 14.650 DRY AT 14.650 WET 1166 1145 AT 14.73 DRY 1172 AT 14.73 WET 1152

SPECIFIC GRAVITY -CALCULATED

MEASURED

0.720

MOLECULAR WT. 20.8707



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Laboratory Services, Inc. 4016 Fiesta Drive Hobbs, New Mexico 88240 Telephone: (505) 397-3713

Water Analysis

| COMPANY Devon Energy | ************************ | |
|---|--|--------------|
| SAMPLE H. B. "2" State #2 | | |
| SAMPLED BY Merv Buecker-Pro We | <u> </u> | |
| DATE TAKEN 5/21/03 REMARKS | | |
| | was a substant of the | |
| Barium as Ba | | |
| Carbonata alkalinity PDM | Q. | |
| Bicarbonate alkalinity PPM | 584 | |
| pH at Lab | 6.81 | |
| pH at Lab Specific Gravity @ 60°F | 1.11 | |
| Magnesium as Mg Total Hardness as CaCO3 | 4,698 | |
| Total Hardness as CaCO3 | 8,100 | |
| Chlorides as Ci | 106,253 | |
| Sulfate as SO4 | | |
| iron as Fe | 25 | |
| Potassium | 138 | |
| Hydrogen Suitide | | |
| HW | 0.075 | @ 21. C |
| Total Dissolved Solids | 115,750 | |
| Calcium as Ca | 3,402 | |
| Nitrate | <u> </u> | |
| | | |
| | | |
| | | |
| | | |
| Results reported as Parts per Million unless stated | membership in a community of the decidence | |
| Langelier Saturation Index | 1.01 | |
| | Analysis by: | Vickie Biggs |

Analysis by: Date: Vickie Biggs 5/21/03