

## APPLICATION FOR AUTHORIZATION TO INJECT

- I. PURPOSE : X Secondary Recovery \_\_\_\_\_ Pressure Maintenance \_\_\_\_\_ Disposal \_\_\_\_\_ Storage  
Application qualifies for administrative approval? X Yes \_\_\_\_\_ No
- II. OPERATOR: BOPCO, L.P.  
ADDRESS : P.O. Box 2760 Midland TX 79702  
CONTACT PARTY : Valerie Truax PHONE : (432)683-2277
- III. WELL DATA: Complete the data required on the reverse side of this form for each well processed for injection.  
Additional sheets may be attached if necessary.
- IV. Is this an expansion of an existing project? \_\_\_\_\_ Yes X No  
If yes, give the Division order number authorizing the project \_\_\_\_\_
- V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.
- VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.
- VII. Attach data on the proposed operation, including:
1. Proposed average and maximum daily rate and volume of fluids to be injected;
  2. Whether the system is open or closed;
  3. Proposed average and maximum injection pressure;
  4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation produced water; and
  5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).
- \*VIII. Attach appropriate geological data on the injection zone including appropriate lithologic detail, geological name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.
- IX. Describe the proposed stimulation program, if any.
- \*X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted.)
- \*XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.
- XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground source of drinking water.
- XIII. Applicants must complete the 'Proof of Notice' section on the reverse side of this form.
- XIV. Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.
- NAME: Valerie Truax TITLE: Regulatory Admin Assistant  
SIGNATURE: [Signature] DATE: 05/14/2010  
E-MAIL ADDRESS: vtruax@basspet.com
- \* If the information required under Sections VI, VII, X, and XI above has been previously submitted, it need not be resubmitted. Please show the date and circumstance of the earlier submittal:

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate District Office

### III. Well Data

A. 1) Lease name: Poker Lake Unit  
 Well #: 166  
 Section: 5  
 Township: 24S  
 Range: 30E  
 Footage: 660' FNL & 660' FWL

2) Casing Info:

| Casing size                      | Set depth | Sacks cmt | Hole size | TOC     | Method     |
|----------------------------------|-----------|-----------|-----------|---------|------------|
| 8-5/8" 24# WC-50 ST&C            | 575'      | 325       | 12-1/4"   | Surface | Circulated |
| 5-1/2" 15.5# & 17# K55, L80 LT&C | 7462'     | 630       | 7-7/8"    | 3879'   | TS         |

3) Tubing to be used (size, lining material, setting depth):  
 2-7/8" 6.5# J-55 Seal Tite IPC tbg set @ 7,050'.

4) Name, model, and depth of packer to be used:  
 Lokset Nickel Plated EXT/INT PC Pkr set @ 7,050'.

B. 1) Name of the injection formation and, if applicable, the field or pool name:  
 Nash Draw (Delaware formation).

2) The injection interval and whether it is perforated or open hole:  
 Additional Delaware perms will be added from 7,091'-7,350' to create the overall injection interval.

3) State if the well was drilled for injection or, if not, the original purpose of the well:  
 Drill & complete Lower Brushy Canyon (Delaware formation) development well.

4) Give the depths of any other perforated intervals and detail on the sacks of cement or BPs used to seal off such perforations:  
 The well currently has Delaware perms located at 7280'-7290'.

5) Give the depth to and the name of the next higher and next lower oil or gas zone in the area of the well, if any:  
 Higher: None  
 Lower: Bone Spring Lime @ 7357'

VII.

Attach data on the proposed operation, including:

1. Proposed average and maximum daily rate and volume of fluids to be injected: 1000 average, 2,000 BWPD
2. Whether the system is open or closed: closed
3. Proposed average and maximum injection pressure: 1318 psi average, 1418 psi maximum
4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water: water will be produced from same reservoir (Delaware)
5. If injection is for disposal purposes into a zone not productive of oil & gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water: n/a

VIII.

Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with TDS of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval:

|                    |                         |
|--------------------|-------------------------|
| Lithologic Detail: | Sand, Shale Sequences   |
| Geological Name:   | Delaware Mountain Group |
| Thickness:         | 3768'                   |
| Depth:             | 3582'-7350'             |

The Rustler Formation is a known source of fresh water throughout this geographic area. Average depth of Rustler is 382-626'. No sources of fresh water are known to exist below the proposed disposal zone.

IX.

Describe the proposed stimulation program, if any:

The new perfs will be perforated and acidized with approximately 50 gallons 7-1/2% NEFE HCl per foot; 500 gals total.

X.

Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted.) Logs previously submitted.

XI.

Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.  
No known fresh water wells within one mile of proposed well.

XII.

Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrology connection between the disposal zone and any underground sources of drinking water.  
Applicant hereby affirms that he has examined the available geologic and engineering data and finds no evidence of open faults, or other hydrologic connection between the disposal zone and any underground source of drinking water.

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LEASE: POKER LAKE UNIT WELL #: 166  
 FIELD: NASH DRAW (DELAWARE)  
 LOCATION: 660' FNL & 660' FWL, SECTION 5, T24S, R30E  
 COUNTY: EDDY ST: NM API: 30-015-31695

KB: 3242'  
 GL: 3229'  
 SPUD DATE: 5/21/2001  
 COMP DATE: 6/21/2001

#### SURFACE CASING

SIZE: 8-5/8"  
 WT/GRD: 24# WC50  
 CSA: 575'  
 SX: 125/200 PERM/PREM+  
 CIRC: Y  
 TOC: SURF  
 HOLE SIZE: 11" 0-575'

#### PRODUCTION CASING

SIZE: 5-1/2"  
 WT/GRD: 15.5# K55 0-6151'  
 WT/GRD: 17# J55 6151-6693'  
 WT/GRD: 17# L80 6693-7462'  
 CSA: 7462'  
 SX: 600/30 PERM+ WIN2 / C  
 CIRC: Y  
 TOC: 3879' TS  
 HOLE SIZE: 7-7/8" 575-7465'

#### TUBING

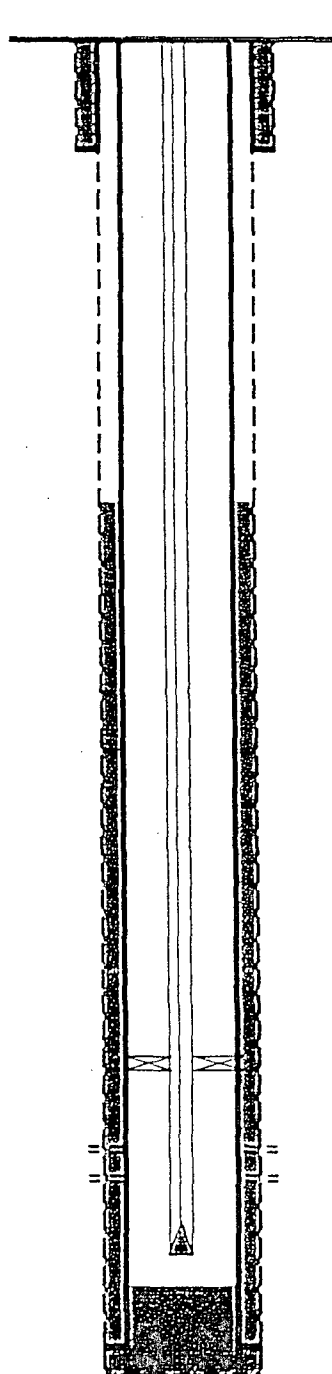
(222 JTS) 2-7/8" 6.5# J55 TUBING  
TAC @ 6901'  
(13 JTS) 2-7/8" 6.5# J55 TUBING  
3' SS TUBING SUB  
MSN @ 7317'

#### RODS & PUMP

1875' 1" WCN-90 STL RODS  
1950' 7/8" WCN-90 STL RODS  
3375' 3/4" WCN-90 STL RODS  
1-1/2" RHBM-HVR-TS PUMP

#### PERFORATION DATA

06/01 PERF 7280-90' LBC "Y" BD W/ 750g  
 7-1/2% HCl. F: 52kg Viking 30+165k# 16/30  
 Brady sd+60k# 16/30 CR-4000



0' GL  
 13' KB  
 575' 8-5/8" 24# WC50 CSG  
 11" HOLE

3,879' TOC (TS)

6,151' 5-1/2" 15.5# K55

5-1/2" 17# J-55 6151-6693'  
 6,693' 5-1/2" 17# L-80 MRKR JT

6,901' TAC

7,280' PERF 7280-90' LBC "Y"  
 7,290' 2SPF 0° PHSG (20 SHOTS)

7,317' MSN

7,389' PBTD  
 7,462' 5-1/2" 17# L80 CSG  
 7,465' 7-7/8" HOLE

PBTD: 7389'  
 TD: 7465'

Updated: 12/18/2009  
 Author: ezg  
 Engr: CC

# PROPOSED

LEASE: POKER LAKE UNIT WELL #: 166  
 FIELD: NASH DRAW (DELAWARE)  
 LOCATION: 660' FNL & 660' FWL, SECTION 5, T24S, R30E  
 COUNTY: EDDY ST: NM API: 30-015-31695

KB: 3242'  
 GL: 3229'  
 SPUD DATE: 5/21/2001  
 COMP DATE: 6/21/2001

## SURFACE CASING

SIZE: 8-5/8"  
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 CSA: 7462'  
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 CIRC: Y  
 TOC: 3879' TS  
 HOLE SIZE: 7-7/8" 575-7465'

## TUBING

(222 JTS) 2-7/8" 6.5# J55 TUBING

TAC @ 6901'

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3' SS TUBING SUB

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## RODS & PUMP

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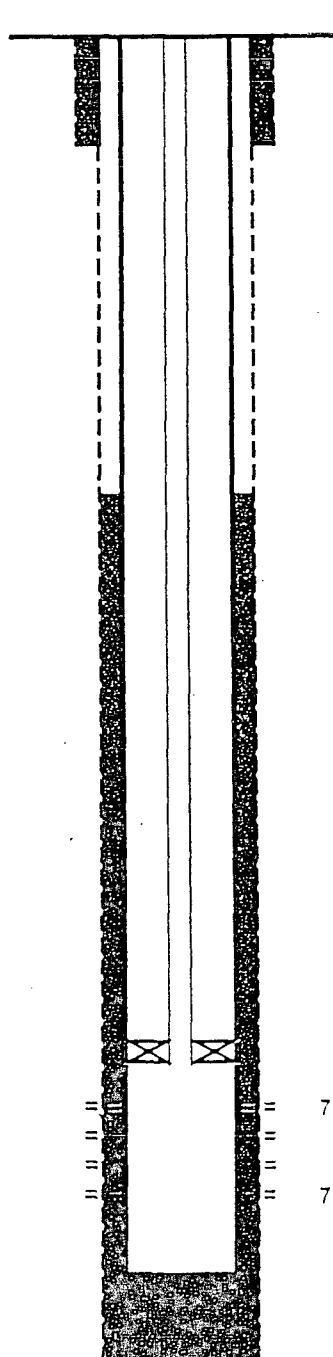
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 13' KB  
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 11" HOLE

3,879' TOC (TS)

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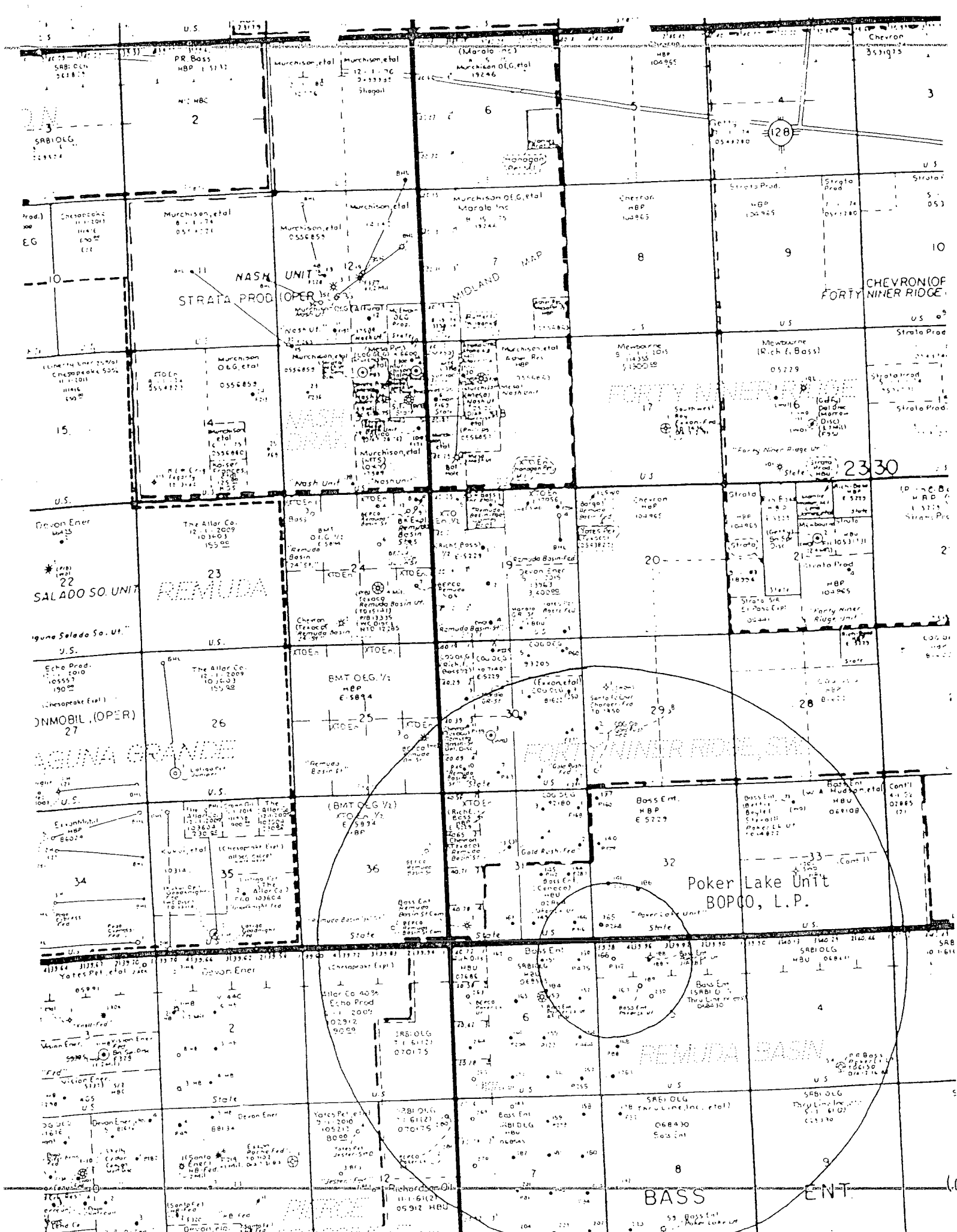
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 6,693' 5-1/2" 17# L-80 MRKR JT

7050' Lokset Nickel Plated EXT/INT PC Pkr  
 2-7/8", 6.5#, J-55 Seal Tite IPC Tbg  
 7091-7279 OA LBC Perfs  
 7,280' PERF 7280-90' LBC "Y" 2SPF  
 7,290' 0° PHSG (20 SHOTS)  
 7291-7350 OA LBC Perfs

7,389' PBTD  
 7,462' 5-1/2" 17# L80 CSG  
 7,465' 7-7/8" HOLE

PBTD: 7389'  
 TD: 7465'

Updated: 1/18/2010  
 Author: ezg  
 Engr: CC



## Affidavit of Publication

State of New Mexico  
County of Eddy, ss.

**Kathy McCarroll**, being first duly sworn, on oath says:

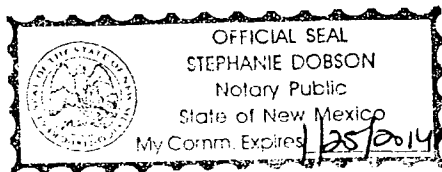
That she is the Classified Supervisor of the Carlsbad Current-Argus, a newspaper published daily at the City of Carlsbad, in said county of Eddy, state of New Mexico and of general paid circulation in said county; that the same is a duly qualified newspaper under the laws of the State wherein legal notices and advertisements may be published; that the printed notice attached hereto was published in the regular and entire edition of said newspaper and not in supplement thereof on the date as follows, to wit:

April 24 \_\_\_\_\_ 2010

That the cost of publication is **\$58.02** and that payment thereof has been made and will be assessed as court costs.

Subscribed and sworn to before me  
this 27th day of April, 2010

My commission expires 1/25/2014  
Notary Public



April 24, 2010  
NOTICE OF APPLICATION FOR A  
SECONDARY RECOVERY WELL PERMIT

BOPCO, L.P. has applied to the New Mexico Oil Conservation Division for a permit to inject produced salt water or other oil and gas waste into a porous formation productive of oil or gas.

The applicant proposes to inject produced water or other oil and gas waste into the Poker Lake Unit #166 (Delaware Formation). The maximum injection pressure will be 1418 psi and the maximum rate will be 2000 bbls produced water/day. The proposed injection well is located 14 miles east of Malaga, New Mexico in Section 5, T24S, R30E, Eddy County, New Mexico. The produced salt water will be disposed at a subsurface depth of 7091'.

Any questions concerning this application should be directed to Valerie Truax, Regulatory Administrative Assistant, BOPCO, L.P., P.O. Box 2760, Midland, Texas 79702-2760, (432) 683-2277.

Interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 S. St. Francis Dr., Santa Fe, New Mexico 87505 within 15 days.

RECEIVED  
APR 30 2010  
BOPCO WTD PRODUCTION