



NEW MEXICO ENERGY, MINERALS  
& NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION  
2040 South Pacheco Street  
Santa Fe, New Mexico 87505  
(505) 827-7131

December 10, 1996

Bass Enterprises Production Company  
6 Desta Drive, Suite 3700  
Midland, Texas 79702

Attn: Mr. John R. Smitherman

***Re: Omissions from Application for Authority to Inject,  
Palladium '13' Federal Well No.1***

Dear Mr. Smitherman:

Enclosed is the salt water disposal well permit for which you recently applied. While the application was processed and an order issued, we will need a water analysis on the water being disposed to include in the permit file.

Additionally, in the future, please submit a Division *Form C-108*, Application for Authority to Inject. This form is generally considered mandatory, but as all information was essentially complete, with the exception of the analysis, the Division processed the application to prevent possible delay of your operations.

I have included a copy of *Form C-108* for your convenience. Please make it available to anyone at your company who may apply for injection operations in the future. Also enclosed is a copy of the new *Administrative Application Coversheet* which should accompany all applications for administrative processing.

Very truly yours,

A handwritten signature in cursive script, appearing to read "Ben Stone".

Benjamin E. Stone  
P.E. Specialist

/BES

Enclosures

**CHECKLIST for ADMINISTRATIVE INJECTION APPLICATIONS**

Operator: BASS ENTER. PROD. CO. Well: PALLADIUM 'B' FED No.1

Contact: KEITH BOYD Title: PROD. SUPER. Phone: (915) 683-2277

DATE IN 11-18-96 RELEASE DATE 12-3-96 DATE OUT 12-10-96

Proposed Injection Application is for:  WATERFLOOD  Expansion  Initial

Original Order: R-  Secondary Recovery  Pressure Maintenance

SENSITIVE AREAS  SALT WATER DISPOSAL  Commercial Well

WIPP  Capitan Reef  Other \_\_\_\_\_

Data is complete for proposed well(s)? YES Additional Data Req'd \_\_\_\_\_

**AREA of REVIEW WELLS**

Total # of AOR  # of Plugged Wells  
 Tabulation Complete  Schematics of P & A's  
 Cement Tops Adequate  AOR Repair Required

**INJECTION FORMATION**

Injection Formation(s) DELAWARE

Source of Water or Injectate AREA PRODUCTION Compatible Analysis YES

**PROOF of NOTICE**

YES Copy of Legal Notice YES Information Printed Correctly  
N/A Correct Operators N/A Copies of Certified Mail Receipts  
 Objection Received  Set to Hearing \_\_\_\_\_ Date

**NOTES:** \_\_\_\_\_

**APPLICATION QUALIFIES FOR ADMINISTRATIVE APPROVAL? YES**

**COMMUNICATION WITH CONTACT PERSON:**

1st Contact:  Telephoned  Letter 12-10-96 Date Nature of Discussion NEED WATER ANALYSIS  
2nd Contact:  Telephoned  Letter \_\_\_\_\_ Date Nature of Discussion \_\_\_\_\_  
3rd Contact:  Telephoned  Letter \_\_\_\_\_ Date Nature of Discussion \_\_\_\_\_

SWD

12/3/96

648

**BASS ENTERPRISES PRODUCTION CO.**

6 DESTA DRIVE, SUITE 3700  
P.O. BOX 2760  
MIDLAND, TEXAS 79702

NOV 18 1996

November 11, 1996

FAX (915) 687-0329

(915) 683-2277

*Certified  
P 460 132 314*

Re: Notice of Application For  
Authorization to Convert to SWD  
Palladium 13 Federal #1  
Poker Lake (Delaware) NW  
Eddy County, New Mexico  
FILE: 400-WF: 96AR13#1.APP

Mr. William J. LeMay  
Director, Oil Conservation Division  
State of New Mexico  
P. O. Box 2088  
Santa Fe, New Mexico 87504-2088

Dear Mr. LeMay:

Enclosed please find Bass Enterprises Production Co.'s Application for Authorization to Convert for disposal purposes only into the Palladium 13 Federal #1, located in Section 13, T24S-R30E, Eddy County, New Mexico.

If additional information is required, please contact Mr. Keith Bucy, Division Production Superintendent at the letterhead address.

Sincerely,

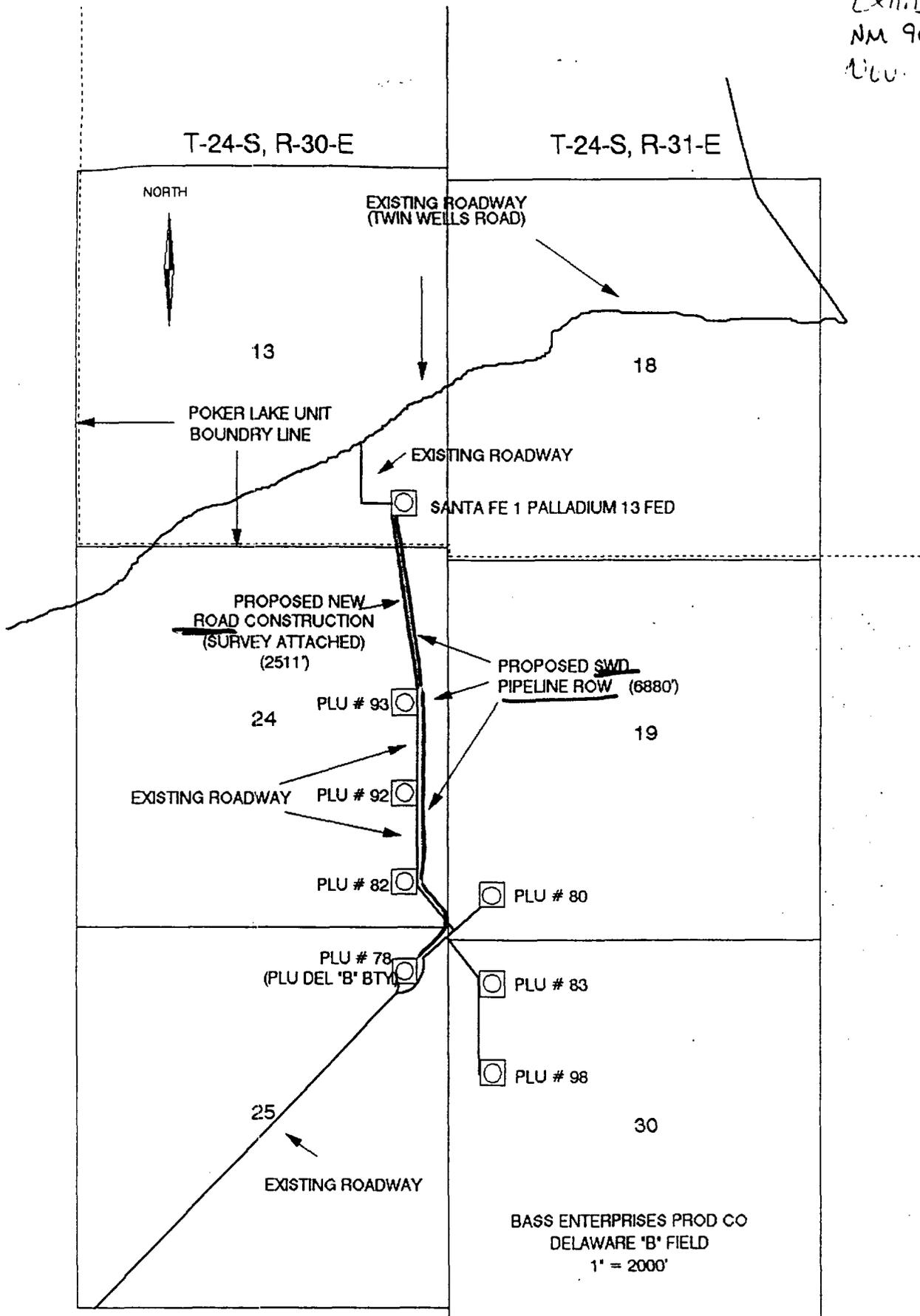


John R. Smitherman  
Division Production Manager

*tlw*

JRS:tlw

Exhibit D  
NM 96658  
NW 4,1996



**PALLADIUM "13" FEDERAL NO. 1**  
**Conversion to SWD Well**

**Job Summary:** Remove all surface production facilities and pull production equipment out of the wellbore. P & A the current completion zone from 7976-8016' by setting a CIBP above and capping with 35 feet of Class "H" cement. Then perforate the Delaware Bell Canyon zone and complete with tubing and a packer, pressure testing annulus to 500 psig.

1. MIRUPU. POH with all production equipment and lay down. RU Computalog WL and set CIBP at 7960' and dump bail 35' of Class "H" cement on top.
2. Tie into Schlumberger's CN-LD-GR log dated 8/17/94 and perforate the following intervals with 2 JSPF and 120<sup>0</sup> phasing.

5007-13'  
4965-73'  
4628-42'  
4439-45'

Stimulate as necessary.

3. TIH with packer and 2-3/8" IPC tubing. Swing packer at 4400' and circulate inhibited fluid to surface then set packer.
4. Pressure test annulus to 500 psig. Place well on injection.



# Proposed Configuration

Spud 8-7-94

Palladium 13 Fed No. 1

740' FSL & 660' FEL  
 Section 13-24S-305  
 Eddy County, New Mexico

Ref: KB 3503' or 13' AGL

13 3/8" 48# H-40 STYC @ 423'  
 w/ 350 sx (cut circ to surf)

8 5/8" 32# J-55 STYC @ 4145'  
 w/ 1200 sx (cut circ to surf)

TOC 5 1/2" @ 3200' (CBL)

φ 17 1/2"

φ 11"

φ 7 7/8"

4439-45

4628-42

4965-73

5007-13

CIBP set at,  
 7960' w/ 35'  
 cement on top

5 1/2" detail  
 0-6087' 15.5"  
 6087-8170' 17.0"

7976

40 holes. Acid.  
 Frac w/ 127 K#

8016

POP  
 190° Phasing 1 JSPF

8107' WL

5 1/2" 15.5 x 17# J-55 & K-55 LTTC  
 @ 8170' w/ 225 sx (442 ft<sup>3</sup>) C Lite  
 + 325 sx (532 ft<sup>3</sup>) H Lite.

TD 8170'

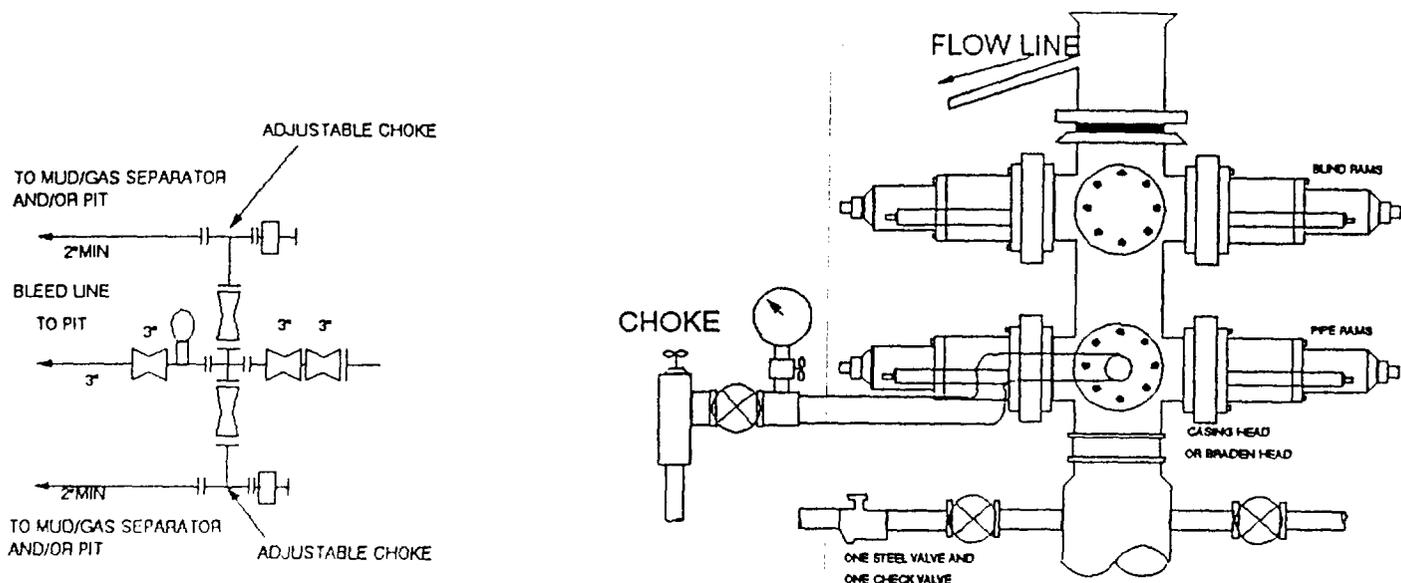
9-4-96/ASW

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# 3000 PSI WP



## THE FOLLOWING CONSTITUTE MINIMUM BLOWOUT PREVENTER REQUIREMENTS

- A. One double gate blowout preventer with lower rams for pipe and upper rams blind, all hydraulically controlled.
- B. Opening on preventers between rams to be flanged, studded or clamped and at least two inches in diameter.
- C. All connections from operating manifold to preventers to be all steel hose or tube a minimum of one inch in diameter.
- D. The available closing pressure shall be at least 15% in excess of that required with sufficient volume to operate (close, open, and re-close) the preventers.
- E. All connections to and from preventers to have a pressure rating equivalent to that of the BOP's.
- F. Manual controls to be installed before drilling cement plug.
- G. Valve to control flow through drill pipe to be located on rig floor.
- H. All chokes will be adjustable. Choke spool may be used between rams.

**BASS ENTERPRISES PRODUCTION CO.**

6 DESTA DRIVE, SUITE 3700  
P.O. BOX 2760  
MIDLAND, TEXAS 79702

FAX (915) 687-0329

**October 18, 1996**

(915) 683-2277

**Re: Notice of Application For  
Authorization to Convert to SWD  
Palladium 13 Federal #1  
Poker Lake (Delaware) NW  
Eddy County, New Mexico  
FILE: 400-WF: 96AR13#1.APP**

Carlsbad Current Argus  
P. O. Box 1629  
Carlsbad, New Mexico 88220

Gentlemen:

Enclosed for publication is a legal advertisement. Bass Enterprises Production Company requests this be published for three consecutive days. Bass Enterprises Production Company is required by the New Mexico Oil Conservation Division to furnish them with a copy of this advertisement, from your newspaper, giving the dates of publication.

Can you please provide us with this item, please send to the attention of Tami Wilber at the letterhead address. Send any billing information to the letterhead address also.

Sincerely,



John R. Smitherman  
Division Production Manager

*tlw*  
JRS:tlw

*JRS*

## **NOTICE OF APPLICATION FOR SALT WATER DISPOSAL WELL PERMIT**

Bass Enterprises Production Company has applied to the New Mexico Oil Conservation Division for a permit to dispose of produced salt water or other oil and gas waste into a porous formation productive of oil or gas.

The applicant proposes to dispose of produced water or other oil and gas waste into the Palladium 13 Federal #1 (Delaware formation). The proposed disposal well is located 35 miles southeast of Carlsbad, New Mexico in Section 13, T24S-R30E, Eddy County, New Mexico. The produced salt water will be disposed at a subsurface depth of 4100-5000'.

Any questions concerning this application should be directed to Bass Enterprises Production Company, Attention: Mr. John Smitherman, Division Production Manager, P. O. Box 2760, Midland, Texas 79702-2760.

Interested parties must file objections or requests for hearing with the Oil Conservation Division, P. O. Box 2088, Santa Fe, New Mexico 87504-2088 within 15 days.

# Affidavit of Publication

No 17332

State of New Mexico,  
County of Eddy, ss.

Amy McKay  
being first duly sworn, on oath says:

That she is Business Manager  
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:

October 31, 1996  
November 1, 1996  
November 2, 1996  
\_\_\_\_\_, 19\_\_\_\_  
\_\_\_\_\_, 19\_\_\_\_  
\_\_\_\_\_, 19\_\_\_\_

That the cost of publication is \$ 74.07,  
and that payment thereof has been made and will  
be assessed as court costs.

Amy McKay

Subscribed and sworn to before me this

6th day of November, 1996

Donna Crump

My commission expires 08/01/98

Notary Public

*October 31, 1996*  
*November 1, 2, 1996*

### NOTICE OF APPLICATION FOR SALT WATER DISPOSAL WELL PERMIT

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P. O. BOX 1468  
 MONAHANS, TEXAS 79758  
 PH. 943-3234 OR 563-1040

Martin Water Laboratories, Inc.

SEP-30 - WATER ANALYSIS

OCT - 3 1994

709 W. INDIANA  
 MIDLAND, TEXAS 79701  
 PHONE 683-4521

RESULT OF WATER ANALYSES

TO: Mr. John Smitherman  
P. O. Box 2760, Midland, TX 79702

LABORATORY NO. 594156 (Corrected Copy)  
 SAMPLE RECEIVED 4-25-94  
 RESULTS REPORTED 5-24-94 (9-30-94)

COMPANY Bass Enterprises Production Company LEASE Poker Lake Unit  
 FIELD OR POOL Poker Lake  
 SECTION \_\_\_\_\_ BLOCK \_\_\_\_\_ SURVEY \_\_\_\_\_ COUNTY Eddy STATE NM

SOURCE OF SAMPLE AND DATE TAKEN:  
 NO. 1 Produced water - taken from Poker Lake Unit #83. 4-17-94  
 NO. 2 Perfs 7956'-66', 8038'-48' (LRC)  
 NO. 3 \_\_\_\_\_  
 NO. 4 \_\_\_\_\_

REMARKS: Lower Brushy Canyon - 8,000'

CHEMICAL AND PHYSICAL PROPERTIES				
	NO. 1	NO. 2	NO. 3	NO. 4
Specific Gravity at 60° F.	1.1966			
pH When Sampled				
pH When Received	6.22			
Bicarbonate as HCO <sub>3</sub>	10			
Supersaturation as CaCO <sub>3</sub>				
Undersaturation as CaCO <sub>3</sub>				
Total Hardness as CaCO <sub>3</sub>	72,000			
Calcium as Ca	24,000			
Magnesium as Mg	2,916			
Sodium and/or Potassium	85,765			
Sulfate as SO <sub>4</sub>	82			
Chloride as Cl	183,229			
Iron as Fe	69.7			
Barium as Ba	0			
Turbidity, Electric				
Color as Pt				
Total Solids, Calculated	296,002			
Temperature °F.				
Carbon Dioxide, Calculated				
Dissolved Oxygen.				
Hydrogen Sulfide	0.0			
Resistivity, ohm/m at 77° F.	0.046			
Suspended Oil				
Filtrable Solids as mg/l				
Volume Filtered, ml				
Resistivity, ohm/m @ 77°F. - measured	0.057			

Results Reported As Milligrams Per Liter

Additional Determinations And Remarks In comparing the above with the water from this well reported on laboratory #194123 (1-17-94), we see a decided change. The water now correlates well with what we would expect from a natural Delaware. We do note that our measured resistivity is higher than the calculated by about 20 percent.

By Waylan C. Martin, M.A.