

Braden-Deem, Inc.

SUITE 1250, 125 NORTH MARKET • WICHITA, KANSAS 67202 • (316) 265-1731

*Oil and Gas Production
Lease Operations and Engineering
Cable-tool Rigs*

September 27, 1984

State of New Mexico
Energy and Minerals Department
Oil Conservation Division
P.O. Box 2088
Santa Fe, New Mexico 87501

Re: State DB #6 Well
SW SW Sec 25-7S-33E
Chaveroo Field
Roosevelt County, New Mexico

Attention: Mr. Gilbert Quintana:

Enclosed, as per our telephone conversation, is Application for Authorization to Inject for Secondary Recovery for our State DB #6 well.

We assumed this Application would qualify for administrative approval as Marathon is injecting into their State #1, SW NE Sec 36-7S-33E. This well is injecting water into the San Andres thru perforations 4163-4460. However, you have stated that this Application must be set for Hearing. Please set this hearing for as soon as possible after November 2, 1984.

We have sent a copy of this application to the following agencies and offset operators in the area. Enclosed are receipts for registerd mail.

State of New Mexico
Energy and Minerals Department
Oil Conservation Division
P.O. Box 1980
Hobbs, New Mexico 88240

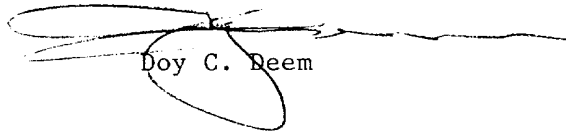
Commissioner of Public Lands
P.O. Box 1148
Santa Fe, New Mexico 87504

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Wiser Oil Company
905 Oil and Gas Building
Wichita Falls, Texas 76301

Stringer Oil & Gas
Box 3037
San Angelo, Texas 76902

Marathon Oil Company
P.O. Box 2409
Hobbs, New Mexico 88240



Doy C. Deem

DCD: tyt

Encl.

APPLICATION FOR AUTHORIZATION TO INJECT

- I. Purpose: ☒ Secondary Recovery ☐ Pressure Maintenance ☐ Disposal ☐ Storage
Application qualifies for administrative approval? ☒ yes ☐ no

II. Operator: Braden-Deem, Inc.

Address: Suite 1250 - 125 N. Market, Wichita, Ks 67202

Contact party: Doy C. Deem

Phone: (316) 265-1731

III. Well data: Complete the data required on the reverse side of this form for each well proposed for injection. Additional sheets may be attached if necessary.

IV. Is this an expansion of an existing project? ☒ yes ☐ no

If yes, give the Division order number authorizing the project Marathon Oil Co. Well.

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. State #1 SW NE Sec 36-7S-33E

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 if other than reinjected 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 source 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.

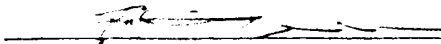
XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.

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: Doy C. Deem

Title: President

Signature: 

Date: September 27, 1984

If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be duplicated and 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 Division district office.

Braden-Deem, Inc.

State DB

OPERATOR

LEASE

6

660' FSL & 660' FWL

25

7-S

33-E

WELL NO.

FOOTAGE LOCATION

SECTION

TOWNSHIP

RANGE

Chaveroo Field, Roosevelt County, New Mexico

Schematic

Tabular Data

Surface Casing

Size 8 5/8" " Cemented with 250 sx.TOC Surface feet determined by CirculateHole size 12 1/4"

Intermediate Casing

Size _____ " Cemented with _____ sx.

TOC _____ feet determined by _____

Hole size _____

Long string

Size 4 1/2" " Cemented with 800 sx.TOC Base of salt feet determined by VolumetricHole size 7 7/8"Total depth 4430' PBTD-4397'

Injection interval

4189 feet to 4382 feet
(perforated or open-hole, indicate which)8 5/8" csg @ 418'
w/ 250 sks.bastic lined
3/8" thg.Baker Mod. AD
@ 4150'San Andres Perfs
4189-4382

PBTD @ 4397

4 1/2" - 9.5# csg @ 4430' (TD)
Cmtd. w/ 800 sks. to base
of salt.Tubing size 2 3/8" OD lined with Plastic (PVC Duo Line) set in a
(material)Baker Model AD (brand and model) packer at 4150 feet

(or describe any other casing-tubing seal).

Other Data

- Name of the injection formation San Andres
- Name of Field or Pool (if applicable) Chaveroo San Andres
- Is this a new well drilled for injection? ☐ Yes ☒ No

If no, for what purpose was the well originally drilled? _____

Producing oil well - San Andres Formation

- Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used) no zone other than

San Andres. San Andres perforations 4189'-4382'

- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.

None known to operators knowledge other than San Andres

FILING NO.

(A)

C

COMPANY <u>Pan American Petroleum Corp</u>		WELL <u>State of New Mexico DB #2</u>		FIELD <u>Lawrence</u>		COUNTY <u>Rooswell</u> STATE <u>New Mexico</u>	
LOCATION: <u>660 FSL</u> <u>660 FWL</u>		OTHER LOGS:					
SEC. <u>25</u> BLK. <u>7-5</u> TWP. <u>33N</u> RGE. <u>33N</u>	ELEVATIONS: KB. <u>4336</u> DF. <u>4335</u> GL. <u>4325</u>						
PERMANENT DATUM <u>Ceased Level</u> ELEV. <u>4325</u>		LOG MEASURED FROM <u>11 Above Ceased Level</u>					
DATE <u>5-18-66</u>		DRILLING MEASURED FROM <u>K.O.</u>					
RUN NO.	TYPE LOG	DEPTH-DRILLER	DEPTH-LOGGER	TOP LOGGED INTERVAL	TYPE FLUID IN HOLE	SALINITY PPM CL.	DENSITY LB/GAL.
		<u>G/R / NW / NW</u>	<u>4080</u> <u>4397</u>	<u>4384</u> <u>4396</u>	<u>Water & Acid</u>		<u>136</u>
MAX. REC. TEMP. DEG. F		RECORDED BY <u>Billington</u>					
WITNESSED BY							
BORE HOLE RECORD		CASING RECORD					
RUN NO.	BIT	FROM	TO	SIZE	WGT.	FROM	TO
<u>1</u>	<u>7 7/8</u>	<u>4400</u>	<u>4400</u>	<u>1 1/2</u>	<u>105</u>	<u>Surface</u>	<u>4700</u>

EQUIPMENT DATA

GAMMA RAY				NEUTRON			
RUN NO.	<u>1 NW</u>			RUN NO.	<u>1 NW</u>		
TOOL MODEL NO.	<u>402</u>			LOG TYPE	<u>N/N</u>		
DIAM.	<u>3 1/2</u>			TOOL MODEL NO.	<u>402</u>		
DETECT. MODEL NO.	<u>D4G1</u>			DIAM.	<u>3 1/2</u>		
TYPE	<u>Scint</u>			DETECT MODEL NO.	<u>D4G1</u>		
LENGTH	<u>4"</u>			TYPE	<u>Scint</u>		
DIST. TO N. SOURCE	<u>145</u>			LENGTH	<u>4"</u>		
SENSITIVITY REF.	<u>C-933</u>			SOURCE MODEL NO.	<u>510A3</u>		
GENERAL							
HOIST TRUCK NO.	<u>PT-2</u>			SERIAL NO.	<u>3365</u>		
INST. TRUCK NO.	<u>507</u>			SPACING	<u>135</u>		
TOOL SERIAL NO.	<u>141-21</u>			TYPE	<u>RABE</u>		
				STRENGTH	<u>5X106</u>		
				SENSITIVITY REF.	<u>D-368</u>		

LOGGING DATA

GENERAL		GAMMA RAY				NEUTRON			
UN NO.	DEPTHS	SPEED	T.C.	SENS.	API G. R. UNITS	T.C.	SENS.	ZERO	API
	FROM TO	FT./MIN	SEC.	SETTINGS	PER LOG DIV.	SEC.	SETTINGS	LOG DIV.	PER
<u>15</u>	<u>3500 4396</u>	<u>28</u>	<u>1.5</u>	<u>454</u>	<u>10</u>	<u>1.5</u>	<u>126</u>	<u>0</u>	
<u>2</u>	<u>10 4396</u>	<u>60</u>	<u>0.9</u>	<u>454</u>	<u>10</u>	<u>0.9</u>	<u>126</u>	<u>0</u>	

REFERENCE LITERATURE:

REMARKS:

GAMMA RAY



RADIATION INTENSITY INCREASES

CASING &
COLLAR LOG
DEPTH

NEUTRON



RADIATION INTENSITY INCREASES

4200

RD 4189 - 4327

1/2000 gal

17F 227600 0601RD

S-14.46

12'

1

2'

15'

4300

D 4384

1/R

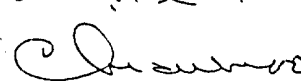
RD 4396

NTD 4397

CC L 7
Pond
Settling

2m. Start 1.5 TC

- De subver



LAND DEPARTMENT

Scale: 1" = 4000'

Date:

Rev: