



STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
HOBBS DISTRICT OFFICE

GARREY CARRUTHERS
GOVERNOR

8-15-88

POST OFFICE BOX 1980
HOBBS, NEW MEXICO 88241-1980
(505) 393-6161

203X-574

OIL CONSERVATION DIVISION
P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

RE: Proposed:

MC _____
DHC _____
NSL _____
NSP _____
SWD _____
WFX ☒ _____
PMX _____

Gentlemen:

I have examined the application for the: *Milnesand ut # 24-J 19-8-35*
" *# 311-B 19-8-35*
Breck Oper Corp. " *# 514-J 24-8-34*
Operator Lease & Well No. Unit S-T-R

and my recommendations are as follows:

Not all P&A wells included in our
DATA

Yours very truly,

Jerry Sexton
Jerry Sexton
Supervisor, District 1

/ed

APPLICATION FOR AUTHORIZATION TO INJECT

- I. Purpose: ☒ Secondary Recovery ☐ Pressure Maintenance ☐ Disposal ☐ Storage
Application qualifies for administrative approval? ☒ yes ☐ no
- II. Operator: Breck Operating Corp.
Address: P.O. Box 911, Breckenridge, Texas 76024
Contact party: Kevin G. Duncan Phone: (817) 559-3355
- 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 R-3770.
- 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 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: Kevin G. Duncan Title Petroleum Engineer
Signature: Kevin G. Duncan Date: 8/10/88
- * 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.

III. WELL DATA

A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:

- (1) Lease name; Well No.; location by Section, Township, and Range; and footage location within the section.
- (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
- (3) A description of the tubing to be used including its size, lining material, and setting depth.
- (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.

- (1) The name of the injection formation and, if applicable, the field or pool name.
- (2) The injection interval and whether it is perforated or open-hole.
- (3) State if the well was drilled for injection or, if not, the original purpose of the well.
- (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
- (5) Give the depth to and name of the next higher and next lower oil or gas zone in the area of the well, if any.

XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

- (1) The name, address, phone number, and contact party for the applicant;
- (2) the intended purpose of the injection well; with the exact location of single wells or the section, township, and range location of multiple wells;
- (3) the formation name and depth with expected maximum injection rates and pressures; and
- (4) a notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, P. O. Box 2088, Santa Fe, New Mexico 87501 within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

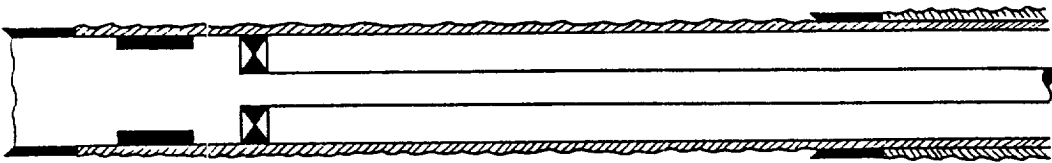
NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

RECEIVED

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OCD
HOBBS OFFICE

Breck Operating Corp.

Milnesand Unit
LEAST24 Unit Letter J, 1980' FSL & 1980' FEL
WELL NO. FOOTAGE LOCATION19
SECTION8S
TOWNSHIP35E
RANGESchematicTubular DataSurface CasingSize 8-5/8" " Cemented with 350 sx.TOC Surface feet determined by circulated.Hole size 12-1/4"Intermediate CasingSize " " Cemented with " sx.TOC " feet determined by "Hole size "Long stringSize 4-1/2" " Cemented with 1375 sx.TOC Surface feet determined by circulatedHole size 7-7/8"Total depth 4785'

Injection interval

4653 feet to 4725 feet
(perforated or ~~perforated~~ indicate which)

INJECTION WELL DATA SHEET -- SIDE 2

Tubing size 2-3/8" lined with plastic (material) set in a
Baker Loc-Set (brand and model) pucker at 4600 feet
 (or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation San Andres

2. Name of field or Pool (if applicable) Milnesand (San Andres)

3. Is this a new well drilled for injection? ☐ Yes ☒ No
 If no, for what purpose was the well originally drilled? Oil

4. 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

5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area. No overlying Underlying -5500' SL (Penn)

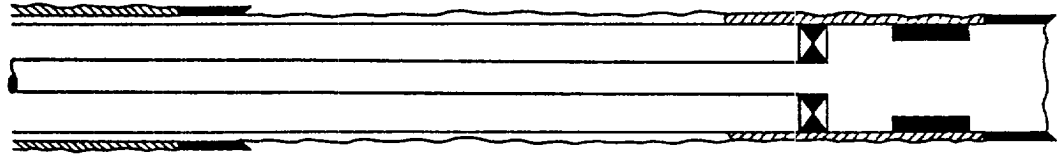
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INJECTION WELL DATA SHEET

SIDE 1

Breck Operating Corp.		Milnesand Unit	
OPERATOR		LEASE	
311 Unit Letter B, 660' FNL and 1980' FEL	19	8S	35E
WELL NO.	FOOTAGE LOCATION	SECTION	TOWNSHIP
			RANGE

Schematic



Tabular Data

<u>Surface Casing</u>	
Size 8-5/8"	Cemented with 225 sx.
TOC Surface	feet determined by circulated.
Hole size 12-1/4"	
<u>Intermediate Casing</u>	
Size "	Cemented with sx.
TOC	feet determined by
Hole size	
<u>Long string</u>	
Size 4-1/2"	Cemented with 200 sx.
TOC 3943'	feet determined by calculation
Hole size 7-7/8"	
Total depth 4720'	
Injection interval	
4566	feet to 4646 feet
(perforated or xxxxxxx indicate which)	

INJECTION WELL DATA SHEET -- SIDE 2

Tubing size 2-3/8" lined with plastic (material) set in a
Baker Loc-Set
 (brand and model) packer at 4500' feet
 (or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation San Andres
2. Name of Field or Pool (if applicable) Milnesand (San Andres)
3. Is this a new well drilled for injection? ☒ Yes ☐ No
 If no, for what purpose was the well originally drilled? Oil
4. 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
5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area. Overlying - None Underlying -5500 SL (Penn)

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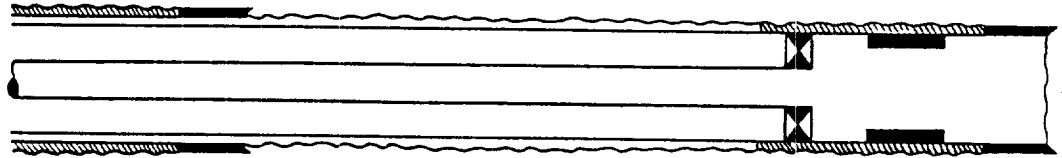
RECEIVED

INJECTION WELL DATA SHEET

SIDE 1

Breck Operating Corp.		Milnesand Unit	
OPERATOR		LEASE	
514	Unit Letter J, 1980' FSL and 1980' FEL	24	8S
WELL NO.	FOOTAGE LOCATION	SECTION	TOWNSHIP
			34E
			RANGE

Schematic



Tabular Data

<u>Surface Casing</u>	
Size 8-5/8"	" Cemented with 225 sx.
TOC Surface	feet determined by circulated
Hole size 12-1/4"	
<u>Intermediate Casing</u>	
Size "	" Cemented with sx.
TOC	feet determined by
Hole size	
<u>Long string</u>	
Size 4-1/2"	" Cemented with 200 sx.
TOC 4081	feet determined by calculation
Hole size 7-7/8"	
Total depth 4772'	
Injection interval	
4658	feet to 4736 feet
(perforated or xxxxxxx , indicate which)	

INJECTION WELL DATA SHEET -- SIDE 2

Tubing size 2-3/8" lined with plastic (material) set in a
Baker Loc-Set
 (brand and model) packer at 4600 feet

(or describe any other casing-tubing seal).

Other Data

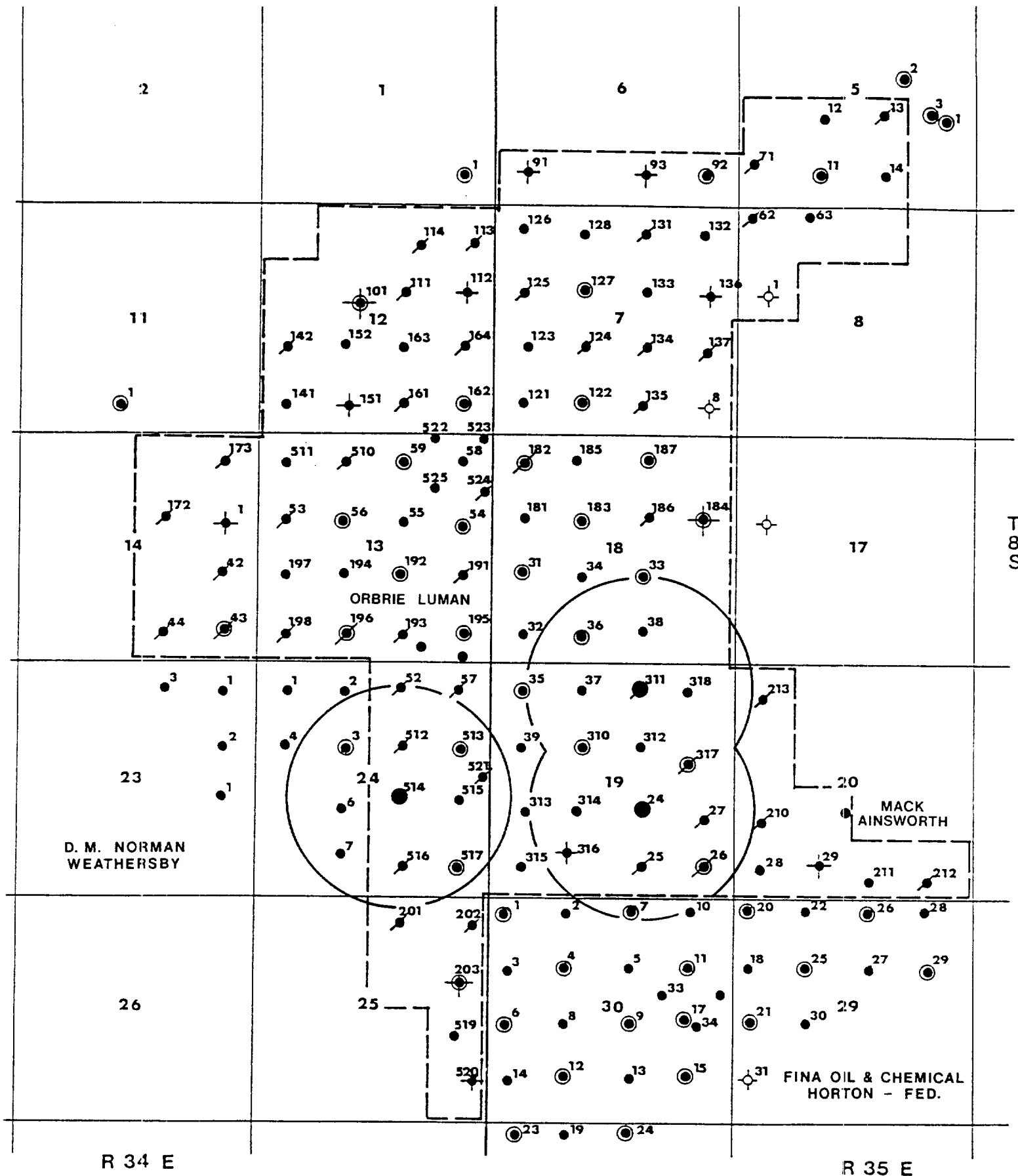
1. Name of the injection formation San Andres
2. Name of Field or Pool (if applicable) Milnesand (San Andres)
3. Is this a new well drilled for injection? ☐ Yes ☒ No
 If no, for what purpose was the well originally drilled? Oil

4. 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

5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area. Overlying - None Underlying -5500 SL (Penn)

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 CO
 NODS OFFICE



- - WELL TO BE CONVERTED
- - AREA OF REVIEW
- - FRESHWATER WELL

BRECK OPERATING CORP.
MILNESAND (SAN ANDRES) UNIT
ROOSEVELT COUNTY, NEW MEXICO
 Scale 1"=3000'

STATE OF TEXAS

COUNTY OF STEPHENS

BEFORE ME, the undersigned authority, on this day personally appeared Kevin G. Duncan, who being by me duly
(Name)
sworn, deposes and says copies of the attached application were sent by certified mail to the names and addresses as listed, on the following date, to wit: August 12, 1988.

Kevin G. Duncan
(Signature)

SUBSCRIBED and Sworn to before me this the 12th day of August, 1988, to certify which witness my hand and seal of office.

Skye D. Byars
Notary Public, State of Texas

SKYE D. BYARS, Notary Public
State of Texas
My Commission Expires 4/29/90

MILNESAND UNIT
WELLS #24, #311, & #514
ROOSEVELT COUNTY, NEW MEXICO

SURFACE OWNERS

Vernon Rogers & Nena Hargrove
c/o Ruth Rogers
826 W. 19th St.
Portales, New Mexico 88130

Irene Terrell
5912 Gladeside Court
Dallas, Texas 75248

OFFSET OPERATORS

Fina Oil & Chemical Company
1004 N. Rig Spring St.
Suite 400
Midland, Texas 79701

D.M. Norman
606 W. Tennessee
Midland, Texas 79701

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TABULATION OF DATA ON WELLS
WITHIN AREA OF REVIEW

Breck Operating Corp.

Milnesand Unit, Well #25

Location: Sec. 19-8S-35E; 660' FSL & 1980' FEL
Casing: 8-5/8" @ 368' w/ 300 sx. cement circ.
4-1/2" @ 4780' w/ 1760 sx. cement circ.
Perforations: 4667'-4733' (San Andres)
TD: 4780'

Milnesand Unit, Well #26

Location: Sec. 19-8S-35E; 660' FSL & 660' FEL
Casing: 8-5/8" @ 367' w/ 300 sx. cement circ.
4-1/2" @ 4800' w/ 1760 sx. cement circ.
Perforations: 4658'-4738' (San Andres)
TD: 4800'

Milnesand Unit, Well #27

Location: Sec. 19-8S-35E; 1720' FSL & 660' FEL
Casing: 8-5/8" @ 357' w/ 350 sx. cement circ.
4-1/2" @ 4775' w/ 1645 sx. cement circ.
Perforations: 4677'-4740' (San Andres)
TD: 4775'

Milnesand Unit, Well #33

Location: Sec. 18-8S-35E; 1980' FSL & 1980' FEL
Casing: 10-3/4" @ 430' w/ 400 sx. cement circ.
7-5/8" @ 4920' w/ 1950 sx. cement circ.
5-1/2" Liner @ 4759'-9273' w/ 500 sx.
Perforations: 4536'-4636' (San Andres)
TD: 9273'
PBDT: 4745' (CIBP w/ 2 sx. cement)

Milnesand Unit, Well #35

Location: Sec. 19-8S-35E; 660' FNL & 660' FWL
Casing: 10-3/4" @ 435' w/ 425 sx. cement circ.
7-5/8" @ 4780' w/ 1700 sx. TOC @ 500'
5-1/2" Liner @ 4710'-9325' w/ 175 sx.
Perforations: 4549'-4635' (San Andres)
TD: 9325'
PBDT: 4695' (CIBP W/ 2 sx. cement)

Tabulation of Data on Wells Within Area of Review - Cont'd.

Breck Operating Corp.

Milnesand Unit, Well #36

Location: Sec. 18-8S-35E; 660' FSL & 1980' FWL
Casing: 8-5/8" @ 432' w/ 450 sx. cement circ.
4-1/2" @ 4751' w/ 300 sx. TOC @ 4000'
Perforations: 4550'-4600' (San Andres)
TD: 4751'

Milnesand Unit, Well #37

Location: Sec. 19-8S-35E; 660' FNL & 1980' FWL
Casing: 8-5/8" @ 450' w/ 450 sx. cement circ.
4-1/2" @ 4699' w/ 200 sx. TOC @ 4200'
Perforations: 4558'-4628' (San Andres)
TD: 4700'
PBTD: 4670'

Milnesand Unit, Well #38

Location: Sec. 18-8S-35E; 660' FSL & 1980' FEL
Casing: 8-5/8" @ 440' w/ 450 sx. cement circ.
4-1/2" @ 4700' w/ 200 sx. TOC @ 4200'
Perforations: 4550'-4616' (San Andres)
TD: 4700'

Milnesand Unit, Well #52

Location: Sec. 24-8S-34E; 660' FNL & 1980' FEL
Casing: 13-3/8" @ 375' w/ 375 sx. cement circ.
8-5/8" @ 4185' w/ 1695 sx. cement circ.
5-1/2" @ 9370' w/ 200 sx. TOC @ 8348'
Cut 5-1/2" @ 4703' & reset @ 4703' w/
225 sx. cement, TOC @ 3382'
Perforations: 4565'-4624' (San Andres)
TD: 9375'
PBTD: 4703'

Milnesand Unit, Well #310

Location: Sec. 19-8S-35E; 1980' FNL & 1908' FWL
Casing: 8-5/8" @ 363' w/ 225 sx. cement circ.
4-1/2" @ 4725' w/ 200 sx. TOC @ 4225'
Perforations: 4618'-4680' (San Andres)
TD: 4725'

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Tabulation of Data on Wells Within Area of Review - Cont'd.

Breck Operating Corp.

Milnesand Unit, Well #312

Location: Sec. 19-8S-35E; 1980' FNL & 1980' FEL
Casing: 8-5/8" @ 365' w/ 225 sx. cement circ.
4-1/2" @ 4735' w/ 200 sx. TOC @ 4235'
Perforations: 4618'-4689' (San Andres)
TD: 4735'

Milnesand Unit, Well #314

Location: Sec. 19-8S-35E; 1980' FSL & 1909' FWL
Casing: 8-5/8" @ 366' w/ 225 sx. cement circ.
4-1/2" @ 4755' w/ 200 sx. TOC @ 4255'
Perforations: 4650'-4724' (San Andres)
TD: 4755'

Milnesand Unit, Well #316

Location: Sec. 19-8S-35E; 990' FSL & 1654' FWL
Casing: 8-5/8" @ 360' w/ 225 sx. cement circ.
4-1/2" @ 4730' w/ 200 sx. TOC @ 4230'
Perforations: 4646'-4714' (San Andres)
TD: 4730'
Well P&A'd 9/25/83 - See Attachments

Milnesand Unit, Well #317

Location: Sec. 19-8S-35E; 2310' FNL & 990' FEL
Casing: 8-5/8" @ 356' w/ 225 sx. cement circ.
4-1/2" @ 4717' w/ 200 sx. TOC @ 4217'
Perforations: 4633'-4712' (San Andres)
TD: 4717'

Milnesand Unit, Well #318

Location: Sec. 19-8S-35E; 660' FNL & 990' FEL
Casing: 8-5/8" @ 362' w/ 225 sx. cement circ.
4-1/2" @ 4700' w/ 200 sx. TOC @ 4200'
Perforations: 4580'-4667' (San Andres)
TD: 4700'

Milnesand Unit, Well #512

Location: Sec. 24-8S-34E; 1980' FNL & 1980' FEL
Casing: 8-5/8" @ 365' w/ 200 sx. cement circ.
4-1/2" @ 4699' w/ 200 sx. TOC @ 4200'
Perforations: 4610'-4679' (San Andres)
TD: 4700'

Tabulation of Data on Wells Within Area of Review - Cont'd.

Breck Operating Corp.

Milnesand Unit, Well #513

Location: Sec. 24-8S-34E; 1980' FNL & 660' FEL
Casing: 8-5/8" @ 357' w/ 200 sx. cement circ.
4-1/2" @ 4730' w/ 250 sx. TOC @ 4230'
Perforations: 4622'-4682' (San Andres)
TD: 4730'

Milnesand Unit, Well #515

Location: Sec. 24-8S-34E; 1980' FSL & 660' FEL
Casing: 8-5/8" @ 359' w/ 225 sx. cement circ.
4-1/2" @ 4800' w/ 225 sx. TOC @ 4250'
Perforations: 4662'-4741' (San Andres)
TD: 4800'

Milnesand Unit, Well #516

Location: Sec. 24-8S-34E; 660' FSL & 1980' FEL
Casing: 8-5/8" @ 360' w/ 350 sx. cement circ.
4-1/2" @ 4795' w/ 200 sx. TOC @ 4295'
Perforations: 4665'-4743' (San Andres)
TD: 4795'

Milnesand Unit, Well #517

Location: Sec. 24-8S-34E; 660' FSL & 660' FEL
Casing: 8-5/8" @ 370' w/ 225 sx. cement circ.
4-1/2" @ 4790' w/ 200 sx. TOC @ 4290'
Perforations: 4624'-4676' (San Andres)
TD: 4791'

Milnesand Unit, Well #521

Location: Sec. 24-8S-34E; 2630' FNL & 100' FEL
Casing: 8-5/8" @ 368' w/ 300 sx. cement circ.
5-1/2" @ 4803' w/ 1500 sx. cement circ.
Perforations: 4635'-4742' (San Andres)
TD: 4803'
PBTD: 4763'

D.M. Norman

F.W. Weathersby, Well #3

Location: Sec. 24-8S-34E; 1980' FNL & 1980' FWL
Casing: 8-5/8" @ 450' w/ 260 sx. cement circ.
5-1/2" @ 4760' w/ 250 sx. TOC @ 3485'
Perforations: 4605'-4672' (San Andres)
TD: 4760'

Tabulation of Data on Wells Within Area of Review - Cont'd.

D.M. Norman

F.W. Weathersby, Well #6

Location: Sec. 24-8S-34E; 1980' FSL & 1980' FWL
Casing: 8-5/8" @ 442' w/ 260 sx. cement circ.
5-1/2" @ 4780' w/ 250 sx. TOC @ 3505'
Perforations: 4637'-4702' (San Andres)
TD: 4780'

F.W. Weathersby, Well #7

Location: Sec. 24-8S-34E; 990' FSL & 330' FEL
* No structural or completion information was available
on this well.

Fina Oil & Chemical Company

Horton-Federal, Well #7

Location: Sec. 30-8S-35E; 330' FNL & 2241' FEL
Casing: 8-5/8" @ 412' w/ 225 sx. cement circ.
4-1/2" @ 4686' w/ 200 sx. TOC @ 4186'
Perforations: 4674'-4688' (San Andres)
TD: 4696'

OPERATOR'S COPY
UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEYSUBMIT IN TRIPPLICATE
(Other instructions
verse side)Form approved.
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

LC 060978

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

SUNDRY NOTICES AND REPORTS ON WELLS RECEIVED

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.)1. OIL WELL ☒ GAS WELL ☐ OTHER ☐

2. NAME OF OPERATOR

UNION TEXAS PETROLEUM CORPO.

3. ADDRESS OF OPERATOR

1400 Wilco Bldg., Midland, TX 79701

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*

See also space 17 below.)
At surface

Unit Letter "N", 990' FSL & 1654.5' FWL

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)

4231' GR, 4239.5' KB

7. UNIT AGREEMENT NAME

Milnesand (SA) Unit

8. FARM OR LEASE NAME

9. WELL NO.

316

10. FIELD AND POOL, OR WILDCAT

Milnesand

11. SEC., T., R., M., OR BLK. AND
SURVEY OR AREA

Sec. 18, T8S, R35E

12. COUNTY OR PARISH

13. STATE

Roosevelt

NM

16.

Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF ☐PULL OR ALTER CASING ☐FRACTURE TREAT ☐MULTIPLE COMPLETE ☐SHOOT OR ACIDIZE ☐ABANDON* ☐REPAIR WELL ☐CHANGE PLANS ☐(Other) ☐

SUBSEQUENT REPORT OF:

WATER SHUT-OFF ☐REPAIRING WELL ☐FRACTURE TREATMENT ☐ALTERING CASING ☐SHOOTING OR ACIDIZING ☐ABANDONMENT* ☒(Other) ☐(NOTE: Report results of multiple completion on Well
Completion or Recompletion Report and Log form.)17. DESCRIBE PROMISED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any
proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones perti-
nent to this work.)

Sept. 23, 1983 - MIRUSU - Removed wellhead, installed BOP - Set CIBP @ 4595'
& dumped 35' cement on top. RIH w/2 3/8" tbg. & displace
hole w/10# mud laden gel.

Sept. 24, 1983 - Perf. 4 1/2" csg. @ 2235' w/4 holes, Set cement retainer
at 2135' - squeezed w/30 sx. Class "C", PO of retainer and
dumped 10 sx. cement on top. Perf. 4 1/2" csg. @ 420'
Set cement retainer @ 320' - tested csg. to 500 psi - csg.
held. Stung into retainer, established circ. and cemented
to surf. w/100 sx. Class "C".

Sept. 25, 1983 - Removed BOP, set 50' cement plug at surf. Cut off 4 1/2"
csg. Welded steel plate across csg. - set dry hole marker
and cleaned up location - WELL NOW P&A.

18. I hereby certify that the foregoing is true and correct

SIGNED

TITLE Prod. Services Supr.

DATE 9-30-83

(This space for Federal or State office use)

APPROVED BY

TITLE

CONDITIONS OF APPROVAL, IF ANY:

APPROVED

PETER W. CHESTER

DATE
Peter W. Chester
MAY 3 1985BUREAU OF LAND MANAGEMENT
ROSWELL RESOURCE AREA

*See Instructions on Reverse Side

BRECK OPERATING CORP.

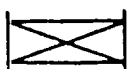
P.O. BOX 911

BRECKENRIDGE, TEXAS 76024-0911

DATE 8-1-88 WELL NO. 316 LEASE MILNESAND UNIT FIELD MILNESAND (SA)

PLUGGING PROCEDURE

- CIBP SET @ 4595' W/ 35' CMT ON TOP.
DISPLACED HOLE W/ 10" MUD LADEN GEL.
- PERF @ 2235' W/ 4 HOLES. SET CMT RET @ 2135' & SQUEEZED W/ 30 SX CMT. DUMPED 10 SX CMT ON TOP.
- PERF @ 420' W/ 4 SHOTS. SET CMT RET @ 320' & SQUEEZED W/ 100 SX CMT TO SURFACE.
- PUMP 50' CMT PLUG @ SURFACE.
- CUT OF CSG & WELD ON PLATE.
- SET DRY HOLE MARKER.



BRIDGE PLUG



PACKER



CENTRALIZER



SCRATCHER



BASKET



PERFORATION



DATA ON THE PROPOSED OPERATION

Proposed Injection Volume: Average - 200 Bbl/Day
Maximum - 400 Bbl/Day

Proposed Injection Pressure: Average - 1400 psi.
Maximum - 1500 psi.

Injection system is closed.

Sources of injection fluid are produced saltwater and freshwater.
The appropriate chemical analysis are included.

Injection is into a zone productive of oil and/or gas.

No stimulation program is proposed on the wells to be converted.

WATER ANALYSIS REPORT
furnished by TRETOLITE CHEMICALS

COMPANY: BRECK OPERATING
LEASE: WEST MILNESAND UNIT
SAMPLE POINT: *fixed from human & WMU 191*
SAMPLE DATE: 02-02-87
SAMPLE TEMP.:

pH: 5.7

TITRATED AND CALCULATED IONS

	MILLIGRAMS PER LITER	MILLIEQUIVALENTS PER LITER
HCO ₃	213.50	3.50
Cl	109046.00	3071.72
SO ₄	1131.25	23.57
Ca	4230.00	211.50
Mg	1646.25	134.94
Na	63315.00	2752.83

IONIC STRENGTH = 3.29
TOTAL HARDNESS = 17349.7 mg/ltr.
TOTAL DISSOLVED SOLIDS = 179451.9 mg/ltr.

PROBABLE MINERAL COMPOSITION AND ION PAIRING

	MILLIEQUIVALENTS PER LITER	MILLIGRAMS PER LITER
Ca(HCO ₃) ₂	3.50	283.64
CaSO ₄	23.57	1604.25
CaCl ₂	184.43	10235.99
Mg(HCO ₃) ₂	0.00	0.00
MgSO ₄	0.00	0.00
MgCl ₂	134.94	6425.77
NaHCO ₃	0.00	0.00
Na ₂ SO ₄	0.00	0.00
NaCl	2752.83	160902.20

CALCULATED SCALING TENDENCIES

SCALING INDEX

CaCO₃ @ 80 DEG F. = -0.6
CaCO₃ @ 120 DEG F. = -0.1

SATURATION POINT

CaSO₄ @ 70 DEG F. = 3468.5 MG/LTR.
CaSO₄ @ 110 DEG F. = 3454.0 MG/LTR.

(THIS SAMPLE CONTAINED 1604.3 MG/LTR. CaSO₄)

WATER ANALYSIS REPORT
furnished by TRETOLITE CHEMICALS

COMPANY: BRECK OPERATING
LEASE: WEST MILNESAND UNIT
SAMPLE POINT: WELL 191
SAMPLE DATE: 11/13/86
SAMPLE TEMP.: NA

pH: 5.6
H₂S: 100
SPECIFIC GRAVITY: 1.165

TITRATED AND CALCULATED IONS

	MILLIGRAMS PER LITER	MILLIEQUIVALENTS PER LITER
HCO ₃	244.00	4.00
Cl	145341.00	4094.11
SO ₄	1500.00	31.25
Ca	5600.00	280.00
Mg	2187.00	179.26
Na	84412.31	3670.10

IONIC STRENGTH = 4.38
TOTAL HARDNESS = 23000.0 mg/ltr.
TOTAL DISSOLVED SOLIDS = 239125.5 mg/ltr.
TOTAL IRON (Fe) = 10.0 ppm

PROBABLE MINERAL COMPOSITION AND ION PAIRINGS

	MILLIEQUIVALENTS PER LITER	MILLIGRAMS PER LITER
Ca (HCO ₃) ₂	4.00	324.16
CaSO ₄	31.25	2127.19
CaCl ₂	244.75	13583.67
Mg (HCO ₃) ₂	0.00	0.00
MgSO ₄	0.00	0.00
MgCl ₂	179.26	8536.47
NaHCO ₃	0.00	0.00
Na ₂ SO ₄	0.00	0.00
NaCl	3670.10	214554.10

CALCULATED SCALING TENDENCIES

SCALING INDEX

CaCO₃ @ 80 DEG F. = -0.2
CaCO₃ @ 120 DEG F. = 0.3

SATURATION POINT

CaSO₄ @ 70 DEG F. = 2583.4 MG/LTR.
CaSO₄ @ 110 DEG F. = 2614.6 MG/LTR.

(THIS SAMPLE CONTAINED 2127.2 MG/LTR. CaSO₄)

WATER ANALYSIS REPORT
furnished by TRETOLITE CHEMICALS

COMPANY: BRECK OPERATING
LEASE: WEST MILNESAND UNIT
SAMPLE POINT: LUMAN WATER WELL
SAMPLE DATE: 1/30/87
SAMPLE TEMP.:

pH: 7.1
H2S: 0
SPECIFIC GRAVITY: 1

TITRATED AND CALCULATED IONS

	MILLIGRAMS PER LITER	MILLIEQUIVALENTS PER LITER
HCO ₃	244.00	4.00
Cl	161.00	4.54
SO ₄	25.00	0.52
Ca	120.00	6.00
Mg	24.30	1.99
Na	24.48	1.06

IONIC STRENGTH = 0.01
TOTAL HARDNESS = 400.0 mg/ltr.
TOTAL DISSOLVED SOLIDS = 598.8 mg/ltr.

PROBABLE MINERAL COMPOSITION AND ION PAIRING

	MILLIEQUIVALENTS PER LITER	MILLIGRAMS PER LITER
Ca(HCO ₃) ₂	4.00	324.16
CaSO ₄	0.52	35.45
CaCl ₂	1.48	82.09
Mg(HCO ₃) ₂	0.00	0.00
MgSO ₄	0.00	0.00
MgCl ₂	1.99	94.85
NaHCO ₃	0.00	0.00
Na ₂ SO ₄	0.00	0.00
NaCl	1.06	62.22

CALCULATED SCALING TENDENCIES

SCALING INDEX

CaCO₃ @ 80 DEG F. = 0.1
CaCO₃ @ 120 DEG F. = 0.4

SATURATION POINT

CaSO₄ @ 70 DEG F. = 2235.9 MG/LTR.
CaSO₄ @ 110 DEG F. = 2293.6 MG/LTR.

(THIS SAMPLE CONTAINED 35.5 MG/LTR. CaSO₄)

GEOLOGICAL DATA ON THE INJECTION ZONE

Lithologic Detail: Dolomite w/ anhydrite inclusions

Geological Name: San Andres

Average Thickness: 80'

Average Depth: 4625'

Underground source of drinking water overlying the injection zone in the proposed area is the Ogallala at an average depth of 75'.

WATER ANALYSIS REPORT
furnished by TRETOLITE CHEMICALS

COMPANY: BRECK OPERATING CORP.
LEASE: WEST MILNESAND UNIT
SAMPLE POINT: LUMAN WATER WELL #1
SAMPLE DATE: 8-9-88
SAMPLE TEMP.:

pH: 7.0
H2S: 0
SPECIFIC GRAVITY: 1.002

TITRATED AND CALCULATED IONS

	MILLIGRAMS PER LITER	MILLIEQUIVALENTS PER LITER
HCO3	244.00	4.00
Cl	4922.00	138.65
SO4	875.00	18.23
Ca	920.00	46.00
Mg	607.50	49.80
Na	1496.89	65.08

IONIC STRENGTH = 0.22
TOTAL HARDNESS = 4800.0 mg/ltr.
TOTAL DISSOLVED SOLIDS = 9060.2 mg/ltr.

PROBABLE MINERAL COMPOSITION AND ION PAIRING

	MILLIEQUIVALENTS PER LITER	MILLIGRAMS PER LITER
Ca(HCO3)2	4.00	324.16
CaSO4	18.23	1240.86
CaCl2	23.77	1319.28
Mg(HCO3)2	0.00	0.00
MgSO4	0.00	0.00
MgCl2	49.80	2371.24
NaHCO3	0.00	0.00
Na2SO4	0.00	0.00
NaCl	65.08	3804.69

CALCULATED SCALING TENDENCIES

SCALING INDEX

CaCO3 @ 80 DEG F. = 0.3
CaCO3 @ 120 DEG F. = 0.8

SATURATION POINT

CaSO4 @ 70 DEG F. = 2773.0 MG/LTR.
CaSO4 @ 110 DEG F. = 2812.6 MG/LTR.

(THIS SAMPLE CONTAINED 1240.9 MG/LTR. CaSO4)

WATER ANALYSIS REPORT
furnished by TRETOLITE CHEMICALS

COMPANY: BRECK OPERATING CORP.
LEASE: WEST MILNESAND UNIT
SAMPLE POINT: LUMAN WATER WELL #4
SAMPLE DATE: 8-9-88
SAMPLE TEMP.:

pH: 7.4
H₂S: 0
SPECIFIC GRAVITY: 1

TITRATED AND CALCULATED IONS

	MILLIGRAMS PER LITER	MILLIEQUIVALENTS PER LITER
HCO ₃	122.00	2.00
Cl	856.00	24.11
SO ₄	375.00	7.81
Ca	400.00	20.00
Mg	121.50	9.96
Na	91.22	3.97

IONIC STRENGTH = 0.05
TOTAL HARDNESS = 1500.0 mg/ltr.
TOTAL DISSOLVED SOLIDS = 1965.4 mg/ltr.

PROBABLE MINERAL COMPOSITION AND ION PAIRING

	MILLIEQUIVALENTS PER LITER	MILLIGRAMS PER LITER
Ca(HCO ₃) ₂	2.00	162.08
CaSO ₄	7.81	531.80
CaCl ₂	10.19	565.41
Mg(HCO ₃) ₂	0.00	0.00
MgSO ₄	0.00	0.00
MgCl ₂	9.96	474.25
NaHCO ₃	0.00	0.00
Na ₂ SO ₄	0.00	0.00
NaCl	3.97	231.86

CALCULATED SCALING TENDENCIES

SCALING INDEX

CaCO₃ @ 80 DEG F. = 0.5
CaCO₃ @ 120 DEG F. = 0.9

SATURATION POINT

CaSO₄ @ 70 DEG F. = 2036.4 MG/LTR.
CaSO₄ @ 110 DEG F. = 2092.5 MG/LTR.

(THIS SAMPLE CONTAINED 531.8 MG/LTR. CaSO₄)

WATER ANALYSIS REPORT
furnished by TRETOLITE CHEMICALS

COMPANY: BRECK OPERATING CORP.
LEASE: WEST MILNESAND UNIT
SAMPLE POINT: AINSWORTH WATER WELL
SAMPLE DATE: 8-9-88
SAMPLE TEMP.:

pH: 7.5
H₂S: 0
SPECIFIC GRAVITY: 1

TITRATED AND CALCULATED IONS

	MILLIGRAMS PER LITER	MILLIEQUIVALENTS PER LITER
HCO ₃	122.00	2.00
Cl	642.00	18.08
SO ₄	250.00	5.21
Ca	240.00	12.00
Mg	97.20	7.97
Na	122.49	5.33

IONIC STRENGTH = 0.04
TOTAL HARDNESS = 1000.0 mg/ltr.
TOTAL DISSOLVED SOLIDS = 1473.3 mg/ltr.

PROBABLE MINERAL COMPOSITION AND ION PAIRING

	MILLIEQUIVALENTS PER LITER	MILLIGRAMS PER LITER
Ca(HCO ₃) ₂	2.00	162.08
CaSO ₄	5.21	354.53
CaCl ₂	4.79	265.94
Mg(HCO ₃) ₂	0.00	0.00
MgSO ₄	0.00	0.00
MgCl ₂	7.97	379.40
NaHCO ₃	0.00	0.00
Na ₂ SO ₄	0.00	0.00
NaCl	5.33	311.34

CALCULATED SCALING TENDENCIES

SCALING INDEX

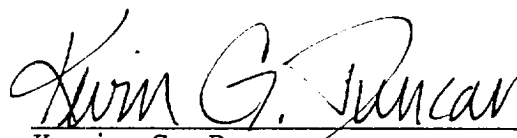
CaCO₃ @ 80 DEG F. = 0.5
CaCO₃ @ 120 DEG F. = 0.8

SATURATION POINT

CaSO₄ @ 70 DEG F. = 2195.9 MG/LTR.
CaSO₄ @ 110 DEG F. = 2252.5 MG/LTR.

(THIS SAMPLE CONTAINED 354.5 MG/LTR. CaSO₄)

Breck Operating Corp. has examined available geological 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.

A handwritten signature in cursive script, reading "Kevin G. Duncan". The signature is written in dark ink and is positioned above a horizontal line.

Kevin G. Duncan
Petroleum Engineer

LEGAL NOTICE
NOTICE OF APPLICATION
FOR FLUID INJECTION
WELL PERMIT

Breck Operating Corp., P.O. Box 911, Breckenridge, Texas 76024 has applied to the New Mexico Oil Conservation Commission for a permit to inject fluid into a formation which is productive of oil or gas.

The applicant proposes to inject fluid into the San Andres formation, Milnesand Unit, Well Nos. 24, Sec. 19, T-8S, R-35E, #311, Sec. 19, T-3S, R-35E, and #514, Sec. 24, T-3S, R-34E. These wells all will be expansion of an existing waterflood and will inject a maximum of 400 barrels of water per day at an approximate injection pressure of 1500#.

Interested parties must file objections or requests for hearing with the Oil Conservation Division, P.O. Box 2088, Santa Fe, New Mexico 87501 within 15 days.

Contact party for the applicant is Kevin G. Duncan, Petroleum Engineer, 817/559-3355.

Published in the Portales News-Tribune July 26, 1988. Legal #0400.

Affidavit of Publication

0

I, Marshall Stinnett
Business Manager of

THE PORTALES NEWS-TRIBUNE

a newspaper of general paid circulation and entered under second class postal privilege in Roosevelt County, published daily, (except Saturday) at Portales, New Mexico, for the fifty-two (52) consecutive weeks preceding this date, do solemnly swear that a copy of the above notice, as per clipping attached, was published weekly in the regular and entire issue of said

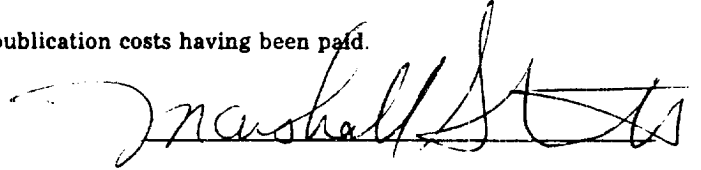
newspaper, and not in any supplement thereof for 1

consecutive weeks commencing with the issue dated _____

July 26 19 88

and ending with the issue dated July 26 19 88

All publication costs having been paid.



Subscribed and sworn to before me this 26th day of July 19 88

Re Maria Barnett
Notary Public

My commission expires 3/7/91 19 91