SWD 12-24-93

CHECKLIST for ADMINISTRATIVE INJECTION APPLICATIONS

Operator: DEVON ENERGY Well: TODD "26A" FED NO. 6

Contact: CHUCK HORSMAN Title: DIST. ENG. Phone: 405 552 4508

DATE IN 12-10-93 RELEASE DATE 12-24-93 DATE OUT _____

Proposed Injection Application is for: ___ WATERFLOOD ___ Expansion ___ Initial

Original Order: R- _____ ___ Secondary Recovery ___ Pressure Maintenance

SENSITIVE AREAS X SALT WATER DISPOSAL

6 MILES DUE SOUTH ___ WIPP ___ Capitan Reef ___ Commercial Operation

Data is complete for proposed well(s)? YES Additional Data _____

AREA of REVIEW WELLS

16 Total # of AOR 0 # of Plugged Wells

YES Tabulation Complete N/A Schematics of P & A's

YES Cement Tops Adequate ___ AOR Repair Required

INJECTION INFORMATION

Injection Formation(s) BELL CANYON & CHERRY CANYON

Source of Water DELAWARE Compatible YES

PROOF OF NOTICE

YES Copy of Legal Notice YES Information Printed Correctly

YES Correct Operators YES Copies of Certified Mail Receipts

___ Objection Received ___ Set to Hearing _____ Date

NOTES: _____

_____

APPLICATION QUALIFIES FOR ADMINISTRATIVE APPROVAL ___

COMMUNICATION WITH CONTACT PERSON:

1st Contact: ___ Telephoned ___ Letter _____ Date Nature of Discussion _____

2nd Contact: ___ Telephoned ___ Letter _____ Date Nature of Discussion _____

3rd Contact: ___ Telephoned ___ Letter _____ Date Nature of Discussion _____

devon
ENERGY CORPORATION

20 North Broadway, Suite 1500
Oklahoma City, Oklahoma 73102-8260

Telephone 405/235-3611
FAX 405/552-4550

December 8, 1993

RE: Application for Authorization to Inject
Todd "26A" Federal #6

State of New Mexico
Oil Conservation Division
P. O. Box 2088
Santa Fe, NM 87504

Attn: Mr. Dave Catanach

Dear Mr. Catanach:

Enclosed are the original and 1 copy of our Application for Authorization to Inject (Form C-108) for the above referenced well in Eddy County. I also sent a copy of this application to the Artesia district office and the Bureau of Land Management office in Carlsbad. Please direct any inquiries concerning this application to our area district engineer, Chuck Horsman at (405) 552-4508.

Sincerely yours,

Devon Energy Corporation (Nevada)

Debby O'Donnell

Debby O'Donnell
Engineering Technician

/do
Enclosures

cc: OCD - Artesia District Office
BLM - Carlsbad

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION
POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501

FORM C-108
Revised 7-1-81

APPLICATION FOR AUTHORIZATION TO INJECT

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

II. Operator: **Devon Energy Corporation (Nevada)**

Address: **20 North Broadway Suite 1500 Oklahoma City, OK 73102**

Contact party: **Charles W. Horsman District Engr.** Phone: **(405) 552-4508**

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.
*** Please refer to Attachment III**

IV. Is this an expansion of an existing project? ☐ yes ☒ 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.
*** Please refer to Attachment V**

* 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.
*** Please refer to Attachment VI**

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.).

***Please refer to Attachment VII**

*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.
*** Please refer to Attachment VIII**

IX. Describe the proposed stimulation program, if any. **Stimulation by whatever means necessary to achieve desired rate and pressure.**

* 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 have previously been 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.
*** Please refer to Attachment XI**

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.
***Please refer to Attachment XII**

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

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: **Charles W. Horsman** Title **District Engineer**

Signature: Charles W Horsman Date: **November 19, 1993**

* 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

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.

TODD 36 FEDERAL #6 ATTACHMENT III-A (2) 11/27/91

COUNTY: EDDY STATE: N.M

LEASE #: FIELD: D&D UNIT/#: CO W.I.: CO N.I.:

PF AREA/#: WSN #: API #:

ELEV - RKB: 3471 GL: COMPL DATE:

INIT PROD - ZONES: IP: DEPTHS:

CURR PROD - ZONES: IP: DEPTHS:

CASING - SURFACE: 8⅝" 24#, @ 620' w/ 200 SX 'C' + 2% A-7 + ¼ #/SX CMT: 300 SX 'C' + 2% CC + A-7

INTER: — CMT: —

(SEE BACK) PROD: 5½" ? @ 6110' (DV @ 4343') w/ 660 SX 'C' + 5 #/SX SALT CMT: 2000 SX TLW + 3% GIL

TD: 6110 PBTD: 6083 TOC: ? TOC DV: SURF

LOGS RUN: NONE STATED IN CIRC NO

TUBING: BPE:

(FOR TOPS SEE BACK)

WELL HISTORY: COMPLETION — RAN COMP NEUTRON 6085 - SURF

PERF 6062-66 W/2 SPF.

SWAB NATURAL 3-4 BBLS (50% OIL) ONFL @ ±2000'

A2 W/ CARDINAL USING 750 GAL 15% UNIGOL W/ NE AGENT (8 BALLS) MAX PR - 1800# MIN PR - 1600# AIR - 3 BPM (FAIR BALL ACTION) ISIP - 700# 15 MIN - 500#

SWAB 3 BFPH (30% OIL).

RAN TBG TO 6002'. RAN 1½" x 12' PUMP RWOP

11-6-74 FINAL 18 BO - 12 MCFD - NO WATER

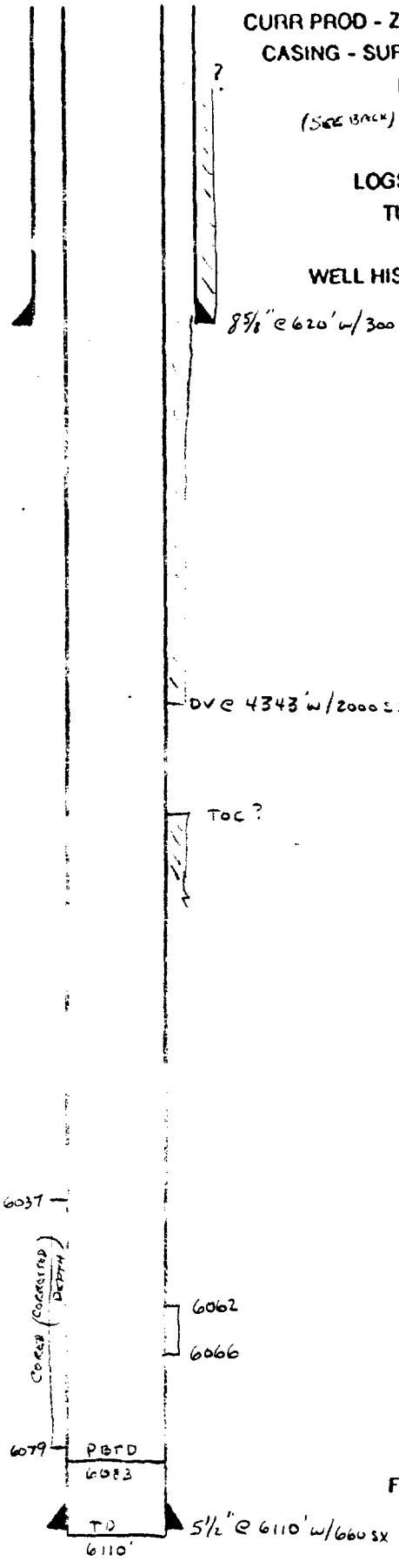
4/75 FRAC DOWN TBG & TBG ANN USING 5000 GAL YF60 (GELLED KEROSENE), 5250# 20/40 SAND & 150 BALLS LSG CAUSE. MAX TP - 1450# MIN TP - 0#? ISIP - 1100# 15 MIN - 950# AIR - 10 BPM

PUMP TESTED 32 BO & 40 BW

ILLEGIBLE

FUTURE POTENTIAL:

PREPARED BY: Cwtt



5½ CMT — 660 : 'C' w/5% SALT/SX
LOST CIRC ON LAST 30 BBLS

OPENED DV & REGAINED CIRC
2000 SX TLW w/3% GIL
(CMT CIRC TO SURF)

CENTRALIZERS — 4 ON BOTTOM
2 AROUND DV

LOG TOPS — RUSTLER 784 (+2687)
BASE OF SALT 4190 (-719)
DELAWARE 4422 (-951)
CHERRY CANYON (PAY SAND) 6054 (-2583)

ATTACHMENT III

WELL DATA

A. (1) Todd "26A" Federal #6
Section A-26-T23S-R31E
660' FNL & 990' FEL

(2) Please refer to the wellbore schematic labeled Attachment III-A(2). Cement was circulated back to surface on the surface string and on the two-stage production string (DV tool at 4343').

(3) We will be using 2 7/8" internally coated tubing (Tuboscope TK70 coating). The tubing will be set at 4400' (±).

(4) We will use a 5 1/2" x 2 7/8" Elder Lok-set Retrievable packer (internally coated) set at 4400' (±). The annulus will contain packer fluid.

B. (1) The injection formations will be the Upper Delaware Bell Canyon and the Upper Cherry Canyon in the Sand Dunes field.

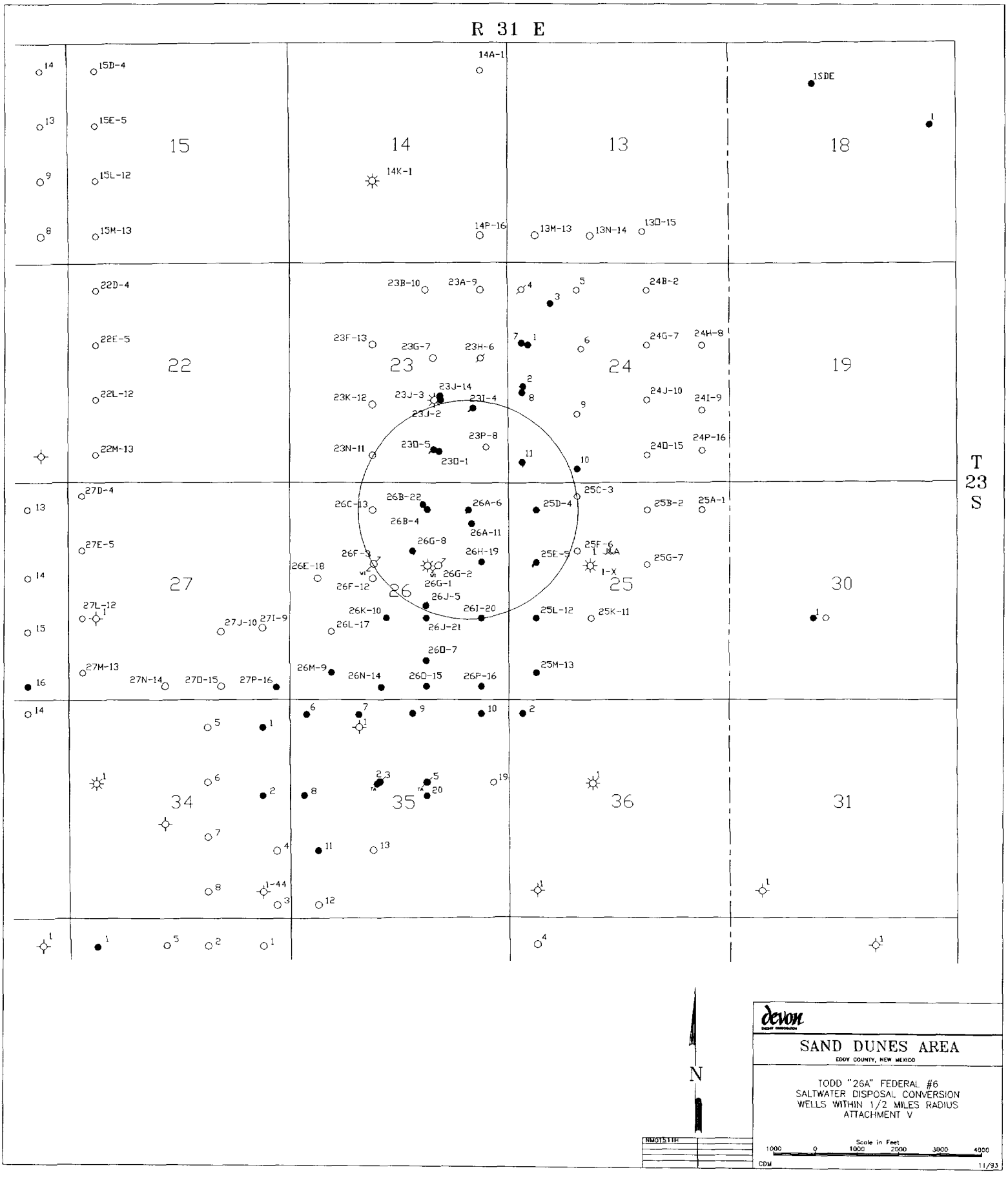
(2) The injection interval will be perforated. The proposed perforated intervals are as follows (shot density = 1 sp2f):

4510' - 4590' (80') - 40 holes
4670' - 4700' (30') - 15 holes Total perfs = 155
5000' - 5160' (160') - 80 holes
5420' - 5460' (40') - 20 holes

(3) This well was originally drilled as a Todd Sand Cherry Canyon oil well.

(4) Please refer to the wellbore schematic labeled Attachment III-A(2). We will set a cast iron bridge plug at 6000' (above the existing Todd Sand Cherry Canyon perfs at 6062'-6066'). We will spot 25' of cement on top of the CIBP.

(5) There are no higher oil or gas zones in the area of this well. The next lower zone is a non-commercial Cherry Canyon sand which is perforated in this well from 6062' - 6066' (2 spf).


R 31 E
T 23 S
15
14
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18
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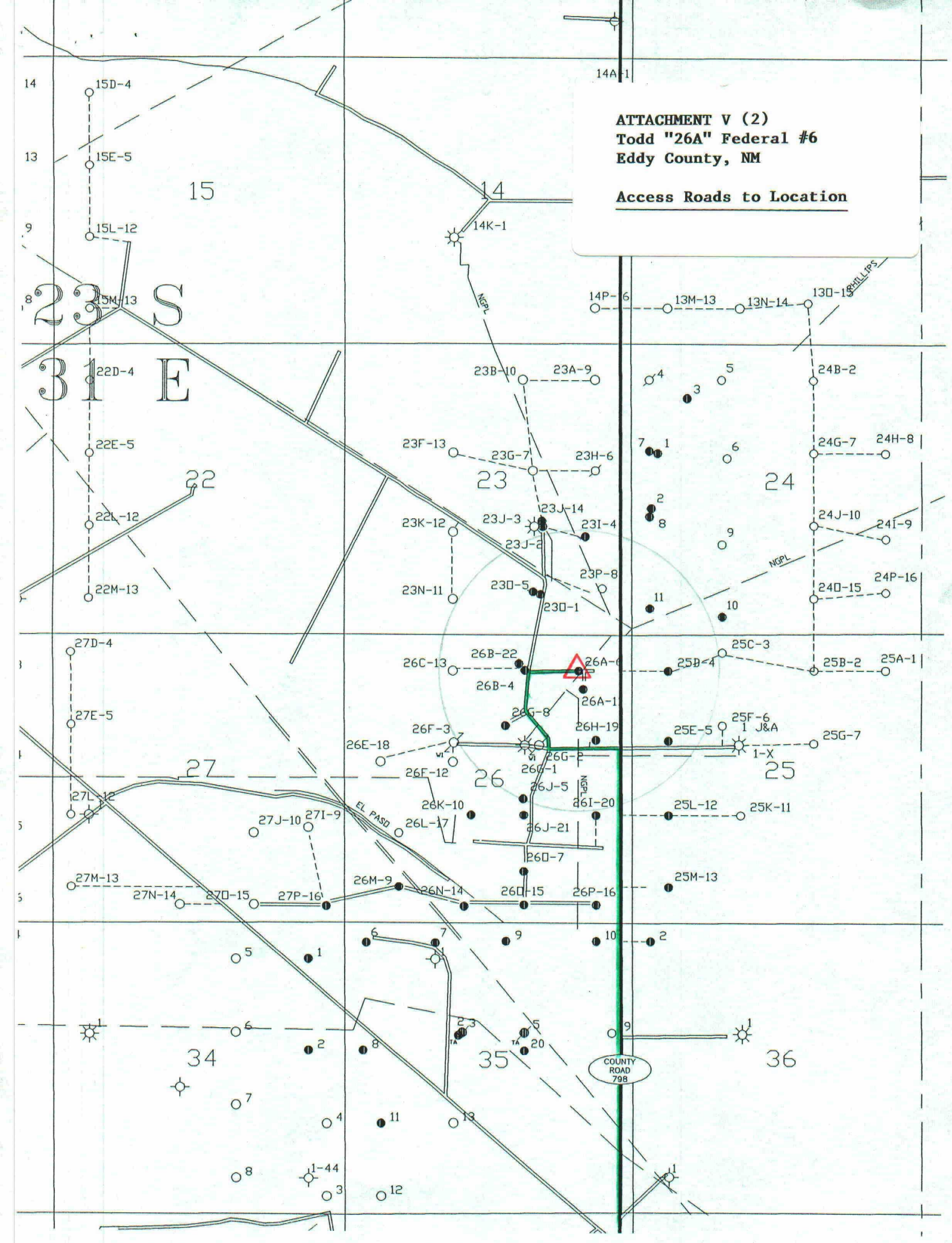
30
34
35
36
31
14A-1
15D-4
15E-5
15L-12
15M-13
14K-1
14P-16
13M-13
13N-14
13O-15
18DE
22D-4
22E-5
22L-12
22M-13
23B-10
23A-9
24B-2
23F-13
23G-7
23H-6
24G-7
24H-8
23J-14
23K-12
23J-3
23J-2
23I-4
24J-10
24I-9
23N-11
23O-5
23O-1
23P-8
24O-15
24P-16
27D-4
27E-5
27L-12
27J-10
27I-9
27M-13
27N-14
27O-15
27P-16
26C-13
26B-22
26A-6
26B-4
26A-11
26G-8
26H-19
26F-3
26E-18
26G-2
26F-12
26G-1
26J-5
26K-10
26I-20
26L-17
26J-21
26O-7
26M-9
26N-14
26O-15
26P-16
25C-3
25D-4
25B-2
25A-1
25F-6
J&A
25E-5
1-X
25G-7
25L-12
25K-11
25M-13
34
35
36
31
1-44
N
devon
SAND DUNES AREA
EDDY COUNTY, NEW MEXICO
TODD "26A" FEDERAL #6
SALTWATER DISPOSAL CONVERSION
WELLS WITHIN 1/2 MILES RADIUS
ATTACHMENT V
Scale in Feet
1000 0 1000 2000 3000 4000
CDM
11/93


ATTACHMENT V (2)
Todd "26A" Federal #6
Eddy County, NM
Access Roads to Location
23 S
31 E
15
14
22
23
24
27
26
25
34
35
36
COUNTY ROAD 798
NGPL
EL PASO
PHILLIPS

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ATTACHMENT VI

WELL NAME	LOCATION	SPUD DATE	COMPLETION DATE	TYPE OF WELL	DEPTH/PBTD	COMPLETION RECORD
Todd "23O" Fed. #1	Section 23-T23S-R31E 660' FSL & 1650' FEL Eddy County, NM	1/30/73	3/19/73	Delaware Oil Well (Cherry Canyon)	6150' / 6115'	8 5/8" surface casing @ 575' (300 sx cement) 5 1/2" production casing @ 6147' (2300 sx cement) Perforated 6017'-6032' (2 spf) 1000 gals acid
Todd "23I" Fed. #4	Section 23-T23S-R31E 1800' FSL & 900' FEl Eddy County, NM	2/11/92	4/20/92	Delaware Oil Well (Brushy Canyon)	8325' / 8281'	13 3/8" surface casing @ 819' (660 sx cement) 8 5/8" intermediate casing @ 4426' (2000 sx cement) 5 1/2" production casing @ 8325' (925 sx cement) 2 7/8" tubing @ 8059' perforated from 8160'-8220' (1 sp2f) 2500 gals 15% HCl acid 37,766 gals gelled water + 76,000# sand
Todd "23O" Fed. #5	Section 23-T23S-R31E 795' FSL & 1800' FEL Eddy County, NM	8/17/93	9/18/93	Delaware Oil Well (BrushyCanyon)	8340' / 8295'	13 3/8" surface casing @ 816' (700 sx cement) 8 5/8" intermediate casing @ 4252' (1500 sx cement) 5 1/2" production casing @ 8340' (1150 sx cement) 2 7/8" tubing @ 7920' perforated from 8036'-8193' (24 holes) 1500 gals 15% HCl acid 56,950 gals gelled water + 190,500# sand
Amax "24" Fed. #11	Section 24-T23S-R31E 492' FSL & 330' FWL Eddy County, NM	6/2/93	7/10/93	Delaware Oil Well (Brushy Canyon)	8460' / 8415'	13 3/8" surface casing @ 832' (950 sx cement) 8 5/8" intermediate casing @ 4320' (1800 sx cement) 5 1/2" production casing @ 8460' (1585 sx cement) 2 7/8" tubing @ 8224' perforated from 8194' - 8255' (61 shots) 1500 gals 7 1/2% acid 57,000 gals gelled water + 62,000# sand

ATTACHMENT VI

WELL NAME	LOCATION	SPUD DATE	COMPLETION DATE	TYPE OF WELL	DEPTH/PBTD	COMPLETION RECORD
Todd "25D" Fed. #4	Section 25-T23S-R31E 660' FNL & 660' FWL Eddy County, NM	6/16/93	7/22/93	Delaware Oil Well (Brushy Canyon)	8400' / 8350'	13 3/8" surface casing @ 855' (800 sx cement) 8 5/8" intermediate casing @ 4275' (1500 sx cement) 5 1/2" longstring @ 8400' (1150sx cement) 2 7/8" tubing @ 7916' perforated from 8088'-8214' (25 shots) 1500 gals 7 1/2% acid 67,600 gals gelled water + 202,500# sand
Todd "25E" Fed. #5	Section 25-T23S-R31E 1920' FNL & 660' FWL Eddy County, NM	7/31/93	9/10/93	Delaware Oil Well (Brushy Canyon)	8412' / 8366'	13 3/8" surface casing @ 870' (700 sx cement) 8 5/8" intermediate casing @ 4340' (1650 sx cement) 5 1/2" longstring @ 8412' (1025 sx cement) 2 7/8" tubing @ 7880' perforated from 8010'-8226' (25 shots) 1500 gals 7 1/2% acid 58,450gals gelled water + 188,300# sand
Todd "26G" Fed. #1	Section 26-T23S-R31E 1980' FNL & 1980' FEL Eddy County, NM	7/29/69	12/12/69	Atoka Gas Well	16,486' / 14,950'	20" conductor @ 619' (1160 sx cement) 13 3/8" surface casing @4114' (3000 sx cement) 10 3/4" interm. casing @ 12,721' (1000 sx cement) 7 5/8" longstring @ 15,800' (1070 sx cement) 2 7/8" tubing @ 7880' perforated from 13,679'-13,907' 15,000 gals acid 58,450gals gelled water + 188,300# sand
Todd "26G" Fed. #2	Section 26-T23S-R31E 1980' FNL & 1650' FEL Eddy County, NM	1/27/70	2/24/70	Salt Water Disposal Well	6140' / 6094'	8 5/8" surface casing @ 637' (425 sx cement) 5 1/2" production casing @ 6125' (960 sx cement) 2 7/8" plastic coated tubing @ 4400' perforated from 4460' - 5134' (Bell Canyon disposal zone) 10,000 gals 15% HCl acid 93,100 gals gelled water + 210,000# sand

ATTACHMENT VI

WELL NAME	LOCATION	SPUD DATE	COMPLETION DATE	TYPE OF WELL	DEPTH/PBTD	COMPLETION RECORD
Todd "26F" Fed. #3	Section 26-T23S-R31E 1980' FNL & 1980' FWL Eddy County, NM	6/17/70	7/2/70	Salt Water Dispoasl Well	6048'/5700'	9 5/8" intermediate casing @ 603' (230 sx cement) 4 1/2" longstring @ 4379' (1500 sx cement) 2 3/8" plastic coated tubing @ 4337' open hole disposal zone from 4379'-5700' 5000 gals 7 1/2% acid
Todd "26B" Fed. #4	Section 26-T23S-R31E 660' FNL & 1980' FEL Eddy County, NM	4/14/72	5/18/72	Delaware Oil Well (Cherry Canyon)	6150' / 6120'	8 5/8" surface casing @ 618' (380 sx cement) 5 1/2" production casing @ 6150' (2600 sx cement) 2 7/8" tbg perforated from 5996'-6051' and 6008'-6016' (16 holes) 1000 gals acid
Todd "26J" Fed. #5	Section 26-T23S-R31E 2310' FSL & 1980' FEL Eddy County, NM	11/28/73	3/1/74	Delaware Oil Well (Cherry Canyon)	6100' / 6058'	8 5/8" surface casing @ 596' (300 sx cement) 5 1/2" production casing @ 6100' (2400 sx cement) 2 7/8" tubing perforated from 6003'-6021' (19 holes) 1100 gals acid 12,500 gals gelled oil + 13,125# sand
Todd "26G" Fed. #8	Section 26-T23S-R31E 1650' FNL & 2310 ' FEL Eddy County, NM	12/29/92	3/5/93	Delaware Oil Well (Brushy Canyon)	8340' / 8292'	13 3/8" surface casing @ 830' (650 sx cement) 11" intermediate casing @ 4390' (1900 sx cement) 5 1/2" production casing @ 8340' (1125 sx cement) 2 7/8" tubing @ 7966' perforated from 8088'-8150' (124 holes) 1500 gals 7 1/2% acid 49,300 gals gelled water + 44,500# sand

ATTACHMENT VI

WELL NAME	LOCATION	SPUD DATE	COMPLETION DATE	TYPE OF WELL	DEPTH/PBTD	COMPLETION RECORD
Todd "26A" Fed. #11	Section 26-T23S-R31E 990' FNL & 890' FEL Eddy County, NM	10/3/92	11/16/92	Delaware Oil Well (Brushy Canyon)	8400' / 8356'	13 3/8" surface casing @ 850' (800 sx cement) 8 5/8" intermediate casing @ 4450' (2300 sx cement) 5 1/2" longstring @ 8400' (1150 sx cement) 2 7/8" tubing @ 7952' perforated from 8052'-8210' 2200 gals 7 1/2% acid 70,132 gals gelled water + 47,375# sand
Todd "26H" Fed. #19	Section 26-T23S-R31E 1905' FNL & 660' FEL Eddy County, NM	3/1/93	6/18/93	Delaware Oil Well (Brushy Canyon	8350' / 8310'	13 3/8" surface casing @ 852' (650 sx cement) 8 5/8" intermediate casing @ 4224' (1900sx cement) 5 1/2" longstring @ 8350' (1050 sx cement) 2 7/8" tubing @ 7348' perforated from 8036'-8194' (24 holes) 1500 gals 7 1/2% acid 59,000gals gelled water + 208,000# sand
Todd "26I" Fed. #20	Section 26-T23S-R31E 1980' FSL & 660' FEL Eddy County, NM	4/9/93	7/7/93	Delaware Oil Well (Brushy Canyon	8340' / 8297'	13 3/8" surface casing @ 818' (650 sx cement) 8 5/8" intermediate casing @ 4200' (1700 sx cement) 5 1/2" longstring @ 8340' (975 sx cement) 2 7/8" tubing @ 7940' perforated from 8042'-8186' (24 holes) 1500 gals 7 1/2% acid 62,500 gals gelled water + 189,000# sand
Todd "26B" Fed. #22	Section 26-T23S-R31E 525' FNL & 2040' FEL Eddy County, NM	10/5/93	11/11/93	Delaware Oil Well (Brushy Canyon	8350' / 8302'	13 3/8" surface casing @ 859' (700 sx cement) 8 5/8" intermediate casing @ 4300' (1450 sx cement) 5 1/2" longstring @ 8350' (1150 sx cement) 2 7/8" tubing @ 7907' perforated from 8014' - 8172' 1500 gals 7 1/2% acid 52,900 gals gelled water + 169,000# sand

ATTACHMENT VII

PROPOSED OPERATION

1. We plan to inject 3,000 - 4,000 bbls of produced water per day.

2. The disposal system will be a closed system.

3. The proposed injection pressure is 900 psig. Maximum pressure will be 1000 psig.

4. The injection fluid will be reinjected produced water.

5. The DST run from 6369'-6439' in the Todd "26G" Federal #1 well showed 70,000 ppm chlorides. Water from all of our wells are disposed into a common batteries at each lease and into the disposal wells. The lack of current problems in the existing disposal wells indicates compatibility. From this we infer the similarity of the Bell Canyon and Cherry Canyon waters. Baker analyzed samples of the water being disposed into the the Todd "26G" Federal #2 and Todd "26F" Federal #3 disposal wells. Please refer to Attachment VII-5 for copies of the analyses.

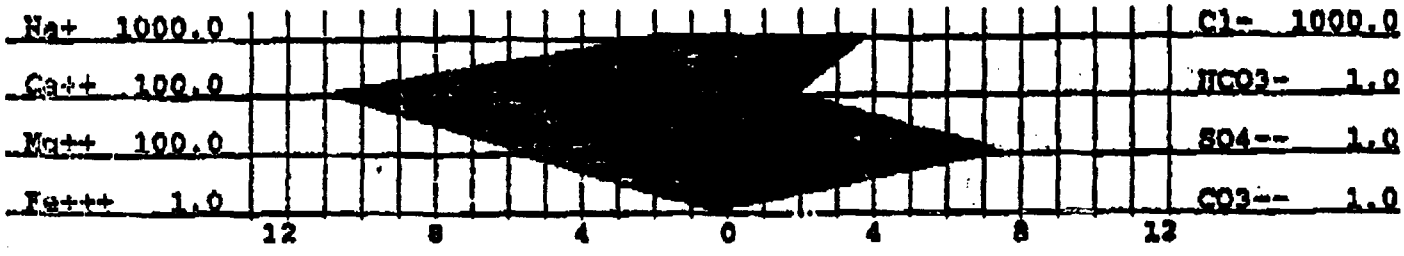
ATTACHMENT VII (5) - page 1 of 4

BAKER PERFORMANCE CHEMICALS

Date of Analysis:	NOVEMBER 10, 1993	Analysis #:	2474
Company:	DEVON	Company Address:	ARTESIA
State:	NEW MEXICO	Field:	N/D
Lease:	TODD 26-3	Well #:	26-3
Oil (bbl/day):	N/D	Water (bbl/day):	N/D
Type of Water:	PRODUCED	Temp.,C:	20
Sample Source:	WELL HEAD	Date of Sampling:	NOVEMBER 8, 1993
Representative:	STEVE STROUD	Analysis By:	SUZANNE WILLIAMS

WATER ANALYSIS PATTERN

(number beside ion symbol indicates me/l scale unit)



DISSOLVED SOLIDS

CATIONS		me/l	mg/l
Total Hardness	:	1680.00	
Calcium, (Ca++)	:	1100.00	22052.93
Magnesium, (Mg++)	:	580.00	7047.81
Iron, (Fe+++)	:	0.54	10.00
Barium, (Ba++)	:	N/D	N/D
Sodium, Na+(calc)	:	2216.27	50974.31
Manganese, (Mn++)	:	0.00	0.00
ANIONS			
Chloride, Cl-	:	3687.32	137995.03
Sulfate, SO4--	:	7.49	360.00
Carbonate, CO3--	:	0.00	0.00
Bicarbonate, HCO3-	:	2.00	122.03
Hydroxyl, OH-	:	0.00	0.00
Sulfide, S--	:	0.00	0.00
TOTAL SOLIDS (quant.)	:		218562.10

DISSOLVED GASES

Hydrogen sulfide	:	0.00	mg/l
Carbon dioxide	:	79.20	mg/l
Oxygen	:	N/D	mg/l

PHYSICAL PROPERTIES

pH	:	5.50
Spec Grav.	:	1.135
TDS (calc.)	:	218564.11

SCALE STABILITIES

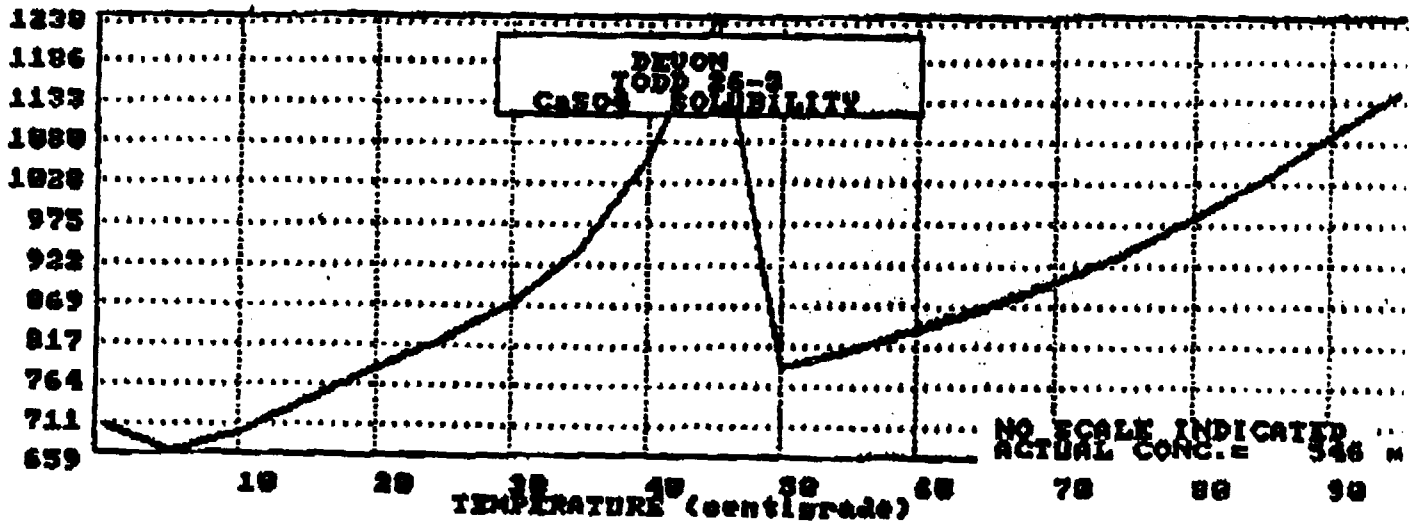
Temp.,C	CaCO3	CaSO4	BaSO4
20.0	.24	772	2
30.0	N/D	858	2
40.0	N/D	1045	3
Max entity, (calc.)		546	0

RESIDUAL HYDROCARBONS: N/D

N/D = not determined

@20'C...CALCIUM SULFATE SCALING IS UNLIKELY.
@20'C...SLIGHTLY CORROSIVE, AND SLIGHT CARBONATE SCALING.

ATTACHEMTN VII (5) - page 2 of 4



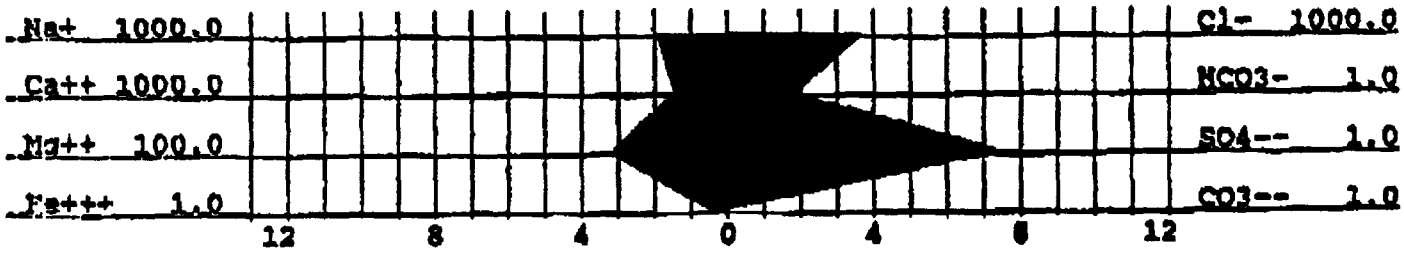
BPCI BAKER PERFORMANCE CHEMICALS

WATER ANALYSIS for DEVON

Date of Analysis:	NOVEMBER 10, 1993	Analysis #:	2473
Company:	DEVON	Company Address:	ARTESIA
State:	NEW MEXICO	Field:	N/D
Lease:	TODD 26-2	Well #:	26-2
Oil (bbl/day):	N/D	Water (bbl/day):	N/D
Type of Water:	PRODUCED	Temp.,C:	20
Sample Source:	WELL HEAD	Date of Sampling:	NOVEMBER 8, 1993
Representative:	STEVE STROUD	Analysis By:	SUZANNE WILLIAMS

WATER ANALYSIS PATTERN

(number beside ion symbol indicates me/l scale unit)



DISSOLVED SOLIDS

CATIONS	me/l	mg/l
Total Hardness :	1820.00	
Calcium, (Ca++) :	1500.00	30072.17
Magnesium, (Mg++):	320.00	3888.45
Iron, (Fe+++) :	0.54	10.00
Barium, (Ba++) :	N/D	N/D
Sodium, Na+(calc):	1963.60	45162.89
Manganese, (Mn++):	0.00	0.00
ANIONS		
Chloride, Cl- :	3774.65	133995.38
Sulfate, SO4-- :	7.49	360.00
Carbonate, CO3-- :	0.00	0.00
Bicarbonate,HCO3-:	2.00	122.03
Hydroxyl,OH- :	0.00	0.00
Sulfide, S-- :	0.00	0.00
TOTAL SOLIDS (quant.):		213610.90

DISSOLVED GASES

Hydrogen sulfide:	0.00	mg/l
Carbon dioxide :	79.20	mg/l
Oxygen :	N/D	mg/l

PHYSICAL PROPERTIES

pH :	6.15
Spec Grav. :	1.135
TDS (calc.) :	213612.92

SCALE STABILITIES

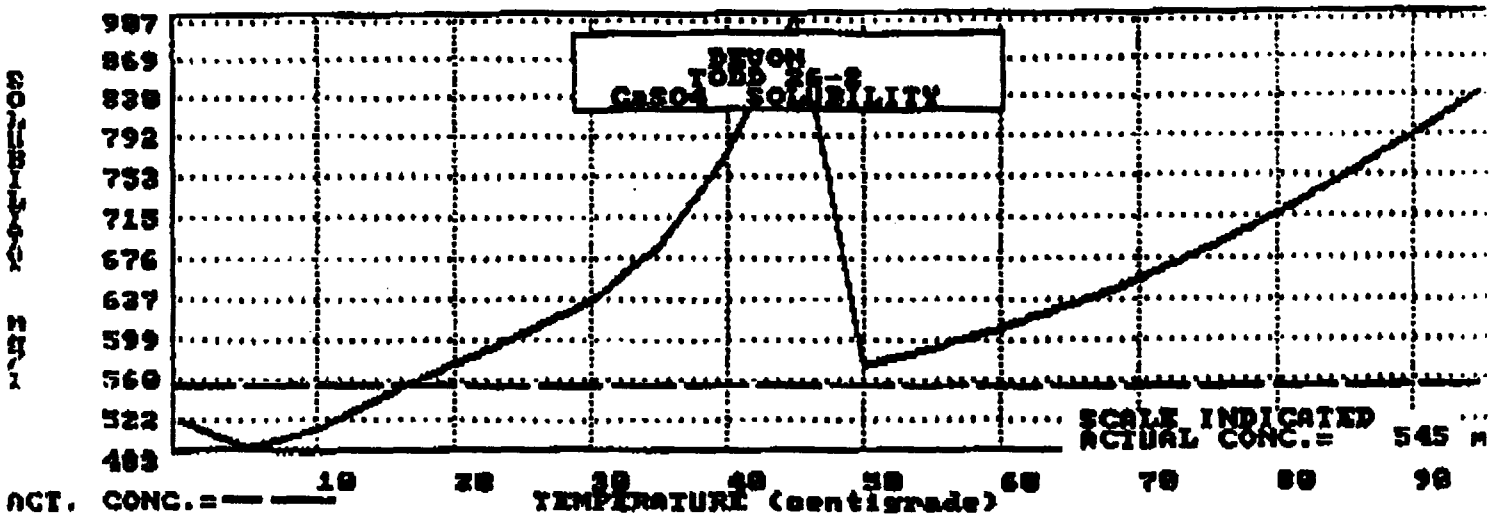
Temp.,C	CaCO3	CaSO4	BaSO4
20.0	1.05	565	2
30.0	N/D	627	2
40.0	N/D	765	3
Max entity, (calc.)		545	0

RESIDUAL HYDROCARBONS: N/D

N/D = not determined

@20°C...CALCIUM SULFATE SCALING IS LIKELY.
@20°C...SEVERE CARBONATE SCALING.

ATTACHMENT VII (5) - page 4 of 4



ATTACHMENT VIII

GEOLOGY AND LITHOLOGY

The depth to the bottom of the aquifers is ≤800' (±). The proposed disposal zone is the sandstones within the Bell Canyon interval and the Upper Cherry Canyon interval of the Delaware Mountain Group. Approximate depth of the interval is 4510' - 5420'.

ATTACHMENT XI (page 1 of 3)

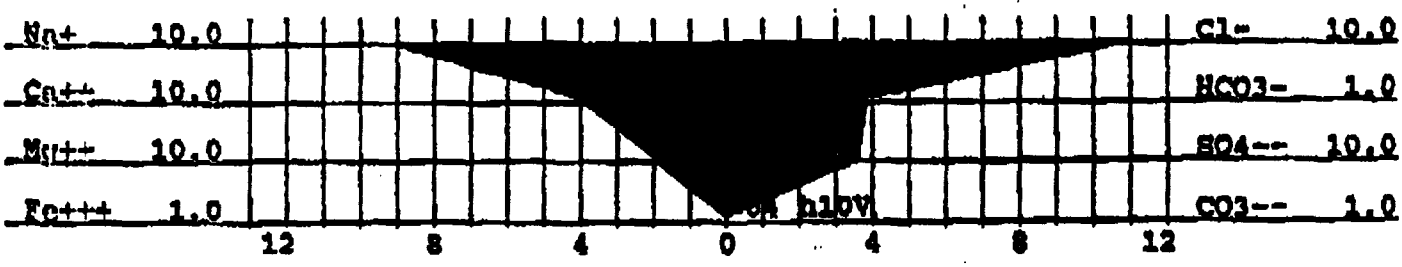
BAKER PERFORMANCE CHEMICALS

WATER ANALYSIS for CHARLEY JAMES

Date of Analysis:	NOVEMBER 10, 1993	Analysis #:	2475
Company:	CHARLEY JAMES	Company Address:	
State:		Field:	N/D
Lease:	SECTION # 26	Well #:	# 26
Oil (bbl/day):	N/D	Water (bbl/day):	N/D
Type of Water:	FRESH	Temp.,C:	20
Sample Source:	WINDMILL	Date of Sampling:	NOVEMBER 8, 1993
Representative:	STEVE STROUD	Analysis By:	SUZANNE WILLIAMS

WATER ANALYSIS PATTERN

(number beside ion symbol indicates me/l scale unit)



DISSOLVED SOLIDS

CATIONS	me/l	mg/l
Total Hardness :	60.00	
Calcium, (Ca++) :	40.00	801.92
Magnesium, (Mg++):	20.00	243.03
Iron, (Fe+++) :	0.00	0.00
Barium, (Ba++) :	N/D	N/D
Sodium, Na+(calc):	94.14	2165.17
Manganese, (Mn++):	0.00	0.00
ANIONS		
Chloride, Cl- :	112.68	4000.00
Sulfate, SO4-- :	37.46	1800.00
Carbonate, CO3-- :	0.00	0.00
Bicarbonate,HCO3-:	4.00	244.05
Hydroxyl,OH- :	0.00	0.00
Sulfide, S-- :	0.00	0.00
TOTAL SOLIDS (quant.):		9254.17

DISSOLVED GASES

Hydrogen sulfide:	0.00	mg/l
Carbon dioxide :	3.96	mg/l
Oxygen :	N/D	mg/l

PHYSICAL PROPERTIES

pH :	6.85
Spec Grav. :	0.999
TDS (calc.) :	9258.18

SCALE STABILITIES

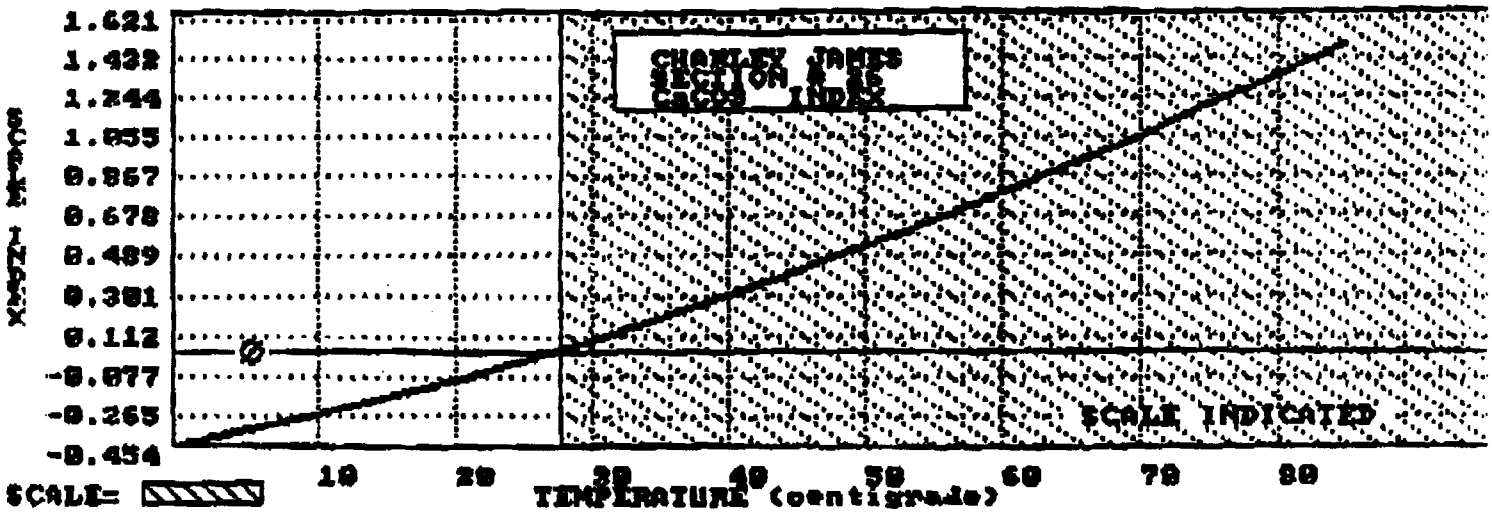
Temp.,C	CaCO3	CaSO4	BaSO4
20.0	-0.14	3139	0
30.0	0.04	3229	0
40.0	0.25	3273	0
Max entity, (calc.)		2556	0

RESIDUAL HYDROCARBONS: N/D

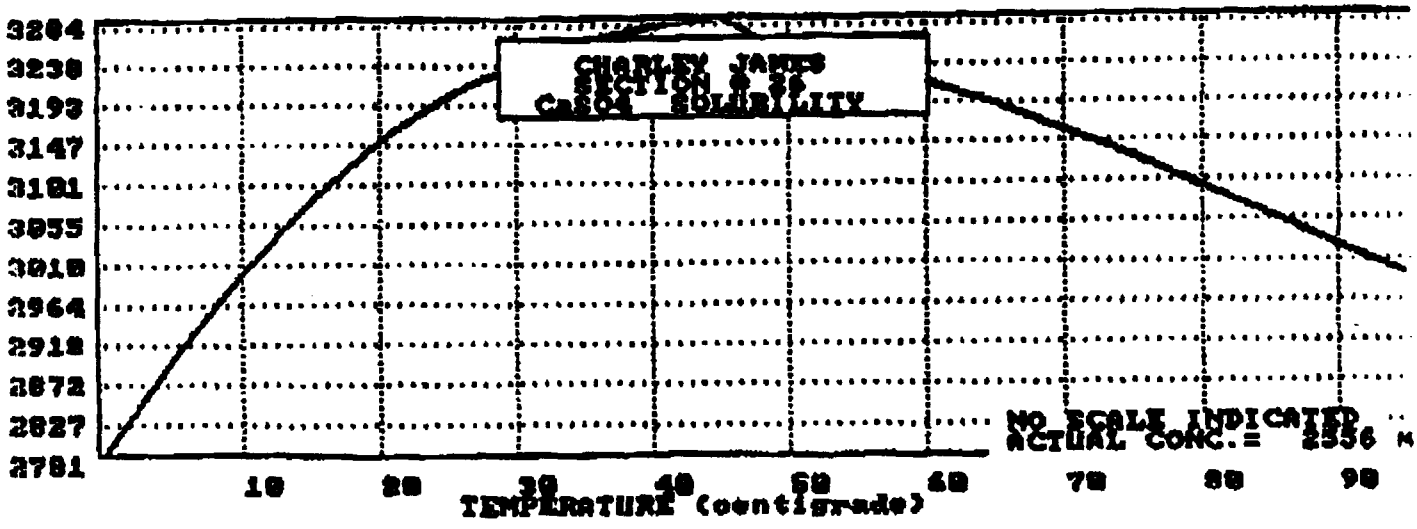
N/D = not determined

@20'C...CALCIUM SULFATE SCALING IS UNLIKELY.
@20'C...SLIGHTLY CORROSIVE.

ATTACHMENT XI (page 2 of 3)



ATTACHMENT XI (page 3 of 3)



ATTACHMENT XII

An examination of the surrounding area shows no evidence of open faults or any other hydrologic connection between the disposal zone and the source(s) of drinking water.

ATTACHMENT XIV

PROOF OF NOTICE

Devon Energy Corporation (Nevada) is the leasehold operator in Section 26. The leasehold operator, Pogo Producing Company (Section 24) has been provided a copy of our application by certified mail. Proof of notice is enclosed. The Bureau of Land Management is the surface owner. They have been notified by BLM Sundry Notice.

PROOF OF PUBLICATION

Proof of publication from the Carlsbad Current-Argus is enclosed.

ATTACHMENT XIV
(Proof of Publication)

devon
ENERGY CORPORATION

20 North Broadway, Suite 1500
Oklahoma City, Oklahoma 73102-8260

Telephone 405/235-3611
FAX 405/552-4550

November 18, 1993

Carlsbad Current Argus
Attn: Classified Department

RE: Legal Advertisement

Dear Carmen,

Enclosed is copy for the legal advertisement we wish to run in your paper. The Oil Conservation Division only requires us to run the ad one time. We must have proof of publication from you in order to complete our application to the OCD. Please run this ad and mail us the proof of publication certificate as soon as possible.

Thank you for your attention in this matter. If you have any questions or need additional information, please call me at (800) 583-3866.

Sincerely yours,

Devon Energy Corporation

Debby O'Donnell

Debby O'Donnell
Engineering Technician

Enc.

Legal Advertisement

Notice is hereby given that Devon Energy Corporation (Nevada) is applying to the New Mexico Oil Conservation Division to convert the following well to salt water disposal:

Todd "26A" Federal #6
660' FNL & 990' FEL
Section A-26-T23S-R31E
Eddy County, NM

The intended purpose of this injection well is to dispose of produced Delaware waters into the Bell Canyon formation at a depth of 4510' - 5460'. Maximum injection rates of 3,000 - 4,000 bwpd and a maximum pressure of 900 psig are expected.

Interested parties must file objections or requests for hearing within 15 days to the following commission:

Oil Conservation Division
P. O. Box 2088
Santa Fe, NM 87501

Charles W. Horsman
District Engineer
Devon Energy Corporation (Nevada)
20 North Broadway Suite 1500
Oklahoma City, OK 73102
(405) 552-4508

No. 16136

NOV 29 1993

Affidavit of Publication

State of New Mexico,
County of Eddy, ss.

Donella Taylor,
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:

NOVEMBER 19, 1993
_____, 19___
_____, 19___
_____, 19___
_____, 19___
_____, 19___
_____, 19___

That the cost of publication is $25.70, and that payment thereof has been made and will be assessed as court costs.

Donella Taylor

Subscribed and sworn to before me this
19 day of NOVEMBER, 1993

Linda S Martin

My commission expires 7/22/96
Notary Public

November 19, 1993

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Suite 1500
Oklahoma City, OK 73102
(405) 552-4508

ATTACHMENT XIV
(Proof of Notice)

devon
ENERGY CORPORATION

20 North Broadway, Suite 1500
Oklahoma City, Oklahoma 73102-8260

Telephone 405/235-3611
FAX 405/552-4550

November 18, 1993

Pogo Producing Company
Engineering Department
P. O. Box 2504
Houston, TX 77252-2504

Certified Mail Receipt # P 164 780 236

RE: Salt Water Disposal Application

Dear Sirs:

Enclosed is a copy of our Application for Authorization to Inject for the Todd "26A" Federal #6 in Section 26-T23S-R31E of Eddy County, New Mexico.

Thank you for your attention in this matter. If you have any questions or need additional information, please contact Chuck Horsman (District Engineer) at 800-583-3866.

Sincerely yours,

Devon Energy Corporation (Nevada)

Debby O'Donnell

Debby O'Donnell
Engineering Technician

Enc.

s your RETURN ADDRESS completed on the reverse side?

SENDER:
- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
Pogo Producing Co.
Engineering Dept.
P.O. Box 2504
Houston, TX 77252-2504

4a. Article Number
P 164 780 236

4b. Service Type
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail ☐ Return Receipt for Merchandise

7. Date of Delivery
NOV 22 1993

5. Signature (Addressee)

8. Addressee's Address (Only if requested and fee is paid)

6. Signature (Agent)
C Kelly

PS Form 3811, December 1991 * U.S. GPO: 1992—323-402 DOMESTIC RETURN RECEIPT