STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

FORM C-108
Revised June 10, 2003

APPLICATION FOR AUTHORIZATION TO INJECT

RECEIVED OCD
2012 MAR 26 A 11:59

I. PURPOSE: _____Secondary Recovery __X__Pressure Maintenance _____Disposal ____Storage
Application qualifies for administrative approval? _____Yes ____X____No

II. OPERATOR: Dugan Production Corp.

ADDRESS: P.O. Box 420, Farmington, NM – 87499

CONTACT PARTY: John Alexander PHONE: 505-325-1821

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 ____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 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 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 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 sources 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: John Alexander TITLE: Vice President

SIGNATURE: John Alexander DATE: 03/12/2012

E-MAIL ADDRESS: John.Alexander@duganproduction.com

* If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted. Please show the date and circumstances of the earlier submittal: Case No. 6034, Order No. R-5539.

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

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 the 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, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, 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.

Application for Authorization to Inject
Bilbrey 51 No.1

General Information

Dugan Production Corp. desires to reactivate the Bilbrey 51 No. 1 as an injection well for pressure maintenance. The well was being used as a disposal well and has been shut-in now for more than a year. The well was converted into an injection well on January 20, 1977 (OCD Order No. R-5539).

The disposal plan estimates to inject at an average rate of 225 BWPD through the San Andres perforations 4941-5022'. Disposal will be through 2-3/8" internally coated tubing with packer set at 4738'. The casing-tubing annulus is filled with an inert fluid consisting of freshwater with a Corrosion Inhibitor and an Oxygen Scavenger.

A pressure gauge is installed on the annulus to determine any leakage in the wellbore. The injection system will be equipped with a pressure activated kill switch, which will limit the wellhead injection pressure to a maximum of 1475 psig. The maximum injection pressure was determined through a step rate test conducted on January 3, 1990 (OCD Case No. 6034)

Any change to the plan contained in this application will be approved by the New Mexico Oil Conservation Division prior to commencement.

Application for Authorization to Inject

Bilbrey 51 No.1

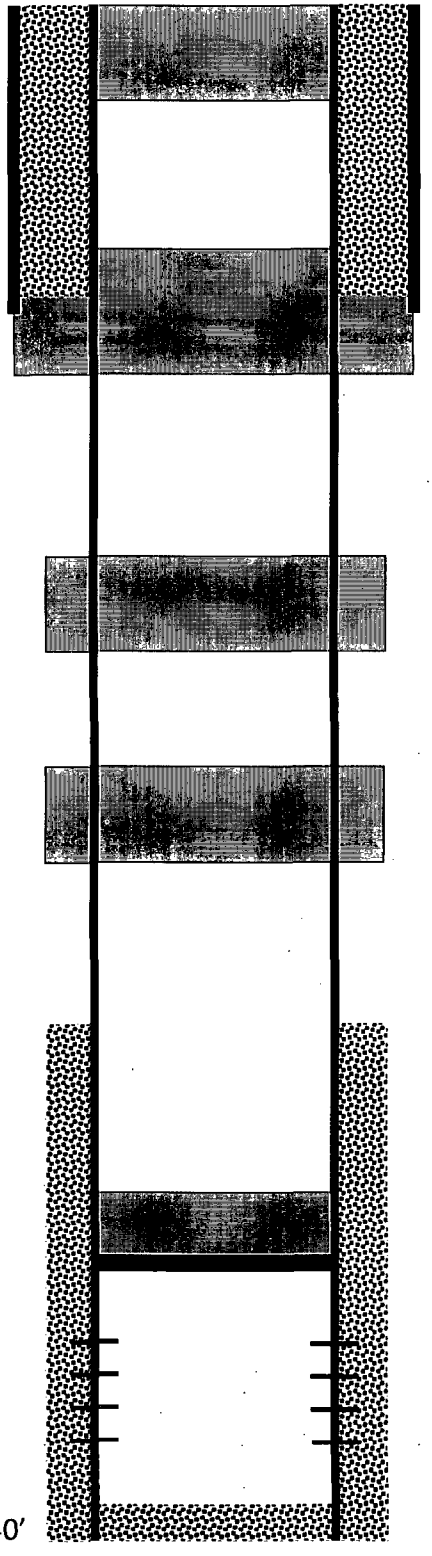
Part III A

Tabular Well Information

API	300 25 24321
Name	Bilbrey 51 No. 1
Location	S.23 T-9-S R-37-E 660' FNL & 660' FEL
Surface Casing	8-5/8" 24 lb/ft J-55 casing set at 415' in 12-1/4" hole. Cemented with 250 sks of Class C w/2% CaCl. 40 sack cement circulated back to surface.
Production Casing	4-1/2" 9.5 lb/ft J-55 casing set at 5070' in 7-7/8" hole. Cemented with 250 sacks of Class C w/2% gel, 0.75 CFR-2 and 8 lb/sk salt. Calculated top of the cement behind casing is 3827'.
Completion History	San Andres Perforated 4941 - 5022. Acidized perforations.
Conversion History	Ran 2-3/8" 4.7 lb/ft tubing to 4934' with 2-3/8" packers set at 4901'. Displaced 2-3/8" x 4-1/2" annulus with inert fluid consisting of a corrosion inhibitor and an Oxygen scavenger. Hole reentered and tubing landed at 4,799' with packer set at 4738'.
Injection Tubulars	2-3/8" 4.7 lb/ft J-55 8RRD EUE Internally Plastic coated tubing with 2-3/8" x 4-1/2" 9.5 lb/ft Baker Lok-Set Packer.

Well Name & API No.	Location	Status	Spud Date	Total Depth	Surface Casing	Long String	Perforations	Stimulation	Plug Details
Brown 84 # 2 300-25-25297	660' FSL & 860' FWL S.13 - T.9S - R.37E	Active	6/20/1976	5025'	8 5/8" 24 lb/ft K-55, @ 354'. 250 sks Class C cement circulated to surface. Hole - 12 1/4"	4 1/2" 10.5 lb/ft K- 55@ 5025' with stg collar @ 2391'. w/ 250 and 850 sks cement. circulated to surface. Hole 7 7/8"	San Andres, 4914'-5003' with 2 spf.	Acidized with 3000 gals 20% and 3000 gals 15% HCl	
Allied 93 #1 300-25-24309	660' FNL &660' FWL S.24 - T.9S - R.37E	Active	12/5/1972	5072'	8 5/8" 24lb/ft J-55 @ 360'. 250 sks class C Cement. Circulated to surface. Hole - 12 1/4"	4 1/2" 9.5 lb/ft J-55 @ 5071'. w/250 sks cement. Hole - 7 7/8"	San Andres, 4939'-5031'. 3/8" Selectfire jets.	4500 gal - 15% Unisol & 4500 gas 7 1/2 % Unisol. 3000 gals Par-A-Clean	
Bilbrey 51 # 4 300-25-25215	860' FNL & 1980' FEL S.23, T-9-S, R-37-E	P & A	1/6/1976	5040'	8 5/8" 24lb/ft J-55 @ 369'. 250 sks class C cement. Circulated to surface. Hole - 12 1/4"	4 1/2" 10.5 H-40 @ 5040. 250 sks Class C cement with 2 % gel. Hole 7 7/8"	San Andres, 4952'-5016' with 2 spf	10,000 gal 20%, 10,000 gals 15% acid	Cast Iron Bridge plug 50' above perf. Spot 35' cement on top of plug. Perforated @ 2960', 2400', 427' squeeze plugged 100' @ depths. Spotted 50' surface plug.
Brown 93 # 1 300-25-23975	660' FNL & 1980' FWL S.24 T-9-S, R-37-E	Active	12/7/1971	5050'	8 5/8" 24 lb/ft J-55 @ 425'. 275 sks Class C cement. Circulated to surface. Hole - 12 1/4"	4 1/2" 9.5 lb/ft J-55 @ 5049'. Cemented with 250 sks. Hole - 7 7/8"	San Andres 4920'-5013' 3/8" Selectfire jets.	1000 gals 28% acid, 3000 gals 15% acid, 4000 gals 3% acid in two stages	
Bilbrey 51 # 3 300-25-25075	2180' FNL & 1980' FEL S 23. T-9-S R-37-E	Active	8/13/1975	5052'	8 5/8" 24 lb/ft K-55 @ 392'. 250 sks Class C. Cement circulated to surface. Hole 12 1/4"	4 1/2" 10.5 lb/ft H-40 @5052'. Cemented with 250 sks Class C Poz, 2% gel, .75 % CFR, 8 lb/sk salt. Hole 7 7/8"	San Andres 4966'-5034' with 2 spf	3000 gal 20%; 3000 gal 15% NE Acid.	
Bilbrey 23 # 4 300-25-24784	1980' FSL & 660' FEL S 23, T-9-S, R-37-E	Active	6/25/1974	5060'	8 5/8" 28 lb.ft H-40 @ 370'. 250 sks class C Cement. Circulated to surface. Hole - 12 1/4"	4 1/2" 9.5 lb/ft J-55 @ 5060. Cemented with 250 sks Class C Pozmix, 2 % gel, .75 CFR-2, 8 lb/sk salt. Hole 7 7/8"	San Andres 5016'-5032'	Acidized with 2000 gal 20%, 2000 gals 15% & 1000 gals 3% HCl.	
Bilbrey 51 # 2 300-25-24900	1980' FNL & 660' FEL S 23, T-9-S, R-37-E	Active	11/25/1974	5067'	8 5/8", 28.55 lb/ft @ 370'. 250 sks Class C Cement. Circulated. Hole 12 1/4"	4 1/2" 10.5 lb.ft H-40 @ 5067'. Cemented with 250 sks 50-50 Poz, 2% gel, .75% CFR & 8 lb/sk salt	San Andres 5029'-5062'	Acidized with 3000 gal 20%, 3000 gals 15% and 2000 gals 3% HCL	
Allied 93 # 4 300-25-24783	1980' FNL & 660' FWL S 24, T-9-S, R-37-E	Active	7/14/1974	5070'	8 5/8", 28 lb/ft H-40 @ 400'. 250 sks Class C cement. Circulated. Hole 12 1/4"	5 1/2" 15.5 lb/ft J-55 @ 5070'. Cemented with 200 sks Class H Poz, 2% gel, 0.75 % CFR & 8 lb/sk salt.	San Andres 4997'-5013'	Acidized with 2000 gal 20%, 2000 gals 15% & 1000 gals 3% HCl.	

Dugan Production Corp.
Bilbrey 51 No. 4
API – 300 25 25215
860' FNL & 1980 FEL, S 23, T-9-S, R-37-E



50' Cement plug to surface

8 5/8" 24 lb/ft J-55 Casing @ 369' – Hole 12 ¼"

Perforated and squeezed 145 sks cement @ 427'

Perforated and squeezed 55 sacks cement from 2300' to 2400'.

Perforated and squeezed 325 sacks cement from 2860' to 2960'.

Calculated top of cement @ 3797'.

35' Class C cement on top of the CIBP.

Cast Iron Bridge Plug @ 4902'

San Andreas Perforations @ 4952-5016'

TD @ 5040'

4 ½" 9.5 lb/ft J-55 Casing @ 5040' – Hole 7 7/8""

Application for Authorization to Inject

Bilbrey 51 No.1

Part VII

1) Average Injection: 225 BWPD
   Maximum Injection: 350 BWPD

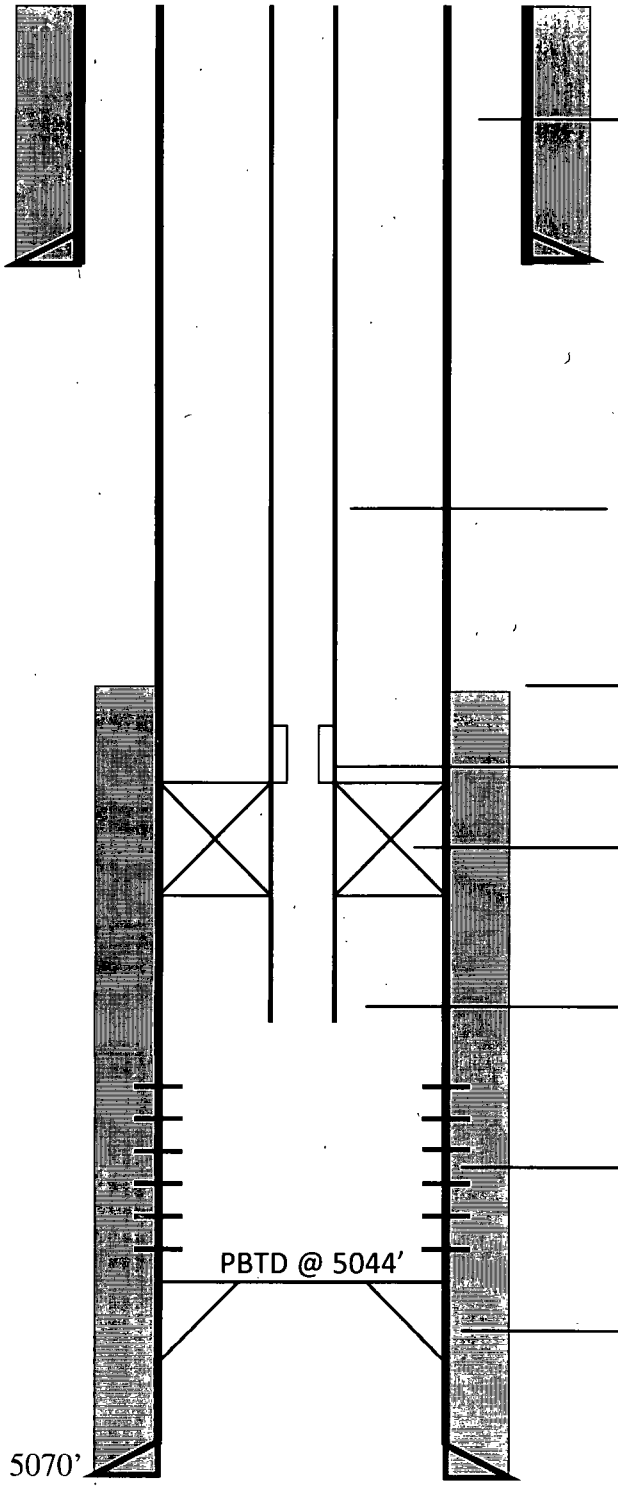
2) System is CLOSED.

3) Average Injection Pressure 900 psig
   Maximum Injection Pressure 1475 psig

4) The producing and the injecting formations are the same.

5) The Injection zone is a productive zone.

Dugan Production Corp.
BILBREY 51 No. 1
660' FNL & 660' FEL
S23, T-9-S, R-37-E



8 5/8" 24 lb/ft, J 55 Casing Set @ 415'. Cemented with 250 sks Class C. Circulated to surface. 12 ¼" hole

2 3/8" 4.7 lb/ft J-55 8 RRD EUE Tubing. Internally Coated

Calculated top of Cement @ 3827'

Seating Nipple @ 4737'

Packer @ 4738' Internally Coated.

Bottom of the tubing @ 4799'

San Andreas Perforated @ 4941 – 5022' w/1 spf

4 ½" 9.5 lb/ft J-55 Casing Set @ 5070'

Application for Authorization to Inject

Bilbrey 51 No.1

Part III B

1) Injection formation : San Andres, Sawyer

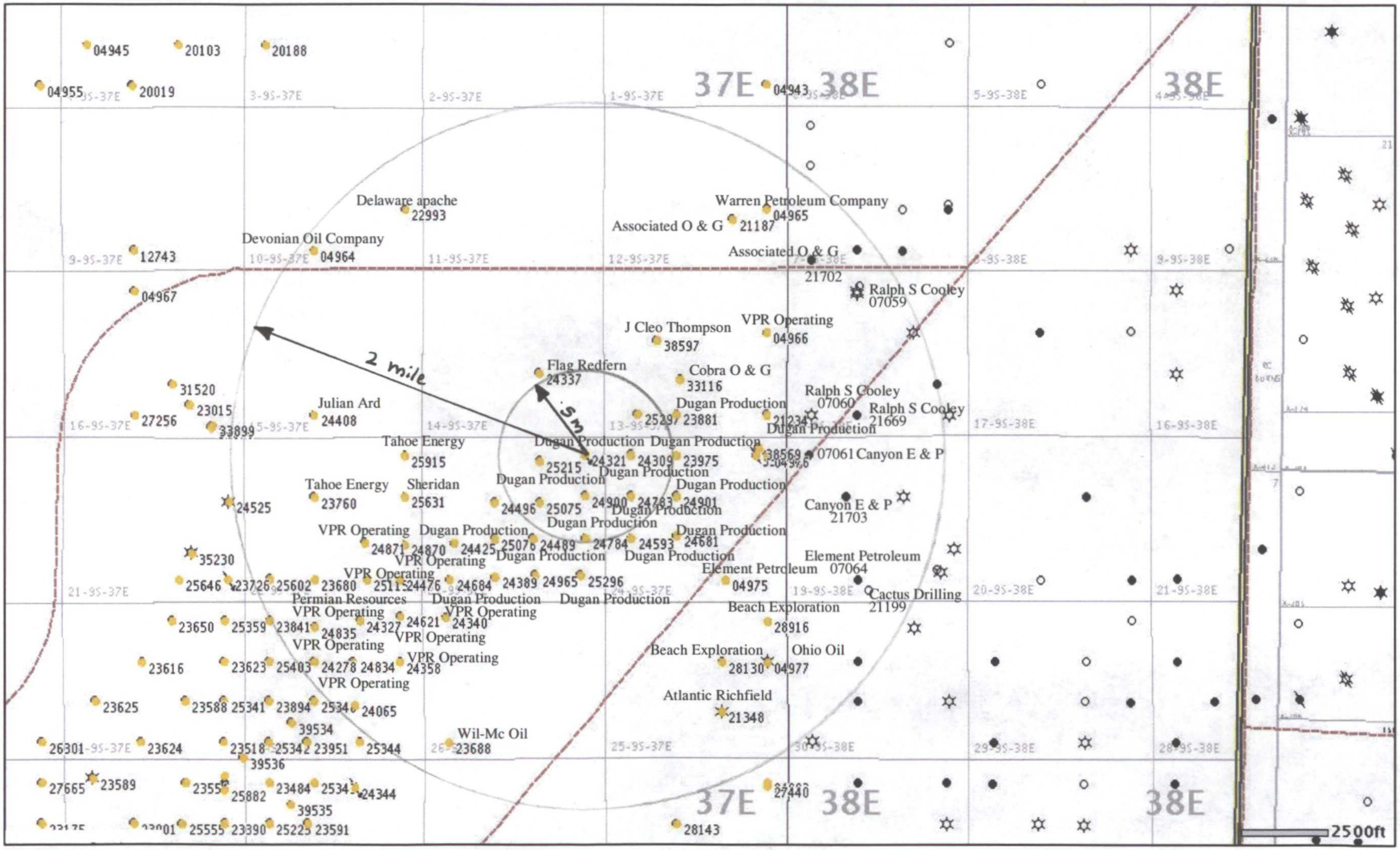
2) Injection Interval : 4941'-5022' . Cemented and Perforated

3) The well was originally drilled for producing from the San Andres.The well was converted to a pressure maintenance well in the same formation

4) San Andres is the only formation perforated. No other formations are perforated or plugged.

5) No higher oil or gas zone. The next productive zone below is the Devonian at 11, 618'.

Part V


37E
38E
37E
38E
38E
38E
2 mile
.5m
2500ft
Delaware apache 22993
Devonian Oil Company 04964
Warren Petroleum Company 04965
Associated O & G 21187
Associated O & G 21702
Ralph S Cooley 07059
J Cleo Thompson 38597
VPR Operating 04966
Flag Redfern 24337
Cobra O & G 33116
Julian Ard 24408
Dugan Production
Ralph S Cooley 07060
Ralph S Cooley 21669
Tahoe Energy 25915
07061 Canyon E & P
Tahoe Energy 23760
Sheridan 25631
Canyon E & P 21703
VPR Operating
Element Petroleum 07064
Element Petroleum 04975
Cactus Drilling 21199
Permian Resources
Beach Exploration 28916
Beach Exploration 28130
Ohio Oil 04977
Atlantic Richfield 21348
Wil-Mc Oil 23688
04945
20103
20188
04955
20019
04943
12743
04967
31520
23015
27256
24525
35230
25646
23650
23616
23625
26301
23624
27665
23589
27440
28143
9-9S-37E
10-9S-37E
11-9S-37E
12-9S-37E
16-9S-37E
15-9S-37E
14-9S-37E
13-9S-37E
17-9S-38E
16-9S-38E
21-9S-37E
24-9S-37E
19-9S-38E
20-9S-38E
21-9S-38E
25-9S-37E
29-9S-38E
28-9S-38E
3-9S-37E
2-9S-37E
1-9S-37E
5-9S-38E
9-9S-38E

Application for Authorization to Inject

Bilbrey 51 No.1

Part VIII - Geological Data

1) Injecting Formation - San Andres

2) Top of the formation - 4774'

3) Thickness of the formation - 250'

4) The only fresh water aquifer in the region is the Ogallala. The top of the aquifer is apporximately at 150' with the base at 250 -300'.

5) There is no freshwater zone below the formation of injection.

Part IX -Stimulation Program

No stimulation program is planned.

Part X - Logging and Test Data

All logs for the proposed injection well and offests are on file with the Oil Conservation Division, New Mexico.

Application for Authorization to Inject

Bilbrey 51 No.1

Part XII - Statement of Geologic and Engineering Data

I have examined available geologic and engineering data associated with this application and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground source of drinking water.

John Alexander, Vice President, Dugan Production Corp

3.16.2012
Date

dugan production corp.

March 16, 2012

CERTIFIED MAIL
RETURN RECEIPT

David.A.Bilbrey
HC65 Box 55
Cross Roads, NM 88114

Re: Notice of Intent to Reactivate Pressure Maintenance Well

Gentlemen:

Dugan Production Corp. has made an application for New Mexico Oil Conservation Division examiner hearing to reactivate the Bilbrey 51 No.1, 660' FNL & 660' FEL, S23 – T9S R37E, Lea Co., NM as injection well for pressure maintenance purpose. Injection will be into San Andres formation between 4941'-5022'. Records indicate that you are the surface owner. A copy of the application is attached.

You must file objections or request for hearing with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico, 87505 with in 15 days.

Please contact the undersigned employee if you have any questions concerning the application.

Sincerely,

John Alexander
Vice President

Attachment

709 E. MURRAY DR. • P. O. BOX 420 • FARMINGTON, N.M. 87499-0420 • PHONE: (505) 325-1821 • FAX# (505) 327-4613

SENDER: *COMPLETE THIS SECTION*

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

David A. Bilbrey
HC65 Box 55
Cross Roads, NM 88114

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X ☐ Agent ☐ Addressee

B. Received by *(Printed Name)* | C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☐ Certified Mail ☐ Express Mail
☐ Registered ☑ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? *(Extra Fee)* ☐ Yes

2. Article Number
(Transfer from service label) 7007 3020 0000 2100 2967

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540

PLACE STICKER AT TOP OF ENVELOPE TO THE RIGHT OF THE RETURN ADDRESS, FOLD AT DOTTED LINE

CERTIFIED MAIL™

7007 3020 0000 2100 2967

7007 3020 0000 2100 2967

U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

For delivery information visit our website at www.usps.com®

OFFICIAL USE

Postage	$ .85
Certified Fee	2.95
Return Receipt Fee (Endorsement Required)	2.35
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	$ 6.15

Postmark Here

Sent To David A. Bilbrey
Street, Apt. No.; or PO Box No. HC65 Box 55
City, State, ZIP+4 Cross Roads, NM 88114

PS Form 3800, August 2006 See Reverse for Instructions