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Michael H. Feldewert Recognized Specialist in the Area of Natural Resources - oil and gas law -New Mexico Board of Legal Specialization mfeldewert@hollandhart.com

March 23, 2012

VIA HAND DELIVERY

Jami Bailey, Director Oil Conservation Division New Mexico Department of Energy, Minerals and Natural Resources 1220 South Saint Francis Drive Santa Fe, New Mexico 87505

juse 14828



Re: Application of Dugan Production Corporation for authorization to injection as part of a lease pressure maintenance project, Lea County, New Mexico.

Dear Ms. Bailey:

Enclosed in triplicate is the Application for Authorization to Inject (Form C-108) filed by Dugan Production Corporation, as well as a copy of a legal advertisement. Dugan requests that this matter be placed on the April 26, 2012, Examiner docket.

Sincerely.

Michael H. Feldewert

MHF

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CASE <u>M828</u>.

Application of Dugan Production Company for authorization to inject as part of a lease pressure maintenance project, Lea County, New Mexico. Applicant in the above-styled cause seeks authorization to inject produced water in the San Adres, Sawyer formation through the Bilbrey 51 Well No. 1 (API 30-025-24321) located 660 feet from the North line and 660 feet from the East line of Section 23, Township 9 South, Range 37 East, NMPM, Lea County, New Mexico. The pressure maintenance project area is approximately 400 acres comprised of the E/2, W/2 SW/4 of said Section 23. The well and this project area is located approximately 15 miles east of Cross Roads, New Mexico.

STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, New Mexico 87505 Case 14828 FORM C-108 Revised June 10, 2003

APPLICATION FOR AUTHORIZATION TO INJECT

	AFFEICATION FOR AUTHORIZATION TO INJECT					
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 AlexanderPHONE:					
III.	WELL DATA: Complete the data required on the reverse side of this form for each well proposed for injection.					
IV.	Is this an expansion of an existing project?YesNoS					
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:					
	 Proposed average and maximum daily rate and volume of fluids to be injected; Whether the system is open or closed; Proposed average and maximum injection pressure; Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and, 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 wit 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 Colefander	DATE: 03/12/2012
E-MAIL ADDRESS: John.Alexander@duganproducti	on.com
If the information required under Sections VI, VIII, X, and XI above has be	en previously submitted, it need not be resubmitted.
Please show the date and circumstances of the earlier submittal: Case I	No. 6034, Order No. R-5539.

Side 2

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.

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.

Bilbrey 51 No.1

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<u>Part III A</u>

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.

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

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Bilbrey 51 No.1

Part III B

1) Injection formation : San Andres, Sawyer

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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



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 5.24 - T.95 - R.37E	Active	12/5/1972	5072'	8 5/8" 241b/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 cernent. 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 gəls 28% acid, 3000 gəls 15% acid, 4000 gəls 3% acid in two stages	
Bilbrey 51 # 3 300-25-25075	2180' FNL & 1980' FEL S 23. Т-9-S R-37-Е	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% gei, .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-9-5, 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.	

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



Bilbrey 51 No.1

<u>Part VII</u>

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.

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'

The only fresh water aquifer in the region is the Ogallala. The top of theaquifer 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.

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

<u>3.16.20</u>2

March 16, 2012

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<u>CERTIFIED MAIL</u> <u>RETURN RECEIPT</u>

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.

dugan production corp.

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,

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John Alexander Vice President

Attachment

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY		
Complete items 1, 2, and 3. Also complete	A. Signature		
 Print your name and address on the reverse so that we can return the card to your 	x	Agent Addressee	
Attach this card to the back of the malipiece, or on the front if space permits.	B. Received by (Printed Name)	C. Date of Delivery	
1. Article Addressed to:	D. Is delivery address different from item 1? Yes If YES, enter delivery address below: No		
David A. Bilbrey HC65 Box 55 Cross Roads NW 9911/			
01051 Roads, NM 08114			
orost Roads, NET 00114	3. Service Type	all selpt for Merchandise	
Arida Marta	3. Service Type Certified Mall Express M Registered Return Rec Insured Mall C.O.D. 4. Restricted Delivery? (Extra Fee)	all elpt for Merchandise	
2. Article Number (Transfer from service label) 7007	3. Service Type Certified Mall Express M Registered E Return Rec Insured Mall C.O.D. 4. Restricted Delivery? (Extra Fee)	all selpt for Merchandise	

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חקחב	3020	Hestricted Delivery Fee (Endorsement Required) Total Postage & Fees	\$ 4.15	
2005	2007	Sent To David A. Street, Apt. No.; or PO Box No. HC6.	Bilbrey 5 Box 55	
		City, State, ZIP+4 CTOS PS Form 3800, August 20	s Roads, NM	88114 See Reverse for Instruction

PLACE STICKER AT TOP OF ENVELOPE TO T OF THE RETURN ADDRESS, FOLD AT DOTT CERTIFIED AAAA