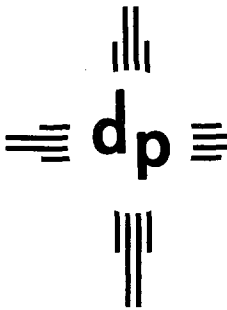


2/20/04 3/6/04  
Suspense

WVS LR SWD

PLR0405529835



dugan production corp.

RECEIVED

February 15, 2004

FEB 20 2004

Mr. David Catanach  
New Mexico Oil Conservation Division  
Engineering Bureau  
1220 South Saint Francis Street  
Santa Fe, New Mexico 87505

Oil Conservation Division  
1220 S. St. Francis Drive  
Santa Fe, NM 87505

--CERTIFIED MAIL, RETURN RECEIPT REQUESTED--  
7001-1940-003-1548-5930

Re: Application to Class 2, water disposal well, Mesa SWD #4 San Juan County, NM

Dear Mr. Catanach:

Enclosed, is Dugan Production Corp.'s application for disposal of produced water in the Mesa SWD #4. In fulfilling the requirements of application, the following materials are provided herein:

1. Form C-108, Application for Authorization to Inject.
2. Tabular and schematic data on proposed injection well.
3. Lease and surface owner maps that identify all wells and leases within 2-miles of proposed injection well with a one-half mile radius circle drawn around the proposed injection well.
4. Data sheet of wells within 2-miles of proposed injection well, highlighting those wells inside one-half mile radius around the injection well.
5. Operations plan for proposed injection well.
6. Water Analysis of produced water to be disposed in proposed injection well (Pictured Cliffs / Fruitland Coal, Gallup and Dakota).
7. Water Analysis of water from proposed injection zone (Mesaverde).
8. Required geologic, stimulation, logging and test data and fresh water data from nearby wells.
9. Signed statement of geologic and engineering data.
10. Proof of notice in the form of notification letters sent to offsetting operators, signed receipt cards and a copy of the Affidavit of Publication and copy of publication as appeared in the Farmington Daily Times.

If you have questions or need additional information, please contact me.

Very Sincerely,

Kurt Fagrelius

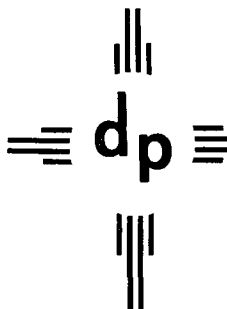
*Kurt Fagrelius*

Attachments

*No AOR  
wells in Port  
Lookart*

cc: Mr. Frank Chavez-New Mexico Oil Conservation Division, 1000 Rio Bravo Rd, Aztec, NM 87410  
Ms. Debbie Padilla-New Mexico State Land Office, P.O. Box 1148 Santa Fe, NM 87504-1148

Mr. Terry Lindeman-Elm Ridge Resources Inc., 20 Road 5060 Bloomfield, NM 87413  
709 E. MURRAY DR. • P.O. BOX 420 • FARMINGTON, N.M. 87499-0420 • PHONE: (505) 325-1821 • FAX# (505) 327-4613



dugan production corp.

RECEIVED

Mr. Frank Chavez  
New Mexico Oil Conservation Division  
1000 Rio Bravo Road  
Aztec, New Mexico 87410

FEB 20 2004

February 13, 2004

Oil Conservation Division  
1220 S. St. Francis Drive  
Santa Fe, NM 87505

**--CERTIFIED MAIL, RETURN RECEIPT REQUESTED--**  
**7001-1940-003-1548-5947**

Re: Application to Class 2, water disposal well, Mesa SWD #4 San Juan County, NM

Dear Mr. Chavez:

Enclosed, is Dugan Production Corp.'s application for disposal of produced water in the Mesa SWD #4. In fulfilling the requirements of application, the following materials are provided herein:

1. Form C-108, Application for Authorization to Inject.
2. Tabular and schematic data on proposed injection well.
3. Lease and surface owner maps that identify all wells and leases within 2-miles of proposed injection well with a one-half mile radius circle drawn around the proposed injection well.
4. Data sheet of wells within 2-miles of proposed injection well, highlighting those wells inside one-half mile radius around the injection well.
5. Operations plan for proposed injection well.
6. Water Analysis of produced water to be disposed in proposed injection well (Pictured Cliffs / Fruitland Coal, Gallup and Dakota).
7. Water Analysis of water from proposed injection zone (Mesaverde).
8. Required geologic, stimulation, logging and test data and fresh water data from nearby wells.
9. Signed statement of geologic and engineering data.
10. Proof of notice in the form of notification letters sent to offsetting operators, signed receipt cards and a copy of the Affidavit of Publication and copy of publication as appeared in the Farmington Daily Times.

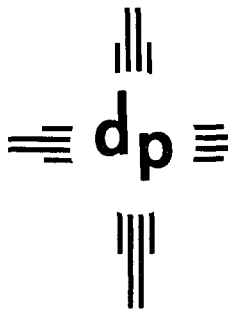
If you have questions or need additional information, please contact me.

Very Sincerely,

Kurt Fagrelus

Attachments

cc: Mr. David Catanach-N.M.O.C.D., 1220 So. St. Francis St. Santa Fe, Aztec, NM 8787505  
Ms. Debbie Padilla-New Mexico State Land Office, P.O. Box 1148 Santa Fe, NM 87504-1148  
Mr. Terry Lindeman-Elm Ridge Resources Inc., 20 Road 5060 Bloomfield, NM 87413



dugan production corp.

---

February 13, 2004

Ms. Debbie Padilla  
New Mexico State Land Office – Surface Resources  
P.O. Box 1148  
Santa Fe, NM 87504-1148

**--CERTIFIED MAIL, RETURN RECEIPT REQUESTED--**  
**7001-1940-003-1548-5954**

Re: Notice of Intent to Complete Salt Water Disposal Well

Dear Ms. Padilla:

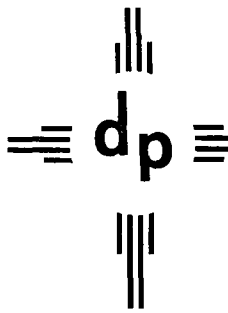
Dugan Production Corp. has filed an application for administrative approval to complete the Mesa SWD #4 (Sec. 16, T24N, R8W, 1,650' FSL and 1,245' FEL) as a salt water disposal well. Injection will be into the Point Lookout Sandstone between 4,290' and 4,390'. A copy of the application is attached.

As surface owner of the land on which the injection well is to be located (Sec. 6, T24N, R8W) the New Mexico State Land Office is being notified of this application. If you wish to object or request the matter for hearing you must contact the New Mexico Oil Conservation Division, 1220 South Saint Francis Drive, Santa Fe, NM 87505 within 15 days.

If you have questions or need additional information concerning this application, please contact me.

Sincerely,

Kurt Fagrelus  
Geologist



dugan production corp.

---

February 13, 2004

Mr. Terry Lindeman  
Elm Ridge Resources Inc.  
20 Road 5060  
Bloomfield, NM 87413

**--CERTIFIED MAIL, RETURN RECEIPT REQUESTED--**  
**7001-1940-003-1548-5961**

Re: Notice of Intent to Complete Salt Water Disposal Well

Dear Mr. Lindeman:

Dugan Production Corp. has filed an application for administrative approval to complete the Mesa SWD #4 (Sec. 16, T24N, R8W, 1,650' FSL and 1,245' FEL) as a salt water disposal well. Injection will be into the Point Lookout Sandstone between 4,290' and 4,390'. A copy of the application is attached.

As an offsetting operator (N/2, Sec. 22, T24N, R8W) you are being notified of this application. If you wish to object or request the matter for hearing you must contact the New Mexico Oil Conservation Division, 1220 South Saint Francis Drive, Santa Fe, NM 87505 within 15 days.

If you have questions or need additional information concerning this application, please contact me.

Sincerely,

Kurt Fagrelus  
Geologist

**APPLICATION FOR AUTHORIZATION TO INJECT**

- I. PURPOSE: Secondary Recovery Pressure Maintenance XX Disposal Storage  
Application qualifies for administrative approval? XX Yes No
- II. OPERATOR: Dugan Production Corp.  
ADDRESS: P.O. Box 420 Farmington, NM 87499  
CONTACT PARTY: Kurt Fagrelius 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 XX 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: Kurt Fagrelius TITLE: Geologist  
SIGNATURE: Kurt Fagrelius DATE: 2/13/04  
E-MAIL ADDRESS: kfagrelius@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: \_\_\_\_\_

### 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.**

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**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

Dugan Production Corp.

**Mesa SWD #4**

General Information

Dugan Production Corp. is hereby, making application for administrative approval to dispose of produced water by underground injection. The proposed disposal site is the Mesa SWD #4 well, located 1450' FSL & 1245' FEL, Sec. 16, Twn. 24N, Rng. 8W, San Juan Co., NM. Water will be injected into the Point Lookout Sandstone between 4,290' and 4,390'. The maximum injection pressure will be 850 psi and the maximum injection rate will be 1,200 barrels of water daily.

Upon approval of this application, an injection test will be conducted. If adequate rates are not found, it may be necessary to stimulate the proposed injection zone or perforate additional sections of the Mesaverde.

Any change to the plans contained herein, will be approved by the New Mexico Oil Conservation Division prior to implementation.



Application for Authorization to Inject

Dugan Production Corp.

**Mesa SWD #4**

Part III. Well Data

A. Tabular Information

1. Name: Mesa SWD #4  
  
Location: 1450' FSL & 1245' FEL  
Sec. 16, T24N, R8W  
San Juan Co., NM
2. Surface Casing: 8-5/8" 24# set @ 200'. Cemented with 160-cu.ft. and circulated to surface.  
Hole size – 12-1/4".  
  
Production Casing: 5-1/2" 15.5# set @ 4,660'. Cemented in two stages with a stage tool at 2,000' using 500 cu.ft. in first stage and 700 cu.ft. in second stage. Cement will be circulated to surface on second stage.  
Hole size – 7-7/8".
3. Injection Tubing: 2-3/8", EUE, 4.7#, plastic lined tubing.
4. Packer: Baker Model AD-1 tension packer, plastic lined, will be set at 4250' or 50' above the upper most perforation.

B. Additional Information

1. Injection Interval: Point Lookout Sandstone member of Mesaverde Group.
2. The injection interval (Point Lookout Sandstone) will be perforated.
3. The well (Mesa SWD #4) will be drilled for the purpose of injection.
4. Only the injection interval is to be perforated.
5. Fruitland Coal / Pictured Cliffs Sandstone – Approx. 1,900'. Gallup Sandstone – Approx. 5,400'.



## INJECTION WELL DATA SHEET

OPERATOR: Dugan Production Corp.WELL NAME & NUMBER: Mesa SMD #4WELL LOCATION: 1450' FSL and 1245' FEL

FOOTAGE LOCATION

UNIT LETTER

I

SECTION

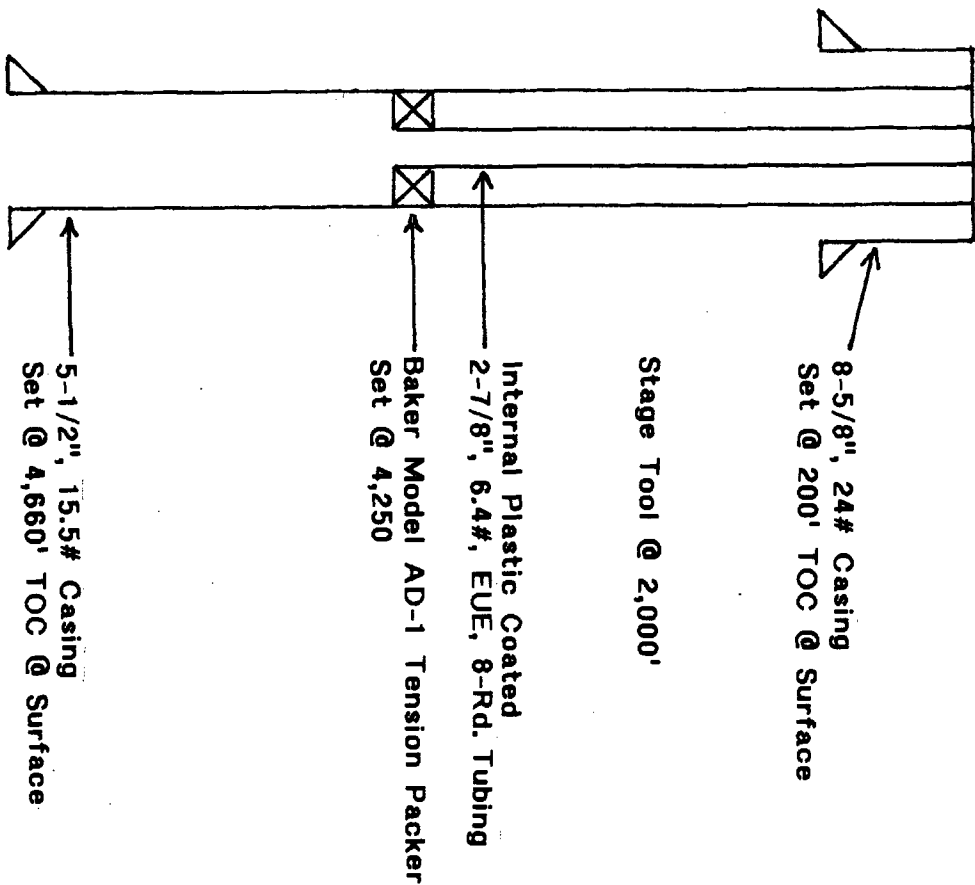
16

TOWNSHIP

24N

RANGE

8W

WELLBORE SCHEMATICWELL CONSTRUCTION DATASurface CasingHole Size: 12-1/4"Casing Size: 8-5/8"Cemented with:            sx.or            160            ft<sup>3</sup>Top of Cement: SurfaceMethod Determined: CirculateIntermediate CasingHole Size:           Casing Size:           Cemented with:            sx.or                       ft<sup>3</sup>Top of Cement:           Method Determined:           Production CasingHole Size: 7-7/8"Casing Size: 5-1/2"Cemented with:            sx.or            1,200            ft<sup>3</sup>Top of Cement: SurfaceMethod Determined: CirculateTotal Depth: 4,660'Injection Interval           Perforate: 4,290'            feet to 4,390'

(Perforated or Open Hole; indicate which)

INJECTION WELL DATA SHEET

Tubing Size: 2-3/8", EUE, 4.7#/ft. Lining Material: Plastic

Type of Packer: Baker Model AD-1 tension packer, plastic lined.

Packer Setting Depth: 4,240' (50' above injection interval).

Other Type of Tubing/Casing Seal (if applicable): \_\_\_\_\_

Additional Data

1. Is this a new well drilled for injection? XX Yes        No

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

2. Name of the Injection Formation: Point Lookout Sandstone of Mesaverde Group

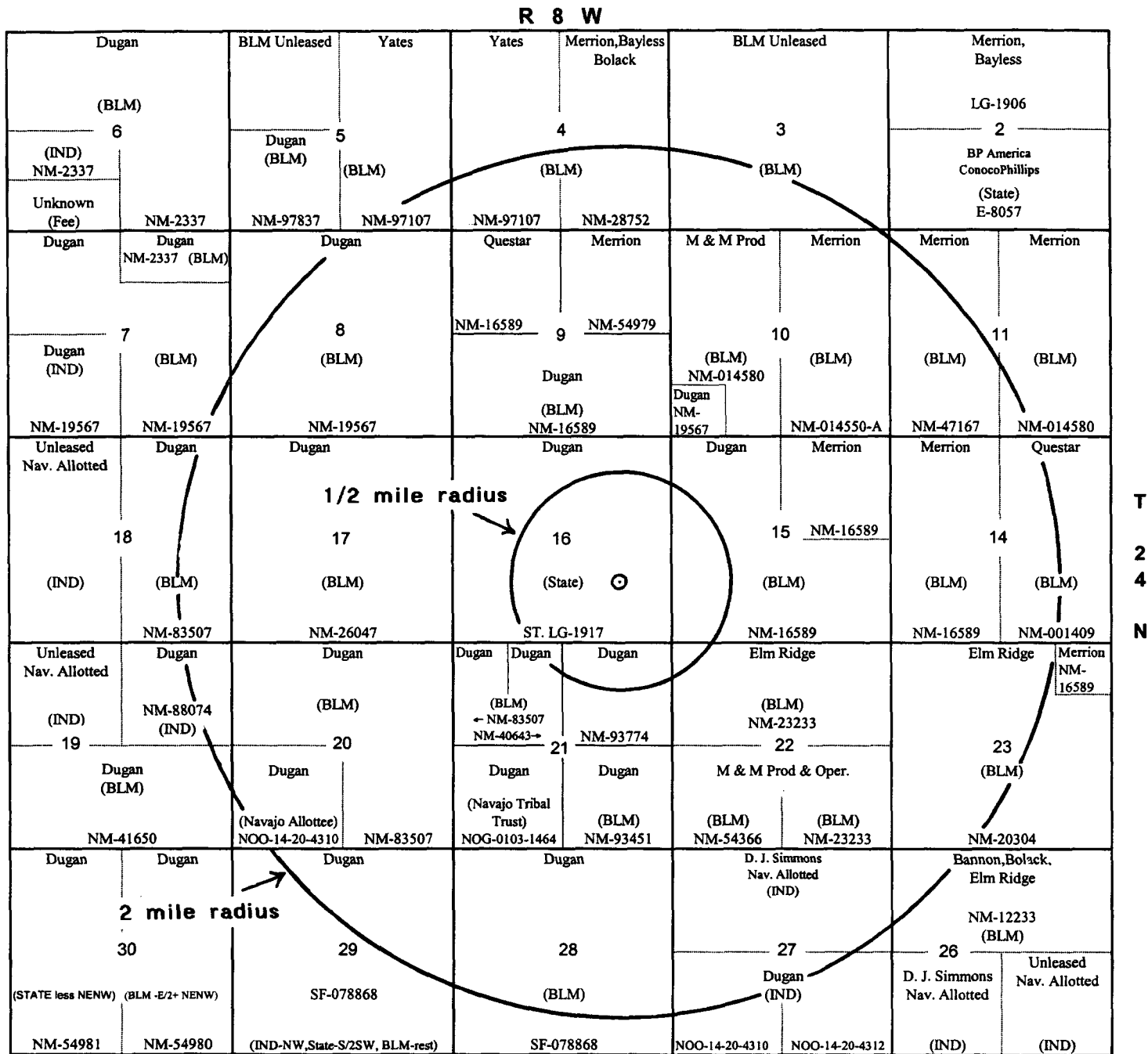
3. Name of Field or Pool (if applicable): Not applicable

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. New Well

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: Fruitland Coal / Pictured Cliffs Sandstone - Approx. 1,900',

Gallup Sandstone - Approx. 5,400'.

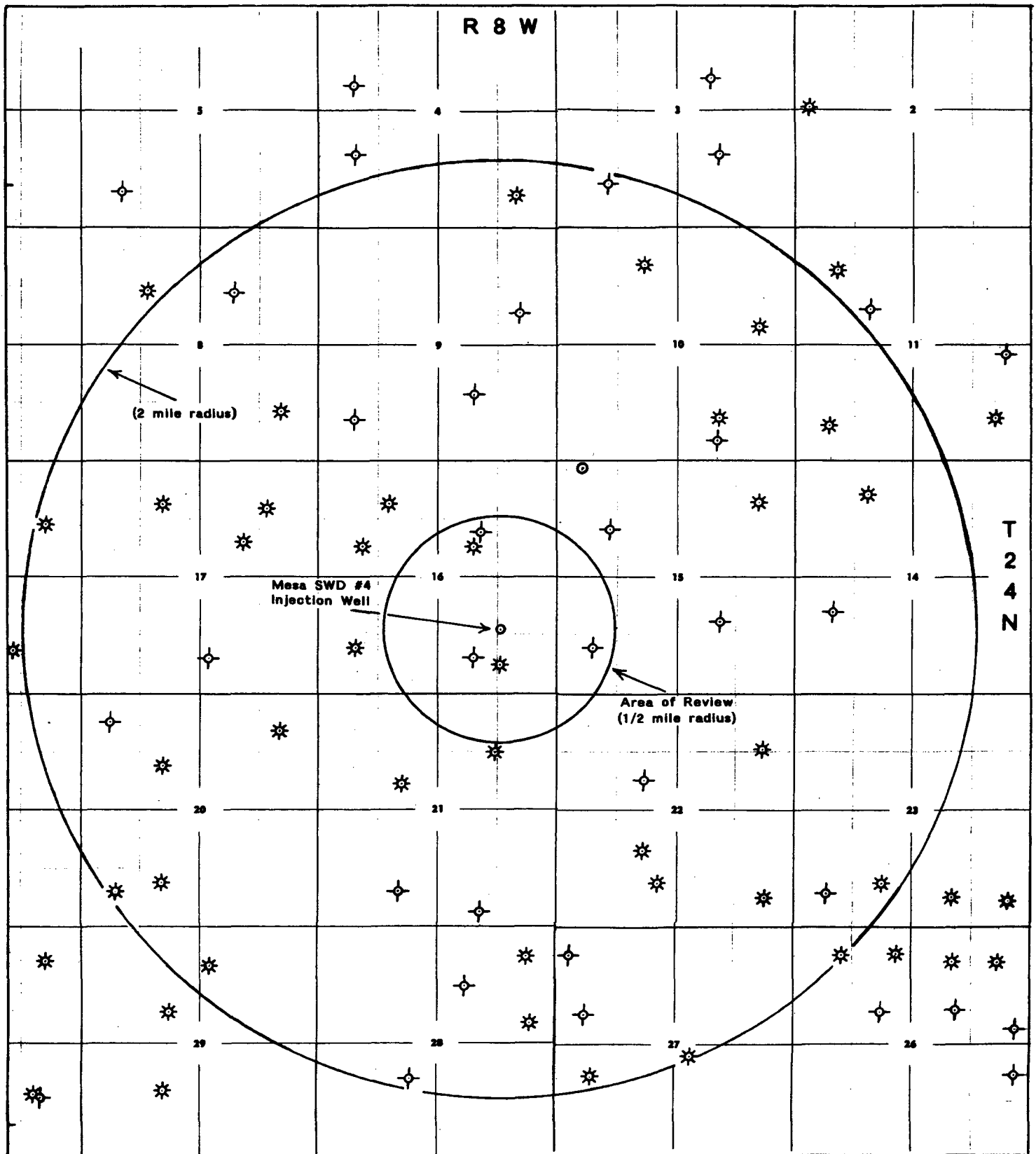
# Part V. Lease and Surface Owner Map



## LEGEND

Lease owner-Dugan  
Surface owner -(BLM)  
Serial Number of lease-SF-078868

Part V. Well Map



NONE IN AOR PENETRATED  
THE POINT LOOKOUT.

Attachment VI. Tabulation of data on offset wells.

Dugan Production Corp., Mesa SWD #4, S.16, T24N, R8W

OPERATOR	WELL_NAME	WELL_NO	POOL	SEC	TWN	RGE	UL	FTAGE_NS	FTAGE_EW	STATUS	TD
MERRION O&G CORP	ROADRUNNER	1	BASIN DAKOTA	02	24N	08W	E	2310/N	330/W	CO	7226
NOEL REYNOLDS	PAQUENCHE	2	WC D3;MORRISON	03	24N	08W	H	1650/N	850/E	PA	7239
MERRION O&G CORP	FEDERAL B	1	BASIN DAKOTA	03	24N	08W	J	1650/S	1650/E	PA	7216
THOMAS A DUGAN	ROYAL FEDERAL	1	WC D3;GALLUP	03	24N	08W	M	990/S	1190/W	PA	6830
KIRBY EXPLORATION CO	ALLEY FEDERAL	1	POTWIN PICTURED CLIFFS	04	24N	08W	E	1850/N	790/W	PA	2305
KIRBY EXPLORATION CO	ALLEY FEDERAL 4	2	WC D3;PICTURED CLIFFS	04	24N	08W	L	1620/S	840/W	PA	2321
MERRION O&G CORP	SCARECROW	1	BASIN DAKOTA	04	24N	08W	P	760/S	900/E	CO	6858
MOUNTAIN STATES PET CORP	PATRICIA	1	WC D3;MESAVERDE	05	24N	08W	M	790/S	930/W	PA	2018
CENTURY EXPLORATION CO	MOBIL FEDERAL 6	1	BASIN DAKOTA	06	24N	08W	D	900/N	900/W	PA	6582
DUGAN PRODUCTION CORP	CHACO	2	POTWIN PICTURED CLIFFS	06	24N	08W	O	970/S	1740/E	PA	1960
DUGAN PRODUCTION CORP	OKIE	2	BASIN FRUITLAND COAL	08	24N	08W	F	1450/N	1500/W	CO	2120
DUGAN PRODUCTION CORP	OKIE	4	POTWIN PICTURED CLIFFS	08	24N	08W	G	1480/N	1850/E	PA	2180
DUGAN PRODUCTION CORP	OKIE	1	POTWIN PICTURED CLIFFS	08	24N	08W	P	1105/S	840/E	ZA	2160
DUGAN PRODUCTION CORP	OKIE	1	BASIN FRUITLAND COAL	08	24N	08W	P	1105/S	840/E	CO	2160
MERRION O&G CORP	FEDERAL D	1	WC D3;MESAVERDE	09	24N	08W	H	1945/N	790/E	PA	3300
DUGAN PRODUCTION CORP	MOUNTAIN	5	POTWIN PICTURED CLIFFS	09	24N	08W	J	1490/S	1850/E	PA	2280
DUGAN PRODUCTION CORP	MOUNTAIN	7	POTWIN PICTURED CLIFFS	09	24N	08W	M	940/S	790/W	PA	2200
M&M PROD & OPERATION INC	PAQUENCHE A	3	BASIN DAKOTA	10	24N	08W	C	850/N	1980/W	CO	6937
MERRION O&G CORP	FEDERAL A	3	BASIN DAKOTA	10	24N	08W	H	2270/N	790/E	CO	5986
ROYAL DEVELOPMENT CO	PAQUENCHE	1	WC D3;MORRISON	10	24N	08W	O	465/S	1745/E	PA	6926
MERRION O&G CORP	FEDERAL A	1	BASIN DAKOTA	10	24N	08W	O	970/S	1700/E	CO	2790
MERRION O&G CORP	WILD HARE	1	BASIN DAKOTA	11	24N	08W	D	970/N	970/W	CO	7175
MERRION O&G CORP	FEDERAL C	1	BASIN DAKOTA	11	24N	08W	F	1850/N	1650/W	PA	743
M&M PROD & OPERATION INC	AKE	1	ESCRITO GALLUP	11	24N	08W	I	2440/S	540/E	PA	6124
MERRION O&G CORP	HORSEFLY	1	BASIN DAKOTA	11	24N	08W	M	790/S	790/W	CO	6041
MERRION O&G CORP	FEDERAL A	2	ESCRITO GALLUP	11	24N	08W	P	940/S	790/E	CO	6174
MERRION O&G CORP	SHOO FLY	1	BASIN DAKOTA	14	24N	08W	C	790/N	1650/W	CO	5970
DUGAN PRODUCTION CORP	MOUNTAIN	4	POTWIN PICTURED CLIFFS	14	24N	08W	L	1850/S	850/W	PA	2222

\* Wells within 1/2- mile area of review are shaded. No wells within area of review penetrate the proposed injection zone.

Attachment VI. Tabulation of data on offset wells.

Dugan Production Corp., Mesa SWD #4, S.16, T24N, R8W

MERRION O&G CORP	SHOO FLY	2	BASIN DAKOTA	15	24N	08W	A	970/N	790/E	CO	5930
DUGAN PRODUCTION CORP	MOUNTAIN	2	POTWIN PICTURED CLIFFS	15	24N	08W	E	1570/N	1190/W	PA	2159
DUGAN PRODUCTION CORP	MOUNTAIN	1	POTWIN PICTURED CLIFFS	15	24N	08W	J	1650/S	1650/E	PA	3034
DUGAN PRODUCTION CORP	MOUNTAIN	3	POTWIN PICTURED CLIFFS	15	24N	08W	M	1050/S	850/W	PA	2150
DUGAN PRODUCTION CORP	MESA	2	POTWIN PICTURED CLIFFS	16	24N	08W	C	990/N	1600/W	CO	2130
DUGAN PRODUCTION CORP	MESA	90S	BASIN FRUITLAND COAL	16	24N	08W	E	1945/N	990/W	CO	2065
DUGAN PRODUCTION CORP	MESA	1	POTWIN PICTURED CLIFFS	16	24N	08W	G	1660/N	1680/E	PA	2192
DUGAN PRODUCTION CORP	MESA	91S	BASIN FRUITLAND COAL	16	24N	08W	G	1960/N	1850/E	CO	2080
DUGAN PRODUCTION CORP	MESA	90	BASIN FRUITLAND COAL	16	24N	08W	M	1084/S	837/W	CO	1920
DUGAN PRODUCTION CORP	MESA	3	POTWIN PICTURED CLIFFS	16	24N	08W	O	790/S	1750/E	PA	2067
DUGAN PRODUCTION CORP	MESA	91	BASIN FRUITLAND COAL	16	24N	08W	P	660/S	1290/E	CO	2060
DUGAN PRODUCTION CORP	BOWERS	1	POTWIN PICTURED CLIFFS	17	24N	08W	A	1120/N	1120/E	CO	2100
DUGAN PRODUCTION CORP	BOWERS	91S	BASIN FRUITLAND COAL	17	24N	08W	C	1000/N	1850/W	PE	
DUGAN PRODUCTION CORP	BOWERS	91	BASIN FRUITLAND COAL	17	24N	08W	G	1870/N	1665/E	CO	2055
DUGAN PRODUCTION CORP	BOWERS	90	BASIN FRUITLAND COAL	17	24N	08W	O	790/S	2435/E	PA	1890
DUGAN PRODUCTION CORP	SUPAI POINT	92S	BASIN FRUITLAND COAL	18	24N	08W	H	1465/N	790/E	SP	
DUGAN PRODUCTION CORP	SUPAI POINT	92	BASIN FRUITLAND COAL	18	24N	08W	O	990/S	1525/E	CO	1810
DUGAN PRODUCTION CORP	LEE'S FERRY	90	BASIN FRUITLAND COAL	19	24N	08W	J	2510/S	1850/E	CO	1740
DUGAN PRODUCTION CORP	LEE'S FERRY	1	CUERVO GALLUP	19	24N	08W	L	1880/S	400/W	CO	5620
DORFMAN PRODUCTION CO	SAPP B	2	WC D3;GALLUP	19	24N	08W	N	990/S	1550/W	PA	5428
DUGAN PRODUCTION CORP	SUPAI POINT	1	BASIN FRUITLAND COAL	20	24N	08W	A	840/N	830/E	CO	1855
EXETER DRILLING CO	ESCRIPTO	1	WC D3;GALLUP	20	24N	08W	D	660/N	660/W	PA	5400
DUGAN PRODUCTION CORP	KAIBAB TRAIL COM	90S	BASIN FRUITLAND COAL	20	24N	08W	F	1620/N	1870/W	PE	
DUGAN PRODUCTION CORP	KAIBAB TRAIL	1	CUERVO GALLUP	20	24N	08W	M	790/S	790/W	CO	5494
DUGAN PRODUCTION CORP	KAIBAB TRAIL	90	BASIN FRUITLAND COAL	20	24N	08W	N	990/S	1850/W	CO	1740
DUGAN PRODUCTION CORP	PHANTOM RANCH	1	LYBROOK GALLUP	21	24N	08W	F	2060/N	1880/W	CO	5575
DUGAN PRODUCTION CORP	ANGELS GATE	90	BASIN FRUITLAND COAL	21	24N	08W	G	1340/N	1400/E	CO	2020
DUGAN PRODUCTION CORP	A DANDY	1	WC D3;PICTURED CLIFFS	21	24N	08W	N	790/S	1850/W	PA	1869
EL PASO NAT GAS PROD CO	SAPP B	1	WC D3;PICTURED CLIFFS	21	24N	08W	O	330/S	1650/E	PA	4180

\* Wells within 1/2- mile area of review are shaded. No wells within area of review penetrate the proposed injection zone.

Attachment VI. Tabulation of data on offset wells.

Dugan Production Corp., Mesa SWD #4, S.16, T24N, R8W

MESA PETROLEUM CO	S BLANCO FEDERAL 22	1	LYBROOK GALLUP	22	24N	08W	F	1980/N	1980/W	PA	5732
ELM RIDGE RESOURCES INC	S BLANCO COAL 22	1	BASIN FRUITLAND COAL	22	24N	08W	H	1307/N	720/E	CO	2186
M&M PROD & OPERATION INC	ANDERSON	1	LYBROOK GALLUP	22	24N	08W	K	1740/S	1980/W	CO	5615
M&M PROD & OPERATION INC	ANDERSON	2	LYBROOK GALLUP	22	24N	08W	N	990/S	2310/W	CO	5600
ELM RIDGE RESOURCES INC	S BLANCO FEDERAL 22	2	LYBROOK GALLUP	22	24N	08W	P	660/S	660/E	CO	5670
BANNON ENERGY INC	S BLANCO FEDERAL 23	1	LYBROOK GALLUP	23	24N	08W	M	795/S	715/W	PA	5700
ELM RIDGE RESOURCES INC	S BLANCO FED UNIT 23	2	LYBROOK GALLUP	23	24N	08W	N	973/S	2004/W	CO	5808
ELM RIDGE RESOURCES INC	S BLANCO FED UNIT 23	3	LYBROOK GALLUP	23	24N	08W	O	627/S	1765/E	CO	5721
ELM RIDGE RESOURCES INC	S BLANCO FED UNIT 23	4	LYBROOK GALLUP	23	24N	08W	P	581/S	500/E	CO	5855
ELM RIDGE RESOURCES INC	S BLANCO FEDERAL 26	6	LYBROOK GALLUP	26	24N	08W	A	830/N	670/E	CO	5700
ELM RIDGE RESOURCES INC	S BLANCO FEDERAL 26	5	LYBROOK GALLUP	26	24N	08W	B	820/N	1700/E	CO	5703
ELM RIDGE RESOURCES INC	S BLANCO FEDERAL 26	4	LYBROOK GALLUP	26	24N	08W	C	660/N	2295/W	CO	5680
ELM RIDGE RESOURCES INC	S BLANCO FEDERAL 26	3	LYBROOK GALLUP	26	24N	08W	D	660/N	1110/W	CO	5675
BANNON ENERGY INC	S BLANCO FEDERAL 26	2	LYBROOK GALLUP	26	24N	08W	F	1950/N	1950/W	PA	5655
BANNON ENERGY INC	S BLANCO FEDERAL 26	7	LYBROOK GALLUP	26	24N	08W	G	1900/N	1660/E	PA	5680
BANNON ENERGY INC	S BLANCO FEDERAL 26	1	LYBROOK GALLUP	26	24N	08W	H	2290/N	330/E	PA	5704
BANNON ENERGY INC	S BLANCO NAVAJO 26 A	4	LYBROOK GALLUP	26	24N	08W	I	1850/S	380/E	PA	5650
DUGAN PRODUCTION CORP	BUMBLE	2	LYBROOK GALLUP	27	24N	08W	D	660/N	330/W	PA	5555
DUGAN PRODUCTION CORP	BUMBLE	1	CUERVO MESAVERDE	27	24N	08W	E	1980/N	660/W	PA	4395
DUGAN PRODUCTION CORP	LAVA FALLS	1	LYBROOK GALLUP	27	24N	08W	J	2310/S	2310/E	CO	5521
DUGAN PRODUCTION CORP	BRIGHT ANGEL	1	LYBROOK GALLUP	27	24N	08W	L	1850/S	790/W	CO	6483
DUGAN PRODUCTION CORP	SAPP	1	CUERVO MESAVERDE	28	24N	08W	A	660/N	660/E	CO	5480
DUGAN PRODUCTION CORP	SAPP	93	BASIN FRUITLAND COAL	28	24N	08W	G	1350/N	1990/E	PA	1712
DUGAN PRODUCTION CORP	SAPP	2	LYBROOK GALLUP	28	24N	08W	H	2240/N	543/E	CO	5450
DUGAN PRODUCTION CORP	SAPP	92	BASIN FRUITLAND COAL	28	24N	08W	K	1850/S	2100/W	PA	1657
DUGAN PRODUCTION CORP	SAPP	90	BASIN FRUITLAND COAL	29	24N	08W	B	890/N	2410/E	CO	1720
DUGAN PRODUCTION CORP	ADOBE A	1	CUERVO GALLUP	29	24N	08W	F	1980/N	1980/W	CO	5520
DUGAN PRODUCTION CORP	SAPP	91	BASIN FRUITLAND COAL	29	24N	08W	K	1555/S	1850/W	CO	1930
DUGAN PRODUCTION CORP	BUDDHA TEMPLE	90	BASIN FRUITLAND COAL	30	24N	08W	A	790/N	790/E	CO	1750

\* Wells within 1/2- mile area of review are shaded. No wells within area of review penetrate the proposed injection zone.

Attachment VI. Tabulation of data on offset wells.

Dugan Production Corp., Mesa SWD #4, S.16, T24N, R8W

DORFMAN PRODUCTION CO	SAPP	1	WC D3;GALLUP	30	24N	08W	I	1450/S	965/E	PA	5469
DUGAN PRODUCTION CORP	BUDDHA TEMPLE	1	POTWIN PICTURED CLIFFS	30	24N	08W	I	1510/S	1070/E	CO	1875
DUGAN PRODUCTION CORP	SHEBA TEMPLE	1	WC D3;PICTURED CLIFFS	30	24N	08W	K	1850/S	1850/W	CO	1795
DUGAN PRODUCTION CORP	SHEBA TEMPLE	1	WC D3;FRUITLAND SAND	30	24N	08W	K	1850/S	1850/W	SP	
KIRBY EXPLORATION CO	FEDERAL 30	1	WC D3;PICTURED CLIFFS	30	24N	08W	O	790/S	1710/E	PA	1900

\* Wells within 1/2- mile area of review are shaded. No wells within area of review penetrate the proposed injection zone.



Application for Authorization to Inject

Dugan Production Corp.

**Mesa SWD #4**

Part VII. Operations Plan

1. Average Injection Rate: 800 bwpd with a maximum of 1200 bwpd.
2. The system will be open.
3. Average Injection Pressure: 600 psi and the maximum will be 850 psi.
- 3) The source of injected water will be produced water from Fruitland Coal wells and Gallup/Dakota wells within the immediate area (T24N, R8 and 9W). Attachment VII-4a. is an analysis of the Fruitland Coal water, Attachment VII-4b. is an analysis of the Gallup water and Attachment VII-4c. is an analysis of the Dakota water. The water to be injected is compatible with the water in the disposal zone.
- 4) Injection is for disposal purposes into a zone (Point Lookout Sandstone) that is not productive of oil or gas within one mile of the proposed injection well. An analysis of the disposal zone water is in Attachment VII-5.

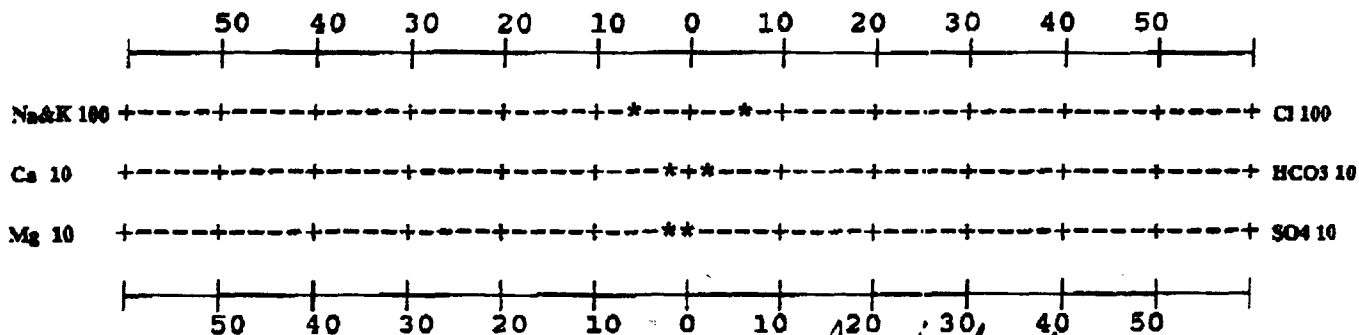
FW01W362

**BJ SERVICES COMPANY**  
**WATER ANALYSIS #FW01W362**  
**FARMINGTON LAB**

GENERAL INFORMATION		
OPERATOR:	DUGAN PRODUCTION	DEPTH:
WELL:	KAIBAB TRAIL #90	DATE SAMPLED:
FIELD:		DATE RECEIVED:
SUBMITTED BY:		COUNTY:
WORKED BY	:D. SHEPHERD	STATE:
PHONE NUMBER:		FORMATION:
		Fruitland Coal

SAMPLE DESCRIPTION	
SAMPLE FOR ANALYSIS	
PHYSICAL AND CHEMICAL DETERMINATIONS	
SPECIFIC GRAVITY:	1.026 @ 76°F PH: 6.77
RESISTIVITY (MEASURED ):	0.180 ohms @ 78°F
IRON (FE++) :	0 ppm
CALCIUM:	351 ppm
MAGNESIUM:	178 ppm
CHLORIDE:	21,597 ppm
SODIUM+POTASS:	13,626 ppm
H2S: NO TRACE	
SULFATE:	0 ppm
TOTAL HARDNESS	1,609 ppm
BICARBONATE:	963 ppm
SODIUM CHLORIDE (Calc)	35,526 ppm
TOT. DISSOLVED SOLIDS:	37,795 ppm
POTASSIUM (PPM):	65
REMARKS	

## STIFF TYPE PLOT (IN MEQ/L)



ANALYST

D. SHEPHERD

## BJ SERVICES

## API WATER ANALYSIS

Company: DUGAN PROD.	W.C.N.A. Sample No.:
Field:	Legal Description:
Well: NOVEMBER 24 #2	Lease or Unit:
Depth:	Water B/D:
Formation: LOWER GALLUP	Sampling Point:
State: NM	Sampled By: GARY BRINK
County: SAN JUAN	Date Sampled: 02/22/96
Type of Water(Produced,Supply, ect.): PRODUCED	

## PROPERTIES

pH: 6.62	Iron, Fe(total): 0
Specific Gravity: 1.026	Sulfide as H <sub>2</sub> S: 0
Resistivity (ohm-meter): .22	Total Hardness:
Temperature: 71F	(see below)

## DISSOLVED SOLIDS

CATIONS		mg/l	me/l	
Sodium, Na:	9499	:	413	
Calcium, Ca:	281	:	14	Sample(ml): 5.0 ml of EDTA: 3.50
Magnesium, Mg:	63	:	5	Sample(ml): 5.0 ml of EDTA: 1.30
Barium, Ba:	N/A	:	N/A	
Potassium, K:	83	:	2	
ANIONS		mg/l	me/l	
N: .500 Chloride, Cl:	15244	:	430	Sample(ml): 5.0 ml of AgNO <sub>3</sub> : 4.30
Sulfate, SO <sub>4</sub> :	0	:	0	
Carbonate, CO <sub>3</sub> :		:		Sample(ml): 1.0 ml of H <sub>2</sub> SO <sub>4</sub> :
Bicarbonate, HCO <sub>3</sub> :	268	:	4	Sample(ml): 25.0 ml of H <sub>2</sub> SO <sub>4</sub> : 1.10
Total Dissolved Solids (calculated): 25438				
Total Hardness: 960				Sample(ml): 5.0 ml of EDTA: 4.80

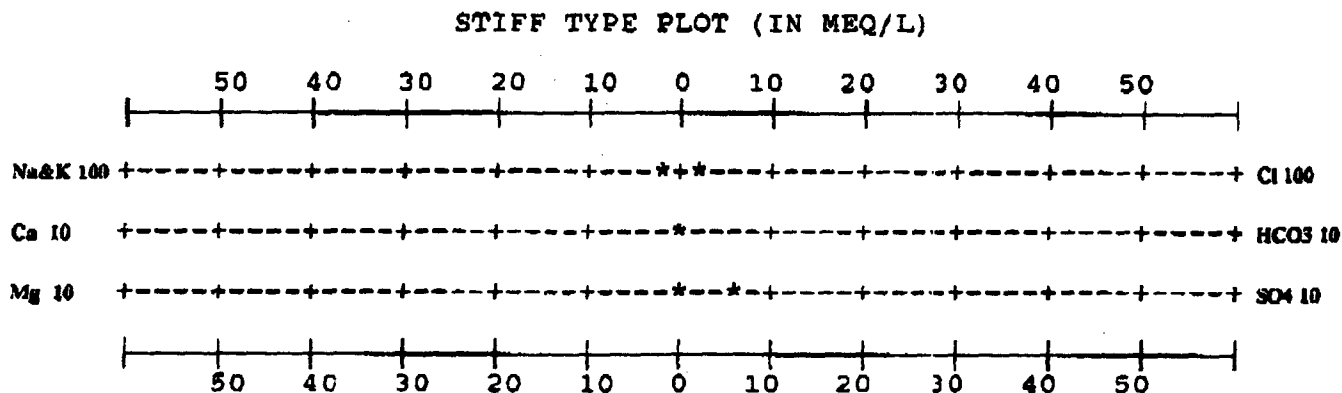
REMARKS AND RECOMMENDATIONS: HAD A W.A.T.E.R. TAG AFFIXED

**FARMINGTON LAB**

DEPTH:  
DATE SAMPLED: 04/15/97  
DATE RECEIVED: 04/16/97  
COUNTY: STATE:  
FORMATION: BASIN DAKOTA

separator sample

SPECIFIC GRAVITY:		1.005	@ 75°F	PH:	6.91
RESISTIVITY (MEASURED ):		0.550	ohms @ 75°F		
IRON (FE++) :	0 ppm	SULFATE:		3,035	ppm
CALCIUM:	116 ppm	TOTAL HARDNESS		348	ppm
MAGNESIUM:	15 ppm	BICARBONATE:		303	ppm
CHLORIDE:	4,762 ppm	SODIUM CHLORIDE (Calc)		7,834	ppm
SODIUM+POTASS:	6,068 ppm	TOT. DISSOLVED SOLIDS:		14,517	ppm
IODINE:		POTASSIUM CHLORIDE:			



**DAVID SHEPHERD**

**BJ SERVICES COMPANY****WATER ANALYSIS #FW01W027****FARMINGTON LAB****GENERAL INFORMATION**

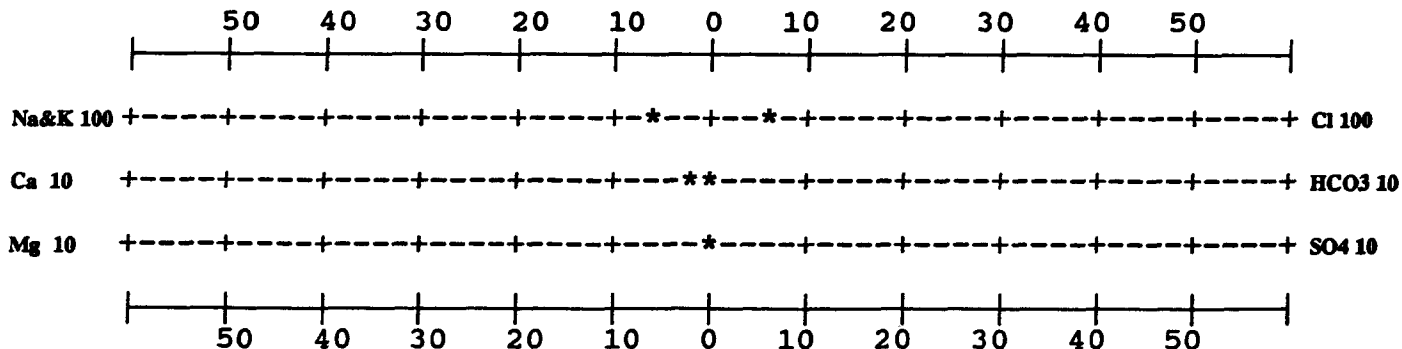
OPERATOR:	DUGAN PRODUCTION	DEPTH:	
WELL:	SANCHEZ O'BRIEN #1	DATE SAMPLED:	12/03/97
FIELD:	SEC. 6/T24N/R9W	DATE RECEIVED:	12/03/97
SUBMITTED BY:	JOHN ALEXANDER	COUNTY:	SAN JUAN
WORKED BY:	D. SHEPHERD	STATE:	NM
PHONE NUMBER:		FORMATION:	MESAVERDE

**SAMPLE DESCRIPTION**

SWAB SAMPLE AFTER 200 BBL.

**PHYSICAL AND CHEMICAL DETERMINATIONS**

SPECIFIC GRAVITY:	1.025	@ 76°F	PH:	7.23
RESISTIVITY (MEASURED ):	0.160	ohms @ 76°F		
IRON (FE++) :	3 ppm	SULFATE:		0 ppm
CALCIUM:	336 ppm	TOTAL HARDNESS		1,074 ppm
MAGNESIUM:	57 ppm	BICARBONATE:		548 ppm
CHLORIDE:	22,137 ppm	SODIUM CHLORIDE (Calc)		36,415 ppm
SODIUM+POTASS:	14,065 ppm	TOT. DISSOLVED SOLIDS:		37,823 ppm
H2S: NO TRACE		POTASSIUM (PPM):		84

**REMARKS****STIFF TYPE PLOT (IN MEQ/L)**

ANALYST

D. SHEPHERD

## Application for Authorization to Inject

Dugan Production Corp.

### Mesa SWD #4

#### Part VIII. Geologic Data

The proposed injection interval is the Point Lookout Sandstone of the Mesaverde Group from approximately 4,290 – 4,390 feet. The Ojo Alamo is a known source of stock water in the area and occurs at a depth of approximately 1,250 – 1,350 feet in the proposed well. There are no known drinking water sources below the Mesaverde interval. The expected formations tops in the well are as follows:

Ojo Alamo	1253
Kirtland Shale	1360
Fruitland Formation	1645
Pictured Cliffs Sandstone	1945
Lewis Shale	2040
Cliff House Sandstone	2765
Menefee	2865
Point Lookout Sandstone	4291
Mancos Shale	4560

#### Part IX. Stimulation Program

Following injection rate tests, it may be necessary to stimulate the Point Lookout by acidizing or fracturing.

#### Part X. Logging and Test Data

All logs and test data for the proposed injection well will be submitted to the New Mexico Oil Conservation Division in Aztec, NM.

#### Part XI. Fresh Water Samples

A records search of water wells located within one mile of the proposed disposal well was conducted. One water well was found to exist approximately 4,050 feet north of the disposal well. The well was located in section 15, T24N, R8W (NE/NW/NW/4) and was drilled by E.C. Barry on December 5, 1977 to a depth of 190'. No other information including water analysis is available on this well.

Application for Authorization to Inject

Dugan Production Corp.

**Mesa SWD #4**

Part XII. Statement of Geologic and Engineering Data

I have examined all 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.

Kurt Fagrelus  
Kurt Fagrelus, Geologist

2/13/04  
Date

Application for Authorization to Inject

Dugan Production Corp.

**Mesa SWD #4**

Part XIII. Proof of Notice

Attached are proof's of notice that this application has been sent by certified mail, to the surface owner of the land which the injection well is to be located on and all leasehold operators within one-half mile of the well location. Also, proof of publication is enclosed showing the legal advertisement which was published in the Farmington Daily Times.



## 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:

*Mr. Terry Lindeman  
Elm Ridge Resources Inc  
20 Road 5060  
Bloomfield, NM 87413*

2. Article Number

(Transfer from service label)

7001 1940 0003 1548 5961

PS Form 3811, August 2001

Domestic Return Receipt

102595-02-M-1035

## 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

## 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:

*Mr. David Cattanach  
New Mexico Oil Conservation Division  
Engineering Bureau  
1220 South Santa Frances Street  
Santa Fe, NM 87505*

2. Article Number

(Transfer from service label)

7001 1940 0003 1548 5930

PS Form 3811, August 2001

Domestic Return Receipt

102595-02-M-1035

## 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

## 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:

*Mr. Frank Chavez  
New Mexico Oil Conservation Division  
1000 Rio Bravo Rd  
Albuquerque, NM 87410*

2. Article Number

(Transfer from service label)

7001 1940 0003 1548 5947

PS Form 3811, August 2001

Domestic Return Receipt

102595-02-M-1035

## 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

Memo SWD #4

**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:

Ms. Debbie Ardillea  
New Mexico State Land Office  
P.O. Box 1148  
Santa Fe, NM  
87504-1148

**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)

7001 1940 0003 1 548 5954

PS Form 3811, August 2001

Domestic Return Receipt

102595-02-M-1035

# AFFIDAVIT OF PUBLICATION

Ad No. 49282

## STATE OF NEW MEXICO County of San Juan:

CONNIE PRUITT, being duly sworn says:  
That she is the CLASSIFIED MANAGER of  
THE DAILY TIMES, a daily newspaper of  
general circulation published in English at  
Farmington, said county and state, and that  
the hereto attached Legal Notice was  
published in a regular and entire issue of the  
said DAILY TIMES, a daily newspaper duly  
qualified for the purpose within the meaning of  
Chapter 167 of the 1937 Session Laws of the  
State of New Mexico for publication and  
appeared in the Internet at The Daily Times  
web site on the following day(s):

Wednesday, February 11, 2004.

And the cost of the publication is \$30.32.

Connie Pruitt

ON 2-11-04 CONNIE PRUITT  
appeared before me, whom I know personally  
to be the person who signed the above  
document.

Gavin Beck  
My Commission Expires April 2, 2004.

## COPY OF PUBLICATION

918 Legals  
NOTICE

Dugan Production Corp., P.O.  
Box 420 Farmington, NM  
87499 is making application  
for administrative approval to  
dispose of produced water by  
underground injection.  
Contact person is Kurt  
Fagrelus, phone 505-325-  
1821. The proposed disposal  
site is the Mesa SWD #4,  
located 1450' fsl & 1245' fsl,  
Sec. 16, Twn. 24N, Rng. 8W,  
San Juan Co., NM. Water will  
be injected into the Point  
Lookout Sandstone between  
4,290' and 4,390'. Maximum  
injection pressure is 850 psi.  
Maximum injection rate is  
1,200 barrels of water daily.  
Any interested parties must  
file objections or requests for  
hearing with the Oil  
Conservation Division 1220  
South Saint Francis Drive,  
Santa Fe, NM 87505 within 15  
days.

Legal No. 49282 published in  
The Daily Times, Farmington,  
New Mexico on Wednesday,  
February 11, 2004.

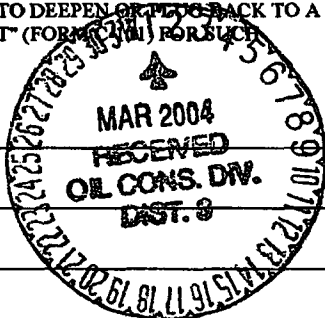
Submit 3 Copies To Appropriate District Office  
District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Ave., Artesia, NM 88210  
District III  
1000 Rio Brazos Rd., Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-103  
Revised June 10, 2003

<b>SUNDRY NOTICES AND REPORTS ON WELLS</b> (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR TO GO BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)		WELL API NO. 30-045-32086
1. Type of Well: Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other SWD <input type="checkbox"/>		5. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>
2. Name of Operator Dugan Production Corp.		6. State Oil & Gas Lease No. LG-1917
3. Address of Operator P. O. Box 420, Farmington, NM 87499-0420		7. Lease Name or Unit Agreement Name Mesa SWD
4. Well Location Unit Letter <u>I</u> : <u>1450</u> feet from the <u>South</u> line and <u>1245</u> feet from the <u>East</u> line Section <u>16</u> Township <u>24N</u> Range <u>8W</u> NMPM San Juan County		8. Well Number 4
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 6819' GL		9. OGRID Number 006515
		10. Pool name or Wildcat SWD Mesaverde (96160)



12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data	
<b>NOTICE OF INTENTION TO:</b> PERFORM REMEDIAL WORK <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> TEMPORARILY ABANDON <input type="checkbox"/> CHANGE PLANS <input type="checkbox"/> PULL OR ALTER CASING <input type="checkbox"/> MULTIPLE COMPLETION <input type="checkbox"/> OTHER: <input type="checkbox"/>	<b>SUBSEQUENT REPORT OF:</b> REMEDIAL WORK <input type="checkbox"/> ALTERING CASING <input type="checkbox"/> COMMENCE DRILLING OPNS. <input type="checkbox"/> PLUG AND ABANDONMENT <input type="checkbox"/> CASING TEST AND CEMENT JOB <input type="checkbox"/> OTHER: TD, Production casing <input checked="" type="checkbox"/>

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Drill to TD 4655' on 2-8-04. Ran 5-1/2" 15.5# J-55 LT&C Maverick casing. Land @ 4651' with float collar @ 4608'. Cement 1<sup>st</sup> stage w/280 sx BJ Premium Lite High Strength w/1/4# celloflake 5#/sx LCM-1. Cement 2<sup>nd</sup> stage w/214 sx Premium Lite FM w/3% CaCl<sub>2</sub>, 1/4# celloflake/sx, 5#/sx LCM-1, 8% Bentonite & .4% Sodium Metasilicate. Tail w/50 Sx Type III cement w/1% CaCl<sub>2</sub> & 1/4# celloflake/sx. Circulate 25 bbls contaminated cement.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE John C. Alexander TITLE Vice-President DATE February 27, 2004

Type or print name John C. Alexander E-mail address: johncalexander@duganproduction.com Telephone No. (505)325-1821  
(This space for State use)

APPROVED BY Chad Th... TITLE DEPUTY OIL & GAS INSPECTOR, DIST. 3 DATE MAR - 1 2004

Conditions of approval, if any:

District I  
PO Box 1980, Hobbs, NM 88241-1980

District II  
PO Drawer DD, Artesia, NM 88211-0719

District III  
1000 Rio Brazos Rd., Aztec, NM 87410

District IV  
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico  
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION  
PO Box 2088  
Santa Fe, NM 87504-2088

Form C-102  
Revised February 21, 1992  
Instructions on back  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number <b>30045-32086</b>		*Pool Code <b>96160</b>	*Pool Name <b>SWD; MESA SWD</b>
*Property Code <b>33278</b>	*Property Name <b>MESA SWD</b>		*Well Number <b>4</b>
*GRID No. <b>006515</b>	*Operator Name <b>DUGAN PRODUCTION CORPORATION</b>		*Elevation <b>6819'</b>

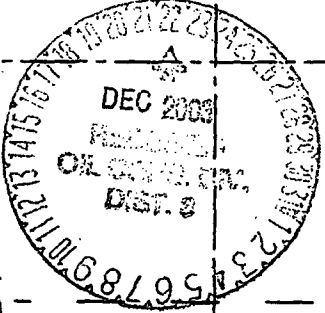
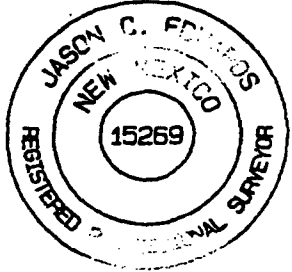
10 Surface Location

UL or lot no.	Section	Township	Range	Lot 10n	Feet from the	North/South line	Feet from the	East/West line	County
I	16	24N	8W		1450	SOUTH	1245	EAST	SAN JUAN

11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot 10n	Feet from the	North/South line	Feet from the	East/West line	County
12 Dedicated Acres <b>320.0 Acres (E/2)</b>					13 Joint or Infill		14 Consolidation Code		15 Order No.

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

16	5276.70'		16	5219.28'	5264.82'	17 OPERATOR CERTIFICATION	
						I hereby certify that the information contained herein is true and correct to the best of my knowledge and belief. <i>Kurt Fagrelius</i> Signature Kurt Fagrelius Printed Name Geologist Title 12/19/2003 Date	
18 SURVEYOR CERTIFICATION							
I hereby certify that the information shown on this plat was obtained from field notes of actual survey made by me or under my supervision, and that the same is true and correct to the best of my belief. Survey Date: SEPTEMBER 4, 2003 Signature and Seal of Professional Surveyor  <i>JASON C. EDWARDS</i> Certificate Number 15269							