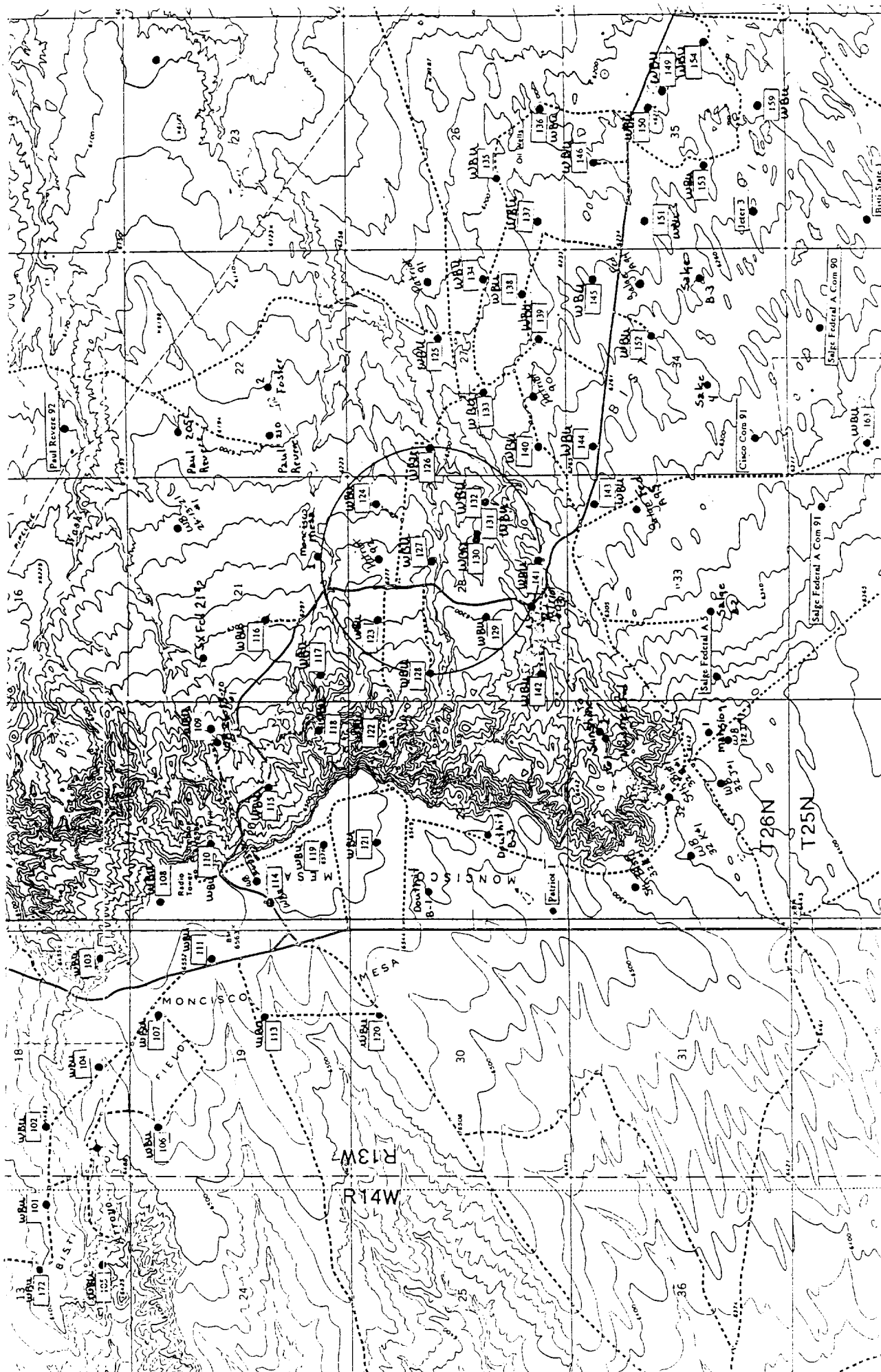


APPLICATION FOR AUTHORIZATION TO INJECT

- I. PURPOSE: XX Secondary Recovery Pressure Maintenance
Application qualifies for administrative approval? X Yes No
- II. OPERATOR: Dugan Production Corp.
ADDRESS: P.O. Box 420, Farmington, NM 87499-0420
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 processed for injection. Additional sheets may be attached if necessary.
- IV. Is this an expansion of an existing project: X Yes No
If yes, give the Division order number authorizing the project R-1638
- V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.
- VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.
- VII. Attach data on the proposed operation, including:
1. Proposed average and maximum daily rate and volume of fluids to be injected;
 2. Whether the system is open or closed;
 3. Proposed average and maximum injection pressure;
 4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and
 5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).
- *VIII. Attach appropriate geological data on the injection zone including appropriate lithologic detail, geological name, thickness and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such 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 source of drinking water.
- XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.
- XIV. Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.
- NAME: John Alexander TITLE: Vice-President
SIGNATURE: John Alexander DATE: 8/10/2000
- * 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 circumstance of the earlier submittal.

Attachment V
Dugan Production Corp.
Application to Convert WBU 127 To Injection Service



Nos. III, VII, VIII, IX, XI, XIV on Form C-108

Dugan Production Corp.
P.O. Box 420
Farmington, New Mexico 87499-0420

III. A. Injection Well Information:

1. West Bisti Unit No. 127
1980' FNL & 1980' FEL
28-26N-13W
2. 9-5/8" 25.4 lb. set @ 214' in 13-3/4" hole. Cemented with 175 sks.
"Regular" + 2% CaCl₂. Circulated to surface.

5-1/2" 14 and 15.5 lb. set @ 5201' in 7-7/8" hole. Cemented with 100
sks. + 3% gel. Cement top @ 4400' by temperature survey.
3. Tubing will be 2-3/8" 4.7 lb. EUE 8rd., plastic lined. Setting depth will
be +-4975'.
4. Packer will be a Baker Model AD-1, plastic coated internally and externally.
Setting depth will be +-4975'

III. B. Formation Information:

1. Gallup Sandstone. Bisti Lower Gallup Field.
2. Injection interval perforated 5028-5048.
3. Originally drilled as a production well.
4. There are no other zones perforated in this well.
5. Next highest production zone: Pictured Cliffs - 1343'
Next lower production zone: Dakota - 5700' (estimate).

VII. Data on Proposed Operation:

1. Average daily injection rate is expected to be 400 bwpd,
with a maximum rate expected to be 1,000 bwpd.
2. The system is closed.

3. The average injection pressure will be 650 psi, with a maximum of 1006 psi.
4. Injected water will be produced from the Gallup and Fruitland Coal formations and re-injected into the Gallup formation. An analysis of the water to be injected is included as Attachment VII – 1. This water is compatible with the Gallup formation.
5. This is not a disposal well.

VIII Geological Information:

Injection will be into the Gallup sandstone. Top of the Gallup is at 4938' with a total thickness of 240'. The Ojo Alamo is a possible source of drinking water. It is near the surface and is located behind the surface casing.

IX Stimulation:

No stimulation is proposed.

XI Fresh Water Analysis:

There are no active water wells in the area.

XIV Proof in Notice:

Attached are copies of the certified mail receipts notifying The Navajo Tribe as surface owner and offset lease owners. A copy of the letter provided is attached.

A certified copy of the legal notice published in The Farmington Daily Times is attached.

DUGAN PRODUCTION CORP.

DATA ON WELLS OFFSET TO WEST BISTI UNIT NO. 127
No. VI on Form C-108

WELL	LOCATION	TYPE	DRILLED	DEPTH	DATA
WBU 124	660' FML & 660' FEL 28-26N-13W	PRODUCER	6-57	5176	9-5/8" 25.4 LB. CASING @ 214' - CEMENTED W/ 200 SKS. - CIRCULATED TO SURFACE. 5 1/2" 14 LB. CASING @ 5176' - CEMENTED W/ 100 SKS. + 3% GEL. CEMENT TOP @ 4600' BY TEMPERATURE SURVEY GALLUP PERFORATED 5020-30; 5070-86 SAND-OIL FRAC W/ 25,000 GAL. OIL & 30,000 LB. SAND. RE-FRAC 76,250 GAL. WATER & 131,000 LB. SAND
WBU 123	660' FML & 1980' FML 28-26N-13W	PRODUCER	4-57	5229	9-5/8" 25.4 LB. CASING @ 214' - CEMENTED W/ 175 SKS. - CIRCULATED TO SURFACE. 5 1/2" 14 LB. CASING @ 5229' - CEMENTED W/ 100 SKS. + 3% GEL. CEMENT TOP @ 4600' BY TEMPERATURE SURVEY GALLUP PERFORATED 5080-99. SAND-OIL FRAC W/ 50,000 GAL. OIL & 50,000 LB. SAND
WBU 141	660' FSL & 1980' FEL 28-26N-13W	PRODUCER	4-57	5122	9-5/8" 25.4 LB. CASING @ 214' - CEMENTED W/ 200 SKS. - CIRCULATED TO SURFACE. 5 1/2" 14 LB. CASING @ 5229' - CEMENTED W/ 100 SKS. + 3% GEL. CEMENT TOP @ 4400' BY TEMPERATURE SURVEY GALLUP PERFORATED 4994-5008; 5026-34; 5040-44; 5052-66. SAND-OIL FRAC W/ 7700 GAL. OIL & 1500 LB. SAND.
WBU 132	1980' FML & 660' FEL 28-26N-13W	PRODUCER (TA)	3-57	5114	9-5/8" 25.4 LB. CASING @ 214' - CEMENTED W/ 200 SKS. - CIRCULATED TO SURFACE. 5 1/2" 14 LB. CASING @ 5114' - CEMENTED W/ 100 SKS. + 3% GEL. CEMENT TOP @ 4365' BY TEMPERATURE SURVEY GALLUP PERFORATED 5026-38; 4968-88. SAND-OIL FRAC W/ 20,000 GAL. OIL & 20,000 LB. SAND. CAST IRON BRIDGE PLUG SET @ 4918 W/ 29.5 CU. FT. CEMENT ON TOP. PACKER FLUID SPOTTED ABOVE CEMENT.

DUGAN PRODUCTION CORP.

DATA ON WELLS OFFSET TO WEST BISTI UNIT NO. 127

MO. VI on Form C-108

WELL	LOCATION	TYPE	DRILLED	DEPTH	DATA
WBU 129	1980' FSL & 1980' FWL 28-26N-13W	PRODUCER	5-57	5174	9-5/8" 25.4 LB. CASING @ 214' - CEMENTED W/ 200 SKS. - CIRCULATED TO SURFACE. 5 1/2" 14 LB. CASING @ 5174' - CEMENTED W/ 100 SKS. + 3% GEL. CEMENT TOP @ 4400' BY TEMPERATURE SURVEY GALLUP PERFORATED 5038-54; 5072-80; 5096-5110. SAND-OIL FRAC W/ 40,000 GAL. OIL & 40,000 LB. SAND. RE-FRAC PERFORATIONS 5038-54 W/ 30,000 GAL. WATER & 30,000 LB. SAND.

WELL	LOCATION	TYPE	DRILLED	DEPTH	DATA
WBU 128	1980' FWL & 660' FWL 28-26N-13W	I.A	5-57	5200	9-5/8" 25.4 LB. CASING @ 214' - CEMENTED W/ 200 SKS. - CIRCULATED TO SURFACE. 5 1/2" 14 LB. CASING @ 5200' - CEMENTED W/ 100 SKS. + 3% GEL. CEMENT TOP @ 4500' BY TEMPERATURE SURVEY GALLUP PERFORATED 5074-92. FRACTURED WITH 12,098 GAL. LEASE OIL AND 5,000 LB. 10-20 SAND.

WELL	LOCATION	TYPE	DRILLED	DEPTH	DATA
WBU 126	1980' FWL & 60' FWL 27-26N-13W	PRODUCER	PRODUCER	5165	9-5/8" 25.4 LB. CASING @ 214' - CEMENTED W/ 200 SKS. - CIRCULATED TO SURFACE. 5 1/2" 14 LB. CASING @ 5164' - CEMENTED W/ 100 SKS. + 3% GEL. CEMENT TOP @ 4660' BY TEMPERATURE SURVEY GALLUP PERFORATED 5024-34. FRACTURED WITH 29,476 GAL. LEASE OIL AND 30,000 LB. 10-20 SAND AND 30,000 LB. 20-40 SAND. PERFORATED GALLUP 4970-90.

FARMINGTON LAB

SEP. 26 1999 14:29 50332766

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:

Manley Resource
PO Box 338
Elgin, IL
81137

2. Article Number (Copy from service label)
P 358 644 662

PS Form 3811, July 1999

Domestic Return Receipt

102595 09 M 1789

COMPLETE THIS SECTION ON DELIVERY

A. Received by (Please Print Clearly) B. Date of Delivery

C. Signature

☒ Agent ☐ Addressee

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

3. Service Type

☒ Certified Mail ☐ Express Mail

☐ Registered ☒ Return Receipt for Merchandise

☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes ☒ No

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:

Seacrests
1331 Fenar St. Ste 501
Houston, TX
77210-3026

2. Article Number (Copy from service label)
P 358 644 661

PS Form 3811, July 1999

Domestic Return Receipt

102595 09 M 1789

COMPLETE THIS SECTION ON DELIVERY

A. Received by (Please Print Clearly) B. Date of Delivery

C. Signature

☒ Agent ☐ Addressee

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

3. Service Type

☒ Certified Mail ☐ Express Mail

☐ Registered ☒ Return Receipt for Merchandise

☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes ☒ No

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:

Little Oil and Gas
PO Box 1258
Farm, MN.
87444

2. Article Number (Copy from service label)
P 358 644 663

PS Form 3811, July 1999

Domestic Return Receipt

102595 09 M 1789

COMPLETE THIS SECTION ON DELIVERY

A. Received by (Please Print Clearly) B. Date of Delivery

C. Signature

☒ Agent ☐ Addressee

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

3. Service Type

☒ Certified Mail ☐ Express Mail

☐ Registered ☒ Return Receipt for Merchandise

☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes ☒ No

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:

BIA
Box 1000
Gallup

2. Article Number (Copy from service label)
P 358 631 232

PS Form 3811, July 1999

Domestic Return Receipt

102595 09 M 1789

COMPLETE THIS SECTION ON DELIVERY

A. Received by (Please Print Clearly) B. Date of Delivery

C. Signature

☒ Agent ☐ Addressee

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

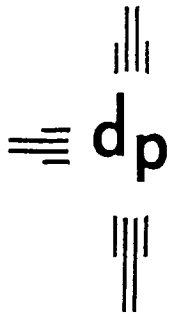
3. Service Type

☐ Certified Mail ☐ Express Mail

☐ Registered ☐ Return Receipt for Merchandise

☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes ☒ No



dugan production corp.

CERTIFIED MAIL - RETURN RECEIPT REQUESTED
P 358 644 663

8/10/2000

CC BY

Little Oil and Gas
P.O. Box 1258
Farmington, NM 87499

Re: Conversion of West Bisti Unit 127 to Waterflood Injection Service

Gentlemen:

This is your notification, as offsetting operator, that Dugan Production Corp. has applied to the New Mexico Oil Conservation Division for conversion of the West Bisti Unit No. 127, from Gallup formation oil producer to Gallup formation waterflood injection well. The well is located at 1980' fnl & 1980' fel S.28-Twn.26N-Rng.13W, San Juan Co., NM. The same interval currently used for production will be used as the injection interval. A copy of the application is attached. You must notify the NMOCD at 2040 S. Pacheco St., Santa Fe, NM 87505 within 15 days if you object to this application.

Sincerely Yours,

John Alexander
Vice President

Attachment

Attachment XIV-Page 2
Dugan Production Corp.
App. to Convert WBU 127
to Injection Service

AFFIDAVIT OF PUBLICATION

Ad No. 43215

STATE OF NEW MEXICO
County of San Juan:

Alethia Rothlisberger, being duly sworn says: That she is the Classified Advertising 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 meeting of Chapter 167 of the 1937 Session Laws of the State of New Mexico for publication on the following day(s):

Thursday, August 10, 2000

And the cost of the publication is \$16.23,

Alethia Rothlisberger

ON 8/15/2000 Alethia Rothlisberger appeared before me whom I know personally to be the person who signed the above document.

Daniel L. Stadel
My Commission Expires April 10, 2004

COPY OF PUBLICATION

918 Legals
LEGAL NOTICE

Dugan Production Corp., P.O. Box 420, Farmington, NM 87401 (505-325-1821, John Alexander) has made application to The New Mexico Oil Conservation Division to convert the West Bisti Unit No. 127 to water injection service. The well is located 1980' nml & 1980' fel, S.28-T.26N-R. 13W, San Juan Co., NM. Injection interval is the Gallup formation from 5028' to 5048'. Maximum pressure is to be 1006 psi. Maximum injection rate is 1000 bwpd. Objecting parties must file written notice with the NMOC at 2040 S. Pacheco St., Santa Fe, NM 87505 within 15 days.

Legal No. 43215 published in The Daily Times, Farmington, New Mexico, Thursday, August 10, 2000.

Attachment XIV-Page 3
Dugan Production Corp.
App. to Convert WBU 127
to Injection Service