dugan production corp.

October 15, 2001

New Mexico Oil Conservation Division
1000 Rio Brazos Road
Aztec, NM 87410

Attention: Mr. Frank Chavez, District Supervisor

Re: Application to Class 2, water disposal well, Salge Federal A #5, San Juan County, NM

L-33-26N-13W 30-045-28578

Dear Mr Chavez:

Attached is Dugan Production Corp.'s application to convert the Salge Federal A #5 from oil & gas production to a water disposal well. The application and all attachments follow the enumeration scheme set out in NMOCD's Permit Application for Underground Injection Control. The Navajo Tribal Trust, surface owner, and all offsetting operators have been notified of this application by certified mail. A notice has been published in the Farmington Daily Times advising the public of our application.

The undersigned employee is the contact person for this application.

Sincerely Yours,

Terry Kochis
Engineer

Attachments

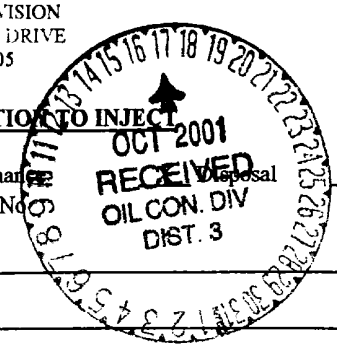
CC David Catanach
New Mexico Oil Conservation Division
Engineering Bureau
1220 South St. Francis Drive
Santa Fe, NM 87505

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

STATE OF NEW MEXICO
ENERGY,MINERALS and NATURAL
RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
1220 SOUTH ST. FRANCIS DRIVE
SANTA FE NM 87505

FORM C-108
Revised 7-1-81



APPLICATION FOR AUTHORIZATION TO INJECT

I. PURPOSE: _____ Secondary Recovery _____ Pressure Maintenance _____ Disposal _____ Storage
Application qualifies for administrative approval? _X_ Yes ___ No

II OPERATOR: Dugan Production Corp.

ADDRESS: P. O. Box 420, Farmington, NM 87499-0420

CONTACT PARTY: Terry Kochis 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: ___ 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 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: Terry Kochis TITLE: Engineer

SIGNATURE: Terry Kochis DATE: October 15,2001

* 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. _____

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 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 publication 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 Drive, Santa Fe, NM 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 data this application was mailed to them.

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. Salge Federal A #5
   Sec 33, T26N, R13W
   1,730' FSL & 595' FWL

2. 8-5/8" 24 lb/ft set @ 217' in 12-1/4" hole. Cemented with 135 sx Class "B" w/ 2% Calcium Chloride. Circulated cemented to surface.

   4-1/2" 10.5 lb/ft set @ 5,219'. 1st stage cemented with 250 sx 50 – 50 posmix w/ 2% gel & 1/4 lb/sx celloflake. 2nd stage cemented with 750 sx 65 – 35 w/ 12% gel & 1/4 lb/sx celloflake tailed by 50 sx 50 – 50 posmix w/ 2% gel & 1/4 lb/sx celloflake. Circulated cemented to surface. Stage tool set @ 4,089'.

3. Tubing will be 2-3/8" 4.7 lb/ft EUE 8rd reg, internally plastic coated. Setting depth will +/- 5,000'.

4. Packer will be Baker Model AD-1, plastic coated internally & externally. Setting depth will be +/- 5,000'.

III **B. Formation Information:**

1. Gallup Sandstone. Lower Bisti Gallup Field.

2. Injection interval perforated 5,066' – 5,120'.

3. Originally drilled as a development production well.

4. There are no other zones perforated in this well.

5. Next highest production zone: Picture Cliffs bottom @ 1,523'.

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 1,100 psi.

4. Injected water will be produced from the Gallup & 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. Injected water is for disposal purposes. An analysis of Gallup water is included as Attachment VII – 2. The Gallup formation water is compatible with the water to be injected.

VIII Geological Information:

Injection will be into the Gallup Sandstone. Top of the Gallup is @ 4,884' with a total thickness of 236'. The Ojo Alamo is a possible source of drinking water. It is near the surface and is located behind the surface & production casing, both strings have been cemented to surface.

IX Stimulation:

Acidized if required to maintain injection rate & pressure.

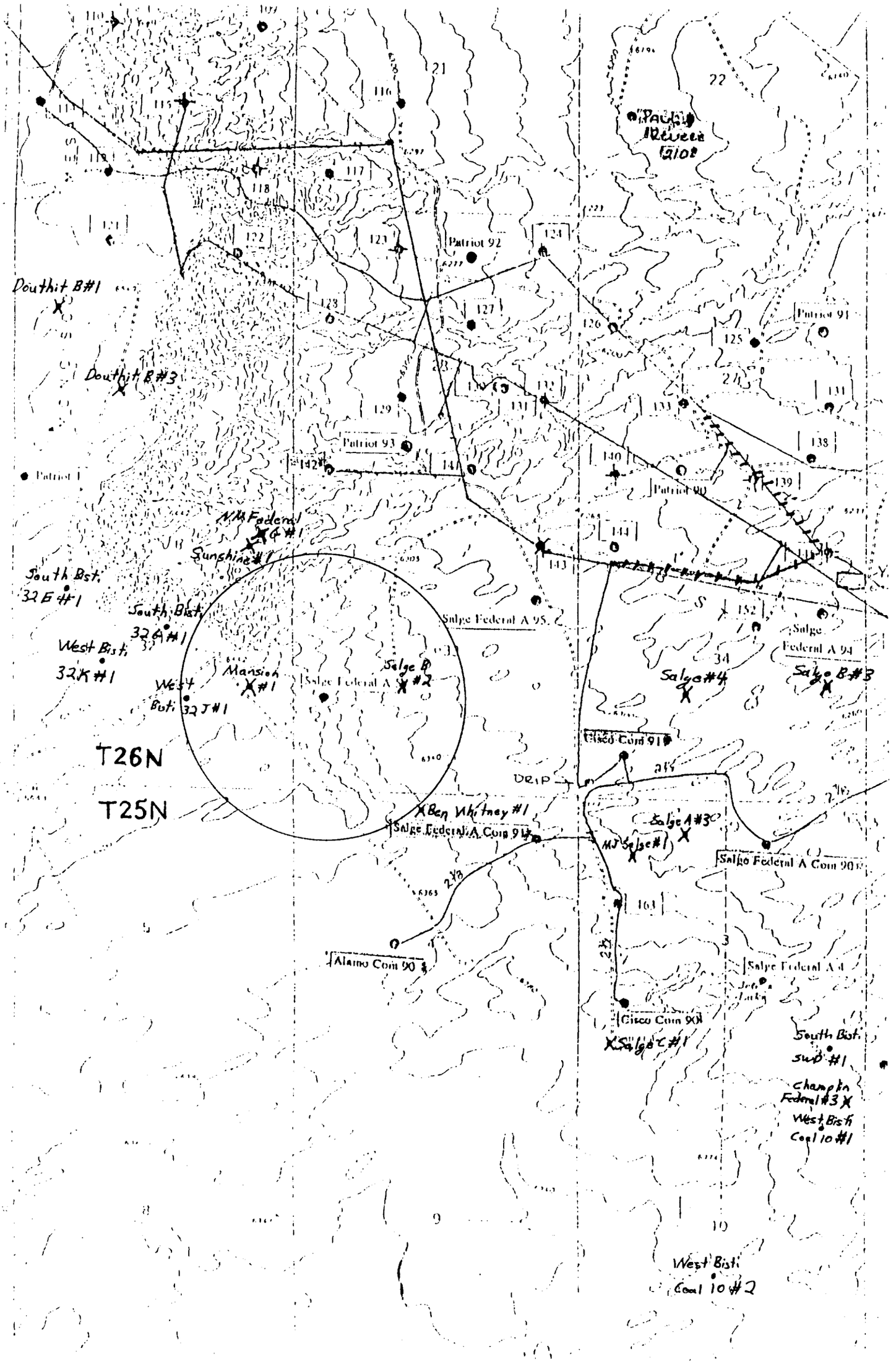
XI Fresh Water Analysis:

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 owners and offset lease owners. A copy of the letter provided is attached.

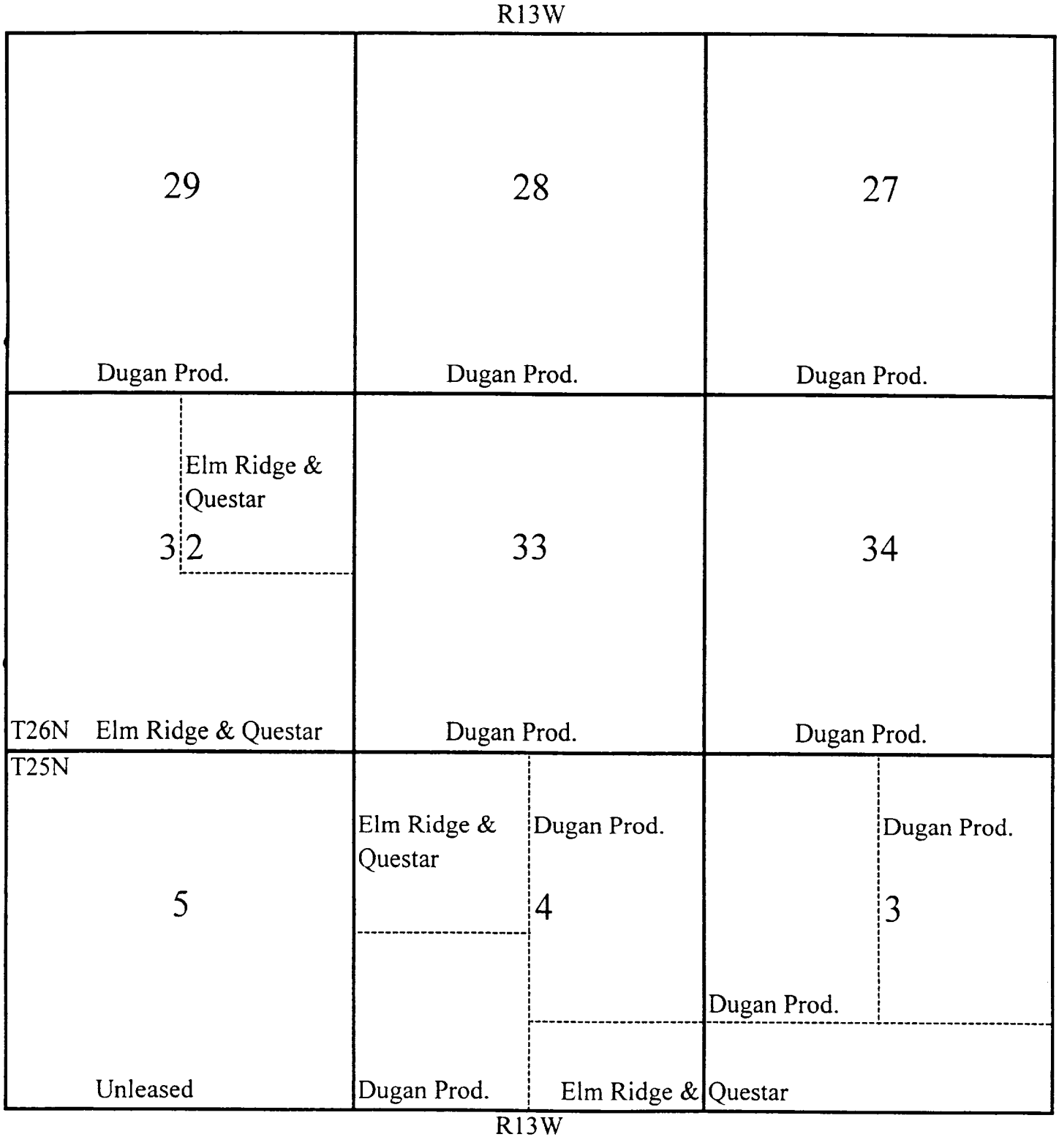
A certified copy of the legal notice published in the Farmington Daily Times is also attached.



Attachment V

Lease Owners Map

Attachment V



Attachment VI

POOL	SEC	TWN	RGE	UL	FTAGE NS	FTAGE EW	TD	STATUS
ITTLAND COAL	32	26N	13W	G	2310/N	2310/E	5350	SI
'ER GALLUP	32	26N	13W	G	2310/N	2310/E	5350	ZA
'ER GALLUP	32	26N	13W	J	1650/S	2000/E	5400	SI
'ER GALLUP	32	26N	13W	I	1650/S	990/E		AL
'ER GALLUP	32	26N	13W	I	1650/S	990/E		AL
'ER GALLUP	32	26N	13W	K	2310/S	1650/W	5350	CO
'ER GALLUP	32	26N	13W	E	1650/N	990/W	5376	CO
:TURED CLIFFS	32	26N	13W	I	1850/S	790/E	1600	PA
KOTA	32	26N	13W	A	660/N	660/E	6050	PA
:TURED CLIFFS	32	26N	13W	A	800/N	790/E	1506	PA
ITTLAND COAL	33	26N	13W	H	1650/N	790/E	1460	CO
'ER GALLUP	33	26N	13W	N	660/S	1980/W		AL
'ER GALLUP	33	26N	13W	L	1730/S	595/W	5220	SI
'ER GALLUP	33	26N	13W	A	660/N	660/E	5133	PA
'ER GALLUP	33	26N	13W	K	1980/S	1980/W	5099	PA
ITTLAND COAL	04	25N	13W	K	2510/S	1850/W	1435	CO
ITTLAND COAL	04	25N	13W	A	790/N	790/E	1420	CO
'ER GALLUP	04	25N	13W	B	330/N	1650/E		AL
'ER GALLUP	04	25N	13W	C	330/N	2310/W	5235	PA