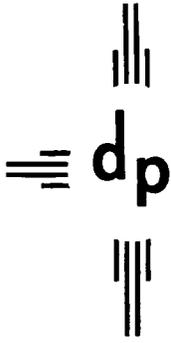


224831508

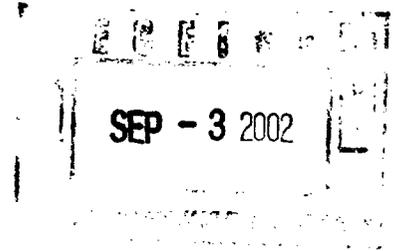
SWD

9/18/02



dugan production corp.

August 27, 2002



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

Attention: Mr. David Catanach

(30-045-27360)

Re: APPLICATION FOR CONVERSION TO SALT WATER DISPOSAL
TURK'S TOAST #4
SAN JUAN COUNTY, NM.

Dear Mr. Catanach:

Attached is Dugan Production Corp.'s application to convert the Turk's Toast #4 from production to produced water disposal well. The application and all attachments follow the enumeration scheme set out in NMOCD's Permit Application for Underground Injection Control. The Bureau of Land Management, 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,


John Alexander
Vice President

JA:sh

Attachments

cc: NMOCD
1000 Rio Brazos Road
Aztec, NM 87410

APPLICATION FOR AUTHORIZATION TO INJECT

- I. PURPOSE: _____ Secondary Recovery _____ Pressure Maintenance Disposal _____ Storage
Application qualifies for administrative approval? _____ Yes _____ No
- II. OPERATOR: _____ DUGAN PRODUCTION CORP. _____
ADDRESS: _____ P.O. Box 420, Farmington, NM 87499 _____
CONTACT PARTY: _____ John Alexander _____ PHONE: _____ (505) 325-1821 _____
- III. WELL DATA: Complete the data required on the reverse side of this form for each well proposed for injection.
Additional sheets may be attached if necessary.
- IV. Is this an expansion of an existing project? _____ Yes No
If yes, give the Division order number authorizing the project: _____
- V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.
- VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.
- VII. Attach data on the proposed operation, including:
1. Proposed average and maximum daily rate and volume of fluids to be injected;
 2. Whether the system is open or closed;
 3. Proposed average and maximum injection pressure;
 4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,
 5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).
- *VIII. Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.
- IX. Describe the proposed stimulation program, if any.
- *X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted).
- *XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.
- XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.
- XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.
- XIV. Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.
- NAME: _____ John Alexander _____ TITLE: _____ Vice-President _____
SIGNATURE: _____ *John Alexander* _____ DATE: _____ August 27, 2002 _____
- * 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.

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.

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. Turk's Toast #4
Sec. 17, T30N, R14W
1,850' FSL & 790' FWL
2. 8-5/8" 28 lb./ft.; set @ 222' in 12-1/4" hole. Cemented with 145 sx. Class "B" with 2% Calcium Chloride & 1/4#/sx. celloflake. Circulated cemented to surface.

4-1/2" 10.5 lb./ft. ; set @ 6,066'. 1st stage cemented with 280 sx. 50-50 Pozmix with 2% gel, 12.5# Gilsonite & 1/4#/sx. celloflake. Tailed by 100 sx. Class "B" with 1/4#/sx. celloflake. 2nd stage cemented with 625 sx. 65/35 with 12% gel and 1/4#/sx. celloflake. Tailed by 125 sx. Class "B" with 4% gel and 1/4#/sx. celloflake. Circulated cement to surface. Stage tool set @ 4,040'.
3. Tubing will be 2-3/8" 4/7 lb./ft. EUE 8rd reg, internally plastic coated. Setting depth will be ± 3,500'.
4. Packer will be Baker Model AD-1, plastic coated internally and externally. Setting depth will be ± 3,500'.

III. B. Formation Information

1. Mesaverde Point Lookout Sandstone.
2. Injection interval intended to perforate @ 3,585'-3,940'.
3. Originally drilled as a development production well.
4. This well is perforated in the Dakota from 5,793' to 5,933'. The Dakota will be plugged by setting a cast iron bridge plug at 5,793' with 100' Class B cement spotted on top. The Gallup formation (top at 4,926') will be covered by setting a 100' plug across it. A cast iron bridge plug will be set 4,000' (just above the second stage tool) to further isolate the Mesaverde perforations at 3,585' – 3,940'. Permission will be obtained from the BLM prior to plugging these formations. Top of cement on the first stage is estimated to be at 4,500' based on 75% cement volume and using gage hole. The second stage cement job circulated 10 bbls. of cement to surface.
5. Next highest production zone: Pictured Cliffs bottom @ 1,267'.

I CONCERN
WVSS

IV. Data on Proposed Operation

6. Average daily injection rate is expected to be 400 bwpd with a maximum rate expected to be 1,000 bwpd.
7. The system is closed.
8. The average injection pressure will be 650 psi, with a maximum of 717 psi.
9. Injected water will be produced from the Fruitland Coal, Pictured Cliffs, Gallup & Dakota formations and re-injected into the Mesaverde Point Lookout formation. An analysis of the water to be injected is included as Attachment VII – 4a, 4b, 4c & 4d. This water is compatible with the Mesaverde formation.
10. Injected water is for disposal purposes. An analysis of Mesaverde water is included as Attachment

VII – 5. The Mesaverde formation water is compatible with the water to be injected.

VIII. Geological Information

Injection will be into the Mesaverde Point Lookout. Top of the Mesaverde is @ 2,700' with a total thickness of 1,200'. The Point Lookout is @ 3,585'-3,940'. The Ojo Alamo is a possible source of drinking water. It is near the surface and is located behind the surface casing which has been cemented to surface.

IX. Stimulation

Acidized if required to maintain inject rate and pressure.

X. Logs

Logs are on file with OCD.

XI. Fresh Water Analysis

There are no active water wells in the area of review.

XIV. Proof in Notice

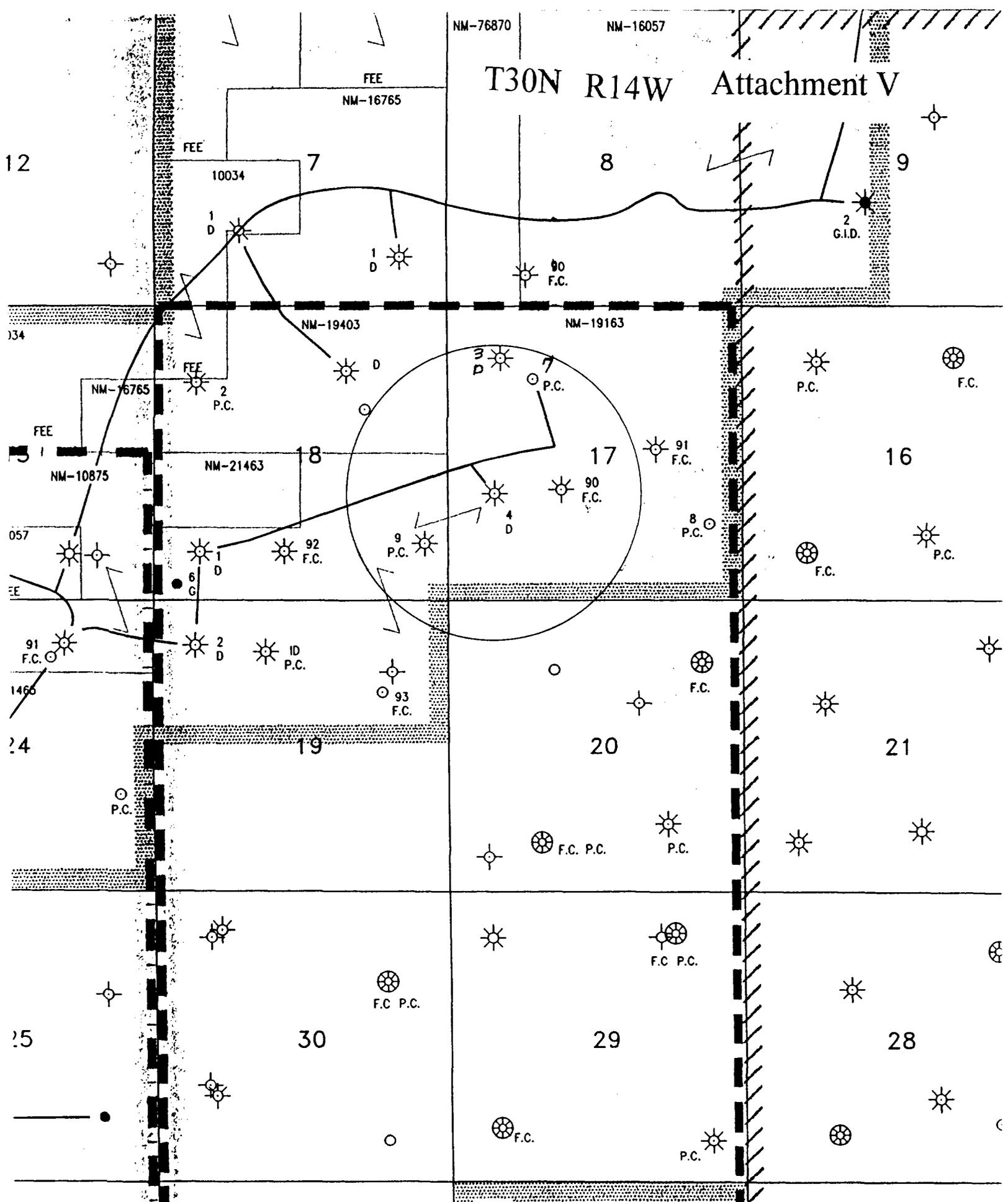
Attached are copies of the certified mail receipts notifying the offset lease owners. A copy of the letter provided is attached.

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

NM-76870

NM-16057

T30N R14W Attachment V



LENGEND

- | | |
|--|--|
|  PRODUCING GAS WELL |  PLUGGED & ABANDONED GAS WELL |
|  PRODUCING OIL WELL |  PLUGGED & ABANDONED OIL WELL |
|  SHUT IN GAS WELL |  TEMPORARILY ABANDONED GAS WELL |
|  SHUT IN OIL WELL |  TEMPORARILY ABANDONED OIL WELL |
|  INJECTION WELL |  WATER WELL |
|  DISPOSAL WELL | |

Scale: 1" - 2100'

Turk's Toast #4, Sec 17, T30N, R14W, 1850' FSL & 790' FWL

Lease Owners Map

Attachment V

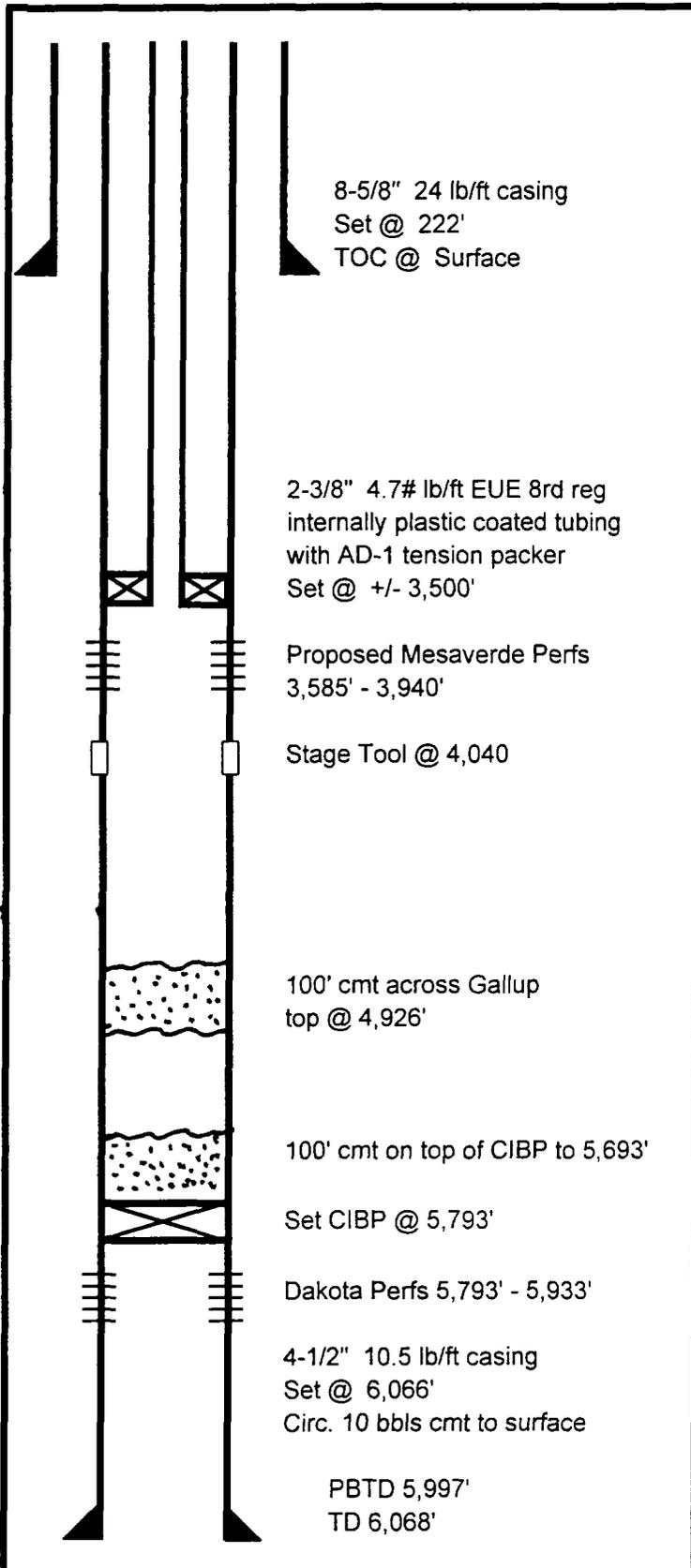
T30N R14W

Dugan Prod. 7	Dugan Prod. 8	Dugan Prod. 9	OPEN
Dugan Prod. 18	Dugan Prod. 17 ♂ Turk's Toast #4 SWD	Richardson Operating Co. 16	
Dugan Prod. 19	Richardson Operating Co. & 20	Richardson Operating Co. 21	
Questar Exploration	Questar Exploration	Richardson Operating Co.	

T30N R14W

INJECTION WELL SCHEMATIC

Attachment VI



OPERATOR: Dugan Production Corp.
 LEASENAME: Turk's Toast
 LEASE #: NM 19163
 API #: 30 - 045 - 27360
 WELL #: 4
 SECTION: 17
 TOWNSHIP: 30 N
 RANGE: 14 W
 UNIT: L San Juan County, New Mexico
 1,850' from South Line, 790' from West Line

All depths Relative to Kelly Bushing 12.0'

GLE: 5,625'
 KBE: 5,637'
 DF: 5,636'

Tubular Data

Surface Casing 8-5/8" 12-1/4" Hole
 landed @ 222'
 Cemented with 145 sx (171 cu.ft.)
 TOC @ surface determined by circulation.

Production Casing 4-1/2" 7-7/8" Hole
 landed @ 6,066'
 Cemented with 1130 sx (2121 cu.ft.)
 TOC @ surface determined by circulation

Injection Interval: 3,585' - 3,940'
 Mesaverde Point Lookout Formation

Tubing Size 2-3/8" Internally Plastic Coated
 with Baker Model AD-1 tension
 packer Set @ +/- 3,500'

Well was originally drilled as a Basin Dakota gas well
 No other zones have been perforated
 Overlying gas formation is the Picture Cliffs Sandstone
 formation bottom @ 1,267'

Dugan Production Corp.
 Application to Dispose of Water in the Mesaverde Point Lookout Formation
 Turk's Toast #4

Attachment VI

WELL	FTGES	SEC	TN	RG	STATUS	DATE DRILLED	DEPTH	SURFACE CASING	PRODUCTION CASING	PLUGGING INFORMATION
Turk's Toast #3	950' FNL 910' FWL	17	30N	14W	(CO) Completed & producing Basin Dakota	9 June 1989	5956	8 5/8" @ 213' Cemented to surface.	4 1/2" @ 5958' Stage Tool @ 3816' 1st stage cmt w/ 400 sx (624 cu.ft.) 50-50 Poxmix w/ 2% gel 12.5 #/sx gilsonite tailed by 100 sx (118 cu.ft.) Class "B" w/ 1/4 #/sx celloflake. TOTAL 1st stage 742 cu.ft. 2nd stage cmt w/ 800 sx (1775 cu.ft.) 65/35/12 tailed by 125 sx (195 cu.ft.) Class "B" w/ 4% gel. TOTAL 2nd stage 1970 cu.ft. TOTAL cmt pumped 2712 cu.ft. Circ. 25 bbis cmt to surface.	
Turk's Toast #4 (Proposed well for salt water disposal into the Mesaverde Point Lookout Formation)	1850' FSL 790' FWL	17	30N	14W	(CO) Completed & producing Basin Dakota	20 Dec 1989	6068	8 5/8" @ 222' Cemented to surface.	4 1/2" @ 6066' Stage Tool @ 4040' 1st stage cmt w/ 280 sx (428 cu.ft.) 50-50 Poxmix w/ 2% gel 12.5 #/sx gilsonite tailed by 100 sx (118 cu.ft.) Class "B" w/ 1/4 #/sx celloflake. TOTAL 1st stage 546 cu.ft. 2nd stage cmt w/ 625 sx (1380 cu.ft.) 65/35/12 tailed by 125 sx (195 cu.ft.) Class "B" w/ 4% gel. TOTAL 2nd stage 1575 cu.ft. TOTAL cmt pumped 2121 cu.ft. Circ. 10 bbis cmt to surface.	5 46 cu.ft.

Dugan Production Corp - Turk's Toast Area salt water disposal well proposal

Those wells within the 2-mile radius of review are listed.

Attachment VI

OPERATOR	WELL NAME	WELL NO	POOL	SEC	TWN	RGE	UL	FTAGE NS	FTAGE EW	TD	STATUS
DUGAN PRODUCTION CORP	TURKS TOAST	7	TWIN MOUNDS FR SND PC	17	30N	14W	F	1335/N			
DUGAN PRODUCTION CORP	TURKS TOAST	91	BASIN FRUITLAND COAL	17	30N	14W	G	2500/N	1650/E		SP
DUGAN PRODUCTION CORP	TURKS TOAST	8	TWIN MOUNDS FR SND PC	17	30N	14W	I	1340/S	725/E		
DUGAN PRODUCTION CORP	TURK'S TOAST	90	BASIN FRUITLAND COAL	17	30N	14W	K	1850/S	1850/W		SP
DUGAN PRODUCTION CORP	TURKS TOAST	3	BASIN DAKOTA	17	30N	14W	D	950/N	910/W	5956	CO
DUGAN PRODUCTION CORP	TURKS TOAST	4	BASIN DAKOTA	17	30N	14W	L	1850/S	790/W	6068	CO
DUGAN PRODUCTION CORP	TURKS TOAST	1	BASIN DAKOTA	18	30N	14W	M	790/S	790/W	5910	CO
DUGAN PRODUCTION CORP	RIVIERA COM	90	BASIN FRUITLAND COAL	18	30N	14W		1955/N	1335/E		
DUGAN PRODUCTION CORP	RIVIERA COM	2	TWIN MOUNDS FR SND PC	18	30N	14W	E	1350/N	660/W	930	CO
DUGAN PRODUCTION CORP	TURKS TOAST	9	TWIN MOUNDS FR SAND PC	18	30N	14W	P	915/S	665/E	1230	CO
DUGAN PRODUCTION CORP	TURKS TOAST COM	92	BASIN FRUITLAND COAL	18	30N	14W	N	805/S	2195/W	1190	CO
DUGAN PRODUCTION CORP	TURK'S TOAST	6	GAMBLERS MESA GALLUP	18	30N	14W	M	400/S	330/W	5352	CO
DUGAN PRODUCTION CORP	RIVIERA	1	BASIN DAKOTA	18	30N	14W	B	1120/N	1850/E	5900	CO
DUGAN PRODUCTION CORP	TURK'S TOAST	10	TWIN MOUNDS FR SND PC	19	30N	14W	C	660/N	1980/W	1145	CO
HUMBLE OIL & REFINING CO	N KIRTLAND UNIT	1	BASIN DAKOTA	19	30N	14W	A	1230/N	998/E	5873	PA
DUGAN PRODUCTION CORP	TURK'S TOAST	93	BASIN FRUITLAND COAL	19	30N	14W		1635/N	1360/E		
RICHARDSON OPERATING CO	WF FEDERAL 19	3	TWIN MOUNDS PC	19	30N	14W		1698/S	1931/W		
RICHARDSON OPERATING CO	WF FEDERAL 19	3	BASIN FRUITLAND COAL	19	30N	14W		1698/S	1931/W		
DUGAN PRODUCTION CORP	TURKS TOAST	2	BASIN DAKOTA	19	30N	14W	D	790/N	790/W	5903	CO
BRITISH-AMER OIL PROD CO	GOV'T REILEY	1	WC D3;GALLUP	20	30N	14W	M	660/S	660/W	5323	PA
STONE DRILLING INC	SAN JUAN 30 14 UNIT	1	WC D3;GALLUP	20	30N	14W	G	1905/N	1990/E	5360	PA
RICHARDSON OPERATING CO	WF FEDERAL 20	4	TWIN MDS FT SND PC EXT	20	30N	14W	C	1175/N	1905/W		AL
RICHARDSON OPERATING CO	WF FEDERAL 20	2	BASIN FRUITLAND COAL	20	30N	14W	A	1086/N	866/E	1325	CO
RICHARDSON OPERATING CO	WF FEDERAL 20	1	TWIN MOUNDS FRT SD PC EXT	20	30N	14W	N	915/S	1600/W	1300	CO
RICHARDSON OPERATING CO	WF FEDERAL 20	1	BASIN FRUITLAND COAL	20	30N	14W	N	915/S	1600/W	1300	CO
RICHARDSON OPERATING CO	WF FEDERAL 20	2	TWIN MOUNDS PC	20	30N	14W	A	1086/N	866/E	1325	CO
RICHARDSON OPERATING CO	WF FEDERAL 20	3	TWIN MOUNDS PC EXT	20	30N	14W	O	1200/S	1515/E	1305	CO

American Energy Services

Attachment VII - 4a



Water Analysis Results Sheet

Farmington NM
708 S. Tucker
Phone: (505) 325-4192
Fax: (505) 564-3524
Zip: 87401

Operator:	Dugan Production	Date:	June 25, 2002
Well :	Turks Toast #92	District:	Farmington
Formation:	Fruitland Coal	Requested by:	John Alexander
County:	n/a	Technician:	Mike Brown
Depth:	n/a	Source:	n/a

PHYSICAL AND CHEMICAL DETERMINATION

SPECIFIC GRAVITY:	1	AT 67 Degrees F.	
pH:	8.8		SULFATES: 0 ppm
IRON:	0	ppm	CALCIUM: 280.0 ppm
H ₂ S:	0	ppm	BICARBONATES: 1781.2 ppm
MAGNESIUM:	899.1	ppm	RESISTIVITY: 1.95 ohm/meter
			CHLORIDES: 4400.0 ppm
			SODIUM : 1505.3 ppm
			POTASSIUM: 5.0 ppm
			TDS: 8872.53 ppm

CaCO₃ Scale Tendency = Remote
CaSO₄ Scale Tendency = Remote

REMARKS:

Data contained in this document is based on the best information & most current test procedures and materials available. No liability is expressed or implied.



American Energy Services

Water Analysis Results Sheet
Farmington NM
708 S. Tucker
Phone:(505)325-4192
Fax:(505)564-3524
Zip:87401

Attachment VII - 4b

Operator:	Dugan Porducion	Date:	June 25, 2002
Well :	Turks Toast #10	District:	Farmington
Formation:	Pictured Cliff	Requested by:	John Alexander
County:	n/a	Technician:	Mike Brown
Depth:	n/a	Source:	n/a

PHYSICAL AND CHEMICAL DETERMINATION

SPECIFIC GRAVITY:	1	AT 67 Degrees F.	
pH:	8.3		SULFATES: 0 ppm
			CALCIUM: 680.0 ppm
IRON:	0	ppm	BICARBONATES: 1769.0 ppm
			RESISTIVITY: 1.94 ohm/meter
H2S:	0	ppm	CHLORIDES: 4400.0 ppm
			SODIUM : 1178.1 ppm
			POTASSIUM: 5.0 ppm
MAGNESIUM:	826.2	ppm	TDS: 8860.254 ppm

CaCO₃ Scale Tendency = Probable
CaSO₄ Scale Tendency = Remote

REMARKS:

Data contained in this document is based on the best information & most current test procedures and materials available. No liability is expressed or implied.



American Energy Services

Water Analysis Results Sheet
Farmington NM
708 S. Tucker
Phone:(505)325-4192
Fax:(505)564-3524
Zip:87401

Attachment VII – 4c

Operator:	Dugan Porducion	Date:	June 25, 2002
Well :	Turks Toast #1	District:	Farmington
Formation:	Dakota	Requested by:	John Alexander
County:	n/a	Technician:	Mike Brown
Depth:	n/a	Source:	n/a

PHYSICAL AND CHEMICAL DETERMINATION

SPECIFIC GRAVITY:	1	AT 67 Degrees F.	
pH:	7.3	SULFATES:	0 ppm
IRON:	0 ppm	CALCIUM:	680.0 ppm
H2S:	0 ppm	BICARBONATES:	585.6 ppm
MAGNESIUM:	923.4 ppm	RESISTIVITY:	0.2 ohm/meter
		CHLORIDES:	20000.0 ppm
		SODIUM :	10655.7 ppm
		POTASSIUM:	91.0 ppm
		TDS:	32935.91 ppm

CaCO3 Scale Tendency = Remote

CaSO4 Scale Tendency = Remote

REMARKS:

Data contained in this document is based on the best information & most current test procedures and materials available. No liability is expressed or implied.



American Energy Services

Water Analysis Results Sheet
Farmington NM
708 S. Tucker
Phone:(505)325-4192
Fax:(505)564-3524
Zip:87401

Attachment VII - 4d

Operator:	Dugan Porducion	Date:	June 25, 2002
Well :	Turks Toast #6	District:	Farmington
Formation:	Gallup	Requested by:	John Alexander
County:	n/a	Technician:	Mike Brown
Depth:	n/a	Source:	n/a

PHYSICAL AND CHEMICAL DETERMINATION

SPECIFIC GRAVITY:	1.01	AT 67 Degrees F.	
pH:	7.5		SULFATES: 0 ppm
			CALCIUM: 475.2 ppm
IRON:	0	ppm	BICARBONATES: 253.7 ppm
			RESISTIVITY: 0.55 ohm/meter
H2S:	0	ppm	CHLORIDES: 9108.9 ppm
			SODIUM : 2502.4 ppm
			POTASSIUM: 29.0 ppm
MAGNESIUM:	1563.9	ppm	TDS: 13933.63 ppm

CaCO3 Scale Tendency = Remote

CaSO4 Scale Tendency = Remote

REMARKS:

Data contained in this document is based on the best information & most current test procedures and materials available. No liability is expressed or implied.



American Energy Services

Water Analysis Results Sheet

Farmington NM
708 S. Tucker
Phone:(505)325-4192
Fax:(505)564-3524
Zip:87401

Attachment VII - 5a

Operator:	Dugan Production	Date:	May 24, 2002
Well :	Locke #1	District:	Farmington
Formation:	Mesa Verde	Requested by:	John Alexander
County:	San Juan	Technician:	Mike Brown
Depth:	n/a	Source:	Well

PHYSICAL AND CHEMICAL DETERMINATION

SPECIFIC GRAVITY:	1.05	AT 67 Degrees F.	
pH:	6.89		SULFATES: 0 ppm
IRON:	10	ppm	CALCIUM: 647.6 ppm
H2S:	0	ppm	BICARBONATES: 348.6 ppm
			RESISTIVITY: 0.12 ohm/meter
			CHLORIDES: 24000.0 ppm
			SODIUM : 12274.5 ppm
MAGNESIUM:	1411.7	ppm	POTASSIUM: 300.0 ppm
			TDS: 38992.56 ppm

CaCO3 Scale Tendency = Remote
CaSO4 Scale Tendency = Remote

REMARKS:

Data contained in this document is based on the best information & most current test procedures and materials available. No liability is expressed or implied.

Attachment XIV - 1

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY	
<ul style="list-style-type: none"> 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. 	A. Received by (Please Print Clearly)	B. Date of Delivery
	Virginia Barber, BLM 11/11/99	
1. Article Addressed to: Mr. Ray Sanchez Bureau of Land Management 1235 La Plata Hwy. Farmington, NM 87401	C. Signature	<input type="checkbox"/> Agent <input checked="" type="checkbox"/> Addressee
	D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input type="checkbox"/> No	
2. Article Number (Copy from service label) 7000 1670 0010 0492 5022	3. Service Type <input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail <input type="checkbox"/> Registered <input checked="" type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.	
	4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes	
PS Form 3811, July 1999 Domestic Return Receipt 102595-00-M-0952		

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY	
<ul style="list-style-type: none"> 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. 	A. Received by (Please Print Clearly)	B. Date of Delivery
	Shari Reeburke 7/13/99	
1. Article Addressed to: Mr. Dave Nelson, District Foreman Questar Exploration + Production P.O. Box 1656 Cortez, CO 81321	C. Signature	<input type="checkbox"/> Agent <input checked="" type="checkbox"/> Addressee
	D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input type="checkbox"/> No	
2. Article Number (Copy from service label) 7000 1670 0010 0492 5008	3. Service Type <input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail <input type="checkbox"/> Registered <input checked="" type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.	
	4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes	
PS Form 3811, July 1999 Domestic Return Receipt 102595-00-M-0952		

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY	
<ul style="list-style-type: none"> 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. 	A. Received by (Please Print Clearly)	B. Date of Delivery
	David Richardson 7/11/99	
1. Article Addressed to: Mr. David Richardson Richardson Operating Co. 3100 La Plata Hwy. Farmington, NM 87401	C. Signature	<input type="checkbox"/> Agent <input checked="" type="checkbox"/> Addressee
	D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input type="checkbox"/> No	
2. Article Number (Copy from service label) 7000 1670 0010 0492 5015	3. Service Type <input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail <input type="checkbox"/> Registered <input checked="" type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.	
	4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes	
PS Form 3811, July 1999 Domestic Return Receipt 102595-00-M-0952		

AFFIDAVIT OF PUBLICATION

Ad No. 46566

STATE OF NEW MEXICO
County of San Juan:

CONNIE PRUITT, being duly sworn says:
That she is the 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):
Friday, August 2, 2002.

And the cost of the publication is \$25.46

Connie Pruitt

ON 8/15/02 CONNIE PRUITT appeared before me, whom I know personally to be the person who signed the above document.

Patricia C. B.
My Commission Expires ~~April 2, 2004.~~

May 3, 2003

COPY OF PUBLICATION

918	Legals
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DUGAN PRODUCTION Corp., P.O. Box 420, Farmington, NM 87499 (505-325-1821), has made application to the New Mexico Oil Conservation Division to convert the Turk's Toast #4 to salt water disposal service. Contact for this application is Terry Kochis. This well is located 1850' FSL & 790' FWL of Section 17, T-30N, R-14W, San Juan County, New Mexico. Disposal will be into the Mesaverde Point Lookout formation at 3585'. Maximum injection pressure will be 717 psi. Maximum injection rate will be 1000 barrels of water daily. Interested parties must file objections or request for hearing with the Oil Conservation Division, 1220 South St. Francis Drive, Santa Fe, NM 87505. within 15 days.

Legal No. 46566, published in The Daily Times, Farmington, New Mexico, Friday, August 2, 2002.