المعادي	, and a second provide constant and a second provide a second provide second provide second provide second prov	SOLVE FOR DATE FOR DEVISION USE CARLY
		MEW MEXICO DIL CONSERVATION DIVISION
		- Engineering Bureau -
	a series a super manimum belances of the set of the big of the set of the big of the set	ADMINISTRATIVE APPLICATION CHECKLIST
	THIS CHECKLIST IS	MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE
Арр	[DHC-Do [PC-1	ms: andard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication] wnhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling] Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement] [WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion] [SWD-Salt Water Disposal] [IPI-Injection Pressure Increase] alified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]
[1]	TYPE OF A [A]	PPLICATION - Check Those Which Apply for [A] Location - Spacing Unit - Simultaneous Dedication NSL NSP SD
	Chec [B]	k One Only for [B] or [C] Commingling - Storage - Measurement DHC CTB PLC PC OLS OLM
	[C]	Injection - Disposal - Pressure Increase - Enhanced Oil Recovery
	[D]	Other: Specify
[2]	NOTIFICAT [A]	TON REQUIRED TO: - Check Those Which Apply, or I Does Not Apply Working, Royalty or Overriding Royalty Interest Owners
	[B]	Offset Operators. Leaseholders or Surface Owner
	[C]	Application is One Which Requires Published Legal Notice
	[D]	Notification and/or Concurrent Approval by BLM or SLO U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office
	(E]	For all of the above, Proof of Notification or Publication is Attached, end/or,
	[ <b>F</b> ]	Waivers are Attached
[3]		CURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE ATION INDICATED ABOVE.

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[4] **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is accurate and complete to the best of my knowledge. I also understand that no action will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

Kurt Fagrelius Print of Type Name	Signature	Fignelin	Geology Title	<u></u>
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kfagrelius@duganproduction.com e-mail Address STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

**Oil Conservation Division** 1220 South St. Francis Dr. Santa Fe, New Mexico 87505

	APPLICATION FOR AUTHORIZATION TO INJECT
I.	PURPOSE:       Secondary Recovery       Pressure Maintenance       X       Disposal       Storage         Application qualifies for administrative approval?       Yes       No1142       YZ
II.	OPERATOR: Dugan Production Corp.
	ADDRESS:709 East Murray Drive, Farmington, New Mexico 87401
	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 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:
	<ol> <li>Proposed average and maximum daily rate and volume of fluids to be injected;</li> <li>Whether the system is open or closed;</li> <li>Proposed average and maximum injection pressure;</li> <li>Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,</li> <li>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.).</li> </ol>
*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: V.P. Exploration
	NAME:     Kurt Fagrelius     TITLE:     V.P. Exploration       SIGNATURE:     Nurt Fagrelius     DATE:     1/17/2007
*	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:
DISTI	RIBUTION: 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 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.

### Side 2

### Dugan Production Corp.

### West Bisti SWD #1

**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 West Bisti SWD #1well, located 2500' FNL & 1855' FEL, Sec. 35, Twn. 26N, Rng. 13W, San Juan Co., NM. Produced water will be injected into the Entrada Sandstone between 6915' and 7115'. The maximum injection pressure will be 1383 psi and the maximum injection rate will be 6,000 barrels of water daily.

The well will be a new drill for the purpose of salt water disposal. The permit to drill is pending. Upon approval, plans are to begin drilling the well in September or October of 2007. 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 zones in the well.

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

Dugan Production Corp.

### West Bisti SWD #1

### Part III. Well Data

A. Tabular Information

1. Name:	West Bisti SWD #1
Location:	2500' FNL & 1855' FEL Sec. 35, T26N, R13W San Juan Co., NM
2. Surface Casing:	8-5/8" 24#, J-55 set @ 480'. Cemented with 300- cu.ft. Circulate cement to surface. Hole size - 12-1/4".
Production Casing	5:5-1/2" 17#, N-80 and 15.5# J-55 set @ 7165'. Cement in three stages with stage tools at 5000' and 1650' using 380 cu.ft. in first stage, 730 cu.ft. in the second stage and 430 cu.ft. in the third stage. Circulate cement to surface on third stage. Hole size - 7-7/8".
3. Injection Tubing:	2-7/8", EUE, 6.5#, plastic lined tubing.
4. Packer:	Baker Model AD-1 tension packer, plastic lined, will be set at 6865' or 50' above the upper most perforation.

- B. Additional Information
  - 1. Injection Interval: Entrada Sandstone.
  - 2. The injection interval (Entrada 6915' 7115') will be perforated.
  - 3. The well (West Bisti SWD #1) will be drilled for the purpose of injection.
  - 4. Only the injection interval is to be perforated.
  - 5. Fruitland Coal / Pictured Cliffs Sandstone Approx. 1150', Gallup Sandstone Approx. 4595'.

Side 1	INJECTION	INJECTION WELL DATA SHEET		
OPERATOR: Dugan Pr	Dugan Production Corp.			
<b>vo</b> 1	R: West Bisti SWD #1			
WELL LOCATION: 25	- 1	G 35	26N	13W
		UNIT LETTER SECTION	TOWNSHIP	RANGE
WELLBOK	WELLBORE SCHEMATIC	WELL Surface	WELL CONSTRUCTION DATA	
			Cuont	
		Hole Size: 12-1/4"	Casing Size: 8-5/8"	-
1	— 8-5/8", 24# Casing	Cemented with: 220 sx.	or 300	ft <sup>3</sup>
	Set @ 480', TOC @ Surface	Top of Cement: Surface	Method Determined: <sup>Will</sup>	ill Circulate
	Stage Tool @ 1650'	Intermed	Intermediate Casing	
	Stage Tool @ 5000'			
		Hole Size:	Casing Size:	
<u>^</u>	Internal Plastic Coated	Cemented with:sx.	or	ft <sup>3</sup>
	2-1/0 , 0.4# EDE TUDINY	Top of Cement:	Method Determined:	
		Producti	Production Casing	
X X	- Baker Model AD-1 Tension Packer Set @ 6865'	Hole Size: 7-7/8"	Casing Size: 5-1/2"	=
	- 5-1/2", 17# and 15.5# Casing	Cemented with: 750 sx.	or 1540	ft <sup>3</sup>
	Set @ /103 , DC Surface	Top of Cement: Surface	Method Determined:	Will Circulate
	Perforate 6915' - 7115'	Total Depth: 7165 '		
			Injection Interval	-
		6915 fr	feet to 7115	
	Total Depth 7165'	(Perforated or Open	(Perforated or Open Hole; indicate which)	

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# **INJECTION WELL DATA SHEET**

Tub	Tubing Size: 2-7/8" Lining Material: Plastic
Туј	Model AD-1 set in to
Pac	Packer Setting Depth: 6865' (50' above uppermost perforation)
Oth	Other Type of Tubing/Casing Seal (if applicable):
	Additional Data
1.	Is this a new well drilled for injection? X Yes No
	If no, for what purpose was the well originally drilled?
2.	2. Name of the Injection Formation: Entrada Sandstone
μ	Name of Field or Pool (if applicable): Not Applicable

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Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: Fruitland Coal 800', Gallup Ss. 4600'.

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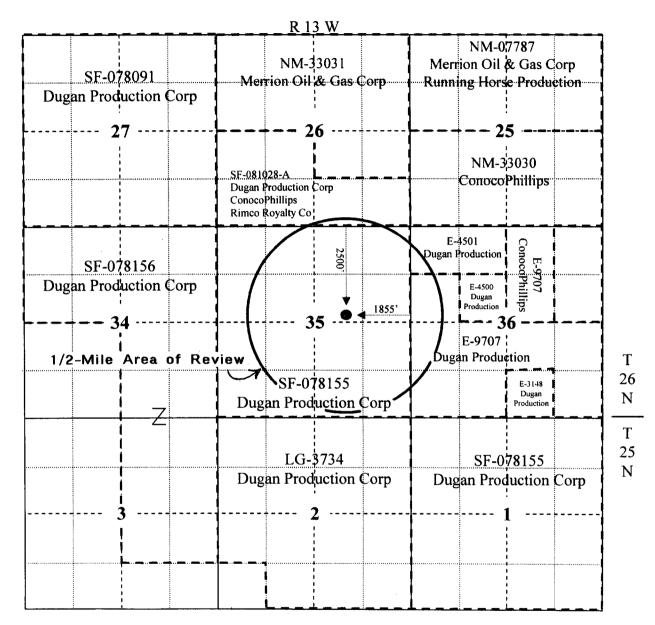
Has the well ever been perforated in any other zone(s)? List all such perforated

intervals and give plugging detail, i.e. sacks of cement or plug(s) used. <u>New well, will be</u>

drilled for purpose of injection into Entrada Ss., no other zones will be perf'd.

Side 2

### Va. Lease Owner Map



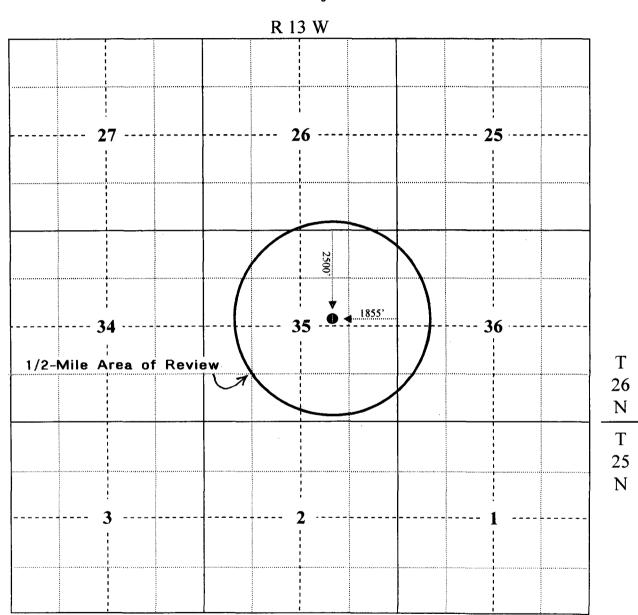
### **OFFSET OPERATOR/LESSEE**

Dugan Production Corp. West Bisti SWD #1 Sec. 35, T26N, R13W 2500' FNL and 1855' FEL San Juan County, New Mexico

Salt Water Disposal Application

### Vb. Surface Owner Map

### SURFACE OWNERSHIP

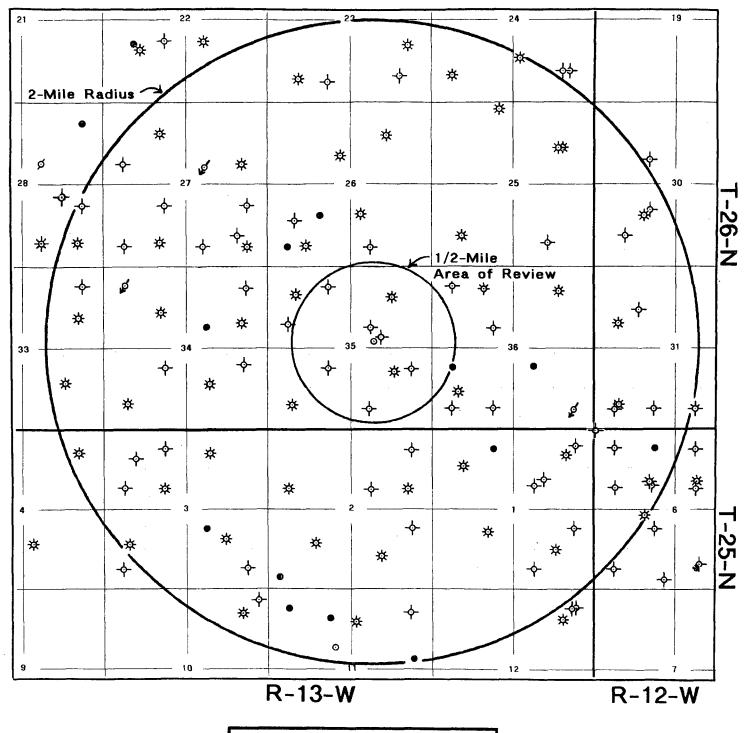


All Affected Lands are Navajo Tribal Trust Lands

Dugan Production Corp. West Bisti SWD #1 Sec. 35, T26N, R13W 2500' FNL and 1855' FEL San Juan County, New Mexico

Salt Water Disposal Application

### Vc. Well Map



Dugan Production Corp. West Bisti SWD #1 Sec. 35, T26N, R13W 2500' FNL and 1855' FEL San Juan County, New Mexico

Salt Water Disposal Application

### Dugan Production Corp.

### West Bisti SWD #1

### Part VI. Data on offset wells

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A tabulation of data on all existing, offset wells (shown on the Well Map Part Vc.) that highlights those wells that fall within the <sup>1</sup>/<sub>2</sub>-mile area of review is presented on Attachment VIa. No wells within the area of review penetrate the proposed injection zone.

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DUGAN PROD	DUGAN PROD	DUGAN PROD	DUGAN PROD	DUGAN PROD		DIGAN BBOD	DUGAN PROD	MERRION O&G	MERRION O&G	DUGAN PROD	MERRION O&G	MERRION O&G	MERRION O&G	MERRION O&G	S UNION EXPL CO	TEXAKOMA O&G	CALPINE NTRL GAS	RUNNING HORSE	CALPINE NTRL GAS	MERRION O&G	SULLIVAN & HILL	CALPINE NTRL GAS	CALPINE NTRL GAS	DUGAN PROD	B M G DRLG CORP	DUGAN PROD	DUGAN PROD	DUGAN PROD	DUGAN PROD	B M G DRLG CORP	DUGAN PROD	OPERATOR	Attachment Vla.
W BISTI UNIT	PATRIOT	W BISTI UNIT	W BISTI UNIT	PATRIOT		W BISTI LINIT	W BISTI LINIT	SERENDIPITY	SERENDIPITY	W BISTI UNIT	SERENDIPITY COM	SERENDIPITY	SERENDIPITY	SERENDIPITY	SX FED 25	BLACK HILLS	GALLEGOS FED	DOME FED	STRIDER	FED 24	FLOOD	GALLEGOS FED	GALLEGOS FED	PAUL REVERE	FOSTER	PAUL REVERE	PAUL REVERE	PAUL REVERE	PAUL REVERE COM	FOSTER	PAUL REVERE COM	WELLNAME	Tabulation of Data on
134	91	125	126	S06	ī	126	137	3R	ы	135			сл	4					25			2	24	204	ы	91	91S	210	95	2	95S	WELL NO.	<b>Offset Wells</b>
26N	26N	26N	26N	26N		220 Nac	Nac	26N	26N	26N	26N	26N	26N	26N	26N	26N	26N	26N	26N	26N	26N	26N	26N	26N	26N	26N	26N	26N	26N	26N	26N	INNN	ells.
13W	13W	13W	13W	13W		13/0	1.3W	13W	13W	13W	13W	13W	13W	13W	13W	13W	13W	13W	13W	13W	13W	13W	13W	13W	13W	13W	13W	13W	13W	13W	13W		
27	27	27	27	27	20	22	AC B	26	26	26	26	26	26	26	25	25	25	25	25	24	24	24	24	23	23	23	23	22	22	22	22	SEC	
—	I	G	Ш	С			Z	Ν	Г	к	ے	د	п	Β	0	Z	Т	Т	ဂ	P	Ρ	Μ	J	P	Z	Ν	-		L	У	ے	<b>UL</b>	
1980/S	1980/N	2163/N	1980/N	N/066		860/9	660/S	691/S	1500/S	1650/S	1650/S	1650/S	1710/N	1080/N	810/S	1000/S	1434/N	1450/N	200/N	S/066	S/066	S/006	1450/S	790/S	660/S	790/S	1850/S	1850/S	1650/S	1980/S	1980/S	FTG NS	Dugan Produ
660/E	(790/E	2031/E	660/W	1845/W		1078/E	REN/W	1268/W	M/006	1650/W	2310/E	2310/E	2370/W	1450/E	1520/E	1000/W	1041/E	1190/E	2180/W	790/E	990/E	700/W	2380/E	980/E	1980/W	1040/W	750/E	M/066	1200/W	1980/W	1980/E	FIGEW	uction Corp.,
PA	co	WI	PA	8	77		S	င္ပ	PA	co	co	ZA	со О	8	PA	8	င္ပ	င္ပ	8	PA	PA	co	8	PA	PA	8	8	co	8	PA	co	STATUS	WEST BIS
GALLUP	FRUIT COAL	GALLUP SWD	GALLUP	FRUIT COAL			GALLIP	FRUIT COAL	FRUIT COAL	GALLUP	FRUIT COAL	GALLUP	FRUIT COAL	FRUIT COAL	PICT CLIFFS	1-1	FRUIT COAL	FRUIT SAND PC	FRUIT COAL	FRUIT SAND PC	FRUIT SAND PC		FRUIT COAL	PICT CLIFFS	GALLUP	FRUIT COAL	FRUIT COAL	GALLU		GALLL	FRUIT		Dugan Production Corp., WEST BISTI SWD #1, S.35, T26
5080	1370	5074	5165	1425	COLC		5108	1462	1385	5078	5120	5120	1400	1395	1304	1365	1385	1340	1384	1350	1348	1370	1343	1340	5104	1383	1350	5225	1460	5191	1465	TD S	T26N, R13W

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DUGAN PROD	DUGAN PROD	DUGAN PROD	DUGAN PROD	DUGAN PROD	DUGAN PROD	DUGAN PROD	DUGAN PROD	BRITISH-AMER OIL	DUGAN PROD	BRITISH-AMER OIL	DUGAN PROD	DUGAN PROD	DUGAN PROD	DUGAN PROD	DUGAN PROD	DUGAN PROD	DUGAN PROD	DUGAN PROD	DUGAN PROD	DUGAN PROD	DUGAN PROD	DUGAN PROD	DUGAN PROD	DUGAN PROD	DUGAN PROD	DUGAN PROD	DUGAN PROD	CHEVRON USA	DUGAN PROD	DUGAN PROD	DUGAN PROD	OPERATOR	Attachment Vla. 1
WBISTLUNIT	<b>W BISTI UNIT</b>	W BISTI UNIT	JETER	W BISTI UNIT		WBISTISWD	CISCO COM	SALGE	SALGE FED A	SALGE B	SALGE FED A	W BISTI UNIT	CISCO COM	W BISTI UNIT	W BISTI UNIT	SALGE FED A	SALGE FED A	W BISTI UNIT	W BISTI UNIT	PATRIOT	W BISTI UNIT	W BISTI UNIT	W BISTI UNIT	W BISTI UNIT	PATRIOT	W BISTI UNIT	PATRIOT	W BISTI UNIT	PATRIOT	W BISTI UNIT	W BISTI UNIT	WELL NAME	<b>Fabulation of Data on</b>
150	149	151	5S	146	5.3		91	4	94S	з	94	152	91S	144	145	95S	95	143	131	93S	124	127	132	141	92	138	91S	139	90	140	133	WELL NO.	<b>Offset Wells</b>
26N	26N	26N	26N	26N	26N	26N	26N	26N	26N	26N	26N	26N	26N	26N	26N	26N	26N	26N	26N	26N	26N	26N	26N	26N	26N	26N	26N	26N	26N	26N	26N	TWN	ells.
NEL -	13W	13W	13W	13W	<b>I BWE</b>	13W	13W	13W	13W	13W	13W	13W	13W	13W	13W	13W	13W	13W	13W	13W	13W	13W	13W	13W	13W	13W	13W	13W	13W	13W	13W	RGE	
35	35	35	35	35	- 35	35	34	34	34	34	34	34	34	34	34	33	33	33	28	28	28	28	28	28	28	27	27	27	27	27	27	SEC	
G	G	m	U	C C	A.	G	≤	⋝	د	_	H	ດ	т	σ	A	-	I	A	د	. -	Þ	പ	_	0	0	ס	ס	0	z	М	ᠵ	UE	
N/086L	2310/N	1880/N	900/N	660/N	N/066	2500/N	790/S	1980/S	1450/S	2090/S	1800/N	1980/N	1500/N	660/N	660/N	1450/S	1650/N	660/N	2200/S	S/062	660/N	1980/N	1980/S	660/S	790/S	S/066	660/S	660/S	790/S	660/S	S/0861	FIGNS	Jugan Produ
<u>1980/E</u>	1650/E	660/W	900/W		1300/E	1855/E	790/W	1980/W	1850/E	715/E	790/E	1980/E	1850/W	660/W	660/E	1250/E	790/E	660/E	1400/E	790/E	660/E	1980/E	660/E	1980/E	1980/E	990/E	660/E	2080/E	1850/W	660/W	1980/W	FTG EW	uction Corp., V
PA	PA -	PA	co	PA PA	CO.	PE	co	PA	င္ပ	PA	co	င္ပ	с о	NI N	PA	8	8	PA	PA	10	8	×	PA	PA	8	PA	8	PA	ŝ	PA	PA	STATUS	NEST BIS
GALLUP		GALLUP	FRUIT COAL	GALLUP	FAUTCOAL	ENJEADA SMD	FRUIT COAL	GALLUP	FRUIT COAL	GALLUP	FRUIT COAL	GALLUP	FRUIT COAL	GALLUP SWD	GALLUP	FRUIT COAL	FRUIT COAL	GALLUP	WATER WELL-MV	FRUIT COAL	GALLUP	GALLUP SWD	GALLUP	GALLUP	FRUIT COAL	WATER WELL-MV	FRUIT COAL	GALLUP	FRUIT COAL	GALLUP	GALLUP	POOL	Dugan Production Corp., WEST BISTI SWD #1, S.35, T26N, R
5075	2540	5055	1420	5077	1360	71(65	1420	5075	1430	5075	1370	5082	1480	5185	5120	1475	1460	5133	2020		5178	5203	5116	5123	1470	2545	1420	5065	1420	5100	5130	TD T	N, R13W

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DUGAN PROD	EL PASO NAT GAS	DUGAN PROD	EL PASO NAT GAS	DUGAN PROD	DUGAN PROD	EL PASO NAT GAS	DUGAN PROD	DUGAN PROD	DUGAN PROD	DUGAN PROD	DUGAN PROD	GULF OIL CORP	GULF OIL CORP	DUGAN PROD	DUGAN PROD	DUGAN PROD	DUGAN PROD	REDWOLF PROD	DUGAN PHOD	DUGAN PROD	SG INTEREST I LTD	CHEVRON USA INC	DUGAN PROD	DUGAN PROD	DUGAN PROD	DUGAN PROD	REDWOLF PROD	DUGAN PROD	DUGAN PROD	DUGAN PROD	DUCANPROP	DUGAN PROD	OPERATOR	Attachment Vla. 1
BISTI ST COM	KELLY ST	BISTI ST	KELLY ST	BISTI ST	BISTI ST	KELLY ST	JETER	JETER	W BISTI UNIT	JETER	JETER	W BISTI UNIT	MARYE FED	W BISTI UNIT	W BISTI UNIT	JETER	W BISTI UNIT	BEAH 1S		W BISTI UNIT	W BISTI ST	W BISTI UNIT	W BISTI UNIT	W BISTI UNIT		W BISTI UNIT	BEAR	W BISTI UNIT	JETER			VETER 2000 CONTRACTOR		<b>Tabulation of Data on</b>
1	11	06	10			9	15	4S	165	1	1	164	9	162	160	4	161	~	) <u>51</u>	158	N	168	155	156	148	147	1	159 -	3	153	154	3S	WELL NO.	h Offset Wells
25N	25N	25N	25N	25N	25N	25N	25N	25N	25N	25N	25N	25N	25N	25N	25N	25N	25N	26N	26N	26N	26N	26N	26N	26N	26N	26N	26N	26N	26N	26N	26N	26N	INN	ells.
13W	13W	13W	13W	13W	13W	13W	13W	13W	13W	13W	13W	13W	13W	13W	13W	13W	13W	13W	13W	13W	13W	13W	13W	13W	13W	13W	13W	MEL	13W	13W	<b>T3W</b>	T3W	RGE	
02	02	02	02	02	02	02	01	01	01	01	01	01	01	01	01	01	01	36	30	36	36	36	36	36	36	36	36	35	35	35	35	35	SEC	
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330/W	660/E	790/E	1980/E	660/W	660/W	660/E	1300/E	1000/W	1980/E	1800/W	1800/W	660/E	1650/E	1980/E	1980/W	945/E	600/E	1666/W	660/E	W/086L	819/W	660/W	660/W	1980/E	1980/W	660/W	1190/E	1980/E	790/W	1960/W	660/E	1200/E	FIG EW	Iction Corp., V
လိ	PA	င္ပ	PA	8	ZA	PA	co	8	PA	င္ပ	ZA	PA	PA	PA	င္ပ	ဗ	PA	<u>v</u>	SI≦	PA	:0	PA	co	co	PA	PA	co	PA-	co	PA	PA	CO S	STATU	NEST BI
GALLUP	GALLUP	FRUIT COAL	GALLUP	FRUIT COAL	GALLUP	GALLUP	FRUIT COAL	FRUIT COAL	F	FRUIT COAL	PICT CLIFFS	GALLUP	PICT CLIFFS	GALLUP	GALLUP	FRUIT COAL	GALLUP	HUII CUAL	GALLUP SWD		FRUIT COAL	GALLUP	GALLUP	GALLUP	GALLUP	GALLUP	FRUIT COAL		FRUIT COAL		GALLUP	FRUIT COAL	S POOL	Dugan Production Corp., WEST BISTI SWD #1, S.35, T26
5050	5016	1320	5010	5050	5050	4978	1370	1400	5000	1334	1334	5031	1350	5000	4951	1275	5000	1355	5042	5050	1380	4886	5005	5028	5075	5051	1309	4975	1320	5050	5000	1345	TD	T26N, R13W

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TEXACO INC	CALPINE NAT GAS	EL PASO NAT GAS	DOME PETROLEUM	SG INTEREST I LTD	MERRION O&G	GULF OIL CORP	ELM RIDGE RES	DUGAN PROD	ELM RIDGE RES	BRITISH-AMER OIL	ELM HIDGE RES	GIANT EXPLOR	DUGAN PROD	DUGAN PROD	DUGAN PROD	ELM RIDGE RES	BRITISH-AMER OIL	DUGAN PROD	DUGAN PROD	DUGAN PROD	DUGAN PROD	BRITISH-AMER OIL	GULF OIL CORP	DUGAN PROD	DUGAN PROD	DUGAN PROD	OPERATOR	a.				
HANLAD FED	GIMLI	SULLIVAN	FREW FED	GALLEGOS FED	FREW FED	W BISTI UNIT	JETER COM	MARYE	BERRY FED	BERRY FED	CHAMPLIN FED	BERRY FED	W BISTI COAL 11	SHIPP	W BISTI COAL 10	CHAMPLIN FED	FED A	SALGE FED A COM	SALGE FED A COM	S BISTI SWD	SALGE C	CISCO COM	SALGE FED A	CISCO COM	W BISTI UNIT	M J SALGE	SALGE A	SALGE FED A COM	BISTI ST	BISTI ST COM	WELLNAME	Tabulation of Data on
1	31	1B	11	N	10	166	N		2	ω		-		2		ω	91S	91	S06			06	4	S06	163		З	06	S06	1S	WELL NO.	Offset Wells
26N	26N	26N	26N	26N	26N	25N	25N	25N	25N	25N	25N	25N	25N	25N	25N	25N	25N	25N	25N	25N	25N	25N	25N	25N	25N	25N	25N	25N	25N	25N	NWI	ells.
12W	12W	12W	12W	12W	12W	13W	13W	13W	13W	13W	13W	13W	13W	13W	13W	13W	13W	13W	13W	13W	13W	13W	13W	13W	13W	13W	13W	13W	13W	13W	RGE	
31	31	30	30	30	30	12	12	12	1-1-1-1		11	11	11	11	10	10	04	04	03	03	03	03	03	03	03	03	03	03	02	02	SEC	
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1450/W	810/W	M/066	1790/W	1650/W	1800/W	660/E	990/E	760/E	600/E	2153/W	660/W	W/0861	2510/E	660/E	790/E	330/E	2270/E	790/E	1345/E	660/E	660/W	840/W	1980/E	1980/W	0660/W	M/066	1980/W	1850/E	1650/E	1500/W	FIGEW	iction Corp., V
PA	00	PA	PA	co	PA	PA	co	PA	co	PE	co	00	င္ပ	PA	60	PA	SO	8	co	PA	PA	8	8	8	ΡA	ΡA	PA	8	co	co	STATUS	<b>VEST BIS</b>
BISTI FARM	FRUIT COAL	GALLUP	FRUIT SAND PC	FRUIT COAL	FRUIT SAND PC	GALLUP	FRUIT COAL	WATER WELL	GALLUP	GALLUP	GALLUP	GALLUP	FRUIT COAL	GALLUP	FRUIT COAL	GALLUP	FRUIT COAI	FRUIT COAL	FRUIT COAL	GALLUP	GALLUP	FRUIT COAL	GALLUP	FRUIT COAL	GALLUP	PICT CLIFFS	GALLUP	FRUIT COAL	FRUIT COAL	FRUIT COAL		Dugan Production Corp., WEST BISTI SWD #1, S.35, T2
1300	1340	5033	1295	1310	1295	4982	1295	570	5100		5025	5025	1400	5000	1429	5055	14.35	1420	1540	5044	5200	1500	5200	1480	5250	1446	5123	1370	1420	1440	TO V	T26N, R13W

SUNRAY	ELM RIDGE RES	HIXON DEVELOP	ELM RIDGE RES	GIANT EXPLOR	OPERATOR	Attachment Vla.								
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	78	ഗ	4	თ	N	ω	2T	N	6	81			WELLNO. TWN	n Offset W
25N	25N	25N	25N	25N	25N	25N	25N	25N	25N	26N	26N	26N	<b>NML</b>	ells,
12W	12W	12W	12W	12W	12W	12W	12W	12W	12W	12W	12W	12W	RGE	
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5/N	330/S	1850/N	660/N	660/N	1980/N	660/S	1730/N	2455/S	1980/S	S/099	800/S	660/S	<b>EFG NS</b>	Dugan Prod
5/W	2300/W	1850/W	1980/W	660/W	660/W	660/W	1810/W	1710/W	1980/W	1980/W	W/008	660/W	<b>FIGEW</b>	uction Corp., V
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GALLUP	GALLUP	BISTI FARM	GALLUP	GALLUP	GALLUP	GALLUP	FRUIT COAL	FRUIT COAL	GALLUP	GALLUP	FRUIT COAL	GALLUP	S POOL	Dugan Production Corp., WEST BISTI SWD #1, S.35, T26N, R1
4973	5115	800	5000	5002	50026	5001	1350	1285	5000	5100	1300	5000		<u>9</u> 6N, R13W

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

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Dugan Production Corp.

### West Bisti SWD #1

### Part VII. Operations Plan

- 1. Average Injection Rate: 5,000 bwpd with a maximum of 6,000 bwpd.
- 2. The system will be closed.
- 3. Average Injection Pressure: 1250 psi and the maximum will be 1383 psi.
- 4. The source of injected water will be produced water from Fruitland Coal and Gallup wells in the area (T25N and T26N, R12W and R13W). Attachment VII-4a., VII-4b. and VII-4c. are analyses of the Fruitland Coal and Gallup water in the immediate area The water to be injected is compatible with the water in the disposal zone.
- 5. Injection is for disposal purposes into a zone (Entrada 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 not available.

# Envirotech Labs

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BRACHICAN SOLULIONS HOR A BELLEHICMORROW

**CATION / ANION ANALYSIS** 

### FRUITLAND COAL SE/4, Sec.23, T26N, R13W

Client:	Dugan Prod. Corp	Project #:	06094-003
Sample ID:	Paul Revere 91-S	Date Reported:	01-26-07
Laboratory Number:	39831	Date Sampled:	01-23-07
Chain of Custody:	1958	Date Received:	01-24-07
Sample Matrix:	Water	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	01-25-07
Condition:	Cool & Intact		

Parameter	Analytical Result	Units		
pH	7.56	S.U.		
Conductivity @ 25º C	28,200	umhos/cm		
Total Dissolved Solids @ 180C	16,640	mg/L		
Total Dissolved Solids (Calc)	16,600	mg/L		
SAR	134	ratio		V
Total Alkalinity as CaCO3	1,020			
-	-	mg/L		
Total Hardness as CaCO3	424	mg/L		
Bicarbonate as HCO3	1,020	mg/L	16.72 meg/L	
Carbonate as CO3	<0.1	mg/L	0.00 meg/L	
Hydroxide as OH	<0.1	mg/L	0.00 meg/L	
Nitrate Nitrogen	0.4	mg/L	0.01 meq/L	
Nitrite Nitrogen	0.015	mg/L	0.00 meg/L	
Chloride	9,500	mg/L	268.00 meq/L	
Fluoride	0.57	mg/L	0.03 meg/L	
Phosphate	1.0	mg/L	0.03 meg/L	
Sulfate	<0.1	mg/L	0.00 meg/L	
Iron	0.017	mg/L	0.00 meg/L	
Calcium	94.4	mg/L	4.71 meq/L	
Magnesium	45.9	mg/L	3.78 meg/L	
Potassium	2.75	mg/L	0.07 meg/L	
Sodium	6,340	mg/L	275.79 meq/L	
Cations			284.35 meg/L	
Anions			284.78 meq/L	
Cation/Anion Difference			0.15%	

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983. Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments:

Mistin alter Analyst

Review

### **NIROTECH** and a

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PEACTICAL SOLUTIONS FOR A DEPTHER TOMORROW

CATION / ANION ANALYSIS

### FRUITLAND COAL SE/4, Sec. 35, T26N, R13W

Client:	Dugan Prod. Corp	Project #:	.06094-003
Sample ID:	Jeter #3S	Date Reported:	01-26-07
Laboratory Number:	39833	Date Sampled:	01-23-07
Chain of Custody:	1958	Date Received:	01-24-07
Sample Matrix:	Water	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	01-25-07
Condition:	Cool & Intact		

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Parameter	Result	Units		
рН	7.12	s.u.		
Conductivity @ 25° C	15,920	umhos/cm		
Total Dissolved Solids @ 180C	9,640	mg/L		
Total Dissolved Solids (Calc)	9,630	mg/L		
SAR	105	ratio		
Total Alkalinity as CaCO3	420	mg/L		
Total Hardness as CaCO3	232	mg/L		
Bicarbonate as HCO3	420	mg/L	6.88	meq/L
Carbonate as CO3	<0.1	mg/L	0.00	meq/L
Hydroxide as OH	<0.1	mg/L	0.00	meq/L
Nitrate Nitrogen	0.9	mg/L	0.01	meq/L
Nitrite Nitrogen	<0.001	mg/L	0.00	meq/L
Chloride	5,600	mg/L	157.98	meg/L
Fluoride	0.68	mg/L	0.04	meq/L
Phosphate	3.2	mg/L	0.10	meq/L
Sulfate	<0.1	mg/L	0.00	meq/L
Iron	67.8	mg/L	2.43	meq/L
Calcium	56.0	mg/L	2.79	meq/L
Magnesium	22.5	mg/L	1.85	meq/L
Potassium	<0.01	mg/L	0.00	meq/L
Sodium	3,690	mg/L	160.52	meq/L
Cations			165.16	meg/L
Anions			165.01	meq/L
Cation/Anion Difference			0.09%	

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983. Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments:

m Walter istice. Analyst

n C. Cal

# ENVIROTECH LABS

ERACTICAL SOLUTIONS FOR A BEIMER TOMORHOW

**CATION / ANION ANALYSIS** 

	GALLU	JP SANDSTONE	
	SW/4, Se	c. 2, T25N, R13W	
Client:	Dugan Prod. Corp	Project #:	06094-003
Sample ID:	Bisti State Com #1	Date Reported:	01-26-07
Laboratory Number:	39832	Date Sampled:	01-23-07
Chain of Custody:	1958	Date Received:	01-24-07
Sample Matrix:	Water	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	01-25-07
Condition:	Cool & Intact		

· · · · ·	Analytical		 	• • • •
Parameter	Result	Units		
pH	7.36	s.u.		
Conductivity @ 25° C	48,100	umhos/cm		
Total Dissolved Solids @ 180C	30,760	mg/L		
Total Dissolved Solids (Calc)	30,840	mg/L		
SAR	205	ratio		
Total Alkalinity as CaCO3	560	mg/L		
Total Hardness as CaCO3	628	mg/L		
Bicarbonate as HCO3	560	mg/L	9.18	meq/L
Carbonate as CO3	<0.1	mg/L	0.00	meq/L
Hydroxide as OH	<0.1	mg/L	0.00	meq/L
<ul> <li>Nitrate Nitrogen</li> </ul>	0.8	mg/L	0.01	meq/L
Nitrite Nitrogen	0.005	mg/L	0.00	meq/L
Chloride	18,400	mg/L	519.06	meq/L
Fluoride	1.36	mg/L	0.07	meq/L
Phosphate	4.4	mg/L	0.14	meq/L
Sulfate	<0.1	mg/L	0.00	meq/L
Iron	1.78	mg/L	0.06	meq/L
Calcium	181	mg/L	9.03	meq/L
Magnesium	43.0	mg/L	3.54	meq/L
Potassium	31.8	mg/L	0.81 🖞	meq/L
Sodium	11,840	mg/L	515.04	meq/L
Cations			528.42	meq/L
Anions			528.47	meq/L
Cation/Anion Difference			0.01%	

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983. Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments:

Misting Walters Analyst

Review

### Dugan Production Corp.

### West Bisti SWD #1

### Part VIII. Geologic Data

The proposed injection interval is the Entrada Sandstone from approximately 6915 - 7115 feet. The only known source of stock water in the area is encountered in existing arroyos at a depth of approximately 35 - 50 feet below the surface. Sources of drinking water include the Ojo Alamo Sandstone at a depth of 75' - 175' and the Mesaverde (Cliff House Sandstone) Interval at a depth of 2040' - 2120'. There are no known drinking water sources below the Mesaverde interval. The expected formation tops in the well are as follows:

Ojo Alamo	75'	Gallup	4595'
Kirtland	175'	Greenhorn	5615'
Fruitland	845'	Graneros	5675'
Pictured Cliffs	1195'	Dakota	5740'
Lewis	1455'	Morrison	5965'
Cliff House	2040'	Bluff	6595'
Menefee	2120'	Todilto	6895'
Point Lookout	3695'	Entrada	6915'
Mancos	3895'	<b>Total Depth</b>	7165'

### Part IX. Stimulation Program

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

### Part X. Logging and Test Data

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

### Part XI. Fresh Water Samples

A records search and field survey for existing water wells in the vicinity of the proposed disposal well were conducted. One shallow water well and three water supply wells for the Bisti Gallup water flood (all of which have been plugged) were located as follows:

Location I	Distance To Proposed E	Disposal Well	Depth to Water	Water Sourc	e Status
SE/SE	S.27, T26N, R13W	1.1 Miles	2545	Mesaverde	P&A
NW/SE	S.28, T26N, R13W	2.1 Miles	2020	Mesaverde	P&A
SW/NE	S.35, T26N, R13W	0.05 Miles	2540	Mesaverde	P&A
SW/SW	S.34, T26N, R13W	1.6 Miles	No Other In	formation Av	ailable

Dugan Production Corp.

### West Bisti SWD #1

### 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.

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Kurt Fagrelius, Geologist

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February 1, 2007 Date

### Dugan Production Corp.

### West Bisti SWD #1

### 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.

### AFFIDAVIT OF PUBLICATION

Ad No. 54457

### STATE OF NEW MEXICO County of San Juan:

ROBIN ALLISON, 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):

Thursday, December 28, 06

And the cost of the publication is \$42.54

ON 1/4/0.7 ROBIN ALLISON appeared before me, whom I know personally to be the person who signed the above document.

Complission Expires Nov. 07, 2008



### COPY OF PUBLICATION

Legal Notices 152
Dugan Prodution Corp.,
P.O. Box 420 Farming
ton, NM 87499 is mak
ing application for ad
ministrative approval to l
dispose of produced
water by underground (
injection. Contact per
son is Kurt Fagrelius,
dispose of produced water by underground injection. Contact per son is Kurt Fagrelius, phone 505-326-1821.
The proposed disposal
The proposed disposal site is the West Bisti
SWD #1. located 2500'
fnl & 1855′ fel, Sec. 35, Twn. 26N, Rng. 13W,
Twn. 26N, Rng. 13W,
San Juan Co., NM, Wal
ter will be injected into
the Entrada Sandstone between 6915' and
between 6915' and
7115' below the surface.
Maximum injection
pressure is 1383 nsi l
Maximum injection rate is 5,000 barrels of wa
is 5,000 parrels of while
ter daily, Any interested
parties must file objec
tions or requests for
hearing with the Oil
Conservation Division
1220' South Saint Fran cis Drive, Santa Fe, NM 87505 within 16 day
87505 within 15 days.
leggi No 54457 muh
Legal No. 54457, pub lished in The Daily Times, Farmington, New Mexico on Thurs
Times, Farminaton
New Mexico on Thurs
dav December 29 l
2006

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New Mexico State Land Office – Surface Resources PO Box 1148 Santa Fe, New Mexico 87504-1148 February 1, 2007

### --CERTIFIED MAIL, RETURN RECEIPT REQUESTED-

7005 2570 0001 3773 3729

Re: Notice of Intent to Complete Salt Water Disposal Well

Dear New Mexico State Land Office:

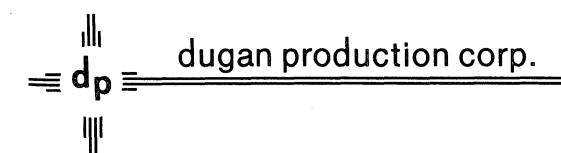
Dugan Production Corp. has filed an application for administrative approval to complete the Bisti SWD #1 (Sec. 35, T26N, R13W, 2500' FNL and 1855' FEL) as a salt water disposal well. Injection will be into the Entrada Sandstone between 6915' and 7115'. A copy of the application is attached.

As a oil and gas interest owner of land adjacent to that which the injection well is located on (Sec. 36, T26N, R13W) 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.

Kurt Fegrelin

Kurt Fagrelius Geologist Attachment



February 1, 2007

Akhtar Zaman The Navajo Nation Minerals Dept. P.O. Box 1910 Window Rock, AZ 86515

### --CERTIFIED MAIL, RETURN RECEIPT REQUESTED-

7005 2570 0001 3773 3804

Re: Notice of Intent to Complete Salt Water Disposal Well

Dear Mr. Zaman:

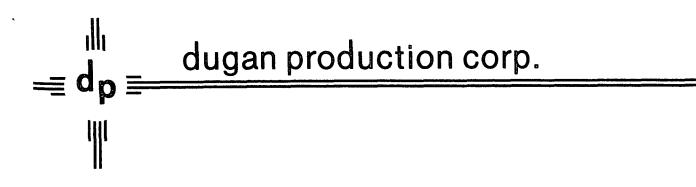
Dugan Production Corp. has filed an application for administrative approval to complete the West Bisti SWD #1 (Sec. 35, T26N, R13W, 2500' FNL and 1855' FEL) as a salt water disposal well. Injection will be into the Entrada Sandstone between 6915' and 7115'. A copy of the application is attached.

As a surface owner of the land the injection well is located on, the Navajo Nation Minerals Dept. 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.

urt Faquiti

Kurt Fagrelius Geologist Attachment



ConocoPhillips Company Attn: Land Department P.O. Box 4289 Farmington, NM 87499 February 1, 2007

### --CERTIFIED MAIL, RETURN RECEIPT REQUESTED-

7005 2570 0001 3773 3743

Re: Notice of Intent to Complete Salt Water Disposal Well

Dear Conoco Phillips:

Dugan Production Corp. has filed an application for administrative approval to complete the West Bisti SWD #1 (Sec. 35, T26N, R13W, 2500' FNL and 1855' FEL) as a salt water disposal well. Injection will be into the Entrada Sandstone between 6915' and 7115'. A copy of the application is attached.

As an offsetting operator (Sec. 26, T26N, R13W) 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.

Fagnelin

Kurt Fagrelius Geologist

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February 1, 2007

Bureau of Land Management 1235 La Plata Highway Farmington, NM 87401

Mr. David Mankiewicz

### --CERTIFIED MAIL, RETURN RECEIPT REQUESTED--

7005 2570 0001 3771 3712

Re: Notice of Intent to Complete Salt Water Disposal Well

Dear Mr. Mankiewicz:

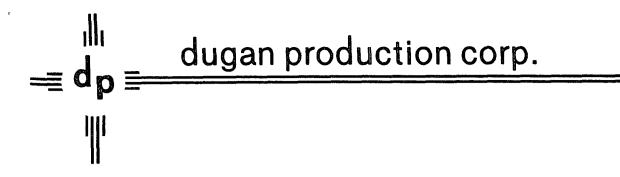
Dugan Production Corp. has filed an application for administrative approval to complete the Bisti SWD #1 (Sec. 35, T26N, R13W, 2500' FNL and 1855' FWL) as a salt water disposal well. Injection will be into the Entrada Sandstone between 6915' and 7115'. A copy of the application is attached.

As an oil and gas interest owner of land the injection well is located on, the Bureau of Land Management 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.

Vurt Fagn lin

Kurt Fagrelius Geologist Attachment



Rimco Royalties Co. P.O. Box 2283 Fort Worth, TX 75081 February 1, 2007

### --CERTIFIED MAIL, RETURN RECEIPT REQUESTED---

### 7005 2570 0001 3773 3781

Re: Notice of Intent to Complete Salt Water Disposal Well

Rimco Royalties Co.:

Dugan Production Corp. has filed an application for administrative approval to complete the West Bisti SWD #1 (Sec. 35, T26N, R13W, 2500' FNL and 1855' FEL) as a salt water disposal well. Injection will be into the Entrada Sandstone between 6915' and 7115'. A copy of the application is attached.

As an offsetting operator (Sec. 26, T26N, R13W) 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.

Kurt Fegalin

Kurt Fagrelius Geologist

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February 1, 2007

Mr. Charlie Perrin New Mexico Oil Conservation Division 1000 Rio Bravo Rd Aztec, New Mexico 87410

### --CERTIFIED MAIL, RETURN RECEIPT REQUESTED---

7005 2570 0001 3773 3774

Re: Application to Class 2, water disposal well, West Bisti SWD #1, San Juan County, NM

Dear Mr. Charlie Perrin:

Enclosed, is Dugan Production Corp.'s application for disposal of produced water in the West Bisti SWD #1. 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 identifying 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 (Fruitland Coal and Gallup).
- 7. Required geologic, stimulation, logging and test data and fresh water data from nearby wells.
- 8. Signed statement of geologic and engineering data.
- 9. Proof of notice in the form of notification letters sent to offsetting operators and surface owner and a copy of the Affidavit of Publication of the notice as it appeared in the Farmington Daily Times.

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

Very Sincerely,

Kunt Fagender Kurt Fagrelius

dugan production corp. J7 FERMOSFERIN 11 APR February Mr. Will Jones New Mexico Oil Conservation Division - Engineering Bureau 1220 South Saint Francis Street Santa Fe, New Mexico 87505

### --CERTIFIED MAIL, RETURN RECEIPT REQUESTED-7005 2570 0001 3773 3767

Re: Application to Class 2, water disposal well, West Bisti SWD #1 San Juan County, NM

Dear Mr. Jones:

Enclosed, is Dugan Production Corp.'s application for disposal of produced water in the West Bisti SWD #1. 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 identifying 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 (Fruitland Coal and Gallup).
- 7. Required geologic, stimulation, logging and test data and fresh water data from nearby wells.
- 8. Signed statement of geologic and engineering data.
- 9. Proof of notice in the form of notification letters sent to offsetting operators and surface owners and a copy of the Affidavit of Publication of the notice as it appeared in the Farmington Daily Times.

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

Very Sincerely,

Frequelin

Kurt Fagrelius

Attachments

	Inje	ction Permit Ch	ecklist 12/7/06	
SWD Order Number _	1072 Dates	: Division Approved	District	Approved
Well Name/Num: WES	T BISTE S	WD #1	Date Spudded:	New Drill
API Num: (30-)				
Footages 2500 FNL	*			
	N PRODUCTIO	N CORP.	Contact Kurt 7	Fagrelius
Operator Address: 701	East Murray	DR. FAR	MINGTON KIM S	R MOI
Current Status of Well:	T Daillel Plan		ill well	Inj. Tubing Size: 27/8 668
Current Status of Weit	Hole/Pipe Sizes	Depths	Cement	P Lormotop/Method
Surface	12/4 858	480	30	CIRC
Intermediate				
Production	778 5/2	7165	380 4730	439
Z Last DV Tool	. V	5000 / 1650 ·	4	<i>F</i>
Open Hole/Liner				
Plug Back Depth				
Diagrams Included (Y/N): B	lefore Conversion	After Conversio	n	
Checks (Y/N): W	ell File Reviewed	ELogs in Imaging	New well	
		Т	1	1
Intervals:	Depths	Formation	Producing (Yes/No)	
Intervals: Salt/Potash	Depths	Formation	Producing (Yes/No)	
	Depths	Formation	Producing (Yes/No)	
Salt/Potash		Formation		
Salt/Potash Capitan Reef	Fresh Ame			
Salt/Potash Capitan Reef Cliff House, Etc:	Fronh Ane 4595 E	2040-212		PSI Max. WHIP
Salt/Potash Capitan Reet Clift House, Etc: Formation Above	Fresh Are 4595 E 6915	2040-21: Jally-		<b>1383</b> _ PSI Max. WHIP <b>No_</b> Open Hole (Y/N)
Salt/Potash Capitan Reef Cliff House Etc: Formation Above Top Inj Interval	1595 C 6915 7115	2040-21 Fallup ENTRADA		
Salt/Potash Capitan Reef Cliff House Etc: Formation Above Top Inj Interval Bottom Inj Interval Formation Below	Fresh Ane 4595 E 6915 7115	2040-21 Fallup ENTRADA 11 + 2040-2	202 2120 CLIFF HON	Deviated Hole (Y/N)
Salt/Potash Capitan Reef Cliff House, Etc: Formation Above Top Inj Interval Bottom Inj Interval Formation Below Fresh Water: Exists (Y/N)	1595 6915 7115 V 35-50 Wells(Y/N)	Zoto-ZIZ Fallup ENTRAPA /1 + Zoto-Z Analysis Includ	2120 CLIFF Have led (Y/N):Affirm	Deviated Hole (Y/N)
Salt/Potash Capitan Reef Cliff House, Etc: Formation Above Top Inj Interval Bottom Inj Interval Formation Below Fresh Water: Exists (Y/N) Salt Water Analysis: Inject	1595 6915 7115 Wells(Y/N)_ tion Zone (Y/N/NA)_	Zoro - 212 Fallup ENTR RPA /1 -+ Zoro- Analysis Includ DispWaters (Y/N	2120 CLIFF How led (Y/N):Affirm I/NA) Types:	Deviated Hole (Y/N)
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Salt/Potash Capitan Reef Cliff House_Etc: Formation Above Top Inj Interval Bottom Inj Interval Formation Below Fresh Water: Exists (Y/N) Salt Water Analysis: Inject Notice: Newspaper(Y/N)_ Other Affected Parties: AOR/Repairs: NumActiveV AOR Num of P&A Wells	$\frac{715}{4595}$ $\frac{4595}{6915}$ $7115$ $\frac{35-56}{Wells(Y/N)}$	2040-21 Tallup ENTRAPA /1 + 2040-2 Analysis Included DispWaters (Y/N BLM S. RIMCE Producing in Diagrams Included?	2120 CLIFF How led (Y/N):Affirm I/NA) Types: Mineral owner(s) Mineral owner(s) m Injection Interval in AC	NO Open Hole (Y/N) NO Deviated Hole (Y/N) SE hative Statement RC/Gallyp BLM DR NO
Salt/Potash Capitan Reef Cliff House, Etc: Formation Above Top Inj Interval Bottom Inj Interval Formation Below Fresh Water: Exists (Y/N) Salt Water Analysis: Inject Notice: Newspaper(Y/N)_ Other Affected Parties: AOR/Repairs: NumActiveV AOR Num of P&A Wells Required Work to this Well	$\frac{712h}{4595}$ $\frac{4595}{6915}$ $7115$ $\frac{35-5}{Wells(Y/N)}$ tion Zone (Y/N/NA) $\frac{1}{Surface Owner}$ $\frac{2}{Surface Owner}$ $\frac{3}{Surface Owner}$ $\frac{3}{Surface Owner}$ $\frac{3}{Surface Owner}$	2040-217 Tallup ENTRADA /1 + 2040-2 Analysis Include DispWaters (Y/N BLM S RIMCE Producing in Diagrams Included? AB T-24	2120 CLIFF How led (Y/N):Affirm //NA) Types: /Mineral owner(s) 2 /Mineral owner(s) 2 mineral owner(s) Mineral owner(s)	NO Open Hole (Y/N) M Deviated Hole (Y/N)
Salt/Potash Capitan Reef Cliff House, Etc: Formation Above Top Inj Interval Bottom Inj Interval Formation Below Fresh Water: Exists (Y/N) Salt Water Analysis: Inject Notice: Newspaper(Y/N)_ Other Affected Parties: AOR/Repairs: NumActiveV AOR Num of P&A Wells Required Work to this Well Well Table Adequate (Y/N)	$\frac{7125h}{4595}$ $\frac{4595}{6915}$ $\frac{35-5}{7115}$ $\frac{35-5}{Wells(Y/N)}$ $\frac{35-5}{Wells(Y/N)}$ $\frac{500}{100}$ $500$	2040-217 Tallup ENTRADA /1 + 2040-2 Analysis Include DispWaters (Y/N BLM S RIMCE Producing in Diagrams Included? AB T-24	Image: SpRge         Image: SpRge	NO Open Hole (Y/N) AD Deviated (Y/N)
Salt/Potash Capitan Reef Cliff House, Etc: Formation Above Top Inj Interval Bottom Inj Interval Formation Below Fresh Water: Exists (Y/N) Salt Water Analysis: Inject Notice: Newspaper(Y/N)_ Other Affected Parties: AOR/Repairs: NumActiveV AOR Num of P&A Wells Required Work to this Well Well Table Adequate (Y/N) New AOR Table Filename	$\frac{7125h}{4595}$ $\frac{4595}{6915}$ $\frac{35-5}{7115}$ $\frac{35-5}{Wells(Y/N)}$ $\frac{35-5}{Wells(Y/N)}$ $\frac{500}{100}$ $500$	2040-21 Tollup ENTRAPA /1 -+ 2040-2 Analysis Include DispWaters (Y/N 		NO Open Hole (Y/N) Deviated Hole (Y/N) SE Pative Statement RC/Gally BLM DR_NO HLOGS RBDMS Updated (Y/N) UIC Form Completed (Y/N)
Salt/Potash Capitan Reef Cliff House, Etc: Formation Above Top Inj Interval Bottom Inj Interval	$\frac{7125h}{4595}$ $\frac{4595}{6915}$ $\frac{35-5}{7115}$ $\frac{35-5}{Wells(Y/N)}$ $\frac{35-5}{Wells(Y/N)}$ $\frac{500}{100}$ $500$	2040-21 Tollup ENTRAPA /1 -+ 2040-2 Analysis Include DispWaters (Y/N 	Image: SpRge         Image: SpRge	NO Open Hole (Y/N) AD Deviated (Y/N)

### Attachments

cc: Mr. Will Jones-New Mexico Oil Cons. Div., 1220 So. St. Francis St., Santa Fe, NM 87505 Mr. David Mankiewicz-Bureau of Land Management, 1235 La Plata Hwy, Farmington, NM 87401 New Mexico State Land Office, PO Box 1148, Santa Fe, NM 87504-1148 Mr. Ahktar Zaman-Navajo Nation Minerals Dept., PO Box 1910, Window Rock, AZ 86515 Attn. Land Department, Conoco Phillips Co.-PO Box 4289, Farmington, NM 87499 Rimco Royalties Co.-PO Box 2283, Fort Worth, TX 75081 cc: Mr. Charlie Perrin-1000 Rio Bravo Rd, Aztec, New Mexico 87410
Mr. David Mankiewicz-Bureau of Land Management, 1235 La Plata Hwy, Farmington, NM 87401
New Mexico State Land Office, PO Box 1148, Santa Fe, NM 87504-1148
Mr. Ahktar Zaman-Navajo Nation Minerals Dept., PO Box 1910, Window Rock, AZ 86515
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