

# SWD Initial Application

Received: 09/24/19

RECEIVED: <b>9/24/19</b>	REVIEWER:	TYPE: <b>SWD</b>	APP NO: <b>pDM1926959317</b>
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ABOVE THIS TABLE FOR OCD DIVISION USE ONLY

**NEW MEXICO OIL CONSERVATION DIVISION**  
 - Geological & Engineering Bureau -  
 1220 South St. Francis Drive, Santa Fe, NM 87505

**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

**Applicant:** DJR Operating, LLC **OGRID Number:** 371838  
**Well Name:** Crow Canyon Unit WDW #1 **API:** \_\_\_\_\_  
**Pool:** SWD; Entrada **Pool Code:** 96436

**SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION  
 INDICATED BELOW**

**1) TYPE OF APPLICATION:** Check those which apply for [A]

A. Location – Spacing Unit – Simultaneous Dedication

☐ NSL☐ NSP (PROJECT AREA)☐ NSP (PRORATION UNIT)☐ SD

B. Check one only for [I] or [II]

[I] Commingling – Storage – Measurement

☐ DHC☐ CTB☐ PLC☐ PC☐ OLS☐ OLM

[II] Injection – Disposal – Pressure Increase – Enhanced Oil Recovery

☐ WFX☐ PMX☒ SWD☐ IPI☐ EOR☐ PPR**2) NOTIFICATION REQUIRED TO:** Check those which apply.A. ☒ Offset operators or lease holdersB. ☐ Royalty, overriding royalty owners, revenue ownersC. ☒ Application requires published noticeD. ☐ Notification and/or concurrent approval by SLOE. ☐ Notification and/or concurrent approval by BLMF. ☒ Surface ownerG. ☒ For all of the above, proof of notification or publication is attached, and/or,H. ☐ No notice required**FOR OCD ONLY**☐

Notice Complete

☐Application  
Content  
Complete

- 3) 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.**

**Ningning Li**

Print or Type Name

Signature

09/24/2019

Date


303-407-7390

Phone Number

nli@djrlc.com

e-mail Address

**APPLICATION FOR AUTHORIZATION TO INJECT**

- I. PURPOSE: \_\_\_\_\_ Secondary Recovery \_\_\_\_\_ Pressure Maintenance \_\_\_\_\_XX\_\_\_\_\_ Disposal \_\_\_\_\_ Storage  
Application qualifies for administrative approval? \_\_\_\_\_ Yes \_\_\_\_\_XX\_\_\_\_\_ No
- II. OPERATOR: DJR Operating, LLC  
ADDRESS: 1600 Broadway, Suite 1960, Denver, CO 80202  
CONTACT PARTY: Ningning Li PHONE: 303-407-7390
- III. WELL DATA: Complete the data required on the reverse side of this form for each well proposed for injection.  
Additional sheets may be attached if necessary.
- IV. Is this an expansion of an existing project? \_\_\_\_\_ Yes \_\_\_\_\_XX\_\_\_\_\_ No  
If yes, give the Division order number authorizing the project: \_\_\_\_\_
- V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.
- VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.
- VII. Attach data on the proposed operation, including:
1. Proposed average and maximum daily rate and volume of fluids to be injected;
  2. Whether the system is open or closed;
  3. Proposed average and maximum injection pressure;
  4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,
  5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).
- \*VIII. Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.
- IX. Describe the proposed stimulation program, if any.
- \*X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted).
- \*XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.
- XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.
- XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.
- XIV. Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.  
NAME: Ningning Li TITLE: Engineer  
SIGNATURE:  DATE: 09/24/2019  
E-MAIL ADDRESS: nli@djrlc.com
- XV. If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted. Please show the date and circumstances of the earlier submittal: \_\_\_\_\_

### III. WELL DATA

A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:

- (1) Lease name; Well No.; Location by Section, Township and Range; and footage location within the section.
- (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
- (3) A description of the tubing to be used including its size, lining material, and setting depth.
- (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District Offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.

- (1) The name of the injection formation and, if applicable, the field or pool name.
- (2) The injection interval and whether it is perforated or open-hole.
- (3) State if the well was drilled for injection or, if not, the original purpose of the well.
- (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
- (5) Give the depth to and the name of the next higher and next lower oil or gas zone in the area of the well, if any.

### XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

- (1) The name, address, phone number, and contact party for the applicant;
- (2) The intended purpose of the injection well; with the exact location of single wells or the Section, Township, and Range location of multiple wells;
- (3) The formation name and depth with expected maximum injection rates and pressures; and,
- (4) A notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

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NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

Application for Authorization to Inject

DJR Operating, LLC

**Crow Canyon Unit WDW #1**

General Information

DJR Operating, LLC is hereby making an application for administrative approval to dispose of produced water by underground injection. The proposed disposal site is the Crow Canyon Unit WDW #1 well located 153' FSL & 1382' FEL in Section 17, Township 24 North, Range 8 West, San Juan County, New Mexico. Produced water will be injected into the Entrada Sandstone between 7290' to 7490'. The maximum injection pressure will be 1300-psi and the maximum injection rate will be 6000 barrels of water daily.

The well is a new drill for the purpose of salt water disposal. The well is in the process of being permitted and is awaiting SWD application approval to commence drilling. 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.

Application for Authorization to Inject

DJR Operating, LLC

**Crow Canyon Unit WDW #1**

Part III. Well Data

A. Tabular Information

1. Name: Crow Canyon Unit WDW #1

Location: 153' FSL & 1382' FEL  
Section 17, T24N, R8W  
San Juan County, NM

2. Surface Casing:  
9-5/8 in, 36 lb, J-55 set at 500 ft, Cemented with 253 sx (352 cu ft). Circulate cement to surface, Hole size – 12-1/4 in.

Production Casing:

7 in, 26 lb (7490 ft) set at 7490 ft. Cement in two stages with stage tool (DV) at 4345 ft using 709 cubic ft in first stage (300 sx in lead and 82 sx in tail) and 980 cubic ft in second stage (436 sx in lead and 82 sx in tail). Hole size – 8-3/4 in.

Injection Tubing:

3-1/2 in L-80 EUE 9.3 lb/ft Internally Coated Tubing set at 7300 ft.

Packer:

7 in by 3 1/2 in AS1-X packer 10K nickel coated, will be set in tension at 7240 ft or 50 ft above the upper most perforation.

B. Additional Information

1. Injection Interval: Entrada Sandstone
2. The injection interval (Entrada 7290' – 7490') will be perforated.
3. The well (Crow Canyon WDW #1) will be drilled for the purpose of injection into the Entrada Sandstone.
4. Only the injection interval is to be perforated.
5. Fruitland Coal / Pictured Cliffs Sandstone-Approx. 1580' – 1995', Gallup-Approx. 5195'- 6130' and Dakota Sandstone-Approx. 6230' - 7230'.



**Injection Well Data Sheet**  
**Operator: DJR Operating LLC**  
**Well Name and Number: Crow Canyon Unit WDW #1**

	<b>WELL NAME:</b> Crow Canyon Unit WDW #1 <b>API NO:</b> <b>TVD:</b> 7490'		<b>STATE:</b> New Mexico <b>COUNTY:</b> San Juan		<b>LOCATION:</b> 153' FSL & 1382' FEL Sec 17, T24N R8W <b>TARGET FORMATION:</b> Entrada								
	<b>CASING DATA and OTHER TOOLS</b>						<b>CEMENT</b>						
		<b>OD</b>	<b>WT/FT</b>	<b>GRADE</b>	<b>THREAD</b>	<b>TOP</b>	<b>EOC</b>			<b>SX</b>	<b>WT.</b>		
	Srf Csg	9.625"	36.00 lb/ft	J-55	STC	0'	500'	Surface	Tail only	253	14.6 ppg	125% Excess over gauge	
Prod Liner	7.00"	26.00 lb/ft	N-80	LT&C	0'	7490'	Production						
DV Tool					4345'		1st Stage	Lead	300	12.5 ppg	50% Excess over gauge		
Packer	7" by 3 1/2" AS1-X 10K Nickel coated						1st Stage	Tail	82	14.6 ppg			
							2nd Stage	Lead	436	12.5 ppg			
							2nd Stage	Tail	82	14.6 ppg			
							Total		900				

Geology							Tubing and Packer		
Formation	Tops	Subsea	TVD	MD	O/G/W	Pressure	Size	Tubing Depth	Packer Depth
Ojo Alamo	5735		1065	1065	W	normal	3.500"	7300'	7240'
Kirtland	5585		1215	1215	W	normal			
Fruitland	5220		1580	1580	G/W	sub-normal			
Pictured Cliffs	4995		1805	1805	G/W	sub-normal			
Lewis	4805		1995	1995	G/W	normal			
Chacara	4205		2595	2595	G/W	normal			
Cliff House	3425		3375	3375	G/W	sub-normal			
Menefee	3355		3445	3445	G/W	normal			
Point Lookout	2635		4165	4165	G/W	normal			
Mancos	2405		4395	4395	O/G	normal			
Gallup	1605		5195	5195	O/G	normal			
Greenhorn	670		6130	6130	O/G/W	normal			
Dakota	570		6230	6230	O/G/W	normal			
Todilto	-430		7230	7230	G/W	normal			
Entrada	-490		7290	7290	W	normal			
<b>Total Depth</b>			7490	7490					

DJR Operating, LLC

**Crow Canyon Unit WDW #1**

**INJECTION WELL DATA SHEET**

**Tubing Size:**

**Surface Casing:**

9-5/8 in, 36 lb, J-55 set at 500 ft, Cemented with 253 sx (352 cu ft). Circulate cement to surface, Hole size – 12-1/4 in.

**Production Casing:**

7 in, 26 lb (7490 ft) set at 7490 ft. Cement in two stages with stage tool (DV) at 4345 ft using 709 cubic ft in first stage (300 sx in lead and 82 sx in tail) and 980 cubic ft in second stage (436 sx in lead and 82 sx in tail). Hole size – 8-3/4 in.

**Injection Tubing:**

3-1/2 in L-80 EUE 9.3 lb/ft Internally Coated Tubing set at 7300 ft.

**Type of Packer:**

7 in by 3 1/2 in AS1-X packer 10K nickel coated, will be set in tension at 7240 ft or 50 ft above the upper most perforation.

**Packer Setting Depth:**

Set in tension at 7240 ft or 50 ft above the upper most perforation.

**Other Type of Tubing/Casing Seal (If applicable):** -NA-

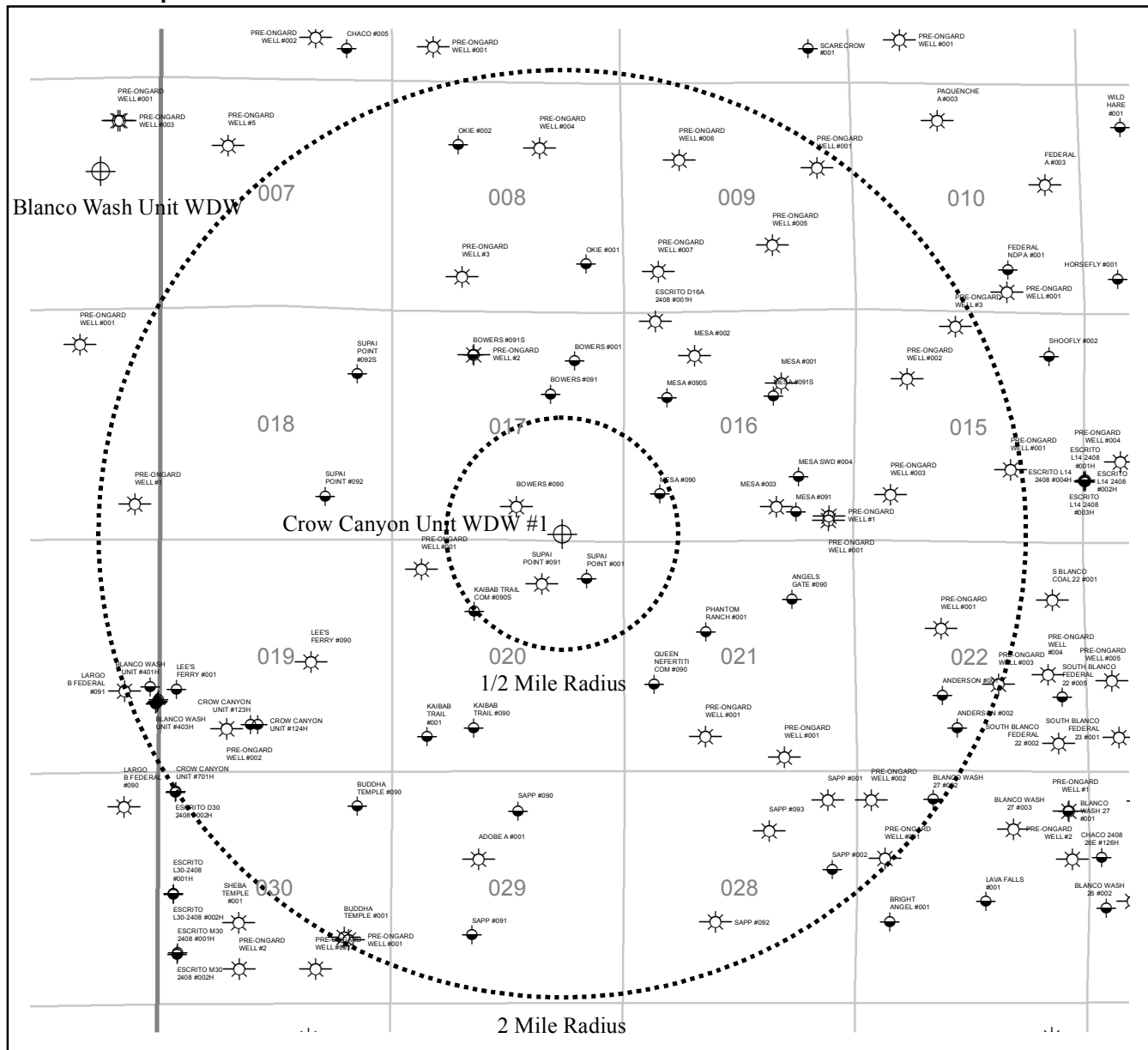
**Additional Data**

1. Is this a new well drilled for injection: X Yes No  
If no, for what purpose was the well originally drilled?
2. Name of Injection Formation: Entrada Sandstone
3. Name of Field or Pool (If applicable): NA
4. Has the well ever been perforated in other zone(s) No  
List all such Perforated intervals and give plugging detail, i.e. Sacks of cement or plug(s) used:  
NA
5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: Fruitland Coal / Pictured Cliffs Sandstone-Approx. 1580' – 1995', Gallup-Approx. 5195' - 6130' and Dakota Sandstone-Approx. 6230' - 7230'.



9W | 8W

## 2 Mile Radius Map



24N

### 2 Mile Radius Map Legend



1/2 Mile Radius\_Crow

2 Mile Radius\_Crow



Suspended, Cancelled, Plugged



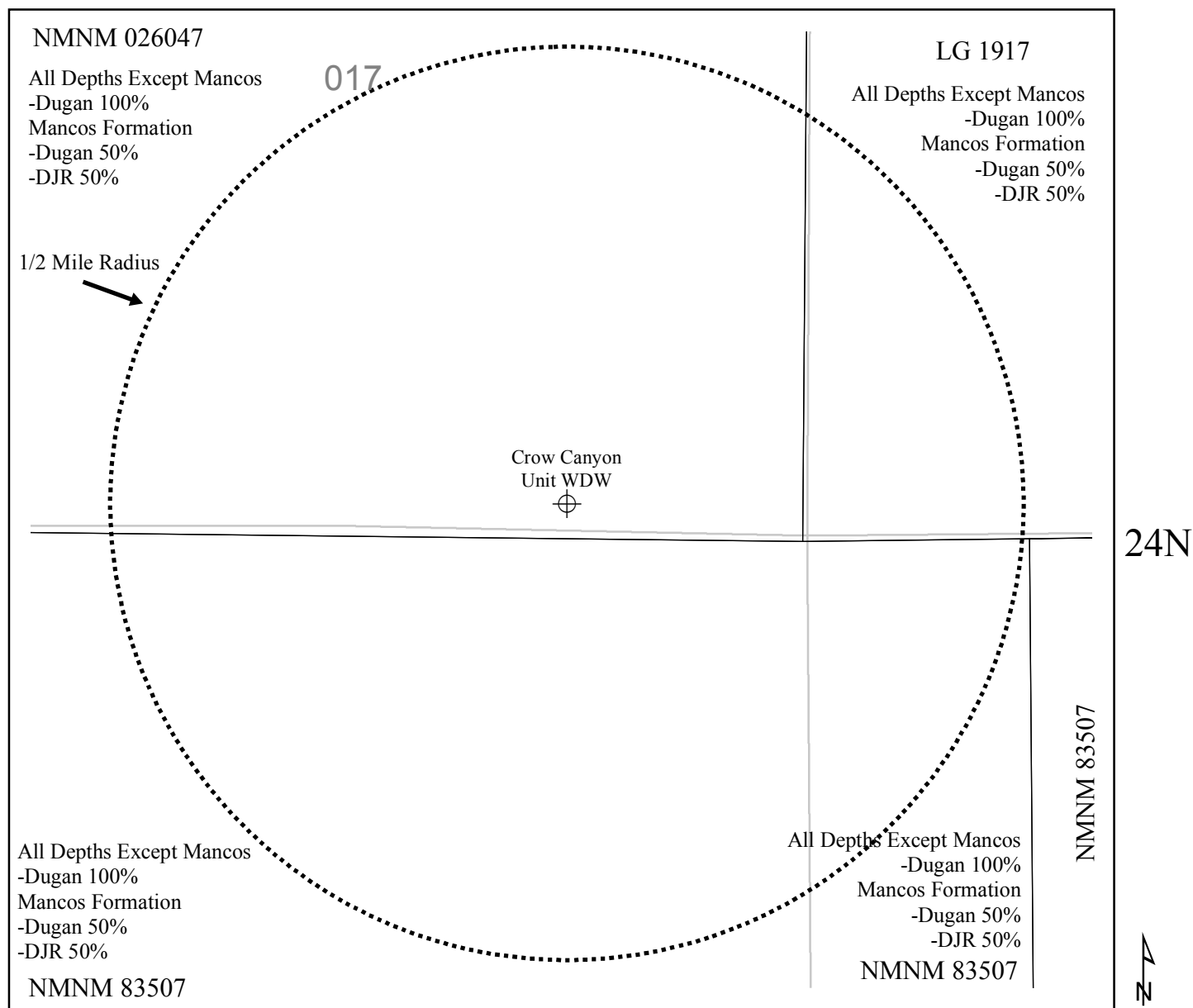
New, Active



Crow Canyon Unit WDW #1

Township 24 North, Range 8 West  
San Juan County, NM

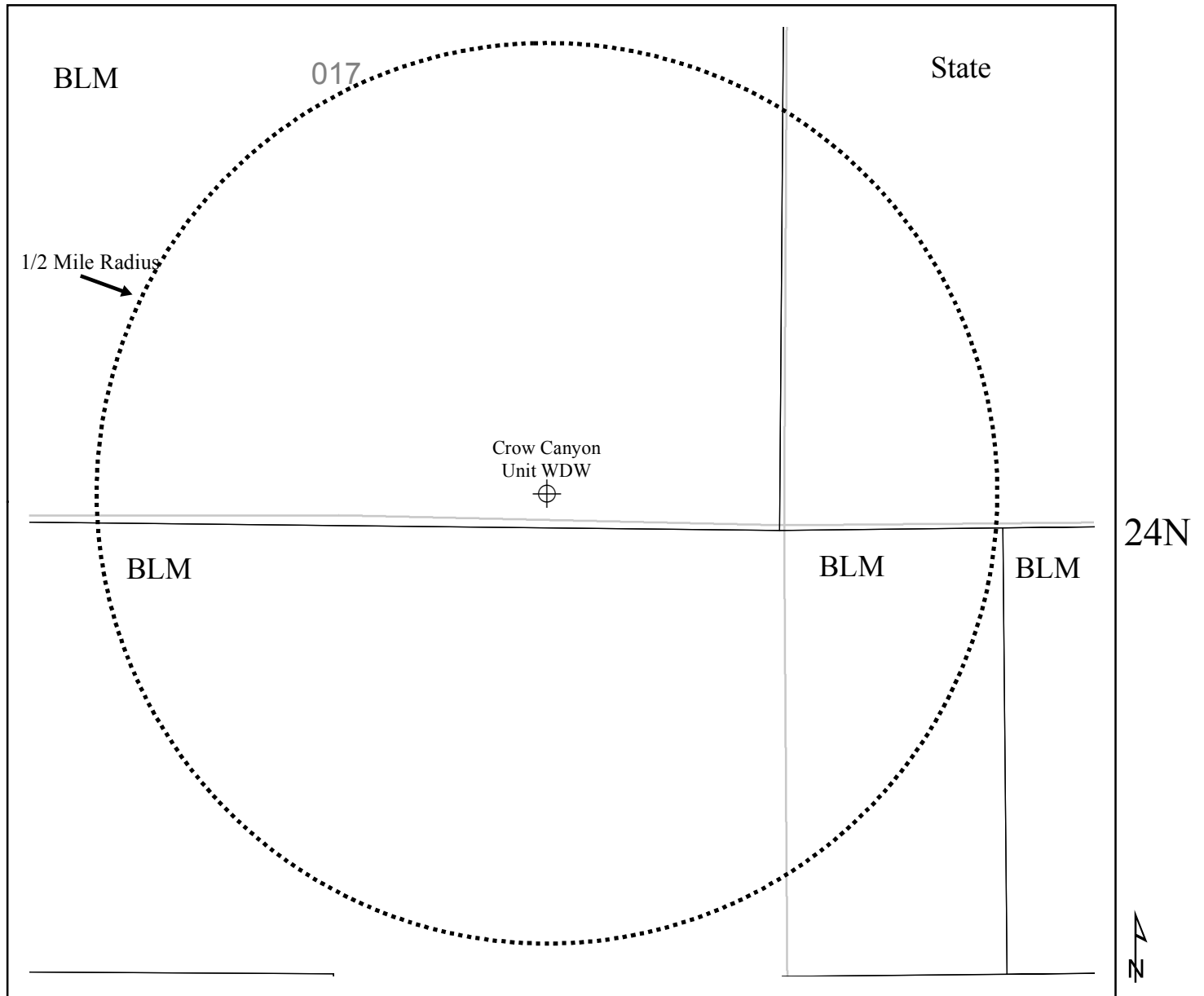
8W



C-108 Application to Inject  
Crow Canyon Unit WDW #1  
Part V. b.  
Lease Ownership Map

Township 24 North, Range 8 West  
San Juan County, NM

8W



C-108 Application to Inject  
Crow Canyon Unit WDW #1  
Part V. c.  
Surface Ownership Map

Application for Authorization to Inject

DJR Operating, LLC

**Crow Canyon Unit WDW #1**

Part VI. Data on Offset Wells

There are no wells within the ½ mile area of review which penetrate the proposed injection zone. There are also no plugged wells in the ½ mile radius of the proposed injection well. There are two producing wells, one plugged well and one cancelled APD within the ½ mile radius Area of Review which are highlighted in bold on the attached Well List.

CROW CANYON UNIT WDW #1															
API	Well Name	Well Number	Type	Mineral Owner	Surface Owner	Status	Unit Letter	Section	Township	Range	OCD Unit Letter	Last Production	Spud Date	Plugged On	Current Operator
30-045-22307	OKIE	#001	Gas	Federal		Active	P	8	24N	08W	P	Jun-19	1/14/1977		[6515] DUGAN PRODUCTION CORP
30-045-22304	OKIE	#002	Gas	Federal		Active	F	8	24N	08W	F	Jun-19	1/27/1977		[6515] DUGAN PRODUCTION CORP
30-045-26322	SHOOFLY	#002	Oil	Federal		Active	A	15	24N	08W	A	May-19	4/22/1985		[372834] EPIC ENERGY, L.L.C.
30-045-22055	MESA	#001	Gas	State		Plugged, Site Released	G	16	24N	08W	G	Dec-92	6/16/1976	10/1/1997	[6515] DUGAN PRODUCTION CORP
30-045-22483	MESA	#002	Gas	State	State	Plugged, Site Released	C	16	24N	08W	C	Mar-17	4/12/1977	1/9/2018	[6515] DUGAN PRODUCTION CORP
30-045-22175	MESA	#003	Gas	State		Plugged, Site Released	O	16	24N	08W	O	Jan-91	10/1/1976	1/17/2002	[6515] DUGAN PRODUCTION CORP
30-045-29159	MESA	#090	Gas	State		Active	M	16	24N	08W	M	Jun-19	9/26/1994		[6515] DUGAN PRODUCTION CORP
30-045-31382	MESA	#090S	Gas	State		Active	E	16	24N	08W	E	Apr-19	3/17/2003		[6515] DUGAN PRODUCTION CORP
30-045-31210	MESA	#091	Gas	State		Active	P	16	24N	08W	P	Jun-19	12/13/2002		[6515] DUGAN PRODUCTION CORP
30-045-31383	MESA	#091S	Gas	State		Active	G	16	24N	08W	G	Jun-19	3/31/2003		[6515] DUGAN PRODUCTION CORP
30-045-32086	MESA SWD	#004	Salt W	State		Active	I	16	24N	08W	I	Jun-19	2/3/2004		[6515] DUGAN PRODUCTION CORP
30-045-25486	BOWERS	#001	Gas	Federal		Active	A	17	24N	08W	A	Jun-19	11/10/1984		[6515] DUGAN PRODUCTION CORP
30-045-29194	BOWERS	#090	Gas	Federal		Plugged, Site Released	O	17	24N	08W	O		10/7/1994	12/4/2001	[6515] DUGAN PRODUCTION CORP
30-045-31408	BOWERS	#091	Gas	Federal		Active	G	17	24N	08W	G	Jun-19	5/27/2003		[6515] DUGAN PRODUCTION CORP
30-045-31723	BOWERS	#091S	Gas	Federal		Active	C	17	24N	08W	C	Jun-19	10/6/2003		[6515] DUGAN PRODUCTION CORP
30-045-31414	SUPAI POINT	#092	Gas	Federal		Active	O	18	24N	08W	O	19-Jun	6/3/2003		[6515] DUGAN PRODUCTION CORP
30-045-31724	SUPAI POINT	#092S	Gas	Federal		Active	H	18	24N	08W	H	19-Jun	9/30/2003		[6515] DUGAN PRODUCTION CORP
30-045-35652	CROW CANYON UNIT	#123H	Gas	Federal	Federal	New	N	19	24N	08W	N		4/17/2019		[371838] DJR OPERATING, LLC
30-045-35651	CROW CANYON UNIT	#124H	Gas	Federal	Federal	New	N	19	24N	08W	N		4/17/2019		[371838] DJR OPERATING, LLC
30-045-26408	LEE'S FERRY	#001	Oil	Federal		Active	3	19	24N	08W	L	Jun-19	10/27/1985		[6515] DUGAN PRODUCTION CORP
30-045-29338	LEE'S FERRY	#090	Gas	Federal	Federal	Plugged, Site Released	J	19	24N	08W	J	Jun-11	4/4/1996	9/11/2017	[6515] DUGAN PRODUCTION CORP
30-045-25034	KAIBAB TRAIL	#001	Oil	Navajo		Active	M	20	24N	08W	M	19-Jun	6/17/1981		[6515] DUGAN PRODUCTION CORP
30-045-29393	KAIBAB TRAIL	#090	Gas	Navajo		Active	N	20	24N	08W	N	19-Jun	8/6/1990		[6515] DUGAN PRODUCTION CORP
30-045-31806	KAIBAB TRAIL COM	#090S	Gas	Federal		Active	F	20	24N	08W	F	19-Jun	10/13/2003		[6515] DUGAN PRODUCTION CORP
30-045-28996	SUPAI POINT	#001	Gas	Federal		Active	A	20	24N	08W	A	19-Jun	10/21/1993		[6515] DUGAN PRODUCTION CORP
30-045-29637	SUPAI POINT	#091	Gas	Federal		Cancelled App	B	20	24N	08W	B				[6515] DUGAN PRODUCTION CORP
30-045-29394	ANGELS GATE	#090	Gas	Federal		Active	G	21	24N	08W	G	19-Jun	8/10/1996		[6515] DUGAN PRODUCTION CORP
30-045-26409	PHANTOM RANCH	#001	Oil	Federal		Active	F	21	24N	08W	F	19-May	6/26/1985		[6515] DUGAN PRODUCTION CORP
30-045-33178	QUEEN NEFERTITI COM	#090	Gas	Navajo		Active	L	21	24N	08W	L	19-Jun	9/26/2005		[6515] DUGAN PRODUCTION CORP
30-045-30772	S BLANCO COAL 22	#001	Gas	Federal		Plugged, Site Released	H	22	24N	08W	H		12/26/2001	7/19/2007	[149052] ELM RIDGE EXPLORATION
30-045-25097	SOUTH BLANCO FEDERAL 22	#002	Oil	Federal		Plugged, Site Released	P	22	24N	08W	P	7-Oct	8/20/1981	10/31/2007	[149052] ELM RIDGE EXPLORATION
30-045-34260	SOUTH BLANCO FEDERAL 22	#005	Oil	Federal		Active	I	22	24N	08W	I	19-Mar	7/17/2007		[372834] EPIC ENERGY, L.L.C.
30-045-26807	ANDERSON	#001	Oil	Federal		Active	K	22	24N	08W	K	18-Oct	9/11/1987		[13673] M & M PRODUCTION & OPERA
30-045-27498	ANDERSON	#002	Oil	Federal		Active	N	22	24N	08W	N	18-Oct	10/19/1989		[13673] M & M PRODUCTION & OPERA
30-045-34096	BLANCO WASH 27	#001	Oil	Navajo		Active	A	27	24N	08W	A	19-Jun	10/4/2007		[5578] D J SIMMONS INC
30-045-34107	BLANCO WASH 27	#002	Oil	Indian		Active	C	27	24N	08W	C	19-Jun	9/7/2007		[5578] D J SIMMONS INC
30-045-25035	BRIGHT ANGEL	#001	Oil	Navajo		Active	L	27	24N	08W	L	19-May	6/8/1981		[6515] DUGAN PRODUCTION CORP
30-045-25164	LAVA FALLS	#001	Oil	Navajo		Active	J	27	24N	08W	J	19-Jun	10/14/1981		[6515] DUGAN PRODUCTION CORP
30-045-05095	SAPP	#001	Oil	Federal		Plugged, Site Released	A	28	24N	08W	A	6-Jan	10/27/1956	4/25/2007	[6515] DUGAN PRODUCTION CORP
30-045-29243	SAPP	#002	Gas	Federal		Active	H	28	24N	08W	H	19-Jun	8/8/1995		[6515] DUGAN PRODUCTION CORP
30-045-29290	SAPP	#092	Gas	Federal		Plugged, Site Released	K	28	24N	08W	K		11/3/1995	1/17/2002	[6515] DUGAN PRODUCTION CORP
30-045-29289	SAPP	#093	Gas	Federal		Plugged, Site Released	G	28	24N	08W	G		10/25/1995	1/17/2002	[6515] DUGAN PRODUCTION CORP
30-045-21872	ADOBE A	#001	Oil	Federal		Plugged, Site Released	F	29	24N	08W	F	7-Aug	4/15/1975	11/19/2007	[6515] DUGAN PRODUCTION CORP
30-045-29192	SAPP	#090	Gas	Federal		Active	B	29	24N	08W	B	19-Jun	10/1/1994		[6515] DUGAN PRODUCTION CORP
30-045-29238	SAPP	#091	Gas	Federal		Active	K	29	24N	08W	K	19-Jun	5/3/1995		[6515] DUGAN PRODUCTION CORP
30-045-35467	CROW CANYON UNIT	#701H	Gas	Federal	Federal	Active	1	30	24N	08W	D	Jun-19	8/2/2013		[371838] DJR OPERATING, LLC
30-045-35657	ESCRITO D30 2408	#002H	Gas	Federal	Federal	New	1	30	24N	08W	D				[371838] DJR OPERATING, LLC
30-045-35662	ESCRITO L30-2408	#001H	Gas	Federal	Federal	New	3	30	24N	08W	L				[371838] DJR OPERATING, LLC
30-045-35661	ESCRITO L30-2408	#002H	Gas	Federal	Federal	New	3	30	24N	08W	L				[371838] DJR OPERATING, LLC
30-045-35650	ESCRITO M30 2408	#001H	Gas	Federal	Federal	New	4	30	24N	08W	M				[371838] DJR OPERATING, LLC
30-045-35649	ESCRITO M30 2408	#002H	Gas	Federal	Federal	New	4	30	24N	08W	M				[371838] DJR OPERATING, LLC
30-045-26752	BUDDHA TEMPLE	#001	Gas	Federal		Plugged, Site Released	I	30	24N	08W	I	May-00	10/16/1986	6/30/2004	[6515] DUGAN PRODUCTION CORP
30-045-29239	BUDDHA TEMPLE	#090	Gas	Federal		Active	A	30	24N	08W	A	Jun-19	5/11/1995		[6515] DUGAN PRODUCTION CORP
30-045-26802	SHEBA TEMPLE	#001	Gas	Federal		Plugged, Site Released	K	30	24N	08W	K		9/8/1987	8/30/2006	[6515] DUGAN PRODUCTION CORP
30-045-35322	BLANCO WASH UNIT	#401H	Oil	Federal	Federal	Active	I	24	24N	09W	I	Jun-19	8/29/2012		[371838] DJR OPERATING, LLC
30-045-35656	BLANCO WASH UNIT	#402H	Oil	Federal	Federal	New	I	24	24N	09W	I		6/6/2019		[371838] DJR OPERATING, LLC
30-045-35658	BLANCO WASH UNIT	#403H	Oil	Federal	Federal	New	I	24	24N	09W	I		6/7/2019		[371838] DJR OPERATING, LLC
30-045-35653	BLANCO WASH UNIT	#404H	Oil	Federal	Federal	New	I	24	24N	09W	I				[371838] DJR OPERATING, LLC
30-045-35655	BLANCO WASH UNIT	#405H	Oil	Federal	Federal	New	I	24	24N	09W	I				[371838] DJR OPERATING, LLC
30-045-35654	BLANCO WASH UNIT	#406H	Oil	Federal	Federal	New	I	24	24N	09W	I				[371838] DJR OPERATING, LLC
30-045-31407	LARGO B FEDERAL	#091	Gas	Federal		Plugged, Site Released	I	24	24N	09W	I	Jun-11	5/19/2003	2/25/2013	[6515] DUGAN PRODUCTION CORP

\* Wells highlighted in bold type are located with the 1/2 mile Area of Review.

## 30-045-29159 MESA #090 [3763]

### General Well Information

Operator:	[6515] DUGAN PRODUCTION CORP	Direction:	Vertical
Status:	Active	Multi-Lateral:	No
Well Type:	Gas	Mineral Owner:	State
Work Type:	New	Surface Owner:	
Surface Location:	M-16-24N-08W 1084 FSL 837 FWL		
Lat/Long:	36.3099251,-107.6931992 NAD83		
GL Elevation:	6748		
KB Elevation:		Sing/Mult Compl:	Single
DF Elevation:		Potash Waiver:	False

### Proposed Formation and/or Notes

BASIN FRT COAL

### Depths

Proposed:	1915	True Vertical Depth:	1920
Measured Vertical Depth:	1920	Plugback Measured:	1854

### Formation Tops

Formation	Top	Producing	Method Obtained
Ojo Alamo Formation	1078		
Kirtland Formation	1286		
Fruitland Formation	1532		
Pictured Cliffs Formation	1823		

### Event Dates

Initial APD Approval:	08/26/1994	Current APD Expiration:	08/26/1996
Most Recent APD Approval:	08/26/1994		
APD Cancellation:			
APD Extension Approval:			
Spud:	09/26/1994	Gas Capture Plan Received:	
Approved Temporary Abandonment:		TA Expiration:	
Shut In:			
Plug and Abandoned Intent Received:		PNR Expiration:	
Well Plugged:		Last MIT/BHT:	11/06/2018
Site Release:			
Last Inspection:	11/06/2018		

### History

Effective Date	Property	Well Number	Operator	C-101 Work Type	Well Type	Well Status
08/26/1994	[3763] MESA	#090	[6515] DUGAN PRODUCTION CORP	New	Gas	Active

### Comments

10-25-96 CHGE IN ACRGE DEDICATION FROM S TO WEST:

Added on 11/04/1996 by Dorothy Jacquez

Operator

General Contact Information

Company:

Address:

Country:

[6515] DUGAN PRODUCTION CORP

709 E Murray Drive

Farmington, NM 87499

U.S.A.

Main Phone:

Main Fax:

505-325-1

505-327-4

Central Contact

Name:

Title:

E-Mail Address:

Lynn Collier

Production Accounting Supervisor

Lynn.Collier@duganproduction.com

Phone Number:

Cell Number:

Fax Number:

505-325-1

505-320-3

505-327-4

Aztec Contact

Name:

Title:

E-Mail Address:

Bill Armenta

barmenta@duganproduction.com

Phone Number:

Cell Number:

Fax Number:

505-330-0

505-320-3

505-327-4

Pits

No Pits Found

Casing

			Boreholes, Strings and Equipment Specifications			Specifications for Strings and Tubing			Strings Cemented and Intervals			Cement an
String/Hole Type	Taper	Date Set	Diameter	Top	Bottom (Depth)	Grade	Length	Weight	Bot of Cem	Top of Cem	Meth	Class of Cement
Hole 1	1		7.000	0	122		0	0.0	0	0		
Surface Casing	1		7.000	0	122		122	23.0	122	50		Class C Cement
Hole 2	1		4.500	0	1917		0	0.0	0	0		
Production Casing	1		4.500	0	1917		1917	10.5	1917	120		Class C Cement
Packer	1		4.500	1787	1792		5	0.0	0	0		
Tubing 1	1		1.250	0	1787		1787	0.0	0	0		

Well Completions

[71629] BASIN FRUITLAND COAL (GAS)

Status:

Bottomhole Location:

Lat/Long:

Acreage:

DHC:

Active

M-16-24N-08W 1084 FSL 837 FWL

W/320 16-24N-08W Units: C D E F K L M N

No

Last Produced:

Consolidation Code:

Production Method:

06/01/2019

Flowing



#### Well Test Data

Production Test:		Test Length:	0 hours
Flowing Tubing Pressure:	0 psi	Flowing Casing Pressure:	0 psi
Choke Size:	0.000 inches	Testing Method:	
Gas Volume:	0.0 MCF	Oil Volume:	0.0 bbls
Gas-Oil Ratio:	0 Kcf / bbl	Oil Gravity:	0.0 Corr. API
Disposition of Gas:		Water Volume:	0.0 bbls

#### Perforations

Date	Top Measured Depth (Where Completion Enters Formation)	Bottom Measured Depth (End of Lateral)	Top Vertical Depth	Bottom Vertical Depth
	1810	1820	0	0

#### Notes

##### Event Dates

Initial Effective/Approval:	08/26/1994	TA Expiration:	
Most Recent Approval:	08/26/1994	Confidential Until:	
Confidential Requested On:		Test Allowable End:	
Test Allowable Approval:		DHC:	
TD Reached:		Rig Released:	
Deviation Report Received:	No	Logs Received:	No
Directional Survey Run:	No	Closure Pit Plat Received:	
Directional Survey Received:	No	First Gas Production:	
First Oil Production:			
First Injection:			
Ready to Produce:	03/17/1995	Completion Report Received:	
C-104 Approval:	05/19/1995	New Well C-104 Approval:	
Plug Back:			
Authorization Revoked Start:		Revoked Until:	

#### Well Completion History

Effective Date	Property	Well Number	Operator	Completion Status	1
08/26/1994	[3763] MESA	#090	[6515] DUGAN PRODUCTION CORP	Active	

#### Financial Assurance

Effective	Bond Type	Base	Balance	Issuer	Cash/Surety	Cancellation Date
04/10/2019	Blanket	250000	250000	WELLS FARGO BANK	LOC	

Last Production for this well:	6/2019
Inactive Additional Bond Due Date:	07/01/2021
Bonding Depth:	1920
Required Well Bond Amount:	28840
Well Bond Required Now:	No
Amount of Well Bond In Place:	0
Variance:	28840 Note: This well is covered by this operator's Blanket Bond(s).
In Violation:	No

If the depth of the well is Unknown, please contact the appropriate OCD District Office and provide: (1) for a deviated or direction well, the measured depth, or (2) for a non-directional well, the true vertical depth.

Requests to release bonds must be submitted in writing. You may send an e-mail to [Denise.Gallegos@state.nm.us](mailto:Denise.Gallegos@state.nm.us) or fax a letter to (505) 476-3453.

#### Compliance

Note that Financial Assurance and Inactive Well Compliance are documented in separate reports ([Inactive Well Report](#), [Financial Assurance Report](#)).

Also note that some compliance issues are addressed at the operator level so not listed under each well.

#### Complaints, Incidents and Spills

No Incidents Found

Please note that incidents that impact ground water are recorded along with "facilities" which may not be wells, so although the initial report may be recorded here as a spill, information related to the abate and ground water impact information are not yet part of this application.

## Orders

No Orders Found

## Production / Injection

Earliest Production in OCD Records: 5/1995 Last

6/2019

[Show A](#)

Time Frame	Production				Injection				
	Oil(BBLS)	Gas(MCF)	Water(BBLS)	Days P/I	Water(BBLS)	Co2(MCF)	Gas(MCF)	Other	Pressure
1995	0	5519	40	242	0	0	0	0	N/A
1996	0	6875	0	366	0	0	0	0	N/A
1997	0	15712	3987	357	0	0	0	0	N/A
1998	0	23016	4334	361	0	0	0	0	N/A
1999	0	20892	5130	365	0	0	0	0	N/A
2000	0	31224	3260	360	0	0	0	0	N/A
2001	0	18753	2910	365	0	0	0	0	N/A
2002	0	17470	3510	365	0	0	0	0	N/A
2003	0	12815	1100	365	0	0	0	0	N/A
2004	0	12977	747	361	0	0	0	0	N/A
2005	0	7423	16	365	0	0	0	0	N/A
2006	0	12798	5590	348	0	0	0	0	N/A
2007	0	10912	3123	365	0	0	0	0	N/A
2008	0	9000	7385	366	0	0	0	0	N/A
2009	0	4206	2615	365	0	0	0	0	N/A
2010	0	5581	5851	365	0	0	0	0	N/A
2011	0	4367	4777	365	0	0	0	0	N/A
2012	0	4788	5218	363	0	0	0	0	N/A
2013	0	14188	5314	363	0	0	0	0	N/A
2014	0	24466	2309	356	0	0	0	0	N/A
2015	0	29947	4407	365	0	0	0	0	N/A
2016	0	26455	3179	361	0	0	0	0	N/A
2017	0	16224	4182	365	0	0	0	0	N/A
2018	0	8356	12500	365	0	0	0	0	N/A
2019	0	1079	2235	181	0	0	0	0	N/A

Time Frame	Production				Injection				
	Oil(BBLS)	Gas(MCF)	Water(BBLS)	Days P/I	Water(BBLS)	Co2(MCF)	Gas(MCF)	Other	Pressure
Grand Total:	0	345043	93719	8765	0	0	0	0	N/A

Transporters

Transporter	Product	Most Recent 1
[149052] ELM RIDGE EXPLORATION COMPANY LLC	Gas	1/2017
[151618] ENTERPRISE FIELD SERVICES L.L.C.	Gas	6/2019
[6515] DUGAN PRODUCTION CORP	Water	6/2019

Points of Disposition

ID	Type	Description	Pool(s)
2814923	Water	MESA #90 45-29159	[71629] BASIN FRUITLAND COAL (GAS)
2814922	Gas	MESA #90 45-29159	[71629] BASIN FRUITLAND COAL (GAS)

## 30-045-28996 SUPAI POINT #001 [13284]

## General Well Information

Operator:	[6515] DUGAN PRODUCTION CORP	Direction:	Vertical
Status:	Active	Multi-Lateral:	No
Well Type:	Gas	Mineral Owner:	Federal
Work Type:	New	Surface Owner:	
Surface Location:	A-20-24N-08W 840 FNL 830 FEL		
Lat/Long:	36.3046494,-107.6988678 NAD83		
GL Elevation:	6710		
KB Elevation:		Sing/Mult Compl:	Single
DF Elevation:		Potash Waiver:	False

## Proposed Formation and/or Notes

BASIN FRT COAL

## Depths

Proposed:	1855	True Vertical Depth:	1855
Measured Vertical Depth:	1855	Plugback Measured:	1787

## Formation Tops

Formation	Top	Producing	Method Obtained
Ojo Alamo Formation	1006		
Kirtland Formation	1208		
Fruitland Formation	1468		
Pictured Cliffs Formation	1735		

## Event Dates

Initial APD Approval:	10/12/1993	Current APD Expiration:	10/12/1995
Most Recent APD Approval:	02/23/1994		
APD Cancellation:			
APD Extension Approval:			
Spud:	10/21/1993	Gas Capture Plan Received:	
Approved Temporary Abandonment:		TA Expiration:	
Shut In:			
Plug and Abandoned Intent Received:		PNR Expiration:	
Well Plugged:		Last MIT/BHT:	05/15/2019
Site Release:			
Last Inspection:	05/15/2019		

## History

Effective Date	Property	Well Number	Operator	C-101 Work Type	Well Type	Well Status
02/23/1994	[13284] SUPAI POINT	#001	[6515] DUGAN PRODUCTION CORP	New	Gas	Active
10/12/1993	[13284] SUPAI POINT	#001	[6515] DUGAN PRODUCTION CORP	New	Gas	Active

Comments

FIRST PERMITTED IN 04-18-89, ABANDONED ON 07-17-89, SEE WELL FILE FOR HISTORY  
Added on 02/19/1994 by ogosh

Operator

General Contact Information

Company:	[6515] DUGAN PRODUCTION CORP	Main Phone:	505-325-1
Address:	709 E Murray Drive	Main Fax:	505-327-4
	Farmington, NM 87499		
Country:	U.S.A.		

Central Contact

Name:	Lynn Collier	Phone Number:	505-325-1
Title:	Production Accounting Supervisor	Cell Number:	
E-Mail Address:	Lynn.Collier@duganproduction.com	Fax Number:	505-327-4

Aztec Contact

Name:	Bill Armenta	Phone Number:	505-330-0
Title:		Cell Number:	505-320-3
E-Mail Address:	barmenta@duganproduction.com	Fax Number:	505-327-4

Pits

Pit On Site: Number 1			
Pit Type:	Production	Status:	Inactive
Registration Denied:			
Closure Approved:			
Closure Denied:			
Event Dates			
Registered:		Approved:	
Open:		Closed (most recent rig release):	09/19/2007
Notes			
Date		Detail	

Casing

			Boreholes, Strings and Equipment Specifications			Specifications for Strings and Tubing			Strings Cemented and Intervals			Cement and	
String/Hole Type	Taper	Date Set	Diameter	Top	Bottom (Depth)	Grade	Length	Weight	Bot of Cem	Top of Cem	Meth	Class of Cement	
Hole 1	1		7.000	0	126		0	0.0	0	0			
Surface Casing	1		7.000	0	126		126	20.0	126	59		Class C Cement	
Hole 2	1		4.500	0	1834		0	0.0	0	0			
Production Casing	1		4.500	0	1834		1834	10.5	1834	217		Class C Cement	
Packer	1		4.500	1697	1702		5	0.0	0	0			

String/Hole Type	Taper	Date Set	Boreholes, Strings and Equipment Specifications			Specifications for Strings and Tubing			Strings Cemented and Intervals			Cement an
			Diameter	Top	Bottom (Depth)	Grade	Length	Weight	Bot of Cem	Top of Cem	Meth	
Tubing 1	1		1.250	0	1697		1697	0.0	0	0		

### Well Completions

#### [71629] BASIN FRUITLAND COAL (GAS)

Status:	Active	Last Produced:	06/01/2019
Bottomhole Location:	A-20-24N-08W 840 FNL 830 FEL		
Lat/Long:			
Acreage:	E/320 20-24N-08W Units: A B G H I J O P		
DHC:	No	Consolidation Code:	
		Production Method:	Flowing

#### Well Test Data

Production Test:		Test Length:	0 hours
Flowing Tubing Pressure:	540 psi	Flowing Casing Pressure:	0 psi
Choke Size:	0.000 inches	Testing Method:	
Gas Volume:	0.0 MCF	Oil Volume:	0.0 bbls
Gas-Oil Ratio:	0 Kcf / bbl	Oil Gravity:	0.0 Corr. API
Disposition of Gas:		Water Volume:	0.0 bbls

#### Perforations

Date	Top Measured Depth (Where Completion Enters Formation)	Bottom Measured Depth (End of Lateral)	Top Vertical Depth	Bottom Vertical Depth
	1724	1734	0	0

#### Notes

#### Event Dates

Initial Effective/Approval:	10/12/1993	TA Expiration:	
Most Recent Approval:	05/02/1994	Confidential Until:	
Confidential Requested On:		Test Allowable End:	
Test Allowable Approval:		DHC:	
TD Reached:		Rig Released:	
Deviation Report Received:	No	Logs Received:	No
Directional Survey Run:	No	Closure Pit Plat Received:	
Directional Survey Received:	No	First Gas Production:	
First Oil Production:			
First Injection:			
Ready to Produce:	01/07/1994	Completion Report Received:	
C-104 Approval:	02/09/1994	New Well C-104 Approval:	
Plug Back:			
Authorization Revoked Start:		Revoked Until:	

#### Well Completion History

Effective Date	Property	Well Number	Operator	Completion Status
05/02/1994	[13284] SUPAI POINT	#001	[6515] DUGAN PRODUCTION CORP	Active
02/25/1994	[13284] SUPAI POINT	#001	[6515] DUGAN PRODUCTION CORP	Active
02/23/1994	[13284] SUPAI POINT	#001	[6515] DUGAN PRODUCTION CORP	Active
01/07/1994	[13284] SUPAI POINT	#001	[6515] DUGAN PRODUCTION CORP	Active
10/12/1993	[13284] SUPAI POINT	#001	[6515] DUGAN PRODUCTION CORP	Active

## Financial Assurance

Effective	Bond Type	Base	Balance	Issuer	Cash/Surety	Cancellation Date
04/10/2019	Blanket	250000	250000	WELLS FARGO BANK	LOC	

Requests to release bonds must be submitted in writing. You may send an e-mail to [Denise.Gallegos@state.nm.us](mailto:Denise.Gallegos@state.nm.us) or fax a letter to (505) 476-3453.

## Compliance

Note that Financial Assurance and Inactive Well Compliance are documented in separate reports ([Inactive Well Report](#), [Financial Assurance Report](#)).

Also note that some compliance issues are addressed at the operator level so not listed under each well.

## Complaints, Incidents and Spills

No Incidents Found

Please note that incidents that impact ground water are recorded along with "facilities" which may not be wells, so although the initial report may be recorded here as a spill, information related to the abate and ground water impact information are not yet part of this application.

## Orders

No Orders Found

## Production / Injection

Earliest Production in OCD Records: 2/1994 Last

6/2019

[Show A](#)

Time Frame	Production				Injection				
	Oil(BBLS)	Gas(MCF)	Water(BBLS)	Days P/I	Water(BBLS)	Co2(MCF)	Gas(MCF)	Other	Pressure
1994	0	73559	1960	324	0	0	0	0	N/A
1995	0	24768	2730	358	0	0	0	0	N/A
1996	0	8500	0	241	0	0	0	0	N/A
1997	0	186	6	153	0	0	0	0	N/A
1998	0	7978	66	104	0	0	0	0	N/A
1999	0	56704	450	365	0	0	0	0	N/A
2000	0	25255	1440	362	0	0	0	0	N/A
2001	0	5993	318	365	0	0	0	0	N/A
2002	0	10231	74	365	0	0	0	0	N/A
2003	0	8211	119	365	0	0	0	0	N/A
2004	0	8664	61	361	0	0	0	0	N/A
2005	0	8282	185	364	0	0	0	0	N/A
2006	0	8074	293	363	0	0	0	0	N/A
2007	0	6299	1404	365	0	0	0	0	N/A
2008	0	3977	1391	366	0	0	0	0	N/A
2009	0	454	310	365	0	0	0	0	N/A



Time Frame	Production				Injection				
	Oil(BBLS)	Gas(MCF)	Water(BBLS)	Days P/I	Water(BBLS)	Co2(MCF)	Gas(MCF)	Other	Pressure
2010	0	2168	335	365	0	0	0	0	N/A
2011	0	4037	418	365	0	0	0	0	N/A
2012	0	17919	926	363	0	0	0	0	N/A
2013	0	62935	1235	363	0	0	0	0	N/A
2014	0	88897	980	356	0	0	0	0	N/A
2015	0	52137	336	365	0	0	0	0	N/A
2016	0	34439	513	361	0	0	0	0	N/A
2017	0	30658	309	365	0	0	0	0	N/A
2018	0	25495	456	365	0	0	0	0	N/A
2019	0	39752	460	181	0	0	0	0	N/A
Grand Total:	0	615572	16775	8635	0	0	0	0	N/A

Transporters

Transporter	Product	Most Recent 1
[151618] ENTERPRISE FIELD SERVICES L.L.C.	Gas	6/2019
[6515] DUGAN PRODUCTION CORP	Water	6/2019
[151618] ENTERPRISE FIELD SERVICES L.L.C.	Gas	6/2019
[6515] DUGAN PRODUCTION CORP	Water	6/2019

Points of Disposition

ID	Type	Description	Pool(s)
2805358	Water		[71629] BASIN FRUITLAND COAL (GAS)
2805357	Gas		[71629] BASIN FRUITLAND COAL (GAS)

Application for Authorization to Inject

DJR Operating, LLC

**Crow Canyon Unit WDW #1**

Part VII. Operations Plan

1. Average Injection Rate: 3,000-bwpd with a maximum of 6,000-bwpd.
2. The system will be closed.
3. The average injection pressure: 1000 psi and the maximum will be 1300-psi.
4. The source of injected water will be produced water from the Crow Canyon Unit wells in the area (T24N and 25N, R8W). 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.

## **Produced Water Samples**

### **1. Crow Canyon Unit 701H**

UL I, Section 30-24N-8W

API: 030-45-35467

### **2. Escrito L14-2408-03H & 04H**

UL L, Section 14-24N-8W

API: 030-45-35533 – 03H

API: 030-45-35534 – 04H

## Water Analysis Report

Production Company: **DJR Operating, LLC**  
 Well Name: **CROW CANYON UNIT 701H**  
 Sample Point: **SEPARATOR**  
 Sample Date: **4/9/2019**  
 Sample ID: **WA-385471**

Sales Rep: **Craig Smith**  
 Lab Tech: **Amanda Harvey**

Scaling potential predicted using ScaleSoftPitzer from  
 Brine Chemistry Consortium (Rice University)

Sample Specifics		Analysis @ Properties in Sample Specifics			
		Cations	mg/L	Anions	mg/L
Test Date:	4/22/2019	Sodium (Na):	17630.13	Chloride (Cl):	27500.00
System Temperature 1 (°F):	50	Potassium (K):	35.99	Sulfate (SO4):	0.00
System Pressure 1 (psig):	15	Magnesium (Mg):	44.65	Bicarbonate (HCO3):	732.00
System Temperature 2 (°F):	200	Calcium (Ca):	276.09	Carbonate (CO3):	
System Pressure 2 (psig):	200	Strontium (Sr):	70.07	Hydroxide (HO):	
Calculated Density (g/ml):	1.0287	Barium (Ba):	21.81	Acetic Acid (CH3COO)	
pH:	7.00	Iron (Fe):	14.07	Propionic Acid (C2H5COO)	
Calculated TDS (mg/L):	46354.57	Zinc (Zn):	0.05	Butanoic Acid (C3H7COO)	
CO2 in Gas (%):		Lead (Pb):	0.23	Isobutyric Acid ((CH3)2CHCOO)	
Dissolved CO2 (mg/L):	148.50	Ammonia (NH3):		Fluoride (F):	
H2S in Gas (%):		Manganese (Mn):	0.19	Bromine (Br):	
H2S in Water (mg/L):	0.00	Aluminum (Al):	0.03	Silica (SiO2):	29.29
Tot. Suspended Solids (mg/L):		Lithium (Li):	1.99	Calcium Carbonate (CaCO3):	
Corrosivity (Langlier Sat. Indx)	0.00	Boron (B):	3.95	Phosphates (PO4):	
Alkalinity:		Silicon (Si):	13.69	Oxygen (O2):	

## Notes:

(PTB = Pounds per Thousand Barrels)

		Calcium Carbonate		Barium Sulfate		Iron Sulfide		Iron Carbonate		Gypsum CaSO4·2H2O		Celestite SrSO4		Halite NaCl		Zinc Sulfide	
Temp (°F)	PSI	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB
200.00	200.00	0.86	68.99	0.00	0.00	0.00	0.00	1.46	9.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
183.00	179.00	0.75	59.53	0.00	0.00	0.00	0.00	1.36	9.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
167.00	159.00	0.64	50.49	0.00	0.00	0.00	0.00	1.25	9.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
150.00	138.00	0.55	42.18	0.00	0.00	0.00	0.00	1.14	9.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
133.00	118.00	0.45	34.49	0.00	0.00	0.00	0.00	1.03	9.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
117.00	97.00	0.37	27.51	0.00	0.00	0.00	0.00	0.91	8.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	77.00	0.29	21.31	0.00	0.00	0.00	0.00	0.79	8.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
83.00	56.00	0.22	15.92	0.00	0.00	0.00	0.00	0.67	7.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
67.00	36.00	0.16	11.49	0.00	0.00	0.00	0.00	0.55	6.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50.00	15.00	0.13	9.05	0.00	0.00	0.00	0.00	0.45	5.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

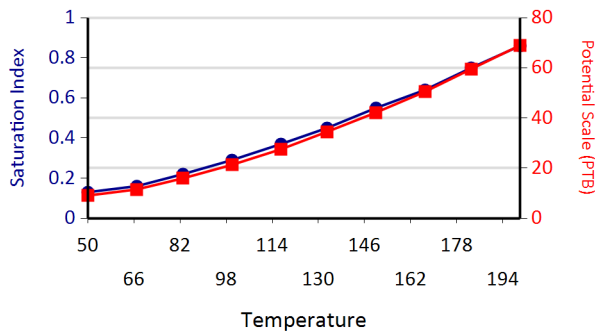
## Water Analysis Report

Temp (°F)	PSI	Hemihydrate CaSO <sub>4</sub> ~0.5H <sub>2</sub> O		Anhydrate CaSO <sub>4</sub>		Calcium Fluoride		Zinc Carbonate		Lead Sulfide		Mg Silicate		Ca Mg Silicate		Fe Silicate	
		SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB
200.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.87	8.82	0.38	4.39	5.59	10.62
183.00	179.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.93	10.42
167.00	159.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.28	10.08
150.00	138.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.64	9.58
133.00	118.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.02	8.83
117.00	97.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.41	7.79
100.00	77.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.82	6.44
83.00	56.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.26	4.81
67.00	36.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.75	3.05
50.00	15.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.41	1.71

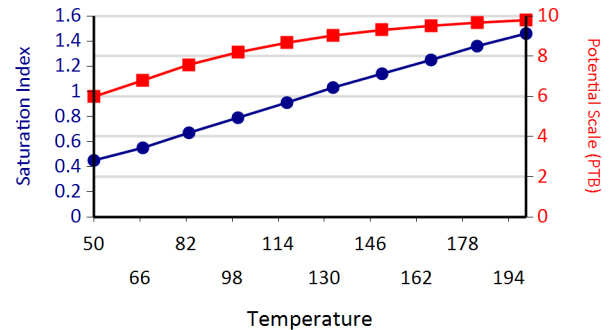
These scales have positive scaling potential under initial temperature and pressure: Calcium Carbonate Iron Carbonate Mg Silicate Ca Mg Silicate Fe Silicate

These scales have positive scaling potential under final temperature and pressure: Calcium Carbonate Iron Carbonate Fe Silicate

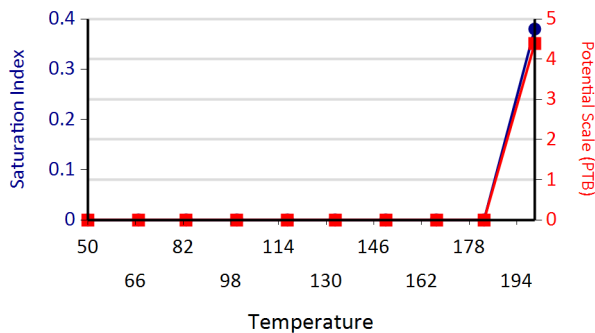
Calcium Carbonate



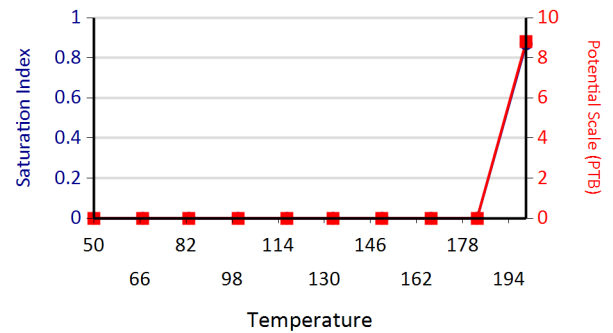
Iron Carbonate



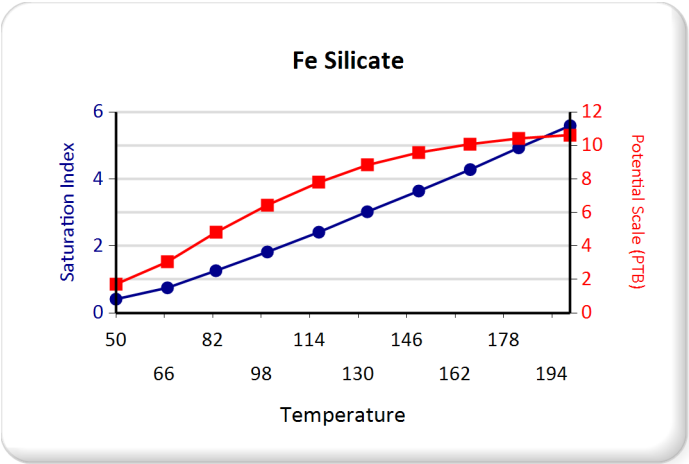
Ca Mg Silicate



Mg Silicate



Water Analysis Report



Water Analysis Report

Production Company:	DJR Operating, LLC	Sales Rep:	Craig Smith
Well Name:	ESCRITO L14-2408-03H/04H	Lab Tech:	Amanda Harvey
Sample Point:	SEPARATOR		
Sample Date:	4/9/2019		
Sample ID:	WA-385475		
			Scaling potential predicted using ScaleSoftPitzer from Brine Chemistry Consortium (Rice University)

Sample Specifics		Analysis @ Properties in Sample Specifics			
		Cations	mg/L	Anions	mg/L
Test Date:	4/22/2019	Sodium (Na):	9581.25	Chloride (Cl):	15500.00
System Temperature 1 (°F):	50	Potassium (K):	33.30	Sulfate (SO4):	0.00
System Pressure 1 (psig):	15	Magnesium (Mg):	43.06	Bicarbonate (HCO3):	335.50
System Temperature 2 (°F):	200	Calcium (Ca):	364.62	Carbonate (CO3):	
System Pressure 2 (psig):	200	Strontium (Sr):	75.28	Hydroxide(HO):	
Calculated Density (g/ml):	1.0152	Barium (Ba):	23.29	Acetic Acid (CH3COO)	
pH:	7.10	Iron (Fe):	34.69	Propionic Acid (C2H5COO)	
Calculated TDS (mg/L):	26024.50	Zinc (Zn):	0.27	Butanoic Acid (C3H7COO)	
CO2 in Gas (%):		Lead (Pb):	0.11	Isobutyric Acid ((CH3)2CHCOO)	
Dissolved CO2 (mg/L):	99.00	Ammonia NH3:		Fluoride (F):	
H2S in Gas (%):		Manganese (Mn):	1.00	Bromine (Br):	
H2S in Water (mg/L):	0.00	Aluminum (Al):	0.10	Silica (SiO2):	32.13
Tot. SuspendedSolids(mg/L):		Lithium (Li):	1.88	Calcium Carbonate (CaCO3):	
Corrosivity(LanglierSat.Indx)	0.00	Boron (B):	3.21	Phosphates (PO4):	0.12
Alkalinity:		Silicon (Si):	15.02	Oxygen (O2):	

Notes:

(PTB = Pounds per Thousand Barrels)

		Calcium Carbonate		Barium Sulfate		Iron Sulfide		Iron Carbonate		Gypsum CaSO4·2H2O		Celestite SrSO4		Halite NaCl		Zinc Sulfide	
Temp (°F)	PSI	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB
200.00	200.00	0.81	33.35	0.00	0.00	0.00	0.00	1.70	23.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
183.00	179.00	0.69	28.05	0.00	0.00	0.00	0.00	1.59	23.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
167.00	159.00	0.58	23.03	0.00	0.00	0.00	0.00	1.47	22.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
150.00	138.00	0.48	18.45	0.00	0.00	0.00	0.00	1.36	21.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
133.00	118.00	0.38	14.34	0.00	0.00	0.00	0.00	1.24	21.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
117.00	97.00	0.29	10.70	0.00	0.00	0.00	0.00	1.11	19.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	77.00	0.21	7.57	0.00	0.00	0.00	0.00	0.99	18.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
83.00	56.00	0.15	4.97	0.00	0.00	0.00	0.00	0.87	17.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
67.00	36.00	0.09	2.95	0.00	0.00	0.00	0.00	0.75	15.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50.00	15.00	0.06	1.98	0.00	0.00	0.00	0.00	0.65	13.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00



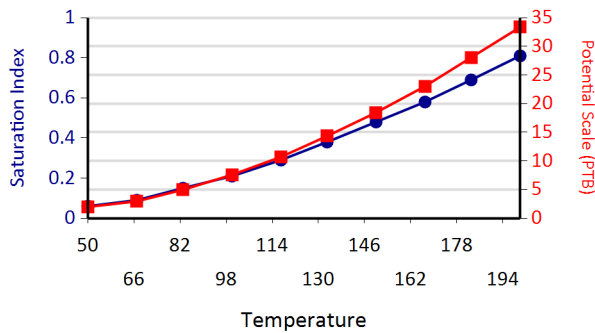
## Water Analysis Report

Temp (°F)	PSI	Hemihydrate CaSO <sub>4</sub> ~0.5H <sub>2</sub> O		Anhydrate CaSO <sub>4</sub>		Calcium Fluoride		Zinc Carbonate		Lead Sulfide		Mg Silicate		Ca Mg Silicate		Fe Silicate	
		SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB
200.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.43	8.18	0.92	6.06	7.48	25.51
183.00	179.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.53	2.79	0.38	2.31	6.80	24.61
167.00	159.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.12	23.33
150.00	138.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.45	21.65
133.00	118.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.81	19.61
117.00	97.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.18	17.30
100.00	77.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.58	14.85
83.00	56.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.01	12.41
67.00	36.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.50	10.16
50.00	15.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.15	8.65

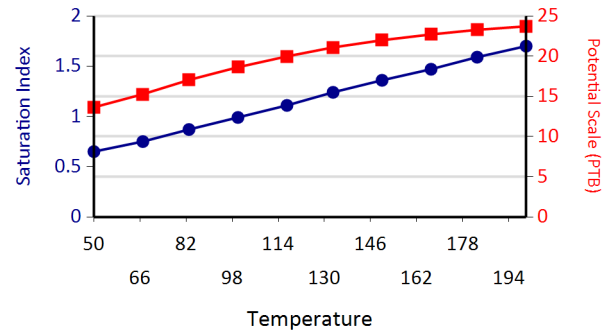
These scales have positive scaling potential under initial temperature and pressure: Calcium Carbonate Iron Carbonate Mg Silicate Ca Mg Silicate Fe Silicate

These scales have positive scaling potential under final temperature and pressure: Calcium Carbonate Iron Carbonate Fe Silicate

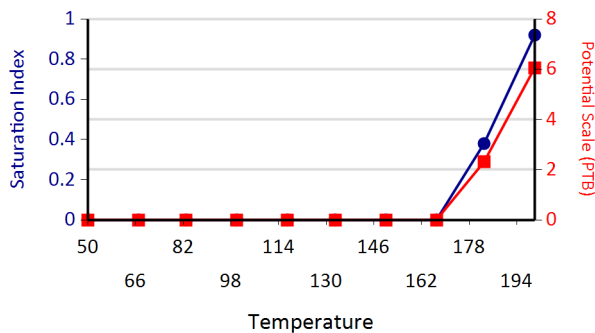
Calcium Carbonate



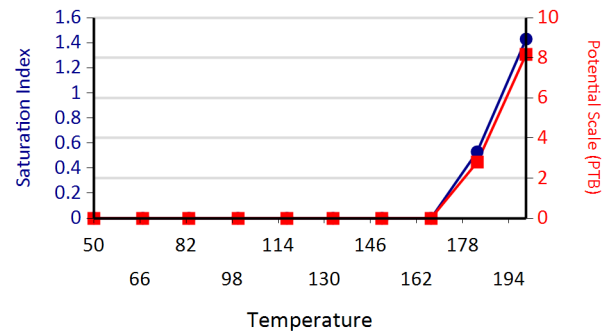
Iron Carbonate



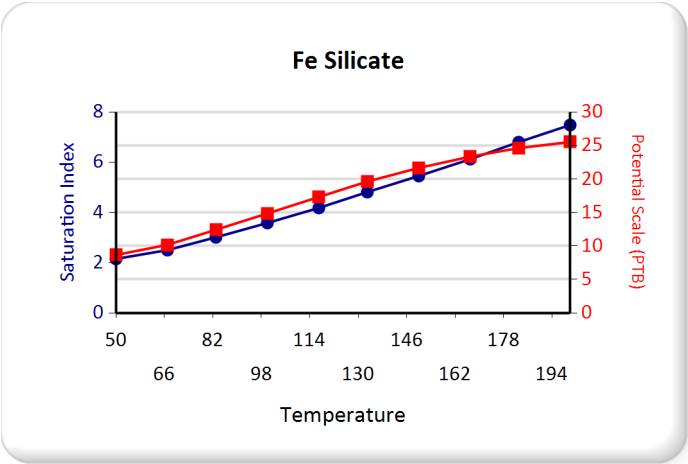
Ca Mg Silicate



Mg Silicate



Water Analysis Report



Application for Authorization to Inject

DJR Operating, LLC

**Crow Canyon Unit WDW #1**

Part VIII. Geologic Data

The proposed injection interval for the Crow Canyon water disposal well is the Entrada Sandstone at a depth of approximately 7,290 feet to 7,490 feet bgs.

Point of diversion data (POD) obtained from the New Mexico Office of the State Engineer (NMOSE) on July 17, 2019 indicates that there are no water wells located within 1 mile of the proposed Crow Canyon water disposal well. The NMOSE POD dataset also indicates that the closest surface water diversion to the Crow Canyon water disposal well is SD 05187, which is located 13.7 miles to the west of the Crow Canyon water disposal well.

The National Hydrography Dataset indicates that the closest surface water feature to the Crow Canyon water disposal well is an unnamed arroyo, which is located 250 feet to the east.

There are no known drinking water sources below the Mesaverde interval. The formation tops are as follows:

<b>Formation Tops</b>	<b>TVD</b>
Ojo Alamo	1065
Kirtland	1215
Fruitland	1580
Pictured Cliffs	1805
Lewis	1995
Chacra	2595
Cliff House	3375
Menefee	3445
Point Lookout	4165
Mancos	4395
Gallup	5195
Greenhorn	6130
Dakota	6230
Todilto	7230
<b>Entrada</b>	<b>7290</b>
<b>Total Depth</b>	<b>7490</b>

Part IX. Stimulation Program

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

# **Entrada Formation Water Samples**

## **1. Entrada SWD**

Section 8-25N-3W

## **2. Santa Fe 20 No. 1 SWD**

Section 20-21N-8W

## **3. Herry Monster #3 SWD**

Section 11-24N-11W

# **Water Analysis of Entrada Formation Water**

**(from TnT Disposal well located in section 8/T25N/R3W)**

## Multi-Chem Analytical Laboratory

1122 S. FM1788

Midland, TX 76706

Units of Measurement: Standard

multi-chem

A HALLIBURTON SERVICE

## Water Analysis Report

Production Company: TNT Environmental

Well Name: SWD ENTRADA

Sample Point: SWD

Sample Date: 11/20/2014

Sample ID: WA-294316

Sales Rep: Greg Ramalho

Lab Tech: Andrew Callaghan

Scaling potential predicted using ScaleSoftPitzer from  
Brine Chemistry Consortium (Rice University)

Sample Specifics		Analysis @ Properties in Sample Specifics			
		Cations		Anions	
Test Date:	11/25/2014	mg/L		mg/L	
System Temperature 1 (°F):	31	Sodium (Na):	4455.35	Chloride (Cl):	6000.00
System Pressure 1 (psig):	15	Potassium (K):	44.79	Sulfate (SO <sub>4</sub> ):	1094.00
System Temperature 2 (°F):	300	Magnesium (Mg):	23.10	Bicarbonate (HCO <sub>3</sub> ):	427.00
System Pressure 2 (psig):	300	Calcium (Ca):	115.67	Carbonate (CO <sub>3</sub> ):	120.00
Calculated Density (g/ml):	1.0059	Strontium (Sr):	7.60	Acetic Acid (CH <sub>3</sub> COO):	
pH:	7.60	Barium (Ba):	9.30	Propionic Acid (C <sub>2</sub> H <sub>5</sub> COO):	
Calculated TDS (mg/L):	12320.63	Iron (Fe):	1.82	Butanoic Acid (C <sub>3</sub> H <sub>7</sub> COO):	
CO <sub>2</sub> in Gas (%):		Zinc (Zn):	0.10	Isobutyric Acid ((CH <sub>3</sub> ) <sub>2</sub> CHCOO):	
Dissolved CO <sub>2</sub> (mg/L):	80.00	Lead (Pb):	0.00	Fluoride (F):	
H <sub>2</sub> S in Gas (%):		Ammonia (NH <sub>3</sub> ):		Bromine (Br):	
H <sub>2</sub> S in Water (mg/L):	2.50	Manganese (Mn):	0.55	Silica (SiO <sub>2</sub> ):	21.35

Notes:

(PTB = Pounds per Thousand Barrels)

		Calcium Carbonate		Barium Sulfate		Iron Sulfide		Iron Carbonate		Gypsum CaSO <sub>4</sub> ·2H <sub>2</sub> O		Celestite SrSO <sub>4</sub>		Halite NaCl		Zinc Sulfide	
Temp (°F)	PSI	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB
300.00	300.00	1.90	85.63	1.92	5.47	2.21	0.99	1.95	1.31	0.00	0.00	0.09	1.02	0.00	0.00	6.95	0.05
270.00	268.00	1.68	77.73	1.90	5.47	2.04	0.99	1.80	1.30	0.00	0.00	0.00	0.00	0.00	0.00	7.04	0.05
240.00	236.00	1.47	68.31	1.90	5.47	1.89	0.98	1.63	1.29	0.00	0.00	0.00	0.00	0.00	0.00	7.17	0.05
210.00	205.00	1.26	57.99	1.92	5.47	1.76	0.97	1.45	1.27	0.00	0.00	0.00	0.00	0.00	0.00	7.32	0.05
180.00	173.00	1.06	47.51	1.98	5.48	1.67	0.96	1.25	1.24	0.00	0.00	0.00	0.00	0.00	0.00	7.53	0.05
150.00	141.00	0.88	37.61	2.08	5.49	1.62	0.96	1.03	1.19	0.00	0.00	0.00	0.00	0.00	0.00	7.79	0.05
120.00	110.00	0.71	29.02	2.23	5.51	1.64	0.96	0.81	1.11	0.00	0.00	0.00	0.00	0.00	0.00	8.13	0.05
90.00	78.00	0.57	22.00	2.44	5.52	1.73	0.97	0.59	0.96	0.00	0.00	0.00	0.00	0.00	0.00	8.56	0.05
60.00	46.00	0.46	16.76	2.73	5.53	1.92	0.98	0.36	0.73	0.00	0.00	0.00	0.00	0.00	0.00	9.11	0.05
31.00	15.00	0.39	13.73	3.10	5.53	2.26	0.99	0.16	0.39	0.00	0.00	0.00	0.00	0.00	0.00	9.83	0.05

		Hemihydrate CaSO <sub>4</sub> ·0.5H <sub>2</sub> O		Anhydrite CaSO <sub>4</sub>		Calcium Fluoride		Zinc Carbonate		Lead Sulfide		Mg Silicate		Ca Mg Silicate		Fe Silicate	
Temp (°F)	PSI	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB
300.00	300.00	0.00	0.00	0.14	31.79	0.00	0.00	0.91	0.06	0.00	0.00	7.71	25.75	4.14	13.11	9.66	1.42
270.00	268.00	0.00	0.00	0.00	0.00	0.00	0.00	0.75	0.06	0.00	0.00	6.34	25.03	3.32	12.39	8.62	1.41
240.00	236.00	0.00	0.00	0.00	0.00	0.00	0.00	0.54	0.05	0.00	0.00	4.87	22.02	2.45	10.55	7.49	1.41
210.00	205.00	0.00	0.00	0.00	0.00	0.00	0.00	0.29	0.03	0.00	0.00	3.30	15.59	1.51	7.07	6.31	1.40
180.00	173.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.67	7.51	0.54	2.57	5.08	1.38
150.00	141.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.84	1.32
120.00	110.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.66	1.18
90.00	78.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.55	0.90
60.00	46.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61	0.45
31.00	15.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01



CORE LABORATORIES, INC.  
Petroleum Reservoir Engineering  
DALLAS, TEXAS  
WATER ANALYSIS

RECEIVED

MAR 25 1977

Minerals Management Inc.

30-045-22291  
G-20-21n-8w

File WA - 5

Company Dome Petroleum Corp. Well Name Sante Fe 20 No. 1 Sample No. SS-2  
Formation \_\_\_\_\_ Depth \_\_\_\_\_ Sampled From \_\_\_\_\_  
Location Sec 20 T 21N R 8W Field \_\_\_\_\_ County San Juan State N.M.  
Date Sampled 3-9-77 Date Analyzed 3-13-77 Engineer RGC

Total Dissolved Solids 11,114.5 mg/L

Sp. Gr. 1.009 @ 70 °F.

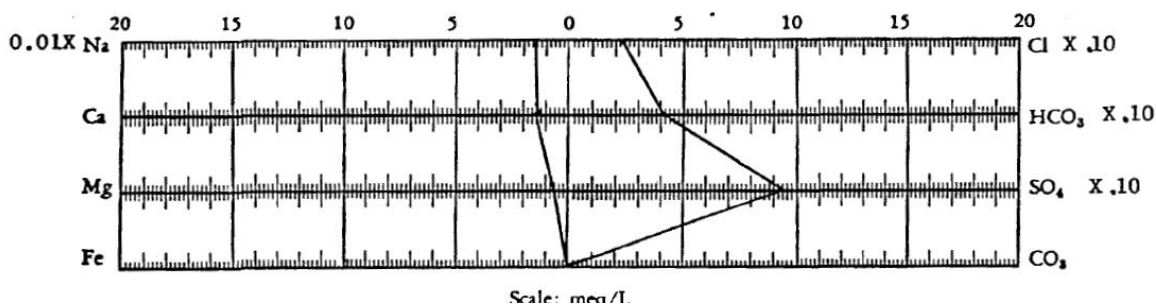
Resistivity 1.0 ohm-meters @ 70 °F.

Hydrogen Sulfide Present

pH 7.73

Constituents	meq/L	mg/L	Constituents	meq/L	mg/L
Sodium	<u>140.44</u>	<u>3228.7</u>	Chloride	<u>25.47</u>	<u>903.0</u>
Calcium	<u>1.35</u>	<u>27.0</u>	Bicarbonate	<u>41.73</u>	<u>2546.0</u>
Magnesium	<u>0.73</u>	<u>8.9</u>	Sulfate	<u>91.61</u>	<u>4400.0</u>
Iron	<u>0.03</u>	<u>0.9</u>	Carbonate	<u>ND</u>	<u>ND*</u>
Barium	<u>ND</u>	<u>ND</u>	Hydroxide	<u>ND</u>	<u>ND</u>

\*ND = Less than 0.1 mg/L





# HALLIBURTON

## Water Analysis Report

30-045-33217

F-11-24n-11w

To:	<u>Dugan Production</u>	Date:	<u>11/10/2005</u>
Submitted by:	<u>Halliburton Energy Services</u>	Date Rec:	<u>11/10/2005</u>
Attention:	<u>Darrin Steed</u>	Report #:	<u>FLMM5A44</u>
Well Name:	<u>Herry Monster #3 SWD</u>	Formation:	<u>Entrada/SWD</u>

Specific Gravity	1.005	
pH	8.4	
Resistivity	0.89	@ 70° F
Iron (Fe)	0	Mg / L
Potassium (K)	200	Mg / L
Sodium (Na)	4165	Mg / L
Calcium (Ca)	176	Mg / L
Magnesium (Mg)	15	Mg / L
Chlorides (Cl)	2200	Mg / L
Sulfates (SO4)	2000	Mg / L
Carbonates (CO3)	40	Mg / L
Bicarbonates (HCO3)	5812	Mg / L
Total Dissolved Solids	14408	Mg / L

Respectfully: Bill Loughridge  
Title: Senior Scientist  
Location: Farmington, NM

#### Part X. Logging and Test Data

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

#### Part XI. Fresh Water Samples

Point of diversion data (POD) obtained from the New Mexico Office of the State Engineer (NMOSE) on July 17, 2019 indicates that there are no water wells completed within 1 mile of the proposed Crow Canyon water disposal well.

Application for Authorization to Inject

DJR Operating, LLC

**Crow Canyon Unit WDW #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.



\_\_\_\_\_  
Ningning Li, Completions Manager

09/24/2019

\_\_\_\_\_  
Date

Application for Authorization to Inject

DJR Operating, LLC

**Crow Canyon Unit WDW #1**

Part XIII. Proof of Notice

Attached are proofs 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.

Re: NOTICE OF FORM C-108 APPLICATION )  
AUTHORIZATION TO INJECT ) SS  
CROW CANYON UNIT WDW 1 )  
SAN JUAN COUNTY, NEW MEXICO )

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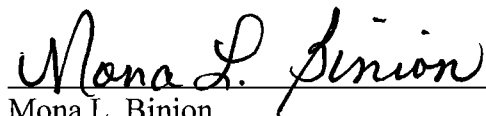
AFFIDAVIT OF MAILING

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STATE OF COLORADO )  
CITY & COUNTY OF DENVER ) ss

Mona L. Binion, Land Negotiator for DJR Operating, LLC ("DJR") does hereby certify that September 12, 2019, she transmitted the attached notice of the captioned matter by certified mail, return receipt requested, to those parties listed on the Notice List attached.

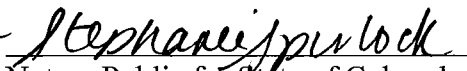
FURTHER AFFIANT SAYETH NOT

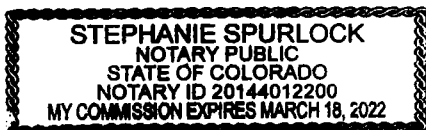


Mona L. Binion  
DJR Operating, LLC  
1600 North Broadway, Suite 1960  
Denver, CO 80202

Subscribed and sworn to before me this 12th day of September, 2019 by Mona L. Binion.

Witness my hand and official seal.

My Commission Expires: March 18, 2022   
Notary Public for State of Colorado





**DELIVERED VIA CERTIFIED MAIL – RETURN RECEIPT REQUESTED**

September 12, 2019

TO OWNERS ON ATTACHED NOTICE LIST

Re: Notice of Application  
Form C-108 Authorization to Inject  
Crow Canyon Unit WDW #1  
San Juan County, New Mexico

Ladies and Gentlemen:

The purpose of this communication is to provide notice of the referenced application which DJR Operating, LLC ("DJR") intends to submit to New Mexico Oil Conservation Division ("NMOCD") in the near future.

Pursuant to the NMOCD notice requirement associated with this application, please find enclosed a copy of the completed C-108 application to be filed. Any objections or requests for hearing related to this application must be filed with NMOCD within fifteen (15) days from the date of mailing of this notice as noted above.

New Mexico Oil Conservation Division  
1200 South St. Francis Drive  
Santa Fe, NM 87505

Please do not hesitate to contact Mona Binion (303) 407-7399 or [mbinion@djrlc.com](mailto:mbinion@djrlc.com) if you have any questions regarding this notice.

Regards,

DJR Operating, LLC

A handwritten signature in black ink that reads 'Mona L. Binion'.

Mona L. Binion, CPL  
Land Consultant

Encls.

**CROW CANYON UNIT WDW #1**

NOTICE OF APPLICATION  
FORM C-108 FOR AUTHORIZATION TO INJECT  
AFFIDAVIT OF MAILING

**SURFACE OWNER UNDER WDW LOCATION**

USA  
Bureau of Land Management  
301 Dinosaur Trail  
Santa Fe, NM 87508

Bureau of Land Management  
6251 College Blvd., Suite A  
Farmington, NM 87402  
Attention: Joe Kilins

**LEASEHOLD OWNERS WITHIN ONE-HALF MILE RADIUS OF WDW LOCATION**

Dugan Production Corp.  
P. O. Box 420  
Farmington, NM 87499  
Attention: Ramon Hancock

DJR Operating, LLC  
1600 Broadway  
Ste 1960  
Denver CO 80202

**USPS CERTIFIED MAIL**



**9407 1108 9876 5044 0626 78**

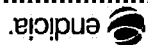
DUGAN PRODUCTION CORP  
ATTN RAMON HANCOCK  
PO BOX 420  
FARMINGTON NM 87499



US POSTAGE AND FEES PAID  
**FIRST-CLASS**  
Sep 12 2019  
Mailed from ZIP 80202  
4 oz First-Class Mail Flat Rate



071S00777793





DJR Operating, LLC  
1600 Broadway  
Ste 1960  
Denver CO 80202

**USPS CERTIFIED MAIL**



**9407 1108 9876 5044 0612 82**

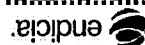
UNITED STATES OF AMERICA  
BUREAU OF LAND MANAGEMENT  
301 DINOSAUR TRAIL  
SANTA FE NM 87508



US POSTAGE AND FEES PAID  
**FIRST-CLASS**  
Sep 12 2019  
Mailed from ZIP 80202  
4 oz First-Class Mail Flat Rate



071S00777793



DJR Operating, LLC  
1600 Broadway  
Ste 1960  
Denver CO 80202

**USPS CERTIFIED MAIL**



**9407 1108 9876 5044 0619 78**

BUREAU OF LAND MANAGEMENT  
ATTN JOE KILINS  
6251 COLLEGE BLVD  
STE A  
FARMINGTON NM 87402



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**FIRST-CLASS**  
Sep 12 2019  
Mailed from ZIP 80202  
4 oz First-Class Mail Flats Rate



071S00777793



**AFFIDAVIT OF PUBLICATION**

**Ad No.  
0001295981**

ANIMAS PROPERTY LAW P.C.  
858 MAIN, SUITE 204

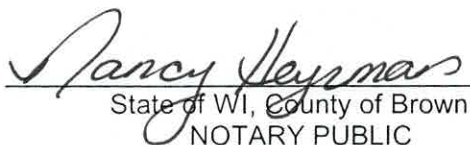
DURANGO CO 81301

I, being duly sworn say: 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 State of New Mexico for publication and appeared in the internet at The Daily Times web site on the following days(s):

09/10/19

  
Legal Clerk

Subscribed and sworn before me this  
10th of September 2019.

  
State of WI, County of Brown  
NOTARY PUBLIC

5.15.23

My Commission Expires

DJR Operating, LLC, 1600 Broadway, Suite 1960, Denver, CO 80202 is making application for administrative approval to dispose of produced and flow-back water by underground injection. Contact person is Ningning Li, Phone 303-407-7390. The proposed disposal site is Crow Canyon Unit WDW #1, located 153' FSL & 1382' FEL, Sec 17 T24N R8W, San Juan Co NM. Water will be injected into the Entrada Sandstone between the depths of approximately 7290' to 7490' below the surface. Maximum anticipated injection pressure is 1300 psi. Maximum injection rate will be 6000 barrels of water per day. Any interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South Saint Francis Drive, Santa Fe, NM 87505 within 15 days of the date of this publication.

Legal No. 1295981 published in The Daily Times on September 10, 2019.

Ad#:0001295981  
P O :  
# of Affidavits :0.00

NANCY HEYRMAN  
Notary Public  
State of Wisconsin