Initial Application Part I

Received: **09/03/2019**

This application is placed in file for record. It MAY or MAY NOT have been reviewed to be determined Administratively Complete

Revised March 23, 2017

RECEIVED: 09/03/2019	REVIEWER:	TYPE: SWD	APP NO: pMAM1924646228

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: Nageezi Unit WDW #1 **API:**
Pool: SWD;ENTRADA **Pool Code:** 96436

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

SWD-2263

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

FOR OCD ONLY
☐ Notice Complete
☐ Application Content Complete

2) **NOTIFICATION REQUIRED TO:** Check those which apply.
A. ☒ Offset operators or lease holders
B. ☐ Royalty, overriding royalty owners, revenue owners
C. ☒ Application requires published notice
D. ☐ Notification and/or concurrent approval by SLO
E. ☒ Notification and/or concurrent approval by BLM
F. ☒ Surface owner
G. ☒ For all of the above, proof of notification or publication is attached, and/or,
H. ☐ No notice required

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

8/23/19
Date

303-407-7390
Phone Number

nli@djrllc.com
e-mail Address

DJR Operating

August 23, 2019

Mr. Will Jones
New Mexico Oil Conservation Division – Engineering Bureau
1200 South St. Francis St.
Santa Fe, NM 87505

Re: Application for Nageezi Unit WDW #1, San Juan Co., NM

Dear Mr. Jones:

Enclosed is DJR Operating, LLC's application for disposal of produced water in the Nageezi Unit WDW #1. In fulfilling the requirements of the 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. Two-mile radius map identifying all wells with a one-half mile radius drawn around the proposed injection well
4. Data sheet of all wells within two miles of proposed injection well, highlighting those wells inside one-half mile radius of the proposed injection well
5. Lease and surface owner maps identifying all lessees and surface owners within a two-mile radius with one-half mile radius drawn around the proposed injection well
6. Operations plan for proposed injection well
7. Water analysis of produced water to be to be disposed in injection well
8. Water analysis of the Entrada formation where produced water is proposed to be injected
9. Required geologic, stimulation, logging, test and fresh water data from nearby wells
10. Signed statement of geologic and engineering data
11. 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 require additional information, please contact me.

Sincerely,

Ningning Li
Completions Manager

Attachments

1600 BROADWAY, SUITE 1960, DENVER, CO 80202 OFFICE: 303-595-7430

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL
RESOURCES DEPARTMENT

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

FORM C-108
Revised June 10, 2003

APPLICATION FOR AUTHORIZATION TO INJECT

I. PURPOSE: _____Secondary Recovery _____Pressure Maintenance _____XX__Disposal _____Storage
Application qualifies for administrative approval? _____Yes _____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: 8/23/19

E-MAIL ADDRESS: _____nli@djrllc.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: _____

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate District Office

III. WELL DATA

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

(1) Lease name; Well No.; Location by Section, Township and Range; and footage location within the section.

(2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.

(3) A description of the tubing to be used including its size, lining material, and setting depth.

(4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

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

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

(1) The name of the injection formation and, if applicable, the field or pool name.

(2) The injection interval and whether it is perforated or open-hole.

(3) State if the well was drilled for injection or, if not, the original purpose of the well.

(4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.

(5) Give the depth to and 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.

Application for Authorization to Inject

DJR Operating, LLC

Nageezi 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 Nageezi Unit WDW #1 well located 848' FNL & 1406' FWL in Section 34, Township 24 North, Range 9 West, San Juan County, New Mexico. Produced water will be injected into the Entrada Sandstone between 6775' and 6970'. 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 changes 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

Nageezi Unit WDW #1

Part III. Well Data

A. Tabular Information

1. Name: Nageezi Unit WDW #1

   Location: 848' FNL & 1406' FWL
   Section 34, T24N, R9W
   San Juan County, NM

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

   Production Casing:
   7 in, 26 lb, N-80 (6970 ft) set at 6970 ft., LT&C coupling, Cement in two stages with stage tool (DV) at 3865 ft using 700 cu ft (587 cu ft 1st lead and 113 cu ft in 1st tail) in first stage and 872 (759 2nd lead and 113 in 2nd tail) cubic ft in second stage. Hole size – 8-3/4 in.

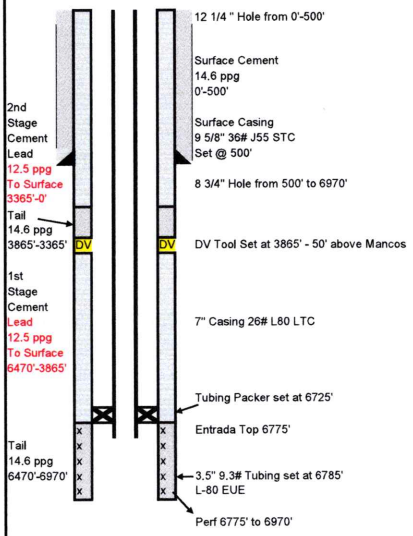
   Injection Tubing:
   3-1/2 in J-55 EUE 9.3 lb/ft Internally Coated Tubing set at 6785 ft.

   Packer:
   7 in by 3 ½ in AS1-X packer 10K nickel coated, will be set in tension at 6725 ft or 50 ft above the upper most perforation.

B. Additional Information

1. Injection Interval: Entrada Sandstone
2. The injection interval (Entrada 6775' – 6970') will be perforated.
3. The well (Nageezi Unit 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. 965' – 1445', Gallup-Approx. 4655'-5585' and Dakota Sandstone-Approx. 5685' to 6715'.

Injection Well Data Sheet
Operator: DJR Operating LLC
Well Name and Number: Nageezi Unit WDW No. 1



WELL NAME: Nageezi Unit WDW #1 **STATE:** New Mexico
API NO: **COUNTY:** San Juan
TVD: 6970'

LOCATION: 848' FNL & 1406' FWL
Sec 34, T24N R9W
TARGET FORMATION: Entrada

CASING DATA and OTHER TOOLS

	OD	WT/FT	GRADE	THREAD	TOP	EOC
Srf Csg	9.625"	36.00 lb/ft	J-55	STC	0'	500'
Prod Liner	7.00"	26.00 lb/ft	N-80	LT&C	0'	6970'
DV Tool					3865'	
Packer	7 " by 3 1/2" AS1-X 10K Nickel coated					

CEMENT

		SX	WT.	
Surface	Tail only	253	14.6 ppg	125% Excess over gauge
Production				
1st Stage	Lead	295	12.5 ppg	50% Excess
1st Stage	Tail	82	14.6 ppg	over gauge
2nd Stage	Lead	381	12.5 ppg	
2nd Stage	Tail	82	14.6 ppg	
Total		840		

Tubing and Packer

Size	Tubing Depth	Packer Depth
3.500"	6785'	6725'

Geology

Formation Tops	Subsea	TVD	MD	O/G/W	Pressure
Ojo Alamo	6215	615	615	W	normal
Kirtland	6050	780	780	W	normal
Fruitland	5865	965	965	G/W	sub-normal
Pictured Cliffs	5495	1335	1335	G/W	sub-normal
Lewis	5385	1445	1445	G/W	normal
Chacra	4815	2015	2015	G/W	normal
Cliff House	3985	2845	2845	G/W	sub-normal
Menefee	3945	2885	2885	G/W	normal
Point Lookout	3075	3755	3755	G/W	normal
Mancos	2915	3915	3915	O/G	normal
Gallup	2175	4655	4655	O/G	normal
Greenhorn	1245	5585	5585	O/G/W	normal
Dakota	1145	5685	5685	O/G/W	normal
Todilto	115	6715	6715	G/W	normal
Entrada	55	6775	6775	W	normal
Total Depth		6970	6970		