District 1 4	State of New Mexico	Form C-101
1625 N. French Dr., Hobbs, NM 88240		Revised July 18, 2013
Phone: (575) 393-6161 Fax: (575) 393-0720	<b>Energy Minerals and Natural Resources</b>	
District II	Energy while als and Natural Resources	
811 S. First St., Artesia, NM 88210	A	
Phone: (575) 748-1283 Fax: (575) 748-9720	Oil Conservation Division	AMENDED REPORT
District III		
1000 Rio Brazos Road, Aztee, NM 87410	1220 South St. Francis Dr.	
Phone: (505) 334-6178 Fax: (505) 334-6170	1220 South St. Francis Dr.	
District IV		
1220 S. St. Francis Dr., Santa Fe, NM 87505	Santa Fe, NM 87505	
Phone: (505) 476-3460 Fax: (505) 476-3462	·	
A DDI TO ATION FOD DEDMIT	CODULT DE ENTED DEEDEN DELLCDAC	V OD ADD A ZONE

### APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

		Stra Ro	• •	on Company 1030 88202-1030				21712 3 API Number 30-015-20899	<u>,</u>
• Prop 2	erty Code 3510		<sup>5</sup> Property Name Forty Niner Ridge Unit 001 SWD						
				<sup>7.</sup> St	urface Location	1	•		
UL - Lot J	Section 16	Township 23S	Range 30E	Lot Idn	Feet from 1980	N/S Line FSL	Feet From 1980	E/W Line FEL	County Eddy
				* Propos	ed Bottom Hol	e Location			
UL - Loi J	Section 16	Township 23S	Range 30E	Lot Idn	Feet from 1980	N/S Line FSL	Feet From 1980	E/W Line FEL	County Eddy
	<u> </u>	L		•	ol Information	]		· · · · · · · · · · · · · · · · · ·	<u> </u>
Pool Name Forty Niner Ridge Devonian SWD					Pool Code 96100				
				Addition	al Well Inforn				

<sup>11.</sup> Work Type	<sup>12.</sup> Well Type	<sup>13.</sup> Cable/Rotary	<sup>14</sup> Lease Type	<sup>15.</sup> Ground Level Elevation
x D	S	R	S .	3170.6
<sup>16.</sup> Multiple	<sup>17.</sup> Proposed Depth	<sup>18.</sup> Formation	<sup>19</sup> Contractor	<sup>20.</sup> Spud Date
No	16000	Devonian	Standard	10-01-2013
Depth to Ground water - >10	00 ft Distance from	nearest fresh water well - 150'	Distance to n	earest surface water - 5 miles

We will be using a closed-loop system in lieu of lined pits

### <sup>21.</sup> Proposed Casing and Cement Program

Туре	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC		
Production	6 1/4"	5 1/2"	20#	15650'	3500'	Surface		
				· · · ·		·		
<u> </u>		Casin	g/Cement Program: A	dditional Commonts		EIVED ]		
			g/Cement Program. A	duttional Comments	·····	<b>9</b> 2013		
		22.	Proposed Blowout Pre	vention Program				
	Type Working Pressure Test Pressure			Manufacturer				
Dou	ble Ram		5000	5000 N.L Shaffer		5000 N.L		N.L Shaffer

<sup>23.</sup> I hereby certify that the information giver of my knowledge and belief.		OIL CONSERVATION DIVISION		
I further certify that I have complied wit 19.15.14.9 (B) NMAC , if applicable. Signature:	h 19.15.14.9 (A) NMAC 🗌 and/or	Approved By:	1	
Printed name: Paul Ragsdale	lule	Title:	"Geologist"	
Title: Operations Manager		Approved Date: 9/13/2013	9/12/2010	
E-mail Address: pragsdale@stratanr	n.com	Approved Date. If J COT2	115/2015	
Date: 09/05/2013 Ph	none: 575-622-1127 Ext. 18	Conditions of Approval Attached C/0	5 must he on file	
		Conditions of Approval Attached C/O Prior to injection	0	

## DRILLING PROGRAM

# FORTY NINER RIDGE UNIT #1 SWD

# REENTRY AND DEEPENING

Proposed Operation: The well is currently an injection well in the Delaware from 4433'-5452'. 9 5/8" casing is set to 11,340' with a CIBP at 5510'.

The proposed operation is to squeeze the existing perfs to shut off any flow back from the injection zone.

Drill out the CIBP and clean out the 9 5/8" casing to 11,135'.

7 <sup>3</sup>/<sub>4</sub>" casing is set as a liner from 11,135'-14,507'.

Drill out the CIBP's and fish the Vann perforating guns out of the hole and clean out to CIBP at 14,333' with a  $6\frac{1}{4}$ " bit.

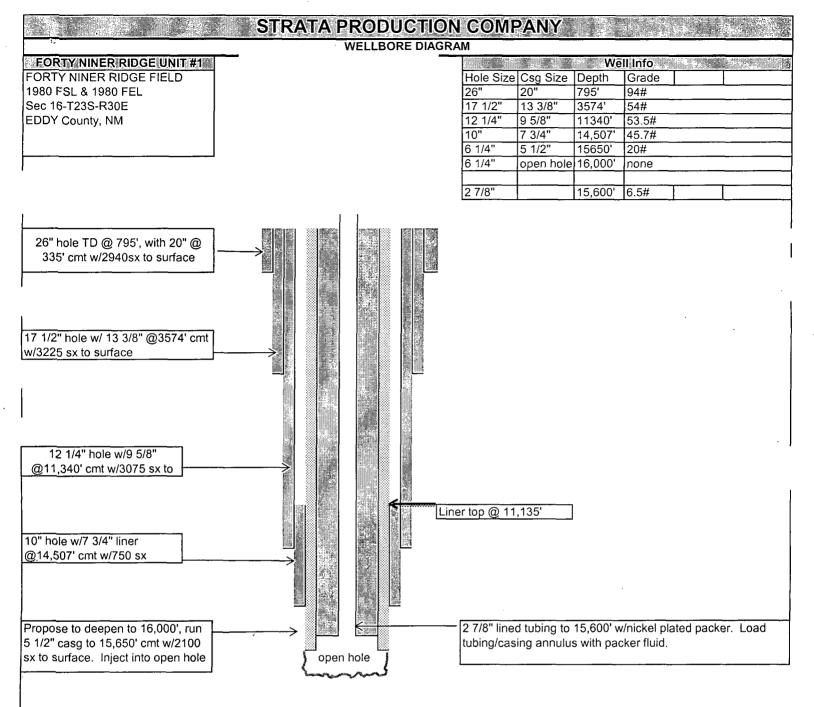
Circulate casing and load with mud. Rig down pulling unit and move a drilling rig on location. TIH with 6 <sup>1</sup>/<sub>4</sub>" bit and drill out CIBP at 14,333' and then drill new hole to 16,000'. Circulate and TOH. Log well with gamma ray.

TIH with 5  $\frac{1}{2}$ , 23#, L-80 casing to 15,500'. Cement the production casing back to surface with 3500 sacks of Class H/Pozmix with 4 % gel and retarder.

Pick up a 4 <sup>3</sup>/<sub>4</sub>" bit and drill out the Casing shoe at 15,500' and clean out to 16,000'. TIH with 2 7/8" plastic coated tubing and a nickel plated packer and set it at 15,450'. Pressure up tubing/casing annulus and commence injection.

A Start Barrier

See attached wellbore diagram.



Strata Production Company Phone: 575-622-1127 ext. 18 PO BOX 1030 ROSWELL, NM 88202-1030

Directions: Go east of Loving NM to Highway 128, Turn right towards Jal. Go to Mile Marker #7, Turn south on County Road 795 for about 1/2 mile, turn right and go 1 mile south past the ranch house on the right, turn left to location on top of the ridge.

# State of New Mexico Energy, Minerals and Natural Resources Department

Susana Martinez Governor

David Martin Cabinet Secretary-Designate

Brett F. Woods, Ph.D. Deputy Cabinet Secretary Jami Bailey, Division Director Oil Conservation Division



Administrative Order SWD-1437 August 23, 2013

#### ADMINISTRATIVE ORDER OF THE OIL CONSERVATION DIVISION

Pursuant to the provisions of 19.15.26.8B NMAC, the Strata Production Company (the "operator") seeks an administrative order to utilize its Forty Niner Ridge Unit Well No. 1 with a location of 1980 feet from the South line and 1980 feet from the East line, Unit letter J of Section 16, Township 23 South, Range 30 East, NMPM, Eddy County, New Mexico, for produced water disposal purposes in a new injection interval.

The well is currently approved under Administrative Order SWD-845 for disposal in the Bell Canyon and Cherry Canyon formations from a depth of 4433 feet to 5952 feet. Additionally, the operation of the well has been modified with Administrative Order IPI-431 which permits a maximum surface tubing pressure of 1500 psig.

#### THE DIVISION DIRECTOR FINDS THAT:

The application has been duly filed under the provisions of 19.15.26.8B NMAC and satisfactory information has been provided that affected parties as defined in said rule have been notified and no objections have been received within the prescribed waiting period. The applicant has presented satisfactory evidence that all requirements prescribed in 19.15.26.8 NMAC have been met and the operator is in compliance with 19.15.5.9 NMAC.

#### **IT IS THEREFORE ORDERED THAT:**

The applicant, Strata Production Company (OGRID 21712), is hereby authorized to utilize its Forty Niner Ridge Unit Well No. 1 (API 30-015-20899) with a location of 1980 feet from the South line and 1980 feet from the East line, Unit letter J of Section 16, Township 23 South, Range 30 East, NMPM, Eddy County, for disposal of oil field produced water (UIC Class II only) into the Devonian formation through open hole from a depth of 15650 feet to 16000 feet. Injection will occur through internally coated tubing and a packer set within 100 feet of the permitted interval.

#### IT IS FURTHER ORDERED THAT:

The operator shall take all steps necessary to ensure that the disposed water enters only the approved disposal interval and is not permitted to escape to other formations or onto the surface. This includes the well construction proposed and described in the application. Administrative Order SWD-1437 Strata Production Company August 23, 2013 Page 2 of 3

Additionally, the operator will squeeze cement all exiting open perforations (inclusive of perforations in the Bell Canyon, Cherry Canyon, Bone Spring, Wolfcamp and Morrow formations) prior to deepening the borehole and the installation of the new  $5\frac{1}{2}$ -inch casing.

If the cement for the installation of the new  $5\frac{1}{2}$ -inch casing does not circulate to surface, the operator shall determine the top of cement by cement bond log (or equivalent method) and submit a copy to Division district II.

The operator shall supply the Division with a copy of a mudlog over the permitted disposal interval and an estimated in-situ water salinity from open hole log correlations. If significant hydrocarbon shows occur in the injection interval while drilling, the operator shall notify Division district II and the operator shall be required to obtain permission from the Division prior to commencing injection.

After installing tubing, the casing-tubing annulus shall be loaded with an inert fluid and equipped with a pressure gauge or an approved leak detection device in order to determine leakage in the casing, tubing, or packer. The casing shall be pressure tested from the surface to the packer setting depth to assure casing integrity.

The well shall pass an initial mechanical integrity test ("MIT") prior to initially commencing disposal and prior to resuming disposal each time the disposal packer is unseated. All MIT testing procedures and schedules shall follow the requirements in Division Rule 19.15.26.11A. NMAC. The Division Director retains the right to require at any time wireline verification of completion and packer setting depths in this well.

The wellhead injection pressure on the well shall be limited to **no more than 3130 psig**. In addition, the disposal well or system shall be equipped with a pressure limiting device in workable condition which shall, at all times, limit surface tubing pressure to the maximum allowable pressure for this well.

The Director of the Division may authorize an increase in tubing pressure upon a proper showing by the operator of said well that such higher pressure will not result in migration of the disposed fluid from the target formation. Such proper showing shall be demonstrated by sufficient evidence including but not limited to an acceptable Step-Rate Test.

The operator shall notify the supervisor of the Division's district II office of the date and time of the installation of disposal equipment and of any MIT test so that the same may be inspected and witnessed. The operator shall provide written notice of the date of commencement of disposal to the Division's district office. The operator shall submit monthly reports of the disposal operations on Division Form C-115, in accordance with Division Rules 19.15.26.13 and 19.15.7.24 NMAC.

Without limitation on the duties of the operator as provided in Division Rules 19.15.29 and 19.15.30 NMAC, or otherwise, the operator shall immediately notify the Division's district II office of any failure of the tubing, casing or packer in the well, or of any leakage or release of

Administrative Order SWD-1437 Strata Production Company August 23, 2013 Page 3 of 3

water, oil or gas from around any produced or plugged and abandoned well in the area, and shall take such measures as may be timely and necessary to correct such failure or leakage.

The injection authority granted under this order is not transferable except upon division approval. The division may require the operator to demonstrate mechanical integrity of any injection well that will be transferred prior to approving transfer of authority to inject.

The division may revoke this injection permit after notice and hearing if the operator is in violation of 19.15.5.9 NMAC.

The disposal authority granted herein shall terminate two (2) years after the effective date of this order if the operator has not commenced injection operations into the subject well. One year after the last date of reported disposal into this well, the Division shall consider the well abandoned, and the authority to dispose will terminate *ipso facto*. The Division, upon written request mailed by the operator prior to the termination date, may grant an extension thereof for good cause.

The previous Administrative Order SWD-845 shall be terminated with the commencement of injection under this order. Additionally, Administrative Order IPI-431 shall be rescinded with the termination of Administrative Order SWD-845.

Compliance with this order does not relieve the operator of the obligation to comply with other applicable federal, state or local laws or rules, or to exercise due care for the protection of fresh water, public health and safety and the environment.

Jurisdiction is retained by the Division for the entry of such further orders as may be necessary for the prevention of waste and/or protection of correlative rights or upon failure of the operator to conduct operations (1) to protect fresh or protectable waters or (2) consistent with the requirements in this order, whereupon the Division may, after notice and hearing, terminate the disposal authority granted herein.

JAMI BAILEY Director

JB/prg

cc: Oil Conservation Division – Artesia District Office State Land Office – Oil, Gas, and Minerals Division