

State of New Mexico
Energy, Minerals and Natural Resources Department

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Oil Conservation Division



BY ELECTRONIC MAIL ONLY

Ryan Davis
Merrion Oil & Gas
E-mail: rdavis@merrion.bz

RE: Injection Pressure Increase; Order IPI-540
Pretty Lady 30 11 34 Well No. 1
UIC Class II Disposal Well

Mr. Davis:

Reference is made to your request on behalf of Merrion Oil & Gas (OGRID 247130; the “operator”) for the application received on August 29, 2023, to increase the maximum surface injection pressure (“MSIP”) based on friction increase due to downsizing of tubing from 5.5-inch (“in.”) to 4.5-in. The injection string downsizing was necessitated by the workover done on the well to address a mechanical integrity issue. The operator ran a 7-in. liner inside the 9-5/8-in. casing and cemented it to surface. With the smaller ID of the liner, downsizing the injection string from 5.5-in. to 4.5-in. was necessary due to clearance issues.

Well Name	API Number	UL-S-T-R	Injection Authority	Existing MSIP Limit (psi)	Existing Tubing OD (in)
Pretty Lady 30 11 34 Well No. 1	30-045-30922	J-34-30N-11W	SWD-1034-A	1350	4.5

It is the Oil Conservation Division’s (“OCD”) understanding that the requested pressure increase is needed to increase the rate of injection and this pressure increase will not result in:

1. the fracturing of the permitted disposal interval.
2. the fracturing of either the upper or lower confining strata; or
3. induced-seismic events as a consequence of the higher injection pressure.

Based on the results of the submitted of friction increase due to downsizing of injection string from 5.5-in. to 4.5-in. The new friction pressure calculated for the 4-1/2 in. injection string configuration is 133 pounds per square inch (“psi”) at six (6) barrels per minute, which is an 85-psi net increase in friction. With the known formation fracture pressure obtained in 2006 of 2980 psi, the new

Administrative Order IPI-540
Merrion Oil & Gas
Page 2 of 2

corresponding surface pressure would be 1484 psi. The pressure increase requested by the operator is 1435 psi which is below the 1484 psi surface formation fracture pressure.

The following shall be the new pressure limit for wells listed below while equipped with injection tubing of 4.5-in. diameter:

Well No.	Step Rate Test Date	New MSIP Limit (psi)	Injection Interval (ft)	Pressure Gradient (psi/ft)
Pretty Lady 30 11 34 Well No. 1	December 28, 2006	1435	3762-3830	0.38

This approval is based on the provision that the tubing size, packer setting depth and completion interval for the well does not change and all provisions in IPI-540 are adhered. Any future requested pressure increase will require resubmission of additional data. The Director retains the right to require, at any time, wireline verification of completion and packer setting depths in the well. This approval is subject to the operator being in compliance with all other OCD rules including, but not limited to, 19.15.5.9 NMAC.

Administrative Order IPI-278, approved February 2, 2007, is superseded and becomes void with the approval of this administrative order.

The Director may rescind any injection pressure increase permit if it becomes apparent that the injected fluid is not being confined to the permitted disposal interval, impacts correlative rights, is endangering any freshwater aquifer or endangers public health and safety.

Sincerely,


DYLAN M. EUGE
DIRECTOR
DMF/mgm

Date: 10/9/23

cc: Administrative Order SWD-1034-A
Well file 30-045-30922

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State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
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CONDITIONS

Action 274100

CONDITIONS

Operator: AGUA MOSS, LLC P.O. Box 600 Farmington, NM 87499	OGRID: 247130
	Action Number: 274100
	Action Type: [IM-SD] Admin Order Support Doc (ENV) (IM-BAO)

CONDITIONS

Created By	Condition	Condition Date
mgebremichael	None	10/10/2023