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

Susana Martinez

Governor

David Martin Cabinet Secretary

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



March 24, 2014

Ms. Kristal Peña Linn Operating, Inc. 600 Travis, Suite 5100 Houston, TX 77002

# **RE:** Packer Setting Depth Exception

Injection Authority: Administrative Order SWD-58
Pool: SWD; Devonian formation
Southlane Well No. 35 API 30-025-21271
Unit D, Sec 35, T10S, R33E, NMPM, Lea County, New Mexico

Ms. Peña:

Reference is made to your request on behalf of Linn Operating, Inc. (OGRID 269324; "Linn") received by the Division on March 24, 2014, for the above named well. Linn applied for exception for setting the packer within 100 feet of the top of the approved injection interval.

It is our understanding that during workover of the well due to failure of mechanical integrity testing that the packer set was determined to be at a depth of 11522 feet. This location of the packer is approximately 1297 feet above the top of the open-hole injection interval that begins at 12819 feet. Continued inspection of the wellbore found blockage (failed tubing set from 1985) below the location of the packer that would impede the positioning of the packer set closer to the top of the injection interval. Administrative Order SWD-58 approved December 8, 1965, authorized injection through open hole from 12819 feet to 12990 feet. Review of the case file for this well showed approval by OCD for installation of the packer at this location as early as 1985. Current production reporting indicates the well continues to inject at very low pressure or at a vacuum reading.

For the reasons stated in the application and because it appears that correlative rights are protected, waste will not occur and this modification will not endanger any fresh water aquifer or the

environment, the exception is granted. The packer location within this well shall not be set higher than 1300 feet unless the operator receives written approval from the Division Director.

The Division Director may rescind this exception if it becomes apparent that the injected fluid is not being confined to the permitted interval or is endangering any fresh water aquifer.

Sincerely,

JAMI BAILEY

Director

JB/prg

cc: Oil Conservation Division - Hobbs Office

SWD-58

Well File API 30-025-21271



# LINN OPERATING, INC

.4 Il bolly suned subsiding of LINN Energy, LLC.
JP Morgan Chase Tower
600 Travis, Saite 5100
Houston, TX 77002
Phone: 281-840-4000
Fax: 281-840-4001
yxxx:l-menergy.com

March 24, 2014

TO: Philip Goetze

RE: Southlane SWD D-35 Packer Exemption Request

Dear Mr. Goetze:

Linn Operating, Inc. ("LINN") is the operator of the Southlane SWD D-35 (API 30-025-21271) well and would like to request an exemption to the packer setting depth beyond 100 feet.

The well in question failed an MIT that was being conducted as part of the annual UIC testing. A Sundry was filed and approved to rig up on the well and mitigate the source of pressure loss. The packer (original setting depth @ 11,522') and tubing were pulled out of the hole. The referenced setting depth is 1,297' above the open hole interval (12,819'-12,990').

A mule shoe was run in order to clean out any fill. The shoe tagged up high at 11,735' and we were unable to work past this point. There is no reference to any fish present in the wellbore. Upon reviewing the well file further, there is note of the OCD district office providing approval in 1994 for the current packer depth. It is of our opinion that this was granted to a former operator based on the lost fish. Also approved packer depth of 11,500 ft by OCD on

There are three strings of casing in the well of which two are cemented to surface. The 5-1/2" production casing has cement to a depth of 8,923'. We believe that there is sufficient cement to not only provide zonal isolation but protection of any groundwater as well. A wellbore diagram is attached for your reference.

Based on the current conditions of the wellbore, LINN requests the permission to leave the fish at its current depth and set the packer as close to 11,522' as possible.

Please feel free to contact me if you have any other questions regarding the Southlane SWD D-35 well. I can be reached by email at <a href="mailto:kpena@linnenergy.com">kpena@linnenergy.com</a> or by phone at (281) 840-4050.

Sincerely,

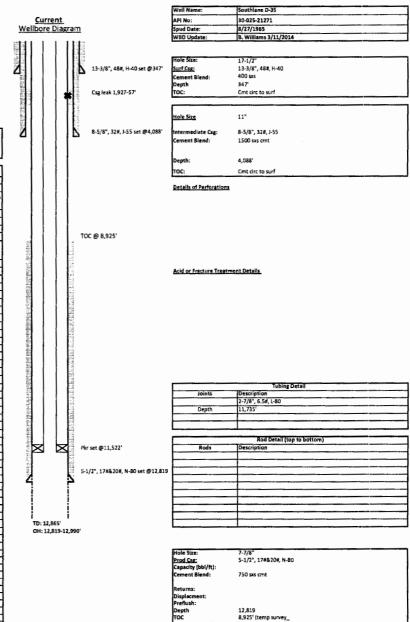
Kristal Peña

Engineer - Permian Basin New Mexico

Well Name:	Southlane D-35		
	Location:		
Location;	500 FNL & 500 FWL		
Section:	D-35-105-33E		
Block:			
Survey:			
County:	Lea		
Lat/Long:	33.4090566207725 -103.54553974336		
Field:	SWD Devonian		
	Elevations:		
GL:	4,213*		
KB:			
KB-GL Calc:			
ck w/log?			

Local		Requireme	
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Date	History
8/27/1965 9/3/1965	Spud well. Surf csg set @347', Cmt'd w/400 sxs cmt. Cmt circ to surf Intermediate csg set @4088'. Cmt'd w/1500 sxs cmt. Cmt circ to surf
3/3/1965	
	Prod csg set @12,819'. Cmt'd w/750 sxs cmt. TOC@ 8,925' (temp survey) TD: OH @12,819 to 12,990'. Ran 421
11/3/1965	of 3-1/2", 9.3#, N-80 plastic tubing. Started injecting water
11/8/1965	TD: 12,865'. Completed as a water disposal well.
11/10/1965	Acidized w/10,000 gais of acid
1/1/1969	Fish parted in tbg
3/1/1979	Leak between 8-5/8" & 13-3/8" csg. Run csg insp. Log. RIH w/2-7/8" tbg. Set pkr @12,500'.
	Acidized w/500 gals of acid. Located leak @ 1927-1957'. Pumped 150sxs cmt. Circ around 8-5/8"csg. PO cmt &
5/1/1984	test. CO well to top of junk @ 12,872'. Acidized w/5000 gals of acid
3/1/1985	Acidized w/1500 gals of acid
7/1/1985	Acidized w/500 gals of acid
10/1/1985	Acidized w/500 gals of acid
1/1/1986	Acidized w/500 gals of acid
1/87-5/88	Acidized w/500 gais of acid
11/1/1991	Replace tbg
2/14/14004	NATE DISCONDINE 2351 ON 812 210 to 12 0001
3/11/1994	MIT. Pkr set @11,735'. OH @12,819 to 12,990'
1/15/2009	MIT Test. Failed. Well will not hold pressure. Suspect hole in tubing.
4/2/2009	RIH w/new tbg and pkr.
4/7/2009	Ran MIT test.
4/25/2011	Return to production. injection rate 73, injection psi - vacuum. RTI 3/1/2010.
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# OIL CONSERVATION COMMISSION P. O. BOX 2088 SANTA FE, NEW MEXICO

# December 8, 1965

Rice Engineering & Operating, Inc. P. O. Box 1142
Hobbs, New Mexico

# Gentlemen:

Enclosed herewith please find Administrative Order SWD-58 for your South Lane SWD Well No. 35 located in Unit D of Section 35, Township 10 South, Range 33 East, MMPM, Lea County, New Mexico.

Very truly yours,

A. L. PORTER, Jr., Secretary-Director

ALP/JEK/og

cc: Oil Conservation Commission - Hobbs
Oil & Gas Engineering Committee - Hobbs

#### SUBJECT: SALT WATER DISPOSAL WELL

THE APPLICATION OF RICE ENGINEERING & OPERATING, INC. FOR A SALT WATER DISPOSAL WELL.

#### ADMINISTRATIVE ORDER OF THE OIL CONSERVATION COMMISSION

Under the provisions of Rule 701 (C) Rice Engineering & Operating, Inc., made application to the New Mexico Oil Conservation Commission on November 11, 1965, for permission to complete for salt water disposal its South Lane SWD Well No. 35 located in Unit D of Section 35, Township 10 South, Range 33 East, NMPM, Lea County, New Mexico.

#### The Secretary-Director Finds:

- That application has been duly filed under the provisions of Rule 701 (C) of the Commission Rules and Regulations;
- That satisfactory information has been provided that all offset operators, surface owners and the New Mexico State Engineer Office have been duly notified; and
- 3. That the applicant has presented satisfactory evidence that all requirements prescribed in Rule (C) will be met.
- 4. That no objections have been received within the waiting period prescribed by said rule.

### IT IS THEREFORE ORDERED:

That the applicant herein, Rice Engineering & Operating, Inc., is hereby authorized to complete its South Lane SWD Well No. 35 located in Unit D of Section 35, Township 10 South, Range 33 East, NMPM, Lea County, New Mexico, in such a manner as to permit the injection of salt water for disposal purposes into the Devonian formation at approximately 12,819 feet to approximately 12,990 feet through 3-1/2 inch tubing.

#### IT IS FURTHER ORDERED:

That jurisdiction of this cause is hereby retained by the Commission for such further order or orders as may seem necessary or convenient for the prevention of waste and/or protection of correlative rights; upon failure of applicant to comply with any requirement of this order after notice and hearing the Commission may terminate the authority hereby granted in the interest of conservation. That applicant shall submit monthly reports of the disposal operation in accordance with Rules 704 and 1120 of the Commission Rules and Regulations.

APPROVED at Santa Fe, New Mexico, on this 8th day of December, 1965.

> STATE OF NEW MEXICO OIL CONSERVATION COMMISSION

A. L. PORTER, Jr., Secretary-Director