

|                       |          |                 |                         |              |                         |
|-----------------------|----------|-----------------|-------------------------|--------------|-------------------------|
| 10/14/2014<br>DATE IN | SUSPENSE | PRG<br>ENGINEER | 10/14/2014<br>LOGGED IN | IP I<br>TYPE | PM 4287411 73<br>APP NO |
|-----------------------|----------|-----------------|-------------------------|--------------|-------------------------|

ABOVE THIS LINE FOR DIVISION USE ONLY

**NEW MEXICO OIL CONSERVATION DIVISION**  
- 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

**Application Acronyms:**

**[NSL-Non-Standard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication]**  
**[DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]**  
**[PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]**  
**[WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]**  
**[SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]**  
**[EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]**

**[1] TYPE OF APPLICATION - Check Those Which Apply for [A]**

[A] Location - Spacing Unit - Simultaneous Dedication  
☐ NSL ☐ NSP ☐ SD

Check One Only for [B] or [C]

[B] Commingling - Storage - Measurement  
☐ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM

[C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery  
☐ WFX ☐ PMX ☐ SWD ☒ IPI ☐ EOR ☐ PPR

[D] Other: Specify SWD - 1457

- SWD  
- R K I EXPLORATION &  
PRODUCTION  
246289

- well  
- LUPSWD # 1  
30-015-42234

Pool  
- SWD, Delaware  
96100

**[2] NOTIFICATION REQUIRED TO: - Check Those Which Apply, or Does Not Apply**

- [A] ☐ Working, Royalty or Overriding Royalty Interest Owners
- [B] ☐ Offset Operators, Leaseholders or Surface Owner
- [C] ☐ Application is One Which Requires Published Legal Notice
- [D] ☐ Notification and/or Concurrent Approval by BLM or SLO  
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office
- [E] ☐ For all of the above, Proof of Notification or Publication is Attached, and/or,
- [F] ☐ Waivers are Attached

**[3] SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE.**

**[4] 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.**

Jody Noerdlinger  
Print or Type Name

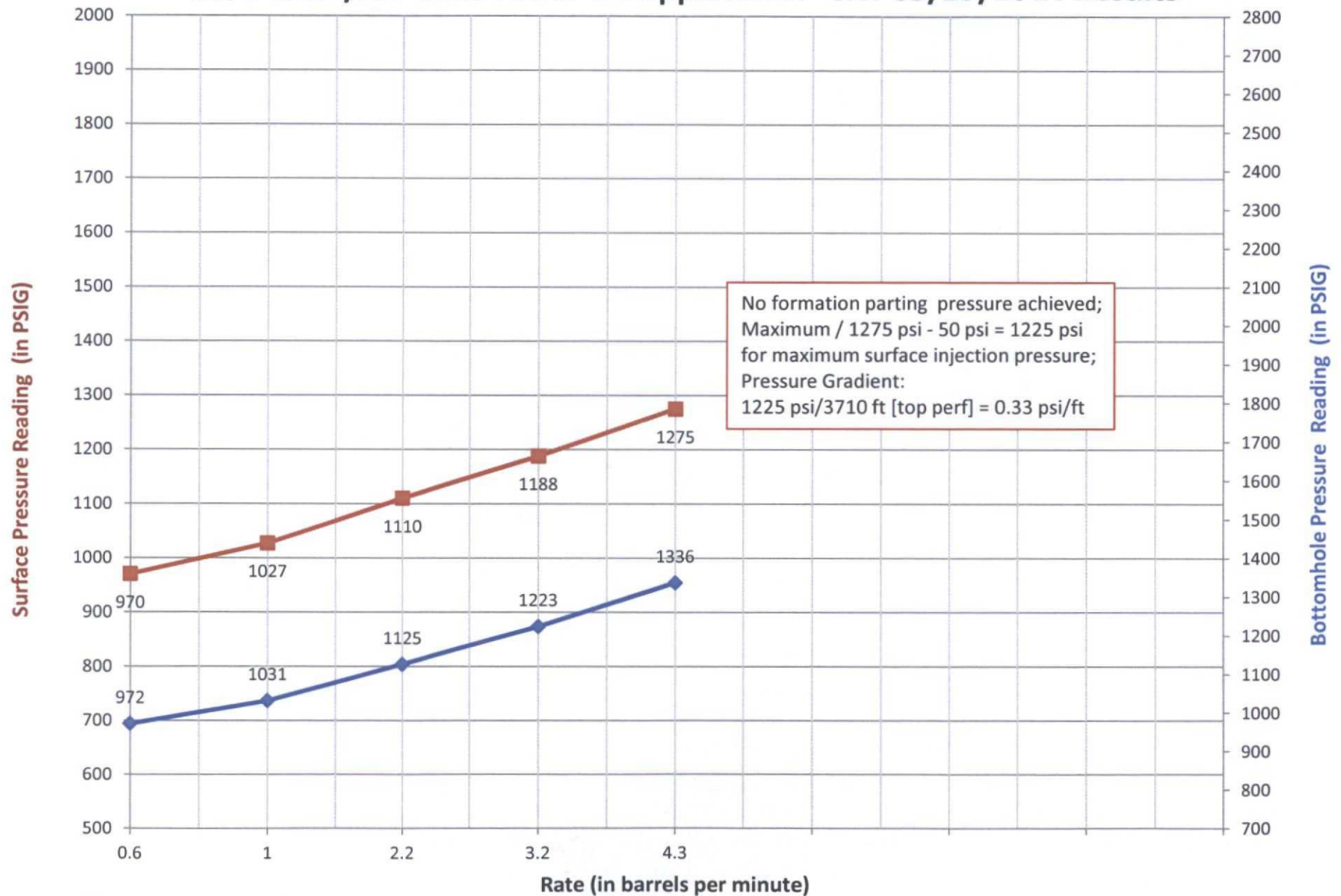
Jody Noerdlinger  
Signature

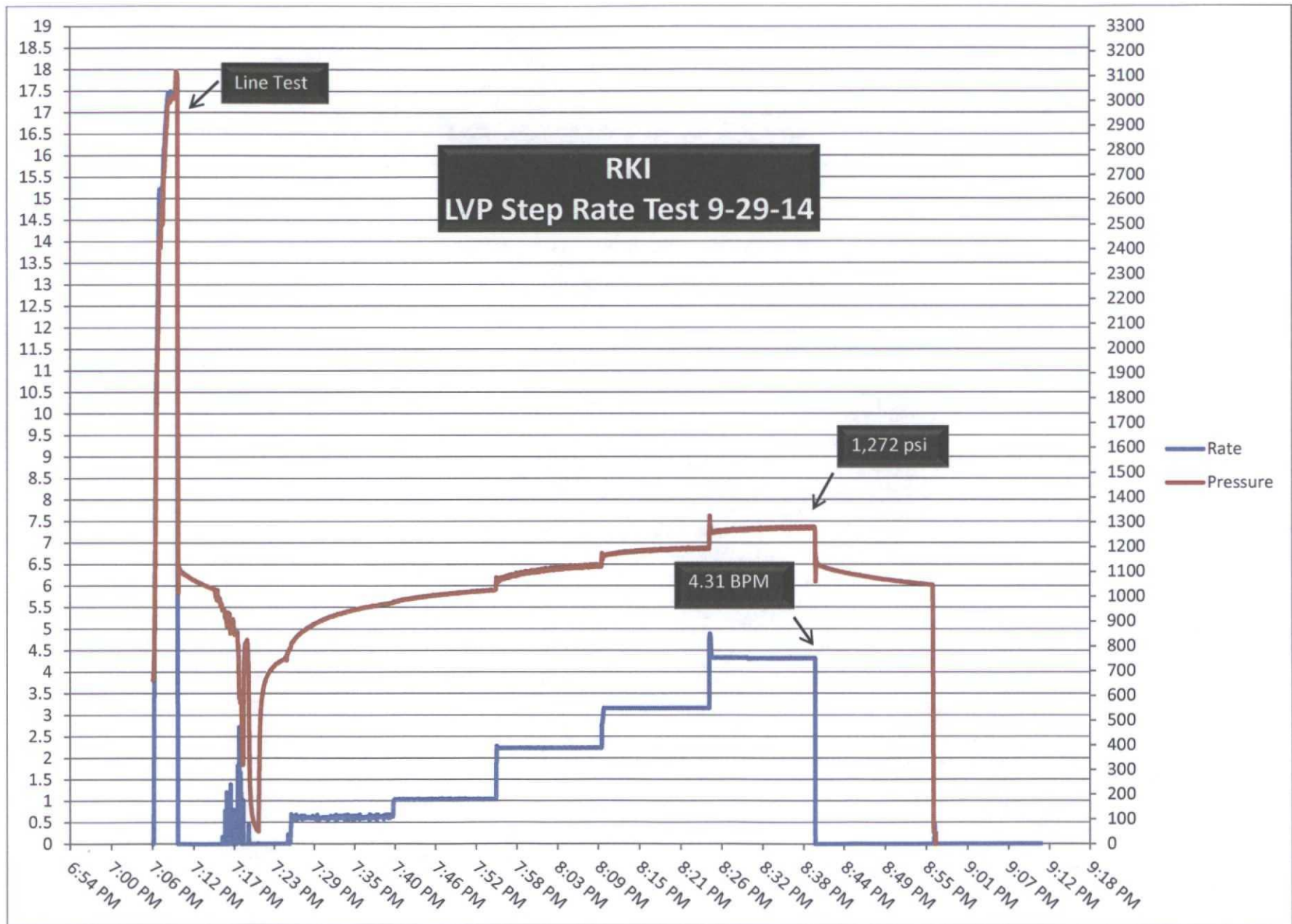
Regulatory Analyst  
Title

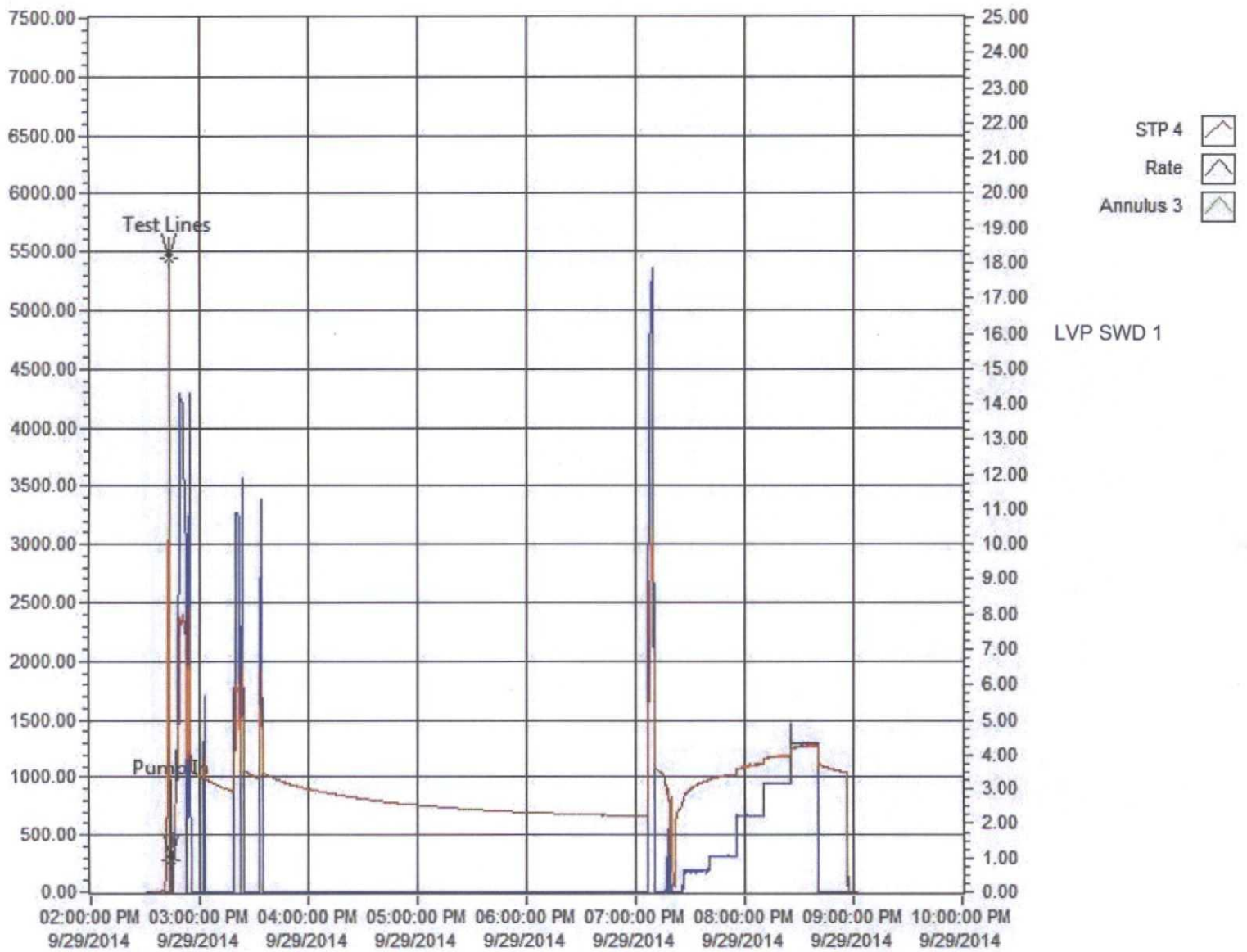
10/1/2014  
Date

jnoerdlinger@rkxp.com  
e-mail Address

## SWD-1457/LVP SWD No. 1- IPI Application - SRT 09/29/2014 Results







LVP SWD 1

SEPTEMBER 2014

## Job Event Log

Surface

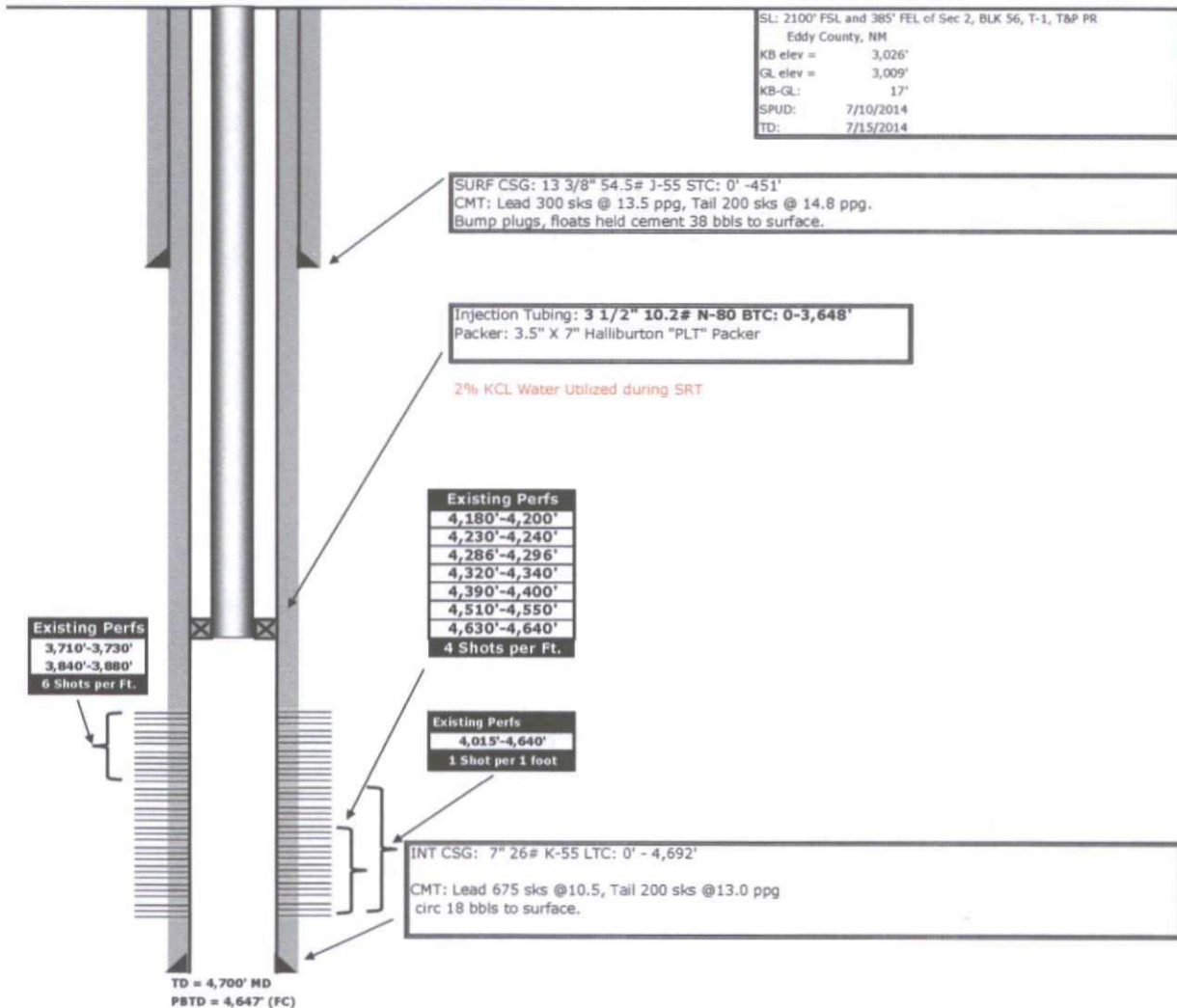
| Time | Stage | Rate | Pressure | Comment            | Stage total | Total |
|------|-------|------|----------|--------------------|-------------|-------|
| 1:41 |       |      | 5478     | Test Lines         |             |       |
| 1:45 |       | 14.3 | 2381     | Pump               |             |       |
| 2:20 |       |      |          | Pump               |             |       |
| 2:25 |       |      |          | SD                 |             |       |
| 6:07 |       | 18   | 3121     | Pump               |             |       |
| 6:10 |       |      | 1079     | ISIP               |             |       |
| 6:15 |       |      | 1005     | 5 Min              |             |       |
| 6:25 |       | .6   | 970      | 1 <sup>st</sup> Rt |             |       |
| 6:40 |       | 1    | 1027     | 2 <sup>nd</sup> Rt |             |       |
| 6:55 |       | 2.2  | 1110     | 3 <sup>rd</sup> rt |             |       |
| 7:10 |       | 3.2  | 1188     | 4 <sup>th</sup> RT |             |       |
| 7:25 |       | 4.3  | 1275     | 5 <sup>th</sup> Rt |             | 276   |
| 7:40 |       |      | 1139     | ISIP               |             |       |
| 7:45 |       |      | 1091     | 5 Min              |             |       |
| 7:50 |       |      | 1066     | 10 Min             |             |       |
| 7:55 |       |      | 1051     | 15 Min             |             |       |
|      |       |      |          |                    |             |       |
|      |       |      |          |                    |             |       |
|      |       |      |          |                    |             |       |
|      |       |      |          |                    |             |       |

~~Friction loss~~Requested  
- 1272 psi

RKI Exploration & Production

**LVP SWD #1**  
**Wellbore Diagram**  
LVP SWD #1  
Eddy County, NM  
API # 30-015-42234

Current 7/24/14



# RKI Exploration & Production, LLC.

October 13, 2014

Phillip Goetz  
Oil Conservation Division  
Engineering and Geological Services Bureau  
1220 South St. Francis Drive  
Santa Fe, NM 87505

Dear Mr. Goetz:

RKI Exploration and Production is requesting an increase in tubing injection pressure on the LVP SWD #1 (30-015-42234) well in Eddy County, New Mexico.

RKI has performed a step rate test, and based on the results of said test can show that the higher pressure will not result in the migration of the disposed fluid from the target formation. RKI would like to amend the tubing injection pressure to the amount of 1,272 psi, shown on the attached chart.

Please see the attachments, which include a current wellbore diagram and step rate test results, along with the original approved permit. If you have any questions or concerns, don't hesitate to contact me.

Thank you for your time, and I appreciate your consideration in this matter.

Sincerely,



Jay Brenner  
Completions Engineer  
RKI Exploration and Production, LLC  
210 Park Ave., Suite 900  
Oklahoma City, OK 73102

405-987-2137  
jbrenner@rkixp.com

RECEIVED OCD  
2014 OCT 14 A 11:11

## Goetze, Phillip, EMNRD

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**From:** Jay Brenner <jbrenner@rkixp.com>  
**Sent:** Wednesday, November 19, 2014 3:12 PM  
**To:** Jody Noerdlinger; Paul Munding; Brent Umberham; Goetze, Phillip, EMNRD  
**Cc:** Charles Ahn; Heather Brehm; Cody Reid; Sam McCurdy; Jim Landrigan; Jim Auld  
**Subject:** RE: LVP SWD 1 injection pressure increase  
**Attachments:** LVP SWD 1 WBD 11-19-14.pdf

Phillip,

I wanted to say thanks for taking the time with me on the phone today and it was a pleasure speaking with you. Per our conversation I have attached an updated wellbore diagram for LVP SWD #1 which includes and additional perf details and injection fluid type.

Additional Questions:

1. *I am assuming that the SRT was measured by surface pressure only (no BH gauge)? That is correct surface pressure only.*
2. *Was fresh water or produced water used for the SRT? 2% KCL*

Thanks again for your time Phillip.

**Jay Brenner**  
RKI Exploration & Production  
Completions Engineer  
210 Park Avenue, Suite 900  
Oklahoma City, OK 73102  
Cell: (918) 289-9252  
Direct: (405) 987-2137  
Fax: (405) 996-5772  
[jbrenner@rkixp.com](mailto:jbrenner@rkixp.com)

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**From:** Jody Noerdlinger  
**Sent:** Wednesday, November 12, 2014 11:28 AM  
**To:** Paul Munding; Brent Umberham; Jay Brenner  
**Cc:** Charles Ahn; Heather Brehm; Cody Reid; Sam McCurdy  
**Subject:** FW: LVP SWD 1 injection pressure increase

Paul , Brent, et al:

Please see Phillip Goetze's remarks below and let me know how you'd like to respond. Thanks!

Jody Noerdlinger  
Senior Regulatory Analyst  
RKI Exploration and Production  
Oklahoma Tower  
210 Park Avenue, Suite 800  
Oklahoma City, OK 73102



Office: 405-996-5774  
Cell: 405-414-0151  
[jnoerdlinger@rkixp.com](mailto:jnoerdlinger@rkixp.com)

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**From:** Goetze, Phillip, EMNRD [<mailto:Phillip.Goetze@state.nm.us>]  
**Sent:** Wednesday, November 12, 2014 10:36 AM  
**To:** Jody Noerdlinger  
**Cc:** Jones, William V, EMNRD; McMillan, Michael, EMNRD  
**Subject:** RE: LVP SWD 1 injection pressure increase

Jody:

The application is being considered, but additional information would be of assistance. I am assuming that the SRT was measured by surface pressure only (no BH gauge)? Was fresh water or produced water used for the SRT? The original well construction in the SWD order showed 4.5-inch diameter tubing and perforations from 3400 ft to 4650 ft. Is the current diagram showing 3.5-inch diameter tubing and perforations from 4025 ft to 4650 ft correct? This will be critical in calculating friction pressure for the plotting of the BH pressures as well as assessing the pressure gradient. If this information could be provided via e-mail, then the review can proceed. PRG

Phillip R. Goetze, P.G.  
Engineering and Geological Services Bureau, Oil Conservation Division  
1220 South St. Francis Drive, Santa Fe, NM 87505  
O: 505.476.3466 F: 505.476.3462  
[phillip.goetze@state.nm.us](mailto:phillip.goetze@state.nm.us)

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**From:** Jody Noerdlinger [<mailto:JNoerdlinger@rkixp.com>]  
**Sent:** Tuesday, November 11, 2014 2:33 PM  
**To:** Goetze, Phillip, EMNRD  
**Cc:** Charles Ahn; Heather Brehm; Paul Munding  
**Subject:** FW: LVP SWD 1 injection pressure increase

Hi, Phillip. I'm just inquiring about the LVP SWD 1 pressure increase we requested back on October 14. Our production department is pretty eager to get that approved, so they asked me to check.

If you get a chance, could you please let me know where it is in your cue? Also, I wanted to be sure you'd received our application for amendment and had all the paperwork you needed.

Thanks for your help with this,

Jody Noerdlinger  
Senior Regulatory Analyst  
RKI Exploration and Production  
Oklahoma Tower  
210 Park Avenue, Suite 800  
Oklahoma City, OK 73102  
Office: 405-996-5774  
Cell: 405-414-0151  
[jnoerdlinger@rkixp.com](mailto:jnoerdlinger@rkixp.com)

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**From:** Jody Noerdlinger  
**Sent:** Thursday, October 16, 2014 10:33 AM  
**To:** 'phillip.goetze@state.nm.us'

**Cc:** Charles Ahn; Heather Brehm  
**Subject:** LVP SWD 1 injection pressure increase

Phillip, at the behest of RKI's production engineers, I've been asked to see if there's any way we can expedite the injection pressure increase approval on the LVP SWD 1 that we recently applied for.

The application materials arrived at your office on Oct. 14 and were signed for by someone named Kiloy, but I don't know if they've made their way to your desk yet or not.

If there's anything we can do to help expedite, please let us know. And, by the way, thank you very much for approving the change on the State 16-1 SWD, which we received today from David Catanach!

Jody Noerdlinger  
Senior Regulatory Analyst  
RKI Exploration and Production  
Oklahoma Tower  
210 Park Avenue, Suite 800  
Oklahoma City, OK 73102  
Office: 405-996-5774  
Cell: 405-414-0151  
[jnoerdlinger@rkixp.com](mailto:jnoerdlinger@rkixp.com)

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