

**STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION DIVISION**

**IN THE MATTER OF THE  
APPLICATION OF DENNIS LANGLITZ  
FOR AUTHORIZATION TO INJECT,  
EDDY COUNTY**

**Case No. 14,190**

RECEIVED  
2008 NOV 18 PM 4 09

**SUPPLEMENTATION OF HEARING RECORD**

Applicant Dennis Langlitz ("Langlitz") hereby supplements the hearing record in this case with two documentary exhibits that pertain to the step rate test that Cardinal Surveys Company ("Cardinal") performed on Langlitz's Saladar Unit No. 012 well November 4, 2008.

During the hearing in this matter conducted on October 30, 2008, the Hearing Examiner granted Langlitz leave to supplement the hearing record with the results of the step rate test to be conducted after the conclusion of the hearing. Accordingly, Langlitz is now submitting the following exhibits:

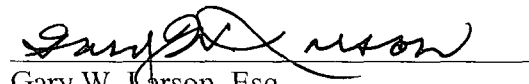
Exhibit No. 17 -- Cardinal's written report of the step rate test results; and

Exhibit No. 18 - the Affidavit of William Kincaid, which authenticates Exhibit No. 17 and addresses the results of Cardinal's step rate test.

Langlitz's Exhibit Nos. 17 and 18 are attached hereto.

Respectfully submitted,

HINKLE, HENSLEY, SHANOR & MARTIN, LLP



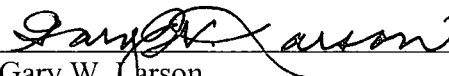
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Santa Fe, NM 87504-2068  
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[glarson@hinklelawfirm.com](mailto:glarson@hinklelawfirm.com)

*Attorneys for Applicant Dennis Langlitz*

**CERTIFICATE OF SERVICE**

I hereby certify that I served a copy of the foregoing *Supplementation of Hearing Record* via U.S. mail this 18<sup>th</sup> day of November, 2008, to:

Gail MacQuesten, Esq.  
Oil Conservation Division  
Energy, Minerals and Natural  
Resources Department  
1220 S. St. Francis Drive  
Santa Fe, NM 87505

  
\_\_\_\_\_  
Gary W. Larson



**Cardinal Surveys Company**

**4-Nov-08**

**Dennis Langlitz**

**Well: Saladar Unit No. 12**

**Field: Saladar**

**County: Eddy Co. - New Mexico**

**SC 57860**

**File No. 18982**

**Intercept @ 296.6 BPD and  
1149.5 BHPSIA**

**Downhole PSI Tool : CSC 2601**

**Surface PSI Gauge S 10509**

**Tool @ 630'**

	<b>Start</b>	<b>End</b>	<b>Rate</b>
1	11:53 AM	12:15 PM	0 at 630'
2	12:15 PM	12:45 PM	100
3	12:45 PM	1:15 PM	200
4	1:15 PM	1:45 PM	300
5	1:45 PM	2:15 PM	400
6	2:15 PM	2:45 PM	500
7	2:45 PM	3:15 PM	600
8	3:15 PM	3:30 PM	Fall Off
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			

Step Rate Test  
4-Nov-08

Dennis Langlitz

Well: Saladar Unit No. 12

Field: Saladar

Location: Eddy, Co.-New Mexico



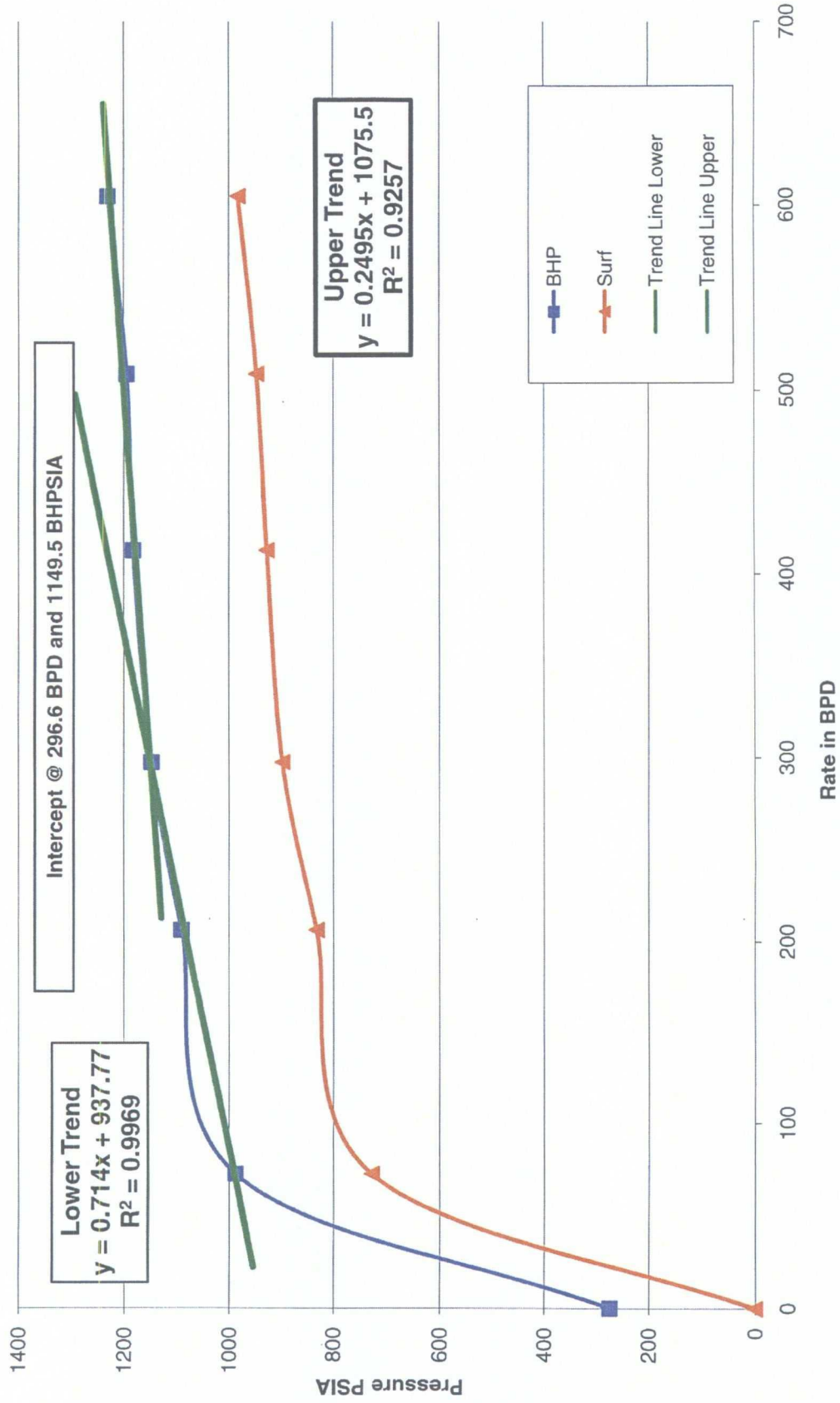
	S Time		E Time		D Time	Last Rate		Step	BHP		Surf		Cum	Delta		Avg.	Lower		Upper
	Time	Min	Time	Min		BPD	BPD		PSIA	PSIA	BBL	BBL		BPD	BPD		Trend	Trend	
1	11:53 AM	22	12:15 PM	30		0	0	100	275.2	987.1	726.7	0	0	0	0	0	72	987.1	
2	12:15 PM	30	12:45 PM	30		100	100	100	987.1	1090.3	831.8	831.8	1.5	5.8	1.5	206	1090.3		
3	12:45 PM	30	1:15 PM	30		200	100	100	1090.3	1147.2	897.2	897.2	12	12	6.2	298	1147.2		
4	1:15 PM	30	1:45 PM	30		300	100	100	1147.2	1182.4	927.1	927.1	20.6	20.6	8.6	413		1182.4	
5	1:45 PM	30	2:15 PM	30		400	100	100	1182.4	1194.6	947.1	947.1	31.2	31.2	10.6	509		1194.6	
6	2:15 PM	30	2:45 PM	30		500	100	100	1194.6	1230.3	982.6	982.6	43.8	43.8	12.6	605		1230.3	
7	2:45 PM	30	3:15 PM	30		600	100	100	1230.3	715.2	450.5	450.5	0	0	0	0			
8	3:15 PM	15	3:30 PM			0			715.2				0	0	0	0			
9																			
10															Lower	0.714	937.7		
11															Upper	0.2495	1075.5		
12																			
13															int point:	296.6631	BPD		
14																1149.517	Psia		
15																			
16																			
17																			
16																			

Lower 0.714 937.7  
Upper 0.2495 1075.5

int point: 296.6631 BPD  
1149.517 Psia

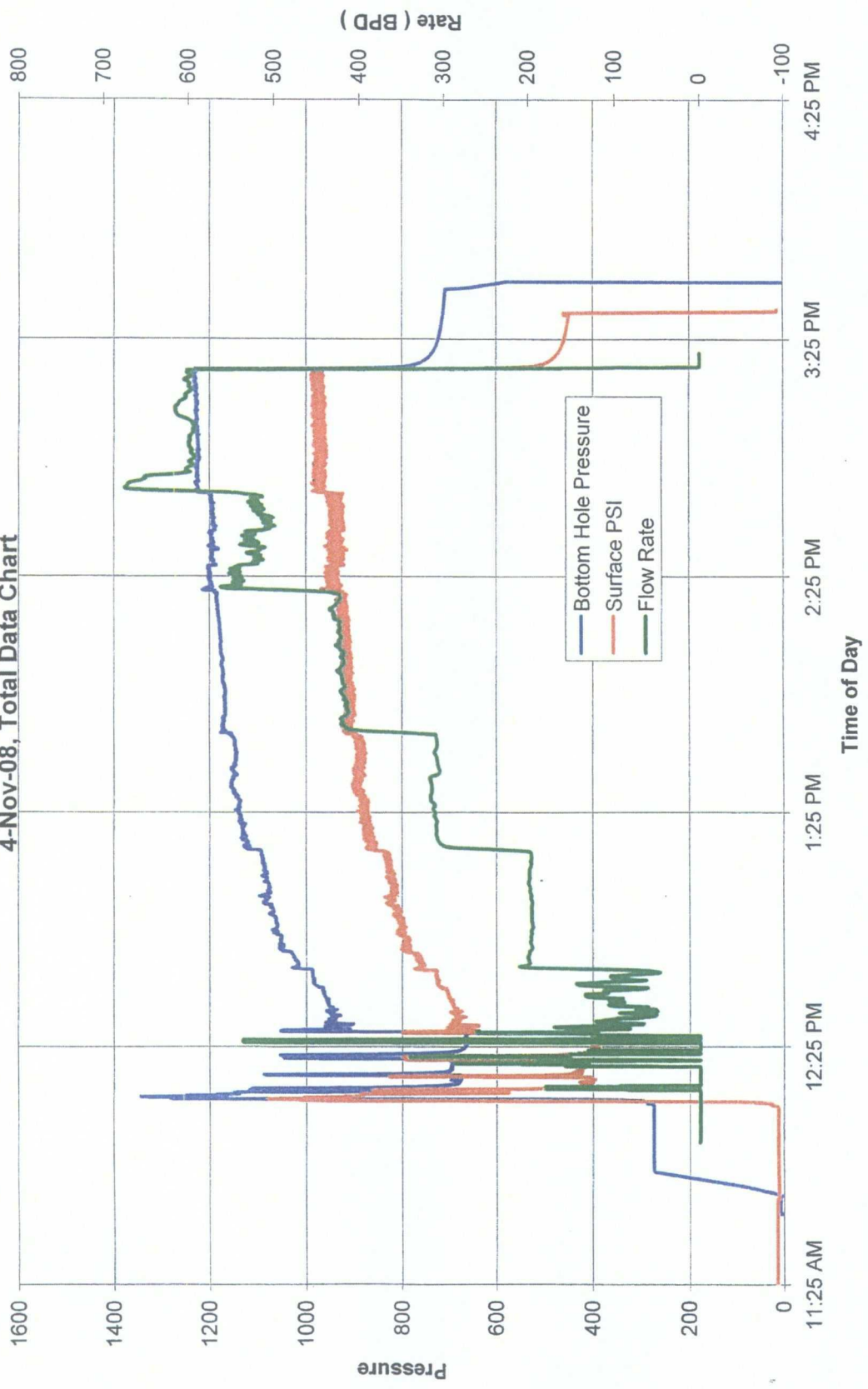


Dennis Langlitz  
Saladar Unit No.12  
Step Rate Chart





Danny Langlitz  
Saladar Unit No. 12  
4-Nov-08, Total Data Chart



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**IN THE MATTER OF THE  
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**Case No. 14,190**

**STATE OF TEXAS            )  
                                      ) ss.  
COUNTY OF WICHITA    )**

**AFFIDAVIT OF WILLIAM KINCAID**

William Kincaid, being first duly sworn, states and deposes as follows:

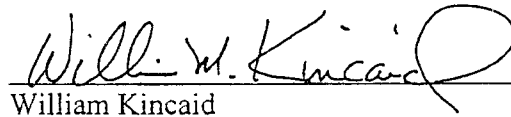
1. My name is William Kincaid. I am over eighteen years of age.
2. I testified in support of Dennis Langlitz's application for authority to inject during the hearings conducted in the above-captioned case on October 16 and October 30, 2008. During the initial hearing, the Hearing Examiner qualified me as a petroleum engineering expert witness.
3. Also during the initial hearing, the Hearing Examiner instructed Mr. Langlitz to perform a step rate test for purposes of determining whether Mr. Langlitz's proposed maximum surface injection pressure of 600 psi could be approved. Accordingly, on behalf of Mr. Langlitz, I retained Cardinal Surveys Company ("Cardinal") of Midland, Texas to perform a step rate test on one of Mr. Langlitz's injection wells. Cardinal was not able to mobilize to the well site prior to the second hearing.
4. During the hearings, I offered my opinion that one step rate test would be sufficient for purposes of determining the frac pressure for each of Mr. Langlitz's six injection wells, all of which are located within the Saladar Unit Waterflood Project. I also offered my opinion that, given the longstanding history of the waterflood project, injection by Mr. Langlitz at pressures of up to 600 psi would not fracture the formation or result in the migration of fluids from the injection zone.

5. On November 4, 2008, Cardinal performed a step rate test on Mr. Langlitz's Saladar Unit No. 012 well. Mr. Langlitz's counsel has marked Cardinal's written report of the results of its step rate test as Exhibit No. 17, which is a true and correct copy of Cardinal's written report. Exhibit No. 17 has been attached to and filed with Mr. Langlitz's Supplementation of Hearing Record.

6. The step rate test performed by Cardinal on the Saladar Unit No. 012 well reveals that the surface frac pressure for the well is 898 psi. *See Exhibit No. 17.*

7. The step rate test results reinforce and support the opinions I offered during the hearings, which I continue to hold, that (i) one step rate test would be and is sufficient to determine the frac pressures for all of Mr. Langlitz's injection wells that are addressed in his application, and (ii) injection into each of the wells at surface pressures of up to 600 psi would neither fracture the formation nor result in the migration of fluids and, therefore, Mr. Langlitz's request for a maximum surface injection pressure of 600 psi should be approved.

FURTHER AFFIANT SAYETH NOT.

  
William Kincaid

SUBSCRIBED AND SWORN TO before me this 18th day of November, 2008, by William Kincaid.

  
Notary Public

My Commission Expires:

