

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

OCD Artesia

FORM APPROVED  
OMB No. 1004-0137  
Expires: July 31, 2010

**SUNDRY NOTICES AND REPORTS ON WELLS**  
**Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.**

5. Lease Serial No.  
NM 29281

6. If Indian, Allottee or Tribe Name

**SUBMIT IN TRIPLICATE** - Other instructions on page 2.

1. Type of Well

☐ Oil Well ☐ Gas Well ☒ Other SWD

2. Name of Operator  
Judah Oil, LLC

8. Well Name and No.  
Green A Federal #10 SWD

9. API Well No.  
30-015-21748

3a. Address

PO Box 568, Artesia, NM 88211

3b. Phone No. (include area code)

575-746-1280

10. Field and Pool or Exploratory Area

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

UL-K, Sec. 29, T17S, R29E, NMPM 1980 FSL, 1980 FWL

11. Country or Parish, State  
Eddy County, NM

**12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other Request for Pressure Increase
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

Geronimo SWD respectfully requests a pressure increase from 1844 psi to 2800 psi.

This request has been sent to the NM OCD.

Individual Bond #NMB00611 is on file with the Carlsbad District office for the amount of \$25,000.00.

**SUBJECT TO LIKE  
APPROVAL BY STATE**

RD 5/12/14  
Accepted for record  
NMB00611

**RECEIVED**  
MAY 12 2014  
NMOCD ARTESIA

**ACCEPTED FOR RECORD**

MAR 7 2014

**BUREAU OF LAND MANAGEMENT  
CARLSBAD FIELD OFFICE**

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)

James B. Campanella

Title Member/Manager

Signature

Date 07/16/2013

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by

Paul R. Swartz

Title

PET

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

C

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

## ***Geronimo SWD, LLC***

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Date: 7-11-2013

To: Wesley Ingram  
BLM

Reference: Step-Rate-Test on Green "A" Fed No 10 (F-29-T17S-R28E)  
API # 30-015-21748, Date June 19, 2012

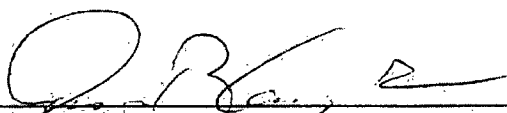
Dear Sir,

Please find the certified report on the subject Step-Rate-Test report and prepared by Van S. Welch II, PE State of Texas # 66291. As presented in this report, the subject well did not fracture up to a surface pressure of 2850 psi and 5483 psi bottom-hole pressure (@ 9450' KB – mid perms). Based on these results, Geronimo SWD, LLC, as operator of this well, respectfully requests the limiting surface pressure be increased from 1844 psi to 2800 psi (50 psi below the highest pressure recorded at the surface).

For information, a previous SRT was run on this well August 14, 2012 when it had 2-7/8 inch coated tubing. From that SRT the BLM/OCD granted increasing the limiting pressure from 1844 psi to 2500 psi. Ultimately it was decided to keep the 1844 psi limit and run 3-1/2" Du-O-Line tubing and the well has been running at approximately 1700 psi since changing out the tubing. However, due to increased public demand in the is area for SWD, it was decide to run this new SRT to see if a higher injection pressure limit could be achieved without fracturing the formation.

The NM OCD is being advised simultaneously of this pressure increase request.

**Geronimo SWD, LLC**

By:   
James B. Campanella  
Member/Manager

P.O. Box 568  
611 W Mahone, Suite D  
Artesia, NM 88211-0568

Office: (575) 746-1280  
Fax: (575) 746-1290  
E-Mail: judahoil@yahoo.com

**GERONIMO SWD, LLC**

**Review of Step-Rate Test Dated June 19, 2013**

**Green "A" Federal No. 10**

**API # 30-015-21748**

**F-29-T17S-R28E**

**Date : June 2013**

**DISCLAIMER - THIS REVIEW IS BASED ON THE INFORMATION COLLECTED ON LOCATION BY VAN WELCH, PE, OF VSW2 E&P, LLC (VSW2), DURING A STEP-RATE-TEST ON THE GREEN "A" FED NO. 10. THE INFORMATION COLLECTED WAS FROM PACESETTER SERVICES (SURFACE RATES AND PRESSURES) AND PRO WELL TESTING & WIRELINE, INC (BHP DATA). ALL DATA WAS ACCEPTED AS TRUE AND VALID. VSW2 DOES NOT GUARANTEE THE RESULTS OF ANY ACTIONS TAKEN BASED ON THIS REVIEW NOR DOES VSW2 ACCEPT ANY RESPONSIBILITY FOR ANY DECISIONS OR ACTIONS TAKEN BY GERONIMO SWD, LLC. ANY PARTNERS TO GERONIMO SWD, LLC, ANY ASSOCIATES OF GERONIMO SWD, LLC AND/OR OTHER THIRD PARTIES OR AGENCIES (PRIVATE OR GOVERNMENTAL) WITH WHOM GERONIMO SWD, LLC MAY SHARE THIS REVIEW.**

**Prepared by:**

**Van S. Welch II, PE # 66291 State of Texas**

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2207 Fairway Dr, Duncan OK, 73533 Cell 281.635.1718 Fax 509.562.9684

June 2013

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## Technical Review

### Preface

This is a review prepared by **VSW2 E&P, LLC.** (VSW2) of Duncan, Oklahoma. Mr. Van Welch, **Professional Engineer (No. 66291 State of Texas)** has performed the "Technical Review" of the Step-Rate-Test (SRT) conducted on the Green "A" Fed No. 10, Eddy Co. New Mexico on June 19, 2013. Mr. Welch was physically present to collect all necessary data and assure that the Step-Rate-Test was properly performed in accordance with industry standards. The SRT program and pressure data collection met industry standards.

**Disclaimer** – VSW2 does not accept any responsibility for any decisions or actions taken by Geronimo SWD, LLC (its Partners, any associates of Geronimo SWD, LLC, third-parties or governmental agencies) relative to this "Technical Review". Due to the many uncertainties relative to individual wells and reservoirs, VSW2 cannot make any guarantees as to the best practices for future reservoir performance on the Green "A" 10 as presented in this document.

### Summary Result

As discussed in the review, the surface and bottom-hole pressure (BHP) data establish that the well has not fractured up to a surface pressure of 2850 psi or 5483 psi bottom-hole @9450' KB (9431' GL). During the test, the well-head started vibrating more than usual during the 4 BPM injection period and for safety reasons, that injection period was reduced from 30 minutes to 20 minutes. As a result, the ending pressure for this injection rate period is low as pointed out on the step-rate =-pressure graphs. The reduced injection period did not effect the interpretation showing that the formation did not fracture during the test.

### Discussion

Mr., Welch collected surface and BHP data from a SRT conducted on June 19, 2013. The surface data set on the SRT are included as **Appendix I** which is a copy of Rising Star Services surface pressure and rates. **Appendix II** is a copy of Pro Well Testing & Wireline, Inc BHP report which is only presented in graphic form. VSW2 included an extraction of the critical ending BHP for each rate increase from Pro Well's extended file which records pressure every 6 seconds. If the BLM or OCD desire this extended pressure file, please advice.

The procedures used in the SRT were as follows:

1. Run Bottom-Hole Gauge to 9431 ft GL; 9450 ft KB (Perfs 9220-9600 ft KB)
2. Start Rate 2.0 BPM constant for approximately 30 Minutes and Record Pressures
3. Increase Rate to 4.0 BPM for approximately 30 Minutes and Record Pressures
4. Increase Rate to 6.0 BPM for approximately 30 Minutes and Record Pressures
5. Increase Rate to 8.0 BPM for approximately 30 Minutes and Record Pressures
6. Increase Rate to 9.0 BPM for approximately 30 Minutes and Record Pressures
7. SI Record Surface ISIP and 5 Minute SIP's

**Figure 1** illustrates the wellbore at the time of the SRT.

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GERONIMO SWD, LLC  
 GREEN "A" FED NO 10  
 API # 30-015-21748  
 1980' FSL - 1980 FWL  
 F-29-T17S-R28E NMPM, EDDY CO, NM

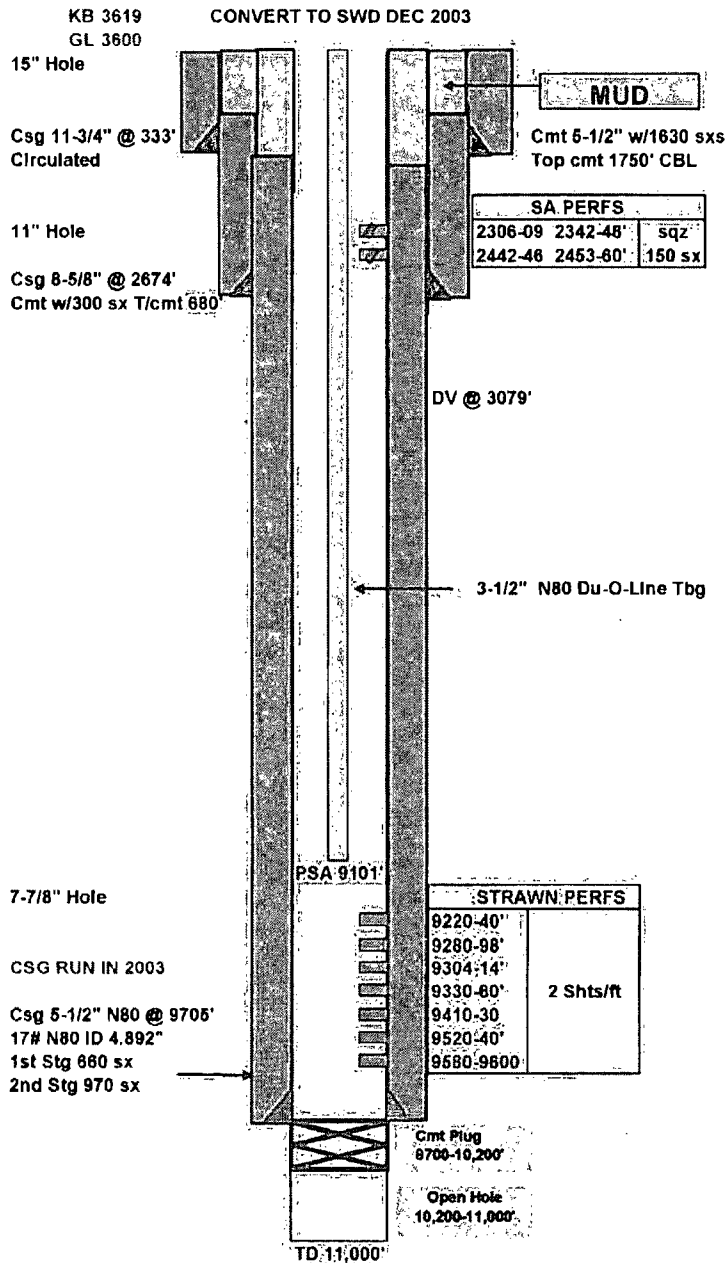


Figure 1 Wellbore Diagram

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This review included graphing the data collected by Mr. Welch in a standard SRT format of plotting the surface and BHP at the end of each 30 minute (approx) injection period as a function of injection rate. Data used for these plots are shown in Table 1. Note that there was a slight discrepancy between the surface and down-hole pressure gauge times, the times shown are from the BHP gauge.

Table 1: SRT Pressure Data

GREEN "A" FED No 10			
Ending Time	Rate BPM	Surface Final PSI	BHP Final PSI
9:19	0	355	4848
9:47	2	506	4895
10:07	4.4	950	4981
10:36	6.2	1575	5144
11:05	8.3	2275	5326
11:34	9.3	2850	5483

The surface and bottom-hole graphs of this data are shown in Figure 2, surface pressure, and Figure 3, bottom-hole pressure.

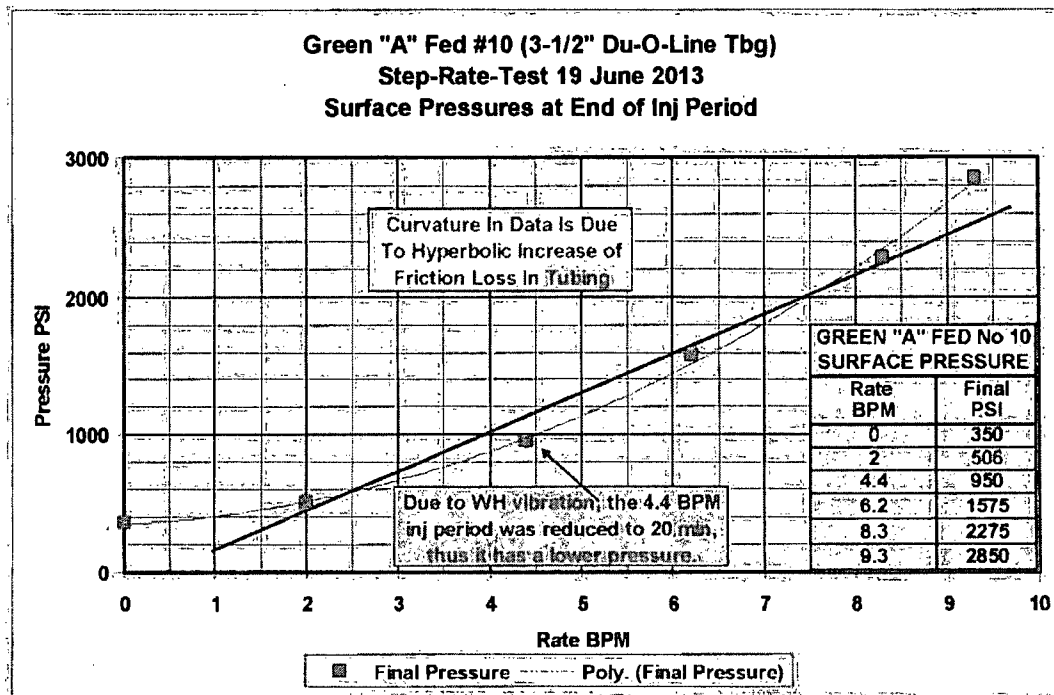
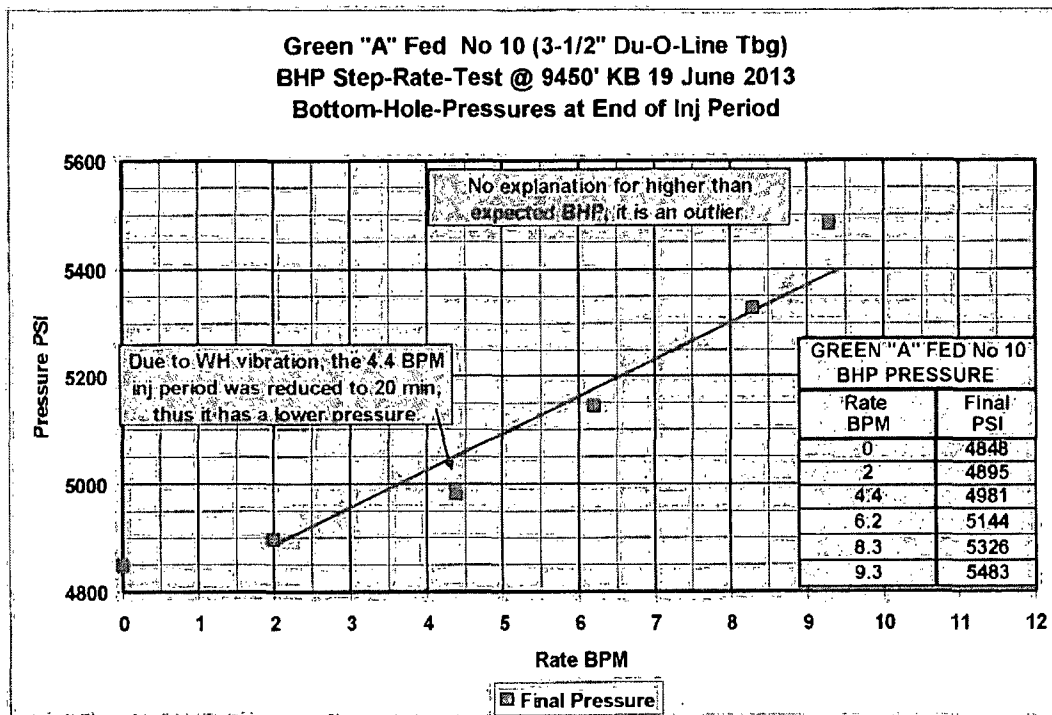


Figure 2: Surface Pressure SRT

Mr. Welch received the complete BHP data file from Pro Well which had pressures on 6 second readings. The report attached from Pro Well only has graphical data. Mr. Welch extracted the starting and end pressures for each strep rate and included it in Appendix II.



**Figure 3: Bottom-Hole Pressure SRT**

Both pressure graphs are representative of a typical SRT illustrating a continued straight-line increase in pressure with each rate increase. Neither graph illustrates the characteristic break associate with fracturing the reservoir in which the pressure increase is significantly reduced with each incremental increase in rate.

For information, a previous SRT was run on this well August 14, 2012 when it had 2-7/8 inch coated tubing. From that SRT the BLM/OCD granted increasing the limiting pressure from 1844 psi to 2500 psi. Ultimately it was decided to keep the 1844 psi limit and run 3-1/2" Du-O-Line tubing and the well has been running at approximately 1700 psi since changing out the tubing. However, due to public demand in the area, it was decided to run this new SRT to see if a higher injection pressure limit could be achieved without fracturing the formation.

*Van S. Welch II*

Van S. Welch II, PE  
V&C Properties, LLC.  
President

Professional Engineer State of Texas (PE No. 66291)

Seal

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## Appendix :1 Pacesetter Surface Rate and Pressure Report



Field Receipt

C20130658

Customer: Judah Oil

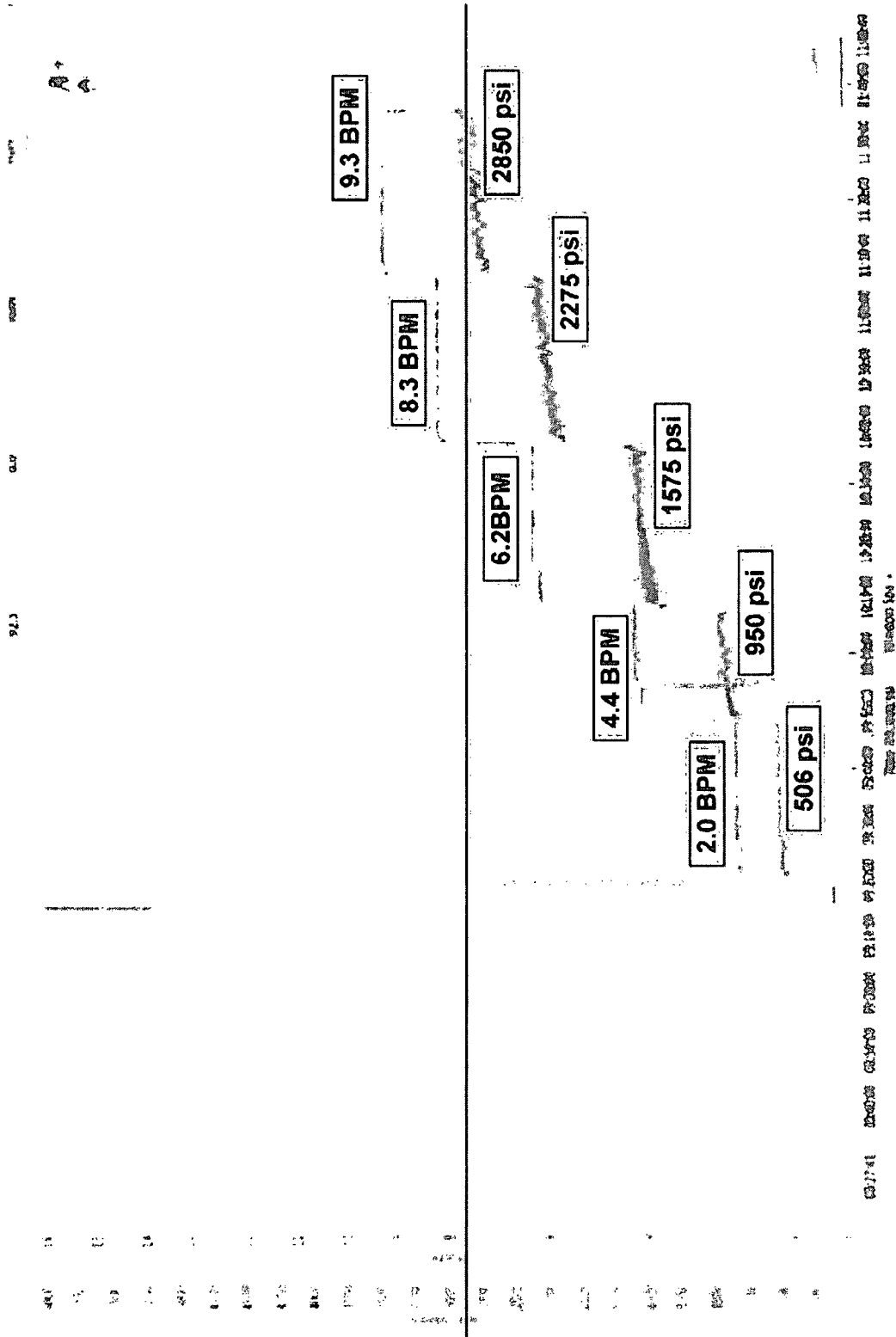
Date: 6/19/2013

Lease: GREEN "A" FED

Well: 10

Job Type: STEP RATE TEST

Injection Rate:			Job Pressures		Job Log
Time	Rate	Bbls in	Tbg psi	Csg psi	
09:00AM					SAFETY MEETING
09:18AM				4309	TEST LINE
09:19AM					OPEN WELLHEAD
09:20AM	2	60		508	START TEST
09:50AM	4.4	80	60	850	INCREASE RATE
10:08AM	8.2	180	140	1510	INCREASE RATE
10:37AM	8.3	240	300	2213	INCREASE RATE
11:01AM	8.3	270	530	2638	INCREASE RATE
11:35AM			630	356	SHUTDOWN (SIP-658)
11:40AM				800	5 MINUTE
11:45AM				710	10 MINUTE
11:46AM				700	SHUT IN WELL RIG DOWN
NOTE: These are actually Strat of Inj Period Tubing Pressures					ALL RATES ARE THE AVERAGE FOR THAT STAGE
					GOOD JOB BY CREW



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**GREEN "A" FED NO 10 SRT JUNE 19, 2013**  
**ENDING INJECTION BHP's @9450' KB**  
**DATA FROM PRO WELL TESTING & WIRELINE**  
**(Complete 6 sec reading data file available on request)**

Line No.	Date M/d/yyyy	T h:mm:ss	Time hr	Rate BPM	Pressure psi	Temp degF
113	6/19/2013	8:57:06	0.183611	0	354.59	87.68
332	6/19/2013	9:19:00	0.548611	0	4847.25	102.47
333	6/19/2013	9:19:06	0.550278	0	4846.97	102.46
334	6/19/2013	9:19:12	0.551944	0	4846.64	102.46
335	6/19/2013	9:19:18	0.553611	0	4847.44	102.47
336	6/19/2013	9:19:24	0.555278	0	4848.14	102.47
607	6/19/2013	9:46:30	1.006944	2	4894.55	102.82
608	6/19/2013	9:46:36	1.008611	2	4894.35	102.81
609	6/19/2013	9:46:42	1.010278	2	4894.44	102.81
610	6/19/2013	9:46:48	1.011944	2	4894.47	102.81
611	6/19/2013	9:46:54	1.013611	2	4894.68	102.81
804	6/19/2013	10:06:12	1.335278	4.4	4979.65	103.46
805	6/19/2013	10:06:18	1.336944	4.4	4979.97	103.46
806	6/19/2013	10:06:24	1.338611	4.4	4980.16	103.46
807	6/19/2013	10:06:30	1.340278	4.4	4980.52	103.45
808	6/19/2013	10:06:36	1.341944	4.4	4981.09	103.45
1093	6/19/2013	10:35:06	1.816944	6.2	5142.08	104.85
1094	6/19/2013	10:35:12	1.818611	6.2	5142.36	104.85
1095	6/19/2013	10:35:18	1.820278	6.2	5142.70	104.85
1096	6/19/2013	10:35:24	1.821944	6.2	5143.12	104.86
1097	6/19/2013	10:35:30	1.823611	6.2	5143.51	104.86
1390	6/19/2013	11:04:48	2.311944	8.3	5323.78	107.32
1391	6/19/2013	11:04:54	2.313611	8.3	5324.18	107.33
1392	6/19/2013	11:05:00	2.315278	8.3	5324.69	107.33
1393	6/19/2013	11:05:06	2.316944	8.3	5325.12	107.33
1394	6/19/2013	11:05:12	2.318611	8.3	5325.52	107.32
1682	6/19/2013	11:34:00	2.798611	9.3	5482.00	109.00
1683	6/19/2013	11:34:06	2.800278	9.3	5482.49	109.00
1684	6/19/2013	11:34:12	2.801944	9.3	5482.77	108.99
1685	6/19/2013	11:34:18	2.803611	9.3	5483.17	108.99
1686	6/19/2013	11:34:24	2.805278	9.3	5483.60	108.98