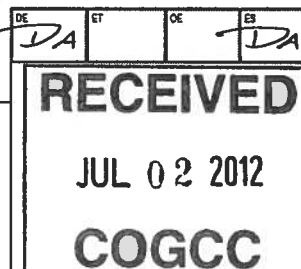


State of Colorado  
Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203 Phone: (303)894-2100 Fax:(303)894-2109



## SUNDRY NOTICE

Submit original plus one copy. This form is to be used for general, technical and environmental sundry information. For proposed or completed operations, describe in full on Technical Information Page (Page 2 of this form.) Identify well or other facility by API Number or by OGCC Facility ID. Operator shall send an informational copy of all sundry notices for wells located in High Density Areas to the Local Government Designee (Rule 603b.)

1. OGCC Operator Number: 96850	4. Contact Name: Greg Davis	Complete the Attachment Checklist OP OGCC
2. Name of Operator: WPX Energy Rocky Mountain, LLC	Phone: (303) 606-4071	
3. Address: 1001 17th Street, Suite 1200 City: Denver State: CO Zip: 80202	Fax: (303) 629-8268	
5. API Number 05-045-20524-00	OGCC Facility ID Number	Survey Plat
6. Well/Facility Name: Clough	7. Well/Facility Number NR 512-3	Directional Survey
8. Location (Qtr/Qtr, Sec, Twp, Rng, Meridian): NESW Section 3-T6S-R94W		Surface Eqpm Diagram
9. County: Garfield	10. Field Name: Rulison	Technical Info Page X
11. Federal, Indian or State Lease Number:		Other

## General Notice

<input type="checkbox"/> <b>CHANGE OF LOCATION:</b> Attach New Survey Plat (a change of surface qtr/qtr is substantive and requires a new permit)	
Change of Surface Footage from Exterior Section Lines:	<input type="checkbox"/> FNU/FSL <input type="checkbox"/> FEL/FWL
Change of Surface Footage to Exterior Section Lines:	<input type="checkbox"/>
Change of Bottomhole Footage from Exterior Section Lines:	<input type="checkbox"/>
Change of Bottomhole Footage to Exterior Section Lines:	<input type="checkbox"/> attach directional survey
Bottomhole location Qtr/Qtr, Sec, Twp, Rng, Mer	
Latitude	Distance to nearest property line
Longitude	Distance to nearest bldg, public rd, utility or RR
Ground Elevation	Distance to nearest lease line
	Is location in a High Density Area (rule 603b)? Yes/No
	Distance to nearest well same formation
	Surface owner consultation date:
<b>GPS DATA:</b> Date of Measurement PDOP Reading Instrument Operator's Name	
<input type="checkbox"/> <b>CHANGE SPACING UNIT</b> Formation Formation Code Spacing order number Unit Acreage Unit configuration	<input type="checkbox"/> <b>Remove from surface bond</b> Signed surface use agreement attached
<input type="checkbox"/> <b>CHANGE OF OPERATOR (prior to drilling):</b> Effective Date: Plugging Bond: <input type="checkbox"/> Blanket <input type="checkbox"/> Individual	<input type="checkbox"/> <b>CHANGE WELL NAME</b> NUMBER From: To: Effective Date:
<input type="checkbox"/> <b>ABANDONED LOCATION:</b> Was location ever built? <input type="checkbox"/> Yes <input type="checkbox"/> No Is site ready for inspection? <input type="checkbox"/> Yes <input type="checkbox"/> No Date Ready for Inspection:	<input type="checkbox"/> <b>NOTICE OF CONTINUED SHUT IN STATUS</b> Date well shut in or temporarily abandoned: Has Production Equipment been removed from site? <input type="checkbox"/> Yes <input type="checkbox"/> No MIT required if shut in longer than two years. Date of last MIT
<input type="checkbox"/> <b>SPUD DATE:</b>	<input type="checkbox"/> <b>REQUEST FOR CONFIDENTIAL STATUS</b> (6 mos from date casing set)
<input type="checkbox"/> <b>SUBSEQUENT REPORT OF STAGE, SQUEEZE OR REMEDIAL CEMENT WORK</b> *submit cbl and cement job summaries Method used Cementing tool setting/perf depth Cement volume Cement top Cement bottom Date	
<input type="checkbox"/> <b>RECLAMATION:</b> Attach technical page describing final reclamation procedures per Rule 1004. Final reclamation will commence on approximately <input type="checkbox"/> Final reclamation is completed and site is ready for inspection.	

## Technical Engineering/Environmental Notice

<input checked="" type="checkbox"/> <b>Notice of Intent</b> Approximate Start Date: 7/2/2012	<input type="checkbox"/> <b>Report of Work Done</b> Date Work Completed:	
Details of work must be described in full on Technical Information Page (Page 2 must be submitted.)		
<input type="checkbox"/> Intent to Recomplete (submit form 2)	<input type="checkbox"/> Request to Vent or Flare	<input type="checkbox"/> E&P Waste Disposal
<input type="checkbox"/> Change Drilling Plans	<input type="checkbox"/> Repair Well	<input type="checkbox"/> Beneficial Reuse of E&P Waste
<input type="checkbox"/> Gross Interval Changed?	<input type="checkbox"/> Rule 502 variance requested	<input type="checkbox"/> Status Update/Change of Remediation Plans
<input type="checkbox"/> Casing/Cementing Program Change	<input checked="" type="checkbox"/> Other: Gas Production Through Csg Holes	for Spills and Releases

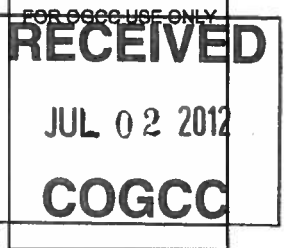
I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct and complete.

Signed: Greg Davis Date: 7/2/12 Email: Greg.J.Davis@Williams.com  
Print Name: Greg Davis Title: Supervisor PermitsCOGCC Approved: David Andrews Title: PE II Date: 7/2/2012

## CONDITIONS OF APPROVAL, IF ANY:

**COGCC Comments:** Casing holes have been reported at 5403' and 5432' (in the Wasatch Formation). Gas is migrating up channeled cement from the upper portion of the Williams Fork Formation and through the casing holes into the production casing. There is no Williams Fork or other Mesa Verde Group completed interval, and bradenhead pressure has been zero. **COGCC Conditions of Approval:** 1) Production of Williams Fork gas through the Wasatch casing holes is approved for a period not to exceed 12 months. 2) Before the end of the 12-month period, a remediation plan must be submitted on a Sundry Notice, describing planned remediation of the casing holes, all planned cement squeeze(s) above the Williams Fork top of gas, and proposed Williams Fork completion intervals. A post-remediation CBL will be required. 3) During this 12-month approval period, bradenhead pressure shall be monitored and recorded at least weekly, and monthly bradenhead monitoring reports shall be emailed to [david.andrews@state.co.us](mailto:david.andrews@state.co.us) no later than the 10<sup>th</sup> of the month for the previous month's summary.

TECHNICAL INFORMATION PAGE



1. OGCC Operator Number: 96850 API Number: 05-045-20524-00
2. Name of Operator: WPX Energy Rocky Mountain, LLC OGCC Facility ID #
3. Well/Facility Name: Clough Well/Facility Number: NR 512-3
4. Location (QtrQtr, Sec, Twp, Rng, Meridian): NESW Section 3-T6S-R94W

This form is to be completed whenever a Sundry Notice is submitted requiring detailed report of work to be performed or completed. This form shall be transmitted within 30 days of work completed as a "subsequent" report and must accompany Form 4, page 1.

5. DESCRIBE PROPOSED OR COMPLETED OPERATIONS

See attached e-mail dated 6/29/12.

## Andrews, David

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**From:** Burt, Samuel [Samuel.Burt@wpxenergy.com]  
**Sent:** Friday, June 29, 2012 2:42 PM  
**To:** Andrews, David  
**Cc:** Tannehill, Julie; Hejl, Kent; Davis, Gregory  
**Subject:** RE: NR 512-3 update

Dave,

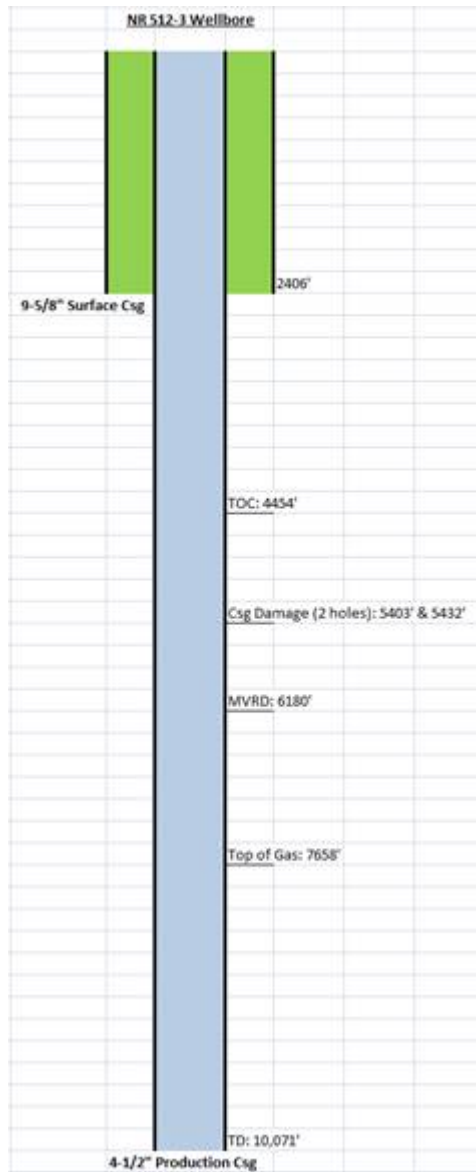
As per our earlier conversation today, here is the information you requested:

- MVRD: 6180'
- Top of Cement: 4454'
- The CBL can be found at the following site:

<https://www.dropbox.com/s/43l29hrdo0u8run/WPX%20CLOUGH%20NR%20512-3%20CBL.PDF>

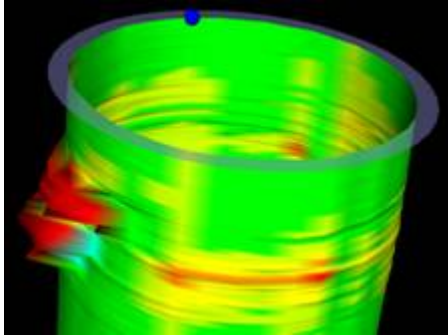
**Here are some additional information to summarize the situation:**

- Wellbore diagram outlining TOC, damage, MVRD, TOG, and TD



- 
- **Timeline of events**
  - Spud: 11/5/11
  - TD well: 11/30/11
  - Winter Stipulations through May 2012
  - Logged CBL: 5/1/12 – No notable casing issues
  - Well Control Issue Identified: 5/19/12

- Control well & swap out washed-out tubing head assembly: 5/20 & 5/21/12, respectively
- Caliper log & gauge ring runs (damaged csg depths located): 5/29/12

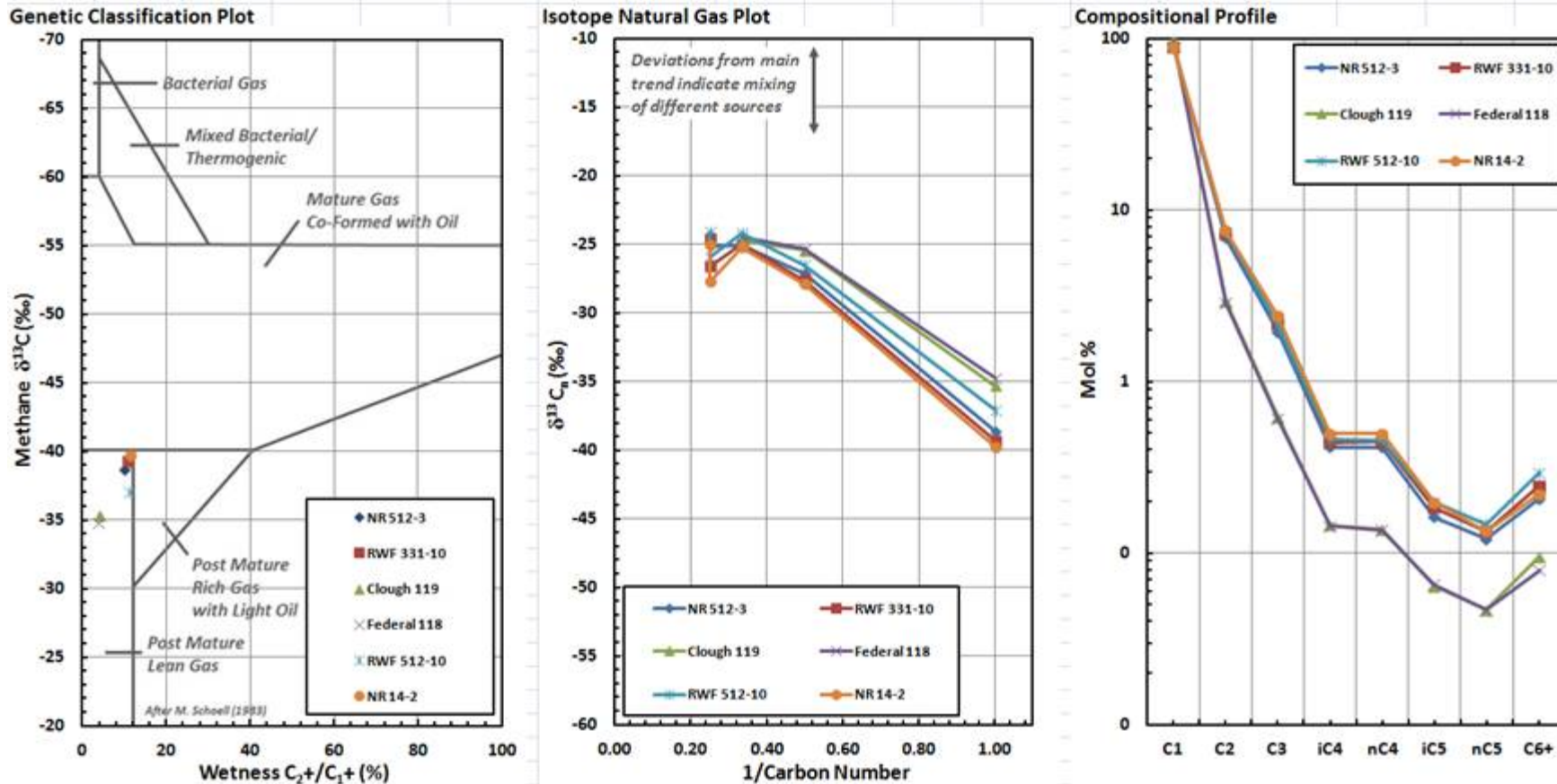


- Temp log and production survey run (confirmed gas produced only through csg holes and not up through casing): 5/31/12
- Gas samples taken: 6/7/12
- Down-hole camera run: 6/10/12
- Well dead due to hydrostatic pressure: 6/11/12 – present
- Gas sample analysis results (indicated Upper Williams Fork source): 6/27/12

Given the fact that the gas is from the Williams Fork and not from the Wasatch formation, WPX Energy would like approval to produce the well through the casing holes for several reasons.

Firstly, HSE is always of great concern to WPX. Flowing the well will keep pressure off the backside. Given the proximity to TOC, WPX would feel better flowing the well than shutting it in and allowing pressure to build. Running in the hole with a tubing string would not only aide in production, but also provide means to easily maintain well control and possibly kill the well if need be.

Secondly, WPX is permitted to produce gas from the Williams Fork formation. Gas samples were taken from the NR 512-3, as well as from the closest bottom-hole Wasatch (Clough 119 & Federal 118) and Williams Fork (RWF 331-10, NR 14-2, & RWF 512-10) wells, for comparison purposes. Samples were tested for composition, isotopes, and wetness. Conclusive results indicate that the gas being produced from the NR 512-3 is from the Upper Williams Fork. Please refer to the graphs below for gas analysis results:



Lastly, the well is located in an area that is highly undeveloped. Thus, there is limited data available for reservoir modeling. This situation provides a unique opportunity to learn more about the shallow Williams Fork reservoir in the North Rulison area. How do we learn about the reservoir in this case? Only an open-hole (OH) log has been run to date. WPX would like to run a cased-hole (CH) log at this time. After producing the well through next spring, another CH log would be run. The neutron curve would then be compared to the earlier CH log to help identify reservoir depletion...providing the source depth(s) of the produced gas through the current casing holes.

Completing any zones below the casing damage will require remediation (squeeze and casing patch) of the holes. The current market environment does not make such remediation operations very attractive at this point in time. Likewise, searching for the source of this Upper Williams Fork gas would also be less economic if WPX has to perforate all the suspect sands. Although unfortunate, these casing holes can still be of use and provide the same valuable information. WPX will gladly file appropriate variance request forms with the State of Colorado.

Please let me know your thoughts and concerns regarding our proposed plan. We are committed to providing you with any information you may need to help make an informed decision.

Thanks,  
Tyler

**Samuel "Tyler" Burt**

Completions Engineer - Piceance Asset

WPX Energy

1001 17th St | Ste 1200 | Denver | CO 80202

**O:** 303-260-4527

**M:** 303-579-1239

**E:** Samuel.Burt@WPXenergy.com

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**From:** Andrews, David [mailto:David.Andrews@state.co.us]

**Sent:** Tuesday, June 05, 2012 8:14 AM

**To:** Hejl, Kent

**Cc:** Burt, Samuel; Tannehill, Julie

**Subject:** RE: NR 512-3 update

Kent,

Thanks for the update. When you are ready to remediate, please email your procedure on a Sundry Notice (Notice of Intent) and include a pdf copy of the production casing CBL. Do not send a duplicate hard copy of the Sundry Notice.

Thanks,

**David D. Andrews, P.E., P.G.**

Engineering Supervisor - Western Colorado

**State of Colorado**

**Oil and Gas Conservation Commission**

707 Wapiti Court, Suite 204

Rifle, Colorado 81650

Office Phone: (970) 625-2497 Ext. 1

Cell Phone: (970) 456-5262

Fax: (970) 625-5682

E-mail: [David.Andrews@state.co.us](mailto:David.Andrews@state.co.us)

Website: <http://www.colorado.gov/cogcc>

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**From:** Hejl, Kent [mailto:Kent.Hejl@wpxenergy.com]  
**Sent:** Tuesday, June 05, 2012 7:59 AM  
**To:** Andrews, David  
**Cc:** Burt, Samuel; Tannehill, Julie; Hejl, Kent  
**Subject:** RE: NR 512-3 update

Dave,

We've ran a caliper log on the NR 512-3, API # 05-045-20524. Based on the caliper log we have a hole in the 4 ½" production casing string at ~5432', we also have some damage at ~5403'. We also ran, in combination, a spinner survey and a temperature log. The spinner and temperature log, confirmed that the well is flowing from the hole at ~5432'. The temperature log does not indicate we have any flow from below this point. We are going to continue our investigation a bit further before we put together a remediation plan.

We're going to have a gas sample analyzed to try to determine the origin of the gas. We are also looking into running a camera down the 4 ½" casing to try and understand the extent of the damage and possibly learn a bit about what happened to cause the casing to fail.

We are currently flowing the well to sales, it's flowing at 600 psi on a 20/65" choke, ~1mmcf/day. Our geologist are also look at logs on the NR 512-3 well and off set wells to see if they can determine the source of the gas flowing from the hole at ~5432'.

I'll continue to update you on ongoing operations.

Thanks

Kent Hejl  
District Completion Manager  
Office: (970) 263-2715  
Cell: (970) 629-2404  
[kent.hejl@wpxenergy.com](mailto:kent.hejl@wpxenergy.com)



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**From:** Hejl, Kent  
**Sent:** Thursday, May 24, 2012 10:24 AM  
**To:** 'david.andrews@state.co.us'  
**Cc:** Burt, Samuel; Tannehill, Julie  
**Subject:** NR 512-3 follow up e-mail

Dave,

Here is some information on the issues we talked about on Tuesday the 22<sup>nd</sup>.



We may have an issue with the integrity of the 4 ½" production casing string on the NR 512-3 well, API# 05-045-20524. For reasons to be determined, the 4 ½" production casing started flowing on May 19th, no completion operation had began. The production casing string is 4 ½" P-110, 11.6# set at 10,060', the casing was ran and cemented on December 3, 2011. We are currently working to find it issue with the 4 ½" production casing, until we pin point the problem I don't have an answer on how we are going to remediate.

The surface casing on this well is 9 5/8" is H-40,32# & J-55,36# set at 2406', there is no pressure on the Bradenhead at this time.

When find out what may have caused the 4 ½" production casing to flow we will update you with our findings, at that time we should have a remediation plan in place.

Thank you

Kent Hejl

District Completion Manager

Office: (970) 263-2715

Cell: (970) 629-2404

[kent.hejl@wpxenergy.com](mailto:kent.hejl@wpxenergy.com)

