Colorado Oil and Gas Conservation Commission

http://cogcc.state.co.us/

FORM 5A Completed Interval Report

INDUSTRY TRAINING



Denver, Colorado November 27, 2012









Form 5A Completed Interval Report Introduction

The purpose of this presentation is to provide instructions for Operators to complete the Completed Interval Report - Form 5A

The Form 5A and associated attachments report and document how & where the well was actually completed and subsequent changes to the completion through the life of the well

This includes the name of the completed formation(s), the depths in the well where the completion was done, the status of the completion, the stimulation treatment of the formation, the initial production test results, and the details of the abandonment of a completion.



Regulatory Basis for the Form 5A Completed Interval Report

308B. COGCC Form 5A. COMPLETED INTERVAL REPORT

The Completed Interval Report, Form 5A, shall be submitted within thirty (30) days of

completing a formation (<u>successful or not</u>), when a formation is temporarily abandoned or permanently abandoned, for a recompletion, reperforation or restimulation,

or when a formation is commingled.

In order to resolve completed interval information uncertainties, the Director may require an operator to submit a Completed Interval Report, Form 5A.



COGCC Review of the Form 5A Completed Interval Report

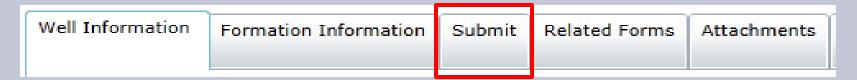
Form 5A is reviewed for compliance with

- The approved drilling plan for this well
 - Permitted Objective Formation(s) per the Application for Permit to Drill (APD)
 Form 2 and any Sundry Notice Form 4
- All Rules, Orders and Policies applicable to the completion of this well
 - Report of Hydraulic Fracture Stimulation to FracFocus Rule 205A
 - Use of Green Completion techniques Rule 805
- Rule 308B Form 5A Requirements
 - All data reported
 - Documents attached
 - Submitted within 30 days of end of completion work
- Agreement with Form 5 Drilling Completion Report
- Agreement with Form 7 Monthly Report of Operations (Production Report)
- Agreement with Form 10 Certificate of Clearance



Form 5A Completed Interval Report Instructions

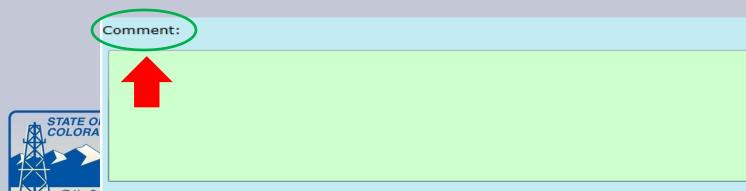
- > eForms divides each type of form into "TABS"
- > Each "Tab" has one or more subjects
- eForm 5A has 5 Tabs



> These instructions will go through them in order, except...

OIL & GAS CONSERVATION COMMISSION

- The Operator Comments are on the Submit tab
- The text box is 8000 characters PLEASE use it!



Form 5A Completed Interval Report Instructions

Important Notes:

- eForm auto-populates some information from your eForm Log-In credentials
- 2. eForm auto-populates some information from the COGCC database
- 3. The auto-populated well data is the planned well information from the approved APD and Sundry Notices in the COGCC database
- 4. Auto-populated information can be edited, but auto-populated well data <u>should not</u> be changed without consulting COGCC staff to determine the cause of the discrepancy between your data and the COGCC database
- 5. All other well data should be the actual data from the drilled well
- 6. All data is required unless noted otherwise

A star identifies information that is <u>often</u> incorrectly reported or omitted.

Form 5A – Well Information Tab (1 of 24)

Mailing Info: auto-populated by eForms from Operator Number in Form 5 Wizard

Contact Name & Info: enter the best person to answer questions about this form, being a Designated Agent is optional for this person

Contact Name:	Sandra	(eg. First Name Last Name)				
Phone	e: 303 629-8456 Fax: 303	629-8268				
Email: sandra.salazar@wpxenergy.com						
Mailing Info:	Operator Num: 96850 Suff: N/A	\ •				
Address: 1001 17TH STREET - SUITE #1200						
	City: DENVER State: CO Zip: 8020	2				

Form 5A – Well Information Tab (2 of 24)

Data auto-populated by eForms for API Number in Form 5A Wizard:

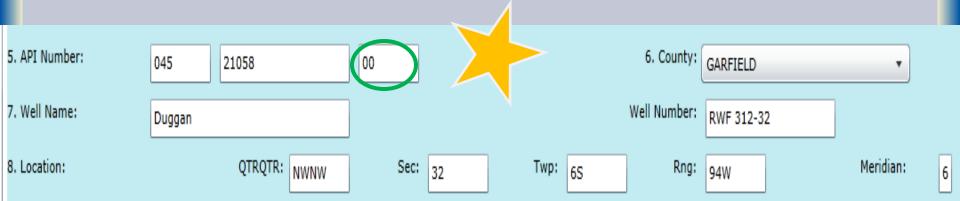
API Number, County, Well Name and Number, Description of Legal Location

The auto-populated well data is the planned well information from the approved APD and Sundry Notices in the COGCC database, displayed on the Scout Card

If any data appears to be inaccurate, contact COGCC staff to resolve the error before submitting Form 5A

The last 2 digits of the API number identify a specific wellbore

It is critical that the correct wellbore is identified as being completed and producing



Form 5A – Well Information Tab (3 of 24)



Field Name: auto-populated from APD

- 1. Non-wildcat well permitted with a field name should match Form 2 and field outlines on COGCC website MAPS
- 2. Wildcat well permitted as wildcat:
- Submit Form 5A as Wildcat
- The field name will be assigned by COGCC staff when the Form 5A is processed after sales are verified through monthly Form 7 production reports
- If the well is close to an existing field, that field will be extended to include it
- ➤ If it is the Discovery Well for a *NEW* field, contact COGCC staff to discuss the naming of the *NEW* field

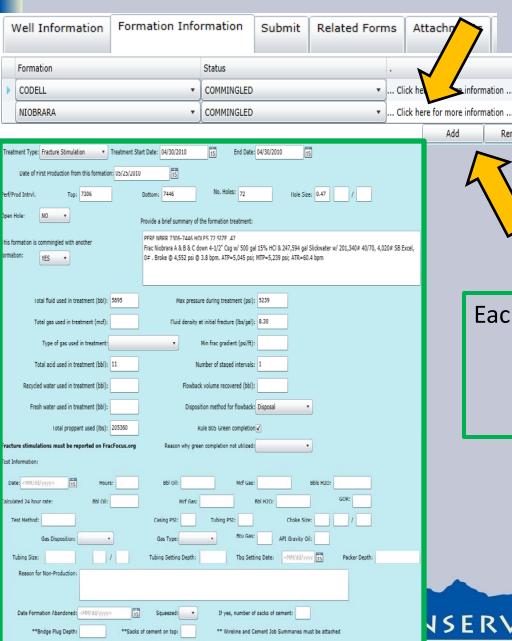


Form 5A – Formation Information Tab (4 of 24)

nformation ...

Remove

Add



Formation Information data is entered in an eForms data "grid" – lines are added (and removed) as needed

Each Line expands (...Click here...) to a large data "block" to enter all the details

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Form 5A – Formation Information Tab (5 of 24)

Formation: Name of formation selected from drop down

- Select very carefully from drop down there are many variations & combinations
- Must be listed on approved APD as an objective
- Depths of the formation top and bottom must be reported on the Form 5

Status: selected from drop down (next slide.....)

- <u>Treatment Type:</u> select from drop down Fracture Stimulation, Acid Job, Cavitation, or Blank
- Blank indicates no treatment done
- Fracture Stimulation or Acid Job treatment <u>details must be reported below</u>



Form 5A – Formation Information Tab (6 of 24)

Formation Status

Status: selected from drop down for each completed formation

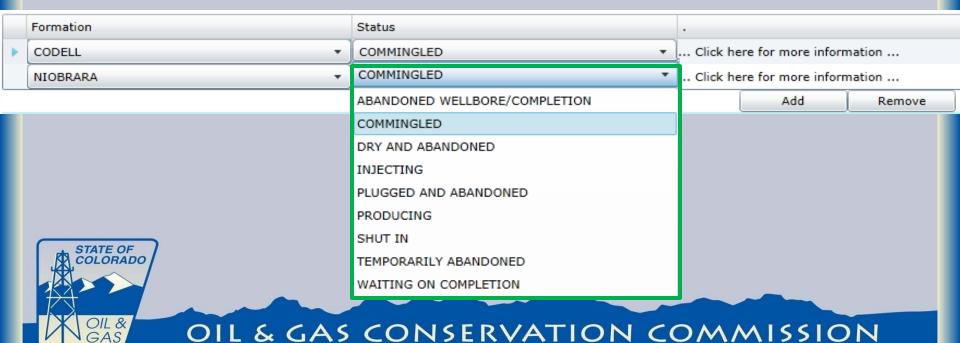
Some of the statuses available on the list are not applicable to the Formation Status reported on a Form 5A and *should not be used*:

Dry and Abandoned

Plugged and Abandoned

Waiting on Completion

These are actually for the Well Status reported on a Form 6





Form 5A - Formation Information Tab (7 of 24)

Formation Status



Abandoned Completion/ Wellbore (AB) (only "Completion" for 5A)

- 1. A formation reporting status is *Abandoned* only if it has been "permanently" abandoned
- 2. Either of these criteria qualifies as "permanently" abandoned
 - A. ALL perfs in the formation are below a bridge plug with 2 or more sacks of cement on top
 - B. ALL perfs in the formation have been squeezed
- Select Abandoned Completion only when all of the perforations in a formation have been abandoned.
- 4. The plugging information must be reported in the Formation Abandonment section of the Form 5A
- 5. The formation must be reported with Abandoned status on the Form 7, using the identical formation name



Form 5A - Formation Information Tab (8 of 24)

Formation Status

Commingled (CM)

A formation reporting status is *Commingled* if it is producing, but no production will be reported on the Form 7 for this formation name

Injecting (IJ)

A formation reporting status is *Injecting* if it is the completed zone in an injection well, reported on the Form 7 with the exact formation name

Producing (PR)

A formation reporting status is *Producing* if the formation is completed and the production is reported using the identical formation name on the Form 7





Form 5A - Formation Information Tab (9 of 24)

Formation Status



Shut-In means that a well is capable of producing - the well has been completed in one or more formations and production facilities are installed - but is currently not producing only because valves are closed, equipment is not activated, or power is required.

In a well with a single completion - Shut-In status applies to the entire well, if one formation is Shut-In, ALL the formations are Shut-In

In a well with a dual or triple completion, Shut-In status can apply to separate completions, so not all of the formations must be Shut-In





Form 5A - Formation Information Tab (10 of 24)

Formation Status



Temporarily Abandoned (TA)

A formation reporting status is *Temporarily Abandoned* if the formation has been completed but is <u>not</u> capable of producing due to one of these reasons:

- 1. production equipment is required
- 2. it has been isolated by a bridge plug with less than 2 sacks of cement on it
- 3. it has been isolated by a sand plug

The Temporary Abandonment information should be reported in the Formation Abandonment section of the Form 5A.



Form 5A - Formation Information Tab (11 of 24)

DATES: all must make logical operational sense, watch for typos

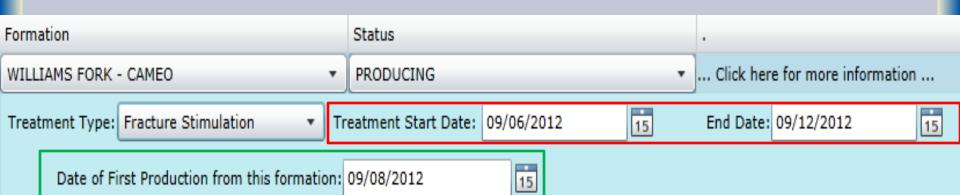
- Compare all dates on this Form 5A for internal consistency
- ➤ Compare with Form 5 dates for spud, TD, casing set
- Compare Form 7 dates and status
- > Compare First Production date reported below and reported on Form 10

Treatment Start & End Dates: required if treatment type selected

Start must be before the end, both can be the same date

Date of First Production from this formation

- The date is required if the Reporting Status is PR and the gas disposition for the test is SOLD
- ➤ The date is required if the Reporting Status is PR and the date of first production is reported on the Form 10
- The date can be left blank in other scenarios





Form 5A – Formation Information Tab (12 of 24)

Perf/Prod Interval:

<u>Top & Bottom</u>: enter measured depths of the overall completed interval within this formation

- Depths of the Top and Bottom of the Productive Zone depend upon the type of well and type of completion
- 1. Production Casing: Top = shallowest perf, Bottom = deepest perf
- 2. Cemented Liner: Top = shallowest perf, Bottom = deepest perf
- 3. Slotted/pre-perforated liner <u>with</u> external swell packers: Top = base of the shallowest packer, Bottom = total depth of the well
- 4. Slotted/pre-perforated liner <u>without</u> external swell packers: Top = production casing setting depth, Bottom = total depth of the well
- Open hole completion: Top = production casing setting depth, Bottom = total depth of the well
 - Measured depths must be between top and base of named formation as reported on the Form 5
 - Top Depth is used to calculate the footages for the Top of Productive Zone reported on the Form 5

Perf/Prod Intrvl: Top:	5899	Bottom:	7837	No. Holes:	127	Hole Size:	0.35		/	

Form 5A – Formation Information Tab (13 of 24)

Perf/Prod Interval:

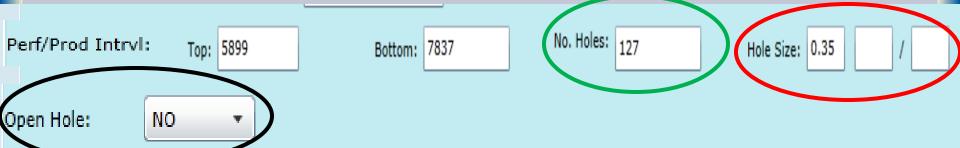
Number of Holes:

Required for perforated production casing and cemented liners Leave blank for all others

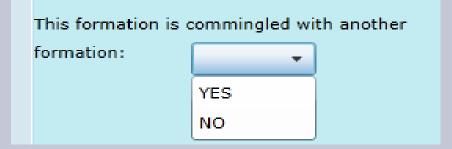
Hole Size:

Required for perforated production casing and cemented liners Leave blank for all others Use spaces for fractions – do not enter decimal values (as done here)

<u>Open Hole</u>: check box = requires YES for openhole completion, requires NO for all others



Form 5A – Formation Information Tab (14 of 24)



This formation is commingled with another formation: YES/NO check box

- 1. Use this to indicate the physical configuration of the producing wellbore relative to this formation
- 2. Checking this box is <u>not</u> optional; it should always be checked
- 3. This is different from "commingled" Formation Reporting Status above
- 4. YES = produced materials from this completed formation are combined down hole with the produced materials from another completed formation(s)
- 5. NO = produced materials from this completed formations are NOT combined down hole with the produced materials from another completed formation because of either of these scenarios:
 - A. This formation is completed separately with an individual string of tubing and is metered separately from other completed formation(s) in the well
 - B. This formation is the only one completed in this well

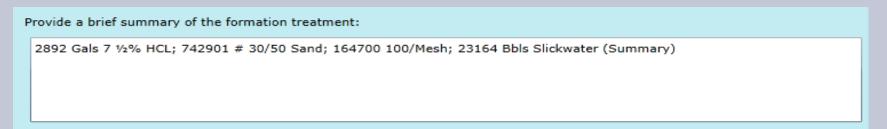


Form 5A – Formation Information Tab (15 of 24)

Formation Treatment Reporting

- Required if the formation was treated with a Fracture Stimulation or an Acid Job (as selected from the drop-down above)
- All applicable information must be reported

Provide a summary: (same old Summary)



Provide numeric data and information selected from drop down lists: (new in June 2012)

Total fluid used in treatment (bbl):	23233	Max pressure during treatment (psi):
Total gas used in treatment (mcf):		Fluid density at initial fracture (lbs/gal): 8.43
Type of gas used in treatment:		Min frac gradient (psi/ft): 0.79
Total acid used in treatment (bbl):	68	Number of staged intervals: 6
Recycled water used in treatment (bbl):	23164	Flowback volume recovered (bbl): 11080
Fresh water used in treatment (bbl):		Disposition method for flowback: Recycle ▼
Total proppant used (lbs):	907601	Rule 805 Green completion ✓
acture stimulations must be reported on Fra	cFocus.org	Reason why green completion not utilized:

Form 5A – Formation Information Tab (16 of 24) Formation Treatment Reporting

Provide a brief narrative summary of the formation treatment:

- This is information that the <u>new detailed</u> numeric data fields and drop-down lists do not accommodate, such as:
 - 1. Type of fluid used (gel, slickwater, etc.)
 - 2. Type of acid and concentration used (HCl, HF, etc.)
 - 3. Types and amounts of proppant(s) used
 - 4. Depth details for multiple stages in this formation
 - 5. Method for determining flowback volume

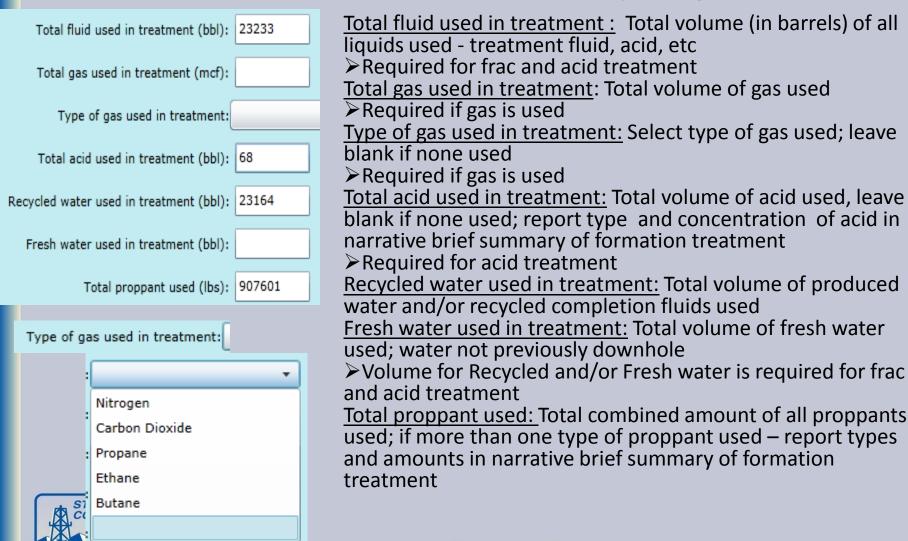
This text box expands to 5000 characters

Provide a brief summary of the formation treatment:

2892 Gals 7 ½% HCL; 742901 # 30/50 Sand; 164700 100/Mesh; 23164 Bbls Slickwater (Summary)

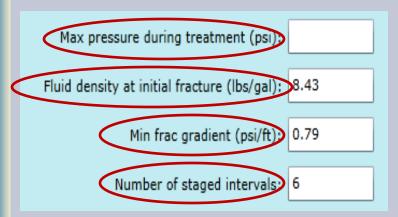
Form 5A – Formation Information Tab (17 of 24)

Detailed Formation Treatment Reporting



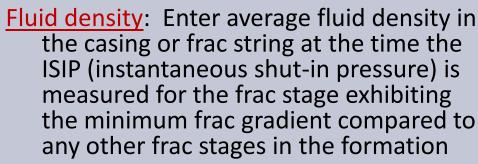
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<u>Form 5A – Formation Information Tab (18 of 24)</u> <u>Detailed Formation Treatment Reporting</u>



Max pressure during treatment:

Enter maximum surface pressure observed at fracture initiation (ISIP - instantaneous shut-in pressure) during any stage of stimulation of the formation > Required for frac and acid treatment



> Required for frac treatment

Min frac gradient: Enter frac gradient corresponding to the frac stage for the reported fluid density which has the minimum calculated frac gradient compared to any other frac stages in the formation

> Required for frac treatment

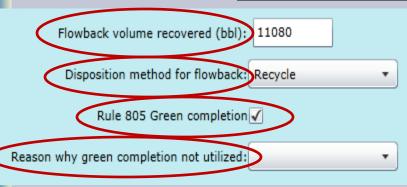
Number of staged intervals: Enter number of stages in fracture treatment of this formation

Required for frac treatment



Form 5A – Formation Information Tab (19 of 24)

Detailed Formation Treatment Reporting



Flowback volume recovered:

- ■Total combined volume of treatment fluids <u>and</u> produced water recovered during flowback
- ■Utilize best measurement method available to determine a meaningful volume for the formation and briefly describe method in summary
- Report total volume recovered as of the date the Form 5A is submitted
- Required for frac and acid treatment

<u>Disposition method for flowback:</u>

Select from drop-down list if flowback materials will be recycled or disposed of :

- Recycle
- Disposal

Indicate intended disposition if signed over to a third party

Required for frac and acid treatment

Rule 805 Green completion techniques utilized:

Check the box if green completion techniques were used

Leave box blank if not used

Reason why green completion not utilized:

When green completion techniques not used (the check box above is blank) the reason <u>must</u> be selected drop down list:

- Pipeline = no pipeline available or
- Pressure = insufficient reservoir pressure

Leave blank if green completion used



Form 5A – Formation Information Tab (20 of 24)

Fracture stimulations must be reported on FracFocus.org

<u>Fracture stimulations must be reported on FracFocus.org:</u> this is a reminder to the operator to submit frac data to Frac Focus

Rule 205A requires submittal to Frac Focus within 60 days of the Treatment End Date, or if treatment is not completed, within 120 days of the Treatment Start Date

COGCC Scout Card is updated monthly (at the beginning for the previous month)

- Frac Focus Icon Link
- Job Date
- Report Date
- Days to report



(click well name for production) Well Name/No: Duggan #RWF 312-32 WPX ENERGY ROCKY MOUNTAIN LLC - 96850 Operator: Federal or State ease #: Status Date: 9/8/2011 5:1 4 PM NWNW 32 **GARFIELD** Location: County: Field: RULISON 5400 Elevation: 5.538 ft. →1093 FNL 1294 FWL Planned Location 5696/-107.915927 Lat/Long: 39 Lat/Long So e: Fie Job Date: 9/14/2012 Reported: 10/12/2012 Days to report: 28 Chemical Disclosure Registry

Form 5A – Formation Information Tab (21 of 24)

TEST INFORMATION: report the actual results of this formation production test

<u>Test Date & Hours:</u> report date and length of time (in hours) for the production test

Bbls oil: report volume (in barrels) of oil produced during test

required if oil produced – enter zero if none

Mcf Gas: report volume (in thousand cubic feet) of gas produced during test

required if gas produced – enter zero if none

Bbls Water: report volume (in barrels) of water produced during test

required if water produced – enter zero if none

<u>Calculated 24 hour rate:</u> using the results of the formation production test, calculate the

24 hour rates

Bbls oil

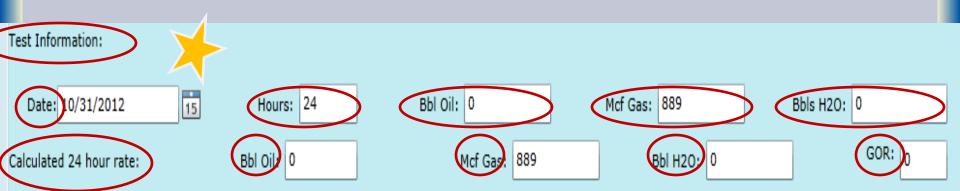
Mcf Gas

Bbls Water

GOR: report Gas to Oil Ratio as barrels of oil per standard cubic feet (scf) of gas

required if gas <u>and liquids</u> produced – enter zero if not

GOR = MCF Gas/Bbls Oil X 1000



Form 5A – Formation Information Tab (22 of 24)

TEST INFORMATION: report the actual results of this formation production test

Test Method: report test method used

Casing PSI: report casing pressure (in pounds per square inch) observed during the test

Tubing PSI: report tubing pressure (in pounds per square inch) observed during the test

Choke size: report the choke size used during the test

<u>Gas Disposition</u>: select disposition of gas as Sold, Vented, Flared, Re-Injected from drop down list (NOTE: extended venting or flaring requires prior approval via Sundry Notice Form 4)

Gas Type: select gas type of Wet, Dry, Coal Gas, CO2, Helium from drop down list

BTU Gas: report BTU of gas

➤ Gas Data – Disposition, Type, BTUs - ALL required if gas produced – leave blank if none if none produced

API Gravity Oil: report API gravity of oil

required if oil produced – leave blank if none if none produced

Tubing Information:

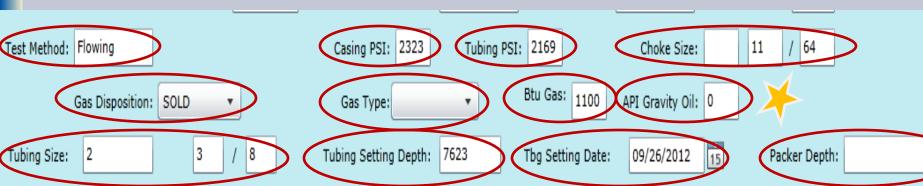
required if tubing has been set – a Tubing PSI entered above indicates it has been set

Tubing Size – use fractions, not decimals

Setting Depth

Setting Date

Packer Depth



Form 5A – Formation Information Tab (23 of 24)

<u>FORMATION ABANDONMENT:</u> Complete details in this section when reporting the formation status is now Temporarily Abandoned (TA) or Abandoned (AB)

Reason for Non-Production: Provide brief explanation of reason this formation is being Temporarily Abandoned or Abandoned

Date Formation Abandoned: Report date the formation was TA or AB

<u>Squeezed:</u> select Yes or No from drop-down to indicate if perforations in this formation were squeezed with cement, select NONE if no perforations

If YES number of sacks cement: if perforations were squeezed, report cement volume (in sacks) used, leave blank if not squeezed

- Required if squeezed
- Cement Job Summary (cement tickets) MUST be attached

Reason for Non-Production:



Form 5A – Formation Information Tab (last of 24)

FORMATION ABANDONMENT: Complete details in this section when reporting the formation status is now Temporarily Abandoned (TA) or Abandoned (AB)

Bridge Plug Depth: if bridge plug set to abandon formation, report setting depth; if multiple plugs set, report deepest plug above perfs in this formation; leave blank if none set

Sacks cement on top of bridge plug: if cement was set on top of bridge plug, report cement volume (in sacks) used; leave blank if none set

- "Abandoned" status requires 2 or more sacks of cement on the Bridge Plug
- "Temporarily Abandoned" is less than 2 sacks of cement on the Bridge Plug

Wireline and Cement Job Summaries must be attached: REMINDER

- Cement Job Summary: must be attached for all cement volumes reported
- Wireline Job Summary: must be attached for all plugs reported that were set by wireline

**Bridge Plug Depth:

**Sacks of cement on top:

** Wireline and Cement Job Summaries must be attached

Form 5A – Submit Tab

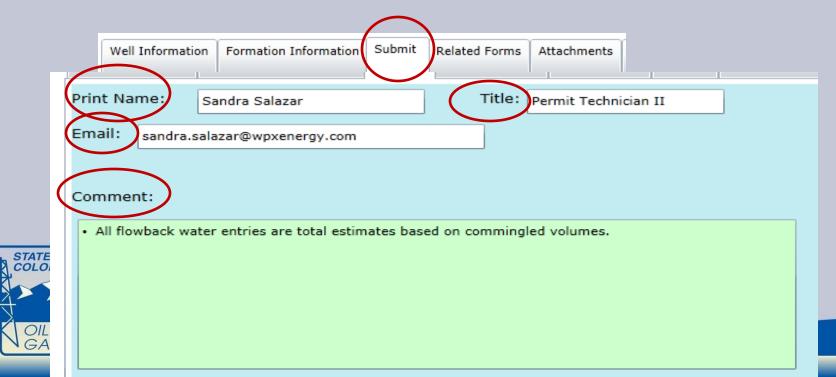
<u>Print Name:</u> Enter the name of the person who is actually submitting this Form 5A

This person <u>must</u> be a Designated Agent for the Operator

<u>Title</u>: Enter the title of the person who is actually submitting this Form 5A

Email: Enter the email address of the person who is actually submitting this Form 5A

<u>Comment:</u> Enter required comments and any additional information deemed necessary to clarify this submitted Form 5A. This box expands to accommodate 8000 characters.



Form 5A – Related Forms Tab

Related Forms are entered in an eForms data "grid" – lines are added (and removed) as needed

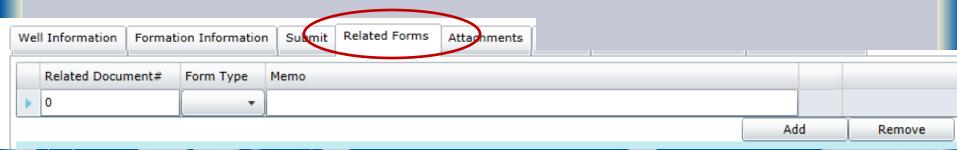
No related forms are required on the Form 5A

If a related form is entered, the Document Number and the Form Type are required; Memo field is optional

Only enter a form for this well that is being submitted simultaneously with this Form 5A

 Enter the Form 5 only if it is being submitted simultaneously with the Form 5A

Do not enter a form that has been submitted previously: Form 2, Form 2A, Preliminary Form 5, etc.





Form 5A - Attachments Tab (1 of 2)

Use "New Attachment" button to attach all documents required for this Form 5A

After attaching:

OTHER

WELLBORE DIAGRAM

WIRELINE JOB SUMMARY

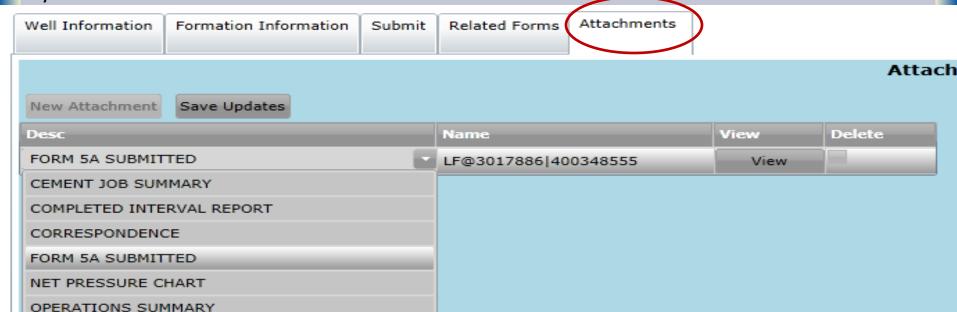
<u>Desc</u>: Select the correct name for each attachment from the drop down list under "Desc" for "Description"

<u>Name</u>: currently, this is a combination of text and document numbers that are assigned by the eForm system and cannot be edited in the form

<u>IMPORTANT Reminder</u>

<u>View</u>: Before submitting the form, click the "View" button to verify for each attachment

- ➤ Document opens properly file is not corrupt
- ➤ Document is for *this* well



Form 5A – Attachments Tab (2 of 2)

- Cement Job Summary (contractor cement tickets): Required for any cement reported as set on top of a plug or used to squeeze a completion (usually to Temporarily Abandon or to Abandon a completion)
- Wireline Job Summary (contractor wireline tickets): Required for any plugs set (usually to Temporarily Abandon or to Abandon a completion)
- Wellbore Diagram: Optional for Form 5A unless required by COA on an APD or Sundry
- Operations Summary: Required if cement tickets or wireline tickets are not available, otherwise this is an optional attachment
- Net Pressure Chart: May be included as part of treatment details Correspondence and Other: as needed



Form 5A Completed Interval Report

Conclusion

The preparation and submittal of a Form 5A is how you report the initial completion of, and subsequent completion work done on, one of your wells.

In reviewing of your Form 5As we must verify that (1) the well was completed, or the work was done, according to the approved plans and all applicable Rules, Orders, and Policies and that (2) all reporting requirements have been met.

If your Form and attachments do not enable us to verify everything, we must request additional information.

Our goal for this training is to provide everything you need in order to submit Form 5As that are absolutely complete and accurate.



Form 5A Completed Interval Report

Any Questions?



Form 5A Completed Interval Report

Thank You!

