



NorthSTAR User Manual

Completion Report

Sample data in this manual represents a typical horizontal well as entered into NorthSTAR.

**Sample well is NDIC File No. 35640
Completed on December 10, 2019.**

Accessing the Completion Report

You can access a completion report if you have the below permissions:

Security Permissions

Access to submit a completion report is only available to those with the below security permissions.

- **NorthSTAR Admin** – Ability to Create, Read, Update, and Delete
- **Well Manager** – Ability to Create, Read, Update, and Delete
- **Well Submitter** – Ability to Create, Read, Update
- **Well Read Only** – Ability to Read

The NorthSTAR Admin is the only person who can view or edit security permissions.

To view Security Permissions:

- Click on My Organization
- Click on Associated People
- Click on the hyperlinked name of the person you would like to review
- Click on Summary
- Click on Security
- Check permissions that apply and click Save

TIP: Users with security permissions for a specific NorthSTAR form will be able to - at a minimum - read all forms in progress or submitted of that specific form type if they are affiliated with the Organization the form is being submitted under.

Open a Completion Report Form:

To access the completion form for submission you can:

1. Select "Forms"
2. Select "Online Forms"
3. Select "Well Completion or Plugging Report"

OR

1. Enter the NDIC File Number in the search field located in the top right corner of the NorthSTAR navigation pane.
2. Click on the file number to open the Well Details page.
3. Select "Actions"
4. Select "Submit Completion or Plugging Report"

Step 1: Form Information

Fields and Functions:

Form Name: Will default to the form you have selected in NorthSTAR.

Organization: Select the name of the organization the sundry applies to if it does not default to the correct organization.

Form Type: When filling out a completion report choose "Completion" or "Preliminary Completion"

Type of Completion:

API: Select the API of the well you are filing the completion report for if it does not default to the correct API.

Well Information: Complete in the format listed. This box is used to indicate that a Completion (or Plugging Report) is being filed.

Hello Nathaniel Erbele, North Dakota Oil & Gas Di

Well Completion or Plugging Report

Help

Form Navigation ?

1. Form Information

Form Information [Hide Form Navigation]

Please enter information below. * Indicates Required Field

Form Name
Well Completion or Plugging Report

Organization
WPX ENERGY WILLISTON, LLC

Form Type * **Type of Completion * ?**

Completion ▼ New Well - Horizontal ▼

API *

3302503610 ▼

Enter the well information in the following format: Township – Range – Section – Well Name and Number – Type of Well (Example: 156 – 097 – 02 – Smith 1– Oil & Gas). * ?

149 - 093 - 09 - ST. ANTHONY 9-16HD - Oil & Gas

Step 2: Operator Information

The Operator Information page is used to designate contacts for the filing.

By default, the person who is logged in and submitting the completion report will be displayed in the "Contacts" grid. By clicking the "Actions" button and selecting "Add Contact", additional contacts can be associated with the completion report. If the individual is already in NorthSTAR, check the box next to the statement "Is this contact already in NorthSTAR?" and complete the "Contact Role" and "Find Person" fields. Then, click "Save".

Review the operator information displayed at the top of the form to ensure the correct organization has been selected.

Operator Information					[Hide Form Navigati
API: 3302503610	File No.: 35640	Field: N/A	Type of Well: Oil & Gas	Type of Work: Completion	
Please confirm the correct Organization has been selected, and designate contact(s) with their correct role. By default, the form submitter is selected as a contact.				* Indicates Required Fie	
Organization Name WPX ENERGY WILLISTON, LLC (3953)			Type of Organization LLC		
Organization Primary Address 3500 One Williams Center- MD38 TULSA, OK 74172					
Organization Primary Phone Number (539) 573-8958			Ext		
Contacts					
					<input type="button" value="Advanced Filtering"/> <input type="button" value="Actions"/>
Name ↑	Phone Number	Email	Role	Actions	

Step 3: Well Information

The Well Information step is used to give more information about the well completed.

- Verify the information appears correct.
- Add the information in the boxes and the bottom of the form then click "Save" to continue.

Well Information
[Hide Form Navigation]

API:	File No.:	Field:	Type of Well:	Type of Work:
3302503610	35640	N/A	Oil & Gas	Completion

Please enter information on the proposed Well operation below. Grey highlighted fields are informational only. * Indicates Required Field

Unit

Field

Pool

Associated Bond
W350

Confidential Status
No

Associated Inspector
Allen Christensen

Well Name
ST. ANTHONY 9-16HD

Wellhead Location

Surface Owner
N/A

Footages From Nearest Section Line

Footage 1: 439	Feet From	N	Line
Footage 2: 2137	Feet From	W	Line

Qtr-Qtr or Lot: NE NW **Section:** 09 **Township:** 149 N **Range:** 93 W **County:** Dunn

Latitude of Well Head (NAD 83): 47.74524178	Longitude of Well Head (NAD 83): -102.59108301
Ground Elevation (Ft above SL): 2304	Graded Pad Elevation (Ft above SL): <input type="text" value="2306"/>

Operator Reported Well Status * <input type="text" value="Producing"/>	Spud/Start Date * <input type="text" value="5/26/19"/>	Driller Total Depth <input type="text" value="21227"/>
----------------------------------------------------------------------------------	------------------------------------------------------------------	------------------------------------------------------------------

Disposition of Gas <input type="text" value="Not Connected"/>	KB Elevation (Ft above SL) * <input type="text" value="2329"/>	Operator Reported Producing Method <input type="text" value="Flowing"/>
-------------------------------------------------------------------------	--------------------------------------------------------------------------	-----------------------------------------------------------------------------------

Date Completed *

- An oil well shall be considered completed when the first oil is produced through wellhead equipment into tanks from the ultimate producing interval after casing has been run.
 - A gas well shall be considered complete when the well is capable of producing gas through wellhead equipment from the ultimate producing zone after casing has been run.
 - For EOR or SWD wells, please report the date the well is capable of injection through tubing and packer into the permitted injection zone. Also, please report the packer type and depth and the tubing size, depth, and type. The packer and tubing type may be included in the "Additional Information" portion of the report.

Size & Type of Pump

Step 4: Geologic Information

This section is used to provide information on types of electric or other logs that were run.

Check the box to the right of the logs that were run, then click the down arrow to move the selected logs into the box below.

Geologic Information
[Hide Form Navigation]

API:	File No.:	Field:	Type of Well:	Type of Work:
3300700725	8705	N/A	Oil & Gas	Completion

Please verify or enter location information on the Well below. * Indicates Required Field

Deepest Formation Penetrated *

Bakken

Select Types of Electric or Other Logs Run That Were Run

Advanced Filtering
Actions

Search

⚙️

<input type="checkbox"/>	Code	Log Name ↑	Field
<input type="checkbox"/>	SON	Acoustic/Sonic	
<input type="checkbox"/>	CHL	Cased hole logs	
<input type="checkbox"/>	CIL	Casing Evaluation	
<input type="checkbox"/>	CBL/CBUS	Cement Evaluation	
<input type="checkbox"/>	DEN	Density	
<input type="checkbox"/>	DRL/MUD	Drilling/Mud Logs	
<input type="checkbox"/>	ENG/ADV	Engineered/Advanced logs	
<input type="checkbox"/>	GRS	Gamma to Ground Level	
<input type="checkbox"/>	GEOI	Geologic Interpretation	
<input type="checkbox"/>	OTHER	Other	
<input type="checkbox"/>	POR	Porosity	
<input type="checkbox"/>	RES	Resistivity	

⏪ ⏩ 1
20 items per page
Viewing 1 - 12 from 12 results
🔄

▼ ▲

Associated Types of Electric or Other Logs Run That Were Run

Advanced Filtering
Actions

Search

⚙️

<input type="checkbox"/>	Code	Log Name ↑	Field	Review Decision	Actions
<input type="checkbox"/>	SON	Acoustic/Sonic			Actions-
<input type="checkbox"/>	CIL	Casing Evaluation			Actions-

If the cores were cut enter the pertinent details by clicking on "Actions" and "Add Core"

The screenshot shows a web interface for 'Cores Cut'. At the top is a header bar with the text 'Cores Cut'. Below this is a toolbar containing a button for 'Advanced Filtering' (with a funnel icon), a dropdown menu for 'Actions', and a gear icon for settings. The main area is a table with the following columns: 'Top MD (ft)' with an upward arrow, 'Bottom MD (ft)', 'Formation' with an upward arrow, and 'Actions'. The table body is currently empty.

The screenshot shows a modal form titled 'Cores Cut' with a close button (X) in the top right corner. A legend indicates that a red asterisk (*) denotes a required field. The form contains three input fields: a large text box for 'Formation *', and two smaller text boxes for 'Top MD (ft) *' and 'Bottom MD (ft) *'. At the bottom right of the form are two buttons: 'Cancel' and 'Save'.

If the permit was approved in NorthSTAR zones of significance will be populated with the geologic prognosis:

1. Click on "Actions" at the right of each zone and edit
2. Update the record from "Estimated" to "Actual"
3. Change the estimated depth to the actual depth

Zones of Significance ⓘ				
<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>				
<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>				
Zone Name	Zone Category ↑	Top TVD (ft)	Bottom TVD (ft)	Actions
Pierre Fm.	Geologic Top	2137		Actions▼
Greenhorn Fm.	Geologic Top	4830		Actions▼

Back Next Save

If the permit was issued prior to NorthSTAR and converted over there will be no zones:

1. Click on "Actions" to add zones at this time
2. Enter all zones of significance

Zone of Significance ⓘ

* Indicates Required Field

Zone Category * <input type="text" value="Geologic Top"/>	Zone Name * <input type="text" value="Greenhorn Fm."/>	Estimated/Actual <input type="text" value="Actual"/>	
Other Zone Category ⓘ <input type="text"/>	Other Zone Name ⓘ <input type="text"/>		
Top TVD (ft) <input type="text" value="4450"/>	Top MD (ft) <input type="text" value="4531"/>	Bottom TVD (ft) <input type="text"/>	Bottom MD (ft) <input type="text"/>
Pressure (PSI) <input type="text"/>	Oil/Gas Show <input type="text"/>		

Step 5, 6, and 7: Not applicable to oil and gas completions.

Step 8: Features and Cement

Under Features & Cement, the wellbores will appear as they were permitted. The status is "Current", because that is the information currently in our system.

For each wellbore, you will need to select "Actions" – "Edit Wellbore", in order to update the information from the permitted values to the actual values.

Features & Cement
[Hide Form Navigation]

API: 3302503610 **File No.:** 35640 **Field:** N/A **Type of Well:** Oil & Gas **Type of Work:** Completion

Please enter information on the Wellbore, Wellbore Construction Features, Cement, and Cement classes below.

Wellbore Information

Advanced Filtering
Actions
⚙️

Wellbore Type ↑	Well... Code (API-...)	Co... Sta...	Re... Sta...	Wel... Sta... (M...)	Dat... Re...	Total Depth (MD ft)	Total Depth (TVD...)	Hole Size (in)	Actions
LATERAL 1	3302503610-02	Installed	Current	10581	N/A	21165			Actions
SURFACEHOLE 1	3302503610-00	Installed	Current	0	N/A	2296			Actions
VERTICALCURVE 1	3302503610-01	Installed	Current	2296	N/A	10581			Actions

Wellbore Information

Wellbore Information
×

* Indicates Required Field

Wellbore Type *	Wellbore Sequence # *	Wellbore Code (API-12)
<input type="text" value="Lateral"/>	<input type="text" value="02"/>	<input type="text" value="3302503610-02"/>
Wellbore Construction Status *		
<input type="text" value="Installed"/>		
Record Status	Parent Wellbore *	
<input type="text" value="Proposed"/>	<input type="text" value="VERTICALCURVE 1"/>	
Wellbore Start Depth (ft MD) *	Date TD Reached	Kick Off Point (MD ft)
<input type="text" value="11563"/>	<input type="text" value="7/6/19"/>	<input type="text"/>
Azimuth°	Total Depth (MD ft) *	Total Depth (TVD ft) *
<input type="text"/>	<input type="text" value="21227"/>	<input type="text" value="10801"/>
Drilling Mud Type *	MWD Contractor	Hole Size (in)
<input type="text" value="Produced Water"/>	<input type="text"/>	<input type="text"/>

Legal Entry Point into Pool & Spacing Unit - Entry Point Coordinates from Well Head

<input type="text"/>	From WH	<input type="text"/>	(N/S)	<input type="text"/>	From WH	<input type="text"/>	(E/W)
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KOP Footages From Nearest Section Line

<input type="text"/>	Feet From	<input type="text"/>	Line	<input type="text"/>	Feet From	<input type="text"/>	Line		
<input type="text"/>	Qtr-Qtr/Lot	<input type="text"/>	Section	<input type="text"/>	Township	<input type="text"/>	Range	<input type="text"/>	County
	<input type="text"/>	<input type="text"/>	<input type="text"/>	N	<input type="text"/>	W	<input type="text"/>	<input type="text"/>	

Bottom Hole Coordinates From Well Head

<input type="text" value="9802"/>	From WH *	<input type="text" value="S"/>	(N/S) *	<input type="text" value="2578"/>	From WH *	<input type="text" value="E"/>	(E/W) *
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Bottom Hole Footages From Nearest Section

<input type="text" value="305"/>	Feet From	<input type="text" value="S"/>	Line	<input type="text" value="544"/>	Feet From	<input type="text" value="E"/>	Line		
<input type="text" value="SE SE"/>	Qtr-Qtr	<input type="text" value="16"/>	Section	<input type="text" value="149"/>	Township	<input type="text" value="93"/>	Range	<input type="text" value="Dunn"/>	County
	<input type="text"/>	<input type="text"/>	<input type="text"/>	N	<input type="text"/>	W	<input type="text"/>	<input type="text"/>	

Description

After you have edited a wellbore, two records will be displayed.

- The updated record will have a status of "Proposed", because the as-drilled information just entered is proposed to be added to the Oil and Gas Division database.
- After the completion report has been accepted by the Oil and Gas Division the Well Details will show the new completion details.

Features & Cement										[Hide Form Navigation]
API:	File No.:	Field:	Type of Well:	Type of Work:						
3302503610	35640	N/A	Oil & Gas	Completion						
Please enter information on the Wellbore, Wellbore Construction Features, Cement, and Cement classes below.										
Wellbore Information										
										<input type="button" value="Advanced Filtering"/> <input type="button" value="Actions"/> <input type="button" value="Settings"/>
Wellbore Type ↑	Well... Code (API-...)	Co... Sta...	Re... Sta...	We... Sta... (M...)	Dat... Re...	Total Depth (MD ft)	Total Depth (TVD...)	Hole Size (in)	Actions	
LATERAL 1	3610-02	Install ed	Curre nt	1	N/A	21165			Actions▼	
LATERAL 1	330250 3610-02	Install ed	Prop osed	1156 3	N/A	21227	10801		Actions▼	
SURFACEHOLE 1	330250 3610-00	Install ed	Curre nt	0	N/A	2296			Actions▼	
SURFACEHOLE 1	330250 3610-00	Install ed	Prop osed	0	N/A	2281	2281		Actions▼	
VERTICALCURVE 1	330250 3610-01	Install ed	Curre nt	2296	N/A	10581			Actions▼	
VERTICALC	330250 3610-	Install	Prop	2296	N/A	11563	10801		Actions▼	

You will follow the same procedure with the casing strings.

Wellbore Construction Feature							
Advanced Filtering Actions ▾ ⚙️							
Feature ID ↑	Install Status	Record Status	Feature Top MD (ft)	Feature Bottom MD (ft)	Outside Diam... (deci... inches)	Form... Isolat...	Actions
Liner 1	Installed	Current	0	21227			Actions▾
Production Casing 1	Installed	Current	0	11580			Actions▾
Surface Casing 1	Installed	Current	0	2296			Actions▾

After selecting "Actions" and "Edit Feature", you will be able to enter the actual values for each casing string.

Wellbore Construction Feature							
Advanced Filtering Actions ▾ ⚙️							
Feature ID ↑	Install Status	Record Status	Feature Top MD (ft)	Feature Bottom MD (ft)	Outside Diam... (deci... inches)	Form... Isolat...	Actions
Liner 1	Installed	Current	0	21227			Actions▾
Liner 1	Installed	Proposed	10570	21207	4.5		Actions▾
Production Casing 1	Installed	Current	0	11580			Actions▾
Production Casing 1	Installed	Proposed	0	11563	7		Actions▾
Surface Casing 1	Installed	Current	0	2296			Actions▾
Surface Casing 1	Installed	Proposed	0	2281	9.625		Actions▾

Updated values will again have a "Proposed" status until approved.

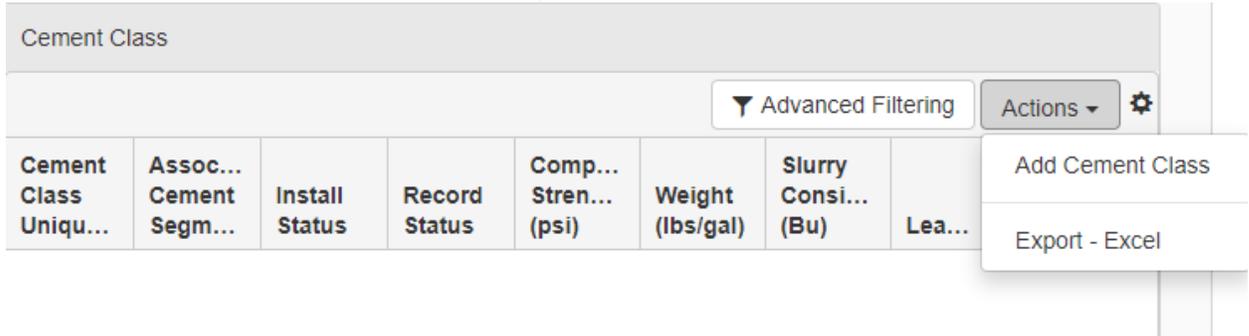
Cement Segments will be updated in the same way.

Cement Segment							
						Advanced Filtering	Actions 
Segment ID	Associated Feature ↑	Install Status	Record Status	Top MD (ft)	Bottom ... (ft)	Actions	
C2	Production Casing 1	Installed	Current	2300	11580	Actions ▼	
C1	Surface Casing 1	Installed	Current	0	2296	Actions ▼	

In this case, a liner needed to be added.

Cement Segment							
						Advanced Filtering	Actions 
Segment ID	Associated Feature ↑	Install Status	Record Status	Top MD (ft)	Bottom ... (ft)	Actions	
C3	Liner 1	Not Installed	New	11574	21056	Actions ▼	
C2	Production Casing 1	Installed	Current	2300	11580	Actions ▼	
C2	Production Casing 1	Installed	Proposed	4500	11563	Actions ▼	
C1	Surface Casing 1	Installed	Current	0	2296	Actions ▼	
C1	Surface Casing 1	Installed	Proposed	0	2281	Actions ▼	

Add a cement class for each cement segment. Select "Actions" – "Add Cement Class"



Enter the information and click "Save"

The 'Cement Class' form contains the following fields and values:

- Associated Cement Segment *: C1
- Cement Type *: Class A Cement
- Construction Status *: Installed
- Record Status: New
- Compressive Strength (psi):
- Weight (lbs/gal):
- Slurry Consistency (Bu):
- Lead/Tail:
- Volume (Sacks): 450
- Yield (cu ft per sack):
- Description:

Buttons: Cancel, Save

Step 9: Completion & Perforation

The completion interval needs to be updated in the same way as the Features and Cement.

For the Completion Interval "C1", select "Actions" – "Edit Completion Interval", in order to update the information.

Completion & Perforation [Hide Form Navigation]

API: 3302503610 **File No.:** 35640 **Field:** N/A **Type of Well:** Oil & Gas **Type of Work:** Completion

Please enter Completion Intervals and Completion Perforations information below. * Indicates Required Field

Completion Interval

Advanced Filtering Actions ▾ ⚙️

Co... Inte... Uni...	Well...	Comp... Interval Type	Pool St...	Inst... Sta...	Rec... Sta...	Top M...	Bo... M...	Field	Pool	Actions
C1	VERTI CALCU RVE 1	Oil & Gas	Shut- In	Install ed	Curre nt			MAN DARE E	BAKK EN	Actions ▾

Edit Completion Interval

Completion Interval x

* Indicates Required Field

Wellbore * LATERAL 1	Completion Interval Type * Oil & Gas	Pool Status Producing by Flowing	Pool Status Date 12/15/19
Pool Completion Date 12/10/19	Interval Construction Status * Installed	Record Status Proposed	
Top MD (ft) * 11574	Top TVD (ft) 10801	Bottom MD (ft) * 21056	Bottom TVD (ft) 10802
Top Coordinates (ft): *		Bottom Coordinates (ft): *	
152	From WH S	N/S	9802
2555	From WH E	E/W	2578
			S
			E

Longstring Casing Point

Footages:		Coordinates (ft):	
<input type="text"/>	Feet From	<input type="text"/>	From WH
<input type="text"/>	Feet From	<input type="text"/>	From WH
Qtr-Qtr	Section	Township	Range
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
		N	W
			County
			<input type="text"/>

Enhanced Recovery Unit	Field	Pool
<input type="text"/>	MANDAREE	BAKKEN
Spacing/Drilling Unit Type	Permit Classification	Acres in Unit
N/A	Development	1280
		Industrial Commission Order
		28991

Legal Description of the Spacing/Drilling Unit

Sections 9 & 16 T149N-R93W

Reservation Surface Boundary Intersected by Spacing/Drilling Unit

Fort Berthold Reservation

Add perforation information in the next section.

Include as much information as you are able.

Completion Open Hole or Perforations							
Perfora... Unique ID	Associ... Compl... Interva...	Install Status	Record Status	Type	Open ... Perfor... Status	Top MD (ft)	Bottom MD (ft)
Advanced Filtering Actions 							
Add Completion Open Hole or Perforation Export - Excel							

* Indicates Required Field

Associated Completion Interval *	Construction Status *	Record Status
<input type="text" value="C1"/>	<input type="text" value="Installed"/>	<input type="text" value="New"/>
Type *	Open Hole or Perforation Status *	
<input type="text" value="Perforation"/>	<input type="text" value="Open"/>	
Top MD (ft) *	Bottom MD (ft) *	
<input type="text" value="11574"/>	<input type="text" value="21056"/>	
Perforation Diameter (inches)	Perforation Spacing (ft)	
<input type="text"/>	<input type="text"/>	
Number of Shots (per foot)	Perforated Date	
<input type="text"/>	<input type="text" value=""/>	
Objective Horizons *		
<input type="text" value="Bakken x"/>		
Description		
<input style="height: 40px;" type="text"/>		

Step 10: Stimulations & Tests

In Stimulations & Tests, you will need to add and initial production test and well stimulation.

Stimulations & Tests
[Hide Form Navigation]

API:	File No.:	Field:	Type of Well:	Type of Work:
3302503610	35640	N/A	Oil & Gas	Completion

Please enter information for stimulations and tests below. An Initial Production Test is required if the associated Pool does not have an installed Completion Interval.

Stimulations & Tests

▼ Advanced Filtering
Actions ▼

Test Type	Associated Completion Interval(s)	Date	Actions

- Add Initial Production Test
- Add Production Test
- Add Drill Stem Test
- Add Well Stimulation

- Export - Excel

Stimulation Or Test
✕

* Indicates Required Field

Test Type	Actual Test Date *		
Initial Production Test	12/15/19		

Pool Name *	Formation
BAKKEN	Bakken

Comments

Prod Method *	Pool 2 Name	Duration (hrs)
Flowing		24

Choke (in/64)	Oil (Bbls)	Water (Bbls)	Gas (MCF)
30	2341	3083	1062

Oil Gravity - API	Gas Oil Ratio	Flowing Tubing (psi)
42	453.65	

Flowing Casing (psi)	Bottom Hole Pressure (psi)

Chlorides (ppm)	Hydrogen Sulfide Concentration (ppm)

Bottom Hole Temp (°F)

24-Hour Oil (Bbls)	24-Hour Water (Bbls)	24-Hour Gas (MCF)
2341.00	3083.00	1062.00

Stimulation Or Test ✕

* Indicates Required Field

Date Stimulated *

Pool *

Stimulated Formation *

Associated Completion Interval *

Top MD (ft) *	Bottom MD (ft) *	Stimulated Stages *	Volume *
<input type="text" value="11574"/>	<input type="text" value="21056"/>	<input type="text" value="33"/>	<input type="text" value="120445"/>

Volume Units *	Treatment Type *	Acid %
<input type="text" value="Barrels"/>	<input type="text" value="Sand Frac"/>	<input type="text"/>

Lbs Proppant

Max Treatment PSI *

Max Treatment Rate (bbbls/min) *

Bakken Shoe/Toe Design

Details

Step 11: Completed Work

Add comments about the completion.

Step 12: Document Upload

BAKKEN PETROLEUM SYSTEM (I.E.: Bakken, Bakken/Three Forks, Sanish) WELLS: In Document Upload, attach a wellbore completion schematic.

The screenshot shows a web interface for document uploads. At the top, there's a header 'Document Upload' with a '[Hide Form Navigation]' link. Below the header, there are five fields: API (3302503610), File No. (35640), Field (N/A), Type of Well (Oil & Gas), and Type of Work (Completion). A text instruction reads: 'Select documents to be uploaded, if applicable. Click Add New and complete all required fields to upload a document.' Below this is a section titled 'Uploaded Documents' containing a table. The table has columns for 'Upload Date', 'Uploaded By', 'Type', 'Description', and 'Actions'. An 'Advanced Filtering' button and a search box are located above the table. The 'Actions' dropdown menu is open, showing 'Add New', 'Export - Excel', and 'Export - PDF' options.

Step 13: Form Submit

Add Comments and submit the Form.