

# Electronic Submittal of Directional Drilling Information in eForms

**Directional Drilling** ✕

**Directional Drilling Path: 400420419** Save Updates Close [x]  
(if available)

Well Name:  API #:  Loc Info:   
Form 5 Well Info. Well Name: SHELEY3A-4H / API Num: 123-34750 / Location: SWSW 4 2N 67W

**Import Data**

Deviation Indicator:  Citing Type:   
North Reference:  Grid Type:

Total: 157 rows Add Delete Remove All Download Data Template

Measured Depth	Inclination	Azimuth	True Vertical Depth	Northing	Easting	Remarks
162	0.30	107.30	162	-0.1	0.4	
255	0.40	20.00	255	0.1	0.7	
348	1.00	300.50	348	0.8	0.2	
441	2.00	293.50	441	1.9	-2	
534	3.40	294.90	534	3.7	-6	
627	4.30	287.70	627	5.9	-11.8	
720	4.90	283.40	719	7.9	-19	
782	5.80	278.80	781	9	-24.7	

# Directional Data Requirements for Forms 2, 4, and 5 for Directional Wells

## **1) Application for Permit to Drill, Form 2**

- a. Attached: PDF file of the Deviated Drilling Plan = the planned directional coordinate data and two (2) wellbore deviation plots, one depicting the plan view and one depicting the side view of the proposed wellbore
- b. Imported and Uploaded: Electronic Deviated Drilling Plan = a completed Directional Data Template (Excel Spreadsheet) with the planned directional coordinate data for the proposed wellbore

## **2) Sundry Notice, Form 4 – Change of Location/Drilling Plans prior to drilling**

- a. Attached: PDF file of the Deviated Drilling Plan = the planned directional coordinate data and two (2) wellbore deviation plots, one depicting the plan view and one depicting the side view of the proposed wellbore
- b. Imported and Uploaded: Electronic Deviated Drilling Plan = a completed Directional Data Template (Excel Spreadsheet) with the planned directional coordinate data for the proposed wellbore

## **3) Drilling Completion Report, Form 5**

- a. Attached: PDF file of the Directional Survey = the actual directional survey coordinates and two (2) wellbore deviation plots, one depicting the plan view and one depicting the side view of the drilled wellbore
- b. Imported and Uploaded: Electronic Directional Survey = a completed Directional Data Template (Excel Spreadsheet) with the actual directional survey coordinates measured in the drilled wellbore

**NOTE:** When a completed Directional Data Template (Excel Macro-Enabled Workbook spreadsheet) has been successfully imported (uploaded) to a form, the eForm system automatically creates an attachment of that spreadsheet and attaches it to that form with the name DIRECTIONAL DATA. The operator should not make a similar attachment.

# Instructions for Saving Directional Survey Template

## Method #1: Outside eForms

- 1) Under FORMS on COGCC website
- 2) Open Excel spreadsheet for the **Directional Data Template**.
- 3) Save a copy of the **Directional Data Template** to your computer as an Excel Macro-Enabled Workbook spreadsheet.
- 4) See pages 6 and 7 for details on how to populate the form.

**HOME**

**FORMS**

To best use these forms:  
Right click on the Adobe PDF icon of the desired form, click on "Save Target As" and save the form to your computer.

Acrobat Reader may be downloaded at no cost and will enable you to open forms, complete them on your computer you will have to purchase the Standard version of the Adobe Acrobat Reader.



Form Name	Form Number	Adobe PDF	Other Format
Instructions for Rule 510 Statements			
<u>Directional Data Template</u>			

# Instructions for Saving Directional Survey Template

## Method #2: Within eForms

- 1) Click **Import Directional Drilling**

Form 02 - Permit to Drill

Well Name & Contact Info | Well Location | Surface & Minerals | Cultural Setbacks | Spacing & Formations | Drilling & Waste Plans | Casing | Offset Wells Evaluation | Operator BMP/COA | Exceptions | Submit | Related Forms | Attachments

Attachments for Document: 1638211

New Attachment | Save Updates | **Import Directional Drilling**

Desc	Name	View	Delete
APD ORIGINAL	LF@3073561 1638211	View	

- 2) Click **Download Data Template** button in the Directional Drilling box

Directional Drilling

Directional Drilling Path: 1638211 (if available)

Well Name:  API #:  Loc Info:

Form 2 Well Info. Location: nene 10 6s 91w

Import Data

Deviation Indicator  Citing Type PLANNED

North Reference  Grid Type

Total: 0 rows

Add Delete Remove All

Download Data Template

Measured Depth	Inclination	Azimuth	True Vertical Depth	Northing	Easting	Remarks
----------------	-------------	---------	---------------------	----------	---------	---------

- 3) Save a copy of the **Directional Data Template** to your computer as an Excel Macro-Enabled Workbook spreadsheet.
- 4) See pages 6 and 7 for details on how to populate the form.

## Instructions for Completing the Directional Data Template (1 of 6)

The screenshot displays an Excel spreadsheet titled "DirectionalDataTemplate.xlsxm [Read-Only]". The spreadsheet is divided into two main sections. On the left, a blue-bordered box labeled "Header" encompasses rows 1 through 19, which contain various fields for well identification and location. On the right, a red-bordered box labeled "Directional Data" encompasses columns B through G, which are used for recording wellbore coordinates. A large "Page 1" watermark is visible in the center of the spreadsheet.

	B	C	D	E	F	G
1	measured depth (ft)	inclination (°)	azimuth (°)	true vertical depth (ft)	northing +N/-S (ft)	easting +E/-W (ft)
2	Operator Name					
3						
4	Operator Number					
5						
6	Well Name and Number					
7						
8	API Number (if available)					
9						
10	Location: QQ SEC TWP RGE					
11						
12	Citing Type: Planned or Actual					
13						
14	Deviation Indicator					
15						
16	North Reference					
17						
18	Grid Type					
19						
20						
21						
22						

- 1) Save a copy of the **Directional Data Template** to your computer as an Excel Macro-Enabled Workbook spreadsheet.
- 2) **For Form 2 and Form 4:** Complete the Directional Data Template spreadsheet with the proposed directional coordinate data of the Deviated Drilling Plan for the proposed wellbore.
- 3) **For Form 5:** Complete the Directional Data Template spreadsheet with the actual directional survey coordinates of the Directional Survey of the drilled wellbore.
- 4) See page 6 for details on Required Header Information.
- 5) See page 7 for details on Required Directional Data Information.

## Instructions for Completing Directional Data Template (2 of 6)

Instructions for HEADER INFORMATION			
Header Information	What Must be Entered	How <i>Must</i> it be <i>Formatted</i>	When is an Entry <i>REQUIRED</i>
Operator Name	Company Name	Letters, Numbers, Special Characters, Punctuation	Required for ALL Submittals
Operator Number	COGCC Operator Number	Numbers ONLY; Do NOT use " # " symbol (no special characters)	Required for ALL Submittals
Well Name and Number	Lease Name and Number of Well	Letters and Numbers ONLY; Do NOT use " # " symbol (no special characters)	Required for ALL Submittals
API Number (if available)	Complete API Number if Available	05-XXX-XXXX-XX ; Standard API Format of Numbers and Dashes; No Spaces	Required for Form 2s to Refile or Deepen, some Sidetracks; <a href="#">ALL</a> Form 4s; <a href="#">ALL</a> Form 5s
Location: QQ SEC TWP RGE	Surface Location of Well	Format as: NENE 1 2N 90W; separate with spaces; no Sec, T, or R; no periods, commas, no dashes, no underscores; no special characters; no meridian	Required for ALL Submittals
Citing Type: Planned or Actual	Type of Directional Data: <a href="#">Planned</a> for Form 2 and 4, <a href="#">Actual</a> for Form 5	As written: Planned or Actual	Required for ALL Submittals
Deviation Indicator	Select Type of Deviation from Drop Down List	Select Directional, High Angle, or Horizontal; blank is <u>NOT</u> a valid entry	Required for ALL Submittals
North Reference	Select North Reference from Drop Down List	True or Grid must be selected; blank is <u>NOT</u> a valid entry	Required for ALL Submittals
Grid Type	Select Grid Type from Drop Down List	Grid Type is required ONLY if North Reference is Grid; leave BLANK if North Reference is True	Required Field ONLY if North Reference is <a href="#">GRID</a>

## Instructions for Completing Directional Data Template (3 of 6)

Instructions for DIRECTIONAL DATA						
	measured depth (ft)	inclination (°)	azimuth (°)	true vertical depth (ft)	northing +N/-S (ft)	easting +E/-W (ft)
<b>What Must be Entered</b>	Sequential listing of measured depths from surface to, and including, Total Depth	Inclination at the corresponding measured depth	Azimuth at the corresponding measured depth	Calculated TVD at the corresponding measured depth	N/S offset from surface location at the corresponding measured depth	E/W offset from surface location at the corresponding measured depth
	<b>A value <u>must</u> be entered in every column for each Depth Record - <u>no blank cells</u> .</b>					
<b>Whole Numbers or Decimals</b>	Whole Numbers ONLY - NO Decimals	Decimals to 2 Places	Decimals to 2 Places	Whole Numbers ONLY - NO Decimals	Decimals to 2 Places	Decimals to 2 Places
<b>Postive or Negative Values</b>	Positive Values ONLY - <u>No</u> Negative Numbers	Positive Values ONLY - <u>No</u> Negative Numbers	Positive Values ONLY - <u>No</u> Negative Numbers	Positive Values ONLY - <u>No</u> Negative Numbers	Positive Values for NORTH Offset; Negative Values for SOUTH Offset	Positive Values for EAST Offset; Negative Values for WEST Offset
<b>What about empty rows below the the Total Depth Record</b>	<b>Delete all empty rows below the Total Depth record.</b>					
	<b>Do not enter any data in any cells below Total Depth record.</b>					

## Instructions for Completing Directional Data Template (4 of 6)

	A	B	C	D	E	F	G
1	<b>Header Information</b>	measured depth (ft)	inclination (°)	azimuth (°)	true vertical depth (ft)	northing +N/-S (ft)	easting +E/-W (ft)
2	Operator Name	162	0.30	107.30	162	-0.1	0.4
3	ENCANA OIL & GAS (USA) INC	255	0.40	20.00	255	0.1	0.7
4	Operator Number	348	1.00	300.50	348	0.8	0.2
5	100185	441	2.00	293.5	441	1.9	-2
6	Well Name and Number	534	3.40	294.9	534	3.7	-6
7	SHELEY 3A-4H	627	4.30	287.7	627	5.9	-11.8
8	API Number (if available)	720	4.90	283.4	719	7.9	-19
9	05-123-34750	782	5.80	278.8	781	9	-24.7
10	Location: QQ SEC TWP RGE	905	5.80	274.2	903	10.4	-37
11	SWSW 4 2N 67W	998	7.10	280.8	996	11.8	-47.4
12	Citing Type: Planned or Actual	1091	9.30	280.9	1088	14.3	-60.4
13	Actual	1184	10.70	278	1180	16.9	-76.3
14	Deviation Indicator	1277	11.50	275.8	1271	19.1	-94.1
15	Directional	1370	10.60	274.4	1362	20.7	-111.9
16	North Reference	1463	11.3	274.2	1453	22	-129.5
17	True	1558	11	278.9	1547	24.1	-147.7
18	Grid Type	1653	11.6	279.8	1640	27.1	-166.1
19		1748	12.1	275	1733	29.6	-185.4

- 1) You may be able to copy and paste the tabular data from the Directional Data spreadsheet you receive from your service company into the **Directional Data Template**, *if it is formatted correctly*. (See pages 6 & 7.)
- 2) Save the completed **Directional Data Template** to your computer as an Excel Macro-Enabled Workbook spreadsheet.

## Instructions for Completing Directional Data Template (5 of 6)

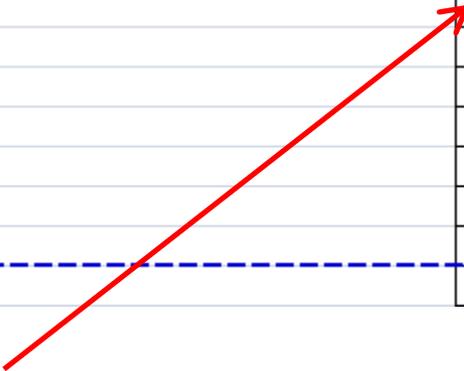
	A	B	C	D	E	F	G
1	<b>Header Information</b>	measured depth (ft)	inclination (°)	azimuth (°)	true vertical depth (ft)	northing +N/-S (ft)	easting +E/-W (ft)
2	Operator Name	0	0.00	0.00	0	0	0
3	ENCANA OIL & GAS (USA) INC	162	0.30	107.30	162	-0.1	0.4
4	Operator Number	255	0.40	20.00	255	0.1	0.7
5	100185	348	1.00	300.50	348	0.8	0.2
6	Well Name and Number	441	2.00	293.5	441	1.9	-2
7	SHELEY #3A-4H	534	3.40	294.9	533.9	3.7	-6
8	API Number (if available)	627	4.30	287.7	626.6	5.9	-11.8
9	05-123-34750	720	4.90	283.4	719.3	7.9	-19
10	Location: QQ SEC TWP RGE	782	5.80	278.8	781.1	9	-24.7
11	SWSW 4 2N 67W 6 PM	905	5.80	274.2	903.4	10.4	-37
12	Citing Type: Planned or Actual	998	7.10	280.8	995.9	11.8	-47.4
13	Actual	1091	9.30	280.9	1087.9	14.3	-60.4
14	Deviation Indicator	1184	10.70	278	1179.5	16.9	-76.3
15	Directional	1277	11.50	275.8	1270.7	19.1	-94.1
16	North Reference	1370	10.60	274.4	1362	20.7	-111.9
17	True	1463	11.3	274.2	1453.3	22	-129.5
18	Grid Type	1558	11	278.9	1546.5	24.1	-147.7
19		1653	11.6	279.8	1639.7	27.1	-166.1

If present, remove the top row of zeros (0) in the of the **Directional Data Template** spreadsheet by deleting the cells and moving the columns up.

## Instructions for Completing Directional Data Template (6 of 6)

Page 5

149	10893	90.1	91.7	7260.2	-7.5	3092.6
150	10988	90	91.5	7260.1	-10.1	3187.5
151	11083	89.9	91.7	7260.2	-12.8	3282.5
152	11178	88.9	90.9	7261.1	-15	3377.5
153	11273	89.6	91.9	7262.4	-17.3	3472.4
154	11368	88.8	92.8	7263.7	-21.2	3567.3
155	11462	87.8	92.7	7266.5	-25.7	3661.2
156	11557	89	92.6	7269.2	-30.1	3756.1
157	11640	88.6	92.3	7270.9	-33.6	3839
158	11695	88.6	92.3	7272.2	-35.8	3893.9
159						
160						
161						
162						
163						
164						
165						
166						
167						

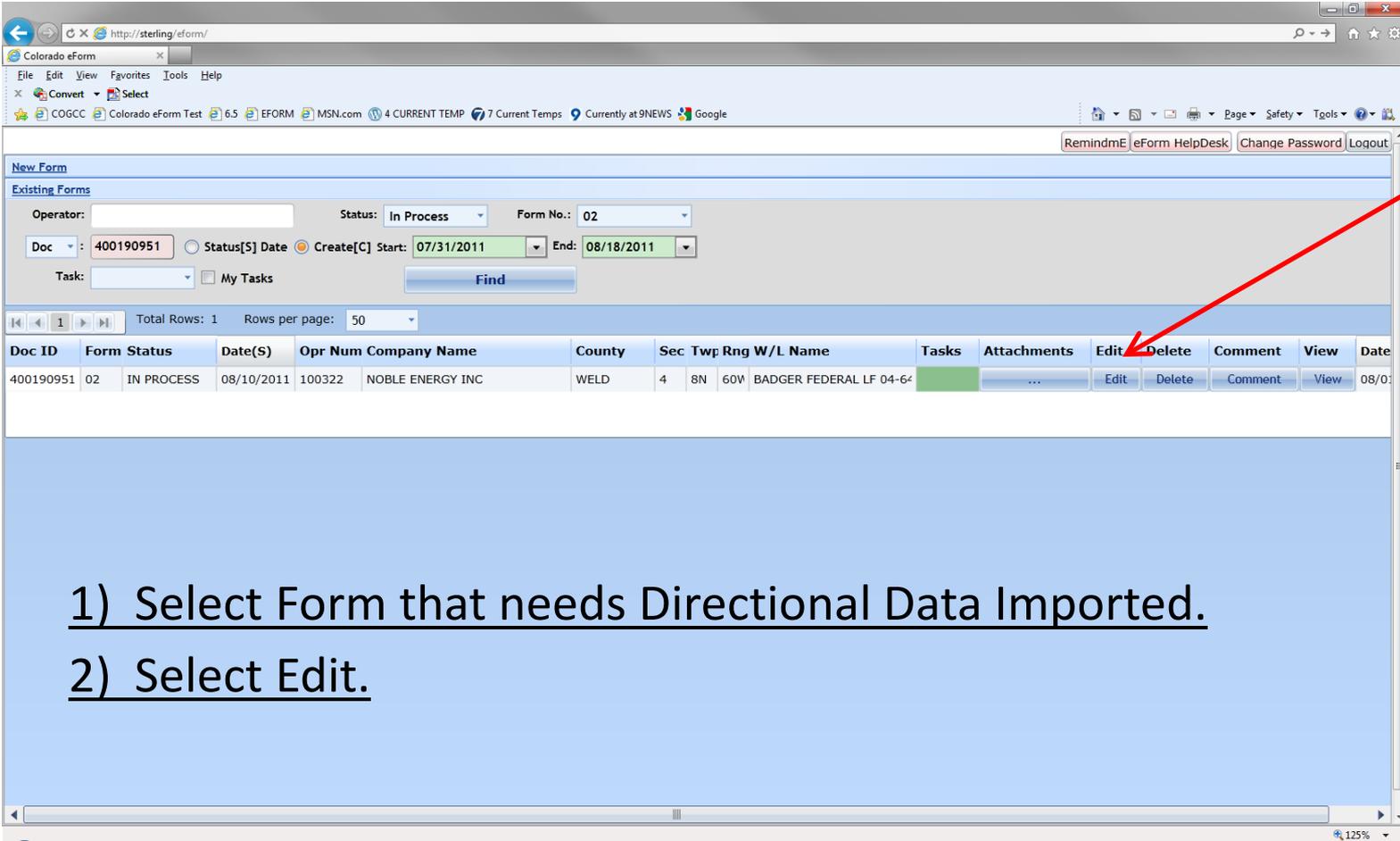


Remove any blank rows at the bottom of the **Directional Data Template** spreadsheet by deleting the rows.

# Instructions for Importing Directional Data Template into eForms (1 of 10)

The screenshot shows a web browser window with the address bar displaying `http://sterling/eform/`. The browser's address bar and menu bar are visible at the top. The main content area of the browser displays the "Colorado eForm Login" page. The page features a light blue background and a central login form. The form includes three input fields: "Login Name:", "Password:", and "Operator #:". Below these fields is a blue "Login" button. To the right of the login fields is the logo for the "STATE OF COLORADO OIL & GAS". Below the login button, the text reads "Service Version: Release 2.0.0.0 (@STERLING)" and "Last Updated on 09/22/2010.01". A white box in the center of the page contains the following text: "Your current Silverlight version is [4.0.60531.0]". Below this, it says "In order to get best performance Following setting and softwares recommended". A numbered list follows: "1. Screen Resolution : 1440 x 900 pixels", "2. Browsers Type:", "i. Internet Explorer ver.7 or above", "ii. Mozilla Firefox", "iii. Safari 4.0 or above". In the bottom right corner of the browser window, the zoom level is set to 125%. At the bottom of the screenshot, the text "Sign into eForms." is overlaid in a large, bold, black font.

## Instructions for Importing Directional Data Template into eForms (2 of 10)



The screenshot shows the Colorado eForm application interface. At the top, there is a navigation bar with links for "RemindMe", "eForm HelpDesk", "Change Password", and "Logout". Below this, there are sections for "New Form" and "Existing Forms". The "Existing Forms" section includes search filters for "Operator", "Status" (set to "In Process"), "Form No." (set to "02"), "Doc" (set to "400190951"), "Status[S] Date", "Create[C] Start" (set to "07/31/2011"), and "End" (set to "08/18/2011"). A "Find" button is located below these filters. Below the search filters, there is a table with the following columns: "Doc ID", "Form", "Status", "Date(S)", "Opr Num", "Company Name", "County", "Sec Twp", "Rng", "W/L Name", "Tasks", "Attachments", "Edit", "Delete", "Comment", "View", and "Date". The table contains one row of data for Doc ID 400190951. A red arrow points to the "Edit" button in the table.

Doc ID	Form	Status	Date(S)	Opr Num	Company Name	County	Sec Twp	Rng	W/L Name	Tasks	Attachments	Edit	Delete	Comment	View	Date
400190951	02	IN PROCESS	08/10/2011	100322	NOBLE ENERGY INC	WELD	4	8N	60W	BADGER FEDERAL LF 04-64	...	Edit	Delete	Comment	View	08/01/2011

1) Select Form that needs Directional Data Imported.  
2) Select Edit.

# Instructions for Importing Directional Data Template into eForms (3 of 10)

Form: 02 DocNum: 400190951 Status: IN PROCESS Operator: NOBLE ENERGY INC W/L Name: BADGER FEDERAL LF 04-64HN Created: 08/01/2011 8:08:40 AM Received: 08/08/2011 3:13:46 PM

**Form 02 -Permit to Drill**

Well Name & Contact Info	Well Location	Surface & Minerals	Drilling Plans	Operator Comments	Objective Formation	Casing	BMP	Related Forms	Attachments	Review	COGCC Comments & COAs	Exceptions, Status & NTOS
--------------------------	---------------	--------------------	----------------	-------------------	---------------------	--------	-----	---------------	-------------	--------	-----------------------	---------------------------

1. Application for permit to: DRILL Refiling: SideTrack

2. A.Type of Well: OIL Other: B.Zone Type: SINGLE ZONE COMMINGLE ZONES NO

3. Well Name: BADGER FEDERAL LF Well Number: 04-64HN

4. Unit Name (if appl): Unit Number:

5. Proposed Total measured Depth: 10375

Contact Name: JAN KAJIWARA (eg. First Name Last Name)  
Phone: 303 228-4092 Fax: 303 228-4286  
Email: jkajiwara@nobleenergyinc.com

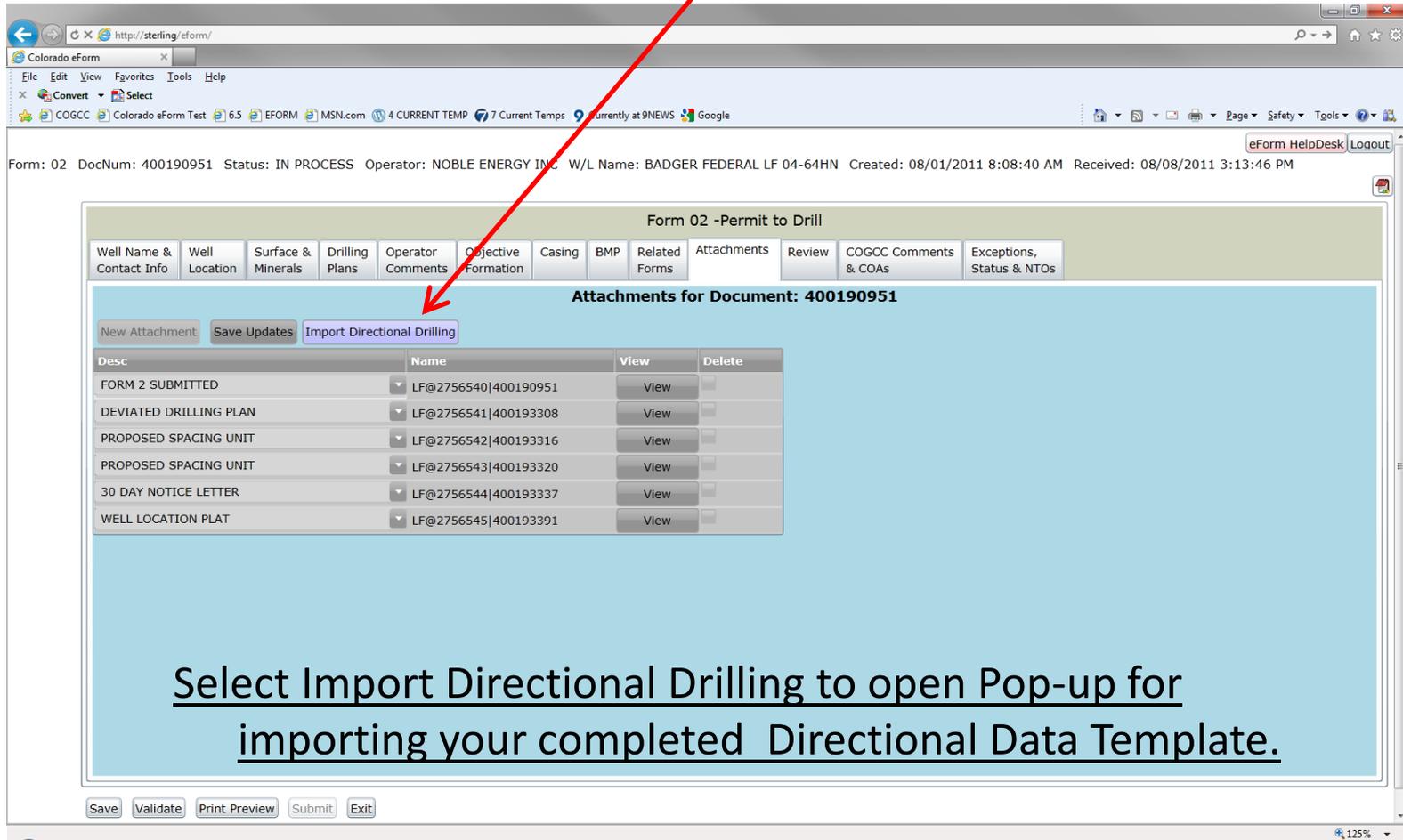
Mailing Info: Operator Num: 100322 Suff: N/A  
Address: 1625 BROADWAY STE 2200  
City: DENVER State: CO Zip: 80202

Plugging Bond Surety ID: 20030009

Select Attachments.

Save Validate Print Preview Submit Exit

## Instructions for Importing Directional Data Template into eForms (4 of 10)



Form: 02 DocNum: 400190951 Status: IN PROCESS Operator: NOBLE ENERGY INC W/L Name: BADGER FEDERAL LF 04-64HN Created: 08/01/2011 8:08:40 AM Received: 08/08/2011 3:13:46 PM

Form 02 -Permit to Drill

Well Name & Contact Info Well Location Surface & Minerals Drilling Plans Operator Comments Objective Formation Casing BMP Related Forms Attachments Review COGCC Comments & COAs Exceptions, Status & NTOS

Attachments for Document: 400190951

New Attachment Save Updates **Import Directional Drilling**

Desc	Name	View	Delete
FORM 2 SUBMITTED	LF@2756540 400190951	View	<input type="checkbox"/>
DEVIATED DRILLING PLAN	LF@2756541 400193308	View	<input type="checkbox"/>
PROPOSED SPACING UNIT	LF@2756542 400193316	View	<input type="checkbox"/>
PROPOSED SPACING UNIT	LF@2756543 400193320	View	<input type="checkbox"/>
30 DAY NOTICE LETTER	LF@2756544 400193337	View	<input type="checkbox"/>
WELL LOCATION PLAT	LF@2756545 400193391	View	<input type="checkbox"/>

Select Import Directional Drilling to open Pop-up for importing your completed Directional Data Template.

Save Validate Print Preview Submit Exit

## Instructions for Importing Directional Data Template into eForms (5 of 10)

**Directional Drilling** Directional Drilling Path: 400501118 (if available) Save Updates Close [x]

Well Name:  API #:  Loc Info:

Form 5 Well Info. Well Name: HINGLEY FARMS1 / API Num: 123-07367 / Location: NENE 18 1N 67W

**Import Data**

Deviation Indicator  Citing Type ACTUAL

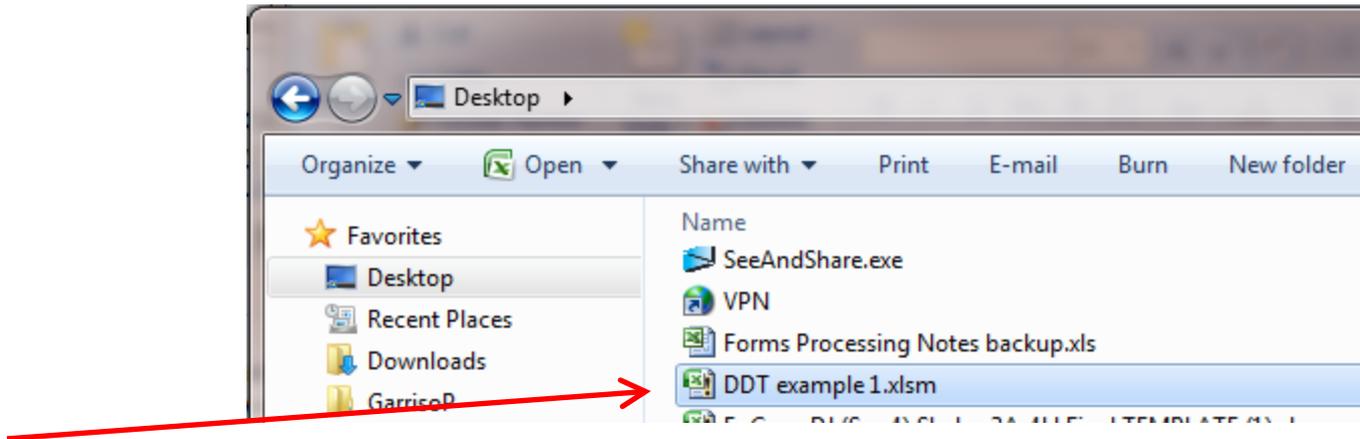
North Reference  Grid Type

Total: 0 rows Add Delete Remove All Download Data Template

Measured Depth	Incination	Azimuth	True Vertical Depth	Northing	Easting	Remarks
----------------	------------	---------	---------------------	----------	---------	---------

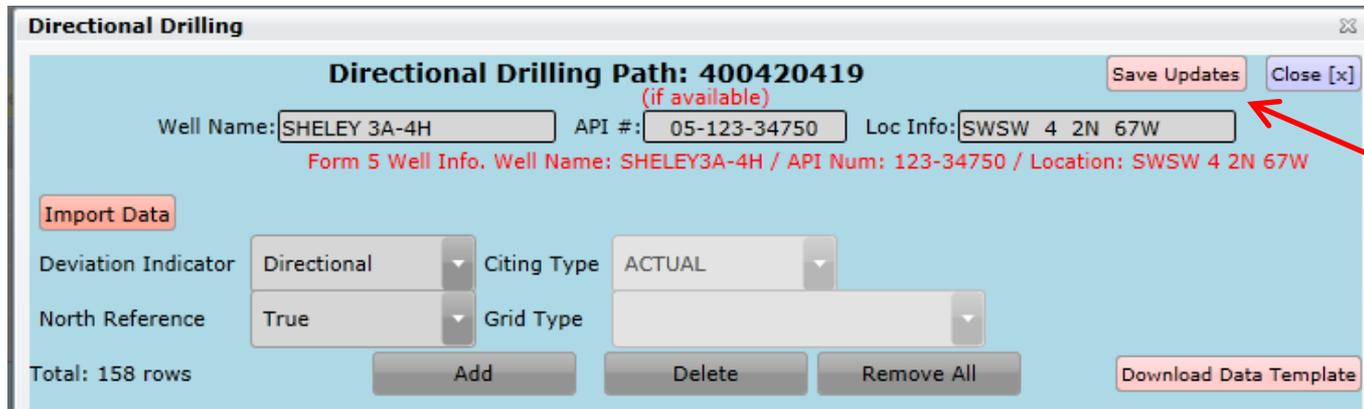
Select Import Data.

## Instructions for Importing Directional Data Template into eForms (6 of 10)



Browse your folders for saved file of Directional Data Template.

## Instructions for Importing Directional Data Template into eForms (7 of 10)



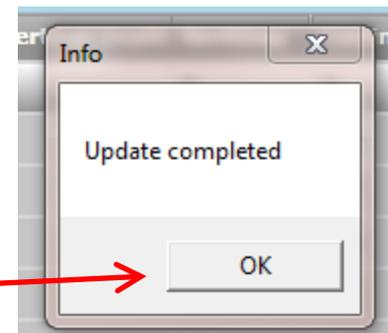
Verify that the Header Information imported correctly and matches the PDF of the attached Deviated Drilling Plan (Form 2 and 4) or the attached Directional Survey (Form 5).

Header information must be changed here if it did not import correctly. Use the drop-down lists to select the:

- a) Deviation Indicator
- b) North Reference
- c) Grid type (if North Reference is Grid)

Correct the Location Info in the cell.

Click the Save Updates button to save any corrections. Click OK on the pop-up box.



## Instructions for Importing Directional Data Template into eForms (8 of 10)

Measured Depth	Inclination	Azimuth	True Vertical Depth	Northing	Easting	Remarks
162	0.30	107.30	162	-0.1	0.4	
255	0.40	20.00	255	0.1	0.7	
348	1.00	300.50	348	0.8	0.2	
441	2.00	293.50	441	1.9	-2	
534	3.40	294.90	534	3.7	-6	
627	4.30	287.70	627	5.9	-11.8	
720	4.90	283.40	719	7.9	-19	
782	5.80	278.80	781	9	-24.7	
905	5.80	274.20	903	10.4	-37	
998	7.10	280.80	996	11.8	-47.4	
1091	9.30	280.90	1088	14.3	-60.4	
1184	10.70	278.00	1180	16.9	-76.3	
1277	11.50	275.80	1271	19.1	-94.1	
1370	10.60	274.40	1362	20.7	-111.9	

Verify the Directional Data imported correctly and matches the PDF of the attached Deviated Drilling Plan (Form 2 and 4) or the attached Directional Survey (Form 5).

Check for consistent directions in the Northing and Easting columns (North has no sign, South is “-”, East has no sign, West is “-”).

## Instructions for Importing Directional Data Template into eForms (9 of 10)

Directional Drilling Path: 400420419  
(if available)

Well Name: SHELEY 3A-4H API #: 05-123-34750 Loc Info: SWSW 4 2N 67W

Form 5 Well Info. Well Name: SHELEY3A-4H / API Num: 123-34750 / Location: SWSW 4 2N 67W

Import Data

Deviation Indicator: Directional Citing Type: ACTUAL

North Reference: True Grid Type:

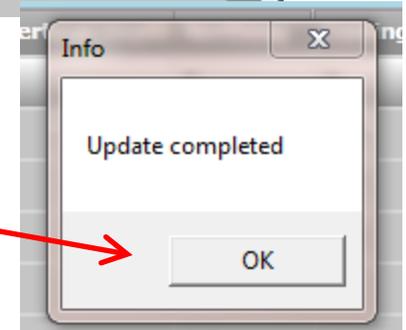
Total: 158 rows

Add Delete Remove All

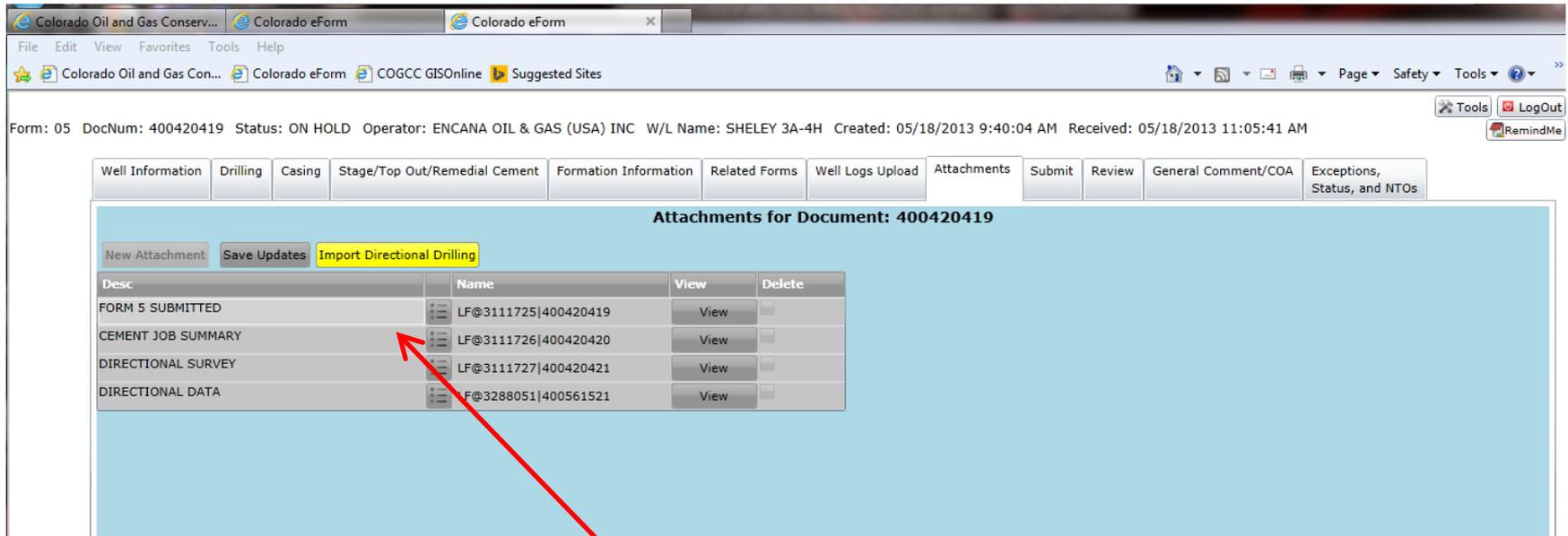
Download Data Template

Measured Depth	Inclination	Azimuth	True Vertical Depth	Northing	Easting	Remarks
0	0.00	0.00	0	0	0	
162	0.30	107.30	162	-0.1	0.4	
255	0.40	20.00	255	0.1	0.7	
348	1.00	300.50	348	0.8	0.2	

- 1) Click the Save Updates button
- 2) Click OK on the pop-up box.
- 3) Close window



# Instructions for Importing Directional Data Template into eForms (10 of 10)



- 1) Check to make sure the Import Directional Drilling button has changed from purple to yellow.
- 2) If it is yellow the data was imported correctly and has been accepted.
- 3) *If it is still purple the data was not imported and you need refer to the details on pages 6 & 7 to see what corrections are required for the data to import.*

If done properly your Electronic Submittal of Directional Drilling Information will populate the data base and create directional lines on the COGCC's GIS Maps when the form is submitted.

