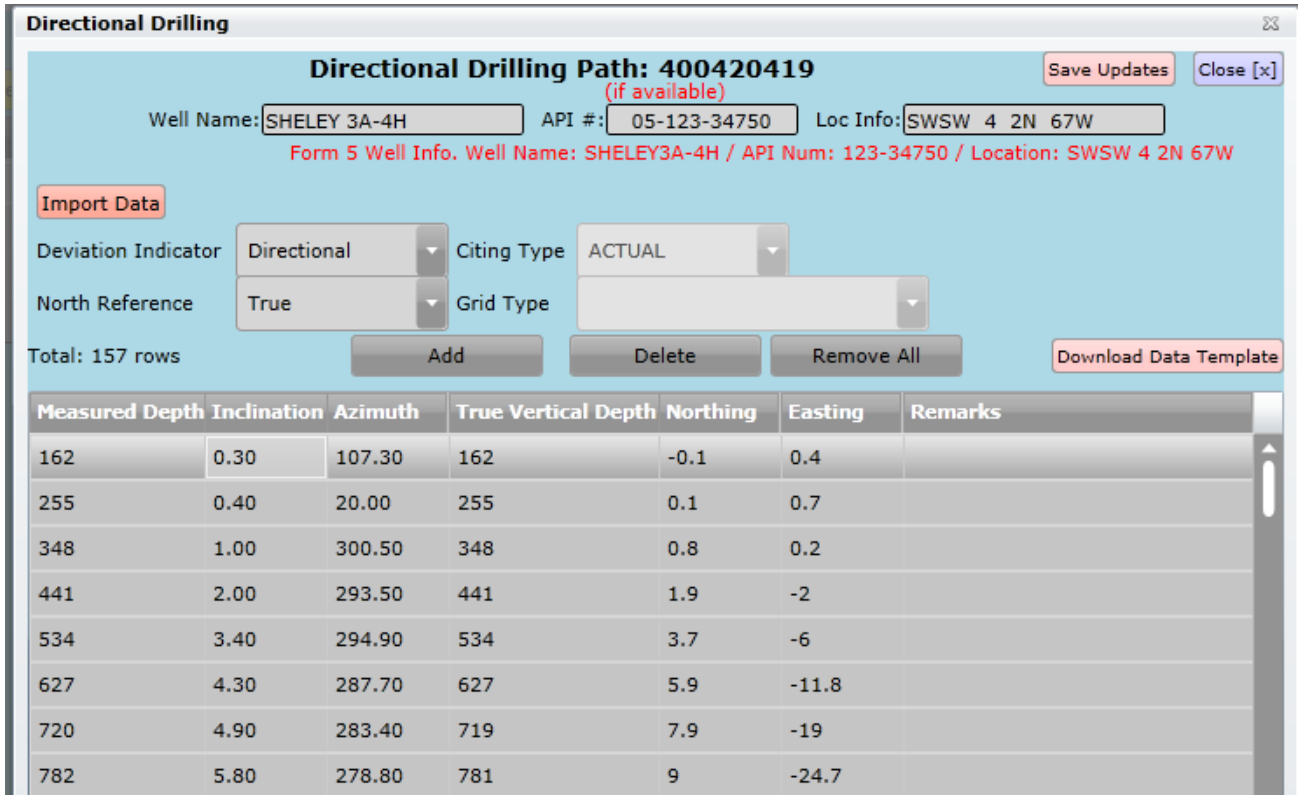
Electronic Submittal of Directional Drilling Information in eForms



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

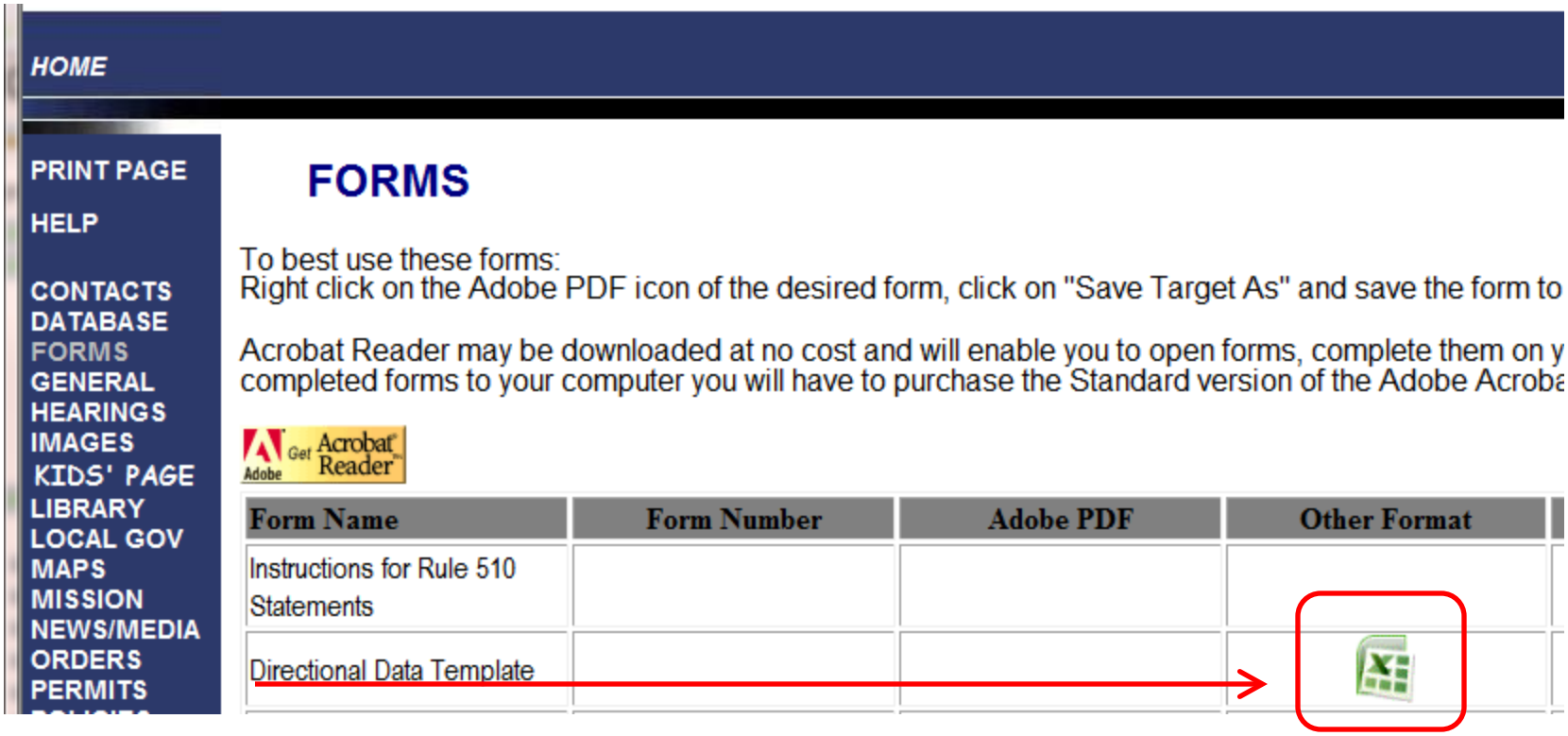
2) **Sundry Notice, Form 4 – Change of Location/Drilling Plans prior to drilling**
   a. Attached: PDF file of the Deviated Drilling Plan = the planned directional coordinate data and two (2) wellbore deviation plots, one depicting the plan view and one depicting the side view of the proposed wellbore
   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.

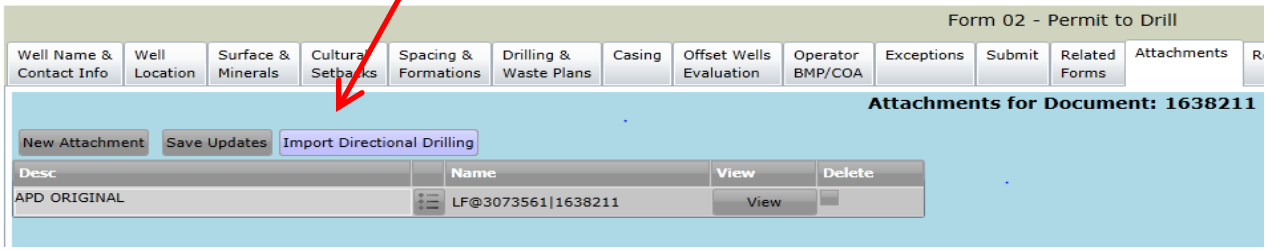
Instructions for Saving Directional Survey Template
Method #1: Outside eForms

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.

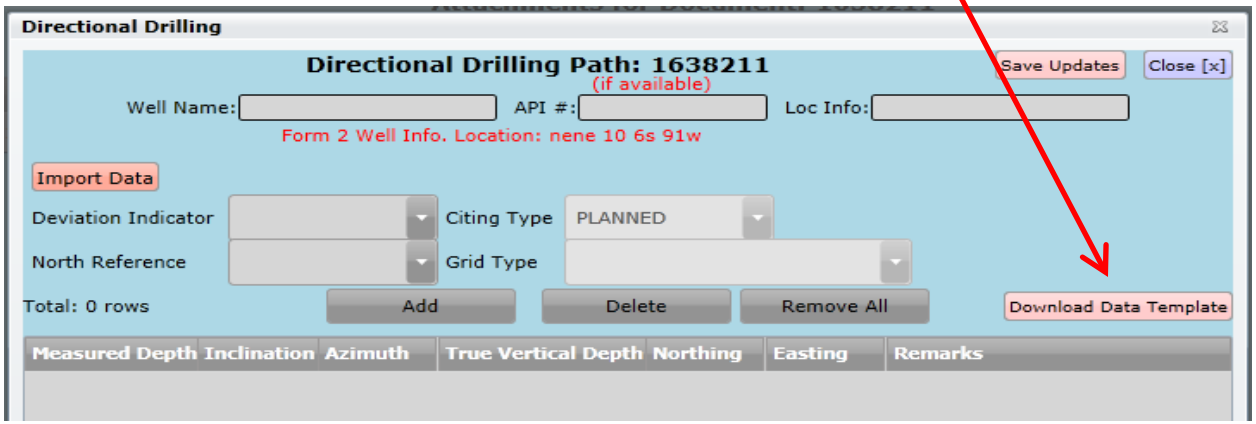


Instructions for Saving Directional Survey Template
Method #2: Within eForms

1) Click **Import Directional Drilling**



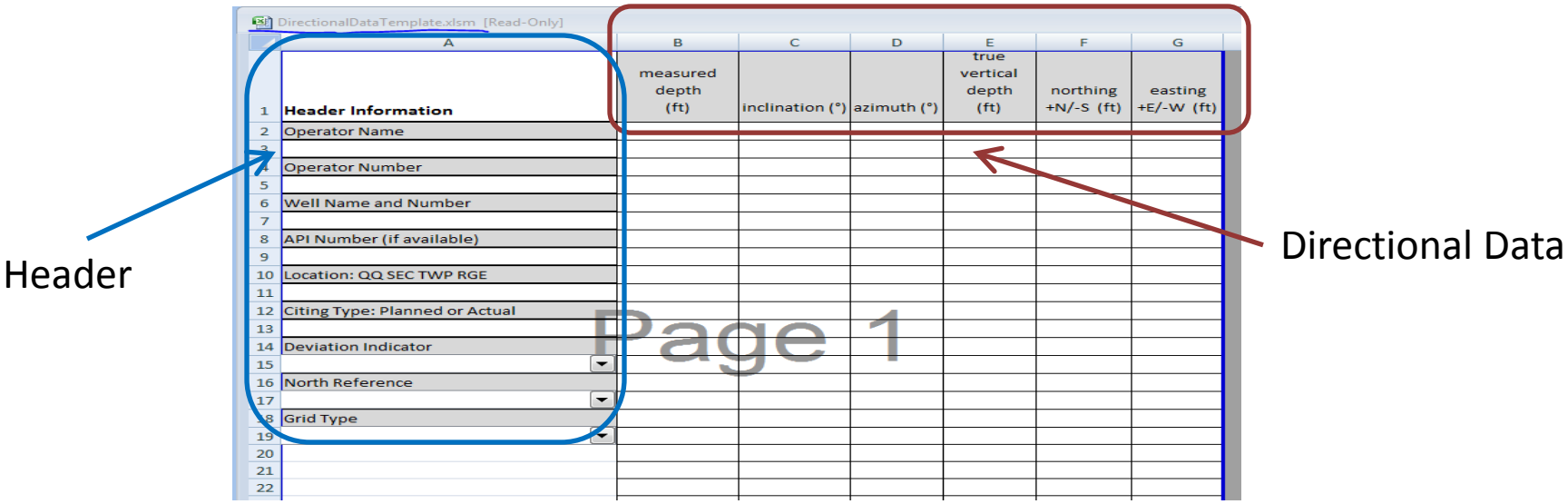
2) Click **Download Data Template** button in the Directional Drilling box



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)



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 *Must* it be *Formatted***	**When is an Entry *REQUIRED***
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-XXXXX-XX ;** Standard API Format of Numbers and Dashes; No Spaces	Required for Form 2s to Refile or Deepen, some Sidetracks; ALL Form 4s; ALL 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: Planned for Form 2 and 4, Actual 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 NOT a valid entry	Required for ALL Submittals
North Reference	Select North Reference from Drop Down List	True or Grid must be selected; blank is NOT 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 GRID

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)
What Must be Entered	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
	A value ***must*** be entered in every column for each Depth Record - ***no blank cells*** .					
Whole Numbers or Decimals	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
Postive or Negative Values	Positive Values ONLY - ***No*** Negative Numbers	Positive Values ONLY - ***No*** Negative Numbers	Positive Values ONLY - ***No*** Negative Numbers	Positive Values ONLY - ***No*** Negative Numbers	Positive Values for NORTH Offset; Negative Values for SOUTH Offset	Positive Values for EAST Offset; Negative Values for WEST Offset
What about empty rows below the the Total Depth Record						
		Delete all empty rows below the Total Depth record.				
		Do not enter any data in any cells below Total Depth record.				

Instructions for Completing Directional Data Template (4 of 6)

	A	B	C	D	E	F	G
1	**Header Information**	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

Page 1

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.

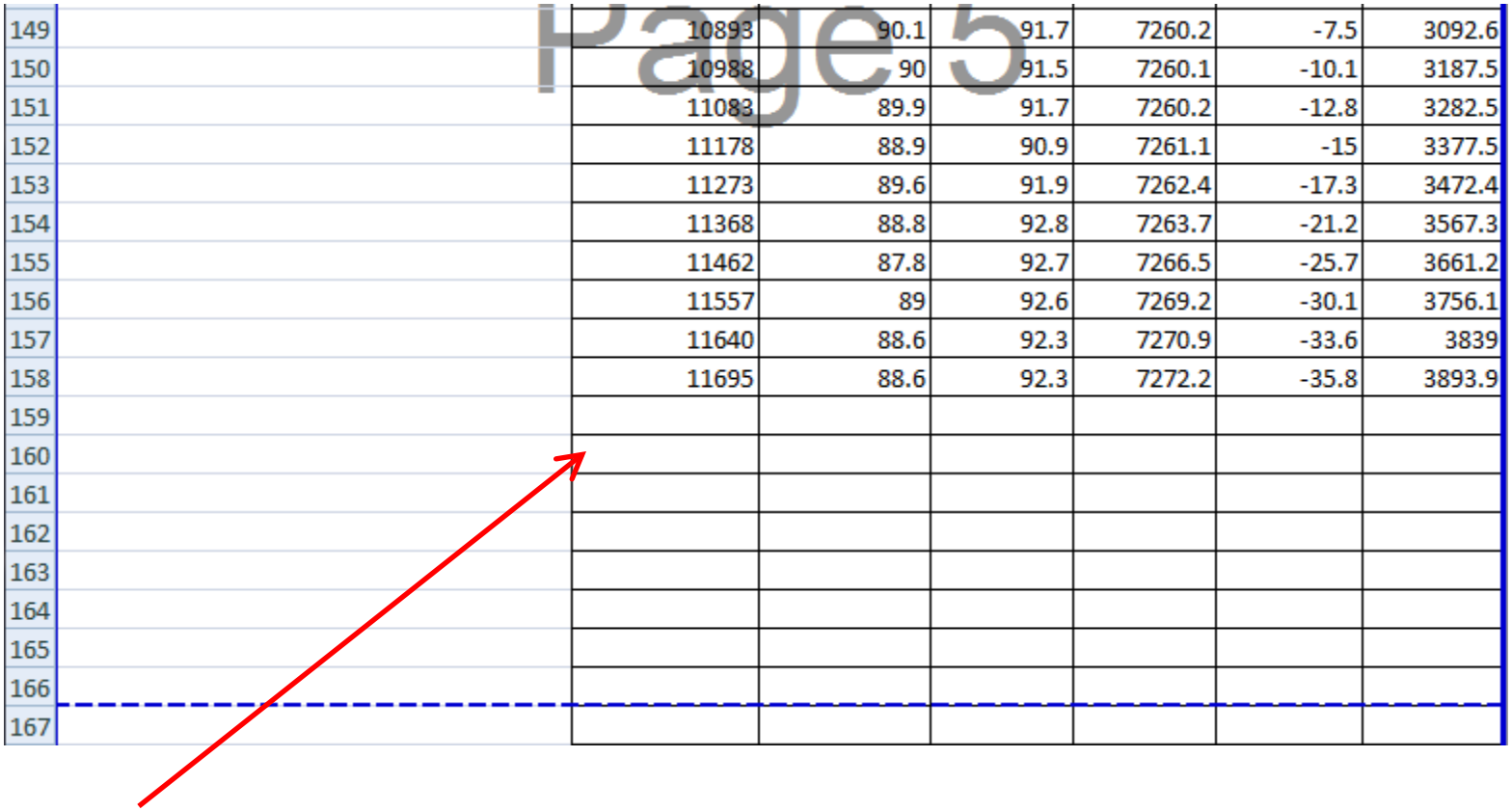
Instructions for Completing Directional Data Template (5 of 6)

	A	B	C	D	E	F	G
1	**Header Information**	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

Page 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.

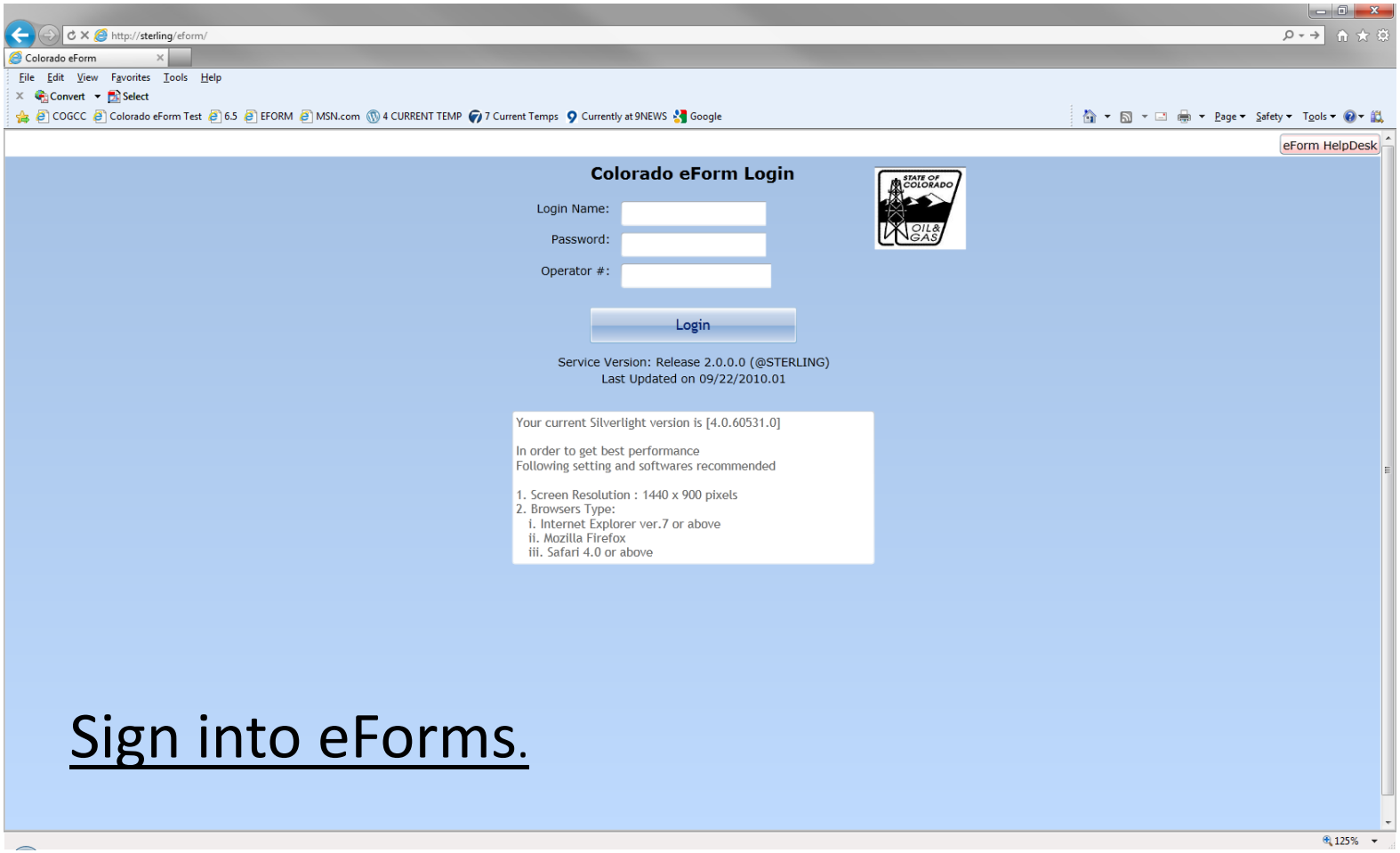
Instructions for Completing Directional Data Template (6 of 6)



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						

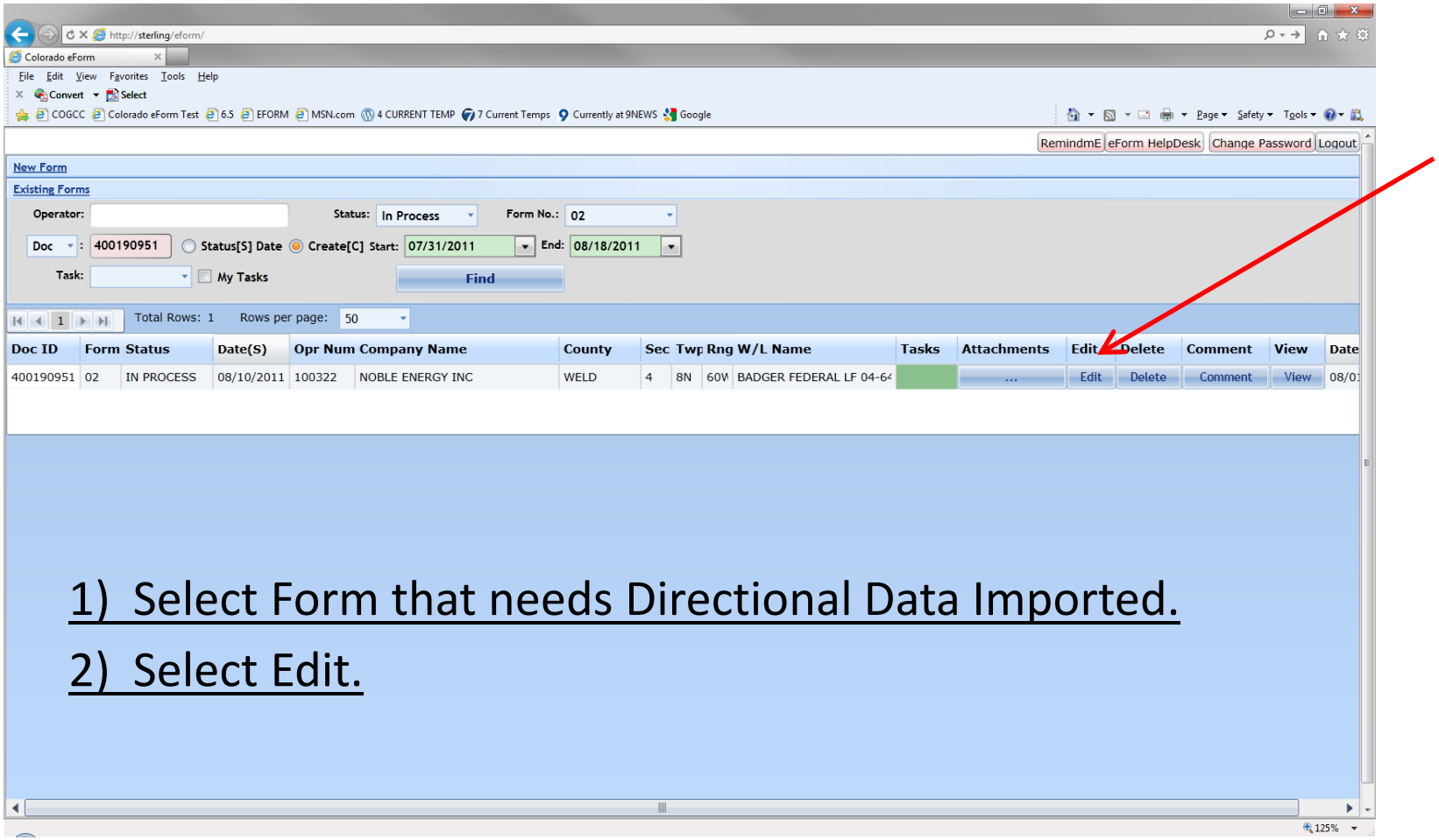
Remove any blanks rows at the bottom of the **Directional Data Template** spreadsheet by deleting the rows.

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



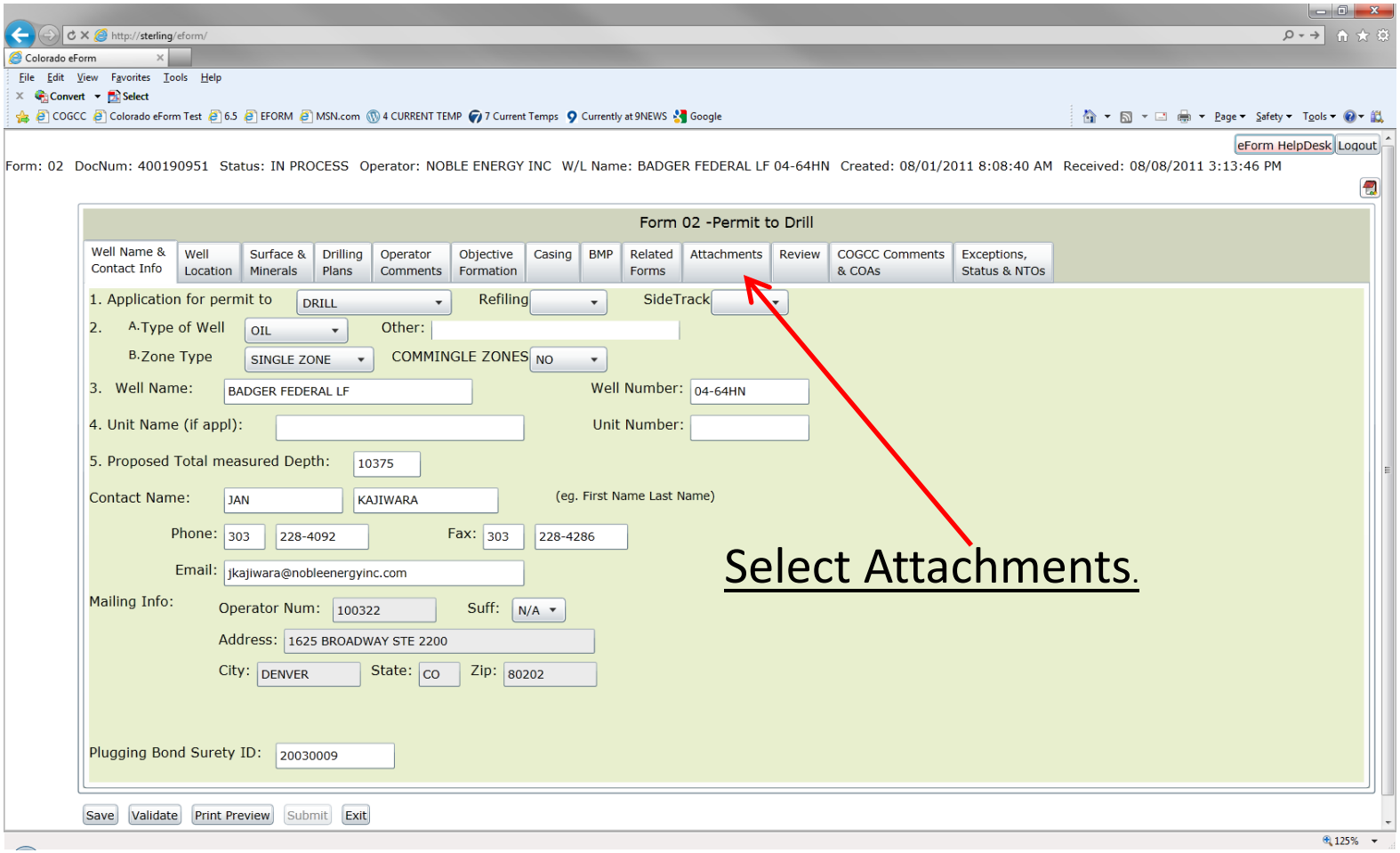
Sign into eForms.

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

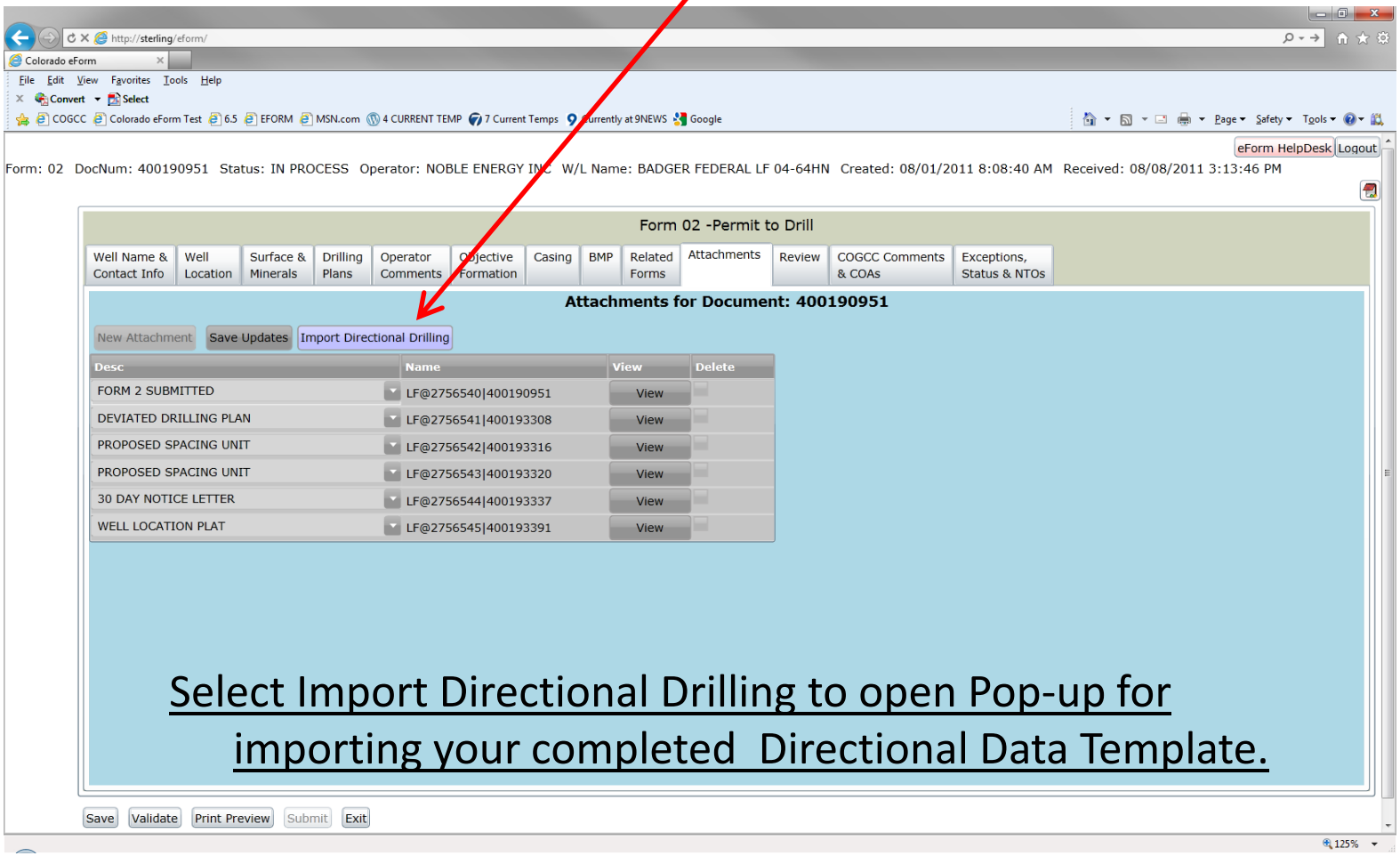


1) Select Form that needs Directional Data Imported.
2) Select Edit.

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

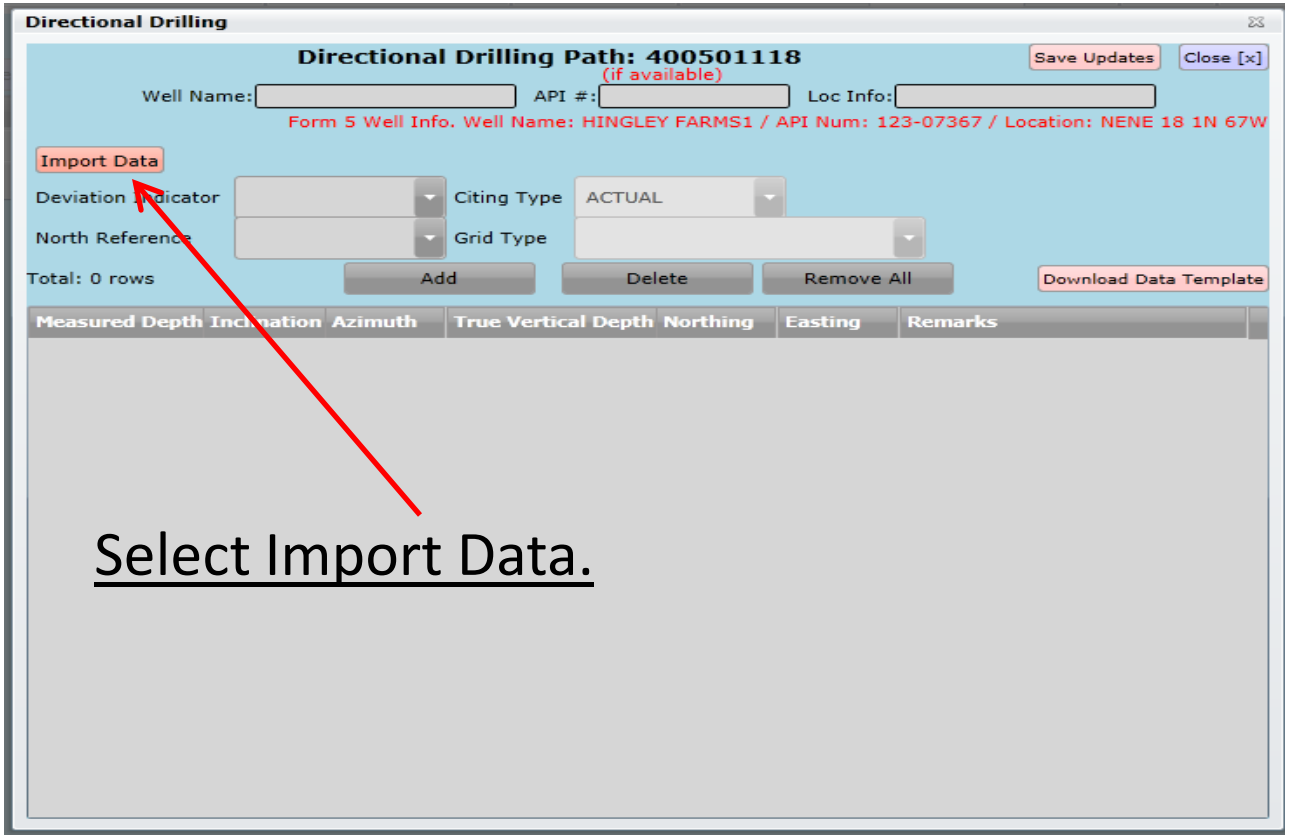


Instructions for Importing Directional Data Template into eForms (4 of 10)

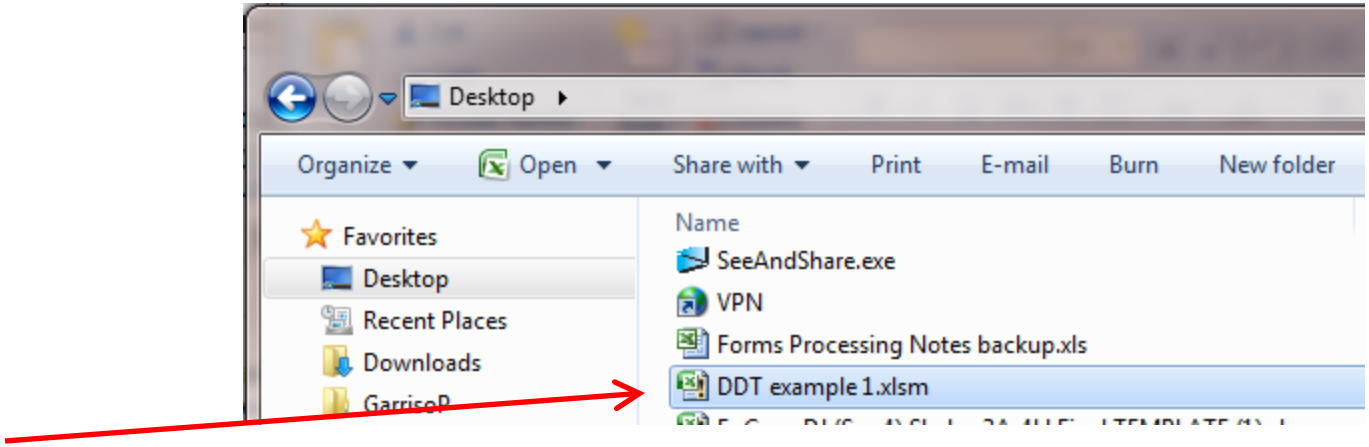


Select Import Directional Drilling to open Pop-up for importing your completed Directional Data Template.

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

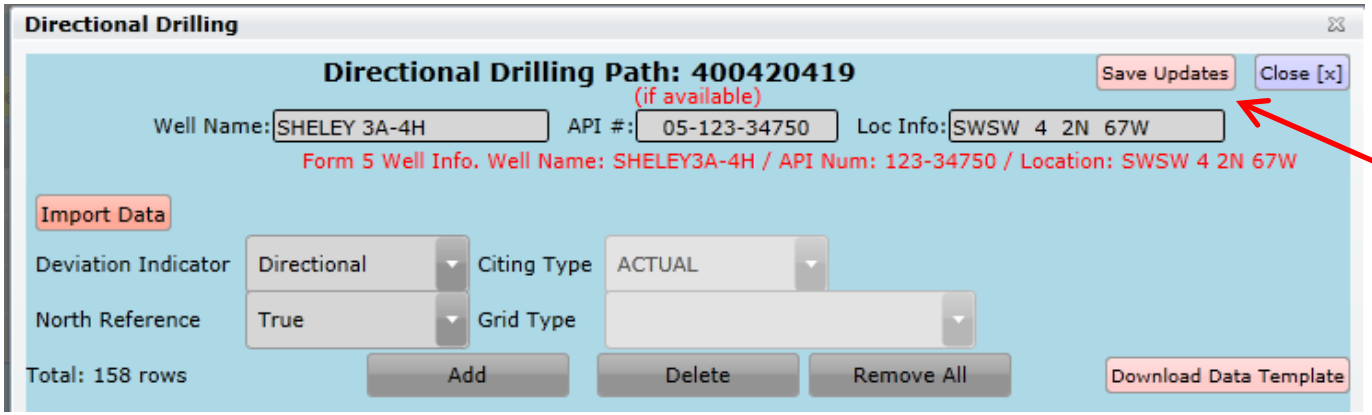


Instructions for Importing Directional Data Template into eForms (6 of 10)



Browse your folders for saved file of Directional Data Template.

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



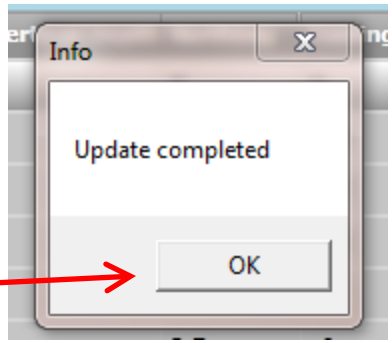
Verify that the Header Information imported correctly and matches the PDF of the attached Deviated Drilling Plan (Form 2 and 4) or the attached Directional Survey (Form 5).

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.



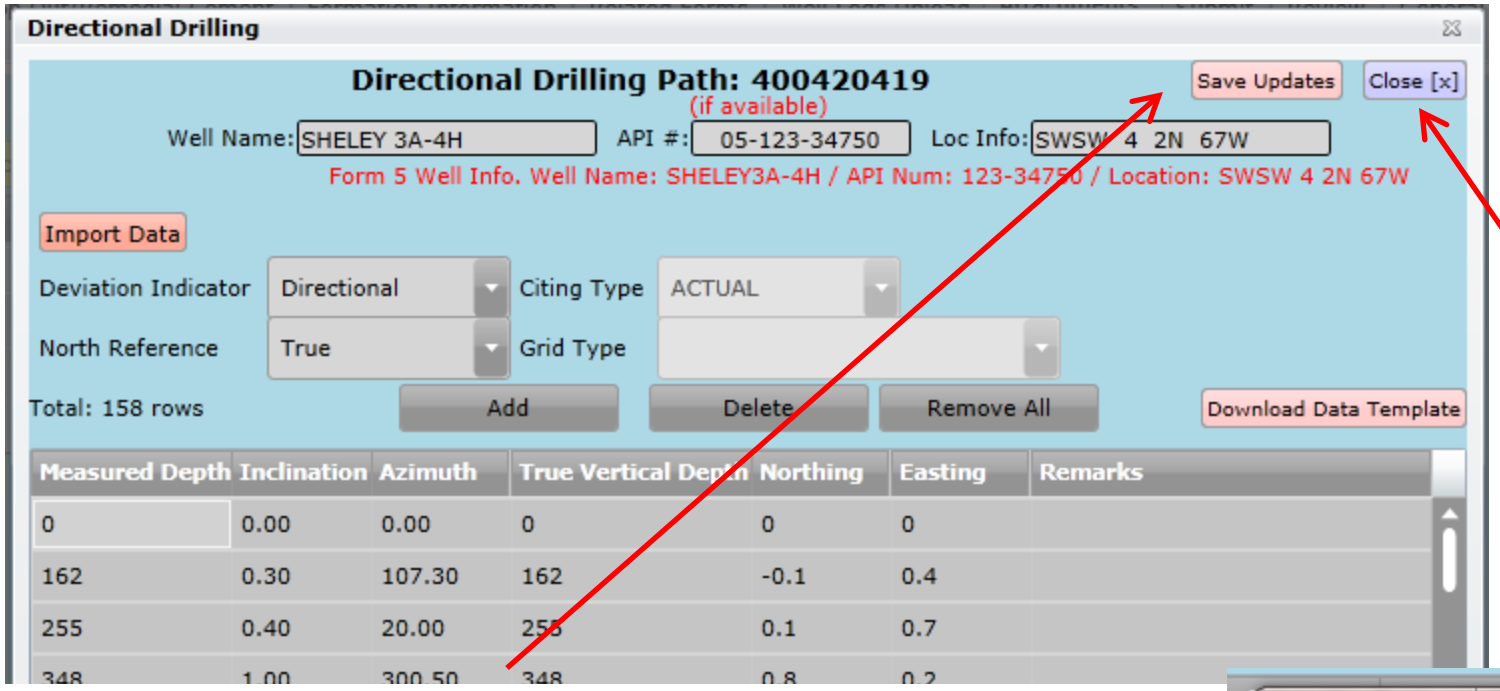
Instructions for Importing Directional Data Template into eForms (8 of 10)

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	

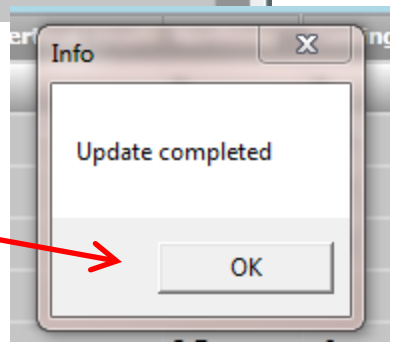
Verify the Directional Data imported correctly and matches the PDF of the attached Deviated Drilling Plan (Form 2 and 4) or the attached Directional Survey (Form 5).

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

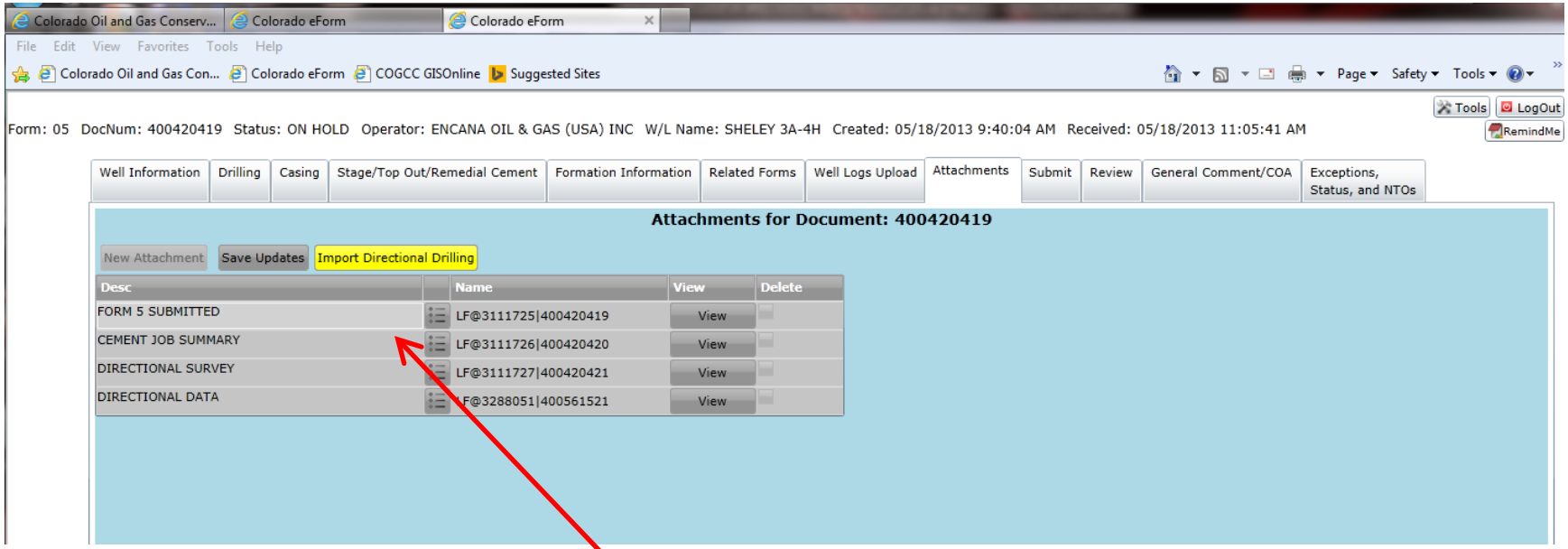
Instructions for Importing Directional Data Template into eForms (9 of 10)

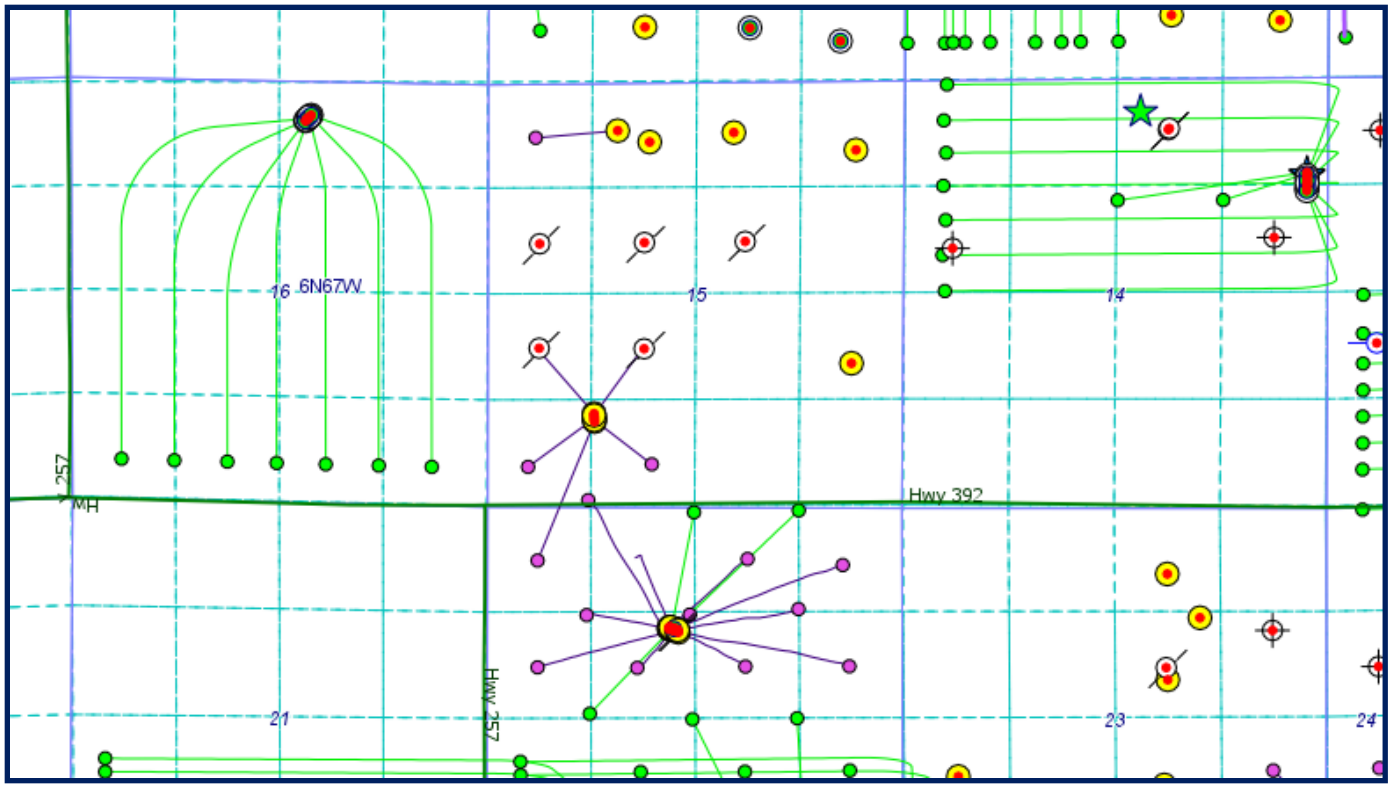


1) Click the Save Updates button
2) Click OK on the pop-up box.
3) Close window



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.