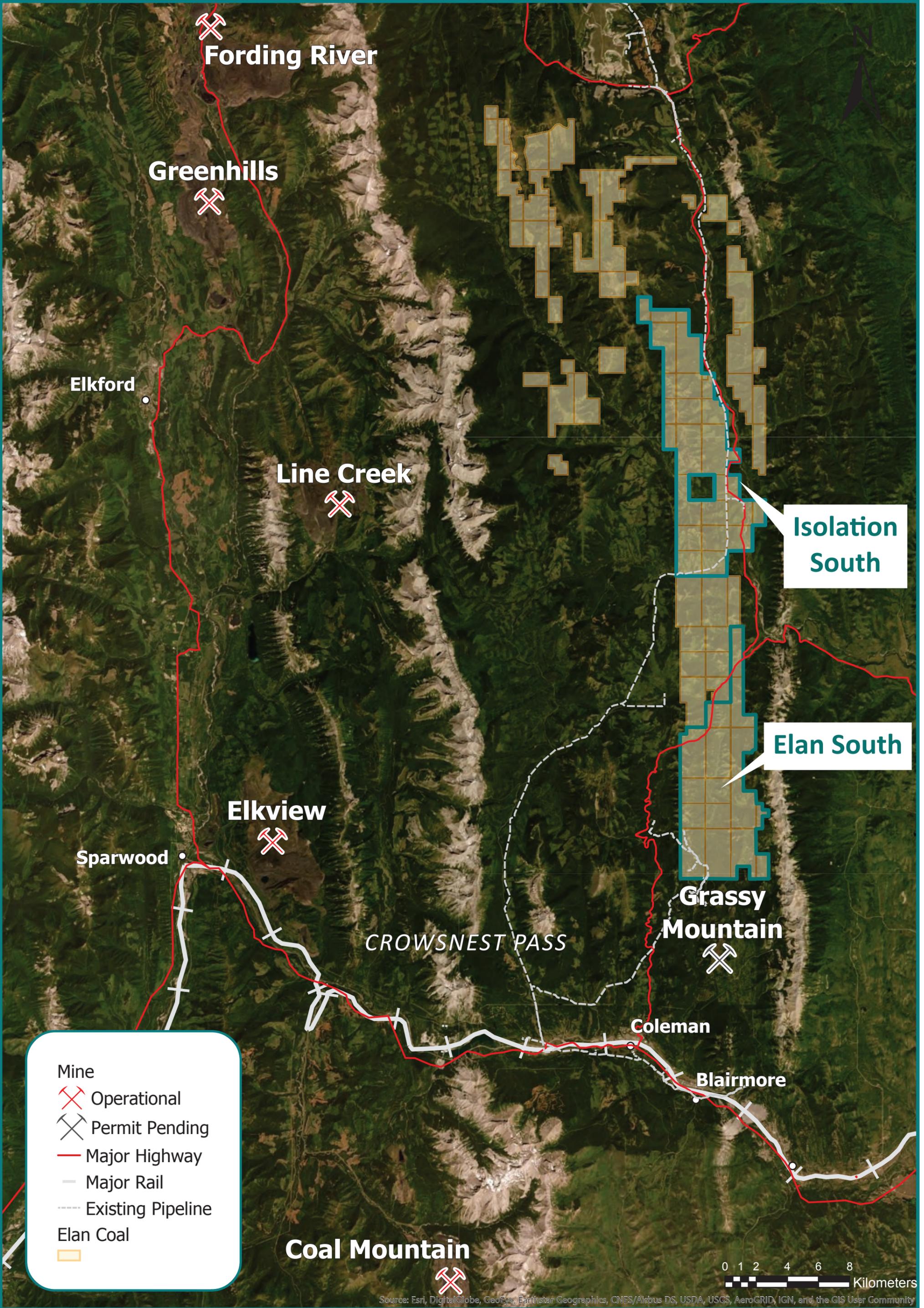




# Elan Hard Coking Project

Financial Analysts Site Visit Follow Up, 10 September 2019

▶ Atrum Coal



 **Fording River**

**Greenhills**  


Elkford

**Line Creek**  


**Isolation South**

**Elan South**

**Elkview**  


Sparwood

*CROWSNEST PASS*

**Grassy Mountain**  


Coleman

Blairmore

**Coal Mountain**  


0 1 2 4 6 8 Kilometers

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



HWY 40

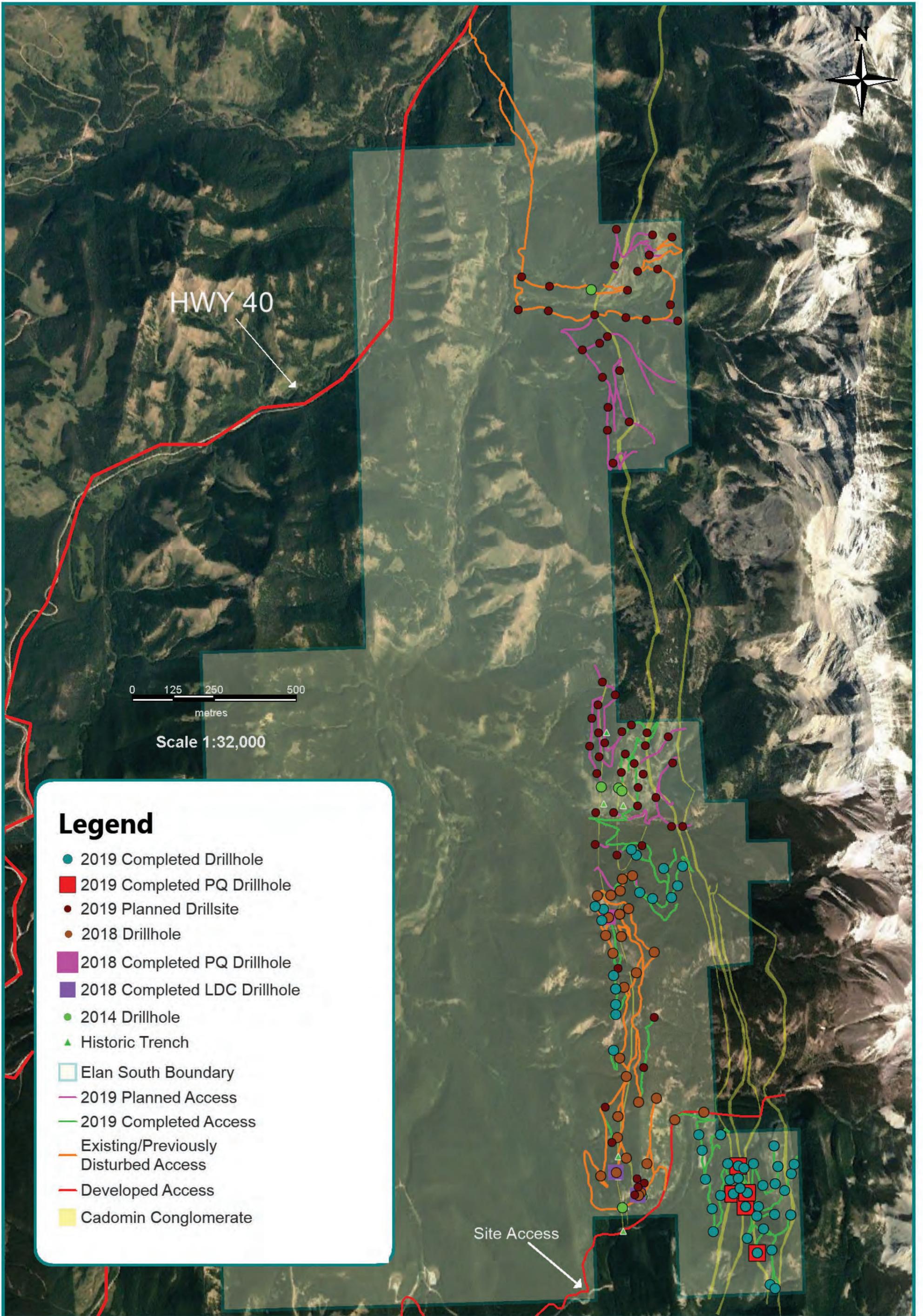
0 125 250 500  
metres

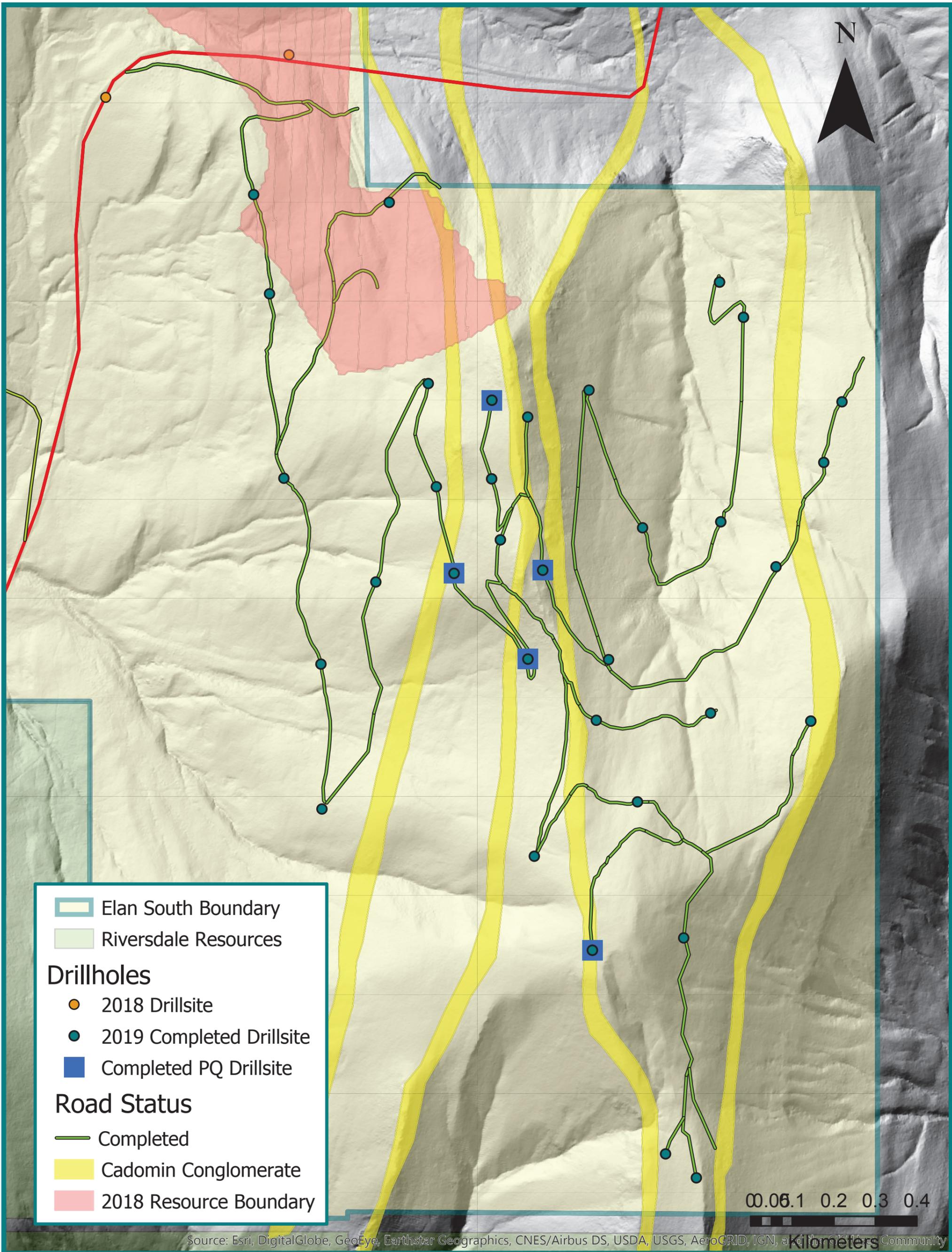
Scale 1:32,000

### Legend

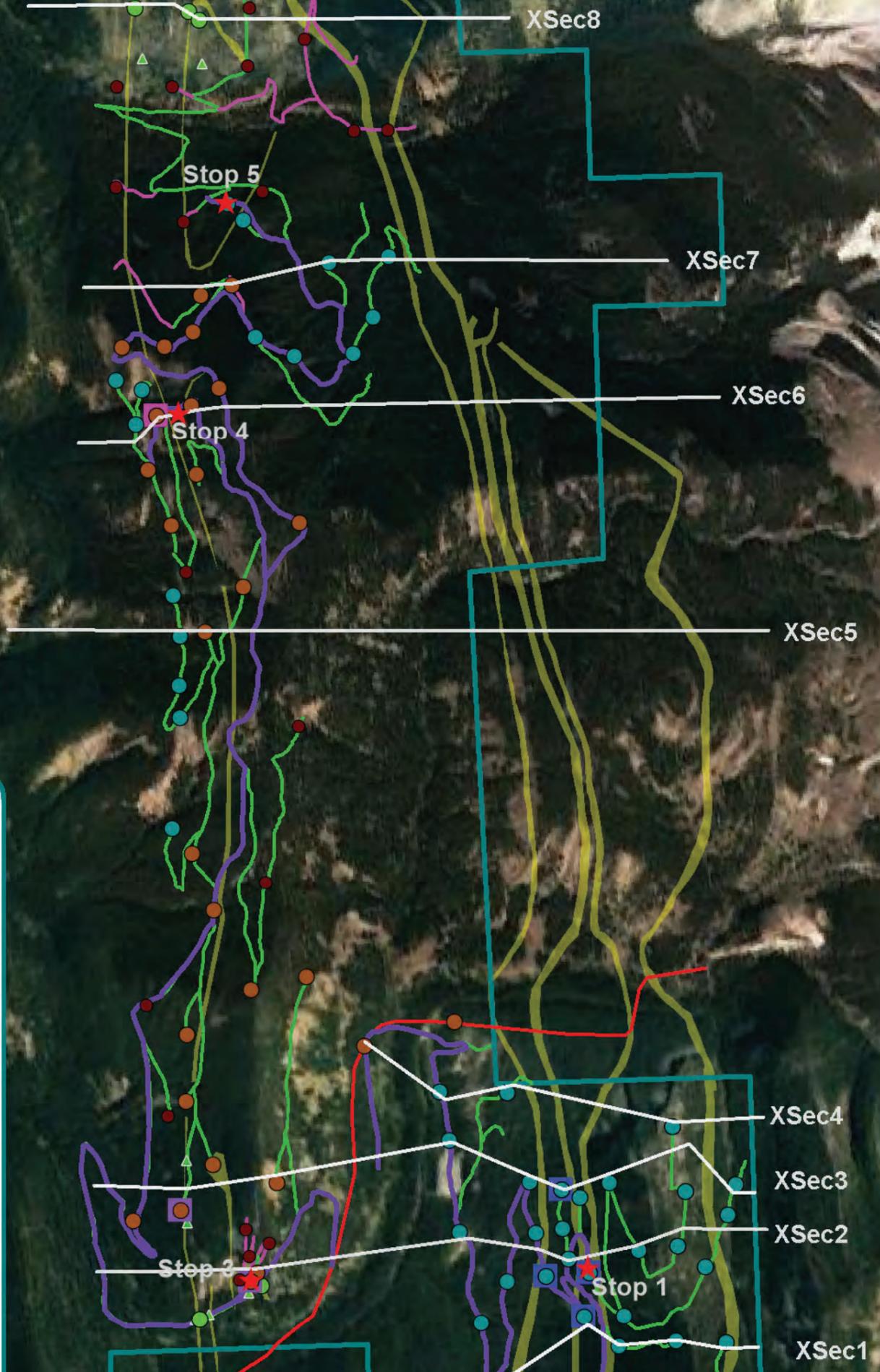
- 2019 Completed Drillhole
- 2019 Completed PQ Drillhole
- 2019 Planned Drillsite
- 2018 Drillhole
- 2018 Completed PQ Drillhole
- 2018 Completed LDC Drillhole
- 2014 Drillhole
- ▲ Historic Trench
- Elan South Boundary
- 2019 Planned Access
- 2019 Completed Access
- Existing/Previously Disturbed Access
- Developed Access
- Cadomin Conglomerate

Site Access





Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



### Legend

#### Completed Exploration

- 2019 Drillhole
- 2019 PQ Drillhole
- 2018 Drillhole
- 2018 PQ Drillhole
- 2018 LDC Drillhole
- 2014 Drillhole
- ▲ Historic Trench
- 2019 Completed Access

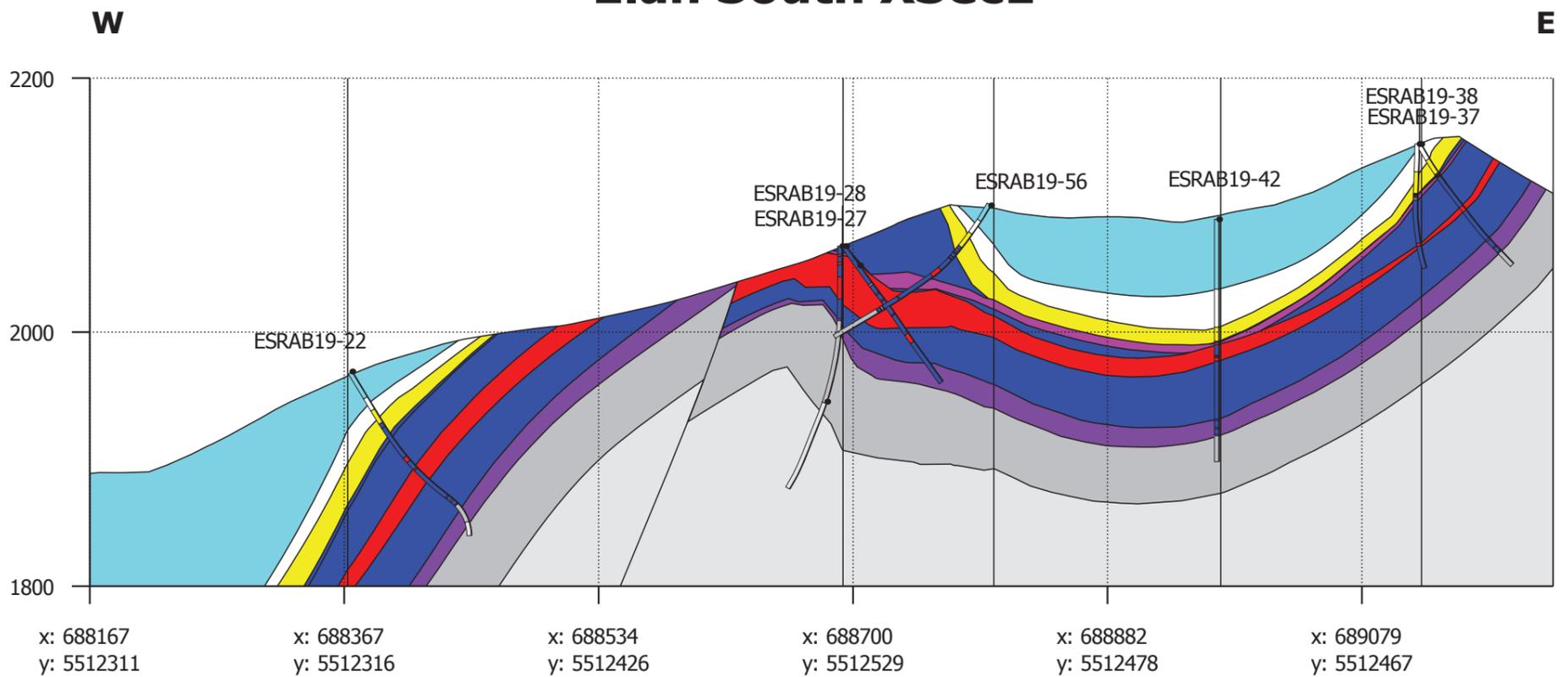
#### Planned Exploration

- 2019 Planned Drillsite
- 2019 Planned Access
- Developed Access
- Cadomin Conglomerate
- Elan South Boundary
- Cross Section
- Tour Route
- ★ Tour Stop

Site Access

# Geologic Cross Section is Preliminary & Conceptual in Nature

## Elan South XSec1



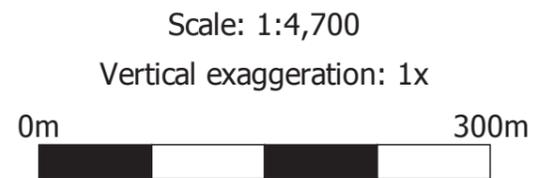
### Legend

- |                                                                                                                                       |                                                                                                                                          |                                                                                                                                      |
|---------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| <span style="display: inline-block; width: 15px; height: 15px; background-color: #003366; border: 1px solid black;"></span> 1_INT_2   | <span style="display: inline-block; width: 15px; height: 15px; background-color: #D3D3D3; border: 1px solid black;"></span> Fernie Shale | <span style="display: inline-block; width: 15px; height: 15px; background-color: #800080; border: 1px solid black;"></span> Seam One |
| <span style="display: inline-block; width: 15px; height: 15px; background-color: #003366; border: 1px solid black;"></span> 2_INT_4   | <span style="display: inline-block; width: 15px; height: 15px; background-color: #ADD8E6; border: 1px solid black;"></span> Gladstone    | <span style="display: inline-block; width: 15px; height: 15px; background-color: #FF0000; border: 1px solid black;"></span> Seam Two |
| <span style="display: inline-block; width: 15px; height: 15px; background-color: #003366; border: 1px solid black;"></span> Cad_INT_1 | <span style="display: inline-block; width: 15px; height: 15px; background-color: #A9A9A9; border: 1px solid black;"></span> Moose        | <span style="display: inline-block; width: 15px; height: 15px; background-color: #FFFFFF; border: 1px solid black;"></span> SSSP     |
| <span style="display: inline-block; width: 15px; height: 15px; background-color: #FFFF00; border: 1px solid black;"></span> Cadomin   | <span style="display: inline-block; width: 15px; height: 15px; background-color: #663399; border: 1px solid black;"></span> Seam Four    |                                                                                                                                      |

Geological interpretation is conceptual in nature

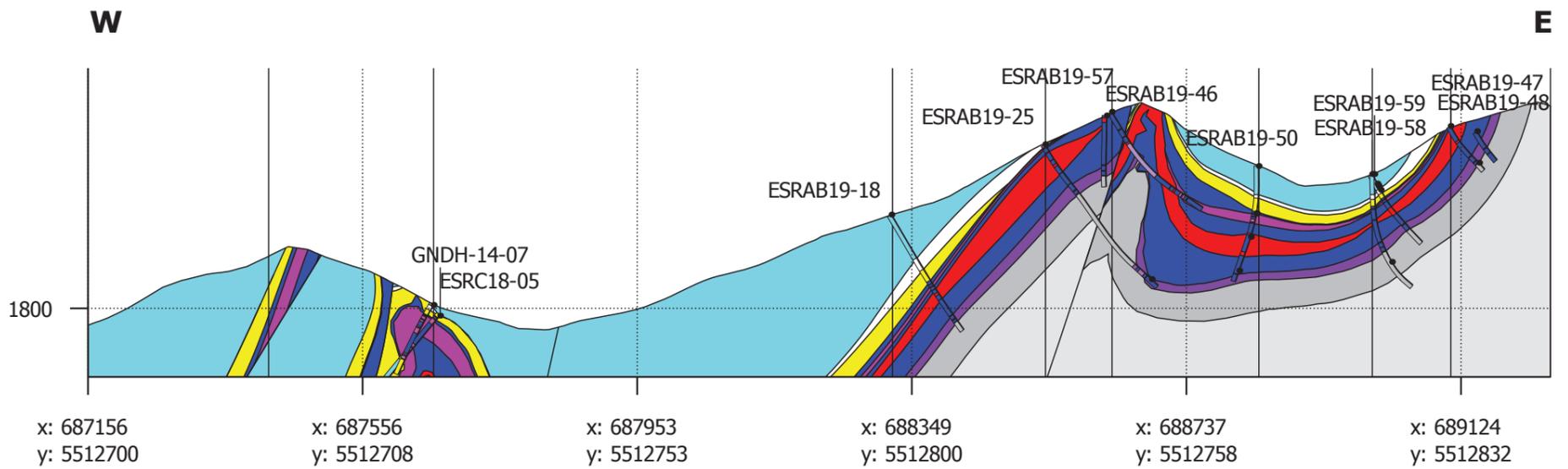
### Location

W: 688167, 5512311  
E: 689229, 5512463



Geologic Cross Section is Preliminary & Conceptual in Nature

## Elan South XSec2



### Legend

- |                                                                                                                                 |                                                                                                                                       |                                                                                                                                |
|---------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|
| <span style="display:inline-block; width:15px; height:15px; background-color:blue; border:1px solid black;"></span> 1_INT_2     | <span style="display:inline-block; width:15px; height:15px; background-color:lightgrey; border:1px solid black;"></span> Fernie Shale | <span style="display:inline-block; width:15px; height:15px; background-color:purple; border:1px solid black;"></span> Seam One |
| <span style="display:inline-block; width:15px; height:15px; background-color:darkblue; border:1px solid black;"></span> 2_INT_4 | <span style="display:inline-block; width:15px; height:15px; background-color:cyan; border:1px solid black;"></span> Gladstone         | <span style="display:inline-block; width:15px; height:15px; background-color:red; border:1px solid black;"></span> Seam Two    |
| <span style="display:inline-block; width:15px; height:15px; background-color:blue; border:1px solid black;"></span> Cad_INT_1   | <span style="display:inline-block; width:15px; height:15px; background-color:grey; border:1px solid black;"></span> Moose             | <span style="display:inline-block; width:15px; height:15px; background-color:white; border:1px solid black;"></span> SSSP      |
| <span style="display:inline-block; width:15px; height:15px; background-color:yellow; border:1px solid black;"></span> Cadomin   | <span style="display:inline-block; width:15px; height:15px; background-color:purple; border:1px solid black;"></span> Seam Four       |                                                                                                                                |

Geological interpretation is conceptual in nature

### Location

W: 687156, 5512700  
E: 689255, 5512831

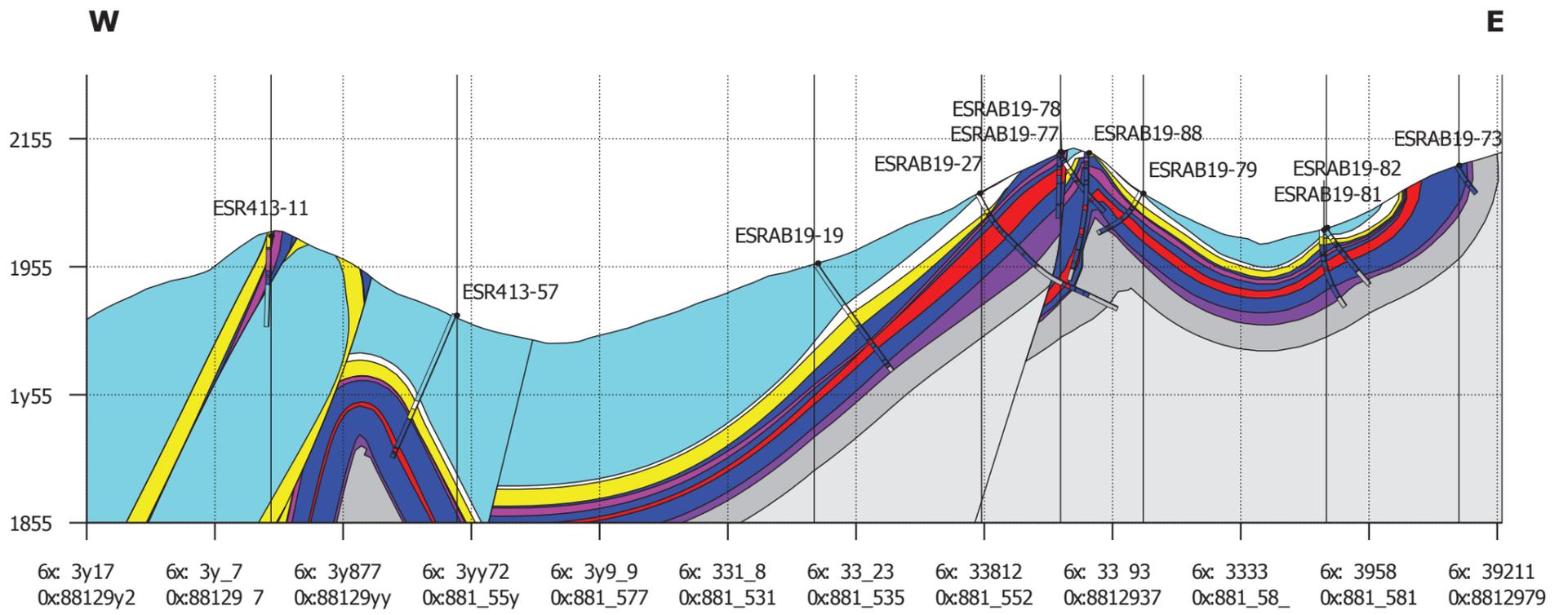
Scale: 1:8,700

Vertical exaggeration: 1x



# Geologic Cross Section is Preliminary & Conceptual in Nature

## Elan South XSec3



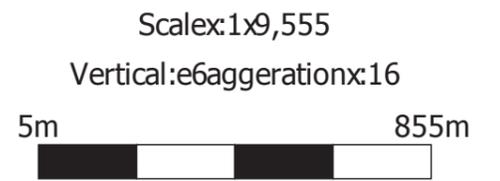
### Legend

- |                                                                                                                                  |                                                                                                                                       |                                                                                                                                |
|----------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|
| <span style="display:inline-block; width:15px; height:15px; background-color:blue; border:1px solid black;"></span> 1I NCI 2     | <span style="display:inline-block; width:15px; height:15px; background-color:lightgrey; border:1px solid black;"></span> Fernie:Shale | <span style="display:inline-block; width:15px; height:15px; background-color:purple; border:1px solid black;"></span> Seam:One |
| <span style="display:inline-block; width:15px; height:15px; background-color:darkblue; border:1px solid black;"></span> 2I NCI 7 | <span style="display:inline-block; width:15px; height:15px; background-color:cyan; border:1px solid black;"></span> Gladstone         | <span style="display:inline-block; width:15px; height:15px; background-color:red; border:1px solid black;"></span> Seam:Cwo    |
| <span style="display:inline-block; width:15px; height:15px; background-color:blue; border:1px solid black;"></span> 4adI NCI 1   | <span style="display:inline-block; width:15px; height:15px; background-color:grey; border:1px solid black;"></span> Moose             | <span style="display:inline-block; width:15px; height:15px; background-color:white; border:1px solid black;"></span> SSSP      |
| <span style="display:inline-block; width:15px; height:15px; background-color:yellow; border:1px solid black;"></span> 4adomin    | <span style="display:inline-block; width:15px; height:15px; background-color:purple; border:1px solid black;"></span> Seam:Four       |                                                                                                                                |

Geological interpretation is conceptual in nature

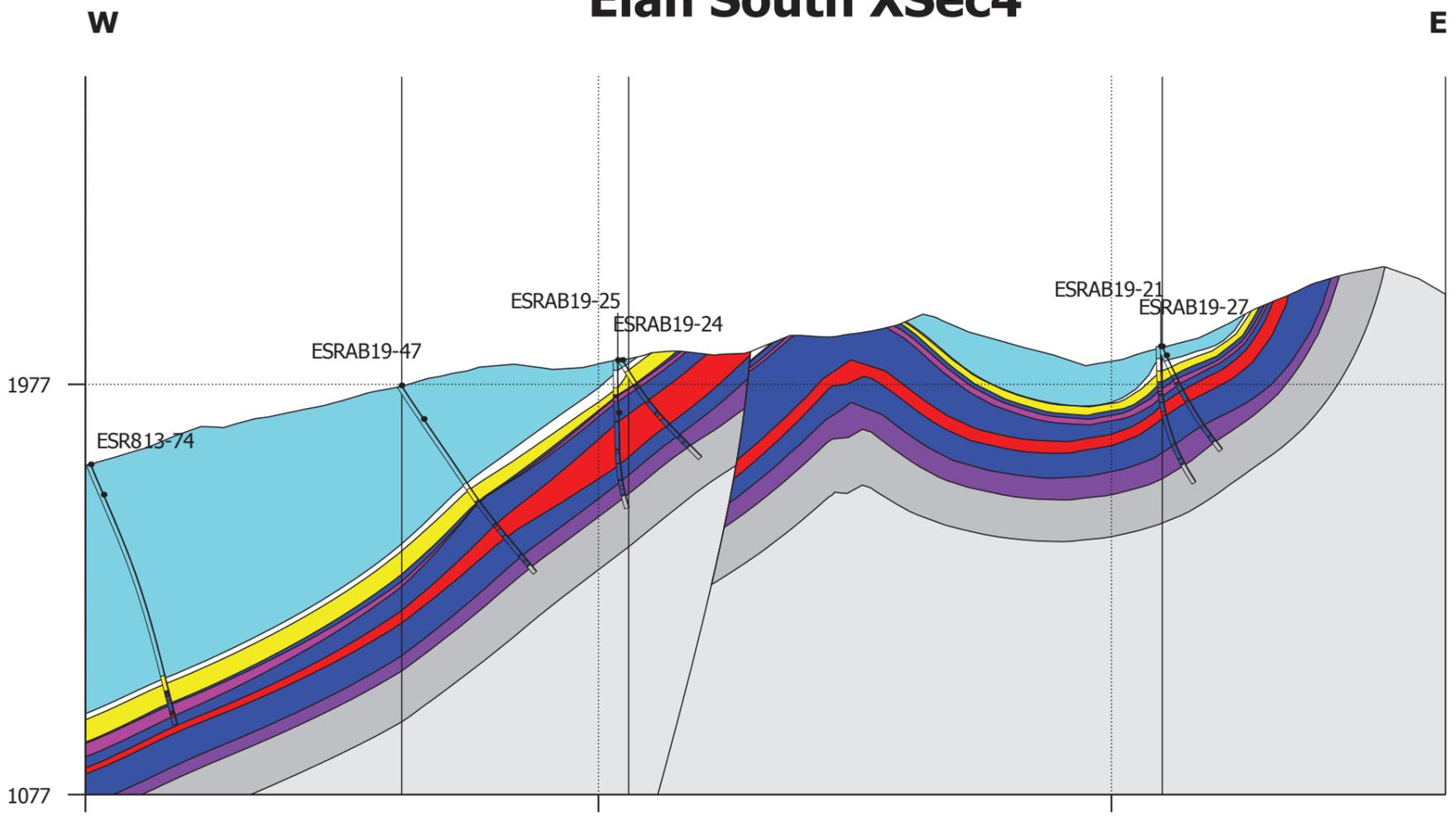
### Location

Wx: 3y17 ,:88129y2  
 Ex: 39213,:8812979



Geologic Cross Section is Preliminary & Conceptual in Nature

### Elan South XSec4



6x:23 992  
yx:0015\_41

6x:233\_5\_  
yx:0015437

6x:233941  
yx:00151 9

**Legend**

- 1I N CI 4
- Fernie:Shale
- Seam:One
- Gladstone
- 4I N CI \_
- Moose
- Seam:Cwo
- SSSP
- 8adI N CI 1
- Seam:Four
- 8adomin

Geological interpretation is conceptual in nature

**Location**

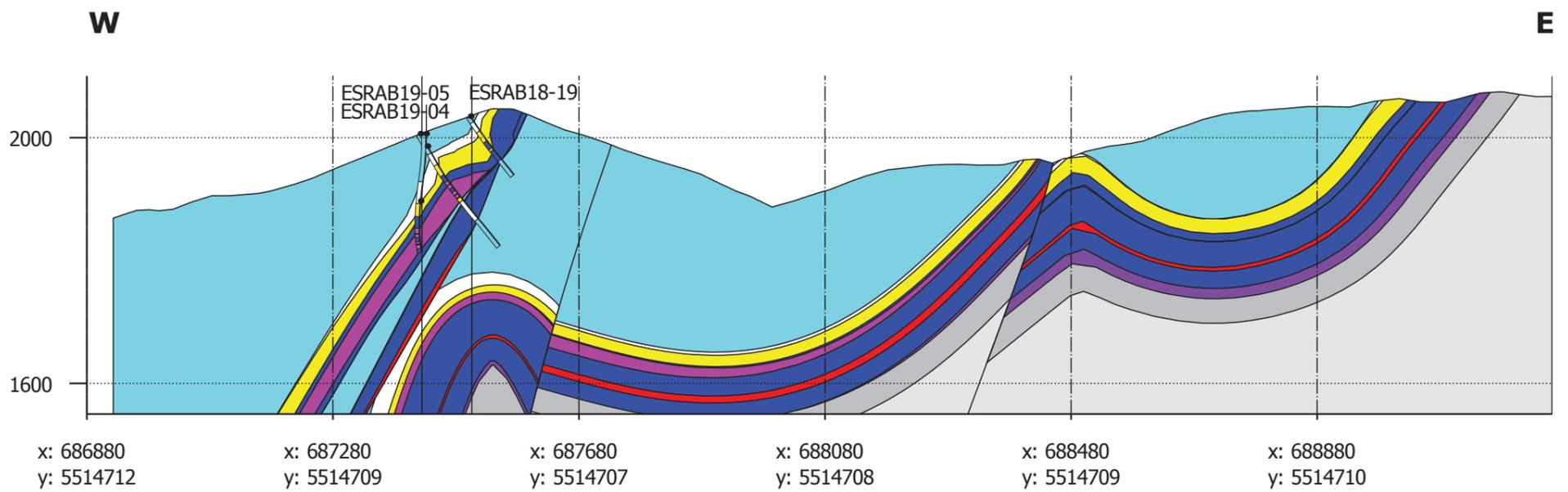
Wx: 23 992, :0015\_41  
Ex: 2394 \_\_, :001513\_

Scale: 1x0, 77  
Vertical: e6aggregation: 16



Geologic Cross Section is Preliminary & Conceptual in Nature

## Elan South XSec5



### Legend

- |           |              |          |
|-----------|--------------|----------|
| 1_INT_2   | Fernie Shale | Seam One |
| 2_INT_4   | Gladstone    | Seam Two |
| Cad_INT_1 | Moose        | SSSP     |
| Cadomin   | Seam Four    |          |

Geological interpretation is conceptual in nature

### Location

W: 686880, 5514712

E: 689261, 5514711

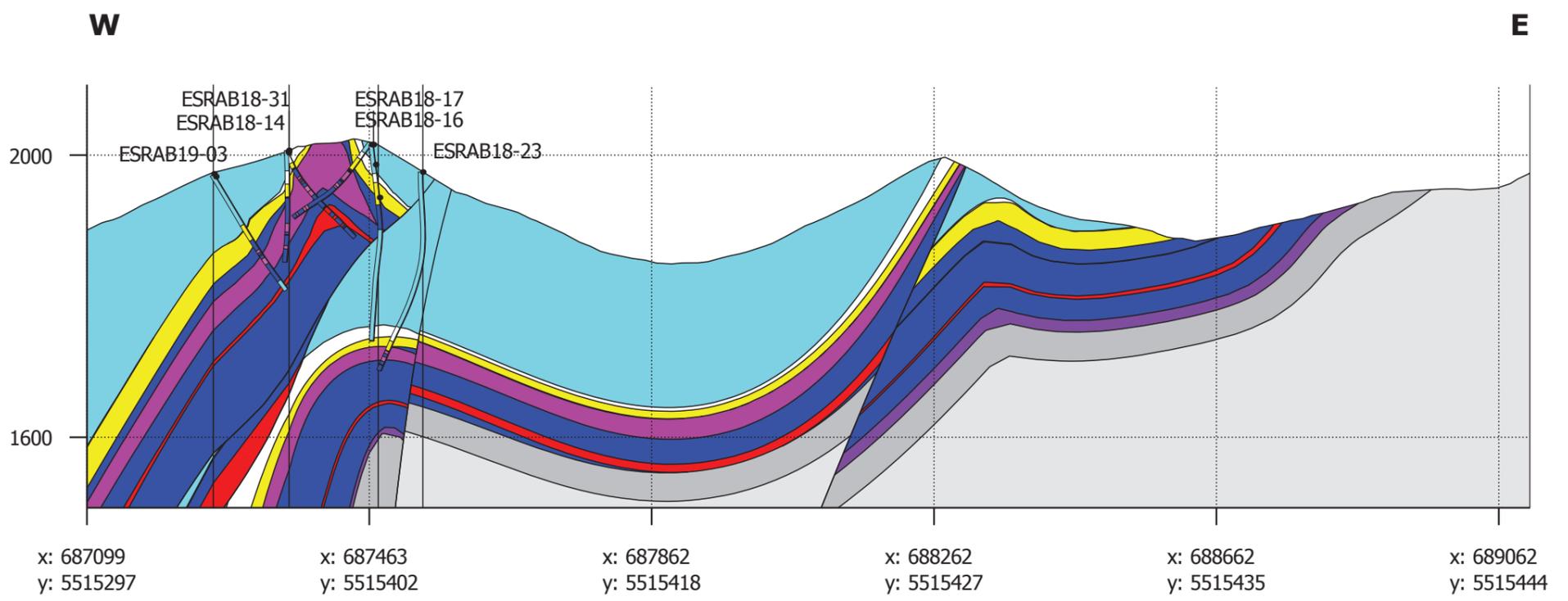
Scale: 1:9,400

Vertical exaggeration: 1x



Geologic Cross Section is Preliminary & Conceptual in Nature

### Elan South XSec6



**Legend**

- |           |              |          |
|-----------|--------------|----------|
| 1_INT_2   | Fernie Shale | Seam One |
| 2_INT_4   | Gladstone    | Seam Two |
| Cad_INT_1 | Moose        | SSSP     |
| Cadomin   | Seam Four    |          |

Geological interpretation is conceptual in nature

**Location**

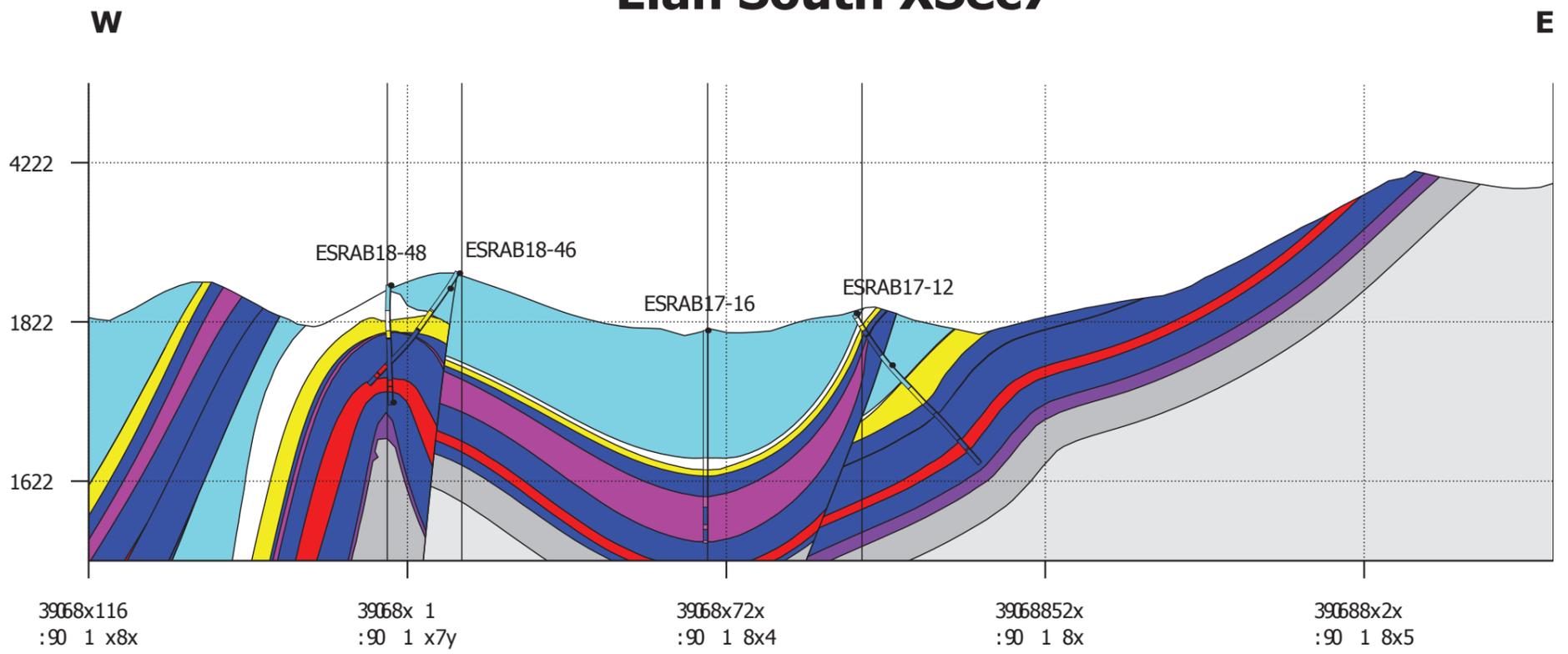
- A: 687099, 5515297  
 B: 689106, 5515445

Scale: 1:8,200  
 Vertical exaggeration: 1x



# Geologic Cross Section is Preliminary & Conceptual in Nature

## Elan South XSec7



### Legend

- |                                                                                                                                       |                                                                                                                                         |                                                                                                                                     |
|---------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| <span style="display: inline-block; width: 15px; height: 15px; background-color: #003366; border: 1px solid black;"></span> 1_INT_4   | <span style="display: inline-block; width: 15px; height: 15px; background-color: #D3D3D3; border: 1px solid black;"></span> FernieShale | <span style="display: inline-block; width: 15px; height: 15px; background-color: #800080; border: 1px solid black;"></span> SeamOne |
| <span style="display: inline-block; width: 15px; height: 15px; background-color: #003366; border: 1px solid black;"></span> 4_INT_y   | <span style="display: inline-block; width: 15px; height: 15px; background-color: #ADD8E6; border: 1px solid black;"></span> Gladstone   | <span style="display: inline-block; width: 15px; height: 15px; background-color: #FF0000; border: 1px solid black;"></span> SeamTwo |
| <span style="display: inline-block; width: 15px; height: 15px; background-color: #003366; border: 1px solid black;"></span> Cad_INT_1 | <span style="display: inline-block; width: 15px; height: 15px; background-color: #A9A9A9; border: 1px solid black;"></span> Moose       | <span style="display: inline-block; width: 15px; height: 15px; background-color: #FFFFFF; border: 1px solid black;"></span> SSSP    |
| <span style="display: inline-block; width: 15px; height: 15px; background-color: #FFD700; border: 1px solid black;"></span> Cadomin   | <span style="display: inline-block; width: 15px; height: 15px; background-color: #663399; border: 1px solid black;"></span> SeamFour    |                                                                                                                                     |

Geological interpretation is conceptual in nature

### Location

A90 68x116,0 1 x8x  
B90 6887yy,0 1 8x1

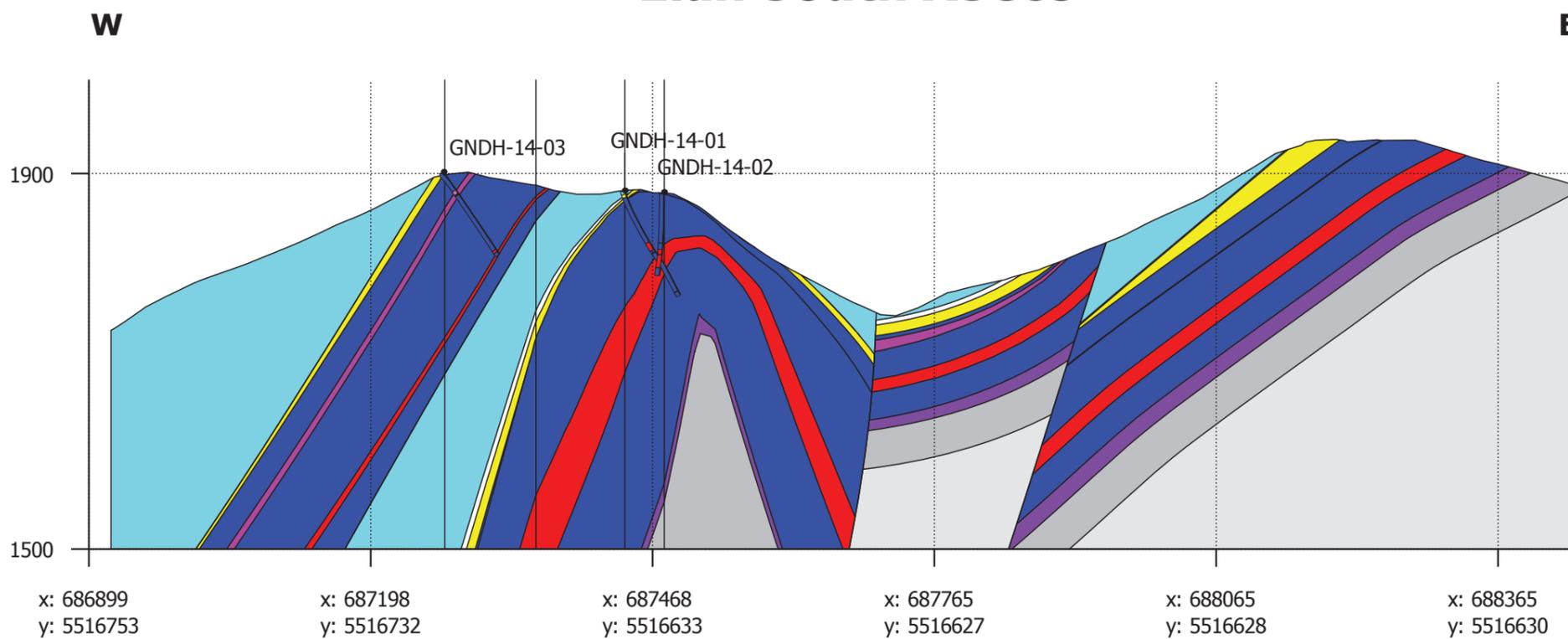
Scale9019x,y22

Vertical0e3aggeration9013



# Geologic Cross Section is Preliminary & Conceptual in Nature

## Elan South XSec8



### Legend

- |                                                                                                                                       |                                                                                                                                          |                                                                                                                                      |
|---------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| <span style="display: inline-block; width: 15px; height: 15px; background-color: #003366; border: 1px solid black;"></span> 1_INT_2   | <span style="display: inline-block; width: 15px; height: 15px; background-color: #D3D3D3; border: 1px solid black;"></span> Fernie Shale | <span style="display: inline-block; width: 15px; height: 15px; background-color: #800080; border: 1px solid black;"></span> Seam One |
| <span style="display: inline-block; width: 15px; height: 15px; background-color: #003366; border: 1px solid black;"></span> 2_INT_4   | <span style="display: inline-block; width: 15px; height: 15px; background-color: #ADD8E6; border: 1px solid black;"></span> Gladstone    | <span style="display: inline-block; width: 15px; height: 15px; background-color: #FF0000; border: 1px solid black;"></span> Seam Two |
| <span style="display: inline-block; width: 15px; height: 15px; background-color: #003366; border: 1px solid black;"></span> Cad_INT_1 | <span style="display: inline-block; width: 15px; height: 15px; background-color: #A9A9A9; border: 1px solid black;"></span> Moose        | <span style="display: inline-block; width: 15px; height: 15px; background-color: #FFFFFF; border: 1px solid black;"></span> SSSP     |
| <span style="display: inline-block; width: 15px; height: 15px; background-color: #FFFF00; border: 1px solid black;"></span> Cadomin   | <span style="display: inline-block; width: 15px; height: 15px; background-color: #663399; border: 1px solid black;"></span> Seam Four    |                                                                                                                                      |

Geological interpretation is conceptual in nature

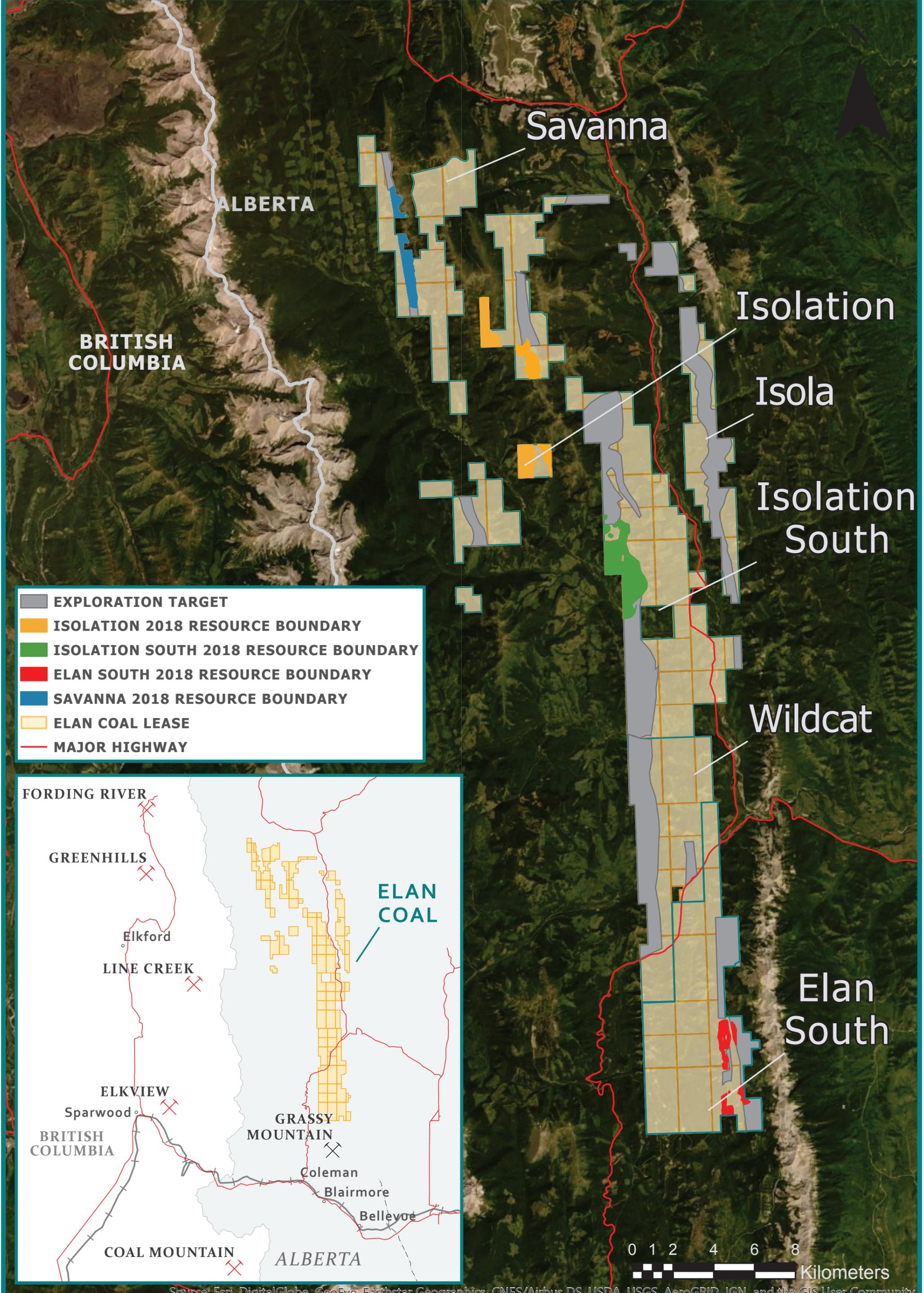
### Location

W: 686899, 5516753  
E: 688447, 5516630

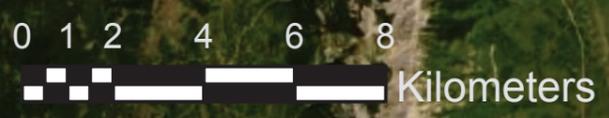
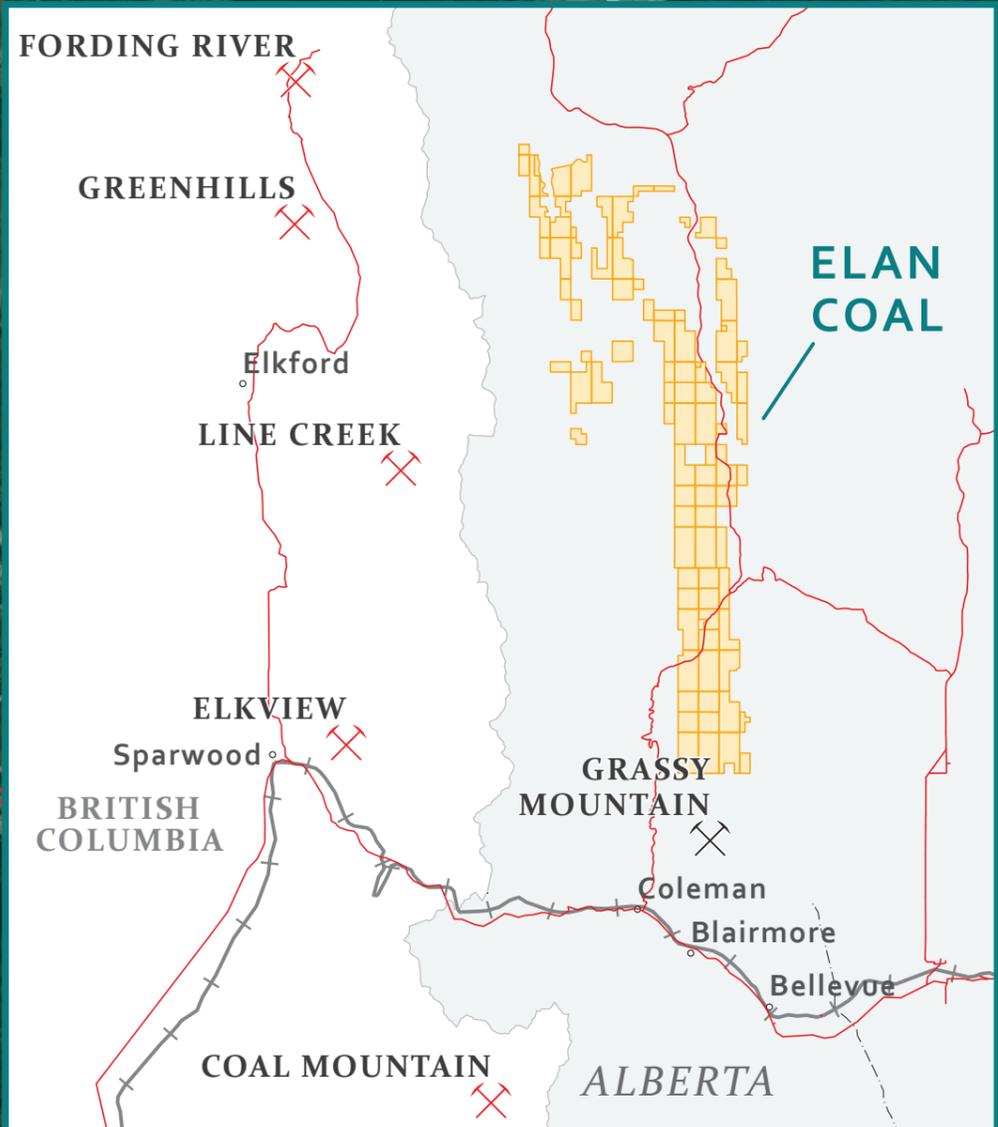
Scale: 1:6,300

Vertical exaggeration: 1x





- EXPLORATION TARGET
- ISOLATION 2018 RESOURCE BOUNDARY
- ISOLATION SOUTH 2018 RESOURCE BOUNDARY
- ELAN SOUTH 2018 RESOURCE BOUNDARY
- SAVANNA 2018 RESOURCE BOUNDARY
- ELAN COAL LEASE
- MAJOR HIGHWAY



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

# Isolation South



ISRAB19-01

ISRAB19-08

ISRAB19-05

ISRAB19-02

ISRAB19-06

ISRAB19-03

ISRAB19-04

ISRAB19-07

ISRAB19-09

ISRAB19-10

ISRAB19-11

- 2019 Completed Drillholes
- Planned Drillsite
- Field Mapping Point
  - Geological Mapping Point
  - ★ Coal
- Access Status
  - Completed
  - Planned New Access
- Historic Exploration
  - Drillhole
  - ▲ Trench
- Tenure
  - Isolation South Project Boundary
- Geology
  - Cadomin Conglomerate



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

# Isolation South



XSec 3

XSec 2

XSec 1

Stop 1

Stop 4

Stop 3

Stop 2

Stop 5

ISRAB19-01

ISRAB19-08

ISRAB19-05

ISRAB19-02

ISRAB19-06

ISRAB19-03

ISRAB19-09

ISRAB19-04

ISRAB19-10

ISRAB19-07

ISRAB19-11

● IS 2019 Completed Drillholes

**Planned Drillsite**

●

**Status**

— Completed

— Flagged

— Planned New Access

★ Tour Stop

— Tour Route

**Historic Exploration**

● Drillhole

▲ Trench

**Tenure**

□ Isolation South Project Outline

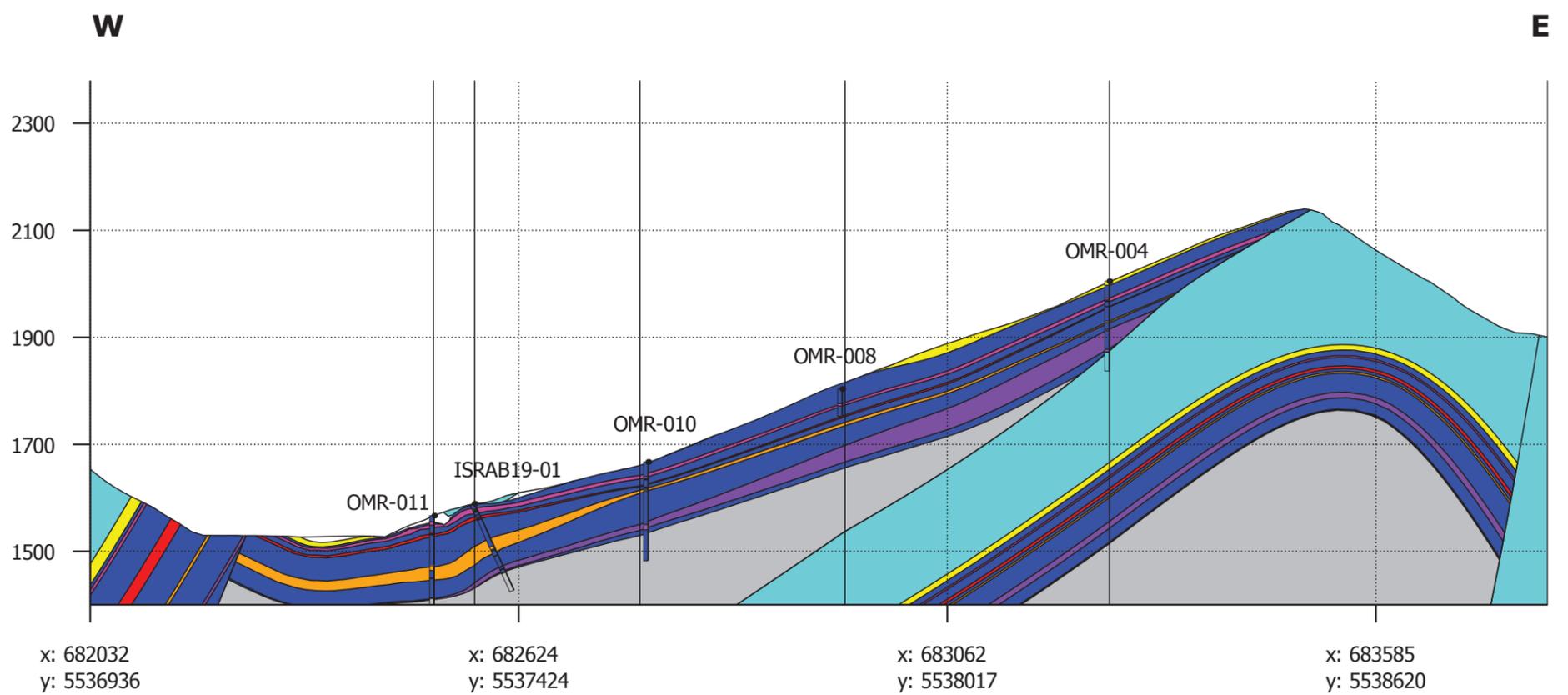
**Geology**

□ Cadomin Conglomerate



# Geologic Cross Section is Preliminary & Conceptual in Nature

## Isolation South XSec1



### Legend

1_INT_2	CAD_INT_1	S1	S5
2_INT_3	Cadomin	S2	SSSP
3_INT_4	Gladstone	S3	
4_INT_5	Moose	S4	

Geological interpretation is conceptual in nature

### Location

W: 682032, 5536936  
E: 683807, 5538852

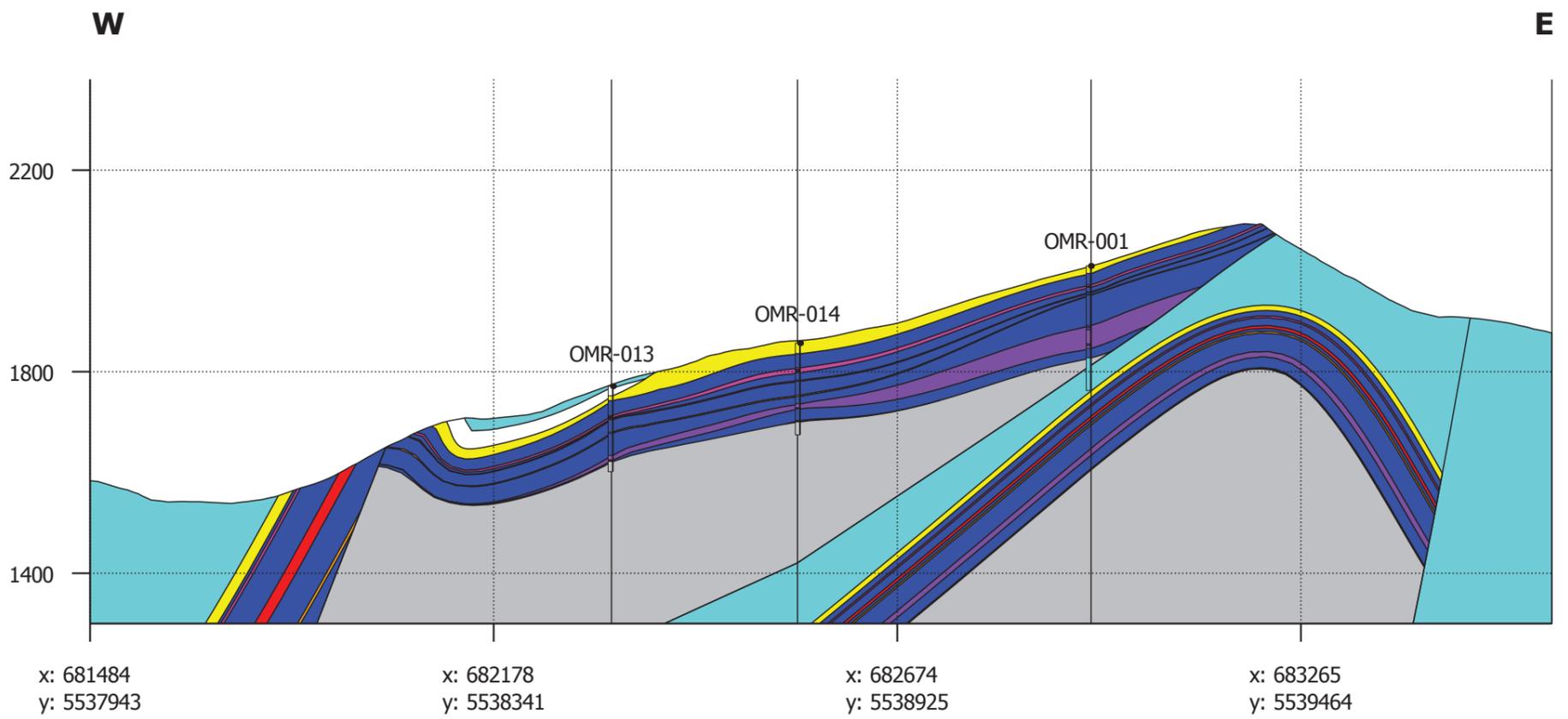
Scale: 1:11,000

Vertical exaggeration: 1x



Geologic Cross Section is Preliminary & Conceptual in Nature

### Isolation South XSec2



**Legend**

1_INT_2	CAD_INT_1	S1	S5
2_INT_3	Cadomin	S2	SSSP
3_INT_4	Gladstone	S3	
4_INT_5	Moose	S4	

Geological interpretation is conceptual in nature

**Location**

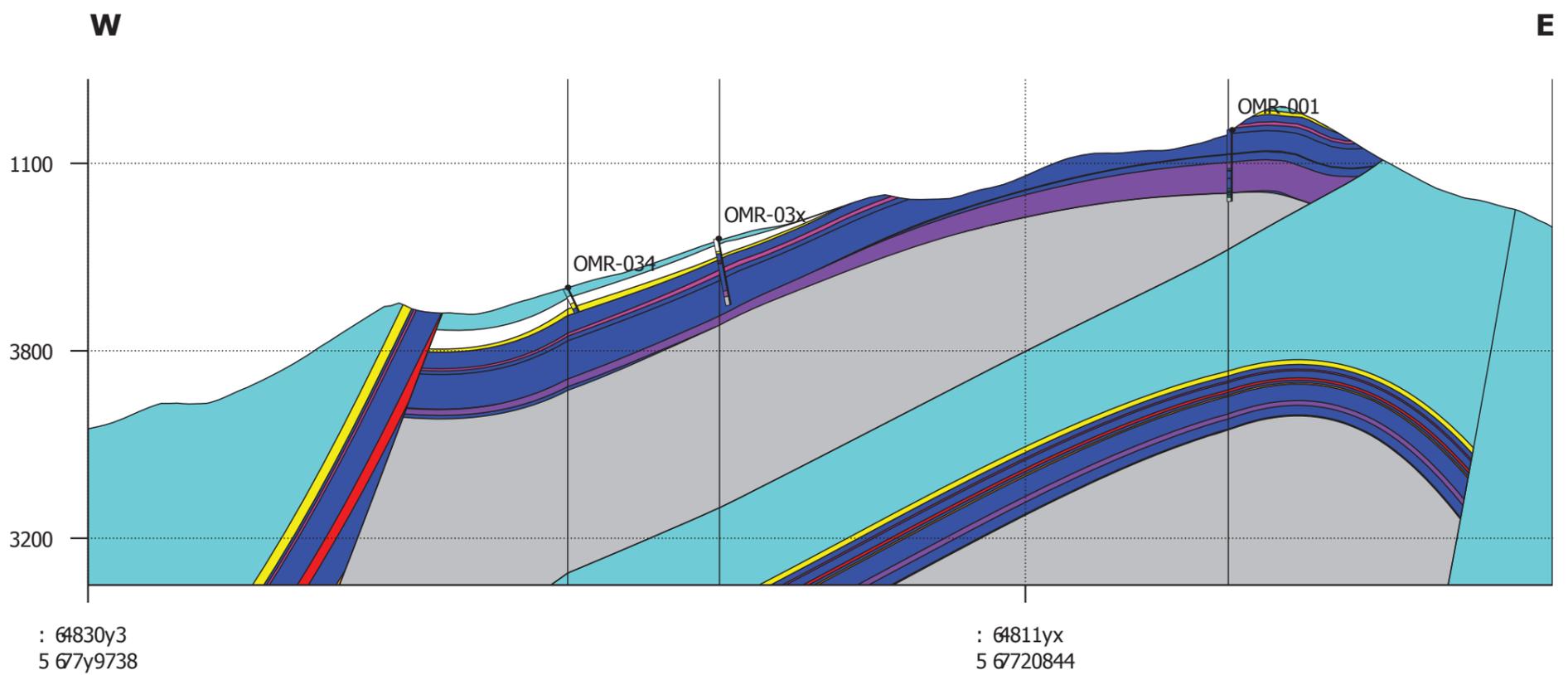
W: 681484, 5537943  
 E: 683620, 5539812

Scale: 1:12,000  
 Vertical exaggeration: 1x

0m 1000m

Geologic Cross Section is Preliminary & Conceptual in Nature

### Isolation South XSec3



**Legend**

3_INT_1	CAD_INT_3	S3	S7
1_INT_y	Cadomin	S1	SSSP
y_INT_2	Gladstone	Sy	
2_INT_7	Moose	S2	

Geological interpretation is conceptual in nature

**Location**  
 W 4830y3,677y9738  
 E 6 4811yx,6720844

Scale 1:31,700  
 Vertical exaggeration 6x

0m 3000m