

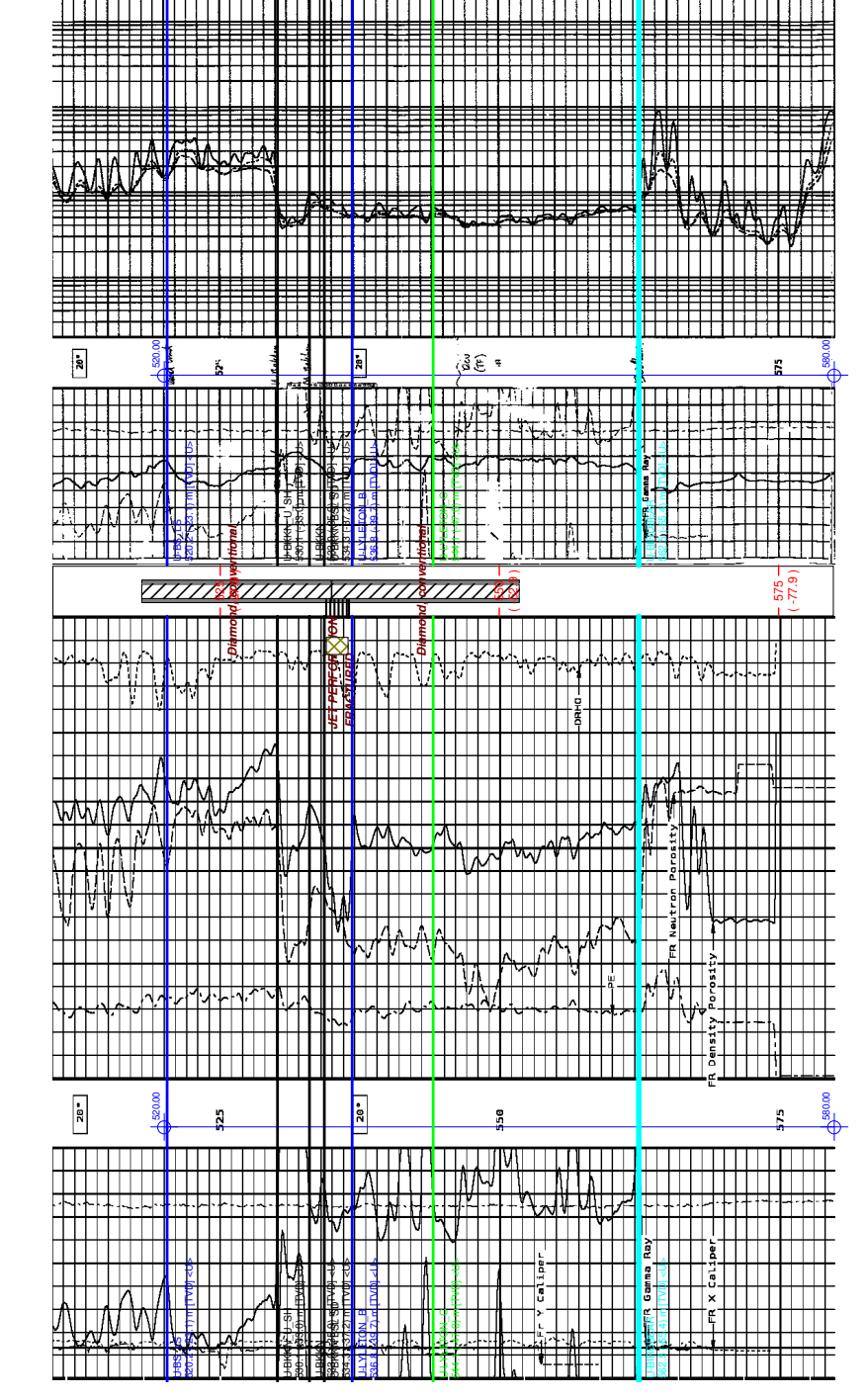
**Proposed Birdtail Unit No. 4**

**Application for Enhanced Oil Recovery Waterflood Project**

**LIST OF APPENDICES**

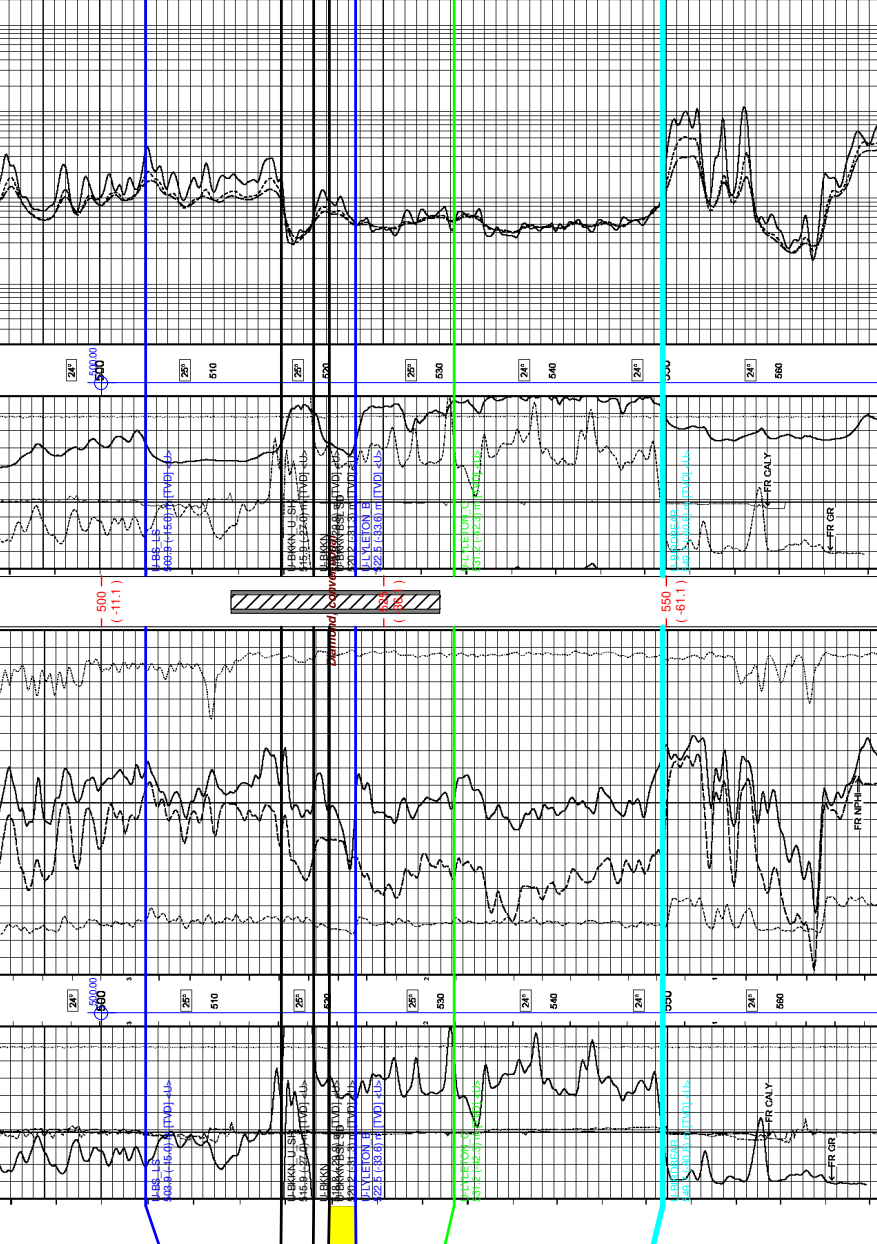
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00/02-01-01-7-28W1/0  
 TD: 580.0 m (TV) 48, 487.0 m  
 FormID: BRDBER RC: 2008-2-20  
 TUNDRA ST. LAJARE 2: 117.28 (WPM)  
 726.0m to next well



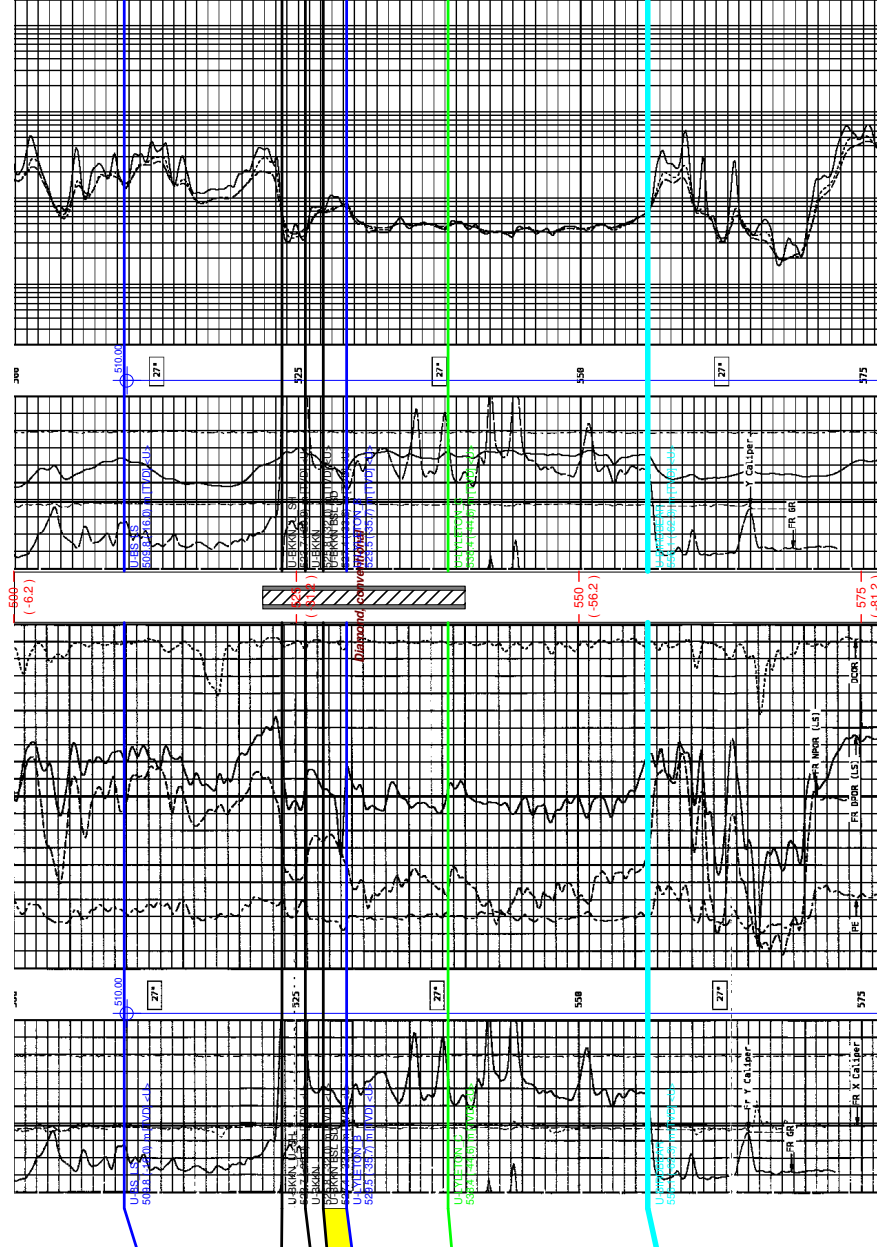
BST Information  
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 Cum 4322.0 0.0 3133.4  
 Daily 1.0 0.0 1.4

00/10-36-016-28W1/0  
 TD: 579.5 m (TV) 48, 489.0 m  
 FormID: BAKENM RC: NA  
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 726.5m to previous well



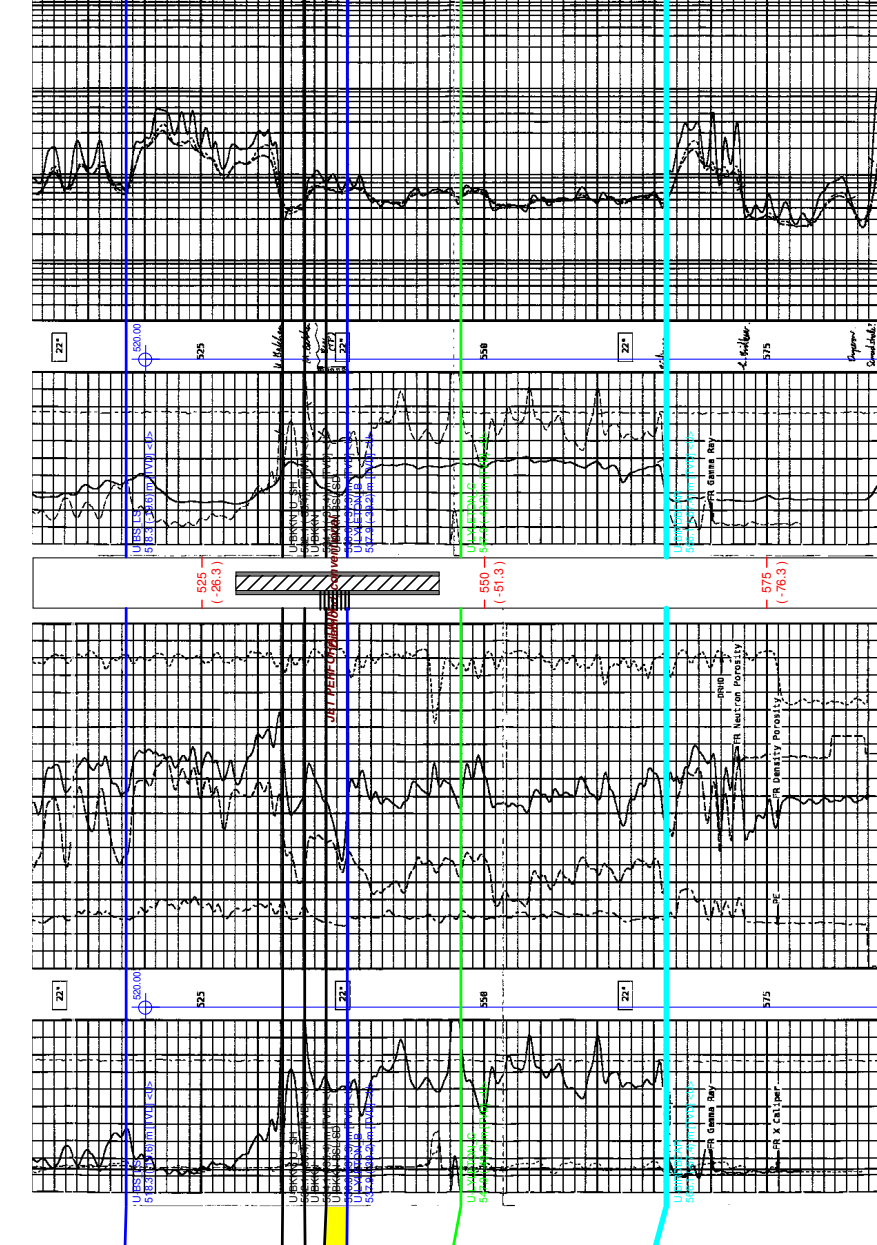
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00/05-31-016-27W1/0  
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 726.5m to previous well



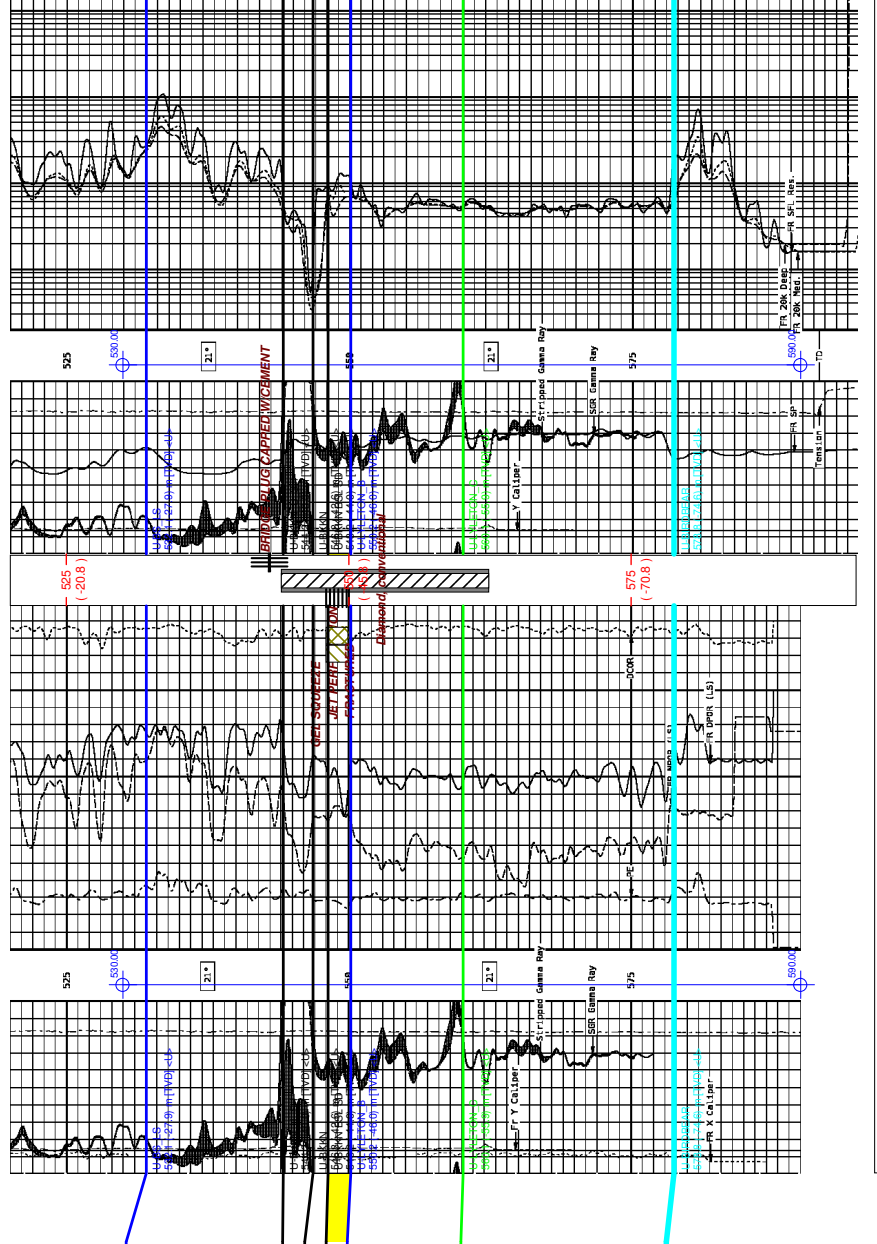
BST Information  
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00/09-30-016-27W1/0  
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 1457.4m to next well



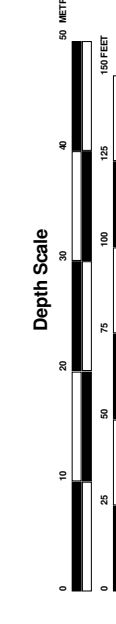
BST Information  
 Prod Oil (m3) Gas (E3m3) Water (m3)  
 Cum 5320.0 0.0 9248.5  
 Daily 1.7 0.0 2.9

00/02-32-016-27W1/0  
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 FormID: BRDBER RC: 2010-1-08  
 TUNDRA BRDCTAIL 9:30-16:27 (WPM)  
 1457.4m to previous well



BST Information  
 Prod Oil (m3) Gas (E3m3) Water (m3)  
 Cum 90.8 0.0 738.7  
 Daily 0.3 0.0 2.2

- Legend**
- Oil
  - Dry & Abandoned
  - Service or Drain
  - Contact Type - Conformity
  - Contact Type - Conformity
  - Contact Type - Time Equivalence
  - Contact Type - Left Fault
  - Contact Type - Right Fault
  - Yellow
  - Red

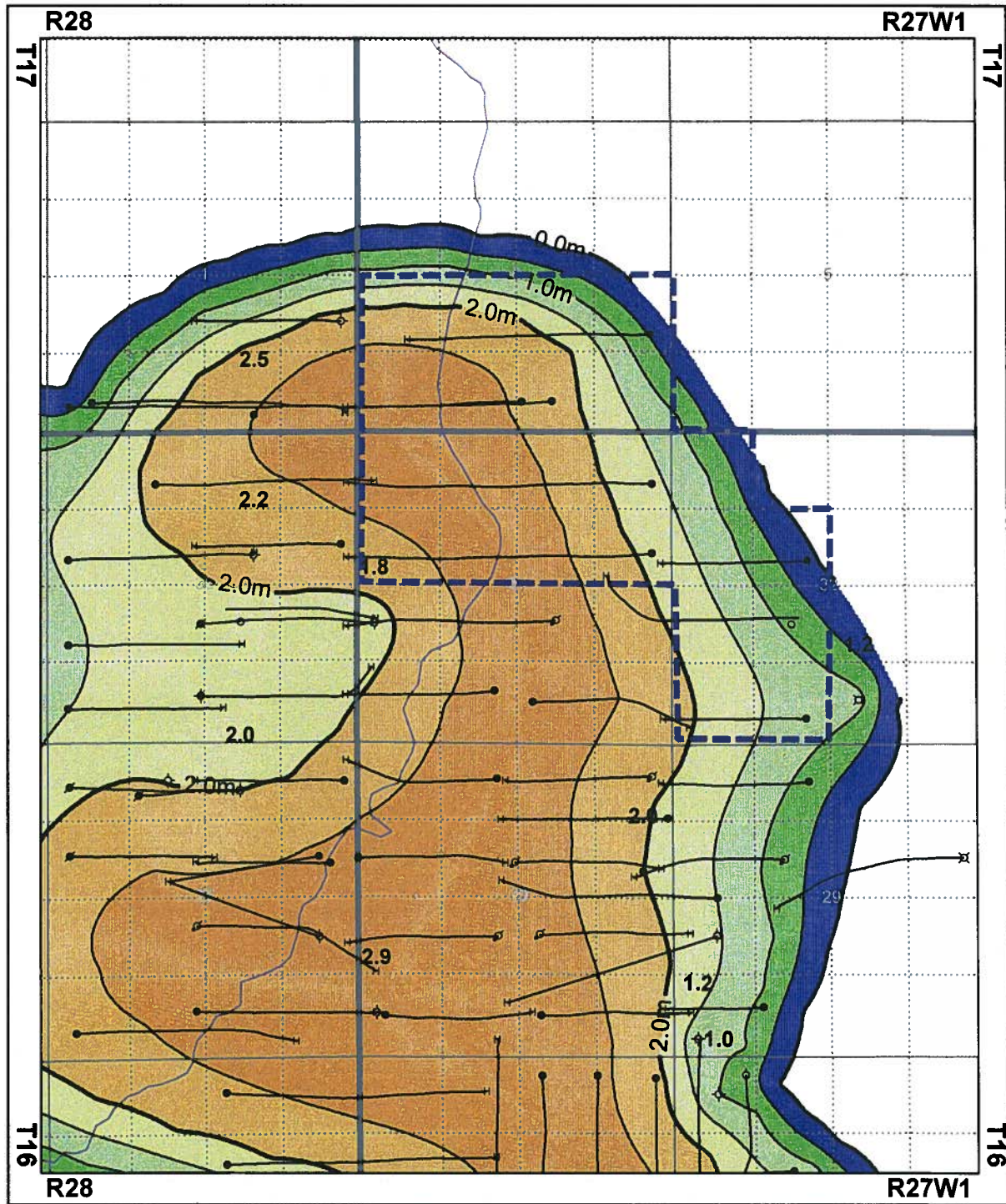


**Tundra Oil and Gas Limited**  
 Birdhall Unit 4 Stratigraphic Cross Section  
 Datum: Upper Bakken Shale  
 APPENDIX 1

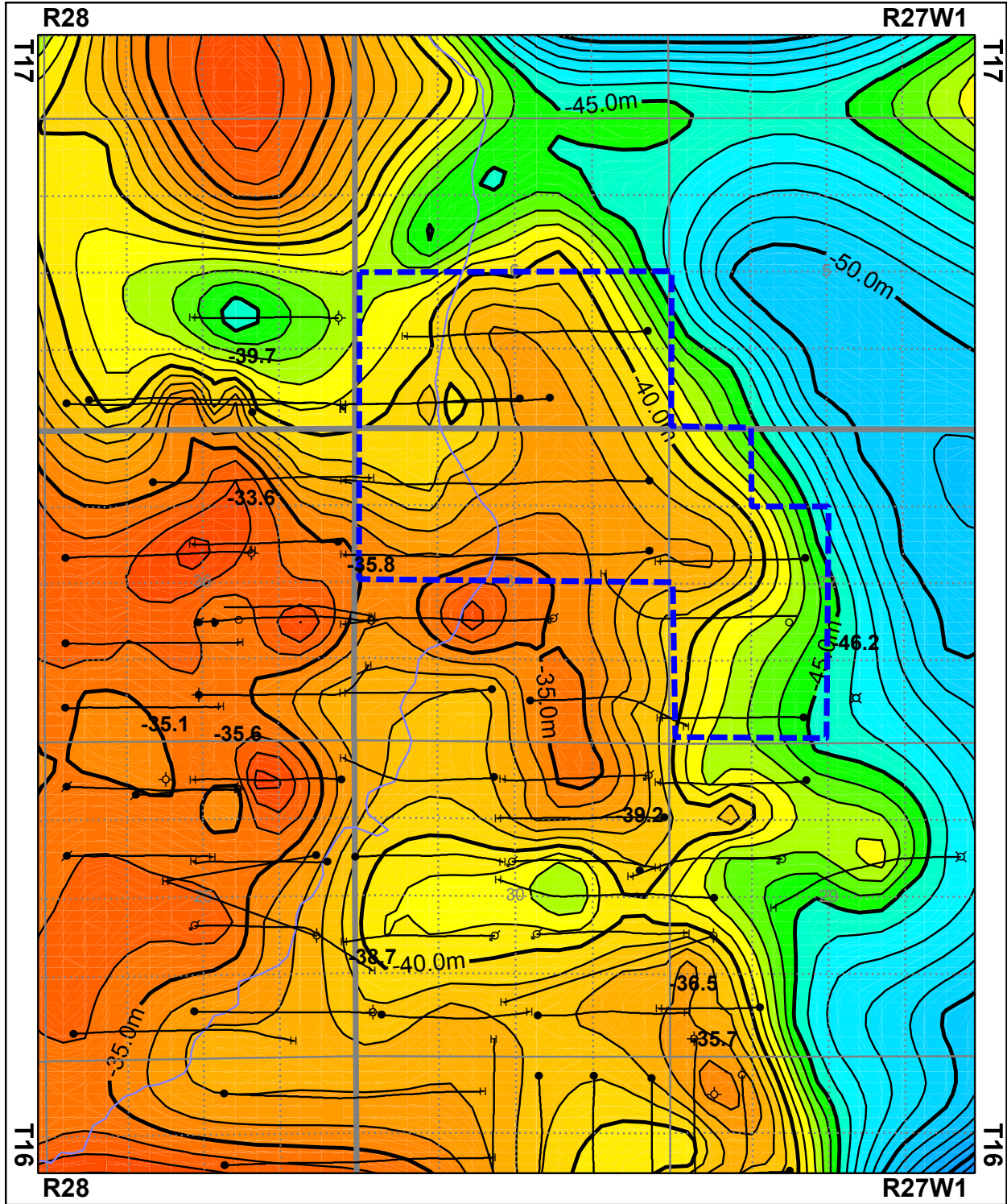
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 Title: [Redacted]  
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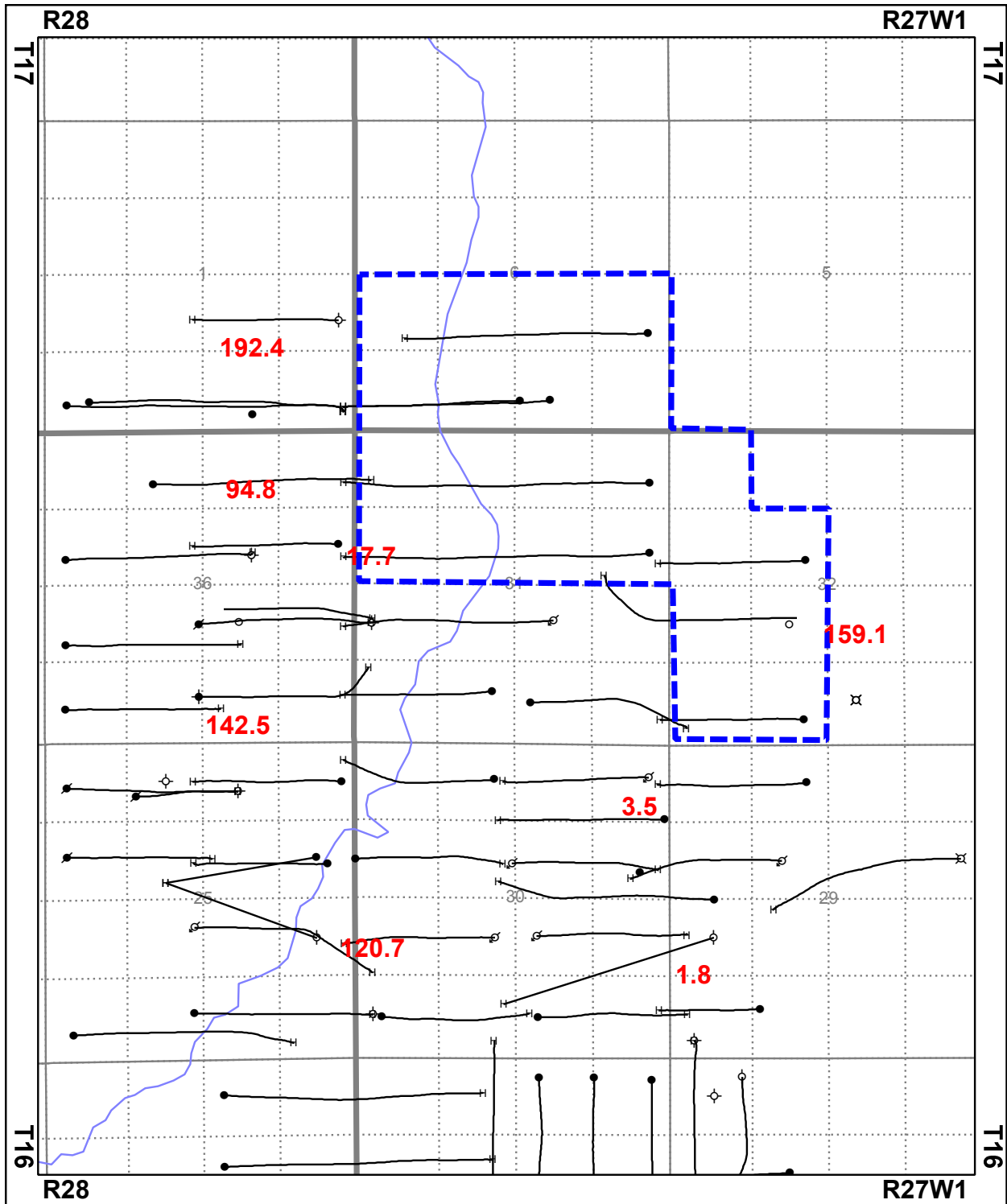
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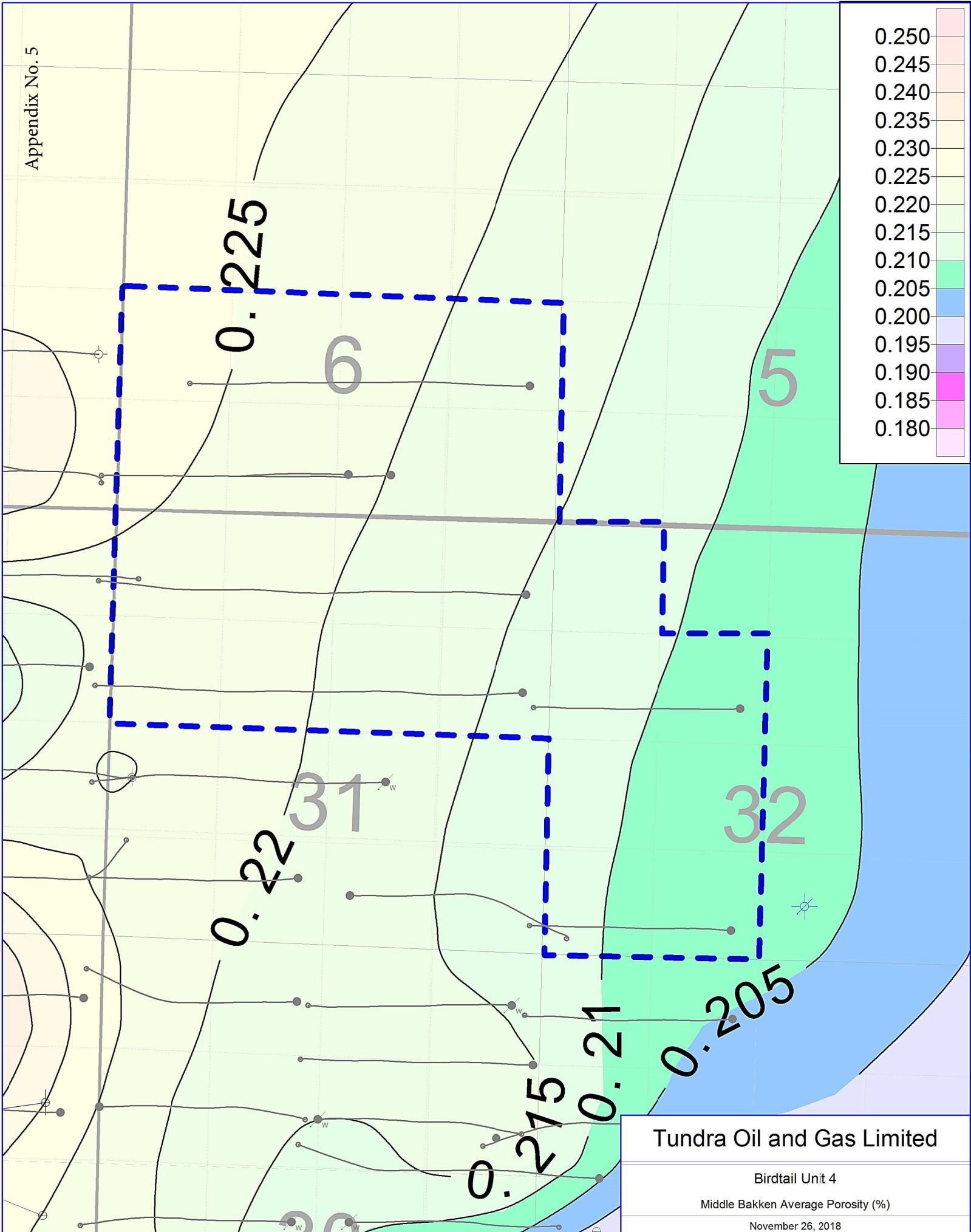
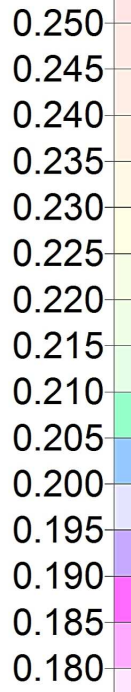
Tundra Oil and Gas Limited
Birdtail Unit 4 M Bakken Net Pay (CI=0.5m)
BW, November 19, 2018 North Bakken accumap



Tundra Oil and Gas Limited
Birdtail Unit 4 Lyleton Subsea Structure (CI=1.0m)
BW, November 19, 2018 North Bakken.accumap



Tundra Oil and Gas Limited
Birdtail Unit 4
M Bakken Kmaxh (mDm)
BW, November 26, 2018
North Bakken.accumap



Tundra Oil and Gas Limited

Birdtail Unit 4

Middle Bakken Average Porosity (%)

November 26, 2018

## **Appendix 6 – Corrosion Controls**

### *Injection Wells*

- Corrosion inhibitor in the annulus between tubing and casing.
- Surface freeze protection of annular fluids near surface.
- Corrosion-resistant valves on wellhead and flowline.
- Corrosion-resistant flowline equipment.
- Installation of cathodic protection to protect casing.
- Scale inhibitor protection as needed.
- Bacteria control chemical treatments when needed.
- Water injector packer will be coated for corrosion resistance.

### *Producing Wells*

- Downhole corrosion inhibitor, either batch or daily injection, as needed.
- Scale inhibitor treatment daily injection as required for horizontal wells.
- Paraffin treatment daily injection if needed.
- Casing cathodic protection where required.

### *Pipelines*

- The water source line will be Flexcord 2000# pipe.
- Injection lines will be a mix of Flexpipe 601 pipe and Centron 2000# pipe.
- Producing lines existing as per original flowline licenses.
- 

### *Facilities*

#### **8-30-16-27W1 Water Plant**

- Plant piping – internally coated, fiberglass or stainless steel.
- Filtration – stainless steel.
- Pumps – ceramic plungers, stainless steel disc valves.
- Tanks – fiberglass with stainless steel valves.