

Taproot – Pintail Lateral – Produced Water Release

**Photo: 1**

**Description:**

Release location looking east. Photo taken at 8:00 AM 11/18.



**Photo: 2**

**Description:**

Release location looking southwest.



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**Photo: 3**

**Description:**

South end of the impacted area looking north towards the release location. Maximum extents were determined by wet soil and surveyed by a professional surveyor.



**Photo: 4**

**Description:**

Impacted area looking south from the release location.



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**Photo: 5**

**Description:**

Hydro excavator working in the primary excavation area to locate the pipeline failure.



**Photo: 6**

**Description:**

The failure in the pipeline. Deformed Thermoflex 6" pipe.



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**Photo: 7**

**Description:**

Surface scraping of impacted area to remove visible wet soil.



**Photo: 8**

**Description:**

Surface scraping of impacted area.



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**Photo: 9**

**Description:**

Looking south at the primary and secondary excavation areas on 11/18



**Photo: 10**

**Description:**

Primary excavation area after exposing failed pipeline. Day 2 of hydroexcavation 10/19/22.



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**Photo: 11**

**Description:**

Secondary excavation area after surface scrape looking south.



**Photo: 12**

**Description:**

Secondary excavation area after surface scrape looking southeast.



**Photo: 13**

**Description:**

Secondary excavation looking South. Following impacts with visual observations of impacts, as well as with a soil conductivity meter. Impacted soil was observed  $>4.0$  mmhos/cm on the darker soil on the right, and  $<0.5$ mmhos/cm in the lighter soil on the left.

12/20/22



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**Photo: 14**

**Description:**

Excavation and disposal of impacted soil on 12/20/22.



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**Photo: 15**

**Description:**

Final Site Conditions following excavation of 1,150 tons of soil on 12/20 and 12/21.



**Photo: 16**

**Description:**

Drilling investigation completed 2/9/2023



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**Photo: 17**

**Description:**

Drilling investigation  
completed 2/9/2023



**Photo: 18**

**Description:**

Drilling investigation  
completed 2/9/2023.  
Borings advanced to refusal  
in dense, dry claystone.



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**Photo: 19**

**Description:**

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Borings advanced to refusal in dense, dry claystone.



**Photo: 20**

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