

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.



Taproot – Pintail Lateral – Produced Water Release

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.



Taproot – Pintail Lateral – Produced Water Release

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.



Taproot – Pintail Lateral – Produced Water Release

Photo: 7

Description:

Surface scraping of impacted area to remove visible wet soil.



Photo: 8

Description:

Surface scraping of impacted area.



Taproot – Pintail Lateral – Produced Water Release

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.



Taproot – Pintail Lateral – Produced Water Release

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



Photo: 14

Description:

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



Taproot – Pintail Lateral – Produced Water Release

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



Taproot – Pintail Lateral – Produced Water Release

Photo: 17

Description:

Drilling investigation
completed 2/9/2023

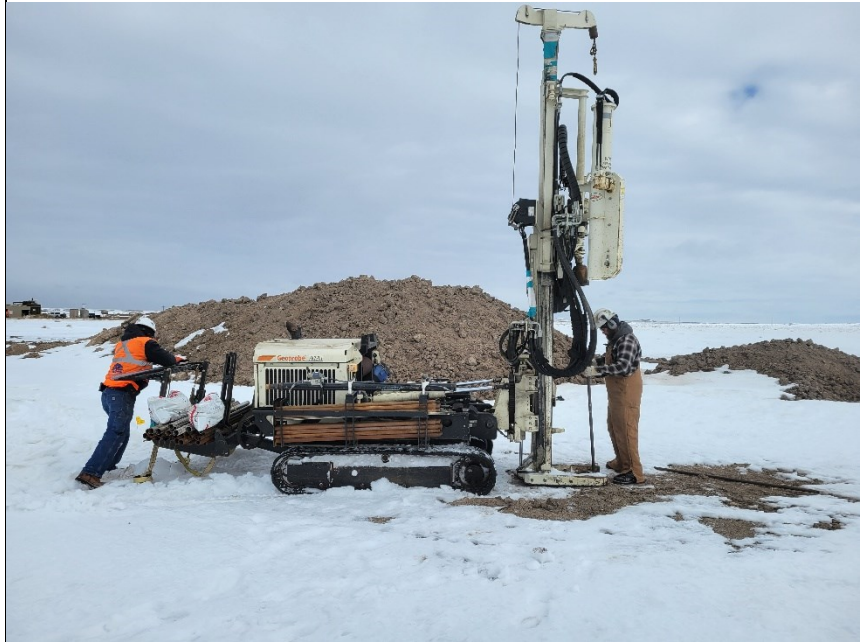


Photo: 18

Description:

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



Taproot – Pintail Lateral – Produced Water Release

Photo: 19

Description:

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



Photo: 20

Description: