OROGO Site Decommissioning Inspection Summary Report

Facility Information

Facility: Liard West

OA#: POA-2620-D-12-9 (Liard West Field)

Operator: Paramount Resources Ltd.

Site Representative (if applicable): D.Rock Oilfield Consulting & Contracting

Name: Rocky Arndt
Title: Construction Foreman

Location: West of Fort Liard, NT

H_2S site? ☒ Yes ☐ No

Facility status: Shut In

Details: Crews were actively pigging and decommissioning pipelines, disconnecting above ground pipelines from buildings, and removing associated debris from site.

Associated Well(s): Facilities decommissioning at K-29, M-25, F-25, and O-80
See Well Inspection Report Form dated: 2023-08-01

Inspection Date and Contact Information

Date of inspection: 2024-07-30

Access method: Vehicle

OROGO Inspectors: Brandon Bradbury and Mike Martin

Inspection Results

Facilities

Structures	Status: Being separated and disconnected from gas lines & electrical lines for offsite removal. Buildings have also been cut with a torch from all pilings so they can be hoisted and staged for removal. (Photo #1)
Pilings	Status: Some pilings have been removed to allow access to the buildings on site but the majority have been left in the ground until final reclamation of the land use area (Photo #2).
Above ground lines	Status: Actively being dismantled, insulation being removed from pipelines, and all above ground pipelines are being cut to an appropriate length with an excavator mounted shear. All above ground pipelines are being containerized into metal bins which are being actively removed on an ongoing basis to prevent accumulation on site (Photos #3 & #4).
Oil and gas processing equipment	Status: Equipment is being disconnected from above ground lines, and all electrical lines are being wrapped and safely secured inside the buildings (Photos #5 & #6). Equipment not purged to the facilities structure is being collected and staged for backhaul. Equipment attached to the structures have been emptied/purged and labeled and will remain in place until they reach the salvage location in Fort nelson (Photo #7).

Overall facilities decommissioning is: ☒ Acceptable ☐ Unacceptable ☐ Unacceptable but corrected onsite ☐ Not applicable	Comments: No concerns were noted with the facility decommissioning and it appears that the operator is progressing in an environmentally and safe manner.

Pipelines

Purging	Status:
Pigging	Status: Pipelines from all facilities (K-29, M-25, F-25) have been pigged to the junction (Photo #8), along with the pipeline from the junction point in Liard West to the Pointed Mountain Transboundary Pipeline (Photo #9). Waterlines have also been pigged to the O-80 water injection well. (Photo #10)
Plugging	Status: upon completion of pigging and confirmation that all product has me removed, pipelines are being cut where they turn in a horizonal direction and plugged and backfilled in place.
Burying	Status: No debris is being buried on site and capped pipelines are being backfilled. Ongoing backfilling and mounding is proposed for all capped pipelines below ground surface.
Overall pipelines decommissioning is: ☒ Acceptable ☐ Unacceptable ☐ Unacceptable but corrected onsite ☐ Not applicable	Comments:

Earthworks

Backfilling and mounding of holes	Status: During the pigging of the waterline to the F-25 site, the pig got stuck several times prompting the operator to perform earthworks to locate the pig. The operator utilized an excavator to dig up and pull sections of the waterline so that any remaining fluids in the pipeline could be recovered where the pig was stuck. As seen in Photos #11 & #12, the waterline was removed from the subsurface incrementally as to minimize ground disturbance during pipeline decommissioning.
Re-contouring	Status: The excavator was actively raking back ruts and recontouring disturbed areas where the waterline was removed (Photo #13). Open excavations near the junction points for the water lines and pipelines will be re-contoured and mounded.
Erosion mitigation/management	Status: No concerns were noted with erosion mitigations and management on site.
Overall earthworks are: ☒ Acceptable ☐ Unacceptable ☐ Unacceptable but corrected onsite ☐ Not applicable	Comments:

Waste Storage and Removal

Containment	Status: Waste metals and sections of above ground pipelines are being cut into appropriate lengths (Photo #14) and stored in metal bins (Photo #15), all other waste on site is being consolidated on the ground surface until the appropriate waste bin arrives on site for removal (Photo #16). Liquid liabilities such as hydrocarbons and produced water are all being removed for proper offsite disposal at an authorized facility at the earliest opportunity (Prior to fall 2024). All remaining waste and debris is planned to be containerized, removed from site and barged across Liard River to an authorized disposal facility.
Identification	Status: No concerns were noted with proper identification on waste items.
Inventory	Status: An inventory of all items is being logged and tracked.
Staging	Status: Waste items are consolidated and staged either on site at the K-29, M-25 and F-25 sites or in appropriate disposal bins.
Disposal	Status: It Is anticipated that all manageable waste items will be removed for proper offsite disposal at an authorized disposal facility.
Overall waste storage and removal is: ☒ Acceptable ☐ Unacceptable ☐ Unacceptable but corrected onsite ☐ Not applicable	Comments: Waste segregation, labelling and removal is ongoing and no concerns were noted. Vertical tanks containing Methanol, Diesel, etc have been emptied with a vac truck and all contents removed from the land use area (Photo #17). Access hatches on the tanks were also opened confirming the tanks were empty. These items have been listed in a manifest to log all liquid liabilities removed from site which will be provided to Inspectors.

Site Cleanliness

Waste separated by type and labelled	Status: Waste was being segregated.
Evidence of improper containment of waste (for ex., staining, spills)	Status: During the pigging and containment of fluids from the waterlines at the junction. The 60m3 vertical tank viewed in Photo #18 was overtopped and hydrocarbons (<100L) spilled into the underlying soils. This concern was identified on site by the Inspectors along with residual staining directly underneath the connection point to empty the tank (Photo #19). The near-miss summary report (NM-2024-001-PAR-POA-2620-D-12-9) submitted on August 12, 2024 details steps that must be followed to remediate impacts and prevent this from occurring during future operations.
Debris consolidated, staged, and disposed of	Status: No concerns were noted with the consolidation of staged debris since it was being removed for proper offsite disposal on a regular basis to prevent accumulation on site.
Overall site cleanliness is: ☒ Acceptable ☐ Unacceptable ☐ Unacceptable but corrected onsite ☐ Not applicable	Comments: Personnel were actively removing debris, waste metals, and drip trays were placed under fittings while being disconnected.

Personnel Safety

Valid safety tickets ☒ First Aid / CPR ☐ H2S ☐ WHIMS ☐ TDG ☐ Other (specify in comments)	☒ Compliant ☐ Non-Compliant ☐ Corrected Non- Compliance	Comments:
Safety meetings and documentation	☒ Compliant ☐ Non-Compliant ☐ Corrected Non- Compliance	Comments: Safety meetings were occurring every morning at the camp.
Personal Protective Equipment (PPE)	☒ Compliant ☐ Non-Compliant ☐ Corrected Non- Compliance	Comments: Personnel were all wearing their PPE during the Inspection.
First Aid equipment and/or EMS on site and accessible	☒ Compliant ☐ Non-Compliant ☐ Corrected Non- Compliance	Comments: EMS was on site central to all active operations.
Gas detection equipment on site and accessible	☐ Compliant ☐ Non-Compliant ☐ Corrected Non- Compliance	Comments: Personal 4 head monitors (H_2S, CO, LEL, <18% O_2) were being used by staff on during the Inspection.
Communication plans available	☒ Compliant ☐ Non-Compliant ☐ Corrected Non- Compliance	Comments:
Hazard identification and signage	☒ Compliant ☐ Non-Compliant ☐ Corrected Non- Compliance	Comments: Hazard identifiers were placed in a visible location (Photo #20) and overhead hazard signs and delineators were also placed near the crane during hoisting operations.
ERP available upon request	☒ Compliant ☐ Non-Compliant ☐ Corrected Non- Compliance	Comments:
Safety Plan available upon request	☒ Compliant ☐ Non-Compliant ☐ Corrected Non- Compliance	Comments:

Other Personnel Safety notes:

Safety Plan

Compliant? ☒ Yes ☐ No Comments:

Environmental Protection Plan

Compliant? ☒ Yes ☐ No Comments:

Emergency Response (Contingency) Plan

Compliant? ☒ Yes ☐ No Comments:

Authorization and Approvals

Following program as approved? ☒ Yes ☐ No Comments:

Meeting all conditions? ☒ Yes ☐ No Comments:

Other Documents Requested / Received During Inspection

☒ Maps and records of gathering system
☐ Other documents (as follows):
Maps of the decommissioned gathering system indicating location of existing line, areas of removal and plugging will be provided in Paramount Operations report in the fall of 2024.

Photographs

Number of photographs attached: 20

Additional Comments / Observations

This inspection was conducted under the *Oil and Gas Operations Act* and associated regulations.

Name: Brandon Bradbury

Designation: Safety/ Conservation Officer

ID number:

Date: 2024-08-16

Signature:

Name: Michael Martin

Designation: Chief Conservation/Chief Safety Officer

ID number:

Date: 2024-08-16

Signature:

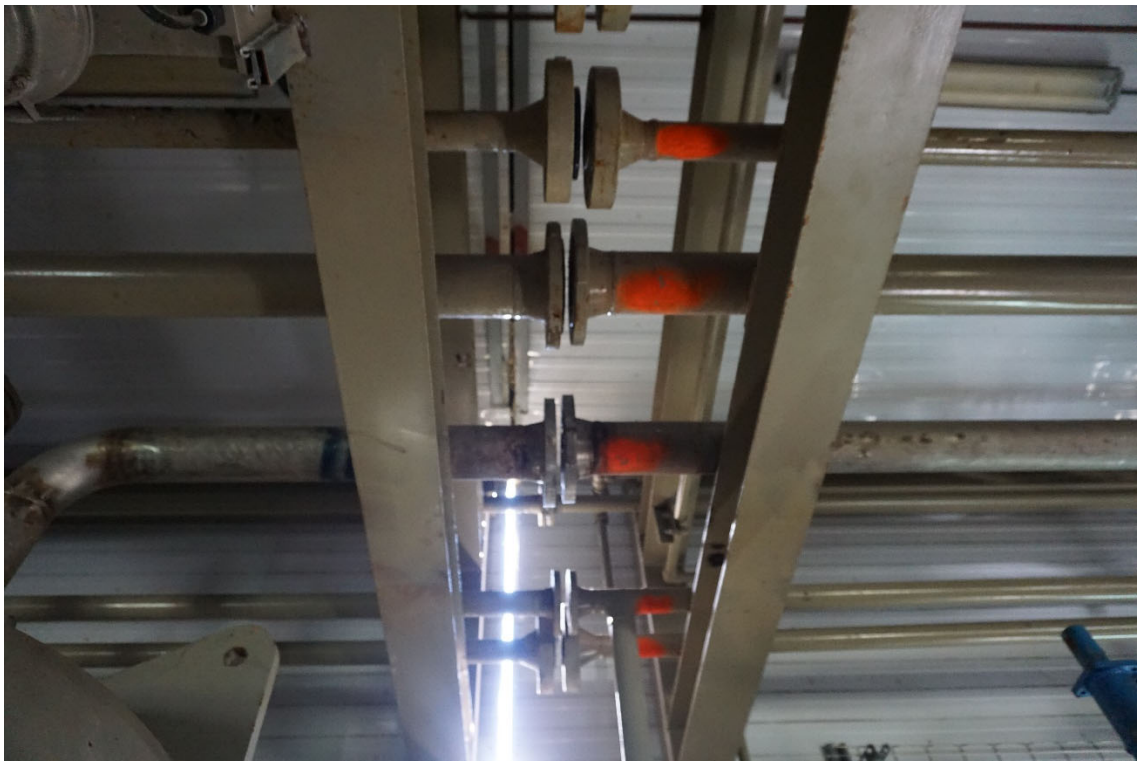

Photo #1: Pipelines inside buildings have been disconnected along with the walls and floor of the building.

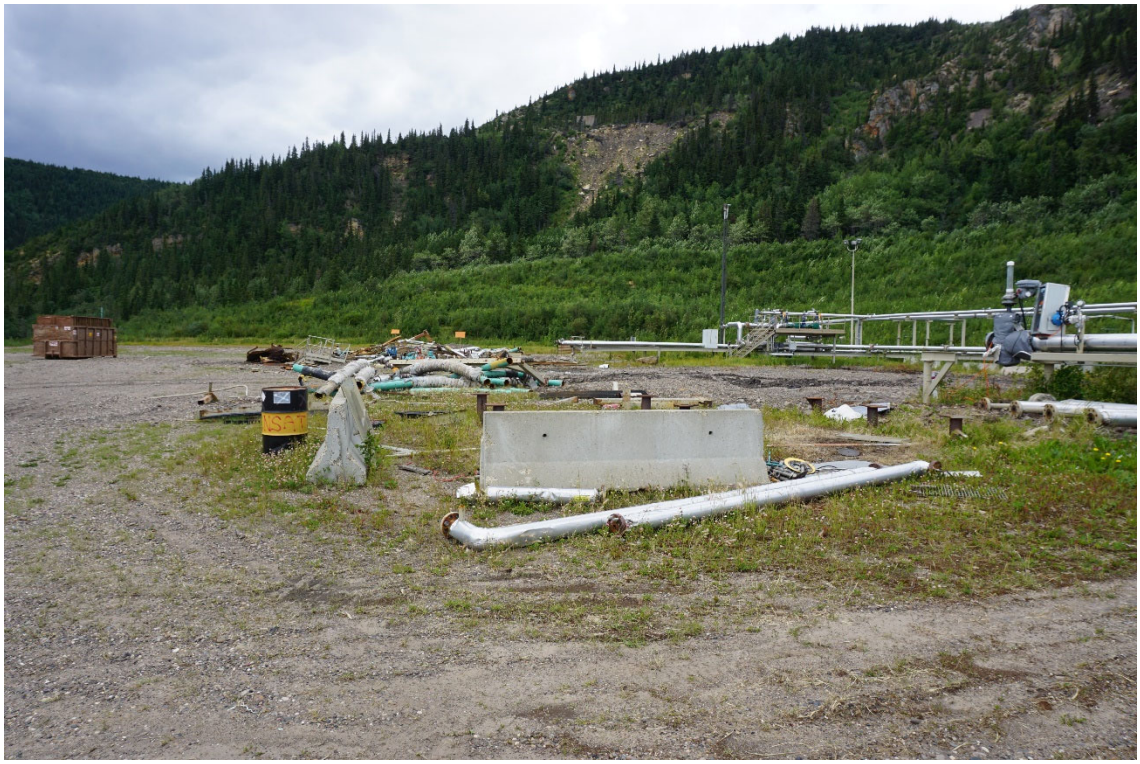

Photo #2: Waste items have been consolidated on site until waste bins arrive for proper offsite disposal. Remaining Pilings can be seen in place for future removal.

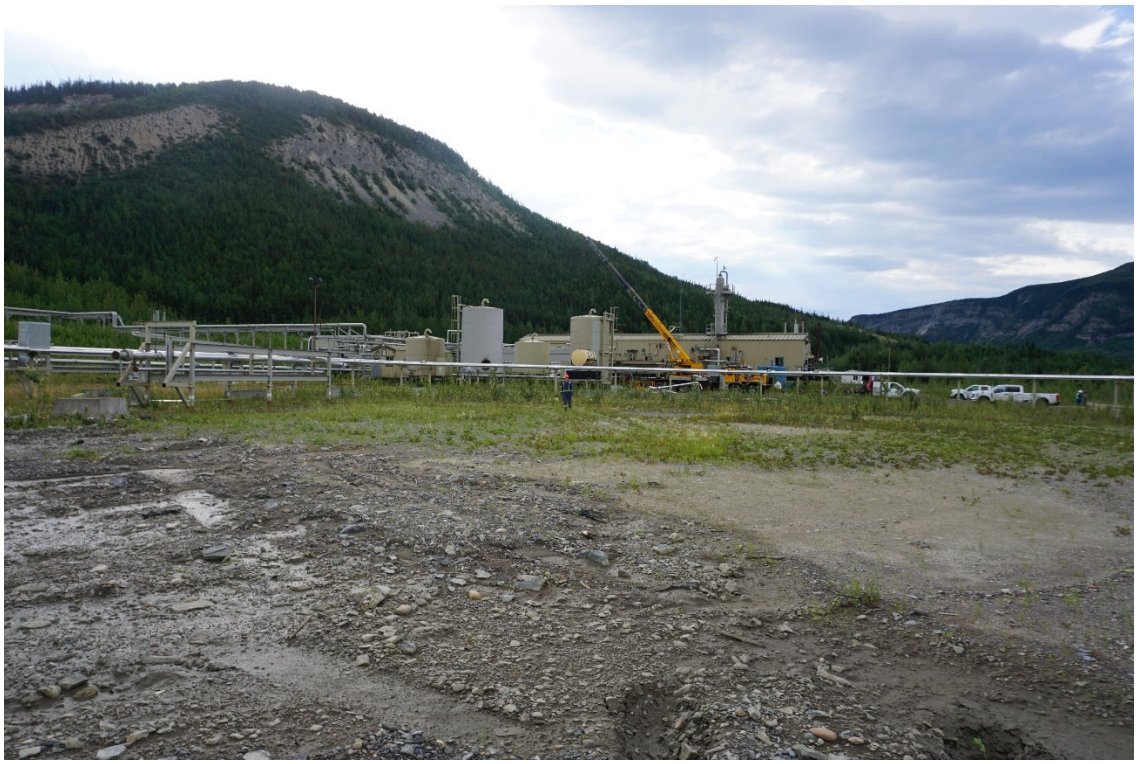

Photo #3: Above ground pipelines are being dismantled.

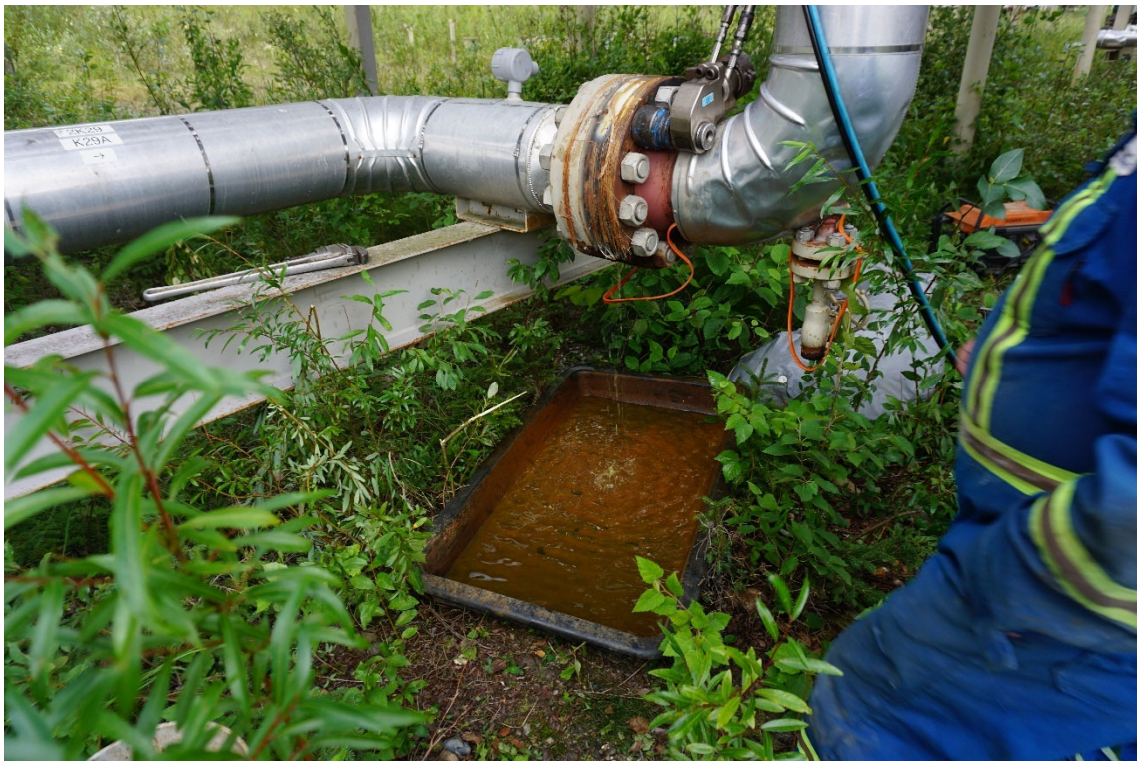

Photo #4: Drip trays were present underneath disconnected lines to prevent impacts to the underlying soils.

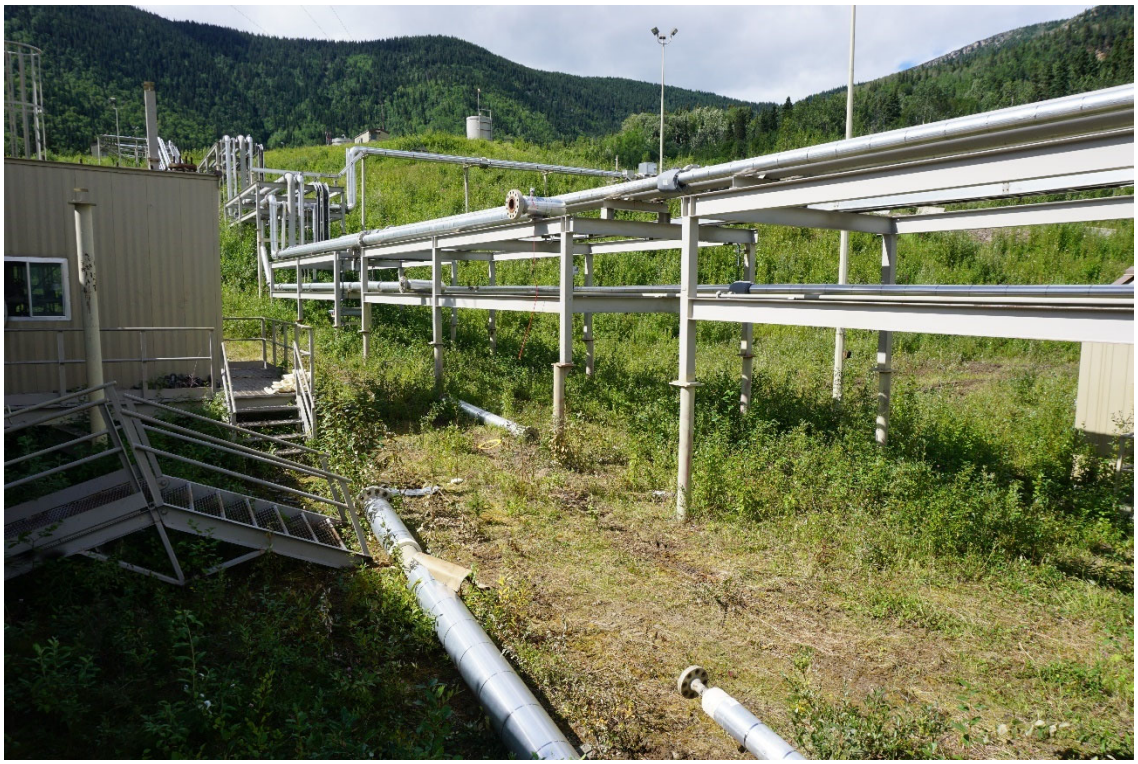

Photo #5: Above ground lines at the F-25 site have been disconnected from the separator buildings.

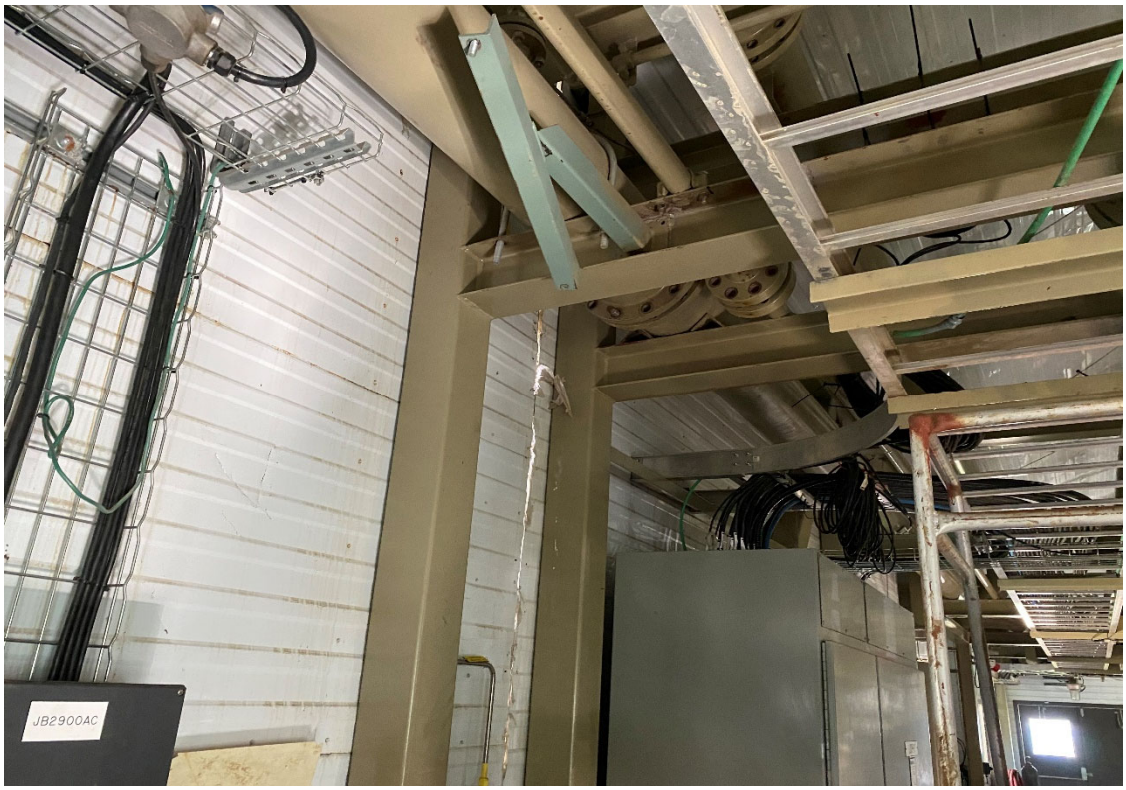

Photo #6: Electrical lines are disconnected and wrapped neatly inside the buildings.

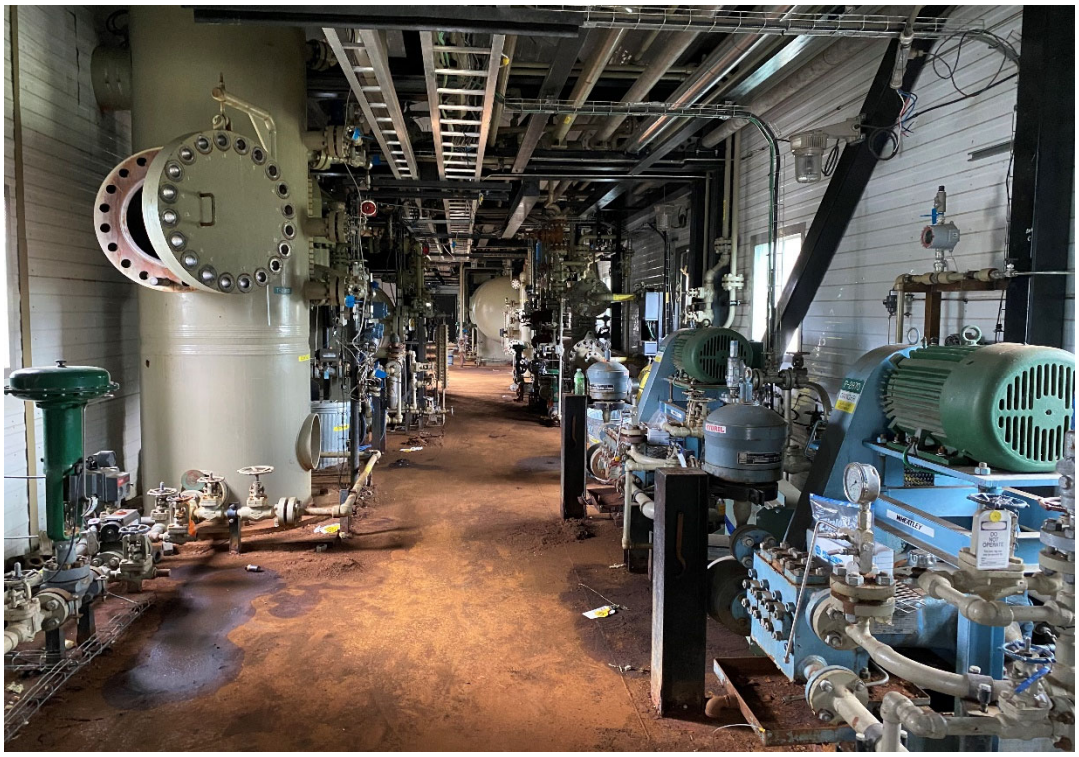

Photo #7: View of the inside of a purged and plugged building that has been disconnected from the outside above ground pipelines.

Photo #8: Waterlines at the junction that leads to the O-80 Injection well. And Pipelines from the Liard West field that lead to the South Pointed Mountain pig receiver. This hole will be refilled and mounded to prevent the ponding of water.

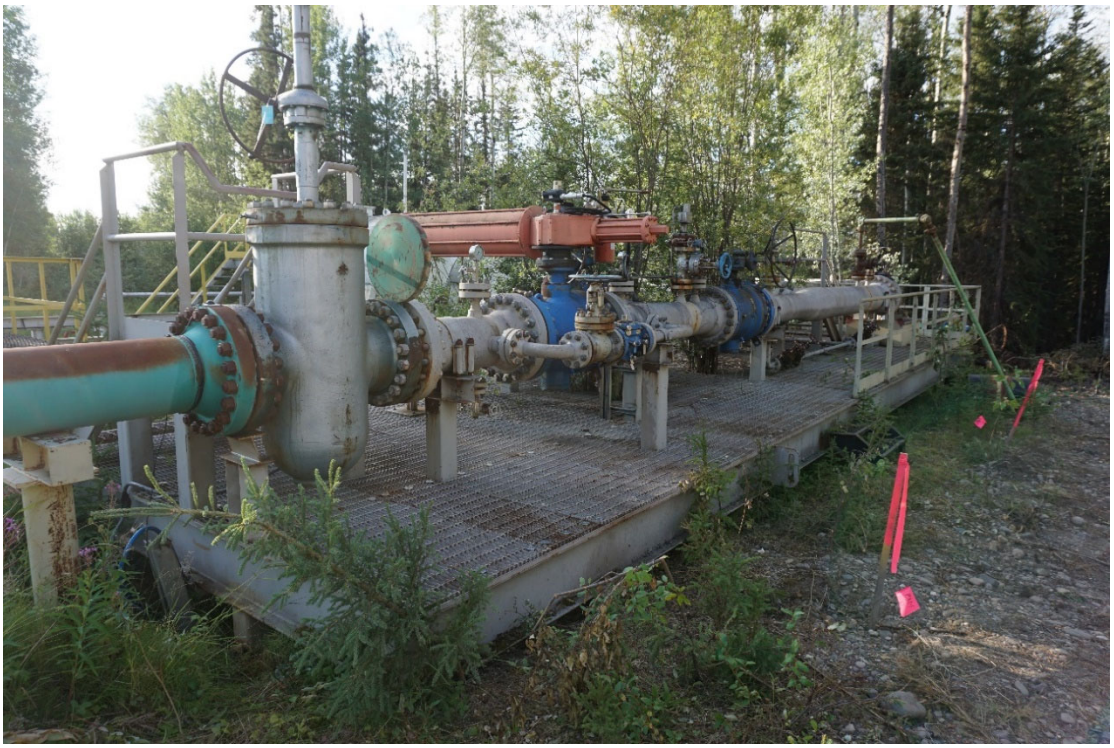

Photo #9: View of the South Pointed Mountain pig receiver. The pipeline from the Liard West Field ties into the South Pointed Mountain transboundary pipeline at this location.

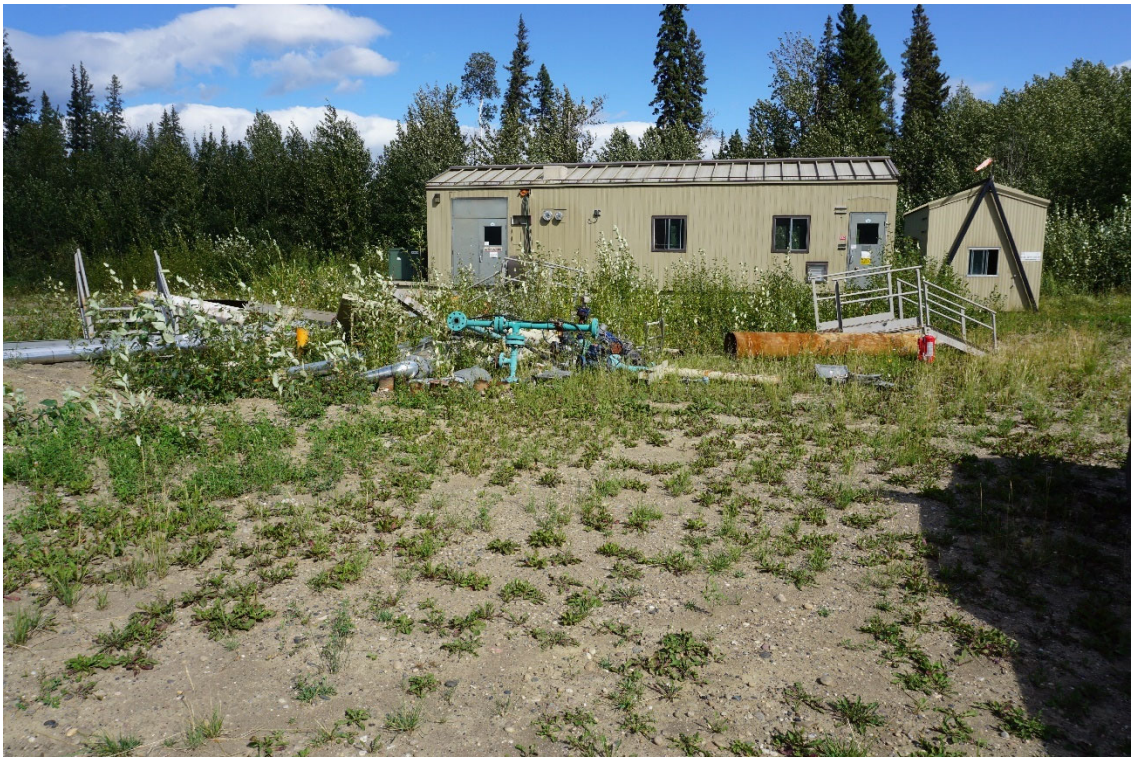

Photo #10: View of the consolidated waste at the O-80 water injection well that will be removed.

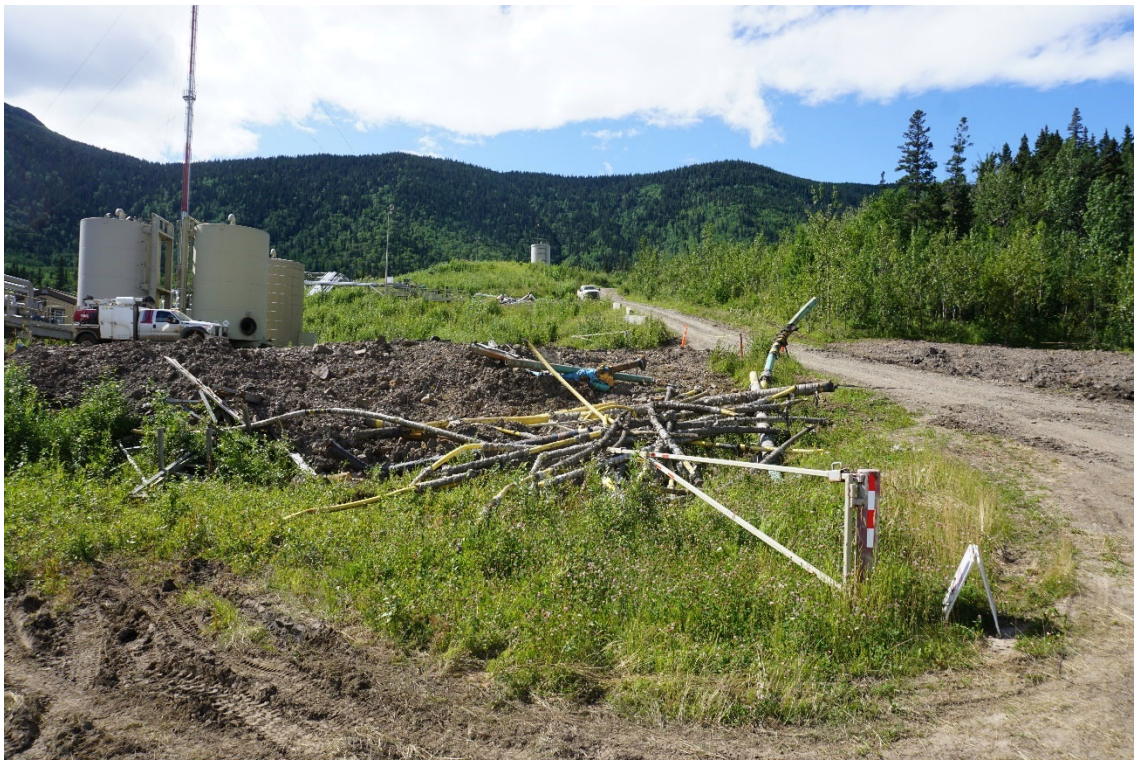

Photo #11: Waterline was removed from the ground and staged at the F-25 site.

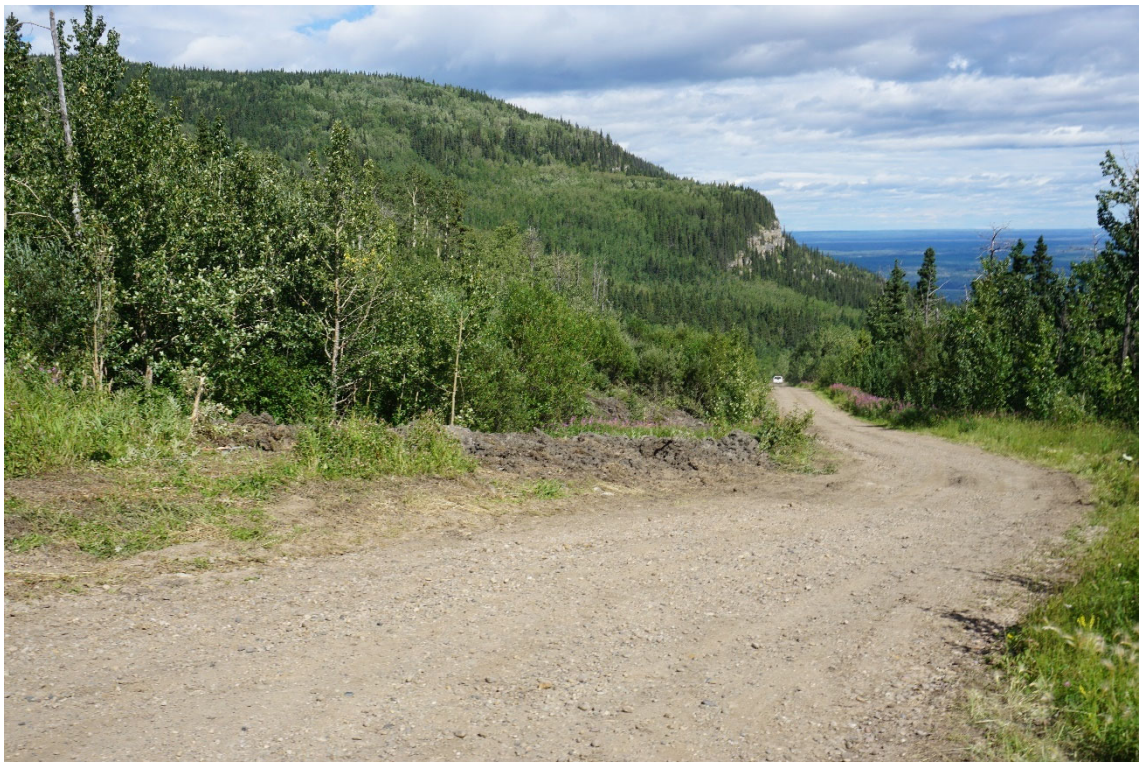

Photo #12: Water pipeline was removed laterally in sections to minimize ground disturbance.

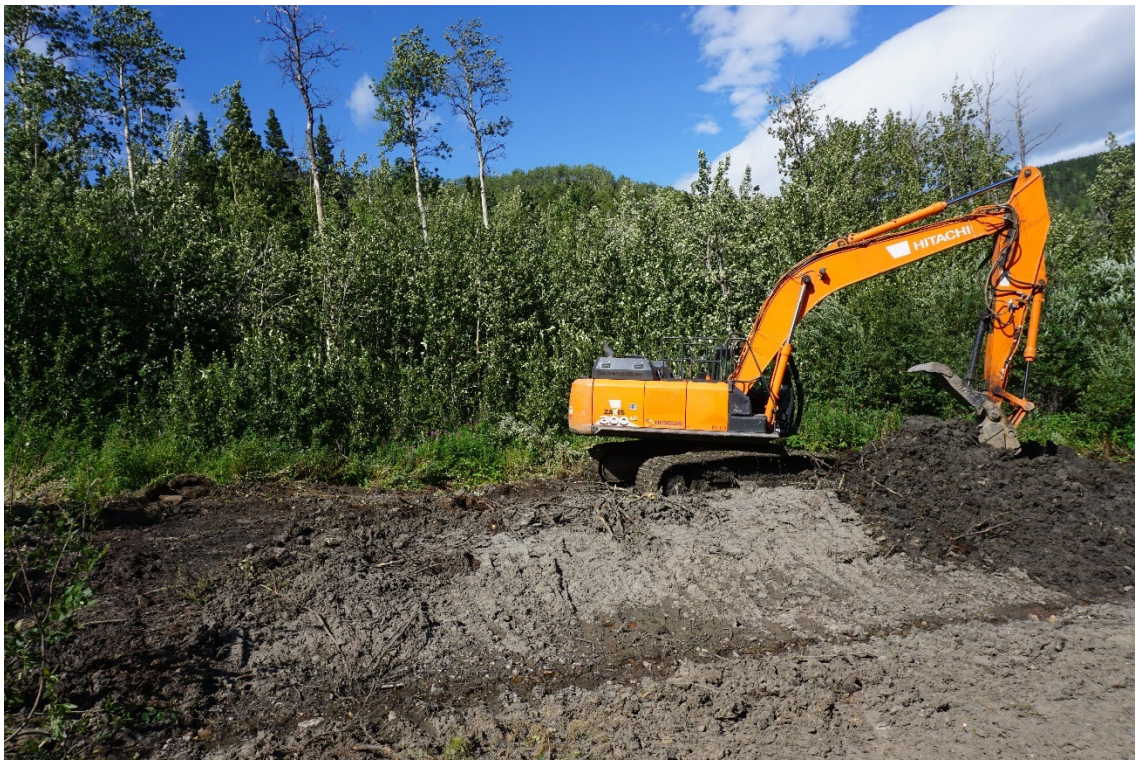

Photo #13: The areas under the waterline extraction points were re-contoured.

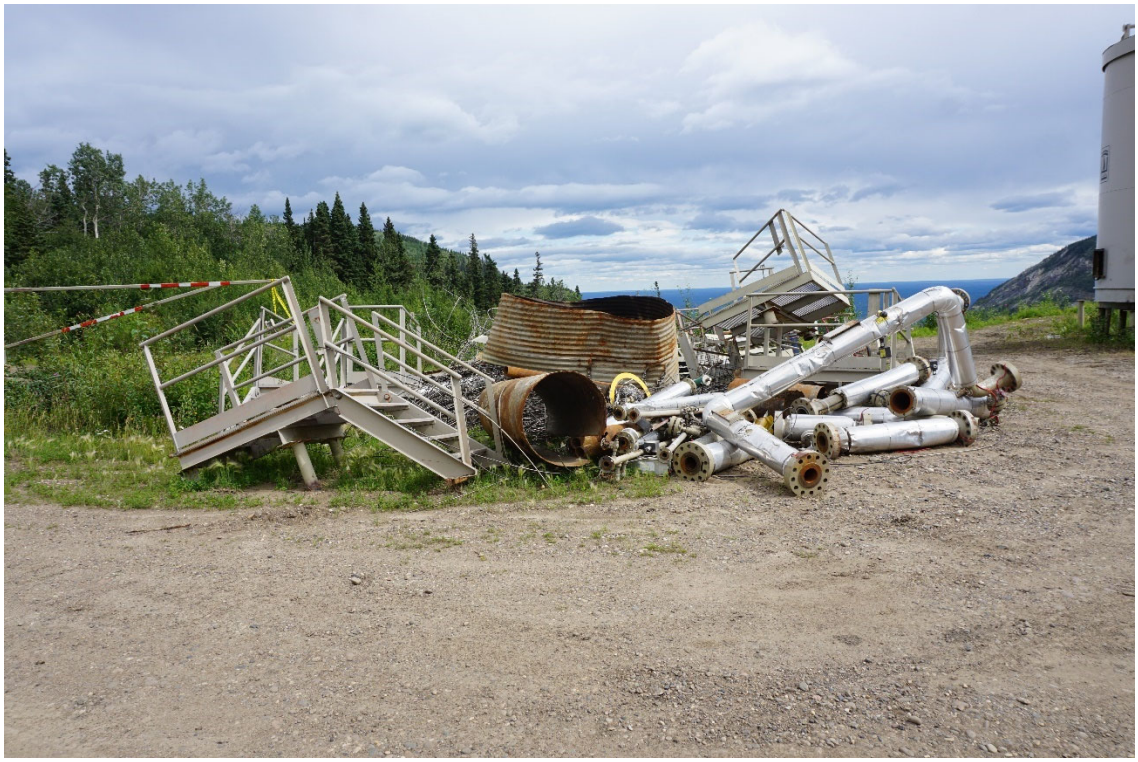

Photo #14: Waste metals staged on the F-25 site awaiting metal bins for proper offsite disposal.

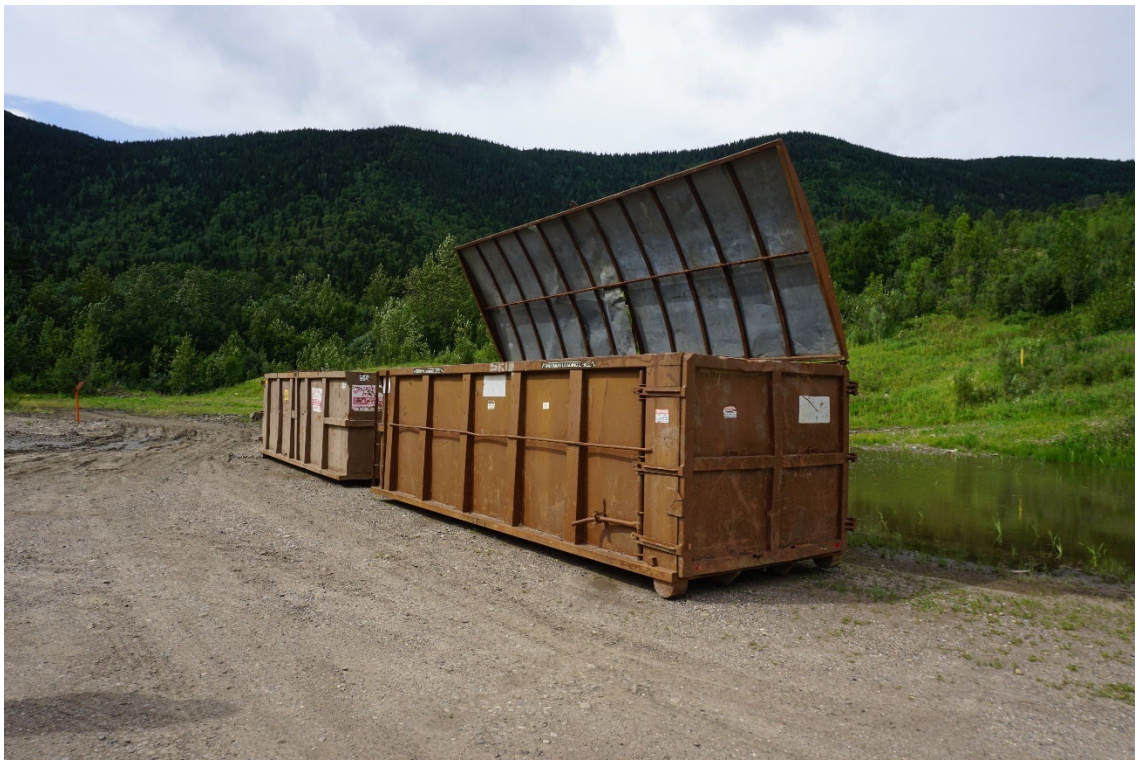

Photo #15: Metal bins staged on the F-25 site for the proper disposal of various waste metals on site.

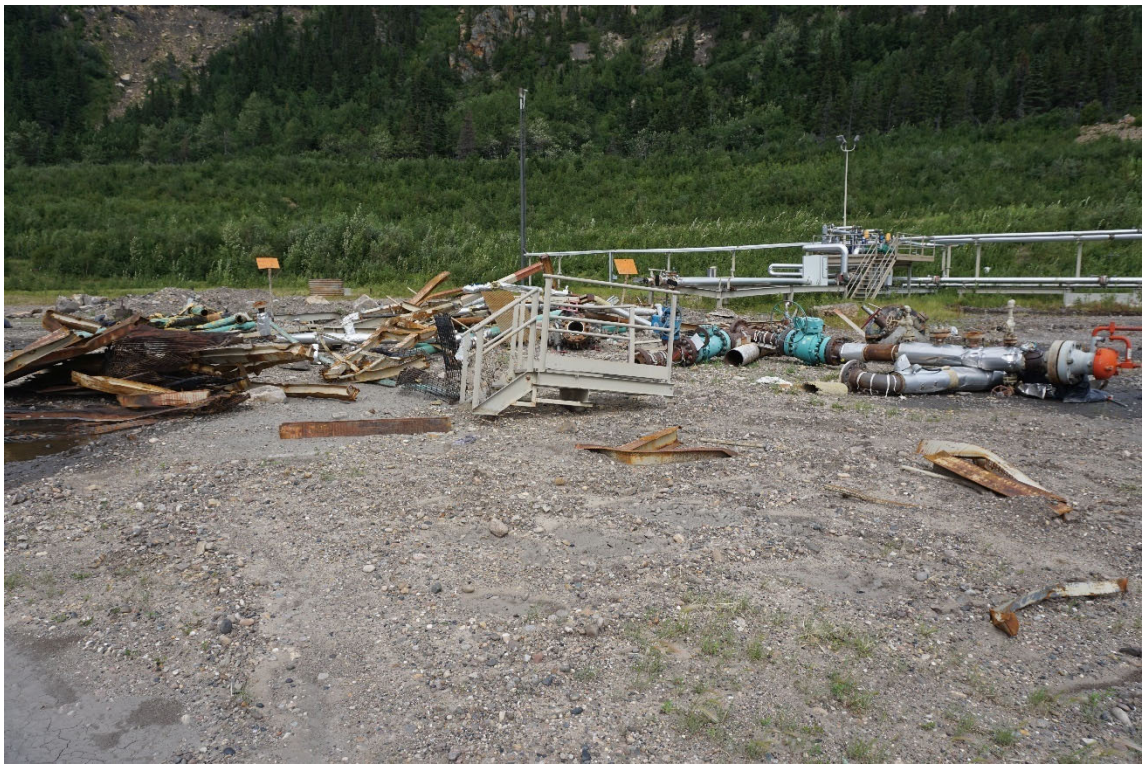

Photo #16: Waste is scattered around on the M-25 site but is planned to be placed into metal bins and removed as soon as they arrive on site.

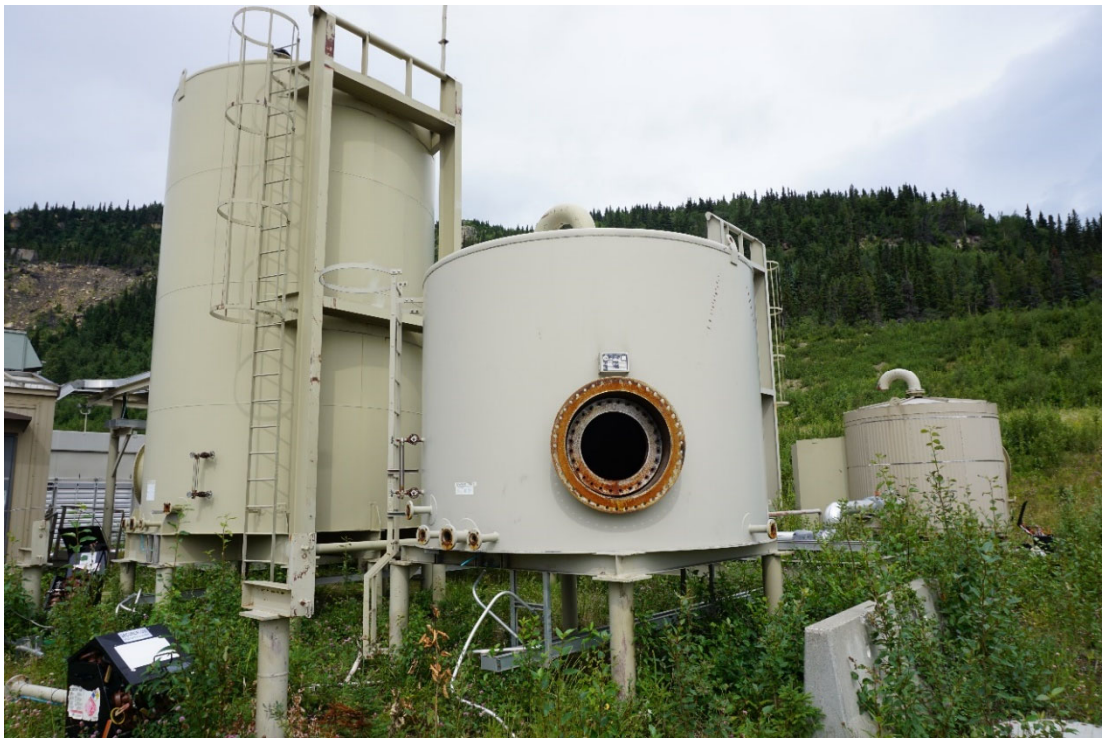

Photo #17: Vertical tanks containing Methanol, Diesel, etc have been emptied with a vac truck and access hatches opened to ensure all fluids have been removed.

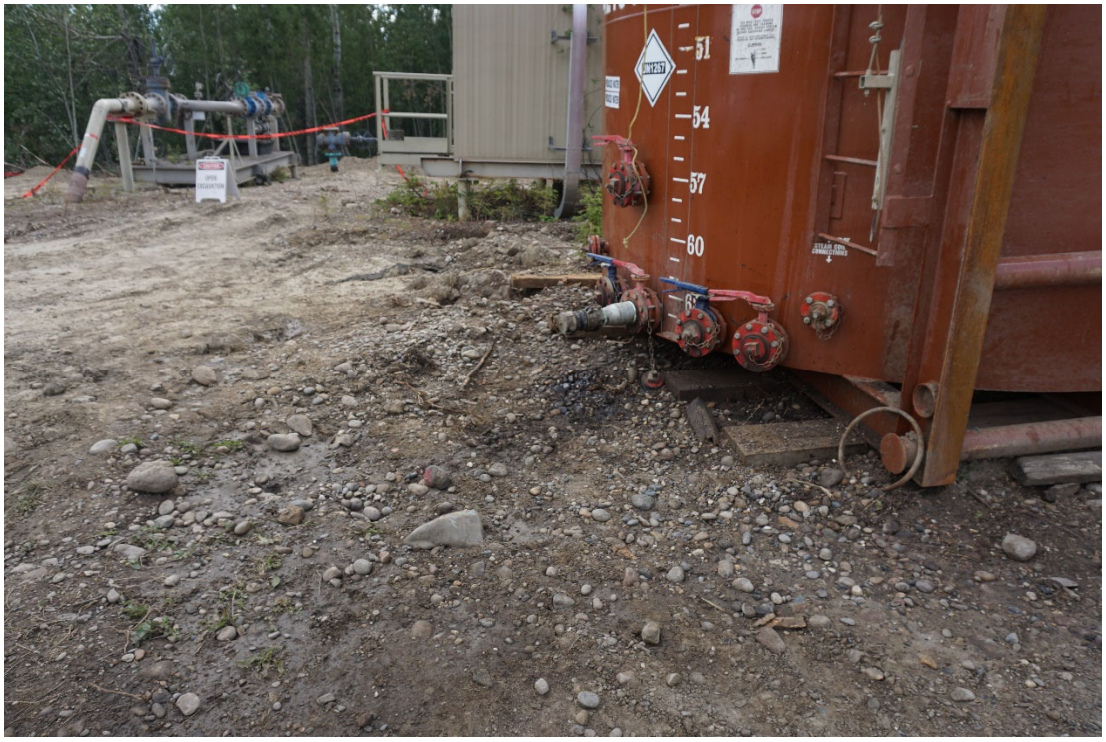

Photo #18: Vertical tank containing water and hydrocarbons from pigging operations was overtopped and hydrocarbons have impacted the underlying soils. This concern was discussed on site and contaminated soils will be excavated, containerized, and removed for proper offsite disposal prior to the end of operations.

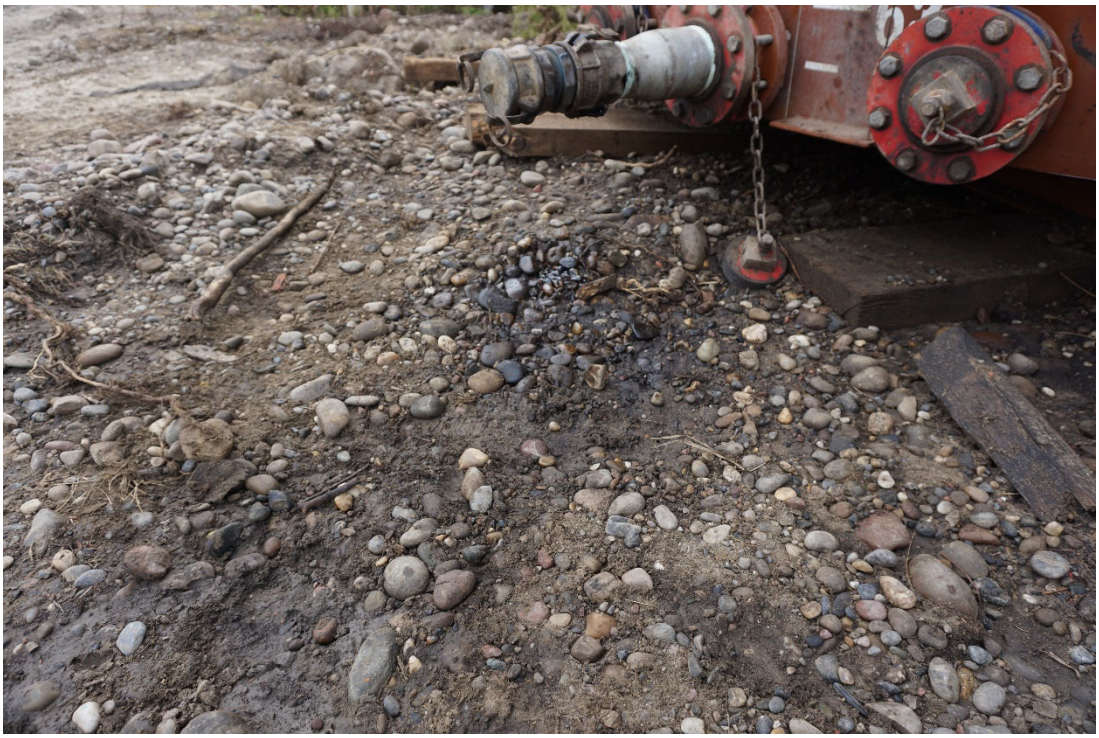

Photo #19: Drip trays must be utilized under all fluid transfer points to reduce the likelihood of hydrocarbon impacts to the underlying soils.

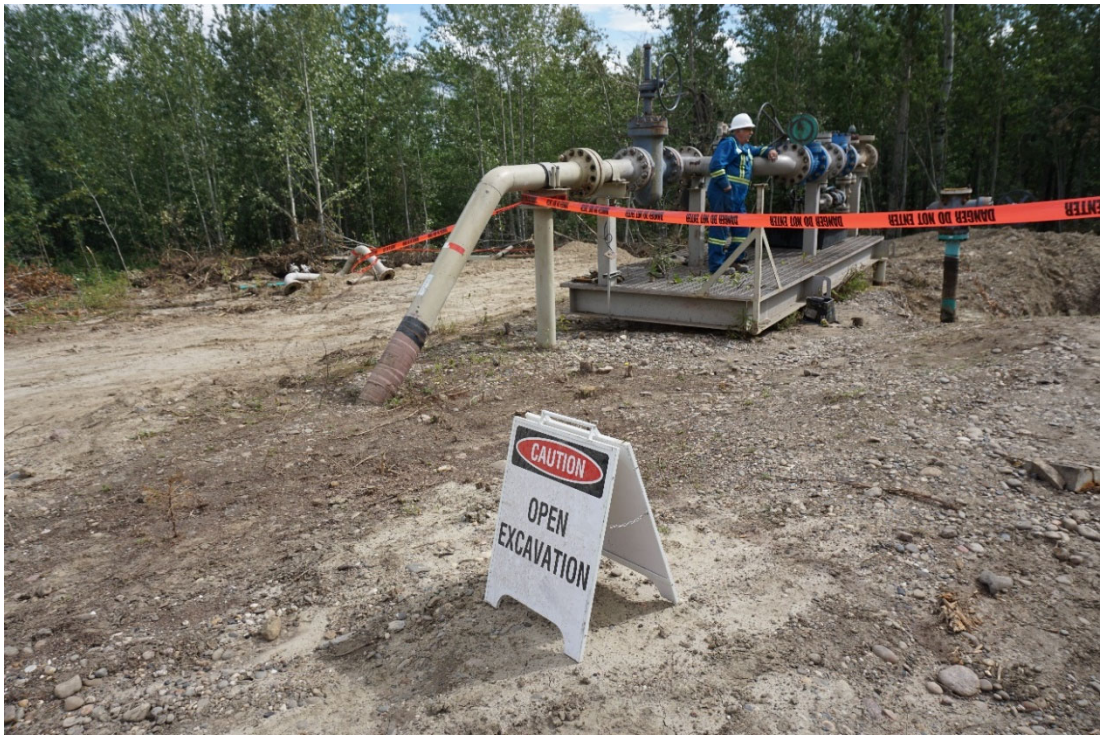

Photo #20: Hazard identifiers were present during the inspection.