



Greens Creek Mine Field Inspection Report

Inspection Date: September 23, 2025
Time: 7:30 AM to 2:30 PM
Weather: Overcast with low clouds and scattered rain showers in the morning clearing to broken cloud cover in the afternoon. Slight breeze throughout most of the day with an average temperature of 45°F.
DNR Personnel: Aaron Kruse, William Groom, Erika Alexander, Jonathan Kummer
ADF&G Personnel: Greg Albrecht
Hecla Personnel: Jennifer Stoutamore, Sierra Kryzer
Inspection Objectives: Site Inspection

Operations:

The Greens Creek Mine is an underground polymetallic mine located approximately 18 miles southwest of Juneau on the northwest side of Admiralty Island within the Tongass National Forest. Hecla Greens Creek Mining Company (HGCMC) is the operator of the mine, a wholly owned subsidiary of Hecla Mining Company with 100% interest.¹ The mine's operational footprint resides both on private property and federal lands, including unpatented claims located within the Admiralty Island National Monument. Greens Creek Mine is the largest underground silver mine in the U.S. producing 8.7 Moz Silver, 59.3 Koz Gold, 18.2 Ktons Lead, and 51.3 Ktons Zinc in 2025.²

The Greens Creek deposit is a complex polymetallic, stratiform massive sulfide system hosted within deformed marine sedimentary and mafic to ultramafic volcanic and plutonic rocks. Underground operations produce approximately 2,300 tons of ore per day utilizing two primary mining methods: cut-and-fill and long-hole stoping.³ These mining methods are supported by a trackless underground fleet enhancing operational efficiency and flexibility in ore extraction. Extracted ore is transferred to the surface mill for processing through the SAG and ball mills, floatation circuits for base-metal-rich sulfide recovery, and gravity separation for precious metals generating approximately 1,800 tons of tailings per day. About 50% of the tailings are mixed with cement and used as backfill underground disposal with the rest of the tailings placed above ground in the Tailings Disposal Facility (TDF).⁴

¹ HGCMC. (2020). *General Plan of Operations*. Greens Creek Mine Admiralty Island, Alaska. Available at DNR's Large Mine Webpage: [Hecla Greens Creek Mining Company - General Plan of Operations](#)

² Hecla Mining Company. (2026). *Greens Creek, AK*. Online overview of operations, history, resources, and local insights. Retrieved: May 27, 2026. <https://www.hecla.com/operations/greens-creek-alaska>

³ *Id.*

⁴ *Ibid.* HGCMC. (2020).

Field Inspection Plan, Execution and Summary Schedule:

The Alaska Department of Natural Resources (DNR) primary objectives for this field inspection were to inspect areas of active disturbance, construction, waste rock storage (WRS), reclamation, and water management (Map 1). Additionally, the inspection plan was designed to allow for selecting additional sites to inspect in an opportunistic fashion, and as time allowed. DNR conducts site inspections to ensure compliance with Green Creek's Reclamation Plan Approval (J20202682RPA.01), as required under AS 27.19 and 11 AAC 97. The United States Forest Service (USFS) is the lead agency regarding mining activities in the Tongass National Forest and Admiralty Island National Monument.

DNR staff arrived via crew boat at Young Bay Dock at approximately 6:00 AM. From there, crew buses transported DNR personnel via the A-Road to the Hawk Inlet Facility where we met with Hecla personnel before attending a safety brief of the mine site and its facilities. Afterwards, DNR staff had a short meeting with Jennifer to review the inspection plan for the day and to address any additional questions or concerns regarding current mining operations.

The inspection began at 7:30 AM by traveling from Hawk Inlet Facility, along the B-Road, to the 1350 Portal located above the 920 mine/mill area. Traveling back along B-Road, DNR stopped at Site 23 and Site E to document the area with a drone (Map 2). The inspection continued along the A-Road, driving to MP 2.2 before turning around near proposed culvert replacement. Working our way back, DNR stopped at Pit 7, and Sand Pit. The last area of focus was visiting the Tailings Disposal Facility (TDF), Ponds 7 and 10, and active construction activities for the TDF expansion just off the B-Road (Map 3). Two drone flights were required at the TDF to document the entire area and its facilities.

Findings:

A summary of findings can be found below with a description of active sites that were visited. Detailed route maps with areas of interest, including photos of all inspected sites with observations notes are in Appendix A.

1. Inspection of Active Areas of Disturbance and Reclamation

- 1.1. Observations at the 1350 Portal reflect active water management consistent with long-term closure plans for drainage control and portal decommissioning (Photo 1). The collection pond contained standing water at the time of inspection. This water drains into the underground workings and is tested regularly. The portal and related infrastructure appeared in good condition and well maintained; however, there was water ponded within the entrance to the portal (Photo 2).
- 1.2. Site 23 Waste Rock Storage (WRS) has had a consistent footprint of disturbance, even with ongoing deposition of class 1, 2, and 3 waste rock. Waste rock, type 2-3 material, is planned for relocation underground, or transported to the TDF for disposal at mine closure.⁵ No active depositional work was observed at time of inspection. A dozer was onsite across the access road from a burn pile of pallets and wood shipping container debris (Photo 3). Storm water ponds are partially full along the Site 23 access road. Surface water runoff is managed through a series of pipes and ditches which flow to the Site 23 water management pond.⁶ Lower slopes have been contoured to an angle of repose with well-established vegetative growth (Photo 4).

⁵ HGCMC. (2019). *General Plan of Operations Appendix 14 Reclamation and Closure Plan*. Section 6.6, Pg. 14-24. Available at DNR's Large Mine Webpage: [Hecla Greens Creek Mining Company - General Plan of Operations](#)

⁶ HGCMC. (2019). *General Plan of Operations Appendix 11 Waste Rock Management Plan*. Section 3.3, Pg. 11-10. Available at DNR's Large Mine Webpage: [Hecla Greens Creek Mining Company - General Plan of Operations](#)

- 1.3. Site E is currently used for storage of aggregate road material, equipment, and explosives. Partial grading was observed along the periphery of the site along its western and northern edges (Photo 5). No seeding was observed along the contoured portions; however, this area may still be used as a future laydown yard.
- 1.4. Pit 7 has consistently remained unchanged from previous inspections. Primarily, this site is used for storage of stockpiled aggregate, including super sacks filled with finer material, and metal piping (Photo 6). Reclamation of slopes shows good vegetative growth and are stable. The toe of the slope has been excavated to enlarge the pad area and has remained stable (Photo 7). The overall site condition is well maintained with good vegetative growth on the slopes leading up to the old rock quarry highwall (Photo 8).
- 1.5. Sand Pit, located at 1.4 A-Road, has remained consistent in size and scope with little change from previous inspections. Its primary use is a laydown yard where culverts, piping, and other construction materials are stored (Photo 9). Partial reclamation along the slopes surrounding the site is well vegetated since they were reseeded over half a decade ago and are in stable condition. Water within the pit was observed to be well below the spillway along the western extent of the facility adjacent to A-Road (Photo 10). Field conditions confirm partial reclamation consistent with the site's operational role as a reclamation-material reserve.⁷
- 1.6. Atop the TDF, active tailings deposition was observed via drone. A dozer was spreading material next to a roller to create the next lift while an excavator moved Jersey barriers lining the access route for haul trucks (Photo 11). Current slope geometry has been graded 3:1 on the east, south, and west faces of the TDF as part of reclamation efforts (Photo 12), matching documented closure design specifications.

Wind fencing was observed along the haul truck access route and along the eastern edge of the TDF as part of the operations fugitive dust control efforts (Photo 13). Initial grubbing was under way just north of the TDF on the west side of the B-Road in preparation to begin construction for its expansion next season (Photo 14). Several active material sites were observed to be well kept and organized located within the northeastern end of the TDF and one larger stockpile just off the east side of B-Road opposite the TDF (Photo 15).

2. Water Management

- 2.1. Potable Water Treatment Facility, near the 920 Portal, with walkways to Greens Creek for sampling are in good condition and well maintained (Photo 16). Active treatment matches the documentation emphasis on sustained water treatment needs for the mill and surrounding buildings during operations.
- 2.2. At the time of inspection, a major storm event had precipitated above average rainfall. Pond 7 freeboard was noted to be just below the culverts that connect to Pond 10. Free standing water was seen ponding in half of Pond 10, a fraction of its total storage capacity (Photo 17).
- 2.3. DNR staff stopped briefly at the potable water draw for Hawk Inlet Camp facilities. This area was well kept and maintained with proper signage (Photo 18).
- 2.4. Lined storm water runoff ditching around the TDF is mostly clean of debris and overall, well maintained. No standing water was observed within ditches along the periphery of TDF viewed via drone (Photo 19).

⁷ HGCMC. (2019). *General Plan of Operations Appendix 14 Reclamation and Closure Plan*. Section 6.2, Pg. 14-19. Available at DNR's Large Mine Webpage: [Hecla Greens Creek Mining Company - General Plan of Operations](#)

2.5. MP 2.2 along the A-Road and access to Pit 7 are two locations scheduled for culvert replacement to improve fish habitat. Work has not begun, but replacement culverts have been delivered to each location (Photos 20 and 21)

Conclusion and Recommendations:

HGCMC facilitates their mining activities in a manner which prevents unnecessary and undue degradation of private and Federal lands and State water resources. All observed activities conform with the Reclamation Plan Approval, and current activities meet the state's requirements under AS 27.19 and 11 AAC 97. DNR finds Greens Creek Mine operations are in good condition and consistent with industry standards.

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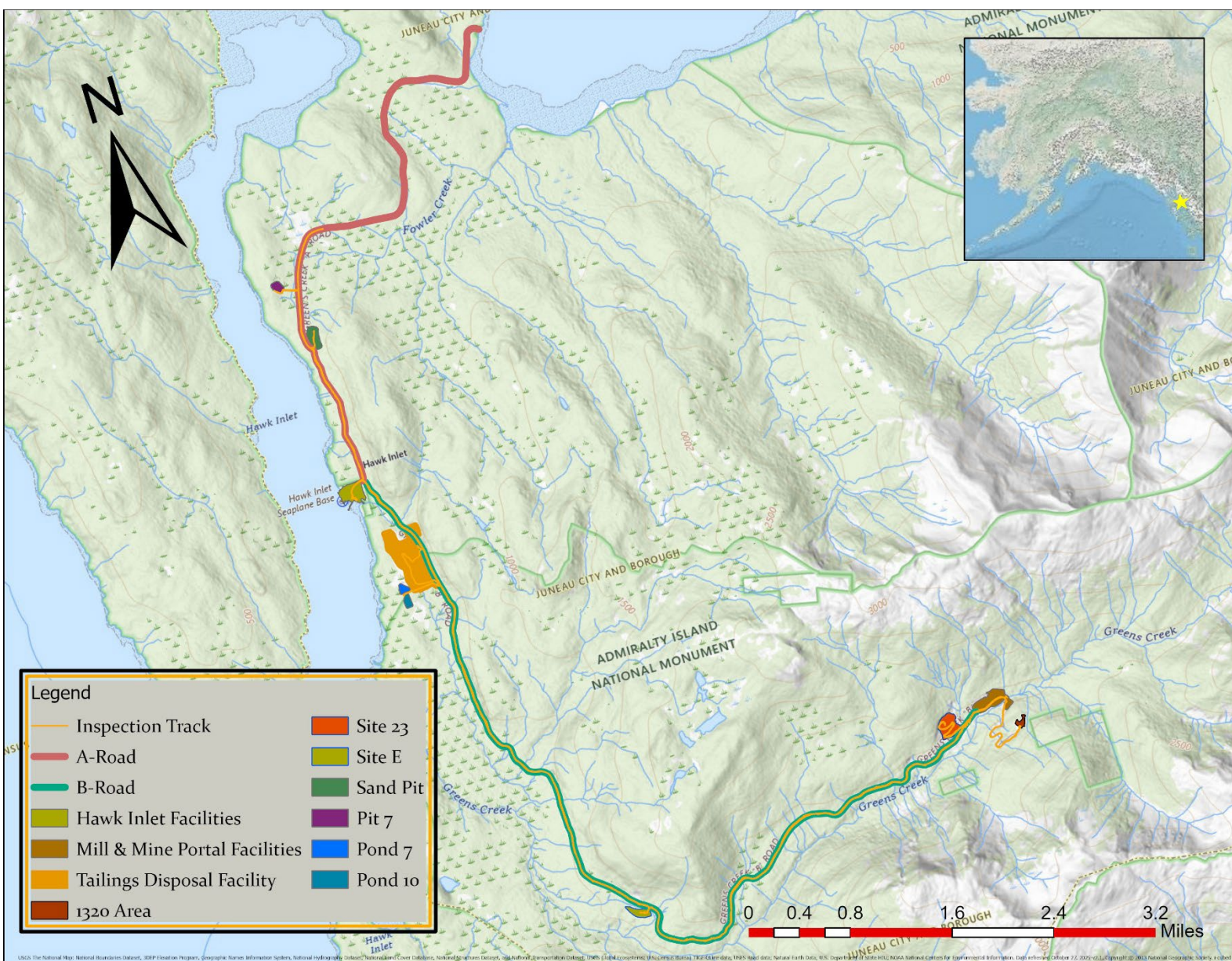
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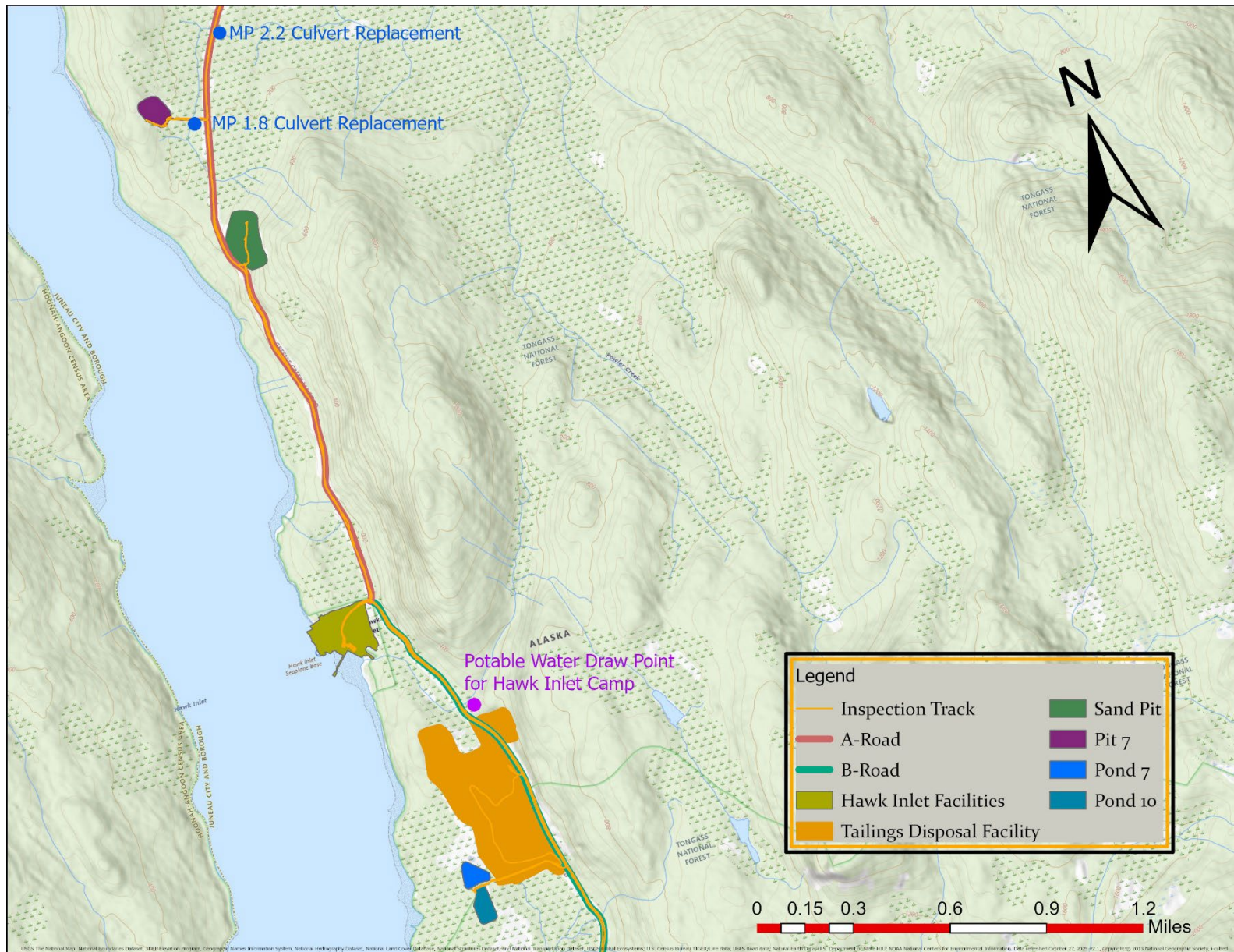
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Appendix A

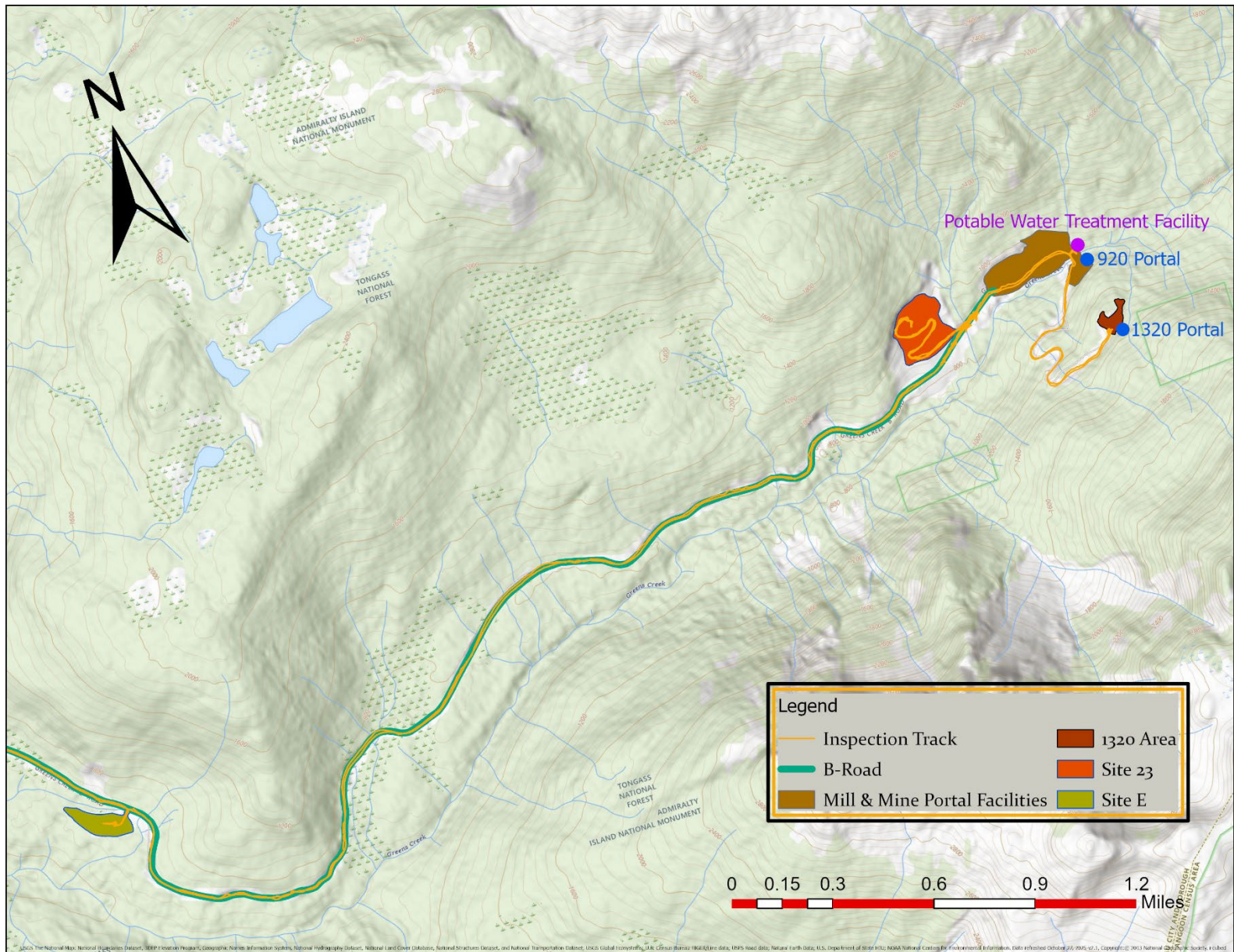
Inspection Maps, Photos, and Observations of Note



Map 1: Inspection route used between all facilities at Greens Creek Mine.



Map 2: Facilities inspected along A and B Roads which include the facilities at the TDF, Sand Pit, and Pit 7.



Map 3: Site 23, Site E, and associated water management sites within the 920 mill and mine portal facilities.

Field Inspection Photos with Observations of Note

Photo 1: Water management activities at the 1350 Portal showing the collection pond with standing water.



Photo 2: Ponded water observed at the entrance of the 1350 Portal.



Photo 3: Partially full storm water ponds along the access road for Site 23. View from top waste rock facility looking southeast.

Wood debris staged to be burned in between switch back of access road.



Photo 4: Aerial view of Site 23 looking northeast. Lower contoured slopes at Site 23 with-established vegetative growth.



Photo 5: Aerial view looking west. Partial grading along the western and northern edges of Site E (Circled). Storm water drainage pond near capacity at the far end of the facility. Site E is used as a laydown yard and storage facility.



Photo 6: Stockpiled aggregate, super sacks, and metal piping stored at Pit 7. View looking south.



Photo 7: Excavated and stabilized toe of the slope at Pit 7 to enlarge the pad area for aggregate storage. Sloped areas have good vegetative coverage. View looking to the west.



Photo 8: Vegetated slopes leading up to the old rock quarry highwall at Pit 7.



Photo 9: Construction materials stored at Sand Pit laydown yard seen from access looking south.



Photo 10: Poned water within Sand Pit observed below the spillway. View of the well vegetated slopes on the eastern side of the facility.



Photo 11: Active tailings deposition atop the TDF using a dozer and roller (Circled). Excavator placing Jersey barriers along access road. Ariel view of the central eastern end of the TDF.



Photo 12: Final grade of 3:1 of slopes on the east and west faces of the TDF per reclamation requirements. Ariel view of TDF looking northeast.



Photo 13: Wind fencing installed along the haul truck access route and eastern TDF edge (circled) to help mitigate fugitive dust.



Photo 14: Initial grubbing north of the TDF along B-Road for next season's expansion viewed to the north (circled).

Upper right of image is an older area of the TDF that has been sloped and reseeded.



Photo 15: Organized active material sites at the northeastern end of the TDF and adjacent B-Road.



Photo 16: Potable Water Treatment facility next to water draw point near the 920 Portal with maintained walkways to Greens Creek used for water sampling.



Photo 17: Water storage capacity at Pond 7 is just below culverts that are piped to Pond 10. Ariel view looking south.



Photo 18: Potable water draw point for Hawk Inlet Camp facilities is well maintained. This area is just off the B-Road along Cannery Creek.



Photo 19: Storm water runoff ditching around TDF are well maintained with no visible standing water (circled). Ariel view of the southern end of the TDF.



Photo 20: Delivered replacement culvert at MP 2.2 along A-Road for future fish-habitat improvements.



Photo 21: Delivered replacement culvert at Pit 7 access location for planned habitat upgrades.

