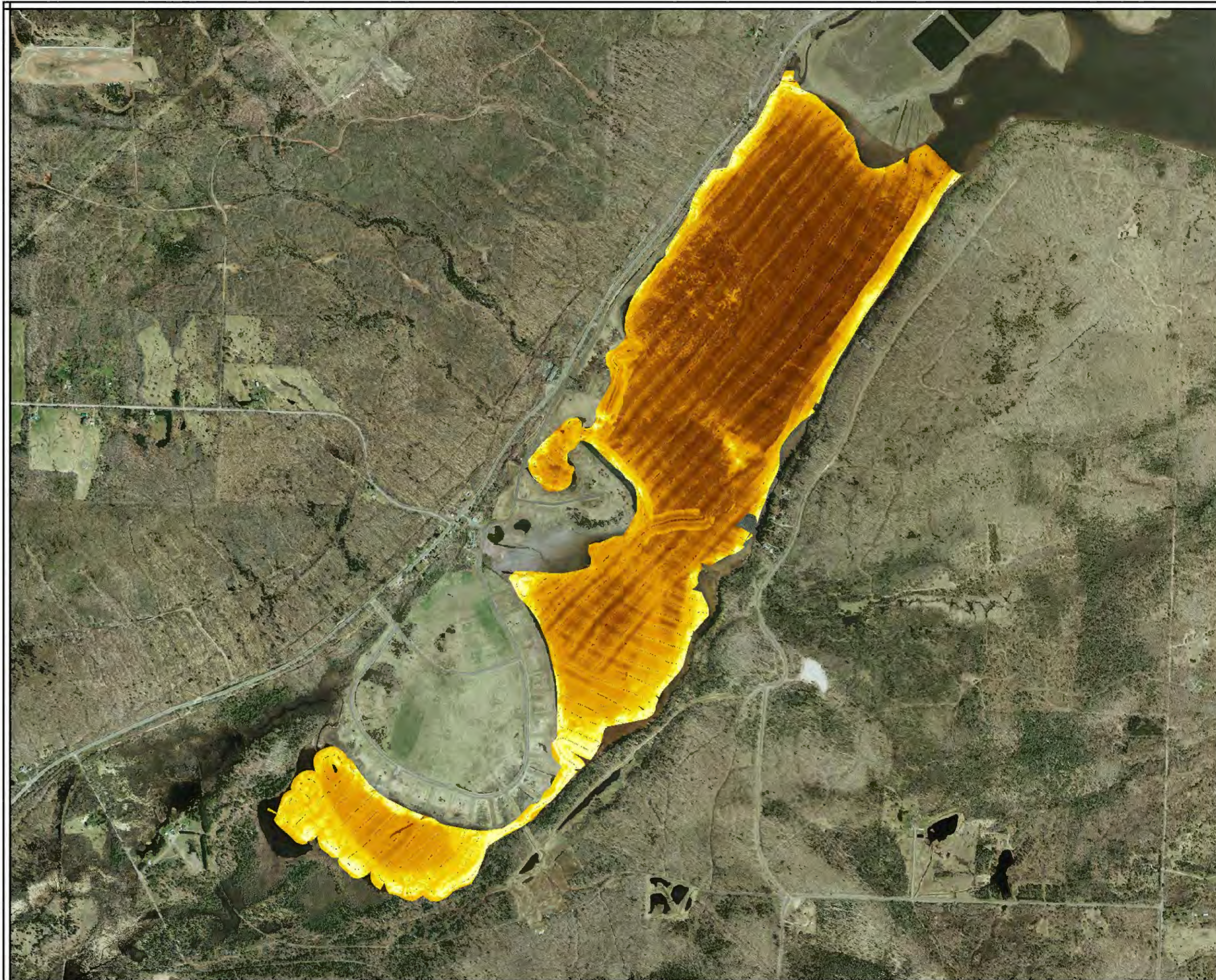


APPENDIX B

SIDE SCAN SONAR IMAGERY





0 0.1 0.2 0.4 0.6 Miles
1 inch = 0.26 miles

0 0.15 0.3 0.6 0.9 Kilometers
1 inch = 0.41 kilometers

DATUM - NAD83
PROJECTION: MICHIGAN GEOREF
SCALE: 1:16,169
AERIAL PHOTO SOURCE: MI CENTER FOR
SHARED SOLUTIONS, BEST AVAILABLE MOSAIC
AERIAL PHOTO DATE: 2010

SIDE SCAN SONAR SURVEY COMPLETED ON 7/24 &
7/25/2016 USING A HUMMINBIRD ONIX 8 SI.

**Torch Lake AMW
QMCM Processing Area**

Osceola & Torch Lake Township, Houghton County
T55N R33W Sections 13,14, 23, 24, 26 & 27

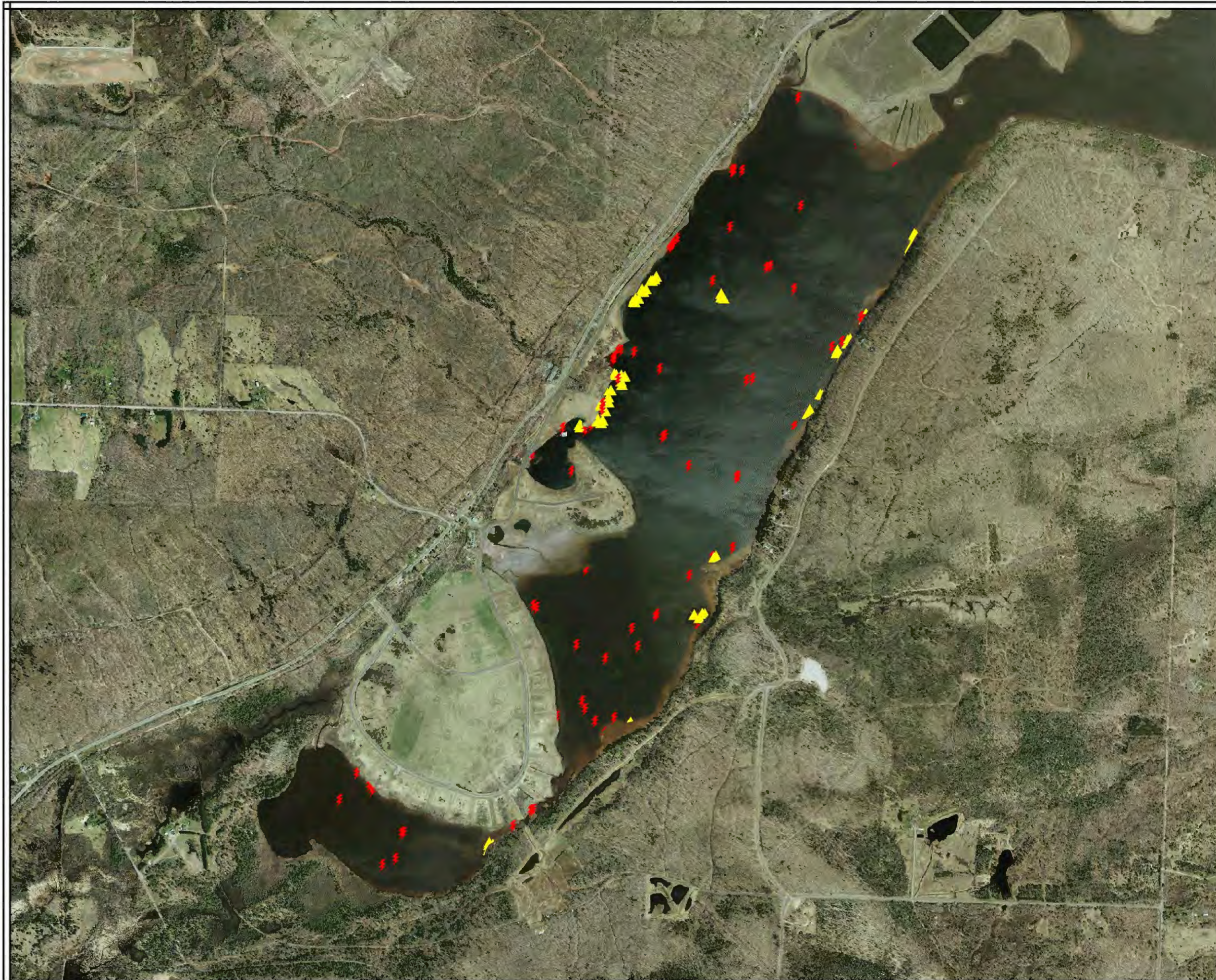
**SITE MAP SHOWING 2016
SIDE SCAN SONAR COVERAGE AREA**

GEOLOGIST
Daniel Peabody
Geological Services Unit
Remediation and
Redevelopment
Division



CREATION DATE
January 2017

FIGURE 1



0 0.1 0.2 0.4 0.6 Miles
1 inch = 0.26 miles

0 0.225 0.45 0.9 Kilometers
1 inch = 0.41 kilometers

DATUM - NAD83
PROJECTION: MICHIGAN GEOREF
SCALE: 1:16,160
AERIAL PHOTO SOURCE: MI CENTER FOR
SHARED SOLUTIONS, BEST AVAILABLE MOSAIC
AERIAL PHOTO DATE: 2010

SIDE SCAN SONAR SURVEY COMPLETED ON 7/24 &
7/25/2016 USING A HUMMINBIRD ONIX 8 SI.

LEGEND



Debris Field
Outline



Point Target

Torch Lake AMW QMCM Processing Area

Osceola & Torch Lake Township, Houghton County
T55N R33W Sections 13,14, 23, 24, 26 & 27

SITE MAP SHOWING 2016 SIDE SCAN SONAR INTERPRETATION

GEOLOGIST
Daniel Peabody
Geological Services Unit
Remediation and
Redevelopment
Division



CREATION DATE
January 2017

FIGURE 4

APPENDIX C

UNDERWATER VIDEOS



APPENDIX C

UNDERWATER VIDEOS

PROVIDED ON CD AS SEPARATE FILES

| | |
|-----------|-------------|
| Dredge 1 | East Pond |
| Coal Dock | SD44 & SD45 |
| Dredge II | West Pond |



LEGEND

-  Debris
-  Suspected Drum
-  ROV Sub Trail



0 0.05 0.1 0.2 Miles
1 inch = 0.08 miles

0 0.05 0.1 0.2 Kilometers
1 inch = 0.13 kilometers

DATUM - NAD83
PROJECTION: MICHIGAN GEOREF
SCALE: 1:5,310
AERIAL PHOTO SOURCE: MI CENTER FOR
SHARED SOLUTIONS, BEST AVAILABLE MOSAIC
AERIAL PHOTO DATE: 2010

ROV SURVEY COMPLETED USING A VIDEORAY
PRO4 PLUS AND TRITECH MICRONAV USBL GPS SYSTEM
WITH A TRIMBLE R10 ANTENNA ON 7/25, 7/26 & 7/27/2016

TORCH LAKE AMW QMCM PROCESSING AREA

Osceola & Torch Lake Township, Houghton County
T55N R33W Sections 23 & 26

SITE MAP SHOWING ROV SUB TRAIL & IDENTIFIED TARGETS

GEOLOGIST
Daniel Peabody
Geological Services Unit
Remediation and
Redevelopment
Division





CREATION DATE
January 2017

FIGURE 2



LEGEND

ROV Identified Targets

-  Debris
-  Suspected Drum



0 0.01 0.02 0.04 Miles
1 inch = 0.02 miles

0 0.015 0.03 0.06 Kilometers
1 inch = 0.03 kilometers

DATUM - NAD83
PROJECTION: MICHIGAN GEOREF
SCALE: 1:1,173
AERIAL PHOTO SOURCE: MI CENTER FOR
SHARED SOLUTIONS, BEST AVAILABLE MOSAIC
AERIAL PHOTO DATE: 2010

ROV SURVEY COMPLETED USING A VIDEORAY
PRO4 PLUS AND TRITECH MICRONAV USBL GPS SYSTEM
WITH A TRIMBLE R10 ANTENNA ON 7/25, 7/26 & 7/27/2016

TORCH LAKE AMW QMCM PROCESSING AREA

Osceola Township, Houghton County
T55N R33W Section 23

SITE MAP SHOWING ROV IDENTIFIED TARGETS

GEOLOGIST
Daniel Peabody
Geological Services Unit
Remediation and
Redevelopment
Division



CREATION DATE
January 2017

FIGURE 3

APPENDIX D

SITE INSPECTIONS – RECONNAISSANCE LOGS



APPENDIX D
Site Inspections - Reconnaissance Logs
Quincy Mining Company Mason Operations Area
Abandoned Mining Wastes - Torch Lake Non-Superfund Site







Geographic Area:Quincy Mining Company Mason Area

Property (Common Name):Quincy Stamp Sands Area

Property Identification Number and Owner:009-026-100-00, Portage Lake Water & Sewage Authority

Inspection Date:S/3/2017

General Property Description (Significant Landscape Features, Topography, Cover, Etc.,) : The property is bound to the north by Parcel No. 009-023-001-00. To the west, the property is bound by an ORV trail and multiple residential properties that were not inspected. Torch Lake bounds the property to the east. Access is restricted to the majority of the property by a gated fence and the property is currently vacant. The area to the west of the fence line and east of the residential properties is accessible to trespassers. The topography of the property appears to be relatively flat, sloping towards the shoreline. The southeast lobe of the parcel is comprised of a stamp sand deposit that was capped during remedial actions implemented by the EPA. The area southwest of the capped lobe is marshy and features a small creek that discharges into Torch Lake. The parcel features mining era ruins that include the Quincy Reclamation Plant and the Quincy Shore Plant areas located at the west end. These mining era ruins contain residual processing material and suspect asbestos containing material that includes black tar roofing material, gasket material, tar mastic, felt paper, black rubber sheeting, and tubing. The wooded area south of the Quincy Reclamation Plant includes a number of small mounds of partially buried debris including cable, railroad ties, suspect asbestos containing material and potentially abandoned containers. Suspect asbestos containing material includes gasket material, black tar roofing, rubber coated belt fabric and Transite siding. A variety of crushed, rusted, and/or partially buried drums were also observed.

| Check as Appropriate: | | Record Field Measurements: | Provide Written Description Including Condition, Content, and Similar Material Properties: | Document as Applicable: | | | | |
|--|---|---|---|---|----------|-------|------------------------|--|
| Potential Chemical or Physical Hazards | ✓ | Location/Coordinates | Description | Estimated Size/Area/Volume | Quantity | Units | Sample Recommendations | Notes |
| Suspect ACM | | Latitude: 47.13986491N Longitude: 88.46471665W | Drum#22: Rusted drum, buried in hillside, contents unknown |  | | | | |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | ✓ | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | | Latitude: 47.13989280N Longitude: 88.46461114W | SACM#72: Pile of debris, includes black tar roofing material buried under leaf litter, area includes wooden floorboard (approximately 10x15 feet) partially buried, may include more debris items |  | | | | Material sample QMCM-ASBBLK02-052417 collected during targeted inspection activities is representative of the materials identified during reconnaissance activities. |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: ___ Potential Freon Containing Refrigerator ___ | ✓ | | | | | | | |
| Suspect ACM | ✓ | Latitude: 47.13980180N Longitude: 88.46444644W | SACM#73: Three large rubber, belt-like tubes, with brown foam material on ends, under rubber coating, material appears to be layered fabric and appears similar to other suspect items seen in area, Tubes are partially buried into hillside and are approximately 3x3 feet. |  | | | | Material sample QMCM-ASBBLK03-052417 collected during targeted inspection activities is representative of the materials identified during reconnaissance activities. |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | | Latitude: 47.13980180N Longitude: 88.46444644W | Same location as SACM#73: Thin circular sheet metal cut-outs with teeth, area contains large pile of layered cut-outs and scattered pieces |  | | | | |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: ___ Physical Hazard ___ | ✓ | | | | | | | |
| Suspect ACM | | Latitude: 47.13978547N Longitude: 88.46435443W | Container#23: Rusted container approximately 10 inches in height, approximately 3 liters, contains a valve on top, potentially pressurized |  | | | | |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | ✓ | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | ✓ | Latitude: 47.13979147N Longitude: 88.46429922W | SACM#74: Partially buried roofing material with metallic coating, weathered and in poor condition |  | | | | Material sample QMCM-ASBBLK04-052417 collected during targeted inspection activities is representative of the materials identified during reconnaissance activities. |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |

APPENDIX D
Site Inspections - Reconnaissance Logs
Quincy Mining Company Mason Operations Area
Abandoned Mining Wastes - Torch Lake Non-Superfund Site




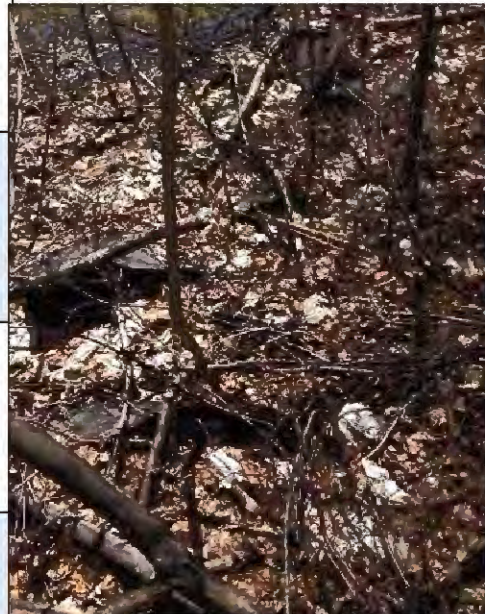
Geographic Area: Quincy Mining Company Mason Area

Property (Common Name): Quincy Stamp Sands Area

Property Identification Number and Owner: 009-026-100-00, Portage Lake Water & Sewage Authority

Inspection Date: 5/3/2017

General Property Description (Significant Landscape Features, Topography, Cover, Etc.,) : The property is bound to the north by Parcel No. 009-023-001-00. To the west, the property is bound by an ORV trail and multiple residential properties that were not inspected. Torch Lake bounds the property to the east. Access is restricted to the majority of the property by a gated fence and the property is currently vacant. The area to the west of the fence line and east of the residential properties is accessible to trespassers. The topography of the property appears to be relatively flat, sloping towards the shoreline. The southeast lobe of the parcel is comprised of a stamp sand deposit that was capped during remedial actions implemented by the EPA. The area southwest of the capped lobe is marshy and features a small creek that discharges into Torch Lake. The parcel features mining era ruins that include the Quincy Reclamation Plant and the Quincy Shore Plant areas located at the west end. These mining era ruins contain residual processing material and suspect asbestos containing material that includes black tar roofing material, gasket material, tar mastic, felt paper, black rubber sheeting, and tubing. The wooded area south of the Quincy Reclamation Plant includes a number of small mounds of partially buried debris including cable, railroad ties, suspect asbestos containing material and potentially abandoned containers. Suspect asbestos containing material includes gasket material, black tar roofing, rubber coated belt fabric and Transite siding. A variety of crushed, rusted, and/or partially buried drums were also observed.

| Record as Appropriate: | | Record Field Measurements: | | Provide Written Description Including Condition, Content, and Similar Material Properties: | Document as Applicable: | | | | |
|---|---|----------------------------|---|--|----------------------------|--|-------|------------------------|---|
| Potential Chemical or Physical Hazards | | ✓ | Location/Coordinates | Description | Estimated Size/Area/Volume | Quantity | Units | Sample Recommendations | Notes |
| Suspect ACM | | | Latitude: 47.13978937N Longitude: 88.46429651W | Drum#24: Rusted drum, appears to be empty, has black tar mastic on sides | 55 Gal |  | | | |
| Residual Process Materials | | | | | | | | | |
| Potentially Abandoned Containers | ✓ | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | | |
| Other: _____ | | | | | | | | | |
| Suspect ACM | | | Latitude: 47.13971273N Longitude: 88.46435615W | Drum#25: Rusted Drum, circular hole on one end, intact bottom, unknown contents | 55 Gal |  | | | |
| Residual Process Materials | | | | | | | | | |
| Potentially Abandoned Containers | ✓ | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | | |
| Other: _____ | | | | | | | | | |
| Suspect ACM | | | Latitude: 47.13969077N Longitude: 88.46437048W | Drum#26: Rusted drum, open on one end, intact on other end, unknown contents, if any | 55 Gal |  | | |  |
| Residual Process Materials | | | | | | | | | |
| Potentially Abandoned Containers | ✓ | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | | |
| Other: _____ | | | | | | | | | |
| Suspect ACM | | | Latitude: 47.13976462N Longitude: 88.46483727W | Drum#27: Five rusted, crushed drums, partially buried, unknown contents, potentially more buried | 55 Gal | 5 | | | |
| Residual Process Materials | | | | | | | | | |
| Potentially Abandoned Containers | ✓ | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | | |
| Other: _____ | | | | | | | | | |
| Suspect ACM | | | Latitude: 47.13915633N Longitude: 88.46548587W | Drum#28: Rusted, crushed drum, partially buried, unknown contents | 55 Gal | | | | |
| Residual Process Materials | | | | | | | | | |
| Potentially Abandoned Containers | ✓ | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | | |
| Other: _____ | | | | | | | | | |
| Suspect ACM | | | Latitude: 47.13931278N Longitude: 88.46471785W | Drum#29: Rusted black crushed drum, partially buried, unknown contents | 55 Gal | | | | |
| Residual Process Materials | | | | | | | | | |
| Potentially Abandoned Containers | ✓ | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | | |
| Other: _____ | | | | | | | | | |

APPENDIX D
Site Inspections - Reconnaissance Logs
Quincy Mining Company Mason Operations Area
Abandoned Mining Wastes - Torch Lake Non-Superfund Site


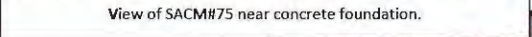
Geographic Area: Quincy Mining Company Mason Area

Property (Common Name): Quincy Stamp Sands Area

Property Identification Number and Owner: 009-026-100-00, Portage Lake Water & Sewage Authority

Inspection Date: 5/3/2017

General Property Description (Significant Landscape Features, Topography, Cover, Etc.,) : The property is bound to the north by Parcel No. 009-023-001-00. To the west, the property is bound by an ORV trail and multiple residential properties that were not inspected. Torch Lake bounds the property to the east. Access is restricted to the majority of the property by a gated fence and the property is currently vacant. The area to the west of the fence line and east of the residential properties is accessible to trespassers. The topography of the property appears to be relatively flat, sloping towards the shoreline. The southeast lobe of the parcel is comprised of a stamp sand deposit that was capped during remedial actions implemented by the EPA. The area southwest of the capped lobe is marshy and features a small creek that discharges into Torch Lake. The parcel features mining era ruins that include the Quincy Reclamation Plant and the Quincy Shore Plant areas located at the west end. These mining era ruins contain residual processing material and suspect asbestos containing material that includes black tar roofing material, gasket material, tar mastic, felt paper, black rubber sheeting, and tubing. The wooded area south of the Quincy Reclamation Plant includes a number of small mounds of partially buried debris including cable, railroad ties, suspect asbestos containing material and potentially abandoned containers. Suspect asbestos containing material includes gasket material, black tar roofing, rubber coated belt fabric and Transite siding. A variety of crushed, rusted, and/or partially buried drums were also observed.

| Check as Appropriate: | | Record Field Measurements: | Provide Written Description Including Condition, Content, and Similar Material Properties: | Document as Applicable: | | | | |
|---|---|----------------------------|---|---|----------|-------|------------------------|--|
| Potential Chemical or Physical Hazards | ✓ | Location/Coordinates | Description | Estimated Size/Area/Volume | Quantity | Units | Sample Recommendations | Notes |
| Suspect ACM | ✓ | Latitude: 47.13950995N | SACM#75: Suspect asbestos containing Transite siding, white/gray tile pieces partially buried near 10x10 foot concrete foundation, approximately 3 square feet visible, potentially more buried |  | | | | Material sample QMCM-ASBBLK01-052417 collected during targeted inspection activities is representative of the materials identified during reconnaissance activities. |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | Longitude: 88.463831107W | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | ✓ | Latitude: 47.14083171 N | SACM#80: Black roofing material nailed to wooden boards on ground, poor condition, appear to be asphaltic, area is littered with trash |  | | | | Material sample QMCM-ASBBLK51-052517 collected during targeted inspection activities is representative of the materials identified during reconnaissance activities. |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | Longitude: 88.46439736 W | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | | Latitude: 47.14022593 N | Drum#37: Eight concrete filled rusted drums arranged in a rectangle, partially sunken, one drum is on its side | 55-Gal | | | | |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | ✓ | | | | | | | |
| Soil Staining/Stressed Vegetation | | Longitude: 88.46507881 W | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | | Latitude: 47.13976003 N | Drum#38: Two rusted, crushed, partially buried drums, possibly empty, a galvanized container is located with drums | 55-Gal | | | | |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | ✓ | | | | | | | |
| Soil Staining/Stressed Vegetation | | Longitude: 88.46541891 W | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | | Latitude: 47.13990712 N | Drum#39: Crushed drum, partially buried, dark brown, sandy, granular material inside, embossed with: S.T.C. at one end | 55-Gal. | | | | |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | ✓ | | | | | | | |
| Soil Staining/Stressed Vegetation | | Longitude: 88.46566400 W | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | | Latitude: 47.13989646 N | Drum#40: Crushed, rusted, partially buried drum, unknown contents, if any | 55-Gal. | | | | |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | ✓ | | | | | | | |
| Soil Staining/Stressed Vegetation | | Longitude: 88.46587654 W | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |



APPENDIX D
Site Inspections - Reconnaissance Logs
Quincy Mining Company Mason Operations Area
Abandoned Mining Wastes - Torch Lake Non-Superfund Site


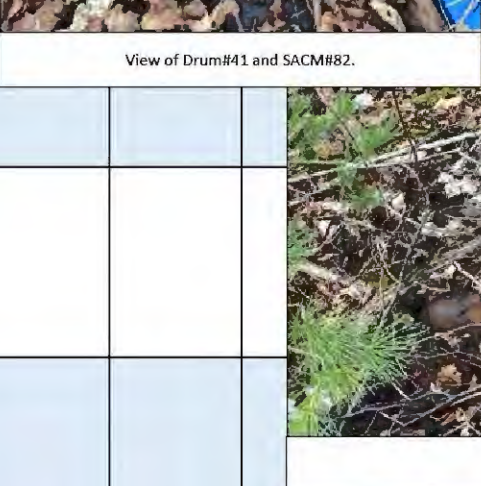

Geographic Area:Quincy Mining Company Mason Area

Property (Common Name):Quincy Stamp Sands Area

Property Identification Number and Owner:009-026-100-00, Portage Lake Water & Sewage Authority

Inspection Date:5/4/2017

General Property Description (Significant Landscape Features, Topography, Cover, Etc.,) : The property is bound to the north by Parcel No. 009-023-001-00. To the west, the property is bound by an ORV trail and multiple residential properties that were not inspected. Torch Lake bounds the property to the east. Access is restricted to the majority of the property by a gated fence and the property is currently vacant. The area to the west of the fence line and east of the residential properties is accessible to trespassers. The topography of the property appears to be relatively flat, sloping towards the shoreline. The southeast lobe of the parcel is comprised of a stamp sand deposit that was capped during remedial actions implemented by the EPA. The area southwest of the capped lobe is marshy and features a small creek that discharges into Torch Lake. The parcel features mining era ruins that include the Quincy Reclamation Plant and the Quincy Shore Plant areas located at the west end. These mining era ruins contain residual processing material and suspect asbestos containing material that includes black tar roofing material, gasket material, tar mastic, felt paper, black rubber sheeting, and tubing. The wooded area south of the Quincy Reclamation Plant includes a number of small mounds of partially buried debris including cable, railroad ties, suspect asbestos containing material and potentially abandoned containers. Suspect asbestos containing material includes gasket material, black tar roofing, rubber coated belt fabric and Transite siding. A variety of crushed, rusted, and/or partially buried drums were also observed.

| Check as Appropriate: | | Record Field Measurements: | Provide Written Description Including Condition, Content, and Similar Material Properties: | Document as Applicable: | | | | |
|---|---|---|--|----------------------------|---|-------|------------------------|--|
| Potential Chemical or Physical Hazards | ✓ | Location/Coordinates | Description | Estimated Size/Area/Volume | Quantity | Units | Sample Recommendations | Notes |
| Suspect ACM | ✓ | Latitude: 47.13985488 N Longitude: 88.46600599 W | SACM#82: Black asphaltic roofing material, underneath Drum#41 | 25 SF |  | | | Material sample QMCM-ASBBLK51-052517 collected during targeted inspection activities is representative of the materials identified during reconnaissance activities. |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | | Latitude: 47.13985488 N Longitude: 88.46600599 W | Drum#41: Rusted drum with bullet holes, feels empty, located near ORV trail | 55-Gal |  | | | View of Drum#41 and SACM#82. |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | ✓ | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | | Latitude: 47.13877148 N Longitude: 88.46664616 W | Drum#42: Crushed, empty drum | 55-Gal |  | | | View of Container#43 |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | ✓ | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | | Latitude: 47.13849063 N Longitude: 88.46684869 W | Container#43: Automobile fuel tank, rusted, partially buried | | | | | |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | ✓ | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | | Latitude: 47.13852820 N Longitude: 88.46697173 W | Drum#44: Crushed drum, unknown contents, if any | | | | | |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | ✓ | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | ✓ | Latitude: 47.13852820 N Longitude: 88.46697173 W | SACM#83: Rubber 1/4 inch thick, 8 x 8 foot sheeting | 8 x 8 feet | | | | |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |

APPENDIX D
Site Inspections - Reconnaissance Logs
Quincy Mining Company Mason Operations Area
Abandoned Mining Wastes - Torch Lake Non-Superfund Site


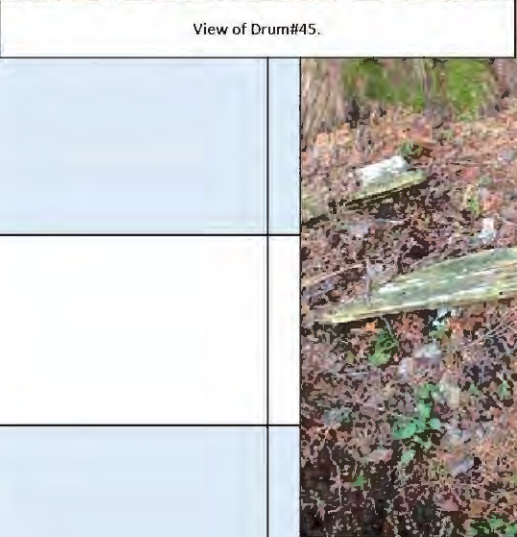
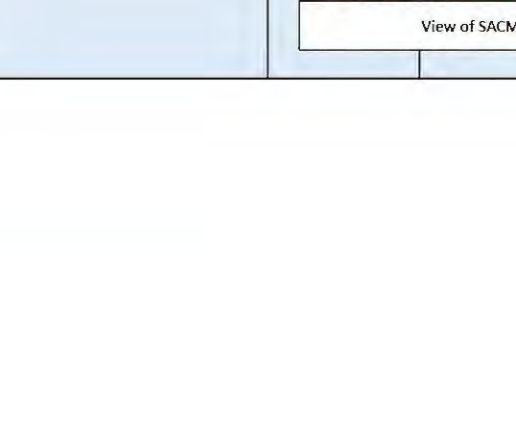
Geographic Area: Quincy Mining Company Mason Area

Property (Common Name): Quincy Stamp Sands Area

Property Identification Number and Owner: 009-026-100-00, Portage Lake Water & Sewage Authority

Inspection Date: 5/4/2017

General Property Description (Significant Landscape Features, Topography, Cover, Etc.,) : The property is bound to the north by Parcel No. 009-023-001-00. To the west, the property is bound by an ORV trail and multiple residential properties that were not inspected. Torch Lake bounds the property to the east. Access is restricted to the majority of the property by a gated fence and the property is currently vacant. The area to the west of the fence line and east of the residential properties is accessible to trespassers. The topography of the property appears to be relatively flat, sloping towards the shoreline. The southeast lobe of the parcel is comprised of a stamp sand deposit that was capped during remedial actions implemented by the EPA. The area southwest of the capped lobe is marshy and features a small creek that discharges into Torch Lake. The parcel features mining era ruins that include the Quincy Reclamation Plant and the Quincy Shore Plant areas located at the west end. These mining era ruins contain residual processing material and suspect asbestos containing material that includes black tar roofing material, gasket material, tar mastic, felt paper, black rubber sheeting, and tubing. The wooded area south of the Quincy Reclamation Plant includes a number of small mounds of partially buried debris including cable, railroad ties, suspect asbestos containing material and potentially abandoned containers. Suspect asbestos containing material includes gasket material, black tar roofing, rubber coated belt fabric and Transite siding. A variety of crushed, rusted, and/or partially buried drums were also observed.

| Check as Appropriate: | | Record Field Measurements: | Provide Written Description Including Condition, Content, and Similar Material Properties: | Document as Applicable: | | | | |
|---|---|---|---|---|----------|-------|------------------------|--|
| Potential Chemical or Physical Hazards | ✓ | Location/Coordinates | Description | Estimated Size/Area/Volume | Quantity | Units | Sample Recommendations | Notes |
| Suspect ACM | | Latitude: 47.13823390 N Longitude: 88.46721466 W | Drum#45: Crushed, empty drum, flattened |  | | | | |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | ✓ | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | ✓ | Latitude: 47.13899864 N Longitude: 88.46694089 W | SACM#84: Black roofing material nailed to wooden boards, black backed linoleum nailed to boards, located at base of cedar trees in grove |  | | | | Material samples QMCM-ASBBLK53-052517, QMCM-ASBBLK54-052517, QMCM-ASBBLK55-052517, QMCM-ASBBLK56-052517, and QMCM-ASBBLK57-052517 collected during targeted inspection activities are representative of the materials identified during reconnaissance activities. |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | ✓ | Latitude: 47.13927475 N Longitude: 88.46677921 W | SACM#85 : Dump Site to east of trail, behind residential area, includes household items, black rubber gasket material, black rubber sheeting |  | | | | Items determined not to be SACM. |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ Dump Site _____ | | | | | | | | |
| Suspect ACM | | Latitude: 47.13950359 N Longitude: 88.46639922 W | Drum#46: Crushed, partially buried, rusted | | | | | |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | ✓ | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | ✓ | Latitude: 47.14000953N Longitude: 88.46484457W | SACM#71: Black rubber coated aluminum cables, partially buried in hillside, near other debris, including bricks, rusted bolts, and timber debris, approximately 5 linear feet visible | | | | | Material sample QMCM-ASBBLK05-052417 collected during targeted inspection activities is representative of the materials identified during reconnaissance activities. |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | | Latitude: _____ Longitude: _____ | | | | | | |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |

APPENDIX D
Site Inspections - Reconnaissance Logs
Quincy Mining Company Mason Operations Area
Abandoned Mining Wastes - Torch Lake Non-Superfund Site







Geographic Area:Quincy Mining Company Mason Area

Property (Common Name):Quincy Reclamation Plant Area

Property Identification Number and Owner:009-026-003-00, Lakeshore Estates

Inspection Date:4/25/2017 and 5/3/2017

General Property Description (Significant Landscape Features, Topography, Cover, Etc.,) : The property is bound to the north by Parcel No. 009-023-001-00. To the west, the property is bound by an ORV trail and multiple residential properties that were not inspected. Torch Lake bounds the property to the east. Access is restricted to the majority of the property by a gated fence and the property is currently vacant. The area to the west of the fence line and east of the residential properties is accessible to trespassers. The topography of the property appears to be relatively flat, sloping towards the shoreline. The southeast lobe of the parcel is comprised of a stamp sand deposit that was capped during remedial actions implemented by the EPA. The area southwest of the capped lobe is marshy and features a small creek that discharges into Torch Lake. The parcel features mining era ruins that include the Quincy Reclamation Plant and the Quincy Shore Plant areas located at the west end. These mining era ruins contain residual processing material and suspect asbestos containing material that includes black tar roofing material, gasket material, tar mastic, felt paper, black rubber sheeting, and tubing. The wooded area south of the Quincy Reclamation Plant includes a number of small mounds of partially buried debris including cable, railroad ties, suspect asbestos containing material and potentially abandoned containers. Suspect asbestos containing material includes gasket material, black tar roofing, rubber coated belt fabric and Transite siding. A variety of crushed, rusted, and/or partially buried drums were also observed.

| Check as Appropriate: | | Record Field Measurements: | Provide Written Description Including Condition, Content, and Similar Material Properties: | Document as Applicable: | | | | |
|---|---|---|--|---|----------|-------|------------------------|--|
| Potential Chemical or Physical Hazards | ✓ | Location/Coordinates | Description | Estimated Size/Area/Volume | Quantity | Units | Sample Recommendations | Notes |
| Suspect ACM | ✓ | Latitude: 47.14095346 N Longitude: 88.46098202 W | SACM#61: Black faded, weathered material in strips along wooden boards near pits on edge of capped area, red and white coloring are found along the opposite side, strips are various lengths and are found near each of the wooden pits in the vicinity |  | | | | Material sample QMCM-ASBBLK21-052417 collected during targeted inspection activities is representative of the materials identified during reconnaissance activities. |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | Latitude: 47.14078429 N Longitude: 88.46335091 W | SACM#62: Quincy Shore Plant: various suspected asbestos containing materials including: black tar-like roofing material and black roofing material with metallic paint varying in size from small quarter sized bits to larger 4x6 foot sheets attached to wooden boards and corrugated metal sheeting, black gasket material, green shingles, layered rubber coated woven material, 1-inch diameter black solid tubing, 2-inch diameter black wrapped tubing, rubber and woven fabric coated wiring, white imprinted thin paper-like material, potential lumpy white TSI material that appears fibrous (similar to other piles), a concrete area approximately 5x12 feet covered in brown/gray fine grained sandy material with hardened appearance on top (RPM), white paper-like material (potential TSI material, further out on wood debris), and white coated wiring |  | | | | Material samples QMCM-ASBBLK13-052417, QMCM-ASBBLK14-052417, QMCM-ASBBLK15-052417, QMCM-ASBBLK16-052417, QMCM-ASBBLK17-052417, QMCM-ASBBLK18-052417, QMCM-ASBBLK19-052417, QMCM-ASBBLK20-052417, and QMCM-RPM02-0"-6" collected during targeted inspection activities are representative of the materials identified during reconnaissance activities. |
| Suspect ACM | ✓ | | | | | | | |
| Residual Process Materials | ✓ | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | Latitude: 47.14036552 N Longitude: 88.46404602W | SACM#63: Concrete slab with the following items: Rubbery roofing material nailed to boards, rubber, black coated wiring, metal rusted coated wiring, various weathered roofing material pieces, and rusted crushed metal paint cans |  | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | ✓ | | | | | | | |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | Latitude: 47.14040758N Longitude: 88.46410869W | Drum#20: Buried crushed drum, appears to have rolled top and is hollow underneath, potentially a carcass |  | | | | Material samples QMCM-ASBBLK06-052417 and QMCM-ASBBLK07-052417 collected during targeted inspection activities are representative of the materials identified during reconnaissance activities. |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | ✓ | | | | | | | |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | ✓ | Latitude: 47.14012865N Longitude: 88.46420838W | SACM#64: Concrete circular structure with rebar. Contains wood debris, black roofing material with metallic coating in various sizes and conditions. Also contains automobile tires. |  | | | | Material sample QMCM-ASBBLK10-052417 collected during targeted inspection activities is representative of the materials identified during reconnaissance activities. |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | ✓ | Latitude: 47.14043893N Longitude: 88.46445164W | SACM#65: Black tar mastic on concrete base, found mostly on left side/corner looking east, appears to have dripped from top of concrete wall, also found on small square concrete base to the south. |  | | | | Material sample QMCM-ASBBLK10-052417 collected during targeted inspection activities is representative of the materials identified during reconnaissance activities. |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |

APPENDIX D
Site Inspections - Reconnaissance Logs
Quincy Mining Company Mason Operations Area
Abandoned Mining Wastes - Torch Lake Non-Superfund Site







Geographic Area: Quincy Mining Company Mason Area

Property (Common Name): Quincy Reclamation Plant Area

Property Identification Number and Owner: 009-026-003-00, Lakeshore Estates

Inspection Date: 5/3/2017

General Property Description (Significant Landscape Features, Topography, Cover, Etc.,) : The property is bound to the north by Parcel No. 009-023-001-00. To the west, the property is bound by an ORV trail and multiple residential properties that were not inspected. Torch Lake bounds the property to the east. Access is restricted to the majority of the property by a gated fence and the property is currently vacant. The area to the west of the fence line and east of the residential properties is accessible to trespassers. The topography of the property appears to be relatively flat, sloping towards the shoreline. The southeast lobe of the parcel is comprised of a stamp sand deposit that was capped during remedial actions implemented by the EPA. The area southwest of the capped lobe is marshy and features a small creek that discharges into Torch Lake. The parcel features mining era ruins that include the Quincy Reclamation Plant and the Quincy Shore Plant areas located at the west end. These mining era ruins contain residual processing material and suspect asbestos containing material that includes black tar roofing material, gasket material, tar mastic, felt paper, black rubber sheeting, and tubing. The wooded area south of the Quincy Reclamation Plant includes a number of small mounds of partially buried debris including cable, railroad ties, suspect asbestos containing material and potentially abandoned containers. Suspect asbestos containing material includes gasket material, black tar roofing, rubber coated belt fabric and Transite siding. A variety of crushed, rusted, and/or partially buried drums were also observed.

| Check as Appropriate: | | Record Field Measurements: | Provide Written Description Including Condition, Content, and Similar Material Properties: | Document as Applicable: | | | | |
|---|---|---|--|--|----------|-------|------------------------|--|
| Potential Chemical or Physical Hazards | ✓ | Location/Coordinates | Description | Estimated Size/Area/Volume | Quantity | Units | Sample Recommendations | Notes |
| Suspect ACM | ✓ | Latitude: 47.14012865N Longitude: 88.46420838W | Silver felt paper, with some black coloring, found on concrete walls of circular structures, between wooden boards and wall, found in three other circular concrete structures, approximately quantity 130SF. Use the GPS location from SACM#64 for this material. |  | | | | Material sample QMCM-ASBBLK07-052417 collected during targeted inspection activities is representative of the materials identified during reconnaissance activities. |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | Latitude: 47.14043893N Longitude: 88.46445164W | Fibrous string-like piles of material, appears white/gray, weathered, found on concrete floor of Reclamation Plant, also found on ground and on wooden boards between concrete in circular structures. Brown suspect TSI material is observed in the SW circular structure, approximately 2 square feet of material is visible on wooden board, more may be buried within debris. Use the GPS location from SACM#65 for this material. |  | | | | Material samples QMCM-ASBBLK08-052417 and QMCM-ASBBLK09-052417 collected during targeted inspection activities are representative of the materials identified during reconnaissance activities. |
| Suspect ACM | ✓ | | | | | | | |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | Latitude: 47.14058117N Longitude: 88.46437282W | RPM#5: Dark brown/black, greasy, globular and sheet-like material on concrete walls. The material appears to start at the top of the concrete and follows the wall down, forming hardened piles at the bottom. |  | | | | Waste Characterization sample QMCM-RPM03-0"-6" collected during targeted inspection activities. |
| Suspect ACM | ✓ | | | | | | | |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | Latitude: 47.14058117N Longitude: 88.46437282W | SACM#66: Creamy/white/yellow mastic material on northwest corner of concrete structures near arches, found with RPM#5, black tar mastic on northeast concrete corners |  | | | | Material sample QMCM-ASBBLK10-052417 collected during targeted inspection activities is representative of the (black tar mastic) materials identified during reconnaissance activities. Creamy/white/yellow mastic material was determined not to be SACM. |
| Suspect ACM | ✓ | | | | | | | |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | Latitude: 47.14058117N Longitude: 88.46437282W | RPM#6: Piles of tar-like, dark brown/black substance on concrete floor, appears blob-like and hardened, found in piles throughout area of concrete arches and reclamation plant floor, adjacent to RPM#5 (same GPS coordinates). |  | | | | Waste Characterization sample QMCM-RPM03-0"-6" collected during targeted inspection activities. |
| Suspect ACM | ✓ | | | | | | | |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | Latitude: 47.14075090N Longitude: 88.46425435W | SACM#67: Black hardened rubber material with imprint on one side, found in small pile at north end of concrete structure and scattered south along the concrete remains. |  | | | | Material sample QMCM-ASBBLK11-052417 collected during targeted inspection activities is representative of the materials identified during reconnaissance activities. |
| Suspect ACM | ✓ | | | | | | | |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |

APPENDIX D
Site Inspections - Reconnaissance Logs
Quincy Mining Company Mason Operations Area
Abandoned Mining Wastes - Torch Lake Non-Superfund Site




Geographic Area:Quincy Mining Company Mason Area

Property (Common Name):Quincy Reclamation Plant Area

Property Identification Number and Owner:009-026-003-00, Lakeshore Estates

Inspection Date:5/3/2017

General Property Description (Significant Landscape Features, Topography, Cover, Etc.,) : The property is bound to the north by Parcel No. 009-023-001-00. To the west, the property is bound by an ORV trail and multiple residential properties that were not inspected. Torch Lake bounds the property to the east. Access is restricted to the majority of the property by a gated fence and the property is currently vacant. The area to the west of the fence line and east of the residential properties is accessible to trespassers. The topography of the property appears to be relatively flat, sloping towards the shoreline. The southeast lobe of the parcel is comprised of a stamp sand deposit that was capped during remedial actions implemented by the EPA. The area southwest of the capped lobe is marshy and features a small creek that discharges into Torch Lake. The parcel features mining era ruins that include the Quincy Reclamation Plant and the Quincy Shore Plant areas located at the west end. These mining era ruins contain residual processing material and suspect asbestos containing material that includes black tar roofing material, gasket material, tar mastic, felt paper, black rubber sheeting, and tubing. The wooded area south of the Quincy Reclamation Plant includes a number of small mounds of partially buried debris including cable, railroad ties, suspect asbestos containing material and potentially abandoned containers. Suspect asbestos containing material includes gasket material, black tar roofing, rubber coated belt fabric and Transite siding. A variety of crushed, rusted, and/or partially buried drums were also observed.

| Check as Appropriate: | | Record Field Measurements: | Provide Written Description Including Condition, Content, and Similar Material Properties: | Document as Applicable: | | | | |
|--|---|----------------------------|--|--|----------|-------|------------------------|--|
| Potential Chemical or Physical Hazards | ✓ | Location/Coordinates | Description | Estimated Size/Area/Volume | Quantity | Units | Sample Recommendations | Notes |
| Suspect ACM | ✓ | Latitude: 47.14066270N | SACM#68: Black rubber-coated fabric hydraulic tubing, approximately 2 inches in diameter, weathered, and appears dry rotted. Some tubing appears more deteriorated. Material is found in the concrete pit on the east side of the plant. |  | | | | Material sample QMCM-ASBBLK12-052417 collected during targeted inspection activities is representative of the materials identified during reconnaissance activities. |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | Longitude: 88.46420167W | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | | Latitude: 47.14048036N | Container#21: Large rusted refrigerator without door, may potentially contain Freon |  | | | | |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | Longitude: 88.46443858W | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ Potential Freon Containing Refrigerator _____ | ✓ | | | | | | | |
| Suspect ACM | ✓ | Latitude: 47.13973025N | SACM#70: Black rubber sheeting, imprinted on one side, smooth on other, approximately 2x6 foot section, similar to SACM#67 |  | | | | Material sample QMCM-ASBBLK11-052417 collected during targeted inspection activities is representative of the materials identified during reconnaissance activities. |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | Longitude: 88.46268787W | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | ✓ | Latitude: 47.13994955N | SACM#69: Black tar paper roofing found on ground, one small piece, similar to SACM#62 | | | | | Material sample QMCM-ASBBLK51-052517 collected during targeted inspection activities is representative of the materials identified during reconnaissance activities. |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | Longitude: 88.46145780W | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | ✓ | Latitude: | Small pieces of roofing material found scattered on reclamation plant floor, nonmetallic coated and metallic coated tar-paper and rubber roofing material was observed | | | | | |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | Longitude: | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | | Latitude: | | | | | | |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | Longitude: | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |

APPENDIX D
Site Inspections - Reconnaissance Logs
Quincy Mining Company Mason Operations Area
Abandoned Mining Wastes - Torch Lake Non-Superfund Site

Geographic Area: Quincy Mining Company Mason Area

Property (Common Name): Quincy Stamp Mills Area

Property Identification Number and Owner: 009-023-001-00, Lakeshore Estates

Inspection Date: 4/21/2017

General Property Description (Significant Landscape Features, Topography, Cover, Etc.): Access is not restricted to the western portion of the property. The property portion is bound to the east by Highway M-26, to the northwest by an ORV Trail, and to the north by Parcel No. 009-023-001-20. The property includes portions of two former stamp mill operations. Foundations and mining era materials are present in the central portion of the property. The property slopes to the southeast from a ridge on which the ORV trail is located to M-26. The majority of the property to the west side of M-26 is wooded and is steeply sloped in most places. Quincy Creek bisects the property and discharges to Torch Lake. Suspect asbestos containing materials, including asphaltic roofing material, potential thermal insulation material and rubber sheeting and gasket materials were observed on the property in and around the stamp mill ruins. Abandoned drums were observed in the wooded area to the south of the foundation remains. Residual processing materials were observed in the woods along the property line to the north, and in and around the concrete foundation remains of both stamp mill ruins.

| Check as Appropriate: | | Record Field Measurements: | Provide Written Description Including Condition, Content, and Similar Material Properties: | Document as Applicable: | | | | |
|---|---|---|---|----------------------------|----------|-------|------------------------|--|
| Potential Chemical or Physical Hazards | ✓ | Location/Coordinates | Description | Estimated Size/Area/Volume | Quantity | Units | Sample Recommendations | Notes |
| Suspect ACM | ✓ | Latitude: 47.14927069 N Longitude: 88.45903392 W | SACM#1/RPM #1: Pile of black debris including fabric-like material, gaskets, wiring; black debris is tar-like, exuding goo and includes fibrous-like material within, pile also includes metal debris | | | | | Material samples QMCM-ASBBLK80-052617, QMCM-ASBBLK81-052617, QMCM-ASBBLK82-052617, QMCM-ASBBLK83-052617, and QMCM-RPM04-0"-6" collected during targeted inspection activities are representative of the materials identified during reconnaissance activities. |
| Residual Process Materials | ✓ | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | | Latitude: 47.14924046 N Longitude: 88.45943766 W | DRUM #1: Crushed drum with unknown contents, drum is rusting and contains holes near "bottom" with contents near creasing and slag near "top" of drum, highly weathered and damaged drum | | | | | |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | ✓ | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | ✓ | Latitude: 47.14851010 N Longitude: 88.45886447 W | SACM#2: Black sheet-like (possibly asphaltic roofing material), partially buried into hillside, sheet-like material is thin and contains various size, color, and shaped pebbles. | | | | | Material sample QMCM-ASBBLK87-052617 collected during targeted inspection activities is representative of the materials identified during reconnaissance activities. |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | ✓ | Latitude: 47.14852962 N Longitude: 88.45879550 W | SACM#3: Pile that includes debris, metal wiring (rebar), gray woven fabric-like material, and bricks | | | | | |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | ✓ | Latitude: 47.14858119 N Longitude: 88.45883563 W | SACM#4: Black, asphaltic roof-like material laying on concrete slab, contains black tar-like substance on one side, pebbles of various shapes, sizes and color on opposite | | | | | Material sample QMCM-ASBBLK87-052617 collected during targeted inspection activities is representative of the materials identified during reconnaissance activities. |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | ✓ | Latitude: 47.14856878 N Longitude: 88.45857854 W | SACM#5: Black asphaltic roof-like material, similar in appearance to SACM#2 and #4, partially buried, commonly spread throughout the area | | | | | Material sample QMCM-ASBBLK87-052617 collected during targeted inspection activities is representative of the materials identified during reconnaissance activities. |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |



APPENDIX D
Site Inspections - Reconnaissance Logs
Quincy Mining Company Mason Operations Area
Abandoned Mining Wastes - Torch Lake Non-Superfund Site

Geographic Area: Quincy Mining Company Mason Area

Property (Common Name): Quincy Stamp Mills Area

Property Identification Number and Owner: 009-023-001-00, Lakeshore Estates

Inspection Date: 4/21/2017 and 4/24/2017

General Property Description (Significant Landscape Features, Topography, Cover, Etc.,) : Access is not restricted to the western portion of the property. The property portion is bound to the east by Highway M-26, to the northwest by an ORV Trail, and to the north by Parcel No. 009-023-001-20. The property includes portions of two former stamp mill operations. Foundations and mining era materials are present in the central portion of the property. The property slopes to the southeast from a ridge on which the ORV trail is located to M-26. The majority of the property to the west side of M-26 is wooded and is steeply sloped in most places. Quincy Creek bisects the property and discharges to Torch Lake. Suspect asbestos containing materials, including asphaltic roofing material, potential thermal insulation material and rubber sheeting and gasket materials were observed on the property in and around the stamp mill ruins. Abandoned drums were observed in the wooded area to the south of the foundation remains. Residual processing materials were observed in the woods along the property line to the north, and in and around the concrete foundation remains of both stamp mill ruins.

| Check as Appropriate: | | Record Field Measurements: | Provide Written Description Including Condition, Content, and Similar Material Properties: | Document as Applicable: | | | | |
|---|---|---|---|----------------------------|----------|-------|------------------------|--|
| Potential Chemical or Physical Hazards | ✓ | Location/Coordinates | Description | Estimated Size/Area/Volume | Quantity | Units | Sample Recommendations | Notes |
| Suspect ACM | ✓ | Latitude: 47.14857970 N Longitude: 88.45864831 W | SACM#6: Roofing material, similar in appearance to SACM#2, #4, and #5, in a large pile near birch tree, material is scattered nearby and in entire area of Washing/Classifying Floor (area between beginning of ditch and Stamp Mill foundation wall) | | | | | Material sample QMCM-ASBBLK87-052617 collected during targeted inspection activities is representative of the materials identified during reconnaissance activities. |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | ✓ | Latitude: 47.14857499 N Longitude: 88.45867424 W | SACM #7: Yellow rectangular firebricks with black streaking, partially weathered and buried or scattered on ground in vicinity. Smaller broken pieces are found scattered in the area. | | | | | Material sample QMCM-ASBBLK85-052617 collected during targeted inspection activities is representative of the materials identified during reconnaissance activities. |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | ✓ | Latitude: 47.14890116 N Longitude: 88.45853793 W | SACM#8: Roof-like material, black weathered sheets, possibly felt paper, layered with tar-like substance, found on hillside and buried into hill on northeast side of Stamp Mill No. 2 | | | | | Material sample QMCM-ASBBLK84-052617 collected during targeted inspection activities is representative of the materials identified during reconnaissance activities. |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | ✓ | Latitude: 47.14895530 N Longitude: 88.45881476 W | SACM#9: Woven, fabric-like material, partially buried in wood debris and brick pile with rocks, material is gray, weathered with rusting nails/tacks | | | | | Material sample QMCM-ASBBLK73-052617 collected during targeted inspection activities is representative of the materials identified during reconnaissance activities. |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | ✓ | Latitude: 47.14894778 N Longitude: 88.45877797 W | SACM#10: Flat sheets of layered asphaltic, roof material, black with gray metallic paint, contains felt paper within layering | | | | | Material sample QMCM-ASBBLK86-052617 collected during targeted inspection activities is representative of the materials identified during reconnaissance activities. |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | ✓ | Latitude: 47.14889770 N Longitude: 88.45890047 W | SACM#11: Scattered debris found in concrete trench and foundational block along the northeast side of Stamp Mill No. 2, Debris includes: black gasket material of various sizes, black woven, mesh-like material, small pieces of red, yellow and black material, roofing pieces with tar-like substance, gray woven material (similar in appearance to SACM#9), and black mastic w/ fabric | | | | | Material sample QMCM-ASBBLK78-052617 and QMCM-ASBBLK79-052617 collected during targeted inspection activities are representative of the materials identified during reconnaissance activities. |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |



View looking east to reconnaissance location SACM#11 within Quincy Stamp Mill No. 2.

APPENDIX D
Site Inspections - Reconnaissance Logs
Quincy Mining Company Mason Operations Area
Abandoned Mining Wastes - Torch Lake Non-Superfund Site

Geographic Area: Quincy Mining Company Mason Area

Property (Common Name): Quincy Stamp Mills Area

Property Identification Number and Owner: 009-023-001-00, Lakeshore Estates

Inspection Date: 4/21/2017 and 4/24/2017

General Property Description (Significant Landscape Features, Topography, Cover, Etc.): Access is not restricted to the western portion of the property. The property portion is bound to the east by Highway M-26, to the northwest by an ORV Trail, and to the north by Parcel No. 009-023-001-20. The property includes portions of two former stamp mill operations. Foundations and mining era materials are present in the central portion of the property. The property slopes to the southeast from a ridge on which the ORV trail is located to M-26. The majority of the property to the west side of M-26 is wooded and is steeply sloped in most places. Quincy Creek bisects the property and discharges to Torch Lake. Suspect asbestos containing materials, including asphaltic roofing material, potential thermal insulation material and rubber sheeting and gasket materials were observed on the property in and around the stamp mill ruins. Abandoned drums were observed in the wooded area to the south of the foundation remains. Residual processing materials were observed in the woods along the property line to the north, and in and around the concrete foundation remains of both stamp mill ruins.

| Check as Appropriate: | | Record Field Measurements: | Provide Written Description Including Condition, Content, and Similar Material Properties: | Document as Applicable: | | | | |
|---|---|---|---|----------------------------|----------|-------|------------------------|--|
| Potential Chemical or Physical Hazards | ✓ | Location/Coordinates | Description | Estimated Size/Area/Volume | Quantity | Units | Sample Recommendations | Notes |
| Suspect ACM | | Latitude: 47.14886974 N Longitude: 88.45901200 W | RPM#2: Yellow and orange rubbery mesh-imprinted material in small pieces, appears to be flexible, contains mesh imprinted on one side and is smooth on the opposite. Material is situated in two scattered piles nearby and is mixed with wood pieces and other debris | | | | | Material sample QMCM-RPM05-0"-6" collected during targeted inspection activities is representative of the materials identified during reconnaissance activities. |
| Residual Process Materials | ✓ | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | Latitude: 47.14892273 N Longitude: 88.45904887 W | RPM#3: Potential tailing debris that has a copper-like, green coloring, small pieces are concentrated in an area scattered with wood debris and concrete pieces | | | | | Material sample QMCM-RPM01-0"-6" collected during targeted inspection activities is representative of the materials identified during reconnaissance activities. |
| Suspect ACM | | | | | | | | |
| Residual Process Materials | ✓ | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | Latitude: 47.14892065 N Longitude: 88.45906968 W | SACM#12: Tar mastic in blocky, fist-sized chunks, loose pieces are scattered and appear to be weathered, mostly found on west side of concrete bases | | | | | Material sample QMCM-ASBBLK72-052617 collected during targeted inspection activities is representative of the materials identified during reconnaissance activities. |
| Other: _____ | | | | | | | | |
| Suspect ACM | ✓ | | | | | | | |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | Latitude: 47.14894135 N Longitude: 88.45912784 W | SACM#13: White rubber gasket (or caulk-like stripping) approximately 1" x 1' in length with rust marks, appears weathered and layered on sides, found on concrete slab | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | ✓ | | | | | | | |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | Latitude: 47.14897341 N Longitude: 88.45905222 W | SACM#14: Black tar mastic, similar in appearance to SACM#12, found on lengths of concrete foundation | | | | | Material sample QMCM-ASBBLK71-052617 collected during targeted inspection activities is representative of the materials identified during reconnaissance activities. |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | ✓ | | | | | | | |
| Residual Process Materials | | Latitude: 47.14898482 N Longitude: 88.45904424 W | SACM#15: Black, mesh-imprinted felt-like material in small pieces, appears to be flexible, some is attached to burlap-like fabric material, mixed in with yellow mesh-imprinted material (similar to RPM#2), some pieces appear to be partially buried Gray woven material and tar roofing material is found nearby. | | | | | Material sample QMCM-ASBBLK76-052617 collected during targeted inspection activities is representative of the materials identified during reconnaissance activities. |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |



View looking east to SACM#14 on concrete foundation of Stamp Mill No. 2.

APPENDIX D
Site Inspections - Reconnaissance Logs
Quincy Mining Company Mason Operations Area
Abandoned Mining Wastes - Torch Lake Non-Superfund Site

Geographic Area: Quincy Mining Company Mason Area

Property (Common Name): Quincy Stamp Mills Area

Property Identification Number and Owner: 009-023-001-00, Lakeshore Estates

Inspection Date: 4/21/2017 and 4/24/2017

General Property Description (Significant Landscape Features, Topography, Cover, Etc.): Access is not restricted to the western portion of the property. The property portion is bound to the east by Highway M-26, to the northwest by an ORV Trail, and to the north by Parcel No. 009-023-001-20. The property includes portions of two former stamp mill operations. Foundations and mining era materials are present in the central portion of the property. The property slopes to the southeast from a ridge on which the ORV trail is located to M-26. The majority of the property to the west side of M-26 is wooded and is steeply sloped in most places. Quincy Creek bisects the property and discharges to Torch Lake. Suspect asbestos containing materials, including asphaltic roofing material, potential thermal insulation material and rubber sheeting and gasket materials were observed on the property in and around the stamp mill ruins. Abandoned drums were observed in the wooded area to the south of the foundation remains. Residual processing materials were observed in the woods along the property line to the north, and in and around the concrete foundation remains of both stamp mill ruins.

| Check as Appropriate: | | Record Field Measurements: | Provide Written Description Including Condition, Content, and Similar Material Properties: | Document as Applicable: | | | | |
|---|---|---|--|----------------------------|----------|-------|------------------------|--|
| Potential Chemical or Physical Hazards | ✓ | Location/Coordinates | Description | Estimated Size/Area/Volume | Quantity | Units | Sample Recommendations | Notes |
| Suspect ACM | ✓ | Latitude: 47.14904098 N Longitude: 88.45910419 W | SACM#16: Red woven, fabric material, approximately 3-4 inches in width with smaller width pieces found scattered on ground | | | | | Material sample QMCM-ASBBLK77-052617 collected during targeted inspection activities is representative of the materials identified during reconnaissance activities. |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | ✓ | Latitude: 47.14903925 N Longitude: 88.45924797 W | SACM#17: Various piles of cream to gray lumpy material (suspected asbestos containing thermal system insulation) found at top of hill on northeast side of Stamp Mill No. 2, material contains visible fibers and appears similar to wet, partially disintegrated paper Piles continue down the hill and vary in coloring from brownish to white/green with a fibrous appearance. | | | | | Material sample QMCM-ASBBLK74-052617 collected during targeted inspection activities is representative of the materials identified during reconnaissance activities. |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | ✓ | Latitude: 47.14895639 N Longitude: 88.45916340 W | SACM#18: Pile of grey to black fibrous material approximately 1 foot in diameter, contains visible fibers through pile | | | | | Material sample QMCM-ASBBLK75-052617 collected during targeted inspection activities is representative of the materials identified during reconnaissance activities. |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | ✓ | Latitude: 47.14895634 N Longitude: 88.45914456 W | SACM#19: Pile of black roofing material that appears tar-like, roofing material is mixed with wood debris, black mesh-imprinted material (similar to SACM#15), fibrous grey/black material (similar to SACM#18) and gray woven material (similar to SACM#9) | | | | | Material sample QMCM-ASBBLK73-052617 collected during targeted inspection activities is representative of the materials identified during reconnaissance activities. |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | ✓ | Latitude: 47.14891748 N Longitude: 88.45915174 W | SACM#20: Black roofing material, layered felt-like material nailed into wooden board in trench near foundation of Stamp Mill No. 2, loose pieces of the same material are found on the ground nearby | | | | | Material sample QMCM-ASBBLK84-052617 collected during targeted inspection activities is representative of the materials identified during reconnaissance activities. |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | | Latitude: _____ Longitude: _____ | SEEP #1, #2: Seeps on northeast side of parcel flowing near highway ditch into which they drain. SEEP #2 is approximately 20 feet southwest of #1, both contain clay pipes, broken into pieces and scattered around on the ground. A larger piece of clay pipe is found uphill and to the east of #1. | | | | | |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: __groundwater seeps__ | ✓ | | | | | | | |



View looking north to SACM#17 on foundation of Stamp Mill No. 2.

APPENDIX D
Site Inspections - Reconnaissance Logs
Quincy Mining Company Mason Operations Area
Abandoned Mining Wastes - Torch Lake Non-Superfund Site


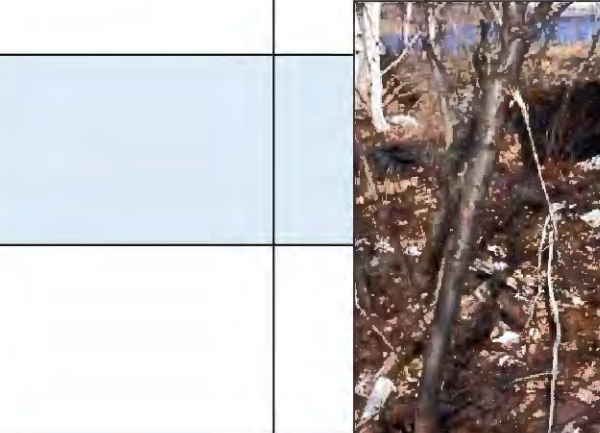
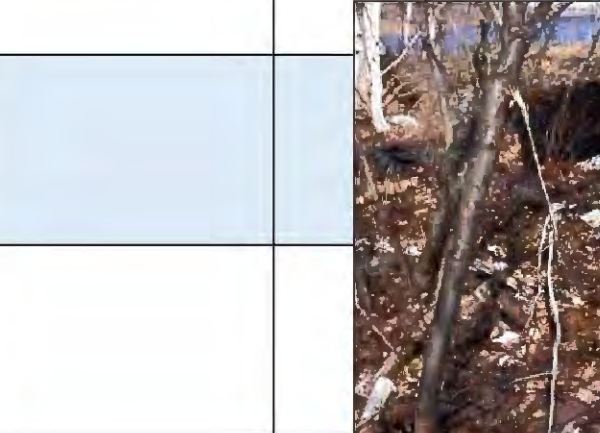
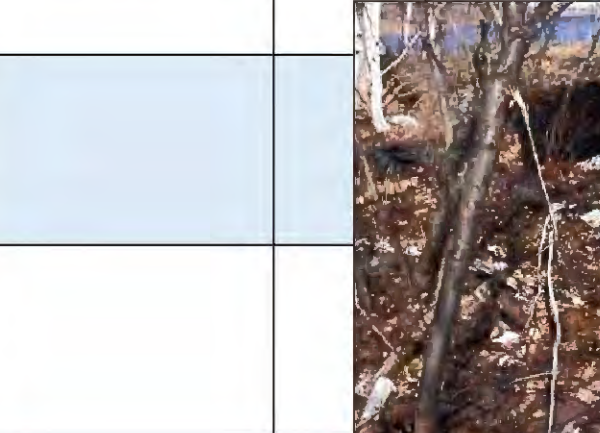



Geographic Area: Quincy Mining Company Mason Area

Property (Common Name): Quincy Stamp Mills Area

Property Identification Number and Owner: 009-023-001-00, Lakeshore Estates

Inspection Date: 4/24/2017

General Property Description (Significant Landscape Features, Topography, Cover, Etc.,) : Access is restricted to the eastern portion of the property. The property portion is bound to the west by Highway M-26, to the north by Parcel No. 009-014-017-00, to the east by Torch Lake, and to the south by the Quincy Stamp Sands Area. Parcel No.009-023-001-70 is located within the property area. The center portion of the property includes foundations and mining era ruins. The property slopes to the southeast towards Torch Lake and is comprised of mostly open grassland and wooded areas. EPA completed remedial activities at the subject and adjacent properties in 2005, capping what are now the open grassland portions of the property. Quincy Creek bisects the property and discharges to Torch Lake. Suspect asbestos containing materials, including asphaltic roofing material and rubber sheeting and gasket materials were observed on the property. Abandoned drums were observed in the wooded area to the southeast. A former dump appears to be present in a portion of the property near Torch Lake.

| Check as Appropriate: | | Record Field Measurements: | Provide Written Description Including Condition, Content, and Similar Material Properties: | Document as Applicable: | | | | |
|--|---|---|---|---|----------|-------|------------------------|---|
| Potential Chemical or Physical Hazards | ✓ | Location/Coordinates | Description | Estimated Size/Area/Volume | Quantity | Units | Sample Recommendations | Notes |
| Suspect ACM | | Latitude: Longitude: | Approximately a 10-foot long section of 4-foot tall fence is damaged near the access gate on the southeast side of M-26, across the highway from Stamp Mill No. 2 |  | | | | |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: ___ Physical Hazard ___ | ✓ | Latitude: 47.14870808 N Longitude: 88.45726001 W | SACM#38: Red layered paper material in small pieces on former foundation area, appears rough and chipped, area encompasses foundational extent and includes potential Transite tiles, black roofing material, gray layered material (potentially dried paint), and white/gray paper-like layered gasket material |  | | | | Material sample QMCM-ASBBLK42-052517, QMCM-ASBBLK43-052517, QMCM-ASBBLK44-052517 collected during targeted inspection activities are representative of the materials identified during reconnaissance activities. |
| Suspect ACM | ✓ | | | | | | | |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | Latitude: 47.14857874 N Longitude: 88.45690433 W | SACM#39: Black layered woven fabric material, appears to be weathered, wrapped around brown foam-like material in a bundle, partially buried |  | | | | Material sample QMCM-ASBBLK36-052517 collected during targeted inspection activities is representative of the materials identified during reconnaissance activities. |
| Other: ___ | | | | | | | | |
| Suspect ACM | ✓ | | | | | | | |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | Latitude: 47.14857874 N Longitude: 88.45690433 W | SACM#39: Black layered woven fabric material, appears to be weathered, wrapped around brown foam-like material in a bundle, partially buried |  | | | | Material sample QMCM-ASBBLK36-052517 collected during targeted inspection activities is representative of the materials identified during reconnaissance activities. |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: ___ Dump Area #1 - Physical Hazards ___ | ✓ | | | | | | | |
| Suspect ACM | | | | | | | | |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | Latitude: 47.14857874 N Longitude: 88.45690433 W | Dump Area #1: Residential/Commercial Dump Site, items observed include: car parts, rubber gasket material, floor tile/linoleum, gray woven fabric sheeting (similar in appearance to SACM#39), black weathered roofing material, gray woven metallic painted fabric tubing, rusted metal woven tubing, paint cans (most rusted, crushed, appear to be empty), automobile tires (10 counted, potentially more), large kitchen appliances, black rubber sheeting, black tape wrapped hose, weathered household linoleum, rusted drums and carcasses including the following: 10 drum carcasses, drum pieces, one empty crushed drum, and one 5-gallon empty can |  | | | | Material sample QMCM-ASBBLK37-052517, QMCM-ASBBLK38-052517, QMCM-ASBBLK39-052517, QMCM-ASBBLK40-052517, and QMCM-ASBBLK41-052517 collected during targeted inspection activities are representative of the materials identified during reconnaissance activities. |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: ___ Dump Area #2 - Physical Hazards ___ | ✓ | | | | | | | |
| Suspect ACM | | | | | | | | |
| Residual Process Materials | | Latitude: 47.14794143 N Longitude: 88.45760635 W | Dump Area #2: Dump Site, includes mostly buried items including household bottles and containers, wire mesh, black woven fabric material, at least one rusted drum carcass, and sheet metal |  | | | | Material sample QMCM-ASBBLK37-052517, QMCM-ASBBLK38-052517, QMCM-ASBBLK39-052517, QMCM-ASBBLK40-052517, and QMCM-ASBBLK41-052517 collected during targeted inspection activities are representative of the materials identified during reconnaissance activities. |
| Potentially Abandoned Containers | ✓ | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: ___ | | | | | | | | |
| Suspect ACM | | Latitude: 47.14794143 N Longitude: 88.45760635 W | Drum#11: Crushed, rusted drum, partially flattened, appears empty, contents unknown |  | | | | Material sample QMCM-ASBBLK37-052517, QMCM-ASBBLK38-052517, QMCM-ASBBLK39-052517, QMCM-ASBBLK40-052517, and QMCM-ASBBLK41-052517 collected during targeted inspection activities are representative of the materials identified during reconnaissance activities. |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | ✓ | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: ___ | | | | | | | | |

APPENDIX D
Site Inspections - Reconnaissance Logs
Quincy Mining Company Mason Operations Area
Abandoned Mining Wastes - Torch Lake Non-Superfund Site







Geographic Area:Quincy Mining Company Mason Area

Property (Common Name):Quincy Stamp Mills Area

Property Identification Number and Owner:009-023-001-00, Lakeshore Estates

Inspection Date:4/24/2017

General Property Description (Significant Landscape Features, Topography, Cover, Etc.): Access is restricted to the eastern portion of the property. The property portion is bound to the west by Highway M-26, to the north by Parcel No. 009-014-017-00, to the east by Torch Lake, and to the south by the Quincy Stamp Sands Area. Parcel No.009-023-001-70 is located within the property area. The center portion of the property includes foundations and mining era ruins. The property slopes to the southeast towards Torch Lake and is comprised of mostly open grassland and wooded areas. EPA completed remedial activities at the subject and adjacent properties in 2005, capping what are now the open grassland portions of the property. Quincy Creek bisects the property and discharges to Torch Lake. Suspect asbestos containing materials, including asphaltic roofing material and rubber sheeting and gasket materials were observed on the property. Abandoned drums were observed in the wooded area to the southeast. A former dump appears to be present in a portion of the property near Torch Lake.

| Check as Appropriate: | | Record Field Measurements: | Provide Written Description Including Condition, Content, and Similar Material Properties: | Document as Applicable: | | | | |
|---|---|---|--|--|----------|-------|---|--|
| Potential Chemical or Physical Hazards | ✓ | Location/Coordinates | Description | Estimated Size/Area/Volume | Quantity | Units | Sample Recommendations | Notes |
| Suspect ACM | | Latitude: 47.14804420 N Longitude: 88.45766746 W | Drum#12: Crushed, rusted drum, flattened, appears empty, contents unknown, located on top of overgrown debris pile |  | | | | |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | ✓ | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | | Latitude: 47.14804911 N Longitude: 88.45771026 W | Drum#13: Crushed, rusted drum carcass, contents unknown, if any, located on top of overgrown debris pile |  | | | | |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | ✓ | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | ✓ | Latitude: 47.14773628 N Longitude: 88.45784860 W | SACM#40: Black roofing material with tar paper, attached by nails to wooden boards, scattered throughout trench area to the east of remaining/standing brick wall |  | | | | Material sample QMCM-ASBBLK35-052517 collected during targeted inspection activities is representative of the materials identified during reconnaissance activities. |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | ✓ | Latitude: 47.14773629 N Longitude: 88.45767896 W | SACM#41: Gray woven fabric material, coated with black rubber material, appears to be in sheets (similar to SACM#39), partially buried | | | |  | Material sample QMCM-ASBBLK36-052517 collected during targeted inspection activities is representative of the materials identified during reconnaissance activities. |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | ✓ | Latitude: 47.14700700 N Longitude: 88.45803578 W | SACM#42: Black tar paper roofing material, partially buried on railroad grade, similar material is found south toward Torch Lake near wood structural remains | | | |  | Material sample QMCM-ASBBLK32-052517 collected during targeted inspection activities is representative of the materials identified during reconnaissance activities. |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | ✓ | Latitude: 47.14688894 N Longitude: 88.45795587 W | SACM#43: Black tar paper roofing material, attached to wooden boards, some unattached, area includes 8 inch x 4 foot sheet of black rubber material sandwiching woven layers, area includes imprinted black rubber | | | |  | Material sample QMCM-ASBBLK34-052517 collected during targeted inspection activities is representative of the materials identified during reconnaissance activities. |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |

APPENDIX D
Site Inspections - Reconnaissance Logs
Quincy Mining Company Mason Operations Area
Abandoned Mining Wastes - Torch Lake Non-Superfund Site







Geographic Area: Quincy Mining Company Mason Area

Property (Common Name): Quincy Stamp Mills Area

Property Identification Number and Owner: 009-023-001-00, Lakeshore Estates

Inspection Date: 4/24/2017

General Property Description (Significant Landscape Features, Topography, Cover, Etc.,) : Access is restricted to the eastern portion of the property. The property portion is bound to the west by Highway M-26, to the north by Parcel No. 009-014-017-00, to the east by Torch Lake, and to the south by the Quincy Stamp Sands Area. Parcel No.009-023-001-70 is located within the property area. The center portion of the property includes foundations and mining era ruins. The property slopes to the southeast towards Torch Lake and is comprised of mostly open grassland and wooded areas. EPA completed remedial activities at the subject and adjacent properties in 2005, capping what are now the open grassland portions of the property. Quincy Creek bisects the property and discharges to Torch Lake. Suspect asbestos containing materials, including asphaltic roofing material and rubber sheeting and gasket materials were observed on the property. Abandoned drums were observed in the wooded area to the southeast. A former dump appears to be present in a portion of the property near Torch Lake.

| Check as Appropriate: | | Record Field Measurements: | | Provide Written Description Including Condition, Content, and Similar Material Properties: | Document as Applicable: | | | | | | |
|---|---|----------------------------|---|--|-------------------------|-------|--|--|--|--|--|
| Potential Chemical or Physical Hazards | ✓ | Location/Coordinates | Description | Estimated Size/Area/Volume | Quantity | Units | Sample Recommendations | Notes | | | |
| Suspect ACM | ✓ | Latitude: 47.14696437 N | SACM#44: Pile of black weathered tar paper roofing material in pile and scattered nearby, similar to SACM #42, area/pile extends south toward Torch Lake and drum removal area |  | | | | Material sample QMCM-ASBBLK32-052517 collected during targeted inspection activities is representative of the materials identified during reconnaissance activities. | | | |
| Residual Process Materials | | | | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | | | | |
| Other: _____ | | Latitude: 47.14711821 N | Drum#14: Crushed drum, partially buried on west side of Quincy Creek Bank |  | | | | | | | |
| Suspect ACM | | | | | | | | | | | |
| Residual Process Materials | | | | | | | | | | | |
| Potentially Abandoned Containers | ✓ | | | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | Longitude: 88.45758156 W | | | | | | | | | |
| Other: _____ | | | | | | | | | | | |
| Suspect ACM | | | | | | | | | | | |
| Residual Process Materials | | | | | | | | | | | |
| Potentially Abandoned Containers | ✓ | | | | | | | | | | |
| Soil Staining/Stressed Vegetation | | Longitude: 88.45727676 W | Drum#15: Rusted, mangled, drum carcass, partially buried |  | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | | | | |
| Other: _____ | | | | | | | | | | | |
| Suspect ACM | | | | | | | | | | | |
| Residual Process Materials | | | | | | | | | | | |
| Potentially Abandoned Containers | ✓ | Latitude: 47.14702364 N | | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | | | | |
| Other: _____ | | | | | | | | | | | |
| Suspect ACM | | | | | | | | | | | |
| Suspect ACM | ✓ | Latitude: 47.14664070 N | SACM#45: Wooden barge structure partially covered by weathered black roofing material with a gray metallic coating, roofing is partially attached to wooden boards of structure, some pieces are on the ground nearby |  | | | Material sample QMCM-ASBBLK31-052517 collected during targeted inspection activities is representative of the materials identified during reconnaissance activities. | | | | |
| Residual Process Materials | | | | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | | | | |
| Other: _____ | | Longitude: 88.45806708 W | | | | | | | | | |
| Suspect ACM | | | | | | | | | | | |
| Residual Process Materials | | | | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | Latitude: 47.14651737 N | SACM#46: Black roll of weathered rubbery material, nearby items include: two rolls of gray woven fabric material with red fabric that is partially buried, partially uncoiled rubber sheeting, and buried rubber sheeting with grommets |  | | | | | | | |
| Other: _____ | | | | | | | | | | | |
| Suspect ACM | | | | | | | | | | | |
| Residual Process Materials | | | | | | | | | | | |
| Potentially Abandoned Containers | ✓ | | | | | | | | | | |
| Soil Staining/Stressed Vegetation | | Longitude: 88.45826326 W | Drum#16: Buried drum, rusted, unknown if visible piece is a carcass or complete drum, contents unknown |  | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | | | | |
| Other: _____ | | | | | | | | | | | |
| Suspect ACM | | | | | | | | | | | |
| Residual Process Materials | | | | | | | | | | | |
| Potentially Abandoned Containers | ✓ | Latitude: 47.14651737 N | | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | | | | |
| Other: _____ | | | | | | | | | | | |
| Suspect ACM | | | | | | | | | | | |
| Residual Process Materials | | Longitude: 88.45826326 W | Drum#16: Buried drum, rusted, unknown if visible piece is a carcass or complete drum, contents unknown | | | | | | | | |
| Potentially Abandoned Containers | ✓ | | | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | | | | |
| Other: _____ | | | | | | | | | | | |

APPENDIX D
Site Inspections - Reconnaissance Logs
Quincy Mining Company Mason Operations Area
Abandoned Mining Wastes - Torch Lake Non-Superfund Site


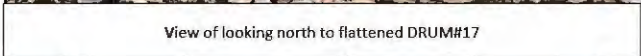
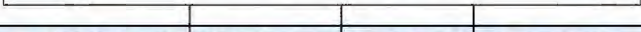


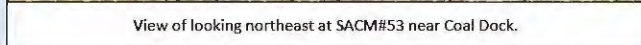
Geographic Area:Quincy Mining Company Mason Area

Property (Common Name):Quincy Stamp Mills Area

Property Identification Number and Owner:009-023-001-00, Lakeshore Estates

Inspection Date:4/21/2017

General Property Description (Significant Landscape Features, Topography, Cover, Etc.,) : Access is restricted to the eastern portion of the property. The property portion is bound to the west by Highway M-26, to the north by Parcel No. 009-014-017-00, to the east by Torch Lake, and to the south by the Quincy Stamp Sands Area. Parcel No.009-023-001-70 is located within the property area. The center portion of the property includes foundations and mining era ruins. The property slopes to the southeast towards Torch Lake and is comprised of mostly open grassland and wooded areas. EPA completed remedial activities at the subject and adjacent properties in 2005, capping what are now the open grassland portions of the property. Quincy Creek bisects the property and discharges to Torch Lake. Suspect asbestos containing materials, including asphaltic roofing material and rubber sheeting and gasket materials were observed on the property. Abandoned drums were observed in the wooded area to the southeast. A former dump appears to be present in a portion of the property near Torch Lake.

| Check as Appropriate: | | Record Field Measurements: | | Provide Written Description Including Condition, Content, and Similar Material Properties: | Document as Applicable: | | | | |
|---|---|--|---|--|---|-------|------------------------|--|--|
| Potential Chemical or Physical Hazards | ✓ | Location/Coordinates | Description | Estimated Size/Area/Volume | Quantity | Units | Sample Recommendations | Notes | |
| Suspect ACM | ✓ | Latitude: 47.14641487 N Longitude: 88.45837528 W | SACM#47: Pile of white/gray woven material covered/coated in black rubber, approximately 4 inches in width, partially buried | |  | | | Material sample QMCM-ASBBLK30-052517 collected during targeted inspection activities is representative of the materials identified during reconnaissance activities. | |
| Residual Process Materials | | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | | |
| Other: _____ | | | | | | | | | |
| Suspect ACM | | Latitude: 47.14634112 N Longitude: 88.45824729 W | Drum#17: Flattened drum carcass, rusted, surrounded by granular tan colored substance, unknown contents | |  | | | Waste Characterization sample QMCM-DM02-0"-6" was collected during targeted inspection activities of the spilled material | |
| Residual Process Materials | | | | | | | | | |
| Potentially Abandoned Containers | ✓ | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | | |
| Other: _____ | | | | | | | | | |
| Suspect ACM | ✓ | Latitude: 47.14630505 N Longitude: 88.458832708 W | SACM#48: Black tar roofing material, scattered in pieces on south side of railroad grade, some has metallic gray coating (similar in appearance to SACM#45) | |  | | | Material sample QMCM-ASBBLK29-052517 collected during targeted inspection activities is representative of the materials identified during reconnaissance activities. | |
| Residual Process Materials | | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | | |
| Other: _____ | | | | | | | | | |
| Suspect ACM | ✓ | Latitude: 47.14623118 N Longitude: 88.45844810 W | SACM#49: Black belt material approximately 6-8 inches wide, coiled, partially buried, included in area is strip of gray dry rotted weathered gasket | |  | | | Material sample QMCM-ASBBLK26-052517 and QMCM-ASBBLK27-052517 collected during targeted inspection activities are representative of the materials identified during reconnaissance activities. | |
| Residual Process Materials | | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | | |
| Other: _____ | | | | | | | | | |
| Suspect ACM | ✓ | Latitude: 47.14588667 N Longitude: 88.45738316 W | SACM#53: Black tar roofing material, appears felt-like, fibrous and layered, partially buried along coal dock edge of cap toward remaining dock location, various sized pieces from 1 square foot to quarter sized pieces scattered among coal debris and piled rocks, area extends south towards concrete pylon, larger area includes black weathered roofing material attached to wooden boards that appears layered, but melted together, approximately 25 square feet | |  | | | Material sample QMCM-ASBBLK28-052517 collected during targeted inspection activities is representative of the materials identified during reconnaissance activities. | |
| Residual Process Materials | | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | | |
| Other: _____ | | | | | | | | | |
| Suspect ACM | | Latitude: 47.15110725 N Longitude: 88.45533960 W | SEEP#3: Metallic sheen on water and sediment in ditch. When disturbed, the material forms "blocks" and then pulls back together | |  | | | Surface water sample QMCM-SW08 and sediment sample QMCM-SD47 were collected during targeted inspection activities. | |
| Residual Process Materials | | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | | |
| Other: ____ SEEP#3 | ✓ | | | | | | | | |

APPENDIX D
Site Inspections - Reconnaissance Logs
Quincy Mining Company Mason Operations Area
Abandoned Mining Wastes - Torch Lake Non-Superfund Site

Geographic Area: Quincy Mining Company Mason Area

Property (Common Name): Quincy Stamp Mills Area

Property Identification Number and Owner: 009-023-001-00, Lakeshore Estates

Inspection Date: 4/24/2017 - 4/25/2017

General Property Description (Significant Landscape Features, Topography, Cover, Etc.): Access is restricted to the eastern portion of the property. The property portion is bound to the west by Highway M-26, to the north by Parcel No. 009-014-017-00, to the east by Torch Lake, and to the south by the Quincy Stamp Sands Area. Parcel No.009-023-001-70 is located within the property area. The center portion of the property includes foundations and mining era ruins. The property slopes to the southeast towards Torch Lake and is comprised of mostly open grassland and wooded areas. EPA completed remedial activities at the subject and adjacent properties in 2005, capping what are now the open grassland portions of the property. Quincy Creek bisects the property and discharges to Torch Lake. Suspect asbestos containing materials, including asphaltic roofing material and rubber sheeting and gasket materials were observed on the property. Abandoned drums were observed in the wooded area to the southeast. A former dump appears to be present in a portion of the property near Torch Lake.

| Check as Appropriate: | | Record Field Measurements: | Provide Written Description Including Condition, Content, and Similar Material Properties: | Document as Applicable: | | | | |
|---|---|----------------------------|---|----------------------------|----------|-------|------------------------|--|
| Potential Chemical or Physical Hazards | ✓ | Location/Coordinates | Description | Estimated Size/Area/Volume | Quantity | Units | Sample Recommendations | Notes |
| Suspect ACM | ✓ | Latitude: 47.14437050 N | SACM#55: Black roofing material, similar in appearance to SACM#54, less metallic coloring, appears more weathered, found on shoreline | | | | | Material sample QMCM-ASBBLK45-052517 collected during targeted inspection activities is representative of the materials identified during reconnaissance activities. |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | Longitude: 88.46025314 W | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | ✓ | Latitude: 47.14445596 N | SACM#56: Black roofing material, similar in appearance to SACM#54 and #55, pieces approximately 5 square feet in size laying on top of the cap | | | | | Material sample QMCM-ASBBLK45-052517 collected during targeted inspection activities is representative of the materials identified during reconnaissance activities. |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | Longitude: 88.46052994 W | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | ✓ | Latitude: 47.14388484 N | SACM#57: Black rubber coated belt-like material, weathered in places and appears to be layered under rubber coating, partially buried in debris/rock pile, (similar in appearance to SACM#43) | | | | | Material sample QMCM-ASBBLK34-052517 collected during targeted inspection activities is representative of the materials identified during reconnaissance activities. |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | Longitude: 88.46151238 W | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | ✓ | Latitude: 47.14349329 N | SACM#58: Black roofing material with metallic coating, attached to wooden board along shoreline, similar in appearance to other samples found along shoreline near dredge | | | | | Material sample QMCM-ASBBLK45-052517 collected during targeted inspection activities is representative of the materials identified during reconnaissance activities. |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | Longitude: 88.45754114 N | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | ✓ | Latitude: 47.14475602 N | SACM#59: Black roofing material, similar in appearance to SACM#54, 55, and 58, along shoreline, one piece is attached to a wooden board underwater | | | | | Material sample QMCM-ASBBLK45-052517 collected during targeted inspection activities is representative of the materials identified during reconnaissance activities. |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | Longitude: 88.45880084 W | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | | Latitude: | | | | | | |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | Longitude: | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |



View of looking east to dredge and SACM#55.

APPENDIX D
Site Inspections - Reconnaissance Logs
Quincy Mining Company Mason Operations Area
Abandoned Mining Wastes - Torch Lake Non-Superfund Site

Geographic Area: Quincy Mining Company Mason Area

Property (Common Name): Quincy Stamp Mills Area

Property Identification Number and Owner: 009-023-001-00, Lakeshore Estates

Inspection Date: 4/25/2017

General Property Description (Significant Landscape Features, Topography, Cover, Etc.,) : Access is restricted to the eastern portion of the property. The property portion is bound to the west by Highway M-26, to the north by Parcel No. 009-014-017-00, to the east by Torch Lake, and to the south by the Quincy Stamp Sands Area. Parcel No.009-023-001-70 is located within the property area. The center portion of the property includes foundations and mining era ruins. The property slopes to the southeast towards Torch Lake and is comprised of mostly open grassland and wooded areas. EPA completed remedial activities at the subject and adjacent properties in 2005, capping what are now the open grassland portions of the property. Quincy Creek bisects the property and discharges to Torch Lake. Suspect asbestos containing materials, including asphaltic roofing material and rubber sheeting and gasket materials were observed on the property. Abandoned drums were observed in the wooded area to the southeast. A former dump appears to be present in a portion of the property near Torch Lake.

| Check as Appropriate: | | Record Field Measurements: | Provide Written Description Including Condition, Content, and Similar Material Properties: | Document as Applicable: | | | | |
|---|---|--|---|---|----------|-------|------------------------|---|
| Potential Chemical or Physical Hazards | ✓ | Location/Coordinates | Description | Estimated Size/Area/Volume | Quantity | Units | Sample Recommendations | Notes |
| Suspect ACM | ✓ | Latitude: 47.14331184 N Longitude: 88.458771011 W | SACM#60: Black roofing material, similar in appearance to SACM#58 and #59 along shore line, one piece is attached to a board in the water | 6 inches x 2 feet 1 foot x 10 inches | | | | Material sample QMCM-ASBBLK45-052517 collected during targeted inspection activities is representative of the materials identified during reconnaissance activities. |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | Latitude: 47.14500256 N Longitude: 88.46137115 W | SACM#77: Black tar chunk found at base of tree, buried in ground, approximately 30 feet from highway M-26, near concrete slab | | | | | Material not sampled for SACM, determined to be road tar. |
| Suspect ACM | ✓ | | | | | | | |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | Latitude: 47.14227911 N Longitude: 88.46284838 W | SACM#78: Rubber material buried into hillside, includes rubber coated belts and rubber sheeting, located along north hillside | | | | | Material not sampled for SACM, determined to be rubber. |
| Suspect ACM | ✓ | | | | | | | |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | Latitude: 47.14241588 N Longitude: 88.46275438 W | SACM#79: Area just west of monitoring wells toward concrete foundation, including suspect items: black rubber 1 1/2 inch diameter hose, black rubber gaskets, rubber sheeting, white/gray weathered fabric material with gray substance attached in places located toward fence line, thicker rubber matting located just to the south, and black/gray/red metal clipped fabric belting | | | | | Material sample QMCM-ASBBLK46-052517, QMCM-ASBBLK47-052517, QMCM-ASBBLK48-052517, QMCM-ASBBLK49-052517, QMCM-ASBBLK50-052517 collected during targeted inspection activities are representative of the materials identified during reconnaissance activities. |
| Suspect ACM | ✓ | | | | | | | |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | Latitude: 47.14190619 N Longitude: 88.46350579 W | Drum#30: Rusted drum, partially crushed and buried | 55-Gal | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | | | | | | | | |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | ✓ | | | | | | | |
| Soil Staining/Stressed Vegetation | | Latitude: 47.14181034 N Longitude: 88.46348122 W | Drum#31: Rusted, partially sunk drum with stick-up (petcock) bung, top and bottom intact, no oil sheen in water surrounding it | 55-Gal | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | | | | | | | | |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | ✓ | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |



View of looking northeast to Drum#31.

APPENDIX D
Site Inspections - Reconnaissance Logs
Quincy Mining Company Mason Operations Area
Abandoned Mining Wastes - Torch Lake Non-Superfund Site





Geographic Area:Quincy Mining Company Mason Area

Property (Common Name):Quincy Stamp Mills Area

Property Identification Number and Owner:009-023-001-00, Lakeshore Estates

Inspection Date:4/25/2017

General Property Description (Significant Landscape Features, Topography, Cover, Etc.,) : Access is restricted to the eastern portion of the property. The property portion is bound to the west by Highway M-26, to the north by Parcel No. 009-014-017-00, to the east by Torch Lake, and to the south by the Quincy Stamp Sands Area. Parcel No.009-023-001-70 is located within the property area. The center portion of the property includes foundations and mining era ruins. The property slopes to the southeast towards Torch Lake and is comprised of mostly open grassland and wooded areas. EPA completed remedial activities at the subject and adjacent properties in 2005, capping what are now the open grassland portions of the property. Quincy Creek bisects the property and discharges to Torch Lake. Suspect asbestos containing materials, including asphaltic roofing material and rubber sheeting and gasket materials were observed on the property. Abandoned drums were observed in the wooded area to the southeast. A former dump appears to be present in a portion of the property near Torch Lake.

| Check as Appropriate: | | Record Field Measurements: | Provide Written Description Including Condition, Content, and Similar Material Properties: | Document as Applicable: | | | | |
|---|---|---|---|---|----------|--|------------------------|-------|
| Potential Chemical or Physical Hazards | ✓ | Location/Coordinates | Description | Estimated Size/Area/Volume | Quantity | Units | Sample Recommendations | Notes |
| Suspect ACM | | Latitude: 47.14197462 N Longitude: 88.46354392 W | Drum#32: Approximately 24 rusted drum tops and bottoms, partially buried, some folded/crushed, at least one contains a label that reads: Dow Chemical Company | | | | | |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | ✓ | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | | Latitude: 47.14200196 N Longitude: 88.46328898 W | Drum#33: Rusted drum, both ends intact except a bullet hole is present at one end, petroleum-like odor near the drum | | | | | |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | ✓ | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | | Latitude: 47.14205956 N Longitude: 88.46324170 W | Drum#34: Rusted black painted drum, partially buried, appears to have a lid inside |  | | | | |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | ✓ | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | | Latitude: 47.14223289 N Longitude: 88.46288684 W | Drum#35: Black, rusted, partially buried drum, no visible top, contents unknown (only leaf litter is visible), approximately 10 inches of the drum is visible |  | | | | |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | ✓ | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | | Latitude: 47.14241588 N Longitude: 88.46275439 W | Drum#36 (GPS point for SACM#79): Mangled, flattened drum carcass, partially buried |  | | | | |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | ✓ | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | ✓ | Latitude: _____ Longitude: _____ | Black wire wrap, appears to be aluminum wire, near northeast shoreline of Coal Dock area, observed and sampled during targeted inspection activities. |  | | | | |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |
| | | | | View of Drum#36, near SACM#79 | | | | |
| | | | | | | Material sample QMCM-ASBBLK33-052517 collected during targeted inspection activities is representative of the materials identified during reconnaissance activities. | | |



View looking southeast to Drum#32.

APPENDIX D
Site Inspections - Reconnaissance Logs
Quincy Mining Company Mason Operations Area
Abandoned Mining Wastes - Torch Lake Non-Superfund Site

Geographic Area:

Quincy Mining Company Mason Area

Property (Common Name):

Quincy Stamp Mills Area







Property Identification Number and Owner:

009-023-001-70, Osceola Township

Inspection Date:

04/24/2017 - 04/25/2017

General Property Description (Significant Landscape Features, Topography, Cover, Etc.,) : Access is restricted to the property. The property is bounded to the west by Highway M-26, to the north, northeast, and south by Parcel No. 009-023-001-00, and to the southeast by Torch Lake. The property includes portions of the former stamp mill operations. Foundations and mining era materials are present in the northeast portion of the property. The western portion of the property contains an access road that runs throughout the gated Stamp Sands area. EPA completed remedial activities at the subject and adjacent properties in 2005. Suspect asbestos containing materials, including asphaltic roofing material, mastic, and fire bricks were observed on the north end of the property. Additional suspect asbestos containing asphaltic roofing material was observed at the south end of the parcel. Abandoned drums were observed at the north end of the property near mining era structures and foundational remains.

| Check as Appropriate: | | Record Field Measurements: | Provide Written Description Including Condition, Content, and Similar Material Properties: | Document as Applicable: | | | | |
|---|---|---|--|--|----------|---|------------------------|---|
| Potential Chemical or Physical Hazards | ✓ | Location/Coordinates | Description | Estimated Size/Area/Volume | Quantity | Units | Sample Recommendations | Notes |
| Suspect ACM | ✓ | Latitude: 47.14626304 N Longitude: 88.45848218 W | SACM#50: Gray/black shingle-like roofing material attached to wooden board with nails along approximately 3/4 of the height of the coal bin/silo, approximately 3 feet wide Includes gray/white mastic between wooden boards and the concrete silo walls. |  | | | | Material samples QMCM-ASBBLK24-052517 and QMCM-ASBBLK25-052517 collected during targeted inspection activities are representative of the materials identified during reconnaissance activities. |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | | Latitude: 47.14631996 N Longitude: 88.45853916 W | Drum#18: Drum buried with only top portion of rim visible, buried near the southeast side of the coal bin, contents unknown, but contains visible leaf litter |  | | | | |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | ✓ | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | | Latitude: 47.14633410 N Longitude: 88.45877515 W | Drum#19: Drum carcass without top or bottom, rusted, partially flattened, contents are unknown but crystallized material is spilling out that appears to be white and solid |  | | | | Waste Characterization sample QMCM-DM03-0"-6" collected during targeted inspection activities |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | ✓ | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | ✓ | Latitude: 47.14656547 N Longitude: 88.45883351 W | SACM#51: Pile of bricks at base of smoke stack, yellow "fire bricks" of varying sizes, including 5x5 inch, 5x7 inch, and 9x6 inch, pile includes slate material mixed within. Nearby a rusted metal flange was observed with approximately 2 linear feet of rope gasket attached | | |  | | Material samples QMCM-ASBBLK22-052517 and QMCM-ASBBLK23-052517 collected during targeted inspection activities are representative of the materials identified during reconnaissance activities. |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | ✓ | Latitude: 47.14625785 N Longitude: 88.45934283 W | SACM#52: Black, tar-like roofing material attached to wooden boards, found in concrete and wood basin, two pieces are visible with potentially more buried in leaf litter | | |  | | Material sample QMCM-ASBBLK28-052517 collected during targeted inspection activities is representative of the materials identified during reconnaissance activities. |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | ✓ | Latitude: 47.14471045 N Longitude: 88.45981845 W | SACM#54: Black roofing material on shoreline near edge of cap, has metallic coating, appears weathered and in poor condition, material appears to be similar to that on dredge roof in places | | |  | | Material sample QMCM-ASBBLK45-052517 collected during targeted inspection activities is representative of the materials identified during reconnaissance activities. |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |

View of SACM#50, shingle-like material and gray mastic.

View looking south to Drum#19.

APPENDIX D
Site Inspections - Reconnaissance Logs
Quincy Mining Company Mason Operations Area
Abandoned Mining Wastes - Torch Lake Non-Superfund Site



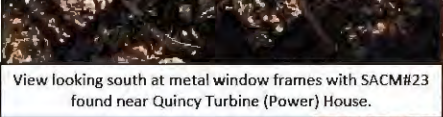
Geographic Area:Quincy Mining Company Mason Area

Property (Common Name):Quincy Stamp Mills Area

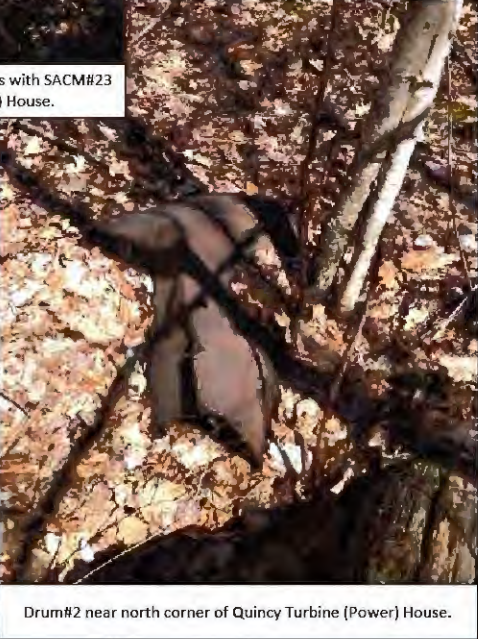
Property Identification Number and Owner:009-023-001-05, Iroquois Copper, LLC.

Inspection Date:4/21/2017 and 4/24/2017

General Property Description (Significant Landscape Features, Topography, Cover, Etc.,) : Access is not restricted to the western portion of the property. The property portion is bound to the east by Highway M-26, to the northwest by an ORV Trail, and to the north by Parcel No. 009-023-001-20. The property includes portions of two former stamp mill operations. Foundations and mining era materials are present in the central portion of the property. The property slopes to the southeast from a ridge on which the ORV trail is located to M-26. The majority of the property to the west side of M-26 is wooded and is steeply sloped in most places. Quincy Creek bisects the property and discharges to Torch Lake. Suspect asbestos containing materials, including asphaltic roofing material, potential thermal insulation material and rubber sheeting and gasket materials were observed on the property in and around the stamp mill ruins. Abandoned drums were observed in the wooded area to the south of the foundation remains. Residual processing materials were observed in the woods along the property line to the north, and in and around the concrete foundation remains of both stamp mill ruins.

| Check as Appropriate: | | Record Field Measurements: | Provide Written Description Including Condition, Content, and Similar Material Properties: | Document as Applicable: | | | | |
|---|---|----------------------------|--|---|----------|-------|------------------------|--|
| Potential Chemical or Physical Hazards | ✓ | Location/Coordinates | Description | Estimated Size/Area/Volume | Quantity | Units | Sample Recommendations | Notes |
| Suspect ACM | ✓ | Latitude: 47.14770860 N | SACM#21: Flat, rectangular sheet of layered material with rusted metal brackets attached, sheet is approximately 18 x 36 inches |  | | | | Material sample QMCM-ASBBLK68-052617 collected during targeted inspection activities is representative of the materials identified during reconnaissance activities. |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | Longitude: 88.46018467 W | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | ✓ | Latitude: 47.14758350 N | SACM#22: Scraps of white/gray woven fabric with visibly weathered black coating. Visible length is approximately 4 feet and is partially buried. |  | | | | Material sample QMCM-ASBBLK70-052617 collected during targeted inspection activities is representative of the materials identified during reconnaissance activities. |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | Longitude: 88.45988498 W | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | ✓ | Latitude: 47.14754006 N | SACM#23: Gray/white caulking material around rusted window frames laying on ground, material is attached to the windows in creases |  | | | | Material sample QMCM-ASBBLK67-052617 collected during targeted inspection activities is representative of the materials identified during reconnaissance activities. |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | Longitude: 88.46042663 W | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | ✓ | Latitude: 47.14765748 N | SACM#24: Black woven fabric tubing, appears weathered and deteriorated, approximately 2 inches in diameter and approximately 5 feet long, partially buried | | | | | Material sample QMCM-ASBBLK69-052617 collected during targeted inspection activities is representative of the materials identified during reconnaissance activities. |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | Longitude: 88.46040243 W | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | | Latitude: 47.14782446 N | DRUM#2: Rusted, crushed drum carcass, no visible top or bottom, partially buried | | | | | |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | ✓ | | | | | | | |
| Soil Staining/Stressed Vegetation | | Longitude: 88.46024110 W | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | ✓ | Latitude: 47.14665213 N | SACM#25: Pile of black asphalt shingle roofing material along edge of ORV trail, appear to be more modern than previously seen roofing material | | | | | Material sample QMCM-ASBBLK65-052517 collected during targeted inspection activities is representative of the materials identified during reconnaissance activities. |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | Longitude: 88.46122398 W | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |

View looking south at metal window frames with SACM#23 found near Quincy Turbine (Power) House.



Drum#2 near north corner of Quincy Turbine (Power) House.

APPENDIX D
Site Inspections - Reconnaissance Logs
Quincy Mining Company Mason Operations Area
Abandoned Mining Wastes - Torch Lake Non-Superfund Site

Geographic Area:Quincy Mining Company Mason Area

Property (Common Name):Quincy Stamp Mills Area

Property Identification Number and Owner:009-023-001-05, Iroquois Copper, LLC.

Inspection Date:4/21/2017 and 4/24/2017

General Property Description (Significant Landscape Features, Topography, Cover, Etc.,) : Access is not restricted to the western portion of the property. The property portion is bound to the east by Highway M-26, to the northwest by an ORV Trail, and to the north by Parcel No. 009-023-001-20. The property includes portions of two former stamp mill operations. Foundations and mining era materials are present in the central portion of the property. The property slopes to the southeast from a ridge on which the ORV trail is located to M-26. The majority of the property to the west side of M-26 is wooded and is steeply sloped in most places. Quincy Creek bisects the property and discharges to Torch Lake. Suspect asbestos containing materials, including asphaltic roofing material, potential thermal insulation material and rubber sheeting and gasket materials were observed on the property in and around the stamp mill ruins. Abandoned drums were observed in the wooded area to the south of the foundation remains. Residual processing materials were observed in the woods along the property line to the north, and in and around the concrete foundation remains of both stamp mill ruins.

| Check as Appropriate: | | Record Field Measurements: | Provide Written Description Including Condition, Content, and Similar Material Properties: | Document as Applicable: | | | | |
|---|---|---|---|----------------------------|----------|-------|------------------------|--|
| Potential Chemical or Physical Hazards | ✓ | Location/Coordinates | Description | Estimated Size/Area/Volume | Quantity | Units | Sample Recommendations | Notes |
| Suspect ACM | ✓ | Latitude: 47.14696845 N Longitude: 88.46067707 W | SACM#26: The area is littered with black gasket material and black roofing material with tar-like substance, some of which is attached to wooden boards (similar in appearance to SACM#8), material varies in size | | | | | Material sample QMCM-ASBBLK84-052617 collected during targeted inspection activities is representative of the materials identified during reconnaissance activities. |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | ✓ | Latitude: 47.14706515 N Longitude: 88.46058317 W | SACM#27: Pile of gray fibrous material, appears deteriorated, suspected asbestos containing thermal system insulation, small piles extend southeast toward Stamp Mill No. 1 building wall and include overall area of approximately 60 x 40 feet | | | | | Material sample QMCM-ASBBLK60-052517 collected during targeted inspection activities is representative of the materials identified during reconnaissance activities. |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | ✓ | Latitude: 47.14743876 N Longitude: 88.46046196W | SACM#28: Crushed metal sheeting that appears to have been a fire door, material inside metal is gray paper-like and appears layered, suspect TSI | | | | | Material sample QMCM-ASBBLK64-052517 collected during targeted inspection activities is representative of the materials identified during reconnaissance activities. |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | ✓ | Latitude: _____ Longitude: _____ | Approximately 50 feet of pipe wrap partially attached to metal pipes and on floor inside Stamp Mill No. 1 building, suspected asbestos-containing thermal system insulation material was viewed from outside building on northeast corner looking southwest. An abandoned drum is observed further into the building. | | | | | |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | ✓ | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | | Latitude: 47.14661340 N Longitude: 88.46097310 W | Container #3: Quart-sized rusted container of "Quality Plus" Motor Oil, empty | | | | | |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | ✓ | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | | Latitude: _____ Longitude: _____ | SACM#29: Pile of lumpy gray material, potential asbestos containing thermal system insulation, similar in appearance to SACM#17 and #27 | | | | | Material sample QMCM-ASBBLK60-052517 collected during targeted inspection activities is representative of the materials identified during reconnaissance activities. |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |



APPENDIX D
Site Inspections - Reconnaissance Logs
Quincy Mining Company Mason Operations Area
Abandoned Mining Wastes - Torch Lake Non-Superfund Site




Geographic Area:Quincy Mining Company Mason Area

Property (Common Name):Quincy Stamp Mills Area

Property Identification Number and Owner:009-023-001-05, Iroquois Copper, LLC.

Inspection Date:4/21/2017 and 4/24/2017

General Property Description (Significant Landscape Features, Topography, Cover, Etc.): Access is not restricted to the western portion of the property. The property portion is bound to the east by Highway M-26, to the northwest by an ORV Trail, and to the north by Parcel No. 009-023-001-20. The property includes portions of two former stamp mill operations. Foundations and mining era materials are present in the central portion of the property. The property slopes to the southeast from a ridge on which the ORV trail is located to M-26. The majority of the property to the west side of M-26 is wooded and is steeply sloped in most places. Quincy Creek bisects the property and discharges to Torch Lake. Suspect asbestos containing materials, including asphaltic roofing material, potential thermal insulation material and rubber sheeting and gasket materials were observed on the property in and around the stamp mill ruins. Abandoned drums were observed in the wooded area to the south of the foundation remains. Residual processing materials were observed in the woods along the property line to the north, and in and around the concrete foundation remains of both stamp mill ruins.

| Check as Appropriate: | | Record Field Measurements: | Provide Written Description Including Condition, Content, and Similar Material Properties: | Document as Applicable: | | | | |
|---|---|---|---|--|----------|-------|------------------------|--|
| Potential Chemical or Physical Hazards | ✓ | Location/Coordinates | Description | Estimated Size/Area/Volume | Quantity | Units | Sample Recommendations | Notes |
| Suspect ACM | ✓ | Latitude: 47.14672952 N Longitude: 88.46053163 W | SACM#30: Length of black and red woven fabric material, approximately 40 feet x 4 inches, shredded and frayed along the edges, surrounded by small pieces of mesh-imprinted material, roofing, and screen |  | | | | Material sample QMCM-ASBBLK62-052517 collected during targeted inspection activities is representative of the materials identified during reconnaissance activities. |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | Latitude: 47.14660240 N Longitude: 88.46061797 W | DRUM #4: Rusted drum, top and bottom appear missing, crushed to approximately 6 inches, appears to be filled with possibly soil and leaf debris |  | | | | |
| Suspect ACM | | | | | | | | |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | ✓ | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | Latitude: 47.14660744 N Longitude: 88.46057546 W | DRUM #5: Crushed, rusted drum, open at one end, appears to be empty and filled with leaf debris, partially buried |  | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | | | | | | | | |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | ✓ | | | | | | | |
| Soil Staining/Stressed Vegetation | | Latitude: 47.14655622 N Longitude: 88.46061783 W | RPM#4: Thick brown sludge-like material found beneath rusted metal roofing of thickener in Mineral House, material is mixed with leaf and wood debris | | | | | Material sample QMCM-RPM06-0"-6" collected during targeted inspection activities is representative of the materials identified during reconnaissance activities. |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | ✓ | | | | | | | |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | Latitude: 47.14688890 N Longitude: 88.46035698 W | SACM#31: Piles varying in size of suspected asbestos containing thermal system insulation (similar in appearance to SACM#17, 27, and 29), gray or brown, fibrous, overall area encompasses approximately 40 x 80 feet | | | | | Material sample QMCM-ASBBLK60-052517 collected during targeted inspection activities is representative of the materials identified during reconnaissance activities. |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | ✓ | | | | | | | |
| Residual Process Materials | | Latitude: _____ Longitude: _____ | SACM#32: 1 x2 foot section of layered black woven fabric material, faded and weathered with rivet holes and bolts, approximately 5-6 sheets, with pieces of debris of same material throughout the area | | | | | Material sample QMCM-ASBBLK63-052517 collected during targeted inspection activities is representative of the materials identified during reconnaissance activities. |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |

View looking northeast at SACM#30 on Stamp Mill #1 floor.

SACM#31 observed on Stamp Mill foundation.

APPENDIX D
Site Inspections - Reconnaissance Logs
Quincy Mining Company Mason Operations Area
Abandoned Mining Wastes - Torch Lake Non-Superfund Site







Geographic Area:Quincy Mining Company Mason Area

Property (Common Name):Quincy Stamp Mills Area

Property Identification Number and Owner:009-023-001-05, Iroquois Copper, LLC.

Inspection Date:4/21/2017 and 4/24/2017

General Property Description (Significant Landscape Features, Topography, Cover, Etc.,) : Access is not restricted to the western portion of the property. The property portion is bound to the east by Highway M-26, to the northwest by an ORV Trail and to the north by Parcel No. 009-023-001-20. The property includes portions of two former stamp mill operations. Foundations and mining era materials are present in the central portion of the property. The property slopes to the southeast from a ridge on which the ORV trail is located to M-26. The majority of the property to the west side of M-26 is wooded and is steeply sloped in most places. Quincy Creek bisects the property and discharges to Torch Lake. Suspect asbestos containing materials, including asphaltic roofing material, potential thermal insulation material and rubber sheeting and gasket materials were observed on the property in and around the stamp mill ruins. Abandoned drums were observed in the wooded area to the south of the foundation remains. Residual processing materials were observed in the woods along the property line to the north, and in and around the concrete foundation remains of both stamp mill ruins.

| Check as Appropriate: | | Record Field Measurements: | Provide Written Description Including Condition, Content, and Similar Material Properties: | Document as Applicable: | | | | |
|---|---|---|--|--|----------|---|------------------------|--|
| Potential Chemical or Physical Hazards | ✓ | Location/Coordinates | Description | Estimated Size/Area/Volume | Quantity | Units | Sample Recommendations | Notes |
| Suspect ACM | ✓ | Latitude: 47.14698200 N Longitude: 88.46046098 W | SACM#33: Yellow/mustard colored flexible material, approximately 8 x 5 inches, appears weathered and layered with burlap-like material attached on one side, smaller similar pieces nearby |  | | | | Material sample QMCM-ASBBLK61-052517 collected during targeted inspection activities is representative of the materials identified during reconnaissance activities. |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | Latitude: 47.14712444 N Longitude: 88.46001584 W | DRUM#6: Partially buried drum carcass, filled with visible leaf debris, other contents not visible, missing lid |  | | | | |
| Suspect ACM | | | | | | | | |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | ✓ | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | Latitude: 47.14713202 N Longitude: 88.45989596 W | SACM#34: Black roofing material, sheet approximately 4 x 6 feet attached to wooden boards, material is weathered and flaking, boards are partially buried |  | | | | Material sample QMCM-ASBBLK59-052517 collected during targeted inspection activities is representative of the materials identified during reconnaissance activities. |
| Other: _____ | | | | | | | | |
| Suspect ACM | ✓ | | | | | | | |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | Latitude: 47.14683184 N Longitude: 88.45973366 W | SACM#35: Roofing material along southeast edge of Stamp Mill No. 1 building, adjacent to M-26. Roofing is black, weathered, and similar in appearance to SACM#34. Pieces are scattered on the ground between the building and the roadway in the right of way, additional pieces are found on ground near the south edge of the building near the parking lot. Roofing appears to have come from Stamp Mill No. 1 building | | |  | | Material sample QMCM-ASBBLK58-052517 collected during targeted inspection activities is representative of the materials identified during reconnaissance activities. |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | ✓ | | | | | | | |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | Latitude: 47.14675008 N Longitude: 88.45984209 W | SACM#36: Underground steam pipe with visible thermal system insulation material that appears white and in poor condition found on pipe and on ground of underground crawlspace | | |  | | Material was not sampled during Targeted Inspection Activities |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | | Latitude: 47.14650268 N Longitude: 88.45984209 W | DRUM#7: Rusted and crumbled drum carcass, found along south edge of Stamp Mill No.1 building, partially buried | | |  | | |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | ✓ | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |

APPENDIX D
Site Inspections - Reconnaissance Logs
Quincy Mining Company Mason Operations Area
Abandoned Mining Wastes - Torch Lake Non-Superfund Site

Geographic Area: Quincy Mining Company Mason Area

Property (Common Name): Quincy Stamp Mills Area

Property Identification Number and Owner: 009-023-001-05, Iroquois Copper, LLC.

Inspection Date: 4/21/2017 and 4/24/2017

General Property Description (Significant Landscape Features, Topography, Cover, Etc.): Access is not restricted to the western portion of the property. The property portion is bound to the east by Highway M-26, to the northwest by an ORV Trail and to the north by Parcel No. 009-023-001-20. The property includes portions of two former stamp mill operations. Foundations and mining era materials are present in the central portion of the property. The property slopes to the southeast from a ridge on which the ORV trail is located to M-26. The majority of the property to the west side of M-26 is wooded and is steeply sloped in most places. Quincy Creek bisects the property and discharges to Torch Lake. Suspect asbestos containing materials, including asphaltic roofing material, potential thermal insulation material and rubber sheeting and gasket materials were observed on the property in and around the stamp mill ruins. Abandoned drums were observed in the wooded area to the south of the foundation remains. Residual processing materials were observed in the woods along the property line to the north, and in and around the concrete foundation remains of both stamp mill ruins.

| Check as Appropriate: | | Record Field Measurements: | Provide Written Description Including Condition, Content, and Similar Material Properties: | Document as Applicable: | | | | |
|---|---|---|--|----------------------------|----------|-------|------------------------|--|
| Potential Chemical or Physical Hazards | ✓ | Location/Coordinates | Description | Estimated Size/Area/Volume | Quantity | Units | Sample Recommendations | Notes |
| Suspect ACM | | Latitude: 47.14630981 N Longitude: 88.46095246 W | DRUM #8: Crushed drum with rusted hole, partially buried, appears empty, but contents unknown | | | | | |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | ✓ | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | | Latitude: 47.14635391 N Longitude: 88.46127222 W | Container #9: Three 5-gallon plastic container, two white/clear with blue tops, one full with contents unknown and appears dark, second partially full; third white/clear with a red top, container crack and empty | | | | | Surface soil sample QMCM-SS49-0"-6" collected during targeted inspection activities. |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | ✓ | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | | Latitude: 47.14650847 N Longitude: 88.46104754 W | DRUM#10: Rusted drum, bulging at both ends, container showing visible cracks, contents unknown | | | | | |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | ✓ | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | ✓ | Latitude: 47.14656781 N Longitude: 88.46114700 W | SACM#37: Weathered gray woven fabric, similar in appearance to SACM#9 | | | | | Material sample QMCM-ASBBLK66-052517 collected during targeted inspection activities is representative of the materials identified during reconnaissance activities. |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | ✓ | Latitude: _____ Longitude: _____ | SACM#76: Metal fire door, similar to fire door found by Quincy Creek with suspect TSI material visible, TSI material was not visible without disturbing leaf litter surrounding crumbled metal sheeting (similar metal to SACM 2B) | | | | | |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |
| Suspect ACM | | Latitude: _____ Longitude: _____ | | | | | | |
| Residual Process Materials | | | | | | | | |
| Potentially Abandoned Containers | | | | | | | | |
| Soil Staining/Stressed Vegetation | | | | | | | | |
| Potential PCB or Mercury Containing Equipment | | | | | | | | |
| Other: _____ | | | | | | | | |

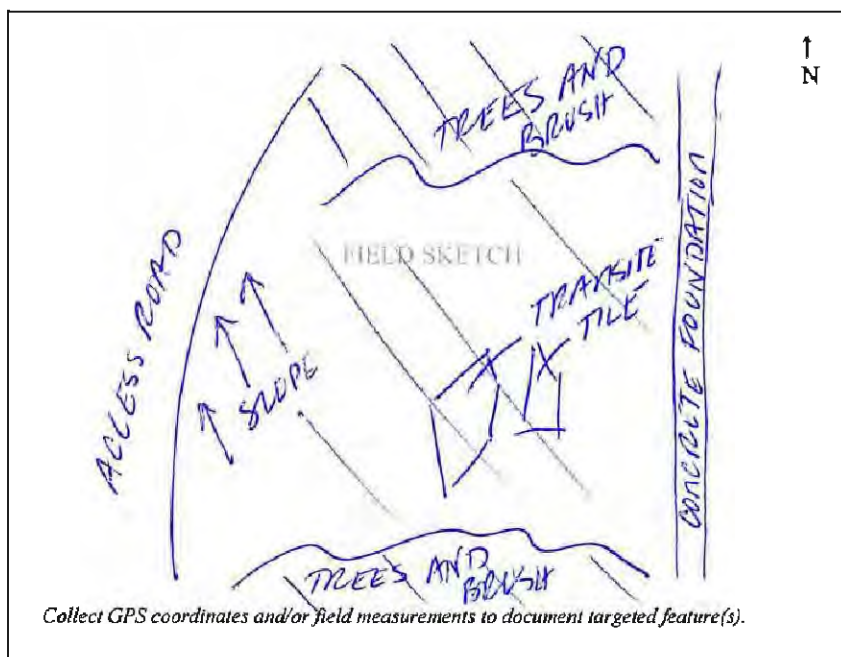


APPENDIX E

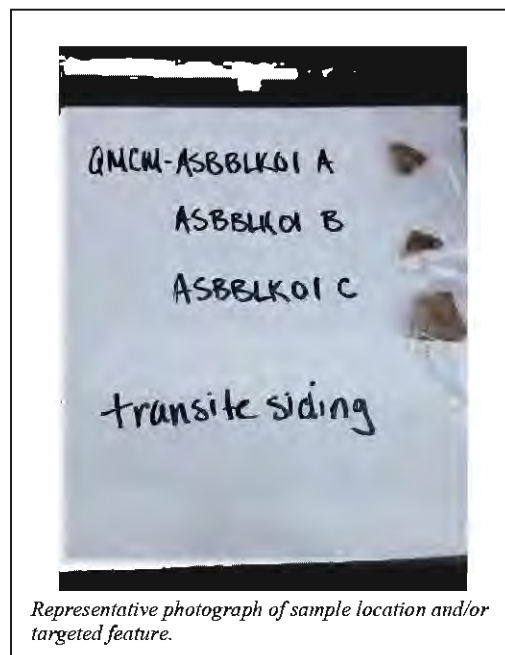
SITE INSPECTIONS – TARGETED INSPECTIONS



**ABANDONED MINING WASTES TORCH LAKE NON-SUPERFUND SITE
QUINCY MINING COMPANY MASON OPERATIONS
TARGETED INSPECTION FORM**



Collect GPS coordinates and/or field measurements to document targeted feature(s).



Representative photograph of sample location and/or targeted feature.

Inspection Date: 5/24/2017 Feature Identification/Name: Wooded area southeast of Rec. Plant/east of access road

Study Area: Quincy Mining Company Mason Property Identification Number: 009-026-003-00

OBSERVATIONS (Including description and sketch) Inspector/Sampler: A. Miller/J. Binkley

Circle the appropriate answer;

Potential Physical Hazard: ☐ Yes ☒ No Potential Chemical Hazard: ☐ Yes ☒ No

Capped Area: ☐ Yes ☒ No Residual Process Material: ☐ Yes ☒ No Abandoned Container: ☐ Yes ☒ No

Stressed Vegetation: ☐ Yes ☒ No Visible Staining: ☐ Yes ☒ No Building Materials: ☒ Yes ☐ No

Describe Targeted Feature:

Located to the east of the access road. Transite siding is found within the concrete foundation, mostly buried by over grown grass, trees and brush.

Sampling Activities (Sample Description, Sample Time, Requested Analyses):

QMCM-ASBBLK01(A-C)-052417 (Transite siding) - collected at 1305

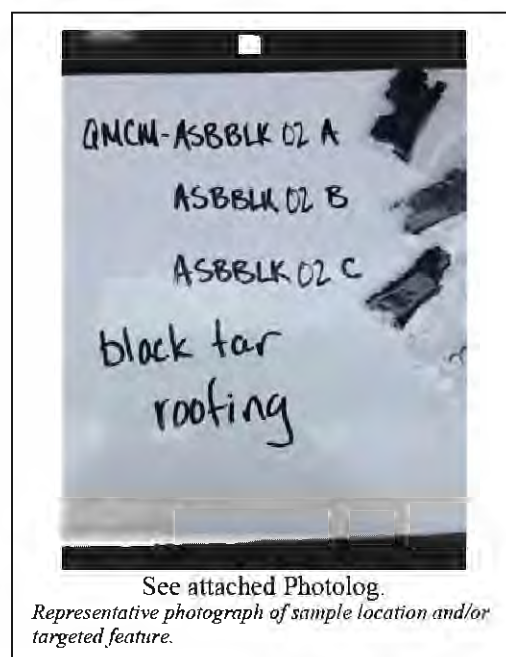
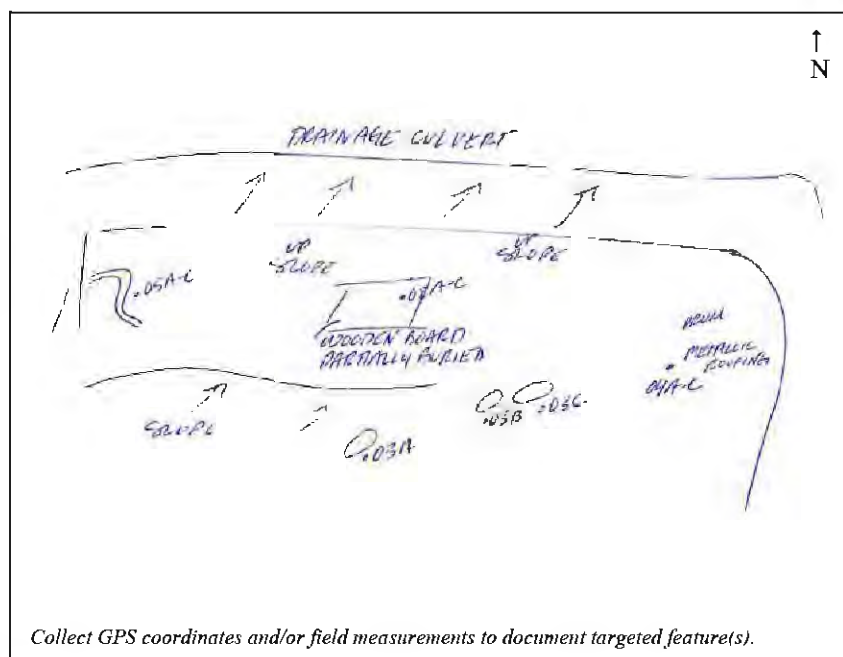
Potential Exposure Pathways (Ingestion, Inhalation, Direct Contact):

Property is partially secured, material is not friable.

Other Relevant Below and Above Ground Features (Conduit, Drainage Swales, Culverts):

Material is partially buried near concrete foundation, close proximity to drainage culvert and outlet to Torch Lake.

**ABANDONED MINING WASTES TORCH LAKE NON-SUPERFUND SITE
QUINCY MINING COMPANY MASON OPERATIONS
TARGETED INSPECTION FORM**



Inspection Date: 5/24/2017

Feature Identification/Name: Wooded area south of Reclamation Plant

Study Area: Quincy Mining Company Mason

Property Identification Number: 009-026-003-00

OBSERVATIONS (Including description and sketch)

Inspector/Sampler: A. Miller/J. Binkley

Circle the appropriate answer;

Potential Physical Hazard: ☒ Yes ☐ No Potential Chemical Hazard: ☐ Yes ☒ No

Capped Area: ☐ Yes ☒ No Residual Process Material: ☐ Yes ☒ No Abandoned Container: ☐ Yes ☒ No

Stressed Vegetation: ☐ Yes ☒ No Visible Staining: ☐ Yes ☒ No Building Materials: ☒ Yes ☐ No

Describe Targeted Feature:

Wooded area south of the Reclamation Plant. Debris is found throughout the wooded area and includes abandoned drums, black tar roofing, conveyor belts, metallic coated roofing, wire wrap, and other potential physical hazards including large sheet metal cut-outs, and a potentially pressurized container.

Sampling Activities (Sample Description, Sample Time, Requested Analyses):

QMCM-ASBBLK02(A-C)-052417 (black tar roofing) – collected at 1313

QMCM-ASBBLK03(A-C)-052417 (conveyor belt) – collected at 1316

QMCM-ASBBLK04(A-C)-052417 (metallic roofing) - collected at 1333

QMCM-ASBBLK05(A-C)-052417 (wire wrap) – collected at 1339

Potential Exposure Pathways (Ingestion, Inhalation, Direct Contact):

Property is partially secured. Material, especially roofing, is in poor condition and may become friable.

Other Relevant Below and Above Ground Features (Conduit, Drainage Swales, Culverts):

Materials are distributed in the wooded area, are partially buried, and within close proximity to drainage culverts. Large sheet metal cutouts and potentially pressurized container may pose physical hazard to trespassers; other abandoned containers are documented throughout area.

ABANDONED MINING WASTES TORCH LAKE NON-SUPERFUND SITE
QUINCY MINING COMPANY MASON OPERATIONS
TARGETED INSPECTION FORM

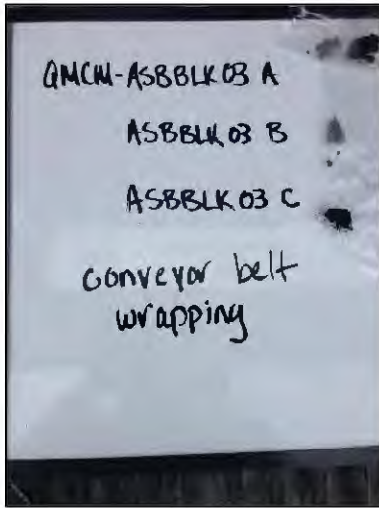


Photo 1: QMCM-ASBBLK03(A-C)-052417

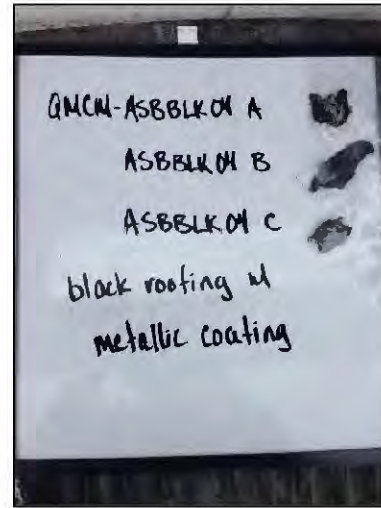


Photo 2: QMCM-ASBBLK04(A-C)-052417

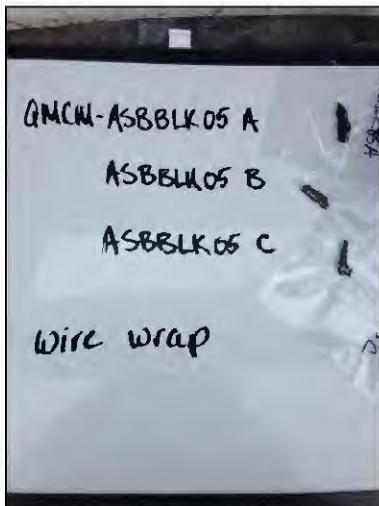
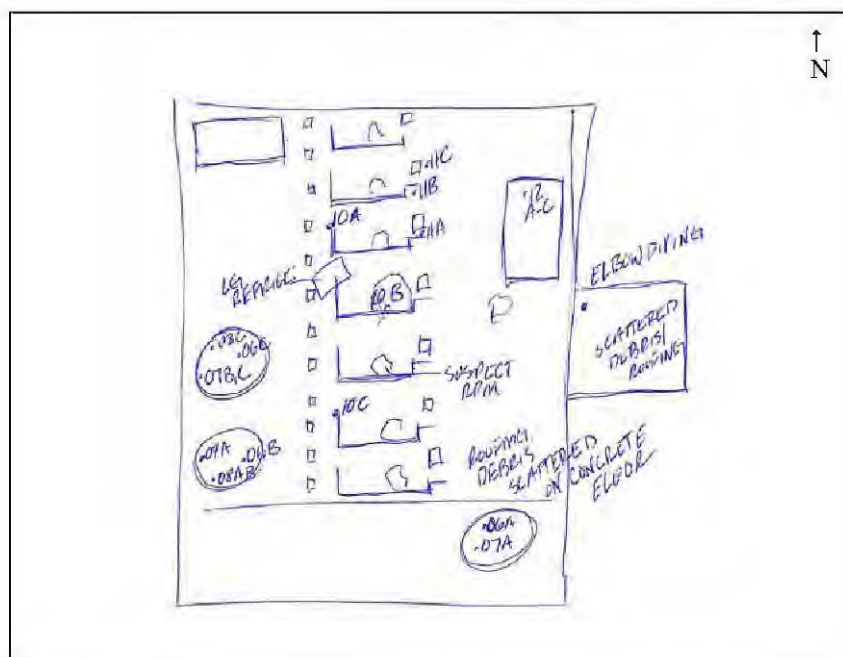


Photo 3: QMCM-ASBBLK05(A-C)-052417

**ABANDONED MINING WASTES TORCH LAKE NON-SUPERFUND SITE
QUINCY MINING COMPANY MASON OPERATIONS
TARGETED INSPECTION FORM**



ABANDONED MINING WASTES TORCH LAKE NON-SUPERFUND SITE
QUINCY MINING COMPANY MASON OPERATIONS
TARGETED INSPECTION FORM

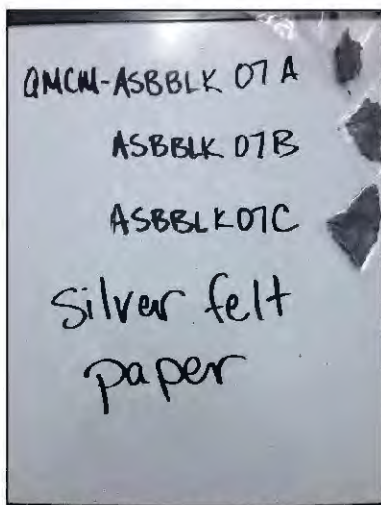


Photo 1: QMCW-ASBBLK07(A-C)-052417

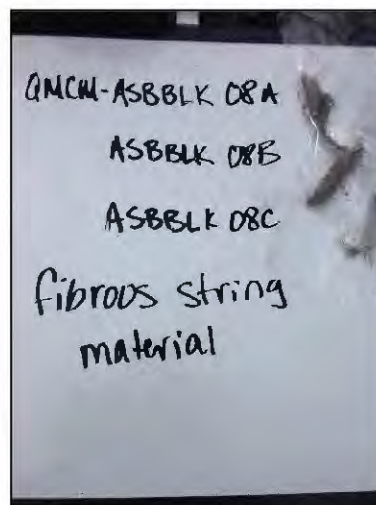


Photo 2: QMCW-ASBBLK08(A-C)-052417

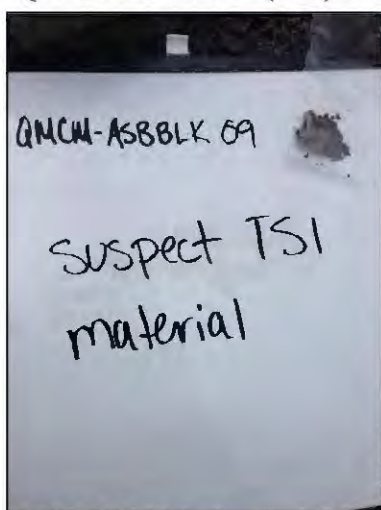


Photo 3: QMCW-ASBBLK09(A)-052417

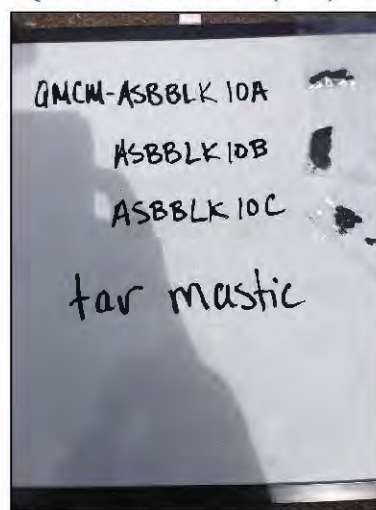


Photo 4: QMCW-ASBBLK10(A-C)-052417

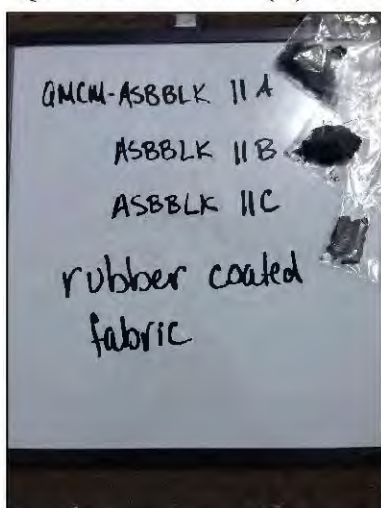


Photo 5: QMCW-ASBBLK11(A-C)-052417

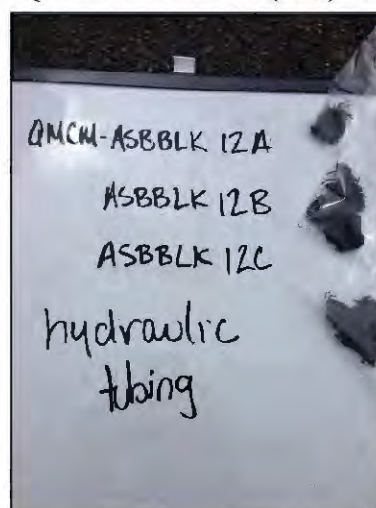
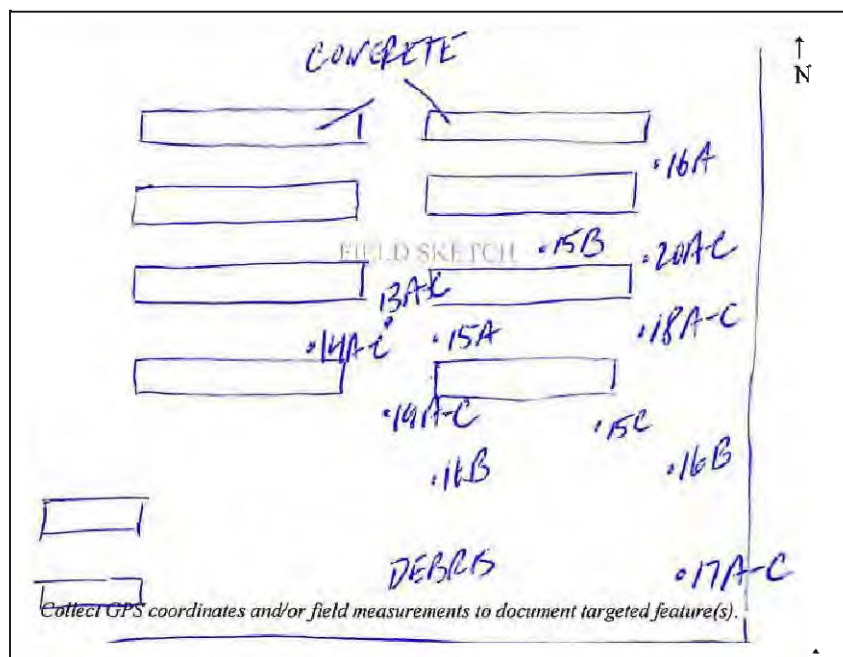


Photo 6: QMCW-ASBBLK12(A-C)-052417

**ABANDONED MINING WASTES TORCH LAKE NON-SUPERFUND SITE
QUINCY MINING COMPANY MASON OPERATIONS
TARGETED INSPECTION FORM**



ABANDONED MINING WASTES TORCH LAKE NON-SUPERFUND SITE
QUINCY MINING COMPANY MASON OPERATIONS
TARGETED INSPECTION FORM

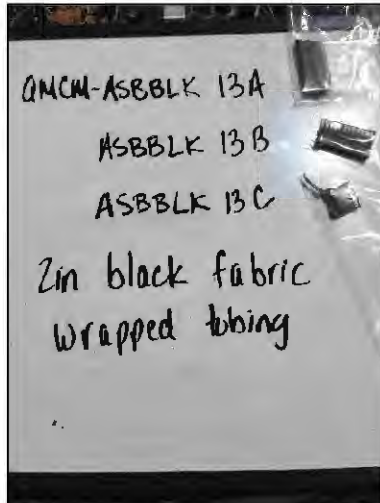


Photo 1: QMCM-ASBBLK13(A-C)-052417

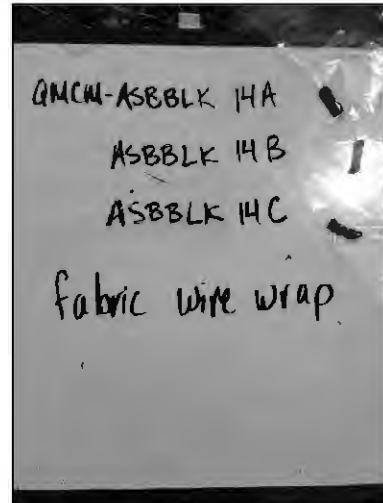


Photo 2: QMCM-ASBBLK14(A-C)-052417

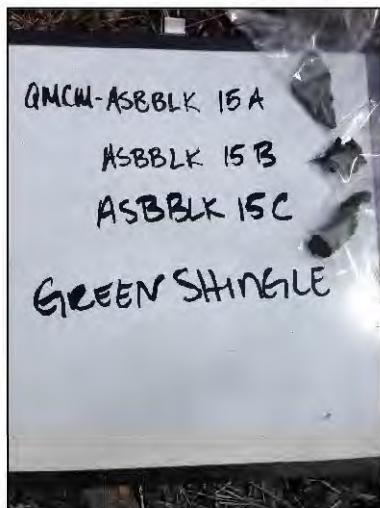


Photo 3: QMCM-ASBBLK15(A-C)-052417

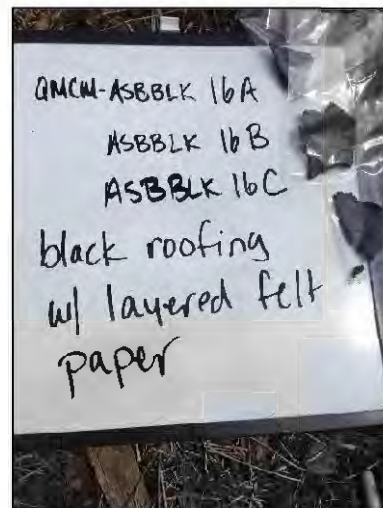


Photo 4: QMCM-ASBBLK16(A-C)-052417

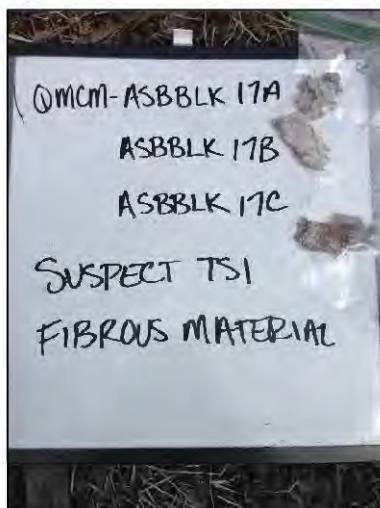


Photo 5: QMCM-ASBBLK17(A-C)-052417

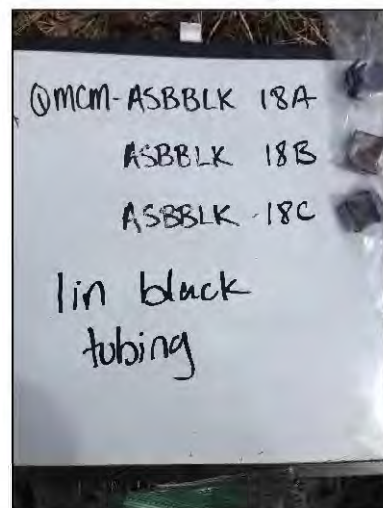


Photo 6: QMCM-ASBBLK18(A-C)-052417

ABANDONED MINING WASTES TORCH LAKE NON-SUPERFUND SITE
QUINCY MINING COMPANY MASON OPERATIONS
TARGETED INSPECTION FORM

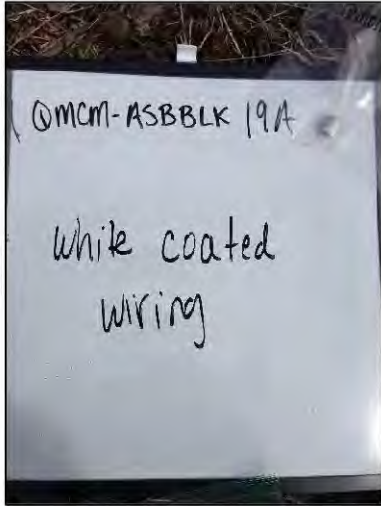


Photo 7: QMCM-ASBBLK19(A-C)-052417

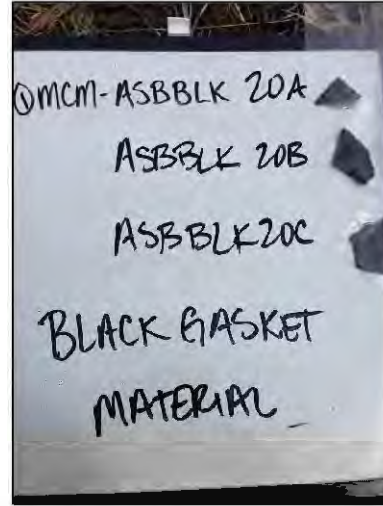
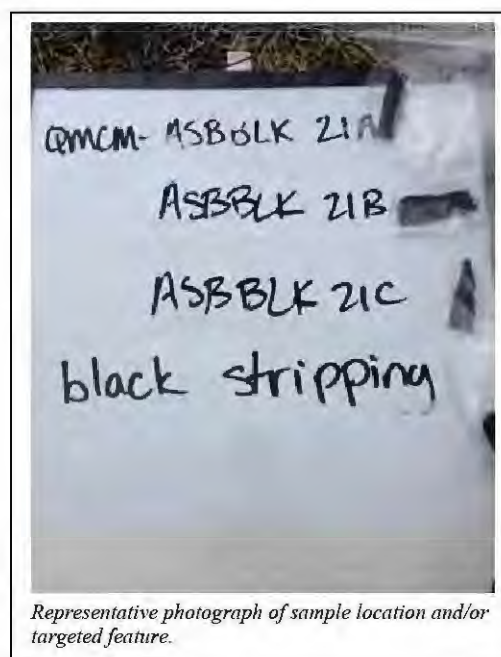
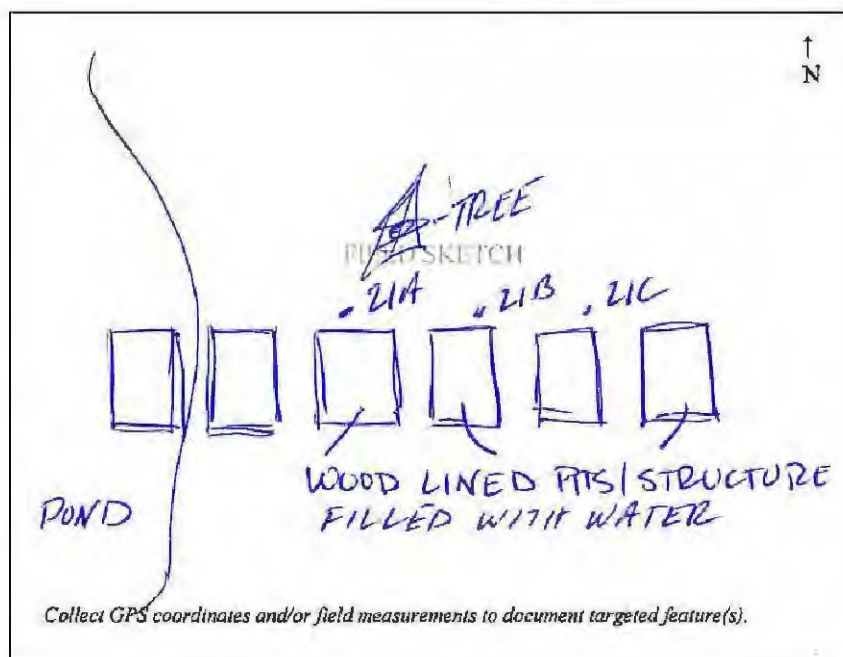


Photo 8: QMCM-ASBBLK20(A-C)-052417

**ABANDONED MINING WASTES TORCH LAKE NON-SUPERFUND SITE
QUINCY MINING COMPANY MASON OPERATIONS
TARGETED INSPECTION FORM**



Inspection Date: 5/24/2017

Feature Identification/Name: Wooden pits/structures east of Shore Plant

Study Area: Quincy Mining Company Mason

Property Identification Number: 009-026-003-00

OBSERVATIONS (Including description and sketch)

Inspector/Sampler: A. Miller/J. Binkley

Circle the appropriate answer;

Potential Physical Hazard: ☐ Yes ☒ No Potential Chemical Hazard: ☐ Yes ☒ No

Capped Area: ☒ Yes ☐ No Residual Process Material: ☐ Yes ☒ No Abandoned Container: ☐ Yes ☒ No

Stressed Vegetation: ☐ Yes ☒ No Visible Staining: ☐ Yes ☒ No Building Materials: ☒ Yes ☐ No

Describe Targeted Feature:

The area is situated at the edge of the capped area east of the Reclamation and Shore Plant foundations. The target feature includes six wood line structures/pits that are filled with water and wood debris. The suspect asbestos containing material is found near the wooden boards near each of the six structures/pits. The caulking material is found in small pieces and still intact and on the wooden boards, approximately 1-2 centimeters in width.

Sampling Activities (Sample Description, Sample Time, Requested Analyses):

QMCM-ASBBLK21(A-C)- (black caulking) – collected at 1635

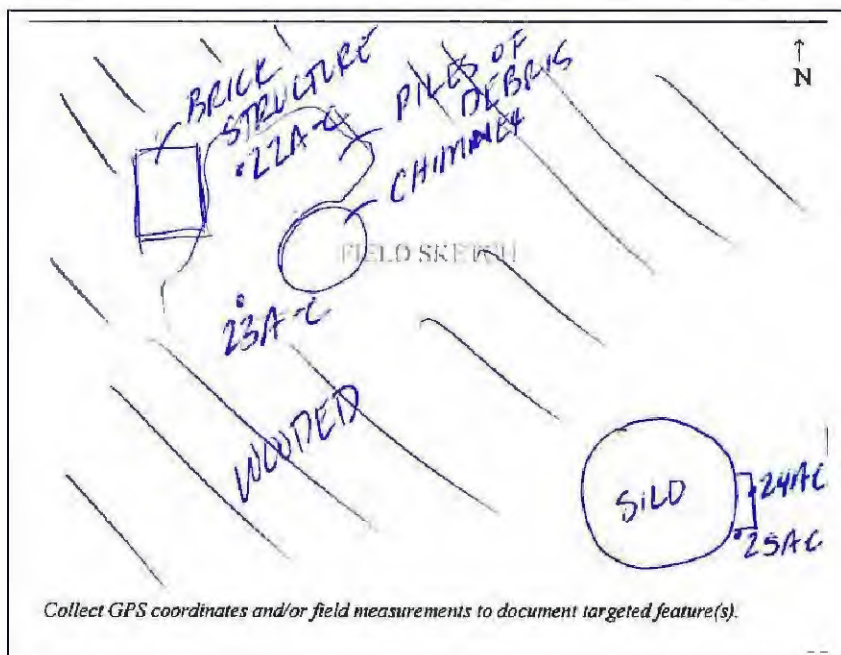
Potential Exposure Pathways (Ingestion, Inhalation, Direct Contact):

The material is weathered and is in fair condition. The property is partially secured with a 'walk through' gate north and west of the Reclamation and Shore Plants nearby.

Other Relevant Below and Above Ground Features (Conduit, Drainage Swales, Culverts):

The material is located at the edge of the stamp sand cap near the shoreline of Torch Lake.

**ABANDONED MINING WASTES TORCH LAKE NON-SUPERFUND SITE
QUINCY MINING COMPANY MASON OPERATIONS
TARGETED INSPECTION FORM**



Inspection Date: 5/25/2017 Feature Identification/Name: Lakeshore Estates near Concrete Chimney and Coal Bin

Study Area: Quincy Mining Company Mason Property Identification Number: 009-023-001-70

OBSERVATIONS (Including description and sketch) Inspector/Sampler: A. Miller/J. Chrestensen

Circle the appropriate answer;

Potential Physical Hazard: ☒ Yes ☐ No Potential Chemical Hazard: ☐ Yes ☒ No
Capped Area: ☐ Yes ☒ No Residual Process Material: ☐ Yes ☒ No Abandoned Container: ☐ Yes ☒ No
Stressed Vegetation: ☐ Yes ☒ No Visible Staining: ☐ Yes ☒ No Building Materials: ☒ Yes ☐ No

Describe Targeted Feature:

The area is partially wooded and includes mining era foundational remains and debris. Two abandoned drums (one with visible waste) are found in the vicinity. The suspect asbestos containing material included fire bricks (which also pose a physical trip hazard), rope gasket attached to a metal flange on the ground, shingle material and mastic on the south side of the Coal Bin.

Sampling Activities (Sample Description, Sample Time, Requested Analyses):

QMCM-ASBBLK22(A-C)-052517 (yellow fire bricks) – collected at 0900
QMCM-ASBBLK23(A-C)-052517 (rope gasket) – collected at 0905
QMCM-ASBBLK24(A-C)-052517 (silo shingle) – collected at 0910
QMCM-ASBBLK25(A-C)-052517 (gray mastic) – collected at 0911

Potential Exposure Pathways (Ingestion, Inhalation, Direct Contact):

The property is partially secured with a 'walk through' gate north and west of the Reclamation and Shore Plants nearby. A breach in the fence is also found closer to the property, making it accessible to trespassers. Rope gasket and gray mastic noted as in poor condition and friable.

Other Relevant Below and Above Ground Features (Conduit, Drainage Swales, Culverts):

The materials are located in a wooded area approximately 200 feet from the shoreline of Torch Lake.

ABANDONED MINING WASTES TORCH LAKE NON-SUPERFUND SITE
QUINCY MINING COMPANY MASON OPERATIONS
TARGETED INSPECTION FORM

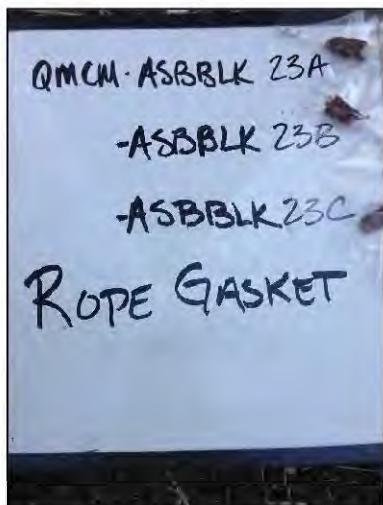


Photo 1: QMCM-ASBBLK23(A-C)-052517

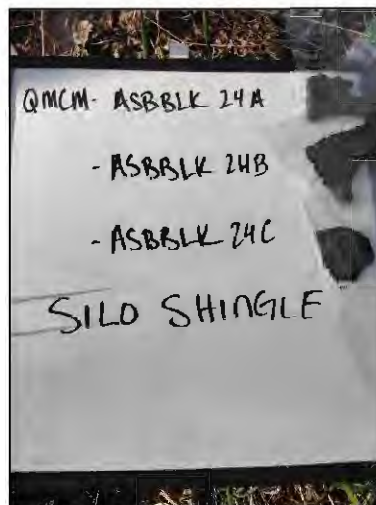


Photo 2: QMCM-ASBBLK24(A-C)-052517

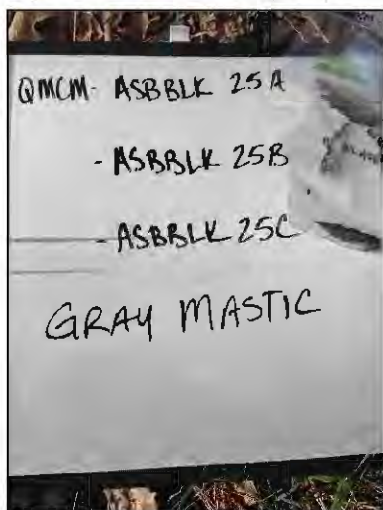
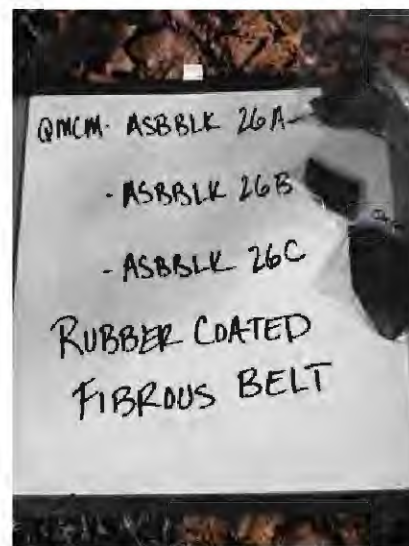
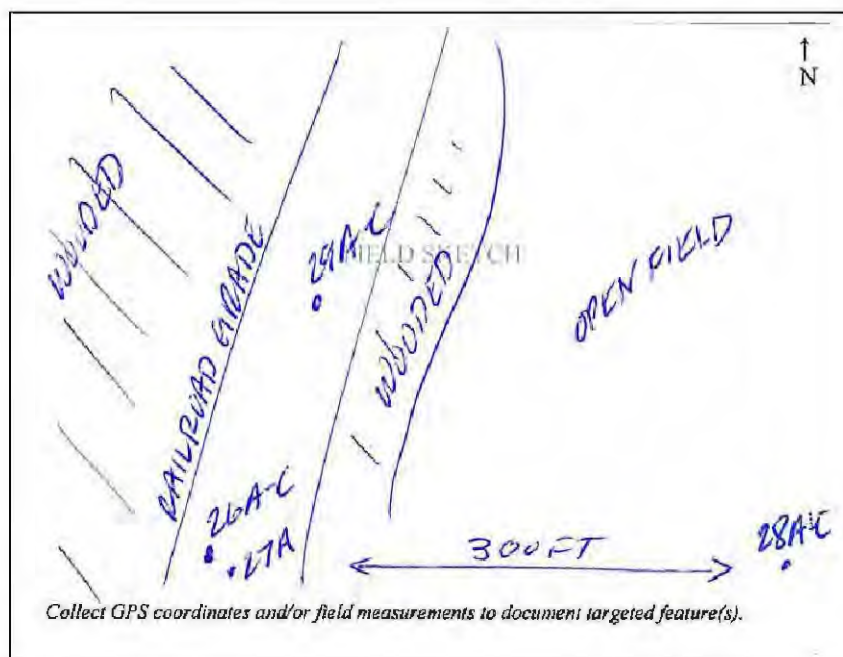


Photo 3: QMCM-ASBBLK25(A-C)-052517

**ABANDONED MINING WASTES TORCH LAKE NON-SUPERFUND SITE
QUINCY MINING COMPANY MASON OPERATIONS
TARGETED INSPECTION FORM**



See attached photolog.
Representative photograph of sample location and/or targeted feature.

Inspection Date: 5/25/2017

Feature Identification/Name: Coal Dock Area

Study Area: Quincy Mining Company Mason

Property Identification Number: 009-023-001-00

OBSERVATIONS (Including description and sketch)

Inspector/Sampler: A. Miller/J. Chrestensen

Circle the appropriate answer;

Potential Physical Hazard: ☐ Yes ☒ No Potential Chemical Hazard: ☐ Yes ☒ No

Capped Area: ☐ Yes ☒ No Residual Process Material: ☐ Yes ☒ No Abandoned Container: ☒ Yes ☐ No

Stressed Vegetation: ☐ Yes ☒ No Visible Staining: ☐ Yes ☒ No Building Materials: ☒ Yes ☐ No

Describe Targeted Feature:

The area is partially wooded and includes mining era foundational remains and debris. Two abandoned drums (one with visible waste) are found in the vicinity. The suspect asbestos containing material includes rubber coated fibrous belting approximately 6-8 inches in width, gray gasket material, felt roofing w/ mastic and black tar mastic. The material is scattered throughout area and partially buried in some locations near the south side of the railroad grade.

Sampling Activities (Sample Description, Sample Time, Requested Analyses):

QMCM-ASBBLK26(A-C)- (black fibrous belt) – collected at 0919
QMCM-ASBBLK27(A)- (gray gasket) – collected at 0921
QMCM-ASBBLK28(A-C)- (felt roofing w/ mastic) – collected at 0928
QMCM-ASBBLK29(A-C)- (black tar roofing) – collected at 0935

Potential Exposure Pathways (Ingestion, Inhalation, Direct Contact):

The property is partially secured with a 'walk through' gate north and west of the Reclamation and Shore Plants nearby. A breach in the fence is also found closer to the property, making it accessible to trespassers.

Other Relevant Below and Above Ground Features (Conduit, Drainage Swales, Culverts):

The materials are located in a wooded area approximately 300 feet from the shoreline of Torch Lake, except ASBBLK29(A-C), which is located on the shoreline near the Coal Dock.

ABANDONED MINING WASTES TORCH LAKE NON-SUPERFUND SITE
QUINCY MINING COMPANY MASON OPERATIONS
TARGETED INSPECTION FORM

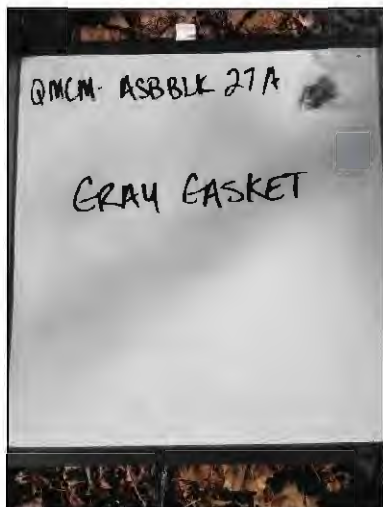


Photo 1: QMCM-ASBBLK27(A)-052517

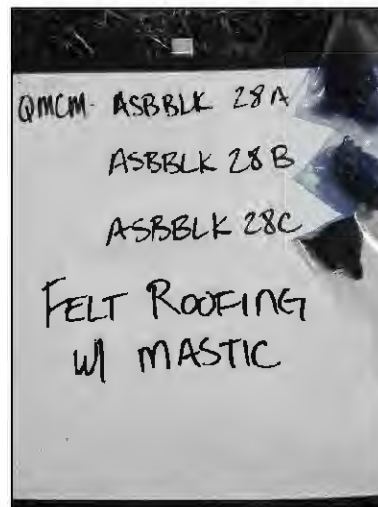


Photo 2: QMCM-ASBBLK28(A-C)-052517

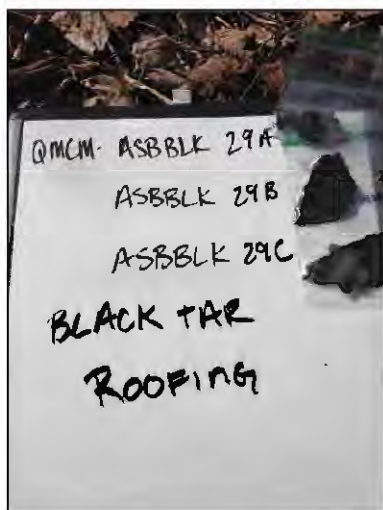
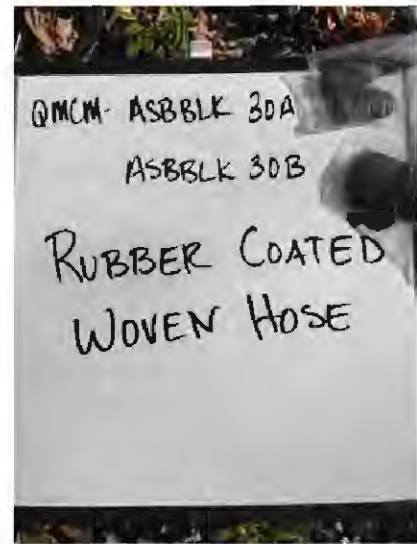
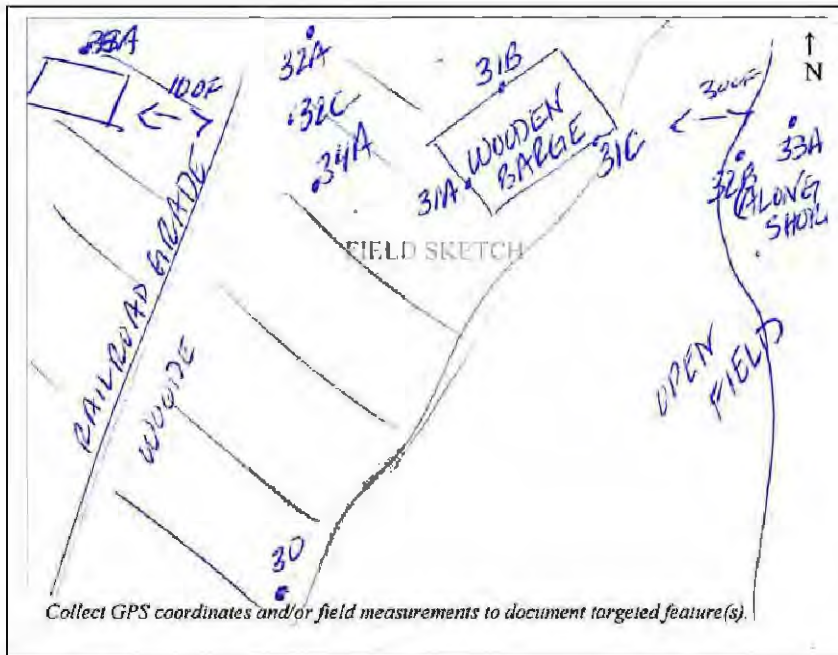


Photo 3: QMCM-ASBBLK29(A-C)-052517

**ABANDONED MINING WASTES TORCH LAKE NON-SUPERFUND SITE
QUINCY MINING COMPANY MASON OPERATIONS
TARGETED INSPECTION FORM**



See attached Photolog.
Representative photograph of sample location and/or targeted feature.

Inspection Date: 5/25/2017

Feature Identification/Name: Coal Dock Area

Study Area: Quincy Mining Company Mason

Property Identification Number: 009-023-001-00

OBSERVATIONS (Including description and sketch)

Inspector/Sampler: A. Miller/J. Chrestensen

Circle the appropriate answer;

Potential Physical Hazard: ☐ Yes ☒ No Potential Chemical Hazard: ☐ Yes ☒ No

Capped Area: ☐ Yes ☒ No Residual Process Material: ☐ Yes ☒ No Abandoned Container: ☐ Yes ☒ No

Stressed Vegetation: ☐ Yes ☒ No Visible Staining: ☐ Yes ☒ No Building Materials: ☒ Yes ☐ No

Describe Targeted Feature:

The area is partially wooded and includes mining era foundational remains and debris. Two abandoned drums are found in the vicinity south of Quincy Creek. The suspect asbestos containing material includes woven hosing, woven layered material, roofing and layered felt paper. The material is scattered throughout area and partially buried in some locations near the wooden barge in the woods.

Sampling Activities (Sample Description, Sample Time, Requested Analyses):

QMCM-ASBBLK30(A-B)- (woven hose) – collected at 0940
QMCM-ASBBLK31(A-C)- (black/metallic roofing) – collected at 0951
QMCM-ASBBLK32(A-C)- (black tar roofing) – collected at 0958
QMCM-ASBBLK33(A)- (black wire wrap) – collected at 1003
QMCM-ASBBLK34(A)- (woven layers) – collected at 1015
QMCM-ASBBLK35(A)- (black layered felt paper) – collected at 1037

Potential Exposure Pathways (Ingestion, Inhalation, Direct Contact):

The property is partially secured with a 'walk through' gate north and west of the Reclamation and Shore Plants nearby. A breach in the fence is also found closer to the property, making it accessible to trespassers.

Other Relevant Below and Above Ground Features (Conduit, Drainage Swales, Culverts):

The materials are located in a wooded area approximately 50-100 feet from the Quincy Creek, which drains into Torch Lake.

ABANDONED MINING WASTES TORCH LAKE NON-SUPERFUND SITE
QUINCY MINING COMPANY MASON OPERATIONS
TARGETED INSPECTION FORM

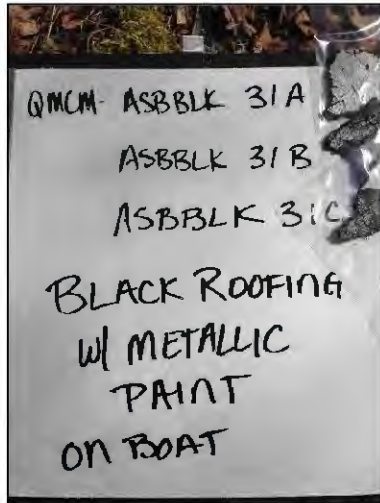


Photo 1: QMCM-ASBBLK31(A-C)-052517

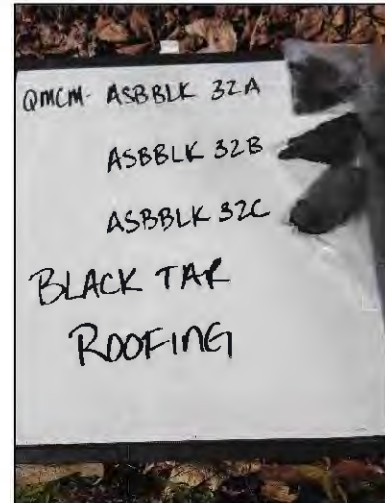


Photo 2: QMCM-ASBBLK32(A-C)-052517



Photo 3: QMCM-ASBBLK33(A)-052517

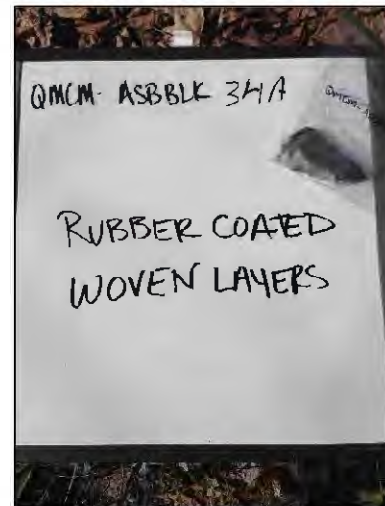


Photo 4: QMCM-ASBBLK34(A)-052517

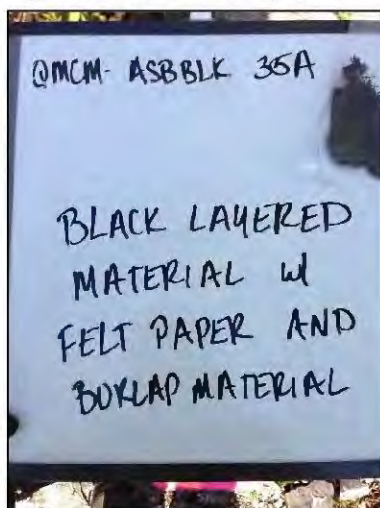
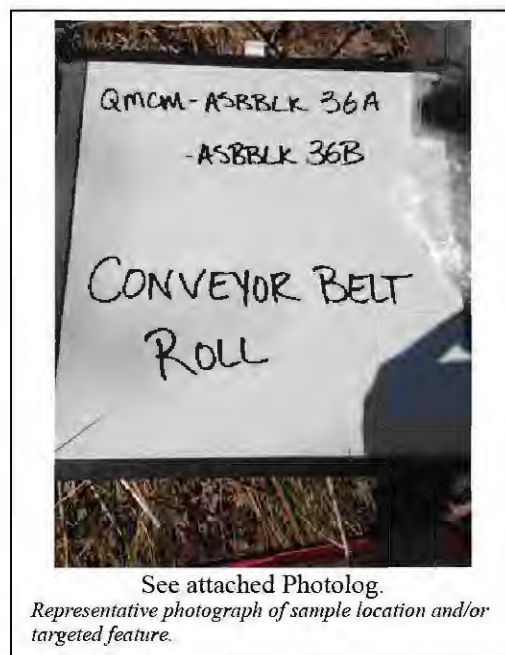
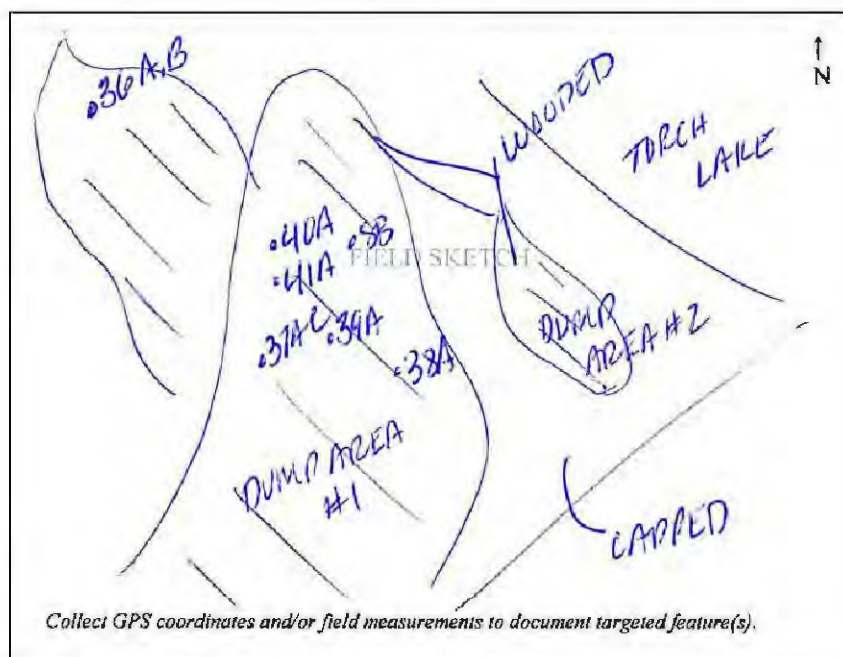


Photo 5: QMCM-ASBBLK35(A)-052517

**ABANDONED MINING WASTES TORCH LAKE NON-SUPERFUND SITE
QUINCY MINING COMPANY MASON OPERATIONS
TARGETED INSPECTION FORM**



Inspection Date: 5/25/2017

Feature Identification/Name: Coal Dock Area

Study Area: Quincy Mining Company Mason

Property Identification Number: 009-023-001-00

OBSERVATIONS (Including description and sketch)

Inspector/Sampler: A. Miller/J. Chrestensen

Circle the appropriate answer;

Potential Physical Hazard: ☒ Yes ☐ No Potential Chemical Hazard: ☐ Yes ☒ No

Capped Area: ☐ Yes ☒ No Residual Process Material: ☐ Yes ☒ No Abandoned Container: ☒ Yes ☐ No

Stressed Vegetation: ☐ Yes ☒ No Visible Staining: ☐ Yes ☒ No Building Materials: ☒ Yes ☐ No

Describe Targeted Feature:

The Dump Site is found near the edge of the capped area in two partially wooded areas. The area is littered with debris that includes apparent industry and household materials. Abandoned drums and drum carcasses are found throughout the area.

Sampling Activities (Sample Description, Sample Time, Requested Analyses):

QMCM-ASBBLK36(A-B)-052517(conveyor belt) – collected at 1048

QMCM-ASBBLK37(A-C)-052517 (gray woven tubing) – collected at 1116

QMCM-ASBBLK38(A)-052517 (white woven screen) – collected at 1125

QMCM-ASBBLK39(A-C)-052517 (black tape wrapped hose) – collected at 1130

QMCM-ASBBLK40(A)-052517 (black linoleum) – collected at 1138

QMCM-ASBBLK41(A)-052517 (white linoleum) – collected at 1139

Potential Exposure Pathways (Ingestion, Inhalation, Direct Contact):

The property is partially secured with a 'walk through' gate north and west of the Reclamation and Shore Plants nearby. A breach in the fence is also found closer to the site, making it accessible to trespassers.

Other Relevant Below and Above Ground Features (Conduit, Drainage Swales, Culverts):

The materials are located in a partially wooded area approximately 50-100 feet from Torch Lake. The ground slopes gradually to the east from the dump areas.

ABANDONED MINING WASTES TORCH LAKE NON-SUPERFUND SITE
QUINCY MINING COMPANY MASON OPERATIONS
TARGETED INSPECTION FORM

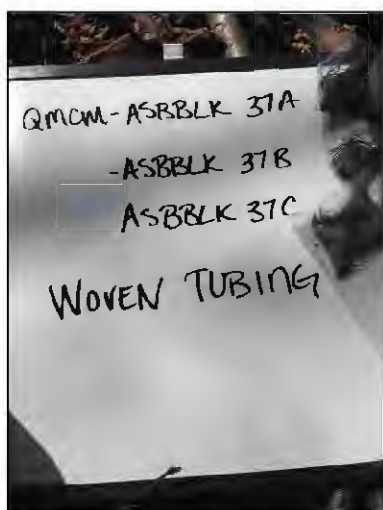


Photo 1: QMCM-ASBBLK37(A-C)-052517

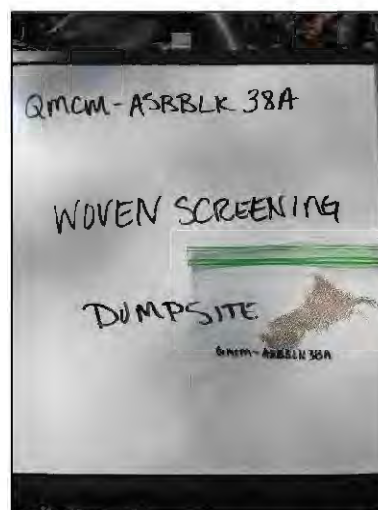


Photo 2: QMCM-ASBBLK38(A-C)-052517

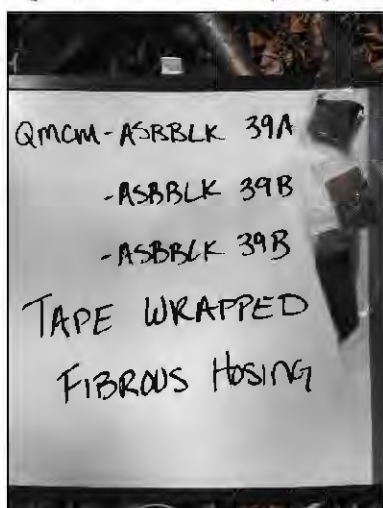


Photo 3: QMCM-ASBBLK39(A-C)-052517

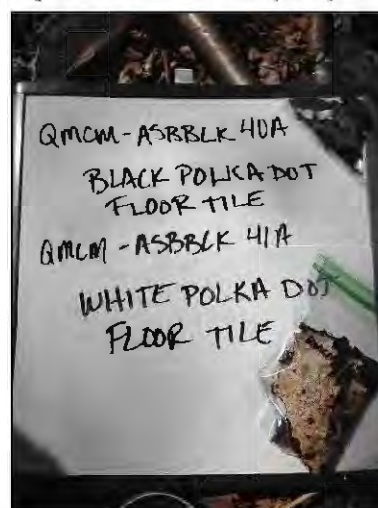
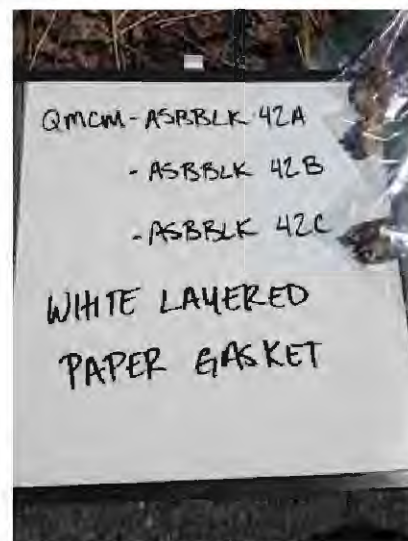
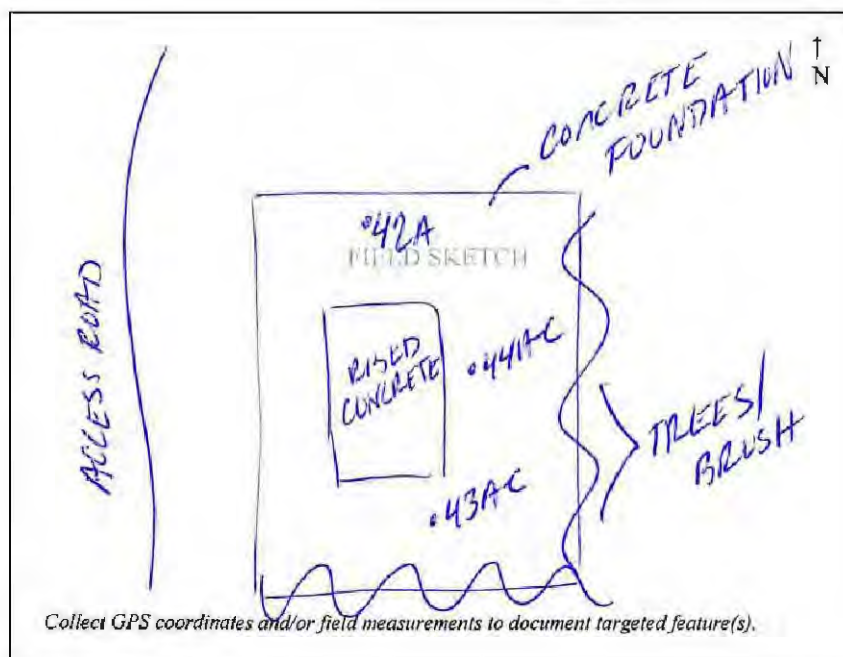


Photo 4: QMCM-ASBBLK40(A)-052517
QMCM-ASBBLK41(A)-052517

**ABANDONED MINING WASTES TORCH LAKE NON-SUPERFUND SITE
QUINCY MINING COMPANY MASON OPERATIONS
TARGETED INSPECTION FORM**



See attached Photolog.
Representative photograph of sample location and/or targeted feature.

Inspection Date: 5/25/2017

Feature Identification/Name: Concrete foundation near access road in Coal Dock Area

Study Area: Quincy Mining Company Mason

Property Identification Number: 009-023-001-00

OBSERVATIONS (Including description and sketch)

Inspector/Sampler: A. Miller/J. Chrestensen

Circle the appropriate answer;

Potential Physical Hazard: ☒ Yes ☒ No Potential Chemical Hazard: ☐ Yes ☒ No

Capped Area: ☒ Yes ☐ No Residual Process Material: ☐ Yes ☒ No Abandoned Container: ☐ Yes ☒ No

Stressed Vegetation: ☐ Yes ☒ No Visible Staining: ☐ Yes ☒ No Building Materials: ☒ Yes ☐ No

Describe Targeted Feature:

The area includes a concrete foundation (Quincy Booster Pump Station) to the east of the access road and west of the dump site. The concrete slab contains suspect asbestos containing materials such as Transite tiles and gasket material laying on the foundation. Material quantities observed were less than 1 square foot each.

Sampling Activities (Sample Description, Sample Time, Requested Analyses):

QMCM-ASBBLK42(A-C)-052517 (white layered gasket) – collected at 1150

QMCM-ASBBLK43(A-C)-052517 (Transite tile) – collected at 1155

QMCM-ASBBLK44(A-C)-052517 (black Transite tile) – collected at 1200

Potential Exposure Pathways (Ingestion, Inhalation, Direct Contact):

The property is partially secured with a 'walk through' gate north and west of the Reclamation and Shore Plants nearby. A breach in the fence is also found closer to the site, making it accessible to trespassers. White layered gasket noted as friable.

Other Relevant Below and Above Ground Features (Conduit, Drainage Swales, Culverts):

The materials are located approximately 200 feet from the Torch Lake shoreline.

ABANDONED MINING WASTES TORCH LAKE NON-SUPERFUND SITE
QUINCY MINING COMPANY MASON OPERATIONS
TARGETED INSPECTION FORM

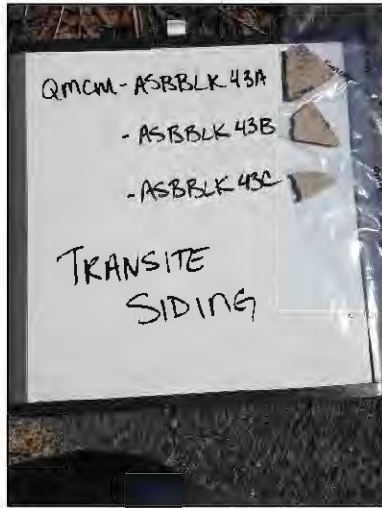


Photo 1: QMCM-ASBBLK43(A-C)-052517

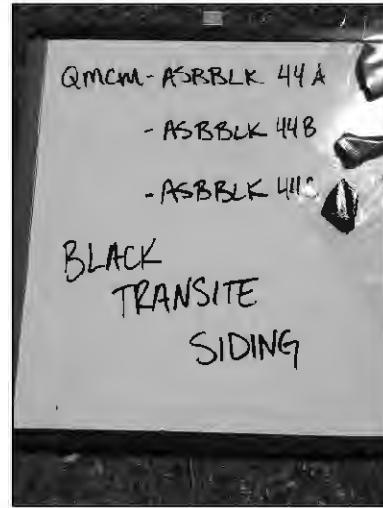
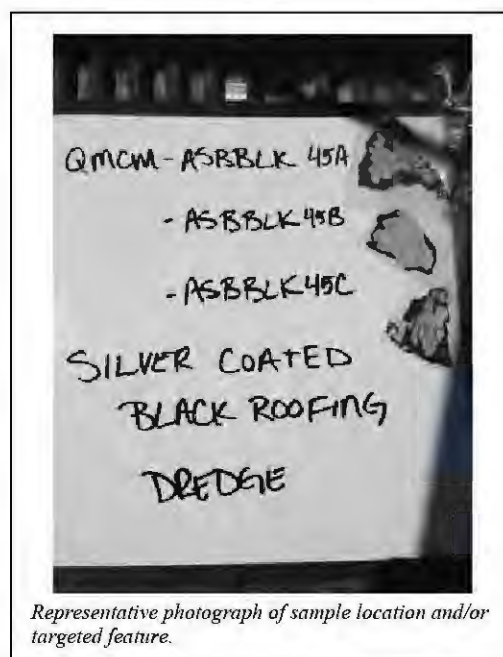
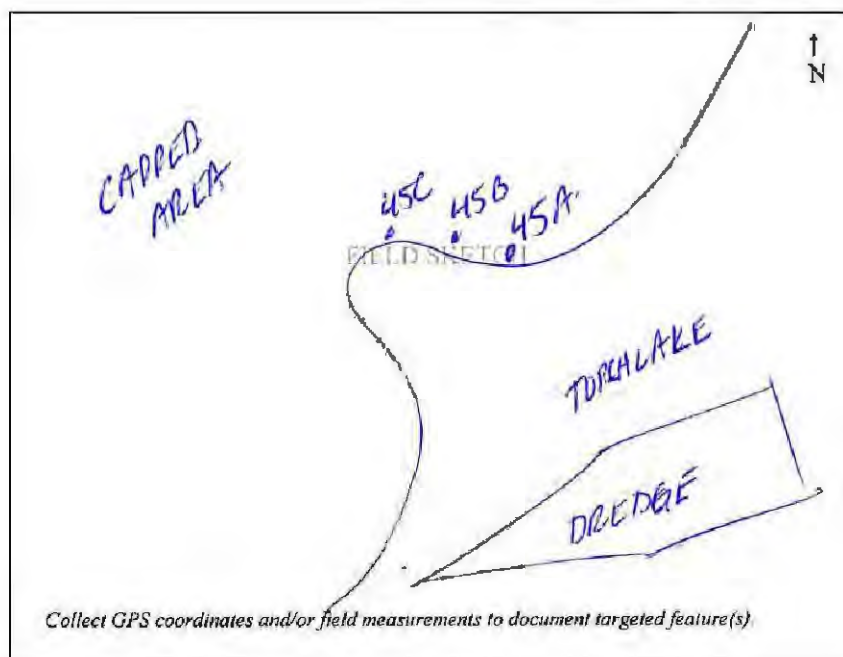


Photo 2: QMCM-ASBBLK44(A-C)-052517

**ABANDONED MINING WASTES TORCH LAKE NON-SUPERFUND SITE
QUINCY MINING COMPANY MASON OPERATIONS
TARGETED INSPECTION FORM**



Inspection Date: 5/25/2017

Feature Identification/Name: Open field near partially sunken Dredge

Study Area: Quincy Mining Company Mason

Property Identification Number: 009-023-001-70

OBSERVATIONS (Including description and sketch)

Inspector/Sampler: A. Miller/J. Chrestensen

Circle the appropriate answer;

Potential Physical Hazard: ☐ Yes ☒ No Potential Chemical Hazard: ☐ Yes ☒ No

Capped Area: ☒ Yes ☐ No Residual Process Material: ☐ Yes ☒ No Abandoned Container: ☐ Yes ☒ No

Stressed Vegetation: ☐ Yes ☒ No Visible Staining: ☐ Yes ☒ No Building Materials: ☒ Yes ☐ No

Describe Targeted Feature:

Pieces of roofing material, varying in sizes, approximately 1 square foot scattered on ground near shoreline of Dredge. It is assumed that the roofing material is from the Dredge structure.

Sampling Activities (Sample Description, Sample Time, Requested Analyses):

QMCM-ASBBLK45 (A-C)-052517 (metallic/black roofing) – collected at 1212

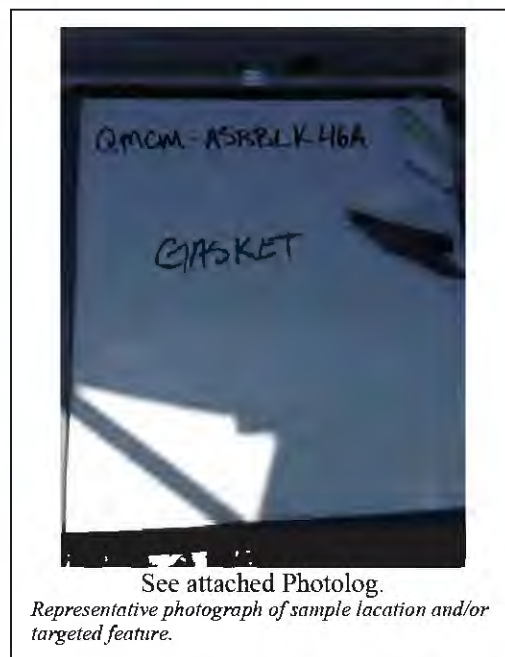
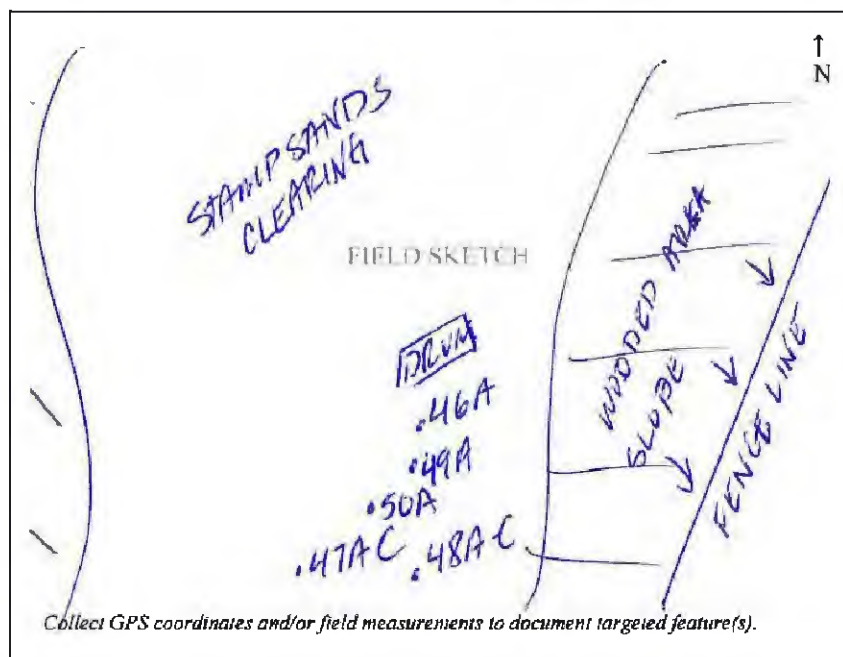
Potential Exposure Pathways (Ingestion, Inhalation, Direct Contact):

The property is partially secured with a 'walk through' gate north and west of the Reclamation and Shore Plants nearby. A breach in the fence is also found closer to the site, making it accessible to trespassers. Material in poor condition and friable.

Other Relevant Below and Above Ground Features (Conduit, Drainage Swales, Culverts):

The materials are located along the shoreline of Torch Lake near the Dredge.

**ABANDONED MINING WASTES TORCH LAKE NON-SUPERFUND SITE
QUINCY MINING COMPANY MASON OPERATIONS
TARGETED INSPECTION FORM**



Inspection Date: 5/25/2017

Feature Identification/Name: Wooded area north of Reclamation Plant

Study Area: Quincy Mining Company Mason

Property Identification Number: 009-023-001-70

OBSERVATIONS (Including description and sketch)

Inspector/Sampler: A. Miller/J. Chrestensen

Circle the appropriate answer;

Potential Physical Hazard: ☐ Yes ☒ No Potential Chemical Hazard: ☐ Yes ☒ No

Capped Area: ☒ Yes ☐ No Residual Process Material: ☐ Yes ☒ No Abandoned Container: ☐ Yes ☒ No

Stressed Vegetation: ☐ Yes ☒ No Visible Staining: ☐ Yes ☒ No Building Materials: ☒ Yes ☐ No

Describe Targeted Feature:

Area located North of Reclamation Plant, east of fence line and west of ORV trail. Area contains foundational remains and various abandoned drums in a wooded area. Suspect asbestos containing material includes gaskets, fabric tubing, woven fabric material and fabric belting scattered on the ground and partially buried.

Sampling Activities (Sample Description, Sample Time, Requested Analyses):

QMCM-ASBBLK46 (A)-052517 (black gasket) – collected at 1236

QMCM-ASBBLK47 (A-C)-052517 (black fabric tubing) – collected at 1311

QMCM-ASBBLK48 (A-C)-052517 (gray woven fabric) – collected at 1315

QMCM-ASBBLK49 (A)-052517 (coated fabric gasket) – collected at 1316

QMCM-ASBBLK50 (A)-052517 (red/gray belting) – collected at 1318

Potential Exposure Pathways (Ingestion, Inhalation, Direct Contact):

The property is not secured and is accessible to trespassers from the adjacent ORV trail.

Other Relevant Below and Above Ground Features (Conduit, Drainage Swales, Culverts):

The materials are located in a wooded area to the east of the ORV trail in a partially wooded area. The ground generally slopes to the east toward the fence line and capped area.

ABANDONED MINING WASTES TORCH LAKE NON-SUPERFUND SITE
QUINCY MINING COMPANY MASON OPERATIONS
TARGETED INSPECTION FORM

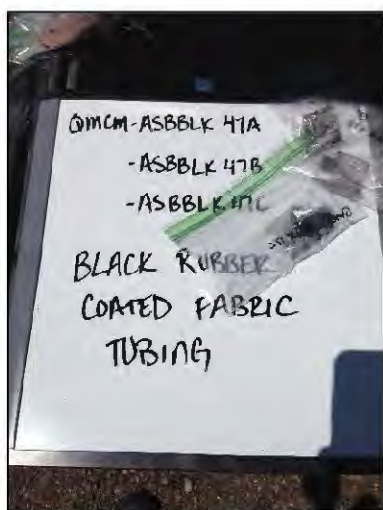


Photo 1: QMCM-ASBBLK47(A)-052517

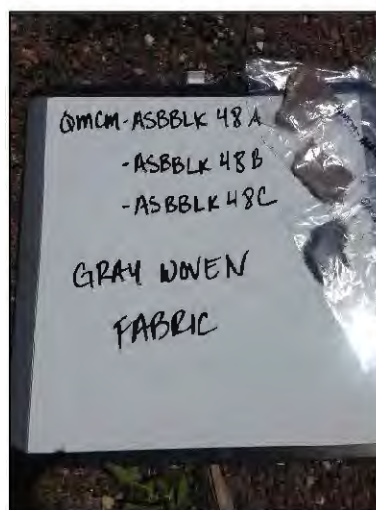


Photo 2: QMCM-ASBBLK48(A-C)-052517

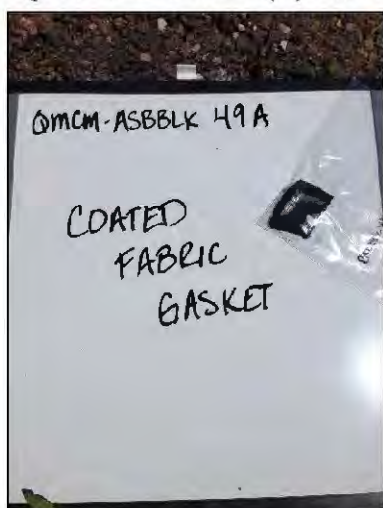


Photo 3: QMCM-ASBBLK49(A)-052517

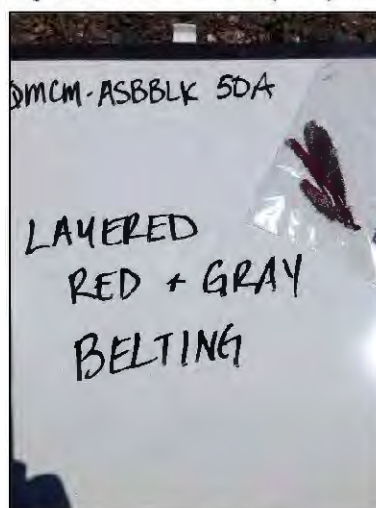
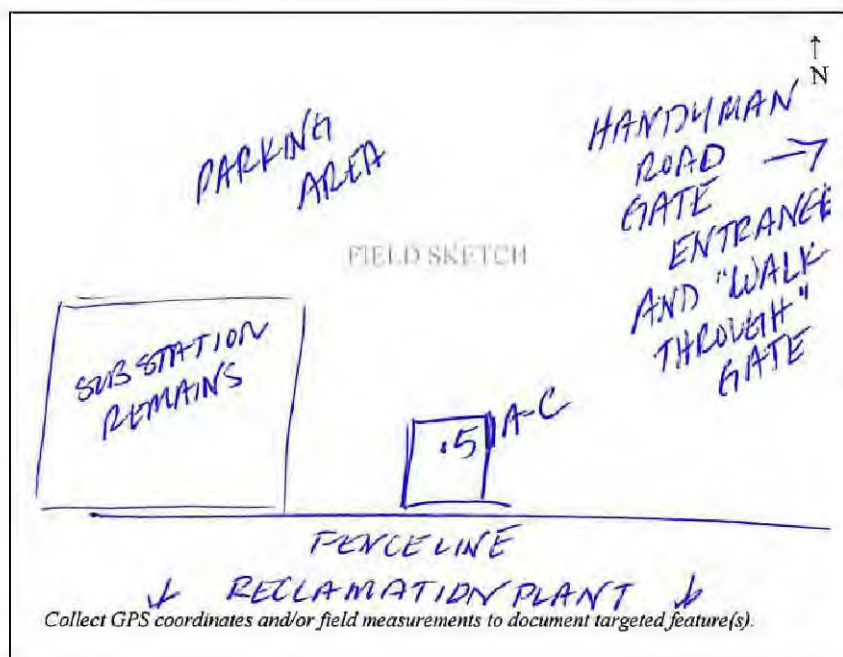


Photo 4: QMCM-ASBBLK50(A)-052517

**ABANDONED MINING WASTES TORCH LAKE NON-SUPERFUND SITE
QUINCY MINING COMPANY MASON OPERATIONS
TARGETED INSPECTION FORM**



Representative photograph of sample location and/or targeted feature.

Inspection Date: 5/25/2017

Feature Identification/Name: Parking area north of Reclamation Plant

Study Area: Quincy Mining Company Mason

Property Identification Number: 009-023-001-70

OBSERVATIONS (Including description and sketch)

Inspector/Sampler: A. Miller/J. Chrestensen

Circle the appropriate answer;

Potential Physical Hazard: ☐ Yes ☒ No Potential Chemical Hazard: ☐ Yes ☒ No

Capped Area: ☒ Yes ☐ No Residual Process Material: ☐ Yes ☒ No Abandoned Container: ☐ Yes ☒ No

Stressed Vegetation: ☐ Yes ☒ No Visible Staining: ☐ Yes ☒ No Building Materials: ☒ Yes ☐ No

Describe Targeted Feature:

Parking lot area located North of Reclamation Plant, accessible by Handyman Road. Board approximately 5 x 4 feet with black roofing material. Roofing is in poor condition, area is littered with trash.

Sampling Activities (Sample Description, Sample Time, Requested Analyses):

QMCM-ASBBLK51 (A-C)-052517 (asphaltic roofing) – collected at 1325

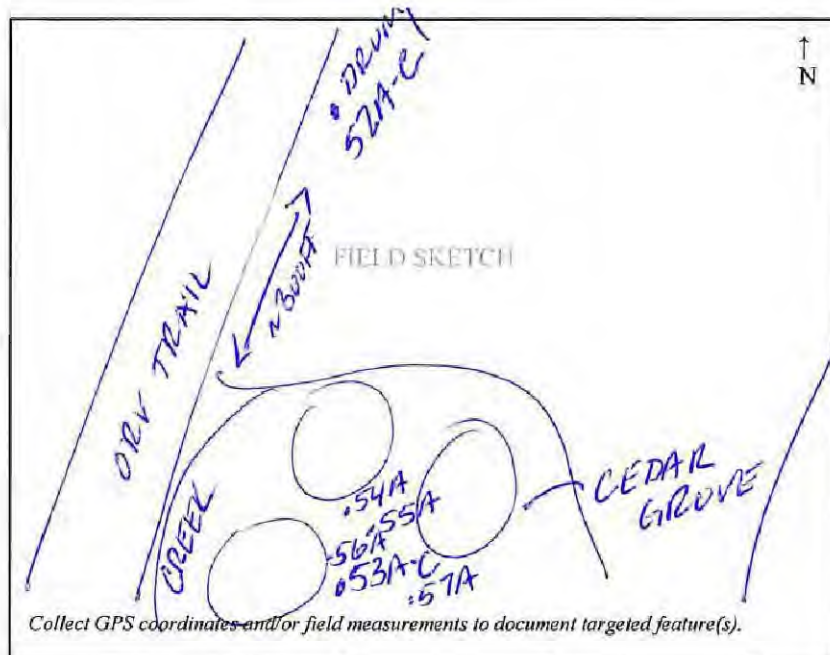
Potential Exposure Pathways (Ingestion, Inhalation, Direct Contact):

The parking area is not secured and is accessible. The roofing material has weathered and is in poor condition.

Other Relevant Below and Above Ground Features (Conduit, Drainage Swales, Culverts):

The material is located near drainage ditches carrying water from across M-26 toward Torch Lake.

**ABANDONED MINING WASTES TORCH LAKE NON-SUPERFUND SITE
QUINCY MINING COMPANY MASON OPERATIONS
TARGETED INSPECTION FORM**



See attached Photolog.
Representative photograph of sample location and/or targeted feature.

Inspection Date: 5/25/2017

Feature Identification/Name: Wooded area south of Reclamation Plant

Study Area: Quincy Mining Company Mason

Property Identification Number: 009-023-001-70

OBSERVATIONS (Including description and sketch)

Inspector/Sampler: A. Miller/J. Chrestensen

Circle the appropriate answer;

Potential Physical Hazard: ☐ Yes ☒ No Potential Chemical Hazard: ☐ Yes ☒ No

Capped Area: ☐ Yes ☒ No Residual Process Material: ☐ Yes ☒ No Abandoned Container: ☐ Yes ☒ No

Stressed Vegetation: ☐ Yes ☒ No Visible Staining: ☐ Yes ☒ No Building Materials: ☒ Yes ☐ No

Describe Targeted Feature:

Wooded area located south of the Reclamation Plant, east of the ORV trail and west of the fence line. A number of abandoned drums are located through the wooded area, which also includes areas of household trash and debris. Suspect asbestos containing materials located in the area include roofing and various linoleums.

Sampling Activities (Sample Description, Sample Time, Requested Analyses):

QMCM-ASBBLK52 (A-C)-052517 (black felt paper roofing) – collected at 1332
QMCM-ASBBLK53 (A-C)-052517 (felt paper w/ silver paint) – collected at 1335
QMCM-ASBBLK54 (A)-052517 (green floral linoleum) – collected at 1337
QMCM-ASBBLK55 (A)-052517 (green patterned linoleum) – collected at 1337
QMCM-ASBBLK56 (A)-052517 (red patterned linoleum) – collected at 1337
QMCM-ASBBLK57 (A)-052517 (pink layered linoleum) – collected at 1337

Potential Exposure Pathways (Ingestion, Inhalation, Direct Contact):

The wooded area is unsecure and may be accessible to trespassers.

Other Relevant Below and Above Ground Features (Conduit, Drainage Swales, Culverts):

The materials are located near wetlands on the west side of the fence line and various drainage ditches carrying water from across M-26 toward Torch Lake.

ABANDONED MINING WASTES TORCH LAKE NON-SUPERFUND SITE
QUINCY MINING COMPANY MASON OPERATIONS
TARGETED INSPECTION FORM

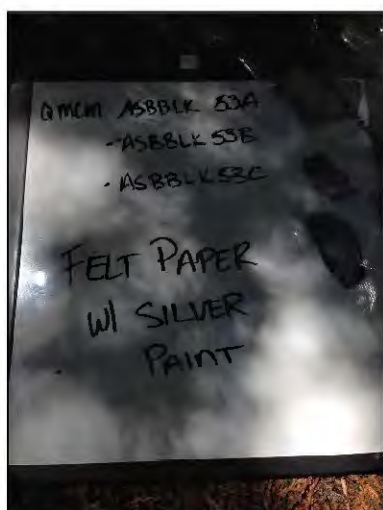


Photo 1: QMCM-ASBBLK53(A-C)-052517

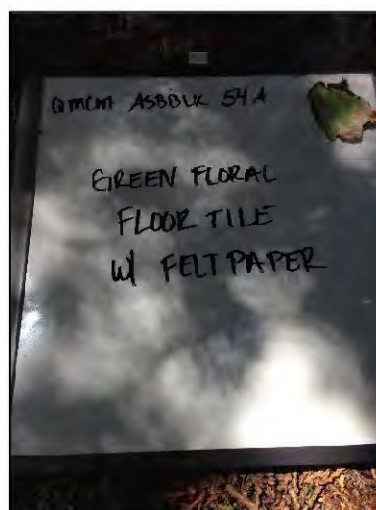


Photo 2: QMCM-ASBBLK54(A)-052517



Photo 3: QMCM-ASBBLK55(A)-052517



Photo 4: QMCM-ASBBLK56(A)-052517

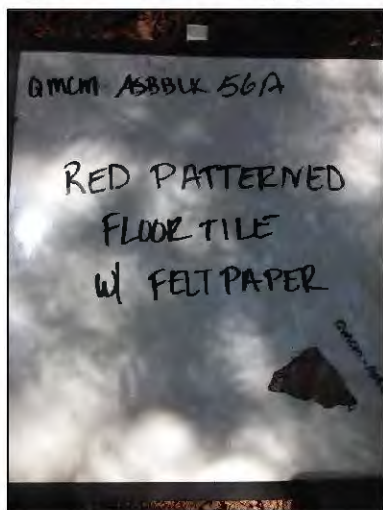


Photo 5: QMCM-ASBBLK56(A)-052517

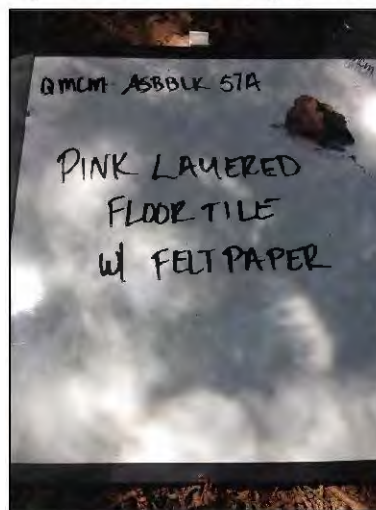
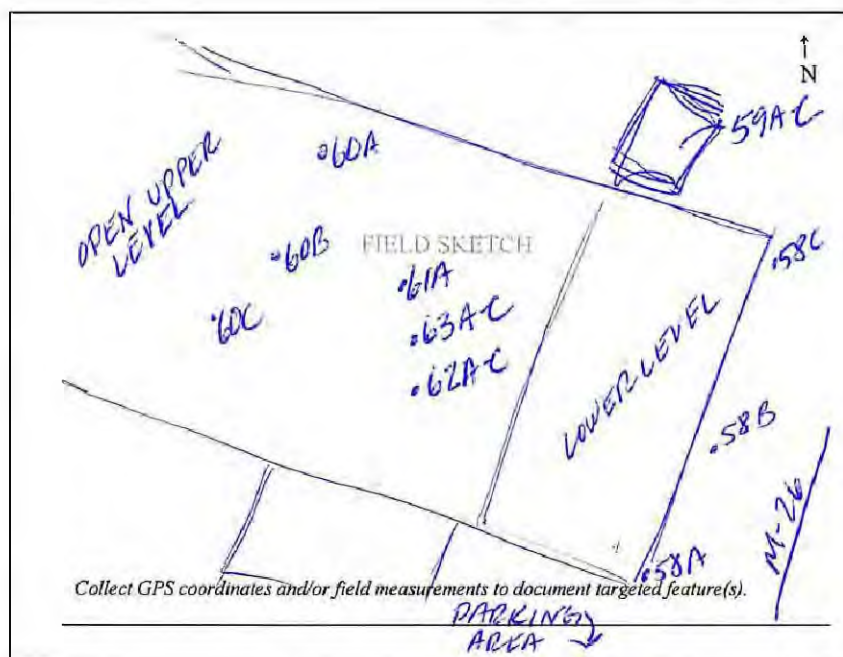


Photo 6: QMCM-ASBBLK57(A)-052517

**ABANDONED MINING WASTES TORCH LAKE NON-SUPERFUND SITE
QUINCY MINING COMPANY MASON OPERATIONS
TARGETED INSPECTION FORM**



See attached Photolog.
Representative photograph of sample location and/or
targeted feature.

Inspection Date: 5/26/2017

Feature Identification/Name: Quincy Stamp Mill No. 1

Study Area: Quincy Mining Company Mason

Property Identification Number: 009-023-001-00

OBSERVATIONS (Including description and sketch)

Inspector/Sampler: A. Miller/J. Chrestensen

Circle the appropriate answer;

Potential Physical Hazard: ☐ Yes ☒ No Potential Chemical Hazard: ☐ Yes ☒ No

Capped Area: ☐ Yes ☒ No Residual Process Material: ☐ Yes ☒ No Abandoned Container: ☐ Yes ☒ No

Stressed Vegetation: ☐ Yes ☒ No Visible Staining: ☐ Yes ☒ No Building Materials: ☒ Yes ☐ No

Describe Targeted Feature:

The concrete foundation and area surrounding the remaining portion of the former Stamp Mill includes debris piles and suspect asbestos containing materials. Roofing from the remaining Stamp Mill is found along M-26, roofing from another structure is found along the north side of the Stamp Mill. Suspect TSI material is observed in piles throughout the upper concrete foundation.

Sampling Activities (Sample Description, Sample Time, Requested Analyses):

QMCM-ASBBLK58 (A-C)-052517 (black asphaltic tar roofing) – collected at 1443
QMCM-ASBBLK59 (A-C)-052517 (black roofing w/ specks) – collected at 1450
QMCM-ASBBLK60 (A-C)-052517 (dark gray/white TSI) – collected at 1500
QMCM-ASBBLK61 (A)-052517 (woven material w/ yellow) – collected at 1513
QMCM-ASBBLK62 (A-C)-052517 (red/black woven fabric) – collected at 1519
QMCM-ASBBLK63 (A-C)-052517 (gray layered fabric) – collected at 1535

Potential Exposure Pathways (Ingestion, Inhalation, Direct Contact):

The Stamp Mill area is unsecure and may be accessible to trespassers. The weathered and friable nature of the TSI material make them susceptible to wind erosion.

Other Relevant Below and Above Ground Features (Conduit, Drainage Swales, Culverts):

The materials are located on the upper portion of the Mill. Various trenches create hazards and pathways for contaminated materials to reach lower levels.

ABANDONED MINING WASTES TORCH LAKE NON-SUPERFUND SITE
QUINCY MINING COMPANY MASON OPERATIONS
TARGETED INSPECTION FORM

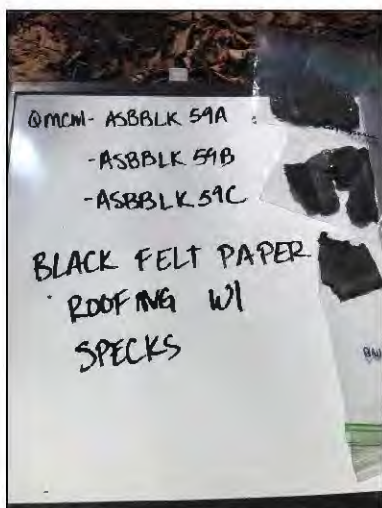


Photo 1: QMCM-ASBBLK59(A-C)-052517

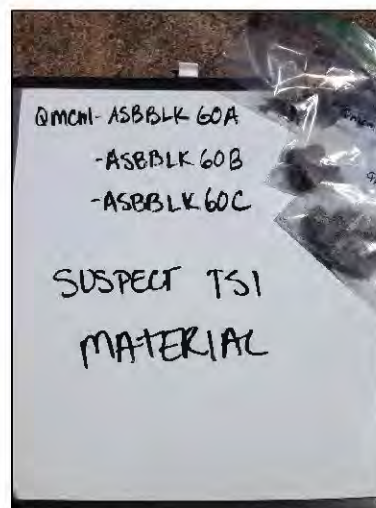


Photo 2: QMCM-ASBBLK60(A-C)-052517

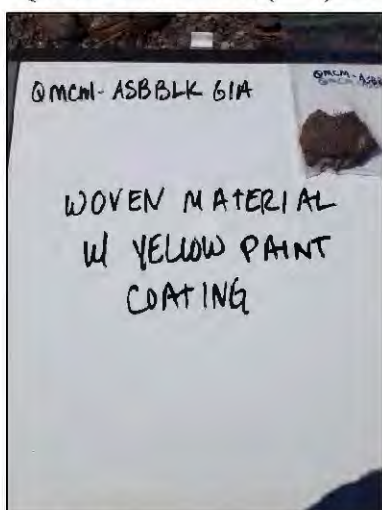


Photo 3: QMCM-ASBBLK61(A)-052517

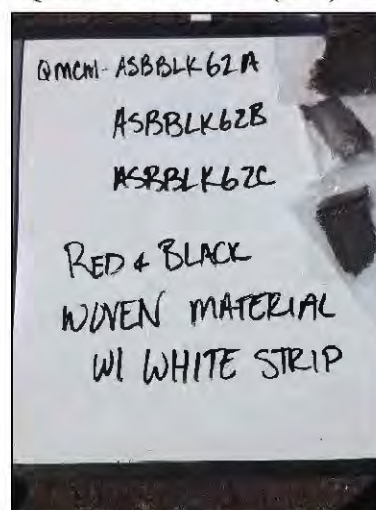


Photo 4: QMCM-ASBBLK26(A-C)-052517

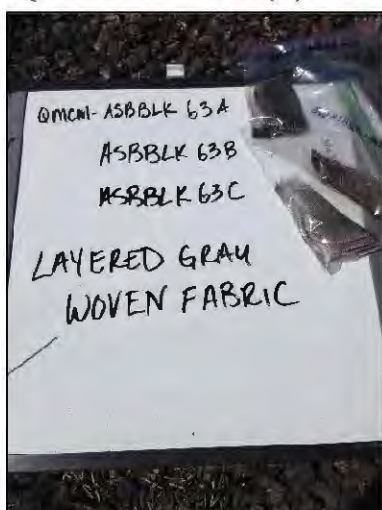
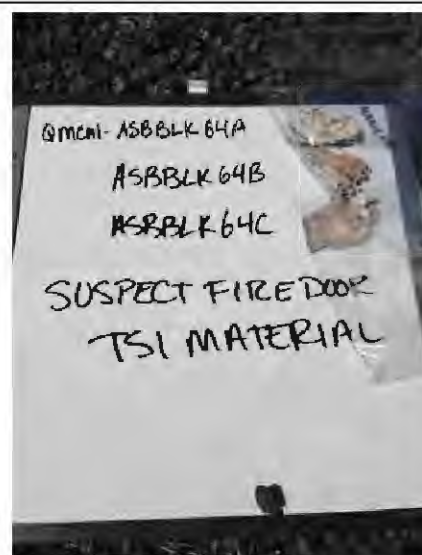
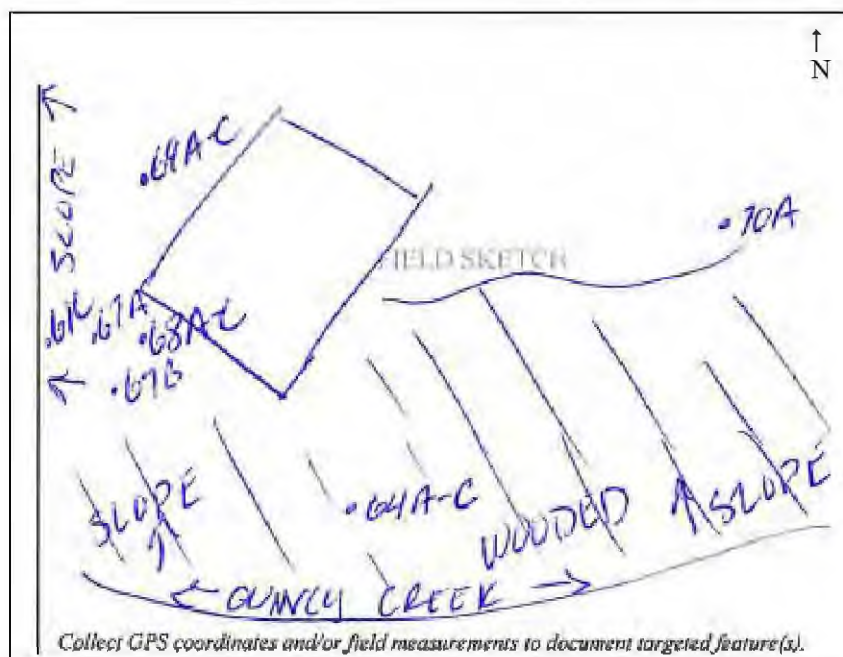


Photo 5: QMCM-ASBBLK63(A-C)-052617

**ABANDONED MINING WASTES TORCH LAKE NON-SUPERFUND SITE
QUINCY MINING COMPANY MASON OPERATIONS
TARGETED INSPECTION FORM**



See attached Photolog.
Representative photograph of sample location and/or targeted feature.

Inspection Date: 5/25-26/2017

Feature Identification/Name: Quincy Stamp Mill No. 1 – Turbine House

Study Area: Quincy Mining Company Mason

Property Identification Number: 009-023-001-00

OBSERVATIONS (Including description and sketch)

Inspector/Sampler: A. Miller/J. Chrestensen

Circle the appropriate answer;

Potential Physical Hazard: ☐ Yes ☒ No Potential Chemical Hazard: ☐ Yes ☒ No

Capped Area: ☐ Yes ☒ No Residual Process Material: ☐ Yes ☒ No Abandoned Container: ☐ Yes ☒ No

Stressed Vegetation: ☐ Yes ☒ No Visible Staining: ☐ Yes ☒ No Building Materials: ☒ Yes ☐ No

Describe Targeted Feature:

The partially wooded area surrounding the Quincy Turbine (Power) House includes debris and building material on the ground. Suspect asbestos containing material includes various fabrics, tubing, roofing, window glazing, sheeting and suspect TSI material found within a crumbled metal fire door.

Sampling Activities (Sample Description, Sample Time, Requested Analyses):

QMCM-ASBBLK64 (A-C)-052517 (fire door TSI) – collected at 1540
QMCM-ASBBLK67 (A-C)-052617 (window glazing) – collected at 1413
QMCM-ASBBLK68 (A-C)-052617 (slate sheeting) – collected at 1420
QMCM-ASBBLK69 (A-C)-052617 (black fabric tubing) – collected at 1423
QMCM-ASSBLK70 (A)-052617 (white/black fabric) – collected at 1427

Potential Exposure Pathways (Ingestion, Inhalation, Direct Contact):

The Stamp Mill area is unsecure and may be accessible to trespassers. The weathered and friable nature of the TSI material and fabric make it susceptible to wind erosion and water from overland flow.

Other Relevant Below and Above Ground Features (Conduit, Drainage Swales, Culverts):

The materials are located on the upper portion of the Turbine House area near the Quincy Creek. Various trenches create hazards and pathways for contaminated materials to reach lower levels.

ABANDONED MINING WASTES TORCH LAKE NON-SUPERFUND SITE
QUINCY MINING COMPANY MASON OPERATIONS
TARGETED INSPECTION FORM

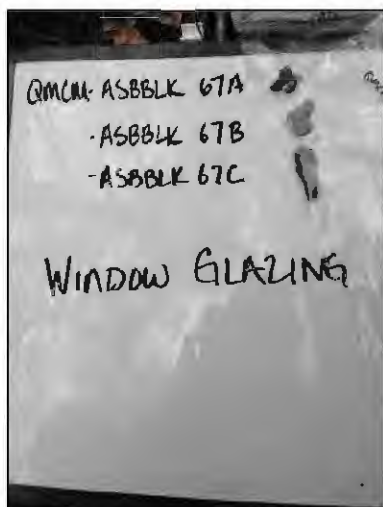


Photo 1: QMCM-ASBBLK67(A-C)-052617

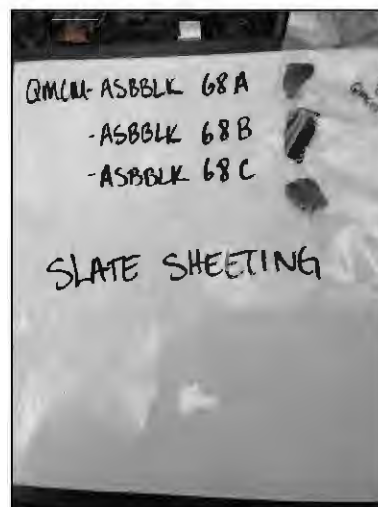


Photo 2: QMCM-ASBBLK68(A-C)-052617

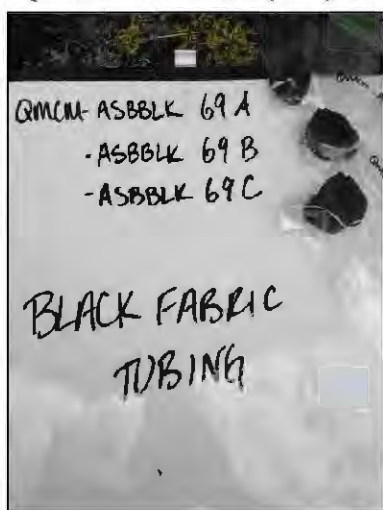


Photo 3: QMCM-ASBBLK69(A-C)-052617

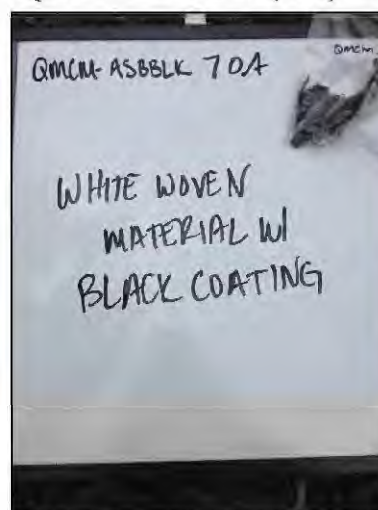
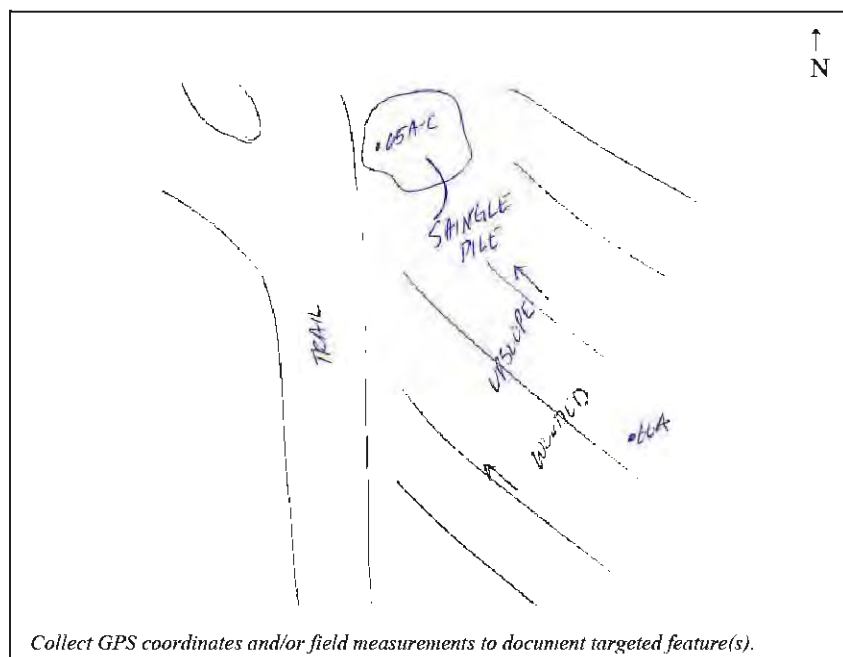


Photo 4: QMCM-ASBBLK70(A)-052617

**ABANDONED MINING WASTES TORCH LAKE NON-SUPERFUND SITE
QUINCY MINING COMPANY MASON OPERATIONS
TARGETED INSPECTION FORM**



See attached Photolog.

Representative photograph of sample location and/or targeted feature.

Inspection Date: 5/25/2017

Feature Identification/Name: Quincy Stamp Mill No. 1- Wooded Area to the southwest

Study Area: Quincy Mining Company Mason

Property Identification Number: 009-023-001-00

OBSERVATIONS (Including description and sketch)

Inspector/Sampler: A. Miller/J. Chrestensen

Circle the appropriate answer;

Potential Physical Hazard: ☐ Yes ☒ No Potential Chemical Hazard: ☐ Yes ☒ No

Capped Area: ☐ Yes ☒ No Residual Process Material: ☐ Yes ☒ No Abandoned Container: ☐ Yes ☒ No

Stressed Vegetation: ☐ Yes ☒ No Visible Staining: ☐ Yes ☒ No Building Materials: ☒ Yes ☐ No

Describe Targeted Feature:

The wooded area to the southwest of the concrete foundation of Stamp Mill No. 1 includes suspect asbestos containing roofing materials and weathered belting. The wooded area also includes abandoned drums and other containers. A pile of roofing material is found at the edge of the wooded area adjacent to the ORV trail, along with other household trash and debris.

Sampling Activities (Sample Description, Sample Time, Requested Analyses):

QMCM-ASBBLK65 (A-C)-052517 (black/gray shingles) – collected at 1546

QMCM-ASBBLK66 (A)-052517 (white belting) – collected at 1522

Potential Exposure Pathways (Ingestion, Inhalation, Direct Contact):

The Stamp Mill area is unsecure and may be accessible to trespassers and the public using the ORV trail.

Other Relevant Below and Above Ground Features (Conduit, Drainage Swales, Culverts):

The materials are located on the upper portion of a sloped wooded area. Various trenches create hazards and pathways for contaminated materials to reach lower levels.

ABANDONED MINING WASTES TORCH LAKE NON-SUPERFUND SITE
QUINCY MINING COMPANY MASON OPERATIONS
TARGETED INSPECTION FORM

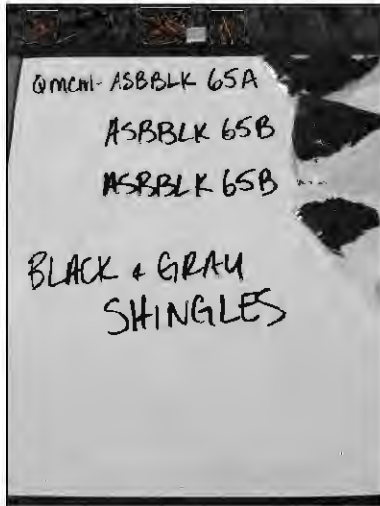


Photo 1: QMCM-ASBBLK65(A-C)-052517

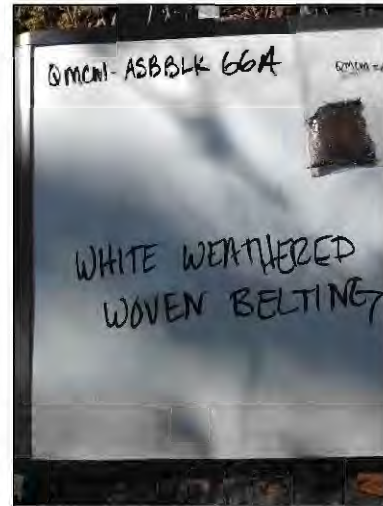
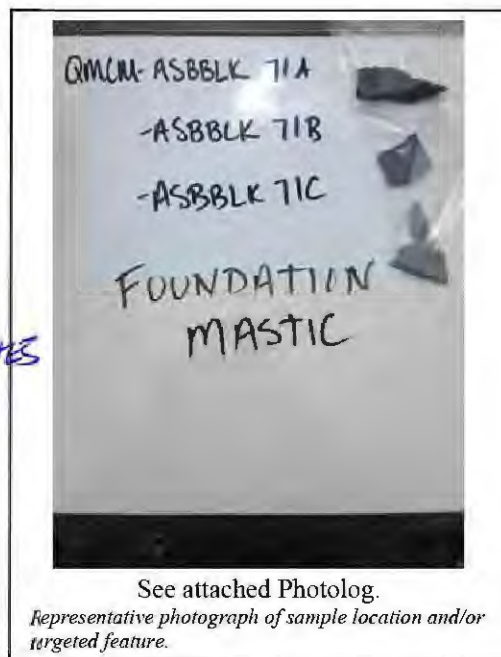
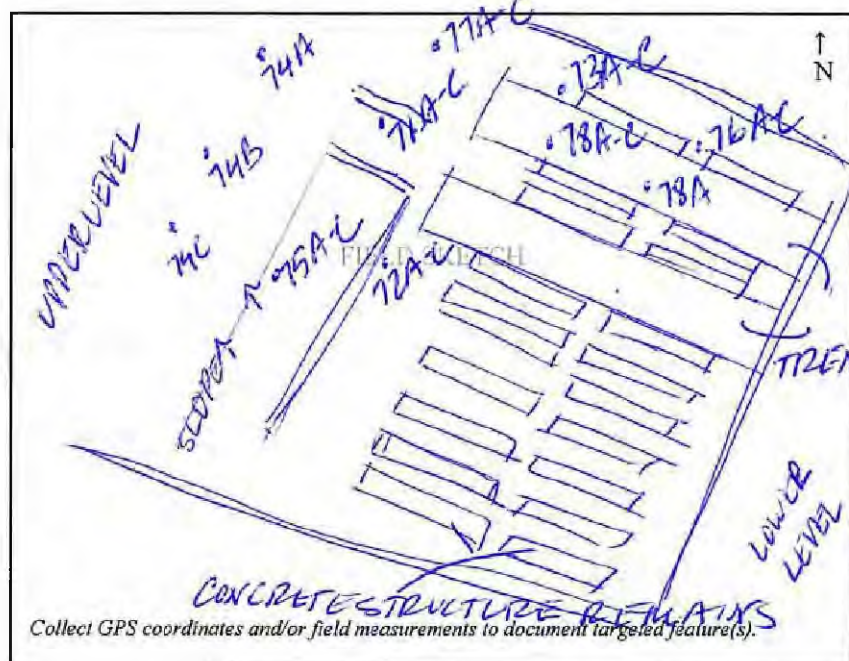


Photo 2: QMCM-ASBBLK66(A)-052517

**ABANDONED MINING WASTES TORCH LAKE NON-SUPERFUND SITE
QUINCY MINING COMPANY MASON OPERATIONS
TARGETED INSPECTION FORM**



Inspection Date: 5/26/2017 Feature Identification/Name: Upper level Concrete Foundation - Quincy Stamp Mill No. 2

Study Area: Quincy Mining Company Mason Property Identification Number: 009-023-001-00

OBSERVATIONS (Including description and sketch) Inspector/Sampler: A. Miller/J. Chrestensen

Circle the appropriate answer;

Potential Physical Hazard: ☐ Yes ☒ No Potential Chemical Hazard: ☐ Yes ☒ No

Capped Area: ☐ Yes ☒ No Residual Process Material: ☐ Yes ☒ No Abandoned Container: ☐ Yes ☒ No

Stressed Vegetation: ☐ Yes ☒ No Visible Staining: ☐ Yes ☒ No Building Materials: ☒ Yes ☐ No

Describe Targeted Feature:

The concrete foundation and area surrounding the remaining portion of the former Stamp Mill includes debris piles and suspect asbestos containing materials. Suspect asbestos containing material includes mastic, felt paper, a variety of woven fabric materials and suspect thermal system insulation.

Sampling Activities (Sample Description, Sample Time, Requested Analyses):

QMCM-ASBBLK71 (A-C)-052617 (black foundation mastic) – collected at 1540

QMCM-ASBBLK72 (A-C)-052617 (loose tar mastic) – collected at 1546

QMCM-ASBBLK73 (A-C)-052617 (gray woven material) – collected at 1552

QMCM-ASBBLK74 (A-C)-052617 (beige TSI) – collected at 1413

QMCM-ASBBLK75 (A-C)-052617 (black fibrous material) – collected at 1420

QMCM-ASBBLK76 (A-C)-052617 (black mesh imprint felt paper) – collected at 1423

QMCM-ASBBLK77 (A-C)-052617 (red woven fabric) – collected at 1427

QMCM-ASBBLK78 (A-C)-052617 (black woven material) – collected at 1527

QMCM-ASBBLK79(A)-052617 (black mastic w/ fabric) – collected at 1528

Potential Exposure Pathways (Ingestion, Inhalation, Direct Contact):

The Stamp Mill area is unsecure and may be accessible to trespassers. The weathered and friable nature of the TSI material and felt paper make it susceptible to wind erosion and water from overland flow.

Other Relevant Below and Above Ground Features (Conduit, Drainage Swales, Culverts):

The materials are located on the upper portion of the Stamp Mill foundation. Various trenches create hazards and pathways for contaminated materials to reach lower levels. Drainage channels for overland flow are found running to the east.

ABANDONED MINING WASTES TORCH LAKE NON-SUPERFUND SITE
QUINCY MINING COMPANY MASON OPERATIONS
TARGETED INSPECTION FORM

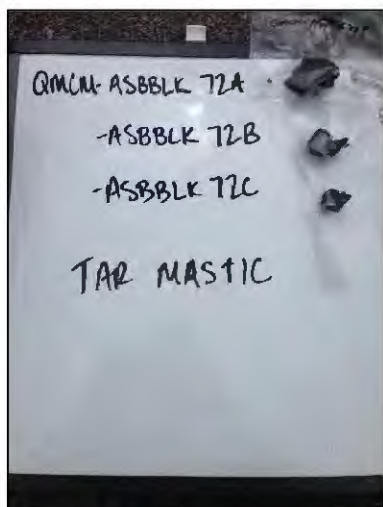


Photo 1: QMCM-ASBBLK72(A-C)-052617

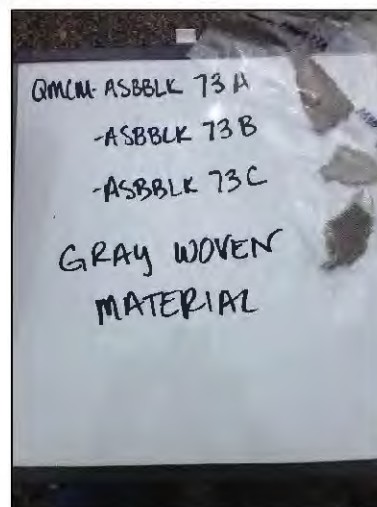


Photo 2: QMCM-ASBBLK73(A-C)-052617

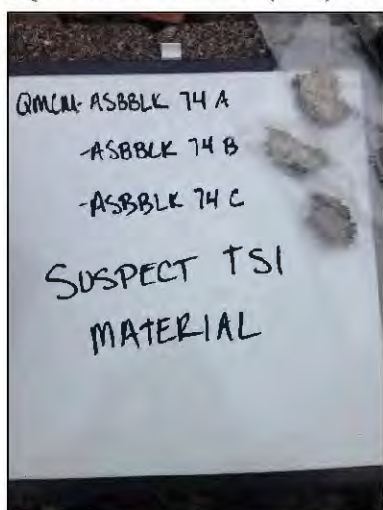


Photo 3: QMCM-ASBBLK74(A-C)-052617

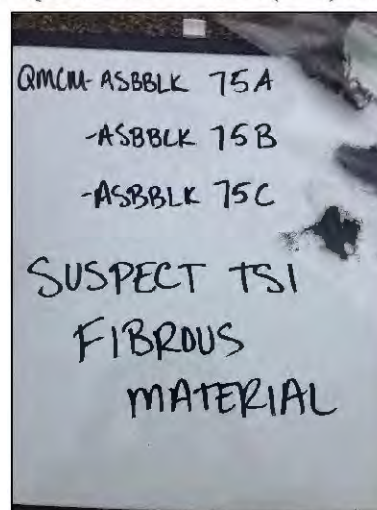


Photo 4: QMCM-ASBBLK75(A-C)-052617

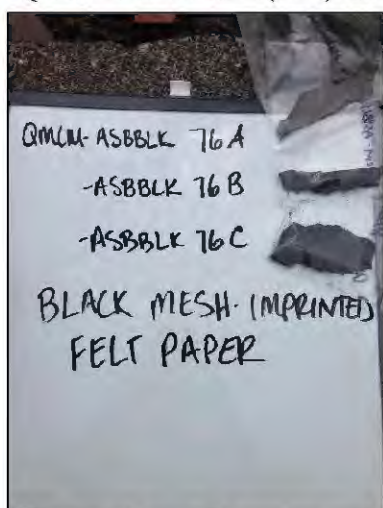


Photo 5: QMCM-ASBBLK76(A-C)-052617

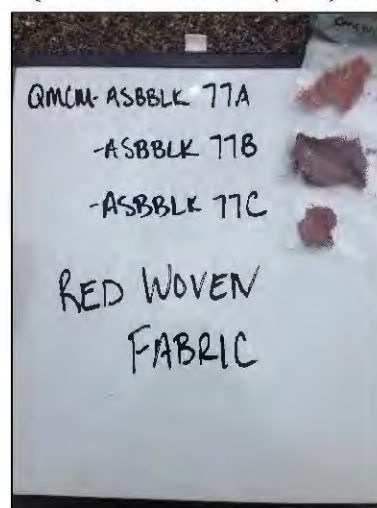
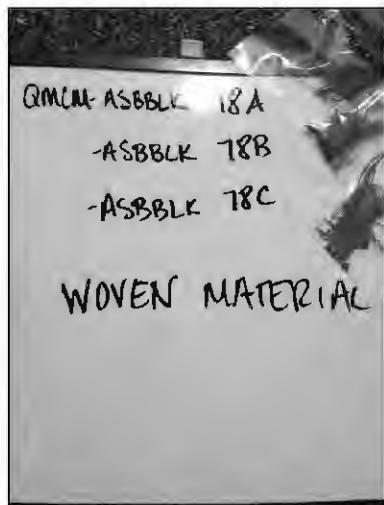


Photo 6: QMCM-ASBBLK77(A-C)-052617

ABANDONED MINING WASTES TORCH LAKE NON-SUPERFUND SITE
QUINCY MINING COMPANY MASON OPERATIONS
TARGETED INSPECTION FORM

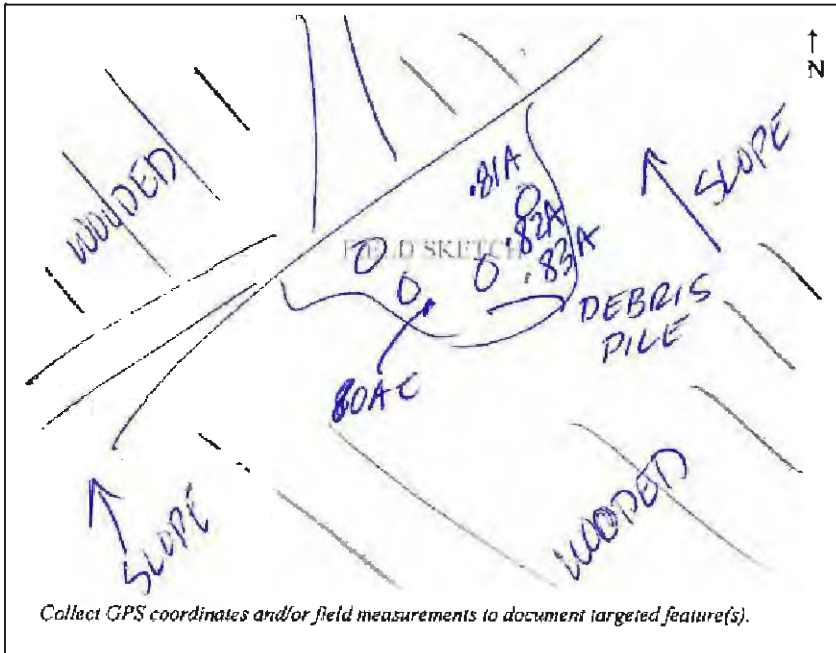


QMCM-ASBBLK78(A-C)-052617



QMCM-ASBBLK79(A)-052617

**ABANDONED MINING WASTES TORCH LAKE NON-SUPERFUND SITE
QUINCY MINING COMPANY MASON OPERATIONS
TARGETED INSPECTION FORM**



Inspection Date: 5/26/2017

Feature Identification/Name: Wooded hillside north of Quincy Stamp Mill No. 2

Study Area: Quincy Mining Company Mason

Property Identification Number: 009-023-001-00

OBSERVATIONS (Including description and sketch)

Inspector/Sampler: A. Miller/J. Chrestensen

Circle the appropriate answer;

Potential Physical Hazard: ☐ Yes ☒ No Potential Chemical Hazard: ☐ Yes ☒ No

Capped Area: ☐ Yes ☒ No Residual Process Material: ☐ Yes ☒ No Abandoned Container: ☐ Yes ☒ No

Stressed Vegetation: ☐ Yes ☒ No Visible Staining: ☐ Yes ☒ No Building Materials: ☒ Yes ☐ No

Describe Targeted Feature:

The hillside north of the concrete foundation of Stamp Mill No. 2 is the location of suspect asbestos containing material that includes layered gaskets, woven fabrics and felt paper. The 15 ft diameter debris pile includes RPM material.

Sampling Activities (Sample Description, Sample Time, Requested Analyses):

QMCM-ASBBLK80 (A-C)-052617 (layered gaskets) – collected at 1542
QMCM-ASBBLK81 (A)-052617 (gray woven fabric) – collected at 1543
QMCM-ASBBLK82 (A)-052617 (gray/brown woven fabric) – collected at 1544
QMCM-ASBBLK83 (A)-052617 (gray coated felt paper) – collected at 1545

Potential Exposure Pathways (Ingestion, Inhalation, Direct Contact):

The wooded area is unsecure and may be accessible to trespassers. Felt paper material and gaskets may become friable.

Other Relevant Below and Above Ground Features (Conduit, Drainage Swales, Culverts):

The materials are located on a wooded hillside north of the Stamp Mill foundation. Drainage channels for overland flow are found as the ground surface slopes to the east.

ABANDONED MINING WASTES TORCH LAKE NON-SUPERFUND SITE
QUINCY MINING COMPANY MASON OPERATIONS
TARGETED INSPECTION FORM

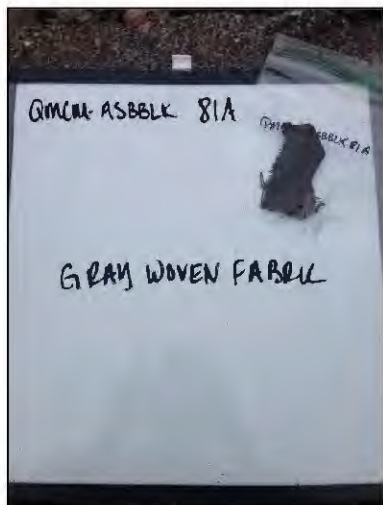


Photo 1: QMCM-ASBBLK81(A)-052617

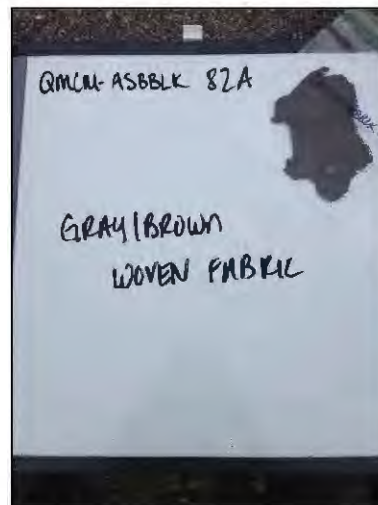


Photo 2: QMCM-ASBBLK82(A)-052617

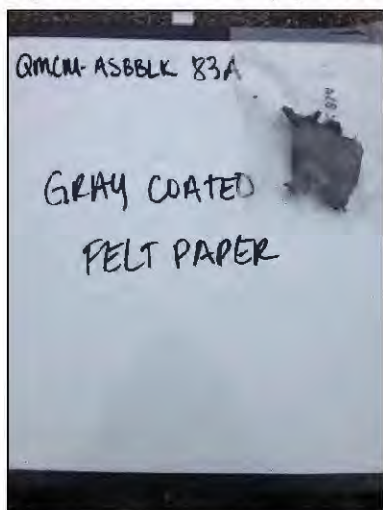
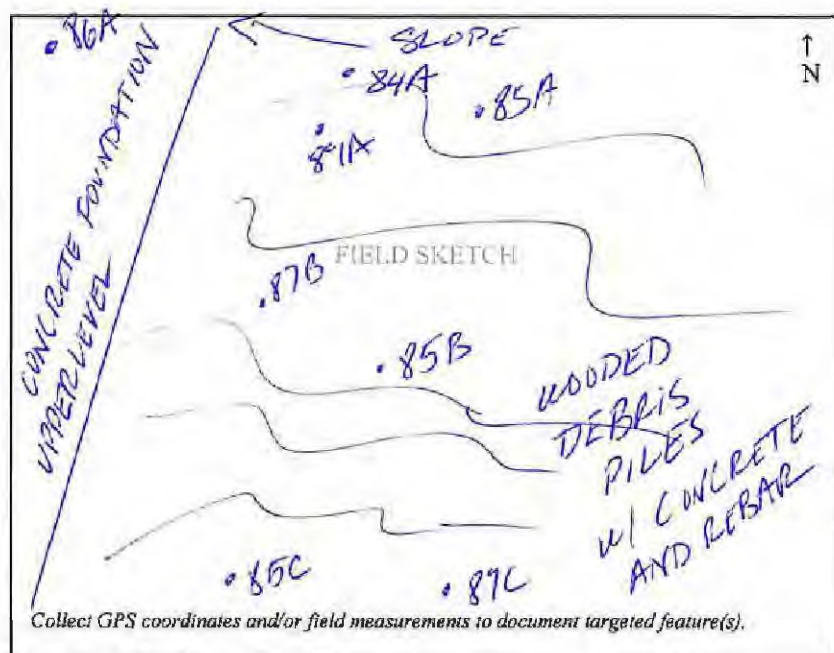


Photo 3: QMCM-ASBBLK83(A)-052617

**ABANDONED MINING WASTES TORCH LAKE NON-SUPERFUND SITE
QUINCY MINING COMPANY MASON OPERATIONS
TARGETED INSPECTION FORM**



See attached Photolog.
Representative photograph of sample location and/or targeted feature.

Inspection Date: 5/26/2017

Feature Identification/Name: Quincy Stamp Mill No. 2 - Lower level

Study Area: Quincy Mining Company Mason

Property Identification Number: 009-023-001-00

OBSERVATIONS (Including description and sketch)

Inspector/Sampler: A. Miller/J. Chrestensen

Circle the appropriate answer;

Potential Physical Hazard: ☐ Yes ☒ No Potential Chemical Hazard: ☐ Yes ☒ No

Capped Area: ☐ Yes ☒ No Residual Process Material: ☐ Yes ☒ No Abandoned Container: ☐ Yes ☒ No

Stressed Vegetation: ☐ Yes ☒ No Visible Staining: ☐ Yes ☒ No Building Materials: ☒ Yes ☐ No

Describe Targeted Feature:

The lower level of the Stamp Mill foundation is littered with large debris piles that include fire bricks and roofing, as well as rebar and concrete debris. Suspect asbestos containing material includes various roofing and fire bricks.

Sampling Activities (Sample Description, Sample Time, Requested Analyses):

QMCM-ASBBLK84 (A)-052617 (felt paper roofing) – collected at 1557
QMCM-ASBBLK85 (A-C)-052617 (light yellow fire bricks) – collected at 1558
QMCM-ASBBLK86 (A)-052617 (metallic roofing) – collected at 1559
QMCM-ASBBLK87 (A-C)-052617 (tar pebble felt paper roofing) – collected at 1600

Potential Exposure Pathways (Ingestion, Inhalation, Direct Contact):

The area is unsecure and may be accessible to trespassers.

Other Relevant Below and Above Ground Features (Conduit, Drainage Swales, Culverts):

The materials are located on the lower level of the Stamp Mill foundation. Drainage channels for overland flow are found as the ground surface slopes to the east.

ABANDONED MINING WASTES TORCH LAKE NON-SUPERFUND SITE
QUINCY MINING COMPANY MASON OPERATIONS
TARGETED INSPECTION FORM

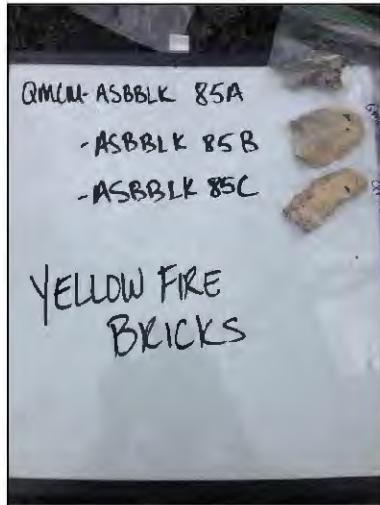


Photo 1: QMCM-ASBBLK85(A-C)-052617

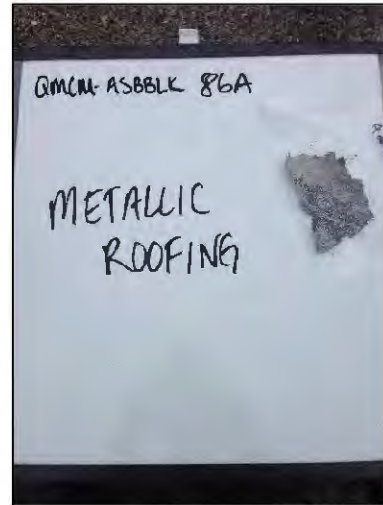


Photo 2: QMCM-ASBBLK86(A)-052617

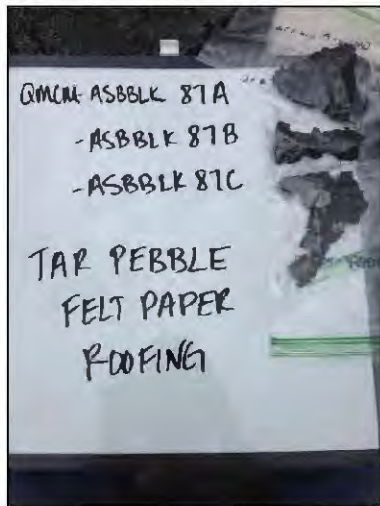
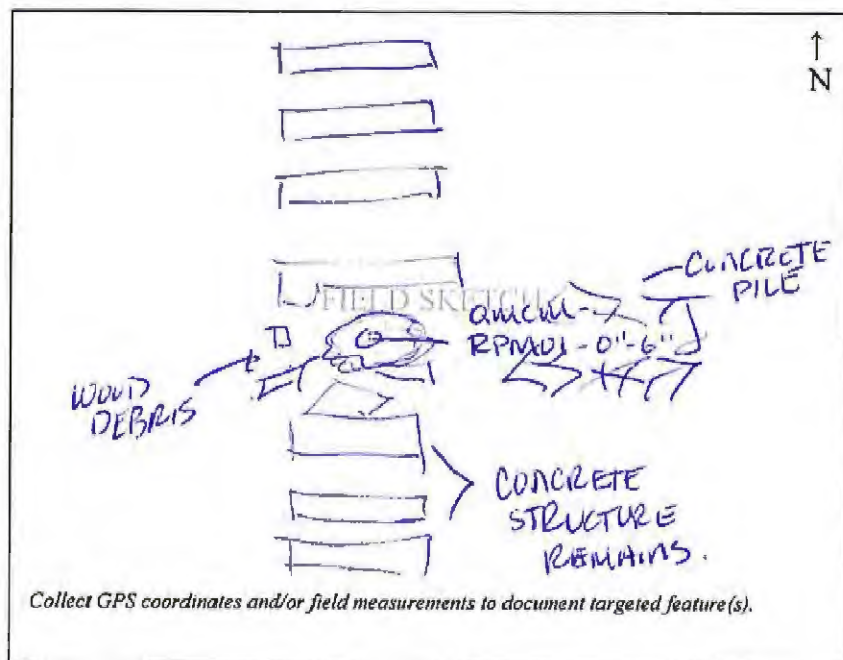


Photo 3: QMCM-ASBBLK87(A-C)-052617

**ABANDONED MINING WASTES TORCH LAKE NON-SUPERFUND SITE
QUINCY MINING COMPANY MASON OPERATIONS
TARGETED INSPECTION FORM**



Representative photograph of sample location and/or targeted feature.

Inspection Date: 05/16/17 Feature Identification/Name QMCN-RPM01-0'-6"

Study Area: QUINCY STAMPEMILL NO. 2 Property Identification Number: 009-023-001-00

OBSERVATIONS (Including description and sketch) Inspector/Sampler: A. MILLER / M. PRIBE

Circle the appropriate answer;

Potential Physical Hazard: Yes ☒ No ☐ Potential Chemical Hazard: ☒ Yes ☐ No
Capped Area: Yes ☒ No ☐ Residual Process Material: ☒ Yes ☐ No Abandoned Container: Yes ☒ No ☐
Stressed Vegetation: Yes ☒ No ☐ Visible Staining: Yes ☒ No ☐ Building Materials: Yes ☒ No ☐

Describe Targeted Feature:

APPROXIMATELY 5FT DIAMETER PILE OF GRAY SOIL MATERIAL, SANDS FINES WITH FINER SILTY MATERIAL. PILE INCLUDES WOOD DEBRIS, LARGER GRAVEL

Sampling Activities (Sample Description, Sample Time, Requested Analyses):

QMCN-RPM01-0'-6", Collected 05/16/17 @ 0904

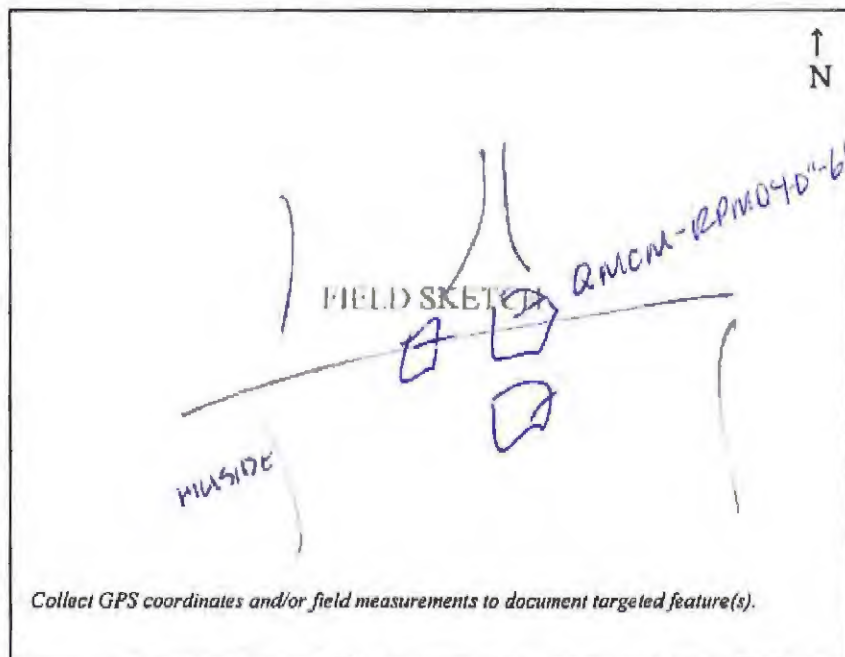
Potential Exposure Pathways (Ingestion, Inhalation, Direct Contact):

MATERIALS ARE LOCATED IN PILE AT LOCATE ACCESSIBLE TO PUBLIC / TRESSPASSERS

Other Relevant Below and Above Ground Features (Conduit, Drainage Swales, Culverts):

PILE IS LOCATED ON CONCRETE FLOOR OF MILL RUINS, MAY BE SUBJECT TO EROSION

**ABANDONED MINING WASTES TORCH LAKE NON-SUPERFUND SITE
QUINCY MINING COMPANY MASON OPERATIONS
TARGETED INSPECTION FORM**



Inspection Date: 05/16/17 Feature Identification/Name QMCN-RPM04-0"-6"

Study Area: QUINCY STAMP MILL NOL Property Identification Number: 009-023-001-00

OBSERVATIONS (Including description and sketch) Inspector/Sampler: AMILLER / M. PRISE

Circle the appropriate answer;

Potential Physical Hazard: Yes ☒ No ☐ Potential Chemical Hazard: ☒ Yes ☐ No
Capped Area: Yes ☒ No ☐ Residual Process Material: ☒ Yes ☐ No Abandoned Container: Yes ☒ No ☐
Stressed Vegetation: Yes ☒ No ☐ Visible Staining: Yes ☐ No Building Materials: Yes ☒ No ☐

Describe Targeted Feature:

BLACK RPM - TAR-LIKE - FIBROUS MATERIAL IN PILE APPROXIMATELY 15FT IN DIAMETER. PILE INCLUDES WEATERED GASKET MATERIAL METAL DEBRIS NEARBY

Sampling Activities (Sample Description, Sample Time, Requested Analyses):

BLACK TAR-LIKE MATERIAL WITH STRING FIBERS MIXED THROUGHOUT
QMCN-RPM04-0"-6" COLLECTED 05/16/17 @ 0937

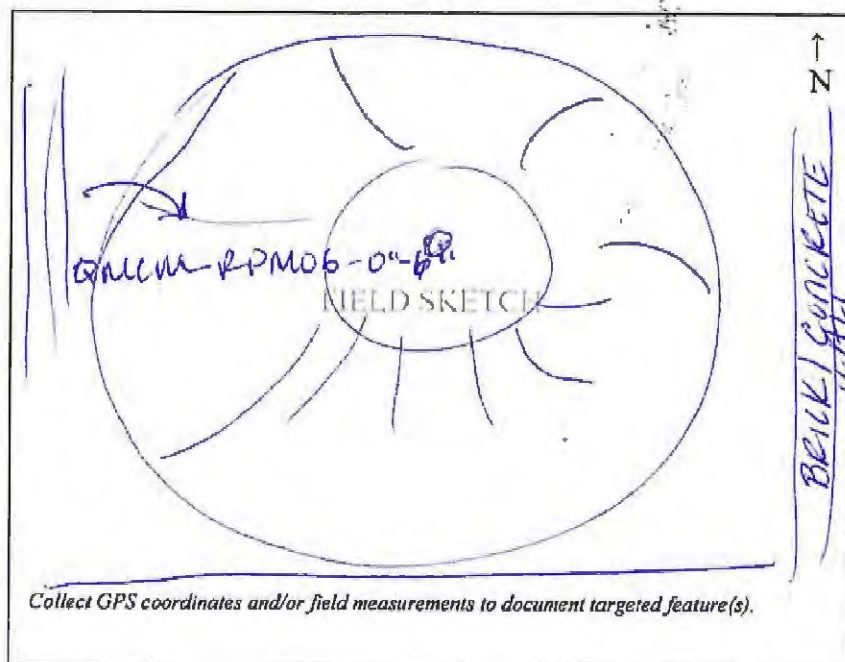
Potential Exposure Pathways (Ingestion, Inhalation, Direct Contact):

MATERIAL IS SITUATED ON HILLSIDE AWAY FROM POTENTIAL TOURIST/VISITORS/TRESPASSERS

Other Relevant Below and Above Ground Features (Conduit, Drainage Swales, Culverts):

DEBRIS SCATTERED IN AREA- METAL PIECES NEARBY. MATERIAL IS SITUATED ON HILLSIDE, POTENTIALLY EXPOSED TO EROSIONAL FORCES.

**ABANDONED MINING WASTES TORCH LAKE NON-SUPERFUND SITE
QUINCY MINING COMPANY MASON OPERATIONS
TARGETED INSPECTION FORM**



Representative photograph of sample location and/or targeted feature.

Inspection Date: 05/16/17 Feature Identification/Name: QWCM-RPM06-0'-6"
Study Area: QUINCY STAMP MILL NO. 1 Property Identification Number: 009-023-001-00

OBSERVATIONS (Including description and sketch) Inspector/Sampler: AMILLER / M. PRIBE

Circle the appropriate answer;

Potential Physical Hazard: Yes No Potential Chemical Hazard: Yes No
Capped Area: Yes No Residual Process Material: Yes No Abandoned Container: Yes No
Stressed Vegetation: Yes No Visible Staining: Yes No Building Materials: Yes No

Describe Targeted Feature:

MATERIAL IS BROWN, CLAY-LIKE. FORMS WHEN PRESSURE IS APPLIED, IS COHESIVE AND WET

Sampling Activities (Sample Description, Sample Time, Requested Analyses):

QWCM-RPM06-0'-6"

Potential Exposure Pathways (Ingestion, Inhalation, Direct Contact):

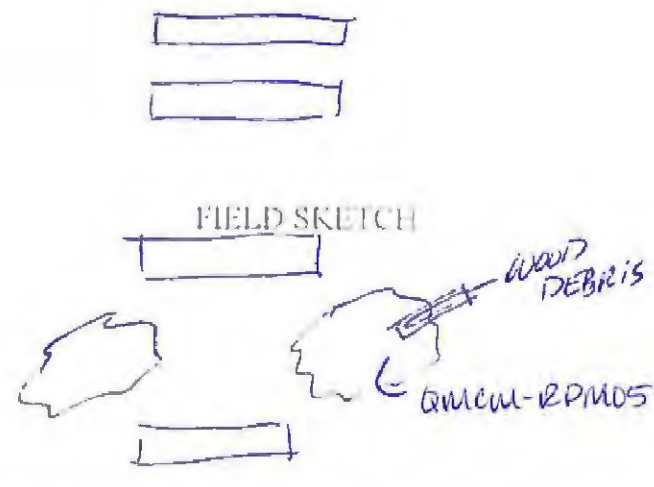
MATERIAL IS LOCATED IN AREA WHERE TRESPASSERS MAY ACCESS, UNSECURED PROPERTY

Other Relevant Below and Above Ground Features (Conduit, Drainage Swales, Culverts):

MATERIAL IS FOUND BENEATH RUSTED METAL ROOFING IN CIRCULAR WOODEN STRUCTURE IN MINERAL THICKENER

**ABANDONED MINING WASTES TORCH LAKE NON-SUPERFUND SITE
QUINCY MINING COMPANY MASON OPERATIONS
TARGETED INSPECTION FORM**

↑
N



FIELD SKETCH

WOOD DEBRIS

QMCU-RPM05-0"-6"

Collect GPS coordinates and/or field measurements to document targeted feature(s).



Inspection Date: 05/16/17 Feature Identification/Name: QMCU-RPM05-0"-6"

Study Area: QUINCY STAMP MILL NO. 2 Property Identification Number: 004-023-001-00

OBSERVATIONS (Including description and sketch) Inspector/Sampler: AMMER / M PRIBE

Circle the appropriate answer;

Potential Physical Hazard: Yes ☒ No ☐ Potential Chemical Hazard: Yes ☒ No ☐
 Capped Area: Yes ☒ Residual Process Material: Yes ☒ No ☐ Abandoned Container: Yes ☒
 Stressed Vegetation: Yes ☒ Visible Staining: Yes ☒ Building Materials: Yes ☒

Describe Targeted Feature:

YELLOW/ORANGE COLORED RUBBERY MATERIAL THAT HAS BEEN HARDENED
 SMALL PIECES SITUATED IN TWO PILES AND SCATTERED NEARBY
 GRID-LIKE IMPRINT ON ONE SIDE

Sampling Activities (Sample Description, Sample Time, Requested Analyses):

QMCU-RPM05-0"-6" COLLECTED 05/16/17 @ 0917

Potential Exposure Pathways (Ingestion, Inhalation, Direct Contact):

MATERIAL IS LOCATED IN PILE IN AREA WHERE PUBLIC VISITORS
 HAVE BEEN. PROPERTY IS NOT SECURED AND ACCESSIBLE
 TO TRESPASSERS

Other Relevant Below and Above Ground Features (Conduit, Drainage Swales, Culverts):

MATERIAL IS LOCATED ON CONCRETE FOUNDATION FLOOR
 AND MAY BE SUBJECT TO EROSIONAL FORCES

ABANDONED MINING WASTES TORCH LAKE NON-SUPERFUND SITE
QUINCY MINING COMPANY MASON OPERATIONS
TARGETED INSPECTION FORM



Collect GPS coordinates and/or field measurements to document targeted feature(s).



Representative photograph of sample location and/or targeted feature.

Inspection Date: 05/17/17 Feature Identification/Name QUINCY-DM02-0''-6''

Study Area: QUINCY MINING - COAL DOCK Property Identification Number: 009-023-001-00

OBSERVATIONS (Including description and sketch) Inspector/Sampler: AMULLER

Circle the appropriate answer;

Potential Physical Hazard: Yes ☒ No ☐ Potential Chemical Hazard: ☒ Yes ☐ No
Capped Area: Yes ☒ No ☐ Residual Process Material: Yes ☒ No ☐ Abandoned Container: ☒ Yes ☐ No
Stressed Vegetation: Yes ☒ No ☐ Visible Staining: Yes ☒ No ☐ Building Materials: Yes ☒ No ☐

Describe Targeted Feature:

MATERIAL IS MED-TO COARSE GRAINED TAN GRANULAR SUBSTANCE NEARBY TO CRUSHED DRUM AND LOCATED IN CRUSHED DRUM

Sampling Activities (Sample Description, Sample Time, Requested Analyses):

QUINCY-DM02-0''-6'' COLLECTED @ 1650 05/17/17

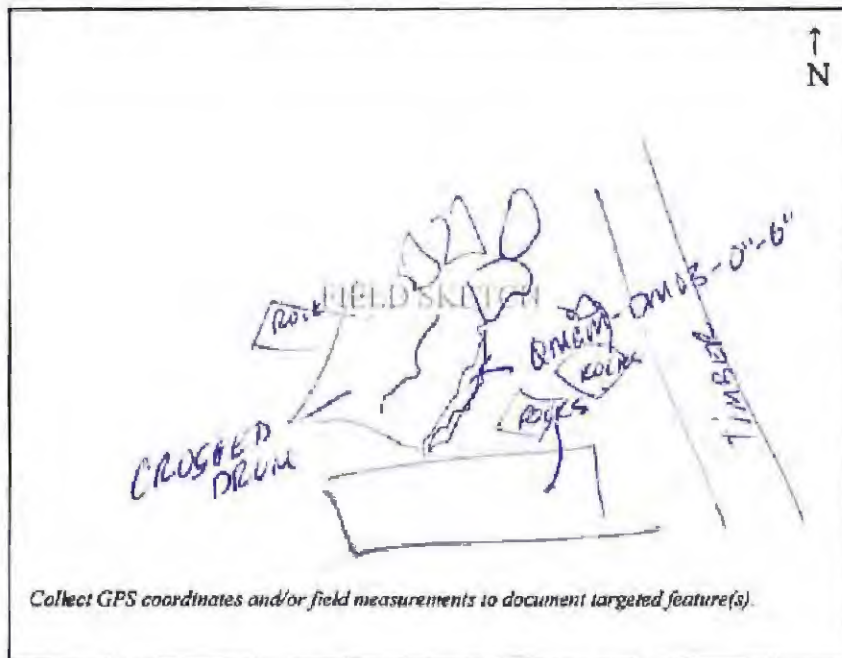
Potential Exposure Pathways (Ingestion, Inhalation, Direct Contact):

DRUM IS LOCATED ON PROPERTY THAT IS SECURED WITH FENCED FENCE. TRESPASSERS MAY HAVE ACCESS. VISIBLE SIGNS OF TRESPASSING INCLUDING GRAFFITI NEARBY

Other Relevant Below and Above Ground Features (Conduit, Drainage Swales, Culverts):

AREA IS IN A CLEARING SOUTHEAST OF A GRADE BIRCH TREES NEARBY. POTENTIAL FOR EROSION

**ABANDONED MINING WASTES TORCH LAKE NON-SUPERFUND SITE
QUINCY MINING COMPANY MASON OPERATIONS
TARGETED INSPECTION FORM**



Collect GPS coordinates and/or field measurements to document targeted feature(s).



Representative photograph of sample location and/or targeted feature.

Inspection Date: 05/17/17 Feature Identification/Name: QUINCY - DM03 - 0" - 6"
Study Area: QUINCY MINING - COAL DUMP Property Identification Number: 004-023-001-07

OBSERVATIONS (Including description and sketch) Inspector/Sampler: AMWEL

Circle the appropriate answer;

Potential Physical Hazard: ☒ Yes ☐ No Potential Chemical Hazard: ☒ Yes ☐ No
Capped Area: Yes ☒ No Residual Process Material: ☒ Yes ☐ No Abandoned Container: ☒ Yes ☐ No
Stressed Vegetation: Yes ☒ No Visible Staining: Yes ☒ No Building Materials: Yes ☒ No

Describe Targeted Feature: MATERIAL IS WHITE/YELLOW/BEIGE ^{IN} COLOR AND IS SITUATED WITHIN PARTIALLY CRUSHED DRUM. MATERIAL IS IN SMALL HARDENED PIECES, BUT ARE ABLE TO BE FORMED WITH MINIMAL PRESSURE

Sampling Activities (Sample Description, Sample Time, Requested Analyses):

WASTE CHARACTERIZATION 1630
QUINCY - DM03 - 0" - 6" collected 05/17/17 @ 1630

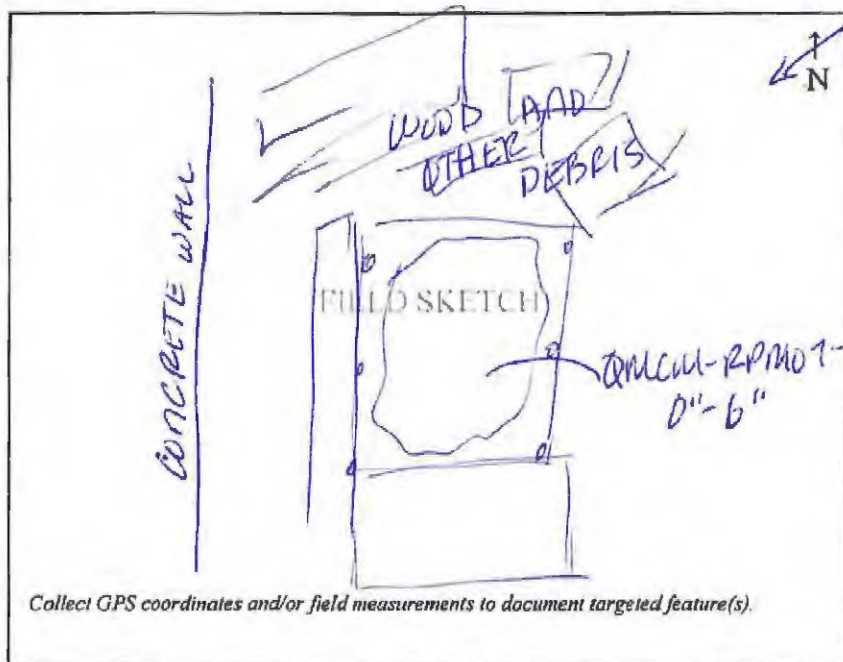
Potential Exposure Pathways (Ingestion, Inhalation, Direct Contact):

DRUM IS LOCATED ON PROPERTY THAT IS SECURED WITH A GATED FENCE, BUT TRESSPASSERS ^{W/} HAVE ACCESS, VISIBLE SIGNS OF TRESSPASSING NEARBY INCLUDING GRAFFITI

Other Relevant Below and Above Ground Features (Conduit, Drainage Swales, Culverts):

AREA CONTAINS LARGE Boulders, TIMBER DEBRIS NEAR AN OBVIOUS TRAIL NEAR COAL BIN SILO, MATERIAL IS MOSTLY CONTAINED WITHIN DRUM

**ABANDONED MINING WASTES TORCH LAKE NON-SUPERFUND SITE
QUINCY MINING COMPANY MASON OPERATIONS
TARGETED INSPECTION FORM**



Inspection Date: 05/17/17 Feature Identification/Name QMCU-RPM07-0"-6"

Study Area: RECLAMATION PLANT AREA Property Identification Number: _____

OBSERVATIONS (Including description and sketch) Inspector/Sampler: AMILLER

Circle the appropriate answer;

Potential Physical Hazard: Yes ☒ No ☐ Potential Chemical Hazard: ☒ Yes ☐ No
Capped Area: Yes ☒ No ☐ Residual Process Material: ☒ Yes ☐ No Abandoned Container: Yes ☒ No ☐
Stressed Vegetation: Yes ☒ No ☐ Visible Staining: Yes ☒ No ☐ Building Materials: Yes ☒ No ☐

Describe Targeted Feature:

MATERIAL IS BROWN GRAY IN COLOR - SAND - FINE GRAINED WITH HARDER APPEARANCE ON "TOP" OF MATERIAL

Sampling Activities (Sample Description, Sample Time, Requested Analyses):

QMCU-RPM07-0"-6" COLLECTED @ 1212 05/17/17

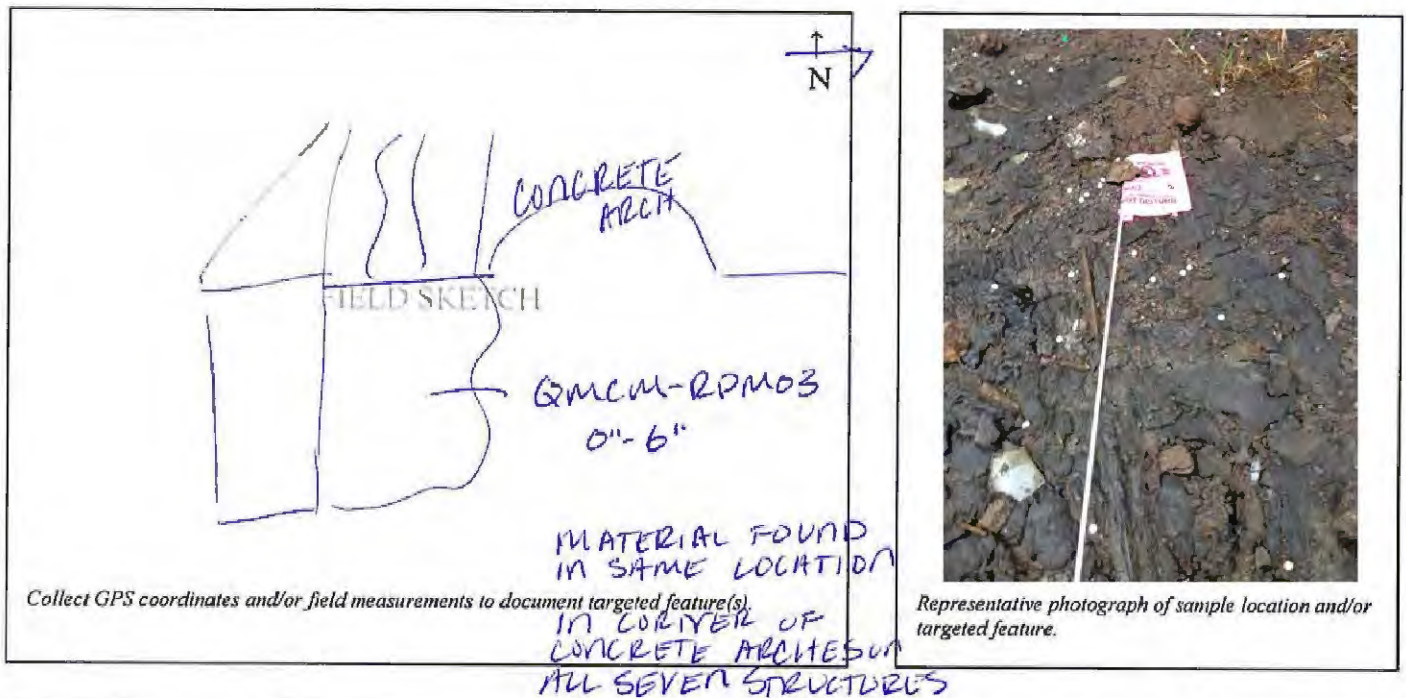
Potential Exposure Pathways (Ingestion, Inhalation, Direct Contact):

MATERIAL IS LOCATED WITHIN GATED FENCED AREA
POTENTIAL FOR TRESPASSERS

Other Relevant Below and Above Ground Features (Conduit, Drainage Swales, Culverts):

MATERIAL IS LOCATED ON CONCRETE SLABS APPROX. 5'x12'
AND IS NEAR EDGE OF SHORE PLANT POND

**ABANDONED MINING WASTES TORCH LAKE NON-SUPERFUND SITE
QUINCY MINING COMPANY MASON OPERATIONS
TARGETED INSPECTION FORM**



Inspection Date: 05/17/17 Feature Identification/Name QMLCM-RPM03-0"-6"

Study Area: WINNIE RECLAMATION PLANT Property Identification Number:

OBSERVATIONS (Including description and sketch) Inspector/Sampler: AMULLER MPRIBE

Circle the appropriate answer;

Potential Physical Hazard: Yes ☒ No ☐ Potential Chemical Hazard: Yes ☒ No ☐
Capped Area: Yes ☒ No ☐ Residual Process Material: Yes ☒ No ☐ Abandoned Container: Yes ☒ No ☐
Stressed Vegetation: Yes ☒ No ☐ Visible Staining: Yes ☒ No ☐ Building Materials: Yes ☒ No ☐
ON CONCRETE

Describe Targeted Feature:

MATERIAL IS CRUSTED AND HARDENED, BLACK, BROWN IN APPEARANCE -
LOCATED IN CONCRETE FLOOR, UNDER HARDENED LAYER, MATERIAL
IS BLACK AND VERY VISCID, SHINY

Sampling Activities (Sample Description, Sample Time, Requested Analyses):

Q1MCM-RPM03-6"-6" COLLECTED @ ~~H30~~ 1127 on 05/17/17

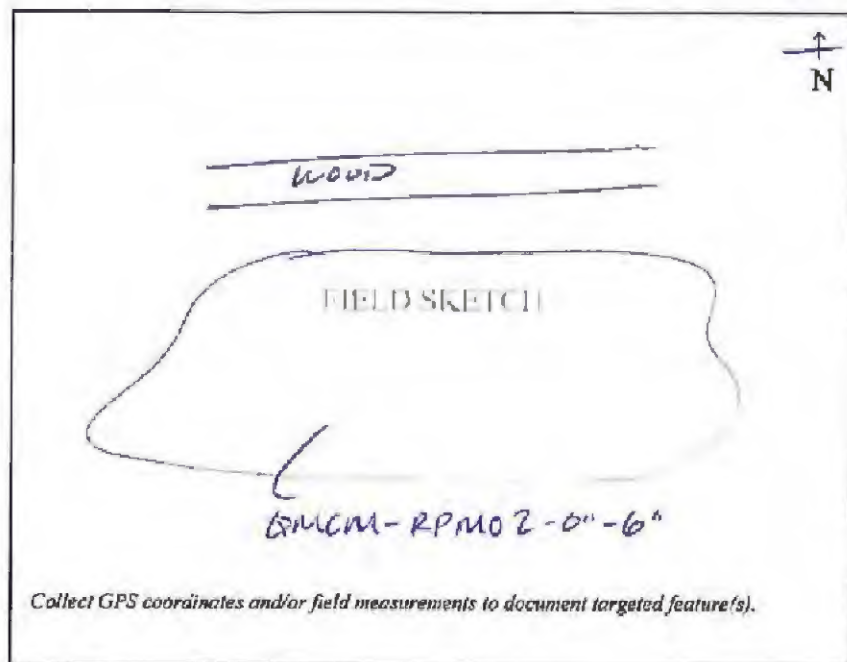
Potential Exposure Pathways (Ingestion, Inhalation, Direct Contact):

AREA IS SECURED BY LOCKED GATED FENCE, HOWEVER IS ACCESSIBLE BY FOOT BY TRESSPASSERS - EVIDENCE OF TRESSPASSERS INCLUDE AIRSOFT PELLETS SCATTERED NEARBY

Other Relevant Below and Above Ground Features (Conduit, Drainage Swales, Culverts):

MATERIAL APPEARS TO BE POOLED WITH THE ORDER OF CONCRETE STRUCTURES THROUGHOUT

**ABANDONED MINING WASTES TORCH LAKE NON-SUPERFUND SITE
QUINCY MINING COMPANY MASON OPERATIONS
TARGETED INSPECTION FORM**



Inspection Date: 05/17/17 Feature Identification/Name QMLCM-RPM02-0''-6''

Study Area: QUINCY RECLAMATION PLANT Property Identification Number: _____

OBSERVATIONS (Including description and sketch) Inspector/Sampler: AMILLER/M PRIBE

Circle the appropriate answer;

Potential Physical Hazard: Yes ☒ No ☐ Potential Chemical Hazard: ☒ Yes ☐ No
Capped Area: Yes ☒ Residual Process Material: ☒ Yes ☐ No Abandoned Container: Yes ☒ No
Stressed Vegetation: Yes ☒ Visible Staining: Yes ☒ No Building Materials: Yes ☒ No

Describe Targeted Feature:

MATERIAL IS BROWN MED GRAINED WITH GRAVEL PIECES, LOCATED ON CONCRETE FOUNDATION

Sampling Activities (Sample Description, Sample Time, Requested Analyses):

QMLCM-RPM02-0''-6''

Potential Exposure Pathways (Ingestion, Inhalation, Direct Contact):

MATERIAL IS LOCATED IN AREA WHERE EVIDENCE OF TRESPASSERS IS FOUND. PROPERTY IS SECURED WITH GATED FENCE, HOWEVER FOOT ENTRANCES ARE ACCESSIBLE

Other Relevant Below and Above Ground Features (Conduit, Drainage Swales, Culverts):

MAY BE AFFECTED BY EROSION ACROSS CONCRETE FLOOR

APPENDIX F
GEOPHYSICAL SURVEY MAPS



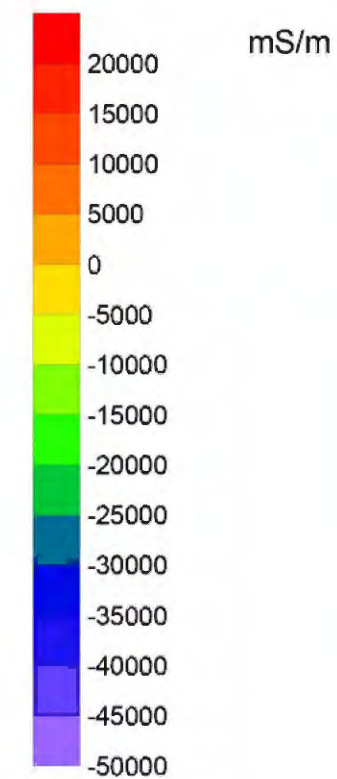
313517 E
735899 N

313651 E
735899 N

313517 E
735792 N

313651 E
735792 N

LEGEND



- DATUM - NAD83
- PROJECTION: MICHIGAN GEOREF
- NORTHING AND EASTING COORDINATES (IN METERS) ARE IN CORNERS OF MAP

AERIAL PHOTO SOURCE: MI CENTER FOR
SHARED SOLUTIONS
AERIAL PHOTO DATE: 2010
AERIAL RESOLUTION: 1 foot Natural Color

0 2.5 5 10 Meters

0 5 10 20 Feet

1 inch = 35 feet



**Quincy Mining Company Mason
Quincy Stamp Mills**

Mason, Houghton County

**ELECTRO-MAGNETIC SURVEY MAP
1000 hz conductivity**

GEOLOGIST
Jeff Pincumbe
Geological Services Unit
Remediation and
Redevelopment
Division



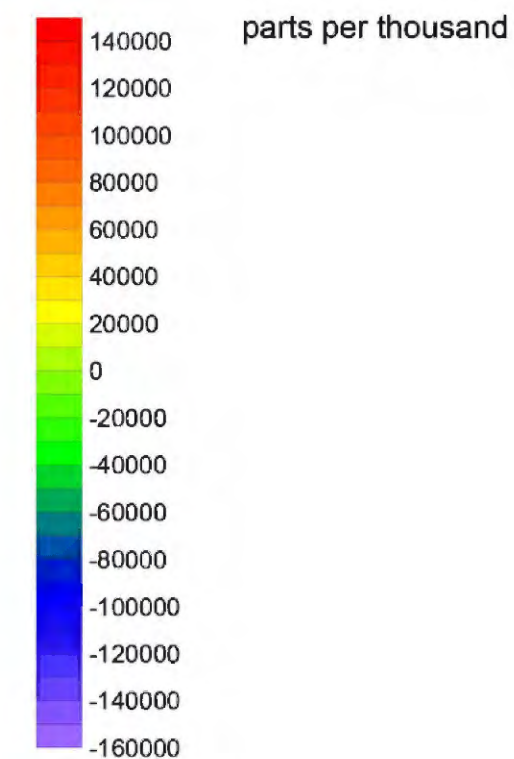
CREATION DATE
May 2017

FIGURE 1

313517 E
735899 N

313651 E
735899 N

LEGEND



- DATUM - NAD83
- PROJECTION: MICHIGAN GEOREF
- NORTHING AND EASTING COORDINATES (IN METERS) ARE IN CORNERS OF MAP

AERIAL PHOTO SOURCE: MI CENTER FOR
SHARED SOLUTIONS
AERIAL PHOTO DATE: 2010
AERIAL RESOLUTION: 1 foot Natural Color

0 2.5 5 10 Meters

0 5 10 20 Feet

1 inch = 35 feet



**Quincy Mining Company Mason
Quincy Stamp Mills**

Mason, Houghton County

**ELECTRO-MAGNETIC SURVEY MAP
1000 hz in-phase**

GEOLOGIST
Jeff Pincumbe
Geological Services Unit
Remediation and
Redevelopment
Division



CREATION DATE
May 2017

FIGURE 2

313517 E
735792 N

313651 E
735792 N

APPENDIX G
PHOTOGRAPHIC LOG





Photo 1: View looking north to a portion of Quincy Mining Company Mason (QMCM) historic ruins. Photo taken on 4/25/2017.



Photo 2: View looking south to portions of QMCM. Photo taken 4/21/2017.



Photo 3: Suspect asbestos containing building material (ACBM) documented at QMCM during reconnaissance activities. Photo taken 4/24/2017.

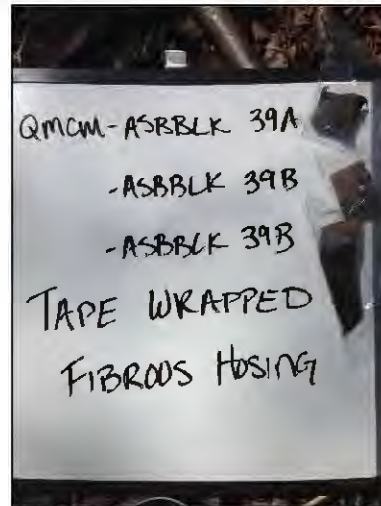


Photo 4: Documentation of suspect ACBM sampling activities. Photo taken 5/25/2017.



Photo 5: Surface soil sampling location SS15. Photo taken on 5/16/2017.



Photo 6: Residual Processing Material (RPM) sampled as QMCM-RPM05-0"-6". Photo taken on 5/16/2017.



Photo 7: Drum material observed during reconnaissance and sampled as QMCM-DM02-0"-6". Photo taken on 5/17/2017.



Photo 8: Barge used for in lake sampling activities, view looking west to Shore Plant. Photo taken on 6/9/2017.



Photo 9: Soil boring drilling and sampling at QMCM. Photo taken 6/8/2017.

APPENDIX H

BORING LOGS



SITE: AMW - Quincy Mining Company Mason

COUNTY: Houghton

DATE: 5-17-17

TOWNSHIP: Osceola

DRILLER: Scott Densteadt

TOWN: 55N

GEOLOGIST: Jeff Pincumbe

RANGE: 33W




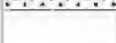
DRILL METHOD: Geoprobe

SECTION: 23

TOTAL DEPTH: 14 feet

LOCATION DESCRIPTION: Center of dump area NE of Boiler House #2

ERNIE#: 31000098

| WELL CONSTRUCTION | LITHOLOGIC LOG | DESCRIPTION | DEPTH | SAMPLE ID | SAMPLE TYPE | FIELD SCREENING RESULTS | PID ppm ↑ 1000 |
|----------------------|---|--|-------|-----------|-------------|--|----------------------|
| | | Grd | 0 | | | | |
| |  | TOP SOIL | | | | | |
| |  | SAND Medium, gray | | | | Soil samples collected from 0 - 6" and 6" - 8" with a duplicate samples from 0 - 6" and 6" - 8" | |
| |  | SILT SAND Fine, gray | 5 | | | | |
| |  | SAND Medium to coarse, gray, saturated | 10 | | | | |
| | | NO CUTTINGS | | | | | |
| | | | 15 | | | Groundwater sample collected from 12' - 14' | |
| | | EOB | 15 | | | | |
| | | | 20 | | | | |
| | | | 25 | | | | |

VERTICAL DATUM: NA

GRD, ELEVATION: NA

T.O.C.: NA

S.W.L.: NA

CASING: NA

SCREEN: NA

WELL DEPTH: NA

COMPLETION NOTES: back filled with bentonite

LATITUDE: 47.148378556

LONGITUDE: -88.456735479

DATUM: MichGeoRef

NORTHING: 735852.378

EASTING: 313594.781



EASTING: 313619.656

DE Recreation and
Development
Division
BOREHOLE LOG

BORING/WELL: QMCM-SB-3/GW-3

SITE: AMW - Quincy Mining Company Mason

COUNTY: Houghton

DATE: 5-17-17

TOWNSHIP: Osceola

DRILLER: Scott Densteadt

TOWN: 55N

GEOLOGIST: Jeff Pincumbe

RANGE: 33W

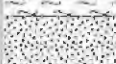


DRILL METHOD: Geoprobe

SECTION: 23

TOTAL DEPTH: 12 feet

LOCATION DESCRIPTION: Southwest sde of dump area NE of Boiler House #2

ERNIE#: 31000098

| WELL CONSTRUCTION | LITHOLOGIC LOG | DESCRIPTION | DEPTH | SAMPLE ID | SAMPLE TYPE | FIELD SCREENING RESULTS | PID ppm 1000 |
|----------------------|---|--|-------|-----------|-------------|--|--------------------|
| | | Grd. | 0 | | | | |
| |  | TOP SOIL No Cap Present | | | | Soil samples collected from 0" - 6" and 6" - 5' | |
| |  | SAND Medium, dark gray | | | | | |
| |  | SAND Fine to medium, reddish brown, saturated at 5 feet | 5 | | | | |
| | | NO CUTTINGS | 10 | | | Groundwater sample collected from 10' - 12' | |
| | | EOB | 15 | | | | |
| | | | 20 | | | | |
| | | | 25 | | | | |

VERTICAL DATUM: NA

GRD. ELEVATION: NA

T.O.C.: NA

S.W.L.: NA

CASING: NA

SCREEN: NA

WELL DEPTH: NA

COMPLETION NOTES: back filled with bentonite

LATITUDE: 47.148111678

LONGITUDE: -88.456962229

DATUM: MichGeoRef

NORTHING: 735823.269

EASTING: 313576.670

SITE: AMW - Quincy Mining Company Mason

COUNTY: Houghton

DATE: 5-17-17

TOWNSHIP: Osceola

DRILLER: Scott Densteadt

TOWN: 55N

GEOLOGIST: Jeff Pincumbe

RANGE: 33W

DRILL METHOD: Geoprobe

SECTION: 23

TOTAL DEPTH: 10 feet

LOCATION DESCRIPTION: South side of dump area NE of Boiler House #2

ERNIE#: 31000098

| WELL CONSTRUCTION | LITHOLOGIC LOG | DESCRIPTION | DEPTH | SAMPLE ID | SAMPLE TYPE | FIELD SCREENING RESULTS | PID ppm ↑ 1000 |
|----------------------|-------------------|--|-------|-----------|-------------|---|-------------------------|
| | | Grd | 0 | | | | |
| | | CLAY CAP | | | | | |
| | | SAND Coarse, gray, saturated at 2 feet | | | | Soil samples collected from 8" - 12" and 12" - 24" | |
| | | | 5 | | | | |
| | | NO CUTTINGS | | | | | |
| | | | 10 | | | Groundwater sample collected from 8" - 10' | |
| | | EOB | | | | | |
| | | | 15 | | | | |
| | | | 20 | | | | |
| | | | 25 | | | | |

VERTICAL DATUM: NA

GRD. ELEVATION: NA

T.O.C.: NA

S.W.L.: NA

CASING: NA

SCREEN: NA

WELL DEPTH: NA

COMPLETION NOTES: back filled with bentonite

LATITUDE: 47.148110286

LONGITUDE: -88.456710046

DATUM: MichGeoRef

NORTHING: 735822.517

EASTING: 313595.777

DE Recreation and
Developmental
Division
BOREHOLE LOG

BORING/WELL: QMCM-SB-5/GW-5

SITE: AMW - Quincy Mining Company Mason

COUNTY: Houghton

DATE: 5-16-17

TOWNSHIP: Osceola

DRILLER: Scott Densteadt

TOWN: 55N

GEOLOGIST: Jeff Pincumbe

RANGE: 33W

DRILL METHOD: Geoprobe

SECTION: 23

TOTAL DEPTH: 10 feet

LOCATION DESCRIPTION: West side of Oil House

ERNIE#: 31000098

| WELL CONSTRUCTION | LITHOLOGIC LOG | DESCRIPTION | DEPTH | SAMPLE ID | SAMPLE TYPE | FIELD SCREENING RESULTS | PID ppm 1000 |
|----------------------|-------------------|---------------------------------------|-------|-----------|-------------|--|--------------------|
| | | Grd. | 0 | | | Soil samples collected from 0 - 6" and 6" - 10' | |
| | | SAND Fine, light brown | | | | | |
| | | SAND Fine, reddish brown | | | | | |
| | | | 5 | | | | |
| | | SAND Coarse, brown | | | | | |
| | | SAND Fine, reddish brown | | | | No groundwater sample collected | |
| | | refusal at 10 feet - possible bedrock | 10 | | | | |
| | | No groundwater encountered. | | | | | |
| | | EOB | | | | | |
| | | | 15 | | | | |
| | | | 20 | | | | |
| | | | 25 | | | | |

VERTICAL DATUM: NA

GRD. ELEVATION: NA

T.O.C.: NA

S.W.L.: NA

CASING: NA

SCREEN: NA

WELL DEPTH: NA

COMPLETION NOTES: back filled with bentonite

LATITUDE: 47.147755980

LONGITUDE: -88.459567911

DATUM: MichGeoRef

NORTHING: 735789.936

EASTING: 313377.956

DEQ Recreation and
Redevelopment
Division
BOREHOLE LOG

BORING/WELL: QMCM-SB-6/GW-6

SITE: AMW - Quincy Mining Company Mason

COUNTY: Houghton

DATE: 5-16-17

TOWNSHIP: Osceola

DRILLER: Scott Densteadt

TOWN: 55N

GEOLOGIST: Jeff Pincumbe

RANGE: 33W

DRILL METHOD: Geoprobe

SECTION: 23

TOTAL DEPTH: 12 feet

LOCATION DESCRIPTION: Edge of Oil House

ERNIE#: 31000098

| WELL CONSTRUCTION | LITHOLOGIC LOG | DESCRIPTION | DEPTH | SAMPLE ID | SAMPLE TYPE | FIELD SCREENING RESULTS | PID ppm 1000 |
|----------------------|-------------------|--|-------|-----------|-------------|--|--------------------|
| | | Grd. | 0 | | | | |
| | | TOP SOIL Silty Loam | | | | Soil samples collected from 0 - 6" and 6" - 12' | |
| | | SAND Fine, reddish brown | | | | | |
| | | | 5 | | | | |
| | | SAND Coarse, brown | | | | | |
| | | SILTY SAND Fine, reddish brown | | | | No groundwater sample collected | |
| | | SAND Fine, reddish brown | | | | | |
| | | Refusal at 12 feet - possible bedrock | | | | | |
| | | No groundwater encountered | | | | | |
| | | EOB | 15 | | | | |
| | | | 20 | | | | |
| | | | 25 | | | | |

VERTICAL DATUM: NA

GRD. ELEVATION: NA

T.O.C.: NA

S.W.L.: NA

CASING: NA

SCREEN: NA

WELL DEPTH: NA

COMPLETION NOTES: back filled with bentonite

LATITUDE: 47.147703326

LONGITUDE: -88.459403564

DATUM: MichGeoRef

NORTHING: 735783.697

EASTING: 313390.230

SITE: AMW - Quincy Mining Company Mason

COUNTY: Houghton

DATE: 5-16-17

TOWNSHIP: Osceola

DRILLER: Jeff Pincumbe

TOWN: 55N

GEOLOGIST: Jeff Pincumbe

RANGE: 33W

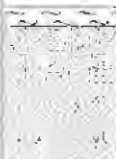
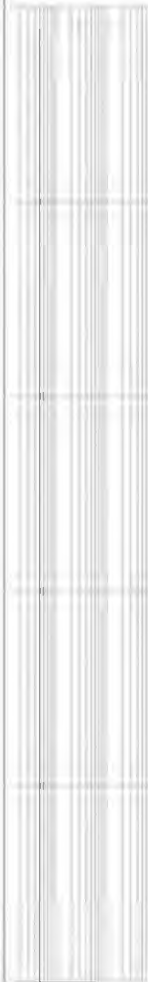
DRILL METHOD: Hand Auger

SECTION: 23

TOTAL DEPTH: 4 feet

LOCATION DESCRIPTION: Edge of Oil House

ERNIE#: 31000098

| WELL CONSTRUCTION | LITHOLOGIC LOG | DESCRIPTION | DEPTH | SAMPLE ID | SAMPLE TYPE | FIELD SCREENING RESULTS | PID ppm 1 1000 |
|----------------------|---|---|---|-----------|-------------|--|--|
| |  | <p>Grd</p> <p>TOP SOIL Silty Loam</p> <p>SAND Fine, reddish brown</p> <p>Refusal at 4 feet - possible bedrock</p> <p>No groundwater encountered.</p> <p>EOB</p> | <p>0</p> <p>5</p> <p>10</p> <p>15</p> <p>20</p> <p>25</p> | | | <p>Soil samples collected from 0 - 6" and 6" - 4'</p> <p>No groundwater sample collected</p> |  |

VERTICAL DATUM: NA

GRD. ELEVATION: NA

T.O.C.: NA

S.W.L.: NA

CASING: NA

SCREEN: NA

WELL DEPTH: NA

COMPLETION NOTES: back filled with bentonite

LATITUDE: 47.147645460

LONGITUDE: -88.459222450

DATUM: MichGeoRef

NORTHING: 735776.839

EASTING: 313403.755



Recreation and
Redevelopment
Division

BOREHOLE LOG

BORING/WELL: QMCM-SB-8/GW-8

SITE: AMW - Quincy Mining Company Mason

COUNTY: Houghton

DATE: 5-16-17

TOWNSHIP: Osceola

DRILLER: Scott Densteadt

TOWN: 55N

GEOLOGIST: Jeff Pincumbe

RANGE: 33W

DRILL METHOD: Geoprobe

SECTION: 23

TOTAL DEPTH: 2.5 feet

LOCATION DESCRIPTION: North side of Quincy Turbine House

ERNIE#: 31000098

| WELL CONSTRUCTION | LITHOLOGIC LOG | DESCRIPTION | DEPTH | SAMPLE ID | SAMPLE TYPE | FIELD SCREENING RESULTS | PID ppm 1 1000 |
|----------------------|-------------------|--|--------------------------------|-----------|-------------|---|----------------------|
| | | <p>Grd</p> <p>TOP SOIL</p> <p>SAND</p> <p>Fine to medium, reddish brown.</p> <p>Refusal at 2.5 feet - possible bedrock.</p> <p>No groundwater encountered.</p> <p>E.O.B.</p> | 0 5 10 15 20 25 | | | <p>Soil samples collected from 0 - 6" and 6" - 30"</p> <p>No groundwater sample collected</p> | |

VERTICAL DATUM: NA

GRD. ELEVATION: NA

T.O.C.: NA

S.W.L.: NA

CASING: NA

SCREEN: NA

WELL DEPTH: NA

COMPLETION NOTES: back filled with bentonite

LATITUDE: 47.147718679

LONGITUDE: -88.460152907

DATUM: MichGeoRef

NORTHING: 735787.181

EASTING: 313333.494

SITE: AMW - Quincy Mining Company Mason

COUNTY: Houghton

DATE: 5-20-17

TOWNSHIP: Osceola

DRILLER: Chris Black

TOWN: 55N

GEOLOGIST: Jeff Pincumbe

RANGE: 33W



DRILL METHOD: Hand Auger

SECTION: 23

TOTAL DEPTH: 5 feet

LOCATION DESCRIPTION: Near old foundation 500 feet NE of Regrinding Plant

ERNIE#: 31000098

| WELL CONSTRUCTION | LITHOLOGIC LOG | DESCRIPTION | DEPTH | SAMPLE ID | SAMPLE TYPE | FIELD SCREENING RESULTS | PID ppm 1 1000 |
|----------------------|---|--|---|-----------|-------------|---|--|
| |  | <p>Grd</p> <p>TOP SOIL</p> <p>SAND</p> <p>Fine to medium, gray, saturated at 4 feet</p> <p>EOB</p> | <p>0</p> <p>5</p> <p>10</p> <p>15</p> <p>20</p> <p>25</p> | | | <p>Soil samples collected from 0 - 6" and 6" - 4'</p> |  |

VERTICAL DATUM: NA

GRD. ELEVATION: NA

T.O.C.: NA

S.W.L.: NA

CASING: NA

SCREEN: NA

WELL DEPTH: NA

COMPLETION NOTES: back filled with bentonite

LATITUDE: 47.141995620

LONGITUDE: -88.463276430

DATUM: MichGeoRef

NORTHING: 735158.847

EASTING: 313076.836

SITE: AMW - Quincy Mining Company Mason

COUNTY: Houghton

DATE: 5-20-17

TOWNSHIP: Osceola

DRILLER: Chris Black

TOWN: 55N

GEOLOGIST: Jeff Pincumbe

RANGE: 33W

DRILL METHOD: Geoprobe

SECTION: 23

TOTAL DEPTH: 15 feet

LOCATION DESCRIPTION: 45 feet east of QMCM-SB-9

ERNIE#: 31000098

| WELL CONSTRUCTION | LITHOLOGIC LOG | DESCRIPTION | DEPTH | SAMPLE ID | SAMPLE TYPE | FIELD SCREENING RESULTS | PID ppm 1 1000 |
|----------------------|-------------------|---------------------------|-------|-----------|-------------|--|----------------------|
| | | Grd NO CUTTINGS | 0 | | | | |
| | | | 5 | | | | |
| | | | 10 | | | | |
| | | | 15 | | | Groundwater sample collected from 10' - 15' | |
| | | EOB | 15 | | | | |
| | | | 20 | | | | |
| | | | 25 | | | | |

VERTICAL DATUM: NA

GRD. ELEVATION: NA

T.O.C.: NA

S.W.L.: NA

CASING: NA

SCREEN: NA

WELL DEPTH: NA

COMPLETION NOTES: back filled with bentonite

LATITUDE: 47.141906679

LONGITUDE: -88.463075796

DATUM: MichGeoRef

NORTHING: 735148.490

EASTING: 313091.733

SITE: AMW - Quincy Mining Company Mason

COUNTY: Houghton

DATE: 5-16-17

TOWNSHIP: Osceola

DRILLER: Scott Denstead

TOWN: 55N

GEOLOGIST: Jeff Pincumbe

RANGE: 33W

DRILL METHOD: Geoprobe

SECTION: 23

TOTAL DEPTH: 10 feet

LOCATION DESCRIPTION: East side of Quincy Turbine House

ERNIE#: 31000098

| WELL CONSTRUCTION | LITHOLOGIC LOG | DESCRIPTION | DEPTH | SAMPLE ID | SAMPLE TYPE | FIELD SCREENING RESULTS | PID ppm 1000 |
|----------------------|-------------------|--|-------|-----------|-------------|--|--------------------|
| | | Grd. | 0 | | | | |
| | | SILTY CLAY Reddish brown | | | | Soil samples collected from 0 - 6" and 6" - 10" | |
| | | SAND Fine to medium, reddish brown | | | | | |
| | | Refusal at 10 feet - possible bedrock | 5 | | | | |
| | | No groundwater encountered | | | | | |
| | | | 10 | | | No groundwater sample collected | |
| | | EOB | | | | | |
| | | | 15 | | | | |
| | | | 20 | | | | |
| | | | 25 | | | | |

VERTICAL DATUM: NA

GRD. ELEVATION: NA

T.O.C.: NA

S.W.L.: NA

CASING: NA

SCREEN: NA

WELL DEPTH: NA

COMPLETION NOTES: back filled with bentonite

LATITUDE: 47.147558531

LONGITUDE: -88.460112401

DATUM: MichGeoRef

NORTHING: 735769.295

EASTING: 313336.006

SITE: AMW - Quincy Mining Company Mason

COUNTY: Houghton

DATE: 5-17-17

TOWNSHIP: Osceola

DRILLER: Scott Densteadt

TOWN: 55N

GEOLOGIST: Jeff Pincumbe

RANGE: 33W




DRILL METHOD: Geoprobe

SECTION: 23

TOTAL DEPTH: 13 feet

LOCATION DESCRIPTION: North side of coal shed

ERNIE#: 31000098

| WELL CONSTRUCTION | LITHOLOGIC LOG | DESCRIPTION | DEPTH | SAMPLE ID | SAMPLE TYPE | FIELD SCREENING RESULTS | PID ppm 1 1000 |
|----------------------|---|--|-------|-----------|-------------|--|----------------------|
| | | Grd | 0 | | | | |
| |  | SAND Fine, reddish brown | | | | Soil samples collected from 0' - 6" and 6" - 3' | |
| |  | SAND Coarse, gray | | | | | |
| |  | SAND Fine to medium, reddish brown, saturated at 3 feet | 5 | | | | |
| | | NO CUTTINGS | | | | | |
| | | | 10 | | | Groundwater sample collected from 8' - 13' | |
| | | | 15 | | | | |
| | | EOB | | | | | |
| | | | 20 | | | | |
| | | | 25 | | | | |

VERTICAL DATUM: NA

GRD. ELEVATION: NA

T.O.C.: NA

S.W.L.: NA

CASING: NA

SCREEN: NA

WELL DEPTH: NA

COMPLETION NOTES: back filled with bentonite

LATITUDE: 47.146995482

LONGITUDE: -88.457394784

DATUM: MichGeoRef

NORTHING: 735700.301

EASTING: 313540.009

DEQ Recreation and
Redevelopment
Division
BOREHOLE LOG

BORING/WELL: QMCM-SB-13/GW-13

SITE: AMW - Quincy Mining Company Mason

COUNTY: Houghton

DATE: 5-17-17

TOWNSHIP: Osceola

DRILLER: Scott Densteadt

TOWN: 55N

GEOLOGIST: Jeff Pincumbe

RANGE: 33W


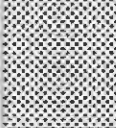
DRILL METHOD: Geoprobe

SECTION: 23

TOTAL DEPTH: 13 feet

LOCATION DESCRIPTION: North side of coal shed

ERNIE#: 31000098

| WELL CONSTRUCTION | LITHOLOGIC LOG | DESCRIPTION | DEPTH | SAMPLE ID | SAMPLE TYPE | FIELD SCREENING RESULTS | PID ppm 1000 |
|----------------------|---|--|-------|-----------|-------------|--|--------------------|
| | | Grd | 0 | | | | |
| |  | TOP SOIL No Cap Present | | | | Soil samples collected from 0' - 6" and 6" - 4' | |
| |  | SAND Medium to coarse, gray, saturated at 4 feet | | | | | |
| | | NO CUTTINGS | 5 | | | | |
| | | | 10 | | | Groundwater sample collected from 8' - 13' | |
| | | EOB | 15 | | | | |
| | | | 20 | | | | |
| | | | 25 | | | | |

VERTICAL DATUM: NA

GRD. ELEVATION: NA

T.O.C.: NA

S.W.L.: NA

CASING: NA

SCREEN: NA

WELL DEPTH: NA

COMPLETION NOTES: back filled with bentonite

LATITUDE: 47.146935830

LONGITUDE: -88.457558864

DATUM: MichGeoRef

NORTHING: 735694.063

EASTING: 313527.366

SITE: AMW - Quincy Mining Company Mason

COUNTY: Houghton

DATE: 5-17-17

TOWNSHIP: Osceola

DRILLER: Scott Densteadt

TOWN: 55N

GEOLOGIST: Jeff Pincumbe

RANGE: 33W

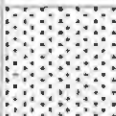




DRILL METHOD: Geoprobe

SECTION: 23

TOTAL DEPTH: 13 feet

LOCATION DESCRIPTION: North side of coal shed

ERNIE#: 31000098

| WELL CONSTRUCTION | LITHOLOGIC LOG | DESCRIPTION | DEPTH | SAMPLE ID | SAMPLE TYPE | FIELD SCREENING RESULTS | PID ppm 1 1000 |
|----------------------|---|---|-------|-----------|--|--|----------------------|
| |  | SAND Medium to coarse, gray | 0 | |  | Soil samples collected from 0' - 6" and 6" - 3' | |
| |  | SAND Fine to medium, reddish brown, saturated | 5 | |  | | |
| | | NO CUTTINGS | | | | | |
| | | | 10 | |  | Groundwater sample collected from 8' - 13' | |
| | | | 15 | | | | |
| | | | 20 | | | | |
| | | | 25 | | | | |

VERTICAL DATUM: NA

GRD. ELEVATION: NA

T.O.C.: NA

S.W.L.: NA

CASING: NA

SCREEN: NA

WELL DEPTH: NA

COMPLETION NOTES: back filled with bentonite

LATITUDE: 47.146902015

LONGITUDE: -88.457229817

DATUM: MichGeoRef

NORTHING: 735689.527

EASTING: 313552.187

SITE: AMW - Quincy Mining Company Mason

COUNTY: Houghton

DATE: 5-17-17

TOWNSHIP: Osceola

DRILLER: Scott Densteadt

TOWN: 55N

GEOLOGIST: Jeff Pincumbe

RANGE: 33W





DRILL METHOD: Geoprobe

SECTION: 23

TOTAL DEPTH: 13 feet

LOCATION DESCRIPTION: North side of coal shed

ERNIE#: 31000098

| WELL CONSTRUCTION | LITHOLOGIC LOG | DESCRIPTION | DEPTH | SAMPLE ID | SAMPLE TYPE | FIELD SCREENING RESULTS | PID ppm ↑ 1000 |
|----------------------|--|---|-------|-----------|-------------|--|----------------------|
| | | Grd | 0 | | | | |
| |  | CLAY CAP | | | | | |
| |  | SAND Medium to coarse, gray | | | | Soil samples collected from 6" - 12" and 12" - 4' | |
| |  | SAND Fine to medium, reddish brown, saturated | 5 | | | | |
| |  | SAND Coarse, gray, saturated | | | | | |
| | | NO CUTTINGS | | | | | |
| | | | 10 | | | Groundwater sample collected from 8' - 13' and a duplicate sample from 8' - 13' | |
| | | EOB | 15 | | | | |
| | | | 20 | | | | |
| | | | 25 | | | | |

VERTICAL DATUM: NA

GRD. ELEVATION: NA

T.O.C.: NA

S.W.L.: NA

CASING: NA

SCREEN: NA

WELL DEPTH: NA

COMPLETION NOTES: back filled with bentonite

LATITUDE: 47.146837431

LONGITUDE: -88.457410139

DATUM: MichGeoRef

NORTHING: 735682.780

EASTING: 313538.296

SITE: AMW - Quincy Mining Company Mason

COUNTY: Houghton

DATE: 5-17-17

TOWNSHIP: Osceola

DRILLER: Scott Densteadt

TOWN: 55N

GEOLOGIST: Jeff Pincumbe

RANGE: 33W



DRILL METHOD: Geoprobe

SECTION: 23

TOTAL DEPTH: 15 feet

LOCATION DESCRIPTION: West side of coal shed

ERNIE#: 31000098

| WELL CONSTRUCTION | LITHOLOGIC LOG | DESCRIPTION | DEPTH | SAMPLE ID | SAMPLE TYPE | FIELD SCREENING RESULTS | PID ppm 1000 |
|----------------------|--|--|-------|-----------|-------------|--|--------------------|
| | | Grd. | 0 | | | | |
| |  | SAND Medium with gravel, gray | | | | Soil samples collected from 0' - 6" and 6" - 6' | |
| |  | SAND Fine to medium, reddish brown, saturated at 6 feet | 5 | | | | |
| | | NO CUTTINGS | 10 | | | Groundwater sample collected from 10' - 15' | |
| | | | 15 | | | | |
| | | EOB | 20 | | | | |
| | | | 25 | | | | |

VERTICAL DATUM: NA

GRD. ELEVATION: NA

T.O.C.: NA

S.W.L.: NA

CASING: NA

SCREEN: NA

WELL DEPTH: NA

COMPLETION NOTES: back filled with bentonite

LATITUDE: 47.146804280

LONGITUDE: -88.458293615

DATUM: MichGeoRef

NORTHING: 735681.192

EASTING: 313471.224

SITE: AMW - Quincy Mining Company Mason

COUNTY: Houghton

DATE: 5-18-17

TOWNSHIP: Osceola

DRILLER: Chris Black

TOWN: 55N

GEOLOGIST: Jeff Pincumbe

RANGE: 33W



DRILL METHOD: Geoprobe

SECTION: 23

TOTAL DEPTH: 15 feet

LOCATION DESCRIPTION: West side of coal shed

ERNIE#: 31000098

| WELL CONSTRUCTION | LITHOLOGIC LOG | DESCRIPTION | DEPTH | SAMPLE ID | SAMPLE TYPE | FIELD SCREENING RESULTS | PID ppm ↑ 1000 |
|----------------------|--|--|-------|-----------|-------------|--|-------------------------|
| | | Grd. | 0 | | | | |
| |  | SILTY SAND Fine, dark gray | | | | Soil samples collected from 0' - 6" and 6" - 6' | |
| |  | SAND Fine to medium, reddish brown, saturated at 6 feet | 5 | | | | |
| | | NO CUTTINGS | 10 | | | Groundwater sample collected from 10' - 15' | |
| | | EOB | 15 | | | | |
| | | | 20 | | | | |
| | | | 25 | | | | |

VERTICAL DATUM: NA

GRD. ELEVATION: NA

T.O.C.: NA

S.W.L.: NA

CASING: NA

SCREEN: NA

WELL DEPTH: NA

COMPLETION NOTES: back filled with bentonite

LATITUDE: 47.146748330

LONGITUDE: -88.458534151

DATUM: MichGeoRef

NORTHING: 735675.547

EASTING: 313452.800

SITE: AMW - Quincy Mining Company Mason

COUNTY: Houghton

DATE: 5-18-17

TOWNSHIP: Osceola

DRILLER: Chris Black

TOWN: 55N

GEOLOGIST: Jeff Pincumbe

RANGE: 33W



DRILL METHOD: Geoprobe

SECTION: 23

TOTAL DEPTH: 17 feet

LOCATION DESCRIPTION: West side of coal shed

ERNIE#: 31000098

| WELL CONSTRUCTION | LITHOLOGIC LOG | DESCRIPTION | DEPTH | SAMPLE ID | SAMPLE TYPE | FIELD SCREENING RESULTS | PID ppm 1000 |
|----------------------|--|--|-------|-----------|-------------|--|--------------------|
| | | Grd | 0 | | | Soil samples collected from 0" - 6" and 6" - 8" | |
| |  | SILTY SAND Fine, dark gray | 5 | | | | |
| |  | SAND Fine to medium, reddish brown, saturated at 8 feet | 10 | | | | |
| | | NO CUTTINGS | 15 | | | Groundwater sample collected from 12' - 17' | |
| | | EOB. | 20 | | | | |
| | | | 25 | | | | |

VERTICAL DATUM: NA

GRD. ELEVATION: NA

T.O.C.: NA

S.W.L.: NA

CASING: NA

SCREEN: NA

WELL DEPTH: NA

COMPLETION NOTES: back filled with bentonite

LATITUDE: 47.146634387

LONGITUDE: -88.458189443

DATUM: MichGeoRef

NORTHING: 735662.072

EASTING: 313478.528

SITE: AMW - Quincy Mining Company Mason

COUNTY: Houghton

DATE: 5-17-17

TOWNSHIP: Osceola

DRILLER: Scott Densteadt

TOWN: 55N

GEOLOGIST: Jeff Pincumbe

RANGE: 33W



DRILL METHOD: Geoprobe

SECTION: 23

TOTAL DEPTH: 15 feet

LOCATION DESCRIPTION: West side of coal shed

ERNIE#: 31000098

| WELL CONSTRUCTION | LITHOLOGIC LOG | DESCRIPTION | DEPTH | SAMPLE ID | SAMPLE TYPE | FIELD SCREENING RESULTS | PID ppm 1000 |
|----------------------|---|--|-------|-----------|-------------|--|--------------------|
| | | Grd. | 0 | | | | |
| |  | SAND Medium to coarse, gray | | | | Soil samples collected from 0" - 6" and 6" - 7" and a duplicate sample from 6" - 7' | |
| |  | SAND Fine to medium, reddish brown, saturated at 7 feet | | | | | |
| | | | 5 | | | | |
| | | NO CUTTINGS | 10 | | | Groundwater sample collected from 10' - 15' | |
| | | | 15 | | | | |
| | | EOB | | | | | |
| | | | 20 | | | | |
| | | | 25 | | | | |

VERTICAL DATUM: NA

GRD. ELEVATION: NA

T.O.C.: NA

S.W.L.: NA

CASING: NA

SCREEN: NA

WELL DEPTH: NA

COMPLETION NOTES: back filled with bentonite

LATITUDE: 47.146580868

LONGITUDE: -88.458382864

DATUM: MichGeoRef

NORTHING: 735656.586

EASTING: 313463.683



SITE: AMW - Quincy Mining Company Mason

ERNIE#: 31000098

VERTICAL DATUM: NA
GRD. ELEVATION: NA
T.O.C.: NA
S.W.L.: NA
CASING: NA
SCREEN: NA
WELL DEPTH: NA
COMPLETION NOTES: back filled with bentonite

LATITUDE: 47.146244883
LONGITUDE: -88.458389528
DATUM: MichGeoRef
NORTHING: 735619.278
EASTING: 313462.010

SITE: AMW - Quincy Mining Company Mason

COUNTY: Houghton

DATE: 5-18-17

TOWNSHIP: Osceola

DRILLER: Chris Black

TOWN: 55N

GEOLOGIST: Jeff Pincumbe

RANGE: 33W



DRILL METHOD: Geoprobe

SECTION: 23

TOTAL DEPTH: 15 feet

LOCATION DESCRIPTION: Southwest corner of coal shed

ERNIE#: 31000098

| WELL CONSTRUCTION | LITHOLOGIC LOG | DESCRIPTION | DEPTH | SAMPLE ID | SAMPLE TYPE | FIELD SCREENING RESULTS | PID ppm ↑ 1000 |
|----------------------|---|---|-------|-----------|-------------|--|----------------------|
| |  | SAND Medium to coarse, dark gray | 0 | | | | |
| |  | SAND Fine to medium, brown, saturated at 6 feet | 5 | | | Soil samples collected from 0" - 6" and 6" - 6" | |
| | | NO CUTTINGS | 10 | | | | |
| | | | 15 | | | Groundwater sample collected from 10' - 15' | |
| | | | EOB | | | | |
| | | | 20 | | | | |
| | | | 25 | | | | |

VERTICAL DATUM: NA

GRD. ELEVATION: NA

T.O.C.: NA

S.W.L.: NA

CASING: NA

SCREEN: NA

WELL DEPTH: NA

COMPLETION NOTES: back filled with bentonite

LATITUDE: 47.146194051

LONGITUDE: -88.458595530

DATUM: MichGeoRef

NORTHING: 735614.120

EASTING: 313446.221

SITE: AMW - Quincy Mining Company Mason

COUNTY: Houghton

DATE: 5-18-17

TOWNSHIP: Osceola

DRILLER: Chris Black

TOWN: 55N

GEOLOGIST: Jeff Pincumbe

RANGE: 33W




DRILL METHOD: Geoprobe

SECTION: 23

TOTAL DEPTH: 15 feet

LOCATION DESCRIPTION: Southwest corner of coal shed

ERNIE#: 31000098

| WELL CONSTRUCTION | LITHOLOGIC LOG | DESCRIPTION | DEPTH | SAMPLE ID | SAMPLE TYPE | FIELD SCREENING RESULTS | PID ppm ↑ 1000 |
|----------------------|---|--|--------|-----------|-------------|---|----------------------|
| |  | CLAY CAP | Grd. 0 | | | | |
| |  | SAND Coarse, dark gray | | | | Soil samples collected from 12" - 18" and 18" - 4' | |
| |  | SAND Fine to medium, brown, saturated at 4 feet | | | | | |
| | | NO CUTTINGS | 5 | | | | |
| | | | 10 | | | Groundwater sample collected from 10' - 15' | |
| | | | 15 | | | | |
| | | EOB | 20 | | | | |
| | | | 25 | | | | |

VERTICAL DATUM: NA

GRD. ELEVATION: NA

T.O.C.: NA

S.W.L.: NA

CASING: NA

SCREEN: NA

WELL DEPTH: NA

COMPLETION NOTES: back filled with bentonite

LATITUDE: 47.146093120

LONGITUDE: -88.458302887

DATUM: MichGeoRef

NORTHING: 735602.214

EASTING: 313468.049

DE Recreation and
Redevelopment
Division
BOREHOLE LOG

BORING/WELL: QMCM-SB-23/GW-23

SITE: AMW - Quincy Mining Company Mason

COUNTY: Houghton

DATE: 5-18-17

TOWNSHIP: Osceola

DRILLER: Chris Black

TOWN: 55N

GEOLOGIST: Jeff Pincumbe

RANGE: 33W


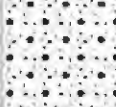

DRILL METHOD: Geoprobe

SECTION: 23

TOTAL DEPTH: 15 feet

LOCATION DESCRIPTION: Southwest corner of coal shed

ERNIE#: 31000098

| WELL CONSTRUCTION | LITHOLOGIC LOG | DESCRIPTION | DEPTH | SAMPLE ID | SAMPLE TYPE | FIELD SCREENING RESULTS | PID ppm 1000 |
|----------------------|--|---|-------|-----------|-------------|--|--------------------|
| | | Grd | 0 | | | | |
| |  | CLAY CAP | | | | | |
| |  | SAND Coarse, dark gray | | | | Soil samples collected from 8" - 12" and 12" - 6" | |
| |  | SAND Fine to medium, brown, saturated at 6 feet | 5 | | | | |
| | | NO CUTTINGS | 10 | | | Groundwater sample collected from 10' - 15' | |
| | | | 15 | | | | |
| | | EOB | | | | | |
| | | | 20 | | | | |
| | | | 25 | | | | |

VERTICAL DATUM: NA

GRD. ELEVATION: NA

T.O.C.: NA

S.W.L.: NA

CASING: NA

SCREEN: NA

WELL DEPTH: NA

COMPLETION NOTES: back filled with bentonite

LATITUDE: 47.146053295

LONGITUDE: -88.458494814

DATUM: MichGeoRef

NORTHING: 735598.245

EASTING: 313453.365

SITE: AMW - Quincy Mining Company Mason

COUNTY: Houghton

DATE: 5-19-17

TOWNSHIP: Osceola

DRILLER: Chris Black

TOWN: 55N

GEOLOGIST: Jeff Pincumbe

RANGE: 33W


DRILL METHOD: Geoprobe

SECTION: 26

TOTAL DEPTH: 15 feet

LOCATION DESCRIPTION: North side of Quincy Regrinding Plant

ERNIE#: 31000098

| WELL CONSTRUCTION | LITHOLOGIC LOG | DESCRIPTION | DEPTH | SAMPLE ID | SAMPLE TYPE | FIELD SCREENING RESULTS | PID ppm 1000 |
|----------------------|---|---|-------|-----------|-------------|--|--------------------|
| | | Grd. | 0 | | | | |
| |  | ROAD GRAVEL SAND Fine to medium, brown, saturated at 4.5 feet | | | | Soil samples collected from 0 - 6" and 6" - 4' with a duplicate sample from 6" - 4' | |
| | | NO CUTTINGS | 5 | | | | |
| | | | 10 | | | Groundwater sample collected from 10' - 15' | |
| | | | 15 | | | | |
| | | EOB | | | | | |
| | | | 20 | | | | |
| | | | 25 | | | | |

VERTICAL DATUM: NA

GRD. ELEVATION: NA

T.O.C.: NA

S.W.L.: NA

CASING: NA

SCREEN: NA

WELL DEPTH: NA

COMPLETION NOTES: back filled with bentonite

LATITUDE: 47.140999910

LONGITUDE: -88.464478974

DATUM: MichGeoRef

NORTHING: 735051.096

EASTING: 312982.220

SITE: AMW - Quincy Mining Company Mason

COUNTY: Houghton

DATE: 5-19-17

TOWNSHIP: Osceola

DRILLER: Chris Black

TOWN: 55N

GEOLOGIST: Jeff Pincumbe

RANGE: 33W


DRILL METHOD: Geoprobe

SECTION: 26

TOTAL DEPTH: 15 feet

LOCATION DESCRIPTION: North side of Quincy Regrinding Plant

ERNIE#: 31000098

| WELL CONSTRUCTION | LITHOLOGIC LOG | DESCRIPTION | DEPTH | SAMPLE ID | SAMPLE TYPE | FIELD SCREENING RESULTS | PID ppm 1 1000 |
|----------------------|---|--|--------|-----------|-------------|---|----------------------|
| |  | SILTY SAND Fine, gray SAND Fine to medium, brown, saturated at 4 feet | Grd. 0 | | | Soil samples collected from 0 - 8" and 6" - 4' | |
| | | NO CUTTINGS | 5 | | | | |
| | | | 10 | | | Groundwater sample collected from 10' - 15' | |
| | | | 15 | | | | |
| | | EOB. | 20 | | | | |
| | | | 25 | | | | |

VERTICAL DATUM: NA

GRD. ELEVATION: NA

T.O.C.: NA

S.W.L.: NA

CASING: NA

SCREEN: NA

WELL DEPTH: NA

COMPLETION NOTES: back filled with bentonite

LATITUDE: 47.140953453

LONGITUDE: -88.464599334

DATUM: MichGeoRef

NORTHING: 735046.222

EASTING: 312972.935

SITE: AMW - Quincy Mining Company Mason

COUNTY: Houghton

DATE: 5-19-17

TOWNSHIP: Osceola

DRILLER: Chris Black

TOWN: 55N

GEOLOGIST: Jeff Pincumbe

RANGE: 33W


DRILL METHOD: Geoprobe

SECTION: 26

TOTAL DEPTH: 13 feet

LOCATION DESCRIPTION: North side of Quincy Regrinding Plant

ERNIE#: 31000098

| WELL CONSTRUCTION | LITHOLOGIC LOG | DESCRIPTION | DEPTH | SAMPLE ID | SAMPLE TYPE | FIELD SCREENING RESULTS | PID ppm 1000 |
|----------------------|---|--|-------|-----------|-------------|---|--------------------|
| |  | Grd. SILTY SAND Fine, gray SAND Fine to medium, brown, saturated at 4.5 feet | 0 | | | Soil samples collected from 0 - 8" and 6" - 4' | |
| | | NO CUTTINGS | 5 | | | | |
| | | | 10 | | | Groundwater sample collected from 8' - 13' | |
| | | EOB | 15 | | | | |
| | | | 20 | | | | |
| | | | 25 | | | | |

VERTICAL DATUM: NA

GRD. ELEVATION: NA

T.O.C.: NA

S.W.L.: NA

CASING: NA

SCREEN: NA

WELL DEPTH: NA

COMPLETION NOTES: back filled with bentonite

LATITUDE: 47.140851787

LONGITUDE: -88.464643934

DATUM: MichGeoRef

NORTHING: 735035.034

EASTING: 312969.200



EASTING: 312982.916

SITE: AMW - Quincy Mining Company Mason

COUNTY: Houghton

DATE: 5-19-17

TOWNSHIP: Osceola

DRILLER: Chris Black

TOWN: 55N

GEOLOGIST: Jeff Pincumbe

RANGE: 33W


DRILL METHOD: Geoprobe

SECTION: 26

TOTAL DEPTH: 13 feet

LOCATION DESCRIPTION: North side of Quincy Regrinding Plant

ERNIE#: 31000098

| WELL CONSTRUCTION | LITHOLOGIC LOG | DESCRIPTION | DEPTH | SAMPLE ID | SAMPLE TYPE | FIELD SCREENING RESULTS | PID ppm 1 1000 |
|----------------------|---|--|-------|-----------|-------------|---|----------------------|
| |  | Grd. SILTY SAND Fine, gray SAND Fine to medium, brown, saturated at 4.5 feet | 0 | | | Soil samples collected from 0 - 8" and 6" - 4' | |
| | | NO CUTTINGS | 5 | | | | |
| | | | 10 | | | Groundwater sample collected from 8' - 13' | |
| | | EOB | 15 | | | | |
| | | | 20 | | | | |
| | | | 25 | | | | |

VERTICAL DATUM: NA

GRD. ELEVATION: NA

T.O.C.: NA

S.W.L.: NA

CASING: NA

SCREEN: NA

WELL DEPTH: NA

COMPLETION NOTES: back filled with bentonite

LATITUDE: 47.140828165

LONGITUDE: -88.464302648

DATUM: MichGeoRef

NORTHING: 735031.598

EASTING: 312994.986

DE Recreation and
Redevelopment
Division
BOREHOLE LOG

BORING/WELL: QMCM-SB-29/GW-29

SITE: AMW - Quincy Mining Company Mason

COUNTY: Houghton

DATE: 5-19-17

TOWNSHIP: Osceola

DRILLER: Chris Black

TOWN: 55N

GEOLOGIST: Jeff Pincumbe

RANGE: 33W




DRILL METHOD: Geoprobe

SECTION: 26

TOTAL DEPTH: 13 feet

LOCATION DESCRIPTION: North side of Quincy Regrinding Plant

ERNIE#: 31000098

| WELL CONSTRUCTION | LITHOLOGIC LOG | DESCRIPTION | DEPTH | SAMPLE ID | SAMPLE TYPE | FIELD SCREENING RESULTS | PID ppm 1 1000 |
|----------------------|---|---|--------------------------------|-----------|---|--|--|
| |  | Grd. SILTY SAND Fine, gray SAND Fine to medium, brown, saturated at 4 feet NO CUTTINGS EOB | 0 5 10 15 20 25 | |  | Soil samples collected from 0 - 8" and 6" - 4' Groundwater sample collected from 8' - 13' |  |

VERTICAL DATUM: NA

GRD. ELEVATION: NA

T.O.C.: NA

S.W.L.: NA

CASING: NA

SCREEN: NA

WELL DEPTH: NA

COMPLETION NOTES: back filled with bentonite

LATITUDE: 47.140931686

LONGITUDE: -88.464347218

DATUM: MichGeoRef

NORTHING: 735043.204

EASTING: 312991.968

SITE: AMW - Quincy Mining Company Mason

COUNTY: Houghton

DATE: 5-18-17

TOWNSHIP: Osceola

DRILLER: Chris Black

TOWN: 55N

GEOLOGIST: Jeff Pincumbe

RANGE: 33W

DRILL METHOD: Geoprobe

SECTION: 26

TOTAL DEPTH: 17 feet

LOCATION DESCRIPTION: Southeast corner of Quincy Regrinding Plant

ERNIE#: 31000098

| WELL CONSTRUCTION | LITHOLOGIC LOG | DESCRIPTION | DEPTH | SAMPLE ID | SAMPLE TYPE | FIELD SCREENING RESULTS | PID ppm 1 1000 |
|----------------------|-------------------|---|-------|-----------|-------------|--|----------------------|
| | | Grd | 0 | | | | |
| | | SAND Fine to medium, light brown | | | | Soil samples collected from 0" - 6" and 6" - 7" and a duplicate sample from 6" - 7' | |
| | | SAND Coarse with gravel, dark gray | | | | | |
| | | SAND Fine to medium, brown, saturated at 7 feet | 5 | | | | |
| | | NO CUTTINGS | 10 | | | | |
| | | | 15 | | | Groundwater sample collected from 12' - 17' and a duplicate sample from 12' - 17' | |
| | | EOB. | 20 | | | | |
| | | | 25 | | | | |

VERTICAL DATUM: NA

GRD. ELEVATION: NA

T.O.C.: NA

S.W.L.: NA

CASING: NA

SCREEN: NA

WELL DEPTH: NA

COMPLETION NOTES: back filled with bentonite

LATITUDE: 47.140086412

LONGITUDE: -88.463917975

DATUM: MichGeoRef

NORTHING: 734948.507

EASTING: 313021.565

SITE: AMW - Quincy Mining Company Mason

COUNTY: Houghton

DATE: 5-18-17

TOWNSHIP: Osceola

DRILLER: Chris Black

TOWN: 55N

GEOLOGIST: Jeff Pincumbe

RANGE: 33W

DRILL METHOD: Geoprobe

SECTION: 26

TOTAL DEPTH: 17 feet

LOCATION DESCRIPTION: Southeast corner of Quincy Regrinding Plant

ERNIE#: 31000098

| WELL CONSTRUCTION | LITHOLOGIC LOG | DESCRIPTION | DEPTH | SAMPLE ID | SAMPLE TYPE | FIELD SCREENING RESULTS | PID ppm 1000 |
|----------------------|-------------------|---|-------|-----------|-------------|--|--------------------|
| | | Grd | 0 | | | | |
| | | CLAY CAP | | | | | |
| | | SAND Fine to medium, light brown | | | | Soil samples collected from 9" - 15" and 15" - 7" | |
| | | | 5 | | | | |
| | | SAND Fine to medium, brown, saturated at 7 feet | | | | | |
| | | | 10 | | | | |
| | | NO CUTTINGS | | | | | |
| | | | 15 | | | Groundwater sample collected from 12' - 17' | |
| | | | 20 | | | | |
| | | EOB. | 25 | | | | |

VERTICAL DATUM: NA

GRD. ELEVATION: NA

T.O.C.: NA

S.W.L.: NA

CASING: NA

SCREEN: NA

WELL DEPTH: NA

COMPLETION NOTES: back filled with bentonite

LATITUDE: 47.14006668

LONGITUDE: -88.463991154

DATUM: MichGeoRef

NORTHING: 734946.266

EASTING: 313015.943

SITE: AMW - Quincy Mining Company Mason

COUNTY: Houghton

DATE: 5-20-17

TOWNSHIP: Osceola

DRILLER: Chris Black

TOWN: 55N

GEOLOGIST: Jeff Pincumbe

RANGE: 33W

DRILL METHOD: Geoprobe

SECTION: 27

TOTAL DEPTH: 15 feet

LOCATION DESCRIPTION: South side of Quincy Stamp Sands

ERNIE#: 31000098

| WELL CONSTRUCTION | LITHOLOGIC LOG | DESCRIPTION | DEPTH | SAMPLE ID | SAMPLE TYPE | FIELD SCREENING RESULTS | PID ppm ↑ 1000 |
|----------------------|-------------------|--|-------|-----------|-------------|---|----------------------|
| | | Grd. | 0 | | | | |
| | | CLAY CAP | | | | | |
| | | SAND Fine to medium, gray, saturated at 5 feet | | | | Soil samples collected from 9" -15" and 15" - 5' | |
| | | | 5 | | | | |
| | | NO CUTTINGS | 10 | | | Groundwater sample collected from 10' - 15' | |
| | | | 15 | | | | |
| | | E.O.B. | | | | | |
| | | | 20 | | | | |
| | | | 25 | | | | |

VERTICAL DATUM: NA

GRD. ELEVATION: NA

T.O.C.: NA

S.W.L.: NA

CASING: NA

SCREEN: NA

WELL DEPTH: NA

COMPLETION NOTES: back filled with bentonite

LATITUDE: 47.133758373

LONGITUDE: -88.468083423

DATUM: MichGeoRef

NORTHING: 734255.240

EASTING: 312723.009

SITE: AMW - Quincy Mining Company Mason

COUNTY: Houghton

DATE: 5-20-17

TOWNSHIP: Osceola

DRILLER: Chris Black

TOWN: 55N

GEOLOGIST: Jeff Pincumbe

RANGE: 33W



DRILL METHOD: Geoprobe

SECTION: 27

TOTAL DEPTH: 15 feet

LOCATION DESCRIPTION: Southwest edge of Quincy Stamp Sands

ERNIE#: 31000098

| WELL CONSTRUCTION | LITHOLOGIC LOG | DESCRIPTION | DEPTH | SAMPLE ID | SAMPLE TYPE | FIELD SCREENING RESULTS | PID ppm ↑ 1000 |
|----------------------|---|---|-------|-----------|-------------|--|-------------------------|
| |  | CLAY CAP | Grd. | | | | |
| |  | SAND Fine to medium, gray, saturated at 4 feet | 0 | | | Soil samples collected from 6" - 12" and 1' - 4' with a duplicate sample from 1' - 4' | |
| | | NO CUTTINGS | 5 | | | | |
| | | | 10 | | | Groundwater sample collected from 10' - 15' | |
| | | | 15 | | | | |
| | | EOB | 20 | | | | |
| | | | 25 | | | | |

VERTICAL DATUM: NA

GRD. ELEVATION: NA

T.O.C.: NA

S.W.L.: NA

CASING: NA

SCREEN: NA

WELL DEPTH: NA

COMPLETION NOTES: back filled with bentonite

LATITUDE: 47.132181808

LONGITUDE: -88.470350063

DATUM: MichGeoRef

NORTHING: 734085.507

EASTING: 312506.409

SITE: AMW - Quincy Mining Company Mason

COUNTY: Houghton

DATE: 5-20-17

TOWNSHIP: Osceola

DRILLER: Chris Black

TOWN: 55N

GEOLOGIST: Jeff Pincumbe

RANGE: 33W

DRILL METHOD: Geoprobe

SECTION: 26

TOTAL DEPTH: 13 feet

LOCATION DESCRIPTION: South side of Quincy Stamp Sands

ERNIE#: 31000098

| WELL CONSTRUCTION | LITHOLOGIC LOG | DESCRIPTION | DEPTH | SAMPLE ID | SAMPLE TYPE | FIELD SCREENING RESULTS | PID ppm 1 1000 |
|----------------------|-------------------|--|-------|-----------|-------------|--|----------------------|
| | | Grd. | 0 | | | | |
| | | CLAY CAP | | | | | |
| | | SAND Fine to medium, gray, saturated at 2 feet | | | | Soil samples collected from 12" -18" and 18" - 24" | |
| | | | 5 | | | | |
| | | NO CUTTINGS | | | | | |
| | | | 10 | | | Groundwater sample collected from 8' - 13' | |
| | | | 15 | | | | |
| | | EOB | | | | | |
| | | | 20 | | | | |
| | | | 25 | | | | |

VERTICAL DATUM: NA

GRD. ELEVATION: NA

T.O.C.: NA

S.W.L.: NA

CASING: NA

SCREEN: NA

WELL DEPTH: NA

COMPLETION NOTES: back filled with bentonite

LATITUDE: 47.131844332

LONGITUDE: -88.467477336

DATUM: MichGeoRef

NORTHING: 734041.174

EASTING: 312723.009

SITE: AMW - Quincy Mining Company Mason

COUNTY: Houghton

DATE: 5-20-17

TOWNSHIP: Osceola

DRILLER: Chris Black

TOWN: 55N

GEOLOGIST: Jeff Pincumbe

RANGE: 33W



DRILL METHOD: Geoprobe

SECTION: 26

TOTAL DEPTH: 17 feet

LOCATION DESCRIPTION: Southeast central area of Quincy Stamp Sands

ERNIE#: 31000098

| WELL CONSTRUCTION | LITHOLOGIC LOG | DESCRIPTION | DEPTH | SAMPLE ID | SAMPLE TYPE | FIELD SCREENING RESULTS | PID ppm 1000 |
|----------------------|---|--|-------|-----------|-------------|--|--------------------|
| | | Grd | 0 | | | | |
| |  | CLAY CAP | | | | | |
| |  | SAND Fine to medium, gray, saturated at 5 feet | | | | Soil samples collected from 12" -18" and 18" - 5' | |
| | | | 5 | | | | |
| | | NO CUTTINGS | | | | | |
| | | | 10 | | | | |
| | | | 15 | | | Groundwater sample collected from 12' - 17' | |
| | | | 20 | | | | |
| | | EOB. | 25 | | | | |

VERTICAL DATUM: NA

GRD. ELEVATION: NA

T.O.C.: NA

S.W.L.: NA

CASING: NA

SCREEN: NA

WELL DEPTH: NA

COMPLETION NOTES: back filled with bentonite

LATITUDE: 47.132718198

LONGITUDE: -88.464476539

DATUM: MichGeoRef

NORTHING: 734131.107

EASTING: 312953.542

SITE: AMW - Quincy Mining Company Mason

COUNTY: Houghton

DATE: 5-20-17

TOWNSHIP: Osceola

DRILLER: Chris Black

TOWN: 55N

GEOLOGIST: Jeff Pincumbe

RANGE: 33W




DRILL METHOD: Geoprobe

SECTION: 26

TOTAL DEPTH: 13 feet

LOCATION DESCRIPTION: Southeast edge of Quincy Stamp Sands

ERNIE#: 31000098

| WELL CONSTRUCTION | LITHOLOGIC LOG | DESCRIPTION | DEPTH | SAMPLE ID | SAMPLE TYPE | FIELD SCREENING RESULTS | PID ppm 1 1000 |
|----------------------|---|--|-------|-----------|-------------|---|----------------------|
| |  | CLAY CAP Grd | 0 | | | | |
| |  | SAND Fine to medium, reddish brown | | | | Soil samples collected from 8" -12" and 12" - 2' | |
| |  | SAND Fine to medium, gray, saturated | | | | | |
| | | NO CUTTINGS | 5 | | | | |
| | | | 10 | | | Groundwater sample collected from 8' - 13' | |
| | | | 15 | | | | |
| | | | 20 | | | | |
| | | | 25 | | | | |
| | | EOB | | | | | |

VERTICAL DATUM: NA

GRD. ELEVATION: NA

T.O.C.: NA

S.W.L.: NA

CASING: NA

SCREEN: NA

WELL DEPTH: NA

COMPLETION NOTES: back filled with bentonite

LATITUDE: 47.130104252

LONGITUDE: -88.462621777

DATUM: MichGeoRef

NORTHING: 733836.324

EASTING: 313085.045

SITE: AMW - Quincy Mining Company Mason

COUNTY: Houghton

DATE: 5-19-17

TOWNSHIP: Osceola

DRILLER: Chris Black

TOWN: 55N

GEOLOGIST: Jeff Pincumbe

RANGE: 33W

DRILL METHOD: Geoprobe

SECTION: 27

TOTAL DEPTH: 19 feet

LOCATION DESCRIPTION: Northeast side of Dollar Bay Furniture Stripping

ERNIE#: 31000098

| WELL CONSTRUCTION | LITHOLOGIC LOG | DESCRIPTION | DEPTH | SAMPLE ID | SAMPLE TYPE | FIELD SCREENING RESULTS | PID ppm 1000 |
|----------------------|-------------------|--|-------|-----------|-------------|---|--------------------|
| | | Grd. TOP SOIL SAND Fine to medium, brown, saturated at 4.5 feet | 0 | | | Soil sample collected from 3' | |
| | | NO CUTTINGS | 5 | | | | |
| | | | 10 | | | Groundwater samples collected from 4' - 9' and 14' - 19' with a duplicate from 14' - 19' | |
| | | | 15 | | | | |
| | | E.O.B. | 20 | | | | |
| | | | 25 | | | | |

VERTICAL DATUM: NA

GRD. ELEVATION: NA

T.O.C.: NA

S.W.L.: NA

CASING: NA

SCREEN: NA

WELL DEPTH: NA

COMPLETION NOTES: back filled with bentonite

LATITUDE: 47.128993619

LONGITUDE: -88.480464595

DATUM: MichGeoRef

NORTHING: 733755.508

EASTING: 311728.459

SITE: AMW - Quincy Mining Company Mason

COUNTY: Houghton

DATE: 5-19-17

TOWNSHIP: Osceola

DRILLER: Chris Black

TOWN: 55N

GEOLOGIST: Jeff Pincumbe

RANGE: 33W

DRILL METHOD: Geoprobe

SECTION: 27

TOTAL DEPTH: 19 feet

LOCATION DESCRIPTION: Southeast side of Dollar Bay Furniture Stripping

ERNIE#: 31000098

| WELL CONSTRUCTION | LITHOLOGIC LOG | DESCRIPTION | DEPTH | SAMPLE ID | SAMPLE TYPE | FIELD SCREENING RESULTS | PID ppm 1000 |
|----------------------|-------------------|--|-------|-----------|-------------|--|--------------------|
| | | Grd. TOP SOIL SAND Fine to medium, brown, saturated at 3.5 feet | 0 | | | Soil sample collected from 3' | |
| | | NO CUTTINGS | 5 | | | | |
| | | | 10 | | | Groundwater samples collected from 4' - 9' and 14' - 19' | |
| | | | 15 | | | | |
| | | E.O.B. | 20 | | | | |
| | | | 25 | | | | |

VERTICAL DATUM: NA

GRD. ELEVATION: NA

T.O.C.: NA

S.W.L.: NA

CASING: NA

SCREEN: NA

WELL DEPTH: NA

COMPLETION NOTES: back filled with bentonite

LATITUDE: 47.128849008

LONGITUDE: -88.480437096

DATUM: MichGeoRef

NORTHING: 733739.378

EASTING: 311730.036

SITE: AMW - Quincy Mining Company Mason

COUNTY: Houghton

DATE: 9-17-17

TOWNSHIP: Osceola

DRILLER: Mike Priebe

TOWN: 55N

GEOLOGIST: Jeff Pincumbe

RANGE: 33W


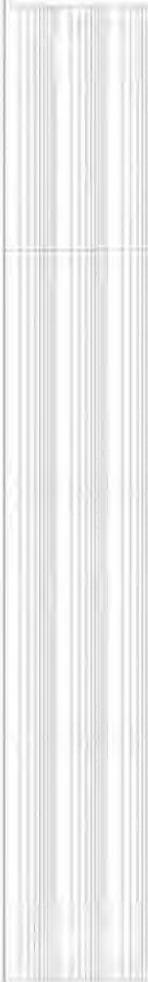
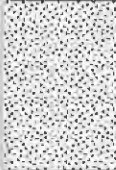
DRILL METHOD: Geoprobe

SECTION: 23

TOTAL DEPTH: 4 feet

LOCATION DESCRIPTION: NE of dump area NE of Boiler House #2

ERNIE#: 31000098

| WELL CONSTRUCTION | LITHOLOGIC LOG | DESCRIPTION | DEPTH | SAMPLE ID | SAMPLE TYPE | FIELD SCREENING RESULTS | PID ppm 1 1000 |
|----------------------|---|--|-------|-----------|-------------|--|--|
| |  | CLAY CAP | Grd 0 | | | Soil samples collected from 8" - 12" and 12" - 4' |  |
| |  | SAND Medium, gray, saturated at 4 feet | EOB 5 | | | | |
| | | | 10 | | | | |
| | | | 15 | | | | |
| | | | 20 | | | | |

VERTICAL DATUM: NA

GRD. ELEVATION: NA

T.O.C.: NA

S.W.L.: NA

CASING: NA

SCREEN: NA

WELL DEPTH: NA

COMPLETION NOTES: back filled with bentonite

LATITUDE: 47.148427300

LONGITUDE: -88.456385493

DATUM: MichGeoRef

NORTHING: 735856.964

EASTING: 313621.475



Regulation and
Redevelopment
Division

BOREHOLE LOG

BORING/WELL: QMCM-SB-40

SITE: AMW - Quincy Mining Company Mason

COUNTY: Houghton

DATE: 9-17-17

TOWNSHIP: Osceola

DRILLER: Mike Priebe

TOWN: 55N

GEOLOGIST: Jeff Pincumbe

RANGE: 33W


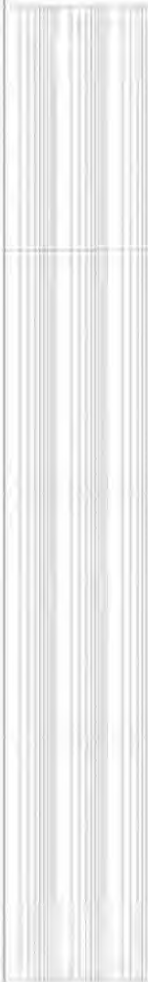
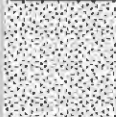
DRILL METHOD: Geoprobe

SECTION: 23

TOTAL DEPTH: 3 feet

LOCATION DESCRIPTION: East of dump area NE of Boiler House #2

ERNIE#: 31000098

| WELL CONSTRUCTION | LITHOLOGIC LOG | DESCRIPTION | DEPTH | SAMPLE ID | SAMPLE TYPE | FIELD SCREENING RESULTS | PID ppm 1 1000 |
|----------------------|---|---|-------|-----------|-------------|--|--|
| |  | CLAY CAP | Grd 0 | | | Soil samples collected from 8" - 12" and 12" - 24" |  |
| |  | SAND Medium, gray, saturated at 2 feet | EOB | | | | |
| | | | 5 | | | | |
| | | | 10 | | | | |
| | | | 15 | | | | |
| | | | 20 | | | | |

VERTICAL DATUM: NA

GRD. ELEVATION: NA

T.O.C.: NA

S.W.L.: NA

CASING: NA

SCREEN: NA

WELL DEPTH: NA

COMPLETION NOTES: back filled with bentonite

LATITUDE: 47.148191719

LONGITUDE: -88.456198180

DATUM: MichGeoRef

NORTHING: 735830.350

EASTING: 313634.852

SITE: AMW - Quincy Mining Company Mason

COUNTY: Houghton

DATE: 9-17-17

TOWNSHIP: Osceola

DRILLER: Mike Priebe

TOWN: 55N

GEOLOGIST: Jeff Pincumbe

RANGE: 33W


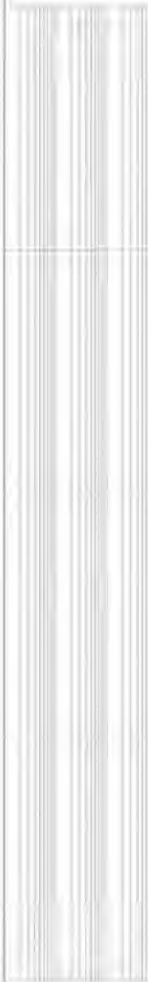
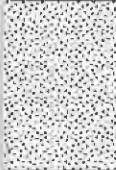
DRILL METHOD: Geoprobe

SECTION: 23

TOTAL DEPTH: 4 feet

LOCATION DESCRIPTION: SE of dump area NE of Boiler House #2

ERNIE#: 31000098

| WELL CONSTRUCTION | LITHOLOGIC LOG | DESCRIPTION | DEPTH | SAMPLE ID | SAMPLE TYPE | FIELD SCREENING RESULTS | PID ppm 1 1000 |
|----------------------|---|--|-------|-----------|-------------|--|--|
| |  | CLAY CAP | Grd 0 | | | Soil samples collected from 6" - 12" and 12" - 3' |  |
| |  | SAND Medium, gray, saturated at 3 feet | EOB 5 | | | | |
| | | | 10 | | | | |
| | | | 15 | | | | |
| | | | 20 | | | | |

VERTICAL DATUM: NA

GRD. ELEVATION: NA

T.O.C.: NA

S.W.L.: NA

CASING: NA

SCREEN: NA

WELL DEPTH: NA

COMPLETION NOTES: back filled with bentonite

LATITUDE: 47.148053173

LONGITUDE: -88.456422429

DATUM: MichGeoRef

NORTHING: 735815.491

EASTING: 313617.376

SITE: AMW - Quincy Mining Company Mason

COUNTY: Houghton

DATE: 9-17-17

TOWNSHIP: Osceola

DRILLER: Mike Priebe

TOWN: 55N

GEOLOGIST: Jeff Pincumbe

RANGE: 33W


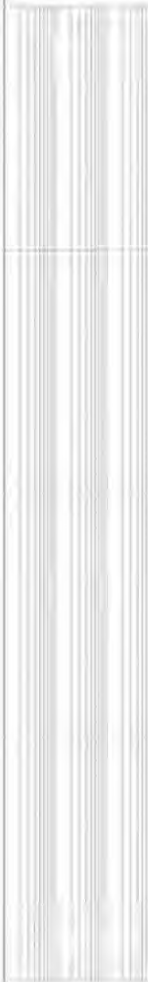
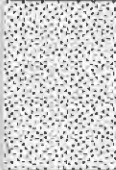
DRILL METHOD: Geoprobe

SECTION: 23

TOTAL DEPTH: 4 feet

LOCATION DESCRIPTION: SE of dump area NE of Boiler House #2

ERNIE#: 31000098

| WELL CONSTRUCTION | LITHOLOGIC LOG | DESCRIPTION | DEPTH | SAMPLE ID | SAMPLE TYPE | FIELD SCREENING RESULTS | PID ppm 1 1000 |
|----------------------|---|--|-------|-----------|-------------|--|--|
| |  | CLAY CAP | Grd 0 | | | Soil samples collected from 8" - 12" and 12" - 24" |  |
| |  | SAND Medium, gray, saturated at 2 feet | EOB 5 | | | | |
| | | | 10 | | | | |
| | | | 15 | | | | |
| | | | 20 | | | | |

VERTICAL DATUM: NA

GRD. ELEVATION: NA

T.O.C.: NA

S.W.L.: NA

CASING: NA

SCREEN: NA

WELL DEPTH: NA

COMPLETION NOTES: back filled with bentonite

LATITUDE: 47.147925448

LONGITUDE: -88.456735272

DATUM: MichGeoRef

NORTHING: 735802.044

EASTING: 313593.223

SITE: AMW - Quincy Mining Company Mason

COUNTY: Houghton

DATE: 9-17-17

TOWNSHIP: Osceola

DRILLER: Mike Priebe

TOWN: 55N

GEOLOGIST: Jeff Pincumbe

RANGE: 33W

DRILL METHOD: Geoprobe

SECTION: 26

TOTAL DEPTH: 9 feet

LOCATION DESCRIPTION: East of Quincy Regrinding Plant

ERNIE#: 31000098

| WELL CONSTRUCTION | LITHOLOGIC LOG | DESCRIPTION | DEPTH | SAMPLE ID | SAMPLE TYPE | FIELD SCREENING RESULTS | PID ppm 1 1000 |
|----------------------|-------------------|---------------------------|-------|-----------|-------------|---|----------------------|
| | | Grd NO CUTTINGS | 0 | | | | |
| | | | 5 | | | Groundwater sample collected from 4 - 9' | |
| | | EOB | 10 | | | | |
| | | | 15 | | | | |
| | | | 20 | | | | |

VERTICAL DATUM: NA

GRD. ELEVATION: NA

T.O.C.: NA

S.W.L.: NA

CASING: NA

SCREEN: NA

WELL DEPTH: NA

COMPLETION NOTES: back filled with bentonite

LATITUDE: 47.140026210

LONGITUDE: -88.463448755

DATUM: MichGeoRef

NORTHING: 734940.482

EASTING: 313056.914

APPENDIX I

SEDIMENT CORE LOGS AND SURFACE WATER SAMPLING RECORDS





Reclamation and
Redevelopment
Division

BOREHOLE LOG

BORING/WELL: QMCM-SD01

SITE: Abandoned Mining Wastes Torch Lake

COUNTY: Houghton

DATE: June 8, 2017

TOWNSHIP: Torch Lake

DRILLER: B. Lower

TOWN: 55N

GEOLOGIST: B. Eustice

RANGE: 33W

DRILL METHOD: Vibracore

SECTION: 26

TOTAL DEPTH: 5' in 8.7' of water

LOCATION DESCRIPTION: Quincy Mining Company Mason

ERNIE ID# 31000098

| WELL CONSTRUCTION | LITHOLOGIC LOG | DESCRIPTION | DEPTH | SAMPLE TYPE | SAMPLE ID | NOTES | Water Quality Meter |
|----------------------|-------------------|--|-------|-------------|--------------------|-------|------------------------|
| | | Lake Bottom | 0 | | | | |
| | | SILTY CLAY dark brown, loose, wet. | | | QMCM-SD01 0-2.9' | | |
| | | SILTY CLAY trace sand, dark brown, noncohesive, non-plastic, wet. | | | | | |
| | | SILTY CLAY trace sand, dark brown, noncohesive, high plasticity, wet. | | | QMCM-SD01 2.9-4.5' | | |
| | | SAND medium grain, reddish brown. | | | | | |
| | | No Recovery | | | | | |
| | | EOB | 5 | | | | |

VERTICAL DATUM:

GRD. ELEVATION:

T.O.C.:

S.W.L.:

CASING:

SCREEN:

WELL DEPTH:

COMPLETION NOTES:

LATITUDE: 47.141085532

LONGITUDE: -88.461407709

PROJECTION: MiGeoRef

NORTHING: 735053.311

EASTING: 313215.302



Reclamation and
Redevelopment
Division

BOREHOLE LOG

BORING/WELL: QMCM-SD02/SW01

SITE: Abandoned Mining Wastes Torch Lake

COUNTY: Houghton

DATE: June 8, 2017

TOWNSHIP: Torch Lake

DRILLER: B. Lower

TOWN: 55N

GEOLOGIST: B. Eustice

RANGE: 33W

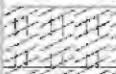
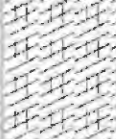

DRILL METHOD: Vibracore

SECTION: 26

TOTAL DEPTH: 2.5' in 8.1' of water

LOCATION DESCRIPTION: Quincy Mining Company Mason

ERNIE ID# 31000098

| WELL CONSTRUCTION | LITHOLOGIC LOG | DESCRIPTION | DEPTH | SAMPLE TYPE | SAMPLE ID | NOTES | Water Quality Meter |
|----------------------|--|--|-------|-------------|---------------------|-------|------------------------|
| | | Lake Bottom | 0 | | | | |
| |  | SILTY CLAY dark brown, trace organics, soft, wet | | | | | |
| |  | SILTY CLAY dark brown, trace organics, firm, wet | | | QMCM-SD02 0-1.4' | | |
| |  | SILTY SAND fine grain, dark brown, firm | | | QMCM-SD02 1.4-2.25' | | |
| | | EOB | | | | | |
| | | | 5 | | | | |

VERTICAL DATUM:

GRD. ELEVATION:

T.O.C.:

S.W.L.:

CASING:

SCREEN:

WELL DEPTH:

COMPLETION NOTES:

LATITUDE: 47.140872865

LONGITUDE: -88.461438471

PROJECTION: MiGeoRef

NORTHING: 735029.747

EASTING: 313212.246



Reclamation and
Redevelopment
Division

BOREHOLE LOG

BORING/WELL: QMCM-SD03

SITE: Abandoned Mining Wastes Torch Lake

COUNTY: Houghton

DATE: June 8, 2017

TOWNSHIP: Torch Lake

DRILLER: B. Lower

TOWN: 55N

GEOLOGIST: B. Eustice

RANGE: 33W





DRILL METHOD: Vibracore

SECTION: 26

TOTAL DEPTH: 4.75' in 8.5' of water

LOCATION DESCRIPTION: Quincy Mining Company Mason

ERNIE ID# 31000098

| WELL CONSTRUCTION | LITHOLOGIC LOG | DESCRIPTION | DEPTH | SAMPLE TYPE | SAMPLE ID | NOTES | Water Quality Meter |
|----------------------|---|--|-------|-------------|------------------|-------|------------------------|
| | | Lake Bottom | 0 | | | | |
| |  | SILTY CLAY dark brown, loose, wet. | | | | | |
| |  | SANDY SILT dark brown, soft, wet | | | QMCM-SD03 0-3' | | |
| |  | SILT dark brown - red mottled, cohesive, high plasticity | | | QMCM-SD03 3-3 9' | | |
| |  | SAND medium to coarse grain, brown, stiff, wet. | | | | | |
| | | No Recovery | | | | | |
| | | EOB | 5 | | | | |

VERTICAL DATUM:

GRD. ELEVATION:

T.O.C.:

S.W.L.:

CASING:

SCREEN:

WELL DEPTH:

COMPLETION NOTES:

LATITUDE: 47.140981681

LONGITUDE: -88.461786249

PROJECTION: MiGeoRef

NORTHING: 735042.671

EASTING: 313186.254



Restoration and
Redevelopment
Division

BOREHOLE LOG

BORING/WELL: QMCM-SD04

SITE: Abandoned Mining Wastes Torch Lake

COUNTY: Houghton

DATE: June 9, 2017

TOWNSHIP: Torch Lake

DRILLER: B. Lower

TOWN: 55N

GEOLOGIST: B. Eustice

RANGE: 33W

DRILL METHOD: Vibracore

SECTION: 26

TOTAL DEPTH: 4' in 16.3' of water

LOCATION DESCRIPTION: Quincy Mining Company Mason

ERNIE ID# 31000098

| WELL CONSTRUCTION | LITHOLOGIC LOG | DESCRIPTION | DEPTH | SAMPLE TYPE | SAMPLE ID | NOTES | Water Quality Meter |
|----------------------|-------------------|--|-------|-------------|------------------|--|------------------------|
| | | Lake Bottom | 0 | | | | |
| | | SILT dark brown - black, saturated, loose, oily sheen | | | QMCM-SD04 0-1' | Oily sheen on water surface after coring | |
| | | SILTY SAND fine grain, brown, firm, moist, oily sheen | | | | | |
| | | SILTY SAND medium grain, brown, trace copper colored flecks, oily sheen | | | QMCM-SD04 1-1 9' | | |
| | | No Recovery | | | | | |
| | | EOB | 5 | | | | |

VERTICAL DATUM:

GRD. ELEVATION:

T.O.C.:

S.W.L.:

CASING:

SCREEN:

WELL DEPTH:

COMPLETION NOTES:

LATITUDE: 47.140783714

LONGITUDE: -88.462901066

PROJECTION: MiGeoRef

NORTHING: 735023.329

EASTING: 313101.066



Reclamation and
Redevelopment
Division

BOREHOLE LOG

BORING/WELL: QMCM-SD05/SW02

SITE: Abandoned Mining Wastes Torch Lake

COUNTY: Houghton

DATE: June 9, 2017

TOWNSHIP: Torch Lake

DRILLER: B. Lower

TOWN: 55N

GEOLOGIST: B. Eustice

RANGE: 33W

DRILL METHOD: Vibracore

SECTION: 26

TOTAL DEPTH: 6' in 18.2' of water

LOCATION DESCRIPTION: Quincy Mining Company Mason

ERNIE ID# 31000098

| WELL CONSTRUCTION | LITHOLOGIC LOG | DESCRIPTION | DEPTH | SAMPLE TYPE | SAMPLE ID | NOTES | Water Quality Meter |
|----------------------|-------------------|---|-------|-------------|---------------------|-------|------------------------|
| | | Lake Bottom | 0 | | | | |
| | | SILT dark brown - black, saturated, loose | | | QMCM-SD05 0-1.4' | | |
| | | SAND brown, fine grain, firm, moist | | | QMCM-SD05 1.4-2.75' | | |
| | | No Recovery | | | | | |
| | | | 5 | | | | |
| | | E.O.B. | | | | | |

VERTICAL DATUM:

GRD. ELEVATION:

T.O.C.:

S.W.L.:

CASING:

SCREEN:

WELL DEPTH:

COMPLETION NOTES:

LATITUDE: 47.140561640

LONGITUDE: -88.462962584

PROJECTION: MiGeoRef

NORTHING: 734998.805

EASTING: 313095.629



Reclamation and
Redevelopment
Division

BOREHOLE LOG

BORING/WELL: QMCM-SD06

SITE: Abandoned Mining Wastes Torch Lake

COUNTY: Houghton

DATE: June 9, 2017

TOWNSHIP: Torch Lake

DRILLER: B. Lower

TOWN: 55N

GEOLOGIST: B. Eustice

RANGE: 33W

DRILL METHOD: Vibracore

SECTION: 26

TOTAL DEPTH: 6' in 4.7' of water

LOCATION DESCRIPTION: Quincy Mining Company Mason

ERNIE ID# 31000098

| WELL CONSTRUCTION | LITHOLOGIC LOG | DESCRIPTION | DEPTH | SAMPLE TYPE | SAMPLE ID | NOTES | Water Quality Meter |
|----------------------|-------------------|--|-------|-------------|---------------------|-------|------------------------|
| | | Lake Bottom | 0 | | | | |
| | | SILT dark brown - black, loose, wet. | | | QMCM-SD06 0-1.4' | | |
| | | SILTY SAND fine grain, brown, firm, moist. | | | QMCM-SD06 1.4-2.75' | | |
| | | No Recovery | | | | | |
| | | | 5 | | | | |
| | | E.O.B. | | | | | |

VERTICAL DATUM:

GRD. ELEVATION:

T.O.C.:

S.W.L.:

CASING:

SCREEN:

WELL DEPTH:

COMPLETION NOTES:

LATITUDE: 47.140415073

LONGITUDE: -88.463244063

PROJECTION: Michigan GeoRef

NORTHING: 734983.193

EASTING: 313073.785



Reclamation and
Redevelopment
Division

BOREHOLE LOG

BORING/WELL: QMCM-SD07/SW03

SITE: Abandoned Mining Wastes Torch Lake

COUNTY: Houghton

DATE: June 9, 2017

TOWNSHIP: Torch Lake

DRILLER: B. Lower

TOWN: 55N

GEOLOGIST: B. Eustice

RANGE: 33W

DRILL METHOD: Vibracore

SECTION: 26

TOTAL DEPTH: 6' in 1.5' of water

LOCATION DESCRIPTION: Quincy Mining Company Mason

ERNIE ID# 31000098

| WELL CONSTRUCTION | LITHOLOGIC LOG | DESCRIPTION | DEPTH | SAMPLE TYPE | SAMPLE ID | NOTES | Water Quality Meter |
|----------------------|-------------------|--|-------|-------------|--------------------|------------------------|------------------------|
| | | Lake Bottom | 0 | | | Collected QMCM-SW03 | |
| | | SANDY SILT dark brown, organics, soft, wet. | | | | | |
| | | GRAVELLY SAND medium to coarse grain, dark brown - red, poorly sorted, wet. | | | | | |
| | | CLAY red brown mottled, cohesive, soft. | | | QMCM-SD07 0-2 3' | | |
| | | SAND fine grain, brown, well sorted, moist. | | | | | |
| | | CLAY reddish brown, noncohesive, non-plastic, loose, saturated. | | | QMCM-SD07 2 3-4 8' | | |
| | | SAND fine grain, well sorted, reddish brown. | 5 | | | | |
| | | No Recovery | | | | | |
| | | E.O.B. | | | | | |

VERTICAL DATUM:

GRD. ELEVATION:

T.O.C.:

S.W.L.:

CASING:

SCREEN:

WELL DEPTH:

COMPLETION NOTES:

LATITUDE: 47.140201788

LONGITUDE: -88.462629696

PROJECTION: Michigan GeoRef

NORTHING: 734958.040

EASTING: 313119.608



Reclamation and
Redevelopment
Division

BOREHOLE LOG

BORING/WELL: QMCM-SD08

SITE: Abandoned Mining Wastes Torch Lake

COUNTY: Houghton

DATE: June 9, 2016

TOWNSHIP: Torch Lake

DRILLER: B. Lower

TOWN: 55N

GEOLOGIST: B. Eustice

RANGE: 33W




DRILL METHOD: Vibracore

SECTION: 26

TOTAL DEPTH: 6' in 1.2' of water

LOCATION DESCRIPTION: Quincy Mining Company Mason

ERNIE ID# 31000098

| WELL CONSTRUCTION | LITHOLOGIC LOG | DESCRIPTION | DEPTH | SAMPLE TYPE | SAMPLE ID | NOTES | Water Quality Meter |
|----------------------|---|--|--------|-------------|--------------------------|-------|------------------------|
| | | Lake Bottom | 0 | | | | |
| |  | SILTY SAND fine grain, well sorted, dark brown, moist. | | | QMCM-SD08 0-1.25' and FD | | |
| |  | GRAVELLY SAND coarse grain, reddish brown, stiff. | | | | | |
| |  | SILTY SAND fine grain, well sorted, brown, stiff, wet. | | | QMCM-SD08 1.25-2.8' | | |
| | | No Recovery | | | | | |
| | | | 5 | | | | |
| | | | E.O.B. | | | | |

VERTICAL DATUM:

GRD. ELEVATION:

T.O.C.:

S.W.L.:

CASING:

SCREEN:

WELL DEPTH:

COMPLETION NOTES:

LATITUDE: 47.139930623

LONGITUDE: -88.460517764

PROJECTION: Michigan GeoRef

NORTHING: 734922.901

EASTING: 313278.743



Reclamation and
Restoration
Division

BOREHOLE LOG

BORING/WELL: QMCM-SD09/SW04

SITE: Abandoned Mining Wastes Torch Lake

COUNTY: Houghton

DATE: June 9, 2016

TOWNSHIP: Torch Lake

DRILLER: B. Lower

TOWN: 55N

GEOLOGIST: B. Eustice

RANGE: 33W

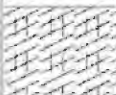

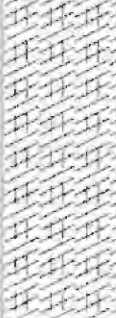
DRILL METHOD: Vibracore

SECTION: 26

TOTAL DEPTH: 4.9' in 2.2' of water

LOCATION DESCRIPTION: Quincy Mining Company Mason

ERNIE ID# 31000098

| WELL CONSTRUCTION | LITHOLOGIC LOG | DESCRIPTION | DEPTH | SAMPLE TYPE | SAMPLE ID | NOTES | Water Quality Meter |
|----------------------|---|--|-------|-------------|---------------------|-------|------------------------|
| | | Lake Bottom | 0 | | | | |
| |  | SILTY CLAY dark brown - black, loose, saturated. | | | | | |
| |  | SAND fine grain, well sorted, brown, stiff, wet. | | | QMCM-SD09 0-2.75' | | |
| |  | SILTY CLAY red brown mottled, noncohesive, non-plastic, loose, wet, firm at bottom of core. | | | QMCM-SD09 2.75-4.9' | | |
| | | EOB | 5 | | | | |

VERTICAL DATUM:

GRD. ELEVATION:

T.O.C.:

S.W.L.:

CASING:

SCREEN:

WELL DEPTH:

COMPLETION NOTES:

LATITUDE: 47.139294159

LONGITUDE: -88.462351459

PROJECTION: Michigan GeoRef

NORTHING: 734856.554

EASTING: 313137.537



Reclamation and
Development
Division

BOREHOLE LOG

BORING/WELL: QMCM-SD10/SW05

SITE: Abandoned Mining Wastes Torch Lake

COUNTY: Houghton

DATE: June 9, 2016

TOWNSHIP: Torch Lake

DRILLER: B. Lower

TOWN: 55N

GEOLOGIST: B. Eustice

RANGE: 33W




DRILL METHOD: Vibracore

SECTION: 27

TOTAL DEPTH: 4' in 4' of water

LOCATION DESCRIPTION: Quincy Mining Company Mason

ERNIE ID# 31000098

| WELL CONSTRUCTION | LITHOLOGIC LOG | DESCRIPTION | DEPTH | SAMPLE TYPE | SAMPLE ID | NOTES | Water Quality Meter |
|----------------------|---|---|-------|---|------------------|-------|------------------------|
| | | Lake Bottom | 0 | | | | |
| |  | SANDY CLAY trace organics, brown, loose, wet. | |  | QMCM-SD10 0-0.5' | | |
| |  | SAND coarse grain, well sorted, brown, wet. | | | QMCM-SD10 0.5-1' | | |
| | | No Recovery | | | | | |
| | | EOB | 5 | | | | |

VERTICAL DATUM:

GRD. ELEVATION:

T.O.C.:

S.W.L.:

CASING:

SCREEN:

WELL DEPTH:

COMPLETION NOTES:

LATITUDE: 47.133980562

LONGITUDE: -88.471329488

PROJECTION: Michigan GeoRef

NORTHING: 734287.659

EASTING: 312438.446



Reclamation and
Redevelopment
Division

BOREHOLE LOG

BORING/WELL: QMCM-SD12

SITE: Abandoned Mining Wastes Torch Lake

COUNTY: Houghton

DATE: June 11, 2016

TOWNSHIP: Torch Lake

DRILLER: B. Lower

TOWN: 55N

GEOLOGIST: B. Eustice

RANGE: 33W

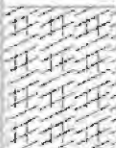

DRILL METHOD: Vibracore

SECTION: 23

TOTAL DEPTH: 2.3' in 56.4' of water

LOCATION DESCRIPTION: Quincy Mining Company Mason

ERNIE ID# 31000098

| WELL CONSTRUCTION | LITHOLOGIC LOG | DESCRIPTION | DEPTH | SAMPLE TYPE | SAMPLE ID | NOTES | Water Quality Meter |
|----------------------|--|--|-------|-------------|-------------------------|-------|------------------------|
| | | Lake Bottom | 0 | | | | |
| |  | SILTY CLAY reddish brown, loose, wet | | | QMCM-SD12 0-1' | | |
| |  | SILTY SAND fine grain, well sorted, reddish brown, firm, wet | | | QMCM-SD12 1-2.3' and FD | | |
| | | EOB | | | | | |
| | | | 5 | | | | |

VERTICAL DATUM:

GRD. ELEVATION:

T.O.C.:

S.W.L.:

CASING:

SCREEN:

WELL DEPTH:

COMPLETION NOTES:

LATITUDE: 47.149801601

LONGITUDE: -88.451174817

PROJECTION: Michigan GeoRef

NORTHING: 735997.295

EASTING: 314021.133



Reclamation and
Redevelopment
Division

BOREHOLE LOG

BORING/WELL: QMCM-SD13

SITE: Abandoned Mining Wastes Torch Lake

COUNTY: Houghton

DATE: June 11, 2016

TOWNSHIP: Torch Lake

DRILLER: B. Lower

TOWN: 55N

GEOLOGIST: B. Eustice

RANGE: 33W

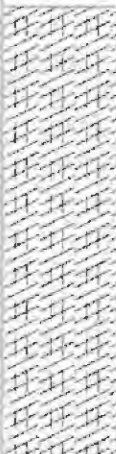

DRILL METHOD: Vibracore

SECTION: 23

TOTAL DEPTH: 5.5' in 57.7' of water

LOCATION DESCRIPTION: Quincy Mining Company Mason

ERNIE ID# 31000098

| WELL CONSTRUCTION | LITHOLOGIC LOG | DESCRIPTION | DEPTH | SAMPLE TYPE | SAMPLE ID | NOTES | Water Quality Meter |
|----------------------|---|--|-------|-------------|------------------|-------|------------------------|
| | | Lake Bottom | 0 | | | | |
| |  | SILTY CLAY reddish brown, loose, soft, wet | | | QMCM-SD13 0-3' | | |
| |  | SILTY SAND fine grain, well sorted, reddish brown, firm, wet | | | QMCM-SD13 3-4 2' | | |
| | | No Recovery | 5 | | | | |
| | | EOB | | | | | |

VERTICAL DATUM:

GRD. ELEVATION:

T.O.C.:

S.W.L.:

CASING:

SCREEN:

WELL DEPTH:

COMPLETION NOTES:

LATITUDE: 47.150117099

LONGITUDE: -88.450679670

PROJECTION: Michigan GeoRef

NORTHING: 736031.171

EASTING: 314059.750



Remediation and
Redevelopment
Division

BOREHOLE LOG

BORING/WELL: QMCM-SD14

SITE: Abandoned Mining Wastes Torch Lake

COUNTY: Houghton

DATE: June 11, 2016

TOWNSHIP: Torch Lake

DRILLER: B. Lower

TOWN: 55N

GEOLOGIST: B. Eustice

RANGE: 33W



DRILL METHOD: Vibracore

SECTION: 23

TOTAL DEPTH: 3' in 40.8' of water

LOCATION DESCRIPTION: Quincy Mining Company Mason

ERNIE ID# 31000098

| WELL CONSTRUCTION | LITHOLOGIC LOG | DESCRIPTION | DEPTH | SAMPLE TYPE | SAMPLE ID | NOTES | Water Quality Meter |
|----------------------|---|--|-------|---|------------------|-------|------------------------|
| | | Lake Bottom | 0 | | | | |
| |  | GRAVELLY SAND coarse grain, reddish brown, wet | |  | QMCM-SD14 0-0 3' | | |
| | | No Recovery | | | | | |
| | | EOB | 5 | | | | |

VERTICAL DATUM:

GRD. ELEVATION:

T.O.C.:

S.W.L.:

CASING:

SCREEN:

WELL DEPTH:

COMPLETION NOTES:

LATITUDE: 47.149805928

LONGITUDE: -88.450304528

PROJECTION: Michigan GeoRef

NORTHING: 735995.717

EASTING: 314087.101



Reclamation and
Redevelopment
Division

BOREHOLE LOG

BORING/WELL: QMCM-SD15

SITE: Abandoned Mining Wastes Torch Lake

COUNTY: Houghton

DATE: June 11, 2016

TOWNSHIP: Torch Lake

DRILLER: B. Lower

TOWN: 55N

GEOLOGIST: B. Eustice

RANGE: 33W

DRILL METHOD: Vibracore

SECTION: 23

TOTAL DEPTH: 6' in 53.4' of water

LOCATION DESCRIPTION: Quincy Mining Company Mason

ERNIE ID# 31000098

| WELL CONSTRUCTION | LITHOLOGIC LOG | DESCRIPTION | DEPTH | SAMPLE TYPE | SAMPLE ID | NOTES | Water Quality Meter |
|----------------------|-------------------|---|-------|-------------|--------------------|-------|------------------------|
| | | Lake Bottom | 0 | | | | |
| | | SANDY GRAVEL coarse grain, reddish brown, wet. | | | QMCM-SD15 0-1.1' | | |
| | | SILTY SAND fine grain, well sorted, reddish brown, wet. | | | | | |
| | | GRAVELLY SAND poorly sorted, reddish brown, wet. | | | | | |
| | | SILTY SAND fine grain, well sorted, reddish brown, wet. | | | QMCM-SD15 1.1-2.9' | | |
| | | GRAVELLY SAND poorly sorted, reddish brown, wet. | | | | | |
| | | SILTY SAND fine grain, well sorted, reddish brown, wet. | | | | | |
| | | GRAVELLY SAND poorly sorted, reddish brown, wet. | | | | | |
| | | No Recovery | | | | | |
| | | | 5 | | | | |
| | | E.O.B. | | | | | |

VERTICAL DATUM:

GRD. ELEVATION:

T.O.C.:

S.W.L.:

CASING:

SCREEN:

WELL DEPTH:

COMPLETION NOTES:

LATITUDE: 47.149486758

LONGITUDE: -88.450752931

PROJECTION: Michigan GeoRef

NORTHING: 735961.544

EASTING: 314052.020



Remediation and
Redevelopment
Division

BOREHOLE LOG

BORING/WELL: QMCM-SD17

SITE: Abandoned Mining Wastes Torch Lake

COUNTY: Houghton

DATE: 6/13/17

TOWNSHIP: Torch Lake

DRILLER: B. Lower

TOWN: 55N

GEOLOGIST: B. Eustice

RANGE: 33W

DRILL METHOD: Vibracore

SECTION: 23

TOTAL DEPTH: 4.2' in 36.2' of water

LOCATION DESCRIPTION: Quincy Mining Company Mason

ERNIE ID# 31000098

| WELL CONSTRUCTION | LITHOLOGIC LOG | DESCRIPTION | DEPTH | SAMPLE TYPE | SAMPLE ID | NOTES | Water Quality Meter |
|----------------------|-------------------|--|-------|-------------|------------------|-------|------------------------|
| | | Lake Bottom | 0 | | | | |
| | | SAND and CLAY brown, some organics. | | | | | |
| | | CLAY reddish brown, soft, wet. | | | QMCM-SD17 0-2' | | |
| | | SAND brown, medium grain, well sorted, with thin clay lenses. | | | | | |
| | | SAND and CLAY alternating layers of sand and clay, 1-4in thick. | | | QMCM-SD17 2-4.2' | | |
| | | EOB | 5 | | | | |

VERTICAL DATUM:

GRD. ELEVATION:

T.O.C.:

S.W.L.:

CASING:

SCREEN:

WELL DEPTH:

COMPLETION NOTES:

LATITUDE: 47.147031053

LONGITUDE: -88.456271795

PROJECTION: MiGeoRef

NORTHING: 735701.590

EASTING: 313625.241



Remediation and
Redevelopment
Division

BOREHOLE LOG

BORING/WELL: QMCM-SD19

SITE: Abandoned Mining Wastes Torch Lake

COUNTY: Houghton

DATE: 6/13/17

TOWNSHIP: Torch Lake

DRILLER: B. Lower

TOWN: 55N

GEOLOGIST: B. Eustice

RANGE: 33W

DRILL METHOD: Vibracore

SECTION: 23

TOTAL DEPTH: 4.3' in 35.8' of water

LOCATION DESCRIPTION: Quincy Mining Company Mason

ERNIE ID# 31000098

| WELL CONSTRUCTION | LITHOLOGIC LOG | DESCRIPTION | DEPTH | SAMPLE TYPE | SAMPLE ID | NOTES | Water Quality Meter |
|----------------------|-------------------|--|-------|-------------|--------------------|-------|------------------------|
| | | Lake Bottom | 0 | | | | |
| | | SAND brown, medium grain, well sorted. | | | | | |
| | | CLAY reddish brown, loose, wet. | | | QMCM-SD19 0-2.2' | | |
| | | SAND brown, medium grain, well sorted. | | | | | |
| | | CLAY reddish brown, soft, wet. | | | | | |
| | | SAND brown, medium grain, well sorted. | | | QMCM-SD19 2.2-4.3' | | |
| | | CLAY reddish brown, soft, wet. | | | | | |
| | | SAND brown, medium grain, well sorted. | | | | | |
| | | CLAY reddish brown, soft, wet. | | | | | |
| | | E.O.B. | 5 | | | | |

VERTICAL DATUM:

GRD. ELEVATION:

T.O.C.:

S.W.L.:

CASING:

SCREEN:

WELL DEPTH:

COMPLETION NOTES:

LATITUDE: 47.146547356

LONGITUDE: -88.456562260

PROJECTION: MiGeoRef

NORTHING: 735648.546

EASTING: 313601.547



Remediation and
Redevelopment
Division

BOREHOLE LOG

BORING/WELL: QMCM-SD20

SITE: Abandoned Mining Wastes Torch Lake

COUNTY: Houghton

DATE: 6/13/17

TOWNSHIP: Torch Lake

DRILLER: B. Lower

TOWN: 55N

GEOLOGIST: B. Eustice

RANGE: 33W



DRILL METHOD: Vibracore

SECTION: 23

TOTAL DEPTH: 4.4' in 34.5' of water

LOCATION DESCRIPTION: Quincy Mining Company Mason

ERNIE ID# 31000098

| WELL CONSTRUCTION | LITHOLOGIC LOG | DESCRIPTION | DEPTH | SAMPLE TYPE | SAMPLE ID | NOTES | Water Quality Meter |
|----------------------|--|--|-------|-------------|---------------------|-------|------------------------|
| | | Lake Bottom | 0 | | | | |
| |  | CLAY brown, soft, loose, wet | | | | | |
| |  | CLAY WITH COAL reddish brown, gravel sized coal pieces throughout | | | QMCM-SD20 0-2.1' | | |
| | | | | | QMCM-SD20 2.1-4.25' | | |
| | | No Recovery | | | | | |
| | | EOB | 5 | | | | |

VERTICAL DATUM:

GRD. ELEVATION:

T.O.C.:

S.W.L.:

CASING:

SCREEN:

WELL DEPTH:

COMPLETION NOTES:

LATITUDE: 47.146315659

LONGITUDE: -88.456748000

PROJECTION: MiGeoRef

NORTHING: 735623.248

EASTING: 313586.665



Remediation and
Redevelopment
Division

BOREHOLE LOG

BORING/WELL: QMCM-SD23

SITE: Abandoned Mining Wastes Torch Lake

COUNTY: Houghton

DATE: 6/12/17

TOWNSHIP: Torch Lake

DRILLER: B. Lower

TOWN: 55N

GEOLOGIST: B. Eustice

RANGE: 33W





DRILL METHOD: Vibracore

SECTION: 23

TOTAL DEPTH: 4.25' in 33.5' of water

LOCATION DESCRIPTION: Quincy Mining Company Mason

ERNIE ID# 31000098

| WELL CONSTRUCTION | LITHOLOGIC LOG | DESCRIPTION | DEPTH | SAMPLE TYPE | SAMPLE ID | NOTES | Water Quality Meter |
|----------------------|---|--|-------|-------------|-------------------|-------|------------------------|
| | | Lake Bottom | 0 | | | | |
| |  | SILTY CLAY reddish brown, loose, soft, wet. | | | QMCM-SD23 0-2' | | |
| |  | COAL gravel sized pieces of coal. | | | | | |
| |  | SILTY CLAY reddish brown, trace coal pieces, and some cardboard like debris | | | QMCM-SD23 2-4.25' | | |
| |  | COAL large pieces of coal in a fine matrix. | | | | | |
| | | EOB | 5 | | | | |

VERTICAL DATUM:

GRD. ELEVATION:

T.O.C.:

S.W.L.:

CASING:

SCREEN:

WELL DEPTH:

COMPLETION NOTES:

LATITUDE: 47.146015437

LONGITUDE: -88.456908954

PROJECTION: MiGeoRef

NORTHING: 735590.279

EASTING: 313573.424



Remediation and
Redevelopment
Division

BOREHOLE LOG

BORING/WELL: QMCM-SD26

SITE: Abandoned Mining Wastes Torch Lake

COUNTY: Houghton

DATE: 6/13/17

TOWNSHIP: Torch Lake

DRILLER: B. Lower

TOWN: 55N

GEOLOGIST: B. Eustice

RANGE: 33W

DRILL METHOD: Vibracore

SECTION: 23

TOTAL DEPTH: 5' in 36' of water

LOCATION DESCRIPTION: Quincy Mining Company Mason

ERNIE ID# 31000098

| WELL CONSTRUCTION | LITHOLOGIC LOG | DESCRIPTION | DEPTH | SAMPLE TYPE | SAMPLE ID | NOTES | Water Quality Meter |
|----------------------|-------------------|---|-------|-------------|------------------|-------|------------------------|
| | | Lake Bottom | 0 | | | | |
| | | CLAY reddish brown, soft, loose, wet, coal and rock (slate) @ 2ft, coal pieces @ 4ft | | | QMCM-SD26 0-2.5' | | |
| | | | | | QMCM-SD26 2.5-5' | | |
| | | | 5 | | | | |
| | | EOB | | | | | |

VERTICAL DATUM:

GRD. ELEVATION:

T.O.C.:

S.W.L.:

CASING:

SCREEN:

WELL DEPTH:

COMPLETION NOTES:

LATITUDE: 47.145907756

LONGITUDE: -88.456826199

PROJECTION: MiGeoRef

NORTHING: 735578.121

EASTING: 313579.321



Restoration and
Redevelopment
Division

BOREHOLE LOG

BORING/WELL: QMCM-SD28

SITE: Abandoned Mining Wastes Torch Lake

COUNTY: Houghton

DATE: 6/12/17

TOWNSHIP: Torch Lake

DRILLER: B. Lower

TOWN: 55N

GEOLOGIST: B. Eustice

RANGE: 33W




DRILL METHOD: Vibracore

SECTION: 23

TOTAL DEPTH: 4' in 34.7' of water

LOCATION DESCRIPTION: Quincy Mining Company Mason

ERNIE ID# 31000098

| WELL CONSTRUCTION | LITHOLOGIC LOG | DESCRIPTION | DEPTH | SAMPLE TYPE | SAMPLE ID | NOTES | Water Quality Meter |
|----------------------|---|--|-------|-------------|----------------|-------|------------------------|
| | | Lake Bottom | 0 | | | | |
| |  | SILTY CLAY reddish brown, soft, loose, wet. | | | QMCM-SD28 0-2' | | |
| |  | GRAVELLY SAND reddish brown, coarse grain, with fines, gravel sized coal pieces | | | | | |
| |  | SILTY CLAY reddish brown, wet, loose, with large coal pieces at bottom. | | | QMCM-SD28 2-4' | | |
| | | EOB | 5 | | | | |

VERTICAL DATUM:

GRD. ELEVATION:

T.O.C.:

S.W.L.:

CASING:

SCREEN:

WELL DEPTH:

COMPLETION NOTES:

LATITUDE: 47.14587677

LONGITUDE: -88.45695147

PROJECTION: MiGeoRef

NORTHING: 735574.964

EASTING: 313569.725



Remediation and
Redevelopment
Division

BOREHOLE LOG

BORING/WELL: QMCM-SD31

SITE: Abandoned Mining Wastes Torch Lake

COUNTY: Houghton

DATE: 6/13/17

TOWNSHIP: Torch Lake

DRILLER: B. Lower

TOWN: 55N

GEOLOGIST: B. Eustice

RANGE: 33W

DRILL METHOD: Vibracore

SECTION: 23

TOTAL DEPTH: 5.6' in 35.6' of water

LOCATION DESCRIPTION: Quincy Mining Company Mason

ERNIE ID# 31000098

| WELL CONSTRUCTION | LITHOLOGIC LOG | DESCRIPTION | DEPTH | SAMPLE TYPE | SAMPLE ID | NOTES | Water Quality Meter |
|----------------------|-------------------|---|-------|-------------|--------------------|-------|------------------------|
| | | Lake Bottom | 0 | | | | |
| | | CLAY brown, loose, soft, wet | | | | | |
| | | CLAY reddish brown, loose, wet, small sand seam <1 in @ 2.5 ft, coal at 5.6 ft | | | QMCM-SD31 0-2.8' | | |
| | | | | | | | |
| | | | | | QMCM-SD31 2.8-5.6' | | |
| | | | 5 | | | | |
| | | E.O.B. | | | | | |

VERTICAL DATUM:

GRD. ELEVATION:

T.O.C.:

S.W.L.:

CASING:

SCREEN:

WELL DEPTH:

COMPLETION NOTES:

LATITUDE: 47.145811832

LONGITUDE: -88.456895247

PROJECTION: MiGeoRef

NORTHING: 735567.629

EASTING: 313573.755



Reclamation and
Redevelopment
Division

BOREHOLE LOG

BORING/WELL: QMCM-SD33

SITE: Abandoned Mining Wastes Torch Lake

COUNTY: Houghton

DATE: 6/12/17

TOWNSHIP: Torch Lake

DRILLER: B. Lower

TOWN: 55N

GEOLOGIST: B. Eustice

RANGE: 33W





DRILL METHOD: Vibracore

SECTION: 23

TOTAL DEPTH: 5.1' in 34.6' of water

LOCATION DESCRIPTION: Quincy Mining Company Mason

ERNIE ID# 31000098

| WELL CONSTRUCTION | LITHOLOGIC LOG | DESCRIPTION | DEPTH | SAMPLE TYPE | SAMPLE ID | NOTES | Water Quality Meter |
|----------------------|---|--|-------|-------------|--------------------|-------|------------------------|
| | | Lake Bottom | 0 | | | | |
| |  | SILTY CLAY reddish brown, soft, loose, wet. | | | QMCM-SD33 0-2.5' | | |
| |  | GRAVELLY SAND reddish brown, coarse grain, poorly sorted. | | | | | |
| |  | SILTY CLAY reddish brown. Seam of black friable gravel sized slag @ 3.25ft. | | | QMCM-SD33 2.5-5.1' | | |
| |  | SILTY SAND brown, fine grain, well sorted, wet. | 5 | | | | |
| | | EOB | | | | | |

VERTICAL DATUM:

GRD. ELEVATION:

T.O.C.:

S.W.L.:

CASING:

SCREEN:

WELL DEPTH:

COMPLETION NOTES:

LATITUDE: 47.145677793

LONGITUDE: -88.457051254

PROJECTION: MiGeoRef

NORTHING: 735553.109

EASTING: 313561.466



| | |
|-------------------|--------------------------|
| VERTICAL DATUM: | LATITUDE: 47.145464727 |
| GRD. ELEVATION: | LONGITUDE: -88.457089469 |
| T.O.C.: | PROJECTION: MiGeoRef |
| S.W.L.: | NORTHING: 735529.531 |
| CASING: | EASTING: 313557.829 |
| SCREEN: | |
| WELL DEPTH: | |
| COMPLETION NOTES: | |



Restoration and
Redevelopment
Division

BOREHOLE LOG

BORING/WELL: QMCM-SD35

SITE: Abandoned Mining Wastes Torch Lake

COUNTY: Houghton

DATE: 6/12/17

TOWNSHIP: Torch Lake

DRILLER: B. Lower

TOWN: 55N

GEOLOGIST: B. Eustice

RANGE: 33W



DRILL METHOD: Vibracore

SECTION: 23

TOTAL DEPTH: 6' in 33.6' of water

LOCATION DESCRIPTION: Quincy Mining Company Mason

ERNIE ID# 31000098

| WELL CONSTRUCTION | LITHOLOGIC LOG | DESCRIPTION | DEPTH | SAMPLE TYPE | SAMPLE ID | NOTES | Water Quality Meter |
|----------------------|---|---|-------|-------------|---------------------|-------|------------------------|
| | | Lake Bottom | 0 | | | | |
| |  | CLAYEY SILT reddish brown, loose, soft, wet. | | | QMCM-SD35 0-0.75' | | |
| |  | GRAVELLY SAND reddish brown, coarse grain, poorly sorted, firm, wet. | | | QMCM-SD35 0.75-1.5' | | |
| | | No Recovery | | | | | |
| | | | 5 | | | | |
| | | EOB | | | | | |

VERTICAL DATUM:

GRD. ELEVATION:

T.O.C.:

S.W.L.:

CASING:

SCREEN:

WELL DEPTH:

COMPLETION NOTES:

LATITUDE: 47.145036800

LONGITUDE: -88.457132501

PROJECTION: MiGeoRef

NORTHING: 735482.096

EASTING: 313553.081



Remediation and
Redevelopment
Division

BOREHOLE LOG

BORING/WELL: QMCM-SD36

SITE: Abandoned Mining Wastes Torch Lake

COUNTY: Houghton

DATE: 6/12/17

TOWNSHIP: Torch Lake

DRILLER: B. Lower

TOWN: 55N

GEOLOGIST: B. Eustice

RANGE: 33W

DRILL METHOD: Vibracore

SECTION: 23

TOTAL DEPTH: 2.7' in 26.2' of water

LOCATION DESCRIPTION: Quincy Mining Company Mason

ERNIE ID# 31000098

| WELL CONSTRUCTION | LITHOLOGIC LOG | DESCRIPTION | DEPTH | SAMPLE TYPE | SAMPLE ID | NOTES | Water Quality Meter |
|----------------------|-------------------|---|-------|-------------|-------------------------|-------|------------------------|
| | | Lake Bottom | 0 | | | | |
| | | SILTY CLAY reddish brown, loose, soft, wet | | | QMCM-SD36 0-1 3' and FD | | |
| | | SILTY SAND reddish brown, fine grain, well sorted, wet | | | | | |
| | | GRAVELLY SAND reddish brown, coarse grain, poorly sorted, wet | | | QMCM-SD36 1 3-1 7' | | |
| | | No Recovery | | | | | |
| | | E.O.B. | 5 | | | | |

VERTICAL DATUM:

GRD. ELEVATION:

T.O.C.:

S.W.L.:

CASING:

SCREEN:

WELL DEPTH:

COMPLETION NOTES:

LATITUDE: 47.144653222

LONGITUDE: -88.459241262

PROJECTION: MiGeoRef

NORTHING: 735444.487

EASTING: 313391.923



Remediation and
Redevelopment
Division

BOREHOLE LOG

BORING/WELL: QMCM-SD38

SITE: Abandoned Mining Wastes Torch Lake

COUNTY: Houghton

DATE: 6/12/17

TOWNSHIP: Torch Lake

DRILLER: B. Lower

TOWN: 55N

GEOLOGIST: B. Eustice

RANGE: 33W



DRILL METHOD: Vibracore

SECTION: 23

TOTAL DEPTH: 6' in 12.5' of water

LOCATION DESCRIPTION: Quincy Mining Company Mason

ERNIE ID# 31000098

| WELL CONSTRUCTION | LITHOLOGIC LOG | DESCRIPTION | DEPTH | SAMPLE TYPE | SAMPLE ID | NOTES | Water Quality Meter |
|----------------------|---|---|-------|---|------------------|-------|------------------------|
| | | Lake Bottom | 0 | | | | |
| |  | GRAVELLY SAND reddish brown, coarse grain, poorly sorted. | |  | QMCM-SD38 0-0.5' | | |
| | | No Recovery | | | | | |
| | | | 5 | | | | |
| | | EOB | | | | | |

VERTICAL DATUM:

GRD. ELEVATION:

T.O.C.:

S.W.L.:

CASING:

SCREEN:

WELL DEPTH:

COMPLETION NOTES:

LATITUDE: 47.144618429

LONGITUDE: -88.457657222

PROJECTION: MiGeoRef

NORTHING: 735436.865

EASTING: 313511.858



Reclamation and
Redevelopment
Division

BOREHOLE LOG

BORING/WELL: QMCM-SD39

SITE: Abandoned Mining Wastes Torch Lake

COUNTY: Houghton

DATE: 6/12/17

TOWNSHIP: Torch Lake

DRILLER: B. Lower

TOWN: 55N

GEOLOGIST: B. Eustice

RANGE: 33W

DRILL METHOD: Vibracore

SECTION: 23

TOTAL DEPTH: 5' in 42' of water

LOCATION DESCRIPTION: Quincy Mining Company Mason

ERNIE ID# 31000098

| WELL CONSTRUCTION | LITHOLOGIC LOG | DESCRIPTION | DEPTH | SAMPLE TYPE | SAMPLE ID | NOTES | Water Quality Meter |
|----------------------|-------------------|---|-------|-------------|---------------------|-------|------------------------|
| | | Lake Bottom | 0 | | | | |
| | | SILTY SAND reddish brown, fine grain, well sorted, loose, soft, wet. | | | QMCM-SD39 0-1.6' | | |
| | | SAND reddish brown, fine grain, well sorted, firm, wet. | | | | | |
| | | CLAYEY SAND red - brown mottled, fine grain, well sorted, soft | | | QMCM-SD39 1.6-3.75' | | |
| | | No Recovery | | | | | |
| | | | 5 | | | | |
| | | EOB | | | | | |

VERTICAL DATUM:

GRD. ELEVATION:

T.O.C.:

S.W.L.:

CASING:

SCREEN:

WELL DEPTH:

COMPLETION NOTES:

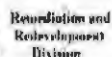
LATITUDE: 47.144598701

LONGITUDE: -88.456799448

PROJECTION: MiGeoRef

NORTHING: 735432.640

EASTING: 313576.801



EASTING: 313369.181



LATITUDE: 47.144394086
LONGITUDE: -88.459711839
PROJECTION: MiGeoRef
NORTHING: 735416.817
EASTING: 313355.356



Reclamation and
Redevelopment
Division

BOREHOLE LOG

BORING/WELL: QMCM-SD42

SITE: Abandoned Mining Wastes Torch Lake

COUNTY: Houghton

DATE: 6/12/17

TOWNSHIP: Torch Lake

DRILLER: B. Lower

TOWN: 55N

GEOLOGIST: B. Eustice

RANGE: 33W

DRILL METHOD: Vibracore

SECTION: 23

TOTAL DEPTH: 3' in 24.3' of water

LOCATION DESCRIPTION: Quincy Mining Company Mason

ERNIE ID# 31000098

| WELL CONSTRUCTION | LITHOLOGIC LOG | DESCRIPTION | DEPTH | SAMPLE TYPE | SAMPLE ID | NOTES | Water Quality Meter |
|----------------------|-------------------|--|-------|-------------|---------------------|-------|------------------------|
| | | Lake Bottom | 0 | | | | |
| | | SILTY SAND brown, loose, soft, firming downward, wet | | | QMCM-SD42 0-1.3' | | |
| | | | | | QMCM-SD42 1.3-2.75' | | |
| | | No Recovery | | | | | |
| | | EOB | 5 | | | | |

VERTICAL DATUM:

GRD. ELEVATION:

T.O.C.:

S.W.L.:

CASING:

SCREEN:

WELL DEPTH:

COMPLETION NOTES:

LATITUDE: 47.144393588

LONGITUDE: -88.459393784

PROJECTION: MiGeoRef

NORTHING: 735416.007

EASTING: 313379.480



Reclamation and
Redevelopment
Division

BOREHOLE LOG

BORING/WELL: QMCM-SD43

SITE: Abandoned Mining Wastes Torch Lake

COUNTY: Houghton

DATE: 6/12/17

TOWNSHIP: Torch Lake

DRILLER: B. Lower

TOWN: 55N

GEOLOGIST: B. Eustice

RANGE: 33W

DRILL METHOD: Vibracore

SECTION: 23

TOTAL DEPTH: 4.5' in 26.4' of water

LOCATION DESCRIPTION: Quincy Mining Company Mason

ERNIE ID# 31000098

| WELL CONSTRUCTION | LITHOLOGIC LOG | DESCRIPTION | DEPTH | SAMPLE TYPE | SAMPLE ID | NOTES | Water Quality Meter |
|----------------------|-------------------|--|-------|-------------|------------------|-------|------------------------|
| | | Lake Bottom | 0 | | | | |
| | | SILTY SAND reddish brown, fine grain, soft to firm. | | | QMCM-SD43 0-0.9' | | |
| | | SILTY SAND reddish brown, fine grain, firm. Less fines than above | | | QMCM-SD43 0.9-3' | | |
| | | No Recovery | | | | | |
| | | EOB | 5 | | | | |

VERTICAL DATUM:

GRD. ELEVATION:

T.O.C.:

S.W.L.:

CASING:

SCREEN:

WELL DEPTH:

COMPLETION NOTES:

LATITUDE: 47.144495523

LONGITUDE: -88.459251025

PROJECTION: MiGeoRef

NORTHING: 735426.992

EASTING: 313390.835



Restoration and
Redevelopment
Division

BOREHOLE LOG

BORING/WELL: QMCM-SD46

SITE: Abandoned Mining Wastes Torch Lake

COUNTY: Houghton

DATE: 6/13/17

TOWNSHIP: Torch Lake

DRILLER: B. Lower

TOWN: 55N

GEOLOGIST: B. Eustice

RANGE: 33W

DRILL METHOD: Vibracore

SECTION: 26

TOTAL DEPTH: 5.2' in 27.6' of water

LOCATION DESCRIPTION: Quincy Mining Company Mason

ERNIE ID# 31000098

| WELL CONSTRUCTION | LITHOLOGIC LOG | DESCRIPTION | DEPTH | SAMPLE TYPE | SAMPLE ID | NOTES | Water Quality Meter |
|----------------------|-------------------|---|-------|-------------|---------------------------|-------|------------------------|
| | | Lake Bottom | 0 | | | | |
| | | SILTY CLAY reddish brown, loose, soft | | | QMCM-SD46 0-2.5' | | |
| | | | | | QMCM-SD46 2.5-5.2' and FD | | |
| | | SAND brown, medium grain, well sorted | 5 | | | | |
| | | EOB | | | | | |

VERTICAL DATUM:

GRD. ELEVATION:

T.O.C.:

S.W.L.:

CASING:

SCREEN:

WELL DEPTH:

COMPLETION NOTES:

LATITUDE: 47.139613980

LONGITUDE: -88.453960545

PROJECTION: MiGeoRef

NORTHING: 734872.179

EASTING: 313774.666



Reclamation and
Development
Division

BOREHOLE LOG

BORING/WELL: QMCM-SD47/SW08

SITE: Abandoned Mining Wastes Torch Lake

COUNTY: Houghton

DATE: June 9, 2016

TOWNSHIP: Torch Lake

DRILLER: B. Lower

TOWN: 55N

GEOLOGIST: B. Eustice

RANGE: 33W

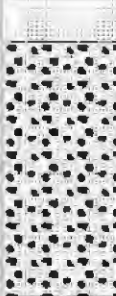

DRILL METHOD: Vibracore

SECTION: 23

TOTAL DEPTH: 4' in 0.2' of water

LOCATION DESCRIPTION: Quincy Mining Company Mason

ERNIE ID# 31000098

| WELL CONSTRUCTION | LITHOLOGIC LOG | DESCRIPTION | DEPTH | SAMPLE TYPE | SAMPLE ID | NOTES | Water Quality Meter |
|----------------------|---|---|-------|-------------|----------------|-------|------------------------|
| | | Lake Bottom | 0 | | | | |
| |  | SAND fine grain, some gravel, red | | | | | |
| | | GRAVELLY SAND coarse grain, well sorted, red and brown, wet, black streak at 2ft, no odor. | | | QMCM-SD47 0-2' | | |
| |  | SAND medium grain, trace gravel, well sorted, brownish red, wet. | | | | | |
| | | No Recovery | | | | | |
| | | EOB | 5 | | | | |

VERTICAL DATUM:

GRD. ELEVATION:

T.O.C.:

S.W.L.:

CASING:

SCREEN:

WELL DEPTH:

COMPLETION NOTES:

LATITUDE: 47.151089977

LONGITUDE: -88.455311408

PROJECTION: Michigan GeoRef

NORTHING: 736150.206

EASTING: 313712.120