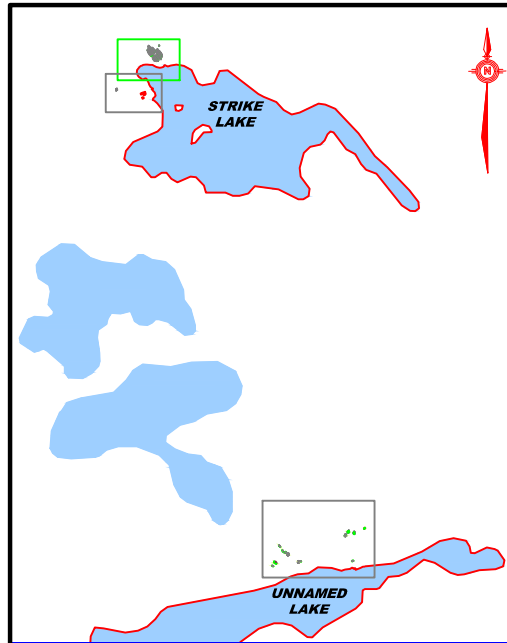




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| | | | | | | |
|-------------------|-------------------------------------------------------------------|---------------|-----------|-------------|----------|------------------------|
| | REMEDIATION ACTION PLAN FOR 7 ABANDONED MINE SITES, NT | | | | | |
| | JOON MINE: GENERAL SITE PLAN | | | | | |
| | PROJECT No. 122510933 | OFFICE OTT | DES DW | CKD FL | REV 0 | DRAWING |
| DATE: Mar 2015 | SHEET No. - of - | DWN APP | LC | STATUS - | | FIGURE JM 1 |

Scale: 1: 4 000 (metres)

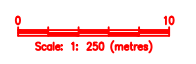


KEY PLAN
N.T.S.



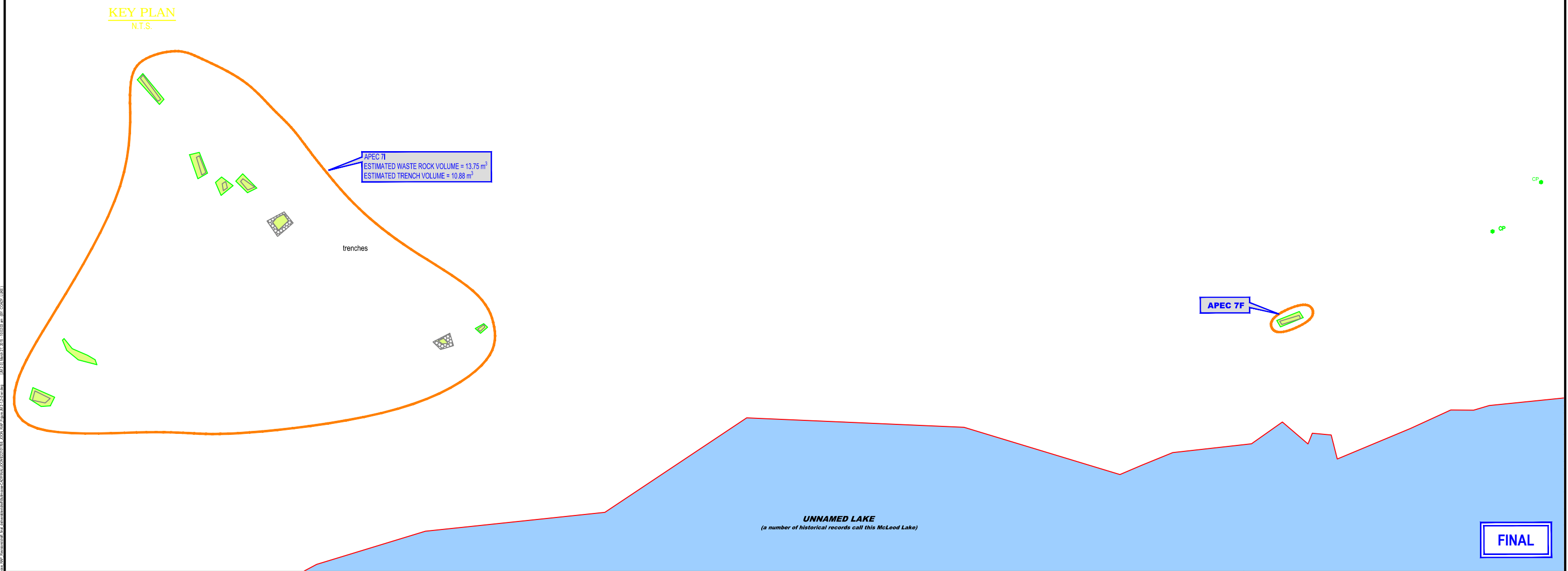
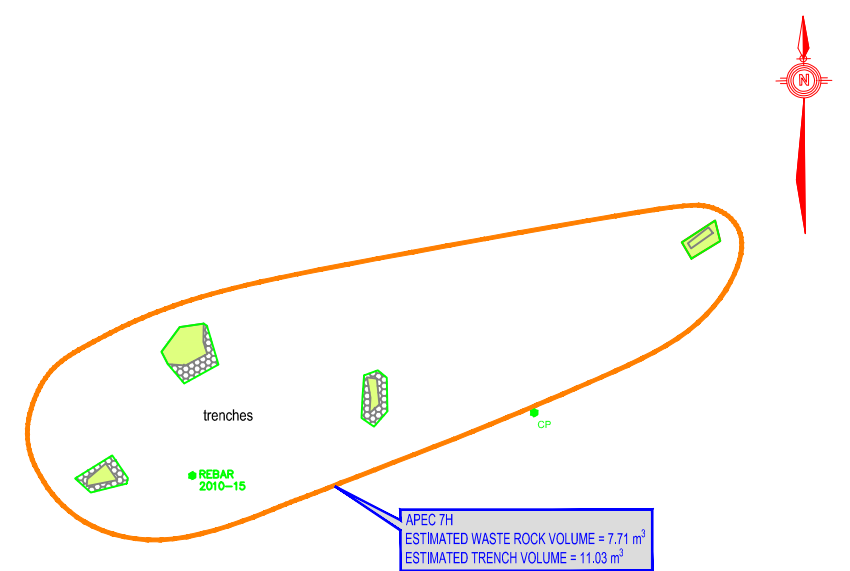
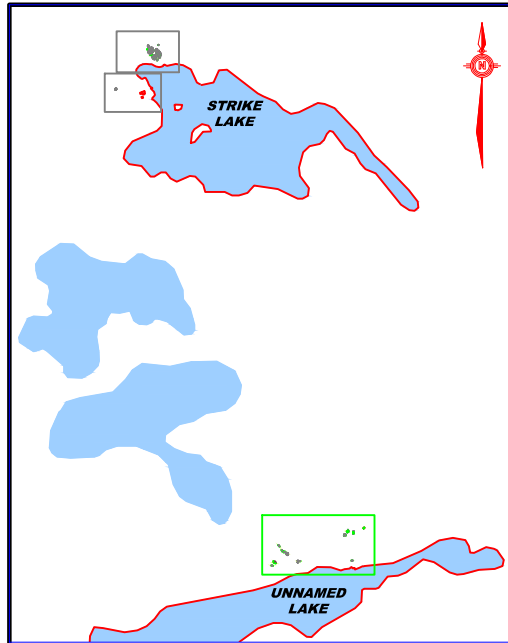
FINAL

- LEGEND:**
- WASTE ROCK SAMPLE LOCATION
 - TRENCH
 - WASTE ROCK
 - CONTROL POINT
 - APEC BOUNDARY

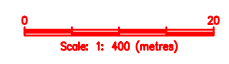


| | | | | | | |
|--|------------------------------------------------------------------------------------------|---------------------|------------------|-------------|----------|-----------------------------|
| | REMEDIATION ACTION PLAN FOR 7 ABANDONED MINE SITES, NT | | | | | |
| | JOON MINE - AREA 1: ESTIMATED VOLUMES FOR WASTE ROCK AND PHYSICAL HAZARDS | | | | | |
| | PROJECT No. 122510933 | OFFICE OTT | DES DW | CKD FL | REV 0 | DRAWING FIGURE JM 2-1 |
| | DATE Mar 2015 | SHEET No. - of - | DWN APP LC | STATUS - | | |

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- LEGEND:
- WASTE ROCK SAMPLE LOCATION
 - TRENCH
 - WASTE ROCK
 - CP - CONTROL POINT
 - APEC BOUNDARY



CLIENT

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REMEDIACTION ACTION PLAN FOR 7 ABANDONED MINE SITES, NT

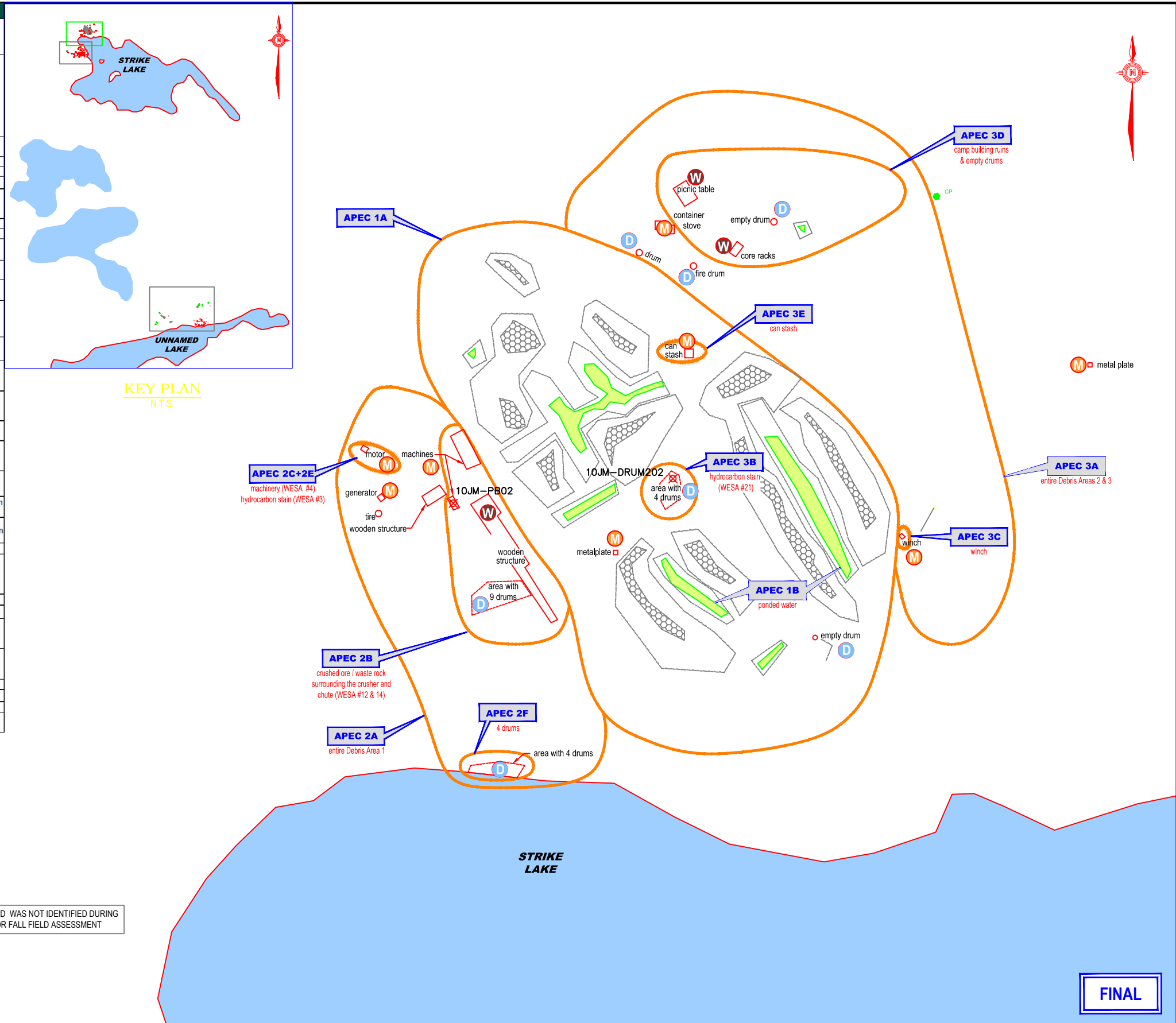
JON MINE - AREA 3:
ESTIMATED VOLUMES FOR
WASTE ROCK AND PHYSICAL HAZARDS

| | | | | | |
|--------------------------|---------------------|-----------|-----------|-------------|------------------|
| PROJECT No. 122510933 | OFFICE OTT | DES DW | CKD FL | REV 0 | DRAWING |
| DATE Mar 2015 | SHEET No. - of - | DWN LC | APP - | STATUS - | FIGURE JM 2-3 |

Stantec

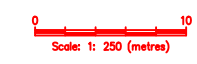
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| JOON NON-HAZARDOUS AND HAZARDOUS MATERIALS INVENTORY TABLE | | | | | | |
|------------------------------------------------------------|----------------------------------------------------------------------------|-------------------------------------|----------------------------------|---------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| APEC # | APEC Description | Material Classification | Material Type | Volume (m ³ , drums and litres) ¹ | Material Description | Condition |
| 1A | Open rock faces and loose blast rocks | Non-Hazardous | Metal Debris | 3 | 20 L metal pails (2), 4 rail tracks (6 m long), metal chain and 5 stakes (1.5 m long), 30 L drum empty, 10 metal food cans, 2 yellow metal doors (0.2 m ³), tube (5 m long), bucket (0.25 m ³), 2 cables, 2 drillings rods (2 m long), half drum, Drum #32: garbage drum, 2/3 full of cans and metal debris, "Empty drum": Drum #33 orange 1/3 full of rocks and leaves | Rusted |
| | | | Rubber Debris | 0.6 | 2 Rubber Mats with interior insulation, sampled and is not an ACM. | Intact |
| | | | Textile | 0.5 | Blue Tarp | Intact |
| 1B | Ponded Water | None Identified | None Identified | None Identified | None Identified | None Identified |
| 2A | Entire Debris Area 1 | Non-Hazardous | Wood Debris | 0.5 | Alternator wood stand, grinder stand, 5 wood 2x4s | Unpainted |
| | | | Metal Debris | 4.5 | Half drum, 23 drum lids, crushed drum, Drum #38: Red, empty, 2 pipes (5.5 m long), 2 pipes (4 m long), cans, stove west of APEC 2A | Rusted |
| | | | Rubber Debris | 1 | 2 tires, 2 roles of rubber hoses | Intact |
| | | | Textile | 3 | 7 Canvas hose rolls | Intact |
| | | | Hazardous (leachable lead paint) | Metal Debris | 1 | Rusted red metal engine (0.25 m ³), blue rusted alternator (0.13 m ³) |
| 2B | Crushed ore/waste rock surrounding the crusher and chute (WESA #12 and 14) | Non-Hazardous | Wood Debris | 10 | Chute: wood structure, (1 m wide, 2.4 m high, 20 m long), Wood frame at bottom of chute: 16 m ² | Unpainted |
| | | | Metal Debris | 3 | Thin metal covering the chute, 9 Drums: Drums #39-47, vertical, full of ore, rusted and 2 half drums, one filled with sand, one empty. | Partially Rusted, Drums have large holes, are falling apart |
| | | | Rubber Debris | 0.5 | Rubber mat (0.3 m ³) and rubber hose with interior insulation, 4 rubber tires on crusher. | Intact |
| | | Hazardous (leachable lead paint) | Metal Debris | 8.5 | Blue rusted grinder with rubber belts (0.5 m ³), Yellow and blue rusted metal crusher (8.1 m ²) | Intact |
| | | Hazardous (hydrocarbon content) | Tar | 10 L | 20 L drum 1/2 full of roof tar | Rusted |
| | | Hazardous (lead and sulphuric acid) | Battery | 0.1 | Decomposed crusher battery | Intact |
| 2C | Machinery (WESA #4) | Hazardous (leachable lead paint) | Metal Debris | 0.5 | Metal blue rusted motor. | Partially Rusted |
| 2D | Hydrocarbon Stain (WESA #9) | None Identified | None Identified | None Identified | None Identified | None Identified |
| 2E | Hydrocarbon Stain (WESA #3) | Same as APEC 2C on the figure | Same as APEC 2C on the figure | Same as APEC 2C on the figure | Same as APEC 2C on the figure | Same as APEC 2C on the figure |
| 2F | 4 Drums | Non-Hazardous | Metal Debris | 1.5 | All empty drums, no color, 2: 205 L, 1: 20 L (Labeled: CRC-5 S-R 18-10-43 Property of Imperial Oil), 1: 50 L | Rusted, cracked, open |
| 3A | Entire Debris Areas 2 and 3 | Non-Hazardous | Wood Debris | 2 | Tent frame and log pile | Unpainted |
| | | | Metal Debris | 1 | Half drum, old gas can box of nails, chimney vent, stove, drilling rod, half stove drum with vent, drum: Used as a stove with vent, heating duct, drum top, 3 metal lids, metal plate east of APEC 3A | Rusted |
| | | | Rubber Debris | 0.3 | Rubber mat with interior insulation | Intact |
| | | | Plastic Debris | 0.2 | 2 empty black oil plastic cans | Intact |
| 3A | Entire Debris Areas 2 and 3 | Hazardous (hydrocarbon content) | Hydrocarbon liquid | 30L | Full old gas can | - |
| 3B | Hydrocarbon Stain (WESA #21) | Hazardous (hydrocarbon content) | Drums (205L) | 3.5 drums, 154 L (3 x 51.25 L) | All 1/4 full: Drums #34 (diesel), #35 (diesel), #36 (heavy oil), and 1 30 L rusted drum | Partially rusted |
| 3C | Winch | Non-Hazardous | Metal Debris | 0.5 | Winch (Case and two roles of steel cable) | Rusted |
| 3D | Camp building ruins and empty drums | Non-Hazardous | Wood Debris | 3 | Picnic Table, Core racks | Unpainted |
| | | | Metal Debris | 5 | Steel chain, 1 drum black and empty | Rusted |
| 3E | Can Stash | Non-Hazardous | Metal Debris | 1 | Drum #32 Rusted, 2/3 full of metal debris and cans, used as garbage drum | Rusted |



- LEGEND:
- HAZMAT SAMPLE LOCATION
 - TRENCH
 - WASTE ROCK
 - CONTROL POINT
 - APEC BOUNDARY
 - DRUM
 - METAL DEBRIS
 - WOOD DEBRIS
 - VEHICLE

- DRUM
- METAL DEBRIS
- WOOD DEBRIS
- VEHICLE



CLIENT: Public Works and Government Services Canada / Travaux publics et Services gouvernementaux Canada

REMEDIACTION ACTION PLAN FOR 7 ABANDONED MINE SITES, NT

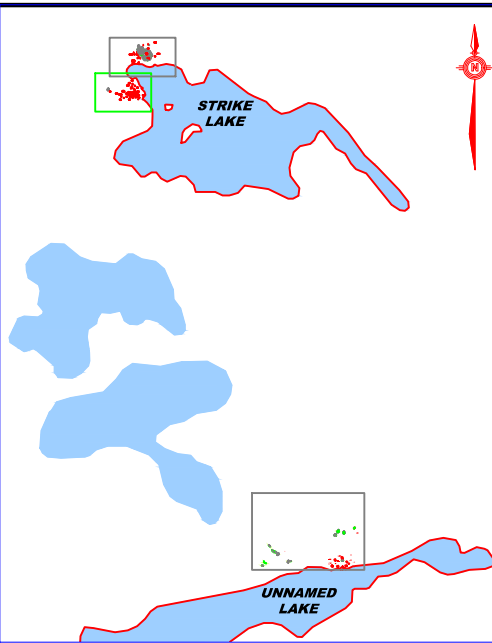
JOON MINE - AREA 1: HAZARDOUS AND NON-HAZARDOUS MATERIALS

PROJECT No. 122510933 OFFICE OTT DES DW FL REV 0 DRAWING DATE: Mar 2015 SHEET No. - of - DWN APP STATUS - LC - - - - - FIGURE JM 3-1

Stantec

FINAL

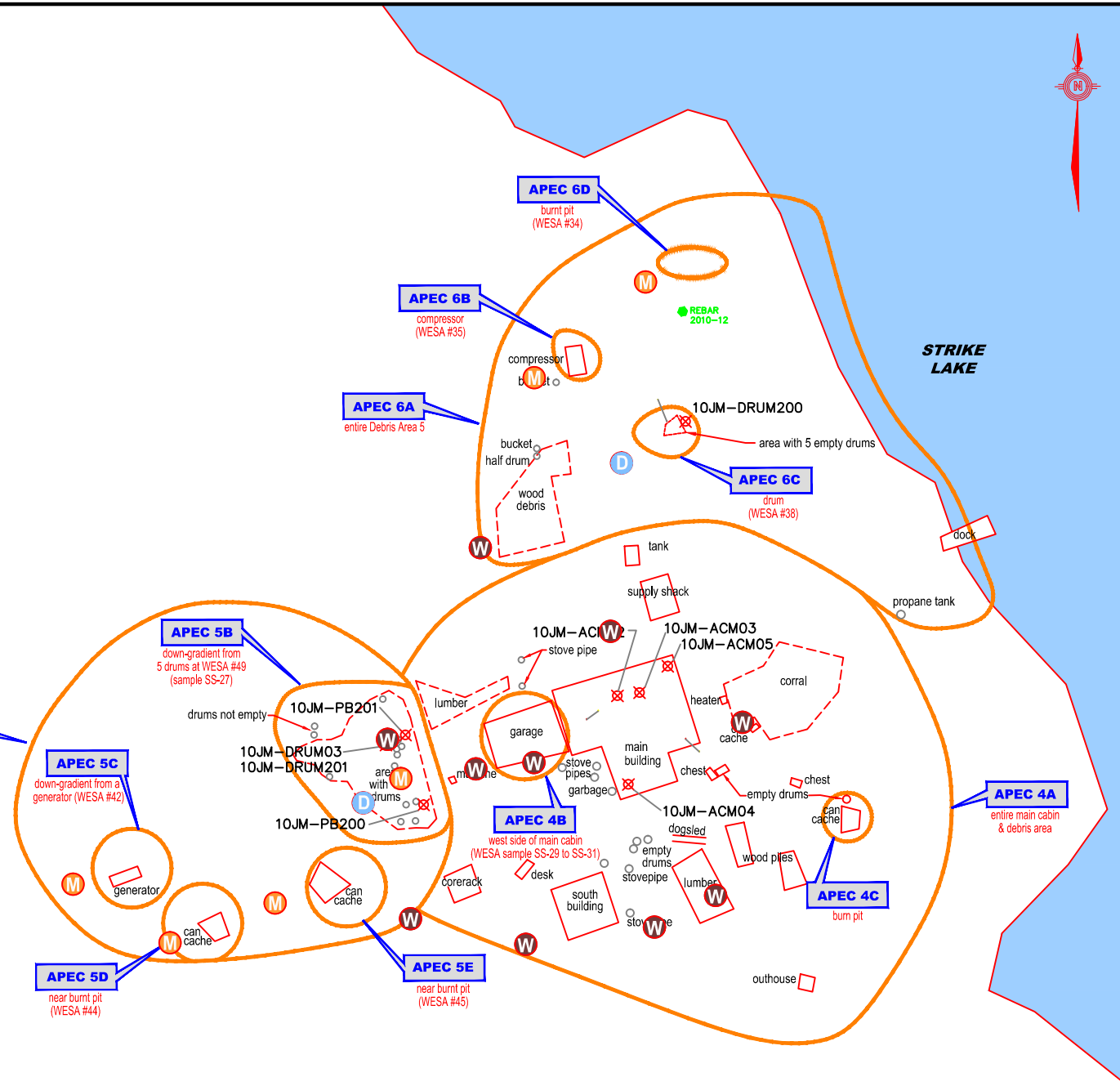
| JOON NON-HAZARDOUS AND HAZARDOUS MATERIALS INVENTORY TABLE | | | | | | | | | |
|------------------------------------------------------------|----------------------------------------------------------|-----------------------------------------|----------------------|---------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|--------------------------------------------------------------------------------------|----------------------|
| APEC # | APEC Description | Material Classification | Material Type | Volume (m ³ , drums and litres) ¹ | Material Description | Condition | | | |
| 4A | Main Building 9.75 x 10 x 3.5 | Non-Hazardous | Wood Debris | 30 | 2x4s, plywood construction, newspaper insulation, red window and door frames, white door sampled and does not contain leachable lead paint. Shelves, tables, books. | Intact | | | |
| | | | Metal Debris | 3 | 1 drum (empty, rusted), cast iron stove with vent, wood and metal bed frames, cans, food containers, nails. | Rusted | | | |
| | | | Insulation | 2 | Fibreglass insulation within all cabin walls | Mostly intact, some in pieces | | | |
| | | | Plastic Debris | 1 | Plastic vapor barrier along inside wall of cabin, tarp. | Mostly intact, some in pieces | | | |
| | | | Roofing Material | 2 | Tar paper and shingles | Intact on roof, some surrounding | | | |
| | Supply shack 3.2 m x 2.3 m x 2.8 m | Non-Hazardous | Batteries | 0.3 | 3 Car Batteries | Intact | | | |
| | | | Refrigeration Unit | 1 | 1 fridge | Intact | | | |
| | 4A | South building 4.3 m x 3.5 m x 4.3 m | Non-Hazardous | Wood Debris | 6 | Building (South of Main Building): Debris wood, cardboard, 1 m ² wood shelves | Unpainted | | |
| | | | | Metal Debris | 2 | Metal table: 1.5 m ² metal rusted stove and vents 1 m x 0.5 m 1/4 full of ash, one metal spring bed, plates, shelf. Machine: winch, 1 x 0.3 x 0.3 m | Rusted | | |
| | | | | Insulation | 1.5 | Fibreglass insulation within all cabin walls | Deteriorating | | |
| Plastic Debris | | | | 1 | Plastic vapor barrier along inside wall of cabin, tarp, plastic debris. | Tom | | | |
| Roofing Material | | | | 1 | White shingles and tar paper roof (same as main cabin). | Intact | | | |
| Debris Area | | Non-Hazardous | Textile | 0.1 | Carpet 6 m ² | Intact | | | |
| | | | Lights | 0.1 | Contains: 2 fluorescent lights 1968 silver ends, one ballast (GE 17A240E) contains no PCBs. | Intact | | | |
| 4A | | Debris Area | Non-Hazardous | Wood Debris | 4 | Coral: 8 wood logs high, 17 m around, wood debris: 2 m ³ , Debris Area: 3 chests (1.5 m ³), lumber: (4 m x 2 m x 2 m), table, 14 core racks: (2 m x 0.5 m), wood table with drawers, 3 plywood sheets 3 m x 1 m, 60 core racks and cores in wood box 2.3 m x 2.3 m x 0.9 m. Dogsled, 2.5 m x 0.65 m x 0.3 m, Outhouse: 1.2 m x 1.2 m x 2 m wood, 5 gallon pail, metal black seat. | Unpainted | | |
| | | | | Metal Debris | 1 | Heater: Duothem furnace, Corner of coral: one stove drum, empty, 3 50 L drums, vents, container. Metal Debris: 5 bed frames, Drum #16: black, empty. East of APEC 4A: half drum with grate used as fire pit, 3 metal chairs. | Rusted | | |
| | | | | Plastic | 0.5 | Plastic: 25 L, 2 x plastic containers, tarp. | Intact | | |
| | Roofing Material | | | 1 | Pieces of tar paper and shingle sheets around supply shack and main building, sampled and it not an ACM. | Tom, scattered | | | |
| | Tank | | | 1 | Stainless steel tank, good condition, empty (1.65 m x 1.1 m x 0.6 m) | Intact | | | |
| | Textile | | | 1 | Canvas tarp | Tom | | | |
| | Pressurized Cylinder | | | 0.3 | Propane, acetylene or oxygen tank | Intact | | | |
| | 4B | | | West Side of Main Cabin (Garage 6.2x3.85x3.5m) | Non-Hazardous | Metal Debris | 1 | Garage: 12 camp fuel containers, 1 engine, Drums #17-20: 2 red empty, 2 black empty. | Collapsed, unpainted |
| | 4C | | | Burn Pit | Non-Hazardous | Metal Debris | 0.5 | Can Cache: empty drum, small generator, cans (2 m x 3 m) | |
| | 5A | | | Entire Debris Area 4 | None Identified | None Identified | None Identified | None Identified | None Identified |
| 5B | Down-gradient from five drums at WESA #49 (Sample SS-27) | Hazardous (Hydrocarbon content) | Drums (205L) | 15 drums, 1230 L (5 x 205 L, 1 x 136.6 L, 1 x 68.3 L) | Drums #1-15: 5 black, 10 red. Mostly diesel, some gas: 5 full, 1 2/3 full, 1 1/3 full, 2 slight remains and 3 empty. Drums #7, #8, #10 (Label on bottom: CTC 17ESTC 184687 Hunter 28 E) | Partially Rusted | | | |
| 5C | Down-gradient from a generator | Non-Hazardous | Metal Debris | 2.1 | Generator: 0.9 m x 2.6 m x 0.9 m, likely contains residual oil and diesel | Rusted | | | |
| 5D | Near Burnt Pit (WESA #44) | Non-Hazardous | Metal Debris | 2 | Can cache: tin cans, food cans, burnt wood. | Rusted | | | |
| 5E | Near Burnt Pit (WESA #45) | Non-Hazardous | Metal Debris | 3 | Can cache: tin, pop cans, glass bottles, food cans | Rusted | | | |
| 5F | Small trench | None Identified | None Identified | None Identified | None Identified | None Identified | | | |
| 6A | Entire Debris Area 5 | Non-Hazardous | Wood Debris | 18 | Wood pile of 50 logs and plywood, wood box, Dock: 2x4's and plywood, 4 m x 2 m x 2 m. | Unpainted | | | |
| | | | Metal Debris | 0.5 | 20 L pail, half drum, 2 folding chairs | Rusted | | | |
| | | | Plastic | 0.1 | 20 L pail, 25 L plastic container | Intact | | | |
| | | Hazardous (Contents) | Pressurized Cylinder | 0.5 | White and rusted, content propane, acetylene or oxygen | Partially Rusted | | | |
| 6B | Compressor (WESA # 35) | Hazardous (Contents) | Batteries | 0.1 | One vehicle battery | Intact | | | |
| | | | Anti-freeze | 4 L | Esso Anti-freeze container, residual hydraulic oils, diesel, no leaking. | Intact | | | |
| | | | Propane | 0.1 | Propane tank | Intact | | | |
| 6C | Drum (WESA # 38) | Hazardous (Hydrocarbon content) | Drums (205L) | 5 drums, 768 L (5 x 153.75 L) | 5 Drums: Drums #21-25, All black and 3/4 full of diesel. | Partially Rusted | | | |
| 6D | Burn Pit (WESA # 34) | Non-Hazardous | Metal Debris | 1 | Contains mostly metal, ash, sticks, cans, possibly fibre glass (4 x 2.2 m). | Rusted, burnt | | | |
| N/A | South 440 m yellow Flextrack Nodwell (4.3 m x 2.3 m) | Non-Hazardous | Wood Debris | 1 | Wood in cab | Unpainted | | | |
| | | | Metal Debris | 5 | Metal flex track metal flatbed and cab, paint sampled is not leachable lead, Model: FN25 | Partially Rusted | | | |
| | | | Rubber Debris | 1 | Rubber track | Intact | | | |
| | | | Insulation | 0.5 | Fibreglass insulation in cab | Deteriorating | | | |



KEY PLAN
N.T.S.

APEC 5F
small trench

approximately 440 m
to sample 10JM-PB03
at Nodwell



FINAL

- LEGEND:
- HAZMAT SAMPLE LOCATION
 - TRENCH
 - WASTE ROCK
 - CONTROL POINT
 - APEC BOUNDARY
 - DRUM
 - METAL DEBRIS
 - WOOD DEBRIS
 - VEHICLE

CLIENT: Public Works and Government Services Canada / Travaux publics et Services Gouvernementaux Canada

PROJECT No: 122510933 | OFFICE: OTT | DES: DW | CKD: FL | REV: 0 | DRAWING: FIGURE JM 3-2

DATE: Mar 2015 | SHEET No: - of - | DWN: APP | STATUS: -

REMEDIATION ACTION PLAN FOR 7 ABANDONED MINE SITES, NT

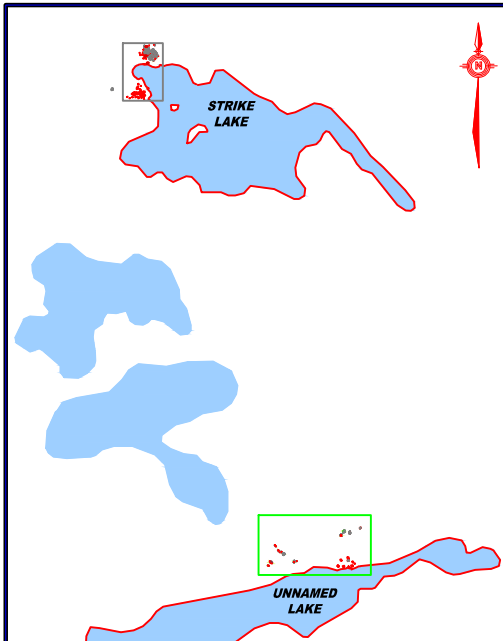
JOON MINE - AREA 2: HAZARDOUS AND NON-HAZARDOUS MATERIALS

Scale: 1: 250 (metres)

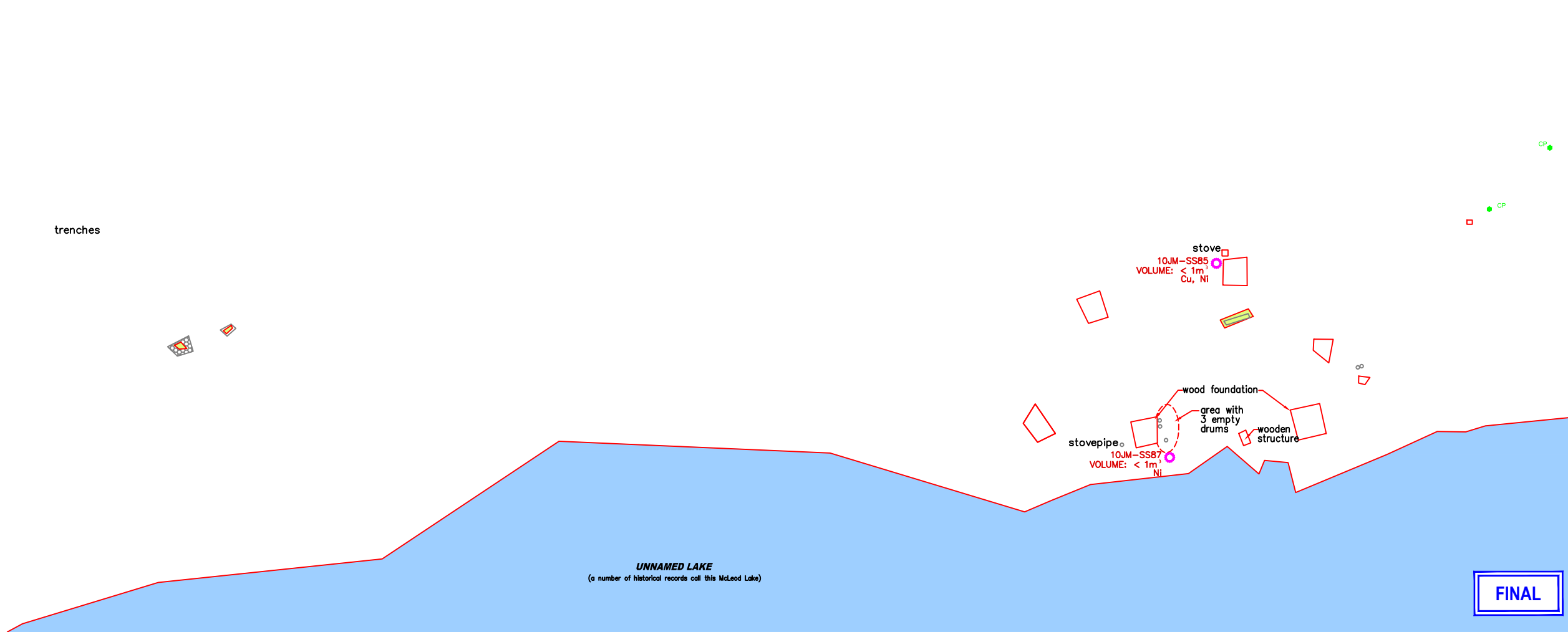
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| WASTE STREAM | TOTAL ESTIMATED VOLUME (m³) | UNCERTAINTY (m³) |
|-----------------------------|-----------------------------|------------------|
| METALS + PHC IMPACTED SOILS | 13 | 7 |

NOTE: INCLUDES VOLUMES AND ASSOCIATED UNCERTAINTIES FROM FIGURES JM 4-1 TO JM 4-2



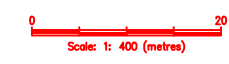
KEY PLAN
N.T.S.



UNNAMED LAKE
(a number of historical records call this McLeod Lake)

FINAL

- LEGEND:
- METAL CONTAMINATION
 - TRENCH
 - WASTE ROCK
 - CONTROL POINT



| | | | | | |
|------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|---------------|-----------|-------------|--------------------------|
| Public Works and Government Services Canada / Travaux publics et Services gouvernementaux Canada | REMEDATION ACTION PLAN FOR 7 ABANDONED MINE SITES, NT | | | | |
| | JOON MINE - AREA 3: SOIL CONTAMINATION AREAS | | | | |
| | PROJECT No. 122510933 | OFFICE OTT | DES DW | CKD FL | REV 0 |
| DATE Mar 2015 | SHEET No. - of - | DWN APP | LC | STATUS - | DRAWING FIGURE JM 4-2 |