



MELIADINE WEST GOLD PROJECT

UNDERGROUND MINERAL EXPLORATION

And

ASSEMBLE A BULK SAMPLE

SITE WATER MANAGEMENT PLAN

COMAPLEX MINERALS CORP.
CALGARY, AB

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1997 Agra Report

1998 Agra Report

1999 Agra Report

2000 Amec Report

Note: only the text of these report is provided here. The complete reports with all photos and figures was already provided to the NWB, KIA, and NIRB in a CD attached to the original application for the underground exploration decline in May 2007.

Introduction

This Site Water Management Plan is requested by Nunavut Water Board License No. 2BB-MEL0709 to Comaplex Minerals Corp. for the Underground Exploration and Bulk Sample at the Meliadine West Gold Project. It consists of two parts. The first part details the proposed water management plan for the underground exploration program, complete with diagrams. The second part responds to each of the conditions as presented in the amended water license.

Plan Objectives

Bearing in mind that the underground program at Meliadine West is exploration, and not development oriented, the objectives of this plan include the following:

- to monitor specified water quality parameters at the camp domestic water intake and grey water outlet;
- to document the drainage and runoff pattern in the area of the underground project and the rock storage pads and describe related water management strategies;
- to monitor the chemical attributes of runoff water from the surface works and rock pads at the underground exploration site to assess the risk of potential contamination to the downstream freshwater environment;
- if required, to contain runoff water from the ore and waste pads that may contain compounds of potential contamination to the downstream freshwater environment;
- to contain site runoff with as little terrain disturbance to the overall exploration site as possible (minimal footprint and impact logic);
- to document the long term storage and disposal of underground ore and waste rock in response to their geochemical characteristics; in particular, their ARD properties (see also the Waste Rock and Ore Storage Management Plan).

Project Overview

The exploration camp established in 1997 will be used to support the underground exploration program which is located approximately 2 kilometers by road southwest of the camp. Camp water is drawn from Meliadine Lake. Ablution products from camp toilets are incinerated on site. Grey water from the shower, laundry and kitchen is discharged to a sump which eventually filters into Meliadine Lake on the opposite side of the peninsula from the water intake (see Figure 1).

The underground exploration project began just as the 2007 summer drilling program was winding down. The underground program will continue through the winter, until about the time when the 2008 drilling program is initiated (as described in the water use license

application). Overall the underground exploration program will produce approximately 44,000 m³ of waste rock and 6500 m³ of ore (all volumes expressed for broken rock on surface). See Figure 1 for domestic water quality sampling/monitoring sites as required by Nunavut Water Board License No. 2BB-MEL0709.

The underground exploration site is configured as shown in Figure 2 and as described more specifically in the Waste Rock and Ore Management Plan. All surfaces will be graded to drain into the primary containment basin adjacent to the ore pad.

Site Water Containment Plan

The site configuration has been engineered such that all runoff from the workings, the waste rock pads, and ore piles on the waste pads (developed surfaces) will be initially contained in one of two primary containment sumps. These are labeled the SUMP and PRIMARY on Figure 2. All developed surfaces in the underground exploration site will be graded to drain into the two primary containment areas. The north side of the road and the access trail to the services pad and the south side of the sump will be lined with a woven polypropylene / polyvinyl liner to completely contain the runoff (see Figure 2).

The capacity of the primary containment areas are:

SUMP – adjacent to services pad	2500 m ³
PRIMARY – adjacent to rock storage pad	12,000 m ³

Secondary containment is provided by the construction of a temporary berm below Peanut Lake, as shown on Figure 2. This containment (labeled SECONDARY on Figure 2) will only be required during spring breakup. Since all of the ore and waste pads are contained upstream in the primary containment area, the berm below Peanut Lake will remain open at a low point to allow normal drainage for 10-11 months of the year. The break in the berm will be filled in early each spring, prior to the spring melt and runoff.

Opening of the berm below Peanut Lake will only take place after scheduled testing of the waters in the secondary containment area show normal or acceptable levels of contaminants. Previous baseline testing of the waters in and near the deposit this summer (Appendix B) and in previous years (Appendix D) show elevated background concentrations of numerous metals and substances above CCME levels. In the summer 2007 testing, arsenic, mercury, selenium, and dissolved iron were all above CCME levels in the immediate area of the deposit. Appropriate levels for these, and potentially other, metals will be determined after the second round of baseline water sample results have been returned. This determination will also factor in baseline sample results from previous years.

The berm for the secondary containment will be constructed of esker materials and include a woven polypropylene/polyvinyl liner as shown in Figures 2 and 3. Movement of runoff waters between the primary and secondary containment areas will take place via

an engineered dip in the road (elevation of 66.75 meters) and/or by pumping over the road, as required. We are also exploring the idea of a sealed culvert set in the road that can be opened as required.

The capacity of the secondary containment area is:

SECONDARY – natural basin east of the portal 294,000 m³

Potential Risks, Related Mitigation Measures, and Monitoring

Human Health Risk

Notwithstanding the long standing use of the camp and operation of its domestic water systems, vigilance is required for ensuring clean water for domestic use.

Monitoring

Water quality monitoring will take samples at Mel 1 and Mel 2. Grey water and related issues will be monitored with samples collected at Mel 3 and Mel 4 on a monthly basis during open water conditions. Parameters for which the samples will be tested (as required by Section J 1 in Nunavut Water Board License No. 2BB-MEL0709) include:

- BOD
- TSS
- Oil and Grease
- Fecal Coliform
- pH

Ammonia Contamination

Explosive residues (ammonium nitrate) could be present on broken rock brought to surface and laid down in pads (waste rock) and in ore piles (surface storage). Natural precipitation may dissolve and mobilize these residues and carry them into the downstream environment. Ammonium nitrate will normally behave like a fertilizer in the natural environment, but at significantly elevated concentrations may be toxic to aquatic organisms.

Mitigation Measures

- Diligent use and storage of explosives underground to keep the amount of ammonium nitrate residue to a minimum.

Monitoring

- Water quality of the contained runoff will be monitored with samples collected as set out in this document, including collection at the toe of the waste rock and ore storage pads. Samples will be collected:
 - before pad construction begins (July 2007); see Appendix B.
 - before freeze-up in 2007.
 - June 2008 during the spring melt (after project completion).

- Samples will be analyzed for ammonia and components as prescribed by License No. 2BB-MEL0709, clause J3.
- Water quality will be reported as prescribed by License No. 2BB-MEL0709, clause J16.

Waste and Ore Storage Risk

The waste and ore storage pads will be constructed of rock that has a strong neutralizing potential. It is important that that buffering capacity is available to any runoff that will originate with exposed ore in storage. The pads will be configured and constructed as shown in Figure 2 attached.

Mitigation Measures

- Placement of the stored ore on the storage pad will allow ample exposure of all runoff to the buffering capacity of the pad as shown in Figure 2. A minimum border of 5 meters will be maintained all around the stored ore piles to ensure no runoff occurs from the ore piles directly to the toe of the pad. This border will also allow ample space for equipment to work on the waste pads around the edges of the ore piles, if required.

Monitoring

- Water quality in the area of the waste rock and ore storage pads will be monitored with samples collected at locations shown on Figure 1:
 - before pad construction begins (July 2007).
 - before freeze-up in 2007.
 - in June 2008 during the spring melt (after project completion).
- Samples will be analyzed for ammonia and components as prescribed by License No. 2BB-MEL0709, clause J3.

Contaminated Water Risk

The risk of metal and acid contamination in runoff arises from natural precipitation dissolving and mobilizing compounds from waste rock and ore as discussed in the Waste Rock Management Plan.

Mitigation measures

- Keep the potential runoff from the pads to a minimum by pushing as much accumulated snow from the pads as possible before spring snow melt.
- Keep water use for drilling and mining underground to a minimum (a re-circulation system will be used).

Monitoring

- Water quality in the area of the underground exploration site will be monitored with samples collected at sites indicated on Figure 1:
 - before work begins (July 2007).
 - in the fall of 2007.

- during spring melt and runoff (after completion) June 2008.
- Water quality will be analyzed for compounds as prescribed by License No. 2BB-MEL0709 clause J3, including:

Field data:

Date Sampled; Time Sampled; Air Temp. °C; Constituent Water Temp. °C; Conductivity µS/cm; pH

Laboratory tests:

pH ; Conductivity µS/cm; Tot-Alkalinity mg/L; Carbonate (CO₃) mgCO₃/L; Calcium (Ca) mg/L; Bicarbonate (HCO₃) mgCO₃/L; Magnesium (Mg) mg/L; Potassium (K) mg/L; Sodium (Na) mg/L; Chloride (Cl) mg/L; Sulphate (SO₄) mg/L; Reac-Silica (as SiO₂) mg/L; Turbidity NTU; Tot-Susp-Solids mg/L; Tot-Diss-Solids mg/L; Tot-Hardness mg/L; Hydroxide mg/L; Tot-Kjeldahl-N mg/L; Nitrate+Nitrite-N mg/L; Nitrate-N mg/L; Ammonia-N mg/L; Tot-Phosphorus mg/L; Diss-Phosphorus mg/L; Orthophosphate (PO₄-P) mg/L; Tot-Carbon mg/L; Tot-Org-Carbon mg/L; Tot-Inorg-Carbon mg/L; Cat/Anion-Balance %; Aluminum (Al) µg/L; Antimony (Sb) µg/L; Arsenic (As) µg/L; Barium (Ba) µg/L; Beryllium (Be) µg/L; Boron (B) µg/L; Cadmium (Cd) µg/L; Chromium (Cr) µg/L; Cobalt (Co) µg/L; Copper (Cu) µg/L; Iron (Fe) µg/L; Lead (Pb) µg/L; Manganese (Mn) µg/L; Mercury (Hg) µg/L; Molybdenum (Mo) µg/L; Nickel (Ni) µg/L; Selenium (Se) µg/L; Silver (Ag) µg/L; Strontium (Sr) µg/L; Uranium (U) µg/L; Vanadium (V) µg/L; Zinc (Zn) µg/L; Cyanide µg/L; Phenols µg/L; Chlorophyll a mg/m³; Secchi Transparency m.

Plus: ICP Lithium, Tin (Sn), Tellurium (Tl), Titanium (Ti) in addition to above.

Baseline Background Levels versus CCME Limits

It is very apparent that the background levels for arsenic, mercury, dissolved iron, and selenium are elevated to highly elevated in the area of the gold deposits on the Meliadine West property. It is also well known that the sediments of the Sam Formation are regionally anomalous for elevated arsenic as shown in the attached Figures 4 and 5, which show details on arsenic values derived from both water samples taken in the area of the deposits and from the soil and till geochemistry taken regionally (data collected during early exploration of Meliadine West - in Comaplex files). A direct correlation to the gold deposits and the down-ice dispersion (glacial) of material from the deposits is apparent, especially in the contoured till geochemistry (Figure 4).

In the water samples taken in July of 2007 (Appendix B), background arsenic levels were high in samples from Lake A57 and in the grey water outlet sample MEL3. Lake A57 is in the immediate area of the gold deposits. It is not yet clear why the MEL 3 sample was anomalous in arsenic when two previous samples from the same site were very low. Previous water samples are also shown on Figure 4 and many of these were anomalous in arsenic. Some of these correlate with the Tiriganiaq gold deposit, while others correlate directly with the satellite gold deposits surrounding the main gold deposit.

Figure 4 shows the location of water samples from the recent (July 2007) sampling program that were elevated in mercury, and selenium. Samples from lake A9 were anomalous in mercury and selenium. Samples A15 and A13, were anomalous in iron, mercury and selenium.

Previous baseline water samples were taken as early as 1996 (Appendix D) and clearly show the background levels in the area of the gold deposits exceeded CCME guidelines for aquatic life prior to any significant exploration work. As such, these natural background values should be the baseline threshold against which future numbers are compared.

Site Water Quality Monitoring Results

Results of analyses for water quality in the area of the underground exploration project will be added to this plan as test results are received.

Samples were collected at 13 sites before pad construction began (Figure 1). Further collections will be made before freeze-up 2007 and again in June 2008 (after project completion). The analytical results of the first round of testing are provided in Appendix B along with the laboratory data sheets. Parameters requested by the Nunavut Water Board that were not tested for in this initial round of pre-development testing will be included in the September and spring sampling results. Test results will be added to this plan as laboratory reports are received.

Response to Specifics of Water License 2BB-MEL0709 dated August 2, 2007

Part B: General Conditions

1. Acknowledged.
2. Completed and submitted on October 5, 2007.
3. Security deposit of \$950,000 (Letter of Credit) already on file with the KIA. See completed Site Liability Security Deposit Review document already submitted.
4. Acknowledged.
5. Acknowledged.
6. Acknowledged. We will notify the NWB of significant changes in operating plans or conditions.
7. Comaplex keeps records of water consumption in the camp by recording each time the water tanks are filled. This is the water use for the camp. These records are available. Water consumption figures for the drills are provided by Boart Longyear, who know how often the mud tanks are filled. Likewise, Redpath Mining knows from experience how often its recirculation system is re-filled. These are the numbers Comaplex provided to the NWB for its water license requirements.

All of these systems work on a flow through system in order to keep the water lines from freezing. Flow through systems work on the principle that moving water will not freeze. Consequently, water is pumped on a continuous basis and diverted to the tanks for consumption as required. When not used, the water just passes out the other end of the pipe back to the same or nearest lake. It is not consumed. Installing water meters on the intakes of these systems will not record water consumption. We suggest water use numbers be based on actual consumption figures. Flow through systems are common for all exploration projects in the north.

8. Acknowledged. The signs will be posted shortly.
9. Acknowledged.
10. Acknowledged.
11. Acknowledged.
12. We will forward data to the Water Board and to the Manager of Licensing as per previous submissions. When data is sent, we specifically request that the Manager acknowledge that he or she received the information.
13. Acknowledged.

Part C: Conditions Applying to Water Use

1. Acknowledged. See B.7
2. Comaplex will follow the conditions of the water license.
3. Acknowledged.
4. Acknowledged.
5. This is already in place.
6. Acknowledged.
7. Acknowledged.
8. Acknowledged.

Part D: Conditions Applying to Waste Disposal

1. Acknowledged.
2. Acknowledged.
3. Acknowledged.
4. This has been done.
5. System in place.
6. System being put in place.
7. System already in place with all grey water discharging to a sump. Our experience is that in the winter, this water collects in the sump and freezes and thaws in place (in the sump, under the snow).
8. System for incineration of all waste already in place. There is no discharge of sewage on the property.
9. Acknowledged. This is our intent.
10. Comaplex will follow accepted normal industry practices within the conditions of the Water License.
11. Acknowledged.

Part E: Conditions for Camps, Access Infrastructures and Operations

1. Acknowledged.
2. Acknowledged.
3. Acknowledged.
4. Primary and secondary containment will ensure that sediment will not enter bodies of water outside of the containment area. We have the understanding that the plans already submitted for the underground decline have been approved as presented.
5. The Site Water Management Plan forms the bulk of this document.
 - a) Water flow directions and basin outlines were presented in the original application to the NWB (Figure 4). Details on the water flow with the attached Site Water Plan are outlined in Figure 2 attached. The bulk fuel storage areas, the storage and ore processing pads, the quarries, and the western half of the access road are all located at the headwaters of the water basins they are contained in (on high ground). This was deliberate. Water flow would then originate at these features and would be directly related to precipitation and snowfall accumulations, which are highly variable and seasonal. There will be no water flow from the underground workings in a permafrost environment.

As further backup, we refer the reader to the four reports submitted with the initial underground application and included in this document (Appendix D). The reports by Agra/Amec Earth and Environmental cover the years 1997-2000 and detail baseline work on hydrometric monitoring, basin yields, climate and precipitation records, and water balance analysis, among other things, for the area of the portal and the larger river basins in the immediate area. Lake identification numbers are based on the scheme developed by RL&L (now Golder) in 1997. To avoid confusion, this lake numbering scheme has been continued.

b) See the Site Water Management Plan attached. Our experience on the property has shown that even in the very heavy snow year of the spring of 2007, the access road (without a geotextile liner) was almost sufficient to maintain the spring run-off/melt. The run-off period tends to be 2-3 weeks in duration, after which water movement slows down immensely. As outlined in the Water Plan attached, we have added a secondary containment area of very considerable size to manage the runoff while tests are conducted to determine water quality. We are confident that the plan, as presented, will be more than sufficient for this purpose. See the attached Plan for capacity details.

c) See the Site Water Management Plan attached and Figure 3. Consistent with Comaplex's policy to keep terrain disturbance to a minimum, and in line with the status of the present work as exploration

and not production, the containment structures are designed to be temporary in nature.

d) See the Site Water Management Plan attached and Figure 1. The sites are consistent with baseline work completed by Agra/Amec in 1998, 1999, 2000 and 2001. The monitoring sites and the entire Site Water Management Plan has benefited from a review by senior Golder personnel.

e) See the Site Water Management Plan attached.

f) See the Site Water Management Plan attached.

6. A Waste Rock and Ore Storage Management Plan was submitted to the KIA, NIRB, and NWB on August 31, 2007.
7. Acknowledged.
8. Acknowledged.

Part F: Conditions Applying to Drilling Operations

1. Acknowledged.
2. Comaplex restricts the flow of drill sludge (ground rock) into any body of water. Quite commonly, the process of drilling creates a depression around the borehole and the sludge is concentrated in and adjacent to that depression. It is our experience that the drilling sludge, if kept to a thin layer around the hole, will re-vegetate completely within a couple of years, while the deposition of thick concentrations of drill sludge into depressions actually hinders re-vegetation in those areas. We have a library of drill hole photos on the property where this is evidenced. We suggest the NWB review these photos and re-consider the practice of moving the sludge around the property. The existing process for drill site re-habilitation that we have had in place with KIA approval has worked very well for the last 15 years.
3. All casing is pulled and since we are in a permafrost environment, the holes are sealed (frozen solid) within hours of that casing being removed. Artesian flows are not possible.
4. No drill holes penetrated depths below the permafrost in 2007.
5. Acknowledged.
6. Acknowledged.
7. Acknowledged.

Part G: Conditions Applying to Modifications

1. Acknowledged.
2. Acknowledged.
3. Acknowledged.

Part H: Conditions Applying to Spill Contingency Planning

1. A Stand Alone Spill Contingency Plan has been submitted to the regulatory groups on October 4, 2007.
2. Acknowledged.

3. Acknowledged.
4. Acknowledged.
5. We will make every effort to ensure that no chemicals or fuel enters water. The sump referenced in the attached Site Water Management Plan is part of the primary containment for the program, as is a small pond (A57 on Figure 1). Likewise, the ponds south of the access road (see Figure 1) are in the secondary containment area. Infrastructure such as the road, dikes, various pads, and storage areas were laid out close to these ponds as described in the project application, and were approved. The main Fuel Tank Farm is over 250 meters from any body of water. See submitted Spill Contingency Plan for details.
6. Acknowledged.
7. Regular inspection of the tanks, the fuel lines, etc. has been, and continues to be, an ongoing process on the project. We will now record the inspections.
8. Acknowledged.

Part I: Conditions Applying to the Abandonment and Restoration or Temporary Closure

1. A revised stand-alone Abandonment and Restoration Plan was submitted to the NWB and other regulatory groups on October 4, 2007.
2. Acknowledged.
3. Acknowledged.
4. Acknowledged.
5. Comaplex is of the understanding that this condition includes the distinct possibility of extensions to this water license that would extend the term of the license beyond the July 31, 2009 expiry date. As the Meliadine West property is in the exploration phase of development, it is extremely unlikely that failure in the current program will result in complete closure of all exploration on the property, including underground exploration. Conversely, exploration success will move the project towards feasibility and subsequent extension or upgrading of the water license will then be required. Completing all restoration work prior to the expiry of this particular license does not seem pertinent in either case. Should the project completely shut down, we will endeavor to complete restoration as soon as possible.
6. Acknowledged.
7. Acknowledged.
8. See point 5 above.
9. Acknowledged.
10. There are presently no culverts installed on the property. Controls are in place, or will be in place to minimize erosion and sedimentation, including wash out of the road. This includes plans outlined in this document to install a geo-textile membrane along the north side of the access road during construction of the primary containment area.
11. Acknowledged.
12. Acknowledged.

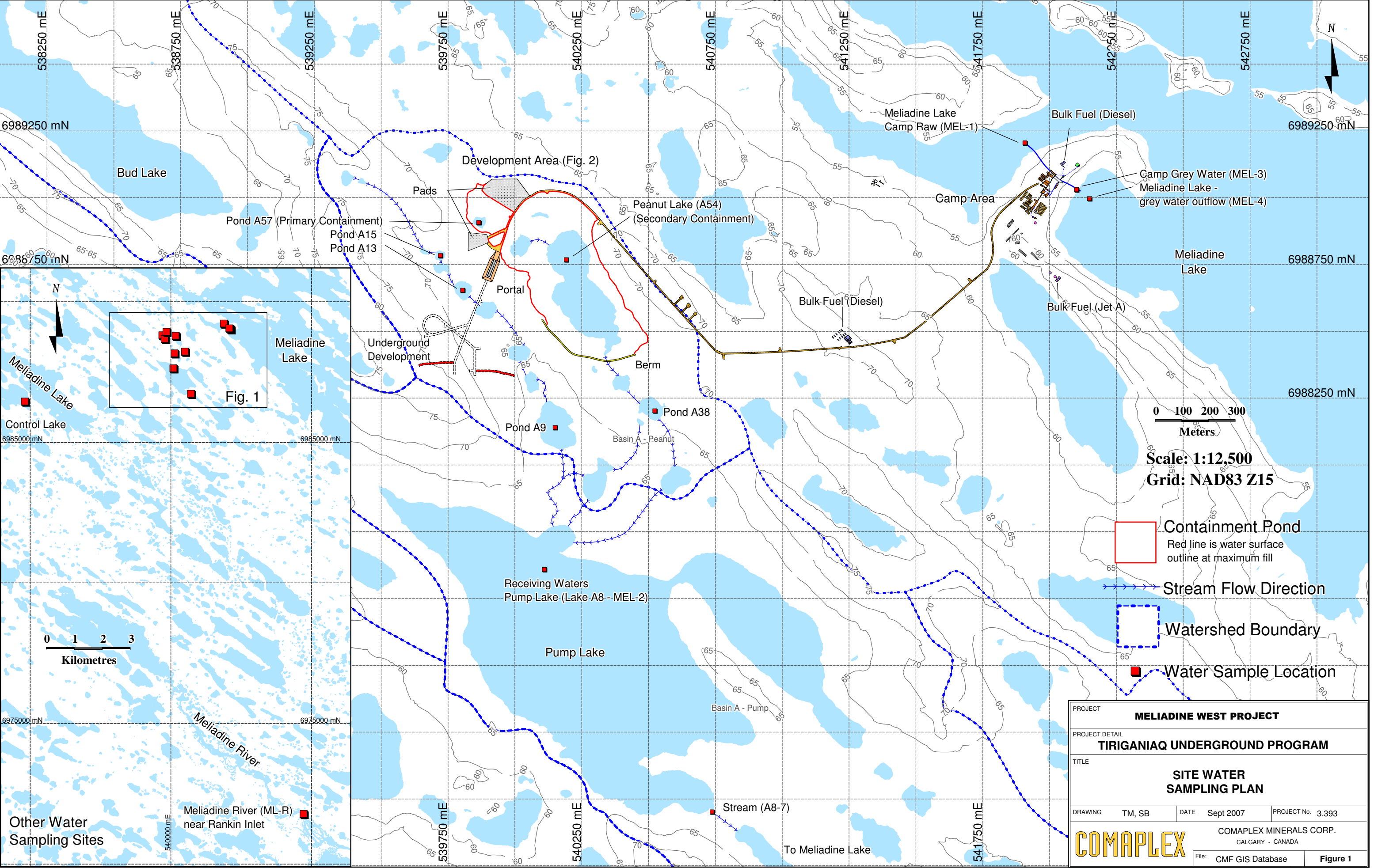
13. See F.2 above. Comaplex attempts to pull all casing on all holes. Where this is not possible, the casing is cut off at, or below, surface. Capping of the holes is not required in permafrost due to the hole freezing solid within hours of the casing being pulled. Restoration of the drill holes and disturbed areas to natural conditions immediately upon completion of drilling is not practical nor possible. It is our experience that removal of sludge from the ground will cause more damage to the tundra than leaving it in the confined area after drilling. As mentioned in F.2. above, the drilling sludge, if kept to a thin layer around the hole, will re-vegetate completely within a couple of years. The concentration and deposition of thick concentrations of drill sludge into depressions actually hinders re-vegetation in those areas. We have a library of abandoned drill hole photos on the property where the re-vegetation of the holes is evident. We suggest the NWB review these photos and re-consider the practice of moving the sludge around the property.
14. Acknowledged.
15. We will do all reasonably possible to stabilize and re-contour the ground upon completion of work, but restoration will occur slowly over time, with wet areas re-vegetating much more quickly than dry sites.

Part J: Conditions Applying to the Monitoring Program

1. Acknowledged. See Figure 1 for locations.
2. We will sample the Monitoring Sites MEL-3 and MEL-4 monthly during open water periods.
3. This refers to diamond drilling on the ice. No drilling is currently planned on the ice for this year.
4. Acknowledged.
5. Signs will be put up shortly for the 4 monitoring sites.
6. We will record the amounts of water consumed in the project.
7. This is included in this document (Appendix C). As per previous years, during the summer diamond drilling program, water is drawn from the nearest lake (for obvious reasons). These locations are not known prior to the program and no coordinates are provided for that reason.
8. This is included in this document (Appendix C).
9. This is included in this document (Appendix A).
10. Acknowledged.
11. Acknowledged.
12. Acknowledged.
13. Acknowledged.
14. Acknowledged.
15. We are open to reasonable, informed suggestions regarding monitoring that are within the conditions of the water license.
16. We will make efforts to submit analyses on a monthly basis but are, to a large degree, at the mercy of the labs. In this heated marketplace, previous samples

have taken considerably longer than a month to get back from the lab. This aspect of the program is out of our hands.

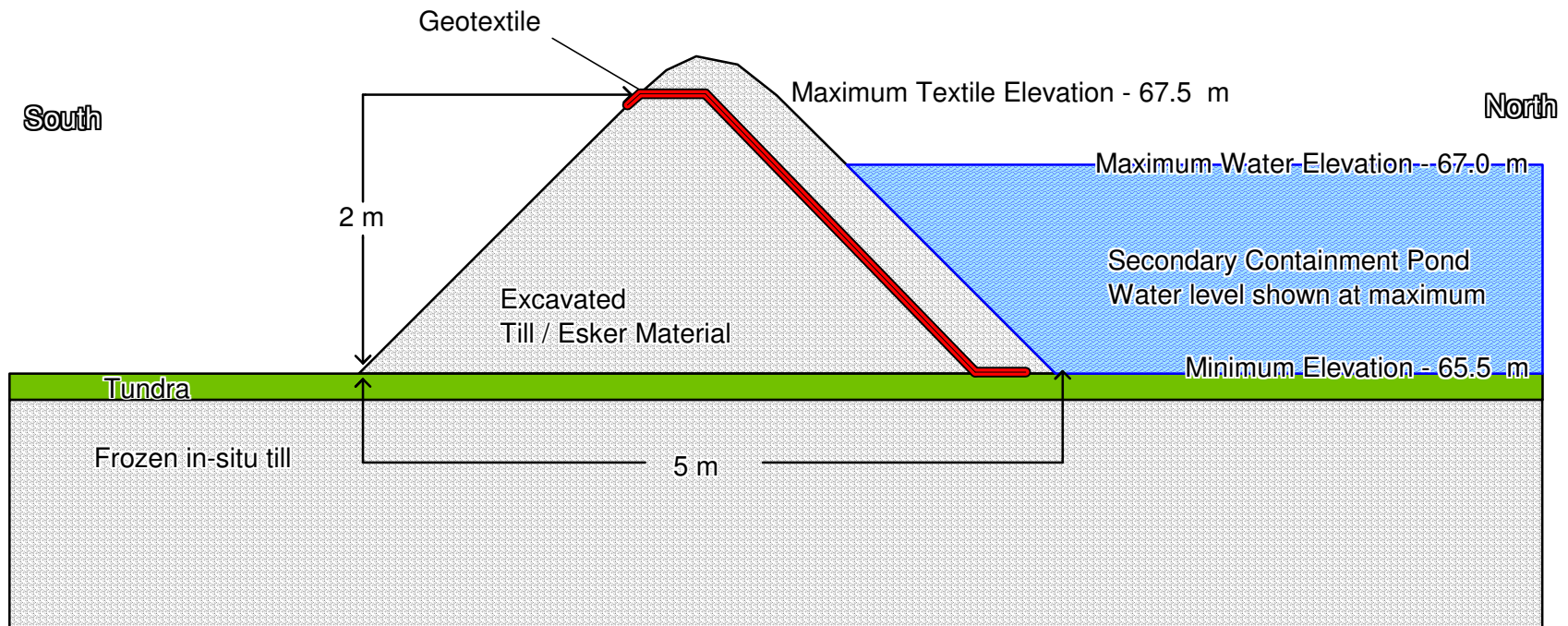
17. Acknowledged, within the constraints of J.16 above.





Note: Maximum berm dimensions shown.
Berm dimensions decrease to east and west.

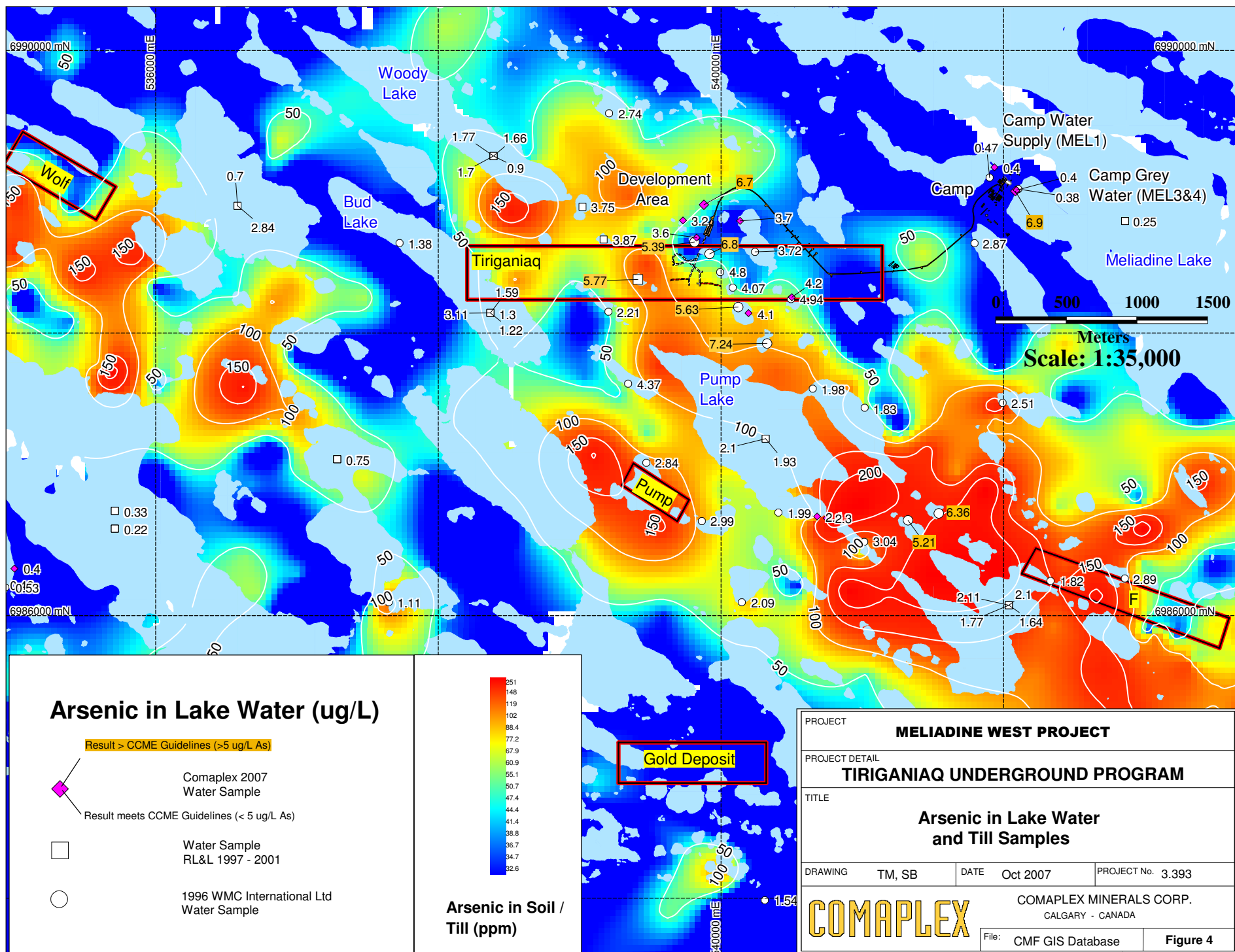
Cross Sectional Area - 6.2 m²
Length - 415 m
Estimated Volume - 2573 m³

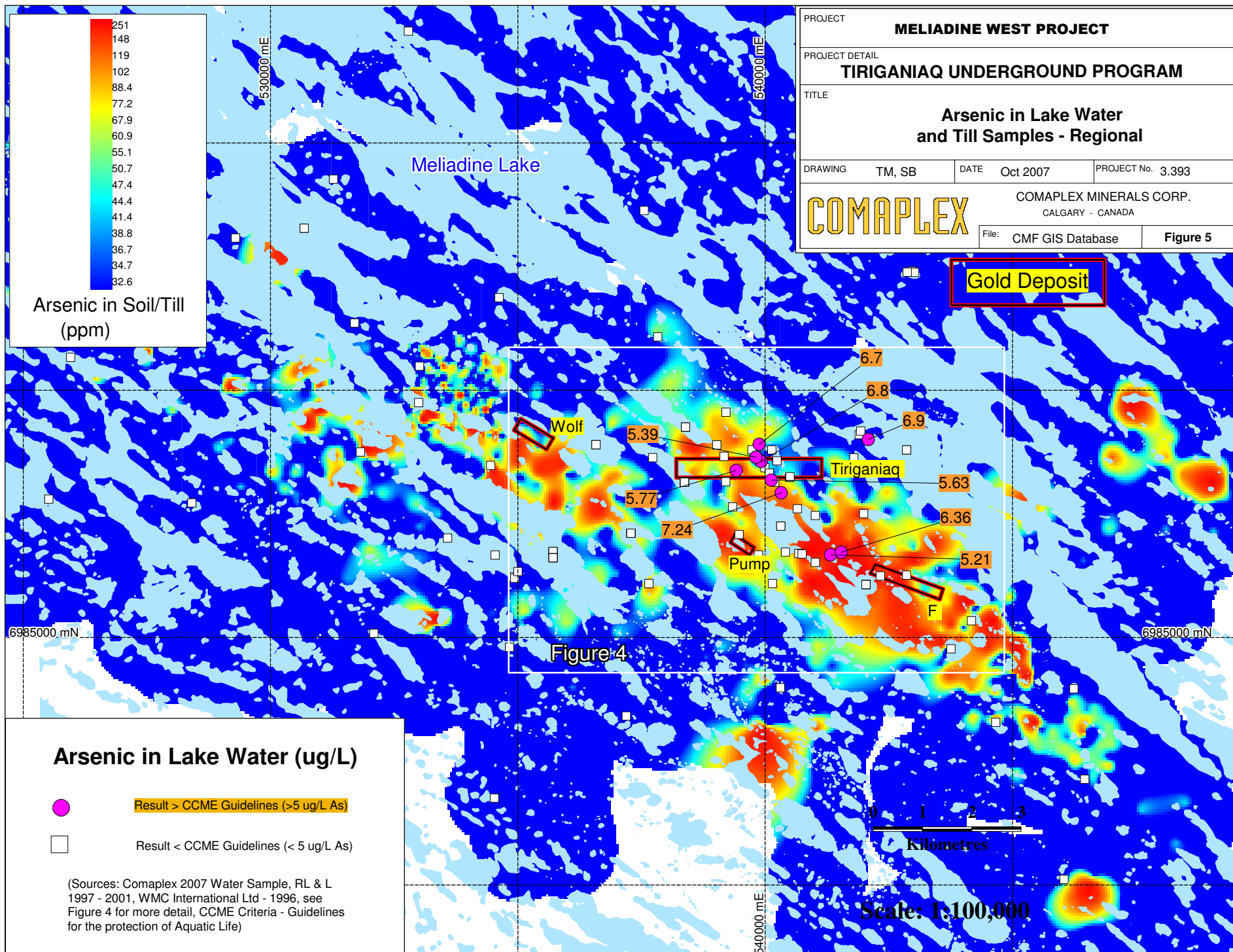


0 0.5 1 1.5 2 2.5 3
Meters

Scale: 1:50

PROJECT			
MELIADINE WEST PROJECT			
PROJECT DETAIL			
TIRIGANIAQ UNDERGROUND PROGRAM			
TITLE			
SITE WATER MANAGEMENT PLAN PROPOSED BERM - CROSS SECTION			
DRAWING	TM, SB	DATE	Sept 2007
		PROJECT No.	3.393
COMAPLEX		COMAPLEX MINERALS CORP. CALGARY - CANADA	
File:		CMF GIS Database	Figure 3





Appendix A:

QUALITY ASSURANCE / QUALITY CONTROL PROCEDURES

Historic Water Quality Data and Control Lake

The overall historical water quality studies have identified and sampled a “control lake” that is outside the proposed development area (Figure 1). The analytical results of all water quality sample testing are reported in filed yearly data reports. Water quality results were assessed against values published by Health Canada (1993) for drinking water, and the Canadian Council of Ministers for the Environment (CCME, 1999) for the protection of aquatic life. Values that did not meet the standard of the published guidelines are indicated in the data sets submitted by R.L. & L. in 1998, 1999, 2000 and 2001.

QA/QC Protocol

All sampling procedures, sample preservation and storage, and analyses shall be completed in accordance with procedures as prescribed in the current edition of Standard Methods for the Examination of Water and Wastewater.

The Site Water Management Plan water quality monitoring program will institute a QA/QC protocol that will include the following procedures:

1. Each field sampling campaign will henceforth include at least one “blind” field duplicate sample from the camp area and also from the exploration area collected by the person(s) taking the field samples.
2. The laboratory implements a comprehensive program of procedures based on the requirements of ISO/IEC 17025:2005, EPA FIFRA and OECD Good Laboratory Practices (GLPs). These protocols are further described in the following description provided by the laboratory



ALS LABORATORIES QUALITY PROGRAM SUMMARY

ALS Laboratories' Quality program is based on the requirements of ISO/IEC 17025:2005, EPA FIFRA and OECD Good Laboratory Practices (GLPs).

The following is a list of standard practices employed on an everyday basis in the laboratory:

1. The Quality division of ALS Laboratories consists of the Quality System Manager and three full-time Quality System Co-ordinators. The Quality System Manager co-ordinates and manages all aspects of the Quality program.
2. Standard Operating Procedures (SOPs) are written for all analytical methodology, operation and maintenance of all lab equipment and instrumentation, safety procedures, general laboratory procedures, quality assurance protocols and support procedures. Controlled copies of SOPs are readily available to all staff and regularly scheduled SOP reviews are carried out.
3. NIST (National Institute of Standards and Technology) - traceable reference materials are used for analysis, where available. Other commercially available reference materials are checked for purity using U.S. EPA protocols. An inventory of reference materials is maintained and records of all laboratory standard preparations are kept.
4. Precision, accuracy, and method detection limit studies are performed to validate analytical methods.
5. Maintenance and calibration records are kept for all major equipment and instrumentation. Records include balance calibrations, water system maintenance, temperature monitoring of coolers, freezers, and drying ovens, thermometer and weight calibrations, pipette calibrations and instrument maintenance.
6. Sample tracking procedures are in place to document sample custody from time of receipt to final analysis. Complete chain of custody documentation ensures that all data is legally defensible.



7. A 10 - 20% program of quality control analyses is maintained for each sample batch. Quality control samples include but is not limited to calibration and verification standards, certified reference materials, matrix spikes, duplicates, method and reagent blanks, transportation and storage blanks, and glassware proofs.
8. Quality control charting is established for all routine analytical tests ensuring that a process is in place to ensure the analytical system remains in control.
9. Prior to issuing a final report, the analytical data package is reviewed by the analyst and project manager to ensure completeness of sample chain of custody documentation, verification of sample history information and analytical requirements, acceptability of QC data, and validity of sample results.
10. Participation in proficiency testing programs is extensive.
11. Training seminars are regularly scheduled and include both in-house as well as outside guest speakers. Seminar topics include training in such areas as Quality, safety, instrumentation and method development. All new employees must complete a set of initial training requirements. Daily training is provided to technicians and analysts by experienced senior staff at the bench-level on a day-to-day basis.
12. Personnel records are maintained for training, analyst proficiency, curriculum vitae, job descriptions and confidentiality agreements.
13. Quality audits are performed regularly by qualified personnel to evaluate adherence to established procedures and assess the effectiveness of the Quality program.

Appendix B:

ANALYTICAL RESULTS: JULY 2007 WATER SAMPLES
LABORATORY DATA SHEETS

Project	COMAPLEX MINERALS CORP., MELIADINE BULK SAMPLING PROGRAM					
ALS File No.	L533001	Date Received	23-Jul-07	Date	20-Sep-07	
ALS File No.	L542462	Date Received	15-Aug-07	Date	18-Sep-07	

RESULTS OF WATER SAMPLE ANALYSES															
Sample ID	CAMP-IN (MEL-1)	MEL L GREY (MEL-4)	CONTROL	A8 (MEL-2)	A8-7	A9	ML-R	A38	A15	A13	A57	A54	GREY (MEL-3)		
Date Sampled	18-JUL-07	18-JUL-07	18-JUL-07	18-JUL-07	18-JUL-07	18-JUL-07	18-JUL-07	18-JUL-07	18-JUL-07	12-AUG-07	12-AUG-07	12-AUG-07	13-AUG-07		
Time Sampled	09:00	09:15	10:50	11:15	11:40	14:30	13:30	15:00	15:30	14:20	14:34	14:51	09:39		
ALS Sample ID	L533001-1	L533001-2	L533001-4	L533001-5	L533001-6	L533001-7	L533001-8	L533001-9	L533001-10	L542462-1	L542462-2	L542462-3	L542462-5		
Matrix	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Units	Detection Limits
Physical Tests															
Alkalinity, Total (as CaCO3)	16	11	21	30	30	52	13	76	36	30	123	49	301	mg/L	5
Carbonate (CO3)	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	mg/L	5
Conductivity (EC)	56.8	57.6	60.3	106	106	759	69.8	456	807	2370	294	618	715	uS/cm	0.2
pH (lab)	7.4	7.3	7.6	7.8	7.7	7.9	7.5	8.2	7.7	7.5	8.1	7.8	8.1	pH	0.1
pH (field)	7.41	7.36	7.83	8.06	8.12	8.60	7.88	8.49	8.29	7.6	8.3	8.1	7.6	pH	0.1
Temperature (field)	13.2	9.3	16.4	17.6	17.8	21.7	15.5	20.4	23.8	10.4	10.4	11.2	9.2	C	0.1
Hydroxide (OH)	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	mg/L	5
Total Dissolved Solids	ND	ND	ND	ND	ND	ND	ND	ND	ND	1440	191	386	456	mg/L	5
Total Suspended Solids	ND	ND	ND	ND	ND	ND	ND	ND	ND	4	3	4	<3	mg/L	3
Turbidity	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	1.9	<0.1	0.4	NTU	0.1
Bicarbonate (HCO3)	19	13	26	37	37	64	16	93	44	37	151	60	367	mg/L	5
Anions and Nutrients															
Ammonia-N										0.06	0.08	<0.05	<0.05	mg/L	0.05
Calcium (Ca)	5.2	5.3	6.1	13.7	13.6	101	6.3	59.3	103	346	47.6	74.5	49.0	mg/L	0.5
Magnesium (Mg)	0.8	0.8	0.4	1.6	1.6	11.6	0.9	7.5	14.6	38.1	5.5	12.2	2.5	mg/L	0.1
Potassium (K)	0.8	0.7	1.0	0.8	0.7	3.8	0.9	3.3	2.9	8.8	3.0	6.1	2.7	mg/L	0.5
Sodium (Na)	3	3	5	2	2	10	4	8	9	26	8	15	123	mg/L	1
Hardness (as CaCO3)	16	17	17	41	41	300	19	179	317	1020	142	236	133	mg/L	1
Chloride (Cl)	7	7	6	12	12	182	8	86	210	716	14	134	40	mg/L	1
Sulfate (SO4)	6.7	3.6	3.9	3.2	3.2	13.3	3.1	11.4	6.8	14.3	4.5	19.8	18.6	mg/L	0.5
Nitrate+Nitrite-N	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.2	mg/L	0.1
Nitrate-N	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.2	mg/L	0.1
Nitrite-N	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	mg/L	0.05
Total Kjeldahl Nitrogen	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6	1.5	0.7	1.6	mg/L	0.2
Orthophosphate (PO4-P)	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.01	<0.01	<0.01	3.19	mg/L	0.01
TDS (Calculated)	33	27	35	51	51	353	31	221	368	1170	156	291	417	mg/L	1
Ion Balance	Low EC	Low EC	Low EC	91.2	90.5	101	Low EC	95.7	100	103	110	107	107	%	1
Dissolved Metals															
Aluminum (Al)	0.01	0.01	0.02	0.01	<0.01	0.01	0.02	0.02	0.04	0.02	0.01	<0.01	0.03	mg/L	0.01
Antimony (Sb)	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	0.0005	mg/L	0.0004
Arsenic (As)	<0.0004	<0.0004	<0.0004	0.0024	0.0023	0.0041	<0.0004	0.0042	0.0032	0.0036	0.0067	0.0037	0.0069	mg/L	0.0004
Barium (Ba)	0.007	0.007	0.008	0.014	0.014	0.099	0.010	0.042	0.123	0.345	0.032	0.050	0.032	mg/L	0.003
Beryllium (Be)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	mg/L	0.001
Boron (B)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	mg/L	0.05
Cadmium (Cd)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0001	<0.0001	<0.0001	<0.0001	mg/L	0.0001
Calcium (Ca)	5.3	5.2	6.7	13.4	13.3	95.1	6.2	57.5	96.2					mg/L	0.5
Chromium (Cr)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.006	<0.005	<0.005	mg/L	0.005
Cobalt (Co)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.006	mg/L	0.002
Copper (Cu)	0.002	0.002	0.002	0.002	0.001	0.004	0.002	0.003	0.003	0.002	0.004	0.001	0.003	mg/L	0.001
Iron (Fe)-Dissolved	0.040	0.039	0.049	0.160	0.142	0.179	0.042	0.170	0.695	1.28	0.286	0.055	0.087	mg/L	0.005
Lead (Pb)	<0.0001	<0.0001	0.0004	0.0007	<0.0001	0.0004	<0.0001	0.0003	0.0001	<0.0001	<0.0001	<0.0001	0.0019	mg/L	0.0001
Lithium (Li)	<0.01	<0.01	<0.01	<0.01	<0.01	0.04	<0.01	0.02	0.03	0.139	<0.003	0.032	<0.003	mg/L	0.003
Magnesium (Mg)	0.9	0.9	0.8	1.7	1.7	11.2	1.0	7.3	13.4					mg/L	0.1
Manganese (Mn)-Dissolved	0.009	0.013	0.007	0.012	0.014	0.013	0.004	0.009	0.006	0.120	0.008	0.003	0.017	mg/L	0.001
Mercury (Hg)	0.0004	<0.0002	<0.0002	<0.0002	<0.0002	0.0005	<0.0002	<0.0002	0.0004	0.0002	0.0001	<0.0001	0.0002	mg/L	0.0001
Molybdenum (Mo)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/L	0.005
Nickel (Ni)	<0.002	<0.002	<0.002	<0.002	<0.002	0.005	<0.002	0.004	0.006	0.015	0.006	0.004	0.023	mg/L	0.002
Potassium (K)	0.8	0.7	0.9	0.8	0.8	4.0	0.9	3.5	3.0					mg/L	0.1
Selenium (Se)	0.0006	0.0005	0.0009	0.0008	0.0004	0.0022	0.0009	0.0007	0.0012	0.0021	0.0005	0.0007	<0.0004	mg/L	0.0004
Silver (Ag)	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0001	<0.0001	<0.0001	<0.0001	mg/L	0.0001
Strontium (Sr)-Dissolved										2.48	0.291	0.674	0.262	mg/L	0.005
Sodium (Na)	3	3	3	2	2	10	4	8	9					mg/L	1
Thallium (Tl)	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0002	0.0002	<0.0001	<0.0001	0.0002	mg/L	0.0001
Tin (Sn)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	mg/L	0.05
Titanium (Ti)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	mg/L	0.001
Uranium (U)	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	<0.0001	0.0002	0.0002	<0.0001	<0.0001	<0.0001	0.0002	mg/L	0.0001
Vanadium (V)	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	0.001	0.001	0.008	0.002	0.004	0.005	mg/L	0.001
Zinc (Zn)	0.008	0.011	0.010	0.009	0.006	0.008	<0.004	0.012	<0.004	0.009	0.005	0.005	0.026	mg/L	0.002
Organic Parameters															
Total Organic Carbon	ND	ND	ND	ND	ND	ND	ND	ND	ND	10	25	12	24	mg/L	1
XNo class															
Total Inorganic Carbon	ND	ND	ND	ND	ND	ND	ND	ND	ND	7	30	11	73	mg/L	1
Total Carbon	ND	ND	ND	ND	ND	ND	ND	ND	ND	16	51	22	89	mg/L	1
Phosphorus, Total Dissolved	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.02	<0.02	<0.02	3.07	mg/L	0.02
NOTE			- exceeds CCME Guidelines for the Protection of Aquatic Life (1999)								ND - not determined				

Appendix C:

**GPS COORDINATES FOR WATER SOURCES AND WASTE DEPOSITION OR
STORAGE AREAS**

[illegible]