

# **ISSUES EVALUATION AND THREATS INVENTORY**

# GROS CAP INTAKE SAULT STE. MARIE, ONTARIO

Prepared For: Sault Ste. Marie Region Conservation Authority

Disclaimer – Please note, Conestoga-Rovers & Associates (CRA) changed its name to GHD Limited on July 1, 2015. This document was originally submitted under the CRA name prior to this date. However, in the interest of continuity, the CRA name will remain on this document after July 1, 2015

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MARCH 2016 Ref. no. 046442 (2)

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### 1.0 INTRODUCTION

This Issues Evaluation and Threats Inventory was prepared on behalf of the Sault Ste. Marie Conservation Authority (SSMRCA) to identify drinking water issues and concerns associated with the drinking water intake located within Lake Superior at Gros Cap, Ontario (Gros Cap Intake) and to create an inventory of threats (past and present) that may adversely affect the drinking water source. The Issues Evaluation and Threats Inventory, prepared in accordance with the Technical Rules (MOE, 2008), will be included as part of the Technical Assessment Report for the Sault Ste. Marie source water protection area.

### 1.1 <u>SCOPE OF WORK</u>

This report includes the required threats assessment and issues evaluation as well as the risk assessment relating to water quality for the Gros Cap Intake.

### 1.2 DATA SOURCES

Various data sources were utilized in compiling the Issues Evaluation and Threats Inventory, including the following:

Data Source Referenced	Purpose
Traffic Statement 2006 Navigation Season, St. Marys Falls Canal	Identification of Materials Transported Through the Shipping Channel
Lock Commodities Report – Sault Locks 2007	Identification of Materials Transported Through the Shipping Channel
ERIS Report - Multiple Databases Searched	Identification of Historical Issues/Threats
ODWSP Data	Historical Raw Water Quality
Property Owner/Tenant Questionnaire	Property Use and Potential Threats

Data Source Referenced	Purpose
Interviews with PUC personnel and Prince Township Staff	Property Use and Potential Threats
Field Reconnaissance	Property Use and Potential Threats
Ontario Base Mapping	Area features and IPZ Overlay
Township of Prince Office Consolidation of Zoning By-law 77-7	Property Use
MPAC Data	Property UTM Coordinates
PIN Maps Obtained from the Sault Ste. Marie Land Registry Office	Property PIN numbers
Aerial Photography (Google Earth)	Property Development
Assessment Report: Draft Guidance Module 5 – Issues Evaluation and Threats Inventory	Original MOE Guidance for Inventory Preparation
Technical Rules: Assessment Report, Clean Water Act, 2006 (December 2008)	Current Technical Rules for Describing Issues, Listing Threats and Assessing Risk
Sault Ste. Marie Region Conservation Authority Watershed Characterization, Draft Report, 2008	Initial Issues and Threats Evaluation
Gros Cap Intake Protection Zone Study, 2008	Raw Water Characterization and WTP Operator Interview
Gros Cap Intake Protection Zone Study Addendum, 2008	IPZ delineation, Vulnerability Scores and Uncertainty Analysis

### 2.0 <u>BACKGROUND</u>

## 2.1 <u>THE CLEAN WATER ACT</u>

The Clean Water Act (Act) of Ontario was passed into law in 2006 for the purpose of protecting past and future drinking water resources within the province. The Act establishes areas within the jurisdiction of Ontario Conservation Authorities as drinking water source protection areas and mandates the development and implementation of source protection plans for municipal residential drinking water sources within these areas. Under the Act, source water protection is presented as a locally driven, science-based, multi-stakeholder process. The local source water protection committee (SPC), established for each source water protection area, is required to develop a terms of reference, an assessment report and a source protection plan for the source protection area.

The assessment report is a locally developed, science-based report, which will include a watershed characterization, a water budget, delineation of vulnerable areas, groundwater and surface water vulnerability analysis, a threats assessment and issues evaluation, and a risk assessment for water quality and quantity. The assessment reports will be used as a basis for the development of source protection plans.

## 2.2 <u>PREVIOUS STUDIES</u>

Previous work conducted in support of the assessment report and source protection plan for the Gros Cap Intake include the preparation of a groundwater management and protection study and vulnerability analysis (Burnside, 2003 and 2005), and a draft *Watershed Characterization Report* (SSMRCA, 2008) for the source protection area as well as the delineation of the surface water intake protection zones (IPZs) around the Gros Cap Intake, the determination of the associated vulnerability scores, and an analysis of the uncertainty associated with the intake protection zone delineation (Baird, 2008). Water Budgets and associated enumeration of threats to water quantity within the source protection area were also conducted by others.

## 2.2.1 WATERSHED CHARACTERIZATION

The draft Watershed Characterization Report prepared for the source protection area (SSMRCA, 2008) notes that approximately 50 percent of the City of Sault Ste. Marie's drinking water is sourced from Lake Superior, drawn from the Gros Cap Intake. The

surface water quality analysis provided in the report indicates that based on a review of available water quality analysis data (1990 to 2005), parameter concentrations detected within raw water at the Gros Cap Intake did not exceed the Ontario Drinking Water Standards (ODWS).

The draft Watershed Characterization Report provides a general assessment of existing drinking water threats mainly associated with groundwater resources within the source protection area. Identified point source threats included fuel storage and handling facilities, waste disposal facilities, septic systems, contaminated sites, PCB storage sites, waste generators and haulers, salt storage facilities, cemeteries and abandoned wells. Non-point source threats identified within the source protection area, which may also apply to surface water, included pesticide, herbicide and fertilizer application for agricultural purposes or for lawn/garden maintenance, organic soil conditioning and septage spreading, as well as road salt application. Threats related to these activities were associated with improper chemical use and spills.

## 2.2.2 INTAKE PROTECTION ZONE STUDY

The Intake Protection Zone Study (Baird, 2008) was conducted to delineate the intake protection zones IPZ-1 and IPZ-2 around the Gros Cap Intake. The Study included assigning vulnerability scores for each of these areas, which reflect the probability that a contaminant released within the area will reach the intake.

An addendum to the Intake Protection Zone Study was released in October 2008. The IPZ-1 was updated to conform to the Draft Technical Rules (MOE, 2008) in place at the time (Baird, 2008). The IPZ-2 was also updated using a computer model that simulated hydrodynamic processes within the IPZ (Baird, 2008). The updated IPZ-2 included the upstream reaches of two tributaries (Jackson Creek and SW0012) that discharge into Lake Superior within IPZ-2. The updated IPZ-1 and IPZ-2 are shown on Figure 1.

The vulnerability scores assigned to each IPZ-1 and IPZ-2 were calculated in accordance with the following formula:

Vulnerability Score =  $B \times C$ 

Where:

B = the area vulnerability factor of the surface water intake protection zone

C = the source vulnerability factor of the surface water intake protection zone

The assigned vulnerability scores are shown below.

IPZ	Area Vulnerability Factor	Source Vulnerability Factor	Vulnerability Score
IPZ-1	10	0.5	5
IPZ-2	8	0.5	4

Summary of Vulnerability Scores - Gros Cap Intake

## 2.3 <u>RAW WATER QUALITY</u>

The Intake Protection Zone Study (Baird, 2008) included a review of the historical concentrations of various parameters from raw water samples collected at the Water Filtration Plant (Plant). Historical raw water quality data was provided for 1990 to 2005 by PUC Services Inc (PUC), the Plant operators. The PUC raw water quality data for the intake was documented as part of the Ontario Drinking Water Surveillance Program (ODWSP). Sample parameters included general chemistry parameters (temperature, harness, alkalinity, etc.) ions, nutrients, bacteria, metals, volatile organic compounds (VOCs), herbicides and pesticides, phenolics, polynuclear aromatic hydrocarbons (PAHs), radionuclides and other chemicals included the Technical Support Document for Ontario Drinking-Water Standards, Objectives, and Guidelines (MOE, 2006) (ODWS).

Based on the historical ODWSP data, average pH, colour, alkalinity, turbidity, and total coliforms showed relatively stable or slight decreasing trends from the mid 1990s to 2005 with a slight increase in 2006. The chloride concentration remains stable since 2000 and the *E.Coli* concentration remained relatively stable at 0 cfu/mL from 2003 to 2007, with occasional peaks of 1 or 2 cfu/mL.

The Intake Protection Zone Study (Baird, 2008) also included the collection of four surface water samples from locations in the area surrounding the Gros Cap Intake. Samples were collected at locations ranging from 400 meters to one kilometre from the intake structure. With the exception of volatile organic compounds (VOCs), samples were composites of water volumes collected throughout the water column. The samples were analyzed for physical, chemical, and microbial parameters included in Tables 1, 2, and 4 of the ODWS, and for phenols. Based on a review of the analytical data, several parameter concentrations exceeded the ODWS including *E.coli*, total coliform bacteria, and organic nitrogen. In addition, the water hardness consistently fell below the

operational guideline range. These parameter concentrations are summarized on Table 1.

None of the noted exceedances are unexpected for a surface water source. The only health related exceedances were for microbiological parameters, which the treatment system can easily handle.

During the operator interview conducted as part of the Intake Protection Zone Study (Baird 2008), the PUC plant operator described the surface water source for the WTP as "very high quality". Considering that samples from the raw source water meet most of the ODWS, which are intended for comparison with treated drinking water analytical results, the results historical and recent source water sampling support that claim.

# 2.4 <u>SEDIMENT QUALITY</u>

The Intake Protection Zone Study (Baird, 2008) included the collection of sediment samples at Jackson Creek, tributary SW0012 and at the Gros Cap shoreline as well as a sample collected from the lake bed at the Intake structure. Sediment samples were analyzed for semi-volatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), metals, and general chemistry parameters.

With the exception of the sediment sample collected at the Gros Cap shoreline no parameters were detected at concentrations that exceeded any of the provincial or federal sediment criteria. The Gros Cap shoreline sample, collected within IPZ-1, approximately 830 metres from the Intake structure, exhibited concentrations of 13 polyaromatic hydrocarbons (PAHs) that exceeded the MOE lowest effect level (LEL). The MOE LELs were adopted as Standards in "Soil, Groundwater and Sediment Standards for Use under Part XV.1 of the Environmental Protection Act" (MOE, 2004) (Soil, Groundwater and Sediment Standards). These parameter concentrations are summarized on Table 2.

With the exception of Benzo(a)pyrene, PAHs are not analyzed as part of the raw water characterization for the Gros Cap Intake. Benzo(a)pyrene was not detected in any of the surface water samples collected during the Intake Protection Zone Study and concentrations of Benzo(a)pyrene provided in the ODWSP data were well below the ODWS.

The extent and source of the PAH impact at the Gros Cap shoreline was not determined during the Intake Protection Zone Study.

In addition, the laboratory method detection limit (MDL) marginally exceeded the MOE LEL for cadmium for all samples. The laboratory MDL for total PCBs exceeded the MOE LEL for the sample collected at the Gros Cap Shoreline. As such, it is not known if these contaminant concentrations exceed the criteria at these locations.

## 2.5 <u>ENVIRONMENTAL DATABASES SEARCH</u>

CRA contracted EcoLog Environmental Risk Information Services Ltd. (ERIS) to conduct a search of available federal, provincial and private environmental databases. The database searches were completed to assist in the identification of environmental conditions within the IPZ. A summary of the pertinent findings from the database search is provided below. The numbers of records identified for the IPZ are identified in the following table. The complete database search report, which describes the database contents and limitations associated with this information, is included in Appendix A.

Database	Number of Records	
FEDERAL DATABASES		
Environmental Effects Monitoring (EEM)	None	
Environmental Issues Inventory System (EIIS)	None	
Federal Convictions (FCON)	None	
Federal Contaminated Sites (FCS)	5	
Five Records were listed in the FCS database for two Sites. A site at the southwest section of the Gros Cap Reefs, located within IPZ -2, was identified within the database. No contaminants of concern were identified. The record indicated that no samples were taken to confirm contamination. Four additional records were included for sites located in the area of the Gros Cap Marina. Based on a historical review, heavy metals were a suspected contaminant within sediment. An initial testing program identified petroleum hydrocarbons, polycyclic aromatic hydrocarbons (PAHs) and heavy metals in soil in the vicinity of the		
Fisheries & Oceans Fuel Tanks (FOFT)	None	
Indian & Northern Affairs Fuel Tanks (IAFT) None		
National Analysis of Trends in Emergencies System (NATE) None		
National Defense & Canadian Forces Fuel Tanks ( <b>NDFT</b> ) None		
National Defence & Canadian Forces Spills (NDSP) None		
National Defence & Canadian Forces Waste Disposal Sites     None       (NDWD)		
National Environmental Emergencies System (NEES)	None	
National PCB Inventory (NPCB) None		

Database	Number of Records
National Pollutant Release Inventory (NPRI)	None
Parks Canada Fuel Storage Tanks (PCFT)	None
Transport Canada Fuel Storage Tanks (TCFT)	None
PROVINCIAL DATABASES	
Abandoned Aggregate Inventory (AAGR)	None
Aggregate Inventory (AGR)	None
Abandoned Mines Information System (AMIS)	None
Certificates of Approval (CA)	None
Coal Gasification Plants (COAL)	None
Compliance and Convictions (CONV)	None
Drill Holes (DRL)	None
Environmental Registry (EBR)	None
Ontario Regulation 347 Waste Generators Summary (GEN)	None
Mineral Occurrences (MNR)	None
Non-Compliance Reports (NCPL)	None
Ontario Inventory of PCB Storage Sites (OPCB)	None
Ontario Oil and Gas Wells (OOGW)	None
Pesticide Register (PES)	None
Private and Retail Fuel Storage Tanks ( <b>PRT</b> )	None
Ontario Regulation 347 Waste Receivers Summary (REC)	None
Record of Site Condition (RSC)	None
Wastewater Discharger Registration Database (SRDS)	None
Ontario Spills (SPL)	None
Waste Disposal Sites - MOE CA Inventory (WDS)	None
Waste Disposal Sites - MOE 1991 Historical Approval Inventory ( <b>WDSH</b> )	None
Water Well Information System (WWIS)	37
The majority of the wells are domestic supply wells. One well listing of the water wells located within the IPZ identified wit included on Table 3. The water well locations are shown on F	l was for public supply. A hin the WWIS database is igures 2 through 7.
PRIVATE DATABASES	
Anderson's Waste Disposal Inventory (ANDR)	None
Automobile Wrecking & Supplies (AUWR)	None
Commercial Fuel Oil Tanks (CFOT)	None

Automobile Wrecking & Supplies (AUWK)	None
Commercial Fuel Oil Tanks (CFOT)	None
Chemical Register (CHEM)	None
ERIS Historical Searches (EHS)	None
Fuel Storage Tanks (FST)	None
Canadian Mine Locations (MINE)	None
Oil and Gas Wells ( <b>OGW</b> )	None
Canadian Pulp and Paper ( <b>PAP</b> )	None
Retail Fuel Storage Tanks ( <b>RST</b> )	None
Scott's Manufacturing Directory (SCT) None	
Anderson's Storage Tanks (TANK) None	

Based on the environmental database search conducted, the only identified potential threat is the presence of contaminated soils in the area of the Gros Cap marina and suspected contaminated sediments in the area of the Gros Cap Reefs. No information was provided detailing the specific chemicals of concern, concentrations or the extent of any contamination in soil or sediment.

### 3.0 FIELD RECONNAISSANCE

In fall 2008 and spring 2009 CRA conducted a field program to gather/verify information regarding property uses and potential land based threats within IPZ-1 and IPZ-2. The field reconnaissance consisted of a site by site inspection. Questionnaires were delivered to each home and business and where possible, owners/residents were interviewed. A drop box was placed at the Prince Township office for owners/residents to return questionnaires. Examples of the introductory letter and accompanying questionnaire distributed within the area are included in Appendix B.

During the field reconnaissance properties were inspected to determine activities conducted at each site, identify the locations of above ground storage tanks (ASTs) and underground storage tanks (USTs), septic systems, outhouses, and drinking water wells. Locations of these features were recorded in UTM coordinates (Zone 16) using a Leica model DF500 GPS unit with sub-metre (m) accuracy. Features identified during the field reconnaissance are shown on Figures 2 to 7.

### 4.0 **ISSUES EVALUATION**

In accordance with Technical Rules, a drinking water issue is defined as the presence of a parameter in water at a surface water intake or in a well related to a drinking water system if the parameter is listed in Schedule 1, 2, 3 or 4 of the ODWS (MOE, 2006) and the parameter is present at a concentration that may result in the deterioration of the source water quality, or a trend of increasing concentrations is observed for such a parameter that would result in a deterioration of source water quality.

Drinking water issues for the Gros Cap Intake were evaluated based on the ODWSP historical raw water quality data, surface water sampling results from the Intake Protection Zone Study (Baird, 2008) and in consultation with the WTP operator.

As discussed in Section 2.3 the water quality at the Gros Cap Intake is described by the WTP operator as "very high quality". The operator did not identify any drinking water issues related to the source water for the Gros Cap Intake. Based on the historical analytical data, with the exception total coliform bacteria and occasional *E.coli* concentrations, none of the analyzed parameters within the raw water exceeded the ODWS since 1990. Water hardness was consistently lower than the operational guideline range. Generally parameter concentrations are stable however the total coliform bacteria concentration exhibits a decreasing trend.

Graphical representations of the E.coli and total coliform bacteria concentrations over time are illustrated below. The ODWS for both *E.Coli* and total coliform bacteria is 0 colony forming units per 100 milliliters (CFU/100mL)





Samples collected in the vicinity of the Gros Cap Intake during the Intake Protection Zone Study (Baird, 2008) exhibited *E.coli*, total coliform bacteria, and organic nitrogen concentrations that exceeded the ODWS and water hardness consistently fell below the operational guideline range.

As discussed in Section 2.3, none of the noted exceedances are unexpected for a surface water source. The source water's hardness is typical of that throughout Lake Superior. Based on discussions with the WTP operator, the hardness, nitrogen and bacteria concentrations observed in raw water at and around the Gros Cap Intake do not represent Issues as these concentrations are easily handled by the WTP.

Based on the above, no Issues were identified for the Gros Cap Intake.

### 5.0 <u>THREATS INVENTORY</u>

In accordance with the Act, a drinking water threat is defined as an activity or condition that adversely affects or has the potential to adversely affect the quality or quantity of any water that is or may be used as a source of drinking water, and included an activity or condition that is prescribed by the regulations as a drinking water threat (MOE, 2008)

Drinking water threats for the Gros Cap IPZs were assessed based on the Technical Rules: Assessment Report (MOE, 2008) (Technical Rules). Threats are divided into two categories, chemical and pathogen. The Technical Rules provide three methods for identifying threats and quantifying the associated risks.

Method 1: Prescribed Threats based on Activities

Method 2: Calculation of Hazard Ratings and Risk Scores based on Other Activities

Method 3: Calculation of Risk Scores based on Conditions resulting from Past Activities

These methods and how they apply to the Gros Cap IPZs are described below.

### 5.1 <u>PRESCRIBED THREATS</u>

Activities prescribed as drinking water threats are those activities included in paragraphs 1 through 18 and paragraph 21 of subsection 1.1 (1) of O.Reg. 287/07, which are as follows:

- The establishment, operation or maintenance of a waste disposal site within the meaning of Part V of the Environmental Protection Act
- The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage
- The application of agricultural source material to land
- The storage of agricultural source material
- The management of agricultural source material
- The application of non-agricultural source material to land
- The handling and storage of non-agricultural source material
- The application of commercial fertilizer to land
- The handling and storage of commercial fertilizer
- The application of pesticide to land

- The handling and storage of pesticide
- The application of road salt
- The handling and storage of road salt
- The storage of snow
- The handling and storage of fuel
- The handling and storage of a dense non-aqueous phase liquid (DNAPL)
- The handling and storage of an organic solvent
- The management of runoff that contains chemicals used in the de-icing of aircraft
- The use of land as livestock grazing or pasturing land, an outdoor confinement area or a farm-animal yard

# 5.1.1 IDENTIFIED LAND USE ACTIVITIES

Land use activities were determined for the IPZs based on field reconnaissance and on a review of Prince Township's zoning By-Law. Properties within IPZ-1 include residential homes, a former hotel (now a residential property), a marina, the Gros Cap municipal water supply pump station, Second Line West, which is a paved roadway, and vacant/undeveloped lands. The majority of the properties located within the IPZ-2 are comprised of residential homes along Second Line East and Pinder Drive, summer cottages at the northern extent of North Gros Cap Road and vacant lands. Other property uses within IPZ-2 include roadways (paved and gravel surfaced), a church and associated cemetery, a taxidermist, and an ice manufacturing facility. The majority of the area within IPZ-2 is comprised of open water. The International Shipping Channel crosses through IPZ-2 at its western extent.

For vacant/undeveloped lands, potential property use was considered based on the land use zoning for the property as well as the surrounding property uses. Given the current development and zoning within the IPZs, vacant/undeveloped lands were assessed as though they were residential properties.

### 5.1.2 PRESCRIBED DRINKING WATER THREATS

Property uses were categorized in accordance with the North American Industry Classification System (NAICS). The NAICS codes for identified property uses within the IPZs are as follows:

Observed Property Use	NAICS Code	Land Use Activity Name
Residential	814110/-9999	Private Households/ Residential Homes
Vacant/Undeveloped	NA	NA
Church	813110	Religious Organizations
Cemetery	81222	Funeral Services
Taxidermy	711511	Independent Artists, Writers and Performers
Ice Production	312110	Soft Drink and Ice Manufacturing
Former Hotel	721111	Traveler Accommodation
PUC Pumping Station	221310	Water, Sewage and Other Systems
Marina	71393	Marinas
Roadway	-9999	Transportation Corridor
Shipping Channel	-9999	Transportation Corridor

NAICS Codes Associated with Property Uses

The MOE prescribed threats based on the above NAICS codes are listed in Table 4. Additional threats associated with specific activities observed during the field reconnaissance were also assessed.

For sites with combined property uses (e.g. a business with an attached residence), all threats prescribed for with each property use were assessed.

### 5.1.3 ASSESSMENT OF THREAT SIGNIFICANCE

Whether particular threats were significant or not was assessed using the Tables of Drinking Water Threats (MOE, 2008) (Threat Tables). The drinking water threat tables identify numerous individual circumstances associated with a prescribed threat. Circumstances include information such as a particular chemical of concern, its storage location (above or below ground), the quantity of chemical stored or used and so on.

The appropriate circumstances and associated reference numbers were determined based on the information gathered from the field reconnaissance, interviews, and questionnaires, etc. Multiple reference numbers were considered in cases where the particular contaminant of concern, volume of chemical stored, etc. was not known. The items considered and assumptions made during the selection of appropriate circumstances for each prescribed threat are further explained below.

# Waste Disposal Site - Storage of wastes described in clauses (p), (q), (r), (s), (t) or (u) of the definition of hazardous waste

This threat refers to incidental wastes that contain hazardous constituents and their empty/discarded containers. This threat was prescribed for all residential properties and thus was also applied to vacant properties as discussed previously in Section 5.1.1. The average household stores small quantities of various chemicals, depending on the activities of the residents. As such, circumstances were considered for storage of all the chemicals of concern listed in the Chemical Threat Table, above and/or below grade. For the cemetery, the burial of human bodies was treated as below grade storage.

# <u>The establishment, operation or maintenance of a system that collects, stores,</u> <u>transmits, treats or disposes of sewage</u>

Since there is no municipal or other centralized sewage collection and treatment system within the area of Prince Township that intersects the IPZs, all properties within the IPZs that have a building large enough for occupancy were assumed to have an associated septic system or outhouse. It was also assumed that should any vacant property be developed a septic system or outhouse would be installed. Circumstances were considered for discharge of all chemicals of concern listed in the Chemical Threat Table as well as discharges of pathogens.

# Application of a Commercial Fertilizer to Land

It was assumed that fertilizer could be applied at all residential properties, properties that might be developed as residential and other non-residential properties with landscaping. No farming (crop or livestock) was observed within the IPZs during the field reconnaissance or on aerial photographs of that area. As such, the managed land percentage and livestock density were assumed to be the minimum for the IPZs.

# Handling and Storage of Commercial Fertilizer

It was assumed that small retail size quantities of fertilizer could be stored and handled at all residential properties, properties that might be developed as residential and other non-residential properties with landscaping.

# Application of a Pesticide to Land

It was assumed that small quantities of pesticide could be applied at residential properties, properties that might be developed as residential and other non-residential properties with landscaping. Developed properties within the IPZs are generally less than one hectare in size. It was not anticipated that pesticide would be applied over areas larger than one hectare.

# Handling and Storage of a Pesticide

It was assumed that small retail size quantities of pesticide could be stored and handled at all residential properties, properties that might be developed as residential and other non-residential properties with landscaping.

# Application of Road Salt

Road Salt application was assumed for all paved roads, but not for seasonal gravel surfaced roads. Total impervious surface area maps were not available for Prince Township. The impervious surface area was estimated to be between 1 and 8 percent.

# <u>Storage of Road Salt</u>

There are no permanent salt storage facilities within the IPZs, however large quantities of salt are transported as cargo within the international shipping channel. This was considered to be temporary storage of road salt.

# Handling and Storage of Fuel

All residential properties and other properties with a building large enough for occupancy were assumed to be storing fuel for heating purposes. Based on the field

reconnaissance not USTs were noted within the IPZ. Residential heating oil tanks are ASTs would typically fall within the range of 250 to 2,500 litres. Larger fuel quantities (>2,500 L) are transported along roadways to make fuel deliveries and even larger quantities of gasoline and fuel oil are transported as cargo within the international shipping channel. Transportation of fuel within the shipping channel and along roadways was considered to be temporary fuel storage.

### Handling and Storage of a DNAPL

This threat was prescribed for the Marina and for the PUC Pump Station. Circumstances were considered where DNAPLs were stored above and/or below grade.

### Handling and Storage of an Organic Solvent

Although a prescribed threat for a Site where funeral services are conducted, the Cemetery was never an embalming facility and it is unlikely that organic solvents were used there although they may have been present in small quantities in the embalmed bodies that are buried at the property.

Circumstances including below grade chemical or other storage were considered only for properties where storage containers were buried, not in the case where containers such as ASTs were situated within basements.

## 5.1.4 LOW, MODERATE AND SIGNIFICANT THREATS

The threat level for each particular circumstance was assessed as significant, moderate or low based on the vulnerability score for the IPZ-1 or 2.

Based on the current and potential future property uses within the IPZ-1, none of the prescribed or identified threats were significant or moderate. Low level threats were identified for 11 properties within IPZ-1, which are listed on Table 5. No threats were identified for IPZ-2.

Considering any potential future development, without restriction, review of the entire list of chemical and pathogen threats provided in the Tables of Drinking Water Threats (MOE, 2008) reveals that there are 599 circumstances (558 Chemical and 41 Pathogen) that represent a low threat level within IPZ-1. Due to the low vulnerability scores this assessment did not reveal any significant or moderate threats for IPZ-1. No threats were identified for IPZ-2. For any threats listed within the Tables of Drinking Water Threats to be classified as moderate or significant the required minimum vulnerability scores are 6 and 9 respectively.

# 5.2 <u>OTHER ACTIVITES</u>

In accordance with the Technical Rules, where an activity is identified by the Source Protection Committee as a potential drinking water threat, with the approval of the Director the Risk Score is calculated as follows:

Risk Score = 
$$A \times B$$

Where:

A = The Chemical or Pathogen Hazard Rating

B = The Vulnerability Score of the Area in which the activity is taking place

Chemical Hazard Ratings are calculated considering:

- Toxicity Score of the parameter
- Environmental Fate Score of the parameter
- Quantity Score
- Method of Release (Direct vs. Indirect)
- The Type of Vulnerable Area in which the activity is located

Pathogen Hazard Ratings are calculated considering:

- The frequency of the presence of pathogens that may be associated with the activity
- Method of Release to the natural environment

Risk Scores that are greater than 80 denote a significant threat, Risk Scores between 60 and 80 denote a moderate threat level, and Risk Scores below 60 denote a low threat level.

# 5.2.1 <u>THE INTERNATIONAL SHIPPING CHANNEL</u>

Based on discussions with the SSMRCA personnel, the International Shipping Channel that passes through the IPZ-2 is approved by the Director as an activity that represents sufficient threat potential for additional consideration.

Based on the Traffic Statement for the St. Marys Falls Canal (US Army Corps., 2006) 70 million tons of cargo moved through the American locks in 2006. Half of the material was iron ore and another quarter of the shipping volume was coal/coke. In addition to these, other materials including asphalt, tar and pitch, petroleum products (crude, gasoline, fuel oil, etc.), metal ores, salt, fertilizers, sodium hydroxide, dredge spoils, etc. are transported through the locks on a regular basis. A total volume of 170 thousand tons of petroleum product was shipped through the locks in 2006.

Various chemical compounds are associated with the materials transported in the Shipping Channel, which if released have the potential to degrade water quality. Due to the number of possible contaminants and contaminants associated with unknown materials transported in the shipping channel, a worst case chemical hazard rating and risk score was initially calculated for the Shipping Channel according to the procedure outlined in the Technical Bulletin: Addressing Transportation Threats (MOE, 2009). For the purpose of considering the worst case scenario, maximum scores of 10 were assigned for the toxicity, environmental fate, quantity and method of release resulting in a Chemical Hazard Rating of 10. The resulting Risk Score and associated risk level for the IPZs is presented below.

IPZ	Vulnerability	Chemical	Risk Score	Risk Level
	Score	Hazard Score		
IPZ-1	5	10	50	Low
IPZ-2	4	10	40	Low

Worst Case Risk Score - Shipping Channel - Gros Cap Intake

Based on the above, further calculations for individual chemicals of concern were not conducted.

# 5.2.2 <u>TAXIDERMIST</u>

Based on information gathered during the field reconnaissance a taxidermist business located within IPZ-2 at 4703 Second Line West. This business uses an underground storage tank (UST) to hold spent chemicals including sulphuric acid, bleach, and formaldehyde. A business representative indicated that the tank is approximately 5,600 litres in size and is pumped out three times a year.

Based on the worst case scenario calculation completed in the previous section, given the low vulnerability score for IPZ-2, risk levels for chemicals of concern at this property would be low.

### 5.3 <u>CONDITIONS RESULTING FROM PAST ACTIVITIES</u>

In accordance with Technical Rules, condition includes one of the following:

- The presence of a non-aqueous phase liquid in groundwater within a highly vulnerable aquifer, a significant groundwater recharge area, or a wellhead protection area
- The presence of a single mass greater than 100 litres of one or more DNAPLs in surface water within an IPZ
- The presence of a contaminant in groundwater within a highly vulnerable aquifer, a significant groundwater recharge area or a wellhead protection area, where the contaminant concentration exceeds the MOE generic standard presented in *"Table 2 Full Depth Generic Site Condition Standards in a Potable Ground Water Condition"* of the Soil, Ground Water and Sediment Standards (MOE, 2004)
- The presence of a contaminant in surface soil in an IPZ where the contaminant concentration exceeds the MOE generic standards presented in *"Table 4 Stratified Site Condition Standards in a Potable Ground Water Condition."* of the Soil, Ground Water and Sediment Standards (MOE, 2004), for industrial/ commercial/community property use
- The presence of a contaminant in sediment, if the contaminant concentration exceeds the generic standards presented in *"Table 1 Full Depth Background Site Condition Standards"* of the Soil, Groundwater and Sediment Standards (MOE 2004)

Based on the above, the PAH levels detected in sediment at the Gros Cap Shore Line during the Intake Protection Zone Study (Baird, 2008) at concentrations that exceeded the *"Table 1 - Full Depth Background Site Condition Standards"* of the Soil, Groundwater and Sediment Standards (MOE 2004) is a condition that is a drinking water threat.

In accordance with the Technical Rules, the Risk Score of an area where a condition is identified is calculated as follows:

Risk Score = 
$$A \times B$$

Where:

A = The Hazard Rating of the Condition = 10 B = The Vulnerability Score of the Area in which the Condition is identified (5 for IPZ-1 and 4 for IPZ-2)

As such, the Risk Scores for IPZ-1 and IPZ-2 are 50 and 40 respectively. Risk Scores that are below 60 denote a low threat level.

### 6.0 <u>SUMMARY AND CONCLUSIONS</u>

- 1. A sediment sample collected at the Gros Cap shoreline during the Intake Protection Zone Study exhibited concentrations of 13 PAHs that exceeded the MOE sediment standard in Soil Groundwater and Sediment Standards (MOE, 2004).
- 2. Based on the environmental database search conducted, the only identified potential threat is the presence of contaminated soils in the area of the Gros Cap marina and suspected contaminated sediments in the area of the Gros Cap Reefs. No information was provided detailing the specific chemicals of concern, concentrations or the extent of any contamination in soil or sediment.
- 3. A field reconnaissance program was conducted to gather information regarding potential land based threats within the IPZs. The program included a site by site inspection and interviews with available property owners/residents. Questionnaires were delivered to each home and business.
- 4. During the field reconnaissance program the locations of ASTs, USTs, septic systems and drinking water wells were recorded in UTM coordinates using a GPS unit.
- 5. Drinking water issues for the Gros Cap Intake were evaluated in consultation with the WTP operator, based on historical raw water quality data for the intake and surface water sampling results from the area around the intake.
- 6. No drinking water issues were identified for the Gros Cap IPZs.
- 7. Drinking water threats were assessed for the Gros Cap IPZs based on the Technical Rules: through the identification of activities and associated prescribed threats, the calculation of hazard and risk scores for other activities that do not have associated prescribed threats, and the calculation of hazard and risk scores for conditions resulting from past activities.
- 8. No significant or moderate drinking water threats were identified for the Gros Cap IPZ-1.
- 9. No threats were identified for the Gros Cap IPZ-2.

All of Which is Respectfully Submitted, CONESTOGA-ROVERS & ASSOCIATES

M. M 11

Kyle Malo, Dip.Tech.

Sarah ackert Ferguson

Sarah Ackert Ferguson, P. Eng.

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CONESTOGA-RO & ASSOCIATES	OVERS
Logond	
Legend	
Water Well Inventory	
Public Supply	
<ul> <li>Domestic</li> </ul>	
Field Reconnaissance	

t<sup>†</sup> Cemetary

- Chemical Holding Tank
- Empty Drums
- $\triangle$  Stream
- 6 Water Holding Tank
- Taxidermist
- Above Ground Storage Tank
- Propane Tank
- DW Well
- Septic System / Outhouse
- WTP Intake
- IPZ 2
- O157 Property Parcels (Address or PIN)
  - ---- Roads
- ----- Watercourse
  - Waterbody
  - Wooded Areas
  - Municipality, Upper Tier



Figure 2 Identified Features Associated with Land Based Activities within IPZ-1 and IPZ-2 Issues Evaluation and Threats Inventory Gros Cap Surface Water Intake Prince Township, Ontario



	<b>CONESTOGA-ROVERS</b> & ASSOCIATES
Lege Water • Field • • • • • • • • • • •	end Well Inventory Public Supply Domestic Reconnaissance Cemetary Chemical Holding Tank Empty Drums Stream Water Holding Tank Taxidermist Above Ground Storage Tank Propane Tank
	DW Well Septic System / Outhouse IPZ - 1 IPZ - 2 Property Parcels (Address or PIN) Roads Watercourse Watercourse Waterbody Wooded Areas Municipality, Upper Tier
0       50       100         Metres       UTM Zone 16 NAD83         Basemapping: Produced by CRA under licence from Ontario Ministry of Natural Resources, Land Information Ontario (LIO), 2009. © Queen's Printer 2009         Figure 3         Identified Features Associated with Land Based Activities (North Gros Cap Road Area) Issues Evaluation and Threats Inventory         Gros Cap Surface Water Intake Prince Township, Ontario	



046442-50(GIS002)WA-004 July 17, 2009





Figure 5 Identified Features Associated with Land Based Activities (Second Line West, 4663 to 4798) Issues Evaluation and Threats Inventory Gros Cap Surface Water Intake Prince Township, Ontario





### Legend Water Well Inventory Public Supply • Domestic Field Reconnaissance +<sup>†</sup>+ Cemetary Chemical Holding Tank Empty Drums Stream $\triangle$ Water Holding Tank $\diamond$ Taxidermist • Above Ground Storage Tank $\bigcirc$ Propane Tank • DW Well • Septic System / Outhouse IPZ - 1 IPZ - 2 Property Parcels (Address or PIN) →→ Watercourse Waterbody Wooded Areas Municipality, Upper Tier 100 50 Metres UTM Zone 16 NAD83 1:2,400 Basemapping: Produced by CRA under licence from Ontario Ministry of Natural Resources, Land Information Ontario (LIO), 2009. © Queen's Printer 2009 Figure 6 Identified Features Associated with Land Based Activities (Second Line West, SW0012) Issues Evaluation and **Threats Inventory** Gros Cap Surface Water Intake

Prince Township, Ontario



### TABLE 1 SURFACE WATER ANALYTICAL RESULTS SUMMARY - 2007 ISSUES EVALUATION AND THREATS INVENTORY GROS CAP DRINKING WATER INTAKE

Sample Location Sample Name Sample Date	Units	MOE Standard <sup>(1)</sup>	<i>Historical</i> <i>Average</i> At Intake	A06 SW-46442-070428-RB-001 4/28/2007	A02 SW-46442-070428-RB-002 4/28/2007	A04 SW-46442-070428-RB-003 4/28/2007	A05 SW-46442-070428-RB-004 4/28/2007
Hardness	mg/L	80 - 100 OG	44.6	40	40	50	40
Nitrogen, Organic	mg/L	0.15 OG		0.3	0.2	0.3	0.3
Escherichia coli	cfu/100mL	ND	0	0	0	1	0
Total Coliform Bacteria	cfu/100mL	ND	2	24	52	18	2

•

#### NOTES:

(1) "Technical Support Document for Ontario Drinking Water Standards, Objectives and Guidelines", June 2003, Revised June 2006

ND Not detectable

OG Treatment Operational Guideline - Not Health Related

**Bold** Measured concentration exceeds applicable water quality standard

-- Data not available
## TABLE 2 SEDIMENT ANALYTICAL RESULTS SUMMARY - 2007 ISSUES EVALUATION AND THREATS INVENTORY GROS CAP DRINKING WATER INTAKE

Sample Location Sample Name Sample Date	Units	MOE LEL Criteria <sup>(1)</sup>	AO4 - 1km NW of Intake SS-46442-070428-RB-001 4/28/2007	Jackson Creek SS-46442-070609-KM-02 6/9/2007	Gros Cap Shoreline SS-46442-070609-KM-03 6/9/2007	SW0012 SS-46442-070609-KM-04 6/9/2007
Semi-Volatiles						
Anthracene	mg/kg	0.22	0.05 U	0.05 U	0.80	0.05 U
Benzo(a)anthracene	mg/kg	0.32	0.05 U	0.05 U	3.40	0.05 U
Benzo(a)pyrene	mg/kg	0.37	0.02 U	0.02 U	2.64	0.02 U
Benzo(g,h,i)perylene	mg/kg	0.17	0.05 U	0.05 U	1.62	0.05 U
Benzo(k)fluoranthene	mg/kg	0.24	0.05 U	0.05 U	2.17	0.05 U
Chrysene	mg/kg	0.34	0.05 U	0.05 U	3.24	0.05 U
Dibenz(a,h)anthracene	mg/kg	0.06	0.05 U	0.05 U	0.23	0.05 U
Fluoranthene	mg/kg	0.75	0.05 U	0.05 U	8.10	0.05
Fluorene	mg/kg	0.19	0.05 U	0.05 U	0.19	0.05 U
Indeno(1,2,3-cd)pyrene	mg/kg	0.2	0.05 U	0.05 U	1.82	0.05 U
Phenanthrene	mg/kg	0.56	0.05 U	0.05 U	1.75	0.05 U
Pyrene	mg/kg	0.49	0.05 U	0.05 U	6.18	0.05 U
Metals						
Cadmium	mg/kg	0.6	1 U	1 U	1 U	1 U
PCBs						
Total PCBs	mg/kg	0.07	0.04 U	0.04 U	0.2 U	0.04 U

#### NOTES:

(1) "Soil, Ground Water and Sediment Standards for use Under Part XV.1 of the Environmental Protection Act", MOE, 2004 Table 1 - Full Depth Backgroud Site Condition Standards for Sediment. All typs of Property Use (MOE, 2004)

U Not detected above method detection limit shown

- No criteria

**Bold** Measured concentration exceeds sediment quality standard.

## TABLE 3 WATER WELL INFORMATION ISSUES EVALUATION AND THREATS INVENTORY GROS CAP DRINKING WATER INTAKE

MOE Well I.D.	x (Easting Nad83)	y (Northing Nad83)	Zone	Margin of Error (m)	<b>Construction</b> Date	Primary Water Use	Well Depth (ft)
1103354	686695.3	5155272	16	unknown	November 30, 1982	Domestic	69
1103714	686697.9	5155274	16	100 - 300	April 15, 1985	Domestic	68
1107366	686553.6	5155325	16	unknown	June 23, 2004	Domestic	70
1101661	686497.9	5155404	16	30 - 100	May 15, 1971	Domestic	48
1103639	686297.9	5155424	16	100 - 300	August 15, 1984	Domestic	68
1101288	686347.9	5155437	16	100 - 300	June 20, 1969	Domestic	43
1102508	686647.9	5155474	16	100 - 300	June 30, 1978	Domestic	60
1102505	686497.9	5155474	16	300 - 1000	June 30, 1978		80
1101456	686247.9	5155474	16	100 - 300	June 18, 1968	Domestic	41
1103353	686097.9	5155474	16	100 - 300	September 1, 1982	Domestic	68
1102617	685972.9	5155474	16	100 - 300	September 11, 1979		400
1102988	685847.9	5155474	16	100 - 300	June 27, 1981	Domestic	71
1103211	685747.9	5155474	16	100 - 300	August 14, 1981	Domestic	80
1102187	686517.9	5155504	16	100 - 300	July 10, 1977	Domestic	64
1102727	686547.9	5155524	16	100 - 300	July 9, 1979	Domestic	68
1103607	686197.9	5155524	16	100 - 300	December 16, 1983	Domestic	60
1101903	685797.9	5155524	16	30 - 100	November 2, 1974	Domestic	35
1101205	686317.9	5155544	16	100 - 300	June 22, 1968	Domestic	46
1103638	685397.9	5155524	16	100 - 300	September 15, 1984	Domestic	70
1101802	685835.9	5155555	16	30 - 100	July 1, 1973	Domestic	55
1102960	685647.9	5155574	16	100 - 300	June 20, 1981	Domestic	75
1102750	685597.9	5155574	16	100 - 300	May 21, 1980	Domestic	74
1102749	685297.9	5155574	16	100 - 300	May 20, 1980	Domestic	68
1102124	686697.9	5155624	16	100 - 300	April 30, 1977	Domestic	68
1102162	686647.9	5155624	16	100 - 300	April 26, 1975	Public Supply	74
1102504	686547.9	5155624	16	100 - 300	June 27, 1978		70
1103528	686497.9	5155624	16	100 - 300	May 3, 1983	Domestic	69
1103747	686447.9	5155624	16	300 - 1000	August 15, 1985	Domestic	67
7051279	685220	5155607	16	10 - 30	September 27, 2007	Domestic	20
1101286	686597.9	5155652	16	100 - 300	June 15, 1969	Domestic	57
1100834	686433.9	5155649	16	100 - 300	October 15, 1966	Domestic	43
1102939	685347.9	5155624	16	100 - 300	April 9, 1981	Domestic	70
1101654	686297.9	5155654	16	30 - 100	June 19, 1972	Domestic	40
1102938	685297.9	5155624	16	100 - 300	April 29, 1981	Domestic	73
1101351	686465.3	5155672	16	unknown	April 19, 1970	Domestic	56
1102179	686497.9	5155674	16	100 - 300	December 24, 1975	Domestic	74
1101459	686137.9	5155669	16	30 - 100	September 6, 1971	Domestic	50

DATA SOURCE: Water Well Information System

#### **Construction** Method

Rotary (Convent.) Rotary (Convent.) Rotary (Convent.) Cable Tool Rotary (Convent.) Cable Tool Rotary (Convent.) Rotary (Convent.) Diamond Rotary (Convent.) Rotary (Convent.) Rotary (Convent.) Rotary (Convent.) Rotary (Convent.) Rotary (Convent.) Cable Tool Jetting Diamond Rotary (Convent.) Cable Tool Cable Tool Rotary (Convent.) Cable Tool Rotary (Convent.) Cable Tool Rotary (Convent.) Driving

Casing	Strata
Steel	Overburden
Galvanized	Overburden
Steel	Overburden
Steel	Overburden
Galvanized	Overburden
Steel	
Steel	Overburden
Steel	Overburden
Steel	Overburden
Galvanized	Overburden
Steel	Overburden
Steel	Overburden
Steel	Overburden
Galvanized	Overburden

Land Use Ac	tivity	Threat Reference Number		ıber	Threat Description							
Property Use	NAICS	Prescribed	Additional Threat	Rational	Prescribed Treat	Threat SubCategory	Threat Type	Contaminant Type	Chemical	Pat		
	814110	1			The establishment, operation or maintenance of a waste disposal site within the meaning of Part V of the Environmental Protection Act.	Waste Disposal Site - Storage of wastes described in clauses (p), (q), (r), (s), (t) or (u) of the definition of hazardous waste	Point	Chemical	1914-1943			
	-9999	2			The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage within the meaning of the Ontario Water Resources Act.	Sewage System Or Sewage Works - Septic System	Point	Both	834, 835, 836			
	-9999	8			The application of commercial fertilizer to land.	Application Of Commercial Fertilizer To Land	Non-Point	Chemical	19, 20			
Private Households/ Residential Homes	-9999	9			The handling and storage of commercial fertilizer.	Storage Of Commercial Fertilizer	Point	Chemical	1395-1396			
	-9999	10			The application of pesticide to land.	Application Of Pesticide To Land	Non-Point	Chemical	55-65			
	-9999	11			The handling and storage of pesticide.	Storage Of A Pesticide	Point	Chemical	1244-1254			
	-9999	15			The handling and storage of fuel.	Storage Of Fuel	Point	Chemical	172-176 and 272-276			
Church	813110	1			The establishment, operation or maintenance of a waste disposal site within the meaning of Part V of the Environmental Protection Act.	Waste Disposal Site - Storage of wastes described in clauses $(p)$ , $(q)$ , $(r)$ , $(s)$ , $(t)$ or $(u)$ of the definition of hazardous waste	Point	Chemical	1930			
	81222	1			The establishment, operation or maintenance of a waste disposal site within the meaning of Part V of the Environmental Protection Act.	Waste Disposal Site - Storage of wastes described in clauses $(p)$ , $(q)$ , $(r)$ , $(s)$ , $(t)$ or $(u)$ of the definition of hazardous waste	Point	Chemical	1930			
	-9999		2	Septic System on Site	The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage within the meaning of the Ontario Water Resources Act.	Sewage System Or Sewage Works - Septic System	Point	Both	834, 835, 836	19		
	-9999		8	Landscaping	The application of commercial fertilizer to land.	Application Of Commercial Fertilizer To Land	Non-Point	Chemical	19,20			
Comotory	-9999		9	Landscaping	The handling and storage of commercial fertilizer.	Storage Of Commercial Fertilizer	Point	Chemical	1395-1396			
Centerry	-9999		10	Landscaping	The application of pesticide to land.	Application Of Pesticide To Land	Non-Point	Chemical	55-65			
	-9999		11	Landscaping	The handling and storage of pesticide.	Storage Of A Pesticide	Point	Chemical	1244-1254			
	-9999		15	Heating	The handling and storage of fuel.	Storage Of Fuel	Point	Chemical	172-176 and 272-276			
	81222	17			The handling and storage of an organic solvent.	Storage Of An Organic Solvent	Point	Chemical	102-126			
	711511	1			The establishment, operation or maintenance of a waste disposal site within the meaning of Part V of the Environmental Protection Act.	Waste Disposal Site - Storage of wastes described in clauses (p), (q), (r), (s), (t) or (u) of the definition of hazardous waste	Point	Chemical	1914-1943			
	-9999		2	Septic System on Site	The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage within the meaning of the Ontario Water Resources Act.	Sewage System Or Sewage Works - Septic System	Point	Both	834, 835, 836			
	-9999		8	Landscaping	The application of commercial fertilizer to land.	Application Of Commercial Fertilizer To Land	Non-Point	Chemical	19,20			
Taxidermist/Residenc e	-9999		9	Landscaping	The handling and storage of commercial fertilizer.	Storage Of Commercial Fertilizer	Point	Chemical	1395-1396			
	-9999		10	Landscaping	The application of pesticide to land.	Application Of Pesticide To Land	Non-Point	Chemical	55-65			
	-9999		11	Landscaping	The handling and storage of pesticide.	Storage Of A Pesticide	Point	Chemical	1244-1254			
	-9999		15	Heating	The handling and storage of fuel.	Storage Of Fuel	Point	Chemical	172-176 and 272-276			
Marina	713930	15			The handling and storage of fuel.	Storage Of Fuel	Point	Chemical	152-156 and 242-246			
iviariita	713930	16			The handling and storage of a dense non-aqueous phase liquid.	Storage Of A Dense Non Aqueous Phase Liquid (DNAPL)	Point	Chemical	102-126			
	<b>721111</b>	1			The establishment, operation or maintenance of a waste disposal site within the meaning of Part V of the Environmental Protection Act.	Waste Disposal Site - Storage of wastes described in clauses (p), (q), (r), (s), (t) or (u) of the definition of hazardous waste	Point	Chemical	1914-1943			
	-9999		2	Septic System on Site	The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage within the meaning of the Ontario Water Resources Act.	Sewage System Or Sewage Works - Septic System	Point	Both	834, 835, 836			
	-9999		8	Landscaping	The application of commercial fertilizer to land.	Application Of Commercial Fertilizer To Land	Non-Point	Chemical	19,20			
Hotel	-9999		9	Landscaping	The handling and storage of commercial fertilizer.	Storage Of Commercial Fertilizer	Point	Chemical	1395-1396			
	-9999		10	Landscaping	The application of pesticide to land.	Application Of Pesticide To Land	Non-Point	Chemical	55-65			
	-9999		11	Landscaping	The handling and storage of pesticide.	Storage Of A Pesticide	Point	Chemical	1244-1254			
	-9999		15	Heating	The handling and storage of fuel.	Storage Of Fuel	Point	Chemical	172-176 and 272-276			
Ice Manufacturing	312110	2			The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage within the meaning of the Ontario Water Resources Act.	Sewage System Or Sewage Works - Industrial Effluent Discharges	Point	Both	834, 835, 836			

## TABLE 4 PRESCRIBED AND OTHER THREATS ASSOICATED WITH LAND USE ACTIVITIES ISSUES EVALUATION AND THREATS INVENTORY GROS CAP DRINKING WATER INTAKE

e Number
thogens
1955
955, 1969
1955
1955
1955

Land Use Ac	ctivity	]	Chreat Reference Num	ıber	Threat Description					
Property Use	NAICS	Prescribed	Additional Threat	Rational	Prescribed Treat	Threat SubCategory	Threat Type	Contaminant Type	Chemical	I
	2213	2			The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage within the meaning of the Ontario Water Resources Act.	Sewage System Or Sewage Works - Septic System	Point	Both	834, 835, 836	
	2213	15			The handling and storage of fuel.	Storage Of Fuel	Point	Chemical	172-176 and 272-276	1
	2213	16			The handling and storage of a dense non-aqueous phase liquid.	Storage Of A Dense Non Aqueous Phase Liquid (DNAPL)	Point	Chemical	102-126	1
PUC Pumping Station	2213		8	Landscaping	The application of commercial fertilizer to land.	Application Of Commercial Fertilizer To Land	Non-Point	Chemical	19,20	1
	2213		9	Landscaping	The handling and storage of commercial fertilizer.	Storage Of Commercial Fertilizer	Point	Chemical	1395-1396	1
	2214		10	Landscaping	The application of pesticide to land.	Application Of Pesticide To Land	Non-Point	Chemical	55-65	1
	2214		11	Landscaping	The handling and storage of pesticide.	Storage Of A Pesticide	Point	Chemical	1244-1254	1
	-9999	10			The application of pesticide to land.	Application Of Pesticide To Land	Corridor	Chemical	55-65	1
Roadways	-9999	12			The application of road salt.	Application Of Road Salt	Corridor	Chemical	94, 95	1
	-9999	15			The handling and storage of fuel.	Storage Of Fuel	Corridor	Chemical	172-176 and 272-276	
	-9999	15			The handling and storage of fuel.	Storage Of Fuel	Corridor	Chemical	187 -191 and 302-306	1
Shinning Changel	-9999		13	Transport in Vessels	The handling and storage of road salt.	Storage Of Road Salt	Corridor	Chemical	1443, 1444	1
Shipping Channel	-9998		17	Transport in Vessels	The handling and storage of an organic solvent.	Storage Of An Organic Solvent	Corridor	Chemical	1381-1384	
	-9999		9	Transport in Vessels	The handling and storage of commercial fertilizer.	Storage Of Commercial Fertilizer	Corridor	Chemical	1425 - 1428	

## TABLE 4 PRESCRIBED AND OTHER THREATS ASSOICATED WITH LAND USE ACTIVITIES ISSUES EVALUATION AND THREATS INVENTORY GROS CAP DRINKING WATER INTAKE

e Number
thogens
1955

MPAC Address	PIN	Property Description	IPZ	Vulnerability Score	NAICS	RegRefNo	Additional Threat	Rational	Prescribed Treat	Threat Sub Category	Contaminant Type	Reference Number	Treat Level
4802-4830 SECOND LINE W	031618-0652	undeveloped - Assessed as Residential	1	5	814110	1			The establishment, operation or maintenance of a waste disposal site within the meaning of Part V of the Environmental Protection Act.	Waste Disposal Site - Storage of wastes described in clauses (p), (q), (r), (s), (t) or (u) of the definition of hazardous waste	Chemical	1914-1943	low
4819 SECOND LINE W	031618-0660	MARINA	1 and 2	4 and 5	713930	16			The handling and storage of a dense non-aqueous phase liquid.	Storage Of A Dense Non Aqueous Phase Liquid (DNAPL)	Chemical	102-126	Low
no address SECOND LINE W	031618-0665	Water Lot - DFO Dock	1 and 2	4 and 5	713930	16			The handling and storage of a dense non-aqueous phase liquid.	Storage Of A Dense Non Aqueous Phase Liquid (DNAPL)	Chemical	107-116	Low
no address SECOND LINE W	031618-0477	Water Lot - DFO Dock	1 and 2	4 and 5	713930	16			The handling and storage of a dense non-aqueous phase liquid.	Storage Of A Dense Non Aqueous Phase Liquid (DNAPL)	Chemical	107-116	Low
4821 SECOND LINE W	031618-0659	Private Household/Residential	1 and 2	4 and 5	814110	1			The establishment, operation or maintenance of a waste disposal site within the meaning of Part V of the Environmental Protection Act.	Waste Disposal Site - Storage of wastes described in clauses (p), (q), (r), (s), (t) or (u) of the definition of hazardous waste	Chemical	1914-1943	low
4827 SECOND LINE W	031618-0658	Private Household/Residential	1	5	814110	1			The establishment, operation or maintenance of a waste disposal site within the meaning of Part V of the Environmental Protection Act.	Waste Disposal Site - Storage of wastes described in clauses (p), (q), (r), (s), (t) or (u) of the definition of hazardous waste	Chemical	1914-1943	low
4835 SECOND LINE W	031618-0657	Private Household/Residential	1	5	814110	1			The establishment, operation or maintenance of a waste disposal site within the meaning of Part V of the Environmental Protection Act.	Waste Disposal Site - Storage of wastes described in clauses (p), (q), (r), (s), (t) or (u) of the definition of hazardous waste	Chemical	1914-1943	low
4837/4841 SECOND LINE W	031618-0656	Private Household/Residential	1	5	814110	1			The establishment, operation or maintenance of a waste disposal site within the meaning of Part V of the Environmental Protection Act.	Waste Disposal Site - Storage of wastes described in clauses (p), (q), (r), (s), (t) or (u) of the definition of hazardous waste	Chemical	1914-1943	low
4851 SECOND LINE W	031618-0653	Former Blue Water Inn - no longer in operation	1	5	721111	1			The establishment, operation or maintenance of a waste disposal site within the meaning of Part V of the Environmental Protection Act.	Waste Disposal Site - Storage of wastes described in clauses (p), (q), (r), (s), (t) or (u) of the definition of hazardous waste	Chemical	1914-1943	low
4851 SECOND LINE W	031618-0653	Former Blue Water Inn - no longer in operation	1	5	-9999		8	Landscaping	The application of commercial fertilizer to land.	Application Of Commercial Fertilizer To Land	Chemical	19,20	Low
no address SECOND LINE W	031618-0654	vacant lot between 4841 and 4851 Second Line West - Assessed as Residential	1	5	814110	1			The establishment, operation or maintenance of a waste disposal site within the meaning of Part V of the Environmental Protection Act.	Waste Disposal Site - Storage of wastes described in clauses (p), (q), (r), (s), (t) or (u) of the definition of hazardous waste	Chemical	1914-1943	low
HWY 550 SECOND LINE W	031618-0655	PUC Pump Station	1	5	2213	16			The handling and storage of a dense non-aqueous phase liquid.	Storage Of A Dense Non Aqueous Phase Liquid (DNAPL)	Chemical	102-126	Low
HWY 550 SECOND LINE W	031618-0655	PUC Pump Station	1	5	2213		8	Landscaping	The application of commercial fertilizer to land.	Application Of Commercial Fertilizer To Land	Chemical	19,20	Low

## TABLE 5 LOW LEVEL THREATS ASSOICATED WITH LAND USE ACTIVITIES WITHIN IPZ-1 ISSUES EVALUATION AND THREATS INVENTORY GROS CAP DRINKING WATER INTAKE

## APPENDIX A

## ERIS DATABASE SEARCH REPORT

# Pinpointing Your Environmental Risks

ECOLOG

**Environmental Risk Information Service** 

Project Site:	Gros Cap surface water N/A Gros Cap, Prince Township, ON
Client:	Jeff Timmermans Conestoga-Rovers & Associates 96 White Oak Drive East Sault Ste. Marie, ON P6B 4J8
ERIS Project No:	20081106028
Report Type:	Custom Report25km Search Radius
Prepared By:	Mark Mattei <u>mmattei@eris.ca</u>
Date:	November 17, 2008

DISCLAIMER AND COPYRIGHT NOTICE

DATABASE

REPORT

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## **Table of Contents**

Order Number:	20081106028
Site Name:	Gros Cap surface water
Site Address:	N/A Gros Cap, Prince Tow nship, ON
Report Type:	Custom Report, 0.25 km Search Radius

	Section
Report Summary This outlines the number of records from each database that fall on the site, and within various distances from	i
the site.	
Site Diagram	ii
The records that were found within a specified distance from the project property (the primary search radius) have been plotted on a diagram to provide you with a visual representation of the information available. Sites will be plotted on the diagram if there is sufficient information from the database source to determine accurate geographic coordinates. Each plotted site is marked with an acronym identifying the database in which the record was found (i.e., WDS for Waste Disposal Sites). These are referred to as "Map Keys". A variety of problems are inherent when attempting to associate various government or private source records with locations. EcoLog ERIS has attempted to make the best fit possible between the available data and their positions on the site diagram.	
Site Profile	iii
This table describes the records that relate directly to the property that is being researched.	
Detail Report	iv
This section represents information, by database, for the records found within the primary search radius. Listed at the end of each database are the sites that could not be plotted on the locator diagram because of insufficient address information. These records will not have map keys. They have been included because they may be found to be relevant during a more detailed investigation.	
	Page
Contaminated Sites on Federal Land	1
	4
Appendix: Database Descriptions	

# **Report Summary**

Order Number:	20081106028
Site Name:	Gros Cap surface water
Site Address:	N/A Gros Cap, Prince Township, ON
Report Type:	Custom Report, 0.25 km Search Radius

Database		Selected	On-site	Within 0.25	0.25km to 0.25km	Tota
AAGR	Abandonad Aggragate Inventory	v	0	0	0	0
AGR		v v	0	0	0	0
	Abandoned Mine Information System	Y	0	0	0	0
	Anderson's Waste Disposal Sites	Y	0	0	0	0
	Automobile Wrecking & Supplies	Y	0	0	0	0
CA	Certificates of Approval	Y	0	0	0	0
CEOT	Commercial Fuel Oil Tanks	Ŷ	0	0	0	0
CHEM	Chemical Register	Y	0	0	0	0
COAL	Coal Gasification Plants	Y	0	0	0	0
CONV		Y	0	0	0	0
DRI	Drill Hole Database	Y	0	0	0	0
FBR		Y	0	0	0	0
EEM	Environmental Effects Monitoring	Y	0	0	0	0
FHS	ERIS Historical Searches	Y	0	0	0	0
FIIS	Environmental Issues Information System	Y	0	0	0	0
FCON	Eederal Convictions	Y	0	0	0	0
FCS	Contaminated Sites on Federal Land	Y	0	5	0	5
FOFT	Fisheries & Oceans Fuel Storage Tanks	Ŷ	0	0	0	(
FST	Fuel Storage Tank	Y	0	0	0	(
GEN	Ontario Regulation 347 Waste Generators Summary	Y	0	0	0	(
IAFT	Indian & Northern Affairs Fuel Tanks	Ŷ	0	0	0	(
MINE	Canadian Mine Locations	Ŷ	0	0	0	(
MNR		Y	0	0	0	(
NATE	National Analysis of Trends in Emergencies System (NATES)	Y	0	0	0	(
NCPI	Non-Compliance Reports	Y	0	0	0	(
	National Defence & Canadian Forces Fuel Storage Tanks	Y	0	0	0	C
NDSP	National Defence & Canadian Forces Spills	Y	0	0	0	(
	National Defence & Canadian Forces Waste Disposal Sites	Ŷ	0	0	0	(
NEES	National Environmental Emergencies System (NEES)	Ŷ	0	0	0	0
NPCB	National PCB Inventory	Ŷ	0	0	0	0
NPRI	National Pollutant Release Inventory	Ŷ	0	0	0	0
OGW	Oil and Gas Wells	Y	0	0	0	C
OOGW	Ontario Oil and Gas Wells	Y	0	0	0	C
OPCB	Inventory of PCB Storage Sites	Y	0	0	0	C
PAP	Canadian Pulp and Paper	Y	0	0	0	0
PCFT	Parks Canada Fuel Storage Tanks	Y	0	0	0	C
PES	Pesticide Register	Y	0	0	0	(
PRT	Private and Retail Fuel Storage Tanks	Y	0	0	0	(
REC	Ontario Regulation 347 Waste Receivers Summary	Y	0	0	0	0
RSC	Record of Site Condition	Y	0	0	0	(
RST	Retail Fuel Storage Tanks	Y	0	0	0	(
SCT	Scott's Manufacturing Directory	V	õ	0	-	

# **Report Summary**

Order Number:	20081106028
Site Name:	Gros Cap surface water
Site Address:	N/A Gros Cap, Prince Township, ON
Report Type:	Custom Report, 0.25 km Search Radius

Database		Selected	On-site	Within 0.25	0.25km to 0.25km	Total
SPL	Ontario Spills	Y	0	0	0	0
SRDS	Wastewater Discharger Registration Database	Y	0	0	0	0
TANK	Anderson's Storage Tanks	Y	0	0	0	0
TCFT	Transport Canada Fuel Storage Tanks	Y	0	0	0	0
WDS	Waste Disposal Sites - MOE CA Inventory	Y	0	0	0	0
WDSH	Waste Disposal Sites - MOE 1991 Historical Approval Inventory	Y	0	0	0	0
WWIS	Water Well Information System	Y	0	37	0	37
		TOTAL	0	42	0	42

The databases chosen by the client as per the submitted order form are denoted in the 'Selected' column in the above table. Counts have been provided outside the primary buffer area for cursory examination only. These records have not been examined or verified, therefore, they are subject to change.

SITE DIAGRAM





This diagram is to be used solely for relative street location purposes. It may not accurately portray street or site positions.





— This diagram is to be used solely for relative street location purposes.
It may not accurately portray street or site positions.

# Site Report

Order Number:	20081106028
Site Name:	Gros Cap surface water
Site Address:	N/A Gros Cap, Prince Township, ON
Report Type:	Custom Report, 0.25 km Search Radius

FOR COMPLETE INFORMATION, REFER TO DETAIL REPORT

A search has been conducted for this site (address) and companyname. No records were found, within the database(s) selected, that meet either of these criteria.

# **Detail Report**

Order Number:	20081106028
Site Name:	Gros Cap surface water
Site Address:	N/A Gros Cap, Prince Township ON
Report Type:	Custom Report, 0.25 km Search Radius

If information is required for sites located beyond the selected address, please contact your ERIS representative.

Contaminated Sites on Federal Land

Water Well Information System

### **Contaminated Sites on Federal Land**

Map Key	Company	Address	Site Id	Departmental Id	PropertyNo.	Site Name
FCS-1		Prince	00014385	C F 50323	36334	Gros Cap
			Location: No sa Municipality: Pr Census Division: Federal Electoral Nearest Populate Longitude: -84. Latitude: 46.512 Reporting Organ Reason for Involt Est m <sup>3</sup> Contamin Est Tons Contamin Site Management Highest Step Cor Action Plan: Additional Info:	imples were taken of soil rince Algoma District District: Sault Ste. Marie d Area: Gros Cap 6153 1 ization: Department of Fis vement: Federal Real Pro ated: 0 ated: 0 strategy: Remediation mpleted: Historical Review	sheries and Oceans perty	
					<u>Medium</u>	<u>Contaminant</u>
FCS-2		Prince	00014383	C F 50320	85363	Unassessed
			Location: Unas: Municipality. Pr Census Division: Federal Electoral Nearest Populate Longitude: -84. Latitude: 46.526 Reporting Organ Reason for Involv Est m <sup>3</sup> Contamin Est Ha Contamin Est Tons Contarr Site Management Highest Step Cor Action Plan: Additional Info:	sessed rince Algoma District District: Sault Ste. Marie d Area: Gros Cap 5819 5 ization: Department of Fis vement: Federal Real Pro ated: 0 inated: 0 Strategy: npleted: Identify Suspect S	sheries and Oceans perty Sites	
					Medium	Contaminant

### **Contaminated Sites on Federal Land**

Map Key	Company	Address	Site Id	Departmental Id	PropertyNo.	Site Name
FCS-3		Prince	00014384	C F 50321	85364	Unassessed
			Location: Unas: Municipality: Pr Census Division: Federal Electoral Nearest Populate Longitude: -84. Latitude: 46.526 Reporting Organ Reason for Involt Est m <sup>3</sup> Contamin Est Ha Contamin Est Tons Contam Site Management Highest Step Cor Action Plan: Additional Info:	sessed rince Algoma District District: Sault Ste. Marie d Area: Gros Cap 5833 6 ization: Department of Fis vement: Federal Real Prop ated: 0 ated: 0 strategy: mpleted: Identify Suspect S	heries and Oceans perty Sites	
					Medium	<u>Contaminant</u>
FCS-4		Prince	00012775	C S 04624	11889	Contaminated sediments
			Location: Vario Municipality: Pro- Census Division: Federal Electoral Nearest Populate Longitude: -84. Latitude: 46.528 Reporting Organ Reason for Invoh- Est m <sup>3</sup> Contamin Est Ha Contamin Est Tons Contam Site Management Highest Step Cor Action Plan: Additional Info:	us areas of the water lot rince Algoma District District: Sault Ste. Marie d Area: Gros Cap 5825 zization: Department of Fis vement: Federal Real Prop ated: 0 ated: 0 inated: 0 Strategy: Other npleted: Historical Review	heries and Oceans perty	
					<u>Medium</u>	
					Seament	neavy metals

#### **Contaminated Sites on Federal Land**

Map Key	Company	Address	Site Id	Departmental Id	PropertyNo.	Site Name
FCS-5		Prince	11889001	C S 04624	11889	Impacted soil
			Location: In vac Municipality: P Census Division Federal Electoral Nearest Populate Longitude: -84 Latitude: 46.528 Reporting Organ Reason for Invol Est m <sup>3</sup> Contamin Est Ha Contamin Est Ha Contamin Site Management Highest Step Con Action Plan: Additional Info:	cintity of access area. Prince : Algoma District District: Sault Ste. Marie ad Area: Gros Cap .5825 B bization: Department of Fis ly ement: Federal Real Pro- hated: 0 hated: 0 hinated: 0 t Strategy: Remediation mpleted: Initial Testing Pr	sheries and Oceans perty ogram	
					<u>Medium</u>	<u>Contaminant</u>
					Soil	Petroleum hydrocarbons and PAH's
					Soil	Heavy metals

Мар Кеу	Company	Address	W ell Id	Lot	Concession	Concession Name	County	Municipality
W W IS-1		PRINCE TOWNSHIP	1103354			S32SE	ALGOMA	PRINCE TOWNSHIP
			Easting Nad& Northing Nad Zone: Utm Reliabili Construction Primary W ate Secondary W W ell Depth ( Pump Rate (g Static W ater Flow Rate (g Clear/Cloudy Specific Cap Final W ell St Construction Flowing (y/n) Elevation Re Depth to Ber Overburden/ W ater Type: Casing Mater	B3: d83: ity: n Date: er Use: / ater Use: / ater Use: ft): gpm): Level (ft): pm): / acity: atus: n Method: : j: drock (ft): /Bedrock: rial:	686695.3 5155272 16 unknown utm 11/30/1982 DOMESTIC 69 30 8 CLEAR 0 WATER SUPPLY ROTARY (CONVEN 0 650 Read from topograph Overburden FRESH STEEL	T.) ic map, contour interval - 50 ft		
WWIS-2		PRINCE TOWNSHIP	1103714			S33SE	ALGOMA	PRINCE TOWNSHIP
			Easting Nada Northing Naa Zone: Utm Reliabili Construction Primary W ate Secondary W W ell Depth ( Pump Rate (g Static W ater Flow Rate (g Clear/Cloudy Specific Cap: Final W ell St Construction Flowing (y/n) Elevation Re Depth to Bec Overburden/ W ater Type: Casing Mate	B3: d83: ty: n Date: er Use: / ater Use: / ater Use: ft): gpm): Level (ft): pm): / acity: atus: n Method: : j: drock (ft): // Bedrock: rial:	686697.9 5155274 16 margin of error : 100 4/15/1985 DOMESTIC 68 30 29 CLEAR 0 WATER SUPPLY ROTARY (CONVEN 0 650 Read from topograph Overburden FRESH STEEL	m - 300 m T.) ic map, contour interval - 50 ft		

-								
Мар Кеу	Company	Address	W ell Id	Lot	Concession	Concession Name	County	Municipality
WWIS-3		PRINCE TOWNSHIP	1107366				ALGOMA	PRINCE TOWNSHIP
			Easting Nad	83:	686553.6			
			Northing Na	d83:	5155325			
			Zone:		16			
			Utm Reliabili	itv:				
			Construction	n Date	6/23/2004			
			Primary W at	er Use:	DOMESTIC			
			SecondaryW	/aterlise	Domeorio			
			Well Denth (	(ft).	70			
			Pump Rate (	(n).	5			
			Static Water	gpin).	14.46			
			Flow Pate (a		14.40			
			Cloar/Cloud	pin).				
			Specific Con	y.	OLLAN			
			Specific Cap	acity.				
			Final well St	atus:		<b>T</b> )		
			Construction	n Methoa:		1.)		
			Flowing (yn)	):	0			
			Elevation (ft	):				
			Elevation Re	eliability:				
			Depth to Be	drock (ft):				
			Overburden/	/Bedrock:	Overburden			
			Water Type:					
			Casing Mate	rial:	STEEL			
WWIS-4		PRINCE TOWNSHIP	1101661			S32SE	ALGOMA	PRINCE TOWNSHIP
			Easting Nad	83:	686497.9			
			Northing Na	d83:	5155404			
			Zone:		16			
			Utm Reliabili	itv:	margin of error · 30 m	n - 100 m		
			Construction	n Date:	5/15/1971			
			Primary W at	er Use	DOMESTIC			
			SecondaryW	/aterlise	2 01120110			
			Well Depth (	(ft).	48			
			Pump Rate (	apm):	12			
			Static Water	Level (ft)	8			
			Flow Rate (or	nm):	~			
			Clear/Cloudy	r	CLEAR			
			Specific Can	acity	0			
			Final Well St	atus:	WATER SUPPLY			
			Construction	n Method	CABLE TOOL			
			Flowing (v/n)	:	0			
			Flevation (ff	). ).	620			
			Elevation Re	,. liability	Read from topograph	ic map contour interval - 50 ft		
			Depth to Re	drock (ft)				
			Overburden	/Bedrock	Overburden			
			Water Type	Bourden.	FRESH			
			Casing Mate	rial·	STEEL			
			ousnig male					

Man Kev	Company	Address	WellId	Lot	Concession	Concession Name	County	Municipality
	company			201	Concession		County	manopany
W W IS-5		PRINCE TOWNSHIP	1103639			S33SE	ALGOMA	PRINCE TOWNSHIP
			Easting Nad	83:	686297.9			
			Northing Na	d83:	5155424			
			Zone:		16			
			Utm Reliabili	ity:	margin of error : 100	m - 300 m		
			Construction	n Date:	8/15/1984			
			Primary W at	er Use:	DOMESTIC			
			SecondaryW	later Use:				
			Well Depth (	(ft):	68			
			Pump Rate (	gpm):	30			
			Static Water	Level (ft):	26			
			Flow Rate (g	pm):				
			Specific Can	y. Jacity				
			Final Well St	tatus:	WATER SUPPLY			
			Construction	n Method:	ROTARY (CONVEN	Т.)		
			Flowing (v/n)	):	0			
			Elevation (ft	, ;):	650			
			Elevation Re	eliability:	Read from topog raphi	ic map, contour interval - 50 ft		
			Depth to Be	drock (ft):				
			Overburden/	/Bedrock:	Overburden			
			Water Type:		FRESH			
			Casing Mate	erial:	STEEL			
W W IS-6		PRINCE TOWNSHIP	1101288			S32SW	ALGOMA	PRINCE TOWNSHIP
			Easting Nad	83:	686347.9			
			Northing Na	d83:	5155437			
			Zone:		16			
			Utm Reliabili	ity:	margin of error : 100	m - 300 m		
			Construction	n Date:	6/20/1969			
			Primary W at	er Use:	DOMESTIC			
			SecondaryW	later Use:				
			Well Depth (	(ft):	43			
			Pump Rate (	gpm):	6			
			Static water	Level (ft):	21			
			Clear/Clouds	pin). v				
			Specific Can	y. Jacity	04			
			Final Well St	tatus:				
			Construction	n Method:	CABLE TOOL			
			Flowing (y/n)	):	0			
			Elevation (ft	:):	620			
			Elevation Re	eliability:	Read from topographi	ic map, contour interval - 25 ft		
			Depth to Be	drock (ft):				
			Overburden	/Bedrock:	Overburden			
			Water Type:		FRESH			
			Casing Mate	rial:	STEEL			

Мар Кеу	Company	Address	W ell Id	Lot	Concession	Concession Name	County	Municipality
WWIS-7		PRINCE TOWNSHIP	1102508			S32SW	ALGOMA	PRINCE TOWNSHIP
			Easting Nad Northing Na Zone: Utm Reliabi Constructio Primary Wat Secondary W W ell Depth Pump Rate ( Static W ate Flow Rate ( Clear/Cloud Specific Cap Final W ell S Constructio Flowing (y/n Elevation R Depth to Be Overburden W ater Type: Casing Mate	I83: ad83: ity: n Date: ter Use: V ater Use: (gpm): r Level (ft): (gpm): r Level (ft): y: bacity: itatus: n Method: ): t): eliability: edrock (ft): //Bedrock: erial:	686647.9 5155474 16 margin of error : 100 6/30/1978 DOMESTIC 60 35 10 CLEAR 0 WATER SUPPLY ROTARY (CONVEN 0 633 Read from topograph Overburden FRESH STEEL	m - 300 m T.) ic map, contour interval - 50 ft		
W W IS-8		PRINCE TOWNSHIP	1102505			S32SW	ALGOMA	PRINCE TOWNSHIP
			Easting Nad Northing Na Zone: Utm Reliabi Constructio Primary W at Secondary W W ell Depth Pump Rate ( Clear/Cloud Specific Cap Final W ell S Constructio Flowing (y/n Elevation R: Depth to Be Overburden W ater Type: Casing Mate	I83: ad83: lity: on Date: ter Use: Vater Use: (ft): (gpm): r Level (ft): gpm): ly: obacity: datus: on Method: i): t): eliability: edrock (ft): MBedrock: : erial:	686497.9 5155474 16 margin of error : 300 6/30/1978 80 40 18 CLEAR 1.8 WATER SUPPLY ROTARY (CONVEN 0 635 Read from topograph Overburden FRESH STEEL	m - 1 km T.) ic map, contour interval - 25 ft		

Мар Кеу	Company	Address	W ell Id	Lot	Concession	Concession Name	County	Municipality
W W IS-9		PRINCE TOWNSHIP	1101456			S31SE	ALGOMA	PRINCE TOWNSHIP
			Easting Nad Northing Na Zone: Utm Reliabil Constructio Primary W at Secondary W W ell Depth Pump Rate ( Static W ater Flow Rate (g Clear/Cloud Specific Cap Final W ell S Constructio Flowing (ym Elevation R Depth to Be Overburden W ater Type: Casing Mate	I83: ad83: Iity: n Date: ter Use: V ater Use: (ft): (gpm): r Level (ft): gpm): y: bacity: tatus: n Method: ): t): eliability: drock (ft): w/Bedrock: erial:	686247.9 5155474 16 margin of error : 100 6/18/1968 DOMESTIC 41 15 14 CLEAR 1.4 WATER SUPPLY DIAMOND 0 620 Read from topograph Overburden FRESH STEEL	m - 300 m ic map, contour interval - 25 ft		
W W IS-10		PRINCE TOWNSHIP	1103353			S32SW	ALGOMA	PRINCE TOWNSHIP
			Easting Nad Northing Na Zone: Utm Reliabil Constructio Primary W at Secondary W W ell Depth Pump Rate ( Static W ater Flow Rate (g Clear/Cloud Specific Cap Final W ell S Constructio Flowing (ym Elevation R Depth to Be Overburden W ater Type: Casing Mate	I83: ad83: Iity: n Date: ter Use: V ater Use: (ft): (gpm): r Level (ft): gpm): y: bacity: tatus: on Method: ): t): eliability: edrock (ft): w/Bedrock:	686097.9 5155474 16 margin of error : 100 9/1/1982 DOMESTIC 68 30 17 CLEAR 0 WATER SUPPLY ROTARY (CONVEN 0 650 Read from topograph Overburden FRESH STEEL	m - 300 m T.) ic map, contour interval - 50 ft		

Map Key	Company	Address	W ell Id	Lot	Concession	Concession Name	County	Municipality
W W IS-11		PRINCE TOWNSHIP	1102617			S32SW	ALGOMA	PRINCE TOWNSHIP
			1102617 Easting Nad83: Northing Nad83: Zone: Utm Reliability: Construction Date: Primary W ater Use: Secondary W ater Use: W ell Depth (ft): Pump Rate (gpm): Static W ater Level (ft): Flow Rate (gpm): Clear/Cloudy: Specific Capacity: Final W ell Status: Construction Method: Flowing (y/n): Elevation (ft): Elevation (ft): Elevation Reliability: Depth to Bedrock (ft): Overburden/Bedrock: W ater Type: Casing Material:		685972.9 5155474 16 margin of error : 100 r 9/11/1979 400 0 ABANDONED-SUPF ROTARY (CONVEN 0 620 Read from topographi 325 Bedrock	m - 300 m PLY T.) ic map, contour interval - 25 ft		
W W IS-12		PRINCE TOWNSHIP	1102988			S32SW	ALGOMA	PRINCE TOWNSHIP
			Easting Nad& Northing Na Zone: Utm Reliabili Construction Primary W ate Secondary W W ell Depth ( Pump Rate (g Static W ater Flow Rate (g Clear/Cloudy Specific Cap Final W ell St Construction Flowing (y/n) Elevation Re Depth to Bee Overburden/ W ater Type: Casing Mate	83: dd83: ity: n Date: er Use: / ater Use: / ater Use: (ft): gpm): Level (ft): pm): // acity: acity: atus: n Method: ): ): sliability: drock (ft): /Bedrock: rial:	685847.9 5155474 16 margin of error : 100 r 6/27/1981 DOMESTIC 71 30 14 CLEAR 0 WATER SUPPLY ROTARY (CONVEN 0 650 Read from topographi Overburden FRESH STEEL	m - 300 m T.) ic map, contour interval - 50 ft		

Map Key	Company	Address	W ell Id	Lot	Concession	Concession Name	County	Municipality
W W IS-13		PRINCE TOWNSHIP	1103211			S31SE	ALGOMA	PRINCE TOWNSHIP
			Easting Nada Northing Na Zone: Utm Reliabili Construction Primary Wate Secondary W W ell Depth ( Pump Rate ( Static W ater Flow Rate (g Clear/Cloudy Specific Cap Final W ell St Construction Flowing (yn) Elevation (ft Elevation Re Depth to Be Overburden, W ater Type: Casing Mate	83: dd83: ity: n Date: er Use: vater Use: (ft): (gpm): Level (ft): pm): y: bacity: tatus: n Method: ): biliability: drock (ft): /Bedrock: erial:	685747.9 5155474 16 margin of error : 100 8/14/1981 DOMESTIC 80 15 20 CLEAR 3 WATER SUPPLY ROTARY (CONVEN 0 650 Read from topograph Overburden UNKNOWN STEEL	m - 300 m IT.) ic map, contour interval - 50 ft		
W W IS-14		PRINCE TOWNSHIP	1102187			S32SW	ALGOMA	PRINCE TOWNSHIP
			Easting Nadi Northing Na Zone: Utm Reliabili Construction Primary Wate Secondary W W ell Depth ( Pump Rate ( Static W ater Flow Rate (g Clear/Cloudy Specific Cap Final W ell St Construction Flowing (y/n) Elevation Re Depth to Be Overburden, W ater Type: Casing Mate	83: hd83: ity: n Date: er Use: / ater Use: (ft): (gpm): · Level (ft): gpm): y: acity: tatus: n Method: ): eliability: drock (ft): /Bedrock: prial:	686517.9 5155504 16 margin of error : 100 7/10/1977 DOMESTIC 64 35 15 CLEAR 0 WATER SUPPLY ROTARY (CONVEN 0 630 Read from topograph Overburden UNKNOWN STEEL	m - 300 m IT.) ic map, contour interval - 25 ft		

Map Key	Company	Address	W ell Id	Lot	Concession	Concession Name	County	Municipality
W W IS-15		PRINCE TOWNSHIP	1102727			S32SW	ALGOMA	PRINCE TOWNSHIP
			Easting Nada Northing Na Zone: Utm Reliabili Construction Primary W atd Secondary W W ell Depth ( Pump Rate (g Clear/Cloudy Specific Cap Final W ell St Construction Flowing (y/n) Elevation (ft Elevation Re Depth to Bed Overburden/ W ater Type: Casing Mate	B3: d83: ty: n Date: er Use: fater Use: fater Use: ft): gpm): Level (ft): pm): acity: acity: atus: n Method: : liability: drock (ft): Bedrock: rial:	686547.9 5155524 16 margin of error : 100 r 7/9/1979 DOMESTIC 68 35 30 CLEAR 0 WATER SUPPLY ROTARY (CONVEN 0 650 Read from topographi Overburden FRESH STEEL	m - 300 m T.) c map, contour interval - 50 ft		
W W IS-16		PRINCE TOWNSHIP	1103607			S32SW	ALGOMA	PRINCE TOWNSHIP
			Easting Nada Northing Na Zone: Utm Reliabili Construction Primary W ato Secondary W W ell Depth ( Pump Rate ( Static W ater Flow Rate (g Clear/Cloudy Specific Cap Final W ell St Construction Flowing (y/n) Elevation (ft Elevation Re Overburden/ W ater Type: Casing Mate	B3: d83: ity: n Date: er Use: / ater Use: / ater Use: ft): gpm): Level (ft): pm): A acity: atus: n Method: : : iliability: drock (ft): Bedrock: rial:	686197.9 5155524 16 margin of error : 100 r 12/16/1983 DOMESTIC 60 12 40 2.4 WATER SUPPLY CABLE TOOL 0 650 Read from topographi Overburden STEEL	m - 300 m c map, contour interval - 50 ft		

Мар Кеу	Company	Address	W ell Id	Lot	Concession	Concession Name	County	Municipality
W W IS-17		PRINCE TOWNSHIP	1101903			S31SE	ALGOMA	PRINCE TOWNSHIP
			Easting Nada Northing Na Zone: Utm Reliabili Construction Primary Wata Secondary W W ell Depth ( Pump Rate ( Static W ater Flow Rate (g Clear/Cloudy Specific Cap Final W ell St Construction Flowing (y/n) Elevation (ft Elevation Re Depth to Bee Overburden/ W ater Type: Casing Mate	83: dd83: ity: n Date: er Use: / ater U	685797.9 5155524 16 margin of error : 30 m 11/2/1974 DOMESTIC 35 3 12 6 WATER SUPPLY JETTING 0 635 Read from topograph Overburden FRESH GALVANIZED	n - 100 m ic map, contour interval - 25 ft		
W W IS-18		PRINCE TOWNSHIP	1101205			S31SE	ALGOMA	PRINCE TOWNSHIP
			Easting Nada Northing Na Zone: Utm Reliabili Construction Primary Wata Secondary W W ell Depth ( Pump Rate ( Static W ater Flow Rate (g Clear/Cloudy Specific Cap Final W ell St Construction Flowing (y/n) Elevation Re Depth to Bee Overburden/ W ater Type: Casing Mate	83: dd83: ity: n Date: er Use: / ater Use: / ater Use: (ft): gpm): Level (ft): pm): // acity: acity: atus: n Method: ): ): aliability: drock (ft): /Bedrock: rial:	686317.9 5155544 16 margin of error : 100 6/22/1968 DOMESTIC 46 15 14 CLEAR 1.4 WATER SUPPLY DIAMOND 0 625 Read from topograph Overburden FRESH STEEL	m - 300 m ic map, contour interval - 25 ft		

Map Key	Company	Address	W ell Id	Lot	Concession	Concession Name	County	Municipality
W W IS-19		PRINCE TOWNSHIP	1103638			S31SE	ALGOMA	PRINCE TOWNSHIP
			Easting Nada Northing Na Zone: Utm Reliabili Construction Primary Wata Secondary W W ell Depth ( Pump Rate ( Static W ater Flow Rate (g Clear/Cloudy Specific Cap Final W ell St Construction Flowing (y/n) Elevation (ft Elevation Re Depth to Bee Overburden/ W ater Type: Casing Mate	83: dd83: ity: n Date: er Use: / ater Use: / ater Use: (ft): gpm): Level (ft): pm): // acity: acity: atus: n Method: ): bilability: drock (ft): /Bedrock: rial:	685397.9 5155524 16 margin of error : 100 9/15/1984 DOMESTIC 70 30 7 CLEAR 0 WATER SUPPLY ROTARY (CONVEN 0 650 Read from topograph Overburden FRESH STEEL	m - 300 m T.) ic map, contour interval - 50 ft		
W W IS-20		PRINCE TOWNSHIP	1101802			S32SW	ALGOMA	PRINCE TOWNSHIP
			Easting Nadi Northing Na Zone: Utm Reliabili Construction Primary W ato Secondary W W ell Depth ( Pump Rate ( Static W ater Flow Rate (g Clear/Cloudy Specific Cap Final W ell St Construction Flowing (yn) Elevation (ft Elevation Re Depth to Bee Overburden/ W ater Type: Casing Mate	83: dd83: ity: n Date: er Use: / ater Use: / ater Use: (ft): gpm): Level (ft): pm): // acity: acity: atus: n Method: ): bilability: drock (ft): //Bedrock: rial:	685835.9 5155555 16 margin of error : 30 m 7/1/1973 DOMESTIC 55 10 5 CLEAR 0 WATER SUPPLY ROTARY (CONVEN 0 620 Read from topograph Overburden FRESH GALVANIZED	n - 100 m T.) ic map, contour interval - 25 ft		

Мар Кеу	Company	Address	W ell Id	Lot	Concession	Concession Name	County	Municipality
W W IS-21		PRINCE TOWNSHIP	1102960			S31SE	ALGOMA	PRINCE TOWNSHIP
			Easting Nad Northing Na Zone: Utm Reliabil Constructio Primary Wat Secondary V W ell Depth Pump Rate ( Static W ater Flow Rate (Q Clear/Cloud Specific Cap Final Well S Constructio Flowing (yin Elevation Re Depth to Be Overburdem W ater Type: Casing Mate	I83: ad83: ity: on Date: ter Use: Vater Use: (ft): (gpm): r Level (ft): gpm): y: boacity: itatus: on Method: ): t): eliability: dorock (ft): w/Bedrock: erial:	685647.9 5155574 16 margin of error : 100 6/20/1981 DOMESTIC 75 12 25 CLEAR 0 WATER SUPPLY ROTARY (CONVEN 0 650 Read from topograph Overburden FRESH STEEL	m - 300 m T.) ic map, contour interval - 50 ft		
W W IS-22		PRINCE TOWNSHIP	1102750			S31NE	ALGOMA	PRINCE TOWNSHIP
			Easting Nad Northing Na Zone: Utm Reliabil Constructio Primary W at Secondary W W ell Depth Pump Rate ( Clear/Cloud Specific Cap Final W ell S Constructio Flowing (yin Elevation Ri Depth to Be Overburden W ater Type: Casing Mate	I83: ad83: Iity: n Date: ter Use: Vater Use: (ft): (gpm): r Level (ft): gpm): y; bacity: dtatus: on Method: ): t): eliability: edrock (ft): ; /Bedrock: ; erial:	685597.9 5155574 16 margin of error : 100 5/21/1980 DOMESTIC 74 30 14 CLEAR 0 WATER SUPPLY ROTARY (CONVEN 0 650 Read from topograph Overburden FRESH STEEL	m - 300 m T.) ic map, contour interval - 50 ft		

Map Key	Company	Address	W ell Id	Lot	Concession	Concession Name	County	Municipality
W W IS-23		PRINCE TOWNSHIP	1102749			S31NE	ALGOMA	PRINCE TOWNSHIP
			Easting Nad Northing Na Zone: Utm Reliabil Constructio Primary W at Secondary W W ell Depth Pump Rate ( Static W ater Flow Rate (g Clear/Cloud Specific Cap Final W ell S Constructio Flowing (ym Elevation Re Depth to Be Overburden W ater Type: Casing Mate	183: ad83: ity: on Date: ter Use: Vater Use: (ft): (gpm): r Level (ft): gpm): v: poacity: tatus: on Method: ): t): eliability: edrock (ft): v/Bedrock: erial:	685297.9 5155574 16 margin of error : 100 5/20/1980 DOMESTIC 68 30 10 CLEAR 0 WATER SUPPLY ROTARY (CONVEN 0 650 Read from topograph Overburden FRESH STEEL	m - 300 m T.) c map, contour interval - 50 ft		
W W IS-24		PRINCE TOWNSHIP	1102124			S32SW	ALGOMA	PRINCE TOWNSHIP
			Easting Nad Northing Na Zone: Utm Reliabil Constructio Primary W at Secondary W W ell Depth Pump Rate ( Static W atee Flow Rate ( Clear/Cloud Specific Cap Final W ell S Constructio Flowing (yn Elevation Re Depth to Be Overburden W ater Type: Casing Mate	I83: ad83: Iity: n Date: ter Use: Vater Use: (ft): (gpm): r Level (ft): gpm): y; bacity: datus: on Method: ): t): eliability: edrock (ft): //Bedrock:	686697.9 5155624 16 margin of error : 100 4/30/1977 DOMESTIC 68 20 40 CLEAR 0 WATER SUPPLY ROTARY (CONVEN 0 635 Read from topograph Overburden FRESH STEEL	m - 300 m T.) ic map, contour interval - 25 ft		

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Мар Кеу	Company	Address	W ell Id	Lot	Concession	Concession Name	County	Municipality
W W IS-25		PRINCE TOWNSHIP	1102162			S32SW	ALGOMA	PRINCE TOWNSHIP
			Easting Nad Northing Na Zone: Utm Reliabil Constructio Primary W at Secondary V W ell Depth Pump Rate ( Static W ate Flow Rate ( Clear/Cloud Specific Cap Final W ell S Constructio Flowing (yn Elevation (f Elevation R Depth to Be Overburden W ater Type: Casing Mate	d83: ad83: bn Date: ter Use: (ft): (gpm): er Level (ft): gpm): ly: pacity: Status: on Method: 1): t): t): edrock (ft): n/Bedrock: : erial:	686647.9 5155624 16 margin of error : 100 4/26/1975 PUBLIC SUPPLY 74 22 30 CLEAR 0 WATER SUPPLY ROTARY (CONVEN 0 635 Read from topograph Overburden FRESH STEEL	m - 300 m T.) ic map, contour interval - 25 ft		
W W IS-26		PRINCE TOWNSHIP	1102504			S32NW	ALGOMA	PRINCE TOWNSHIP
			Easting Nad Northing Nad Zone: Utm Reliabi Constructio Primary Wat Secondary W W ell Depth Pump Rate ( Static W ate Flow Rate ( Clear/Cloud Specific Cap Final Well S Constructio Flowing (yn Elevation R Depth to Be Overburdem W ater Type: Casing Mate	d83: ad83: bility: on Date: ter Use: (ft): (gpm): r Level (ft): gpm): ly: pacity: Status: on Method: b): t): eliability: edrock (ft): n/Bedrock: : erial:	686547.9 5155624 16 margin of error : 100 6/27/1978 70 15 20 CLEAR 0.7 WATER SUPPLY ROTARY (CONVEN 0 650 Read from topograph Overburden FRESH STEEL	m - 300 m T.) ic map, contour interval - 50 ft		

Map Key	Company	Address	W ell Id	Lot	Concession	Concession Name	County	Municipality
W W IS-27		PRINCE TOWNSHIP	1103528			S32SE	ALGOMA	PRINCE TOWNSHIP
			Easting Nad Northing Na Zone: Utm Reliabil Constructio Primary W at Secondary V W ell Depth Pump Rate ( Static W ate Flow Rate ( Clear/Cloud Specific Cap Final W ell S Constructio Flowing (yh Elevation R Depth to Be Overburden W ater Type: Casing Mate	183: ad83: bity: on Date: ter Use: Vater Use: (ft): (gpm): r Level (ft): (gpm): r Level (ft): y: bacit	686497.9 5155624 16 margin of error : 100 5/3/1983 DOMESTIC 69 30 4 CLEAR 0 WATER SUPPLY ROTARY (CONVEN 0 625 Read from topograph Overburden FRESH STEEL	m - 300 m T.) ic map, contour interval - 25 ft		
W W IS-28		PRINCE TOWNSHIP	1103747			S32	ALGOMA	PRINCE TOWNSHIP
			Easting Nad Northing Na Zone: Utm Reliabi Constructio Primary Wat Secondary W W ell Depth Pump Rate ( Static W ate Flow Rate ( Clear/Cloud Specific Cap Final W ell S Constructio Flowing (yn Elevation R Depth to Be Overburden W ater Type: Casing Mate	I83: ad83: lity: on Date: ter Use: V ater Use: (ft): (gpm): r Level (ft): (gpm): ly: obacity: datus: on Method: i): t): eliability: edrock (ft): MBedrock: : erial:	686447.9 5155624 16 margin of error : 300 8/15/1985 DOMESTIC 67 25 37 CLEAR WATER SUPPLY ROTARY (CONVEN 0 650 Read from topograph Overburden FRESH STEEL	m - 1 km T.) ic map, contour interval - 50 ft		

Map Key	Company	Address	W ell Id	Lot	Concession	Concession Name	County	Municipality
W W IS-29	Company	con 31 PRINCE TOWNSHIP	7051279 Easting Nad Northing Na Zone: Utm Reliabil Constructio Primary W at Secondary W W ell Depth o Pump Rate ( Static W ater Flow Rate (g Clear/Cloud; Specific Cap Final W ell S Constructio Flowing (y/n) Elevation Re Depth to Be Overburden W ater Type: Casing Mate	Lot 83: ad83: Iity: n Date: er Use: Vater Use: (ft): (gpm): r Level (ft): jpm): y: tatus: n Method: ): eliability: drock (ft): /Bedrock: erial:	31 685220 5155607 16 margin of error : 10 - 9/27/2007 Domestic 20.1168 15 5 Clear Rotary (Convent.) N	30 m	ALGOMA	PRINCE TOWNSHIP
W W IS-30		PRINCE TOWNSHIP	1101286 Easting Nad Northing Na Zone: Utm Reliabil Constructio Primary W at Secondary W W ell Depth ( Pump Rate ( Static W ater Flow Rate (g Clear/Cloud) Specific Cap Final W ell S Constructio Flowing (yn) Elevation Re Depth to Be Overburden W ater Type: Casing Mate	83: ad83: ity: n Date: er Use: Vater Use: (ft): (gpm): r Level (ft): gpm): y: vacity: tatus: n Method: ): b: b: eliability: vedrock (ft): /Bedrock: erial:	686597.9 5155652 16 margin of error : 100 f 6/15/1969 DOMESTIC 57 12 33 CLEAR 0.7 WATER SUPPLY CABLE TOOL 0 645 Read from topographi Overburden FRESH STEEL	S32NW m - 300 m ic map, contour interval - 25 ft	ALGOMA	PRINCE TOWNSHIP

Мар Кеу	Company	Address	W ell Id	Lot	Concession	Concession Name	County	Municipality
W W IS-31		PRINCE TOWNSHIP	1100834			S32NE	ALGOMA	PRINCE TOWNSHIP
			Easting Nad Northing Na Zone: Utm Reliabil Constructio Primary W at Secondary W W ell Depth Pump Rate ( Static W ater Flow Rate (g Clear/Cloud Specific Cap Final W ell S Constructio Flowing (ym Elevation Re Depth to Be Overburden W ater Type: Casing Mate	I83: ad83: ity: n Date: ter Use: Vater Use: (ft): (gpm): r Level (ft): gpm): y: boacity: ttatus: n Method: ): t): eliability: drock (ft): w/Bedrock: erial:	686433.9 5155649 16 margin of error : 100 10/15/1966 DOMESTIC 43 4 30 CLEAR 0.4 WATER SUPPLY CABLE TOOL 0 646 Read from topograph 3 Mixed in a Layer FRESH STEEL	m - 300 m ic map, contour interval - 25 ft		
W W IS-32		PRINCE TOWNSHIP	1102939			S31SW	ALGOMA	PRINCE TOWNSHIP
			Easting Nad Northing Na Zone: Utm Reliabil Constructio Primary W at Secondary W W ell Depth Pump Rate ( Static W atee Flow Rate (g Clear/Cloud Specific Cap Final W ell S Constructio Flowing (yn Elevation Re Depth to Be Overburden W ater Type: Casing Mate	I83: ad83: Iity: n Date: ter Use: Vater Use: (ft): (gpm): r Level (ft): gpm): y: bacity: datus: on Method: ): t): eliability: edrock (ft): //Bedrock: erial:	685347.9 5155624 16 margin of error : 100 4/9/1981 DOMESTIC 70 35 7 CLEAR 0 WATER SUPPLY ROTARY (CONVEN 0 625 Read from topograph Overburden FRESH STEEL	m - 300 m T.) ic map, contour interval - 25 ft		

Map Key	Company	Address	W ell Id	Lot	Concession	Concession Name	County	Municipality
W W IS-33		PRINCE TOWNSHIP	1101654			S32NE	ALGOMA	PRINCE TOWNSHIP
			Easting Nada Northing Nar Zone: Utm Reliabili Construction Primary W ate Secondary W W ell Depth ( Pump Rate (g Static W ater Flow Rate (g Clear/Cloudy Specific Cap Final W ell St Construction Flowing (y/n) Elevation Re Depth to Bee Overburden/ W ater Type: Casing Mater	83: d83: ity: n Date: er Use: / ater Use: / atus: n Method: / bedrock: rial:	686297.9 5155654 16 margin of error : 30 m 6/16/1972 DOMESTIC 40 3 22 CLEAR 0 WATER SUPPLY CABLE TOOL 0 635 Read from topog raphi Overburden FRESH GALVANIZED	- 100 m c map, contour interval - 25 ft		
W W IS-34		PRINCE TOWNSHIP	1102938			S31SW	ALGOMA	PRINCE TOWNSHIP
			Easting Nada Northing Nat Zone: Utm Reliabili Construction Primary Wate Secondary W W ell Depth ( Pump Rate (g Static W ater Flow Rate (g Clear/Cloudy Specific Cap Final W ell St Construction Flowing (yn) Elevation Re Depth to Bec Overburden/ W ater Type: Casing Mater	B3: d83: ity: n Date: er Use: / ater Use: / ater Use: ft): gpm): Level (ft): pm): / acity: atus: n Method: : ): liability: drock (ft): /Bedrock: rial:	685297.9 5155624 16 margin of error : 100 r 4/29/1981 DOMESTIC 73 35 4 CLEAR 0 WATER SUPPLY ROTARY (CONVENT 0 625 Read from topographi Overburden FRESH STEEL	n - 300 m T.) c map, contour interval - 25 ft		

Map Key	Company	Address	W ell Id	Lot	Concession	Concession Name	County	Municipality
W W IS-35		PRINCE TOWNSHIP	1101351			S32NE	ALGOMA	PRINCE TOWNSHIP
			Easting Nad8 Northing Nad Zone: Utm Reliabili Construction Primary W ate Secondary W W ell Depth ( Pump Rate (g Static W ater Flow Rate (gl Clear/Cloudy Specific Capa Final W ell St Construction Flowing (y/n) Elevation Re Depth to Bec Overburden/ W ater Type: Casing Mater	B3: d83: ty: n Date: er Use: / ater Use: / ater Use: ft): gpm): Level (ft): pm): / acity: atus: n Method: : j: drock (ft): /Bedrock: rial:	686465.3 5155672 16 unknown utm 4/19/1970 DOMESTIC 56 8 35 CLEAR 0 WATER SUPPLY CABLE TOOL 0 650 Read from topograph Overburden FRESH STEEL	ic map, contour interval - 50 ft		
W W IS-36		PRINCE TOWNSHIP	1102179			S32NW	ALGOMA	PRINCE TOWNSHIP
			Easting Nada Northing Nad Zone: Utm Reliabili Construction Primary Wate Secondary W W ell Depth ( Pump Rate (g Static W ater Flow Rate (g Clear/Cloudy Specific Capa Final W ell St Construction Flowing (y/n) Elevation Re Depth to Bec Overburden/ W ater Type: Casing Mater	B3: d83: ty: n Date: er Use: / ater Use: / ater Use: ft): gpm): Level (ft): pm): / acity: atus: n Method: : j: drock (ft): // Bedrock: rial:	686497.9 5155674 16 margin of error : 100 12/24/1975 DOMESTIC 74 15 24 CLEAR 0 WATER SUPPLY ROTARY (CONVEN 0 645 Read from topograph Overburden FRESH STEEL	m - 300 m T.) ic map, contour interval - 25 ft		

## Water Well Information System

Map Key	Company	Address	W ell Id	Lot	Concession	Concession Name	County	Municipality
W W IS-37		PRINCE TOWNSHIP	1101459			S31NE	ALGOMA	PRINCE TOWNSHIP
			Easting Nad8 Northing Nad Zone: Utm Reliabilit Construction Primary Wate Secondary W W ell Depth (f Pump Rate (gp Clear/Cloudy Specific Capa Final W ell Sta Construction Flowing (y/n): Elevation (ft) Elevation (rt) Elevation Rel Depth to Bed Overburden/I W ater Type: Casing Mater	3: 183: Date: r Use: ater Use: ater Use: (ft): gpm): Level (ft): om): acity: atus: Method: : iability: rrock (ft): Bedrock: ial:	686137.9 5155669 16 margin of error : 30 m 9/6/1971 DOMESTIC 50 2 6 CLEAR 0.1 WATER SUPPLY DRIVING 0 630 Read from topographi Overburden FRESH GALVANIZED	r - 100 m c map, contour interval - 25 ft		
# **Appendix: Ontario Database Descriptions**

EcoLog Environmental Risk Information Services Ltd can search the following databases. The extent of historical information varies with each database and current information is determined by what is publicly available to EcoLog ERIS at the time of update. <u>Note</u>: Databases denoted with "\*" indicates that the database will no longer be updated. See the individual database descriptions for more information.

# **Provincial Government Source Databases:**

# Abandoned Aggregate Inventory Up to Sept 2002

The MAAP Program maintains a database of all abandoned pits and quarries. Please note that the database is only referenced by lot and concession and city/town location. The database provides information regarding the location, type, size, land use, status and general comments.

# Aggregate Inventory Up to Mar 2008

The Ontario Ministry of Natural Resources maintains a database of all active pits and quarries. Please note that the database is only referenced by lot\concession and city/town location. The databases provides information regarding the registered owner/operator, location, status, licence type, and maximum tonnage.

# Abandoned Mines Information System 1800- 2005

The Abandoned Mines Information System contains data on known abandoned and inactive mines located on both Crown and privately held lands. The information was provided by the Ministry of Northern Development and Mines (MNDM), with the following disclaimer: "the database provided has been compiled from various sources, and the Ministry of Northern Development and Mines makes no representation and takes no responsibility that such information is accurate, current or complete". Reported information includes official mine name, status, background information, mine start/end date, primary commodity, mine features, hazards and remediation.

## Certificates of Approval 1985-Sept 2002

This database contains the following types of approvals: Certificates of Approval (Air) issued under Section 9 of the Ontario EPA; Certificates of Approval (Industrial Wastewater) issued under Section 53 of the Ontario Water Resources Act ("OWRA"); and Certificates of Approval (Municipal/Provincial Sewage and Waterworks) issued under Sections 52 and 53 of the OWRA.

# Commercial Fuel Oil Tanks 1948-Jul 2008

Since May 2002, Ontario developed a new act where it became mandatory for fuel oil tanks to be registered with TSSA. This data would include all commercial underground fuel oil tanks in Ontario with fields such as location, registration number, tank material, age of tank and tank size.

# Coal Gasification Plants 1987, 1988\*

This inventory of all known and historical coal gasification plants was collected by the Ministry of Environment. It identifies industrial sites that produced and continue to produce or use coal tar and other related tars. Detailed information is available and includes: facility type, size, landuse, soil condition, site operators/occupants, site description, and potential environmental impacts. This information is effective to 1988, but the program has since been discontinued.

# Compliance and Convictions 1989-Aug 2008

This database summarizes the fines and convictions handed down by the Ontario courts beginning in 1989. Companies and individuals named here have been found guilty of environmental offenses in Ontario courts of law.

#### AAGR

# AMIS

AGR

# CFOT

CA

#### COAL

#### CONV

#### Drill Holes 1886-2005

The Ontario Drill Hole Database contains information on more than 113,000 percussion, overburden, sonic and diamond drill holes from assessment files on record with the department of Mines and Minerals. Please note that limited data is available for southern Ontario, as it was the last area to be completed. The database was created when surveys submitted to the Ministry were converted in the Assessment File Research Image Database (AFRI) project. However, the degree of accuracy (coordinates) as to the exact location of drill holes is dependent upon the source document submitted to the MNDM. Levels of accuracy used to locate holes are: centering on the mining claim; a sketch of the mining claim; a 1:50,000 map; a detailed company map; or from submitted a "Report of Work".

#### Environmental Registry 1994-Sept 2007

The Environmental Registry lists proposals, decisions and exceptions regarding policies, Acts, instruments, or regulations that could significantly affect the environment. Through the Registry, provincial ministries notify the public of upcoming proposals and invite their comments. For example, if a local business is requesting a permit, licence, or certificate of approval to release substances into the air or water; these are notified on the registry.

#### Fuel Storage Tanks Current to August 2007

The TSSA, under the *Technical Standards & Safety Act* of 2000 maintains a database of registered private and retail fuel storage tanks in Ontario with fields such as location, tank status, license date, tank type, tank capacity, fuel type, installation year and facility type.

#### Ontario Regulation 347 Waste Generators Summary 1986-Aug 2008

Regulation 347 of the Ontario EPA defines a waste generation site as any site, equipment and/or operation involved in the production, collection, handling and/or storage of regulated wastes. A generator of regulated waste is required to register the waste generation site and each waste produced, collected, handled, or stored at the site. This database contains the registration number, company name and address of registered generators including the types of hazardous wastes generated. This information is a summary of all years from 1986 including the most currently available data. Some records may contain, within the company name, the phrase "See & Use..." followed by a series of letters and numbers. This occurs when one company is amalgamated with or taken over by another registered company. The number listed as "See & Use", refers to the new ownership and the other identification number refers to the original ownership. This phrase serves as a link between the 2 companies until operations have been fully transferred.

#### Mineral Occurrences 1846-Oct 2007

In the early 70's, the Ministry of Northern Development and Mines created an inventory of approximately 19,000 mineral occurrences in Ontario, in regard to metallic and industrial minerals, as well as some information on building stones and aggregate deposits. Please note that the "Horizontal Positional Accuracy" is approximately +/- 200 m. Many reference elements for each record were derived from field sketches using pace or chain/tape measurements against claim posts or topographic features in the area. The primary limiting factor for the level of positional accuracy is the scale of the source material. The testing of horizontal accuracy of the source materials was accomplished by comparing the planimetric (X and Y) coordinates of that point with the coordinates of the same point as defined from a source of higher accuracy.

#### Non-Compliance Reports 1992(water only), 1994-2006

The Ministry of the Environment provides information about non-compliant discharges of contaminants to air and water that exceed legal allowable limits, from regulated industrial and municipal facilities. A reported non-compliance failure may be in regard to a Control Order, Certificate of Approval, Sectoral Regulation or specific regulation/act.

#### Ontario Oil and Gas Wells 1800-Aug 2008

In 1998, the MNR handed over to the Ontario Oil, Gas and Salt Resources Corporation, the responsibility of maintaining a database of oil and gas wells drilled in Ontario. Information available for all wells in the ERIS database include well owner/operator, location, permit start date, well cap date, licence number, status, depth and the primary target (rock unit) of the well being drilled.

# DRL

#### EBR

#### FST

GEN

#### MNR

#### NCPL

#### OOGW

#### Ontario Inventory of PCB Storage Sites 1987-Oct 2004

The Ontario Ministry of Environment, Waste Management Branch, maintains an inventory of PCB storage sites within the province. Ontario Regulation 11/82 (Waste Management - PCB) and Regulation 347 (Generator Waste Management) under the Ontario EPA requires the registration of inactive PCB storage equipment and/or disposal sites of PCB waste with the Ontario Ministry of Environment. This database contains information on: 1) waste quantities; 2) major and minor sites storing liquid or solid waste; and 3) a waste storage inventory.

#### Pesticide Register 1988-Sept 2007

The Ontario Ministry of Environment maintains a database of all manufacturers and vendors of registered pesticides.

#### Private and Retail Fuel Storage Tanks 1989-1996\*

The Fuels Safety Branch of the Ontario Ministry of Consumer and Commercial Relations maintained a database of all registered private fuel storage tanks and licensed retail fuel outlets. This database includes an inventory of locations that have gasoline, oil, waste oil, natural gas and/or propane storage tanks on their property. The MCCR no longer collects this information. This information is now collected by the Technical Standards and Safety Authority.

#### Ontario Regulation 347 Waste Receivers Summary 1986-2005

Part V of the Ontario Environmental Protection Act ("EPA") regulates the disposal of regulated waste through an operating waste management system or a waste disposal site operated or used pursuant to the terms and conditions of a Certificate of Approval or a Provisional Certificate of Approval. Regulation 347 of the Ontario EPA defines a waste receiving site as any site or facility to which waste is transferred by a waste carrier. A receiver of regulated waste is required to register the waste receiving facility. This database represents registered receivers of regulated wastes, identified by registration number, company name and address. This information is a summary of all years from 1986 including the most currently available data.

#### Record of Site Condition 1997-Sept 2001, Oct 2004-June 2008

The Record of Site Condition (RSC) is part of the Ministry of the Environment's Brownfields Environmental Site Registry. Protection from environmental cleanup orders for property owners is contingent upon documentation known as a record of site condition (RSC) being filed in the Environmental Site Registry. In order to file an RSC, the property must have been properly assessed and shown to meet the soil, sediment and groundwater standards appropriate for the use, such as residential, proposed to take place on the property. The Record of Site Condition Regulation (O. Reg. 153/04) details requirements related to site assessment and clean up. Information available includes Registration Number, Filing Owner, Property Address, Filing Date and Municipality.

#### Ontario Spills 1988-2007

This database identifies information such as location (approximate), type and quantity of contaminant, date of spill, environmental impact, cause, nature of impact, etc. Information from 1988-2002 was part of the ORIS (Occurrence Reporting Information System). The SAC (Spills Action Centre) handles all spills reported in Ontario. Regulations for spills in Ontario are part of the MOE's Environmental Protection Act, Part X.

#### Wastewater Discharger Registration Database 1990-1998

Information under this heading is combination of the following 2 programs. The Municipal/Industrial Strategy for Abatement (MISA) division of the Ontario Ministry of Environment maintained a database of all direct dischargers of toxic pollutants within nine sectors including: Electric Power Generation; Mining; Petroleum Refining; Organic Chemicals; Inorganic Chemicals; Pulp & Paper; Metal Casting; Iron & Steel; and Quarries. All sampling information is now collected and stored within the Sample Result Data Store (SRDS).

#### **OPCB**

# PES

PRT

REC

# RSC

SRDS

SPL

#### Waste Disposal Sites - MOE CA Inventory 1970-Sept 2002

The Ontario Ministry of Environment, Waste Management Branch, maintains an inventory of known open (active or inactive) and closed disposal sites in the Province of Ontario. Active sites maintain a Certificate of Approval, are approved to receive and are receiving waste. Inactive sites maintain Certificate(s) of Approval but are not receiving waste. Closed sites are not receiving waste. The data contained within this database was compiled from the MOE's Certificate of Approval database. Locations of these sites may be cross-referenced to the Anderson database described under ERIS's Private Source Database section, by the CA number.

#### Waste Disposal Sites - MOE 1991 Historical Approval Inventory Up to Oct 1990\*

In June 1991, the Ontario Ministry of Environment, Waste Management Branch, published the "June 1991 Waste Disposal Site Inventory", of all known active and closed waste disposal sites as of October 30st, 1990. For each "active" site as of October 31st 1990, information is provided on site location, site/CA number, waste type, site status and site classification. For each "closed" site as of October 31st 1990, information is provided on site location is provided on site location, site/CA number, closure date and site classification. Locations of these sites may be cross-referenced to the Anderson database described under ERIS's Private Source Database section, by the CA number.

#### Water Well Information System 1955-2007

This database describes locations and characteristics of water wells found within Ontario in accordance with Regulation 903. Geographic coordinates are reliable according to the given percentage. Wells that are identified with lot and concession <u>only</u> are now also included in the database and is no longer provided as a separate report.

#### **Federal Government Source Databases:**

#### Environmental Effects Monitoring 1992-2004

The Environmental Effects Monitoring program assesses the effects of effluent from industrial or other sources on fish, fish habitat and human usage of fisheries resources. Since 1992, pulp and paper mills have been required to conduct EEM studies under the Pulp and Paper Effluent Regulations. This database provides information on the mill name, geographical location and sub-lethal toxicity data.

#### Environmental Issues Inventory System 1992-2001\*

The Environmental Issues Inventory System was developed through the implementation of the Environmental Issues and Remediation Plan. This plan was established to determine the location and severity of contaminated sites on inhabited First Nation reserves, and where necessary, to remediate those that posed a risk to health and safety; and to prevent future environmental problems. The EIIS provides information on the reserve under investigation, inventory number, name of site, environmental issue, site action (Remediation, Site Assessment), and date investigation completed.

#### Federal Convictions 1988-Jan 2002

Environment Canada maintains a database referred to as the "Environmental Registry" that details prosecutions under the Canadian Environmental Protection Act (CEPA) and the Fisheries Act (FA). Information is provided on the company name, location, charge date, offence and penalty.

#### Contaminated Sites on Federal Land June 2000-Sept 2007

The Treasury Board of Canada Secretariat maintains an inventory of all known contaminated sites held by various Federal departments and agencies. This inventory does not include properties owned by Crown corporations, but does contain non-federal sites for which the Government of Canada has accepted some or all financial responsibility. All sites have been classified through a system developed by the Canadian Council of Ministers of the Environment. The database provides information on company name, location, site ID #, property use, classification, current status, contaminant type and plan of action for site remediation.

#### **Diagram Identifier:**

WWIS

# EEM

EIIS

#### FCON

#### FCS

#### WDS

WDSH

#### Fisheries & Oceans Fuel Tanks 1964-Sept 2003

Fisheries & Oceans Canada maintains an inventory of all aboveground & underground fuel storage tanks located on Fisheries & Oceans property or controlled by DFO. Our inventory provides information on the site name, location, tank owner, tank operator, facility type, storage tank location, tank contents & capacity, and date of tank installation.

#### Indian & Northern Affairs Fuel Tanks 1950-Aug 2003

The Department of Indian & Northern Affairs Canada (INAC) maintains an inventory of all aboveground & underground fuel storage tanks located on both federal and crown land. Our inventory provides information on the reserve name, location, facility type, site/facility name, tank type, material & ID number, tank contents & capacity, and date of tank installation.

#### National Analysis of Trends in Emergencies System (NATES) 1974-1994\* NATE

In 1974 Environment Canada established the National Analysis of Trends in Emergencies System (NATES) database, for the voluntary reporting of significant spill incidents. The data was to be used to assist in directing the work of the emergencies program. NATES ran from 1974 to 1994. Extensive information is available within this database including company names, place where the spill occurred, date of spill, cause, reason and source of spill, damage incurred, and amount, concentration, and volume of materials released.

#### National Defence & Canadian Forces Fuel Tanks Up to May 2001

The Department of National Defence and the Canadian Forces maintains an inventory of all aboveground & underground fuel storage tanks located on DND lands. Our inventory provides information on the base name, location, tank type & capacity, tank contents, tank class, date of tank installation, date tank last used, and status of tank as of May 2001. This database will no longer be updated due to the new National Security protocols which have prohibited any release of this database.

#### National Defence & Canadian Forces Spills Mar 1999-Oct 2007

The Department of National Defence and the Canadian Forces maintains an inventory of spills to land and water. All spill sites have been classified under the "Transportation of Dangerous Goods Act - 1992". Our inventory provides information on the facility name, location, spill ID #, spill date, type of spill, as well as the quantity of substance spilled & recovered.

#### National Defence & Canadian Forces Waste Disposal Sites 2001, 2003

The Department of National Defence and the Canadian Forces maintains an inventory of waste disposal sites located on DND lands. Where available, our inventory provides information on the base name, location, type of waste received, area of site, depth of site, year site opened/closed and status.

#### National Environmental Emergencies System (NEES) 1974-2003

In 2000, the Emergencies program implemented NEES, a reporting system for spills of hazardous substances. For the most part, this system only captured data from the Atlantic Provinces, some from Quebec and Ontario and a portion from British Columbia. Data for Alberta, Saskatchewan, Manitoba and the Territories was not captured. However, NEES is also a repository for all previous Environment Canada spill datasets. NEES is composed of the historic datasets – or Trends – which dates from approximately 1974 to present. **NEES Trends** is a compilation of historic databases, which were merged and includes data from NATES (National Analysis of Trends in Emergencies System), ARTS (Atlantic Regional Trends System), and NEES. In 2001, the Emergencies Program determined that variations in reporting regimes and requirements between federal and provincial agencies made national spill reporting and trend analysis difficult to achieve. As a consequence, the department has focused efforts on capturing data on spills of substances which fall under its legislative authority only (CEPA and FA). As such, the NEES database will be decommissioned in December 2004.

#### FOFT

IAFT

#### . . . . . .

# NDSP

#### NDWD

#### NEES

# **3** T 4 FR--

NDFT

#### National PCB Inventory 1988-June 2004

Environment Canada's National PCB inventory includes information on in-use PCB containing equipment in Canada including federal, provincial and private facilities. All federal out-of-service PCB containing equipment and all PCB waste owned by the federal government or by federally regulated industries such as airlines, railway companies, broadcasting companies, telephone and telecommunications companies, pipeline companies, etc. are also listed. Although it is not Environment Canada's mandate to collect data on non-federal PCB waste, the National PCB inventory includes some information on provincial and private PCB waste and storage sites.

#### National Pollutant Release Inventory 1993-2006

Environment Canada has defined the National Pollutant Release Inventory ("NPRI") as a federal government initiative designed to collect comprehensive national data regarding releases to air, water, or land, and waste transfers of 178 specified substances.

#### Parks Canada Fuel Storage Tanks 1920-Jan 2005

Canadian Heritage maintains an inventory of all known fuel storage tanks operated by Parks Canada, in both National Parks and at National Historic Sites. The database details information on site name, location, tank install/removal date, capacity, fuel type, facility type, tank design and owner/operator.

#### Transport Canada Fuel Storage Tanks 1970-March 2007

With the provinces of BC, MB, NB, NF, ON, PE, and QC; Transport Canada currently owns and operates 90 fuel storage tanks. This inventory will also include The Pickering Lands, which refers to the 7,530 hectares (18,600 acres) of land in Pickering, Markham and Uxbridge - owned by the Government of Canada since 1972. Properties on this land has been leased by the government since 1975, falls under the Site Management Policy of Transport Canada, but administered by Public Works and Government Services Canada. Our inventory provides information on the site name, location, tank age, capacity and fuel type.

#### **Private Source Databases:**

#### Anderson's Waste Disposal Sites 1860s-Present

The information provided in this database was collected by examining various historical documents which aimed to characterize the likely position of former waste disposal sites from 1860 to present. The research initiative behind the creation of this database was to identify those sites that are missing from the *Ontario MOE Waste Disposal Site Inventory*, as well as to provide revisions and corrections to the positions and descriptions of sites currently listed in the MOE inventory. In addition to historic waste disposal facilities, the database also identifies certain auto wreckers and scrap yards that have been extrapolated from documentary sources. *Please note that the data is not warranted to be complete, exhaustive or authoritive. The information was collected for research purposes only.* 

#### Automobile Wrecking & Supplies 2001-Jan 2008

This database provides an inventory of all known locations that are involved in the scrap metal, automobile wrecking/recycling, and automobile parts & supplies industry. Information is provided on the company name, location and business type.

#### Chemical Register 1992, 1999-Jan 2008

This database includes information from both a one time study conducted in 1992 and private source and is a listing of facilities that manufacture or distribute chemicals. The production of these chemical substances may involve one or more chemical reactions and/or chemical separation processes (i.e. fractionation, solvent extraction, crystallization, etc.).

#### ERIS Historical Searches 1999-Aug 2008

EcoLog ERIS has compiled a database of all environmental risk reports completed since March 1999. Available fields for this database include: site location, date of report, type of report, and search radius. As per all other databases, the ERIS database can be referenced on both the map and "Statistical Profile" page.

#### AUWR

ANDR

# PCFT

TCFT

NPRI

# CHEM

#### EHS

#### NPCB

#### Canadian Mine Locations 1998-2006

# This information is collected from the Canadian & American Mines Handbook. The Mines database is a national database that provides over 290 listings on mines (listed as public companies) dealing primarily with precious metals and hard rocks. Listed are mines that are currently in operation, closed, suspended, or are still being developed (advanced projects). Their locations are provided as geographic coordinates (x, y and/or longitude, latitude). As of 2002, data pertaining to Canadian smelters and refineries has been appended to this database.

# Oil and Gas Wells Oct 2001-Sept 2008

The Nickle's Energy Group (publisher of the Daily Oil Bulletin) collects information on drilling activity including operator and well statistics. The well information database includes name, location, class, status and depth. The main Nickles' database is updated on a daily basis, however, this database is updated on a monthly basis. More information is available at www.nickles.com.

# Canadian Pulp and Paper 1999, 2002, 2004, 2005

This information is part of the Pulp and Paper Canada Directory. The Directory provides a comprehensive listing of the locations of pulp and paper mills and the products that they produce.

# Retail Fuel Storage Tanks 2000-Jan 2008

This database includes an inventory of retail fuel outlet locations (including marinas) that have on their property gasoline, oil, waste oil, natural gas and / or propane storage tanks. Information is provided on company name, location and type of business.

# Scott's Manufacturing Directory 1992-Jun 2008

Scott's Directories is a data bank containing information on over 70,000 manufacturers in Ontario. Even though Scott's listings are voluntary, it is the most comprehensive database of Ontario manufacturers available. Information concerning a company's address, plant size, and main products are included in this database. This database begins with 1992 information and is updated annually.

# Anderson's Storage Tanks 1915-1953\*

The information provided in this database was collected by examining various historical documents, which identified the location of former storage tanks, containing substances such as fuel, water, gas, oil, and other various types of miscellaneous products. Information is available in regard to business operating at tank site, tank location, permit year, permit & installation type, no. of tanks installed & configuration and tank capacity. *Data contained within this database pertains only to the city of Toronto and is not warranted to be complete, exhaustive or authoritative. The information was collected for research purposes only.* 

#### OGW

PAP

# SCT

RST

## TANK

# APPENDIX B

# INTRODUCTORY LETTER AND OWNER/OCCUPANT QUESTIONNAIRE



November 6, 2008

Dear Prince Township Residents,

CRA Conestoga-Rovers & Associates has been contracted by the Sault Ste. Marie Region Conservation Authority to conduct a visual survey and inventory in the area near the Gros Cap municipal drinking water intake.

The survey is part of the Drinking Water Source Protection program of the Conservation Authority. The results of this work will be included in an overall assessment of municipal source water and will contribute to the Source Protection Planning process for the benefit of all community residents.

We are asking for your assistance to ensure that we are able obtain the necessary information we need to keep the local drinking water supply safe for generations to come.

If you have any questions regarding this work being carried out, please feel free to call:

Rhonda Bateman, Drinking Water Source Protection Planning Coordinator @ 705-946-8530

Thank you very much for your continued support,

Rhonda Bateman Sault Ste. Marie Region Conservation Authority

# Source Water Protection Questionnaire Source Water Protection Inventory

Address of Property:		
Property Owners:		
Tenants:		
No. of Buildings on Property: Uses:		
INVENTORIES		
Septic Systems:		
On-Site Septic System: Yes No If yes, how many? Age(s):		
How often are the systems maintained/tank pumped out?: Any decommissioned Septic Systems:YesNo If yes, how many?:		
On-Site Out-House: Yes No		
Additional Comments:		
Drinking Water System :		
Drinking Water Well Onsite: Yes No		
Is the well head maintained/free of debris & plants, etc.: Yes No		
Any decommissioned Water Wells: Yes No If yes, how many?:		
Additional Comments		
Heating Systems:		
How is property/house heated:		
Above Ground Storage Tanks Onsite: 🔄 Yes 🔄 No		

If yes, how many? \_\_\_\_\_

46442-50 - Source Water Protection Questionnaire (No Contact)

Underground Storage Tanks Onsite: 🗌 Yes 🗌 No		
	If yes, how many?	
Were there any USTs or AST on-Site (historical) Yes No If yes, how many?		
Description of AST/UST:		
Make:	_Model:	
Capacity:	_Date of Manufacture:	
Contents:		
Additional Comments		
Additional Comments about Site:		