MINISTRY OF THE ENVIRONMENT
DRINKING-WATER INSPECTION REPORT
NON-MUNICIPAL SEASONAL RESIDENTIAL SYSTEM

CAMERON'S POINT CAMPSITE
WATER TREATMENT SYSTEM

Inspected By: Gerald Menard/Don Munro
Inspection Completed On: July 13, 2004
Report Distributed On: September 30, 2004

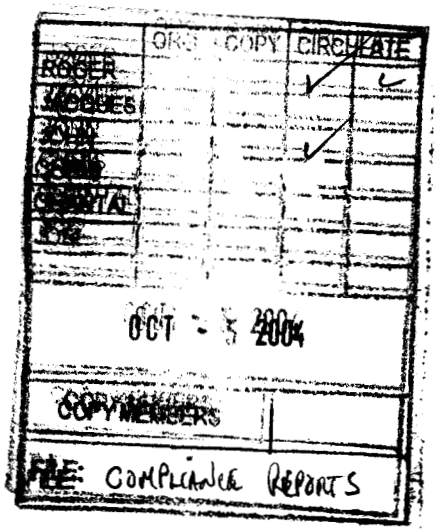
Ministry of the Environment

113 Amelia Street
Cornwall ON K6H 3P1
Telephone: (613) 933-7402
Fax: (613) 933-6402

Ministère de l'Environnement

113 rue Amelia
Cornwall ON K6H 3P1
Téléphone: (613)933-7402
Télécopieur: (613)933-6402

Ontario



October 1, 2004

CAMERON'S POINT CAMPSITE
19568 County Road No. 2,
Summerstown, Ontario
K0C 2E0

Attention: Mr. Charles Beaudette

Dear Mr. Beaudette:

Re: Compliance Inspection - 2004
Cameron's Point Campsite
Water Supply and Treatment System
Township of South Glengarry

The Cameron's Point Campsite Water Supply System and Treatment facility was inspected on July 13, 2004, by Donald Munro, Inspector, Drinking Water Inspection Program, Eastern Region. Enclosed is a copy of the inspection report.

A copy of the enclosed report will also be sent to Dr. Robert Bourdeau, Medical Officer of Health for the Eastern Ontario Health Unit; Mr. Mirek Tybinkowski, Review Engineer, Environmental Assessment & Approvals Branch and Roger Houde, Raisin Region Conservation Authority.

Your attention is directed to Section 6 "Summary of Non Compliance Issues and Actions Required"and Section 7 "Summary of Best Practice Recommendations"of this report. Compliance of this plant is assessed against O. Reg 170/03 which was declared June 1, 2003. Please respond by November 15, 2004 detailing how you plan to address these issues.

Should you have any questions pertaining to the report, please do not hesitate to contact Don Munro at this office at extension 231.

Yours truly,

James Mahoney

James Mahoney
Supervisor,
Drinking Water Inspection Program,

Kingston District/Eastern Region

ccdhm
enclosure

cc: Dr. Robert Bourdeau, Medical Officer of Health
Mirek Tybinkowski, Review Engineer, Environmental Assessment and Approvals Branch
Roger Houde, Raisin Region Conservation Authority
File SI-GL-CH-C1-540 , Cornwall Area Office

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INSPECTION DETAILS	
Location:	**Cameron's Point Campsite** **Lot 6 (w1/2), Concession 1** **Township of South Glengarry** **19658 County Road 2,** **Summerstown, Ont.** **K0C 2E0**
Pump house	**NAD 83, Zone 18**
Water Works Number:	**Not Registered**
Date of Physical Inspection:	**July 13, 2004**

CONTACT INFORMATION	
Owner **Charles Beaudette** **19658 County Rd 2,** **Summerstown, ON** **K0C 2E0** Attention: Mr. Charles Beaudette, **Owner** Phone: (613) 931-1516	**Operating Authority** Mr Charles Beaudette
Inspector: Gerald Menard/**Don Munro** **Cornwall/Eastern Region** **(613) 933-7402**	Distribution Date: September **30, 2004**

Name and address of other contacts can be found in **Appendix C**

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APPENDICES

SECTION 1 INTRODUCTION

1.1 INSPECTION OBJECTIVES

The primary focus of this inspection is to confirm compliance with Ministry of the Environment legislation and control documents, as well as conformance with Ministry drinking water-related policies for the inspection period. Specifically, this includes a review and assessment of operating practices in relation to, but not limited to, the following documents:

- Drinking Water Protection Regulation (O. Reg. 170/03)
- Operator Certification Regulation (Water Works and Sewage Works - O. Reg. 128/04)
- Water Well Record, Cameron's Point Campsite, 1975
- Correspondence Thompson Rosemount Group Well Rehabilitation
- Schematic Water Distribution System

The ministry has implemented a rigorous and comprehensive approach in the inspection of water systems that focuses on the source, treatment, and distribution components as well as water system management practices.

On Tuesday, July 13, 2004 the Ministry of the Environment conducted a site inspection of the Cameron's Point Campsite Well Supply and associated storage reservoir and distribution system. The MOE Inspector, Don Munro was accompanied by Mr. Gerald Menard, Drinking Water Inspector and by Mr. Charles Beaudette, owner of Cameron's Point Campsite who also represented the operating authority for the Park at the time of the inspection. Mr Beaudette is not a licensed operator or trained person.

The drinking-water inspection included a physical inspection of the well supply, water storage reservoir and distribution facilities. Samples from the raw water and the campsite distribution system were collected for bacteriological and chemical analyses. No field measurements for free chlorine residuals were conducted as the drinking-water at the time the samples were collected was not chlorinated.

The Cameron's Point Campsite includes 140 seasonal mobile homes and approximately 10 serviced lots for overnite campers. The water treatment plant consists of a six inch, one hundred and forty-five (145) foot drilled well equipped with a Goulds submersible pump with the pump intake set at 140 feet inside the steel well casing. This well pump supplies water to a pressure tank of unknown size which is then relayed to the campsite distribution system.
A shallow well pump (small submersible) located in a steel galvanized tank (about 150 gallons) supplies water to the existing recreation building. Disinfection is not provided and at present, there are no on-line analyzers to measure turbidity and free chlorine residual.

AUTHORIZING AND CONTROL DOCUMENTS

On July 13, 2004, the Cameron's Point Campsite Waterworks System was inspected to assess the applicability of the facility with respect to O. Reg 170/03. The inspection was conducted as a routine visit to determine if the system complied with the new regulation.

The inspection identified a number of non-compliance issues, including:

- The water treatment equipment (once installed) must be checked weekly by a trained person;
- The facility does not meet the primary disinfection requirements for a ground water supply described in Section 2-3 of Schedule 2 of Ontario Regulation 170/03;
- Microbiological sampling and analysis was not being conducted (O. Reg 170/03, Schedule 12);
- Chemical sampling and analysis was not being conducted (O. Reg 170/03, Schedule 14) and,
- The annual report for this facility was not done (O. Reg 170/03, Section 11).

As a result of these non-compliance issues, Provincial Officer's Order No. 4472-63SPQ6 was issued to the Owners directing to address these issues. A copy of this order is contained in **Appendix E.**

SECTION 2 EXISTING WATER SYSTEM DESCRIPTION

2.1 WATER SOURCE, TREATMENT PROCESSES, AND DISTRIBUTION SYSTEM

2.1.1 Water Source

☐ Surface Water ☒ Groundwater ☐ GUDI

The Cameron's Point Campsite water source is a drilled well, 44. 2 m (145 ft) deep, with 38.1 m (125 ft) of steel 6 inch steel casing and an open hole drilled 6.1 m (20 ft) into the limestone rock. The well capacity is reported to be 378.5 litres per minute (100 gpm) and water was found at 42. 1 m (138 feet). The well is located on the campground site approximately 610 m (2,000 feet) south of County Road No.2 at the rear of the former farmhouse site. The well was drilled in a former dug well but there is no evidence of grouting. The owner reports that the well was rehabilitated recently and grouting was performed. An engineer was reported to have supervised the work. A copy of the engineer's report is contained in Appendix G.

2.1.2 Treatment Processes

- ☐ Zebra Mussel Control
- ☐ Direct Filtration (Coagulation, Flocculation & Filtration)
- ☐ Customized Conventional Surface Water Treatment (Sedimentation & Filtration, Disinfection)
- ☐ Cartridge Filter
- ☐ Actiflo Process
- ☐ Membrane Filtration
- ☐ Reverse Osmosis
- ☐ Softening
- ☐ Fluoridation
- ☐ pH adjustment
- ☐ Alkalinity Augmentation
- ☐ Greensand Filtration
- ☐ Aeration
- ☐ Iron and/or Manganese Sequestration
- ☐ Primary Disinfection using UV Light
- ☐ Primary Disinfection using Ozone
- ☐ Primary Disinfection using Chlorine-based Products
- ☐ Secondary Disinfection using Chlorine-based Products (Includes Chloramination)
- ☐ Re-chlorination within Distribution System
- ☒ No Treatment Provided
- ☐ Other (Specify):

The Cameron's Point Campsite is located on the South side of County Road No. 2 approximately 3 kilometers East of the Community of Summerstown in South Glengarry Township. Water for the campsite is pumped via a submersible pump from a drilled well to the distribution system. Water is also pumped simultaneously to a 568 litre (150 gallon) steel storage tank that is located on the campgrounds site where it is then pumped by a different submersible pump to a recreation building.

The owners could not provide documentation with regards to the size or capacity of the raw water well pump or reservoir submersible pump. An engineering evaluation for the water system has now been done and a final report expected shortly. The engineer calculated that the maximum water consumption for the whole park was less than 30,000 litres per day. Therefore, he concluded that a Permit To Take Water (PTTW) was not required at that time.

Is Process Wastewater Treated Prior to Discharge?

☐ Yes ☐ No ☒ Not Applicable

There is no process water discharged here as there is no treatment.

GPS coordinates for the water works can be found in Appendix "A".

SECTION 3 INSPECTION FINDINGS

3.1 OPERATIONS

3.1.1 Source/Supply

Groundwater

Are measures in place to protect the groundwater source?

☐ Yes ☒ No ☐ Not Applicable

The well is covered by a plywood covering but access could be gained to the well head.

Is the owner maintaining well in a manner sufficient to prevent entry into the well of surface water and foreign materials?

☐ Yes ☒ No ☐ Not Applicable☐

Does a water conservation plan exist?

☐ Yes ☒ No

The Cameron's Point Campsite does not have a formal water conservation plan.

3.1.2 Treatment Processes

Does the drinking-water system provide the required minimum level of treatment at all times ?

☐ Yes ☒ No

Has the owner ensured that all equipment is installed in accordance with O. Reg. 170/03 and the Engineering Evaluation Report?

☐ Yes ☒ No ☐ Not Applicable

The owner is in the process of engaging the services of an Engineering firm to perform an Engineering evaluation.

Does the owner have up-to-date plans for the drinking water treatment system?

☐ Yes ☒ No

Are filters monitored and/or inspected?

☐ Yes ☒ No

There are no filters installed on the system.

Do the facility and equipment appear to be maintained and in a fit state of repair ?

☐ Yes ☒ No

With respect to the well head, the construction could be improved to eliminate any potential for surface water infiltration and the water storage reservoir should be upgraded to ensure no access is available to the general public and the storage vessel is covered.

Has the owner established any water quality goals over and above O. Reg. 169/03?

☐ Yes ☒ No

Is it possible for raw water or partially treated water to bypass key treatment units?

☐ Yes ☒ No

Does the owner have evidence indicating that all chemicals used in the treatment process and all materials contacting the water have met the AWWA and ANSI standards?

☐ Yes ☐ No ☒ Not Applicable

Is adequate spill containment provided for process chemicals?

☐ Yes ☐ No ☒ Not Applicable

Do the placement of floor drains pose a threat to the contamination of source water, treated water, or the natural environment?

☐ Yes ☐ No ☒ Not Applicable

Is the operator aware of the required CT value and is the CT value used in process calculations and process control?

☐ Yes ☐ No ☒ Not Applicable

Has the owner initiated measures to address potential cross-connections at the treatment plant?

☐ Yes ☐ No ☒ Not Applicable

Are there any issues or concerns with respect to the storage, preparation, handling or application of pesticides on the premises ?

☐ Yes ☒ No

The inspection failed to identify any concerns with respect to the storage, preparation, handling or application of pesticides in the immediate vicinity of the well or distribution storage. Mr. Beaudette reported that neither pesticides nor fertilizers were applied within the residential portion of the Campsite.

3.1.3 Process Wastewater

Does the facility generate process wastewater ?

☐ Yes ☒ No

3.2 WATER SYSTEM MANAGEMENT PRACTICES

3.2.1 Operational Manuals

Is an Operations Manual available (does it exist) ?

☐ Yes ☒ No

3.2.2 Logbooks

Is a Logbook available (does it exist) ?

☐ Yes ☒ No

3.2.3 Contingency and Emergency Planning

Has the owner developed a written Contingency / Emergency Plan ?

☐ Yes ☒ No

3.2.4 Security

Are all storage facilities completely covered and secure?

☐ Yes ☒ No ☐ Not Applicable

The Cameron's Point Campsite water distribution system storage tank consists of a network of 1" diameter plastic pipes which supplies water pumped from the existing well and associated pressure tank to the 166 campsite locations found within the park. A galvanized steel storage tank with a capacity of 568 litre (150 gallon) located on the campgrounds site away from the well site and covered with a fibreglass roof also provides water to the existing recreation building and swimming pool. The storage tank is accessible to the public and is located adjacent to a fuel storage tank which has no containment. This situation should be reviewed to ensure that there is no opportunity for the public or the nearby fuel tank to contaminate the water storage tank. Access to the well is achieved by removing a plywood cover. It is not locked.

Are air vents associated with reservoirs equipped with screens?

☐ Yes ☐ No ☒ Not Applicable

Has the owner provided adequate security measures to protect wells, intakes, treatment facilities, and components of the distribution system?

☐ Yes ☒ No

If security measures (e.g. locked gates, 6 foot security fencing, intruder alarms, warning signs etc.) are not in place, is the facility visited by system personnel at least daily?

☒ Yes ☐ No

The well and recreation building storage reservoir is monitored by Park staff daily.

3.2.5 Communication with Consumers

Are required documents made available free-of-charge, during normal business hours, and at a location accessible to the public?

☐ Yes ☒ No

Most of the required documents do not exist for the Cameron's Point Campsite.

Does the owner take effective steps to advise consumers of the availability of reports?

☐ Yes ☒ No

3.2.6 Operators/Trained Persons

Do all operators / trained persons working at the treatment facility possess the required certification?

☐ Yes ☒ No

Where required, are treatment plant system classification certificates and operator certificates displayed in a prominent location?

☐ Yes ☐ No ☒ Not Applicable

Have all operators / trained persons received all required training?

☐ Yes ☒ No ☐ Not Applicable

SECTION 4 WATER QUALITY

4.1 WATER QUALITY MONITORING & ASSESSMENT

Are continuous water quality analyzers and indicators with alarm systems calibrated in accordance with manufacturers instructions or the regulation?

☐ Yes ☐ No ☒ Not Applicable

Are continuous water quality analyzers and indicators with alarm systems installed at the prescribed locations, maintained and operated in accordance with the Regulation?

☐ Yes ☐ No ☒ Not Applicable

Are all water quality monitoring requirements under the *Safe Drinking Water Act* and applicable regulations complied with? Itemize as many as apply.

☐ Yes ☒ No

- Microbiological✔ One sample submitted weekly.
- Chemical, Inorganic (e.g. fluoride, nitrate, heavy metals)✘ Not being conducted.
- Chemical Organic (e.g. VOCs, pesticides)✘ Not being conducted.
- Chlorine Residual✘ There is no on-line chlorine analyzer.
- Turbidity✘ There is no on-line turbidity analyzer.
- Other (corrective action consisting of re-sampling for adverse test results). Re-sampling as required for Corrective Action (Schedule 18) is regularly completed.

Are all ancillary monitoring requirements under Certificates of Approval, Orders, or Directions being complied with?

☐ Yes ☐ No ☒ Not Applicable

Are all testing for parameters required by legislation, C of A or Order conducted by laboratories that are accredited for that parameter ?

☐ Yes ☐ No ☒ Not Applicable

Has the drinking water system owner submitted written notices to the Director (LSB) of the identities of laboratories that conduct testing for parameters required by legislation, C of A or Order ?

☐ Yes ☒ No

Has any form of relief from water quality monitoring requirements been granted ? Itemize as many as apply. *(Does not include reduced sampling and analysis frequencies)*

☐ Yes ☒ No ☐ Not Applicable

Are raw water monitoring requirements being complied with?

☐ Yes ☒ No ☐ Not applicable

Can samples of raw water be collected prior to treatment from an acceptable tap with a smooth nozzle?

☐ Yes ☒ No ☐ Not Applicable

Are samples for chlorine residual analysis tested using continuous monitoring equipment or an electronic direct read-out colourimetric or amperometric chlorine analyzer, or equivalent device? It is also acceptable to use another device that is documented to be equivalent or better.

☐ Yes ☒ No

Are samples for lead analysis are being collected from a point in the distribution system, or connected plumbing that is likely to have an elevated concentration of lead?

☐ Yes ☒ No ☐ Not Applicable

Is the owner conducting any additional i.e. non-required sampling, such as for Giardia or Cryptosporidium?

☐ Yes ☒ No ☐ Not Applicable

Did the Inspector collect audit samples ?

☒ Yes ☐ No ☐ Not Applicable

Audit samples were collected by the Inspector of the raw water (SWIPRAW) and on the distribution system (SWIPDIST).

Are the owner's monitoring results comparable to the results attained through the inspector's audit samples?

☐ Yes ☒ No ☐ Not Applicable

The owner has not collected chemical samples or some parameters required in the microbiological analyzes.

4.2 NOTIFICATION, CORRECTIVE ACTION AND REPORTING

Did the drinking water system have any adverse water quality incidents since the last inspection (or within the last two calendar years, whichever is less)? If YES, itemize as many categories as apply.

☒ Yes ☐ No

- Microbiological✔
- Chemical, Inorganic (e.g. fluoride, nitrate, heavy metals)

The Eastern Ontario Health Unit conducted the only water quality sampling at Cameron's Campsite until July, 2004. Water samples were not being collected on a regular basis and tested for bacteriological contamination as required by Schedule 6 of *Ontario Regulation 170/03*.

Mr. Beaudette commenced weekly microbiological sampling of the Cameron's Point Campsite water supply in July, 2004. What follows is a summary of the Adverse Water Quality Incidents reported for the Park since that date.

SUMMARY OF WATER QUALITY EXCEEDENCES

DATE	EXCEEDENCE	DETAILS
July 2, 2004	HPC > 500	Well
July 16, 2004	A Hydrophila indicated	Distribution System
July 29, 2004	HPC > 500	Distribution System
July 30, 2004	HPC > 500	Restaurant, Distribution System
August 9, 2004	HPC > 500	Distribution System
August 11, 2004	BKG > 200	Distribution System
August 19, 2004	TC = 1	Distribution System

Were all required notifications of adverse water quality incidents provided to the Spills Action Centre and the Medical Officer of Health ? Specify any that apply.

☒ Yes ☐ No

Were there any required corrective actions that were not taken ? Itemize as many as apply.

☐ Yes ☒ No

In instances where written notice of issue resolution was required by O. Reg. 170/03, was that notice provided within 7 days, summarizing the action taken and results achieved?

☒ Yes ☐ No ☐ Not Applicable

Generally, written Notice of Issue Resolution is provided in response to notice of adverse test results. The Notice(s) of Issue Resolution that have been received within the required time frames.

Were warning notices issued in instances where they were required?

☐ Yes ☐ No ☒ Not Applicable

In instances where alarms for continuous monitoring equipment sounded, were appropriate actions taken in a timely manner by a qualified person ?

☐ Yes ☐ No ☒ Not Applicable

If no one is at the location where / when the alarm sounds, was a qualified person is promptly dispatched?

☐ Yes ☐ No ☒ Not Applicable

Was the most recent Engineering Evaluation Report prepared and submitted within required time frames?

☐ Yes ☐ No ☒ Not Applicable

The owners are in the process of retaining the services of an engineering firm to do an engineering evaluation. The deadline for treatment for this type of facility has been extended until December 31, 2006. At the moment, the owners are exploring all options with respect to their water treatment facility.

Have Annual Reports been completed and made available to the public on time, and do they include the required information ?

☐ Yes ☒ No ☐ Not Applicable

The annual report was not done for this facility.

Did the drinking water system owner reduce the frequency of chemical sampling and analysis as a result of the system's not having been in operation for a period of 60 or more consecutive days?

☐ Yes ☐ No ☒ Not Applicable

Did the drinking water system owner reduce the frequency of microbiological sampling and analysis as a result of the system's not having been in operation for a period of 7 or more consecutive days ?

☐ Yes ☒ No ☐ Not Applicable

Did the drinking water system owner reduce the frequency of microbiological sampling and analysis as a result of the system's having had 24 consecutive months with not greater than one confirmed adverse test result for *E.coli,* fecal coliforms or total coliforms

☐ Yes ☒ No ☐ Not Applicable

SECTION 5 ASSESSMENT OF PREVIOUS INSPECTION ISSUES

5.1 NON COMPLIANCE WITH REGULATORY REQUIREMENTS

The Cameron's Point Campsite was not inspected previously.

5.2 BEST MANAGEMENT PRACTICES RECOMMENDATIONS

The Cameron's Point Campsite was not inspected previously.

SECTION 6 SUMMARY OF NON COMPLIANCE ISSUES & ACTIONS REQUIRED

The 2004 drinking water inspection conducted at the Cameron's Point Campsite on July 13, 2004 identified the following non-compliance issues resulting in the issuance of a Provincial Officer's Order No. 4472-63SOQ6.

1) The annual report was not submitted as per Section 11 of O. Reg. 170/03.

2) Microbiological sampling was not being performed as per Schedule 12 of O. Reg 170/03.

3) Chemical sampling and testing was not being performed as per Schedule 14 of O. Reg. 170/03.

4) "Notification of Laboratory Service Provided to Waterworks" completed forms were not submitted to the Ministry of the Environment's Laboratory Services Branch.

SECTION 7 SUMMARY OF BEST PRACTICE RECOMMENDATIONS

Legislated requirements have been identified in the previous section. In the interest of continuous improvement, the following suggestions have been provided:

1. The position and security precautions for the recreation building water storage tank should be reviewed to ensure that the tank is appropriately covered and secure with no access afforded to the general public. It is also located adjacent to a fuel storage tank which has no visible spill containment and there is the potential for contamination of the distribution system via the storage tank plumbing. This situation needs to be reviewed and either the fuel tank be provided with containment or the water storage tank be re-located.

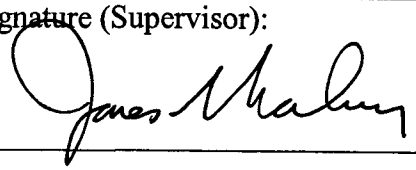
2. The well head area and distribution valve areas should be reviewed and protected from any access by the general public using locked hatches or similar arrangements.

3. Once the engineering evaluation is complete, the owners should ensure that all non-compliance issues will be met in a timely and reasonable manner.

4. Once the owner has installed the necessary treatment equipment by the required deadline, he will need the services of a trained person to make the necessary process changes at the water system as outlined in Schedule 6, section 3 of O. Reg 170/03.

By no later than Thursday, October 15, 2004, the owners of the Drinking Water System shall provide the undersigned Provincial Officer with an Action Plan that specifies how the Owners intend to address each of the four (4) cited issues in Section 6 in a manner that ensures that they will be resolved and not repeated. The Action Plan is to be provided complete with implementation dates.

SIGNATURES

Inspected By: Gerald Menard	Signature: (Inspector):
Reviewed & Approved By: **James Mahoney**	Signature (Supervisor): 
Review & Approval Date: (yyyy/mm/dd) 2004/09/30	

Note: This inspection does not in any way suggest that there is or has been compliance with applicable legislation and regulations as they apply or may apply to this facility. It is, and remains, the responsibility of the owner and/or operating authority to ensure compliance with all applicable legislative and regulatory requirements.

cc: Dr. R.Bourdeau, Eastern Ontario Health Unit, 1000 Pitt Street., Cornwall, ON K6J 5T1
Mr. Roger Houde, Raisin Region Conservation Authority, Grey's Creek, Cornwall, ON

file SI PC AT C6 521

APPENDIX "A"

GPS COORDINATES

GPS REFERENCING	
ITEM	**GLOBAL POSITIONING SYSTEM (GPS) COORDINATES**
MAP DATUM:	**NAD 83**
UTM ZONE:	**Zone 18**
PUMPHOUSE:	**0536518 East, 499399 North**
STORAGE TANK:	**Not Applicable**

APPENDIX "B"

OPERATOR AND FACILITY CERTIFICATION DETAILS

PLANT CLASSIFICATION
Plant Name: Cameron's Point Campsite Well Supply
Facility Level: The facility is not classified but is likely considered to be limited subsystem groundwater.
Certificate Number: No certificate has been issued.
Date of Issue: Not Applicable

PLANT PERSONNEL		
OPERATOR 1		
Operator Name:	**Mr. Charles Beaudette**	**Title: Owner**
Certificate Number:	**Not Applicable**	**Expiry Date: Not Applicable**
Certification Level:	**Not Applicable**	

PLANT PERSONNEL		
OPERATOR 2		
Operator Name:		**Title:**
Certificate Number:		**Expiry Date:**
Certification Level:		

APPENDIX "C"

CONTACT INFORMATION

Local Health Unit

Eastern Ontario Health Unit
1000 Pitt Street
Cornwall, ON
K6J 5T1

Attention: Dr. R. Bourdeau
Medical Officer of Health

Medical Officer of Health:

Phone: (613) 933-1375
Fax: **(613) 933-7930**

Conservation Authority or Ministry of Natural Resources

Raisin Region Conservation Authority
P.O. Box 429
Cornwall, ON
K6H 5T2

Attention: Mr. Roger Houde,
Manager

Phone: (613) 938-3611
Fax: **(613) 938-3221**

MOE Environmental Assessment and Approvals Branch

Ministry of the Environment
2 St. Clair Avenue West
Floor 12A
Toronto ON
M4V 1L5

Attention: Mirek Tybinkowski
Water and Wastewater Specialist

Phone: (416) 314-8202
Fax: (416) 314-6935

Consultants or Other Key Contacts

The Thompson Rosemount Group
1345 Rosemount Avenue,
Cornwall, Ontario
K6J 3E5

Attention: Marco Vincelli P.Eng
Engineer

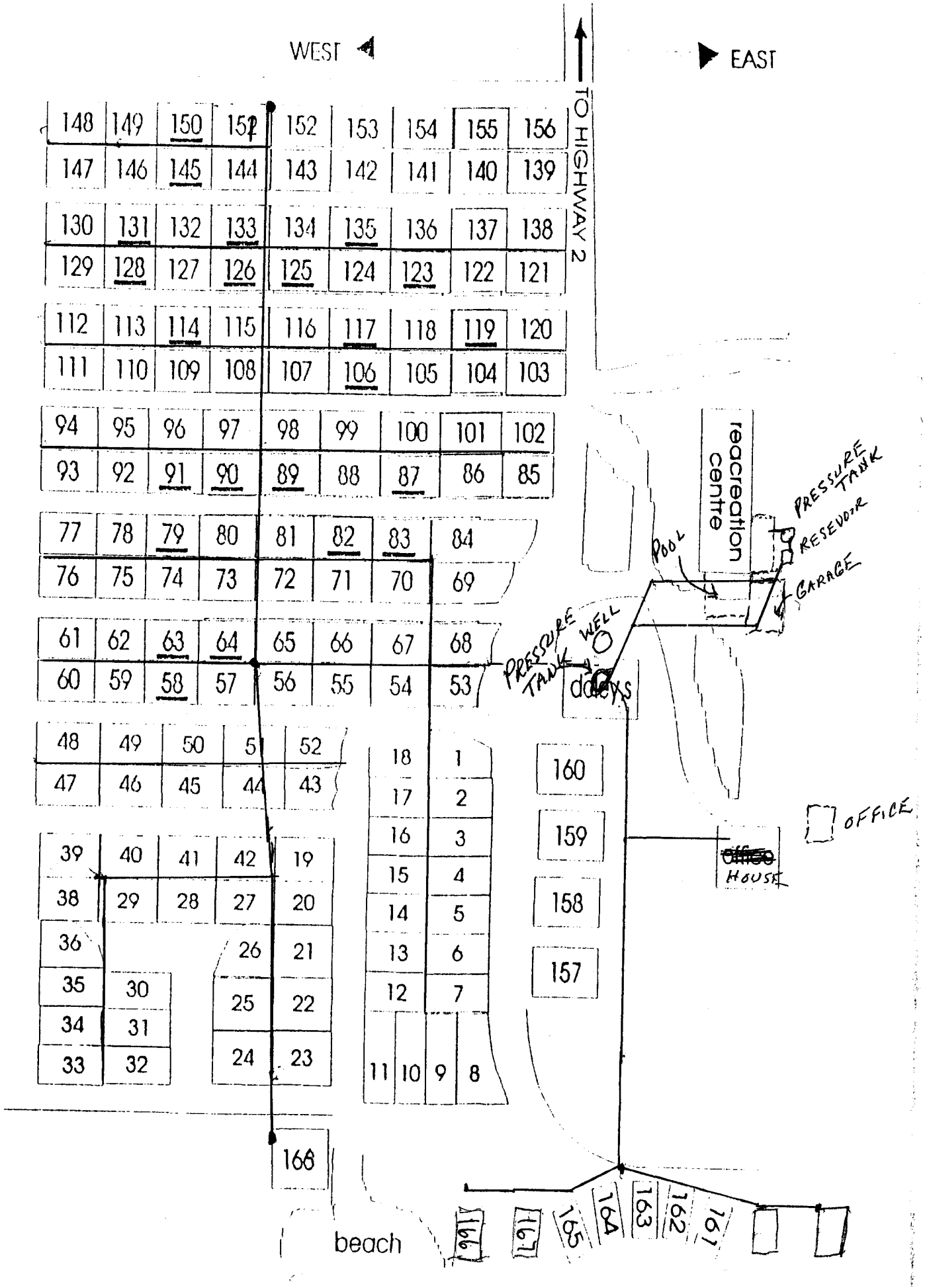
Phone: 613 - 933-5602
Fax: 613 - 936-0335

APPENDIX "D"

DISTRIBUTION SYSTEM SCHEMATIC

(Not Applicable)

CAMERON'S POINT CAMPSITE INC
WELL WATER SYSTEM



APPENDIX "E"

PROVINCIAL OFFICER'S REPORT AND ORDER

Ministry of the Environment
Ministère de l'Environnement
Ontario

Provincial Officer's Report

Order Number
4472-63SPQ6

D R A F T

Cameron's Point Campsite
19568 County Road No. 2
Summerstown, Ontario
South Glengarry, Ontario, K0C 2E0
Canada

Site
19568 County Road No. 2 Summerstown, Ontario
South Glengarry, United Counties of Stormont, Dundas and Glengarry

Observations

On 2004/07/13, I visited the above site(s) and made the following observations:

1. The owner failed to submit an annual report as required by Section 11 of Ontario Regulation 170/03.
2. The owner is not collecting the required microbiological samples according to schedule 12 of Ontario Regulation 170/03.
3. The owner is not collecting the required chemical samples according to Schedule 14 of Ontario Regulation 170/03.
4. No Lab accreditation and Notification documents have been submitted and must be provided as required in Schedule 6 of Ontario Regulation 170/03.
5. There seems to be insufficient contact time to achieve disinfection as required in Schedule 2 of Ontario Regulation 170/03.This needs to be evaluated and the necessary disinfection procedure implemented.
6. The water storage reservoir should be re-located to another location or the nearby fuel tank provided with spill containment to avoid potential water contamination.
7. Both the water storage reservoir and well casing housing should be locked and protected from possible vanadalism or access by the general public.

Offence(s)

Suspected Violation(s)/Offence(s):	
Act - Regulation - Section, Description {General Offence}	

Provincial Officer
Badge Number: Not Determined
Date:
District Office:

Ministry of the Environment

Ministère de l'Environnement

Ontario

D R A F T

Provincial Officer's Order

Environmental Protection Act, R.S.O. 1990, c.E 19 (EPA)
Ontario Water Resources Act, R.S.O. 1990, c. O. 40 (OWRA)
Pesticides Act, R.S.O. 1990, c. P11 (PA)
Safe Drinking Water Act, S.O. 2002, c.32 (SDWA)
Nutrient Management Act, 2002, S.O. 2002, c.4

Order Number
4472-63SPQ6

To: Cameron's Point Campsite
19568 County Road No. 2
Summerstown, Ontario
South Glengarry, Ontario, K0C 2E0
Canada

Site: 19568 County Road No. 2 Summerstown, Ontario
South Glengarry, United Counties of Stormont, Dundas and Glengarry

Work Ordered

1. The owner is required to submit an annual report as required by Section 11 of Ontario Regulation 170/03.

2. The owner is required to immediately collect all microbiological samples according to schedule 12 of Ontario Regulation 170/03.

3. The owner is required to immediately collect all chemical samples according to Schedule 14 of Ontario Regulation 170/03.

4. Lab Accreditation and Notification documents have not been submitted and must be provided as required in Schedule 6 of Ontario Regulation 170/03.

5. By no later than October 15, 2004 provide an Action Plan adressing all of the items listed above and those described in Section 7 of the inspection report (Summary of Best Practice Recommendations).

A.
While this Order is in effect, a copy or copies of this order shall be posted in a conspicuous place.

B.
While this Order is in effect, report in writing , to the District or Area office, any significant changes of operation, emission, ownership, tenancy or other legal status of the facility or

operation.

This Order is being issued for the reasons set out in the annexed Provincial Officers Report which forms part of this Order.

Issued at this day of , .

Badge No:

Tel:

APPEAL/REVIEW INFORMATION

REQUEST FOR REVIEW

You may request that this order be reviewed by the Director. Your request must be made in writing (or orally with written confirmation) within seven days of service of this order and sent by mail or fax to the Director at the address below. In the written request or written confirmation you must,

- specify the portions of this order that you wish to be reviewed;
- include any submissions to be considered by the Director with respect to issuance of the order to you or any other person and with respect to the contents of the order;
- apply for a stay of this order, if necessary; and provide an address for service by one of the following means:
  1. mail 2. fax

The Director may confirm, alter or revoke this order. If this order is revoked by the Director, you will be notified in writing. If this order is confirmed or amended by order of the Director, the Director's order will be served upon you. The Director's order will include instructions for requiring a hearing before the Environmental Review Tribunal.

DEEMED CONFIRMATION OF THIS ORDER

If you do not receive oral or written notice of the Director's decision within seven days of receipt of your request, this order is deemed to be confirmed by order of the Director and deemed to be served upon you.

You may require a hearing before the Environmental Review Tribunal if, within 15 days of service of the confirming order deemed to have been made by the Director, you serve written notice of your appeal on the Environmental Review Tribunal and the Director. Your notice must state the portions of the order for which a hearing is required and the grounds on which you intend to rely at the hearing. Except by leave of the Environmental Review Tribunal , you are not entitled to appeal a portion of the order or to rely on grounds of appeal that are not stated in the notice requiring the hearing. Unless stayed by the Environmental Review Tribunal , the order is effective from the date of service.

Written notice requiring a hearing must be served personally or by mail upon:

The Secretary
Environmental Review Tribunal
P.O. Box 2382
2300 Yonge Street, Suite 1201
Toronto, ON M4P 1E4

and

Director (Provincial Officer Orders)
Ministry of the Environment
Kingston District Office
133 Dalton Ave
Kingston ON K7L 4X6
Fax: (613)548-6908
Tel: (613)549-4000

Where service is made by mail, it is deemed to be made on the fifth day after the date of mailing and the time for requiring a hearing is not extended by choosing service by mail.

Further information on the Environmental Review Tribunal 's requirements for an appeal can be obtained directly from the Tribunal by:

Tel: (416) 314-4600 Fax: (416) 314-4506 www.ert.gov.on.ca

FOR YOUR INFORMATION

- Unless stayed by the Director or the Environmental Review Tribunal , this order is effective from the date of service. Non-compliance with the requirements of this order constitutes an offence.
- The requirements of this order are minimum requirements only and do not relieve you from complying with the following:
  - any applicable federal legislation;
  - any applicable provincial requirements that are not addressed in the order; and
  - any applicable municipal law.
- The requirements of this order are severable. If any requirement of this order or the application of any requirement to any circumstance is held invalid, the application of such requirement to other circumstances and the remainder of the order are not affected.
- Further orders may be issued in accordance with the legislation as circumstances require.
- The procedures to request a review by the Director and other information provided above are intended as a guide. The legislation should be consulted for additional details and accurate reference.

APPENDIX "F"

MINISTRY AUDIT SAMPLE RESULTS

(SEE ATTACHED)

Ontario Ministry of Environment
Central Laboratory - Resources Road
FINAL REPORT(manager.rdf)
Jul. 27, 2004 08:56 AM

Login: **C117360**

Program Code 130072401

Program: MOE OPERATIONS DIVISION
Study: WATER, COMMUNAL
Project: EASTERN REGION - OTTAWA DIST.
Activity: WTP MUNIC INSPECT/ADVERS NOTIF
Organization: District Manager Cornwall

Org. Id: 4615

Mail this copy to :

MUNRO, DON
MOE - CORNWALL AREA OFFICE
113 AMELIA STREET
CORNWALL,ONT
K6H 3P1

Final reports to : MUNRO, DON

Inquires to: RUSTY MOODY Telephone : 416-235-5863
PAUL YANG Telephone : 416-235-6004

LOGIN DESCRIPTION: CAMERON'S POINT CAMPSITE gerald menard 613-933-7402

Ontario Ministry of Environment
Central Laboratory - Resources Road
FINAL REPORT(manager.rdf)
Jul. 27, 2004 08:56 AM

Login: **C117360**

Field Id	Station ID	Sample Location Description	Sampling Date	Time	Zone	Sampler Information
GEM100		RAW WATER UNTREATED	20 JUL 2004	08:00	5	

Sample ID
C117360-0001

Sample Comment Description

MOE*LIMS Products Requested:

WD	E3226A	PA3226	WD	E3407A	TCEC3407	WD	E3408A	PC3408

Login: **C117360**

Field ID:	GEM100
Sample ID:	C117360-0001
MOE*LIMS ID:	2004WD29-00101
Station ID:	
Collect Date:	20 JUL 2004
Sample Location Description:	RAW WATER UNTREATED
Sample Comments Description:	

Listid	Parmname	Value	Units	Qual	Rmk1
3226L1	NT: Total Coliforms	See Non-Target Textual result			
3407L1	Total coliform	0.0	c/100mL		
	Escherichia coli	0.0	c/100mL		
3408L1	Heterotrophic bacteria (HB35)	10.	c/mL	<	

Login: **C117360**

CODE	DESCRIPTION
<	ACTUAL RESULT IS LESS THAN THE REPORTED VALUE
NDAE	NO DATA: ABSENT NT: ESCHERICHIA COLI
NDAT	NO DATA: ABSENT NT: TOTAL COLIFORMS
NDDN	NO DATA: NOT DETECTED NT: DETERIORATION INDICATORS

Login: **C117360**

NON-TARGET TEXTUAL RESULT

Sample ID	Listid	Parmname	Value:	Qual:	Remarks
C117360-0001	3226L1	NT: Total Coliforms		NDAT	

Absent

Sample ID	Listid	Parmname	Value:	Qual:	Remarks
C117360-0001	3226L1	NT: Escherichia coli		NDAE	

Absent

Sample ID	Listid	Parmname	Value:	Qual:	Remarks
C117360-0001	3226L1	NT: Deterioration Indicators		NDDN	

Not Detected

TEXT COMMENTS

** End of Report **

APPENDIX G

ENGINEER'S REPORT
(attached)

The Thompson Rosemount Group Inc.
1345 Rosemount Avenue
Cornwall, ON, Canada K6J 3E5
Telephone: 613-933-5602
Fax: 613-936-0335
Internet: mail@trg.ca Website: www.trg.ca

Ministry of Environment
113 Amelia St.
Cornwall, ON
K6H 3P1

September 20, 2004

Attn: Don Munro
Environmental Officer

Re: Cameron's Point Campground
Well Rehabilitation

Dear Mr. Munro:

The Thompson Rosemount Group Inc. (TRG) was retained by Charles Beaudette, proprietor of Cameron's Point Campground, to undertake an engineering and hydrogeological assessment as part of the Ontario Regulation 170/03 *Drinking-Water Systems Regulation*. Cameron's Point Campground has about 168 seasonal and drop-in RV and trailer sites, and is categorized as a "*Non-Municipal Seasonal Residential*" in accordance with *O.Reg. 170/03*.

During TRG's initial reconnaissance visit, it was recommended to Mr. Beaudette that the well be rehabilitated since the current well configuration could not be classified as non-GUDI. The existing drilled well was instrumented through a dug well which was approximately 12 m deep. The well record stipulated that the drilled well was approximately 43 m deep. Roy's Well Drilling Ltd. (Roy's) was contacted to initiate the well rehabilitation in accordance with O.Reg 903.

On October 15, 2003 the drilled well was extended to about 60 cm above grade and the annular space (between the drilled well and the old dug well) was grouted with cement grout to a depth of 2 m above the base of the dug well. The remainder of the annular space was sealed with clean fill. A pitless adaptor was added to the casing. Roy's shock-chlorinated the well after all upgrades were complete. Mr. Beaudette purged the well for several hours the following day prior to completing the pumping test.

A 6 hour constant rate pumping test was initiated by Roy's Drilling on October 27, 2003 under TRG's supervision. The well was pumped at 62.5 L/min. Once the pumping was completed recovery was measured until 95% recovery was reached. During the pumping test well head measurements of pH, temperature, turbidity, conductivity and water level were taken from the pumping well. Water level observations were taken periodically from a drilled well located 130 m west of the pumping well near the western property line. The drawdown in this well (0.45 m) had essentially stabilized within the 6 hour test period. The need to maintain this well is being reviewed with the owner and if not required it would be properly decommissioned.

Three water samples were collected during the pumping test, the first was taken after the chlorine level was at 0.01 mg/L, the second was collected mid-way through the pumping period, and the

third was collected prior to the pumping test termination. These samples were packaged in a cooler with ice pack, chain of custody and packing and submitted to Caduceon Environmental Laboratories in Ottawa, Ontario for analysis. The samples were analyzed for a suite of parameters termed "subdivision package". This includes bacteria, metals and general water chemistry parameters that are used to provide a comprehensive indication of water quality. The results of analysis were compared to the Ontario Drinking Water Standards (ODWS) and are summarized below and in the attached Table 1:

- ODWS exceedences occurred in all samples for hardness, laboratory turbidity, SO_4, Fe, and TDS;
- The ODWS limit for DOC was exceeded in the first and final sample only;
- All parameters demonstrated little variance in results except for background bacteria which demonstrated a decreasing trend (31 counts/100 mL to 10 counts/100 mL).

The well will be tested again as part of the design of the new water treatment system that TRG is undertaking. At this time we are confident that the well is not a GUDI supply. The elevated concentrations of aesthetic water quality parameters (Fe, SO4, TDS, and hardness) are typical of deeper Eastern Ontario bedrock supplies. We have contacted Roy's Well Drilling and they will furbish a copy of the revised well record to your office.

In terms of the well yield, this well appears to have more than adequate capacity to service the campground but this will be assessed further as the design is undertaken. The transmissivity (T) was calculated to be about 0.6 m^2/d by both recovery and drawdown evaluation (attached). This is typical of fair yielding bedrock supplies in Eastern Ontario. It was noted that cascading occurred when the dynamic water level reached 34.1 m (112') thus this was interpreted as one of the main water bearing zones. No other cascading was noted.

If you have any questions, please contact the undersigned.

Sincerely,

The Thompson Rosemount Group Inc.

John St. Marseille, M.Sc, P. Eng., P.Geo.
Senior Environmental Engineer

cc Charles Beaudette, Cameron's Point Campground

attached. Table 1, Pumping Test Analysis Report

Table 1 - Chemical Analysis
Cameron's Point Park

Parameter	Hard.	Alk.	Cond.	Cond.	Temp.	pH field	pH lab	Colour	Turb. field	Turb. lab	F	Cl	NO_2	NO_3	SO_4	Ca	Mg	Na	K	Fe	Mn	Silica	NH_3+NH_4	TKN	Org-N	Phenol	Tannins	H_2S	DOC	T.C.	E.Coli	Bkgd.	TDS
ODWS	80-100	30-500	field	lab		6.5 - 8.5		5	1	1	1.5	250	1	10	500			200		0.3	0.05				0.15			0.05	5	0	0	200	500
Location/Date																																	
27/10/03 11:45	1290	106	>1990	2140	10.5	8.2	7.47	1	0.20	7.8	0.9	41.0	ND	ND	1290	388	77.5	118	3.5	0.51	0.014	7.49	0.15	0.14	ND	ND	2.0	ND	7	ND	ND	31	1980
27/10/03 13:45	1280	105	>1990	2130	10.2	8.0	7.48	1	0.02	7.8	0.9	41.2	ND	ND	1280	385	77.1	118	3.5	0.50	0.013	7.45	0.14	0.14	ND	ND	2.0	ND	5	ND	ND	15	1966
27/10/03 15:45	1290	106	>1990	2140	10.0	8.1	7.46	4	0.04	7.7	1.0	41.6	ND	ND	1290	388	77.7	118	3.6	0.49	0.013	7.51	0.16	0.14	ND	ND	1.9	ND	6	ND	ND	10	1981

ODWS - Ontario Drinking Water Standards
7.8 - Indicates exceedence of Ontario Drinking Water Standards
ND - Not Detected

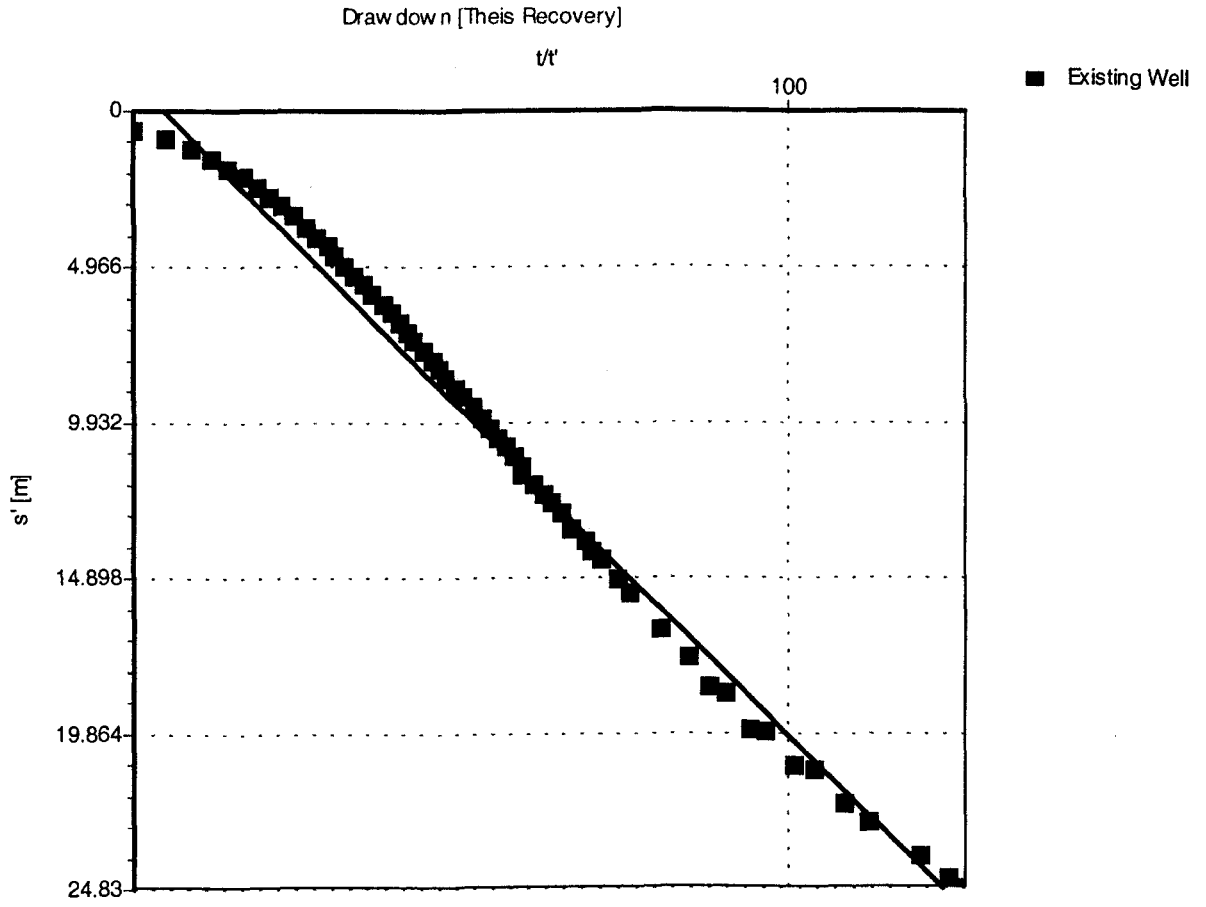
Thompson Rosemount Group
1345 Rosemount Ave.
Cornwall, Ontario, Canada
Phone: (613) 933-5602

Pumping Test Analysis Report

Project: Cameron s Point

Number: 036064 - 4A

Client:



Pumping Test: **Drawdown**

Analysis Method: **Theis Recovery**

Analysis Results: Transmissivity: 7.50E-6 [m²/s]

Test parameters:			
	Pumping Well:	Existing Well	Aquifer Thickness:
	Casing radius:	0.15 [m]	Confined Aquifer
	Screen length:	39.62 [m]	
	Boring radius:	0 [m]	
	Discharge Rate:	0.0010419673 [m³/s]	
	Pumping Time	362.4 [min]	

Comments:

Evaluated by: JS

Evaluation Date: 11/06/2003

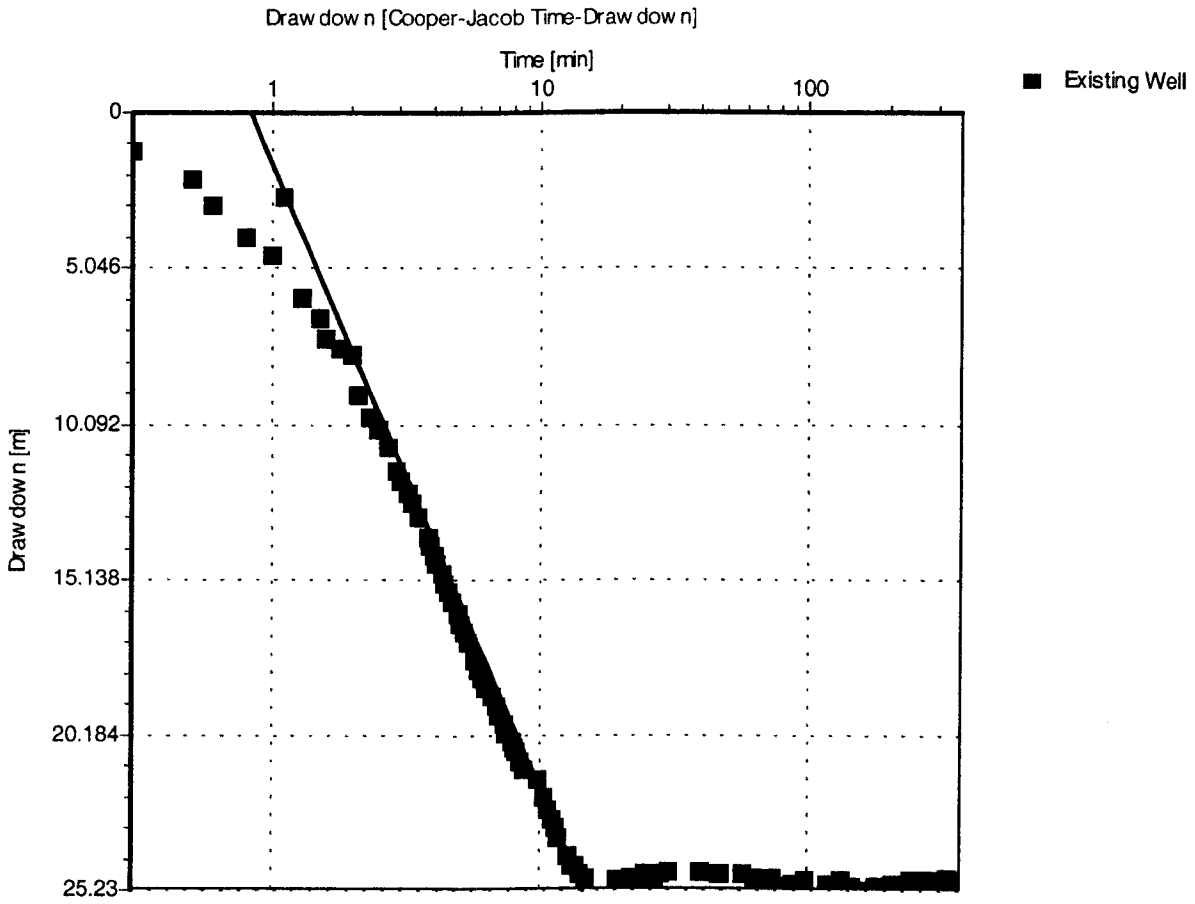
Thompson Rosemount Group
1345 Rosemount Ave.
Cornwall, Ontario, Canada
Phone: (613) 933-5602

Pumping Test Analysis Report

Project: Cameron s Point

Number: 036064

Client:



Pumping Test: **Drawdown**

Analysis Method: **Cooper-Jacob Time-Drawdown**

Analysis Results: Transmissivity: 9.42E-6 [m²/s]

Test parameters:

Pumping Well:	Existing Well	Aquifer Thickness:
Casing radius:	0.15 [m]	Confined Aquifer
Screen length:	39.62 [m]	
Boring radius:	0 [m]	
Discharge Rate:	0.0010419673 [m³/s]	

Comments:

Evaluated by: JS

Evaluation Date: 11/06/2003

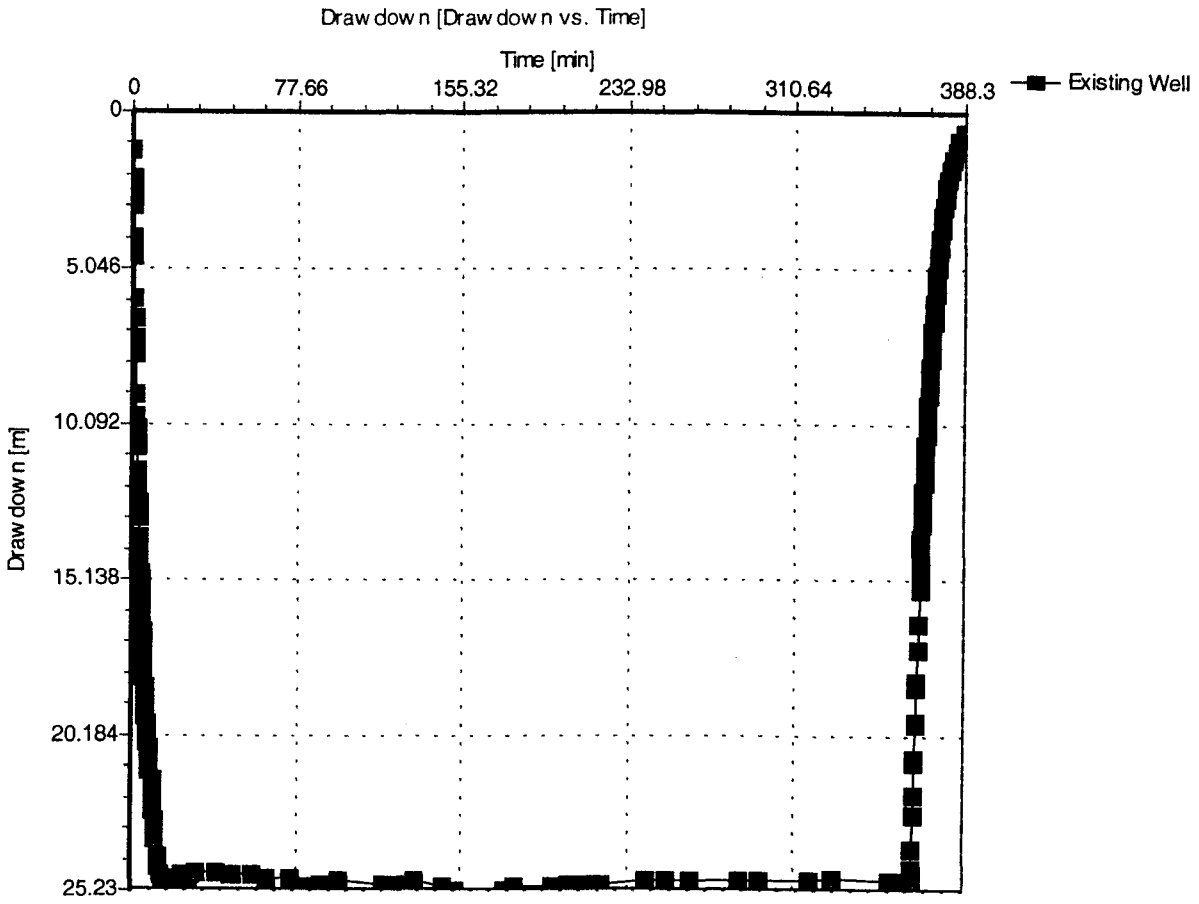
Thompson Rosemount Group
1345 Rosemount Ave.
Cornwall, Ontario, Canada
Phone: (613) 933-5602

Pumping Test Analysis Report

Project: Cameron s Point

Number: 036064

Client:



Pumping Test: **Drawdown**

Analysis Method: **Drawdown vs. Time**

Analysis Results:

Test parameters:			
	Pumping Well:	Existing Well	Aquifer Thickness:
	Casing radius:	0.15 [m]	
	Screen length:	39.62 [m]	
	Boring radius:	0 [m]	
	Discharge Rate:	0.0010419673 [m³/s]	

Comments:

Evaluated by: JS

Evaluation Date: 11/06/2003

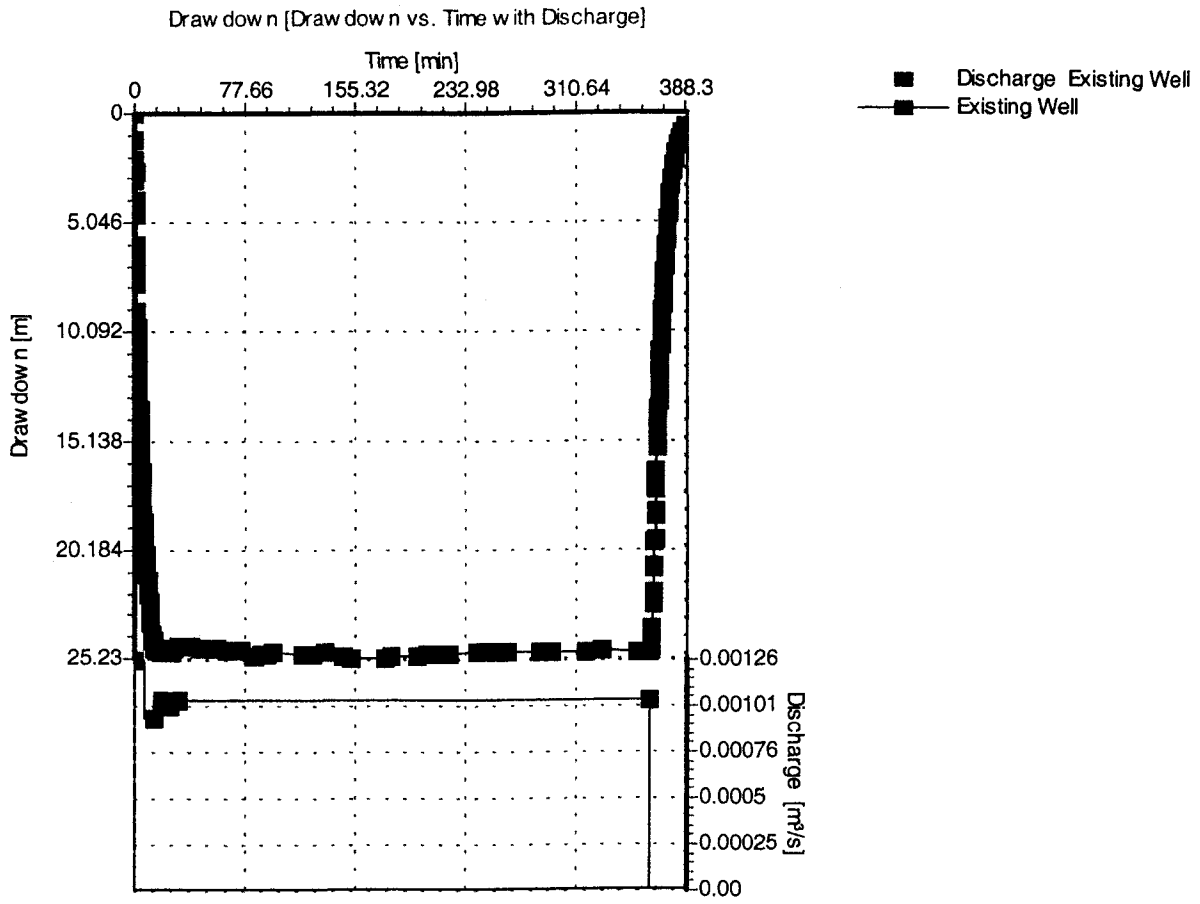
Thompson Rosemount Group
1345 Rosemount Ave.
Cornwall, Ontario, Canada
Phone: (613) 933-5602

Pumping Test Analysis Report

Project: Cameron s Point

Number: 036064

Client:



Pumping Test: **Drawdown**

Analysis Method: **Drawdown vs. Time with Discharge**

Analysis Results:

Test parameters:			
	Pumping Well:	Existing Well	Aquifer Thickness:
	Casing radius:	0.15 [m]	
	Screen length:	39.62 [m]	
	Boring radius:	0 [m]	
	Discharge Rate:	0.0010419673 [m³/s]	

Comments:

Evaluated by: JS

Evaluation Date: 11/06/2003

Thompson Rosemount Group
1345 Rosemount Ave.
Cornwall, Ontario, Canada
Phone: (613) 933-5602

Pumping Test Data Report

Project: Cameron s Point

Number: 036064

Client:

Data observed at: **Existing Well**	**Pumping Test:** **Drawdown**
Distance from PW: 0 [m]	Pumping Well: Existing Well
Depth to Static WL: 12.47 [m]	Casing radius: 0.15 [m]
Location:	Boring radius:
Recorded by: JBH	Screen length: 39.62 [m]
Date: 11/05/2003	Aquifer Thickness:

	Time [min]	Depth to WL [m]	Drawdown [m]
1	0	12.50	0.03
2	0	12.50	0.03
3	0.3	13.70	1.23
4	0.5	14.60	2.13
5	0.6	15.50	3.03
6	0.8	16.50	4.03
7	1	17.10	4.63
8	1.1	15.20	2.73
9	1.3	18.50	6.03
10	1.5	19.10	6.63
11	1.6	19.80	7.33
12	1.8	20.10	7.63
13	2	20.30	7.83
14	2.1	21.60	9.13
15	2.3	22.30	9.83
16	2.5	22.70	10.23
17	2.7	23.30	10.83
18	2.9	24.10	11.63
19	3	24.40	11.93
20	3.2	24.80	12.33
21	3.3	25.10	12.63
22	3.5	25.60	13.13
23	3.8	26.20	13.73
24	3.9	26.50	14.03
25	4	26.80	14.33
26	4.1	27.10	14.63
27	4.3	27.40	14.93
28	4.4	27.70	15.23
29	4.5	28.00	15.53
30	4.7	28.30	15.83
31	4.9	28.70	16.23

Thompson Rosemount Group
1345 Rosemount Ave.
Cornwall, Ontario, Canada
Phone: (613) 933-5602

Pumping Test Data Report

Project: Cameron s Point

Number: 036064

Client:

Data observed at: Existing Well	**Pumping Test: Drawdown**
Distance from PW: 0 [m]	Pumping Well: Existing Well
Depth to Static WL: 12.47 [m]	Casing radius: 0.15 [m]
Location:	Boring radius:
Recorded by: JBH	Screen length: 39.62 [m]
Date: 11/05/2003	Aquifer Thickness:

	Time [min]	Depth to WL [m]	Drawdown [m]
32	5	29.00	16.53
33	5.2	29.30	16.83
34	5.4	29.60	17.13
35	5.7	30.20	17.73
36	5.9	30.50	18.03
37	6.1	30.80	18.33
38	6.3	31.10	18.63
39	6.6	31.40	18.93
40	6.8	31.70	19.23
41	7	32.00	19.53
42	7.3	32.30	19.83
43	7.5	32.60	20.13
44	7.8	32.90	20.43
45	8	33.10	20.63
46	8.1	33.20	20.73
47	8.4	33.50	21.03
48	8.7	33.80	21.33
49	9.9	34.10	21.63
50	10.3	34.70	22.23
51	10.7	35.10	22.63
52	11	35.40	22.93
53	11.4	35.70	23.23
54	11.7	36.00	23.53
55	12.7	36.60	24.13
56	13.2	36.90	24.43
57	13.3	36.90	24.43
58	13.5	36.90	24.43
59	14.1	37.20	24.73
60	14.9	37.30	24.83
61	19.4	37.40	24.93
62	20.9	37.40	24.93

Thompson Rosemount Group
1345 Rosemount Ave.
Cornwall, Ontario, Canada
Phone: (613) 933-5602

Pumping Test Data Report

Project: Cameron s Point

Number: 036064

Client:

Data observed at: Existing Well	**Pumping Test: Drawdown**
Distance from PW: 0 [m]	Pumping Well: Existing Well
Depth to Static WL: 12.47 [m]	Casing radius: 0.15 [m]
Location:	Boring radius:
Recorded by: JBH	Screen length: 39.62 [m]
Date: 11/05/2003	Aquifer Thickness:

	Time [min]	Depth to WL [m]	Drawdown [m]
63	22	37.30	24.83
64	23.1	37.30	24.83
65	24.1	37.30	24.83
66	24.8	37.20	24.73
67	25.6	37.20	24.73
68	27	37.40	24.93
69	28.6	37.20	24.73
70	30.6	37.10	24.63
71	40	37.10	24.63
72	46.8	37.20	24.73
73	47.7	37.20	24.73
74	57.4	37.20	24.73
75	64.4	37.30	24.83
76	74.8	37.30	24.83
77	82.9	37.60	25.13
78	85.1	37.60	25.13
79	89.1	37.50	25.03
80	90.8	37.50	25.03
81	93.7	37.50	25.03
82	97.7	37.40	24.93
83	118.2	37.50	25.03
84	125.4	37.50	25.03
85	133.5	37.40	24.93
86	146.8	37.60	25.13
87	152.7	37.70	25.23
88	176.1	37.70	25.23
89	180.4	37.60	25.13
90	198.6	37.60	25.13
91	205.9	37.50	25.03
92	214	37.50	25.03
93	221	37.50	25.03

Thompson Rosemount Group
1345 Rosemount Ave.
Cornwall, Ontario, Canada
Phone: (613) 933-5602

Pumping Test Data Report

Project: Cameron s Point

Number: 036064

Client:

Data observed at: Existing Well	**Pumping Test: Drawdown**
Distance from PW: 0 [m]	Pumping Well: Existing Well
Depth to Static WL: 12.47 [m]	Casing radius: 0.15 [m]
Location:	Boring radius:
Recorded by: JBH	Screen length: 39.62 [m]
Date: 11/05/2003	Aquifer Thickness:

	Time [min]	Depth to WL [m]	Drawdown [m]
94	241.3	37.40	24.93
95	250.7	37.40	24.93
96	262.7	37.40	24.93
97	284.6	37.40	24.93
98	293.9	37.40	24.93
99	317.4	37.40	24.93
100	328.4	37.30	24.83
101	354.4	37.40	24.93
102	362.4	37.40	24.93
103	364.6	37.30	24.83
104	364.7	37.00	24.53
105	364.9	36.30	23.83
106	365.3	35.20	22.73
107	365.5	34.60	22.13
108	365.8	33.50	21.03
109	366	33.40	20.93
110	366.3	32.30	19.83
111	366.5	32.20	19.73
112	366.8	31.10	18.63
113	367	30.90	18.43
114	367.3	29.90	17.43
115	367.7	29.00	16.53
116	368.2	27.90	15.43
117	368.4	27.40	14.93
118	368.7	26.80	14.33
119	368.9	26.50	14.03
120	369	26.20	13.73
121	369.3	25.80	13.33
122	369.5	25.30	12.83
123	369.7	25.00	12.53
124	369.9	24.70	12.23

Thompson Rosemount Group
1345 Rosemount Ave.
Cornwall, Ontario, Canada
Phone: (613) 933-5602

Pumping Test Data Report

Project: Cameron s Point

Number: 036064

Client:

Data observed at: Existing Well	**Pumping Test: Drawdown**
Distance from PW: 0 [m]	Pumping Well: Existing Well
Depth to Static WL: 12.47 [m]	Casing radius: 0.15 [m]
Location:	Boring radius:
Recorded by: JBH	Screen length: 39.62 [m]
Date: 11/05/2003	Aquifer Thickness:

	Time [min]	Depth to WL [m]	Drawdown [m]
125	370.1	24.40	11.93
126	370.4	24.10	11.63
127	370.4	23.80	11.33
128	370.6	23.50	11.03
129	370.8	23.20	10.73
130	371	22.90	10.43
131	371.2	22.60	10.13
132	371.4	22.30	9.83
133	371.6	21.90	9.43
134	371.9	21.60	9.13
135	372.1	21.30	8.83
136	372.4	21.00	8.53
137	372.6	20.70	8.23
138	372.8	20.40	7.93
139	373.1	20.10	7.63
140	373.4	19.80	7.33
141	373.6	19.50	7.03
142	373.9	19.20	6.73
143	374.2	18.90	6.43
144	374.5	18.60	6.13
145	374.9	18.30	5.83
146	375.2	18.00	5.53
147	375.6	17.70	5.23
148	376	17.40	4.93
149	376.4	17.10	4.63
150	376.7	16.80	4.33
151	377.2	16.50	4.03
152	377.7	16.20	3.73
153	378.2	15.80	3.33
154	378.8	15.50	3.03
155	379.4	15.20	2.73

Thompson Rosemount Group
1345 Rosemount Ave.
Cornwall, Ontario, Canada
Phone: (613) 933-5602

Pumping Test Data Report

Project: Cameron s Point

Number: 036064

Client:

Data observed at:	**Existing Well**	**Pumping Test:**	**Drawdown**
Distance from PW:	0 [m]	Pumping Well:	Existing Well
Depth to Static WL:	12.47 [m]	Casing radius:	0.15 [m]
Location:		Boring radius:	
Recorded by:	JBH	Screen length:	39.62 [m]
Date:	11/05/2003	Aquifer Thickness:	

	Time [min]	Depth to WL [m]	Drawdown [m]
156	380.1	14.90	2.43
157	380.9	14.60	2.13
158	381.8	14.30	1.83
159	382.8	14.00	1.53
160	384.1	13.70	1.23
161	385.8	13.40	0.93
162	388.3	13.10	0.63

Cameron's Point Well Rehab
Drawdown Data

Pumping Well: rehab Observation Well: Existing well west of trailers.
Pump intake set at 130 ft from top
Total Depth 138 ft from top of casing
Static water level (after pump installed) 1< 40.9 ft
Time pumping began 9:47:36 October 27, 2003

Drawdown test data
Pumping Well

Date	Time (hr)	Time (min)	(sec)	Time Interval	Level (ft.)	Level (m)	Flow (US GPM)	Flow (L/m)	Flow (m^3/sec)	Turb. NTU	Cond. uS/cm	pH	Temp °C	Cl 2 res.	Odour	Comments
27/10/03	9	47	36	0.0	40.90	12.47	20	75.7	0.001262							
	9	47	37	0.0	41.00	12.50									Cl	Orange Colour
	9	47	54	0.3	45.00	13.72										
	9	48	4	0.5	48.00	14.63										
	9	48	15	0.6	50.70	15.45										
	9	48	26	0.8	54.00	16.46										
	9	48	36	1.0	56.00	17.07										
	9	48	45	1.1	50.00	15.24										
	9	48	55	1.3	60.70	18.50										
	9	49	4	1.5	62.50	19.05										
	9	49	13	1.6	65.00	19.81	20	75.7	0.001262							
	9	49	21	1.8	66.00	20.12										
	9	49	35	2.0	66.60	20.30										
	9	49	44	2.1	71.00	21.64										
	9	49	55	2.3	73.00	22.25										
	9	50	5	2.5	74.50	22.71										
	9	50	16	2.7	76.50	23.32										
	9	50	30	2.9	79.00	24.08										
	9	50	37	3.0	80.00	24.38										
	9	50	49	3.2	81.30	24.78										
	9	50	55	3.3	82.50	25.15										
	9	51	5	3.5	84.00	25.60										
	9	51	21	3.8	86.00	26.21										
	9	51	29	3.9	87.00	26.52										
	9	51	37	4.0	88.00	26.82										
	9	51	44	4.1	89.00	27.13										
	9	51	51	4.3	90.00	27.43										
	9	52	1	4.4	91.00	27.74										
	9	52	9	4.5	92.00	28.04										
	9	52	19	4.7	93.00	28.35										
	9	52	28	4.9	94.00	28.65										
	9	52	38	5.0	95.00	28.96										
	9	52	48	5.2	96.00	29.26										
	9	52	58	5.4	97.00	29.57										
	9	53	20	5.7	99.00	30.18	20	75.7	0.001262							
	9	53	33	5.9	100.00	30.48										
	9	53	45	6.1	101.00	30.78										
	9	53	56	6.3	102.00	31.09										
	9	54	10	6.6	103.00	31.39										
	9	54	24	6.8	104.00	31.70										
	9	54	39	7.0	105.00	32.00										
	9	54	51	7.3	106.00	32.31										
	9	55	8	7.5	107.00	32.61										
	9	55	25	7.8	108.00	32.92										
	9	55	35	8.0	108.50	33.07										
	9	55	43	8.1	109.00	33.22										
	9	56	0	8.4	110.00	33.53										
	9	56	20	8.7	111.00	33.83										
	9	57	29	9.9	112.00	34.14										CASCADING
	9	57	56	10.3	114.00	34.75										
	9	58	16	10.7	115.00	35.05										
	9	58	35	11.0	116.00	35.36										
	9	58	58	11.4	117.00	35.66										
	9	59	17	11.7	118.00	35.97										
	10	0	15	12.7	120.00	36.58	20	75.7	0.001262							
	10	0	47	13.2	121.00	36.88										
	10	0	55	13.3	121.20	36.94										
	10	1	8	13.5	121.20	36.94	15	56.8	0.000946							
	10	1	40	14.1	122.00	37.19										
	10	2	27	14.9	122.50	37.34										
	10	7	2	19.4	122.70	37.40	16.5	62.5	0.001041							
	10	8	32	20.9	122.60	37.37								2.20	none	still orange tinged
	10	9	35	22.0	122.53	37.35										
	10	10	43	23.1	122.40	37.31										
	10	11	39	24.1	122.30	37.28										
	10	12	25	24.8	122.20	37.25										
	10	13	9	25.6	122.10	37.22	16	60.6	0.001009							
	10	14	36	27.0	122.80	37.43										
	10	16	12	28.6	121.90	37.16										
	10	18	14	30.6	121.80	37.12	16.5	62.5	0.001041							
	10	27	34	40.0	121.85	37.14								0.06		
	10	34	24	46.8	121.95	37.17										
	10	35	18	47.7	122.00	37.19										
	10	45	0	57.4	122.20	37.25								0.02		
	10	52	1	64.4	122.30	37.28										
	11	2	23	74.8	122.42	37.31	16.5	62.5	0.001041					0.01		
	11	10	33	82.0	122.50	37.64	16.5	62.5	0.001041							

Date	Time (hr)	Time (min)	(sec)	Time Interval	Level (ft.)	Level (m)	Flow (US GPM)	Flow (L/m)	Flow (m^3/sec)	Turb. NTU	Cond. uS/cm	pH	Temp °C	Cl 2 res.	Odour	Comments
	11	12	42	85.1	123.38	37.61				0.19	>1990	8.6	10.2			
	11	16	40	89.1	123.10	37.52										
	11	18	26	90.8	123.00	37.49										
	11	21	15	93.7	122.90	37.46								0.01		
	11	25	20	97.7	122.80	37.43										
	11	45	50	118.2	122.90	37.46				0.2	>1990	8.2	10.5			
	11	53	0	125.4	122.90	37.46										
	12	1	5	133.5	122.82	37.44										
	12	14	25	146.8	123.50	37.64				0.2	>1990	8.1	10.1			
	12	20	20	152.7	123.80	37.73										
	12	43	39	176.1	123.55	37.66				0.2	>1990	8	10.2			
	12	48	0	180.4	123.20	37.55										
	13	6	12	198.6	123.40	37.61										
	13	13	28	205.9	123.00	37.49	16.5	62.5	0.001041	0.2	>	8	10.1			
	13	21	37	214.0	123.10	37.52										
	13	28	35	221.0	122.90	37.46	16.5	62.5	0.001041							
	13	48	55	241.3	122.84	37.44				0.2	>	8	10.2			
	13	58	17	250.7	122.85	37.44										
	14	10	15	262.7	122.80	37.43				0.2	>	8.8	10.1			
	14	32	14	284.6	122.60	37.37	16.5	62.5	0.001041							
	14	41	30	293.9	122.60	37.37				0.2	>	8.1	10.1			
	15	5	0	317.4	122.85	37.44										
	15	16	0	328.4	122.35	37.29				0.01	>1990	8.1	10			
	15	42	0	354.4	122.85	37.44				0.04	>1990	8.1	10			
	15	50	0	362.4	122.60	37.37										
Recovery	15	52	11	364.6	122.5	37.34										
	15	52	20	364.7	121.5	37.03										
	15	52	31	364.9	119.2	36.33										
	15	52	56	365.3	115.6	35.23										
	15	53	8	365.5	113.4	34.56										
	15	53	26	365.8	110.0	33.53										
	15	53	34	366.0	109.5	33.38										
	15	53	53	366.3	106.0	32.31										
	15	54	3	366.5	105.5	32.16										
	15	54	22	366.8	102.0	31.09										
	15	54	36	367.0	101.5	30.94										
	15	54	53	367.3	98.0	29.87										
	15	55	20	367.7	95.0	28.96										
	16	55	36	428.0	93.0	28.35										
	15	55	47	368.2	91.5	27.89										
	15	56	0	368.4	90.0	27.43										
	15	56	18	368.7	88.0	26.82										
	15	56	28	368.9	87.0	26.52										
	15	56	38	369.0	86.0	26.21										
	15	56	53	369.3	84.5	25.76										
	15	57	8	369.5	83.0	25.30										
	15	57	19	369.7	82.0	24.99										
	15	57	29	369.9	81.0	24.69										
	15	57	39	370.1	80.0	24.38										
	15	57	59	370.4	79.0	24.08										
	15	58	1	370.4	78.0	23.77										
	15	58	13	370.6	77.0	23.47										
	15	58	24	370.8	76.0	23.16										
	15	58	36	371.0	75.0	22.86										
	15	58	48	371.2	74.0	22.56										
	15	59	1	371.4	73.0	22.25										
	15	59	14	371.6	72.0	21.95										
	15	59	28	371.9	71.0	21.64										
	15	59	42	372.1	70.0	21.34										
	15	59	57	372.4	69.0	21.03										
	16	0	11	372.6	68.0	20.73										
	16	0	25	372.8	67.0	20.42										
	16	0	41	373.1	66.0	20.12										
	16	0	57	373.4	65.0	19.81										
	16	1	13	373.6	64.0	19.51										
	16	1	31	373.9	63.0	19.20										
	16	1	49	374.2	62.0	18.90										
	16	2	7	374.5	61.0	18.59										
	16	2	27	374.9	60.0	18.29										
	16	2	48	375.2	59.0	17.98										
	16	3	10	375.6	58.0	17.68										
	16	3	34	376.0	57.0	17.37										
	16	3	58	376.4	56.0	17.07										
	16	4	20	376.7	55.0	16.76										
	16	4	49	377.2	54.0	16.46										
	16	5	16	377.7	53.0	16.15										
	16	5	47	378.2	52.0	15.85										
	16	6	24	378.8	51.0	15.54										
	16	6	59	379.4	50.0	15.24										
	16	7	43	380.1	49.0	14.94										
	16	8	29	380.9	48.0	14.63										
	16	9	21	381.8	47.0	14.33										
	16	10	24	382.8	46.0	14.02										
	16	11	43	384.1	45.0	13.72										
	16	13	24	385.8	44.0	13.41										
	16	15	56	388.3	43.0	13.11										

Cameron's Point Well Rehab
Drawdown Data

Pumping Well: New Observation Well: Existing well in pumphouse
Pump intake set at 130 ft from top
Total Depth 138 ft from top of casing
Static water level (after pump installed) 40.9 ft
Time pumping began 9:47:36 October 27, 2003

Observation Well

Date	Time (hr)	Time (min)	Time Interval	Level (ft.)	Comments
27/10/03	9	25	0	25.76	
	10	38	1513	26.20	
	10	46	1521	26.30	
	11	15	1550	26.50	
	11	45	1580	26.80	
	12	4	1599	26.90	
	12	45	1640	27.10	
	13	15	1670	27.10	
	13	45	1700	27.20	
	14	15	1730	27.20	
	14	45	1760	27.20	
	15	15	1790	27.26	
	15	45	1820	27.21	
	16	15	1850	27.23	