

1) Risk of Groundwater Contamination Map

The information from the reclassification of AGRASID is the basis for preparing the initial risk map. The depth to the first sand and gravel is then used to modify the initial map and to prepare the final map. The criteria used for preparing the final Risk of Groundwater Contamination map are outlined in the adjacent table.

Surface Permeability	Sand or Gravel Present - Top Within One Metre Of Ground Surface	Groundwater Contamination Risk
Low	No	Low
Moderate	No	Moderate
High	No	High
Low	Yes	High
Moderate	Yes	High
High	Yes	Very High

Table 8. Risk of Groundwater Contamination Criteria

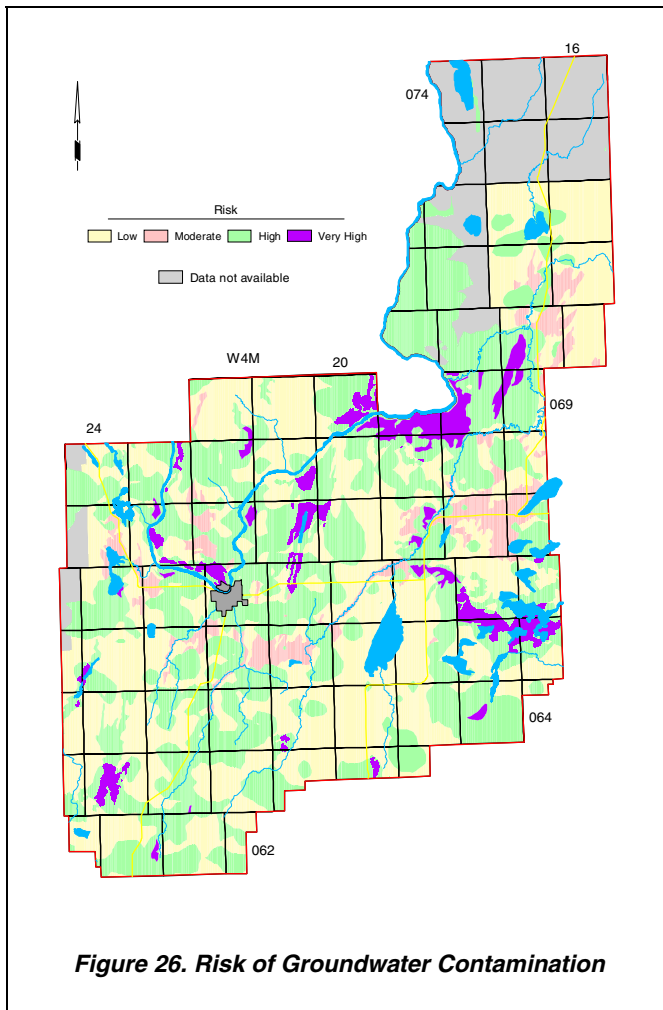


Figure 26. Risk of Groundwater Contamination

The Risk of Groundwater Contamination map shows that, in 45% of the County, there is a high or very high risk for the groundwater to be contaminated. These areas would be considered the least desirable ones for a development that has a product or by-product that could cause groundwater contamination. However, because the map has been prepared as part of a regional study, the designations are a guide only. Detailed hydrogeological studies must be completed at any proposed development site to ensure the groundwater is protected from possible contamination. At all locations, good environmental practices should be exercised in order to ensure that contaminants will not affect groundwater quality.

VIII. RECOMMENDATIONS

The present study has been based on information available from the groundwater database. The database has three problems:

- 1) the quality of the data
- 2) the coordinate system used for the horizontal control
- 3) the distribution of the data.

The quality of the data in the groundwater database is affected by two factors: a) the technical training of the persons collecting the data, and b) the quality control of the data. The possible options to upgrade the database include the creation of a “super” database, which includes only verified data. The first step would be to field-verify the 306 existing water wells listed in Appendix E. These water well records indicate that a complete water well drilling report is available along with at least a partial chemical analysis. The level of verification would have to include identifying the water well in the field, obtaining meaningful horizontal coordinates for the water well and the verification of certain parameters such as water level and completed depth. Even though the water wells for which the County has responsibility do not satisfy the above criteria, it is recommended that they be field-verified, water levels be measured, a water sample be collected for analysis, and a short aquifer test be conducted. There is one County-operated water well that is also included in Appendix E. An attempt to update the quality of the entire database is not recommended.

In general, the elevation of the Base of Groundwater Protection may be too shallow along stretches of the Athabasca River. It is recommended that the elevation of the Base of Groundwater Protection be reviewed by EUB and AE in the study area, specifically along the Athabasca River and the other areas indicated on Figure 4 where the water wells are completed below the Base of Groundwater Protection.

While there are a few areas where water-level data are available, on the overall, there are an insufficient number of water levels to set up a groundwater budget. One method to obtain additional water-level data is to solicit the assistance of the water well owners who are stakeholders in the groundwater resource. In the M.D. of Rocky View and in Flagstaff County, water well owners are being provided with a tax credit if they accurately measure the water level in their water well once per week for a year. A pilot project indicated that approximately five years of records are required to obtain a reasonable data set. The cost of a five-year project involving 50 water wells would be less than the cost of one drilling program that may provide two or three observation water wells.

A second approach to obtain water-level data would be to conduct a field survey to identify water wells not in use that could be used as part of an observation network. The water levels in the water wells could be measured regularly by County personnel and/or local residents.

In general, for the next level of study, the database needs updating. It requires more information from existing water wells, and additional information from new ones.

Before an attempt is made to provide a major upgrade to the level of interpretation provided in this report and the accompanying maps and groundwater query, it is recommended that all water wells for which water well drilling reports are available be subjected to the following actions (see pages C-2 to C-3):

- 1) The horizontal location of the water well should be determined within ten metres. The coordinates must be in 10TM NAD 27 or some other system that will allow conversion to 10TM NAD 27 coordinates.
- 2) A four-hour aquifer test (two hours of pumping and two hours of recovery) should be performed with the water well to obtain a realistic estimate for the transmissivity of the aquifer in which the water well is completed.

- 3) Water samples should be collected for chemical analysis after five and 115 minutes of pumping, and analyzed for major and minor ions.

A list of 306 water wells that could be considered for the above program is given in Appendix E.

In addition to the data collection associated with the existing water wells, all available geophysical logs should be interpreted to establish a more accurate spatial definition of individual aquifers.

There is also a need to provide the water well drillers with feedback on the reports they are submitting to the regulatory agencies. The feedback is necessary to allow for a greater degree of uniformity in the reporting process. This is particularly true when trying to identify the bedrock surface. One method of obtaining uniformity would be to have the water well drilling reports submitted to the AE Resource Data Division in an electronic form. The money presently being spent by AE and PFRA to transpose the paper form to the electronic form should be used to allow for a technical review of the data and follow-up discussions with the drillers.

An effort should be made to form a partnership with the petroleum industry. The industry spends millions of dollars each year collecting information relative to water wells. Proper coordination of this effort could provide significantly better information from which future regional interpretations could be made. This could be accomplished by the County taking an active role in the activities associated with the construction of lease sites for the drilling of hydrocarbon wells and conducting of seismic programs.

Groundwater is a renewable resource and it must be managed.

IX. REFERENCES

- Agriculture Canada Prairie Farm Rehabilitation Administration. Regina, Saskatchewan. 1996. 1996 Agriculture Census (CD-ROM).
- Agriculture, Food and Rural Development. 1995. Water Requirements for Livestock. Agdex 400/716-1.
- Alberta Energy and Utilities Board. June 1995. AEUB ST-55. Alberta's Usable Groundwater Database.
- Canadian Council of Resource and Environment Ministers. 1992. Canadian Water Quality Guidelines.
- Borneuf, D. 1973. Hydrogeology of the Tawatinaw Area, Alberta. Research Council of Alberta. Report 72-11.
- CAESA-Soil Inventory Project Working Group. 1998. AGRASID: Agricultural Region of Alberta Soil Inventory Database (Version 1.0). Edited by J. A. Brierley, B. D. Walker, P. E. Smith, and W. L. Nikiforuk. Alberta Agriculture Food & Rural Development, publications.
- Carlson, V. A. 1977. Bedrock Topography of the Tawatinaw Map Area, Alberta. NTS 83I. Research Council of Alberta Map.
- Carrigy, M. A. 1971. Lithostratigraphy of the Uppermost Cretaceous (Lance) and Paleocene Strata of the Alberta Plains. Research Council of Alberta. Bulletin 27.
- Catuneanu, Octavian, Andrew D. Miall and Arthur R. Sweet. 1997. Reciprocal Architecture of Bearpaw T-R Sequences, Uppermost Cretaceous, Western Canada Sedimentary Basin. Bulletin of Canadian Petroleum Geology. Vol. 45, No. 1 (March, 1997), P. 75-94.
- Cressie, N. A. C. 1990. The Origins of Kriging. Mathematical Geology. Vol. 22, Pages 239-252.
- Freeze, R. Allan and John A. Cherry. 1979. Groundwater. Pages 249-252.
- Glass, D. J. [editor]. 1990. Lexicon of Canadian Stratigraphy, Volume 4: Western Canada, including British Columbia, Alberta, Saskatchewan and southern Manitoba. Canadian Society of Petroleum Geologists, Calgary.
- Hydrogeological Consultants Ltd. November 1978. Alberta Housing and Public Works. Highway Maintenance Yard. Wandering River. 1978 Water Well. Unpublished Contract Report.
- Hydrogeological Consultants Ltd. November 1991. CN Rail – Engineering Operations. Bondiss Station Grounds. 1991 Groundwater Program. NW 05-065-18 W4M. Unpublished Contract Report.
- Minister of Supply and Services Canada. 1996. Guidelines for Canadian Drinking Water Quality, Sixth Edition. Prepared by the Federal-Provincial Subcommittee on Drinking Water of the Federal-Provincial Committee on Environmental and Occupational Health.
- Mossop, G. and I. Shetsen (co-compilers). 1994. Geological Atlas of the Western Canada Sedimentary Basin. Produced jointly by the Canadian Society of Petroleum Geology, Alberta Research Council, Alberta Energy, and the Geological Survey of Canada.
- Ozoray, G., M. Dubord and A. Cowen. 1990. Groundwater Resources of the Vermilion 73E Map Area, Alberta. Alberta Environmental Protection.

Pettijohn, F. J. 1957. Sedimentary Rocks. Harper and Brothers Publishing.

Phinney, V. Laverne (edited and published by). 1999. The Alberta List.

Shetsen, I. 1990. Quaternary Geology, Central Alberta. Produced by the Natural Resources Division of the Alberta Research Council.

Strong, W. L. and K. R. Legatt, 1981. Ecoregions of Alberta. Alta. En. Nat. Resour., Resour. Eval. Plan Div., Edmonton as cited in Mitchell, Patricia and Ellie Prepas (eds.). 1990. Atlas of Alberta Lakes. The University of Alberta Press. Page 12.

Thornthwaite, C. W. and J. R. Mather. 1957. Instructions and Tables for Computing Potential Evapotranspiration and the Water Balance. Drexel Institute of Technology. Laboratory of Climatology. Publications in Climatology. Vol. 10, No. 3, P. 181-289.

X. CONVERSIONS

Multiply	by	To Obtain
Length/Area		
feet	0.304 785	metres
metres	3.281 000	feet
hectares	2.471 054	acres
centimetre	0.032 808	feet
centimetre	0.393 701	inches
acres	0.404 686	hectares
inchs	25.400 000	millimetres
miles	1.609 344	kilometres
kilometer	0.621 370	miles (statute)
square feet (ft ²)	0.092 903	square metres (m ²)
square metres (m ²)	10.763 910	square feet (ft ²)
square metres (m ²)	0.000 001	square kilometres (km ²)
Concentration		
grains/gallon (UK)	14.270 050	parts per million (ppm)
ppm	0.998 859	mg/L
mg/L	1.001 142	ppm
Volume (capacity)		
acre feet	1233.481 838	cubic metres
cubic feet	0.028 317	cubic metres
cubic metres	35.314 667	cubic feet
cubic metres	219.969 248	gallons (UK)
cubic metres	264.172 050	gallons (US liquid)
cubic metres	1000.000 000	litres
gallons (UK)	0.004 546	cubic metres
imperial gallons	4.546 000	litres
Rate		
litres per minute (lpm)	0.219 974	UK gallons per minute (igpm)
litres per minute	1.440 000	cubic metres/day (m ³ /day)
igpm	6.546 300	cubic metres/day (m ³ /day)
cubic metres/day	0.152 759	igpm

COUNTY OF ATHABASCA NO. 12

Appendix B

MAPS AND FIGURES ON CD-ROM

A) Database

B) ArcView Files

C) Query

D) Maps and Figures

1) General

- Index Map
- Surface Casing Types used in Drilled Water Wells
- Location of Water Wells
- Depth of Existing Water Wells
- Depth to Base of Groundwater Protection
- Generalized Cross-Section (For terminology only)
- Geologic Column
- Cross-Section A - A'
- Cross-Section B - B'
- Bedrock Topography
- Bedrock Geology
- E-Log showing Base of Foremost Formation
- Risk of Groundwater Contamination
- Relative Permeability
- Water Wells Recommended for Field Verification

2) Surficial Aquifers

a) Surficial Deposits

- Thickness of Surficial Deposits
- Non-Pumping Water-Level Surface in Surficial Deposits Based on Water Wells Less than 20 Metres Deep
- Modelled Non-Pumping Water-Level Surface in Surficial Deposits
- Total Dissolved Solids in Groundwater from Surficial Deposits
- Sulfate in Groundwater from Surficial Deposits
- Fluoride in Groundwater from Surficial Deposits
- Nitrate + Nitrite (as N) in Groundwater from Surficial Deposits
- Chloride in Groundwater from Surficial Deposits
- Total Hardness in Groundwater from Surficial Deposits
- Piper Diagram - Surficial Deposits
- Thickness of Sand and Gravel Deposits
- Amount of Sand and Gravel in Surficial Deposits
- Thickness of Sand and Gravel Aquifer(s)

b) Upper Sand and Gravel

- Apparent Yield for Water Wells Completed through Upper Sand and Gravel Aquifer(s)

b) First Sand and Gravel

- Thickness of First Sand and Gravel
- First Sand and Gravel - Saturation

3) Bedrock Aquifers

a) General

- Apparent Yield for Water Wells Completed in Upper Bedrock Aquifer(s)
- Total Dissolved Solids in Groundwater from Upper Bedrock Aquifer(s)
- Sulfate in Groundwater from Upper Bedrock Aquifer(s)
- Chloride in Groundwater from Upper Bedrock Aquifer(s)
- Fluoride in Groundwater from Upper Bedrock Aquifer(s)
- Total Hardness of Groundwater from Upper Bedrock Aquifer(s)
- Piper Diagram - Bedrock Aquifer(s)
- Recharge/Discharge Areas between Surficial Deposits and Upper Bedrock Aquifer(s)
- Non-Pumping Water-Level Surface in Upper Bedrock Aquifer(s)

b) Oldman Formation

- Depth to Top of Oldman Formation
- Structure-Contour Map - Oldman Formation

c) Birch Lake Member

- Depth to Top of Birch Lake Member
- Structure-Contour Map - Birch Lake Member
- Non-Pumping Water-Level Surface - Birch Lake Aquifer
- Apparent Yield for Water Wells Completed through Birch Lake Aquifer
- Total Dissolved Solids in Groundwater from Birch Lake Aquifer
- Sulfate in Groundwater from Birch Lake Aquifer
- Chloride in Groundwater from Birch Lake Aquifer
- Piper Diagram - Birch Lake Aquifer
- Recharge/Discharge Areas between Surficial Deposits and Birch Lake Aquifer

d) Ribstone Creek Member

- Depth to Top of Ribstone Creek Member
- Structure-Contour Map - Ribstone Creek Member
- Non-Pumping Water-Level Surface - Ribstone Aquifer
- Apparent Yield for Water Wells Completed through Ribstone Aquifer
- Total Dissolved Solids in Groundwater from Ribstone Aquifer
- Sulfate in Groundwater from Ribstone Aquifer
- Chloride in Groundwater from Ribstone Aquifer
- Piper Diagram - Ribstone Aquifer
- Recharge/Discharge Areas between Surficial Deposits and Ribstone Aquifer

e) Victoria Member

- Depth to Top of Victoria Member
- Structure-Contour Map - Victoria Member
- Non-Pumping Water-Level Surface - Victoria Aquifer
- Apparent Yield for Water Wells Completed through Victoria Aquifer
- Total Dissolved Solids in Groundwater from Victoria Aquifer
- Sulfate in Groundwater from Victoria Aquifer
- Chloride in Groundwater from Victoria Aquifer
- Piper Diagram - Victoria Aquifer
- Recharge/Discharge Areas between Surficial Deposits and Victoria Aquifer

f) Brosseau Member

Depth to Top of Brosseau Member
Structure-Contour Map - Brosseau Member
Non-Pumping Water-Level Surface - Brosseau Aquifer
Apparent Yield for Water Wells Completed through Brosseau Aquifer
Total Dissolved Solids in Groundwater from Brosseau Aquifer
Sulfate in Groundwater from Brosseau Aquifer
Chloride in Groundwater from Brosseau Aquifer
Piper Diagram - Brosseau Aquifer
Recharge/Discharge Areas between Surficial Deposits and Brosseau Aquifer

g) Lea Park Formation

Depth to Top of Lea Park Formation
Structure-Contour Map - Lea Park Formation

h) Milk River Formation

Depth to Top of Milk River Formation
Structure-Contour Map - Milk River Formation

i) *undivided* Colorado Group

Depth to Top of *undivided* Colorado Group
Structure-Contour Map - *undivided* Colorado Group

j) Mannville Group (Grand Rapids)

Depth to Top of Mannville Group
Structure-Contour Map - Mannville Group

4) Hydrographs and Observation Water Wells

Hydrograph - AE Observation Water Well No. 252

COUNTY OF ATHABASCA NO. 12

APPENDIX C

General Water Well Information

Domestic Water Well Testing 2

Purpose and Requirements 2

Procedure 3

 Site Diagrams 3

 Surface Details 3

 Groundwater Discharge Point 3

 Water-Level Measurements 3

 Discharge Measurements 3

 Water Samples 3

Water Act - Water (Ministerial) Regulation 4

Water Act - Flowchart 5

Additional Information 6

Domestic Water Well Testing

Purpose and Requirements

The purpose of the testing of domestic water wells is to obtain background data related to:

- 1) the non-pumping water level for the aquifer - Has there been any lowering of the level since the last measurement?
- 2) the specific capacity of the water well, which indicates the type of contact the water well has with the aquifer;
- 3) the transmissivity of the aquifer and hence an estimate of the projected long-term yield for the water well;
- 4) the chemical, bacteriological and physical quality of the groundwater from the water well.

The testing procedure involves conducting an aquifer test and collecting of groundwater samples for analysis by an accredited laboratory. The date and time of the testing are to be recorded on all data collection sheets. A sketch showing the location of the water well relative to surrounding features is required. The sketch should answer the question, "If this water well is tested in the future, how will the person doing the testing know this is the water well I tested?"

The water well should be taken out of service as long as possible before the start of the aquifer test, preferably not less than 30 minutes before the start of pumping. The non-pumping water level is to be measured 30, 10, and 5 minutes before the start of pumping and immediately before the start of pumping which is to be designated as time 0 for the test. All water levels must be from the same designated reference, usually the top of the casing. Water levels are to be measured during the pumping interval and during the recovery interval after the pump has been turned off; all water measurements are to be with an accuracy of ± 0.01 metres.

During the pumping and recovery intervals, the water level is to be measured at the appropriate times. An example of the time schedule for a four-hour test is as follows, measured in minutes after the pump is turned on and again after the pump is turned off:

1,2,3,4,6,8,10,13,16,20,25,32,40,50,64,80,100,120.

For a four-hour test, the reading after 120 minutes of pumping will be the same as the 0 minutes of recovery. Under no circumstance will the recovery interval be less than the pumping interval.

Flow rate during the aquifer test should be measured and recorded with the maximum accuracy possible. Ideally, a water meter with an accuracy of better than $\pm 1\%$ displaying instantaneous and total flow should be used. If a water meter is not available, then the time required to completely fill a container of known volume should be recorded, noting the time to the nearest 0.5 seconds or better. Flow rate should be determined and recorded often to ensure a constant pumping rate.

Groundwater samples should be collected as soon as possible after the start of pumping and within 10 minutes of the end of pumping. Initially only the groundwater samples collected near the end of the pumping interval need to be submitted to the accredited laboratory for analysis. All samples must be properly stored for transportation to the laboratory and, in the case of the bacteriological analysis, there is a maximum time allowed between the time the sample is collected and the time the sample is delivered to the laboratory. The first samples collected are only analyzed if there is a problem or a concern with the first samples submitted to the laboratory.

Procedure

Site Diagrams

These diagrams are a map showing the distance to nearby significant features. This would include things like a corner of a building (house, barn, garage etc.) or the distance to the half-mile or mile fence. The description should allow anyone not familiar with the site to be able to unequivocally identify the water well that was tested. In lieu of a map, UTM coordinates accurate to within five metres would be acceptable. If a hand-held GPS is used, the post-processing correction details must be provided.

Surface Details

The type of surface completion must be noted. This will include such things as a pitless adapter, well pit, pump house, in basement, etc. Also, the reference point used for measuring water levels needs to be noted. This would include top of casing (TOC) XX metres above ground level; well pit lid, XX metres above TOC; TOC in well pit XX metres below ground level.

Groundwater Discharge Point

Where was the flow of groundwater discharge regulated? For example was the discharge through a hydrant downstream from the pressure tank; discharged directly to ground either by connecting directly above the well seal or by pulling the pump up out of the pitless adapter; from a tap on the house downstream from the pressure tank? Also note must be made if any action was taken to ensure the pump would operate continuously during the pumping interval and whether the groundwater was passing through any water-treatment equipment before the discharge point.

Water-Level Measurements

How were the water-level measurements obtained? If obtained using a contact gauge, what type of cable was on the tape, graduated tape or a tape with tags? If a tape with tags, when was the last time the tags were calibrated? If a graduated tape, what is the serial number of the tape and is the tape shorter than its original length (i.e. is any tape missing)?

If water levels are obtained using a transducer and data logger, the serial numbers of both transducer and data logger are needed and a copy of the calibration sheet. The additional information required is the depth the transducer was set and the length of time between when the transducer was installed and when the calibration water level was measured, plus the length of time between the installation of the transducer and the start of the aquifer test. All water levels must be measured at least to the nearest 0.01 metres.


Discharge Measurements

Type of water meter used. This could include such things as a turbine or positive displacement meter. How were the readings obtained from the meter? Were the readings visually noted and recorded or were they recorded using a data logger?

Water Samples

A water sample must be collected between the 4- and 6-minute water-level measurements, whenever there is an observed physical change in the groundwater being pumped, and 10 minutes before the end of the planned pumping interval. Additional water samples must be collected if it is expected that pumping will be terminated before the planned pumping interval.

Water Act - Water (Ministerial) Regulation



PROVINCE OF ALBERTA

WATER ACT

**WATER (MINISTERIAL)
REGULATION**

Alberta Regulation 205/98

EXTRACT FROM THE
ALBERTA GAZETTE

© Published by
the Queen's Printer for Alberta

Queen's Printer Bookstore
11510 Kingsway
Edmonton, AB T5G 2Y5
(403) 427-4952
Fax: (403) 452-0668
Note: After Jan. 25/99 use area code (780)

Queen's Printer Bookstore
Main Floor, McDougall Centre
455 - 6th Street S.W.
Calgary, AB T2P 4E8
(403) 297-6251
Fax: (403) 297-8450

Shop On-line at <http://www.gov.ab.ca/qp>

ALBERTA REGULATION 205/98

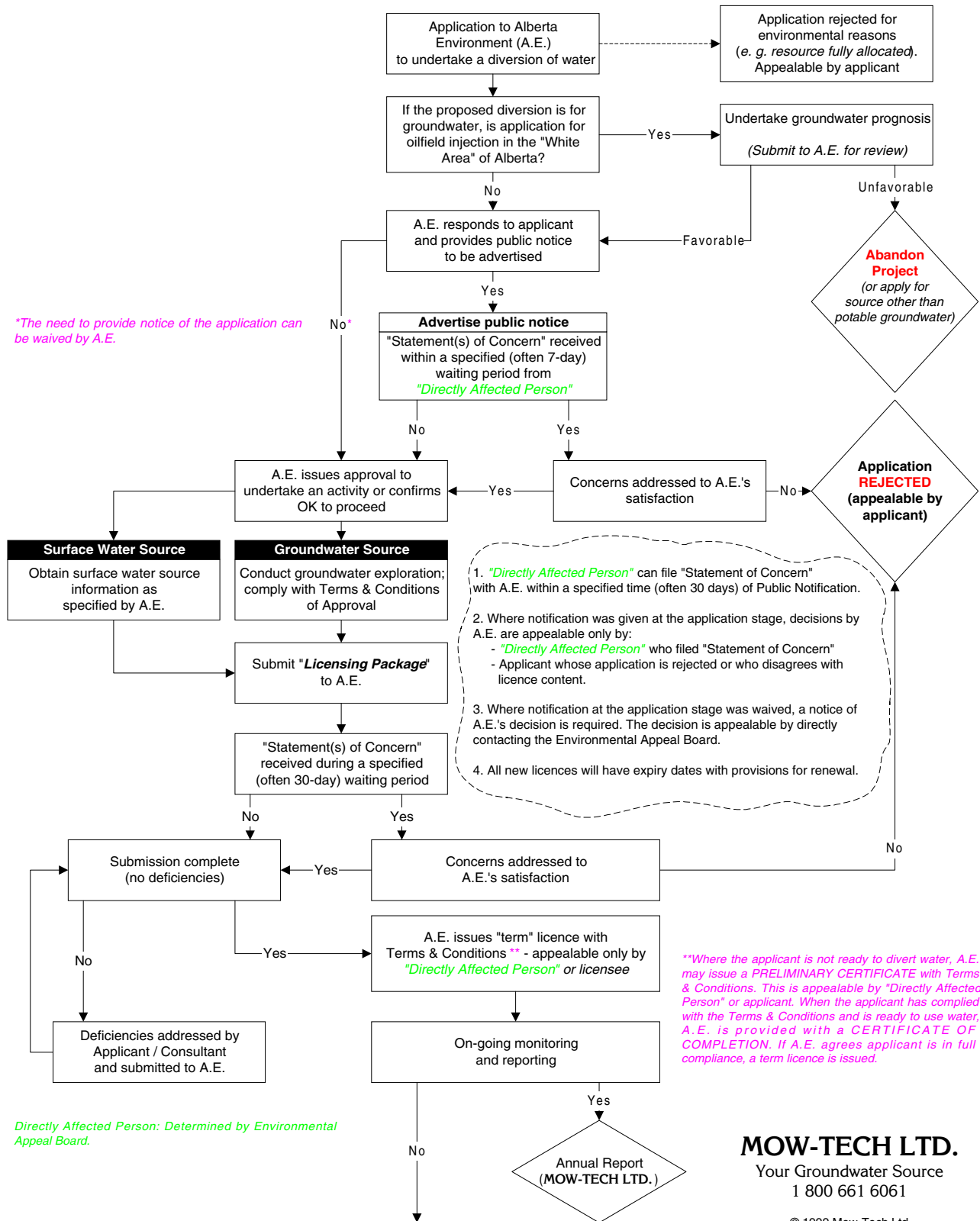
Water Act

WATER (MINISTERIAL) REGULATION

Table of Contents

Interpretation	1
Part 1 Activities	
Approval exemption	2
Approval exemptions subject to Code	3
Notice of section 3 activities	4
Part 2 Diversions and Transfers	
Licence exemption	5
Temporary diversions subject to Code	6
Section 6 temporary diversion notices	7
Diversion for household purposes prohibited	8
Subdivisions requiring reports	9
Major river basin boundaries	10
Licence purposes	11
Licence expiry dates	12
Part 3 Notice	
Notice of application, decision or order	13
Exemptions from notice requirements	14
Part 4 Access to Information	
Disclosure of information	15
Provision of information	16
Extension of time	17
Part 5 Land Compensation Board Procedures	
Appeals	18
Notice of appeal	19
Pre-hearing matters	20
Conduct of a hearing and decision	21
Combining hearings	22
Costs	23
Fees	24
Extension of time	25

Water Act - Flowchart



MOW-TECH LTD.
 Your Groundwater Source
 1 800 661 6061

© 1999 Mow-Tech Ltd.

This flow chart was developed by Mow-Tech Ltd. and is provided as a guide only to Alberta's new Water Act. Mow-Tech Ltd. accepts no responsibility for the information provided.

Additional Information

VIDEOS

Will the Well Go Dry Tomorrow? (Mow-Tech Ltd.: 1-800 GEO WELL)
Water Wells that Last (PFRA – Edmonton Office: 780-495-3307)
Ground Water and the Rural Community (Ontario Ground Water Association)

BOOKLET

Water Wells that Last (PFRA – Edmonton Office: 780-495-3307)

ALBERTA ENVIRONMENTAL PROTECTION

WATER WELL INSPECTORS

Jennifer McPherson (Edmonton: 780-427-6429)
Colin Samis (Lac La Biche: 780-623-5235)

GEOPHYSICAL INSPECTION SERVICE

Edmonton: 780-427-3932

COMPLAINT INVESTIGATIONS

Blair Stone (Red Deer: 403-340-5310)

UNIVERSITY OF ALBERTA – Department of Earth and Atmospheric Sciences - Hydrogeology

Carl Mendosa (Edmonton: 780-492-2664)

UNIVERSITY OF CALGARY – Department of Geology and Geophysics - Hydrogeology

Larry Bentley (Calgary: 780-220-4512)

FARMERS ADVOCATE

Paul Vasseur (Edmonton: 780-427-2433)

PRAIRIE FARM REHABILITATION ADMINISTRATION

Curtis Snell (Westlock: 780-349-3963)

LOCAL HEALTH DEPARTMENTS

COUNTY OF ATHABASCA NO. 12

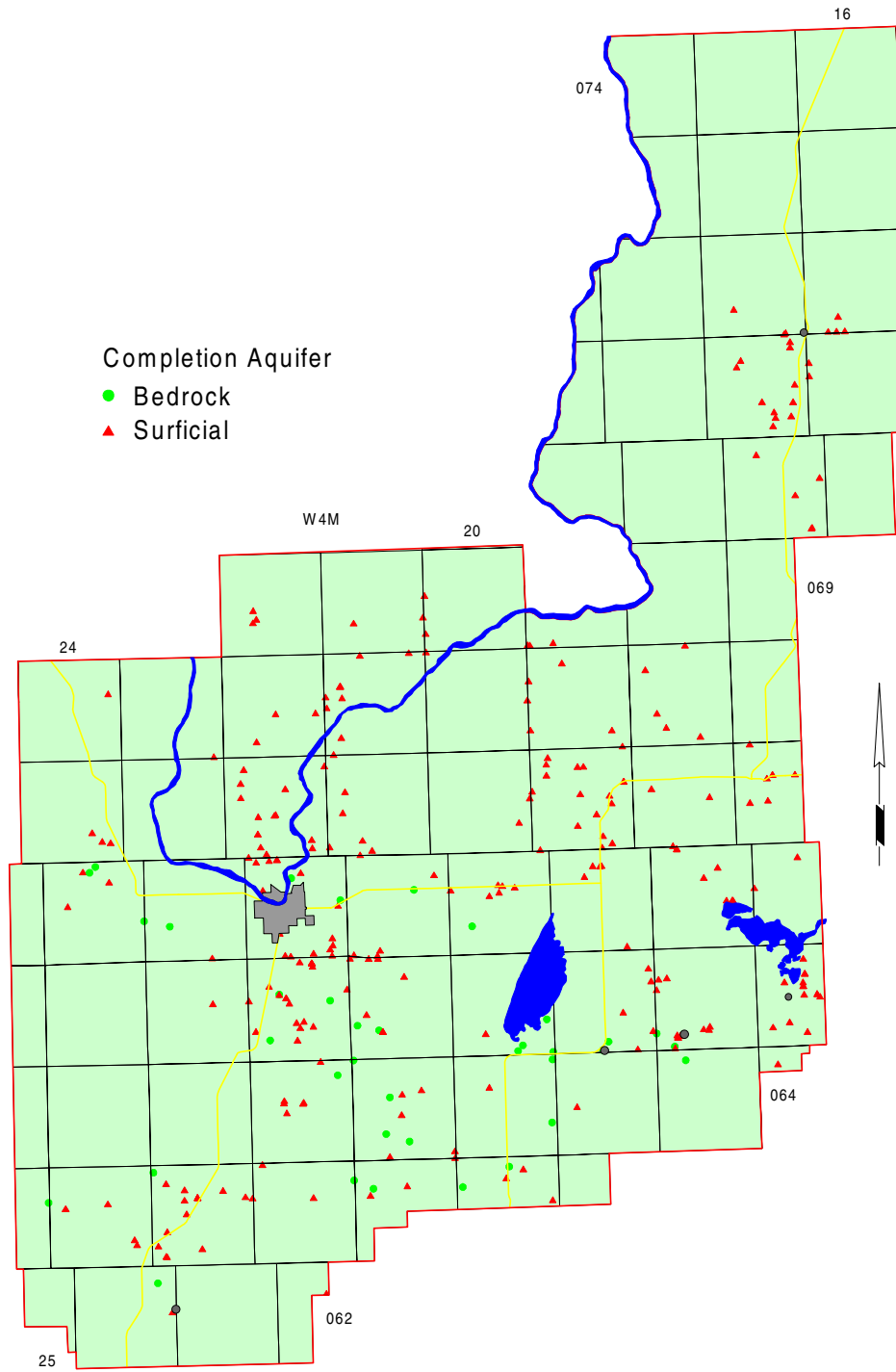
Appendix E

WATER WELLS RECOMMENDED FOR FIELD VERIFICATION

AND

COUNTY - OPERATED WATER WELL

Water Wells Recommended for Field Verification
(details on following pages)



WATER WELLS RECOMMENDED FOR FIELD VERIFICATION

Owner	Location	Aquifer Name	Date Water Well Drilled	Completed Depth		NPWL	
				Metres	Feet	Metres	Feet
Adock, E.	15-12-064-20 W4M	Victoria	May-78	57.9	190.0	24.4	80.0
Alberta Municipal Affairs	01-21-065-17 W4M	Upper Surficial	Oct-84	33.8	111.0	13.1	43.0
Aleksiuk, Brent	SW-02-068-18 W4M	Upper Surficial	Oct-88	3.7	12.0	2.4	8.0
Amisk Lake Trailer Park	SW-10-065-18 W4M	Upper Surficial	Apr-81	9.8	32.0	2.4	8.0
Anderson, Lloyd	SE-08-065-17 W4M	Upper Surficial	Sep-80	42.7	140.0	14.6	48.0
Armfelt, Gerald	SW-20-066-24 W4M	Upper Surficial	Sep-81	13.7	45.0	6.1	20.0
Ashbey, Allen	13-27-065-21 W4M	Upper Surficial	Sep-84	6.7	22.0	2.1	7.0
Balay, Tony	08-26-062-24 W4M	Birch Lake	Aug-76	53.3	175.0	21.9	72.0
Bambrack/Alberta Forestry	02-02-072-17 W4M	Upper Surficial	Oct-79	14.6	48.0	7.0	23.0
Bandola, Nick	16-20-063-23 W4M	Upper Surficial	May-77	7.6	25.0	3.1	10.0
Battrick, Robert	16-25-063-22 W4M	Birch Lake	Jan-79	12.2	40.0	1.8	6.0
Baxandall, Dan	09-19-063-24 W4M	Upper Surficial	May-76	53.3	175.0	7.0	23.0
Baxandall, Don	09-19-063-24 W4M	Upper Surficial	Oct-70	54.3	178.0	10.7	35.0
Begalow, Geo	04-24-071-17 W4M	Upper Surficial	Jun-78	14.0	46.0	9.1	30.0
Bencharsky, David	SW-14-065-19 W4M	Upper Surficial	Sep-75	13.1	43.0	2.3	7.5
Benham, Derril	12-31-063-23 W4M	Ribstone Creek	Aug-81	108.2	355.0	18.3	60.0
Benn Water Wells Ltd	NE-20-065-22 W4M	Ribstone Creek	Mar-93	42.7	140.1	18.3	60.0
Benn, W.	09-16-064-21 W4M	Upper Surficial	Apr-81	40.5	133.0	18.3	60.0
Berezowski, Dean	NW-08-066-20 W4M	Lea Park	Sep-84	42.1	138.0	3.7	12.0
Besler, Ron	...21-065-22 W4M	Upper Surficial	May-84	15.5	51.0	15.9	52.0
Beye, Grant	09-29-063-23 W4M	Upper Surficial	Jan-79	19.5	64.0	4.6	15.0
Bibaud, William	NE-24-063-23 W4M	Upper Surficial	Aug-85	11.3	37.0	0.9	3.0
Bicherstaff, Dale	NE-21-066-20 W4M	Upper Surficial	Sep-78	11.3	37.0	3.7	12.0
Birkigt, A.	15-28-066-22 W4M	Lea Park	Jun-82	13.7	45.0	4.6	15.0
Bittorf, Brian	NE-20-064-22 W4M	Upper Surficial	Jul-79	29.0	95.0	6.7	22.0
Bizon, C.	SW-33-068-19 W4M	Upper Surficial	Jul-87	10.1	33.0	4.0	13.0
Bizon, Roman	08-08-065-20 W4M	Upper Surficial	Jun-78	12.5	41.0	3.7	12.0
Bobocel, Dan	03-24-066-22 W4M	Upper Surficial	Sep-79	10.4	34.0	3.1	10.0
Bouque, Joe	13-15-064-17 W4M	Upper Surficial	Jan-84	64.0	210.0	30.6	100.3
Boven, Tom	SE-30-067-22 W4M	Upper Surficial	Jun-80	14.0	46.0	6.1	20.0
Bow Valley Inn	SE-05-072-16 W4M	Upper Surficial	Aug-84	44.8	147.0	32.3	106.0
Bowzaylo, Jim	07-03-066-23 W4M	Upper Surficial	Sep-69	10.7	35.0	4.0	13.0
Bradfield, C.	SE-13-066-24 W4M	Ribstone Creek	Jul-86	20.7	68.0	6.4	21.0
Breckenridge, Morley	SE-23-065-22 W4M	Brosseau	Sep-85	48.8	160.0	14.3	47.0
Bryan, Robert	SW-17-066-23 W4M	Ribstone Creek	Jun-78	13.7	45.0	3.7	12.0
Buch, Marvin	SE-17-067-22 W4M	Upper Surficial	Oct-79	11.0	36.0	2.4	8.0
Buerfeind, Manfred	SW-34-063-20 W4M	Brosseau	Aug-85	109.7	360.0	43.3	142.0
Bychuk, Doug	SW-07-065-18 W4M	Brosseau	Dec-79	41.2	135.0	4.3	14.0
Byer, Carl	14-22-063-24 W4M	Upper Surficial	Sep-81	15.2	50.0	2.4	8.0
Byrtus, Stan	NE-16-067-22 W4M	Upper Surficial	Nov-78	9.1	30.0	4.3	14.0
Byrtus, Stan	NE-16-067-22 W4M	Upper Surficial	May-88	36.0	118.0	10.5	34.5
Campbell, Norman	SE-27-067-17 W4M	Upper Surficial	Apr-86	64.0	210.0	28.0	92.0
Cardinal, Ray	NW-29-064-17 W4M	Upper Surficial	Oct-73	33.2	109.0	22.0	72.3
Casavant, Lucien	NE-18-065-21 W4M	Upper Surficial	Nov-72	7.3	24.0	3.1	10.0
Chamzuk, Jerry	SE-25-065-19 W4M	Upper Surficial	Jul-81	15.2	50.0	12.2	40.0
Chamzuk, Leonard	NE-32-066-18 W4M	Upper Surficial	Aug-68	13.7	45.0	7.3	24.0
Chamzuk, Stanley	15-32-066-18 W4M	Upper Surficial	Dec-77	19.5	64.0	6.7	22.0
Chamzuk, Stanley	NE-32-066-18 W4M	Upper Surficial	Apr-76	11.0	36.0	4.9	16.0
Cholak, E.J.	NW-27-067-19 W4M	Upper Surficial	Jun-82	88.1	289.0	56.4	185.0
Chrusch, Mike	SW-20-068-21 W4M	Upper Surficial	Aug-85	11.6	38.0	4.6	15.0
Clarke, Gordon	12-21-064-21 W4M	Birch Lake	Oct-83	18.3	60.0	6.4	21.0
Clarke, M.	SW-21-066-20 W4M	Upper Surficial	May-81	13.7	45.0	5.5	18.0
Claussen, F.	SE-05-066-21 W4M	Upper Surficial	Nov-73	4.3	14.0	2.1	7.0
Claussen, Frank	02-05-066-21 W4M	Upper Surficial	May-76	73.2	240.0	15.2	50.0
Colli, H./Whetstone, Arthur	NW-21-065-22 W4M	Upper Surficial	Jun-85	16.5	54.0	3.4	11.0

WATER WELLS RECOMMENDED FOR FIELD VERIFICATION

Owner	Location	Water Well Contractor	Date Water Well Drilled	Completed Depth		NPWL	
				Metres	Feet	Metres	Feet
Combs, L.	SW-15-071-17 W4M	Upper Surficial	Jun-82	22.6	74.0	13.1	43.0
Connochie, Robert W.	SW-26-064-21 W4M	Upper Surficial	Oct-74	9.5	31.0	1.5	5.0
Coonan, Jack	NW-19-071-16 W4M	Upper Surficial	Jul-82	63.1	207.0	36.6	120.0
County of Athabasca	SE-30-065-18 W4M	Upper Surficial	Sep-86	55.5	182.0	22.9	75.0
Croteau, Vic	SE-29-071-17 W4M	Upper Surficial	Jul-85	17.7	58.0	6.1	20.0
Cumbleton, Steve	16-24-063-25 W4M	Birch Lake	Jun-86	79.2	260.0	27.4	90.0
Curat, Henry	SE-32-064-18 W4M	Victoria	Jul-82	51.8	170.0	21.3	70.0
Dagley, Paul	13-16-064-22 W4M	Upper Surficial	Aug-81	13.7	45.0	0.9	3.0
Danylchuk, Steve	13-36-068-21 W4M	Upper Surficial	Jul-83	13.4	44.0	4.0	13.0
Davidson, Bill	16-19-063-21 W4M	Upper Surficial	Oct-76	16.8	55.0	7.6	25.0
Desjarlais, Claude III	16-20-064-17 W4M	Upper Surficial	Jan-84	61.0	200.0	11.1	36.5
Dew All Truss Ltd	SE-02-066-22 W4M	Upper Surficial	Jun-86	18.9	62.0	16.2	53.0
Donatville Gas And Groceries	SE-33-066-19 W4M	Upper Surficial	Sep-87	11.3	37.0	4.9	16.0
Doole, Allan	SE-34-065-22 W4M	Upper Surficial	Oct-74	22.6	74.0	18.0	59.0
Droziak, P/ Norgard, Brenda	NW-21-065-22 W4M	Upper Surficial	Apr-85	25.6	84.0	11.4	37.3
Duigou, Gilbert	SW-28-067-17 W4M	Upper Surficial	Sep-73	11.6	38.0	7.6	25.0
Duigou, Gilbert	SW-28-067-17 W4M	Upper Surficial	Feb-86	35.4	116.0	7.6	25.0
Duma, Alex	NW-12-067-20 W4M	Upper Surficial	Jun-89	42.7	140.0	20.7	68.0
Duma, Stan	SW-27-066-20 W4M	Upper Surficial	Nov-88	13.1	43.0	5.8	19.0
Duniece, Dale	16-13-068-20 W4M	Upper Surficial	Sep-83	57.9	190.0	18.3	60.0
Dunkley, Delbert	SW-12-063-24 W4M	Upper Surficial	Jun-84	13.1	43.0	9.1	30.0
Durell, Gerald	SW-09-068-18 W4M	Upper Surficial	Aug-82	20.7	68.0	5.5	18.0
Edwards, Ken	NE-22-066-20 W4M	Upper Surficial	Dec-88	20.7	68.0	15.5	51.0
Elsenheimer, Lawrence J.	NW-32-065-21 W4M	Upper Surficial		14.6	48.0	3.1	10.0
Emmond, Don	SE-09-065-18 W4M	Upper Surficial	Oct-83	20.7	68.0	10.7	35.0
Energy & Natural Res	SE-02-072-17 W4M	Upper Surficial	Sep-83	40.2	132.0	22.3	73.0
Faragini, Ruth	SE-08-066-22 W4M	Upper Surficial		15.9	52.0	9.8	32.0
Farrell, Garth C.	03-06-066-21 W4M	Upper Surficial	Oct-80	6.1	20.0	3.1	10.0
Faulkner, Richard	04-36-064-22 W4M	Ribstone Creek	Jul-82	32.6	107.0	22.9	75.0
Fesuk, J.	16-05-068-22 W4M	Upper Surficial	May-81	13.7	45.0	4.6	15.0
Flasha, John	NW-19-067-19 W4M	Upper Surficial	Jun-76	86.0	282.0	39.0	128.0
Fleming, Garry	SW-04-067-22 W4M	Upper Surficial	Aug-81	12.2	40.0	3.1	10.0
Fleming, George	SE-23-067-19 W4M	Upper Surficial	Jun-87	24.4	80.0	18.6	61.0
Fleming, Gordon	NE-14-067-19 W4M	Upper Surficial	May-88	55.5	182.0	21.9	72.0
Forcier, Leo	14-05-065-18 W4M	Upper Surficial	Jun-78	11.9	39.0	1.2	4.0
Foss/Johnson (Roy, T.)	SE-02-067-19 W4M	Upper Surficial	May-86	12.5	41.0	2.7	9.0
Fugger, Walter	01-09-063-23 W4M	Upper Surficial	Nov-79	9.1	30.0	6.7	22.0
Georgijevic, B.	02-13-065-20 W4M	Brosseau	Nov-77	9.5	31.0	4.9	16.0
Germain, Real	SW-13-071-17 W4M	Upper Surficial	Jun-81	16.8	55.0	14.0	46.0
Gervais, Paul	SE-33-066-17 W4M	Upper Surficial	Aug-77	18.3	60.0	1.2	4.0
Gill, Ralph	SE-25-065-22 W4M	Upper Surficial	Sep-89	33.2	109.0	12.2	40.0
Goodwin, Clifford F.	SE-24-063-20 W4M	Upper Surficial	Jun-77	26.5	87.0	4.3	14.0
Goossen, Walter/Tara Const	SW-04-066-22 W4M	Upper Surficial	Aug-93	19.2	63.0	7.3	24.0
Gorden, Bruce	SW-19-066-17 W4M	Upper Surficial	Apr-89	59.1	194.0	22.3	73.0
Gordey, Garry	12-15-068-22 W4M	Upper Surficial	Jun-79	11.3	37.0	3.1	10.0
Gorski, Adolph	04-07-069-20 W4M	Upper Surficial	Feb-74	7.9	26.0	6.1	20.0
Gorski, S.	NW-31-068-20 W4M	Upper Surficial	Aug-79	9.8	32.0	3.1	10.0
Gosling Holdings Ltd.	NE-20-065-17 W4M	Upper Surficial	Oct-78	45.7	150.0	13.4	43.9
Guay, John	SE-28-063-23 W4M	Upper Surficial	Sep-86	10.1	33.0	3.1	10.0
Guay, John W.	SE-28-063-23 W4M	Upper Surficial	Jun-79	5.5	18.0	2.4	8.0
Gunderson, Albert	SW-10-064-21 W4M	Birch Lake	Aug-78	21.9	72.0	3.1	10.0
Hanna, George #1 Well	15-31-063-22 W4M	Upper Surficial	Sep-78	28.4	93.0	14.3	47.0
Hatch, Ron	NW-28-071-17 W4M	Upper Surficial	Sep-85	8.5	28.0	5.5	18.0
Haub, Robert	SW-01-068-23 W4M	Upper Surficial	Jul-86	20.7	68.0	11.0	36.0
Hay, D.D.	13-10-065-22 W4M	Upper Surficial	Nov-76	83.8	275.0	2.4	8.0

WATER WELLS RECOMMENDED FOR FIELD VERIFICATION

Owner	Location	Water Well	Date Water	Completed Depth		NPWL	
		Contractor	Well Drilled	Metres	Feet	Metres	Feet
Hayes, Jack	SE-24-062-24 W4M	Upper Surficial	Aug-72	9.1	30.0	8.3	27.1
Hendy, Rick	16-08-069-22 W4M	Upper Surficial	Aug-82	27.7	91.0	14.9	49.0
Henson, Don	NE-21-065-17 W4M	Upper Surficial	Feb-85	30.5	100.0	7.3	24.0
Henson, Donald	NE-21-065-17 W4M	Upper Surficial	Nov-75	10.7	35.0	5.5	18.0
Henson, Donald	NE-21-065-17 W4M	Upper Surficial	Feb-85	34.1	112.0	7.3	24.0
Henson, Rock	02-22-065-17 W4M	Upper Surficial	Dec-85	22.9	75.0	9.1	30.0
Herrmann, Egon	NE-28-063-20 W4M	Upper Surficial	Nov-78	10.4	34.0	7.9	26.0
Hewko, Tony	SW-27-066-18 W4M	Upper Surficial	Sep-79	9.8	32.0	4.3	14.0
Hillson Nursery	SE-18-063-23 W4M	Upper Surficial	Jul-85	18.6	61.0	18.6	61.0
Hofner, D.	NW-02-067-19 W4M	Upper Surficial	Mar-78	11.9	39.0	7.6	25.0
Holdis, Romeo	NW-24-067-19 W4M	Upper Surficial	Oct-81	25.9	85.0	14.6	48.0
Holdis, Romeo	NW-24-067-19 W4M	Upper Surficial	Aug-66	19.5	64.0	14.0	46.0
Holst, E.	13-17-064-19 W4M	Upper Surficial	May-82	12.5	41.0	4.6	15.0
Holt Construction	NE-34-065-22 W4M	Upper Surficial	Aug-86	24.1	79.0	4.0	13.0
Holt, H.	SE-28-066-20 W4M	Upper Surficial	Oct-77	9.8	32.0	3.1	10.0
Homa, Mike	SE-24-067-20 W4M	Upper Surficial	Sep-83	82.3	270.0	34.8	114.0
Hrycun, Casey	NE-28-067-19 W4M	Upper Surficial	Nov-73	13.7	45.0	0.6	2.0
Hrycun, Nick	SE-09-067-19 W4M	Upper Surficial	Nov-85	24.4	80.0	9.8	32.0
Hrynyk, Howard/Allan	NE-17-067-17 W4M	Upper Surficial	Apr-83	47.2	155.0	27.4	90.0
Hume, Gordon	16-22-066-21 W4M	Lea Park	May-76	28.7	94.0	2.4	8.0
Hunter, Bruce	SW-05-072-16 W4M	Upper Surficial	Jun-82	16.8	55.0	3.7	12.0
Hussynec, Harry	SE-18-067-17 W4M	Upper Surficial	Apr-84	62.5	205.0	36.6	120.0
Ireland, Jim	SW-06-067-19 W4M	Upper Surficial	Aug-82	12.8	42.0	9.1	30.0
Jauch, Ralph	NW-14-066-18 W4M	Upper Surficial	Jan-81	43.3	142.0	11.9	39.0
Jenkins, Bob	16-21-064-21 W4M	Upper Surficial	Oct-84	12.5	41.0	5.5	18.0
Jenkins, Charles	SW-20-067-18 W4M	Upper Surficial	Feb-86	59.7	196.0	38.1	125.0
Jenkins, Lloyd	NW-34-068-18 W4M	Upper Surficial	Aug-85	11.6	38.0	3.4	11.0
Jensen, T.	01-30-068-21 W4M	Upper Surficial	Aug-81	13.7	45.0	3.4	11.0
Jensen, Terry	01-30-068-21 W4M	Upper Surficial	Apr-82	10.7	35.0	3.1	10.0
Jewell, T.	NW-01-066-22 W4M	Upper Surficial	Nov-80	33.5	110.0	19.8	65.0
Jodry, Ray	NE-31-066-22 W4M	Upper Surficial	May-74	11.0	36.0	8.5	28.0
Johansen, Fred	09-06-063-23 W4M	Upper Surficial	Sep-80	11.3	37.0	6.1	20.0
Johansen, Fred	NE-06-063-23 W4M	Upper Surficial	Nov-80	14.6	48.0	10.1	33.0
Johnson, W.C.	SE-16-065-22 W4M	Upper Surficial	May-85	25.0	82.0	1.2	4.0
Jolly, Del	01-02-065-19 W4M	Upper Surficial	Jul-82	51.8	170.0	21.3	70.0
Kachur, W.	NW-14-067-18 W4M	Upper Surficial	Jan-78	18.3	60.0	6.1	20.0
Kastyk, Don	NW-08-066-22 W4M	Upper Surficial	Jun-84	10.7	35.0	3.1	10.0
Kavulok, Alex	SE-27-067-22 W4M	Upper Surficial	May-76	7.6	25.0	2.4	8.0
Keddie, Eric	NE-34-065-22 W4M	Upper Surficial	Oct-73	7.6	25.0	3.8	12.5
Khakoo, Firoz	SW-07-063-23 W4M	Upper Surficial	Nov-81	12.2	40.0	2.4	8.0
Kincaid, Nore	NW-20-067-21 W4M	Upper Surficial	May-81	18.0	59.0	13.7	45.0
Klack, A.	NE-08-069-21 W4M	Upper Surficial	Jul-73	9.8	32.0	4.3	14.0
Kochan, Stanley	SE-33-066-19 W4M	Upper Surficial	Jul-76	14.0	46.0	3.7	12.0
Komick, Louis	05-27-063-21 W4M	Upper Surficial	Aug-83	10.7	35.0	4.6	15.0
Kononchuk, Alex	NE-08-068-18 W4M	Upper Surficial	Oct-85	70.4	231.0	18.3	60.0
Korolak, Dave	01-13-069-21 W4M	Upper Surficial	May-78	23.2	76.0	13.7	45.0
Kosowan, Blayne	01-08-072-16 W4M	Upper Surficial	Aug-82	49.4	162.0	21.9	72.0
Kostiuk, John	NW-36-071-17 W4M	Upper Surficial	Aug-75	12.2	40.0	1.8	6.0
Kostiuk, John	12-36-071-17 W4M	Upper Surficial	Feb-83	48.8	160.0	35.1	115.0
Kowalchuk, Frank	NE-17-069-22 W4M	Upper Surficial	Jun-86	27.4	90.0	6.1	20.0
Kowalchuk, G.	SW-16-069-22 W4M	Upper Surficial	Jul-79	6.7	22.0	2.4	8.0
Krawec, John	SW-05-067-22 W4M	Upper Surficial	Sep-81	13.4	44.0	7.6	25.0
Kryway, Gordon	NW-07-065-22 W4M	Upper Surficial	May-73	9.1	30.0	5.5	18.0
Kwasney, Peter E.	NW-32-066-22 W4M	Upper Surficial	Jul-75	7.0	23.0	3.2	10.5
Labonte, Roy	13-05-065-18 W4M	Upper Surficial	May-83	7.6	25.0	0.9	3.0

WATER WELLS RECOMMENDED FOR FIELD VERIFICATION

Owner	Location	Water Well	Date Water	Completed Depth		NPWL	
		Contractor	Well Drilled	Metres	Feet	Metres	Feet
Laine, Violet	SE-05-067-21 W4M	Upper Surficial	May-78	9.5	31.0	5.5	18.0
Larose, Blain	08-34-064-17 W4M	Upper Surficial	Jan-84	19.8	65.0	6.0	19.6
Larose, Grace	08-34-064-17 W4M	Upper Surficial	Jan-84	28.7	94.0	11.9	39.1
Laschuk, Wm	SE-24-066-22 W4M	Brosseau	Apr-76	33.5	110.0	2.7	9.0
Lodewijk, Bert	SE-28-063-23 W4M	Upper Surficial	Jul-80	17.7	58.0	7.6	25.0
Loeuw, Kerry	SE-12-065-19 W4M	Upper Surficial	Dec-78	23.5	77.0	2.4	8.0
Lowe, Jeff	01-30-068-21 W4M	Upper Surficial	May-78	15.2	50.0	3.1	10.0
Lucas, Robert	SW-21-063-23 W4M	Upper Surficial	Jun-78	24.4	80.0	4.3	14.0
Luchka, Terry	SW-01-068-19 W4M	Upper Surficial	Jun-89	39.6	130.0	25.9	85.0
Lyall, Gordon	NE-34-065-22 W4M	Upper Surficial	Jun-78	34.8	114.0	17.7	58.0
Madson, Gary	NE-20-065-22 W4M	Upper Surficial	Jul-86	62.5	205.0	28.4	93.0
Maguire, David	09-20-064-22 W4M	Upper Surficial	Jul-79	20.7	68.0	15.2	50.0
Martha, Joe	10-24-064-17 W4M	Upper Surficial	Mar-94	62.8	206.0	25.0	81.9
Matoga, John	SE-11-068-19 W4M	Upper Surficial	Oct-87	10.4	34.0	6.1	20.0
Matthews, R.J.	NE-22-063-22 W4M	Upper Surficial	Jun-78	11.6	38.0	4.9	16.0
Mauling, Rudy	SW-30-063-20 W4M	Victoria	Nov-83	97.5	320.0	17.7	58.0
Mcintyre, Jim	SE-28-063-23 W4M	Upper Surficial	Jun-74	7.9	26.0	5.8	19.0
Melsness, A.L.	SE-36-067-22 W4M	Upper Surficial	Oct-78	9.5	31.0	3.1	10.0
Milot, Armond	08-34-063-20 W4M	Upper Surficial	Jul-76	93.9	308.0	45.1	148.0
Mochid, Walter	14-33-068-21 W4M	Upper Surficial	Jun-79	22.9	75.0	20.4	67.0
Moe, Charlie	NE-27-066-24 W4M	Upper Surficial	Jul-82	44.2	145.0	23.8	78.0
Mohawk Oil Co. Ltd.	09-36-064-20 W4M	Victoria	Dec-82	24.4	80.0	2.1	7.0
Morrill, Dianne F.	SW-08-065-22 W4M	Lea Park	Jul-81	61.0	200.0	27.4	90.0
Murray, Don	NE-14-066-18 W4M	Upper Surficial	Jul-89	12.8	42.0	4.6	15.0
Mynio, Peter	16-30-063-23 W4M	Upper Surficial	Apr-75	13.7	45.0	5.5	18.0
Nabula Developments	10-14-066-18 W4M	Upper Surficial	Oct-77		#VALUE!	27.1	88.9
Nahomey, Grant	SW-04-067-18 W4M	Upper Surficial	Mar-86	43.9	144.0	11.9	39.0
Nalesnik, Bill	SW-29-063-21 W4M	Birch Lake	Mar-78	18.3	60.0	6.1	20.0
Nedza, Paul	NW-34-066-24 W4M	Ribstone Creek	Sep-84	18.3	60.0	9.8	32.0
Neil, L.M.	08-01-064-21 W4M	Upper Surficial	Jan-79	12.5	41.0	10.7	35.0
Neil, William F.	01-01-064-21 W4M	Upper Surficial	Mar-85	21.0	69.0	6.7	22.0
Nelson, Allyn	NE-10-065-22 W4M	Upper Surficial	Oct-80	33.8	111.0	13.7	45.0
Nelson, Carl	09-19-067-22 W4M	Upper Surficial	May-78	13.4	44.0	3.1	10.0
Netterville, Reg	13-25-066-21 W4M	Upper Surficial	Jul-83	11.0	36.0	1.5	5.0
Nykpilo, James P.	SE-03-065-20 W4M	Victoria	Sep-86	24.4	80.0	4.3	14.0
Olsen, H.J.	SE-04-067-21 W4M	Upper Surficial	Aug-79	6.7	22.0	1.8	6.0
Olson, Kelly	08-22-065-23 W4M	Upper Surficial	Oct-80	14.3	47.0	2.4	8.0
Omelchuk, Victor	NE-30-068-18 W4M	Upper Surficial	Jun-88	23.5	77.0	3.1	10.0
Opper, James	NE-34-065-22 W4M	Upper Surficial	Sep-85	23.8	78.0	2.7	9.0
Ostrander, Dean	04-10-065-18 W4M	Upper Surficial	Aug-79	6.7	22.0	3.7	12.0
Palfenier, W.	NW-03-065-19 W4M	Brosseau	Mar-83	84.4	277.0	51.8	170.0
Palset, Peter	13-34-065-22 W4M	Upper Surficial	Sep-78	21.6	71.0	6.1	20.0
Parent, Gerald	NE-03-071-17 W4M	Upper Surficial	Sep-84	19.5	64.0	7.6	25.0
Patenaude, Laurie	16-30-064-16 W4M	Upper Surficial	Jan-84	32.6	107.0	22.4	73.5
Patenaude, Susan	05-32-064-16 W4M	Upper Surficial	Jan-84	34.7	114.0	17.6	57.7
Patry, Bernard	SW-33-066-24 W4M	Upper Surficial	Aug-74	38.4	126.0	6.1	20.0
Patry, Dorothy	SE-33-066-24 W4M	Victoria	Oct-84	36.6	120.0	2.7	9.0
Patterson, Dave	SW-04-072-16 W4M	Upper Surficial	Aug-83	58.5	192.0	29.3	96.0
Perch Core Estates	NW-19-065-18 W4M	Upper Surficial	Mar-82	30.2	99.0	4.4	14.5
Peruniak, Geoff	NW-19-066-20 W4M	Upper Surficial	Jul-85	12.5	41.0	4.6	15.0
Peters, Walter	NW-04-067-22 W4M	Upper Surficial	May-67	7.3	24.0	2.7	9.0
Peterson, Jim	02-22-065-17 W4M	Upper Surficial	Jul-80	24.4	80.0	6.7	22.0
Pfannmuller, Ken	NE-08-065-21 W4M	Victoria	May-81	25.9	85.0	3.7	12.0
Pitman, C.	NW-07-065-21 W4M	Victoria	Aug-79	17.1	56.0	9.1	30.0

WATER WELLS RECOMMENDED FOR FIELD VERIFICATION

Owner	Location	Water Well Contractor	Date Water Well Drilled	Completed Depth		NPWL	
				Metres	Feet	Metres	Feet
Plamondon, John	SE-07-065-17 W4M	Upper Surficial	May-81	27.4	90.0	7.9	26.0
Plamondon, Ray	SE-11-071-17 W4M	Upper Surficial	Jun-86	42.1	138.0	15.5	51.0
Plante, George	NW-09-066-22 W4M	Upper Surficial	Dec-76	19.8	65.0	5.8	19.0
Polak, Louis	01-28-062-22 W4M	Upper Surficial	Mar-66	33.5	110.0	7.9	26.0
Polok, Larry	11-13-068-22 W4M	Upper Surficial	Jul-80	11.6	38.0	3.7	12.0
Proskow, W.	13-14-070-17 W4M	Upper Surficial	Sep-80	13.7	45.0	8.5	28.0
Proulx, Philip	SW-11-071-17 W4M	Upper Surficial	Sep-75	12.2	40.0	5.5	18.0
Pruden, Ken	16-16-064-17 W4M	Upper Surficial	Jan-84	47.5	156.0	13.8	45.3
Pusiarski, Edward	NE-27-066-18 W4M	Upper Surficial	Oct-85	11.6	38.0	1.8	6.0
Quint Oil Field Contractors	12-01-067-22 W4M	Upper Surficial	Mar-82	27.4	90.0	17.1	56.0
Quint Oil Field Contractors	04-12-067-22 W4M	Upper Surficial	Mar-82	37.5	123.0	21.8	71.5
Ramey, B.	16-32-066-22 W4M	Upper Surficial	Oct-79	17.1	56.0	5.2	17.0
Reders, K.	NE-32-065-21 W4M	Upper Surficial	Jul-80	6.4	21.0	3.1	10.0
Richard Langevin	SW-05-065-18 W4M	Brosseau	Sep-83	54.9	180.1	11.6	38.1
Rodel, G.	NW-04-067-21 W4M	Upper Surficial	May-78	27.7	91.0	18.3	60.0
Rogers, G.D.	SE-08-067-22 W4M	Upper Surficial	Mar-88	6.7	22.0	4.3	14.0
Rogers, Jim	04-29-066-22 W4M	Upper Surficial	Aug-84	13.7	45.0	5.5	18.0
Rogers, Marvin	NW-19-065-22 W4M	Upper Surficial	Apr-80	59.4	195.0	25.9	85.0
Rosa, Metro	16-04-065-17 W4M	Upper Surficial	Feb-84	29.9	98.0	12.8	42.0
Rouncuelle, S.	02-04-066-22 W4M	Upper Surficial	Sep-82	13.7	45.0	7.0	23.0
Ryan, Gerald	SW-34-066-22 W4M	Upper Surficial	Jul-80	12.2	40.0	1.8	6.0
Ryder, Alex	08-05-066-21 W4M	Upper Surficial	Aug-85	41.8	137.0	9.1	30.0
Sale, Normand	NE-18-067-21 W4M	Upper Surficial	Jul-88	23.8	78.0	15.2	50.0
Saley, Alex	13-31-065-21 W4M	Upper Surficial	Jul-81	11.0	36.0	7.0	23.0
Saunders, Charlie	02-25-063-23 W4M	Upper Surficial	May-78	12.8	42.0	2.4	8.0
Sawchuk, Tony	SE-30-067-19 W4M	Upper Surficial	Dec-77	9.8	32.0	3.1	10.0
Scheller, E.	SW-06-068-21 W4M	Upper Surficial	Apr-78	9.1	30.0	3.1	10.0
Schmid, Frank	01-07-068-21 W4M	Upper Surficial	Feb-84	9.1	30.0	2.7	9.0
Schmittroth, Louis	NW-31-064-21 W4M	Victoria	May-78	48.8	160.0	27.4	90.0
Schmold, Siegfried	08-03-066-22 W4M	Upper Surficial	Mar-81	15.2	50.0	12.8	42.0
Sewall, Ian	06-06-069-19 W4M	Upper Surficial	Aug-79	8.2	27.0	3.1	10.0
Sewall, Ian	05-06-069-19 W4M	Upper Surficial	Oct-80	11.9	39.0	3.1	10.0
Sheppard, E.	NE-20-067-17 W4M	Upper Surficial	Jun-83	6.7	22.0	3.1	10.0
Sherenata, Bill	SE-15-067-19 W4M	Upper Surficial	Jul-88	24.4	80.0	14.6	48.0
Sherman, Walter	NW-05-065-18 W4M	Upper Surficial	Nov-85	13.7	45.0	0.3	1.0
Shewchuk, Mike	SE-21-067-19 W4M	Upper Surficial	Oct-88	44.2	145.0	29.0	95.0
Shmyrko, Joe	SW-30-065-18 W4M	Upper Surficial	Jul-85	20.7	68.0	11.6	38.0
Silkie, Walter	SW-29-065-22 W4M	Upper Surficial	Jun-72	6.1	20.0	3.7	12.0
Skeleton Lake Resort	NW-05-065-18 W4M	Upper Surficial	May-83	8.2	26.9	1.1	3.6
Smith, S.	SE-04-065-19 W4M	Victoria	Nov-80	13.7	45.0	6.1	20.0
Smith, Taes	01-32-070-17 W4M	Upper Surficial	Jul-80	13.7	45.0	4.6	15.0
Snydmiller, S.	12-01-070-17 W4M	Upper Surficial	Oct-80	11.6	38.0	2.4	8.0
Snydmiller, Steve	NW-01-070-17 W4M	Upper Surficial	Sep-80	21.0	69.0	3.1	10.0
Souch, Sam	SE-28-065-17 W4M	Upper Surficial	Oct-83	36.6	120.0	6.1	20.0
Souch, Sam	SE-28-065-17 W4M	Upper Surficial	May-87	36.6	120.0	6.7	22.0
Souch, Sam	SE-33-065-17 W4M	Upper Surficial	Oct-83	33.5	110.0	1.8	6.0
Sparkling Eyes, Jim	09-35-064-17 W4M	Upper Surficial	Jan-84	34.4	113.0	10.7	35.1
St Jean, R.M.J.	10-24-070-17 W4M	Upper Surficial	Oct-81	11.6	38.0	7.6	25.0
Stady, Dennis	13-35-064-22 W4M	Upper Surficial	May-79	49.7	163.0	33.5	110.0
Stanton, Daniel O.	SW-05-065-18 W4M	Upper Surficial	Jul-73	6.1	20.0	3.1	10.0
Stapley, Don	SE-11-067-24 W4M	Upper Surficial	Feb-83	16.2	53.0	4.0	13.0
Stephenson, Edward	SW-28-066-19 W4M	Upper Surficial	May-80	91.1	299.0	25.9	85.0
Stewart, L.	SW-30-068-19 W4M	Upper Surficial	Jun-82	9.1	30.0	2.4	8.0
Stobee, Ernie	01-09-065-22 W4M	Upper Surficial	Jan-85	26.8	88.0	15.2	50.0
Storoschuk, A.	NE-08-072-17 W4M	Upper Surficial	Jan-81	24.4	80.0	20.1	66.0

WATER WELLS RECOMMENDED FOR FIELD VERIFICATION

Owner	Location	Water Well Contractor	Date Water Well Drilled	Completed Depth		NPWL	
				Metres	Feet	Metres	Feet
Sutherland, Larry	SW-32-067-22 W4M	Upper Surficial	May-76	18.3	60.0	5.2	17.0
Swink, Dale	SW-15-065-22 W4M	Upper Surficial	Sep-75	9.5	31.0	3.7	12.0
Szmyrko, Dwayne	NE-25-065-19 W4M	Upper Surficial	Mar-82	32.9	108.0	25.6	84.0
Szmyrko, Gary	SW-02-066-19 W4M	Upper Surficial	Mar-83	15.2	50.0	9.8	32.0
Talmey, Walt	16-32-066-22 W4M	Upper Surficial	Aug-80	21.0	69.0	3.1	10.0
Thomson, G.	01-01-065-20 W4M	Victoria	Jul-82	13.7	45.0	4.3	14.0
Thorburn, Ron	NW-11-067-24 W4M	Upper Surficial	May-80	11.6	38.0	3.7	12.0
Tonack, Bob	09-08-065-21 W4M	Upper Surficial	Sep-76	20.4	67.0	14.6	48.0
Tonack, Bob	09-08-065-21 W4M	Upper Surficial	Sep-76	15.2	50.0	5.8	19.0
Trela, Frank J.	SW-07-068-19 W4M	Upper Surficial	May-79	11.9	39.0	9.1	30.0
Turner, Duncan	12-02-065-20 W4M	Victoria	Jul-81	12.2	40.0	4.6	15.0
Turton, Bill	09-11-063-24 W4M	Upper Surficial	Aug-80	19.2	63.0	7.0	23.0
Verstrasto, Emilion	09-08-064-21 W4M	Birch Lake	Jun-81	22.6	74.0	18.3	60.0
Wabaco Property Svc	14-24-068-24 W4M	Upper Surficial	Jul-79	25.3	83.0	5.8	19.0
Wandering River Valley Estates	SW-30-071-16 W4M	Upper Surficial	Nov-78	29.9	98.0	18.2	59.6
Ward, Glen	SW-26-063-23 W4M	Upper Surficial	Jul-85	29.6	97.0	24.7	81.0
Williams, John M.	NW-06-067-21 W4M	Upper Surficial	Aug-82	21.0	69.0	9.8	32.0
Willsie, Gordon	12-22-064-22 W4M	Upper Surficial		20.7	68.0	11.6	38.0
Willsie, Larry	05-22-064-22 W4M	Upper Surficial	Mar-79	12.2	40.0	2.7	9.0
Witney, Hugh	SW-02-067-19 W4M	Upper Surficial	Nov-79	10.4	34.0	2.4	8.0
Witney, John	04-34-066-19 W4M	Upper Surficial	Jun-81	9.8	32.0	4.9	16.0
Wolansky, Willard	NE-15-065-17 W4M	Upper Surficial	Feb-75	18.3	60.0	9.1	30.0
Wolanuk, Victor	NW-18-068-21 W4M	Upper Surficial	May-74	19.5	64.0	12.2	40.0
Wolnuk, John	SW-19-068-21 W4M	Upper Surficial	Aug-85	7.6	25.0	2.4	8.0
Woloncewich, Lanny	04-12-066-22 W4M	Upper Surficial	Jun-83	17.4	57.0	6.1	20.0
Woods, Bob	04-01-066-22 W4M	Upper Surficial	Sep-74	32.3	106.0	12.2	40.0
Yaremchuck, Richard	04-28-064-20 W4M	Upper Surficial	May-82	59.4	195.0	20.4	67.0
Zachkewich, S.	SE-05-069-19 W4M	Upper Surficial	May-78	9.8	32.0	3.7	12.0
Zak, Ed	NE-31-067-17 W4M	Upper Surficial	Apr-86	44.5	146.0	12.8	42.0
Zayonc, M.	SE-10-071-17 W4M	Upper Surficial	Jul-80	9.1	30.0	5.2	17.0
Zemba, Dwayne	NW-32-067-19 W4M	Upper Surficial	Aug-83	8.5	28.0	3.7	12.0
Zemba, Stanley	SE-31-067-19 W4M	Upper Surficial	Jun-82	62.5	205.0	22.9	75.0
Ziegler, G.	SW-04-064-21 W4M	Upper Surficial	Nov-78	22.6	74.0	4.9	16.0
Zolkowski, Wes	12-19-069-20 W4M	Upper Surficial	Jul-81	12.2	40.0	2.4	8.0

COUNTY OF ATHABASCA-OPERATED WATER WELLS

Owner	Location	Date Water Well Drilled	Completed Depth		NPWL	
			Metres	Feet	Metres	Feet
County of Athabasca #12	SE-30-065-18 W4M	Sep-86	55.5	182.0	22.9	75.0