

Phase I Groundwater Supply Assessment for Residential Subdivision

NW-35-51-26W4
Parkland County
51529A Range Road 262
Lot 1A and Lot 1B, Block 1, Plan 1020669
Lat/Long: 53.450481, -113.731897

Project #: AW.97.01
February 2024

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1. EXECUTIVE SUMMARY

A Phase I Groundwater Supply Assessment was undertaken for a proposed expansion of an existing church located within NW-35-51-26W4 to better understand the quality and distribution of aquifer resources in the area as they relate to the future development of the property and its water requirements.

Many existing domestic supply wells produce from surficial sand aquifers found within a buried valley deposit underlying the site. In order to avoid interference with existing domestic groundwater users it is recommended that the client complete wells in bedrock aquifers below the Site.

The best aquifer targets for future wells on site are the bedrock aquifer units present from 85 – 120+ metres below the Site. Conservative projected water yields from wells completed within these aquifers are likely within the range 35 and 50 m³/day (12,784 – 18,263 m³/year or 5.3 – 7.6 imperial gallons per minute) based on pumping test data from surrounding wells and maps generated in previous consulting reports. Sufficient aquifer supplies exist to meet the demands of the facility and its proposed expansion, which are estimated at 4,500 m³ annually.

A moderate volume of the groundwater supply is currently utilized by existing domestic, licensed, or traditional groundwater users in the area. Based on available pumping test data, sufficient aquifer supplies should exist to provide water for future development without causing adverse affects to existing domestic, licensed, or traditional agricultural users.

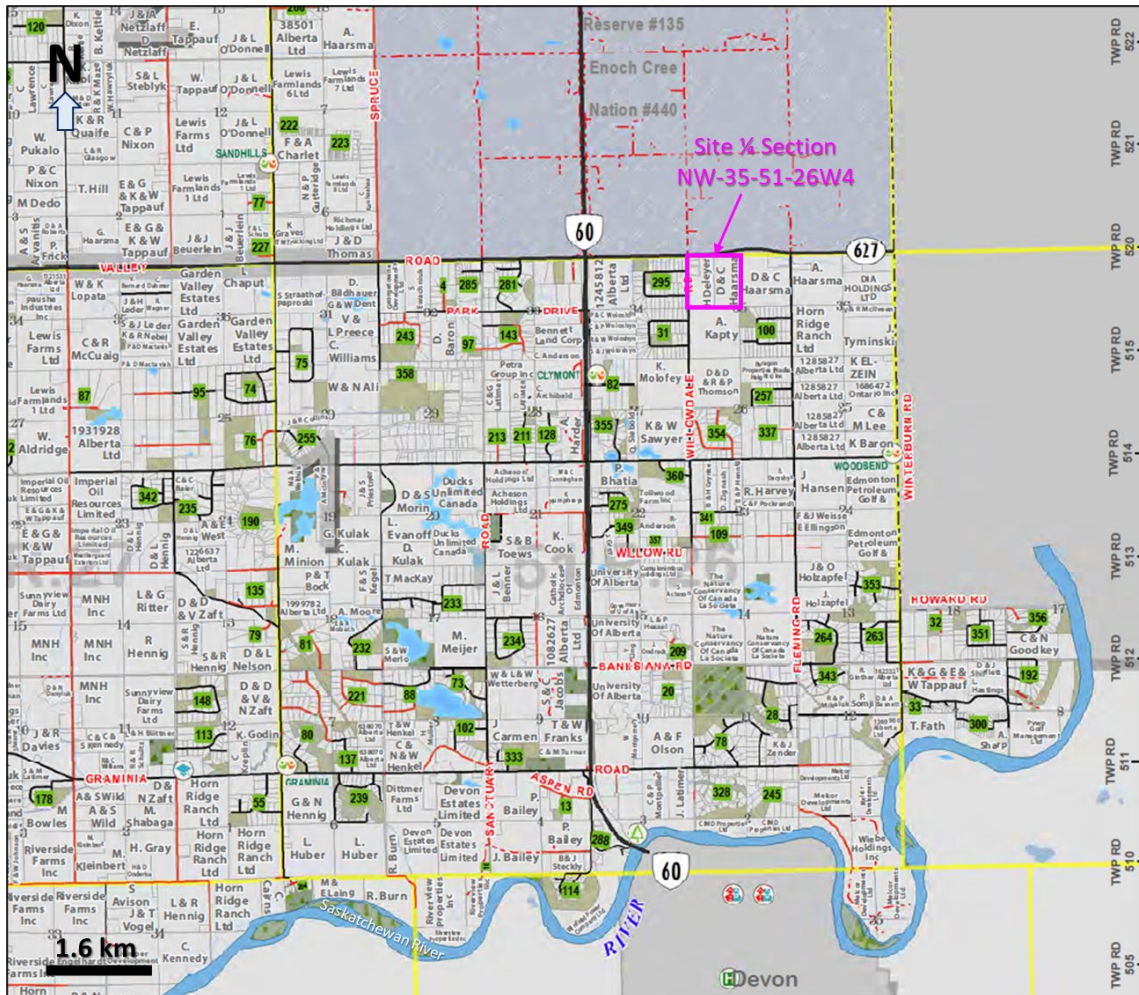
Groundwater chemistry reports from wells in the area were evaluated to determine baseline water chemistry characteristics and provide proxies for future wells water chemistry. In the proxy wells, the water quality meets all health based guidelines however total dissolved solids (TDS), sodium and iron may exceed aesthetic guidelines. Future supply wells completed in aquifers at a similar depth will likely have similar water chemistry and be suitable for use, with recommendations for potential treatment to reduced TDS concentrations to palatable limits.

2. INTRODUCTION

Arletta Water Resources (Arletta) was retained by GraceLife Church to complete a Phase I Groundwater Supply assessment for a proposed expansion of their existing development located within NW-35-51-26W4, herein referred to as “the Site”. The assessment was undertaken to better understand the quality and distribution of aquifer resources in the area as they relate to the future development of the property and its water requirements.

The Site is in Parkland County, approximately 2.4 kilometres (km) west of the City of Edmonton, Alberta. The Site area is occupied by high density residential subdivisions, low density farmsteads and sections of agricultural land. A portion of the Parkland County land map and subject site location is shown in Figure 1.

Figure 1. Parkland County land map and subject site ¼ section location



Water is required to supply a proposed expansion of an existing church with one or more new water supply wells being required. A map showing the proposed expansion information is included in Appendix I.

An aerial photo of the site showing the state of the property and existing water supply well locations as listed on the Alberta Environment and Parks water well database is shown in Figure 2.

Figure 2. Air photo of site quarter section with existing water well locations with GIC Well ID's



There are three wells which are listed on the AEP water well database as simply residing in the middle of the quarter section and two other wells listed as sitting in the middle of the LSD and do not reflect the true location of these wells within the Site quarter section. Additionally, there are 28 wells within the quarter section immediately west of the Site which also are listed on the AEP database as residing in the middle of the quarter section and are not accurately placed on the map.

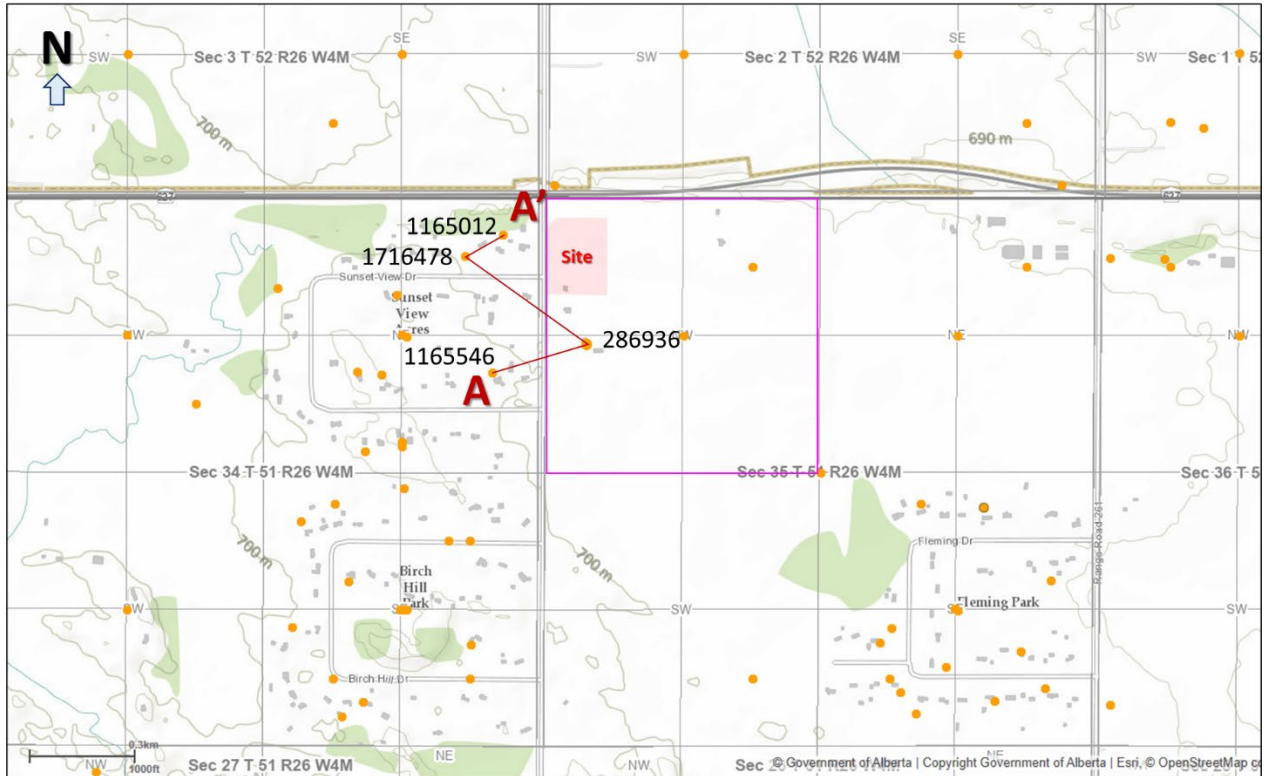
3. WATER SUPPLY NEEDS

Based on conversations with the client the Site requires water to supply staff, 1,500 parishioners on Sunday, bible study and gatherings throughout the week, weddings, funerals and some irrigation. It is understood that there is minimal cooking on Site and therefore minimal water demands related to an on-Site kitchen. Estimates of annual water demand for the Site is 4,500 m³/year. To accommodate periods of peak water demand on Sunday's a pumping rate of 35 m³/day is needed. Peak water demand can also be met through two or more wells producing at a lower rate. A *Water Act* License obtained through Alberta Environment and Protected Areas would need to be sought following successful well completion and testing.

4. TOPOGRAPHY

The Site surface is relatively flat and resides at an elevation of approximately 695 metres above sea level (masl). There are no localized topographic lows within the Site boundaries. The closest major surface water body is the North Saskatchewan River, located 5.5 km southeast of the Site at an elevation of approximately 630 masl. A topographic map showing surface topography contours, surface drainage and the location of wells used in the geologic cross section is as follows:

Figure 3. Topographic map and geologic cross section well locations



5. NATURE OF REGIONAL AQUIFERS

5.1. SURFICIAL GEOLOGY

The surficial geology of the area is mapped in *Surficial Geology Edmonton* (Bayrock, 1972) and indicates that the Site is underlain by glaciolacustrine (lakebed) deposits consisting of mainly sand with minor silt and clay, and minor pockets of coarse sand and gravel.

Based on the strata listed on the Water Well Drillers Report for the existing well within the Site quarter section and immediate surrounding area, the upper strata consist of 31.7 – 61.0 metres of interbedded sand, clay and gravel. This strata has been interpreted as being part of a south to north trending buried valley filled with these deposits and has been named the Devon Valley (Bedrock Topography and Valley Talwegs of the Edmonton Map Area, Andriashek, 1987). Numerous aquifers are present in these deposits.

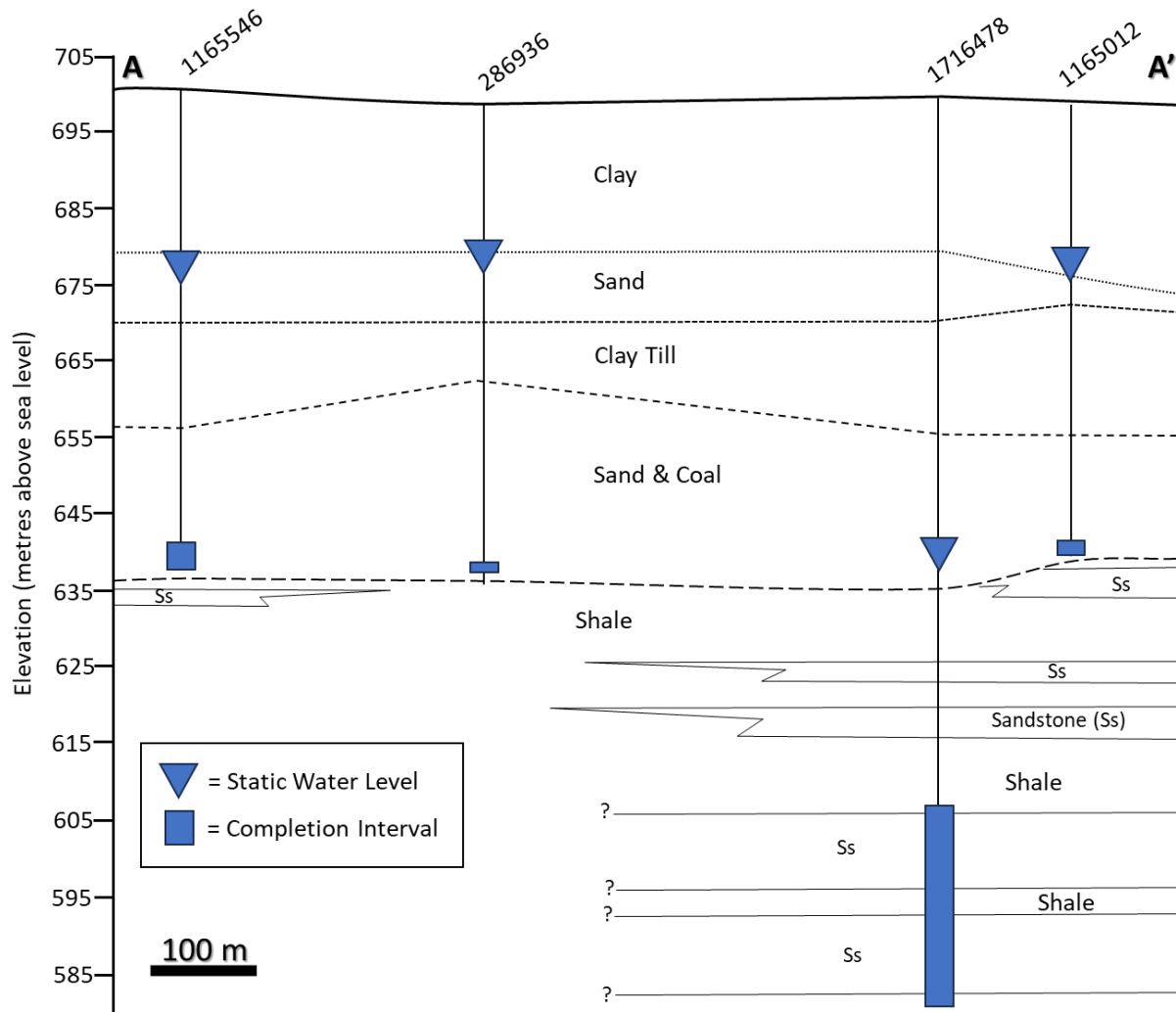
The relatively thick surficial deposits and the presence of clay within the surficial deposits is favourable in preventing contamination from surface sources (such as septic field effluent) from entering lower bedrock aquifers.

5.2. BEDROCK GEOLOGY

The underlying bedrock geology consists of the Campanian aged Wapiabi Formation. The Wapiabi Formation is a marine shale which in some parts contain abundant sideritic concretions, minor siltstone, sandstone and limestone. Water Well Drilling Reports indicate bedrock in the area consists of predominantly shale with thin, discontinuous sandstone layers.

Using existing Water Well Drilling Reports in the area, a cross section (A – A') showing the relationship between topography, target aquifers and static water levels is presented in Figure 4.

Figure 4. Geologic cross section A – A'

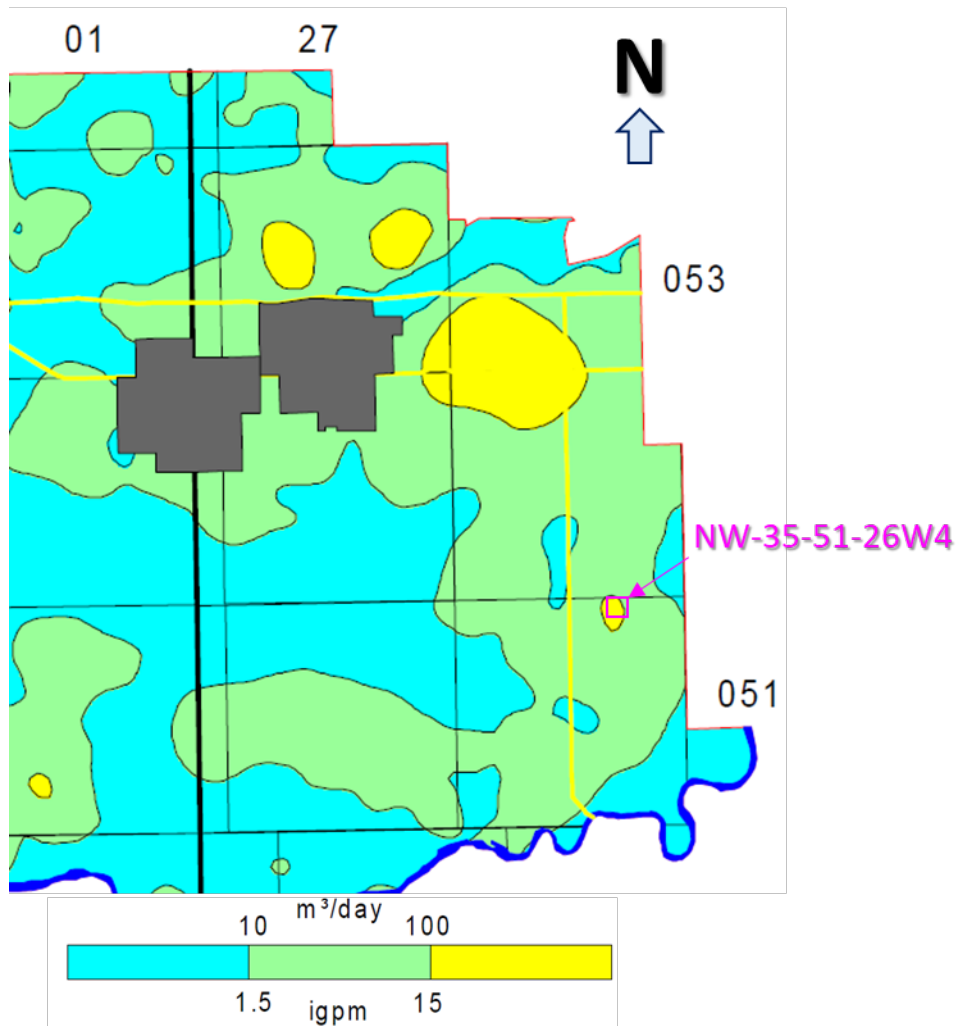


Surficial deposits consist of layers of clay, sand, and till with a base of sand with occasional coal seams overlying bedrock deposits. Many domestic wells in the area produce from the surficial sand aquifer and have static water levels that correlate with each other, indicating the wells are producing from the same hydraulically connected aquifer unit. A newer domestic well near the Site, #1716478, was completed over deeper sandstone aquifer units which may extend below the Site. This well has a much lower static water level compared to those completed in surficial sand aquifers, indicating these deeper bedrock aquifers are not in good hydraulic connection to the surficial sand aquifer.

It is recommended that future wells on the Site target the deeper bedrock aquifers likely present below the Site from 85 – 120 metres deep in order to avoid interference with existing domestic groundwater users. A well completed within a shale bedrock aquifer has a safe yield of 222.6 m³/day, based on existing pumping test data, which would be sufficient to accommodate the water needs of the Site (See Section 6).

Future supply wells completed over bedrock aquifer units could have an anticipated yield of 10 – 100+ m³/day based on data shown in Figure 5, compiled as part of a regional groundwater assessment of Parkland County (Hydrogeological Consultants Ltd. Report, 1998). Based on projected yields discussed further in Section 6 it appears well yields generally fall above the range interpreted in Figure 5.

Figure 5. Apparent yield for water wells completed in upper bedrock aquifers



(Portion of Figure 17 from Hydrogeological Consultants Report – Parkland County, 1998).

6. AREA GROUNDWATER USERS

A search of Alberta Environment and Parks water well data base was done to determine the number of water wells and their associated use in the area. A search was conducted of the wells within a 1.6 km (1-mile) radius of the Site. The search shows a total of 130 wells within the area. Most of the wells are designated for domestic use with one well used for both domestic & stock purposes, one for industrial purposes and three wells used for investigations. There are also nine decommissioned test holes/wells within the search radius. A summary of the well information from the AEP database is included in Appendix II.

There are records for three domestic groundwater wells and two old Alberta Research Council wells within the Site quarter section (locations shown in Figure 2), completed between 1971 and 1997. There are also records for two old Alberta Research Council wells which have sparse information. These were generally drilled to provide information on the nature of the buried valley aquifers in the area. The existing domestic supply wells within the Site quarter section are completed to 59.4 – 61.0 metres below ground and are screened across surficial sand aquifers.

Deeper domestic supply wells completed in the quarter section to the west of the Site are completed in the same surficial sand aquifer or deeper bedrocks sandstone/shale aquifers present from 80 – 115 metres below ground.

6.1. LICENSED WATER USERS

A search of AEP’s authorization viewer water license database was undertaken to determine if any groundwater licenses are present in the area. A search of licenses and registrations for the subject site and adjoining eight sections was undertaken. A summary of the groundwater licenses and registrations in the area is as follows:

Table 1: Area groundwater license and registration summary

Location	Licences/ Registration	Depth Interval (m)	Volume (m ³)	Licensee/Registrant
26-51-26W4	0/3	--	--	<i>Constance Thomson</i>
		--	--	<i>Marlane & Richard Block</i>
		--	--	<i>Terry Roberts</i>
27-51-26W4	0/1	--	--	<i>Wilfred Sawyer</i>
34-51-26W4	1/0	Not Available	Not Available	Parkland County
35-51-26W4	0/2	--	--	<i>Gerard Haarsma</i>
		--	--	<i>De Leyer & Van Haren</i>
36-51-26W4	0/1	--	--	<i>Robert McIlveen</i>

Licenses for surface water withdrawals were not included in the Table 1 summary. One license, held by Parkland County, was found in the search area but there was no attached documentation to determine if the license is for a surface water or

groundwater diversion. Seven registrations were also found in the area. Registrations may include surface water or groundwater diversions up to 6,250 m³ per year. The groundwater use in the area can be described as moderate, consisting largely of individual unregistered domestic groundwater users.

7. AREA AQUIFER PROPERTIES

Of the wells in the adjacent quarter sections, five existing supply wells had pumping test information included in their Water Well Drilling Reports. The pumping tests were analyzed with the aid of AQTESOLV software developed by Hydrosoft Inc. to estimate aquifer properties (Appendix III). A summary of well yield and associated aquifer properties produced from this analysis are tabulated below.

Table 2. Area aquifer properties

GIC Well ID	Completion Zone (m BGS)	Aquifer Thickness (m)	Aquifer Type	Aquifer Transmissivity (m ² /day)	Safe Well Yield (Q ₂₀) (m ³ /day)
1300013	61.3 – 62.8	20.1	Surficial Sand	682.8	849.6
1270060	49.4 – 50.9	11.0	Surficial Sand	133.2	363.7
1300161	54.9 – 56.4	10.1	Surficial Sand	61.9	150.6
1300285	55.5 – 57.0	6.7	Surficial Sand	16.1	76.4
1300398	49.1 – 50.6	14.3	Shale Bedrock	119.3	222.6

Analysis of pumping test data from wells completed in surficial sand aquifers produce a safe yield ranging from 76.4 – 849.6 m³/day. There does not appear to be a correlation between aquifer depth and the calculated safe yield rate. Only 2 hour long pumping tests were available for interpretation. Longer term pumping tests (12 – 24 hours) may show drawdown in the wells increasing or reducing with time, resulting in higher or lower safe yields.

There was only one well nearby that was completed in a bedrock aquifer with available pumping test data. The shale bedrock well produced a safe yield of 222.6 m³/day. As many domestic wells already produce from shallower surficial sand aquifers it is recommended that the client target the underlying bedrock aquifers to ensure no future impact on existing domestic water well users.

There were also 36 existing wells completed within the quarter sections adjacent to the Site which were air tested at rates of 2 – 40 igpm, with 32 of these wells having air tested rates exceeding 8 igpm.

The surficial and bedrock aquifer permeability in the area appears high. A conservative anticipated yield for future subdivision wells installed in the aquifers present below the site could be between 35 and 50 m³/day (12,784 – 18,263

m³/year or 5.3 – 7.6 imperial gallons per minute) based on available pumping test data and maps generated in previous reports (Figure 5). Sufficient aquifer supplies exist to meet the needs of the Site, for an estimated annual consumptive volume of 4,500 m³ and a maximum pumping rate to accommodate periods of peak water demand (~35 m³/day).

8. AREA WATER QUALITY

Three water chemistry reports for existing supply wells located within 1.6 km of the Site on the Alberta Water Well Database were used as a proxy for aquifer water quality in the area. The available proxy wells were completed to a depth of 36.6 – 68.6 meters below ground level. The water analysis reports for the proxy wells are attached in Appendix IV and a summary of the results, with a comparison to Health Canada Guidelines for Canadian Drinking Water Quality (2022) is as follows:

Table 3: Area water quality summary

Parameter	Units	Well ID 89066	Well ID 89047	Well ID 89053	CDWQ MAC/AO
Well Depth	metres	36.6	59.4	68.6	
Date sampled	mm/dd/yyyy	06/02/1977	10/12/1985	11/19/1986	-
pH	pH	9.0	7.9	8.0	7.0 – 10.5
EC (@ 25°C)	µS/cm	1,640	174	1,640	--
Calcium	mg/L	6.0	84	52	--
Magnesium	mg/L	1.0	22.0	15.0	--
Sodium	mg/L	350	315	375	200
Potassium	mg/L	1.43	1.02	2.86	--
Chloride	mg/L	83.1	10.0	<1.0	250
Nitrate	mg/L	<0.1	Not Reported	<0.05	10
Sulfate	mg/L	260.4	216.3	210.3	500
Manganese	mg/L	Not Reported	Not Reported	Not Reported	0.12
Bicarbonate	mg/L	587.1	967.1	935.1	--
Iron	mg/L	0.27	0.23	1.85	0.3

Total Dissolved Solids	mg/L	1,018	1,126	1,116	500
Fluoride	mg/L	0.13	0.23	0.20	1.5
T-Alkalinity	mg/L	525	793	767	--
MAC – Maximum Allowable Concentration					
AO – Aesthetic Objective					

No maximum allowable concentration guidelines (health based) were exceeded in the well, however manganese and nitrate concentrations were not reported for all proxy wells. Aesthetic guidelines (typically for taste and odor) for the concentration of Total Dissolved Solids, sodium, and iron (in one well) were exceeded in the proxy wells.

Future supply wells completed in aquifers at a similar depth will likely have similar water chemistry and be suitable for drinking water with recommended treatment to reduce TDS concentrations to make water palatable for users. It is recommended that a sample from the future supply wells be collected and analyzed prior to long term use to ensure the water meets drinking water quality standards for long-term human consumption.

9. REFERENCES

- Alberta Environment and Parks (AEP). **2023**. Authorization Viewer. Retrieved from: <https://aww.alberta.ca/ApprovalViewer.aspx>
- Alberta Environment and Parks. September **2023**. Groundwater Information System. Retrieved from: <http://groundwater.alberta.ca/WaterWells/d/>
- Andriashek, L. 1987. Bedrock Topography and Valley Talwegs of the Edmonton Map Area. Alberta Energy
- Bayrock, L.A. **1972**. Surficial Geology Edmonton NTS 83H. Alberta Research Council.
- Government of Alberta (GoA). **2023**. Government of Alberta, Alberta Water Well Information Database (or Baseline Water Well Test Database). Retrieved May 2023 from <http://groundwater.alberta.ca/WaterWells/d/>
- Government of Alberta (GoA). **2023**. Guide to Groundwater Authorization | Environment and Protected Areas. Retrieved May 2023 from <https://open.alberta.ca/publications/guide-to-groundwater-authorization>
- Google Earth. **2023**. Google Earth Pro. Desktop Version 7.3.4.8573. Retrieved from: <https://earth.google.com/web/@0,0,0a.22251752.77375655d.35y,0h,0t,0r>
- Health Canada. **2022**. Guidelines for Canadian Drinking Water Quality – Summary Tables. Water and Air Quality Bureau, Healthy Environments and Consumer Safety Branch, Health Canada, Ottawa, Ontario. Retrieved May 2023 from https://www.canada.ca/content/dam/hc-sc/migration/hc-sc/ewh-semt/alt_formats/pdf/pubs/water-eau/sum_guide-res_recom/summary-tables-sept-2022-eng.pdf
- Hydrogeological Consultants Ltd. **1998**. Parkland County Part of the North Saskatchewan and Athabasca River Basins Part of Tp 050 to 054, R 25, W4M to R 08, W5M Regional Groundwater Assessment. Retrieved from HCL website: <https://www.hcl.ca/reports>

10. CLOSURE

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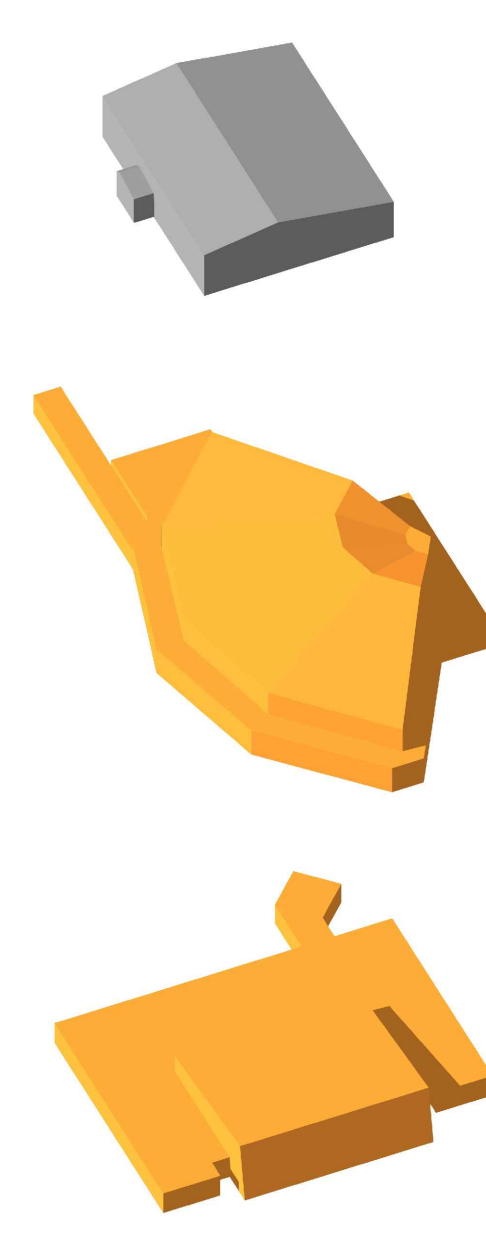
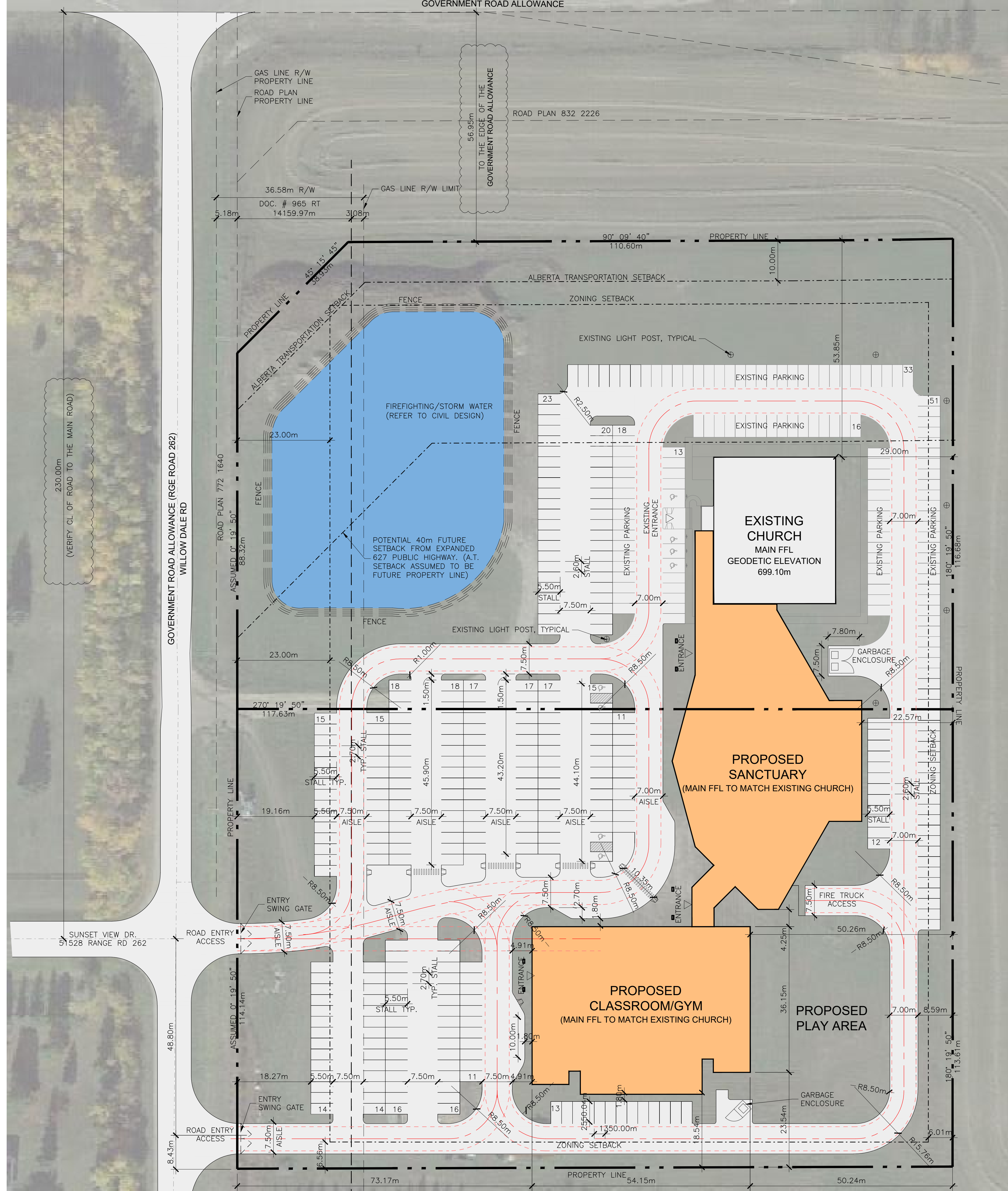
Arletta Water Resources

Alanna Felske, P.Geol.
Junior Hydrogeologist

Ken Hugo, P.Geol.,
Senior Hydrogeologist

APPENDICES

Appendix I:
Site Map



FIRE WATER CALCULATION

EXISTING CHURCH
 BUILDING VOLUME: 8,192.2 m³
 REQUIRED SPATIAL COEFFICIENT: 1.5
 WATER SUPPLY COEFFICIENT: 15
 THEREFORE:
 $Q = 8,192.2 \times 1.5 \times 15 = 184,325$ Liters

PROPOSED SANCTUARY
 BUILDING VOLUME: 22,088.0 m³
 REQUIRED SPATIAL COEFFICIENT: 1.5
 WATER SUPPLY COEFFICIENT: 15
 THEREFORE:
 $Q = 22,088.0 \times 1.5 \times 15 = 496,980$ Liters

PROPOSED CLASSROOM/GYM
 BUILDING VOLUME: 11,744.0 m³
 REQUIRED SPATIAL COEFFICIENT: 1.5
 WATER SUPPLY COEFFICIENT: 19
 THEREFORE:
 $Q = 11,744.0 \times 1.5 \times 19 = 334,704$ Liters

TOTAL EXISTING CISTERN	1,016,009.0 Liters
NEW FIRE WATER SUPPLY REQUIRED	861,009.0 Liters

SITE DEVELOPMENT ANALYSIS:

Legal Address: Lot 1A and Lot 1B, Block 1, Plan 1020669, NW-35-51-26-4
Municipal Address: 51529A Range Road 262, Parkland County, AB
District: (CR) Country Residential District
Land Use: Discretionary Use
Building Classification: Existing Church - Religious Assembly, Proposed Sanctuary Bldg - Religious Assembly, Proposed Classroom/Gym Bldg. - Educational Services

SITE AREA
 Lot 1A = 20,200m² (2.02 Ha)
 Lot 1B = 20,200m² (2.02 Ha)
 TOTAL: 40,400m² (4.04 Ha)

FLOOR AREA
Existing Church
 Main Floor: 1,125m²
 Lobby Mezzanine: 82m²
 Sanctuary Mezzanine: 37m²
 Total: 1,244m²
Proposed Sanctuary
 Main floor: 2,645m²
 Balcony Seating: 698m²
 Total: 3,343m²
Proposed Classroom/Gym
 Floor Area: 2,114m²
 Total Floor Area: 6,701m²

SITE COVERAGE F.A.R.
 $6,701m^2 / 40,400m^2 = 0.166$ (17%)

MINIMUM SETBACK
 North: 45.7m
 South: 6.1m
 East: 6.1m
 West: 23m

BUILDING HEIGHT
 Existing Church: 8.60m
 Proposed Sanctuary: 25.70m
 Proposed Classroom/GYM: 9.55m

OCCUPANT LOAD
 Existing Church: Existing 348 Seats/Occupants
 Proposed Classroom/Gym Bldg:
 Required classroom floor Area per person: 1.85sqm/student
 Provided Classroom floor area: 52m², Typical
 Maximum No. of Students: (52m² / 1.85m²) x 13 Classrooms=365 Students
 No. Employees: 20 Approx.
 Total: 385 Occupants
 Proposed Sanctuary Bldg:
 Provided No. of Seats: 1,147 Seats max (Greatest Occupant load)

PARKING REQUIREMENT
 Note: Occupancy of buildings on site is nonconcurrent, therefore calculation is based on the occupancy with the greatest number of persons/occupants.
 Proposed Sanctuary Bldg with greatest occupant load: 1,147 Seats
 Parking Requirement for Religious Assembly: 1 parking space per 10 Seats
 Required No. of Stalls (1,147 / 10): 115 Regular Stalls
 Required Number of Barrier Free Stalls (51-100 req'd Stalls): 4 Barrier Free Stalls
 Required Total Number of Stalls: 119 Stalls
 Provided Number of Regular Stalls: 390 Stalls
 Provided Number of Barrier Free Stalls: 8 Barrier Free Stalls
 Provided Total number of Stalls: 398 Stalls



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REVISIONS	
ISSUED FOR	DD.MM.YYYY

PROJECT

Gracelife Church

PARKLAND COUNTY, ALBERTA

DRAWING TITLE

SITE PLAN

SCALE: AS NOTED
 DATE: SEPTEMBER 20, 2023
 PROJ. No.: 23-08
 DWG. #

A1.1

1 SITE PLAN
 A1.1 1:500

**Appendix II:
Water Well Reconnaissance Report**



Reconnaissance Report

[View in Imperial](#)

[Export to Excel](#)

Groundwater Wells

Please click the water Well ID to generate the Water Well Drilling Report.

GIC Well ID	LSD	SEC	TWP	RGE	M	DRILLING COMPANY	DATE COMPLETED	DEPTH (m)	TYPE OF WORK	USE	CHM	LT	PT	WELL OWNER	STATIC LEVEL (m)	TEST RATE (L/min)	SC_DIA (cm)
40249	SE	34	51	26	4	GERALD MCGINN DRILLING LTD.	2002-01-16	59.44	New Well	Domestic		5	1	DCT SVC	25.91	63.65	15.24
40497	2	34	51	26	4	COBOB PUMPS & SERVICES LTD.	2002-01-05	0.00	Existing Well- Decommissioned	Domestic				IRVINE, CAROLYN			0.00
40785	SE	2	52	26	4	SUMMERS DRILLING LTD.	2000-10-31	54.86	New Well	Domestic		5	10	ENOCH BAND#NEW HOUSE 3	21.95	136.38	1.27
87562	SE	2	52	26	4	GERALD MCGINN DRILLING LTD.	1971-08-14	50.29	New Well	Domestic		3		ENOCH BAND	21.34	63.65	10.46
87563	1	2	52	26	4	MCDONALD DRLG	1965-09-01	57.91	New Well	Domestic		6					0.00
87564	SW	2	52	26	4	GERALD MCGINN DRILLING LTD.	1979-06-27	49.99	New Well	Domestic		7		ENOCH BAND	22.86	15.91	11.43
87565	SW	2	52	26	4	BOYD'S WATER WELL DRILLING	1985-06-21	36.58	New Well	Domestic		8		ENOCH BAND	6.71	18.18	0.00
87566	NW	2	52	26	4	MCGINNIS ROBERT		51.21	New Well	Domestic	1	10	3	PAPIN, PERCY	20.42	9.09	11.43
87567	NW	2	52	26	4	GERALD MCGINN DRILLING LTD.	1976-08-20	83.52	New Well	Domestic		21		ENOCH BAND	21.34	15.91	14.12
87568	NW	2	52	26	4	MCGINNIS ROBERT	1963-07-31	59.44	New Well	Domestic		9		COWAN, CHARLES	19.20	22.73	11.43
87569	NW	2	52	26	4	BOYD'S WATER WELL DRILLING	1985-10-24	44.81	New Well	Domestic		8		ENOCH BAND	10.67	68.19	11.43
87572	SE	3	52	26	4	GERALD MCGINN DRILLING LTD.	1965-10-15	54.86	New Well	Domestic	2	10		GORDON, BEN	21.64	45.46	11.43
87573	2	3	52	26	4	OTHER	1958-08-19	91.44	New Well	Domestic	1	11		GORDON, BEN	21.34	4.55	7.62
87574	SW	3	52	26	4	GERALD MCGINN DRILLING LTD.	1976-09-16	54.86	New Well	Domestic		6		ENOCH BAND	24.38	11.37	11.43
87575	SW	3	52	26	4	GERALD MCGINN DRILLING LTD.	1965-12-22	39.62	New Well	Domestic		7		MORIN, SAMMY	20.42	31.82	11.43
87576	SW	3	52	26	4	GERALD MCGINN DRILLING LTD.	1970-01-01	54.86	New Well	Domestic		15		ENOCH BAND	29.87	63.65	10.46
87577	SW	3	52	26	4	UHRYN'S WELL BORING	1962-09-20	12.80	New Well	Domestic		2		MORIN, LOUIS	6.10	9.09	60.96
87578	SW	3	52	26	4	MCGINNIS ROBERT	1965-12-28	36.58	New Well- Decommissioned	Domestic		11		MORIN, ROMEO			0.00
87579	SW	3	52	26	4	MCGINNIS ROBERT	1965-12-22	39.62	New Well	Domestic		8		MORIN, JIMMY	20.42	31.82	11.43
87580	SW	3	52	26	4	UNKNOWN DRILLER		10.67	New Well	Domestic				MORIN, LOUIS	6.10	9.09	0.00



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87581	SW	3	52	26	4	UNKNOWN DRILLER		0.00	Chemistry					ENOCH BAND			0.00
87582	SW	3	52	26	4	BOYD'S WATER WELL DRILLING	1982-09-26	77.72	New Well	Domestic		20		ENOCH BAND	4.27	6.82	0.00
87583	SW	3	52	26	4	GERALD MCGINN DRILLING LTD.	1980-05-08	60.96	New Well	Domestic		15		ENOCH BAND	6.10	31.82	11.43
87590	NE	3	52	26	4	GERALD MCGINN DRILLING LTD.	1974-10-07	88.09	New Well	Domestic & Stock		24		ENOCH BAND	7.62	9.09	11.43
87591	NE	3	52	26	4	MCAULEY DRILLING CO. LTD.		67.06	Chemistry	Domestic	1	20		THOMAS, ISADORE			0.00
87592	NE	3	52	26	4	GERALD MCGINN DRILLING LTD.	1980-10-09	32.00	New Well	Domestic		6		ENOCH BAND	7.62	22.73	11.43
89025	SE	34	51	26	4	HOKENSON WW LTD	1972-04-01	51.82	New Well	Domestic		7		GERMAIN, N.	22.86	45.46	10.16
89026	SE	34	51	26	4	IRMC WATER WELL SERVICE & SUPPLY CO. LTD.	1976-08-03	56.39	New Well	Domestic	1	7		VANI, FRED	33.53	9.09	11.43
89027	SE	34	51	26	4	UNKNOWN DRILLER		49.38	Chemistry	Domestic	2			KELLY, MIKE			0.00
89028	SE	34	51	26	4	UNKNOWN DRILLER		49.38	Chemistry	Domestic	2			ZERBST, K.			0.00
89029	SE	34	51	26	4	HOKENSON WW LTD	1971-01-01	50.29	New Well	Domestic		4		MCBAIN, A.	21.34	54.55	10.16
89030	SE	34	51	26	4	HOKENSON WW LTD	1971-01-01	59.44	New Well	Domestic		4		CUNNINGHAM, GERALD	22.56	36.37	10.16
89031	SE	34	51	26	4	HOKENSON WW LTD	1971-09-01	57.91	New Well	Domestic		6		PHILLIPS, TOM	21.64		0.00
89032	SE	34	51	26	4	HOKENSON WW LTD	1973-05-01	54.86	New Well	Domestic	1	4		NICHOLSON, R.	23.16	36.37	0.00
89033	SE	34	51	26	4	WESTERN DRLG & CONST	1970-07-01	73.15	New Well	Domestic		6		STONEHAWKER, JOHN	27.43	31.82	11.43
89034	SE	34	51	26	4	HOKENSON WW LTD	1970-04-11	55.78	New Well	Domestic	1	7		ZUROSKISE, C.	22.25	36.37	0.00
89035	SE	34	51	26	4	HOKENSON WW LTD	1971-08-01	54.86	New Well	Domestic		5		VANDERBERGER	22.25	45.46	0.00
89036	SE	34	51	26	4	GERALD MCGINN DRILLING LTD.	1971-05-05	64.01	New Well	Domestic		13		RITZ, HUGH	22.86	63.65	11.43
89037	SE	34	51	26	4	HOKENSON WW LTD	1972-07-01	57.91	New Well	Domestic		4		HALIHISKA,	23.77	36.37	11.43
89038	SE	34	51	26	4	HOKENSON WW LTD	1971-08-01	56.39	New Well	Domestic		4		GOLKA,	22.25	36.37	11.43



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89039	SE	34	51	26	4	HOKENSON WW LTD	1971-05-01	56.39	New Well	Domestic		6		EDGER, R.	22.25	36.37	11.43
89040	SE	34	51	26	4	HOKENSON WW LTD	1971-05-01	57.91	New Well	Domestic		6		MAUL	22.25	45.46	11.43
89041	SE	34	51	26	4	HOKENSON WW LTD	1972-04-01	53.34	New Well	Domestic		5		AIRES, DOUG	24.38	36.37	11.43
89042	SE	34	51	26	4	HOKENSON WW LTD	1971-06-01	59.44	New Well	Domestic		4		HAROLD, J.	20.12	45.46	11.43
89043	SE	34	51	26	4	HOKENSON WW LTD	1971-05-01	51.82	New Well	Domestic		6		LEFREVE,	22.86	36.37	11.43
89044	SE	34	51	26	4	UNKNOWN DRILLER		53.34	Chemistry	Domestic	1			THOMPSON, ALLAN			0.00
89045	SE	34	51	26	4	UNKNOWN DRILLER		53.34	Chemistry	Domestic	2			KURASH, O.			0.00
89046	SE	34	51	26	4	BOYD'S WATER WELL DRILLING	1983-05-05	54.86	New Well	Domestic		10		SCHULTZ, WALTER	21.64	68.19	11.43
89047	2	34	51	26	4	GROVE DRILLING ENTERPRISES (1980) LTD.	1983-11-01	59.44	New Well	Domestic	1	8		PHILLIPS, E.	0.00		11.43
89048	SE	34	51	26	4	IRMC WATER WELL SERVICE & SUPPLY CO. LTD.	1984-06-15	50.29	New Well	Domestic		6		KENNEDY, RICHARD	23.77	36.37	12.70
89049	SE	34	51	26	4	HOKENSON WW LTD	1970-12-01	57.91	New Well	Domestic		3		PHILLIPS, JOHN	21.34	40.91	11.43
89050	SE	34	51	26	4	UNKNOWN DRILLER		54.86	Chemistry	Domestic	1			RANOSTAY, C.P.			0.00
89051	SE	34	51	26	4	UNKNOWN DRILLER		57.91	Existing Well- Decommissioned	Domestic	1			THOMPSON, ALLAN R.			0.00
89052	SE	34	51	26	4	UNKNOWN DRILLER		56.39	Chemistry	Domestic	1			IRVINE, ROY A.			0.00
89053	SE	34	51	26	4	GERALD MCGINN DRILLING LTD.	1986-06-18	68.58	New Well	Domestic	1	7		HALABISKY, WAYNE	24.38	31.82	11.43
89054	7	34	51	26	4	MID-WEST DRILLING LTD.	1988-10-15	50.29	Reconditioned	Domestic		1		SMITH, JOHN	27.43	5.68	11.43
89054	7	34	51	26	4	COBOB PUMPS & SERVICES LTD.	1999-03-24	0.00	Existing Well- Decommissioned	Domestic				SMITH, DON			0.00
89055	SE	34	51	26	4	GERALD MCGINN DRILLING LTD.	1989-11-14	64.01	New Well	Domestic		4		MURDOC, BILL	24.38	34.10	14.12
89056	SE	34	51	26	4	GERALD MCGINN DRILLING LTD.	1981-07-15	62.48	New Well	Domestic	1	6		MARCINKOWSKI, NELLY	27.43	15.91	11.43
89057	SE	34	51	26	4	IRMC WATER WELL SERVICE & SUPPLY CO. LTD.	1985-05-23	55.47	New Well	Domestic		6		STONEHOCKER, JOHN	27.43	22.73	12.70



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89058	SE	34	51	26	4	UNKNOWN DRILLER		57.91	Chemistry	Domestic	1			MARCINKOSKI, W.			0.00
89059	1	34	51	26	4	UNKNOWN DRILLER		6.10	Federal Well Survey	Domestic & Stock				MORTZ, E.			0.00
89060	8	34	51	26	4	UNKNOWN DRILLER		5.49	Well Inventory	Investigation	1			ARC#WELL 5			0.00
89064	11	34	51	26	4	HOKENSON WW LTD	1970-03-01	56.08	New Well	Domestic		11		WOLOSHYN#WELL 1	18.29	36.37	11.46
89065	NW	34	51	26	4	UNKNOWN DRILLER		45.72	Chemistry	Domestic	1			ST CYR, PAUL/KAREN			0.00
89066	NE	34	51	26	4	UNKNOWN DRILLER	1974-01-01	36.58	Chemistry	Domestic	1			BROWN, G.			0.00
89067	NE	34	51	26	4	UNKNOWN DRILLER	1974-02-25	64.01	New Well	Domestic	1	7		B&H HOMES	33.53	63.65	11.43
89068	NE	34	51	26	4	IRMC WATER WELL SERVICE & SUPPLY CO. LTD.	1974-08-28	64.01	New Well	Domestic		6		BOTS, JOE	0.00	18.18	11.43
89069	NE	34	51	26	4	HOKENSON WW LTD	1972-07-01	54.25	New Well	Domestic		5		WESTON	21.34	45.46	11.43
89070	NE	34	51	26	4	HOKENSON WW LTD	1972-09-01	50.29	New Well	Domestic		4		SCHENFIELD, H.	19.51	36.37	11.43
89071	NE	34	51	26	4	HOKENSON WW LTD	1972-05-01	51.82	New Well	Domestic		5		SCHNIDER, T.	19.20	45.46	11.43
89072	NE	34	51	26	4	HOKENSON WW LTD	1973-07-01	55.47	New Well	Domestic		6		GOUER	23.16	36.37	11.46
89073	NE	34	51	26	4	UNKNOWN DRILLER		152.40	Chemistry	Domestic	1			MELECH, V.P.			0.00
89074	NE	34	51	26	4	UNKNOWN DRILLER	1973-10-05	51.82	Chemistry	Domestic	1			FITZSIMMONS, GEORGE			0.00
89075	NE	34	51	26	4	UNKNOWN DRILLER	1973-07-01	48.77	Chemistry	Domestic	1			VANDENBERG, RALPH			0.00
89076	NE	34	51	26	4	IRMC WATER WELL SERVICE & SUPPLY CO. LTD.	1978-07-25	50.60	New Well	Domestic		9		BERTLEFF, JOHN	21.95	68.19	11.43
89077	NE	34	51	26	4	GROVE DRILLING ENTERPRISES (1980) LTD.	1978-02-01	68.58	New Well	Domestic		12		NOVELASKI, GARY	18.29	10.23	11.43
89078	NE	34	51	26	4	HOKENSON WW LTD	1974-08-24	48.77	New Well	Domestic		5		BRINKMAN, DON	33.53	27.28	11.43
89079	NE	34	51	26	4	UNKNOWN DRILLER		6.10	Chemistry	Domestic	1			FORD, GARTH			152.40
89080	NE	34	51	26	4	GERALD MCGINN DRILLING LTD.	1983-06-22	65.84	New Well	Domestic		8		NORMAND, TED	27.43	63.65	11.43



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89081	NE	34	51	26	4	IRMC WATER WELL SERVICE & SUPPLY CO. LTD.	1984-08-11	53.95	New Well	Domestic		6		GOUR, N.	24.08	22.73	12.70
89082	NE	34	51	26	4	IRMC WATER WELL SERVICE & SUPPLY CO. LTD.	1984-09-02	53.34	New Well	Domestic		7		BELL, JAMES	23.16	81.83	12.70
89083	NE	34	51	26	4	KAP'S DRILLING LTD.	1985-07-23	56.39	New Well	Domestic		1		MELECH, VIC	10.67	6.82	11.43
89084	NE	34	51	26	4	UNKNOWN DRILLER		33.53	Chemistry	Domestic	1			YEATHEARD, KEN			0.00
89085	NE	34	51	26	4	UNKNOWN DRILLER		79.25	Chemistry	Domestic	1			BROWN, DENNIS			0.00
89086	NE	34	51	26	4	UNKNOWN DRILLER		48.77	Chemistry	Domestic	1			ST CYR, PAUL/KAREN			0.00
89087	NE	34	51	26	4	GERALD MCGINN DRILLING LTD.	1986-12-16	65.23	New Well	Domestic		7		PARKINSON, GEORGE	25.91	34.10	12.70
89088	NE	34	51	26	4	KAP'S DRILLING LTD.	1986-10-31	57.61	New Well	Domestic		11		ERICKSON, LISA	22.86	18.18	14.12
89089	NE	34	51	26	4	GROVE DRILLING LTD	1988-02-24	59.74	New Well	Domestic		6		ST CYR, PAUL	18.29	13.64	11.43
89090	NE	34	51	26	4	KAP'S DRILLING LTD.	1988-06-09	60.96	New Well	Domestic		4		KILLIPS, DON	30.48	22.73	11.43
89091	NE	34	51	26	4	GERALD MCGINN DRILLING LTD.	1989-02-09	65.53	New Well	Domestic		5		EMMERLING, DONALD	27.43	95.47	14.12
89092	NE	34	51	26	4	UNKNOWN DRILLER		0.00	Chemistry	Domestic				HOWLE, COLETTE			0.00
89093	NE	34	51	26	4	UNKNOWN DRILLER		0.00	Chemistry	Domestic				KOZAK, CYNTHIA			0.00
89094	NE	34	51	26	4	UNKNOWN DRILLER		62.79	Chemistry	Domestic				THEOPHILE, JOANNE			0.00
89095	NE	34	51	26	4	UNKNOWN DRILLER		24.38	Chemistry	Domestic				SCHNEIDER, ANNETTE			0.00
89096	SE	35	51	26	4	UNKNOWN DRILLER	1972-01-01	13.72	Chemistry	Domestic	1			MEDWED, JOHN			0.00
89097	SE	35	51	26	4	GROVE DRILLING LTD	1975-11-01	41.15	New Well	Domestic		5		KARARRIGAN	15.24	31.82	11.43
89098	SE	35	51	26	4	GROVE DRILLING LTD	1975-11-01	44.20	New Well	Domestic	1	6		HALLMARK HOME	18.29	22.73	11.43
89099	SE	35	51	26	4	IRMC WATER WELL SERVICE & SUPPLY CO. LTD.	1977-10-12	41.76	New Well	Domestic	1	5		KOHLRUSS, DOUGLAS W.	16.76	27.28	11.43
89100	SE	35	51	26	4	UNKNOWN DRILLER		44.50	Chemistry	Domestic	2			SUTTON, B.			0.00



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89101	SE	35	51	26	4	UNKNOWN DRILLER		37.19	Chemistry	Domestic	2			HOLMES, A.D.			0.00
89102	SE	35	51	26	4	UNKNOWN DRILLER		48.77	Chemistry	Domestic	1			LAMMERS			0.00
89103	SE	35	51	26	4	UNKNOWN DRILLER		41.15	Chemistry	Domestic	1			VLECK, WAYNE M.			0.00
89104	SE	35	51	26	4	UNKNOWN DRILLER	1975-03-15	57.91	Chemistry	Domestic	1			BABOR, JOHN			0.00
89104	SE	35	51	26	4	SUMMERS DRILLING LTD.			Existing Well- Decommissioned	Domestic				BABOR, JOHN			
89105	SE	35	51	26	4	UNKNOWN DRILLER		8.53	Chemistry	Domestic	1			SHEPPARD, T.W.			0.00
89106	SE	35	51	26	4	UNKNOWN DRILLER		15.24	Chemistry	Domestic	1			LAIRD, TERRY			0.00
89107	SE	35	51	26	4	UNKNOWN DRILLER		41.15	Chemistry	Domestic	1			MARTYNIUK, HENRY			0.00
89108	SE	35	51	26	4	UNKNOWN DRILLER		36.58	Chemistry	Domestic	2			LEONARD, D.H.			0.00
89109	SE	35	51	26	4	UNKNOWN DRILLER	1973-07-08	9.75	Chemistry	Domestic	1			MEDWED, JOHN			60.96
89110	SE	35	51	26	4	IRMC WATER WELL SERVICE & SUPPLY CO. LTD.	1979-06-02	35.36	New Well	Domestic		9		CEBLANE, G.	17.68	40.91	11.43
89111	SE	35	51	26	4	IRMC WATER WELL SERVICE & SUPPLY CO. LTD.	1979-08-29	36.58	New Well	Domestic	1	11		DEVOS, ROY	3.35	18.18	11.43
89112	SE	35	51	26	4	UNKNOWN DRILLER		18.29	Chemistry	Domestic	1			KUCHER, LEON			0.00
89113	SE	35	51	26	4	UNKNOWN DRILLER	1975-03-21	81.69	Chemistry	Domestic	1			BABOR, JOHN			0.00
89114	SE	35	51	26	4	GERALD MCGINN DRILLING LTD.	1980-10-25	36.58	New Well	Domestic	2	8		SHEPPARD, BILL	16.76	15.91	11.43
89115	SE	35	51	26	4	UNKNOWN DRILLER		0.00	Chemistry	Domestic				GULKA, M.			0.00
89116	SE	35	51	26	4	UNKNOWN DRILLER		45.42	Chemistry	Domestic	1			MARTYNIUK, HENRY			0.00
89117	SE	35	51	26	4	UNKNOWN DRILLER		48.16	Chemistry	Domestic	1			GIBSON, J.M.			0.00
89118	2	35	51	26	4	IRMC WATER WELL SERVICE & SUPPLY CO. LTD.	1983-09-02	49.99	New Well	Domestic		5		FERRY, DON	18.59	29.55	12.70
89119	SE	35	51	26	4	LANDO ENTERPRISES LTD.	1983-07-06	45.72	New Well	Domestic	1	8		JONES, OWEN	10.67	68.19	11.43



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89120	SE	35	51	26	4	GERALD MCGINN DRILLING LTD.	1983-11-16	53.34	New Well	Domestic		5		GIBSON, MAC	19.81	95.47	11.43
89121	2	35	51	26	4	GROVE DRILLING ENTERPRISES (1980) LTD.	1983-10-06	50.29	Chemistry	Contaminati on Invest.	1	5		TOMTE, DOUG	5.49	22.73	10.16
89122	7	35	51	26	4	GERALD MCGINN DRILLING LTD.	1984-04-06	115.52	New Well	Domestic		20	2	MARTYNIUK, HENRY	21.34	11.37	14.12
89123	SE	35	51	26	4	UNKNOWN DRILLER		42.67	Chemistry	Domestic	1			MCQUARRIE, A.V.			0.00
89124	SE	35	51	26	4	GERALD MCGINN DRILLING LTD.	1985-12-13	118.87	New Well	Domestic		23		LEENTVAAR, HUGO	22.86	31.82	11.43
89125	SE	35	51	26	4	GROVE DRILLING LTD	1976-05-01	59.44	New Well	Domestic		15		LAIARD	9.14	63.65	11.43
89126	SE	35	51	26	4	UNKNOWN DRILLER		0.00	Chemistry	Domestic				THOMPSON, JUDY			0.00
89127	SE	35	51	26	4	UNKNOWN DRILLER		39.62	Chemistry	Domestic	1			KOEBEL, SANDRA			0.00
89128	SE	35	51	26	4	GERALD MCGINN DRILLING LTD.	1986-06-23	50.29	New Well	Domestic		6		OLIVER, SHELDON	18.29	31.82	11.43
89129	SE	35	51	26	4	GROVE DRILLING LTD	1986-05-05	36.58	New Well	Domestic		5		JORGENSON, WAYNE	15.24	22.73	11.43
89130	SE	35	51	26	4	GROVE DRILLING LTD	1987-02-05	50.29	New Well	Domestic		4		JOSIASSEN, TOM	13.72	27.28	11.43
89131	SE	35	51	26	4	BIG IRON DRILLING LTD.	1987-05-08	45.72	New Well	Domestic		11		HORCH, RICHARD	18.29	22.73	14.12
89132	SE	35	51	26	4	UNKNOWN DRILLER		48.77	Chemistry	Domestic				LENTON, F.F.			0.00
89133	SE	35	51	26	4	UNKNOWN DRILLER		12.19	Chemistry	Domestic				ALBERT, HAROLD			0.00
89134	SE	35	51	26	4	UNKNOWN DRILLER		30.48	Chemistry	Domestic				NORMAND, JOHN/ALISON			0.00
89135	SE	35	51	26	4	GERALD MCGINN DRILLING LTD.	1989-05-16	42.67	New Well	Domestic		7		HODGSON, TOM	19.81	63.65	0.00
89136	SE	35	51	26	4	UNKNOWN DRILLER		0.00	Chemistry	Domestic				SKOCZYLAS, SARAH			0.00
89137	3	35	51	26	4	SUMMERS DRILLING LTD.	1980-06-10	7.92	New Well	Domestic		2		MELCOR DEV	4.27	272.77	63.50
89138	NW	35	51	26	4	HOKENSON WW LTD	1971-04-01	60.96	New Well	Domestic		4		PAHALL	18.59	45.46	11.43
89139	NW	35	51	26	4	UNKNOWN DRILLER		60.96	Chemistry	Domestic	1			GINTHER, RON			0.00



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GIC Well ID	LSD	SEC	TWP	RGE	M	DRILLING COMPANY	DATE COMPLETED	DEPTH (m)	TYPE OF WORK	USE	CHM	LT	PT	WELL OWNER	STATIC LEVEL (m)	TEST RATE (L/min)	SC_DIA (cm)
89140	14	35	51	26	4	UNKNOWN DRILLER		64.01	Well Inventory	Investigation	1	2		RESEARCH COUNCIL#WELL 4A			0.00
89141	14	35	51	26	4	UNKNOWN DRILLER		137.16	Well Inventory	Domestic	1			RESEARCH COUNCIL#WELL 4B			0.00
89142	NE	35	51	26	4	HOKENSON WW LTD	1971-08-01	54.86	New Well	Domestic		5		BELL	22.25	36.37	11.43
89143	NE	35	51	26	4	GROVE DRILLING LTD	1986-05-13	11.89	New Well	Domestic		8		WESTRIDGE	4.57	31.82	76.20
89144	16	35	51	26	4	UNKNOWN DRILLER		7.62	Well Inventory	Investigation	1			RESEARCH COUNCIL#WELL 13			91.44
89145		35	51	26	4	UNKNOWN DRILLER		0.00	Chemistry	Domestic				SHEPPARD, T. WM			0.00
89146		35	51	26	4	UNKNOWN DRILLER		15.24	Chemistry	Domestic	1			POMNITZ, H.			0.00
89147		35	51	26	4	UNKNOWN DRILLER		36.58	Chemistry	Domestic	2			HIGGINS, ROBERT C.			0.00
101025	SE	34	51	26	4	HOKENSON WW LTD	1970-09-01	60.35	New Well	Domestic		4		DOUCETTE	21.34	36.37	10.16
101026	SE	34	51	26	4	UNKNOWN DRILLER		41.76	Chemistry	Domestic	1			DOUCETTE, A.	24.38		0.00
101027	NE	34	51	26	4	UNKNOWN DRILLER		59.44	Chemistry	Domestic	1			URBANOSKI, W.J.			0.00
101028	NE	34	51	26	4	GERALD MCGINN DRILLING LTD.	1977-02-18	59.44	New Well	Domestic		3		CZUROSKI, ROD	0.00	63.65	11.43
101029	NE	34	51	26	4	UNKNOWN DRILLER		50.90	Chemistry	Domestic	1			BELL, JAMES	22.86		0.00
101030	NE	34	51	26	4	UNKNOWN DRILLER		48.77	Chemistry	Domestic	1			BELL, JAMES	18.29		0.00
101031	NE	34	51	26	4	IRMC WATER WELL SERVICE & SUPPLY CO. LTD.	1978-07-21	54.25	New Well	Domestic	3	6		SPADAFORA, FRANK	21.34	54.55	11.43
101032	NE	34	51	26	4	UNKNOWN DRILLER		45.72	Chemistry	Domestic	1			SPADAFORA, FRANK	21.34		0.00
101125	5	2	52	26	4	MCALLISTER WATERWELLS LTD.	1981-10-16	71.32	Cathodic Protection	Industrial		7		CHEVRON			15.24
150184	NE	35	51	26	4	BAR K DRILLING LTD.	1990-03-02	59.74	New Well	Domestic		5		HAARWEST FARMS	17.68	54.55	12.70
151109	NE	34	51	26	4	GERALD MCGINN DRILLING LTD.	1990-05-01	68.58	New Well	Domestic		10		AINSLIE, BOB	30.48	45.46	14.12
151202	SE	34	51	26	4	COBOB PUMPS & SERVICES LTD.	1990-02-27	60.96	New Well	Domestic		6		SMITH, JIM	26.00	68.19	13.97



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GIC Well ID	LSD	SEC	TWP	RGE	M	DRILLING COMPANY	DATE COMPLETED	DEPTH (m)	TYPE OF WORK	USE	CHM	LT	PT	WELL OWNER	STATIC LEVEL (m)	TEST RATE (L/min)	SC_DIA (cm)
151203	SE	34	51	26	4	COBOB PUMPS & SERVICES LTD.	1990-02-24	60.96	New Well	Domestic		6		ARTUM, BILL	24.38	22.73	15.24
151983	SE	34	51	26	4	GROVE DRILLING ENTERPRISES (1980) LTD.	1989-05-14	53.34	New Well	Domestic		4		VANI, ROGER	29.87	11.37	12.70
151984	NW	35	51	26	4	BAR K DRILLING LTD.	1989-11-29	59.74	New Well	Domestic		5		PAHAL, DOROTHY	20.12	54.55	12.70
152767	NE	34	51	26	4	COBOB PUMPS & SERVICES LTD.	1990-08-28	97.54	New Well	Domestic		25		GINIS, G.	21.34	9.09	15.24
153363	NE	34	51	26	4	MID-WEST WATER WELLS LTD.	1990-10-16	57.91	New Well	Domestic		8		KOZAK, CYNTHIA	18.29	136.38	14.12
154832	NE	34	51	26	4	MID-WEST WATER WELLS LTD.	1991-02-20	59.44	New Well	Domestic		8		DOWSETT, JOHN	18.29	90.92	14.12
154850	SE	3	52	26	4	SUMMERS DRILLING LTD.	1990-07-02	64.01	New Well	Domestic		15		GORDON, RITA	8.23	13.64	14.12
156627	SE	35	51	26	4	UNKNOWN DRILLER		44.81	Chemistry	Domestic				GOODWIN, MURRAY			0.00
157628	SW	3	52	26	4	SUMMERS DRILLING LTD.	1991-03-16	35.05	New Well	Domestic		4		ENOCH INDIAN RESERVE	12.19	13.64	12.70
157689	NE	34	51	26	4	HOKENSON WW LTD	1973-06-01	54.86	New Well	Domestic		4		ZYP, H.	22.56	36.37	10.16
158254	SE	34	51	26	4	IRMC WATER WELL SERVICE & SUPPLY CO. LTD.	1975-06-09	57.91	New Well	Domestic		4		MURDOCH, BILL	21.34	9.09	11.43
158931	SE	35	51	26	4	BIG IRON DRILLING LTD.	1991-08-03	42.98	New Well	Domestic		8		FRANCIS, BRIAN	18.29	45.46	14.12
160783	SE	35	51	26	4	UNKNOWN DRILLER		121.92	Chemistry	Domestic				DEVOS, REYN			0.00
165814	SE	34	51	26	4	COBOB PUMPS & SERVICES LTD.	1992-04-28	64.01	New Well- Decommissioned	Domestic		14		VANDERZYL, TONY	24.99	136.38	15.24
166527	SE	35	51	26	4	GERALD MCGINN DRILLING LTD.	1992-05-19	56.39	New Well	Domestic		4		SCHNELL, GRACE	21.34	90.92	14.12
167569	SE	35	51	26	4	UNKNOWN DRILLER		45.72	Chemistry	Domestic				LABRANCHE, DAREN			0.00
169926	SE	34	51	26	4	GERALD MCGINN DRILLING LTD.	1992-11-17	65.53	New Well	Domestic		10		LAWRENCE, SAMUEL	33.53	63.65	14.12
193959	NE	34	51	26	4	UNKNOWN DRILLER		7.62	Chemistry	Domestic				BUCK, STAN			0.00
238746	SE	34	51	26	4	D&D WATER WELL DRILLING & SERVICING LTD.	1994-03-23	65.53	New Well	Domestic		9	6	SANCHE, DENNIS	24.38		15.24
241862	SE	34	51	26	4	COBOB PUMPS & SERVICES LTD.	1994-08-16	62.79	New Well	Domestic		4	8	ARTUM, BILL	27.43	181.84	15.24



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GIC Well ID	LSD	SEC	TWP	RGE	M	DRILLING COMPANY	DATE COMPLETED	DEPTH (m)	TYPE OF WORK	USE	CHM	LT	PT	WELL OWNER	STATIC LEVEL (m)	TEST RATE (L/min)	SC_DIA (cm)
270824	SW	3	52	26	4	SUMMERS DRILLING LTD.	1994-08-02	33.53	New Well	Domestic		4	17	ENOCH CREE NATION #HOUSE 2008	17.68	159.11	12.70
280466	4	2	52	26	4	UNKNOWN DRILLER	1951-04-20	225.55	Structure Test Hole	Industrial				ROYALITE OIL CO			0.00
280692	1	2	52	26	4	UNKNOWN DRILLER	1951-04-23	213.97	Core Hole	Industrial				ROYALITE OIL CO			0.00
281103	NE	34	51	26	4	D&D WATER WELL DRILLING & SERVICING LTD.	1996-03-12	58.52	New Well	Domestic		10	5	JETHON, GINA	23.77		15.24
282289	NE	34	51	26	4	D&D WATER WELL DRILLING & SERVICING LTD.	1996-03-12	0.00	Existing Well- Decommissioned	Domestic				JETHON, GINA			0.00
285670	SE	34	51	26	4	COBOB PUMPS & SERVICES LTD.	1996-07-15	60.96	New Well	Domestic		10	13	LAPOINTE, W.	21.95	50.01	15.24
285673	10	34	51	26	4	GORDON'S DRILLING LTD.	1996-07-25	53.64	New Well	Domestic		8		HALBERT, OLIVE	28.04	113.65	12.70
286932	SE	34	51	26	4	BIG IRON DRILLING LTD.	1997-03-27	0.00	Existing Well- Decommissioned	Domestic				HOULE, COLLETTE			0.00
286933	SE	34	51	26	4	BIG IRON DRILLING LTD.	1997-03-26	57.00	New Well	Domestic		11	23	HOULE, COLLETTE	20.73	68.19	15.24
286934	SE	35	51	26	4	D&D WATER WELL DRILLING & SERVICING LTD.	1997-02-13	45.72	New Well	Domestic		9	12	FINDLAY, ED	19.20		15.24
286935	SE	35	51	26	4	D&D WATER WELL DRILLING & SERVICING LTD.	1997-02-14	0.00	Existing Well- Decommissioned	Domestic				FINDLAY, ED			0.00
286936	NW	35	51	26	4	D&D WATER WELL DRILLING & SERVICING LTD.	1997-02-24	59.44	New Well	Domestic		5	7	HAARSMA, GARY	20.73		15.24
287125	SW	2	52	26	4	SUMMERS DRILLING LTD.	1992-05-10	44.20	New Well	Domestic		4		SAMMY#HOUSE	18.29	36.37	12.70
287728	SE	34	51	26	4	SUMMERS DRILLING LTD.	1997-05-25	53.34	New Well	Domestic		8	19	YEATHEARD, KEN	19.20	45.46	12.70
289033	NE	34	51	26	4	BAR K DRILLING LTD.	1998-03-31	58.52	New Well	Domestic		20	8	ZURCHER, HANS	25.79	38.64	12.70
290863	SE	34	51	26	4	COBOB PUMPS & SERVICES LTD.	1999-03-24	62.18	New Well	Domestic		13	10	SMITH, DON	25.60	136.38	15.24
296997	SE	35	51	26	4	MAR-WAYNE WATER WELL DRILLING SERVICES LTD.	2001-06-21	59.74	New Well	Domestic		7	13	OSWALD, SHAWN	20.42	95.47	15.24
299598	NE	34	51	26	4	COBOB PUMPS & SERVICES LTD.	2002-01-05	60.96	New Well	Domestic		4	4	IRVINE, CAROLYN	25.30	113.65	22.86
1165011	15	34	51	26	4	CALIBRE DRILLING LTD.	2004-03-20	91.44	New Well	Domestic		27	25	BROWN DENNIS	22.01	27.28	15.24
1165012	16	34	51	26	4	CALIBRE DRILLING LTD.	2003-12-10	60.96	New Well	Domestic		15	25	CLARKE, CASEY	22.09	136.38	15.24



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GIC Well ID	LSD	SEC	TWP	RGE	M	DRILLING COMPANY	DATE COMPLETED	DEPTH (m)	TYPE OF WORK	USE	CHM	LT	PT	WELL OWNER	STATIC LEVEL (m)	TEST RATE (L/min)	SC_DIA (cm)
1165408	SE	34	51	26	4	CALIBRE DRILLING LTD.	2008-06-17	68.58	New Well	Domestic		10	25	REA, KEITH W.	26.92	159.11	15.24
1165546	9	34	57	26	4	CALIBRE DRILLING LTD.	2010-05-20	65.53	New Well	Domestic		12	22	PANNEBAKER, BILL	24.37	136.34	15.24
1165680	7	34	51	26	4	CALIBRE DRILLING LTD.	2012-09-12	67.06	New Well	Domestic		12	24	SMITH, DON	25.74	45.42	
1166095	SE	35	51	26	4	CALIBRE DRILLING LTD.	2016-07-13	51.21	New Well	Domestic		13	26	DURAN, SERGIO	19.81	90.92	15.24
1270060	NE	34	51	26	4	ELK POINT DRILLING CORP.	1996-12-15	60.96	New Well	Domestic		14	23	CUMMINGS, GEORGE	24.54	37.28	14.12
1300013	SE	34	51	26	4	GERALD MCGINN DRILLING LTD.	2003-05-01	64.31	New Well	Domestic		6	25	TURNER, FLOYD	28.74	31.82	15.24
1300161	8	34	51	26	4	GERALD MCGINN DRILLING LTD.	2007-01-23	59.44	New Well	Domestic		8	22	BRENT, RICK	29.17	31.82	15.24
1300285	10	34	51	26	4	GERALD MCGINN DRILLING LTD.	2002-11-27	59.44	New Well	Unknown		15	22	BRINKMAN, GLEN	29.42	22.73	15.24
1300398	2	35	51	26	4	GERALD MCGINN DRILLING LTD.	2012-04-26	53.95	New Well	Domestic		9	22	SCHAFFER, DOUG	22.86	31.82	15.24
1495257	2	35	51	26	4	MAR-WAYNE WATER WELL DRILLING SERVICES LTD.	2006-05-29	52.73	New Well	Domestic		7	12	LEENTVAAR, HUGO	22.00	90.92	15.24
1495278	8	35	51	26	4	MAR-WAYNE WATER WELL DRILLING SERVICES LTD.	2006-10-06	49.07	New Well	Domestic		4	25	FORNARA, BERNARD	20.36	86.38	15.24
1640677	2	34	51	26	4	RODCO DRILLING	2023-07-18	56.39	New Well	Domestic		7	12	MAUL, BRIGEITTE	24.77	136.38	15.24
1640703	8	34	51	26	4	RODCO DRILLING	2023-10-11	54.25	New Well	Domestic		8	12	KOMANIECKI, WALTER	25.08	90.92	
1715082	1	34	51	26	4	SUMMERS DRILLING LTD.	2004-07-26	64.01	New Well	Domestic		6	16	PONTELUK, STEVE	14.78	136.38	15.24
1715620	SE	34	51	26	4	SUMMERS DRILLING LTD.	2011-03-09	60.96	New Well	Domestic		8	21	HANSEN, KEN	23.64	129.97	15.24
1715621	SE	34	51	26	4	SUMMERS DRILLING LTD.	2011-03-08	60.96	New Well	Domestic		9	25	HANSEN, KEN	22.91	44.96	15.24
1715913	9	34	51	26	4	SUMMERS DRILLING LTD.	2014-01-15	65.53	New Well	Domestic		9	24	BURBRIDGE, GARY	28.48	136.38	
1715939	2	34	51	26	4	SUMMERS DRILLING LTD.	2012-05-10		Existing Well- Decommissioned	Domestic				HANSEN, KEN			
1715952	9	34	51	26	4	SUMMERS DRILLING LTD.	2014-01-17		Existing Well- Decommissioned	Domestic				BURBRIDGE			
1716005	SE	35	51	26	4	SUMMERS DRILLING LTD.	2014-05-14	64.01	New Well	Domestic		2	25	HAARSMA, ANDREW	20.51	68.19	



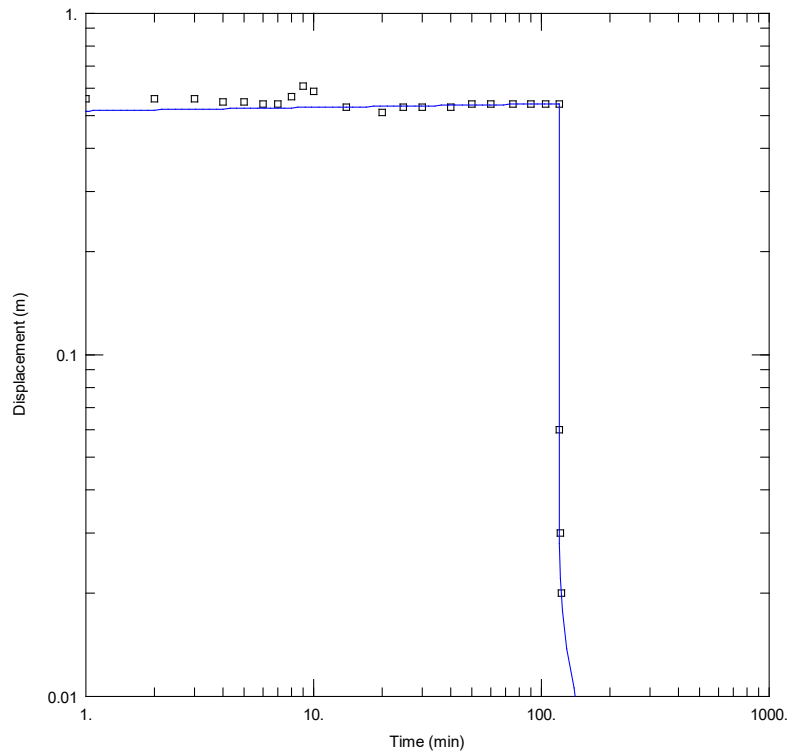
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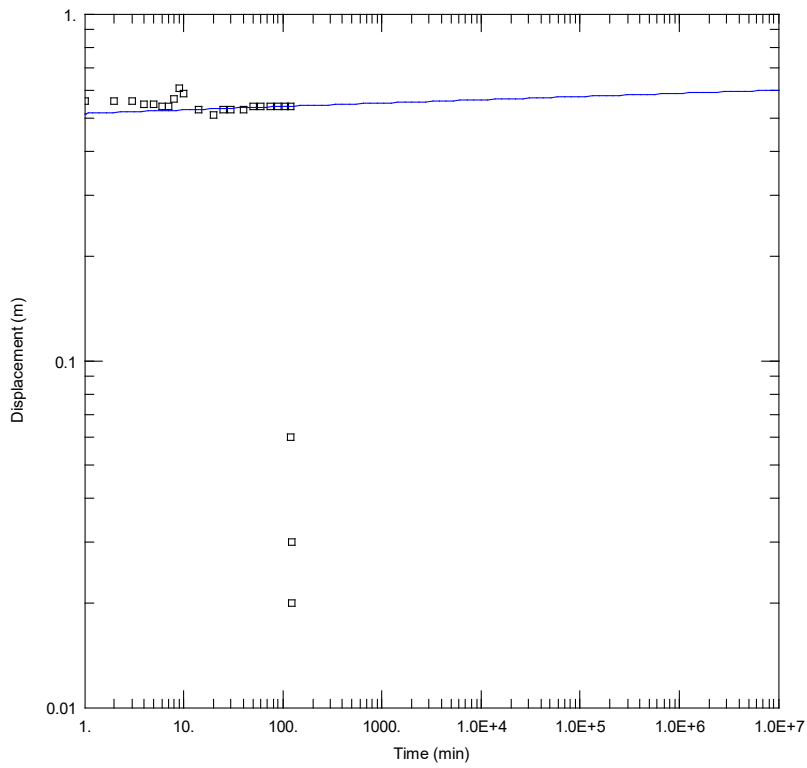
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GIC Well ID	LSD	SEC	TWP	RGE	M	DRILLING COMPANY	DATE COMPLETED	DEPTH (m)	TYPE OF WORK	USE	CHM	LT	PT	WELL OWNER	STATIC LEVEL (m)	TEST RATE (L/min)	SC_DIA (cm)
1716478	16	34	51	26	4	SUMMERS DRILLING LTD.	2017-09-18	114.30	New Well	Domestic		14	20	MCCONNELL, JEREMY	59.44	18.18	15.24
1716557	7	34	51	26	4	SUMMERS DRILLING LTD.	2017-10-23	64.01	New Well	Domestic		8	17	HANSMA, JASON	25.96	45.46	15.24
1716790	13	26	51	26	4	SUMMERS DRILLING LTD.	2018-09-27	68.58	New Well	Domestic		6	26	THOMSON, DAVID	31.44	45.46	15.24
1965830	SE	34	51	26	4	SUMMERS DRILLING LTD.	2002-03-26	50.90	New Well	Domestic		5	20	JOHNSTON, GORDON	12.68	136.38	12.70
2086199	15	34	51	26	4	BLACK DOG DRILLING & ENV SERV. LTD.	2019-05-16	103.63	New Well	Domestic		7	15	GINIS, GREG	26.82	9.09	14.13
2094128	SE	35	51	26	4	UNKNOWNDRILLINGCOMP11	1977-01-07	36.58	Well Inventory	Domestic		1		LEENTVAAR, HUGO			
10096551	10	34	51	26	4	SUMMERS DRILLING INC.	2023-11-14	60.96	New Well	Domestic		13	11	LEDHOWSKI, MICHAEL & DEANNA	28.06	68.19	

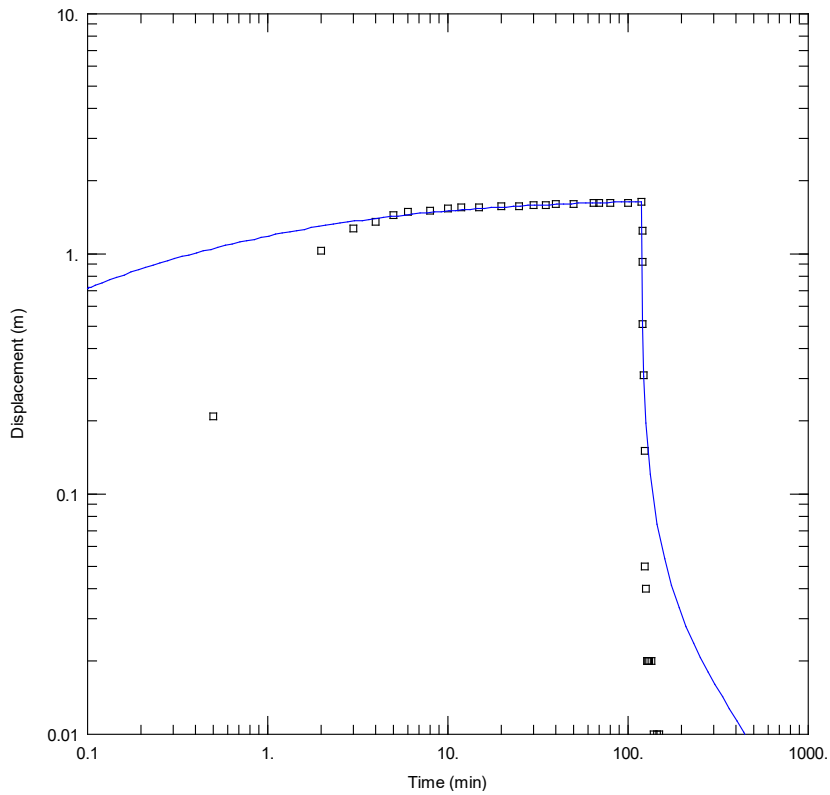
**Appendix III:
AQTESOLV Plots**



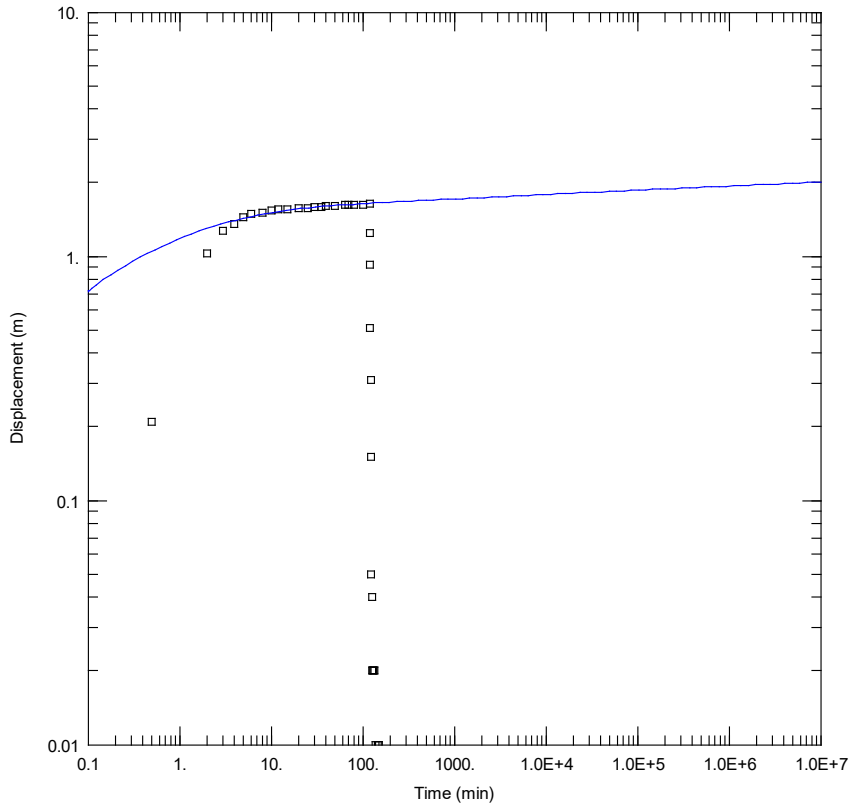
III.A. Pumping test solution fit to data from GIC Well ID 1300013



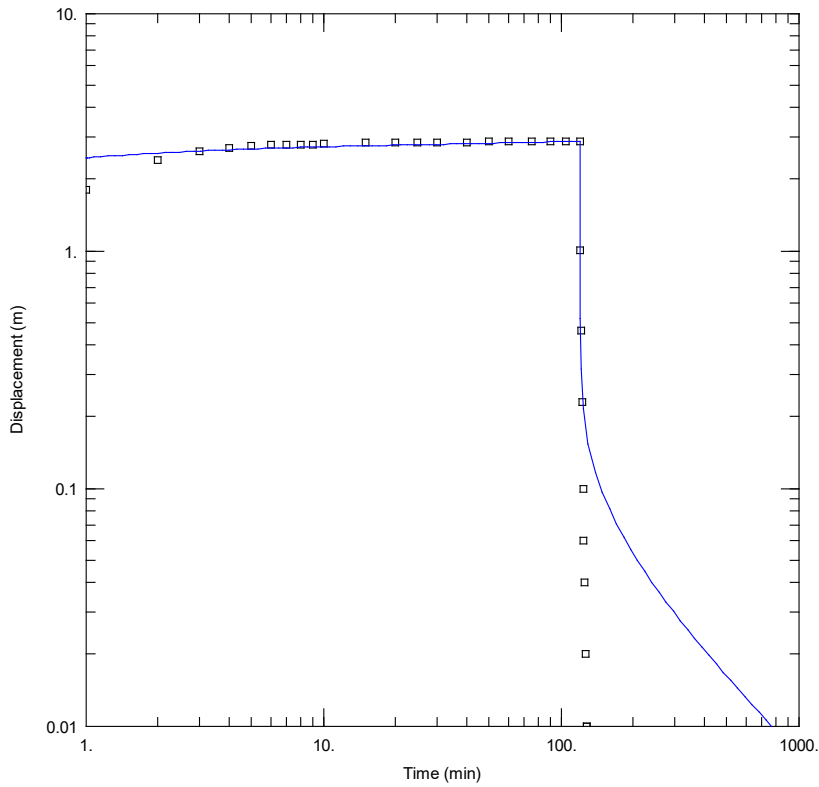
III.B. Solution extrapolated to 20 years of pumping



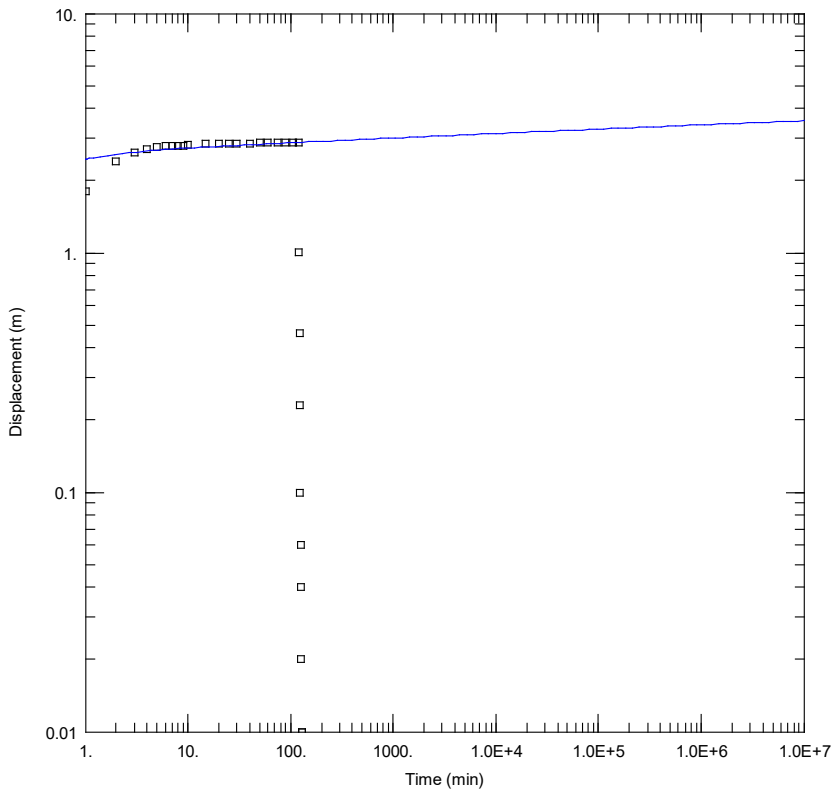
III.C. Pumping test solution fit to data from GIC Well ID 1270060



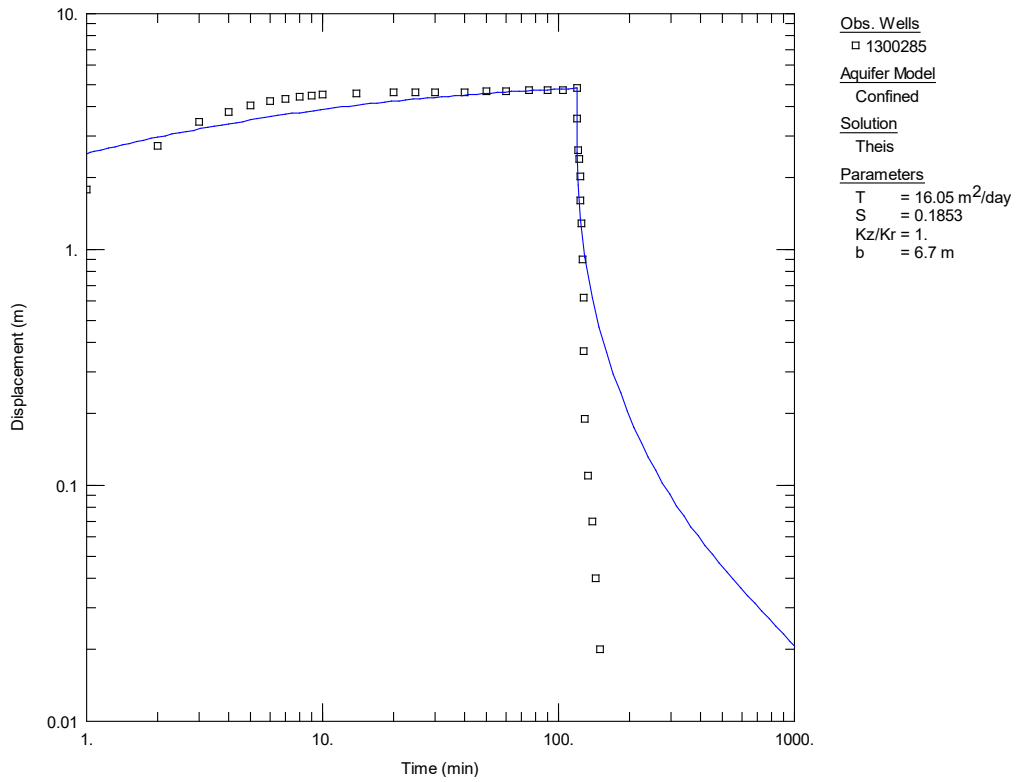
III.D. Solution extrapolated to 20 years of pumping



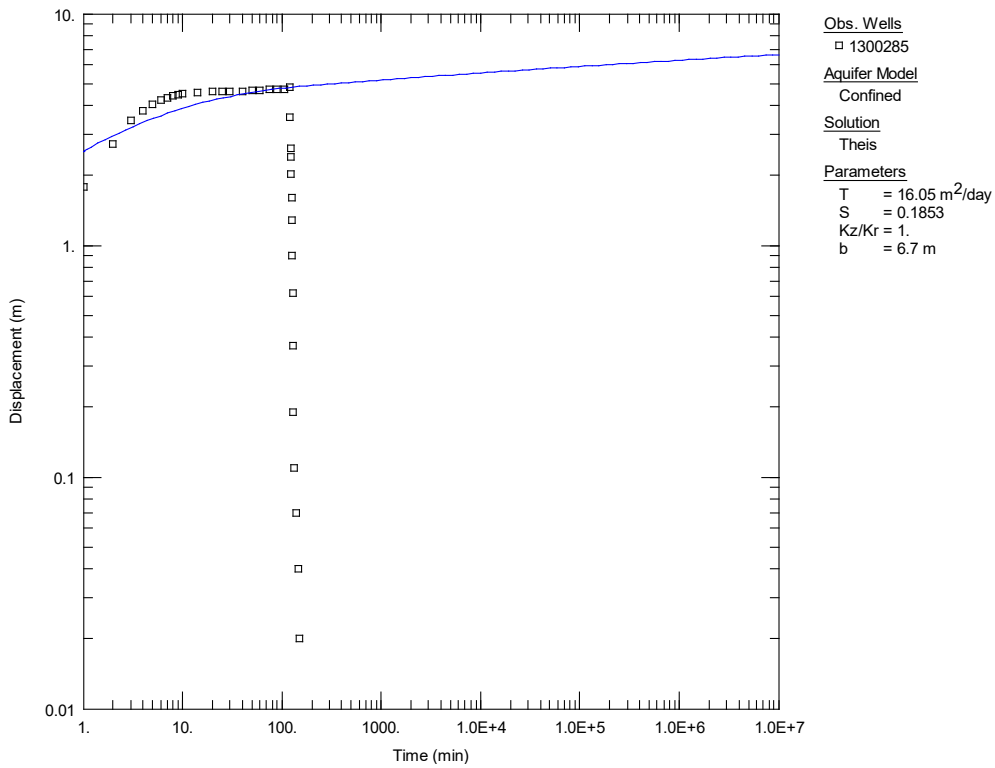
III.E. Pumping test solution fit to data from GIC Well ID 1300161



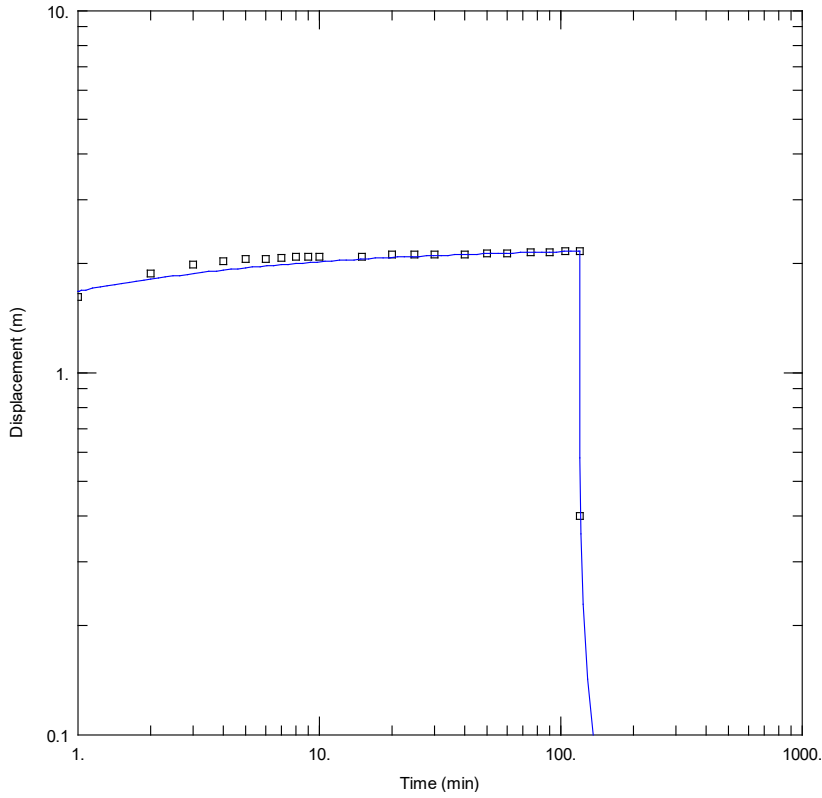
III.F. Solution extrapolated to 20 years of pumping



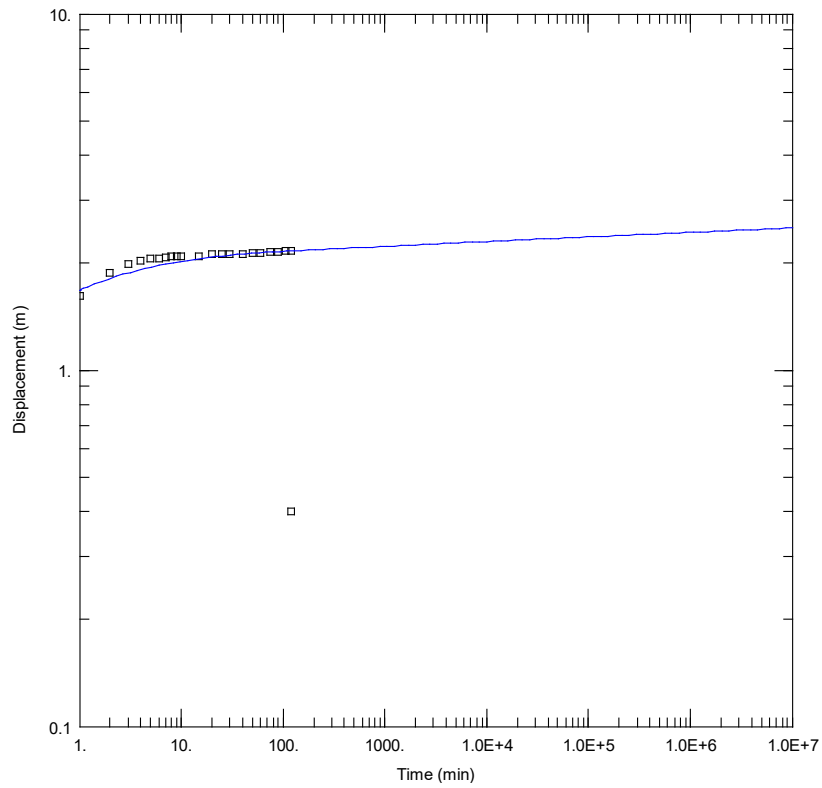
III.G. Pumping test solution fit to data from GIC Well ID 1300285



III.H. Solution extrapolated to 20 years of pumping



III.I. Pumping test solution fit to data from GIC Well ID 1300398



III.J. Solution extrapolated to 20 years of pumping

**Appendix IV:
Water Quality Reports**



CHEMICAL ANALYSIS REPORT

WELL NAME	PHILLIPS, E.	GIC WELL ID	89047
LOCATION	LSD 2 SEC 34 TWP 51 RG 26 M 4	SAMPLE NO.	2073
WELL DEPTH	195.00 ft	WATER LEVEL	23.60 ft
AQUIFER		LABORATORY	AE
SAMPLING DATE	1985-10-12		

FIELD	MG/L	FIELD	MG/L
BICARBONATE		CARBONATE	
CHLORIDE		CONDUCTIVITY	
DISSOLVED OXYGEN		EH	
IRON		MANGANESE	
PH		SULPHATE	
S2		TEMPERATURE(C)	0
TOTAL ALKALINITY		TOTAL HARDNESS	
LABORATORY		Analysis Date	1985-11-08
COD		CONDUCTIVITY	174
DIC		FLUORIDE	0.2300
ION BALANCE		PH	7.90
SAR	7.9000	SIO2	
TOTAL ALKALINITY	793.0000	TC	
TDS	1,126	TN	
DOC		BICARBONATE	967.0973
AMMONIUM-N		CARBONATE	0.0000
CALCIUM	83.9997	MAGNESIUM	22.0181
CHLORIDE	10.0146	NITRITE-N	-0.0700
NITRATE-N		POTASSIUM	1.0240
PHOSPHATE		SULPHATE	216.3153
SODIUM	315.0011	TOTAL HARDNESS	300.0000
NO2 + NO3		ARSENIC	
ALUMINUM		BERYLLIUM	
BARIUM		CHROMIUM	
CADMIUM		COPPER	
COBALT		LEAD	
IRON	0.2300	MERCURY	
MANGANESE		NICKEL	
MOLYBDENUM		STRONTIUM	
SELENIUM		ZINC	
VANADIUM		PESTICIDES	
HYDROCARBONS			
PHENOLICS			

Remarks:

WELL SAMPLE.

Temperature reported in Degree Centigrade. Conductivity reported in microsiemens/cm, pH in pH units. Alkalinity and Hardness expressed as Calcium Carbonate. FE, VA, PB, AL, AG expressed as extractable. FE in field measurements and all remaining metals expressed as total. '-' indicates concentrations less than.

- | | | |
|------------------------------------|--------------------------------|----------------------------------|
| EH - Oxidation-Reduction Potential | SAR - Sodium Adsorption Ratio | DIC - Dissolved Inorganic Carbon |
| COD - Chemical Oxygen Demand | DOC - Dissolved Organic Carbon | TN - Total Particulate Nitrogen |
| TDS - Total Dissolved Solids | TC - Total Particulate Carbon | |

Note: this data may not be fully checked. The Province disclaims all responsibility for its accuracy



CHEMICAL ANALYSIS REPORT

WELL NAME	HALABISKY, WAYNE	GIC WELL ID	89053
LOCATION	LSD SE SEC 34 TWP 51 RG 26 M 4	SAMPLE NO.	14401
WELL DEPTH	225.00 ft	WATER LEVEL	80.00 ft
AQUIFER		LABORATORY	VG
SAMPLING DATE	1986-11-19		

FIELD	MG/L	FIELD	MG/L
BICARBONATE		CARBONATE	
CHLORIDE		CONDUCTIVITY	
DISSOLVED OXYGEN		EH	
IRON		MANGANESE	
PH		SULPHATE	
S2		TEMPERATURE(C)	0
TOTAL ALKALINITY		TOTAL HARDNESS	
LABORATORY		Analysis Date	1986-12-02
COD		CONDUCTIVITY	1,640
DIC		FLUORIDE	0.2000
ION BALANCE	1.0200	PH	8.00
SAR		SIO2	14.0000
TOTAL ALKALINITY	767.0000	TC	
TDS	1,116	TN	
DOC		BICARBONATE	935.0892
AMMONIUM-N		CARBONATE	
CALCIUM	51.9998	MAGNESIUM	15.0127
CHLORIDE	-1.0011	NITRITE-N	-0.0504
NITRATE-N		POTASSIUM	2.8640
PHOSPHATE		SULPHATE	210.3076
SODIUM	374.9989	TOTAL HARDNESS	192.0000
NO2 + NO3	-0.0504	ARSENIC	
ALUMINUM		BERYLLIUM	
BARIUM		CHROMIUM	
CADMIUM		COPPER	
COBALT		LEAD	
IRON	1.8500	MERCURY	
MANGANESE		NICKEL	
MOLYBDENUM		STRONTIUM	
SELENIUM		ZINC	
VANADIUM		PESTICIDES	
HYDROCARBONS			
PHENOLICS			

Remarks:

TAP SAMPLE.

Temperature reported in Degree Centigrade. Conductivity reported in microsiemens/cm, pH in pH units. Alkalinity and Hardness expressed as Calcium Carbonate. FE, VA, PB, AL, AG expressed as extractable. FE in field measurements and all remaining metals expressed as total. '-' indicates concentrations less than.

- | | | |
|------------------------------------|--------------------------------|----------------------------------|
| EH - Oxidation-Reduction Potential | SAR - Sodium Adsorption Ratio | DIC - Dissolved Inorganic Carbon |
| COD - Chemical Oxygen Demand | DOC - Dissolved Organic Carbon | TN - Total Particulate Nitrogen |
| TDS - Total Dissolved Solids | TC - Total Particulate Carbon | |

Note: this data may not be fully checked. The Province disclaims all responsibility for its accuracy



CHEMICAL ANALYSIS REPORT

WELL NAME	BROWN, G.	GIC WELL ID	89066
LOCATION	LSD NE SEC 34 TWP 51 RG 26 M 4	SAMPLE NO.	5541
WELL DEPTH	120.00 ft	WATER LEVEL	ft
AQUIFER		LABORATORY	AE
SAMPLING DATE	1977-06-02		

FIELD	MG/L	FIELD	MG/L
BICARBONATE		CARBONATE	
CHLORIDE		CONDUCTIVITY	
DISSOLVED OXYGEN		EH	
IRON		MANGANESE	
PH		SULPHATE	
S2		TEMPERATURE(C)	0
TOTAL ALKALINITY		TOTAL HARDNESS	
LABORATORY		Analysis Date	1977-06-28
COD		CONDUCTIVITY	1,640
DIC		FLUORIDE	0.1300
ION BALANCE	0.8600	PH	9.00
SAR		SIO2	
TOTAL ALKALINITY	525.0000	TC	
TDS	1,018	TN	
DOC		BICARBONATE	587.0579
AMMONIUM-N		CARBONATE	26.0010
CALCIUM	6.0000	MAGNESIUM	1.0008
CHLORIDE	83.1162	NITRITE-N	-0.0994
NITRATE-N		POTASSIUM	1.4320
PHOSPHATE		SULPHATE	260.3797
SODIUM	350.0002	TOTAL HARDNESS	20.0000
NO2 + NO3	-0.0994	ARSENIC	
ALUMINUM		BERYLLIUM	
BARIUM		CHROMIUM	
CADMIUM		COPPER	
COBALT		LEAD	
IRON	0.2700	MERCURY	
MANGANESE		NICKEL	
MOLYBDENUM		STRONTIUM	
SELENIUM		ZINC	
VANADIUM		PESTICIDES	
HYDROCARBONS			
PHENOLICS			

Remarks:

TAP SAMPLE.

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