

Phase I Groundwater Supply Assessment for Subdivision NE – 23 – 29 – 01W5 Mountain View County

Prepared for:

Modus Holdings Inc.

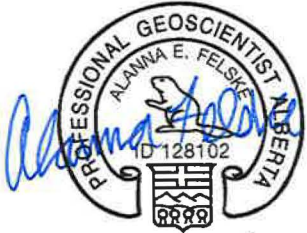
March 27, 2026

File No: 2026-2541



Signatures

Prepared by:



March 27/26

Alanna Felske, P.Geo
Hydrogeologist

APEGA Permit to Practice: 16866

Disclaimer

This report has been prepared by Groundwater Resources Information Technologies 3.0 (the consultant) for the exclusive use and benefit of the addressee (the client) and may not be relied upon by any other person or third party, for any other purpose without the prior written consent of the consultant. The consultant is not responsible for any damages that may be suffered as the result of any unauthorized use of, or reliance on, this report. Groundwater Resources Information Technologies 3.0 (GRIT3) has performed the work as described below and made the findings and conclusions set out in the report in a manner consistent with the level of care and skill normally exercised by members of the geological science profession practicing under similar conditions at the time the work was performed. This report presents a reasonable review of information available to GRIT Ltd. Within the established scope, work schedule and budgetary constraints. GRIT3 Ltd. accepts no responsibility for any deficiency, misstatement or inaccuracy in this report resulting from misinformation from any individuals or parties that provided information as part of this report. GRIT Ltd. appreciates the opportunity to present these findings on behalf of the Client. If you have any questions regarding the above report, please do not hesitate to contact the above signed.



Executive Summary

A Phase I Groundwater Supply Assessment was undertaken for a proposed 26-lot commercial/ industrial subdivision located within NE – 23 – 29 – 01W5 to better understand the distribution and quality of aquifer resources in the area as they relate to the development of the property and its water requirements. The future lots will likely require water for office use (kitchen, sinks, toilets) at an estimated rate of 400 m³/year (~1.1 m³/day) per lot.

Bedrock in the area consists of interbedded sandstone and shale sequences of the Paskapoo Formation. Future wells on the subdivision can target a sandstone-shale aquifer sequences present from 15 – 45 metres below ground. Based on available pumping test data, these aquifers produce yields of 6.2 – 65.9 m³/day, sufficient to meet office water demands of 1.1 m³/day.

A low volume of the groundwater supply is currently being utilized by existing domestic, licensed, or traditional groundwater users in the area. There are five existing groundwater licenses near the subdivision totalling 13,894 m³/year, with one on Site for 1,000 m³/year.

Drawdown interference calculations do not show detrimental effects to nearby existing wells due to production from the new wells producing at estimated rates. Sufficient aquifer supply exists for the additional withdrawal from the new wells without causing adverse impacts to existing groundwater users.

Groundwater chemistry from the on Site well was available to evaluate baseline water chemistry characteristics. The sample exceeded aesthetic objective guideline concentrations for sodium, sulfate, iron and total dissolved solids (TDS). The maximum allowable concentration (MAC) guideline for manganese was also exceeded. It is likely that future wells completed on the subdivision would require water treatment if the water is to be consumed by employees. Water treatment would not be required if the water is not intended to be potable.



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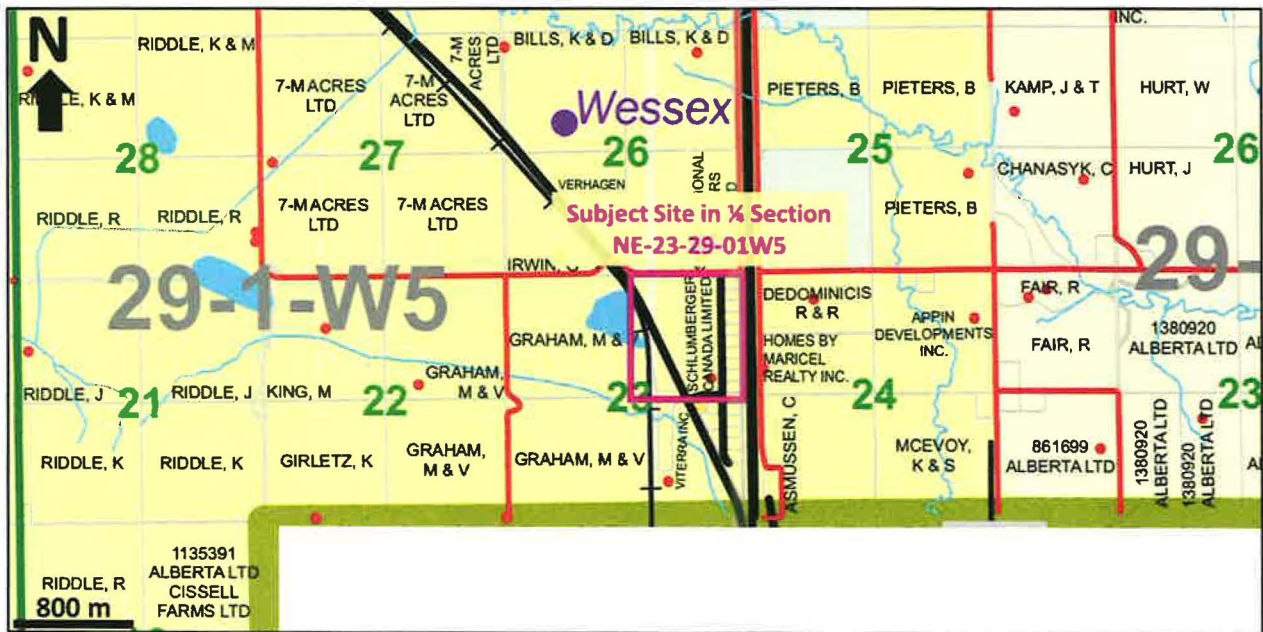


[1.0] Introduction

Groundwater Resources Information Technologies 3.0 Ltd. (GRIT3) was retained by Modus Holdings Inc. to undertake a Phase I Groundwater Supply Assessment for a proposed 26-lot commercial/ industrial subdivision located within NE – 23 – 29 – 01W5, to better understand the distribution and quality of aquifer resources in the area as the relate to the development of the property and its water requirements.

The Site is located approximately 4.9 km southeast of the Town of Carstairs within Mountain View County. The Site area consists of commercial/ industrial developments and is bordered by Highway 2A to the west. Highway 2 is located 175 metres east of the Site. A portion of the Mountain View County landownership map with the location of the Site quarter section is shown in Figure 1.

Figure 1. Portion of Mountain View County landownership map with subject site ¼ section location



A subdivision lot plan of the proposed 2-phase development is included in Appendix I.

An aerial photo of the Site relative to existing water supply well locations (orange circles) as listed on the Alberta Government water well database, is shown in Figure 2.

Figure 2. Air photo of the Site relative to existing well locations



There is one existing water supply well located on the Site, GIC ID 1240318, completed in 2006 which produces from a sandstone bedrock aquifer intersected 16.8 – 17.7 metres below ground.

[2.0] Water Well Supply Needs

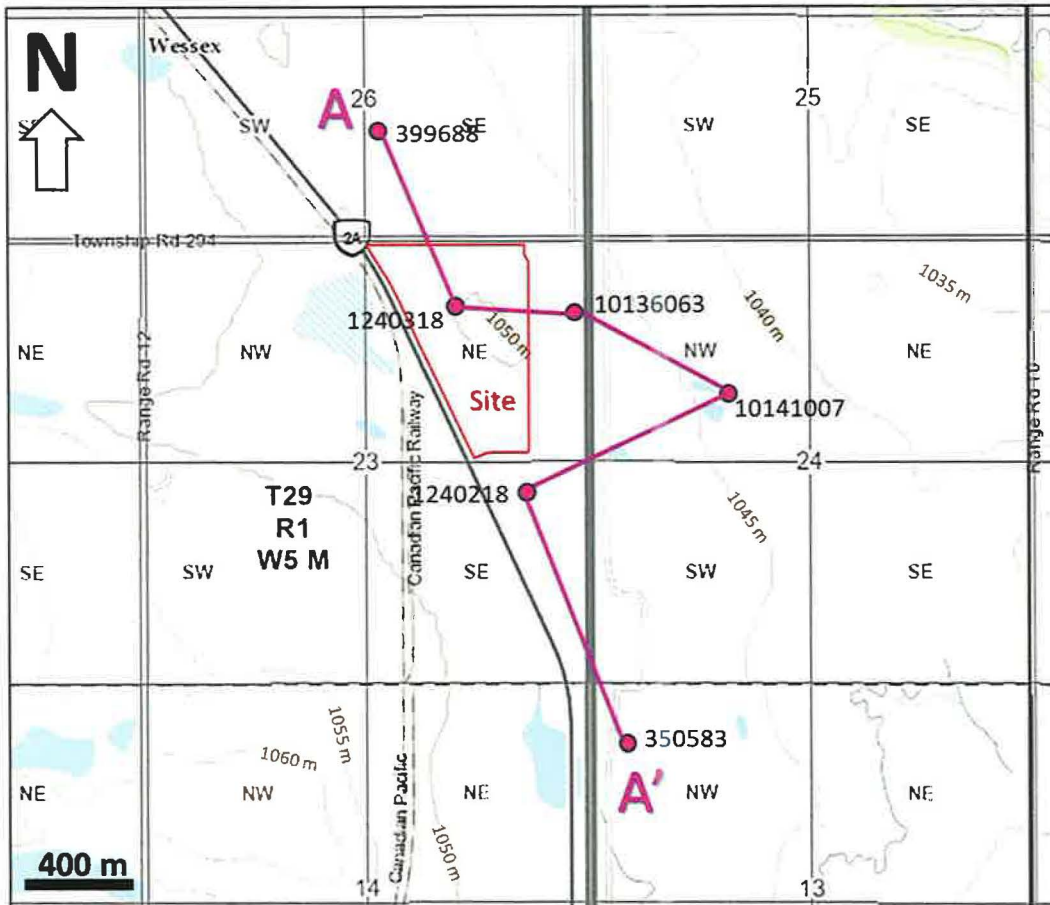
The subdivision lots are proposed for commercial or industrial use. The water requirements will likely consist of supply for offices on site and account for kitchen, sinks and toilet use. The estimated water requirement is 400 m³/year (~1.1 m³/day) per lot. Future developments may require processing water for their operations, with estimated volumes unavailable at this stage of the subdivision development.

[3.0] Topography

The Site area is located around 1,050 metres above sea level (masl) on land that dips gently towards the northeast. Surface relief ranges approximately 5 metres across the Site area. The closest major surface water body is Carstairs Creek, located 1.4 km northeast of the Site at an elevation of approximately 1,000 masl. Several low lying sloughs are located around the Site in all directions.

A topographic map of the Site area with surface elevation contours at 5 metre intervals is shown in Figure 3.

Figure 3. Topographic map of Site area with location of wells in cross section line A-A'



[4.0] Nature of Regional Aquifers

[4.1] Surficial Geology

The surficial strata in the area are mapped in *Quaternary Geology, Southern Alberta* (Shetsen, 1983), with the Site underlain by fluted draped glacial moraine deposits consisting of an unsorted mixture of clay, silt, sand and gravel (till). The till unit is up to 5 metres thick.

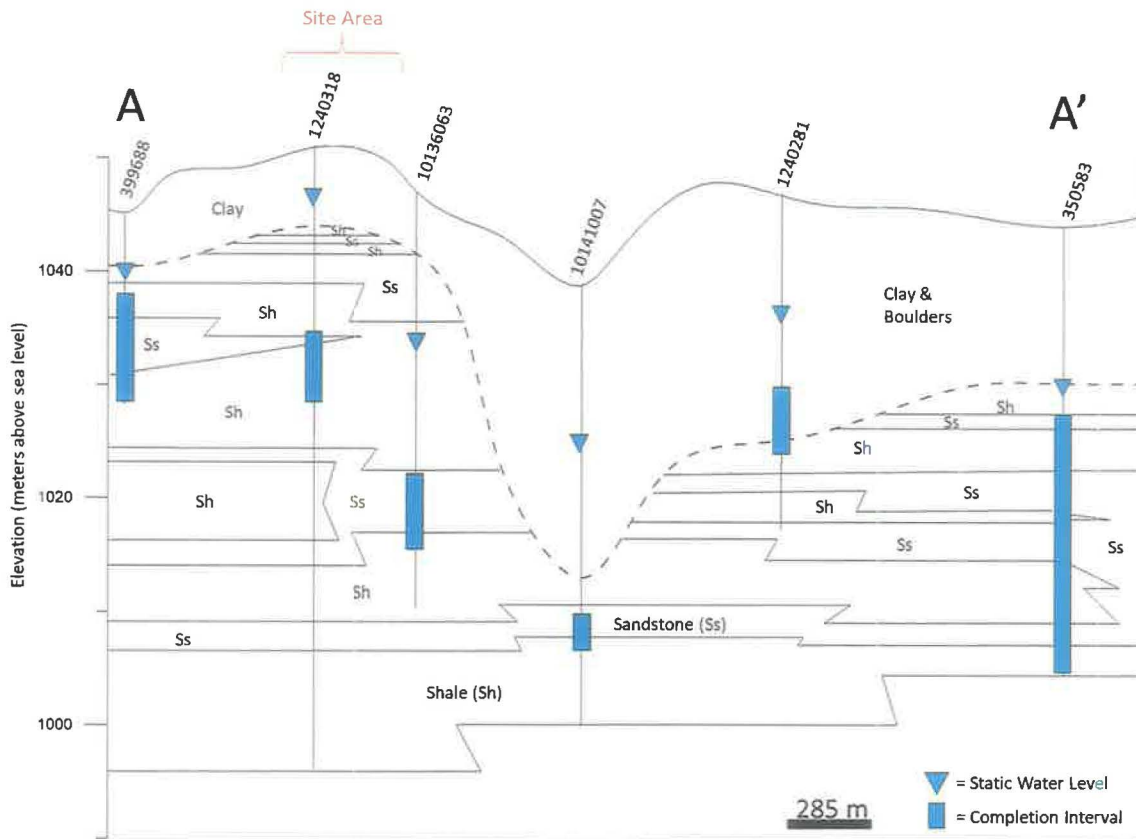
According to Water Well Drilling Reports for nearby wells, surficial sediments consist of 5 – 7 metres of clay.

[4.2] Bedrock Geology

The underlying bedrock consists of Paleogene aged Paskapoo Formation. The Paskapoo Formation is a fluvial deposit consisting of interbedded sandstone channels and overbank mudstone/shales. The priority target aquifers in the formation are the relatively permeable and porous sandstones, while the surrounding mud acts as a confining aquitard. Water Well Drilling Reports indicate bedrock in the area consists of sandstone and shale.

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 near the Site consist predominately of clay, shifting to mixed clay and boulders east and south of the Site. Bedrock in the area consists of interbedded sandstone and shale. Existing supply wells in the area target interbedded sandstone-shale aquifers sequences 15 – 45 metres below ground. Static water levels vary with completion interval, indicating some sandstone aquifer units may be discrete and are hydraulically isolated from one another.

The on Site supply well, ID 1240318, is completed within across a thin sandstone aquifer bounded by shale from 15.2 – 22.9 metres below ground. Data available for the well from the groundwater licensing report available on the Alberta Environmental Records Viewer indicates a safe yield of 6.2 m³/day.

Neighbouring supply well 10141007 is completed within a deeper sandstone aquifer located at an approximate elevation of 28 – 31 metres below ground (~1,007 – 1,010 meters above sea level). Well data from the on site well indicates this aquifer zone likely extends below the Site. Available pumping test data for this well indicates a safe yield of 65.9 m³/day.

Future supply wells on Site could target aquifer intervals from 15 – 45 metres below Site, with yields suitable for office supply needs.



[5.0] Area Groundwater Users

A search of the Government of Alberta water well database was done to determine the number of water wells and their associated use within 1.6 km (1-mile) of the Site. The search shows a total of 16 wells in the area for a mix of stock, domestic and commercial use. Wells were completed between 1976 and 2023 to depths of 16.8 – 91.4 metres below ground. A summary of the available well details is included in Appendix II.

[5.1] Licensed Groundwater Users

A search of the Alberta Environmental Records Viewer was undertaken to determine if any groundwater licenses are present in the area. A search of licenses for the subject site and adjoining eight sections was undertaken. Five licences for groundwater extraction were found, totalling a maximum licensed groundwater diversion of 13,894 m³/year.

Table 1. Groundwater license summary

Location	No. Licences	Licensed Depth Interval (m)	Licensed Volume (m ³)	Licensee
4-24-29-01W5	1	? – 42.7	3,636	Viridian Inc.
14-29-01W5	2	37.2 – 42.7 ? – 56.4 22.9 – 28.9 35.0 – 41.1 47.2 – 53.3 36.6 – 88.4	8,183	Husky Oil Operations Inc.
		30.5 – 39.6	681	John Campbell
23-29-01W5	2	18.2 – 24.4	1,000	Schlumberger Canada Ltd.
		60.9 – 67.0	394	Central Alberta Co-op Ltd.

Licenses for surface water use were not included in the Table 1 summary. One license was found within the Site for 1,000 m³/year. Groundwater use in the area can be described as low, consisting largely of agricultural or commercial licensed use.



[6.0] Area Aquifer Properties

Four nearby wells with available pumping test data were used to evaluate aquifer yields around the Site. The pumping tests were analyzed with the aid of AQTESOLV software developed by Hydrosoft Inc. to estimate aquifer transmissivity and safe yield rates (Q_{20}) (Appendix III). A summary of well yield and associated aquifer properties produced from the analysis is below.

The licensed well on Site (ID 1240318) had aquifer properties and a safe yield rate included in the groundwater report which had accompanied the original license application, available on the Alberta ERV website. These values are also included in the table below.

Table 2. Summary of area aquifer properties

Well ID	Distance (m)/ Direction from Site	Depth to Aquifer Top (m)	Aquifer Thickness (m)	Aquifer Type	Transmissivity (m ² /day)	Safe Well Yield (Q_{20}) (m ³ /day)
1240281	180 S	16.8	3.6	Surficial Clay & Bounders and Sandstone Bedrock	10.4	71.7
1240318	On Site	16.8	0.9	Sandstone	1.2	6.2
10141007	655 E	28.4	3.0	Sandstone	5.7	65.9
1405084*	1,485 W	54.9	12.2	Sandstone	5.8	37.2
498427*	1,455 SW	23.5	15.5	Sandstone	1.0	10.9

*Well does not have accurate GPS coordinates and is listed on the Alberta water well database in the middle of the respective quarter section

The twenty-year safe yield of the supply wells (Q_{20}) was calculated using the modified Moell method as suggested in Alberta Environments *Guide to Groundwater Authorization* (February 2023) as follows:

$$Q_{20} = \frac{(0.7 \times Q \times H_a)}{s_{100min} + (s_{20yrs} - s_{100th})}$$

Where:

- Q - Pump test flow rate (m³/day)
- H_a - Available Head (m) = (Top of Aquifer - (Static Water Level - Well Stickup)
Or $\frac{2}{3} \times$ Saturated Aquifer Thickness (for unconfined aquifers)
- S_{100 min} - Observed drawdown at 100 minutes (m)
- (S_{20yrs} - S_{100 th}) - Difference between theoretical drawdown at 20 years and 100 min (m)
- 0.7 - Safety factor

Yields for wells completed within bedrock sandstone aquifers within 1.5 km of the Site range from 6.2 – 71.7 m³/day, with the on Site well producing at a safe yield rate of 6.2 m³/day. Well yields appear higher when wells are completed over sandstone units at depths over 20 metres.

Based on available pumping test data and bedrock geology mapping, the aquifers underlying the Site produce yields sufficient to meet the estimated office use rate of 1.1 m³/day. A conservative yield of 5 m³/day is estimated for aquifers located over 15 metres below the Site, with evidence of higher yields.

[7.0] Effect on Existing Groundwater Users

Using the Cooper-Jacob equation below, the expected drawdown through time can be calculated at various radial distances from the future development. Radial distances are measured from the centre of the Site. The pumping rate is equal to 26 new wells pumping continuously at 1.1 m³/day.

$$s = \frac{(0.183 \times Q)}{T} \times \text{Log} \left(\frac{2.25 \times T \times t}{r^2 \times S} \right)$$

Where:

s	-	Drawdown (m)
S	-	Storativity (5.0 x 10 ⁻⁴)
Q	-	Pump rate (1.1 m ³ /day x 26 wells = 28.6 m ³ /day)
T	-	Average Transmissivity (5.8 m ² /day) -(from Table 2)
t	-	Time (days)
r	-	Radial distance from pumping well (m)

Water level drawdown at various distances from the centre of the Site are tabulated as a function of time in Table 3.

Table 3. Cooper-Jacob distance drawdown calculations

Distance (m)/ Time (days)	350	400	500	700	1250	1700	3000
1	--	--	--	--	--	--	--
7	0.16	0.05	--	--	--	--	--
30	0.73	0.62	0.45	0.18	--	--	--
365	1.71	1.60	1.43	1.16	0.71	0.47	0.02
1826	2.34	2.23	2.06	1.79	1.34	1.10	0.65
3652	2.61	2.50	2.33	2.07	1.61	1.37	0.92
7305	2.88	2.78	2.60	2.34	1.88	1.64	1.20

The following assumptions were included in the above calculation: A conservative storativity value of 5.0 x 10⁻⁴ for a shallow confined bedrock aquifer, a continuous consumption rate of 28.6 m³/day from 26 new wells supplying offices on the future lots, average aquifer transmissivity from the closest to wells to Site (Table 2 - 5.8 m²/day), no recharge is occurring, and all wells are screened over the same aquifer.

The closest existing well to the Site is ID 10136063, located 350 metres to the east, with an available drawdown (head) of 11.6 metres. The above calculation shows a potential additional drawdown of up to 2.88 metres due to pumping from 26 new supply wells at office supply rates over 20 years, equating to 25% of the wells available head (drawdown). Influences of up to 30% are generally deemed acceptable.

Pumping from the new supply wells for will not impact the ability of existing wells to provide water as sufficient drawdown is still available. Additionally, precipitation and snowmelt will provide long term recharge to the aquifer, helping to maintain water levels.

[8.0] Area Aquifer Water Quality

A water chemistry report was available as part of the water licensing report retrieved from the Alberta ERV website for the on Site well. Future wells completed to a similar depth will likely have similar water chemistry. The water analysis report for the well is attached in Appendix IV and a summary of the results, with a comparison to the *Guidelines for Canadian Drinking Water Quality (2025)* is as follows:

Table 4. Water chemistry summary

Parameter	Units	Well ID 1240318	CDWQ MAC/AO
Screened Interval	metres below ground	15.2 – 22.9	
Date Sampled	mm/dd/yyyy	09/28/2006	
pH	pH	7.96	7.0 – 10.5
EC (@ 25°C)	µS/cm	4,160	--
Calcium	mg/L	159	--
Magnesium	mg/L	115	--
Sodium	mg/L	747	200
Potassium	mg/L	17.4	--
Chloride	mg/L	2.3	250
Nitrate	mg/L	<0.2	10
Nitrite	mg/L	<0.2	1
Sulfate	mg/L	1,684	500
Manganese	mg/L	0.17	0.12/0.02
Bicarbonate	mg/L	750	--
Iron	mg/L	2.87	0.1
Total Dissolved Solids	mg/L	3,094	500
Fluoride	mg/L	0.25	1.5
T-Alkalinity	mg/L	615	--
AO – Aesthetic Objective			
MAC – Maximum Allowable Concentration			

The well water quality sample exceeded the aesthetic objective guideline concentration for sodium, sulfate, iron and total dissolved solids (TDS). The maximum allowable concentration (MAC) guideline for manganese was also exceeded. It is likely that future wells completed on the subdivision would require water treatment if the water is to be consumed by employees. Water treatment would not be required if the water is not intended to be potable. Common treatment methods for elevated solute concentrations are reverse osmosis systems, either installed between the well and the point of use or on taps used specifically for drinking water.



[9.0] References

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<http://groundwater.alberta.ca/WaterWells/d/>

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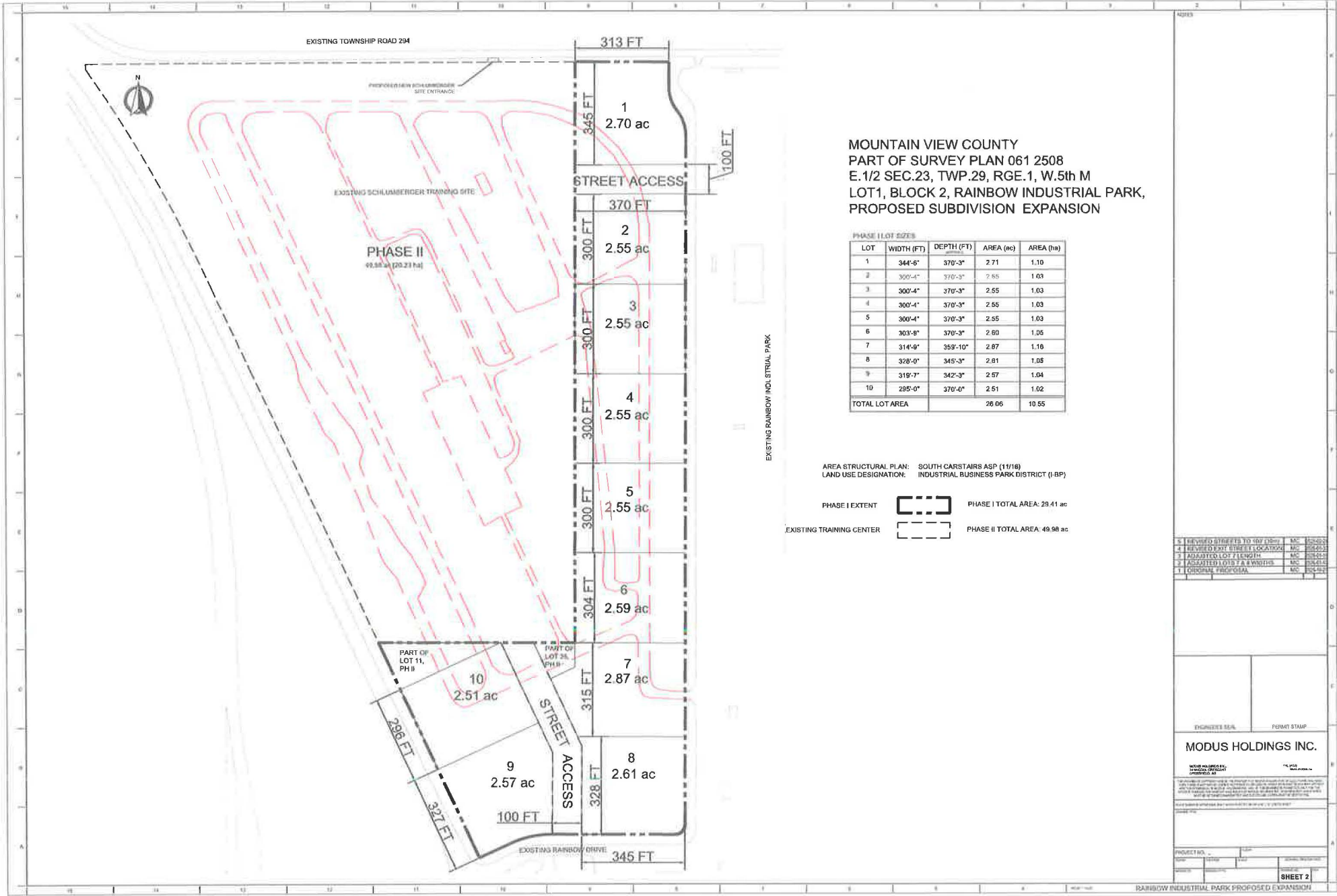
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Health Canada. **2025**. Guidelines for Canadian Drinking Water Quality – Summary Tables. Water and Air Quality Bureau, Healthy Environments and Consumer Safety Branch, Health Canada, Ottawa, Ontario.

Shetsen, I. **1987**. Quaternary Geology, Southern Alberta. Alberta Research Council.



Appendix I: Subdivision Plans



MOUNTAIN VIEW COUNTY
 PART OF SURVEY PLAN 061 2508
 E. 1/2 SEC.23, TWP.29, RGE.1, W.5th M
 LOT1, BLOCK 2, RAINBOW INDUSTRIAL PARK,
 PROPOSED SUBDIVISION EXPANSION

PHASE I LOT SIZES

LOT	WIDTH (FT)	DEPTH (FT)	AREA (ac)	AREA (ha)
1	344'-6"	370'-3"	2.71	1.10
2	300'-4"	370'-3"	2.55	1.03
3	300'-4"	370'-3"	2.55	1.03
4	300'-4"	370'-3"	2.55	1.03
5	300'-4"	370'-3"	2.55	1.03
6	303'-8"	370'-3"	2.60	1.05
7	314'-9"	359'-10"	2.87	1.16
8	328'-0"	345'-3"	2.81	1.05
9	319'-7"	342'-3"	2.57	1.04
10	295'-0"	370'-0"	2.51	1.02
TOTAL LOT AREA			26.06	10.55

AREA STRUCTURAL PLAN: SOUTH CARSTAIRS ASP (1/1/18)
 LAND USE DESIGNATION: INDUSTRIAL BUSINESS PARK DISTRICT (I-BP)

PHASE I EXTENT [Dashed Box] PHASE I TOTAL AREA: 29.41 ac
 EXISTING TRAINING CENTER [Dotted Box] PHASE II TOTAL AREA: 49.98 ac

REVISIONS

5	REVISED STREETS TO 500' CENTER	MC	02/26/20
4	REVISED EXIST STREET LOCATION	MC	05/26/20
3	ADJUSTED LOT LENGTH	MC	05/26/20
2	ADJUSTED LOT AREA WIDTHS	MC	05/26/20
1	ORIGINAL PROPOSAL	MC	02/24/20

ENGINEER SEAL PERMIT STAMP

MODUS HOLDINGS INC.

MODUS HOLDINGS INC.
 10000 W. 10th St., Suite 100
 Overland Park, KS 66204
 (913) 241-1000

PROJECT NO. _____ DATE _____

SHEET 2

RAINBOW INDUSTRIAL PARK PROPOSED EXPANSION



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)
381923	SW	24	29	1	5	HERTZ DRILLING COMPANY LTD.	1995-12-05	46.94	New Well	Observation		12	23	SENTAR CONSULTANTS LTD	10.42	272.77	16.81
391265	3	23	29	1	5	TAKS & SONS DRILLING LTD.	1981-11-16	18.29	New Well	Stock		13		LOWE, ALBERT	0.61	18.18	16.84
391267	SW	24	29	1	5	UNKNOWN DRILLER	1972-01-01	57.91	Chemistry	Domestic	1			WESSEX SVC STN	36.58		0.00
391268	13	24	29	1	5	TAKS & SONS DRILLING LTD.	1985-05-08	22.86	New Well	Domestic & Stock		7		CHRISTIAN, CHESTER	13.72	50.01	16.84
391269	NW	24	29	1	5	UNKNOWN DRILLER		0.00	Chemistry	Unknown				CHRISTINSEN, CHESTER			0.00
391272	SE	26	29	1	5	UNKNOWN DRILLER		0.00	Chemistry	Domestic				NEILSON, D.			0.00
391273	SE	26	29	1	5	UNKNOWN DRILLER		44.81	Well Inventory	Contaminati on Invest.				DUGGAN, C.E.			0.00
391274	2	26	29	1	5	DEN-ALTA DRILLING LTD.	1976-10-27	65.53	New Well	Stock		2		DUGGAN, C.E.	23.16	13.64	14.12
391275	SE	26	29	1	5	DEN-ALTA DRILLING LTD.	1987-04-06	16.76	New Well	Stock		4		DUGGIN EST	4.57	90.92	14.12
391276	SE	26	29	1	5	UNKNOWN DRILLER		0.00	Chemistry	Domestic & Stock				A.C.A. REALTY			0.00
391277	SE	26	29	1	5	UNKNOWN DRILLER		0.00	Chemistry	Domestic & Stock				A.C.A. REALTY			0.00
391278	SE	26	29	1	5	UNKNOWN DRILLER		0.00	Chemistry	Domestic & Stock				SACKETT, DON			0.00
399688	2	26	29	1	5	DEN-ALTA DRILLING LTD.	1994-07-06	16.76	New Well	Stock		6	3	RAIRDAN, SCOTT	5.18	90.92	14.12
469313	SE	26	29	1	5	TAKS & SONS DRILLING LTD.	1997-05-24	32.92	New Well	Stock		11	12	DAVIS, ROGER	7.53	27.28	16.81
469314	SE	26	29	1	5	TAKS & SONS DRILLING LTD.	1997-05-12	65.53	New Well	Stock		17	19	DAVIS, ROGER	9.14	13.64	16.81
1240281	8	23	29	1	5	DEN-ALTA DRILLING LTD.	2008-07-26	22.86	New Well	Domestic		4	25	HORSESHOE CONTRACTING	10.44	36.37	14.12
1240318	15	23	29	1	5	DEN-ALTA DRILLING LTD.	2006-09-17	54.86	New Well	Other		20		SCHLUMBERGER DRIVING CENTER			16.84
1240318	15	23	29	1	5	DEN-ALTA DRILLING LTD.	2006-12-09	54.86	Reconditioned	Other		1		SCHLUMBERGER DRIVING CENTER			16.84
1590144	7	23	29	1	5	PARSONS WATER WELLS LTD (o/a AMA Drilling)	2015-12-30	91.44	New Well	Other		16	30	CENTRAL ALBERTA CO-OP	11.95	2.27	15.24
1590144	7	23	29	1	5	PARSONS WATER WELLS LTD (o/a AMA Drilling)	2015-12-30	91.44	New Well	Other		16	6	CENTRAL ALBERTA CO-OP	11.95	0.23	15.24



Reconnaissance Report

[View in Imperial](#)

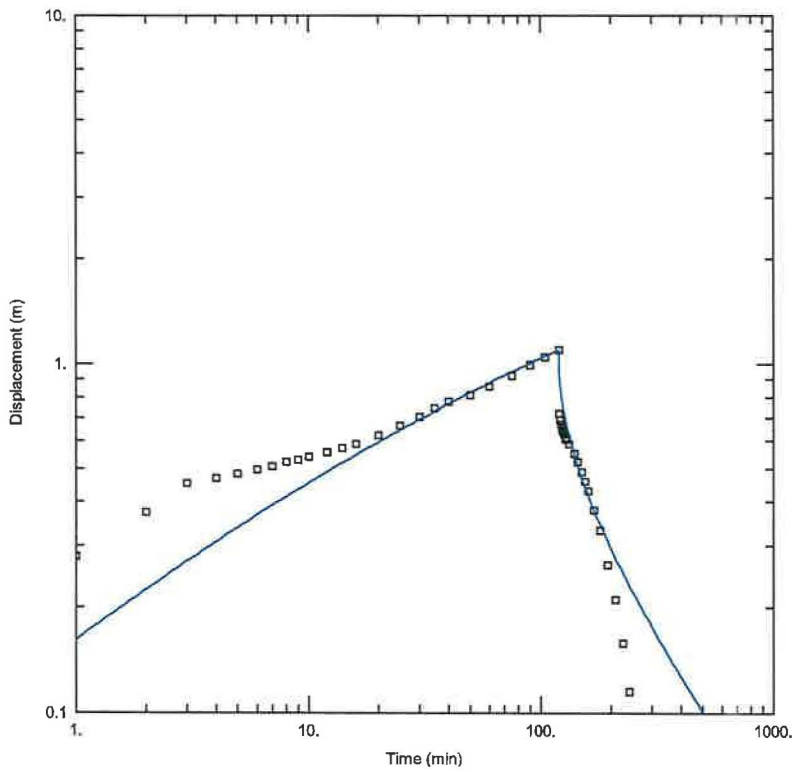
[Export to Excel](#)

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)
2086022	10	24	29	1	5	BLACK DOG DRILLING & ENV SERV. LTD.	2017-05-02	48.77	New Well	Domestic		8		MCCLOUGHLIN, MAURICE	21.95	109.11	14.13
10136063	16	23	29	1	5	BLACK DOG DRILLING INC.	2023-07-19	36.58	New Well	Commercial		5	10	D BAR D BUILDING SOLUTIONS	13.72	81.83	14.13
10141007	11	24	29	1	5	EVOLUTION DRILLING LTD.	2023-10-13	39.01	New Well	Domestic & Stock		8	2	HOMES BY MARICEL LTD	14.17	36.37	17.78

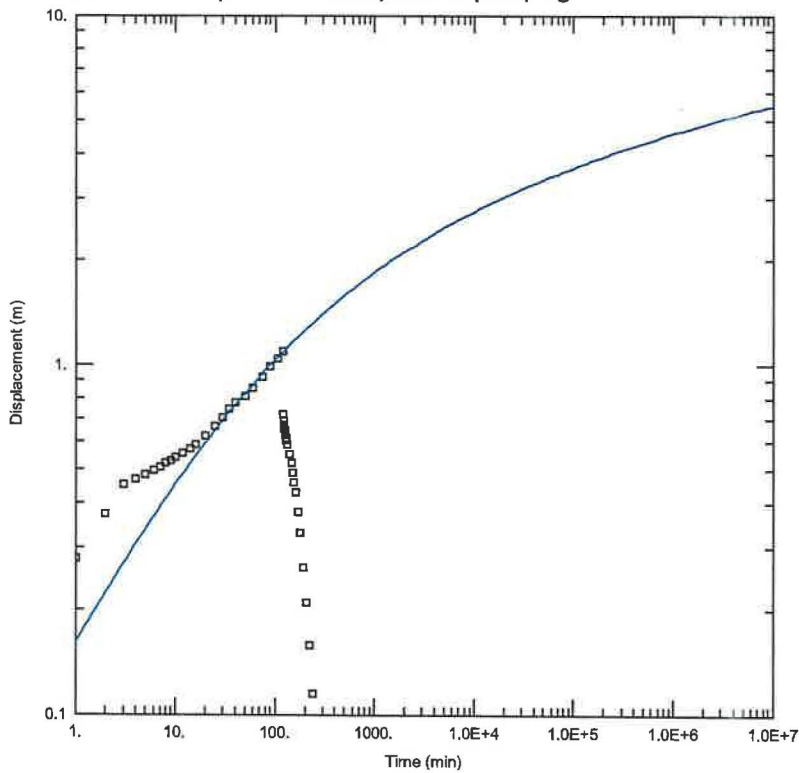


Appendix III: AQTESOLV Plots

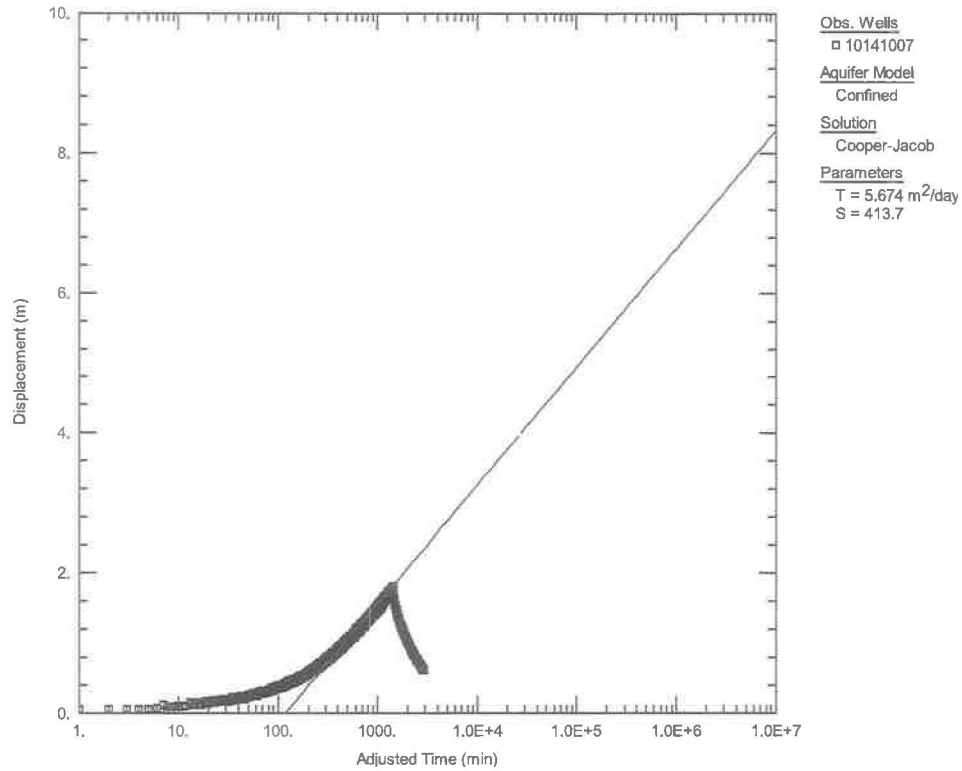
II.A. Pumping test solution matched to data from Well ID 1240281



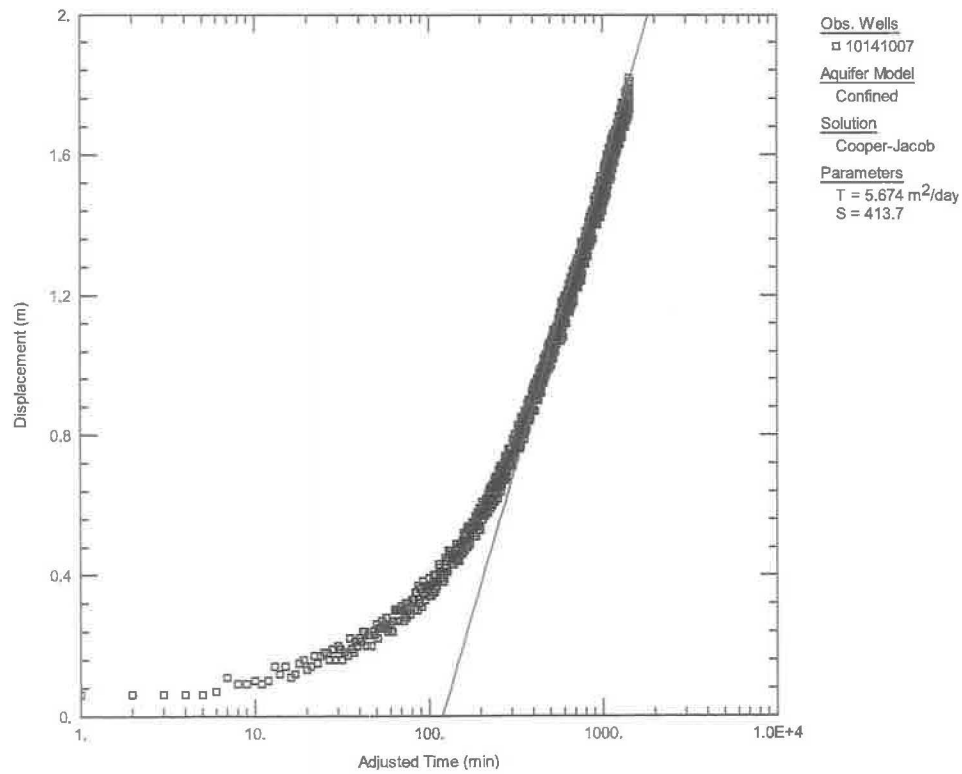
II.B. Solution extrapolated to 20 years of pumping



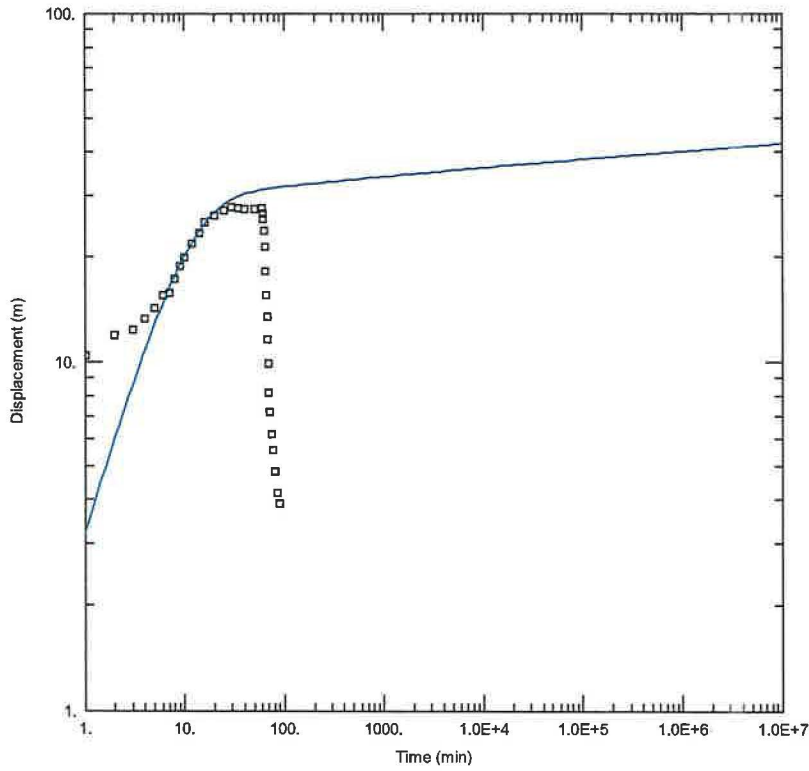
II.C. Pumping test solution matched to data from Well ID 10141007



II.D. Solution extrapolated to 20 years of pumping

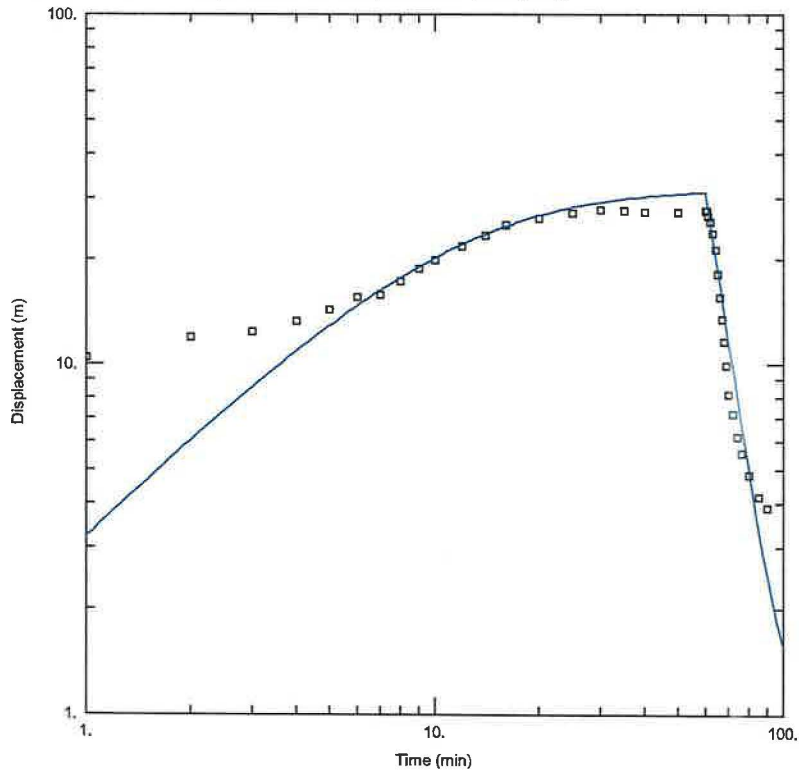


II.E. Pumping test solution matched to data from Well ID 1405084



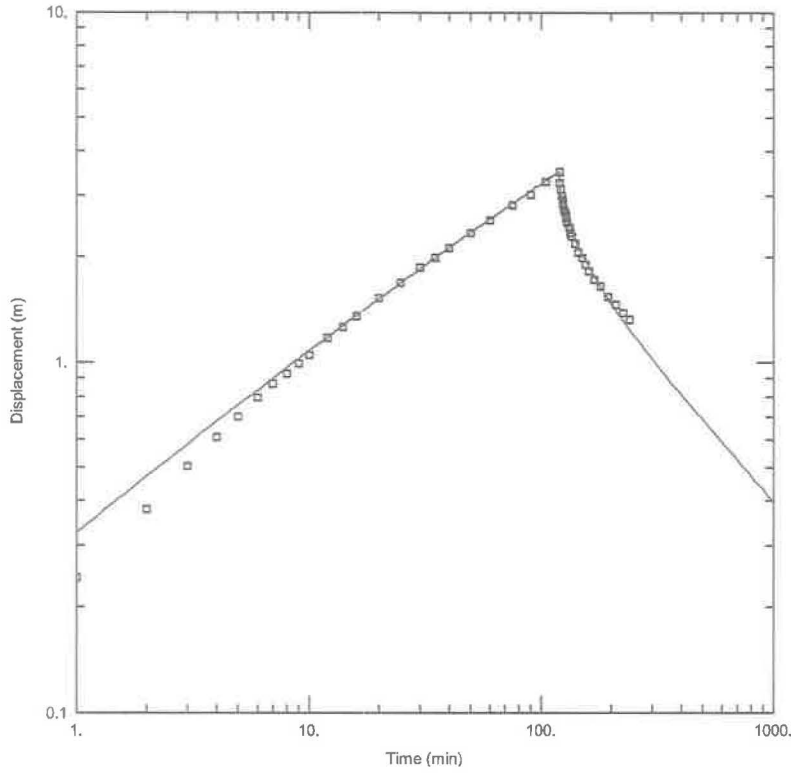
Obs. Wells
 □ 1405084
 Aquifer Model
 Confined
 Solution
 Papadopolos-Cooper
 Parameters
 T = 5.854 m²/day
 S = 9.945E-14
 r(w) = 0.04859 m
 r(c) = 0.06507 m

II.F. Solution extrapolated to 20 years of pumping

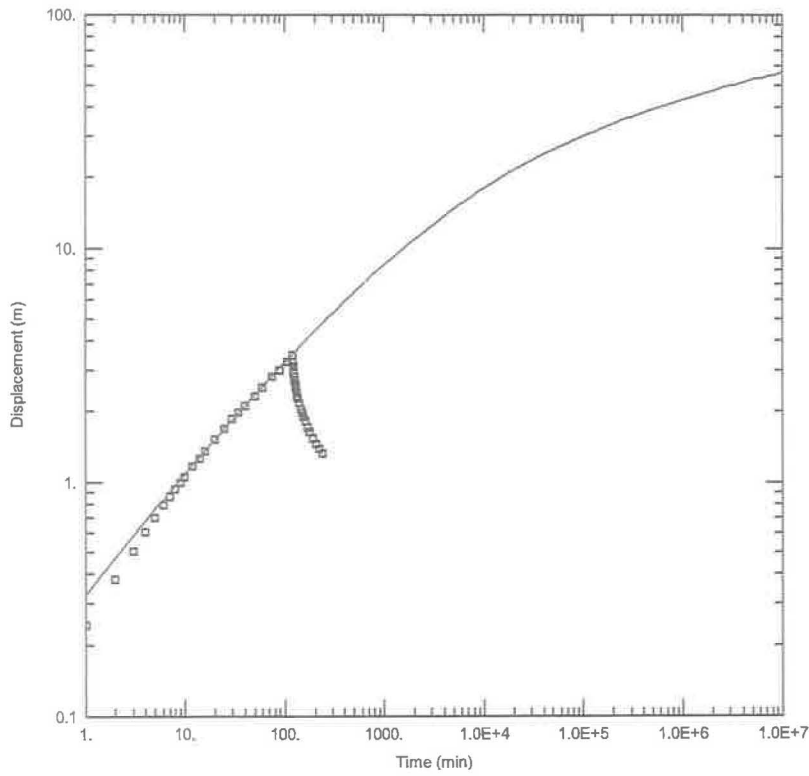


Obs. Wells
 □ 1405084
 Aquifer Model
 Confined
 Solution
 Papadopolos-Cooper
 Parameters
 T = 5.854 m²/day
 S = 9.945E-14
 r(w) = 0.04859 m
 r(c) = 0.06507 m

II.H. Pumping test solution matched to data from Well 498427



II.H. Solution extrapolated to 20 years of pumping





Appendix IV: Water Chemistry Report

**Groundwater Chemistry: PW1-06
Schlumberger Driving Centre**

Parameter	PW1-06	Guidelines [2004]
pH	7.96	6.5-8.5 [AO]
Electrical Conductivity	4160	
Total Dissolved Solids	3094	500 [AO]
Hardness	871	
Alkalinity	615	
Calcium	159	
Iron	2.87	0.3 [AO]
Magnesium	115	
Manganese	0.17	0.05 [AO]
Potassium	17.4	
Sodium	747	200 [AO]
Ammonium	<0.7	
Bicarbonate	750	
Carbonate	0	
Chloride	2.3	250 [AO]
Fluoride	0.25	1.5 [MAC]
Nitrate	<0.2	45 [MAC]
Nitrite	<0.2	
Sulphate	1684	500 [AO]

NOTE: Data from WSH Labs (1992) Ltd
All concentrations in mg/L except pH [pH units]
and electrical conductivity [$\mu\text{S}/\text{cm}$]

[MAC = maximum acceptable concentration; IMAC = interim maximum acceptable concentration; AO = aesthetic objective]