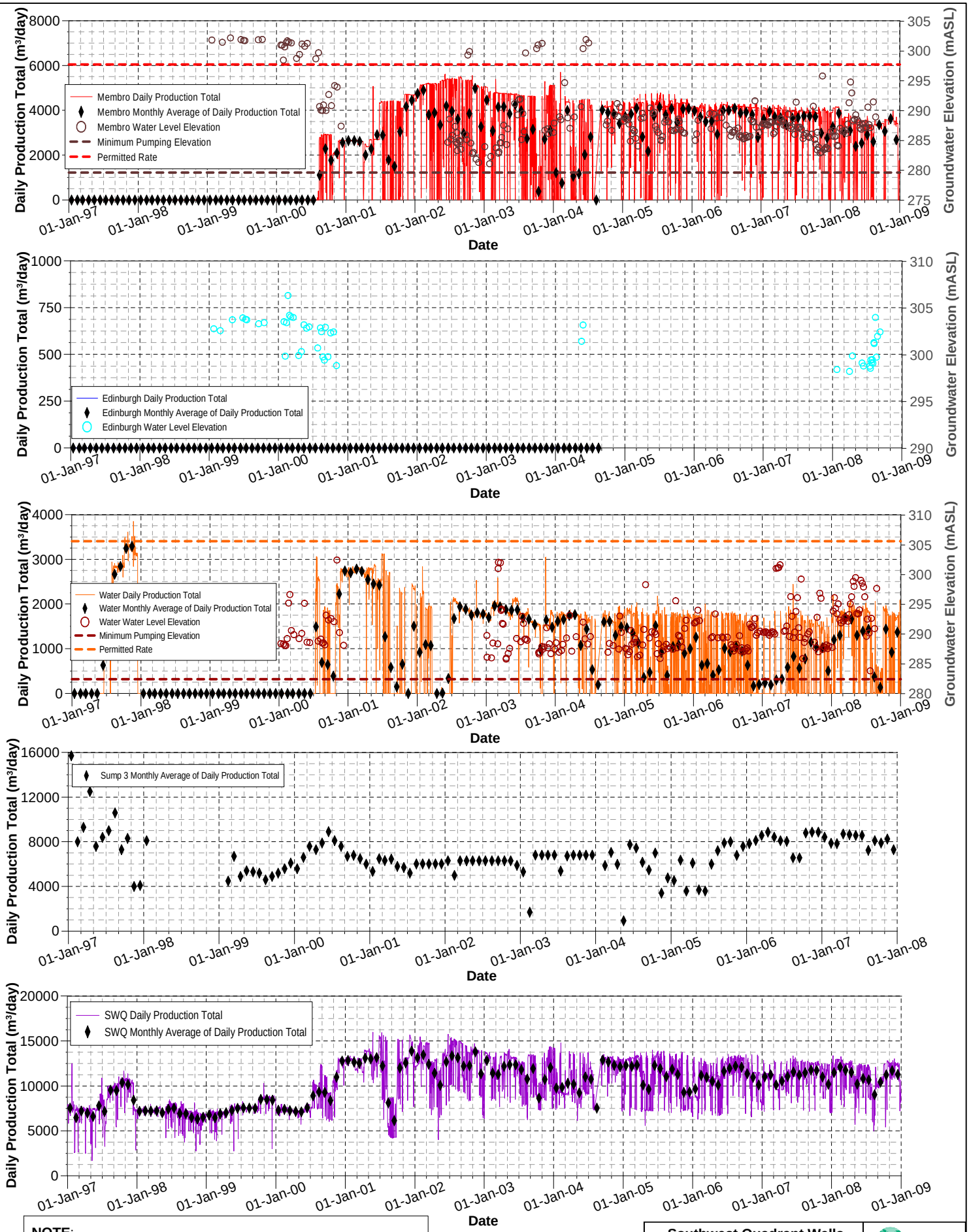
APPENDIX D

Long Term Monitoring Water Level and Pumping Data

D1: Pumping Data Plots

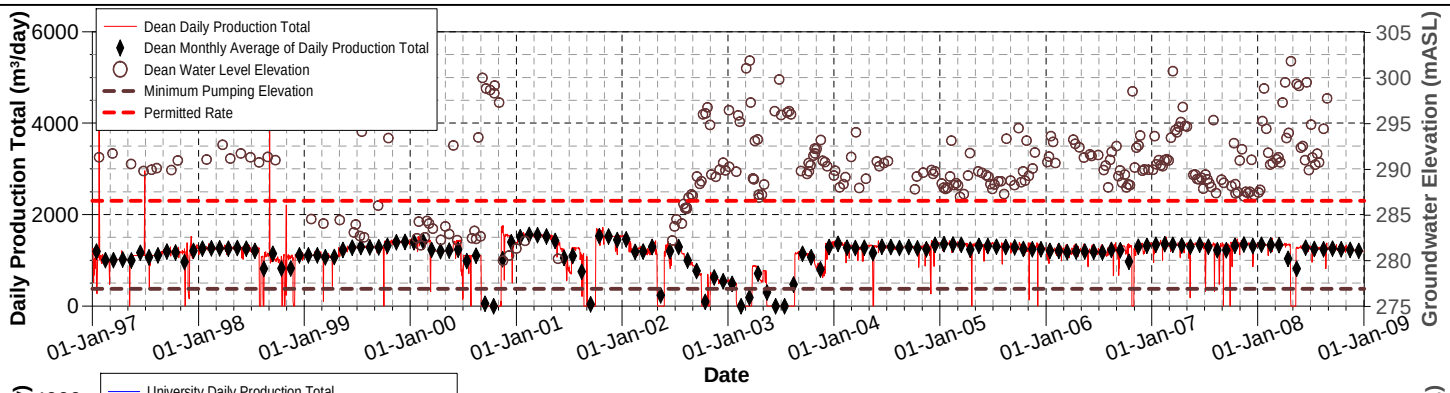


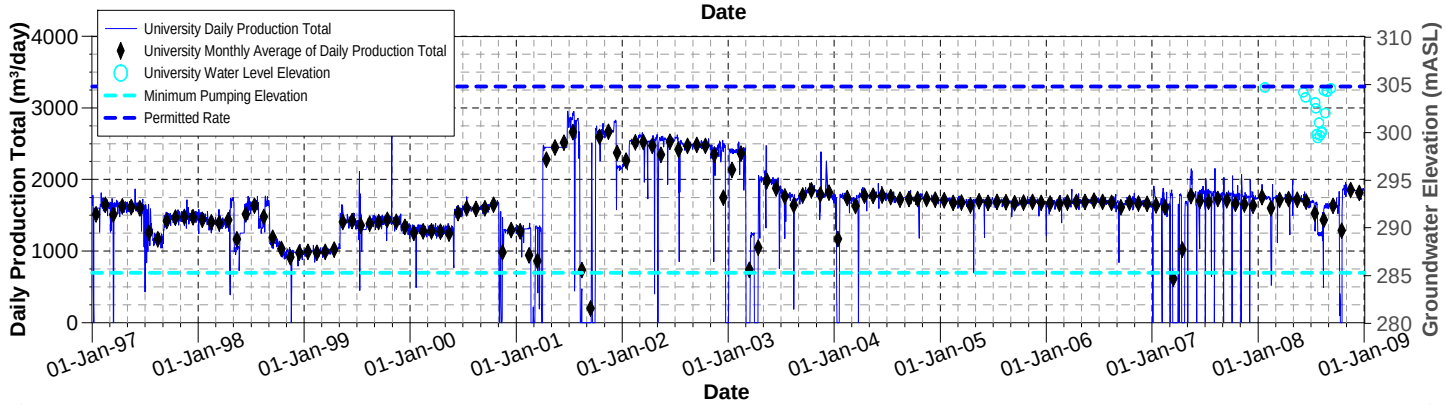
NOTE:
1) The Southwest Quadrant Total Volumes were calculated using the following wells: Membro, Edinburgh, Water, Dean University and Downey.

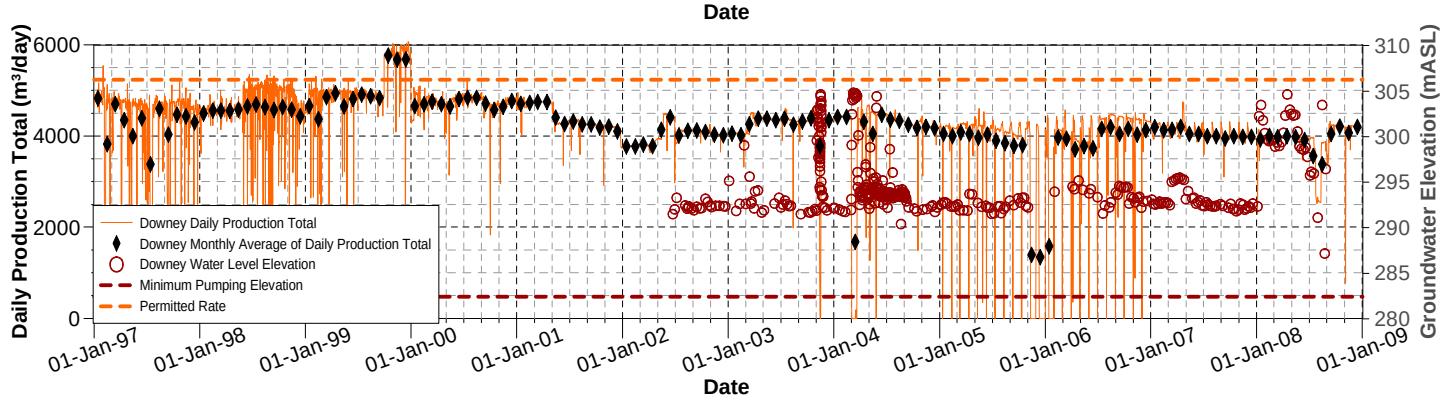
Southwest Quadrant Wells Daily Pumped Volumes and Groundwater Elevations

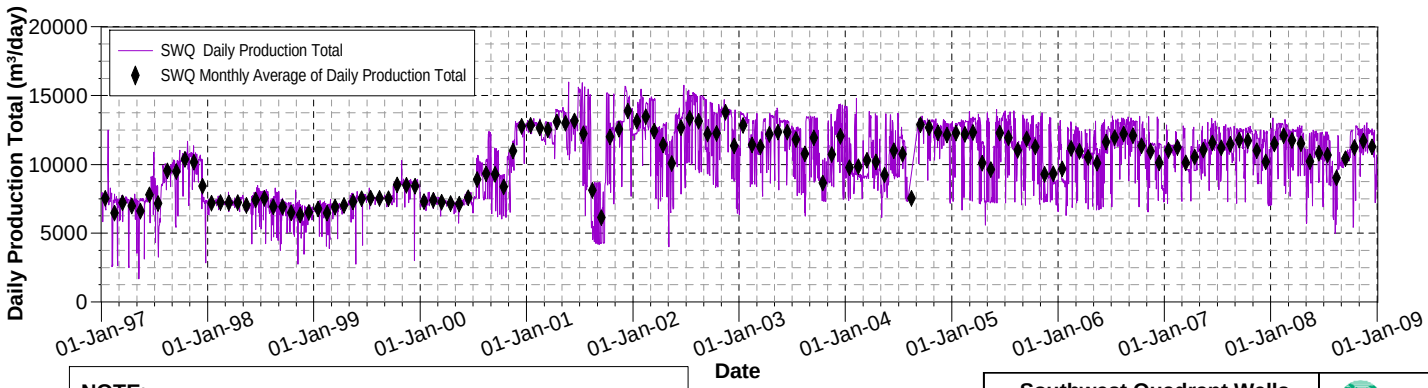
Golder Associates

Drawn: JLH	Approved: JAP	Date: May 2010
Project:08-1112-0021		Figure: D1





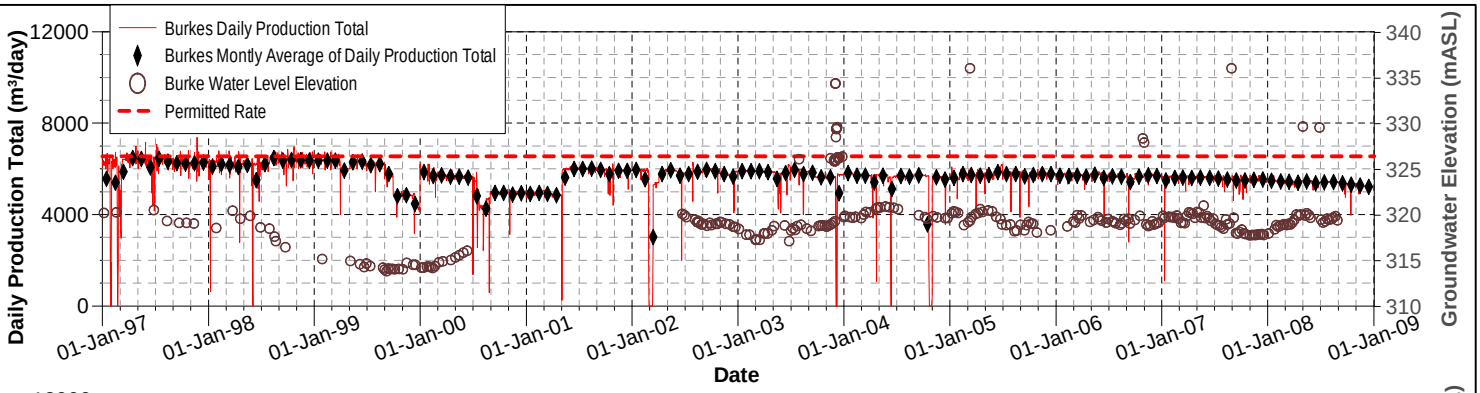


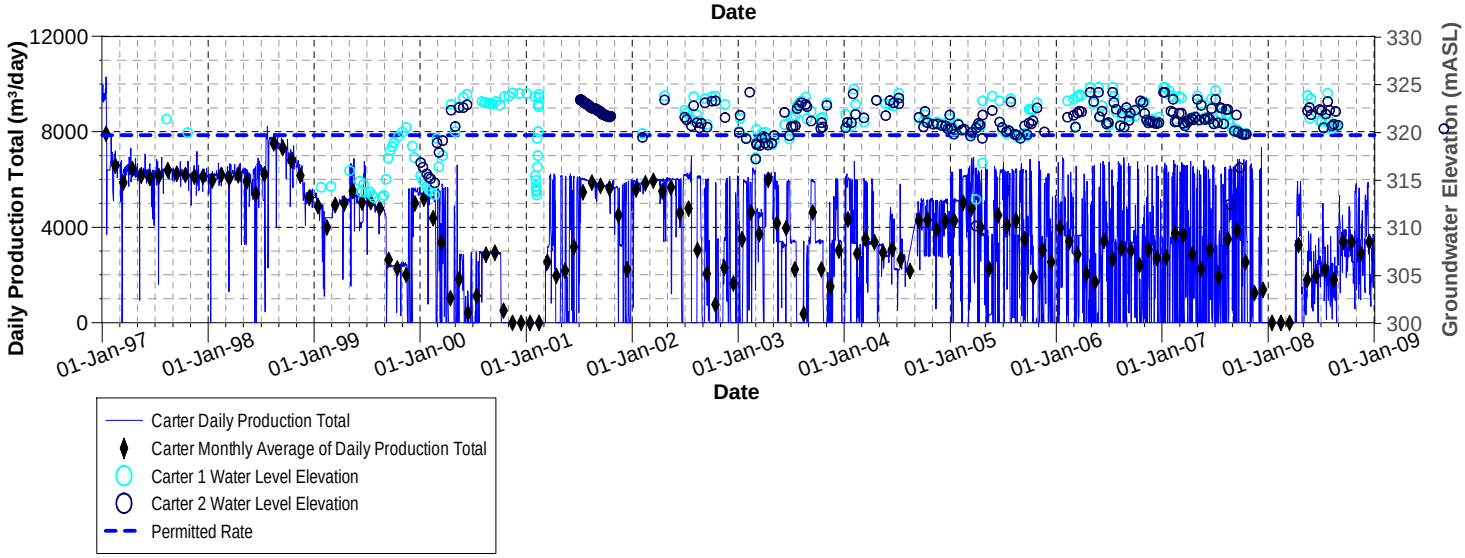


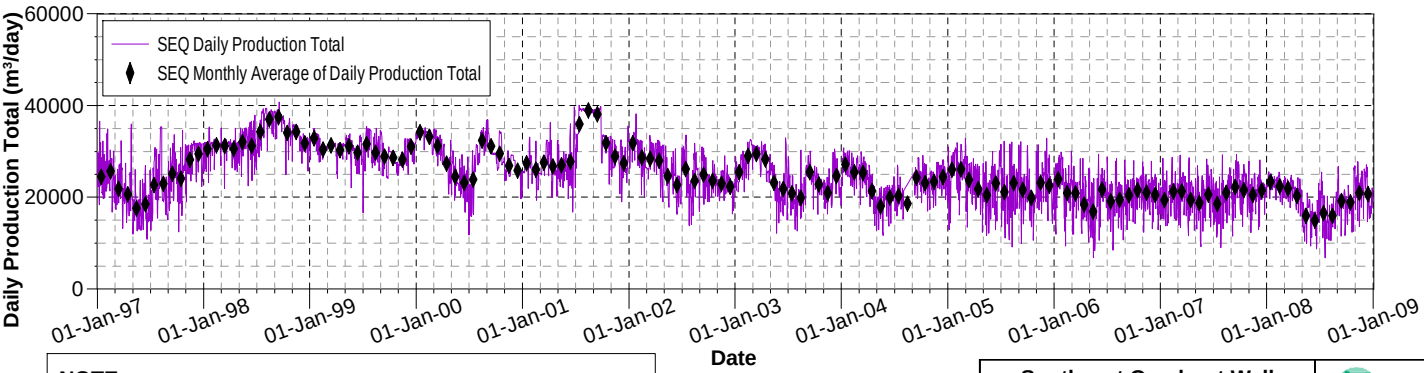
NOTE:
1) The Southwest Quadrant Total Volumes were calculated using the following wells: Membro, Edinburgh, Water, Dean University and Downey.

Southwest Quadrant Wells Daily Pumped Volumes and Groundwater Elevations		
Drawn: JLH	Approved: JAP	Date: May 2010
Project:08-1112-0021		Figure: D2

Golder Associates

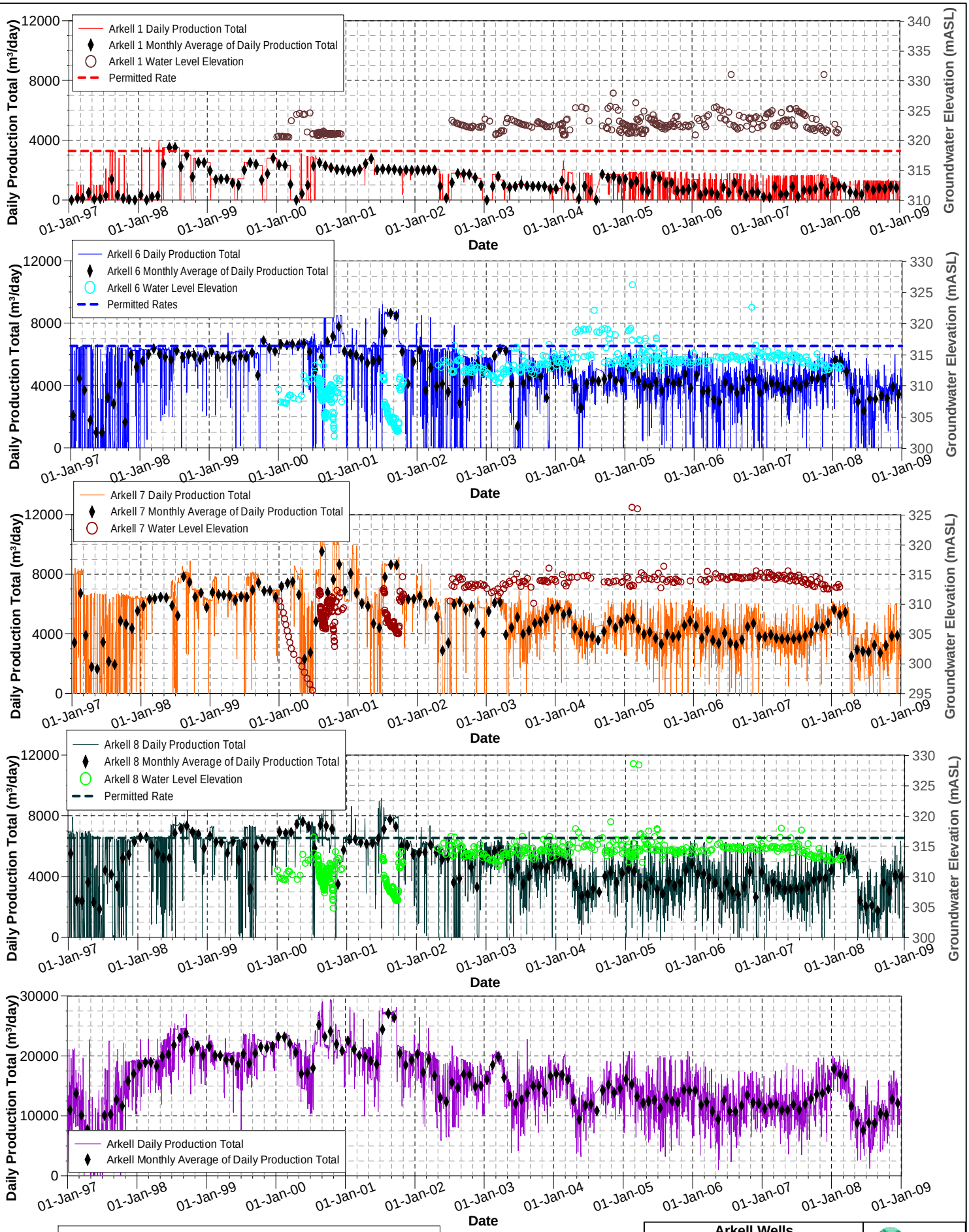






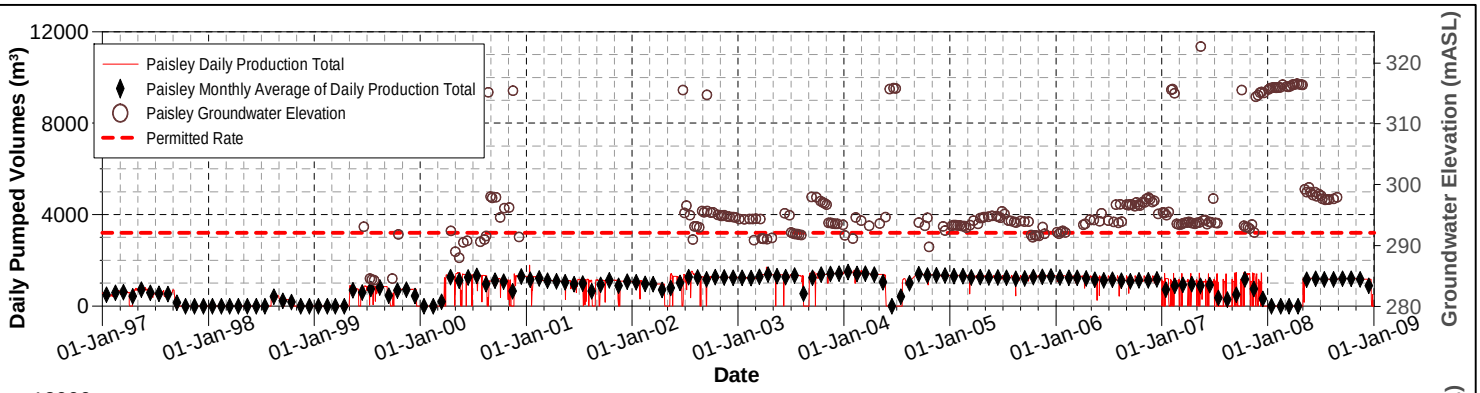
NOTE:
1) The Southeast Quadrant Total Volumes were calculated using the following wells: Burkes, Carter Arkell 1, Arkell 6, Arkell 7 and Arkell 8.

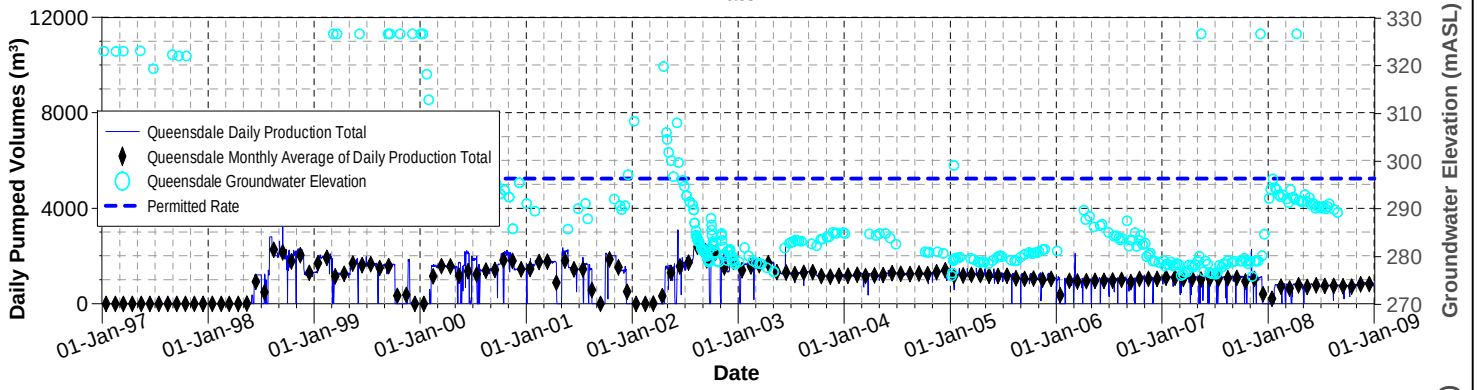
Southeast Quadrant Wells Daily Pumped Volumes and Groundwater Elevations		Golder Associates
Drawn: JLH	Approved: JAP	Date: May 2010
Project: 08-1112-0021		Figure: D3

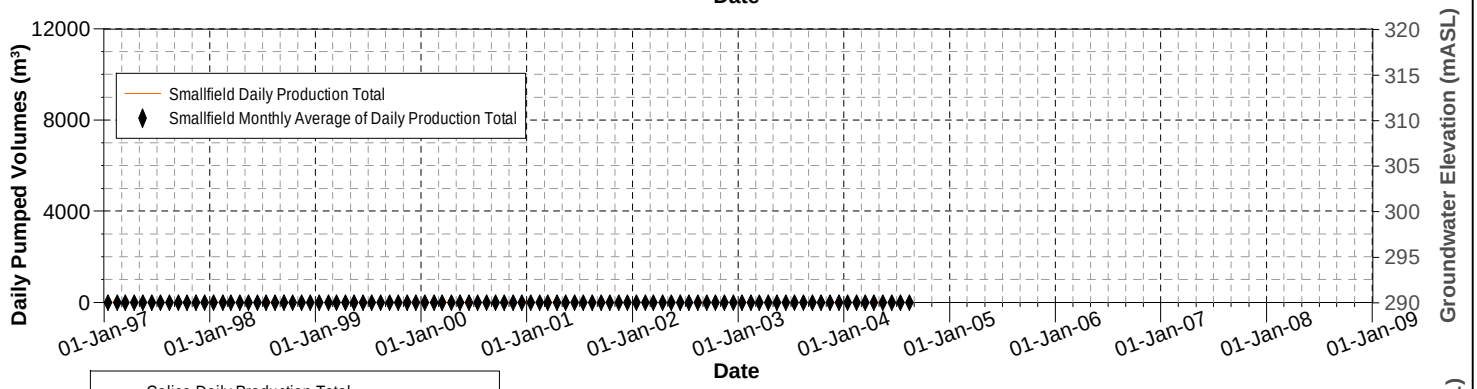


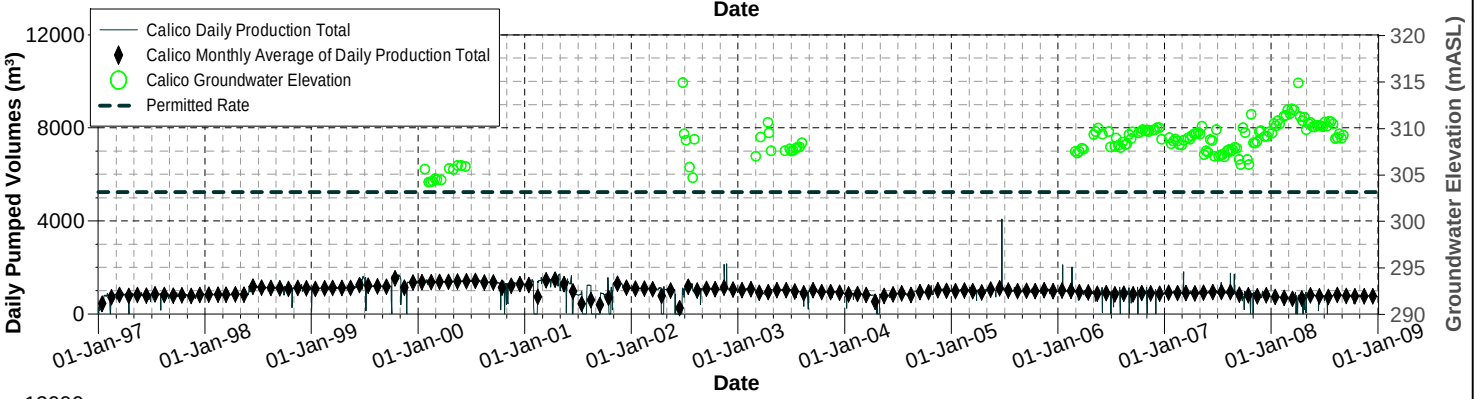
NOTE:
1) The Arkell Total Volumes were calculated using the following wells: Arkell 1, Arkell 6, Arkell 7 and Arkell 8.

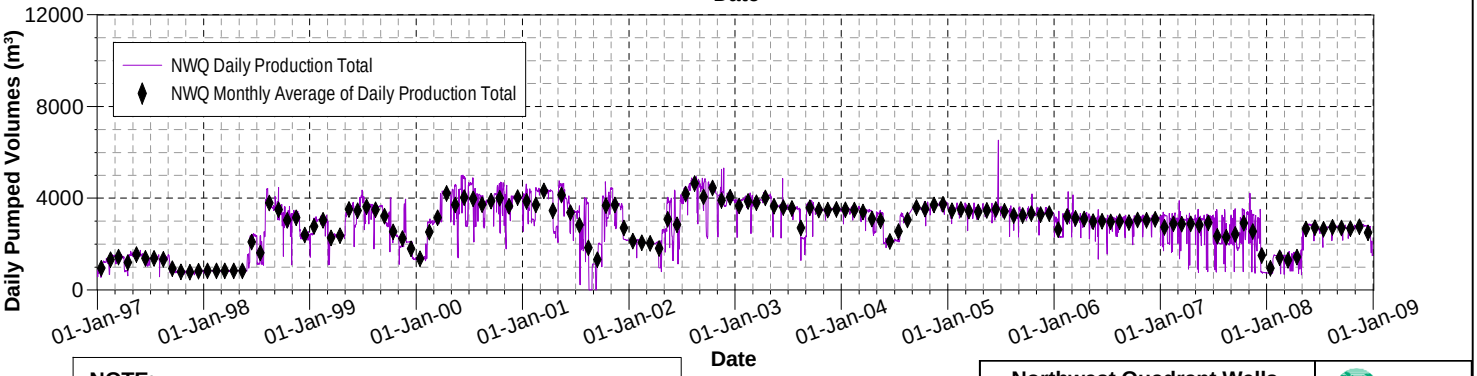
Arkell Wells Daily Pumped Volumes and Groundwater Elevations		Golder Associates
Drawn: JLH	Approved: JAP	Date: May 2010
Project: 08-1112-0021		Figure: D4





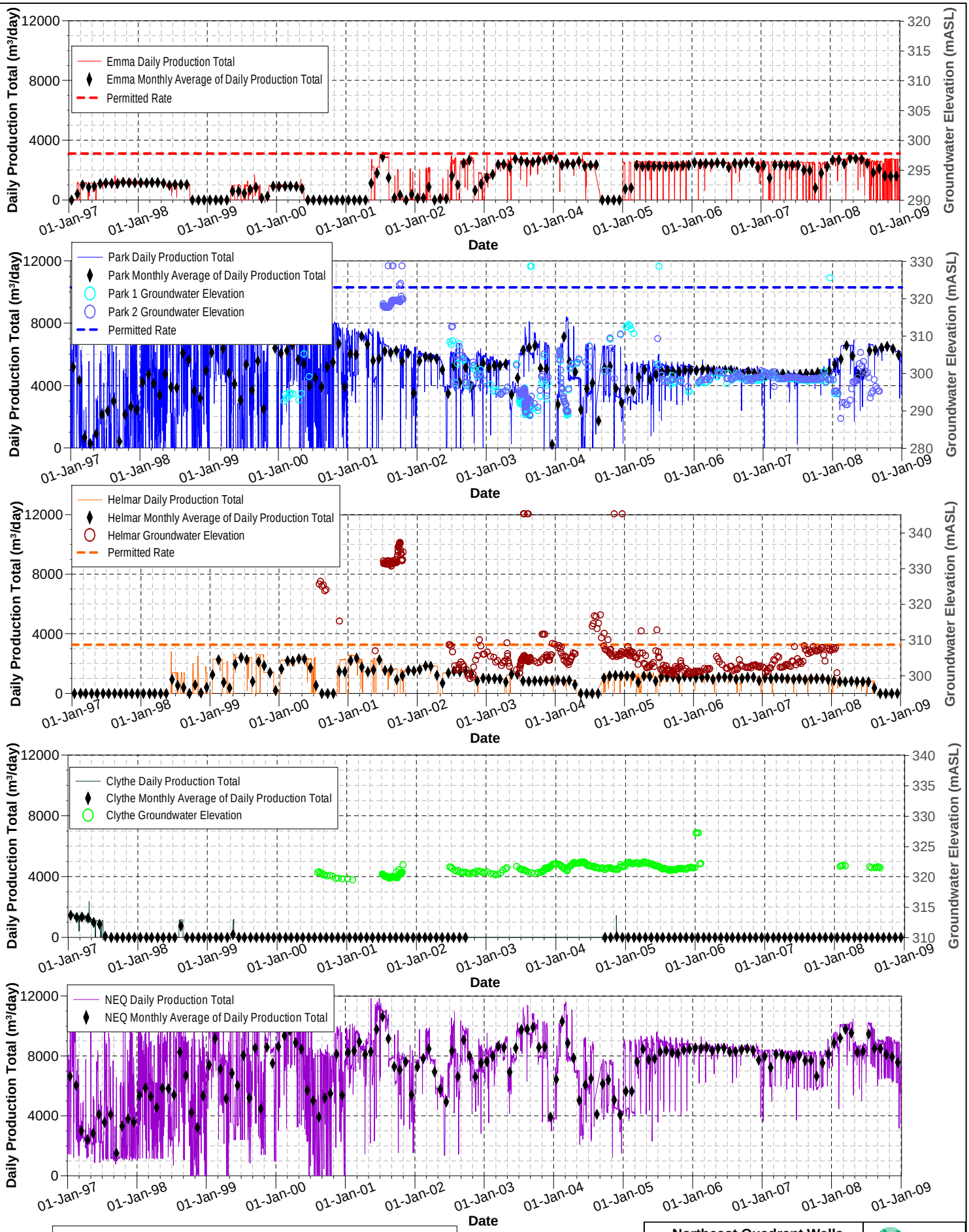






NOTE:
1) The Northwest Quadrant Total Volumes were calculated using the following wells: Paisley, Queensdale, Smallfield, and Calico.

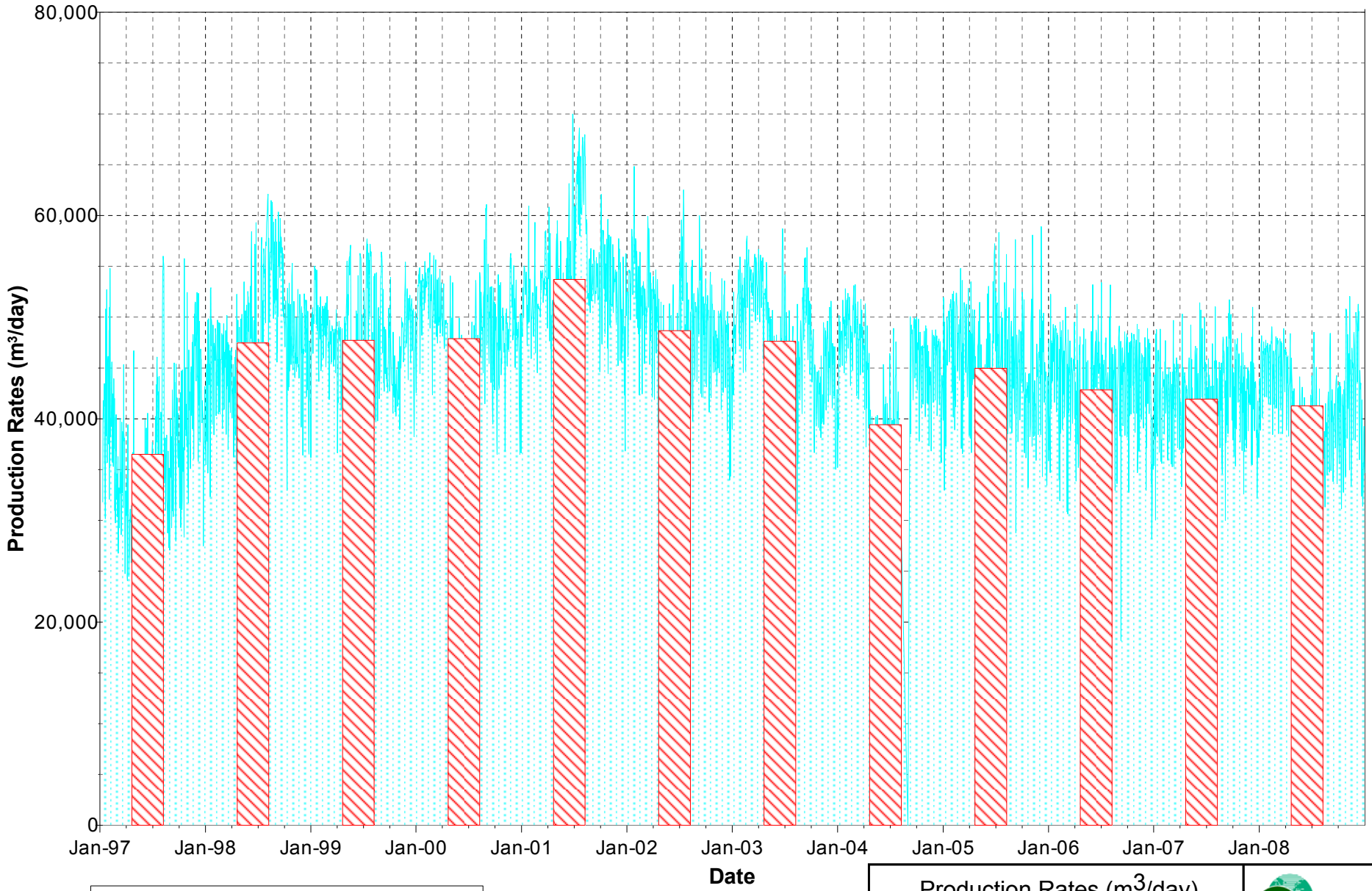
Northwest Quadrant Wells Daily Pumped Volumes and Groundwater Elevations		Golder Associates
Drawn: JLH	Approved: JAP	Date: May 2010
Project: 08-1112-0021		Figure: D5



NOTE:
1) The Northeast Quadrant Total Volumes were calculated using the following wells: Emma, Park, Helmar and Clythe.

Northeast Quadrant Wells Daily Pumped Volumes and Groundwater Elevations		
Drawn: JLH	Approved: JAP	Date: May 2010
Project: 08-1112-0021		Figure: D6

Golder Associates



LEGEND

Daily Production Total

Average Annual Production

Production Rates (m^3/day)
City of Guelph Production Wells
1997-2008

Golder Associates

DRAWN: JLH	APPROVED: JAP	DATE: MAY 2010
PROJECT NO: 08-1112-021		FIGURE: D7

D2: Hydrographs

Table D1: 2007/2008 Representative Water Level Elevations

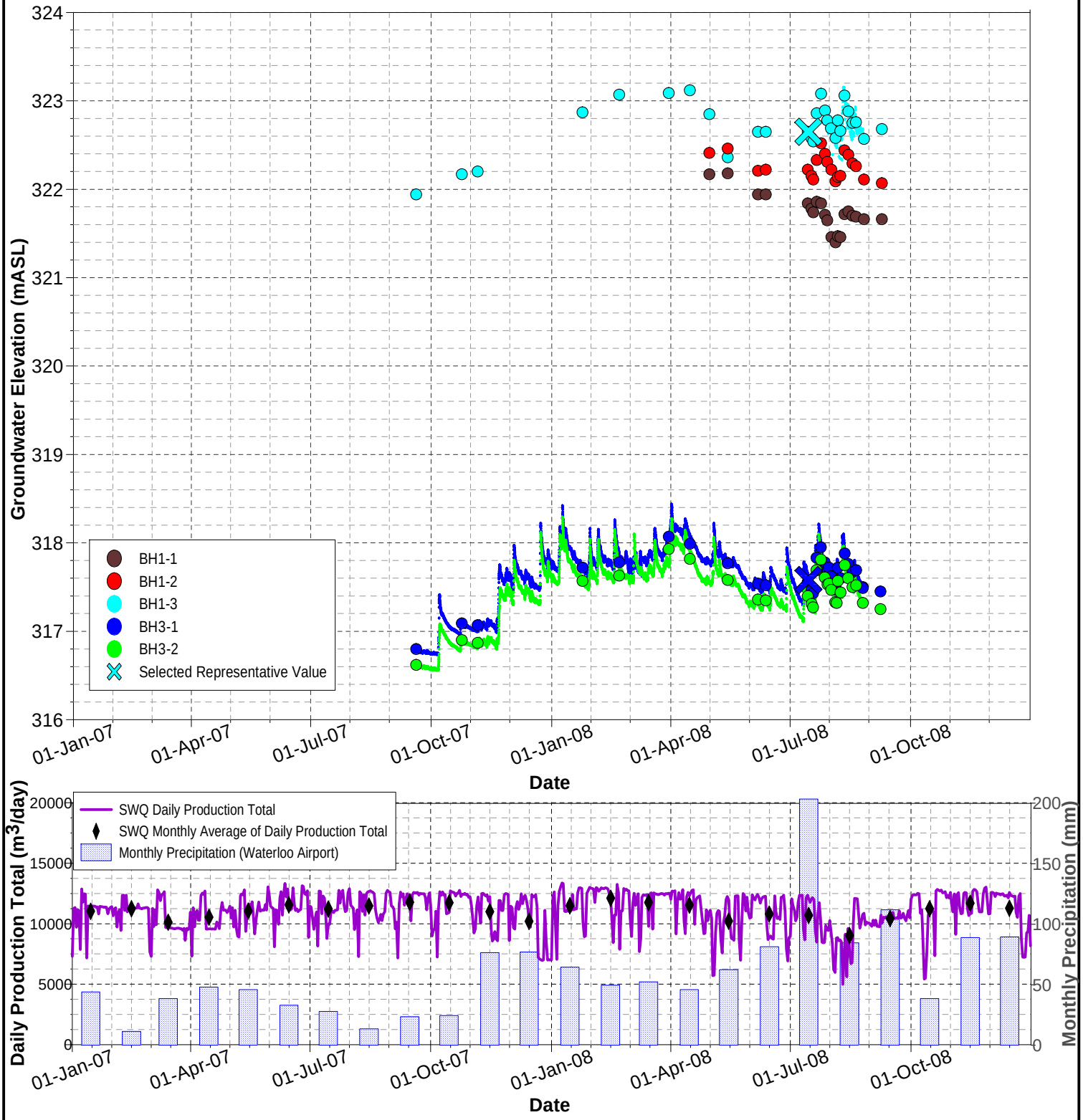
Well_ID	Date	Easting	Northing	Ground Surface (masl)	Top of Screen Depth (m)	Bottom of Screen Depth (m)	Water Elevation (masl)	Water Min (masl)	Water Max (masl)
MW06-06 A	30-May-07	563129	4819827	336.9	62.5	68.6	321.6	319.0	323.0
MW06-06 C	30-May-07	563129	4819827	336.9	19.8	22.9	332.3	331.0	333.0
MW06-07 A	31-May-07	565683	4813872	337.4	85.3	91.4	317.4	316.3	319.1
MW06-07 B	31-May-07	565683	4813872	337.4	61.0	64.0	316.8	316.1	317.1
MW06-07 D	31-May-07	565685	4813872	337.4	16.8	19.8	326.1		
MW06-08 A	31-May-07	565944	4817135	337.9	73.2	79.2	331.5	330.0	332.2
MW06-08 C	31-May-07	565944	4817135	337.9	19.8	27.4	333.7	331.4	334.5
MW06-09 A	31-May-07	566130	4818503	335.9	61.0	67.1	328.6	327.0	330.1
MW06-09 D	31-May-07	566130	4818503	335.9	12.2	15.2	332.3	330.5	333.0
MW06-10 A	31-May-07	567679	4817485	346.6	85.3	91.4	332.7	331.2	333.4
MW06-10 C	31-May-07	567679	4817481	346.6	35.1	38.1	332.6	331.2	333.4
MW08-01 A	15-Jul-08	560990	4817482	313.5	54.9	68.0	299.0	297.0	300.0
MW08-01 B	15-Jul-08	560988	4817483	313.4	4.1	7.9	310.7	310.4	311.6
MW08-02 A	15-Jul-08	560096	4819483	324.9	58.0	67.0	293.2	292.0	295.0
MW08-02 B	15-Jul-08	560096	4819483	324.9	13.7	23.5	312.8	312.5	313.2
MW08-T3-01-Test 4		555101	4824026	339.3	24.4	24.7	335.3	334.4	335.7
MW08-T3-01-Test 1		555101	4824026	339.3	68.1	68.4	336.7	335.6	337.1
MW08-T3-02-Test 1	15-Nov-08	559364	4830635	368.3	60.3	70.3	358.4		
MW08-T3-02-Test 5	15-Nov-08	559364	4830635	368.3	19.3	29.3	360.0		
MW08-T3-04-Test 1	15-Feb-09	552656	4836469	412.9	115.0	125.0	402.8		
MW08-T3-04-Test 3	15-Feb-09	552656	4836469	412.9	26.0	36.0	402.9		
MW08-T3-05-4		562220	4845824	427.6	58.7	59.0	428.0	427.8	428.3
MW08-T3-05-CS		562220	4845824	427.6	23.8	25.3	427.7	427.5	427.9
MW08-T3-06-3		568274	4834617	365.8	10.3	10.6	362.7	362.1	362.5
MW08-T3-06-6		568274	4834617	365.8	36.7	37.0	364.9	364.7	365.3
MW08-T3-07-2		564581	4828349	354.3	20.4	22.4	347.4	341.6	352.2
MW08-T3-07-7		564581	4828349	354.3	54.7	57.8	341.6	341.5	341.8
MW08-T3-08-2		560949	4826604	345.3	20.4	22.4	340.9	340.5	341.7
MW08-T3-08-7		560949	4826604	345.3	56.2	61.0	332.0	331.5	332.7
MW08-T3-09-13		570645	4820065	346.5	71.3	75.6	325.7	325.4	326.1
MW08-T3-09-2		570645	4820065	346.5	31.2	32.8	340.0	339.9	340.1
MW08-T3-10-15		563161	4812509	330.3	93.3	96.8	301.9	300.5	303.3
MW08-T3-10-4		563161	4812509	330.3	49.4	51.1	320.4	320.3	320.8
MW09-T3-01		560864	4810649	315.8	82.3	97.5	303.3	303.2	303.5
MW101		562590	4816126				317.8		
MW102		562163	4815860				319.2		
MW103		562895	4815933				322.8		
MW104		562401	4815648				321.1		
MW105		562700	4815489				322.7		
MW106		563458	4815478				326.2		
MW107		563540	4815143				326.7		
MW108		562867	4814607				327.3		
MW109		563116	4814444				326.7		
MW110		563532	4814502				327.1		
MW111		562710	4815365				324.9		
OW112		562531	4814288	330.4	28.0	32.3	325.8		
OW113		563532	4814478	339.9	40.8	46.3	325.9		
OW114		564115	4814640	338.7	34.1	39.0	326.5		
MW115		562313	4815311				323.5		
MW115A		562312	4815309				322.7		
MW116	15-Jul-08	562305	4816139	318.8	9.8	11.4	314.7	314.5	315.0
MW117	15-Jul-08	562525	4815889	321.2	7.1	9.1	318.1	317.6	318.4
MW118	15-Jul-08	562921	4815685	324.0	7.3	9.2	323.6	323.3	324.0
MW119		562960	4815279				325.2		
MW120		563249	4814948				327.6		
MW121		563395	4814817				326.3		
MW121A		563396	4814817				326.9		
MW122		562960	4814929				326.1		
MW123	15-Jul-08	562723	4815369	325.3	49.7	53.6	307.7	305.0	313.0
MWB-D	15-Jul-08	565144	4818690	333.6	17.7	18.8	328.1	325.3	330.0

Table D1: 2007/2008 Representative Water Level Elevations

Well_ID	Date	Easting	Northing	Ground Surface (masl)	Top of Screen Depth (m)	Bottom of Screen Depth (m)	Water Elevation (masl)	Water Min (masl)	Water Max (masl)
MWB-I	15-Jul-08	565144	4818690	333.6	11.3	12.2	331.8		
MWB-S	15-Jul-08	565144	4818690	333.6	5.0	5.9	332.2		
MWD-D	15-Jul-08	561794	4817031	316.4	7.4	9.0	314.0	313.0	315.0
OW01-92	16-Jun-07	559317	4818440	305.8	5.4	34.7	301.6	300.5	303.5
OW03-92	16-Jun-07	560172	4818351	325.9	14.5	54.1	300.8	299.0	302.0
OW04-92	16-Jun-07	560451	4818648	327.1	17.8	56.2	302.1	300.0	303.0
OW05-92 A	01-Jun-04	560223	4819045	331.5	57.0	64.0	296.5	295.0	297.8
OW05-92 B	16-Jun-07	560223	4819045	331.5	33.8	40.0	309.0	308.0	310.0
OW10-06/D	01-Jun-07	568680	4826606	327.6	25.0	30.0	323.0	321.0	324.0
OW10-06/I	01-Jun-07	568680	4826606	327.6	7.0	11.0	323.3	320.0	325.0
OW11D/00	01-Jun-07	568611	4822275	335.9	17.1	56.4	319.2	315.8	319.7
OW11S/00	01-Jun-07	568612	4822272	336.3	12.7	15.5	328.2	325.9	328.8
OW11-06/D	01-Jun-07	563769	4823687	323.9	52.0	57.0	321.1	319.8	321.8
OW11-06/S	01-Jun-07	563769	4823685	323.8	6.0	12.0	319.9	316.9	321.2
OW12/00	01-Jun-07	567644	4821533	337.2	10.7	57.9	317.7	314.7	324.6
OW13/00	01-Jun-07	566977	4822128	324.5	11.0	16.8	319.4	316.3	320.0
OW14D/00	01-Jun-07	568104	4823140	334.7	14.9	45.7	317.8	312.6	318.0
OW14S/00	01-Jun-07	568103	4823137	334.7	12.5	15.9	326.2	322.0	328.0
OW15/00	01-Jun-07	567438	4822880	319.9	6.2	30.5	318.1	315.2	319.8
OW16/00	15-Jul-01	566841	4822217	318.3	6.1	30.5	315.7		
OW18/00	01-Jun-07	567543	4822126	335.8	36.5	54.9	318.2	314.5	319.0
OW19D/00	01-Jun-07	567064	4822987	317.5	29.1	30.5	317.4	315.4	317.4
OW19S/00	01-Jun-07	567065	4822988	317.5	1.4	4.7	316.5	315.8	316.8
OW1-06/D	01-Jun-07	566772	4821308	342.7	73.0	78.0	319.7	318.0	321.5
OW1-06/S	01-Jun-07	566772	4821306	342.7	8.0	11.0	339.8	337.0	341.0
OW20D/01	01-Jun-07	567459	4823439	317.7	29.4	31.1	317.3	315.0	318.0
OW20S/01	01-Jun-07	567410	4823412	317.7	2.0	5.2	316.9		
OW2-06/D	01-Jun-07	569990	4821372	348.1	70.0	75.0	323.0	321.8	325.5
OW2-06/S	01-Jun-07	569988	4821373	348.1	11.0	15.0	339.9	338.2	340.8
OW3-06/D	01-Jun-07	569593	4823593	357.0	73.0	76.0	323.9	322.0	326.0
OW3-06/S	01-Jun-07	569595	4823592	357.1	28.0	34.0	327.2	325.0	328.1
OW4-06/D	01-Jun-07	568632	4824518	320.4	35.0	40.0	319.0	318.0	321.0
OW5-06/D	01-Jun-07	566441	4823588	351.6	63.0	68.0	318.4	316.0	320.0
OW5-06/S	01-Jun-07	566442	4823587	351.9	15.0	19.0	343.8	338.0	346.0
OW6-06/D	16-Jul-07	566302	4821825	316.0	26.0	30.0	317.3	316.0	318.0
OW7-06/D	01-Jun-07	569191	4824879	321.7	35.0	40.0	320.5	320.0	321.0
OW7-06/S	01-Jun-07	569192	4824880	321.8	5.8	9.8	320.4	319.8	321.2
OW8-06/D	01-Jun-07	571011	4823050	334.6	44.0	49.0	331.2	329.8	332.0
OW8-06/S	01-Jun-07	571014	4823048	334.8	8.0	12.3	333.9	332.9	334.6
OW9-06/D	01-Jun-07	570515	4824670	326.7	33.0	38.0	322.8	322.0	323.5
OW9-06/S	01-Jun-07	570516	4824660	326.7	8.0	11.0	323.2	322.1	325.0
SACCO	12-Jun-00	556416	4821929	339.2	6.1	95.7	337.9	336.0	338.5
SC95-08-6	15-Jul-08	563979	4818172	331.5	3.9	6.1	331.2	330.0	332.5
SMALLFIELD	01-Dec-08	556716	4820859	344.0	5.3	102.1	334.2	330.0	336.0
SUMP 3	01-Jul-07	560020	4819025	288.3			288.3		
TW04-01 A	15-Jul-08	561360	4818045	328.2	62.5	71.6	298.0	294.0	299.0
TW04-01 C	15-Jul-08	561360	4818045	328.2	29.0	33.5	313.5	311.9	314.5
TW04-02 A	15-Jul-08	560339	4818016	325.1	62.5	71.6	296.4	294.0	297.0
TW04-02 C	15-Jul-08	560339	4818016	325.1	24.4	29.0	308.6	306.0	309.3
TW08-01 A	15-Jul-08	561755	4817896	331.6	65.5	82.3	298.5	295.0	300.0
TW08-01 B	15-Jul-08	561755	4817896	331.6	27.4	35.0	314.6	313.0	315.6
TW08-02 A	15-Jul-08	562101	4818417	325.4	57.9	68.0	298.1	295.0	300.0
TW08-02 B	15-Jul-08	562101	4818417	325.4	16.8	22.9	318.8	314.0	319.8
UG-3	15-Jul-08	562584	4820326	332.8	9.9	58.2	308.6		
UG-4	15-Jul-08	562024	4819077	335.0	17.4	68.6	301.2		
UG-7	15-Jul-08	561331	4819442	326.5	6.4	76.0	302.8	300.0	306.0

Table D1: 2007/2008 Representative Water Level Elevations

Well_ID	Date	Easting	Northing	Ground Surface (masl)	Top of Screen Depth (m)	Bottom of Screen Depth (m)	Water Elevation (masl)	Water Min (masl)	Water Max (masl)
500 Stone Road	15-Jul-08	561338	4818174	327.7	19.0	24.4	313.5	311.8	314.3
ADMIRAL	15-Jul-08	564142	4815426	334.4	45.1	101.8	320.9	320.0	327.0
Arkell 15- PW15A/00	15-Jul-01	567443	4822881	319.8	14.0	30.5	314.9	310.0	317.3
Arkell 6 - PW6/63	15-Jul-01	567939	4823073	330.8	10.9	41.2	314.8	310.0	318.0
Arkell 7 - PW7/63	30-May-07	567989	4822433	330.2	24.1	43.3	314.4	310.0	318.0
Arkell 8 - PW8/63	01-Jun-07	568074	4822973	332.4	12.4	42.1	315.1	310.0	318.0
BH1-3	15-Jul-08	563554	4817513	323.8	2.2	6.4	322.7		
BH3-1	15-Jul-08	562546	4816865	318.3	5.4	30.8	317.6	316.5	318.6
BH4-3	15-Jul-08	564849	4815936	333.4	4.2	8.0	330.0		
BH5-1	15-Jul-08	563935	4817179	324.4	14.4	33.4	323.2	322.5	323.8
BH6-1	15-Jul-08	562342	4818144	323.3	8.8	30.7	318.7	315.0	320.7
BURKE OBS	15-Jul-08	565149	4818696	335.5	21.6	81.1	327.3		
Carter 1-PW2/62	30-May-07	564872	4820592	324.2	2.7	20.7	321.4	318.0	325.0
Carter 2-PW1/89	30-May-07	564870	4820808	327.4	2.7	20.1	321.4	318.0	325.0
CLAIR A	30-May-07	564875	4815909	333.7	73.0	83.0	328.4	327.3	329.5
CLAIR C	30-May-07	564875	4815909	333.7	35.8	30.5	329.9	328.9	330.3
DOWNEY OBS	27-Jun-07	561794	4817026	318.1	6.2	46.1	294.4	293.0	295.0
EASTVIEW A	31-May-07	561281	4823857	343.3	59.5	64.0	317.0	313.0	320.0
EASTVIEW C	31-May-07	561281	4823857	343.3	21.3	24.4	331.6	329.9	332.8
Edinburgh-PW2/53	15-Jul-08	560594	4820066	315.6	7.2	69.5	299.0	298.0	304.0
FLEMING A	30-May-07	563298	4826047	343.9	51.8	56.4	343.8	341.5	344.9
FLEMING C	30-May-07	563298	4826047	343.9	15.2	16.8	343.9	341.9	344.5
GSTW1-08	25-Nov-08	562996	4814664	329.9	35.8	91.4	306.4		
GSTW2-08		562286	4816097	319.8	35.8	85.3	312.8		
HAUSER A	30-May-07	555554	4819528	324.0	67.1	76.2	322.1	320.5	323.9
HAUSER C	30-May-07	555554	4819528	324.0	18.3	24.4	322.2	320.7	323.8
HCMW08-01		562046	4817295				315.6		
HCP08-01		562228	4817086				316.7		
HCP08-02		562479	4817094				317.6		
HCP08-03		562899	4817371				319.3		
HCP08-04		562773	4817668				320.5		
HCP08-05		562509	4818197				322.4		
HCP08-06		562614	4817107				317.9		
HCP08-07		562197	4818322				322.8		
Logan 4 - OW4/66	15-Jul-01	563989	4826623	341.5	7.6	74.4	344.0	343.1	344.8
MCCURDY A	30-May-07	563539	4817510	323.9	54.9	59.5	321.3	320.5	322.8
MCCURDY C	30-May-07	563539	4817510	323.9	18.9	20.4	321.8	320.4	322.6
MCW01-13		563816	4817724				326.7		
MCW01-5		563816	4817724				324.3		
MEMBRO OW A	30-May-07	560273	4819870	313.9	4.0	42.9	287.4	283.5	290.0
MEMBRO OW B	15-Jun-04	560273	4819870	313.9	5.2	15.0	309.7	309.4	310.2
MW001		563019	4815738				324.0		
MW002		563116	4815264				325.8		
MW003		562436	4814814				325.9		
MW004		562532	4814286				326.0		
MW005 (I)		564015	4814708				327.7		
MW006		563955	4815051				327.6		
MW04-01 A	31-May-07	560932	4818359	320.9	68.6	74.7	298.3	297.0	300.0
MW04-01 B	31-May-07	560932	4818359	320.9	21.3	24.4	310.7	309.0	311.2
MW06-01-10		563573	4818172				338.1		
MW06-01 A	30-May-07	555406	4821496	342.4	79.2	85.3	335.4	334.0	336.4
MW06-01 C	30-May-07	555405	4821496	342.4	13.7	16.8	341.3	340.3	341.9
MW06-02 A	30-May-07	558091	4821806	332.3	70.1	76.2	331.3	330.7	332.1
MW06-02 C	30-May-07	558091	4821806	332.3	7.6	10.7	331.5	331.0	332.3
MW06-03 A	30-May-07	559683	4824622	342.6	65.5	70.1	306.2	301.8	308.1
MW06-03 C	30-May-07	559683	4824622	342.6	16.8	19.8	337.8	336.1	338.3
MW06-04 A	05-Jun-07	559519	4819464	307.1	45.7	51.8	293.5	292.1	296.7
MW06-04 C	31-May-07	559519	4819464	307.1	5.5	7.0	301.4	300.3	302.9
MW06-05 A	30-May-07	559860	4820988	330.6	59.4	65.5	307.9	304.0	310.2
MW06-05 C	30-May-07	559860	4820988	330.6	12.2	13.7	318.0	316.9	318.5

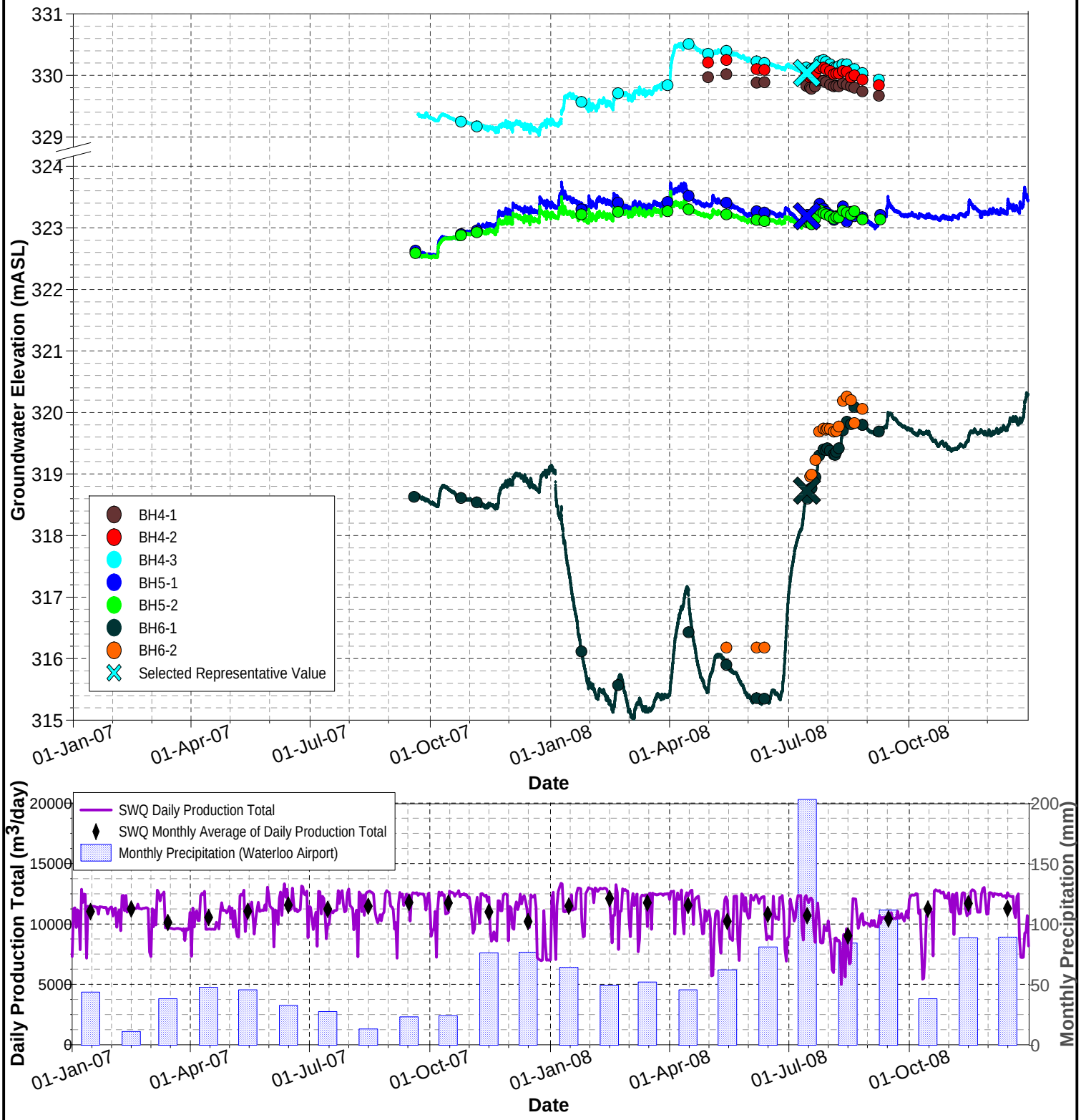


NOTE:
1) The Southwest Quadrant Total Volumes were calculated using the following wells: Membro, Edinburgh, Water, Dean University and Downey.

Groundwater Elevation Monitoring
Southwest Quadrant
BH1 and BH3

Golder Associates

DRAWN: JLH	APPROVED: JAP	DATE: May 2010
PROJECT NUMBER: 08-1112-0021		FIGURE: D8

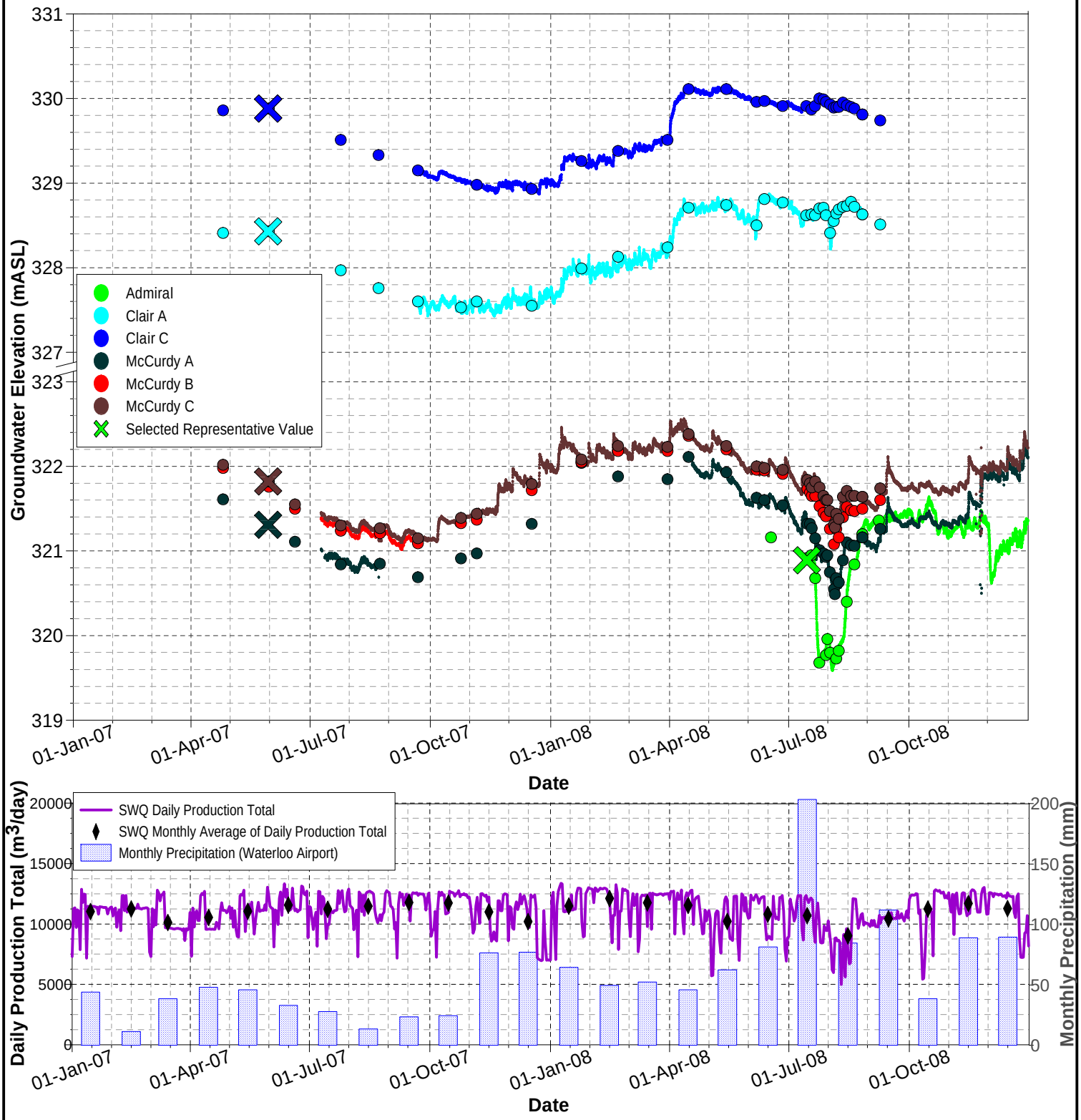


NOTE:
1) The Southwest Quadrant Total Volumes were calculated using the following wells: Membro, Edinburgh, Water, Dean University and Downey.

Groundwater Elevation Monitoring
Southwest Quadrant
BH4, BH5 and BH6

Golder Associates

DRAWN: JLH	APPROVED: JAP	DATE: May 2010
PROJECT NUMBER: 08-1112-0021		FIGURE: D9

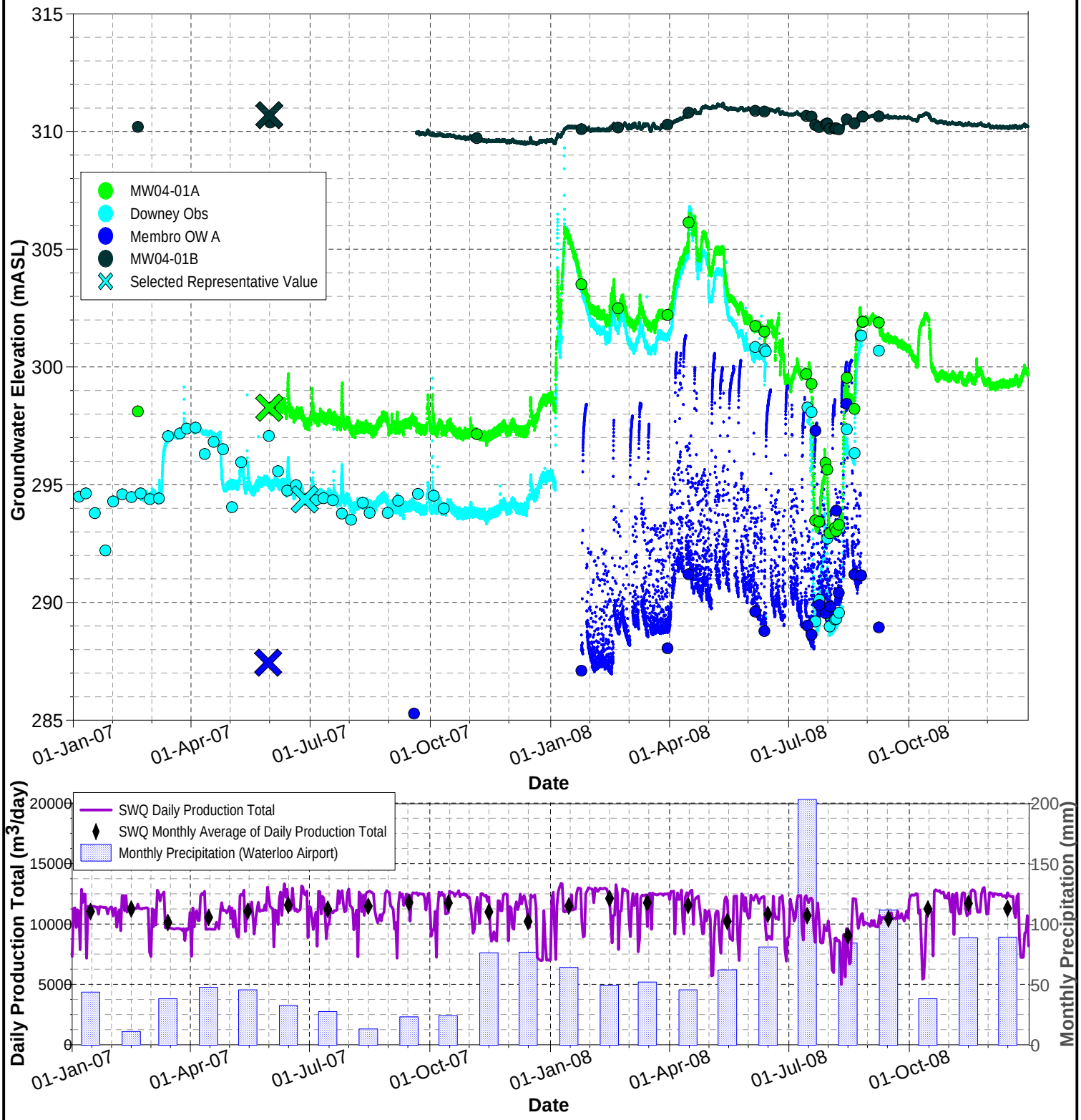


NOTE:
1) The Southwest Quadrant Total Volumes were calculated using the following wells: Membro, Edinburgh, Water, Dean University and Downey.

Groundwater Elevation Monitoring
Southwest Quadrant
Admiral, Clair and McCurdy

Golder Associates

DRAWN: JLH	APPROVED: JAP	DATE: May 2010
PROJECT NUMBER: 08-1112-0021		FIGURE: D10

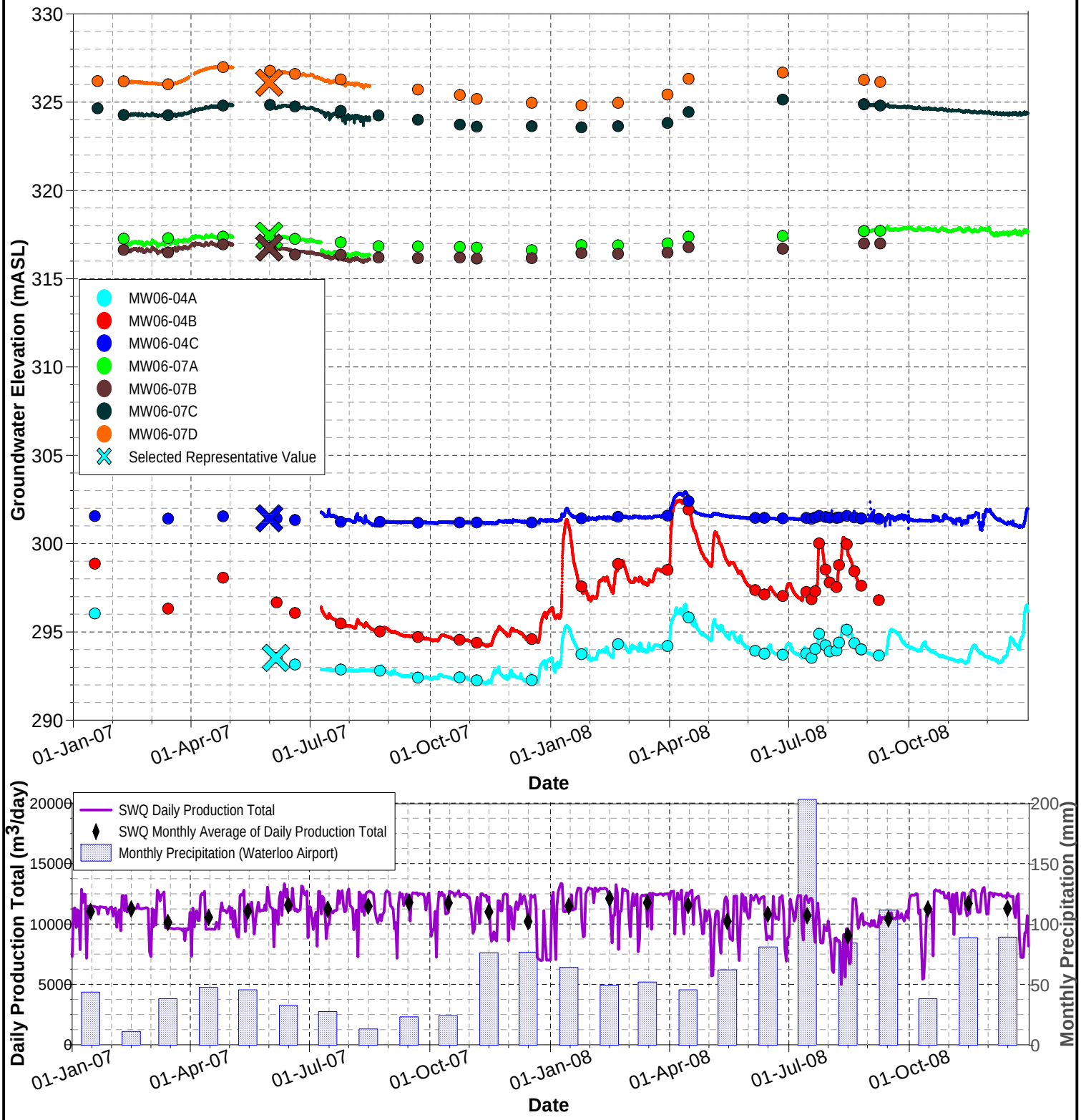


NOTE:
1) The Southwest Quadrant Total Volumes were calculated using the following wells: Membro, Edinburgh, Water, Dean University and Downey.

Groundwater Elevation Monitoring
Southwest Quadrant
Downey Obs, Membro OW
and MW04-01

Golder Associates

DRAWN: JLH	APPROVED: JAP	DATE: May 2010
PROJECT NUMBER: 08-1112-0021		FIGURE: D11

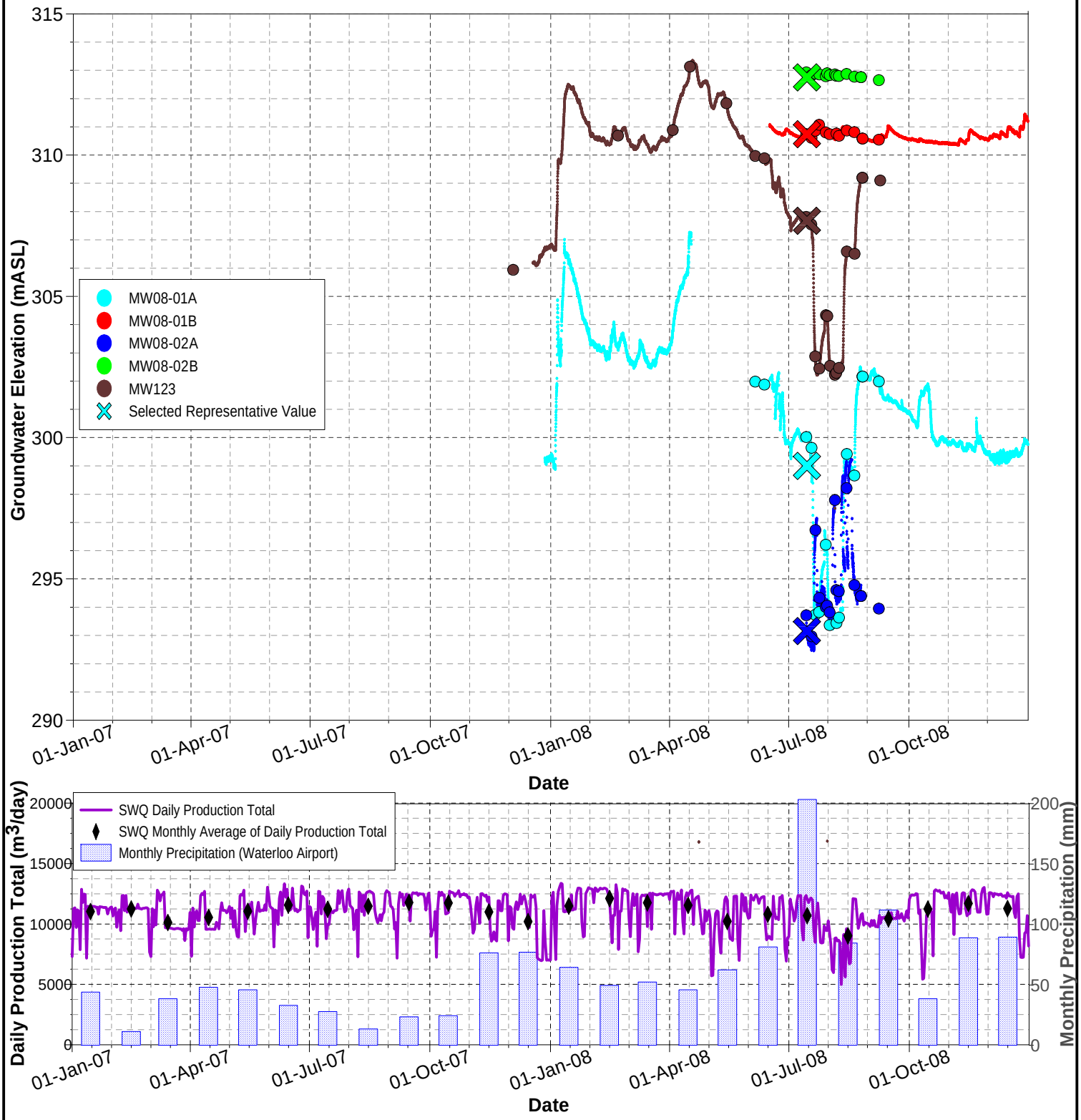


NOTE:
1) The Southwest Quadrant Total Volumes were calculated using the following wells: Membro, Edinburgh, Water, Dean University and Downey.

Groundwater Elevation Monitoring
Southwest Quadrant
MW06-04 and MW06-07

Golder Associates

DRAWN: JLH	APPROVED: JAP	DATE: May 2010
PROJECT NUMBER: 08-1112-0021		FIGURE: D12

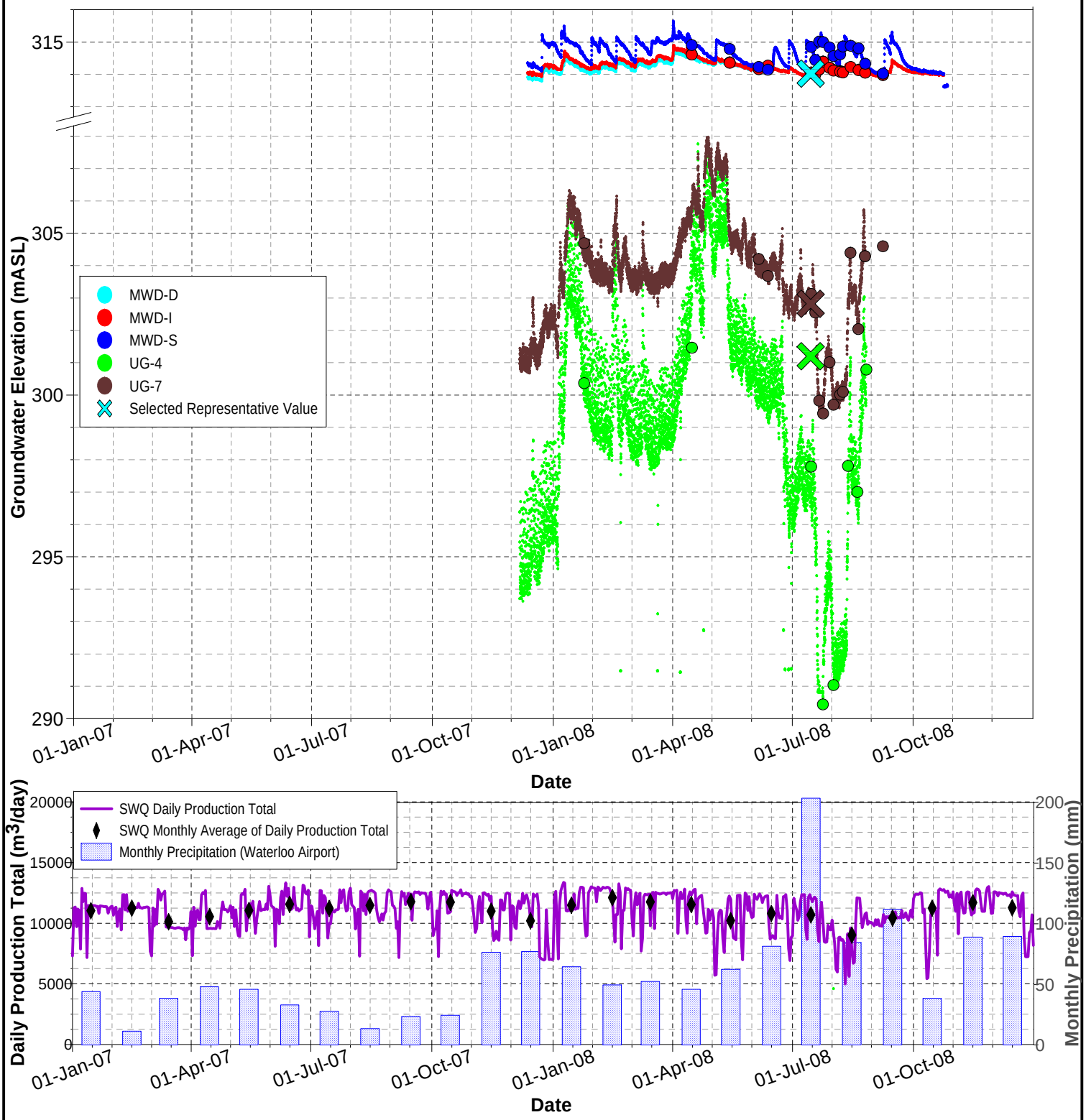


NOTE:
1) The Southwest Quadrant Total Volumes were calculated using the following wells: Membro, Edinburgh, Water, Dean University and Downey.

Groundwater Elevation Monitoring
Southwest Quadrant
MW08-01, MW08-02 and MW123

Golder Associates

DRAWN: JLH	APPROVED: JAP	DATE: May 2010
PROJECT NUMBER: 08-1112-0021		FIGURE: D13

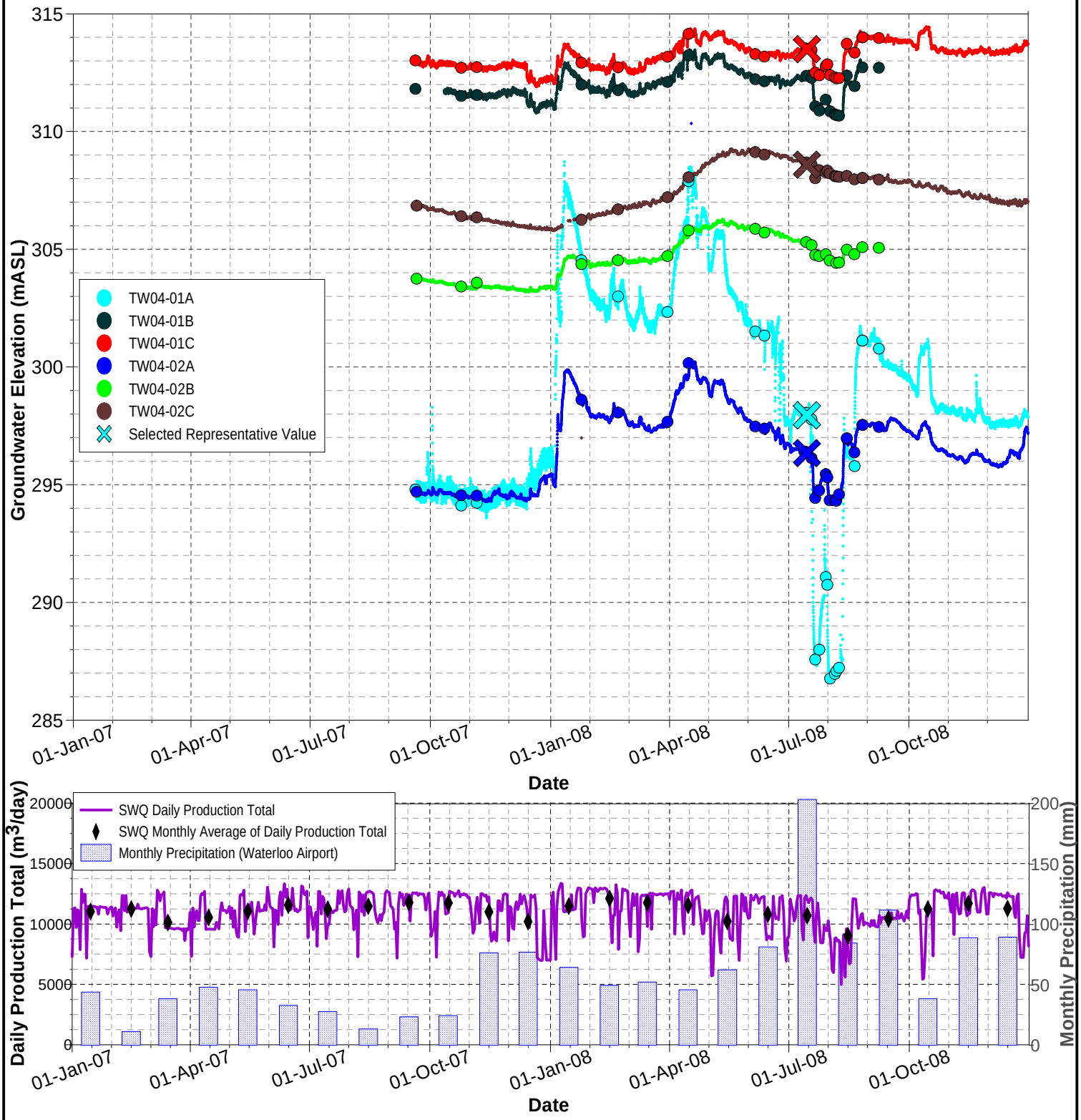


NOTE:
1) The Southwest Quadrant Total Volumes were calculated using the following wells: Membro, Edinburgh, Water, Dean University and Downey.

Groundwater Elevation Monitoring
Southwest Quadrant
MWD and UG

Golder Associates

DRAWN: JLH	APPROVED: JAP	DATE: May 2010
PROJECT NUMBER: 08-1112-0021		FIGURE: D14

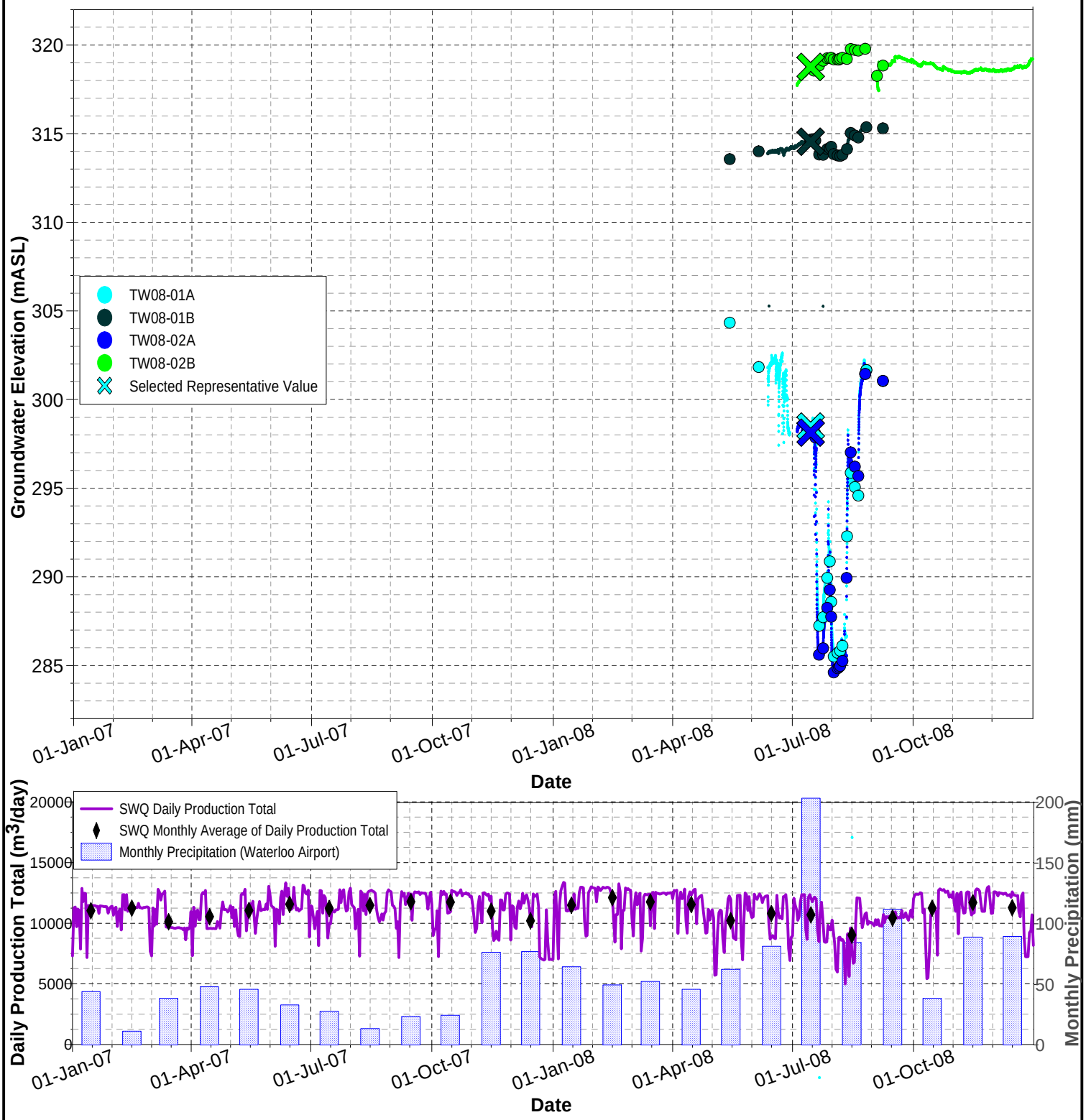


NOTE:
1) The Southwest Quadrant Total Volumes were calculated using the following wells: Membro, Edinburgh, Water, Dean University and Downey.

Groundwater Elevation Monitoring
Southwest Quadrant
TW04-01 and TW04-02

Golder Associates

DRAWN: JLH	APPROVED: JAP	DATE: May 2010
PROJECT NUMBER: 08-1112-0021		FIGURE: D15

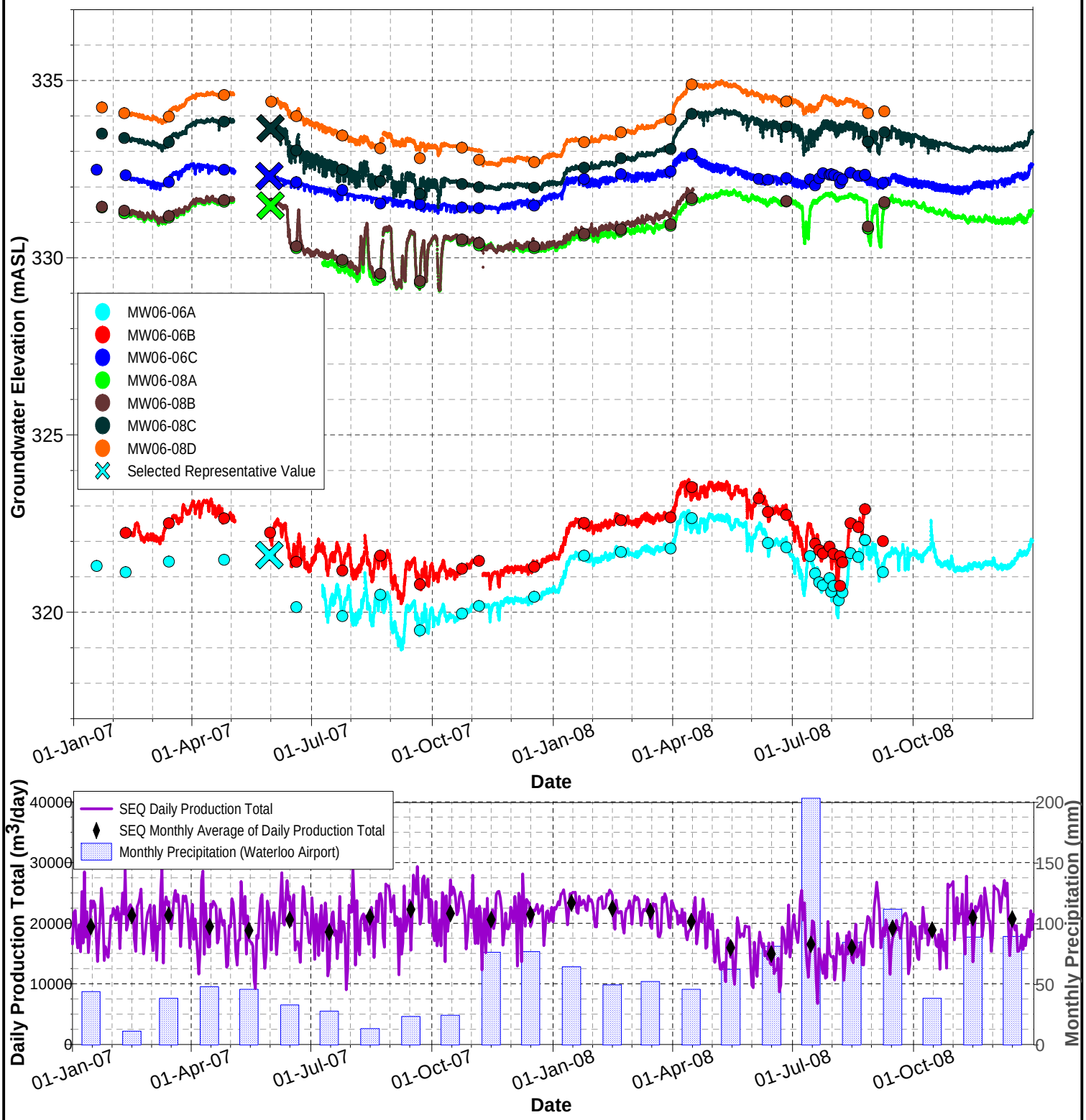


NOTE:
1) The Southwest Quadrant Total Volumes were calculated using the following wells: Membro, Edinburgh, Water, Dean University and Downey.

Groundwater Elevation Monitoring
Southwest Quadrant
TW08-01 and TW08-02

Golder Associates

DRAWN: JLH	APPROVED: JAP	DATE: May 2010
PROJECT NUMBER: 08-1112-0021		FIGURE: D16

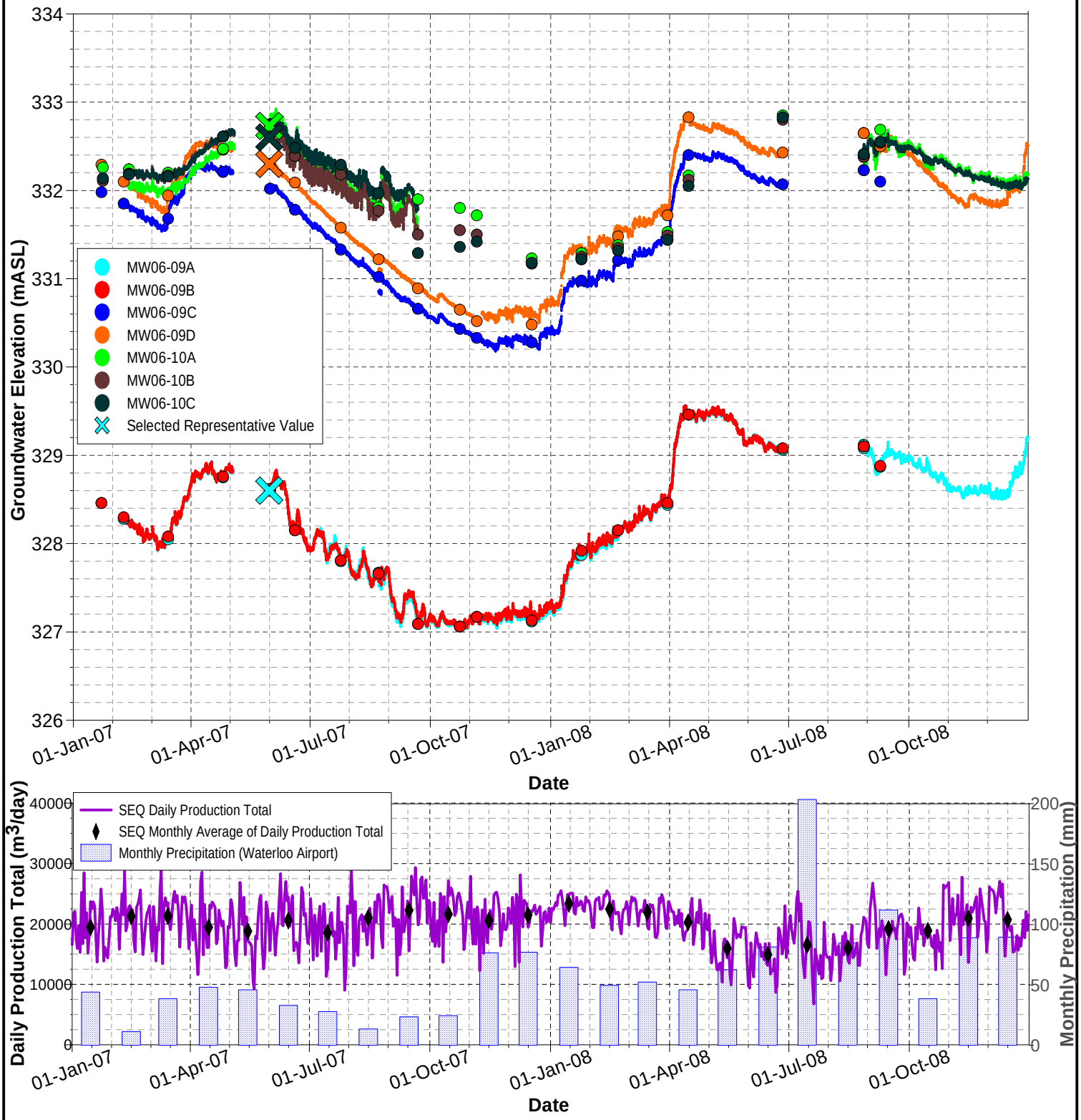


NOTE:
1) The Southeast Quadrant Total Volumes were calculated using the following wells: Burkes, Carter Arkell 1, Arkell 6, Arkell 7 and Arkell 8.

Groundwater Elevation Monitoring
Southeast Quadrant
MW06-06 and MW06-08

Golder Associates

DRAWN: JLH	APPROVED: JAP	DATE: May 2010
PROJECT NUMBER: 08-1112-0021		FIGURE: D17

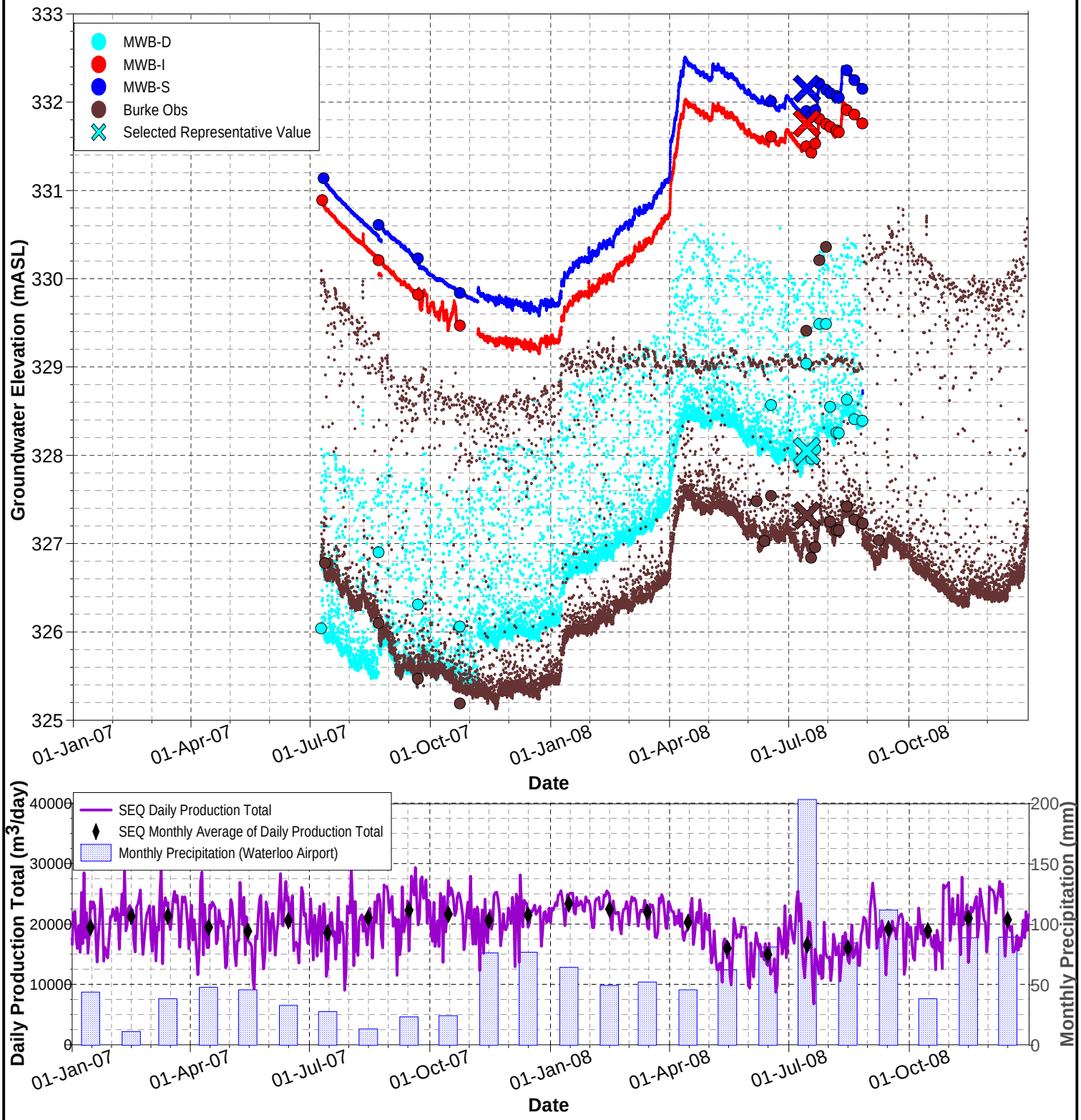


NOTE:
1) The Southeast Quadrant Total Volumes were calculated using the following wells: Burkes, Carter Arkell 1, Arkell 6, Arkell 7 and Arkell 8.

Groundwater Elevation Monitoring
Southeast Quadrant
MW06-09 and MW06-10

Golder Associates

DRAWN: JLH	APPROVED: JAP	DATE: May 2010
PROJECT NUMBER: 08-1112-0021		FIGURE: D18

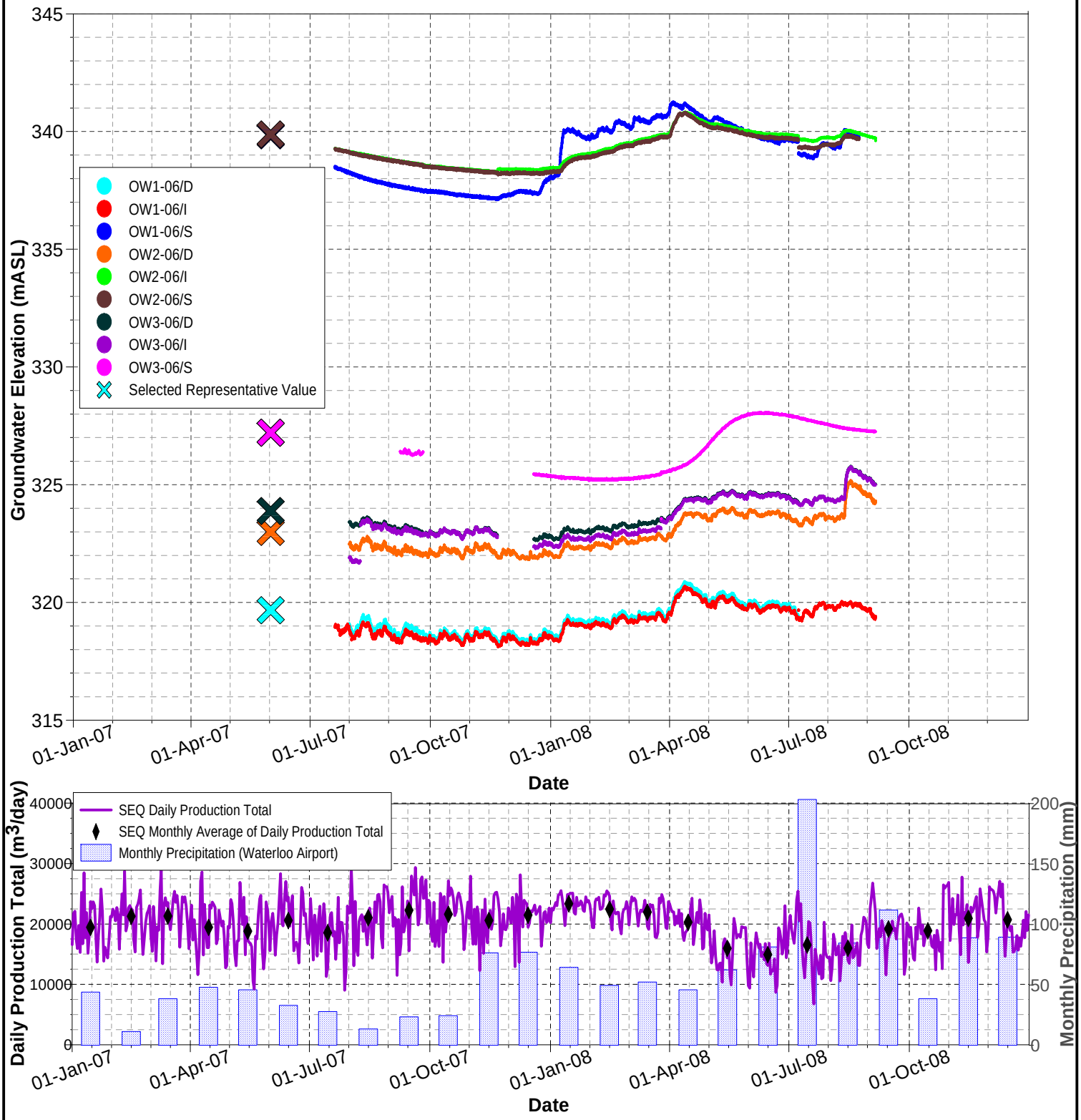


NOTE:
1) The Southeast Quadrant Total Volumes were calculated using the following wells: Burkes, Carter Arkell 1, Arkell 6, Arkell 7 and Arkell 8.

Groundwater Elevation Monitoring
Southeast Quadrant
MWB and Burke Obs

Golder Associates

DRAWN: JLH	APPROVED: JAP	DATE: May 2010
PROJECT NUMBER: 08-1112-0021		FIGURE: D19

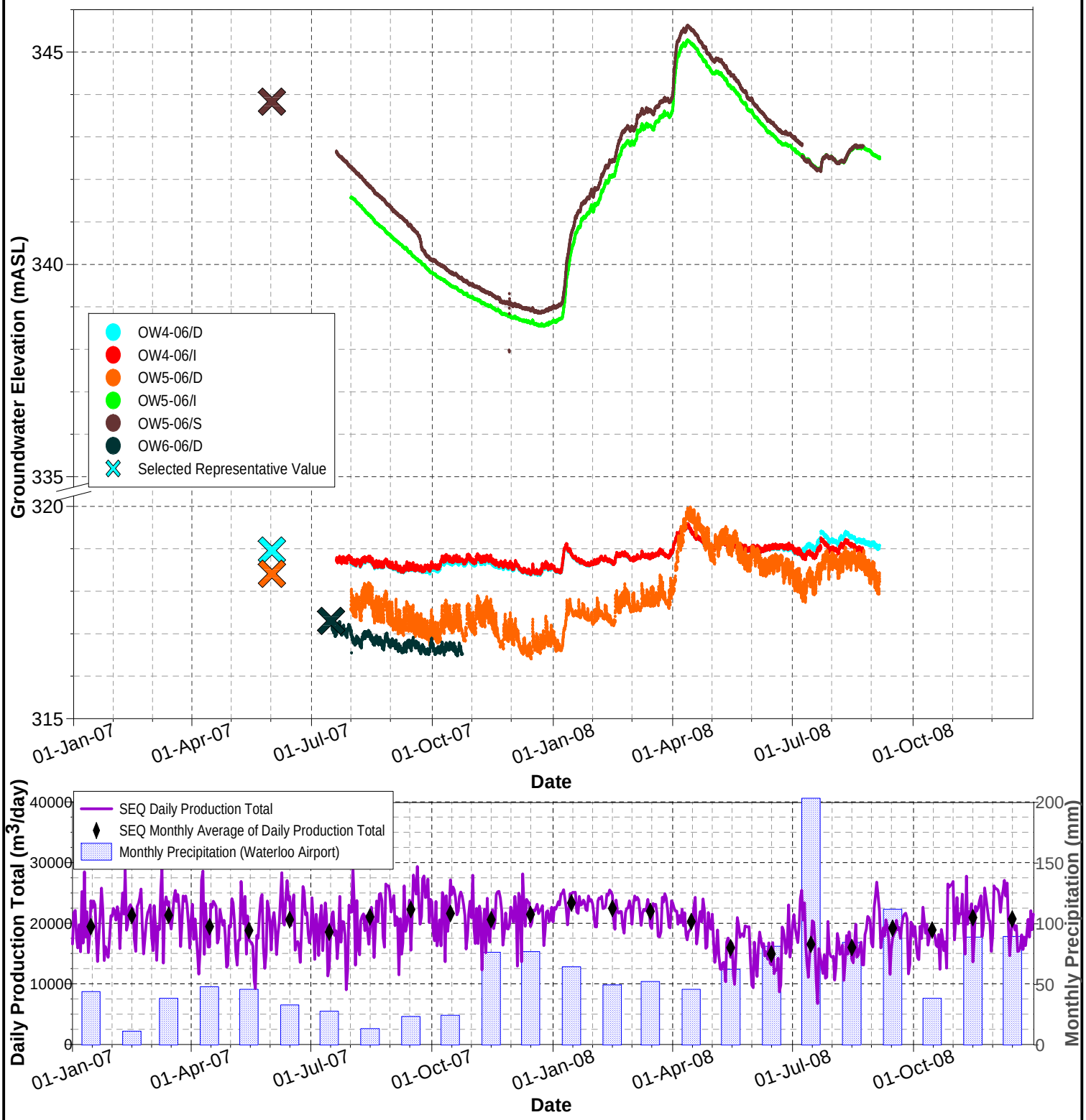


NOTE:
1) The Southeast Quadrant Total Volumes were calculated using the following wells: Burkes, Carter Arkell 1, Arkell 6, Arkell 7 and Arkell 8.

Groundwater Elevation Monitoring
Southeast Quadrant
OW1-06, OW2-06 and OW3-06

Golder Associates

DRAWN: JLH	APPROVED: JAP	DATE: May 2010
PROJECT NUMBER: 08-1112-0021		FIGURE: D20

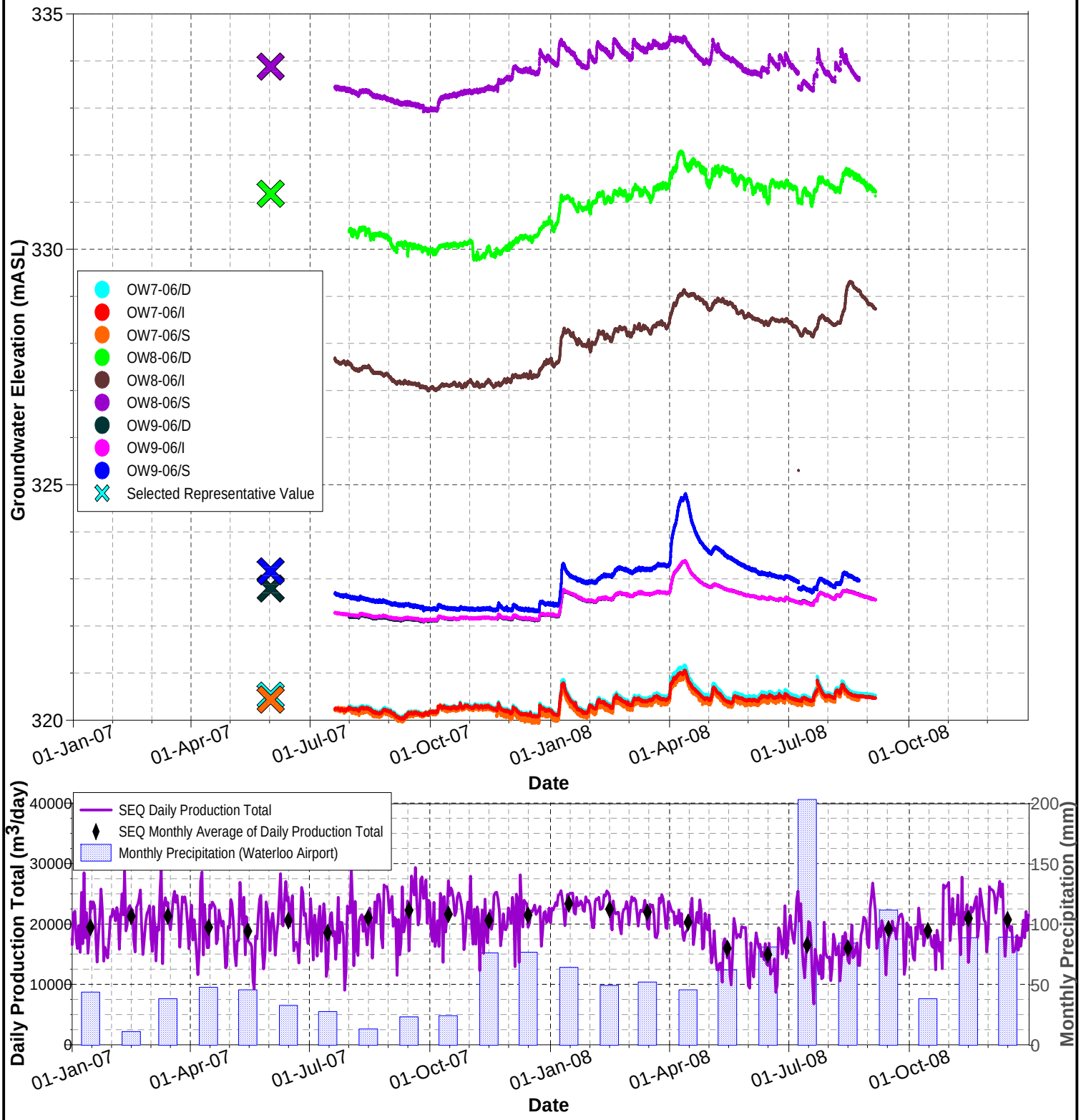


NOTE:
1) The Southeast Quadrant Total Volumes were calculated using the following wells: Burkes, Carter Arkell 1, Arkell 6, Arkell 7 and Arkell 8.

Groundwater Elevation Monitoring
Southeast Quadrant
OW4-06, OW5-06 and OW6-06

Golder Associates

DRAWN: JLH	APPROVED: JAP	DATE: May 2010
PROJECT NUMBER: 08-1112-0021		FIGURE: D21

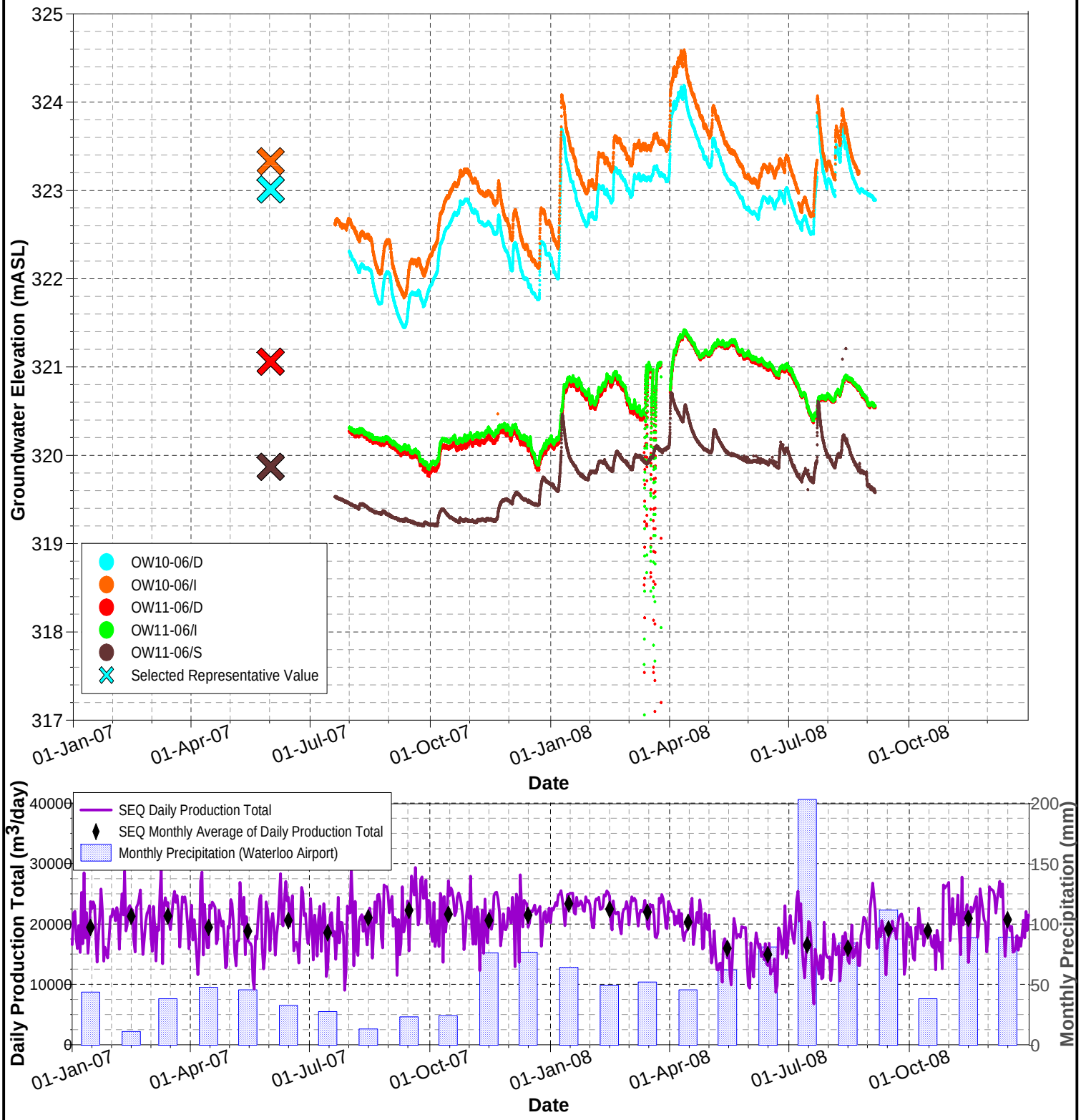


NOTE:
1) The Southeast Quadrant Total Volumes were calculated using the following wells: Burkes, Carter Arkell 1, Arkell 6, Arkell 7 and Arkell 8.

Groundwater Elevation Monitoring
Southeast Quadrant
OW7-06, OW8-06 and OW9-06

Golder Associates

DRAWN: JLH	APPROVED: JAP	DATE: May 2010
PROJECT NUMBER: 08-1112-0021		FIGURE: D22

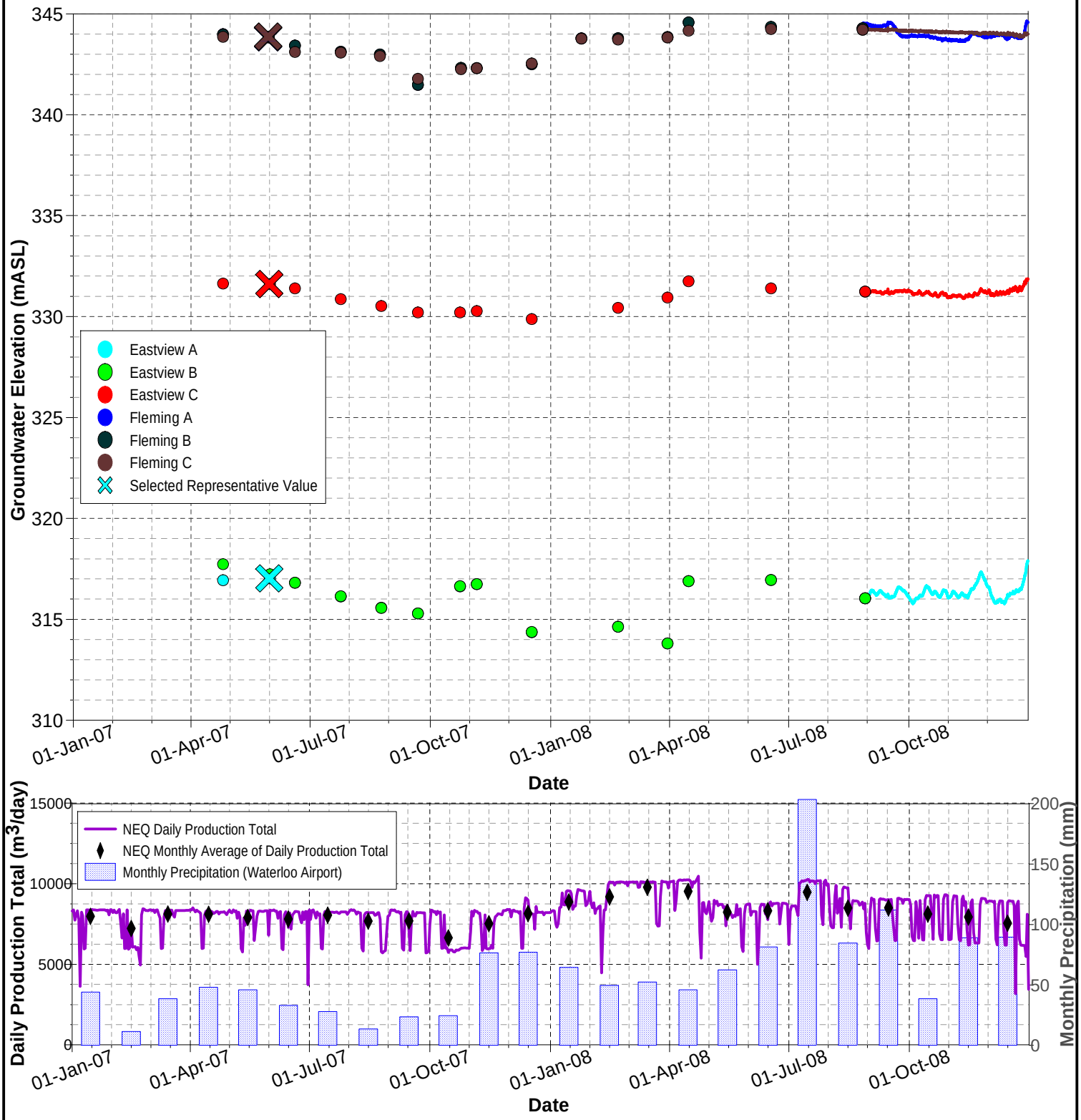


NOTE:
1) The Southeast Quadrant Total Volumes were calculated using the following wells: Burkes, Carter Arkell 1, Arkell 6, Arkell 7 and Arkell 8.

Groundwater Elevation Monitoring
Southeast Quadrant
OW10-06 and OW11-06

Golder Associates

DRAWN: JLH	APPROVED: JAP	DATE: May 2010
PROJECT NUMBER: 08-1112-0021		FIGURE: D23

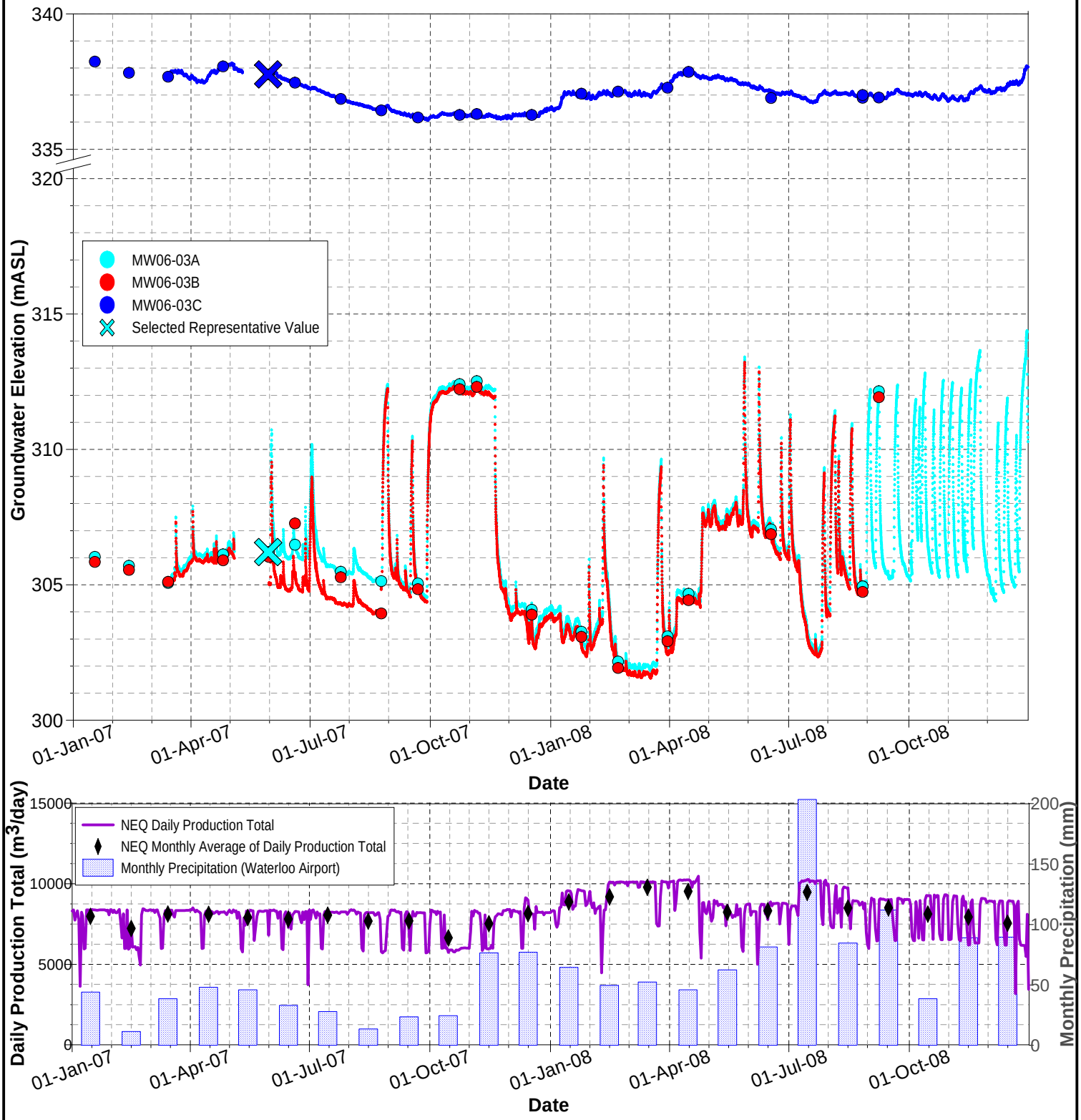


NOTE:
1) The Northeast Quadrant Total Volumes were calculated using the following wells: Emma, Park, Helmar and Clythe.

Groundwater Elevation Monitoring
Northeast Quadrant
Eastview and Fleming

Golder Associates

DRAWN: JLH	APPROVED: JAP	DATE: May 2010
PROJECT NUMBER: 08-1112-0021		FIGURE: D24

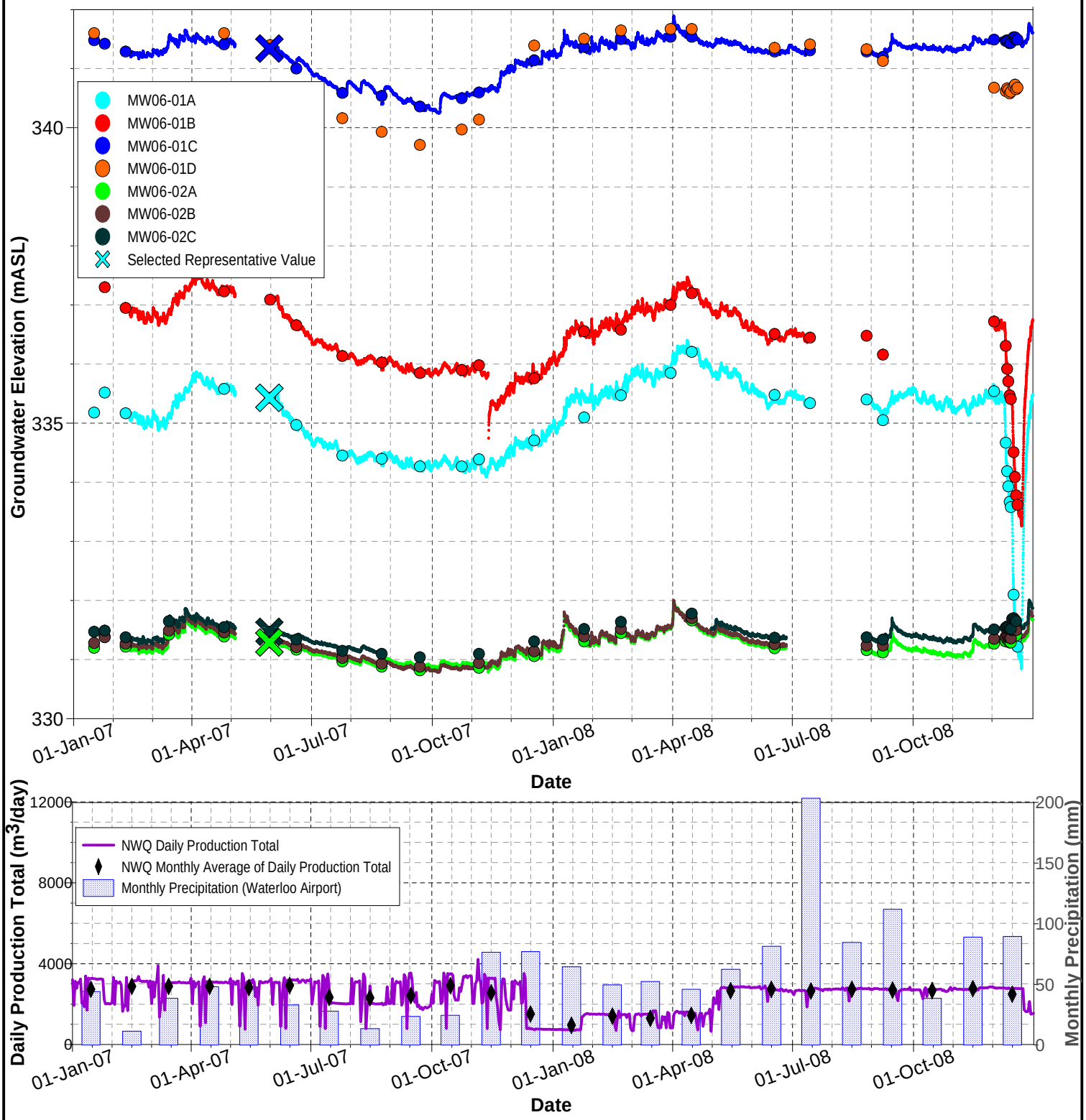


NOTE:
1) The Northeast Quadrant Total Volumes were calculated using the following wells: Emma, Park, Helmar and Clythe.

Groundwater Elevation Monitoring
Northeast Quadrant
MW06-03

Golder Associates

DRAWN: JLH	APPROVED: JAP	DATE: May 2010
PROJECT NUMBER: 08-1112-0021		FIGURE: D25



NOTE:
1) The Northwest Quadrant Total Volumes were calculated using the following wells: Paisley, Queensdale, Smallfield, and Calico.

Groundwater Elevation Monitoring
Northwest Quadrant
MW06-01 and MW06-02

Golder Associates

DRAWN: JLH	APPROVED: JAP	DATE: May 2010
PROJECT NUMBER: 08-1112-0021		FIGURE: D26

APPENDIX E

High Quality Borehole Information

Table E1: City of Guelph Tier Three Assessment
Summary of Key Bedrock Boreholes

Borehole Name	X	Y	BH Ground Elev	BH Bottom Depth	Borehole Type	Cored	PDF LOG	Gamma Log	Video Log	Tele-viewer Log	Cond./ Res. Log	Flow Profile	Tier Three Pick	Relia-bility Rank	Reference
MW06-01 ABCD	555406	4821490	342.44	108.2	Monitoring Well	Y	Y	Y		Y	Y		Y	H	Guelph Monitoring System (Golder, 2009a)
MW06-02 ABC	558090	4821804	332.33	90.2	Monitoring Well	Y	Y	Y		Y	Y		Y	H	Guelph Monitoring System (Golder, 2009a)
MW06-03 ABC	559688	4824619	342.64	82.9	Monitoring Well	Y	Y	Y		Y	Y		Y	H	Guelph Monitoring System (Golder, 2009a)
MW06-04 ABC	559518	4819460	307.14	68.2	Monitoring Well	Y	Y	Y		Y	Y		Y	H	Guelph Monitoring System (Golder, 2009a)
MW06-05 ABC	559804	4820985	330.61	83.6	Monitoring Well	Y	Y	Y		Y	Y		Y	H	Guelph Monitoring System (Golder, 2009a)
MW06-06 ABCD	563133	4819827	336.90	87.2	Monitoring Well	Y	Y	Y		Y	Y		Y	H	Guelph Monitoring System (Golder, 2009a)
MW06-07 ABCD	565685	4813872	337.37	99.9	Monitoring Well	Y	Y	Y		Y	Y		Y	H	Guelph Monitoring System (Golder, 2009a)
MW06-08 ABCD	565946	4817135	337.91	89.9	Monitoring Well	Y	Y	Y		Y	Y		Y	H	Guelph Monitoring System (Golder, 2009a)
MW06-09 ABCD	566130	4818503	335.87	82.3	Monitoring Well	Y	Y	Y		Y	Y		Y	H	Guelph Monitoring System (Golder, 2009a)
MW06-09 ABCD	566130	4818503	335.87	82.3	Monitoring Well	Y	Y	Y		Y	Y		Y	H	Guelph Monitoring System (Golder, 2009a)
MW06-10 ABCD	567679	4817481	346.55	103.6	Monitoring Well	Y	Y	Y		Y	Y		Y	H	Guelph Monitoring System (Golder, 2009a)
CLAIR ABC	564875	4815909	333.71	82.3	Monitoring Well		Y	Y			Y		Y	M	Guelph Monitoring System (Golder, 2009a)
EASTVIEW ABC	561282	4823857	343.25	68.0	Monitoring Well		Y	Y			Y		Y	M	Guelph Monitoring System (Golder, 2009a)
FLEMING ABC	563299	4826047	343.93	67.1	Monitoring Well		Y	Y			Y		Y	M	Guelph Monitoring System (Golder, 2009a)
HAUSER ABC	555555	4819528	324.00	94.8	Monitoring Well		Y	Y			Y		Y	M	Guelph Monitoring System (Golder, 2009a)
MCCURDY ABC	563539	4817510	323.86	77.7	Monitoring Well		Y	Y			Y		Y	M	Guelph Monitoring System (Golder, 2009a)
GSTW1-08	562996	4814664	329.91	91.4	Test Well		Y	Y	Y	Y	Y	Y	Y	M	Guelph South Project (Stantec, 2009b)
GSTW2-08	562286	4816097	319.75	85.3	Test Well		Y	Y	Y		Y	Y	Y	M	Guelph South Project (Stantec, 2009b)
GSTW3-08	565403	4815503	346.91	103.6	Test Well		Y	Y	Y	Y	Y	Y	Y	M	Guelph South Project (Stantec, 2009b)
GSTW4-08	563540	4817511	323.86	77.2	Test Well		Y		Y				Y	M	Guelph South Project (Stantec, 2009b)
MW08-T3-01	555101	4824026	339.25	95.7	Monitoring Well		Y	Y	Y	Y	Y		Y	H	Guelph Tier Three Project
MW08-T3-02	559364	4830635	368.34	89.9	Monitoring Well	Y	Y	Y		Y	Y		Y	H	Guelph Tier Three Project
MW08-T3-03	563022	4835572	398.93	97.2	Monitoring Well		Y	Y		Y	Y		Y	H	Guelph Tier Three Project
MW08-T3-04	552656	4836469	412.88	143.9	Monitoring Well		Y	Y		Y	Y		Y	H	Guelph Tier Three Project
MW08-T3-05	562220	4845824	427.59	104.9	Monitoring Well	Y	Y	Y	Y	Y	Y		Y	H	Guelph Tier Three Project
MW08-T3-06	568274	4834617	365.83	57.7	Monitoring Well	Y	Y	Y	Y	Y	Y		Y	H	Guelph Tier Three Project
MW08-T3-07	564581	4828349	354.29	76.5	Monitoring Well		Y	Y		Y	Y		Y	H	Guelph Tier Three Project
MW08-T3-08	560949	4826604	345.33	76.2	Monitoring Well		Y	Y		Y	Y		Y	H	Guelph Tier Three Project
MW08-T3-09	570645	4820065	346.47	84.1	Monitoring Well		Y	Y	Y	Y	Y		Y	H	Guelph Tier Three Project
MW08-T3-10	563161	4812509	330.31	105.4	Monitoring Well		Y	Y	Y	Y	Y		Y	H	Guelph Tier Three Project
MW09-T3-01	560864	4810649	315.84	113.1	Monitoring Well		Y	Y		Y	Y		Y	H	Guelph Tier Three Project
ADMIRAL	564142	4815426	334.44	101.8	Non-Municipal Water Well		Y	Y	Y		Y	Y	Y	M	Construction and Testing of the Admiral Well (Lotowater, 1999)
Decorso TW1-05	568312	4816988	349.77	102.1	Non-Municipal Water Well		Y								Decorso Hydrogeologic Assessment (Burnside, 2006)
BH1	563554	4817513	323.78	33.4	Monitoring Well	Y	Y								Hanlon Creek (MMM, 1991)
BH3	562476	4816855	318.35	30.8	Monitoring Well	Y	Y								Hanlon Creek (MMM, 1991)
BH4	564849	4815936	333.67	38.8	Monitoring Well	Y	Y								Hanlon Creek (MMM, 1991)
BH5	563954	4817143	324.36	33.4	Monitoring Well	Y	Y								Hanlon Creek (MMM, 1991)
BH6	562333	4818115	323.33	30.7	Monitoring Well	Y	Y								Hanlon Creek (MMM, 1991)
8-1 HANLON CR.	566900	4817925	340.60	35.4	Monitoring Well	Y	Y								Hanlon Creek (MMM, 1991)
MW123	562723	4815369	325.29	53.6	Monitoring Well	Y							Y	M	Hanlon Creek Business Park Study (Banks, 2009)
GDC-1	562855	4821105	336.27		Monitoring Well	Y							Y	H	Information provided by F. Brunton (OGS)
GuelphTools-MW22	556963	4821314	341.73	104.0	Monitoring Well	Y							Y	H	Information provided by F. Brunton (OGS)
MW-367-9	557053	4821237	342.30	105.5	Monitoring Well	Y							Y	H	Information provided by F. Brunton (OGS)
MW2A-07 (nestle)	568935	4812888	311.99	38.0	Test Well	Y							Y	H	Information provided by F. Brunton (OGS)
MW04-01 AB	560933	4818359	320.89	79.4	Monitoring Well	Y	Y	Y			Y		Y	H	The Guelph Lime Project (Golder, 2006)
OW01-92	559317	4818440	305.82	34.7	Monitoring Well										The Guelph Lime Project (Golder, 2006)
OW03-92	560172	4818351	325.86	54.1	Monitoring Well			Y	Y		Y		Y	M	The Guelph Lime Project (Golder, 2006)
OW04-92	560451	4818648	327.08	56.2	Monitoring Well			Y	Y		Y		Y	M	The Guelph Lime Project (Golder, 2006)

Table E1: City of Guelph Tier Three Assessment
Summary of Key Bedrock Boreholes

Borehole Name	X	Y	BH Ground Elev	BH Bottom Depth	Borehole Type	Cored	PDF LOG	Gamma Log	Video Log	Tele-viewer Log	Cond./ Res. Log	Flow Profile	Tier Three Pick	Relia-bility Rank	Reference
OW05-92 AB	560223	4819045	331.54	64.0	Monitoring Well		Y	Y	Y		Y		Y	M	The Guelph Lime Project (Golder, 2006)
TW04-01 ABC	561360	4818045	328.24	90.8	Monitoring Well		Y	Y	Y		Y		Y	M	The Guelph Lime Project (Golder, 2006)
TW04-02 ABC	560339	4818016	325.08	91.0	Monitoring Well		Y	Y	Y		Y		Y	M	The Guelph Lime Project (Golder, 2006)
GD1	559992	4818563	295.32	32.0	Monitoring Well	Y	Y						Y	L	PTTW Amendment Guelph Limestone Quarry (Harden, 2006)
GD2	560325	4818712	297.18	22.9	Monitoring Well	Y	Y						Y	L	PTTW Amendment Guelph Limestone Quarry (Harden, 2006)
GD3	559916	4818984	302.29	62.5	Monitoring Well	Y	Y						Y	L	PTTW Amendment Guelph Limestone Quarry (Harden, 2006)
GD4	559841	4819196	303.40	45.7	Monitoring Well	Y	Y						Y	L	PTTW Amendment Guelph Limestone Quarry (Harden, 2006)
OW1-06	566772	4821308	342.74	83.8	Monitoring Well	Y	Y	Y	Y	Y	Y	Y	Y	H	Arkell Spring Grounds Hydrogeologic Study (AECOM, 2009)
OW2-06	569990	4821372	348.05	80.2	Monitoring Well	Y	Y	Y	Y	Y	Y	Y	Y	H	Arkell Spring Grounds Hydrogeologic Study (AECOM, 2009)
OW3-06	569593	4823593	357.02	83.5	Monitoring Well	Y	Y	Y	Y	Y	Y	Y	Y	H	Arkell Spring Grounds Hydrogeologic Study (AECOM, 2009)
OW4-06	568632	4824518	320.41	42.7	Monitoring Well	Y	Y	Y	Y	Y	Y	Y	Y	H	Arkell Spring Grounds Hydrogeologic Study (AECOM, 2009)
OW5-06	566441	4823588	351.62	85.7	Monitoring Well	Y	Y	Y	Y	Y	Y	Y	Y	H	Arkell Spring Grounds Hydrogeologic Study (AECOM, 2009)
OW6-06	566302	4821825	316.04	30.5	Monitoring Well										Arkell Spring Grounds Hydrogeologic Study (AECOM, 2009)
OW7-06	569191	4824879	321.73	42.7	Monitoring Well	Y	Y	Y	Y	Y	Y	Y	Y	H	Arkell Spring Grounds Hydrogeologic Study (AECOM, 2009)
OW8-06	571011	4823050	334.60	54.9	Monitoring Well	Y	Y	Y	Y	Y	Y	Y	Y	H	Arkell Spring Grounds Hydrogeologic Study (AECOM, 2009)
OW9-06	570515	4824670	326.66	39.6	Monitoring Well	Y	Y	Y	Y	Y	Y	Y	Y	H	Arkell Spring Grounds Hydrogeologic Study (AECOM, 2009)
OW10-06	568680	4826606	327.45	42.2	Monitoring Well	Y	Y	Y	Y	Y	Y	Y	Y	H	Arkell Spring Grounds Hydrogeologic Study (AECOM, 2009)
OW11-06	563769	4823687	323.94	57.9	Monitoring Well	Y	Y	Y	Y	Y	Y	Y	Y	H	Arkell Spring Grounds Hydrogeologic Study (AECOM, 2009)
OW11/00	568611	4822275	335.90	56.4	Monitoring Well		Y	Y			Y		Y	M	Arkell Spring Grounds Investigation (GLL, 2003)
OW12/00	567644	4821533	337.20	57.9	Monitoring Well		Y	Y			Y		Y	M	Arkell Spring Grounds Investigation (GLL, 2003)
OW13/00	566977	4822128	324.50	16.8	Monitoring Well		Y	Y			Y				Arkell Spring Grounds Investigation (GLL, 2003)
OW14/00	568104	4823140	334.70	45.7	Monitoring Well		Y	Y			Y		Y	M	Arkell Spring Grounds Investigation (GLL, 2003)
OW15/00	567438	4822880	319.90	30.5	Monitoring Well		Y	Y			Y		Y	M	Arkell Spring Grounds Investigation (GLL, 2003)
OW16/00	566841	4822217	318.30	30.5	Monitoring Well		Y	Y			Y		Y	M	Arkell Spring Grounds Investigation (GLL, 2003)
OW17/00	566289	4821819	317.10	30.5	Monitoring Well		Y	Y			Y		Y	M	Arkell Spring Grounds Investigation (GLL, 2003)
OW18/00	567543	4822126	335.80	54.9	Monitoring Well		Y	Y			Y		Y	M	Arkell Spring Grounds Investigation (GLL, 2003)
OW19/00	567065	4822988	317.50	30.5	Monitoring Well	Y	Y						Y	M	Arkell Spring Grounds Investigation (GLL, 2003)
OW20/01	567459	4823439	317.70	31.1	Monitoring Well	Y	Y						Y	M	Arkell Spring Grounds Investigation (GLL, 2003)
Arkell 6- PW6/63	567934	4823061	330.80	41.2	Municipal Production Well		Y	Y	Y		Y	Y			Quadrant Reports (JHL, 1998), Lotowater
Arkell 7- PW7/63	567993	4822436	330.20	43.3	Municipal Production Well		Y	Y	Y		Y	Y			Quadrant Reports (JHL, 1998), Lotowater
Arkell 8- PW8/63	568055	4822971	332.40	42.1	Municipal Production Well		Y	Y	Y		Y	Y			Quadrant Reports (JHL, 1998), Lotowater
Arkell 14- PW14A/00	568096	4823126	334.31	40.5	Municipal Production Well		Y	Y			Y	Y	Y	M	Arkell Spring Grounds Investigation (GLL, 2003)
Arkell 15- PW15A/00	567440	4822878	319.75	30.5	Municipal Production Well		Y	Y			Y	Y	Y	M	Arkell Spring Grounds Investigation (GLL, 2003)
Burke- PW2/66	565157	4818701	335.28	78.9	Municipal Production Well		Y	Y	Y		Y	Y	Y	L	Quadrant Reports (JHL, 1998), Lotowater
Calico-PW3/76	554602	4819900	325.00	64.0	Municipal Production Well		Y	Y	Y		Y	Y	Y	L	Quadrant Reports (JHL, 1998), Lotowater
Carter-In- PW2/62	564870	4820808	324.15	20.7	Municipal Production Well		Y	Y	Y		Y	Y			Quadrant Reports (JHL, 1998), Lotowater
Carter-Out- PW1/89	564872	4820592	327.36	20.1	Municipal Production Well		Y	Y	Y		Y	Y			Quadrant Reports (JHL, 1998), Lotowater
Clythe Creek- PW2/76	564031	4823927	327.66	64.0	Municipal Production Well		Y		Y			Y	Y	L	Quadrant Reports (JHL, 1998), Lotowater
Dean Ave-PW3-58	560997	4819805	323.30	57.2	Municipal Production Well		Y	Y	Y		Y				Quadrant Reports (JHL, 1998)
Downey-PW5/67	561798	4817015	317.04	73.8	Municipal Production Well		Y	Y	Y		Y		Y	L	Quadrant Reports (JHL, 1998)
Edinburgh-PW2/53	560594	4820066	315.60	69.5	Municipal Production Well		Y	Y	Y		Y		Y	M	Quadrant Reports (JHL, 1998), Guelph Lime Project (Golder, 2006)
Emma- PW1/31	559931	4823351	330.71	46.3	Municipal Production Well		Y		Y			Y			Quadrant Reports (JHL, 1998), Lotowater
Helmar- PW6/66	560357	4825777	342.90	79.6	Municipal Production Well		Y		Y				Y	L	Quadrant Reports (JHL, 1998)
Membro-PW1/53	560293	4819861	315.60	73.2	Municipal Production Well		Y	Y	Y		Y	Y	Y	M	Quadrant Reports (JHL, 1998), Lotowater
Paisley-PW4/59	558126	4819636	322.20	80.2	Municipal Production Well		Y	Y	Y		Y		Y	M	Quadrant Reports (JHL, 1998), Lotowater
Park #1- PW1/47	560430	4823231	335.28	57.0	Municipal Production Well		Y		Y			Y			Quadrant Reports (JHL, 1998), Lotowater
Park #2	560433	4823280	329.90	47.6	Municipal Production Well		Y		Y			Y			Quadrant Report, Lotowater
University-PW1/73	561613	4819168	329.50	64.3	Municipal Production Well		Y	Y	Y		Y	Y	Y	M	Quadrant Reports (JHL, 1998), Lotowater

Table E1: City of Guelph Tier Three Assessment
Summary of Key Bedrock Boreholes

Borehole Name	X	Y	BH Ground Elev	BH Bottom Depth	Borehole Type	Cored	PDF LOG	Gamma Log	Video Log	Tele-viewer Log	Cond./ Res. Log	Flow Profile	Tier Three Pick	Relia-bility Rank	Reference
Queensdale-PW1/70	558482	4818297	325.93	74.4	Municipal Production Well		Y	Y	Y		Y	Y	Y	M	Quadrant Report, Lotowater
SACCO-PW8/52	556416	4821929	342.90	95.7	Municipal Production Well		Y	Y	Y	Y	Y	Y	Y	M	Quadrant Report, Sacco and Smallfield Assessment (Stantec, 2009a)
Smallfield-PW3/66	556748	4820866	342.90	102.4	Municipal Production Well		Y	Y	Y	Y	Y	Y	Y	M	Quadrant Report, Sacco and Smallfield Assessment (Stantec, 2009a)
Water St.-PW16/53	560773	4820356	313.94	59.4	Municipal Production Well		Y	Y	Y		Y				Quadrant Reports (JHL, 1998)
Huntington	558405	4826512	338.00	72.0	Municipal Production Well								Y	L	Guelph-Puslinch Groundwater Study (Golder, 2006)
Blue Forest	557563	4825915	347.47	76.0	Municipal Production Well										Guelph-Puslinch Groundwater Study (Golder, 2006)
Cross Creek	558038	4825840	352.00	99.0	Municipal Production Well										Guelph-Puslinch Groundwater Study (Golder, 2006)
Elora- E1	545842	4837395	397.76	129.8	Municipal Production Well										County of Wellington Groundwater Study (Golder, 2006)
Elora- E2	546065	4836321			Municipal Production Well										County of Wellington Groundwater Study (Golder, 2006)
Elora- E3	547152	4835881	396.00	121.9	Municipal Production Well										County of Wellington Groundwater Study (Golder, 2006)
Elora- E4	545427	4834899		128.0	Municipal Production Well										County of Wellington Groundwater Study (Golder, 2006)
Erin- E5	574270	4847934	396.24	37.8	Municipal Production Well										County of Wellington Groundwater Study (Golder, 2006)
Erin- E7	573419	4847461	399.90	43.0	Municipal Production Well										County of Wellington Groundwater Study (Golder, 2006)
Erin- E8	573346	4846819		46.0	Municipal Production Well										County of Wellington Groundwater Study (Golder, 2006)
Fergus- F1	550454	4839560	403.86	110.0	Municipal Production Well										County of Wellington Groundwater Study (Golder, 2006)
Fergus- F2	550598	4839952		76.5	Municipal Production Well										County of Wellington Groundwater Study (Golder, 2006)
Fergus- F3	551115	4838278			Municipal Production Well										County of Wellington Groundwater Study (Golder, 2006)
Fergus- F4	550014	4840806	423.67	129.5	Municipal Production Well										County of Wellington Groundwater Study (Golder, 2006)
Fergus- F5	551848	4839095	422.15	124.4	Municipal Production Well										County of Wellington Groundwater Study (Golder, 2006)
Fergus- F6	549221	4841526	424.00	122.5	Municipal Production Well										County of Wellington Groundwater Study (Golder, 2006)
Fergus- F7	548166	4839713		138.7	Municipal Production Well										County of Wellington Groundwater Study (Golder, 2006)
Hillsburgh- H1 (Glendevon)	569069	4849229	432.82	37.2	Municipal Production Well										County of Wellington Groundwater Study (Golder, 2006)
Hillsburgh- H2	568267	4849570		88.0	Municipal Production Well										County of Wellington Groundwater Study (Golder, 2006)
Hillsburgh- H3	568945	4849301		58.0	Municipal Production Well										County of Wellington Groundwater Study (Golder, 2006)
Rockwood 1/2	568785	4830026		73.0	Municipal Production Well										County of Wellington Groundwater Study (Golder, 2006)
Rockwood 4	570565	4829283		70.0	Municipal Production Well										County of Wellington Groundwater Study (Golder, 2006)
Rockwood 3	569833	4828156		70.0	Municipal Production Well										County of Wellington Groundwater Study (Golder, 2006)
Mini Lakes- PW1	569554	4814384	319.25	55.0	Municipal Production Well										County of Wellington Groundwater Study (Golder, 2006)
Mini Lakes- PW2	569465	4814529	321.00	48.0	Municipal Production Well										County of Wellington Groundwater Study (Golder, 2006)
Mini Lakes- PW3	569501	4814742	321.00	30.0	Municipal Production Well										County of Wellington Groundwater Study (Golder, 2006)
Irish Creek- PW1	559037	4807868		55.0	Municipal Production Well										County of Wellington Groundwater Study (Golder, 2006)
Mill Creek	568748	4813935		21.0	Municipal Production Well										County of Wellington Groundwater Study (Golder, 2006)
BURKE OBS	565149	4818696	335.53	81.1	Monitoring Well										Quadrant Reports (JHL, 1998)
Dawn-PW9/66	564670	4817325	330.89	82.6	Monitoring Well								Y	L	Quadrant Reports (JHL, 1998)
DOWNEY OBS	561794	4817026	318.06	46.1	Monitoring Well										Quadrant Reports (JHL, 1998)
Eastview-PW2/58	561282	4823857	342.90	82.0	Monitoring Well		Y		Y						Quadrant Reports (JHL, 1998)
Fleming-OW8/66	563299	4826047	343.07	67.1	Monitoring Well		Y		Y						Quadrant Reports (JHL, 1998)
Hauser-PW7/66	555555	4819528	324.00	96.0	Monitoring Well		Y	Y	Y		Y				Quadrant Reports (JHL, 1998)
Logan 4-PW4/66	563989	4826623	341.49	74.5	Monitoring Well								Y	L	Quadrant Reports (JHL, 1998)
McCurdy-PW10/67	563539	4817510	323.86	82.6	Monitoring Well										Quadrant Reports (JHL, 1998)
MEMBRO OW AB	560273	4819870	313.90	42.9	Monitoring Well										Quadrant Reports (JHL, 1998)
NW-26	557677	4822110	340.61	96.3	Monitoring Well								Y	L	Quadrant Reports (JHL, 1998)
Scout Camp-PW1/87	564895	4821450	316.38	45.7	Monitoring Well							Y			Quadrant Report, Lotowater
SW-35	559541	4814648	322.00	48.8	Monitoring Well								Y	L	Quadrant Reports (JHL, 1998)
MW08-01 AB	560990	4817482	313.47	76.0	Monitoring Well		Y	Y		Y	Y				Southwest Quadrant Project (Golder)
MW08-02 AB	560096	4819483	324.89	67.0	Monitoring Well		Y	Y			Y		Y	M	Southwest Quadrant Project (Golder)
TW08-01 AB	561755	4817896	331.62	89.0	Monitoring Well		Y	Y		Y	Y		Y	M	Southwest Quadrant Project (Golder)
TW08-02 ABC	562101	4818417	325.39	77.7	Monitoring Well		Y	Y		Y	Y		Y	M	Southwest Quadrant Project (Golder)

Table E1: City of Guelph Tier Three Assessment
Summary of Key Bedrock Boreholes

Borehole Name	X	Y	BH Ground Elev	BH Bottom Depth	Borehole Type	Cored	PDF LOG	Gamma Log	Video Log	Tele-viewer Log	Cond./ Res. Log	Flow Profile	Tier Three Pick	Relia-bility Rank	Reference
IRONWOOD	562135	4818395	325.41	75.0	Test Well		Y						Y	M	Southwest Quadrant Project (Golder)
STEFFLER	561763	4817907	331.15	82.3	Test Well		Y						Y	M	Southwest Quadrant Project (Golder)
UG-1	562530	4820310	333.00	64.0	Non-Municipal Water Well										Southwest Quadrant Project (Golder)
UG-3	562584	4820326	332.76	58.2	Non-Municipal Water Well								Y	L	Southwest Quadrant Project (Golder)
UG-4	562024	4819077	335.07	68.6	Non-Municipal Water Well								Y	L	Southwest Quadrant Project (Golder)
UG-5	561890	4819303	338.33	78.6	Non-Municipal Water Well										Southwest Quadrant Project (Golder)
UG-6	561849	4818997	333.76	77.7	Non-Municipal Water Well										Southwest Quadrant Project (Golder)
UG-7	561331	4819442	326.54	76.0	Non-Municipal Water Well			Y			Y		Y	M	Southwest Quadrant Project (Golder)
UG-8	563010	4820588	337.00	63.0	Non-Municipal Water Well										Southwest Quadrant Project (Golder)
UG-10	563036	4821307	330.00	59.0	Non-Municipal Water Well										Southwest Quadrant Project (Golder)
UG-11	563398	4821157	333.00	70.0	Non-Municipal Water Well										Southwest Quadrant Project (Golder)
RW3(Slater)	568371	4821838	357.50	71.9	Non-Municipal Water Well								Y	L	Arkell Spring Grounds Investigation (GLL, 2003)
RW6(Barnstijn)	568636	4824045	344.00	51.2	Non-Municipal Water Well										Arkell Spring Grounds Investigation (GLL, 2003)
Clair- Puslinch GW TW2-67	564876	4815909	336.99	82.3	Monitoring Well										Guelph-Puslinch Groundwater Study (Golder, 2006)
Aberfoyle Springs (Nestle) TW1-	569002	4812639	315.77	25.0	Non-Municipal Water Well										Guelph-Puslinch Groundwater Study (Golder, 2006)
Aberfoyle Springs (Nestle) TW2-	568870	4812485	319.12	55.8	Non-Municipal Water Well										Guelph-Puslinch Groundwater Study (Golder, 2006)
Aberfoyle Springs (Nestle) TW3-	569037	4812797	316.69	42.4	Non-Municipal Water Well										Guelph-Puslinch Groundwater Study (Golder, 2006)
Aberfoyle Springs (Nestle) TW4-	568860	4812797	315.77	43.9	Non-Municipal Water Well										Guelph-Puslinch Groundwater Study (Golder, 2006)
2801783	571210	4822337	338.33	39.6	Non-Municipal Water Well								Y	L	Guelph-Puslinch Groundwater Study (Golder, 2006)
6700856	560179	4823410	335.28	68.6	Non-Municipal Water Well								Y	L	Guelph-Puslinch Groundwater Study (Golder, 2006)
6700861	558803	4820450	327.66	83.8	Non-Municipal Water Well								Y	L	Guelph-Puslinch Groundwater Study (Golder, 2006)
6700869	558615	4823866	332.23	72.5	Non-Municipal Water Well								Y	L	Guelph-Puslinch Groundwater Study (Golder, 2006)
6700871	561904	4823483	332.23	71.9	Non-Municipal Water Well								Y	L	Guelph-Puslinch Groundwater Study (Golder, 2006)
6700874	560345	4820230	304.80	57.9	Non-Municipal Water Well								Y	L	Guelph-Puslinch Groundwater Study (Golder, 2006)
6700886	559599	4824503	342.90	74.1	Non-Municipal Water Well								Y	L	Guelph-Puslinch Groundwater Study (Golder, 2006)
6700936	563010	4816200	323.09	81.1	Non-Municipal Water Well								Y	L	Guelph-Puslinch Groundwater Study (Golder, 2006)
6701068	563164	4823157	327.05	36.6	Non-Municipal Water Well								Y	L	Guelph-Puslinch Groundwater Study (Golder, 2006)
6701327	554332	4825353	350.52	96.0	Non-Municipal Water Well								Y	L	Guelph-Puslinch Groundwater Study (Golder, 2006)
6702412	563239	4819108	334.37	87.2	Non-Municipal Water Well								Y	L	Guelph-Puslinch Groundwater Study (Golder, 2006)
6702660	571915	4813224	325.53	34.1	Non-Municipal Water Well								Y	L	Guelph-Puslinch Groundwater Study (Golder, 2006)
6702947	553876	4845148	429.16	115.8	Non-Municipal Water Well								Y	L	Guelph-Puslinch Groundwater Study (Golder, 2006)
6703490	564994	4824813	329.18	62.5	Non-Municipal Water Well								Y	L	Guelph-Puslinch Groundwater Study (Golder, 2006)
6703535	567884	4810143	313.64	52.4	Non-Municipal Water Well								Y	L	Guelph-Puslinch Groundwater Study (Golder, 2006)
6704688	568084	4820118	359.66	70.7	Non-Municipal Water Well								Y	L	Guelph-Puslinch Groundwater Study (Golder, 2006)
6704763	565912	4825252	338.63	34.7	Non-Municipal Water Well								Y	L	Guelph-Puslinch Groundwater Study (Golder, 2006)
6706036	572214	4838473	387.10	57.9	Non-Municipal Water Well								Y	L	Guelph-Puslinch Groundwater Study (Golder, 2006)
6706105	560593	4813731	326.14	74.7	Non-Municipal Water Well								Y	L	Guelph-Puslinch Groundwater Study (Golder, 2006)
6706314	568794	4830043	360.88	59.1	Non-Municipal Water Well								Y	L	Guelph-Puslinch Groundwater Study (Golder, 2006)
6706725	566214	4826883	347.47	68.6	Non-Municipal Water Well								Y	L	Guelph-Puslinch Groundwater Study (Golder, 2006)
6709283	564891	4826140	355.00	58.8	Non-Municipal Water Well								Y	L	Guelph-Puslinch Groundwater Study (Golder, 2006)
6709383	565185	4820463	331.00	74.7	Non-Municipal Water Well								Y	L	Guelph-Puslinch Groundwater Study (Golder, 2006)
6711145	567662	4835173	390.00	80.8	Non-Municipal Water Well								Y	L	Guelph-Puslinch Groundwater Study (Golder, 2006)
Anthony Seynuck No. 2 - H. Price No. 1, Nassagaweya - 23 - III	574383	4822485	357.53	678.2	Oil and Gas Well								Y	L	Oil and Gas Well Records
Baslen Puslinch No.1, Puslinch 2 - 26 - IX	572720	4815083	330.70	762.0	Oil and Gas Well								Y	L	Oil and Gas Well Records
Blue Springs Exploration, Nassagaweya - 19 - III	576388	4820822	334.06	682.8	Oil and Gas Well								Y	L	Oil and Gas Well Records

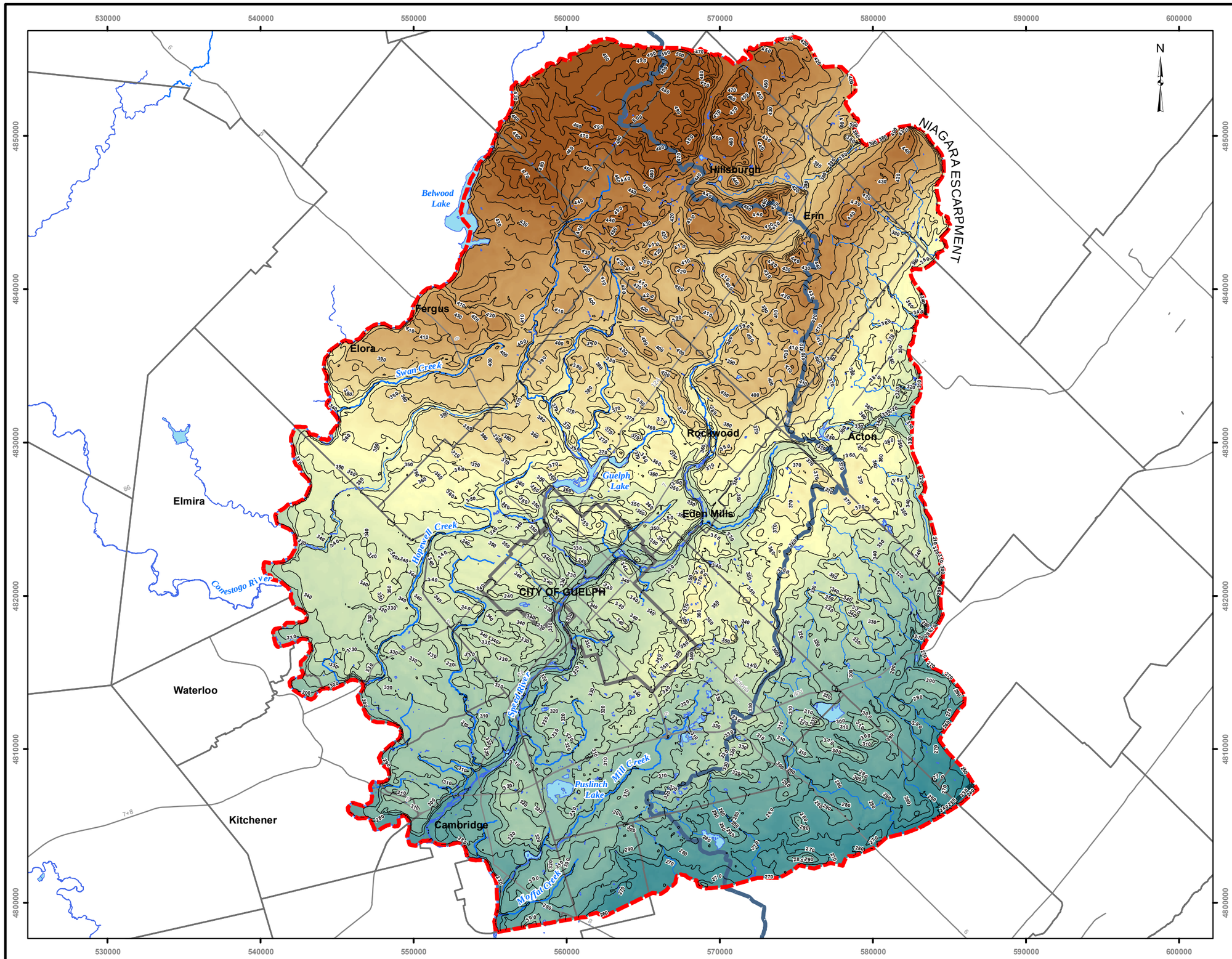
Table E1: City of Guelph Tier Three Assessment
Summary of Key Bedrock Boreholes

Borehole Name	X	Y	BH Ground Elev	BH Bottom Depth	Borehole Type	Cored	PDF LOG	Gamma Log	Video Log	Tele-viewer Log	Cond./ Res. Log	Flow Profile	Tier Three Pick	Relia-bility Rank	Reference
Eramosa Oil No.1, Eramosa - 32 - II	554757	4838681	417.60	1013.2	Oil and Gas Well								Y	L	Oil and Gas Well Records
Geco #1, West Garafraxa 4 - 6 - II	552311	4840880	417.30	155.0	Oil and Gas Well								Y	L	Oil and Gas Well Records
Geco Eramosa - 1, Eramosa 5 - 28 - VI	560084	4841250	404.32	121.9	Oil and Gas Well								Y	L	Oil and Gas Well Records
GECO N-1, Nichol - 7 - II	549957	4836321	404.50	122.0	Oil and Gas Well								Y	L	Oil and Gas Well Records
GECO WG-2, West Garafraxa - 13 - V	551682	4847225	435.00	108.4	Oil and Gas Well								Y	L	Oil and Gas Well Records
Joseph's Well 1, Puslinch 1 - 8 - III	559834	4812316	317.20	719.2	Oil and Gas Well								Y	L	Oil and Gas Well Records

APPENDIX F

Conceptual Model Layer Surface Elevation and Isopachs

Tier Three Local Area Risk Assessment



LEGEND

- Major Roads / Highways
- Topographic Elevation Contour (10 m interval)
- Rivers / Streams
- Open Water
- Guelph Tier III Model Boundary
- GRCA Watershed Boundary
- City of Guelph Boundary
- Municipal Boundaries

Elevation (masl)

High : 510

Low : 205

Scale 1:240,000

2.5 0 2.5 5

Kilometers

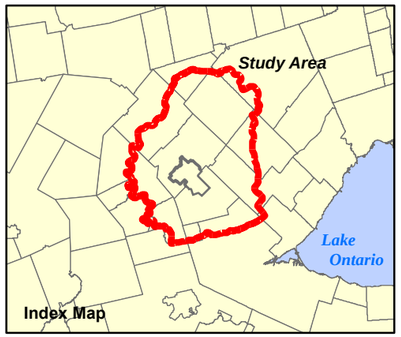


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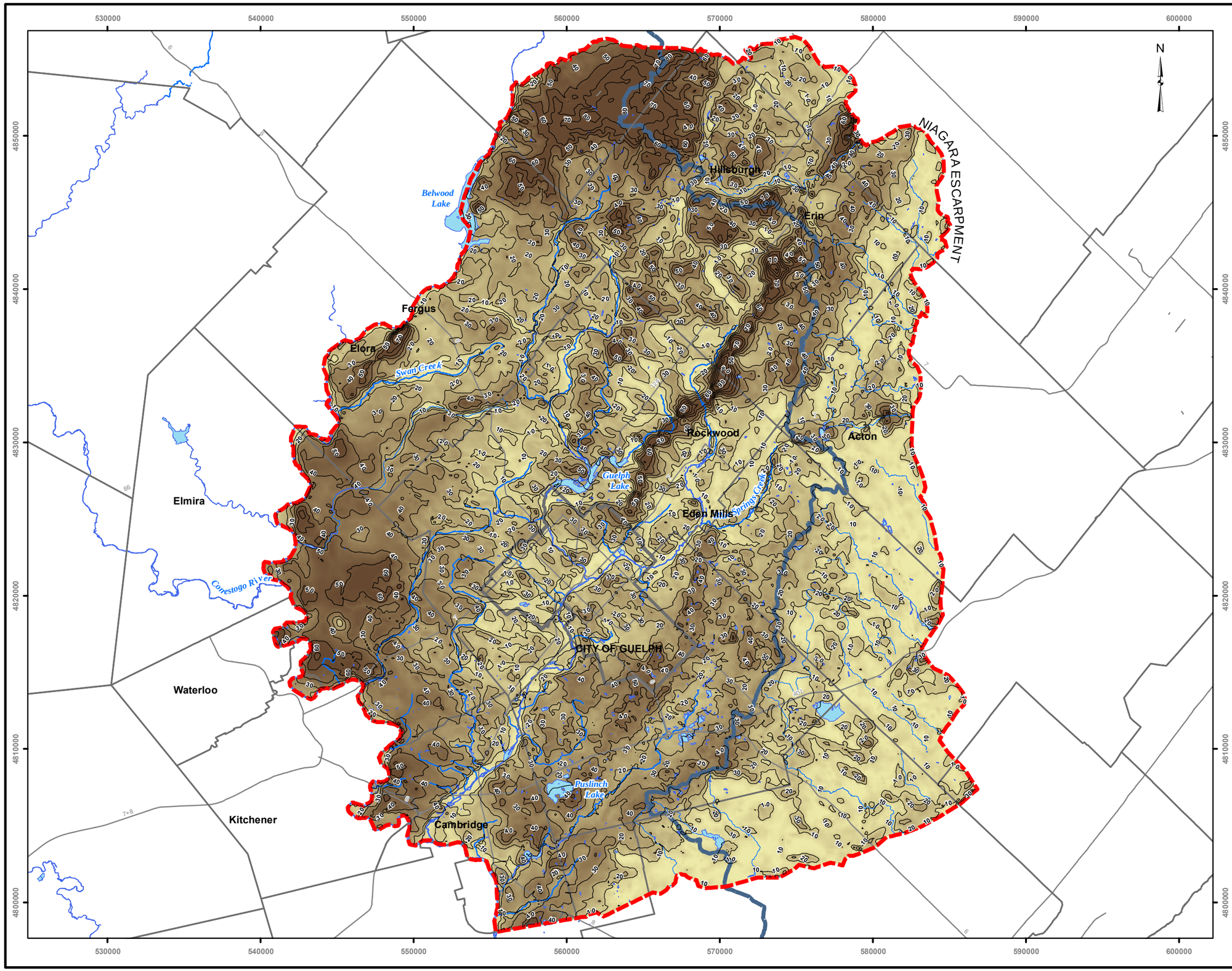
FIGURE: F1

DEM SURFACE ELEVATION

Tier Three Local Area Risk Assessment



LEGEND

- Major Roads / Highways
- Overburden Isopach Contour (m)
- Rivers / Streams
- Open Water
- Guelph Tier III Model Boundary
- GRCA Watershed Boundary
- City of Guelph Boundary
- Municipal Boundaries

Thickness (m)

High : 100

Low : 0

Scale 1:240,000

2.5 0 2.5 5

Kilometers

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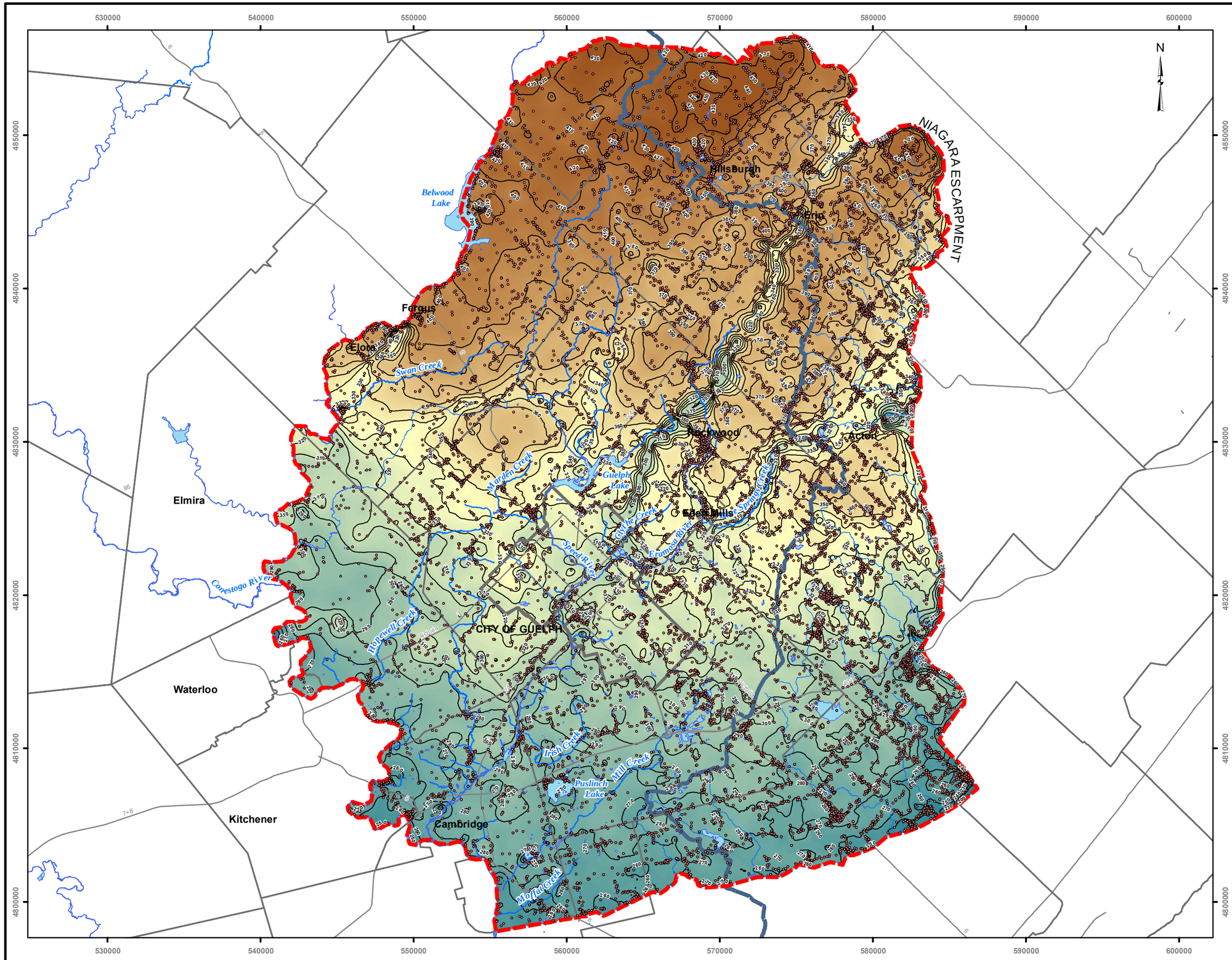
FIGURE: F2

OVERBURDEN ISOPACH

Tier Three Local Area Risk Assessment



LEGEND

- Data Point
- Major Roads / Highways
- Bedrock Surface Contour (masl)
- Rivers / Streams
- Open Water
- Guelph Tier III Model Boundary
- GRCA Watershed Boundary
- City of Guelph Boundary
- Municipal Boundaries

Elevation (masl)

High : 450

Low : 195

Scale 1:240,000

2.5 0 2.5 5

Kilometers

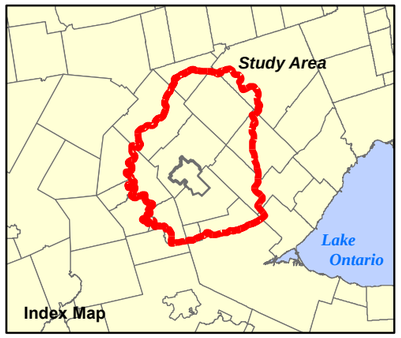


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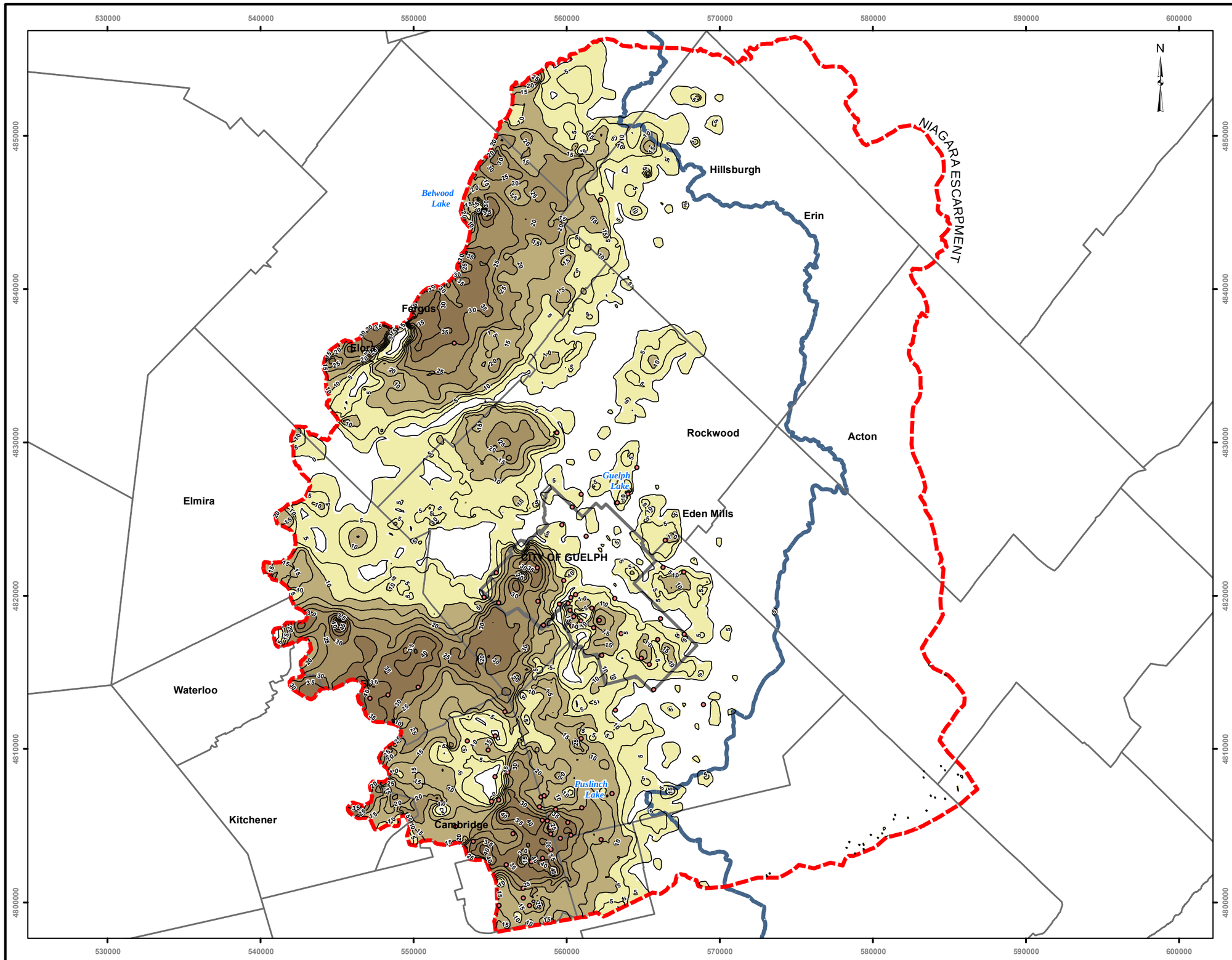
FIGURE: F3

BEDROCK SURFACE

Tier Three Local Area Risk Assessment

City of Guelph

Making a Difference



LEGEND

- Data Point
- Major Roads / Highways
- Guelph Isopach Contour (m)
- Rivers / Streams
- Open Water
- Guelph Tier III Model Boundary
- GRCA Watershed Boundary
- City of Guelph Boundary
- Municipal Boundaries

Thickness (m)

- 50 - 60
- 40 - 50
- 30 - 40
- 20 - 30
- 10 - 20
- 0.5 - 10
- 0 - 0.5

Scale 1:240,000

2.5 0 2.5 5

Kilometers

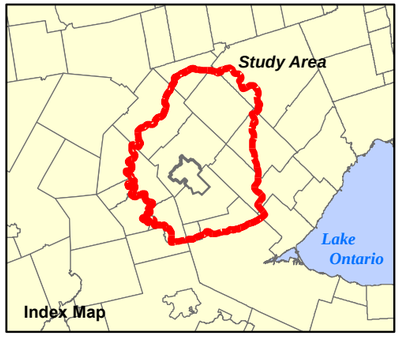


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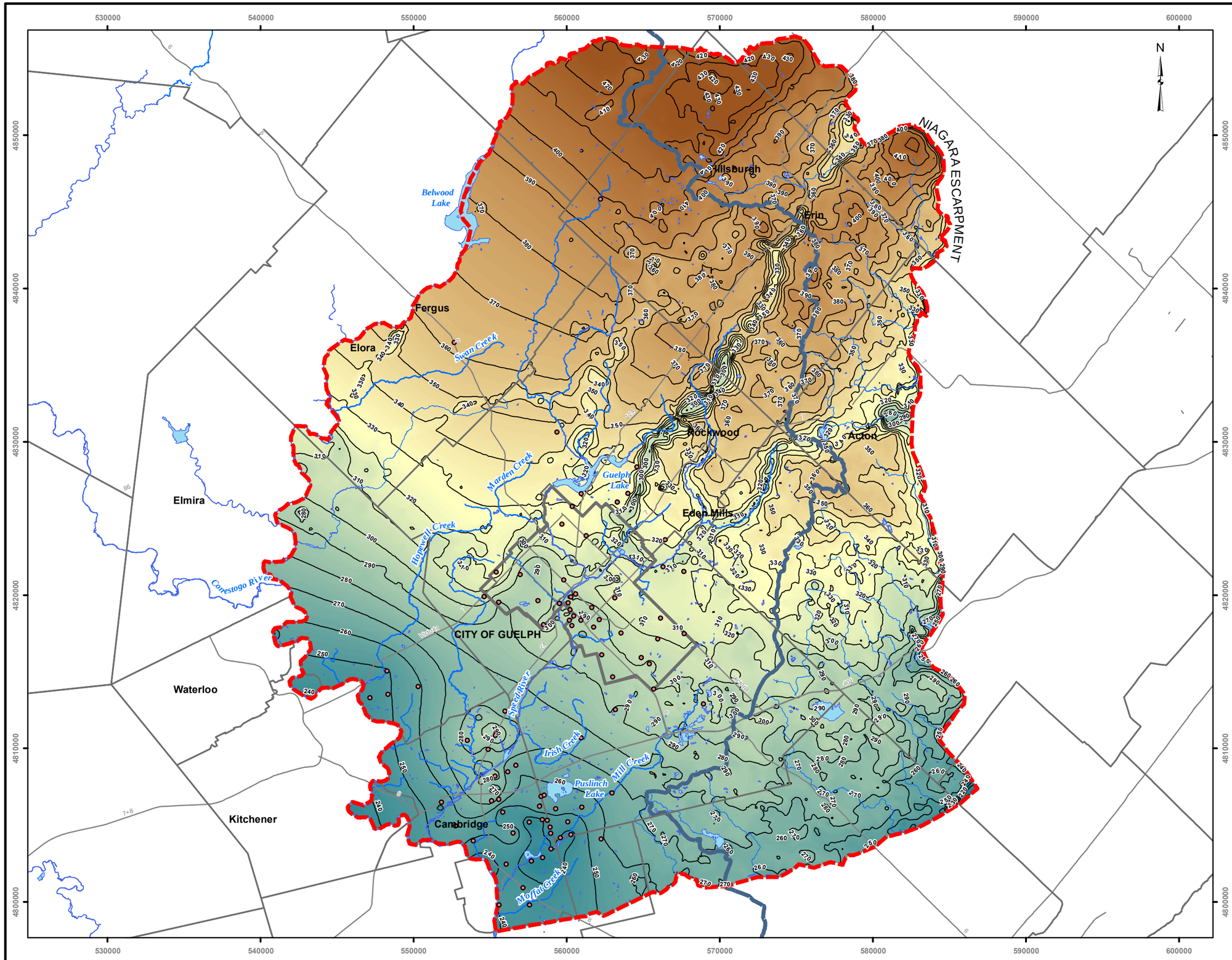
FIGURE: F4

GUELPH ISOPACH

Tier Three Local Area Risk Assessment



LEGEND

- Data Point
- Major Roads / Highways
- Reformatory Surface Elevation Contour (masl)
- Rivers / Streams
- Open Water
- Guelph Tier III Model Boundary
- GRCA Watershed Boundary
- City of Guelph Boundary
- Municipal Boundaries

Elevation (masl)

High : 440

Low : 195

Scale 1:240,000

2.5 0 2.5 5

Kilometers

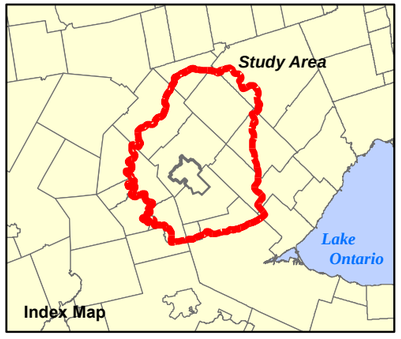


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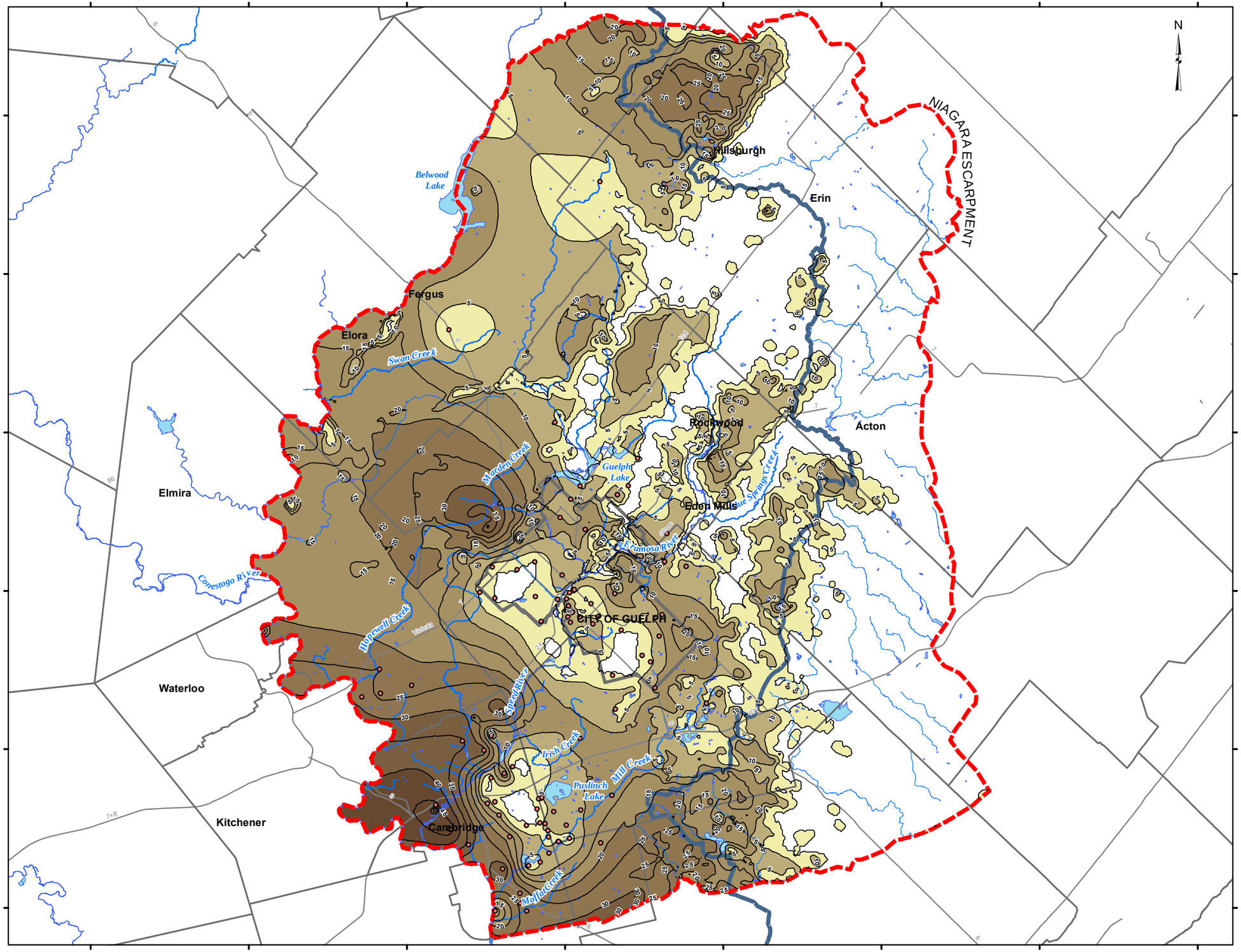
FIGURE: F5

REFORMATORY QUARRY SURFACE

Tier Three Local Area Risk Assessment

City of Guelph



LEGEND

- Data Point
- Isopach Thickness Contour (m)
- Major Roads / Highways
- Rivers / Streams
- Open Water
- Guelph Tier III Model Boundary
- GRCA Watershed Boundary
- City of Guelph Boundary
- Municipal Boundaries

Thickness (m)

- 40 - 50
- 30 - 40
- 20 - 30
- 10 - 20
- 5 - 10
- 0.5 - 5
- 0 - 0.5

Scale 1:240,000

2.5 0 2.5 5

Kilometers

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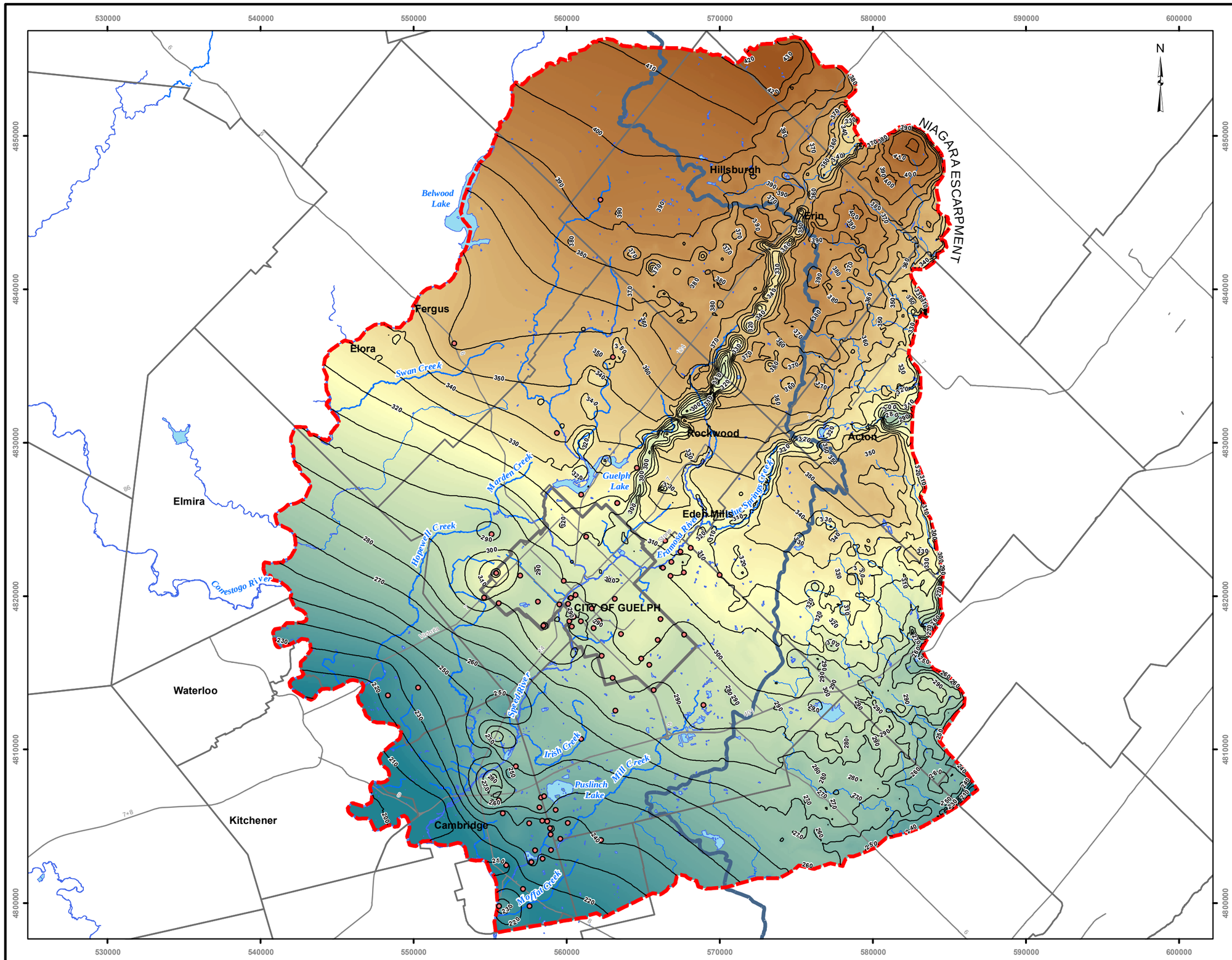
FIGURE: F6

REFORMATORY QUARRY ISOPACH

Tier Three Local Area Risk Assessment

City of Guelph



LEGEND

- Data Point
- Vinemount Surface contour (masl)
- Major Roads / Highways
- Rivers / Streams
- Open Water
- Guelph Tier III Model Boundary
- GRCA Watershed Boundary
- City of Guelph Boundary
- Municipal Boundaries

Elevation (masl)

High : 430

Low : 190

Scale 1:240,000

2.5 0 2.5 5

Kilometers

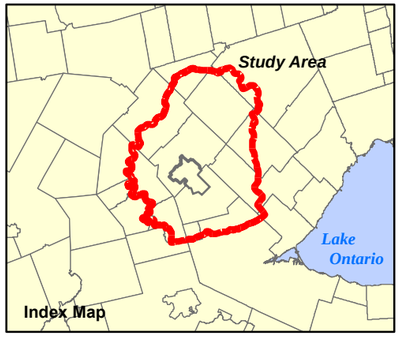


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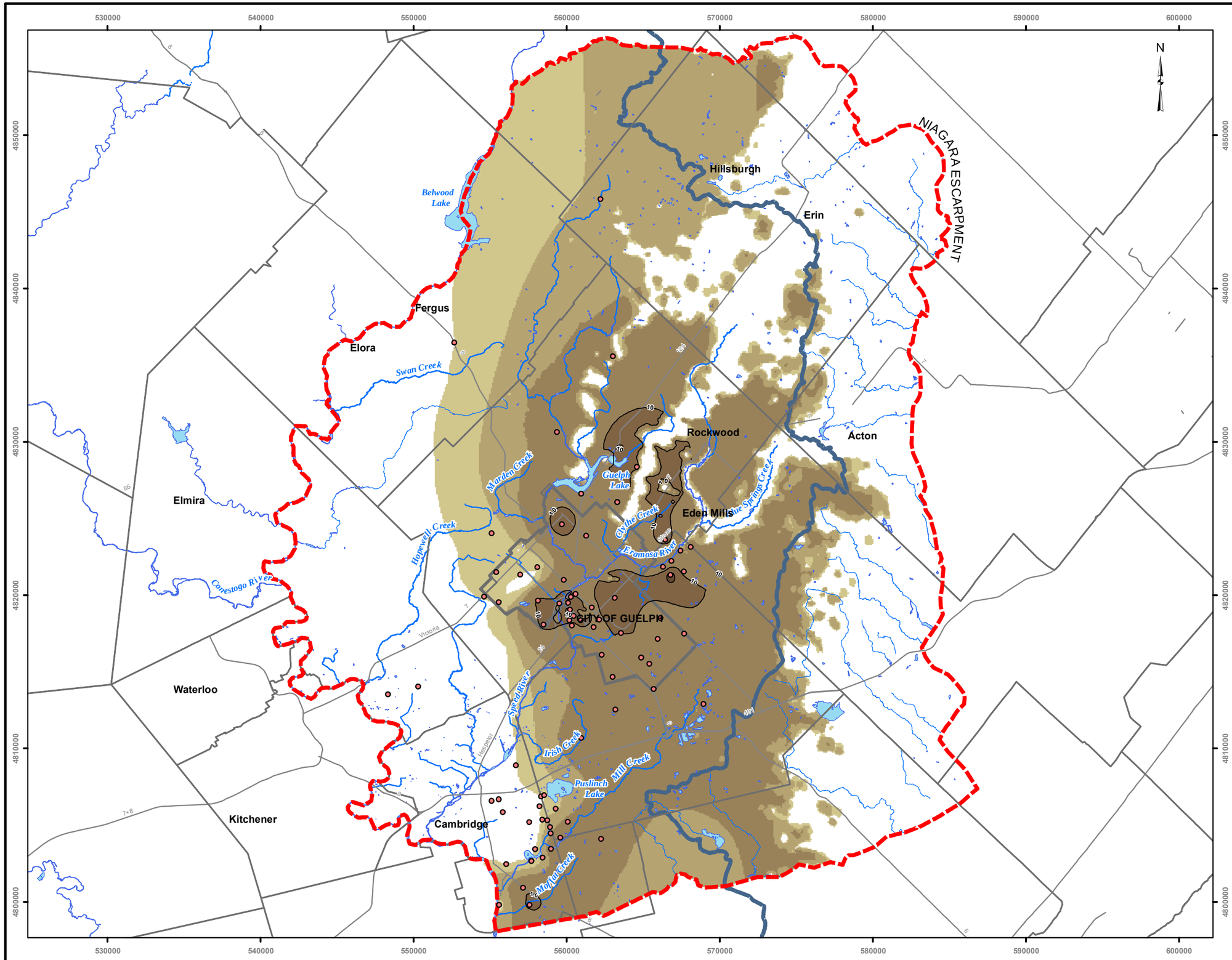
FIGURE: F7

VINEMOUNT SURFACE

Tier Three Local Area Risk Assessment

City of Guelph



LEGEND

- Data Point
- Isopach Thickness Contour (m)
- Major Roads / Highways
- Rivers / Streams
- Open Water
- Guelph Tier III Model Boundary
- GRCA Watershed Boundary
- City of Guelph Boundary
- Municipal Boundaries

Thickness (m)

- 15 - 20
- 10 - 15
- 5 - 10
- 2 - 5
- 0 - 2
- 0

Scale 1:240,000

2.5 0 2.5 5

Kilometers

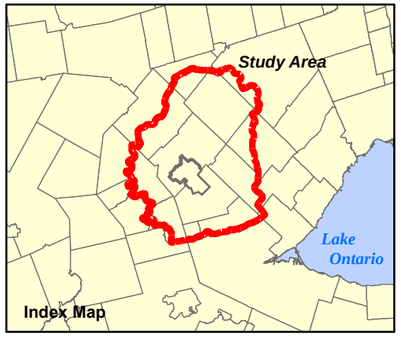


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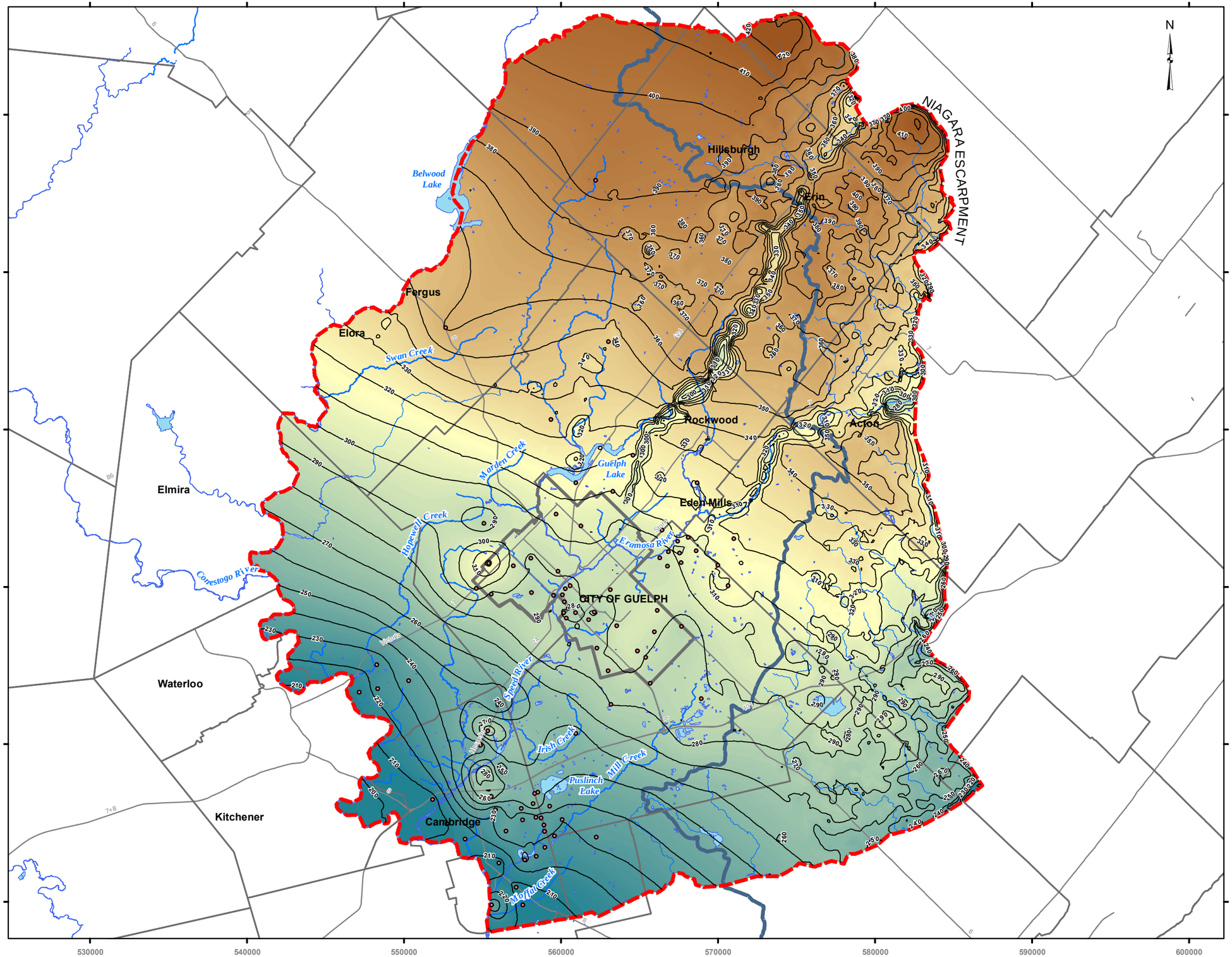
FIGURE: F8

VINEMOUNT ISOPACH

Tier Three Local Area Risk Assessment

City of Guelph



LEGEND

- Data Point
- Major Roads / Highways
- Goat Island Surface (masl)
- Rivers / Streams
- Open Water
- Guelph Tier III Model Boundary
- GRCA Watershed Boundary
- City of Guelph Boundary
- Municipal Boundaries

Elevation (masl)

High : 430

Low : 190

Scale 1:240,000

2.5 0 2.5 5

Kilometers

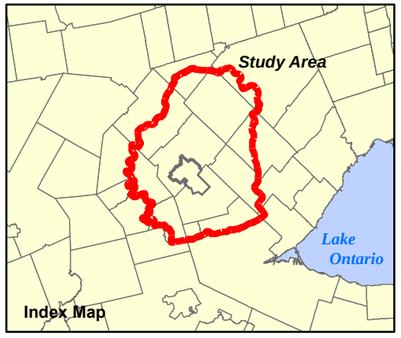


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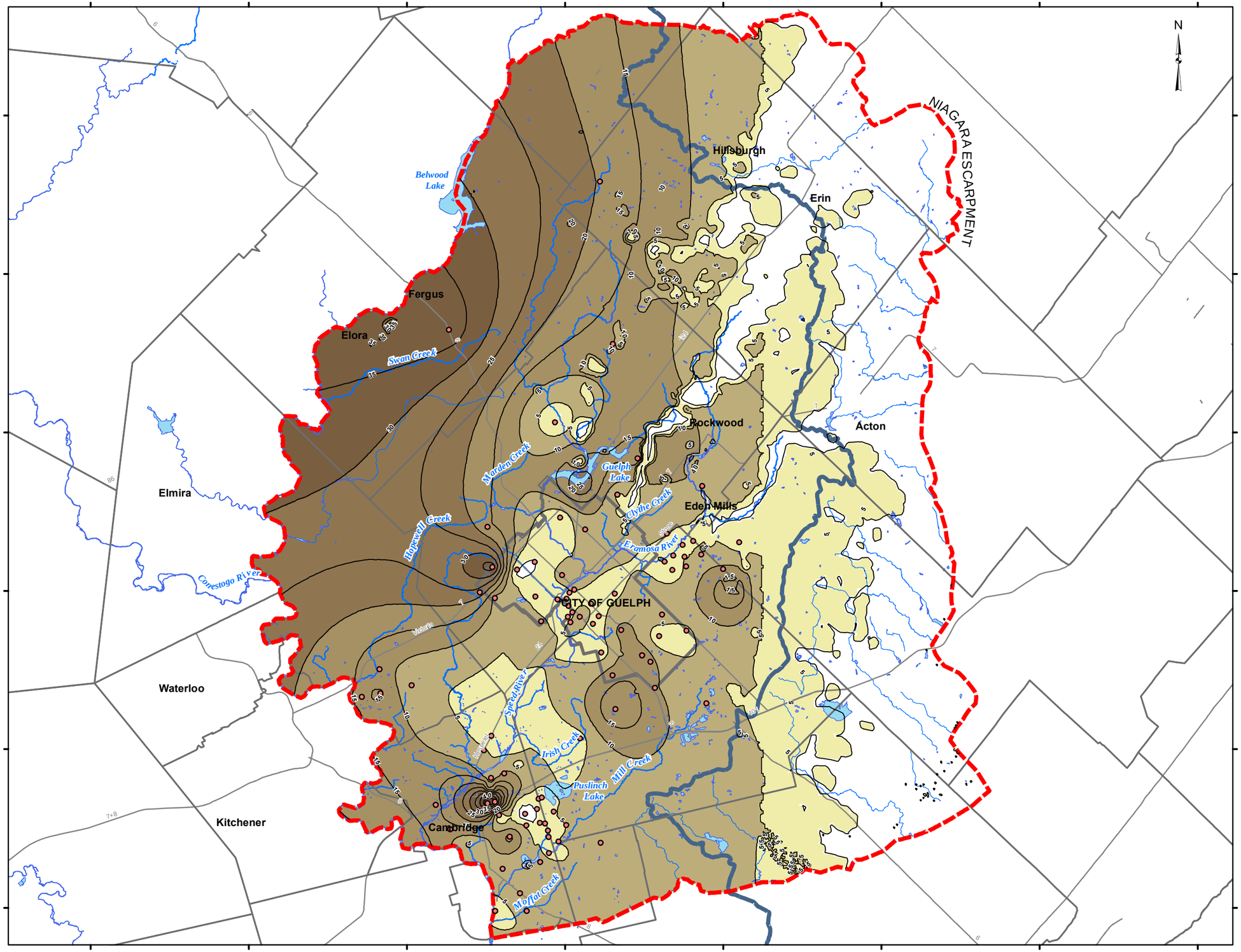
FIGURE: F9

GOAT ISLAND SURFACE

Tier Three Local Area Risk Assessment



LEGEND

- Data Point
- Isopach Thickness Contour (m)
- Major Roads / Highways
- Rivers / Streams
- Open Water
- Guelph Tier III Model Boundary
- GRCA Watershed Boundary
- City of Guelph Boundary
- Municipal Boundaries

Thickness (m)

- 40 - 50
- 30 - 40
- 20 - 30
- 10 - 20
- 5 - 10
- 0.5 - 5
- 0 - 0.5

Scale 1:240,000

2.5 0 2.5 5

Kilometers

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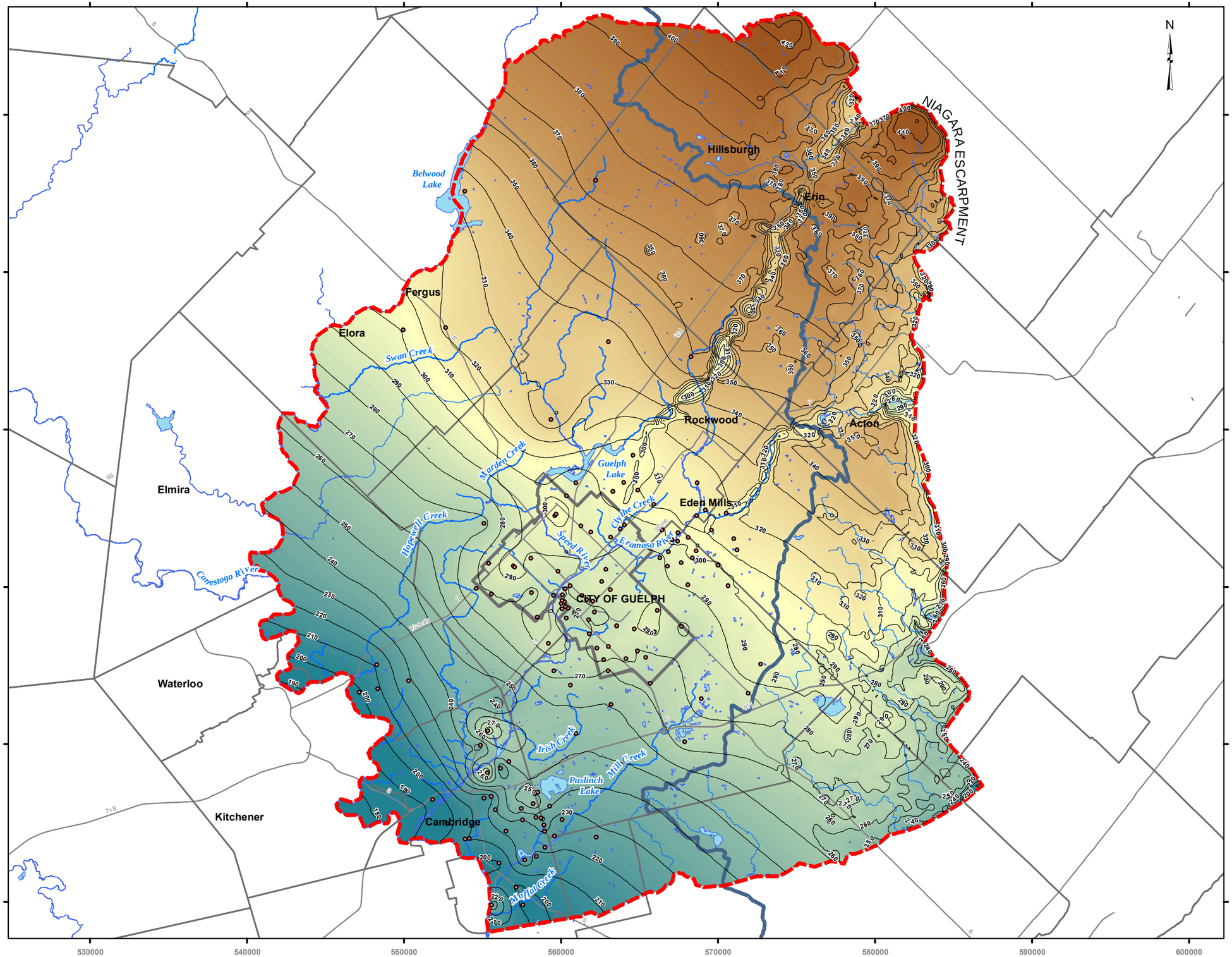
FIGURE: F10

GOAT ISLAND ISOPACH

Tier Three Local Area Risk Assessment



LEGEND

- Data Point
- Major Roads / Highways
- Upper Gasport Surface Contour (masl)
- Rivers / Streams
- Open Water
- Guelph Tier III Model Boundary
- GRCA Watershed Boundary
- City of Guelph Boundary
- Municipal Boundaries

Elevation (masl)

High : 425

Low : 170

Scale 1:240,000

2.5 0 2.5 5

Kilometers

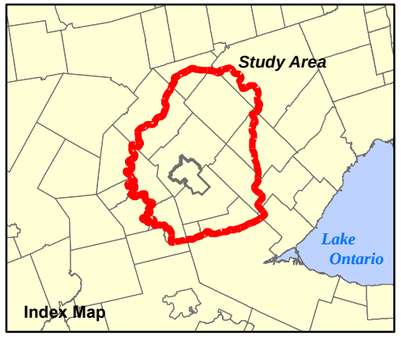


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FIGURE: F11

UPPER GASPORT SURFACE

Tier Three Local Area Risk Assessment

City of Guelph

LEGEND

- Data Point
- Isopach Thickness Contour (m)
- Major Roads / Highways
- Rivers / Streams
- Open Water
- Guelph Tier III Model Boundary
- GRCA Watershed Boundary
- City of Guelph Boundary
- Municipal Boundaries

Thickness (m)

- 90 - 100
- 80 - 90
- 70 - 80
- 60 - 70
- 50 - 60
- 40 - 50
- 30 - 40
- 20 - 30
- 10 - 20
- 0 - 10
- 0

Scale 1:240,000

2.5 0 2.5 5

Kilometers

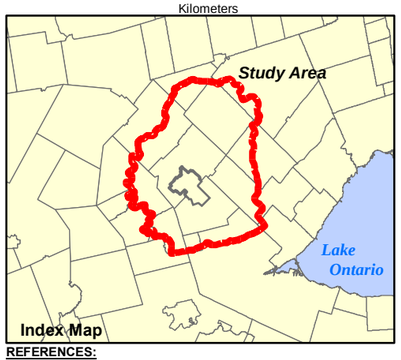

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FIGURE: F12

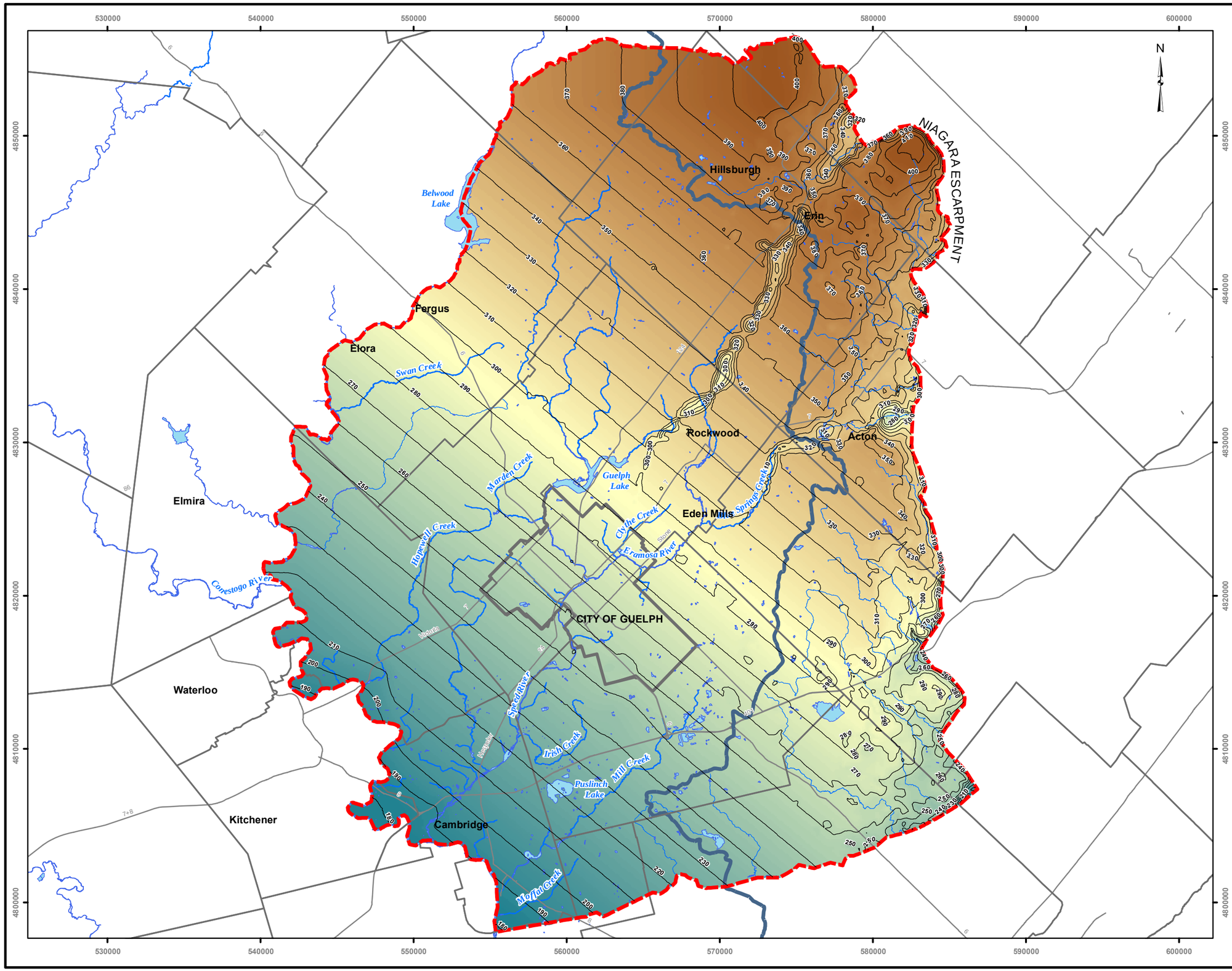
GASPORT ISOPACH

G:\Projects\2008\08-1112-0021_Guelph_TierIII\GIS\MXDs\Final\May_2011_Report\Appendix\Combined_Gasport_Isopach.mxd

Project: 08-1112-0021_Guelph_Tier3

Tier Three Local Area Risk Assessment

City of Guelph



LEGEND

- Major Roads / Highways
- Middle Gasport Surface Contour (masl)
- Rivers / Streams
- Open Water
- Guelph Tier 3 Model Boundary
- GRCA Watershed Boundary
- City of Guelph Boundary
- Municipal Boundaries

Elevation (masl)

High : 420

Low : 170

Scale 1:240,000

2.5 0 2.5 5

Kilometers

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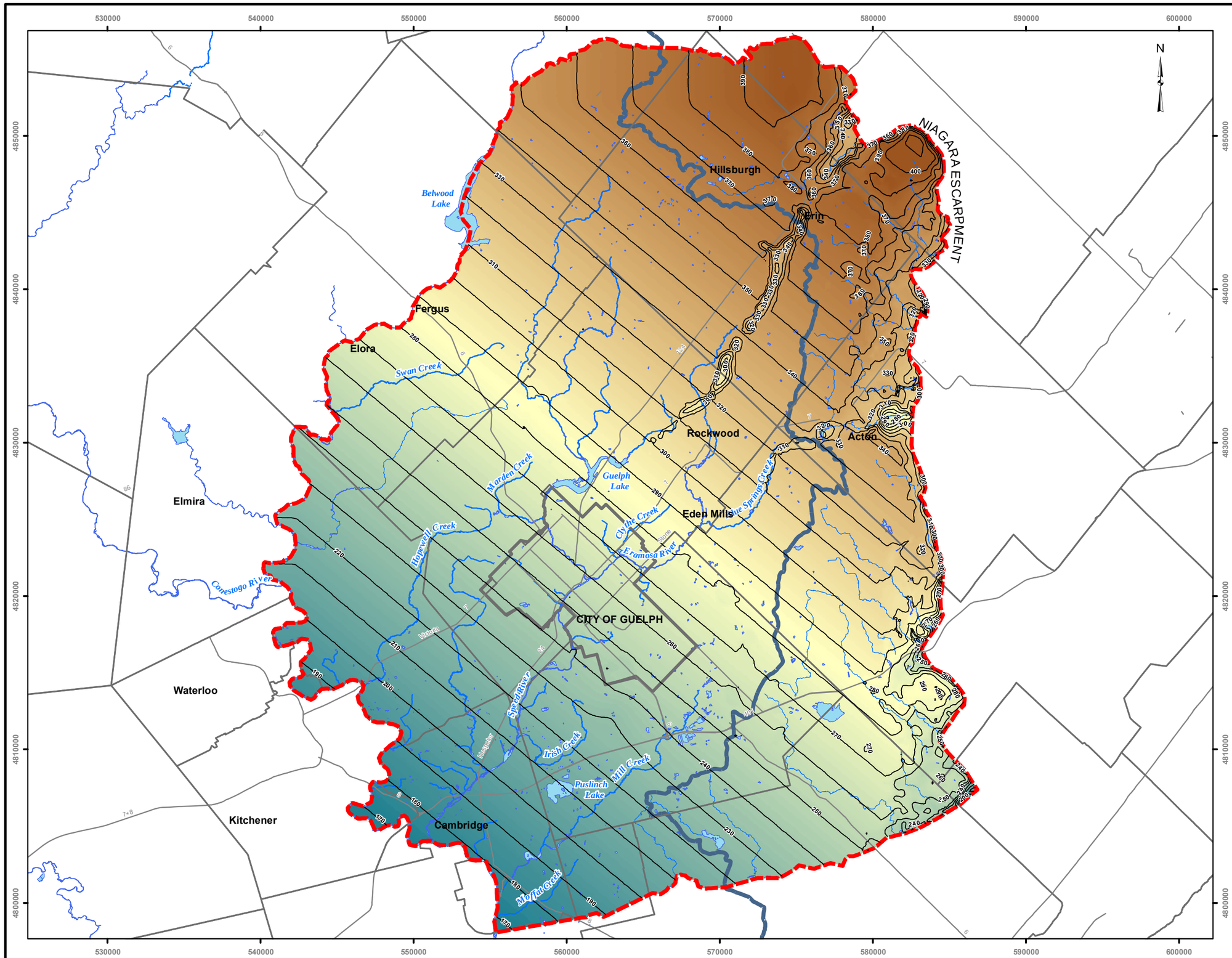
FIGURE: F13

MIDDLE GASPORT SURFACE

Tier Three Local Area Risk Assessment

City of Guelph



LEGEND

- Major Roads / Highways
- Lower Gasport Surface Contour (masl)
- Rivers / Streams
- Open Water
- Guelph Tier III Model Boundary
- GRCA Watershed Boundary
- City of Guelph Boundary
- Municipal Boundaries

Elevation (masl)

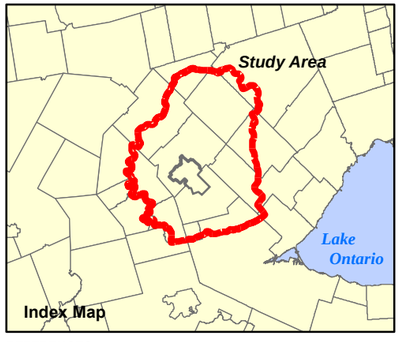
High : 410

Low : 165

Scale 1:240,000

2.5 0 2.5 5

Kilometers



REFERENCES:

Base Data - City of Guelph, 2009; GRCA, 2008, CVC, 2008, Ministry of Natural Resources, 2008
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Projection: UTM Zone 17N, NAD 83
Map Version: 1; Map Date: 15-Mar-10; Created By: CC/KD

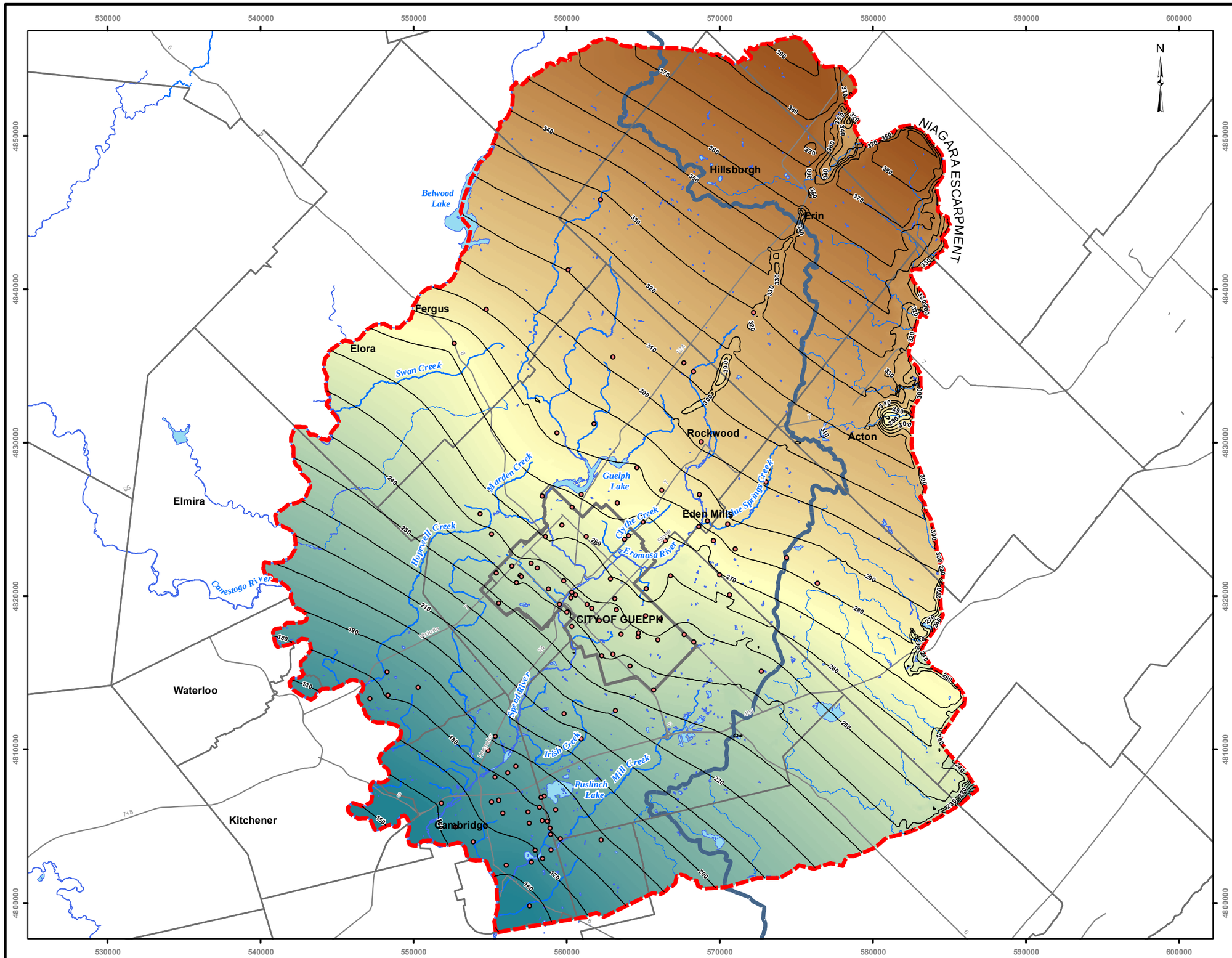
Produced by
Aquaresource Inc. and
Golder Associates

FIGURE: F14

LOWER GASPORT SURFACE

Tier Three Local Area Risk Assessment

City of Guelph



LEGEND

- Data Point
- Major Roads / Highways
- Cabot Head Surface Contour (masl)
- Rivers / Streams
- Open Water
- Guelph Tier III Model Boundary
- GRCA Watershed Boundary
- City of Guelph Boundary
- Municipal Boundaries

Elevation (masl)

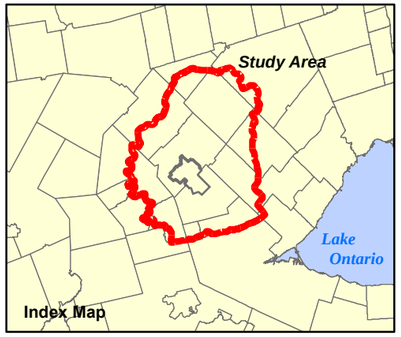
High : 395

Low : 150

Scale 1:240,000

2.5 0 2.5 5

Kilometers



REFERENCES:

Base Data - City of Guelph, 2009; GRCA, 2008, CVC, 2008, Ministry of Natural Resources, 2008
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Projection: UTM Zone 17N, NAD 83
Map Version: 1; Map Date: 15-Mar-10; Created By: CC/KD

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Golder Associates

FIGURE: F15

CABOT HEAD SURFACE

APPENDIX G

Hydraulic Testing and Parameter Information

Table G1: 2004 Guelph Lime Rotating Municipal Well Shutdown

Response During Membro Shutdown

Monitoring Well	Radial Distance from Membro (m)	Recovery after 16 hours (m)	Comments
Monitoring Wells Completed in the Gasport Formation			
Membro	0	10.6	
Membro OW A	8	9.7	
Edinburgh	368	1.6	masked by Water & Dean
OW05-92 A	832	1.4	
MW04-01 A	1659	0	masked by Downey
TW04-02 A	1876	0.18	
TW04-01 A	2133	0	masked by Downey
Downey OW	3229	0	masked by Downey
Monitoring Wells Completed in the Guelph Formation			
Membro OW B	8	0.04	
OW05-92 B	832	0	
MW04-01 B	1659	0	masked by Downey
TW04-02 B	1876	0	
TW04-02 C	1876	0	
TW04-01 B	2133	0	masked by Downey
TW04-01 C	2133	0	masked by Downey

Response During Downey Shutdown

Monitoring Well	Radial Distance from Downey (m)	Recovery after 16 hours (m)	Comments
Monitoring Wells Completed in the Gasport Formation			
Downey	0	8.3	
Downey OW	1	8.18	Direct hydraulic connection to Downey
TW04-01 A	1101	6.01	
MW04-01 A	1580	3.61	
TW04-02 A	1751	1.67	
OW05-92 A	2553	0	masked by Membro, Dean and Water
Membro OW A	3229	0	
Edinburgh	3264	0	
Monitoring Wells Completed in the Guelph Formation			
TW04-01 C	1101	0.43	
TW04-01 B	1101	0.52	
MW04-01 B	1580	0.16	
TW04-02 C	1751	0.04	
TW04-02 B	1751	0.28	
OW05-92 B	2553	0	masked by Membro
Membro OW B	3229	0	masked by Membro

Table G1: 2004 Guelph Lime Rotating Municipal Well Shutdown

Response During University, Dean and Water Shutdown

Monitoring Well	Lateral Distance from line between University to Dean (m)	Recovery after 16 hours (m)	Comments
Monitoring Wells Completed in the Gasport Formation			
University	1	11.84	
Water	1	6.82	
Dean	1	10.81	
Edinburgh	385	0.86	masked by Membro
Membro OW A	710	0.36	
OW05-92 A	1075	0.25	
MW04-01 A	1086	1.1	masked slightly by Downey
TW04-01 A	1184	1.54	
TW04-02 A	1747	0.03	
Monitoring Wells Completed in the Guelph Formation			
Membro OW B	710	< 0.1	masked by Membro
OW05-92 B	1075	< 0.1	
MW04-01 B	1086	0.2	masked slightly by Downey
TW04-01 C	1184	0.33	
TW04-01 B	1184	0.44	
TW04-02 C	1747	< 0.1	
TW04-02 B	1747	< 0.1	

Table G2: Observed Groundwater Elevations in the Gasport Formation

Observation Well Name	Easting (m)	Northing (m)	Observed Water Elevation (masl)
DOWNEY OBS	561794	4817026	294.4
ADMIRAL	564142	4815426	320.9
Arkell15-PW15A/00	567443	4822881	314.9
Arkell6-PW6/63	567939	4823073	314.8
Arkell7-PW7/63	567989	4822433	314.4
Arkell8-PW8/63	568074	4822973	315.1
CLAIR A	564875	4815909	328.4
EASTVIEW A	561281	4823857	317.0
Edinburgh-PW2/53	560594	4820066	299.0
FLEMING A	563298	4826047	343.8
GSTW1-08	562996	4814664	306.4
GSTW2-08	562286	4816097	312.8
GSTW3-08	565403	4815503	330.6
HAUSER A	555554	4819528	322.1
Logan4-OW4/66	563989	4826623	344.0
MCCURDY A	563539	4817510	321.3
MEMBRO OW A	560273	4819870	287.4
MW04-01A	560932	4818359	298.3
MW06-01A	555406	4821496	335.4
MW06-02A	558091	4821806	331.3
MW06-03A	559683	4824622	306.2
MW06-04A	559519	4819464	293.5
MW06-05A	559860	4820988	307.9
MW06-06A	563129	4819827	321.6
MW06-07A	565683	4813872	317.4
MW06-08A	565944	4817135	331.5
MW06-09A	566130	4818503	328.6
MW06-10A	567679	4817485	332.7
MW08-01A	560990	4817482	299.0
MW08-02A	560096	4819483	293.2
MW08-T3-02-Test1	559361	4830633	358.4
MW08-T3-04-Test1	552654	4836467	402.8
MW08-T3-05-Test2	562220	4845824	431.0
MW08-T3-06-Test1	568274	4834617	365.7
MW08-T3-06-Test6	568274	4834617	363.4
MW08-T3-07-Test1	564581	4828349	342.8
MW08-T3-08-Test1	560949	4826604	336.5
MW08-T3-09-Test1	570645	4820065	330.3
MW08-T3-10-Test1	563161	4812509	302.7
MW09-T3-01-2	560864	4810649	303.4
MW123	562723	4815369	307.7
OW01-92	559317	4818440	301.6
OW05-92A	560223	4819045	296.5
OW10D-06	568680	4826606	323.0
OW10I	568680	4826606	323.3
OW11/00-D	568611	4822275	319.2
OW11D-06	563769	4823687	321.1
OW12/00	567644	4821533	317.7
OW14/00-D	568104	4823140	317.8
OW15/00	567438	4822880	318.1
OW16/00	566841	4822217	315.7
OW18/00	567543	4822126	318.2
OW19A/00	567064	4822987	317.4
OW1D-06	566772	4821308	319.7
OW20A/00-I-OW20/01	567459	4823439	317.3
OW2D-06	569990	4821372	323.0
OW3D-06	569593	4823593	323.9
OW4D-06	568632	4824518	319.0
OW5D-06	566441	4823588	318.4
OW6D-06	566302	4821825	317.3
OW7D-06	569191	4824879	320.5
OW7S	569192	4824880	320.4
OW8D-06	571011	4823050	331.2
OW9D-06	570515	4824670	322.8
SACCO-PW8/52	556416	4821929	337.9
Smallfield-PW3/66	556716	4820859	334.2
SUMP3	560020	4819025	288.3
TW04-01A	561360	4818045	298.0
TW04-02A	560339	4818016	296.4
TW08-01A	561755	4817896	298.5
TW08-02A	562101	4818417	298.1
UG-3	562584	4820326	308.6
UG-4	562024	4819077	301.2
UG-7	561331	4819442	302.8

NOTES:
1) Water Level Elevations are from the period form May to June 2007.
2) For wells with no data during this period, water levels from June to July 2008 were used as representative values.

Well Name	Magnitude of Jan 2008 Spike (m)	Start Date	Peak Date	Comments
BH3-1	0.7	01/06/2008 AM	01/09/2008 AM	peak, stabilizes at higher water level
BH3-2	0.8	01/06/2008 PM	01/09/2008 AM	peak
BH5-1	0.4	01/07/2008 AM	01/09/2008 AM	peak
BH5-2	0.35	01/06/2008 AM	01/09/2008 AM	peak
BURKE OBS	0.6	01/07/2008 AM	01/15/2008 AM	no peak,stabilizes at higher water level
CLAIR C	0.35	01/07/2008 AM	01/15/2008 PM	no peak,stabilizes at higher water level
DOWNEY OBS	11	01/04/2008 PM	01/08/2008 PM	peak, gentle decline
McCURDY C	0.55	01-05-2008 AM	01/09/2008 AM	peak, gentle decline
MP OW7	0.5	01/06/2008 PM	01/09/2008 AM	peak, gentle decline
MPOW8	0.25	01/06/2008 PM	01/09/2008 PM	peak
MW04-01A	8	01/04/2008 PM	01/11/2008 PM	peak, stabilizes at higher water level
MW04-01B	0.7	01/04/2008 PM	01-15-2008 AM	no peak,stabilizes at higher water level
MW06-01A	0.75	01-03-2008 AM	01-18-2008 AM	no peak,stabilizes at higher water level
MW06-01B	0.75	01-04-2008 AM	01-18-2008 AM	no peak,stabilizes at higher water level
MW06-01C	0.45	01-07-2008 AM	01-09-2008 AM	peak, stabilizes at higher water level
MW06-02A	0.6	01/06/2008 PM	01-09-2008 AM	peak, gentle decline
MW06-02B	0.6	01/06/2008 PM	01-09-2008 AM	peak, gentle decline
MW06-04A	2.6	01/04/2008 PM	01-13-2008 AM	peak
MW06-04B	5.7	01/08/2008 PM	01-13-2008 AM	peak
MW06-04C	0.7	01-07-2008 AM	01-13-2008 AM	peak
MW06-06A	1.05	01-05-2008 AM	01-18-2008 AM	no peak,stabilizes at higher water level
MW06-06B	1.15	01-05-2008 AM	01-18-2008 AM	no peak,stabilizes at higher water level
MW06-06C	0.6	01/07/2008 PM	01/11/2008 PM	no peak,stabilizes at higher water level
MW06-06D	0.9	01/07/2008 PM	01/15/2008 PM	no peak,stabilizes at higher water level
MW06-08C	0.5	01/07/2008 AM	01-18-2008 AM	no peak,stabilizes at higher water level
MW06-08D	0.5	01/07/2008 AM	01-18-2008 AM	no peak,stabilizes at higher water level
MW08-01A	7.7	01-04-2008 AM	01-11-2008 AM	no peak,stabilizes at higher water level
MW123	5.9	01/04/2008 PM	01-13-2008 AM	peak, gentle decline
MWB-D	0.6	01-06-2008 AM	01-22-2008 AM	no peak, water level stabilizes at higher level
MWB-I		01-06-2008 AM	01-24-2008 AM	no peak, water level stabilizes at higher level, then continues to rise
MWD-D	0.55	01/06/2008 PM	01/09/2008 PM	peak
MWD-I	0.55	01/06/2008 PM	01/09/2008 PM	peak
MWD-S	0.95	01/07/2008 AM	01-09-2008 AM	peak
OW10D	1.65	01/07/2008 AM	01/09/2008 PM	peak
OW10I	1.7	01/07/2008 AM	01/09/2008 PM	peak, stabilizes at higher water level
OW11D	0.75	01/07/2008 AM	01/15/2008 PM	no peak,stabilizes at higher water level
OW11I	0.75	01/07/2008 AM	01-17-2008 AM	no peak,stabilizes at higher water level
OW11S	0.85	01/07/2008 AM	01-09-2008 AM	peak
OW1D	0.95	01-08-2008 AM	01-13-2008 AM	peak, stabilizes at higher water level
OW1I	0.95	01-08-2008 AM	01-13-2008 AM	peak, stabilizes at higher water level
OW1S	1.95	01-07-2008 AM	01-11-2008 AM	no peak,stabilizes at higher water level
OW2D	0.65	01-08-2008 AM	01/13/2008 PM	peak, stabilizes at higher water level
OW3D	0.5	01/07/2008 PM	01-14-2008 AM	peak, stabilizes at higher water level
OW3I	0.55	01/07/2008 PM	01/13/2008 PM	peak, stabilizes at higher water level

Well Name	Magnitude of Jan 2008 Spike (m)	Start Date	Peak Date	Comments
OW4D	0.7	01-07-2008 AM	01-11-2008 AM	peak
OW4I	0.65	01-07-2008 AM	01-07-2008 AM	peak
OW5D	1.2	01-07-2008 AM	01/13/2008 PM	peak, stabilizes at higher water level
OW7D	0.7	01/06/2008 PM	01/10/2008 PM	nice peak
OW7I	0.7	01/06/2008 PM	01/10/2008 PM	nice peak
OW7S	0.7	01/06/2008 PM	01/10/2008 PM	
OW8D	0.7	01/04/2008 PM	01-09-2008 AM	peak levels off, gradual decline
OW8I	0.7	01-07-2008 AM	01-11-2008 AM	peak
OW8S	0.55	01/06/2008 PM	01-09-2008 AM	peak
OW9D	0.55	01-07-2008 AM	01-11-2008 AM	peak, very gradual decline
OW9I	0.6	01-07-2008 AM	01-11-2008 AM	peak, very gradual decline
OW9S	0.9	01/06/2008 PM	01/10/2008 PM	peak
SS-2	0.4	01-07-2008 AM	01-09-2008 AM	sharp peak
TW04-01A	14	01/04/2008 PM	01/11/2008 PM	gradual decline
TW04-01B	2	01/04/2008 PM	01/11/2008 PM	gradual decline
TW04-01C	2	01/04/2008 PM	01/11/2008 PM	gradual decline
TW04-02A	5	01/04/2008 PM	01/11/2008 PM	gradual decline
TW04-02B	1.5	01/04/2008 PM	01-18-2008 AM	gentle peak
UG-3	2.8	01/04/2008 PM	01/13/2008 PM	gentle peak, gradual decline
UG-4	8	01/04/2008 PM	01/13/2008 PM	gentle peak, gradual decline
UG-7	4.5	01/04/2008 PM	01/13/2008 PM	gentle peak, gradual decline

Well	Report Reference	Report Page #	Type of Test	Ground Surface Elevation (masl)	Interval Top Depth (mbgs)	Interval Bottom Depth (mbgs)	Formation	Hydraulic Conductivity (m/s)	Transmissivity (m^2/day)	Storativity	Calculation Method
Southwest Quadrant											
Clair Road	JHL, 1998a	71	Constant Rate	335.59	17.4	82.3	multiple- open borehole		29-31	2E-05	
Dean (PW3-58)	JHL, 1998a	Table 4-7	Constant Rate	323.30	12.4	57.2	multiple- open borehole		155		Cooper-Jacob
Dean (PW3-58)	JHL, 1998a	81	Step Test	323.30	12.4	57.2	multiple- open borehole		173		
Downey (PW5/67)	JHL, 1998a	Table 4-7	Constant Rate	317.40	12.1	73.8	multiple- open borehole		467		Cooper-Jacob
Downey (PW5/67)	JHL, 1998a	Table 4-8, 69	Constant Rate	317.40	12.1	73.8	multiple- open borehole		432		Cooper-Jacob
Downey (PW5/67)	JHL, 1998a	82	Step Test	317.40	12.1	73.8	multiple- open borehole		605		
Downey (PW5/67)	Golder, 2006	Table 3.1	Recovery Test	317.40	12.1	73.8	multiple- open borehole		1,600		Jacob-Theis
Downey (PW5/67)	Golder, 2006	Table 3.1	Recovery Test	317.40	12.1	73.8	multiple- open borehole		225		Jacob-Theis
Edinburgh (PW2/53)	JHL, 1998a	Table 4-8, page 67	Constant Rate	315.60	7.2	69.5	multiple- open borehole		432		Cooper-Jacob
Edinburgh (PW2/53)	JHL, 1998a	81	Step Test	315.60	7.2	69.5	multiple- open borehole		173		
McCurdy	JHL, 1998a	70	Constant Rate	324.05	11.9	78.0	multiple- open borehole		259-337	2E-03	
Membro (PW1/53)	JHL, 1998a	Table 4-7	Constant Rate	315.60	4.4	73.2	multiple- open borehole		280		Cooper-Jacob
Membro (PW1/53)	JHL, 1998a	69	Step Test	315.60	4.4	73.2	multiple- open borehole		96-596		
Membro (PW1/53)	Golder, 2006	Table 3.1	Recovery Test	315.60	4.4	73.2	multiple- open borehole		384		Jacob-Theis
University (PW1/73)	JHL, 1998a	Table 4-7	Constant Rate	329.50	26.3	64.3	multiple- open borehole		50		Cooper-Jacob
University (PW1/73)	JHL, 1998a	Table 4-8, 68	Constant Rate	329.50	26.3	64.3	multiple- open borehole		259		Cooper-Jacob
University (PW1/73)	JHL, 1998a	81	Step Test	329.50	26.3	64.3	multiple- open borehole		166		
Water (PW16/53)	JHL, 1998a	Table 4-8, page 67	Constant Rate	315.00	5.2	60.0	multiple- open borehole		346		Cooper-Jacob
Water (PW16/53)	JHL, 1998a	Table 4-7	Constant Rate	315.00	5.2	60.0	multiple- open borehole		229		Cooper-Jacob
Water (PW16/53)	JHL, 1998a	80	Step Test	315.00	5.2	60.0	multiple- open borehole		86		
University/Dean/Water	Golder, 2006	Table 3.1	Recovery Test				multiple- open borehole		185 to 283		Jacob-Theis
TW04-01	Golder, 2006	23	Packer Test	328.24	62.4	74.6	Gasport	3E-04	267		Jacob-Theis
TW04-02	Golder, 2006	24	Packer Test	325.08	62.5	74.7	Gasport	8E-05	81		Jacob-Theis
TW04-01C	Golder, 2006	27	Single Well Response Test	328.24	29.0	33.5	Guelph	7E-07			
TW04-02C	Golder, 2006	27	Single Well Response Test	325.08	24.4	29.0	Guelph	9E-07			
MW04-01	Golder, 2006	18	Packer Test	320.89	12.2	28.0	Guelph	1E-07			Hvorslev
MW04-01	Golder, 2006	18	Packer Test	320.89	26.5	37.3	Ref. Q./Vinemount	2E-08			Hvorslev
MW04-01	Golder, 2006	18	Packer Test	320.89	35.1	46.5	Vinemount/Goat Island	5E-06			Hvorslev
MW04-01	Golder, 2006	18	Packer Test	320.89	44.8	46.5	Goat Island	9E-06			Hvorslev
MW04-01	Golder, 2006	18	Packer Test	320.89	46.5	56.6	Goat Island / Upper Gasport	7E-07			Hvorslev
MW06-04C	Golder, 2009a	Table F1	Single Well Response Test	307.14	5.5	7.0	Reformatory Quarry	9E-03			Hvorslev
MW06-04B	Golder, 2009a	Table F1	Single Well Response Test	307.14	20.4	21.9	Gasport	2E-04			Hvorslev
MW06-04A	Golder, 2009a	Table F1	Single Well Response Test	307.14	45.7	51.8	Gasport	3E-04			Hvorslev
MW06-07D	Golder, 2009a	Table F1	Single Well Response Test	337.37	16.8	19.8	Overburden	2E-03			Hvorslev
MW06-07C	Golder, 2009a	Table F1	Single Well Response Test	337.37	36.6	39.6	Reformatory Quarry	5E-05			Hvorslev
MW06-07B	Golder, 2009a	Table F1	Single Well Response Test	337.37	61.0	64.0	Goat Island	6E-04			Hvorslev
MW06-07A	Golder, 2009a	Table F1	Single Well Response Test	337.37	85.3	91.4	Gasport	4E-04			Hvorslev
MWD-D	GLL, 2004	8, Appendix C	Shut-Down Test; Slug Test	316.40	7.4	9.0	Guelph	6E-04			Bouwer-Rice
GSTW1-08	Stantec, 2009b	Table 6, Appendix G	Constant Rate - Packered	329.91	35.8	91.4	Goat Island / Gasport	2E-05	82	2E-05	Theis-confined
GSTW1-08	Stantec, 2009b	Table 6, Appendix G	Constant Rate - Open Borehole	329.91	29.0	91.4	multiple- open borehole	8E-07	320	4E-03	Theis-confined
GSTW2-08	Stantec, 2009b	Table 6, Appendix G	Constant Rate - Open Borehole	319.75	17.0	85.3	multiple- open borehole	4E-04	346		Theis-confined
GSTW4-08	Stantec, 2009b	Table 6, Appendix G	Constant Rate - Packered	324.09	35.2	77.7	Goat Island / Gasport	3E-05	147	9E-06	Neuman-Witherspoon
Steffler	Golder, 2010		Constant Rate	331.15	60.5	82.3	Gasport	1E-04	259		Cooper-Jacob
Ironwood	Golder, 2010		Constant Rate	325.41	51.8	78.9	Gasport	1E-04	250		Cooper-Jacob
Northwest Quadrant											
Calico	JHL, 1998b	Table 4-7	Constant Rate	325.32	18.0	64.0	multiple- open borehole		50		Cooper-Jacob
Paisley (PW4/59)	JHL, 1998b	Table 4-7	Constant Rate	322.20	13.6	80.2	multiple- open borehole		62		Cooper-Jacob
Queensdale (PW1/70)	JHL, 1998b	Table 4-7	Constant Rate	325.93	10.7	74.4	multiple- open borehole		230		Cooper-Jacob
Sacco	JHL, 1998b	Table 4-7	Constant Rate	339.20	6.1	95.7	multiple- open borehole		15		Cooper-Jacob
Sacco	Stantec, 2009a	page 6.9, Table 5		339.20	65.0	95.7	multiple- open borehole		209	1E-04 to 1E-07	Theis
Smallfield	JHL, 1998b	Table 4-7	Constant Rate	344.00	5.3	102.1	multiple- open borehole		8		Cooper-Jacob

Well	Report Reference	Report Page #	Type of Test	Ground Surface Elevation (masl)	Interval Top Depth (mbgs)	Interval Bottom Depth (mbgs)	Formation	Hydraulic Conductivity (m/s)	Transmissivity (m^2/day)	Storativity	Calculation Method
Smallfield	Stantec, 2009a	page 6.9, Table 5		344.00	54.0	102.1	multiple- open borehole		145	1E-04 to 1E-07	Theis
Hauser	JHL, 1998b	Table 4-7	Step Test	324.00	11.6	96.0	multiple- open borehole		40		Cooper-Jacob
MW06-02	Golder, 2009a	Table D-1	Packer Test	332.33	5.8	15.8	Guelph	6E-06			
MW06-02	Golder, 2009a	Table D-1	Packer Test	332.33	15.0	25.0	Guelph	4E-07			
MW06-02	Golder, 2009a	Table D-1	Packer Test	332.33	24.1	34.1	Guelph	2E-06			
MW06-02	Golder, 2009a	Table D-1	Packer Test	332.33	33.3	43.3	Guelph	2E-05			
MW06-02	Golder, 2009a	Table D-1	Packer Test	332.33	42.4	52.4	Guelph/Gasport	1E-05			
MW06-02	Golder, 2009a	Table D-1	Packer Test	332.33	51.6	61.6	Gasport	2E-06			
MW06-02	Golder, 2009a	Table D-1	Packer Test	332.33	60.7	70.7	Gasport	1E-05			
MW06-02	Golder, 2009a	Table D-1	Packer Test	332.33	69.8	79.8	Gasport	1E-05			
MW06-02	Golder, 2009a	Table D-1	Packer Test	332.33	79.3	89.3	Gasport	2E-05			
MW06-02	Golder, 2009a	Table D-1	Packer Test	332.33	5.5	44.1	Guelph/Gasport	6E-05			
MW06-02	Golder, 2009a	Table D-1	Packer Test	332.33	31.1	90.2	multiple- open borehole	5E-06			
MW06-01D	Golder, 2009a	Table F1	Single Well Response Test	342.44	7.6	10.7	Overburden	5E-07			Hvorslev
MW06-01C	Golder, 2009a	Table F1	Single Well Response Test	342.44	13.7	16.8	Overburden / Reformatory Quarry	3E-06			Hvorslev
MW06-01B	Golder, 2009a	Table F1	Single Well Response Test	342.44	35.0	38.1	Goat Island	9E-08			Hvorslev
MW06-01A	Golder, 2009a	Table F1	Single Well Response Test	342.44	79.2	85.3	Gasport	5E-06			Hvorslev
MW06-02C	Golder, 2009a	Table F1	Single Well Response Test	332.33	4.5	16.7	Guelph	1E-05			Hvorslev
MW06-02B	Golder, 2009a	Table F1	Single Well Response Test	332.33	44.2	47.2	Gasport	1E-05			Hvorslev
MW06-02A	Golder, 2009a	Table F1	Single Well Response Test	332.33	70.1	76.2	Gasport	8E-06			Hvorslev
Southeast Quadrant											
Arkell 1 (PW1/66)	JLH, 1998c	Table 6-7, Table3-2	Constant Rate	330.24	9.6	14.2	Overburden		3,700	7E-02	Cooper-Jacob
Arkell 1 (PW1/66)	JLH, 1998c	Table 6-7, Table3-2	Recovery Test	330.24	9.6	14.2	Overburden		3,500	7E-02	Cooper-Jacob
Arkell 14 (TW14A/00)	GLL, 2003	Table D-2.1	Constant Rate	334.31	26.5	40.5	Gasport	1E-03	1,200		Cooper-Jacob
Arkell 15 (TW15A/00)	GLL, 2003	Table D-2.1	Constant Rate	319.75	12.2	30.5	Gasport	1E-03	1,590		Cooper-Jacob
Arkell 6 (PW6/63)	JLH, 1998c	Table 6-7, Table3-2	Constant Rate	330.27	11.0	43.0	multiple- open borehole		2,900	2E-05	Cooper-Jacob
Arkell 6 (PW6/63)	JLH, 1998c	Table 6-8, Table 3-2	Constant Rate	330.27	10.9	44.2	multiple- open borehole		3,100		Cooper-Jacob
Arkell 7 (PW7/63)	JLH, 1998c	Table 6-7, Table3-2	Constant Rate	330.20	23.8	41.2	multiple- open borehole		1,500	2E-05	Cooper-Jacob
Arkell 7 (PW7/63)	JLH, 1998c	Table 6-8, Table 3-2	Constant Rate	330.20	24.1	43.8	multiple- open borehole		1,350		Cooper-Jacob
Arkell 8 (PW8/63)	JLH, 1998c	Table 6-7	Constant Rate	332.40	12.4	42.1	multiple- open borehole		3,200	7E-05	Cooper-Jacob
Arkell 8 (PW8/63)	JLH, 1998c	Table 6-8	Constant Rate	332.40	12.4	42.1	multiple- open borehole		1,900		Cooper-Jacob
Burke (PW2/66)	JLH, 1998c	Table 6-13, 6-1, 3-2	Constant Rate	335.61	21.4	79.6	multiple- open borehole		3,715		Cooper-Jacob
Carter (PW2/62)	JLH, 1998c	Table 6-14	Constant Rate	324.15	4.6	20.7	Guelph		7,200		
MW06-06	Golder, 2009a	Table D-2	Packer Test	336.90	17.7	27.7	Reformatory Quarry	7E-07			
MW06-06	Golder, 2009a	Table D-2	Packer Test	336.90	26.2	33.5	Reformatory Quarry/Vinemount	2E-07			
MW06-06	Golder, 2009a	Table D-2	Packer Test	336.90	32.3	39.3	Vinemount	5E-06			
MW06-06	Golder, 2009a	Table D-2	Packer Test	336.90	38.4	45.4	Vinemount	5E-07			
MW06-06	Golder, 2009a	Table D-2	Packer Test	336.90	44.5	51.5	Vinemount/Goat Island/Gasport	2E-07			
MW06-06	Golder, 2009a	Table D-2	Packer Test	336.90	50.6	57.6	Gasport	3E-06			
MW06-06	Golder, 2009a	Table D-2	Packer Test	336.90	56.7	63.7	Gasport	4E-05			
MW06-06	Golder, 2009a	Table D-2	Packer Test	336.90	62.8	69.8	Gasport	1E-05			
MW06-06	Golder, 2009a	Table D-2	Packer Test	336.90	68.9	75.9	Gasport	2E-05			
MW06-06	Golder, 2009a	Table D-2	Packer Test	336.90	75.0	82.0	Gasport/Irondequoit	8E-07			
MW06-06	Golder, 2009a	Table D-2	Packer Test	336.90	81.1	87.1	Irondequoit/Rockway/Cabot Head	7E-07			
MW06-06	Golder, 2009a	Table D-2	Packer Test	336.90	16.8	32.0	Reformatory Quarry	2E-07			
MW06-06	Golder, 2009a	Table D-2	Packer Test	336.90	49.1	87.2	Goat Island/Gasport/Irondequoit/ Rockway/Cabot Head	2E-05			
MW06-10	Golder, 2009a	Table D-3	Packer Test	346.55	37.2	46.9	Reformatory Quarry	2E-06			
MW06-10	Golder, 2009a	Table D-3	Packer Test	346.55	46.1	53.0	Reformatory Quarry	2E-06			
MW06-10	Golder, 2009a	Table D-3	Packer Test	346.55	52.2	59.1	Reformatory Quarry/Vinemount	4E-06			
MW06-10	Golder, 2009a	Table D-3	Packer Test	346.55	58.3	65.2	Vinemount/Goat Island	4E-07			
MW06-10	Golder, 2009a	Table D-3	Packer Test	346.55	64.4	71.3	Goat Island/Gasport	2E-07			

Well	Report Reference	Report Page #	Type of Test	Ground Surface Elevation (masl)	Interval Top Depth (mbgs)	Interval Bottom Depth (mbgs)	Formation	Hydraulic Conductivity (m/s)	Transmissivity (m^2/day)	Storativity	Calculation Method
MW06-10	Golder, 2009a	Table D-3	Packer Test	346.55	70.5	77.4	Gasport	3E-06			
MW06-10	Golder, 2009a	Table D-3	Packer Test	346.55	76.6	83.5	Gasport	7E-07			
MW06-10	Golder, 2009a	Table D-3	Packer Test	346.55	82.7	89.6	Gasport	5E-07			
MW06-10	Golder, 2009a	Table D-3	Packer Test	346.55	88.8	95.7	Gasport/Irondequoit	7E-07			
MW06-10	Golder, 2009a	Table D-3	Packer Test	346.55	94.9	101.8	Gasport/Irondequoit/ Rockway	6E-07			
MW06-10	Golder, 2009a	Table D-3	Packer Test	346.55	99.5	103.6	Irondequoit/Rockway/Cabot Head	6E-06			
MW06-06D	Golder, 2009a	Table F-1	Single Well Response Test	336.90	7.6	10.7	Overburden	2E-07			Hvorslev
MW06-06C	Golder, 2009a	Table F-1	Single Well Response Test	336.90	19.8	22.9	Reformatory Quarry	7E-07			Hvorslev
MW06-06B	Golder, 2009a	Table F-1	Single Well Response Test	336.90	44.8	47.2	Vinemount / Goat Island	5E-06			Hvorslev
MW06-06A	Golder, 2009a	Table F-1	Single Well Response Test	336.90	62.5	68.6	Gasport	1E-06			Hvorslev
MW06-08D	Golder, 2009a	Table F-1	Single Well Response Test	337.91	12.2	13.7	Overburden	1E-07			Hvorslev
MW06-08C	Golder, 2009a	Table F-1	Single Well Response Test	337.91	19.8	27.4	Guelph	2E-06			Hvorslev
MW06-08B	Golder, 2009a	Table F-1	Single Well Response Test	337.91	48.8	51.8	Gasport	2E-08			Hvorslev
MW06-08A	Golder, 2009a	Table F-1	Single Well Response Test	337.91	73.2	79.2	Gasport	2E-06			Hvorslev
MW06-09D	Golder, 2009a	Table F-1	Single Well Response Test	335.87	12.2	15.2	Overburden	9E-06			Hvorslev
MW06-09C	Golder, 2009a	Table F-1	Single Well Response Test	335.87	24.4	27.4	Reformatory Quarry	3E-06			Hvorslev
MW06-09B	Golder, 2009a	Table F-1	Single Well Response Test	335.87	38.1	41.1	Goat Island	2E-07			Hvorslev
MW06-09A	Golder, 2009a	Table F-1	Single Well Response Test	335.87	61.0	67.1	Gasport	3E-06			Hvorslev
MW06-10D	Golder, 2009a	Table F-1	Single Well Response Test	346.55	12.2	15.2	Overburden	2E-06			Hvorslev
MW06-10C	Golder, 2009a	Table F-1	Single Well Response Test	346.55	35.1	38.1	Reformatory Quarry	6E-06			Hvorslev
MW06-10B	Golder, 2009a	Table F-1	Single Well Response Test	346.55	57.9	61.0	Vinemount	3E-06			Hvorslev
MW06-10A	Golder, 2009a	Table F-1	Single Well Response Test	346.55	85.3	91.4	Gasport	4E-06			Hvorslev
MWB-D	GLL, 2004	15, Appendix C	Shut-Down Test; Slug Test	333.63	17.7	18.8		6E-04			Bouwer-Rice
OW1-06	AECOM, 2009	Table C1	Packer Test	342.74	14.9	19.8	Guelph	2E-06			Bouwer-Rice
OW1-06	AECOM, 2009	Table C1	Packer Test	342.74	23.6	28.5	Reformatory Quarry	1E-05			Hvorslev
OW1-06	AECOM, 2009	Table C1	Packer Test	342.74	30.5	35.4	Reformatory Quarry/Vinemount	4E-05			Hvorslev
OW1-06	AECOM, 2009	Table C1	Packer Test	342.74	45.5	50.4	Vinemount/Goat Island	1E-06			Hvorslev
OW1-06	AECOM, 2009	Table C1	Packer Test	342.74	60.7	65.8	Gasport	3E-05			Hvorslev
OW11/00	AECOM, 2009	30	Constant Rate	335.90	17.1	56.4	multiple- open borehole		458		
OW12/00	AECOM, 2009	30	Constant Rate	337.20	10.7	57.9	multiple- open borehole		743		
OW14/00	AECOM, 2009	30	Constant Rate	334.70	14.9	45.7	multiple- open borehole		1,209		
OW15/00	AECOM, 2009	30	Constant Rate	319.90	6.2	30.5	multiple- open borehole		1,469		
OW16/00	AECOM, 2009	30	Constant Rate	318.30	6.1	30.5	multiple- open borehole		138		
OW17/00	AECOM, 2009	30	Constant Rate	317.10	6.4	30.5	multiple- open borehole		73		
OW18/00	AECOM, 2009	30	Constant Rate	335.80	36.5	54.9	Gasport	5E-04	812		
OW4-06	AECOM, 2009	51, Table C1	Packer Test	320.41	9.5	14.4	Gasport	1E-02			Butler
OW4-06	AECOM, 2009	51, Table C1	Packer Test	320.41	17.4	22.3	Gasport	1E-02			Butler
OW4-06	AECOM, 2009	51, Table C1	Packer Test	320.41	25.6	30.5	Gasport	3E-03			Butler
OW4-06	AECOM, 2009	51, Table C1	Packer Test	320.41	33.5	38.4	Gasport	2E-03			Butler
OW9-06	AECOM, 2009	68, Table C1	Packer Test	326.66	7.6	12.5	Gasport	6E-05			Hvorslev
OW9-06	AECOM, 2009	68, Table C1	Packer Test	326.66	14.0	18.9	Gasport	1E-04			Hvorslev
OW9-06	AECOM, 2009	68, Table C1	Packer Test	326.66	14.0	18.9	Gasport	1E-04			Hvorslev
OW9-06	AECOM, 2009	68, Table C1	Packer Test	326.66	21.0	25.9	Gasport	5E-04			Hvorslev
OW9-06	AECOM, 2009	68, Table C1	Packer Test	326.66	28.0	32.9	Gasport	2E-04			Hvorslev
OW1-06/I	AECOM, 2009	Table C.2-1	Single Well Response Test	342.74	40.0	45.0	Vinemount	3E-05			Hvorslev
OW1-06/D	AECOM, 2009	Table C.2-1	Single Well Response Test	342.74	73.0	78.0	Vinemount	1E-05			Hvorslev
OW1-06/D	AECOM, 2009	Table C.2-1	Single Well Response Test	342.74	73.0	78.0	Gasport	2E-04			Hvorslev
OW2-06/I	AECOM, 2009	Table C.2-1	Single Well Response Test	348.05	26.0	31.0	Reformatory Quarry / Vinemount	4E-05			Hvorslev
OW2-06/D	AECOM, 2009	Table C.2-1	Single Well Response Test	348.05	70.0	75.0	Gasport / Irondequoit	2E-04			Butler
OW3-06/I	AECOM, 2009	Table C.2-1	Single Well Response Test	357.02	54.0	58.0	Gasport	3E-04			Hvorslev
OW3-06/D	AECOM, 2009	Table C.2-1	Single Well Response Test	357.02	73.0	76.0	Gasport	1E-04			Hvorslev
OW4-06/I	AECOM, 2009	Table C.2-1	Single Well Response Test	320.41	12.0	17.0	Gasport	1E-04			Hvorslev

Well	Report Reference	Report Page #	Type of Test	Ground Surface Elevation (masl)	Interval Top Depth (mbgs)	Interval Bottom Depth (mbgs)	Formation	Hydraulic Conductivity (m/s)	Transmissivity (m^2/day)	Storativity	Calculation Method
OW4-06/D	AECOM, 2009	Table C.2-1	Single Well Response Test	320.41	35.0	40.0	Gasport / Irondequoit	1E-04			Hvorslev
OW5-06/I	AECOM, 2009	Table C.2-1	Single Well Response Test	351.62	40.0	45.0	Vinemount	1E-05			Hvorslev
OW5-06/D	AECOM, 2009	Table C.2-1	Single Well Response Test	351.62	63.0	68.0	Gasport	8E-04			Butler
OW7-06/S	AECOM, 2009	Table C.2-1	Single Well Response Test	321.84	5.8	9.8	Gasport	2E-04			Hvorslev
OW7-06/I	AECOM, 2009	Table C.2-1	Single Well Response Test	321.73	20.0	25.0	Gasport	2E-04			Hvorslev
OW7-06/D	AECOM, 2009	Table C.2-1	Single Well Response Test	321.73	35.0	40.0	Gasport / Irondequoit / Rockway / Cabot Head	2E-04			Butler
OW8-06/I	AECOM, 2009	Table C.2-1	Single Well Response Test	334.60	18.0	23.0	Goat Island / Gasport	5E-05			Hvorslev
OW8-06/D	AECOM, 2009	Table C.2-1	Single Well Response Test	334.60	44.0	49.0	Gasport	4E-04			Butler
OW9-06/S	AECOM, 2009	Table C.2-1	Single Well Response Test	326.65	8.0	11.0	Gasport	3E-06			Hvorslev
OW9-06/I	AECOM, 2009	Table C.2-1	Single Well Response Test	326.66	23.0	28.0	Gasport	6E-05			Hvorslev
OW9-06/D	AECOM, 2009	Table C.2-1	Single Well Response Test	326.66	33.0	38.0	Gasport / Irondequoit / Rockway / Merriton	3E-04			Butler
OW10-06/I	AECOM, 2009	Table C.2-1	Single Well Response Test	327.58	7.0	11.0	Goat Island	4E-04			Hvorslev
OW10-06/D	AECOM, 2009	Table C.2-1	Single Well Response Test	327.58	25.0	30.0	Gasport	5E-04			Hvorslev
OW11-06/I	AECOM, 2009	Table C.2-1	Single Well Response Test	323.94	35.0	40.0	Gasport	2E-04			Butler
OW11-06/D	AECOM, 2009	Table C.2-1	Single Well Response Test	323.94	52.0	57.0	Gasport / Irondequoit / Rockway	8E-05			Hvorslev
Scout Camp (PW1/87)	JLH, 1998c	Table 6-13	Constant Rate	316.38	8.2	47.9	multiple- open borehole		400		Cooper-Jacob
Northeast Quadrant											
Clythe Creek (PW2/76)	JHL, 1995	98	Constant Rate	327.66	7.4	58.9	multiple- open borehole		173		Cooper-Jacob
Eastview	JHL, 1995	98	Constant Rate	343.25	18.2	68.1	multiple- open borehole		518	8E-05	Cooper-Jacob
Emma	JHL, 1995	98	Constant Rate	328.51	6.4	46.0	multiple- open borehole		259	5E-05	Cooper-Jacob
Fleming	JHL, 1995	135	Step Test	344.52	19.2	57.9	multiple- open borehole		173		Cooper-Jacob
Helmar (PW6/66)	JHL, 1995	98	Constant Rate	342.90	12.2	59.4	multiple- open borehole		432	4E-04	Cooper-Jacob
Logan	JHL, 1995	135	Step Test	342.40	9.0	73.8	multiple- open borehole		259		Cooper-Jacob
Park 1 (PW1/47)	JHL, 1995	98	Constant Rate	328.26	10.0	57.0	multiple- open borehole		1,210	8E-05	Cooper-Jacob
MW06-03C	Golder, 2009a	Table F1	Single Well Response Test	342.64	16.8	19.8	Reformatory Quarry	2E-05			Hvorslev
MW06-03B	Golder, 2009a	Table F1	Single Well Response Test	342.64	50.9	54.0	Gasport	2E-05			Hvorslev
MW06-03A	Golder, 2009a	Table F1	Single Well Response Test	342.64	65.5	70.1	Gasport	8E-06			Hvorslev
MW06-05C	Golder, 2009a	Table F1	Single Well Response Test	330.61	12.2	13.7	Guelph	2E-05			Hvorslev
MW06-05B	Golder, 2009a	Table F1	Single Well Response Test	330.61	19.8	22.9	Guelph / Reformatory Quarry	9E-08			Hvorslev
MW06-05A	Golder, 2009a	Table F1	Single Well Response Test	330.61	59.4	65.5	Gasport	3E-06			Hvorslev

Table G5: Flow Profile Results

Well Name	Ground Surface Elevation (masl)	Depth of Well (mbgs)	Major Flow Intervals Downhole Flow Profile Results (masl)	Reference
Southwest Quadrant				
University (PW1/73)	329.5	64.3	274.5 - 265.2	Cole et al, 2009
GSTW1-08	330.57	91.44	265.57 - 255.57	Stantec, 2009b
GSTW2-08	319.75	85.34	299.75 - 294.75	Stantec, 2009b
OW1-06	342.74	83.8	304.74 - 298.74	AECOM, 2009
OW1-06	342.74	83.8	270.24; 267.24; 261.74	AECOM, 2009
OW2-06	348.05	80.2	322-05 - 320.05	AECOM, 2009
OW2-06	348.05	80.2	275.05 - 267.85	AECOM, 2009
OW3-06	357.02	83.5	313.02 - 305.02;	AECOM, 2009
OW4-06	320.41	42.7	309.41 - 307.41; 283.41 - 281.41	AECOM, 2009
OW4-06	320.41	42.7	279.41 - 278.41	AECOM, 2009
OW5-06	351.62	85.7	288.62 - 283.62	AECOM, 2009
OW7-06	321.73	42.7	313.73 - 303.23	AECOM, 2009
OW7-06	321.73	42.7	284.23	AECOM, 2009
OW8-06	334.6	54.9	318.6 - 307.6; 288.6 - 283.6	AECOM, 2009
OW9-06	326.66	39.6	316.7 - 314.7; 310.7 - 308.7; 293.7 - 290.7	AECOM, 2009
OW10-06	327.45	39.7	316.45 - 309.45	AECOM, 2009
OW11-06	323.94	57.9	283.94 - 273.94	AECOM, 2009
Northwest Quadrant				
Calico	324.14	64	303.74 - 299.74	Cole et al, 2009
Queensdale (PW1/70)	325.93	74.3	269.53	Cole et al, 2009
Sacco	339.15	95.9	324.15 - 314.15	Stantec, 2009a
Smallfield	343.98	102.1	273.98 - 260.98	Stantec, 2009a
Southeast Quadrant				
Arkell 6 (PW6/63)	330.27	44.2	298.57; 295.87; 292.47 - 290.67	Cole et al, 2009
Arkell 7 (PW7/63)	330.21	43.8	292.21 - 286.41	Cole et al, 2009
Arkell 8 (PW8/63)	330.21	42.1	295.21 - 294.21; 292.21 - 288.11	Cole et al, 2009
Burke (PW2/66)	335.61	78.9	308.81	Cole et al, 2009
Scout Camp (PW1/87)	316.47	45.7	303.97 - 301.27; 284.17 - 282.07	Cole et al, 2009
Carter 1 (PW1/89)	324.15	20.1	313.15	Cole et al, 2009
Carter 2 (PW2/62)	323.97	20.7	312.97	Cole et al, 2009
Arkell 14 (TW14A/00)	334.313	40.54	306.3; 305.8; 304.0; 297.7; 297.3; 295.7	GLL, 2003
Arkell 15 (TW15A/00)	319.746	30.48	297.4; 296.9; 295.8; 293.8; 291.7	GLL, 2003
Admiral	334.45	101.8	262.25 - 259.75	Lotowater, 1999
Northeast Quadrant				
Park Well #1	328.74	56.3	282.44 - 272.44	Cole et al, 2009
Park Well #2	328.82	57.9	294.32; 286.22 - 270.92	Cole et al, 2009
Emma St	328.71	47.2	307.41 - 299.21; 284.51 - 281.51	Cole et al, 2009
Clythe Creek	326.96	64	304.46; 298.36; 282.16 - 278.16	Cole et al, 2009