

Fraser Valley Groundwater Monitoring Program: Correlating Community Wells to Aquifers

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Introduction

In the Fraser Valley Groundwater Monitoring (FVGM) Program, the study wells (community and private) were correlated, where ever possible, to aquifers to:

- 1) assist in interpreting water quality results and
- 2) facilitate delineation of preliminary capture zones for the community wells.

Correlating the study wells to aquifers provide an aquifer framework for interpreting results. This brief report documents the methodology for and presents the results of correlating the study wells to developed aquifers identified by Kreye and Wei (1994) in the Lower Fraser Valley.

Methodology

In correlating the study wells to aquifers, the lithology and screen location information in well records were reviewed to identify the water-bearing zone and aquifer materials tapped by study well. Aquifer materials were then correlated to the surficial geologic deposit (as defined by Armstrong, 1980a, b, or c) or bedrock formation and aquifer (as identified by Kreye and Wei, 1994), knowing the depth of the well and the occurrence of the geologic deposits and the aquifers,

For well records with no lithology, the well can, in some cases, be correlated to the aquifer based on the well depth (assuming the well screen or intake is at or near the bottom of the well). For example, if the aquifer comprises surficial geologic deposits directly underlying the land surface, shallow wells with no lithological information may be assumed to be completed into the shallow aquifer. Knowing the type of well (eg. if depth is unknown) may also help in matching the well to the aquifer. For example, dug wells are typically shallow and are completed into unconsolidated surficial geologic materials. The reported well yield may also provide clues as to the nature of the aquifer materials, and hence, the aquifer. For example, reported capacities of > 1 L/s (~10-15 gpm) would suggest the aquifer comprises sand and gravel.

In addition to aquifers, the study wells were also correlated to defined hydrostratigraphic units. This was done by comparing the well lithology and well screen information to the hydrostratigraphic cross-sections in Halstead (1986).

Results

Results of correlating the study wells to aquifers are tabulated in Appendix A. Also tabulated are the corresponding lithologic unit, hydrostratigraphic unit, and

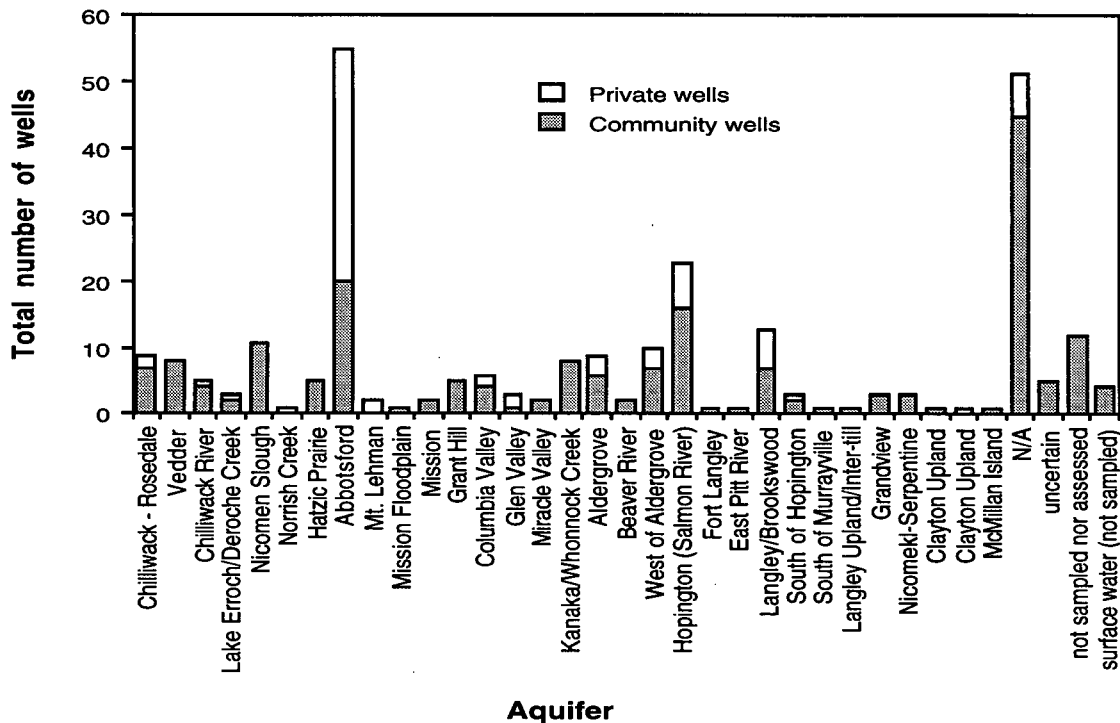
APK: Just a brief report documenting how we correlated wells to aquifers for completeness

NTS FVGM file.

AAL file

rationale for aquifer selection. The study wells tap 31 of the 54 aquifers in the study area. "Wells" 39, 52, and 75 were actually surface water sources. Well 53 is a duplicate of well 54. Wells 69, 144, 145, 172, 173, and 185 were not sampled in Phase 2 and consequently, no effort was made to correlate these wells to aquifers. It is evident from Appendix A that correlation of wells to aquifers for many study wells include some degree of uncertainty, generally due to limited lithological information. The distribution of study wells by aquifer is shown in Figure 1 below.

Figure 1. Distribution of FVGM Wells by Aquifer



References

- Armstrong, J. E., 1980a. *Surficial Geology, New Westminster, West of Sixth Meridian, British Columbia*. Geological Survey of Canada, Map 1484A.
- Armstrong, J. E., 1980b. *Surficial Geology, Mission, West of Sixth Meridian, British Columbia*. Geological Survey of Canada, Map 1485A.
- Armstrong, J. E., 1980c. *Surficial Geology, Chilliwack (West Half), West of Sixth Meridian, British Columbia*. Geological Survey of Canada, Map 1487A.
- Halstead, E. C., 1986. *Ground Water Supply - Fraser Lowland, British Columbia*. Environment Canada, NHRI Paper No. 26.
- Kreye, R. and M. Wei, 1994. *A Proposed Aquifer Classification System for Groundwater Management in British Columbia*. B. C. Environment, Ministry of Environment, Lands and Parks, Water Management Division, Hydrology Branch.

Appendix A

Appendix A. 1

Well	Aquifer (from Kreys & Wei, 1994)	Hydrostratigraphic Unit (Halstead, 1986)	Lithologic Units	Aquifer Materials	Geologic Materials Description	Rationale for aquifer selection
1	Lake Erroch/Deroche Creek	C	Sumas Drift	Glaciofluvial sand & gravel	Glaciofluvial deposits of Sumas Drift (Sd)	well lithology consistent with aquifer lithology (Sumas Drift)
2	Mission	F	Tertiary Bedrock	Shale bedrock	Tertiary shale bedrock (T)	completed in Tertiary sedimentary bedrock
3	Lake Erroch/Deroche Creek	C	Salish Sediments	Lacustrine (?) sand	Recent lacustrine deposits of Salish Sediments (SAr)?	well lithology consistent with aquifer lithology (Salish Sediments?)
4	N/A	F	Pre-Tertiary Bedrock	Granite bedrock	Pre-Tertiary granite bedrock (PT)	aquifer not identified in Kreys & Wei (1994)
5	Hatzic Prairie		Salish Sediments or Fraser River Sediments	<i>Fluvial sand & gravel</i>	Stream deposits of Salish Sediments (SAh) or fluvial deposits of Fraser River Sediments (Fh)	likely completed into recent stream (Salish Sediments) or fluvial (Fraser River Sediments) deposits
6	Hatzic Prairie		Salish Sediments or Fraser River Sediments	<i>Fluvial sand & gravel</i>	Stream deposits of Salish Sediments (SAh) or fluvial deposits of Fraser River Sediments (Fh)	likely completed into recent stream (Salish Sediments) or fluvial (Fraser River Sediments) deposits
7	Nicomen Slough		Fraser River Sediments	<i>Fluvial sand & gravel</i>	Fluvial deposits of Fraser River Sediments (Fh/Ff)	likely completed into recent fluvial (Fraser River Sediments) deposits
8	Nicomen Slough		Fraser River Sediments	<i>Fluvial sand & gravel</i>	Fluvial deposits of Fraser River Sediments (Fh/Ff)	likely completed into recent fluvial (Fraser River Sediments) deposits
9	Nicomen Slough		Fraser River Sediments	<i>Fluvial sand & gravel</i>	Fluvial deposits of Fraser River Sediments (Ff/Fh)	likely completed into recent fluvial (Fraser River Sediments) deposits
10	Nicomen Slough		Fraser River Sediments	<i>Fluvial sand & gravel</i>	Fluvial deposits of Fraser River Sediments (Fh/Ff)	likely completed into recent fluvial (Fraser River Sediments) deposits
11	Nicomen Slough		Fraser River Sediments	<i>Fluvial sand & gravel</i>	Fluvial deposits of Fraser River Sediments (Fh/Ff)	likely completed into recent fluvial (Fraser River Sediments) deposits
12	Hatzic Prairie		Salish Sediments or Fraser River Sediments	<i>Fluvial sand & gravel</i>	Colluvial deposits of Salish Sediments (SAp) or fluvial deposits of Fraser River Sediments (Fh)	likely completed into recent colluvial (Salish Sediments) or fluvial (Fraser River Sediments) deposits

N/A = Not identified in Kreys and Wei (1994)

Aquifer materials description based on well records (italics-based on general description in Armstrong 1980a, 1980b, or 1980c)

Appendix A. 2

Well	Aquifer (from Kreye & Wei, 1994)	Hydrostratigraphic Unit (Halstead, 1986)	Lithologic Units	Aquifer Materials	Geologic Materials Description	Rationale for aquifer selection
13	N/A		uncertain (Tertiary Bedrock or Salish Sediments)	<i>Sandstone bedrock or fluvial sand & gravel</i>	Tertiary sandstone bedrock (T) or recent stream deposits of Salish Sediments (SAj)	aquifer not identified in Kreye & Wei (1994); well depth unknown; overburden thickness in area is <20'
14	Nicomen Slough		Fraser River Sediments	<i>Fluvial sand & gravel</i>	Fluvial deposits of Fraser River Sediments (Fh/Ff)	likely completed into recent fluvial (Fraser River Sediments) deposits
15	N/A					
16	Hatzic Prairie		Salish Sediments or Fraser River Sediments	<i>Fluvial sand & gravel</i>	Colluvial deposits of Salish Sediments (SAp) or fluvial deposits of Fraser River Sediments (Fh)	likely completed into recent colluvial (Salish Sediments) or fluvial (Fraser River Sediments) deposits
17	Miracle Valley	D,C?	Fort Langley Formation or Vashon Drift	<i>Glaciofluvial sand & gravel</i>	Glaciofluvial deposits of Fort Langley Formation (FLe?) or Vashon Drift (Vb?)	likely completed into glaciofluvial deposits (Fort Langley Formation or Vashon Drift)
18	N/A	F	Pre-Tertiary Bedrock	Granite bedrock	Pre-Tertiary granite bedrock (PT)	aquifer not identified in Kreye & Wei (1994)
19	N/A	C?	Sumas Drift	<i>Glaciofluvial gravel & sand</i>	Glaciofluvial deposits of Sumas Drift (Sa)	aquifer not identified in Kreye & Wei (1994)
20	N/A	D,C?	Sumas Drift or Vashon Drift	<i>Glaciofluvial gravel & sand</i>	Glaciofluvial deposits of Sumas Drift (Sj?) or Vashon Drift (Vb?)	aquifer not identified in Kreye & Wei (1994)
21	Hatzic Prairie		Fraser River Sediments	Fluvial gravel	Fluvial deposits of Fraser River Sediments (Ff?)	well lithology consistent with aquifer lithology (Fraser River Sediments)
22	Nicomen Slough		Fraser River Sediments	<i>Fluvial sand & gravel</i>	Fluvial deposits of Fraser River Sediments (Fh/Ff)	likely completed into recent fluvial (Fraser River Sediments) deposits
23	Nicomen Slough		Fraser River Sediments	<i>Fluvial sand & gravel</i>	Fluvial deposits of Fraser River Sediments (Fh/Ff)	likely completed into recent fluvial (Fraser River Sediments) deposits
24	N/A	C?	Sumas Drift	<i>Glaciofluvial gravel & sand</i>	likely completed into sand & gravel seams in Sumas Drift (Sa)	aquifer not identified in Kreye & Wei (1994)

Appendix A. 3

Well	Aquifer (from Kreye & Wei, 1994)	Hydrostratigraphic Unit (Halstead, 1986)	Lithologic Units	Aquifer Materials	Geologic Materials Description	Rationale for aquifer selection
25	N/A, Mission?		uncertain Sumas Drift or Tertiary Bedrock	Boulder till or sandstone bedrock	Glaciofluvial sediments of Sumas Drift (Sf?) or Tertiary sandstone bedrock (T)	aquifer not identified in Kreye & Wei (1994); bottom of well (150'-180') may be completed into bedrock (open hole)
26	Miracle Valley		Fort Langley Formation	Glaciofluvial sand & gravel	Glaciofluvial deposits of Fort Langley Formation (FLc?/FLe?)	well lithology consistent with aquifer lithology (Fort Langley Formation)
27						sampled in Phase I; no longer in use; use well 25 instead
28	Nicomen Slough		Fraser River Sediments	<i>Fluvial sand & gravel</i>	Fluvial deposits of Fraser River Sediments (Fh/Ff)	likely completed into recent fluvial (Fraser River Sediments) deposits
29	N/A	D?	Vashon Drift	Glaciofluvial sand & gravel	Glaciofluvial deposits of Vashon Drift (Vb) below Fort Langley Formation	aquifer not identified in Kreye & Wei (1994)
30	Nicomen Slough		Fraser River Sediments	<i>Fluvial sand & gravel</i>	Fluvial deposits of Fraser River Sediments (Fh/Ff)	likely completed into recent fluvial (Fraser River Sediments) deposits
31	Nicomen Slough		Fraser River Sediments	<i>Fluvial sand & gravel</i>	Fluvial deposits of Fraser River Sediments (Fh/Ff)	likely completed into recent fluvial (Fraser River Sediments) deposits
32	Mission Floodplain		Fraser River Sediments	<i>Fluvial sand & gravel</i>	Fluvial deposits of Fraser River Sediments (Ff?)	likely completed into recent fluvial (Fraser River Sediments) deposits
33	N/A	D?	Vashon Drift	Glaciofluvial sand & gravel	Glaciofluvial deposits of Vashon Drift (Vb)	aquifer not identified in Kreye & Wei (1994)
34	N/A	F	Pre-Tertiary Bedrock	Bedrock	likely completed into Pre-Tertiary bedrock (PT)	aquifer not identified in Kreye & Wei (1994)
35	N/A	D?	Sumas Drift	<i>Sandy till</i>	likely completed into sand & gravel seam in Sumas Drift (Sf)	aquifer not identified in Kreye & Wei (1994)
36	N/A	F	Pre-Tertiary Bedrock	Granite bedrock	Pre-Tertiary granite bedrock (PT)	aquifer not identified in Kreye & Wei (1994)

Appendix A. 4

Well	Aquifer (from Kreye & Wei, 1994)	Hydrostratigraphic Unit (Hairstead, 1986)	Lithologic Units	Aquifer Materials	Geologic Materials Description	Rationale for aquifer selection
37	Mission	F	Tertiary Bedrock	Sandstone bedrock	Tertiary sandstone bedrock (T)	well lithology consistent with aquifer lithology (Tertiary sandstone)
38	N/A	B?	Fort Langley Formation?	<i>Sandy seam in glaciomarine silt & clay?</i>	sand & gravel seam in Fort Langley Formation (FLc)?	aquifer not identified in Kreye & Wei (1994)
39	N/A					surface water source
40		A?	Fort Langley Formation		Fort Lanley formation - glaciomarine stony silt to loamy clay, 8 to 100m thick (FLc).	not sampled; not in use
41						not sampled; not in use
42	Kanaka/Whonnock Creek	D?	Vashon Drift	Glaciofluvial gravel & sand	Glaciofluvial deposits of Vashon Drift (Va/Vb)	well lithology consistent with aquifer lithology (Vashon Drift)
43	Kanaka/Whonnock Creek	D?	Vashon Drift	Glaciofluvial gravel & sand	Glaciofluvial deposits of Vashon Drift (Va/Vb)	well lithology consistent with aquifer lithology (Vashon Drift)
44	Kanaka/Whonnock Creek	D?	Vashon Drift	<i>Glaciofluvial sand & gravel</i>	Glaciofluvial deposits of Vashon Drift (Va/Vb)	likely completed into same aquifer as well no. 45 (Vashon Drift)-check neighboring wells with same depth
45	Kanaka/Whonnock Creek	D?	Vashon Drift	Glaciofluvial sand & gravel	Glaciofluvial deposits of Vashon Drift (Va/Vb)	well lithology consistent with aquifer lithology (Vashon Drift)
46	Kanaka/Whonnock Creek	D?	Vashon Drift	<i>Glaciofluvial sand & gravel</i>	Glaciofluvial deposits of Vashon Drift (Va/Vb)	likely completed into same aquifer as well no. 45 (Vashon Drift)-check neighboring wells with same depth
47	N/A	D?	Vashon Drift		Vashon drift - till and glaciofluvial deposits (Va).	likely completed into aquifer below Kanaka/Whoonck Creek aquifer based on well depth (well lithology not available)
48	Grant Hill	F	Tertiary Bedrock	Sandstone bedrock	Tertiary sandstone bedrock (T)	well lithology consistent with aquifer lithology (Tertiary Bedrock)

Appendix A. 5

Well	Aquifer (from Kreye & Wei, 1994)	Hydrostratigraphic Unit (Halstead, 1986)	Lithologic Units	Aquifer Materials	Geologic Materials Description	Rationale for aquifer selection
49	Grant Hill	F	Tertiary Bedrock	Sandstone bedrock	Tertiary sandstone bedrock (T)	well lithology consistent with aquifer lithology (Tertiary Bedrock)
50	Grant Hill, Kanaka/Whonnock Creek?				Vashon/preVashon or tertiary bedrock	**check chemistry for high pH and fluoride; depth & lithology unknown
51	N/A				completed in unconsolidated deposits (formation not mapped)	aquifer not identified in Kreye & Wei (1994)
52	N/A	Lake water supply				lake water supply
53						duplicate well 54
54	Grant Hill	F	Tertiary Bedrock	Bedrock	Tertiary bedrock (T)	likely completed into Tertiary bedrock
55	N/A				likely completed into unconsolidated deposits above bedrock	aquifer not identified in Kreye & Wei (1994)
56	Grant Hill	F	Tertiary Bedrock	<i>Bedrock</i>	Tertiary bedrock (T)	likely completed in Tertiary bedrock
57	N/A	D?	Vashon Drift	Glaciofluvial sand & gravel	Glaciofluvial deposits of Vashon Drift (Va/Vb)	aquifer not identified in Kreye & Wei (1994)
58	Kanaka/Whonnock Creek	D?	Vashon Drift	Glaciofluvial gravel	Glaciofluvial deposits of Vashon Drift (Va/Vb)	well lithology consistent with aquifer lithology (Vashon Drift)
59	Kanaka/Whonnock Creek	D?	Vashon Drift	Glaciofluvial gravel	Glaciofluvial deposits of Vashon Drift (Va/Vb)	well lithology consistent with aquifer lithology (Vashon Drift)
60	N/A	D?	Vashon Drift	<i>Till</i>	Glaciofluvial deposits of Vashon Drift (Va)	aquifer not identified in Kreye & Wei (1994)

Appendix A. 6

Well	Aquifer (from Kreye & Wei, 1994)	Hydrostratigraphic Unit (Halstead, 1986)	Lithologic Units	Aquifer Materials	Geologic Materials Description	Rationale for aquifer selection
61	Grant Hill	F	Tertiary Bedrock	Sandstone bedrock	Tertiary sandstone bedrock (T)	well lithology consistent with aquifer lithology (Tertiary Bedrock)
62	N/A		Salish Sediments	<i>Fluvial gravel & sand</i>	Recent stream deposits of Salish Sediments (SAj); neighboring wells completed in unconsolidated deposits	aquifer not identified in Kreye & Wei (1994)
63						aquifer not identified in Kreye & Wei (1994)
64	N/A		Salish Sediments	<i>Fluvial gravel & sand</i>	stream deposits of Salish Sediments (SAj)	likely completed into recent stream deposits (Salish Sediments)
65	N/A	A?	Fort Langley Formation	<i>Sandy seam in glaciomarine silt & clay</i>	likely completed into sand & gravel seam in Fort Langley Formation (FLc)	aquifer not identified in Kreye & Wei (1994)
66	N/A		Salish Sediments	Fluvial sand & gravel	completed in recent stream deposits of Salish Sediments (SAj)	aquifer not identified in Kreye & Wei (1994)
67	N/A		Fraser River Sediments	Fluvial gravel & sand	completed in fluvial deposits of Fraser River Sediments (Ff?)	aquifer not identified in Kreye & Wei (1994)
68	Kanaka/Whonnock Creek	D?	Vashon Drift	Fluvial gravel	Glaciofluvial deposits of Vashon Drift (Va/Vb)	well lithology consistent with aquifer lithology (Vashon Drift)
69						not sampled nor assessed in Phase I or II; site abandoned
70	N/A	F	Pre-Tertiary Bedrock	Granite bedrock	Pre-Tertiary granite bedrock (PT)	aquifer not identified in Kreye & Wei (1994)
71	N/A	D?	Vashon Drift	Glaciofluvial sand	Glaciofluvial deposits of Vashon Drift (Va)	aquifer not identified in Kreye & Wei (1994)
72	N/A	A?	Fort Langley Formation	<i>Sandy seam in glaciomarine silt & clay</i>	likely completed into sand & gravel seams in Fort Langley Formation (FLc)	aquifer not identified in Kreye & Wei (1994)

N/A = Not identified in Kreye and Wei (1994)

Aquifer materials description based on well records (italics-based on general description in Armstrong 1980a, 1980b, or 1980c)

Appendix A. 7

Well	Aquifer (from Kreye & Wei, 1994)	Hydrostratigraphic Unit (Halstead, 1986)	Lithologic Units	Aquifer Materials	Geologic Materials Description	Rationale for aquifer selection
73	N/A		Salish Sediments	<i>Fluvial gravel & sand</i>	likely completed into fluvial deposits of Salish Sediments (SAj)	aquifer not identified in Kreye & Wei (1994)
74	East Pitt River		Fraser River Sediments	<i>Fluvial sand & silt</i>	Fluvial deposits of Fraser River Sediments (Fd)	likely completed in fluvial deposit (Fraser River Sediments)
75	N/A					surface water source
76	Abbotsford/Sumas	C	Sumas Drift	Glaciofluvial gravel	Glaciofluvial deposits of Sumas Drift (Sj)	well lithology consistent with aquifer lithology (Sumas Drift)
77	Abbotsford/Sumas	C	Sumas Drift	Glaciofluvial sand & gravel	Glaciofluvial deposits of Sumas Drift (Sj)	well lithology consistent with aquifer lithology (Sumas Drift)
78	Abbotsford/Sumas	C	Sumas Drift	Glaciofluvial sand & gravel	Glaciofluvial deposits of Sumas Drift (Sa,j)	well lithology consistent with aquifer lithology (Sumas Drift)
79	Abbotsford/Sumas	C	Sumas Drift	Glaciofluvial sand & gravel	Glaciofluvial deposits of Sumas Drift (Sa,j)	well lithology consistent with aquifer lithology (Sumas Drift)
80	Abbotsford/Sumas	C	Sumas Drift	Glaciofluvial sand & gravel	Glaciofluvial deposits of Sumas Drift (Sa,j)	well lithology consistent with aquifer lithology (Sumas Drift)
81	Abbotsford/Sumas	C	Sumas Drift	Glaciofluvial sand & gravel	Glaciofluvial deposits of Sumas Drift (Sa)	well lithology consistent with aquifer lithology (Sumas Drift)
82	Abbotsford/Sumas	C	Sumas Drift	Glaciofluvial sand & gravel	Glaciofluvial deposits of Sumas Drift (Sa)	well lithology consistent with aquifer lithology (Sumas Drift)
83	Abbotsford/Sumas	C	Sumas Drift	Glaciofluvial sand & gravel	Glaciofluvial deposits of Sumas Drift (Sa,j)	well lithology consistent with aquifer lithology (Sumas Drift)
84a	N/A				unconsolidated deposits above bedrock	aquifer not identified in Kreye & Wei (1994); no longer in use; use 84b

Appendix A. 8

Well	Aquifer (from Kreye & Wei, 1994)	Hydrostratigraphic Unit (Halstead, 1966)	Lithologic Units	Aquifer Materials	Geologic Materials Description	Rationale for aquifer selection
84b	N/A	F	Pre-Tertiary Bedrock	Bedrock	Pre-Tertiary bedrock (PT)	aquifer not identified in Kreye & Wei (1994)
85	N/A		Fraser River Sediments	<i>Fluvial sand & silt</i>	Fluvial deposits of Fraser River Sediments (Fh) above aquifer no. 24	aquifer not identified in Kreye & Wei (1994)
86	N/A		Sumas Drift	<i>Sandy till</i>	likely completed in sand & gravel seam in Sumas Drift (Sf)	aquifer not identified in Kreye & Wei (1994)
87	Abbotsford/Sumas	C	Sumas Drift	Glaciofluvial gravel	Glaciofluvial deposits of Sumas Drift (Sa,j)	well lithology consistent with aquifer lithology (Sumas Drift)
88	Abbotsford/Sumas	C	Sumas Drift	Glaciofluvial gravel	Glaciofluvial deposits of Sumas Drift (Sa,j)	well lithology consistent with aquifer lithology (Sumas Drift)
89	Abbotsford/Sumas	C	Sumas Drift	Glaciofluvial gravel & sand	Glaciofluvial deposits of Sumas Drift (Sa,j)	well lithology consistent with aquifer lithology (Sumas Drift)
90	Abbotsford/Sumas	C	Sumas Drift	Glaciofluvial sand & gravel	Glaciofluvial deposits of Sumas Drift (Sa)	well lithology consistent with aquifer lithology (Sumas Drift)
91	Abbotsford/Sumas	C	Sumas Drift	Glaciofluvial sand & gravel	Glaciofluvial deposits of Sumas Drift (Sa)	well lithology consistent with aquifer lithology (Sumas Drift)
92	Abbotsford/Sumas	C	Sumas Drift	Glaciofluvial gravel & sand	Glaciofluvial deposits of Sumas Drift (Sa)	well lithology consistent with aquifer lithology (Sumas Drift)
93	Abbotsford/Sumas	C	Sumas Drift	Glaciofluvial gravel	Glaciofluvial deposits of Sumas Drift (Sa)	well lithology consistent with aquifer lithology (Sumas Drift)
94	Abbotsford/Sumas	C	Sumas Drift	Glaciofluvial sand & gravel	Glaciofluvial deposits of Sumas Drift (Sa)	well lithology consistent with aquifer lithology (Sumas Drift)
95	Abbotsford/Sumas	C	Sumas Drift	Glaciofluvial sand & gravel	Glaciofluvial deposits of Sumas Drift (Sa)	well lithology consistent with aquifer lithology (Sumas Drift)

N/A = Not identified in Kreye and Wei (1994)

Aquifer materials description based on well records (italics-based on general description in Armstrong 1980a, 1980b, or 1980c)

Appendix A. 9

Well	Aquifer (from Kreye & Wei, 1994)	Hydrostratigraphic Unit (Halstead, 1986)	Lithologic Units	Aquifer Materials	Geologic Materials Description	Rationale for aquifer selection
96	Aldergrove	C?	Fort Langley Formation	Glaciofluvial sand & gravel	Glaciofluvial deposits of Fort Langley Formation (FLe?)	well lithology consistent with aquifer lithology (Fort Langley Formation)
97	Abbotsford/Sumas	C	Sumas Drift	<i>Glaciofluvial sand & gravel</i>	Glaciofluvial deposits of Sumas Drift (Sa)	well lithology consistent with aquifer lithology (Sumas Drift)
98	Aldergrove	C	Fort Langley Formation	Glaciofluvial sand & gravel	Glaciofluvial deposits of Fort Langley Formation (FLe)	well lithology consistent with aquifer lithology (Fort Langley Formation)
99	N/A	A	Fort Langley Formation	Sand & gravel seam in glaciomarine silt & clay	sand & gravel seam in Fort Langley Formation (FLc)	aquifer not identified in Kreye & Wei (1994)
100	Langley Upland Intertill	C	Fort Langley Formation	Glaciofluvial sand & gravel	Glaciofluvial deposits of Fort Langley Formation (FLe?)	well lithology consistent with aquifer lithology (Fort Langley Formation)
101	West of Aldergrove, Hopington?			<i>Glaciofluvial sand & gravel?</i>		well lithology and depth unknown; not sampled at all
102	Hopington	C	Fort Langley Formation	Glaciofluvial sand & gravel	Glaciofluvial deposits of Fort Langley Formation (FLb/e?)	well lithology consistent with aquifer lithology (Fort Langley Formation)
103	West of Aldergrove	D	Fort Langley Formation	Glaciofluvial sand & gravel	Glaciofluvial deposits of Fort Langley Formation (FLb,e?)	well lithology consistent with aquifer lithology (Fort Langley Formation)
104	N/A	E	Pre-Vashon Deposits	Glaciofluvial sand	Glaciomarine/marine sediments of Pre-Vashon Deposits	aquifer not identified in Kreye & Wei (1994)
105	West of Aldergrove	D	Fort Langley Formation	Glaciofluvial sand & gravel	Glaciofluvial deposits in Fort Langley Formation (FLe?)	northern extension of West of Aldergrove aquifer; well lithology consistent with aquifer lithology
106	Abbotsford/Sumas	C	Sumas Drift	Glaciofluvial gravel & sand	Glaciofluvial deposits of Sumas Drift (Sa)	well lithology consistent with aquifer lithology (Sumas Drift)
107	Langley/Brookswood	C	Sumas Drift	Glaciofluvial sand	Glaciofluvial deposits of Sumas Drift (Se)	well lithology consistent with aquifer lithology (Sumas Drift)

N/A = Not identified in Kreye and Wei (1994)

Aquifer materials description based on well records (italics-based on general description in Armstrong 1980a, 1980b, or 1980c)

Well	Aquifer (from Kreye & Wei, 1994)	Hydrostratigraphic Unit (Halstead, 1986)	Lithologic Units	Aquifer Materials	Geologic Materials Description	Rationale for aquifer selection
108a	Grandview	E	Pre-Vashon Deposits	Marine sand	Marine sediments of Pre-Vashon Deposits (According to Table 2 of Halstead, 1986)	completed in glaciomarine sand below Langley/Brookwood aquifer
108b	Grandview	E	Pre-Vashon Deposits	Marine sand	Marine sediments of Pre-Vashon Deposits (According to Table 2 of Halstead, 1986)	completed in glaciomarine sand below Langley/Brookwood aquifer
109	Grandview	E	Pre-Vashon Deposits	<i>Marine sand</i>	Marine sediments of Pre-Vashon Deposits (According to Table 2 of Halstead, 1986)	likely completed in glaciomarine sand below Langley/Brookwood aquifer
110	Langley/Brookwood	C	Sumas Drift	Glaciofluvial sand	Glaciofluvial deposits of Sumas Drift (Se)	well lithology consistent with aquifer lithology (Sumas Drift)
111a	Hopington	C	Fort Langley Formation	Glaciofluvial sand	Glaciofluvial deposits of Fort Langley Formation (FLb/e?)	well lithology consistent with aquifer lithology (Fort Langley Formation)
111b	Hopington	C	Fort Langley Formation	Glaciofluvial sand & gravel	Glaciofluvial deposits of Fort Langley Formation (FLb/e?)	well lithology consistent with aquifer lithology (Fort Langley Formation)
112	Hopington	C	Fort Langley Formation	Glaciofluvial sand & gravel	Glaciofluvial deposits of Fort Langley Formation (FLe)	well lithology consistent with aquifer lithology (Fort Langley Formation)
113	West of Aldergrove	D	Fort Langley Formation	Glaciofluvial gravel	Glaciofluvial deposits in Fort Langley Formation (FLe?)	northern extension of West of Aldergrove aquifer; well lithology consistent with aquifer lithology
114	Hopington	C	Fort Langley Formation	<i>Glaciofluvial gravel & sand</i>	Glaciofluvial deposits of Fort Langley Formation (FLb/e?)	likely completed into glaciofluvial sand & gravel of Fort Langley Formation
115	Hopington	C	Fort Langley Formation	Glaciofluvial sand & gravel	Glaciofluvial deposits of Fort Langley Formation (FLb/e?)	well lithology consistent with aquifer lithology (Fort Langley Formation)
116	N/A	A	Sumas Drift	<i>Glaciofluvial gravel & sand</i>	Glaciofluvial deposits of Sumas Drift (Sd)	likely completed in glaciofluvial sand & gravel of Sumas Drift
117	Aldergrove	C	Fort Langley Formation	<i>Glaciofluvial gravel & sand</i>	Glaciofluvial deposits of Fort Langley Formation (FLb,e?)	likely completed into glaciofluvial deposits (Fort Langley Formation)

Appendix A. 11

Well	Aquifer (from Kreye & Wei, 1994)	Hydrostratigraphic Unit (Halstead, 1986)	Lithologic Units	Aquifer Materials	Geologic Materials Description	Rationale for aquifer selection
118	Hopington	C	Fort Langley Formation	<i>Glaciofluvial gravel & sand</i>	Glaciofluvial deposits of Fort Langley Formation (FLb/e?)	likely completed into same aquifer as well nos. 114, 115, 119
119	Hopington	C	Fort Langley Formation	Glaciofluvial sand & gravel	Glaciofluvial deposits of Fort Langley Formation (FLb/e?)	well lithology consistent with aquifer lithology (Fort Langley Formation)
120	Hopington	C	Fort Langley Formation	Glaciofluvial sand & gravel	Glaciofluvial deposits of Fort Langley Formation (FLb/e?)	well lithology consistent with aquifer lithology (Fort Langley Formation)
121	Hopington	C	Fort Langley Formation	<i>Glaciofluvial gravel & sand</i>	Glaciofluvial deposits of Fort Langley Formation (FLb/e?)	likely completed into glaciofluvial sands & gravel (Fort Langley Formation)
122	South of Hopington	D	Fort Langley Formation	Glaciofluvial sand & gravel	Glaciofluvial deposits of Fort Langley Formation (FLb,e?)	well lithology consistent with aquifer lithology (Fort Langley Formation)
123	McMillan Island	C	Fraser River Sediments	Fluvial sand & gravel	Fluvial deposits of Fraser River Sediments (Fd)	well lithology consistent with aquifer lithology (Fraser River Sediments)
124	N/A	A	Fort Langley Formation	Glaciofluvial sand & gravel	Glaciofluvial deposits of Fort Langley Formation (FLc)	aquifer not identified in Kreye & Wei (1994)
125	Abbotsford/Sumas	C	Sumas Drift	<i>Glaciofluvial gravel & sand</i>	Glaciofluvial deposits of Sumas Drift (Sa)	likely completed into glaciofluvial sand & gravel (Sumas Drift)
126	Hopington	C	Fort Langley Formation	<i>Glaciofluvial gravel & sand</i>	Glaciofluvial deposits of Fort Langley Formation (FLe)	likely completed into glaciofluvial sand & gravel of Fort Langley Formation
127	Hopington	C	Fort Langley Formation	Glaciofluvial sand	Glaciofluvial deposits of Fort Langley Formation (FLe)	well lithology consistent with aquifer lithology (Fort Langley Formation)
128	Langley/Brookwood	C	Sumas Drift	<i>Glaciofluvial gravel & sand</i>	Glaciofluvial sand & gravel deposits of Sumas Drift (Se)	likely completed into glaciofluvial sand & gravel (Sumas Drift)
129	Beaver River	E	Pre-Vashon Deposits	Glaciofluvial sand	Glaciomarine/marine sediments of Pre-Vashon Deposits (PVe)?	likely completed into glaciomarine/marine deposits

Appendix A. 12

Well	Aquifer (from Kreye & Wei, 1994)	Hydrostratigraphic Unit (Halstead, 1986)	Lithologic Units	Aquifer Materials	Geologic Materials Description	Rationale for aquifer selection
130	Hopington	C	Fort Langley Formation	Glaciofluvial gravel & sand	Glaciofluvial sand & gravel of Fort Langley Formation (FLb,e?)	likely completed into glaciofluvial sand & gravel of Fort Langley Formation
131	Glen Valley		Fraser River Sediments	<i>Fluvial sand & silt</i>	Fluvial sand & gravel deposits of Fraser River Sediments (Fc,d)	likely completed into fluvial sand & gravel deposits (Fraser River Sediments)
132	West of Aldergrove	D	Vashon Drift	Glaciofluvial sand & gravel	Glaciofluvial deposits of Vashon Drift (Va,b)?	completed into sand & gravel deposits below till (Vashon Drift?)
133	South of Hopington	D	Fort Langley Formation	<i>Glaciofluvial sand & gravel</i>	Glaciofluvial deposits of Fort Langley Formation	assume well is completed into South of Hopington aquifer same as neighboring wells (Fort Langley Formation)
134	Hopington	C	Fort Langley Formation	Glaciofluvial sand	Glaciofluvial deposits of Fort Langley Formation (FLb,e)	well lithology consistent with aquifer lithology (Fort Langley Formation)
135	Nicomekl-Serpentine	E	Pre-Vashon Deposits	Glaciofluvial sand	Glaciomarine/marine sediments of Pre-Vashon Deposits (PVA-h)	well lithology consistent with aquifer lithology (Pre-Vashon Deposits)
136	N/A	C	Fraser River Sediments	Fluvial sand	Fluvial deposits of Fraser River Sediments (Fd)	aquifer not identified in Kreye & Wei (1994)
137a	Hopington,N/A?	C	Fort Langley Formation	<i>Glaciofluvial gravel & sand</i>	Glaciofluvial deposits of Fort Langley Formation (FLb,e)	likely completed into unit C but is north of Aldergrove aquifer and east of Hopington aquifer-aquifer not identified in Kreye & Wei (1994)?
137b	Hopington,N/A?	C	Fort Langley Formation	<i>Glaciofluvial gravel & sand</i>	Glaciofluvial deposits of Fort Langley Formation (FLb,e)	likely completed into unit C but is north of Aldergrove aquifer and east of Hopington aquifer-aquifer not identified in Kreye & Wei (1994)?
138	Hopington	C	Fort Langley Formation	Glaciofluvial sand & gravel	Glaciofluvial deposits of Fort Langley Formation (FLb,e)	well lithology consistent with aquifer lithology (Fort Langley Formation)
139	Clayton Upland (Upper)	D	Vashon Drift	Glaciofluvial sand & gravel	Glaciofluvial deposits of Vashon Drift (Vb)	well lithology consistent with aquifer lithology (Vashon Drift)
140	Nicomekl-Serpentine	E	Pre-Vashon Deposits	Marine sand & gravel	Glaciomarine/marine sediments of Pre-Vashon Deposits (PVA-h)	well lithology consistent with aquifer lithology (Pre-Vashon Deposits)

N/A = Not identified in Kreye and Wei (1994)

Aquifer materials description based on well records (italics-based on general description in Armstrong 1980a, 1980b, or 1980c)

Appendix A. 13

Well	Aquifer (from Kreye & Wei, 1994)	Hydrostratigraphic Unit (Haistead, 1986)	Lithologic Units	Aquifer Materials	Geologic Materials Description	Rationale for aquifer selection
141	Ft. Langley		Fraser River Sediments	Fluvial sand & gravel	Fluvial deposits of Fraser River Sediments (Fd)	well lithology consistent with aquifer lithology (Fraser River Sediments)
142	Langley/Brookwood	C	Sumas Drift	Glaciofluvial sand & gravel	Glaciofluvial sand & gravel deposits of Sumas Drift (Se)	well lithology consistent with aquifer lithology (Sumas Drift)
143	Langley/Brookwood	C	Sumas Drift	<i>Glaciofluvial gravel & sand</i>	Glaciofluvial sand & gravel deposits of Sumas Drift (Se)	likely completed in sand & gravel of Sumas Drift
144						not sampled nor assessed in Phase I or II; abandoned
145						not sampled nor assessed in Phase I or II; abandoned
146	Langley/Brookwood	C	Sumas Drift	Glaciofluvial sand & gravel	Glaciofluvial sand & gravel deposits of Sumas Drift (Se)	well lithology consistent with aquifer lithology (Sumas Drift)
147	Langley/Brookwood	C	Sumas Drift	Glaciofluvial gravel & sand	Glaciofluvial sand & gravel deposits of Sumas Drift (Se)	well lithology consistent with aquifer lithology (Sumas Drift)
148	West of Aldergrove	D	Fort Langley Formation	Glaciofluvial sand & gravel	Glaciofluvial deposits of Fort Langley Formation (FLb,e)	well lithology consistent with aquifer lithology (Fort Langley Formation)
149	N/A	E?	Pre-Vashon Deposits	<i>Marine sand</i>	Glaciomarine/marine sediments of Pre-Vashon Deposits (PVa-h)?	aquifer not identified in Kreye & Wei (1994)
150	West of Aldergrove	D	Fort Langley Formation	Glaciofluvial sand	Glaciofluvial deposits of Fort Langley Formation (FLb,e)?	completed in northern edge of aquifer no. 33?
151	N/A	E	Pre-Vashon Deposits	Marine sand	Glaciomarine/marine sediments of Pre-Vashon Deposits (PVa-h)?	aquifer not identified in Kreye & Wei (1994)
152	Hopington, West of Aldergrove?	C?	Fort Langley Formation		Fort Langley Formation - proglacial deltaic gravel and sand (FLe).	not sampled nor assessed in Phase I or II

N/A = Not identified in Kreye and Wei (1994)

Aquifer materials description based on well records (italics-based on general description in Armstrong 1980a, 1980b, or 1980c)

Appendix A. 14

Well	Aquifer (from Kreye & Wei, 1994)	Hydrostratigraphic Unit (Halstead, 1986)	Lithologic Units	Aquifer Materials	Geologic Materials Description	Rationale for aquifer selection
153	Beaver River	E	Pre-Vashon Deposits	Marine sand and gravel	Glaciomarine/marine sediments of Pre-Vashon Deposits (PVe)?	likely completed into glaciomarine/marine deposits
154	West of Aldergrove	D?	Fort Langley Formation	<i>Glaciofluvial gravel & sand</i>	Glaciofluvial deposits of Fort Langley Formation (FLb,e)	likely completed in glaciofluvial deposits of Fort Langley Formation
155	Aldergrove	C	Fort Langley Formation	Glaciofluvial sand	Glaciofluvial deposits of Fort Langley Formation (FLb,e?)	well lithology consistent with aquifer lithology (Fort Langley Formation)
156	Aldergrove	C	Fort Langley Formation	Glaciofluvial sand & gravel	Glaciofluvial deposits of Fort Langley Formation (FLb,e?)	well lithology consistent with aquifer lithology (Fort Langley Formation)
157	Aldergrove	C	Fort Langley Formation	Glaciofluvial sand & gravel	Glaciofluvial deposits of Fort Langley Formation (FLb,e?)	well lithology consistent with aquifer lithology (Fort Langley Formation)
158	Nicomekl-Serpentine	E	Pre-Vashon Deposits	Marine sand and gravel	Glaciomarine/marine sediments of Pre-Vashon Deposits (PVe)	well lithology consistent with aquifer lithology (Pre-Vashon Deposits)
159	South of Murrayville	D	Pre-Vashon Deposits	Glaciofluvial gravel	Glaciofluvial sediments of Pre-Vashon Deposits (PVf?)	well lithology consistent with aquifer lithology (Pre-Vashon Deposits)
160	Hopington	C	Fort Langley Formation	Glaciofluvial sand & gravel	Glaciofluvial deposits of Fort Langley Formation (FLb,e?)	well lithology consistent with aquifer lithology (Fort Langley Formation)
161	Vedder		Salish Sediments	Fluvial gravel & sand	Recent stream and floodplain deposits of Salish Sediments (SAi)	well lithology consistent with aquifer lithology (Salish Sediments)
162	Vedder		Salish Sediments	Fluvial gravel & sand	Recent stream and floodplain deposits of Salish Sediments (SAi)	well lithology consistent with aquifer lithology (Salish Sediments)
163	Vedder		Salish Sediments	Fluvial sand & gravel	Recent stream and floodplain deposits of Salish Sediments (SAi)	well lithology consistent with aquifer lithology (Salish Sediments)
164	Chilliwack-Rosedale		Salish Sediments or Fraser River Sediments	Fluvial gravel	Recent slope deposits of Salish Sediments (SAo,p) or Fraser River Sediments (Fg)	well lithology consistent with aquifer lithology (Salish Sediments or underlying Fraser River Sediments)

Appendix A. 15

Well	Aquifer (from Kreye & Wei, 1994)	Hydrostratigraphic Unit (Halstead, 1986)	Lithologic Units	Aquifer Materials	Geologic Materials Description	Rationale for aquifer selection
165	Chilliwack-Rosedale		Salish Sediments or Fraser River Sediments	Fluvial sand & gravel	Rescent slope deposits of Salish Sediments (SAo,p) or Fraser River Sediments (Fg)	well lithology consistent with aquifer lithology (Salish Sediments or underlying Fraser River Sediments)
166	Chilliwack-Rosedale		Salish Sediments or Fraser River Sediments	<i>Fluvial sand & gravel</i>	Rescent slope deposits of Salish Sediments (SAo,p) or Fraser River Sediments (Fg)	likely completed into same aquifer as well no. 165
167	Vedder		Salish Sediments	<i>Fluvial gravel & sand</i>	Recent stream and floodplain deposits of Salish Sediments (SAi)	well lithology consistent with aquifer lithology (Salish Sediments)
168	Chilliwack-Rosedale		Fraser River Sediments	Fluvial sand & gravel	Rescent fluvial deposits of Fraser River Sediments (Fa,h)	well lithology consistent with aquifer lithology (Fraser River Sediments)
169	Chilliwack-Rosedale		Salish Sediments or Fraser River Sediments	<i>Fluvial sand & gravel</i>	Rescent slope deposits of Salish Sediments (SAo,p) or Fraser River Sediments (Fg)	well lithology consistent with aquifer lithology (Salish Sediments or underlying Fraser River Sediments)
170	Vedder		Salish Sediments	<i>Fluvial gravel & sand</i>	Rescent slope deposits of Salish Sediments (SAi)	well lithology consistent with aquifer lithology (Salish Sediments)
171	Chilliwack River		Salish Sediments	Fluvial sand & gravel	Recent channel and floodplain deposits of Salish Sediments (SAj)	well lithology consistent with aquifer lithology (Salish Sediments)
172						not sampled nor assessed in Phase I or II
173						not sampled nor assessed in Phase I or II
174	Vedder		Salish Sediments	<i>Fluvial gravel & sand</i>	Recent stream and floodplain deposits of Salish Sediments (SAi)	likely completed into same aquifer as well no. 167
175	Vedder		Salish Sediments	<i>Fluvial gravel & sand</i>	Recent stream and floodplain deposits of Salish Sediments (SAi)	likely completed into recent sand & gravel deposits (Salish Sediments)
176	Chilliwack River	C	Sumas Drift	Glaciofluvial gravel	Glaciofluvial deposits of Sumas Drift (Sa) beneath Salish Sediments (SAj)	likely completed into recent sand & gravel deposits (Sumas Drift beneath Salish Sediments)

Well	Aquifer (from Kreye & Wei, 1994)	Hydrostratigraphic Unit (Hailestead, 1986)	Lithologic Units	Aquifer Materials	Geologic Materials Description	Rationale for aquifer selection
177	Chilliwack River	C	Sumas Drift	Glaciofluvial sand & gravel	Glaciofluvial deposits of Sumas Drift (Sa)	well lithology consistent with aquifer lithology (Sumas Drift)
178	N/A				Likely Pre-Tertiary bedrock (PT) or shallow unconsolidated deposits	aquifer not identified in Kreye & Wei (1994)
179	Columbia Valley		Salish Sediments	Glaciofluvial gravel	Recent fluvial deposits of Salish Sediments (SAj?)	well lithology consistent with aquifer lithology (Salish Sediments)
180	Chilliwack River	C	Sumas Drift	Glaciofluvial gravel & sand	Glaciofluvial deposits of Sumas Drift (Sa)	well lithology consistent with aquifer lithology (Sumas Drift)
181	N/A		Sumas Drift	<i>Sandy till</i>	likely completed in sand & gravel within sandy till of Sumas Drift (Sf)	aquifer not identified in Kreye & Wei (1994)
182	N/A	Spring				spring source
183	N/A		Sumas Drift or Pre-Sumas Deposits	Glaciofluvial gravel & sand	Glaciofluvial gravel seam in Sumas or Pre-Sumas Deposits (PSa)?	aquifer not identified in Kreye & Wei (1994)
184	N/A		Sumas Drift	<i>Sandy till</i>	likely completed in sandy till (Sumas Drift)	aquifer not identified in Kreye & Wei (1994)
185						not sampled nor assessed in Phase I or II; private system
186	N/A	F	Tertiary Bedrock	Bedrock	Tertiary bedrock (T)?	aquifer not identified in Kreye & Wei (1994)
187	Vedder		Salish Sediments	Fluvial gravel & sand	Recent stream and floodplain deposits of Salish Sediments (SAi)	likely completed into recent sand & gravel deposits (Salish Sediments)
188	Columbia Valley		Salish Sediments	<i>Fluvial gravel & sand</i>	Recent stream and floodplain deposits of Salish Sediments (SAj)	likely completed into recent sand & gravel deposits (Salish Sediments)

Appendix A. 17

Well	Aquifer (from Kreye & Wei, 1994)	Hydrostratigraphic Unit (Haistead, 1986)	Lithologic Units	Aquifer Materials	Geologic Materials Description	Rationale for aquifer selection
189	N/A	F	Pre-Tertiary Bedrock	Shale bedrock	Pre-tertiary shale bedrock (PT)	aquifer not identified in Kreye & Wei (1994)
190	Chilliwack-Rosedale		Salish Sediments or Fraser River Sediments	Fluvial sand & gravel	Rescent slope deposits of Salish Sediments (SAo,p) or Fraser River Sediments (Fg)	well lithology consistent with aquifer lithology (Salish Sediments or underlying Fraser River Sediments)
191	Chilliwack-Rosedale		Salish Sediments or Fraser River Sediments	Fluvial (?) sand & gravel	Rescent fluvial deposits of Fraser River Sediments (Fa,h) or glaciofluvial deposits of Sumas Drift (Sa)	well lithology consistent with aquifer lithology (Fraser River Sediments); may be completed into Sumas Drift below Chilliwack-Rosedale aquifer
192a	Columbia Valley	C	Salish Sediments	Fluvial sand & gravel	Glaciofluvial deposits of Sumas Drift (Sa)	well lithology consistent with aquifer lithology (Salish Sediments)
192b	Columbia Valley	C	Sumas Drift	Fluvial sand & gravel	Glaciofluvial deposits of Sumas Drift (Sa)	well lithology consistent with aquifer lithology (Sumas Drift)
193	Langley/Brookwood	C	Sumas Drift	<i>Glaciofluvial gravel & sand</i>	Glaciofluvial deposits of Sumas Drift (Se)	likely completed in sand & gravel (Sumas Drift)
194	Langley/Brookwood	C	Sumas Drift	<i>Glaciofluvial gravel & sand</i>	Glaciofluvial deposits of Sumas Drift (Se)	likely completed in sand & gravel (Sumas Drift)
195	Langley/Brookwood	C	Sumas Drift	Glaciofluvial sand & gravel	Glaciofluvial sand & gravel deposits of Sumas Drift (Se)	well lithology consistent with aquifer lithology (Sumas Drift)
196	Langley/Brookwood	C	Sumas Drift	Glaciofluvial sand & gravel	Glaciofluvial sand & gravel deposits of Sumas Drift (Se)	well lithology consistent with aquifer lithology (Sumas Drift)
197	Langley/Brookwood	C	Sumas Drift	Glaciofluvial sand & gravel	Glaciofluvial sand & gravel deposits of Sumas Drift (Se)	well lithology consistent with aquifer lithology (Sumas Drift)
198	Langley/Brookwood	C	Sumas Drift	Glaciofluvial sand & gravel	Glaciofluvial sand & gravel deposits of Sumas Drift (Se)	well lithology consistent with aquifer lithology (Sumas Drift)
199	Chilliwack-Rosedale0	E	Pre-Vashon Deposits	Marine sand	Glaciomarine/marine sediments of Pre-Vashon Deposits (PVa-h)	well lithology consistent with aquifer lithology (Pre-Vashon Deposits)

N/A = Not identified in Kreye and Wei (1994)

Aquifer materials description based on well records (italics-based on general description in Armstrong 1980a, 1980b, or 1980c)

Appendix A. 18

Well	Aquifer (from Kreye & Wei, 1994)	Hydrostratigraphic Unit (Halstead, 1986)	Lithologic Units	Aquifer Materials	Geologic Materials Description	Rationale for aquifer selection
200	Glen Valley		Fraser River Sediments	Fluvial sand & gravel	Recent fluvial sand & gravel of Fraser River Sediments (Fi)	well lithology consistent with aquifer lithology (Fraser River Sediments)
201	Glen Valley		Fraser River Sediments	Fluvial gravel	Recent fluvial sand & gravel of Fraser River Sediments (Fi)	well lithology consistent with aquifer lithology (Fraser River Sediments)
202	Hopington	C	Fort Langley Formation	Glaciofluvial sand & gravel	Glaciofluvial sand & gravel of Fort Langley Formation (FLe)	well lithology consistent with aquifer lithology; northern extension of Hopington aquifer according to Fig 15 (Halstead, 1986)
203	Hopington	C	Fort Langley Formation	Glaciofluvial sand & gravel	Glaciofluvial sand & gravel of Fort Langley Formation (FLe)	well lithology consistent with aquifer lithology (Fort Langley Formation)
204	Hopington	C	Fort Langley Formation	Glaciofluvial sand & gravel	Glaciofluvial sand & gravel of Fort Langley Formation (FLe)	well lithology consistent with aquifer lithology (Fort Langley Formation)
205	West of Aldergrove	D	Fort Langley Formation	Glaciofluvial sand & gravel	Glaciofluvial deposits in Fort Langley Formation (FLe?)	northern extension of West of Aldergrove aquifer; well lithology consistent with aquifer lithology
206	West of Aldergrove	D	Fort Langley Formation	Glaciofluvial sand & gravel	Glaciofluvial sand & gravel deposits of Fort Langley Formation (FLb,e?)	well lithology consistent with aquifer lithology (Fort Langley Formation)
207	Hopington	C	Sumas Drift	<i>Glaciofluvial gravel & sand</i>	Glaciofluvial sand & gravel of Sumas Drift (Se)	likely completed into glaciofluvial sand & gravel of Sumas Drift
208	Hopington	C	Fort Langley Formation	Glaciofluvial sand	Glaciofluvial sand & gravel of Fort Langley Formation (FLe)	well lithology consistent with aquifer lithology (Fort Langley Formation)
209	Hopington	C	Fort Langley Formation	Glaciofluvial sand & gravel	Glaciofluvial sand & gravel of Fort Langley Formation (FLe)	well lithology consistent with aquifer lithology (Fort Langley Formation)
210	West of Aldergrove	D	Fort Langley Formation	Glaciofluvial gravel & sand	Glaciofluvial sand & gravel deposits of Fort Langley Formation (FLb,e?)	well lithology consistent aquifer lithology (Fort Langley Formation)
211	Hopington	C	Fort Langley Formation	<i>Glaciofluvial gravel & sand</i>	Glaciofluvial sand & gravel of Fort Langley Formation (FLe)	likely completed into glaciofluvial sand & gravel of Fort Langley Formation

Appendix A. 19

Well	Aquifer (from Kreye & Wei, 1994)	Hydrostratigraphic Unit (Haistead, 1986)	Lithologic Units	Aquifer Materials	Geologic Materials Description	Rationale for aquifer selection
212	N/A	D	Sumas Drift	Glaciofluvial gravel	Glaciofluvial sand & gravel layer in till (Sumas Drift-Sd)	aquifer not identified in Kreye & Wei (1994)
213	N/A	D	Sumas Drift	Glaciofluvial sand	Glaciofluvial sand & gravel layer in till (Sumas Drift-Sd)	aquifer not identified in Kreye & Wei (1994)
214	Abbotsford/Sumas	A	Sumas Drift	Glaciofluvial gravel & sand	Glaciofluvial sand & gravel layer in till (Sumas Drift-Sd)	aquifer not identified in Kreye & Wei (1994)
215	South of Hopington	D	Fort Langley Formation	Glaciofluvial sand & gravel	Glaciofluvial sand & gravel deposits of Fort Langley Formation (FLb,e?)	well lithology consistent aquifer lithology (Fort Langley Formation)
216	N/A	D	Sumas Drift	Glaciofluvial sand	Glaciofluvial sand & gravel layer in till (Sumas Drift-Sd)	aquifer not identified in Kreye & Wei (1994)
217	Aldergrove	C	Fort Langley Formation	Glaciofluvial sand & gravel	Glaciofluvial sand & gravel deposits of Fort Langley Formation (FLb,e?)	well lithology consistent aquifer lithology (Fort Langley Formation)
218	Aldergrove	C	Fort Langley Formation	Glaciofluvial sand	Glaciofluvial sand & gravel deposits of Fort Langley Formation (FLb,e?)	well lithology consistent aquifer lithology (Fort Langley Formation)
219	Aldergrove	C	Fort Langley Formation	Glaciofluvial sand	Glaciofluvial sand & gravel of Fort Langley Formation (FLe)	well lithology consistent with aquifer lithology (Fort Langley Formation)
220	Abbotsford/Sumas	C	Sumas Drift	Glaciofluvial sand & gravel	Glaciofluvial sand & gravel of Sumas Drift (Sa)	well lithology consistent with aquifer lithology (Sumas Drift)
221	N/A	D	Sumas Drift	Glaciofluvial sand & gravel	Glaciofluvial sand & gravel of Sumas Drift (Sd?)	aquifer not identified in Kreye & Wei (1994); may be completed in southwest extension of South of Aldergrove aquifer
222	Abbotsford/Sumas	C	Sumas Drift	Glaciofluvial sand & gravel	Glaciofluvial sand & gravel of Sumas Drift (Sa)	well lithology consistent with aquifer lithology (Sumas Drift)
223	1Chilliwack-Rosedale	D	Sumas Drift	Glaciofluvial sand & gravel	Glaciofluvial sand & gravel of Sumas Drift (Sd)	well lithology consistent with aquifer lithology (Sumas Drift)

Well	Aquifer (from Kreye & Wei, 1994)	Hydrostratigraphic Unit (Halstead, 1986)	Lithologic Units	Aquifer Materials	Geologic Materials Description	Rationale for aquifer selection
224	1Chilliwack-Rosedale	A	Fort Langley Formation	Glaciofluvial sand & gravel	Glaciofluvial sand & gravel of Fort Langley Formation (FLC?)	well lithology consistent with aquifer lithology (Fort Langley Formation)
225	Abbotsford/Sumas	C	Sumas Drift	Glaciofluvial sand & gravel	Glaciofluvial sand & gravel of Sumas Drift (Sa)	well lithology consistent with aquifer lithology (Sumas Drift)
226	Abbotsford/Sumas	C	Sumas Drift	Glaciofluvial sand & gravel	Glaciofluvial sand & gravel of Sumas Drift (Sa)	well lithology consistent with aquifer lithology (Sumas Drift)
227	Abbotsford/Sumas	C	Sumas Drift	Glaciofluvial sand & gravel	Glaciofluvial sand & gravel of Sumas Drift (Sa)	well lithology consistent with aquifer lithology (Sumas Drift)
228	Abbotsford/Sumas	C	Sumas Drift	Glaciofluvial sand & gravel	Glaciofluvial sand & gravel of Sumas Drift (Sa)	well lithology consistent with aquifer lithology (Sumas Drift)
229	Abbotsford/Sumas	C	Sumas Drift	Glaciofluvial sand & gravel	Glaciofluvial sand & gravel of Sumas Drift (Sa)	well lithology consistent with aquifer lithology (Sumas Drift)
230	Abbotsford/Sumas	C	Sumas Drift	Glaciofluvial sand & gravel	Glaciofluvial sand & gravel of Sumas Drift (Sa)	well lithology consistent with aquifer lithology (Sumas Drift)
231	Abbotsford/Sumas	C	Sumas Drift	Glaciofluvial sand & gravel	Glaciofluvial sand & gravel of Sumas Drift (Sa)	well lithology consistent with aquifer lithology (Sumas Drift)
232	Abbotsford/Sumas	C	Sumas Drift	Glaciofluvial sand & gravel	Glaciofluvial sand & gravel of Sumas Drift (Sa)	well lithology consistent with aquifer lithology (Sumas Drift)
233	Abbotsford/Sumas	C	Sumas Drift	Glaciofluvial sand & gravel	Glaciofluvial sand & gravel of Sumas Drift (Sa)	well lithology consistent with aquifer lithology (Sumas Drift)
234	Abbotsford/Sumas	C	Sumas Drift	Glaciofluvial sand & gravel	Glaciofluvial sand & gravel of Sumas Drift (Sa)	well lithology consistent with aquifer lithology (Sumas Drift)
235	Abbotsford/Sumas	C	Sumas Drift	Glaciofluvial sand & gravel	Glaciofluvial sand & gravel of Sumas Drift (Sa)	well lithology consistent with aquifer lithology (Sumas Drift)

Appendix A. 21

Well	Aquifer (from Kreye & Wei, 1994)	Hydrostratigraphic Unit (Halstead, 1986)	Lithologic Units	Aquifer Materials	Geologic Materials Description	Rationale for aquifer selection
236	Abbotsford/Sumas	C	Sumas Drift	Glaciofluvial sand & gravel	Glaciofluvial sand & gravel of Sumas Drift (Sa)	well lithology consistent with aquifer lithology (Sumas Drift)
237	Abbotsford/Sumas	C	Sumas Drift	Glaciofluvial sand & gravel	Glaciofluvial sand & gravel of Sumas Drift (Sa)	well lithology consistent with aquifer lithology (Sumas Drift)
238	Abbotsford/Sumas	C	Sumas Drift	Glaciofluvial sand & gravel	Glaciofluvial sand & gravel of Sumas Drift (Sa)	well lithology consistent with aquifer lithology (Sumas Drift)
239	Abbotsford/Sumas	C	Sumas Drift	Glaciofluvial sand & gravel	Glaciofluvial sand & gravel of Sumas Drift (Sa)	well lithology consistent with aquifer lithology (Sumas Drift)
240	Abbotsford/Sumas	C	Sumas Drift	Glaciofluvial sand & gravel	Glaciofluvial sand & gravel of Sumas Drift (Sa)	well lithology consistent with aquifer lithology (Sumas Drift)
241	Abbotsford/Sumas	C	Sumas Drift	Glaciofluvial sand & gravel	Glaciofluvial sand & gravel of Sumas Drift (Sa,.)	well lithology consistent with aquifer lithology (Sumas Drift)
242	Abbotsford/Sumas	C	Sumas Drift	Glaciofluvial sand & gravel	Glaciofluvial sand & gravel of Sumas Drift (Sj)	well lithology consistent with aquifer lithology (Sumas Drift)
243	Abbotsford/Sumas	C	Sumas Drift	<i>Glaciofluvial gravel & sand</i>	Glaciofluvial sand & gravel of Sumas Drift (Sa)	likely completed in glaciofluvial sand & gravel deposits (Sumas Drift)
244	Abbotsford/Sumas	C	Sumas Drift	Glaciofluvial sand & gravel	Glaciofluvial sand & gravel of Sumas Drift (Sa)	well lithology consistent with aquifer lithology (Sumas Drift)
245	Abbotsford/Sumas	C	Sumas Drift	Glaciofluvial sand & gravel	Glaciofluvial sand & gravel of Sumas Drift (Sa)	well lithology consistent with aquifer lithology (Sumas Drift)
246	Abbotsford/Sumas	C	Sumas Drift	Glaciofluvial sand & gravel	Glaciofluvial sand & gravel of Sumas Drift (Sa)	well lithology consistent with aquifer lithology (Sumas Drift)
247	Abbotsford/Sumas	C	Sumas Drift	Glaciofluvial sand & gravel	Glaciofluvial sand & gravel of Sumas Drift (Sd)	well lithology consistent with aquifer lithology (Sumas Drift)

Well	Aquifer (from Kreye & Wei, 1994)	Hydrostratigraphic Unit (Halstead, 1986)	Lithologic Units	Aquifer Materials	Geologic Materials Description	Rationale for aquifer selection
248	Abbotsford/Sumas	C	Sumas Drift	Glaciofluvial sand & gravel	Glaciofluvial sand & gravel of Sumas Drift (Sa)	well lithology consistent with aquifer lithology (Sumas Drift)
249	Abbotsford/Sumas	C	Sumas Drift	Glaciofluvial sand	Glaciofluvial sand & gravel of Sumas Drift (Sa)	well lithology consistent with aquifer lithology (Sumas Drift)
250	Abbotsford/Sumas	C	Sumas Drift	Glaciofluvial sand	Glaciofluvial sand & gravel of Sumas Drift (Sa)	well lithology consistent with aquifer lithology (Sumas Drift)
251	Abbotsford/Sumas	Spring				spring source of Abbotsford/Sumas aquifer
252	Abbotsford/Sumas	C	Sumas Drift	Glaciofluvial sand & gravel	Glaciofluvial sand & gravel of Sumas Drift (Sa)	well lithology consistent with aquifer lithology (Sumas Drift)
253	Abbotsford/Sumas	C	Sumas Drift	<i>Glaciofluvial gravel & sand</i>	Glaciofluvial sand & gravel of Sumas Drift (Sa)	likely completed in glaciofluvial sand & gravel (Sumas Drift)
254	Abbotsford/Sumas	C	Sumas Drift	Glaciofluvial sand & gravel	Glaciofluvial sand & gravel of Sumas Drift (Sa)	well lithology consistent with aquifer lithology (Sumas Drift)
255	Abbotsford/Sumas	C	Sumas Drift	Glaciofluvial gravel	Glaciofluvial sand & gravel of Sumas Drift (Sa)	well lithology consistent with aquifer lithology (Sumas Drift)
256	Chilliwack River	C	Sumas Drift	Glaciofluvial sand & gravel	Glaciofluvial sand & gravel of Sumas Drift (Sa)	well lithology consistent with aquifer lithology (Sumas Drift)
257	Chilliwack River		Salish Sediments	Fluvial sand & gravel	Recent fluvial sand & gravel of Salish Sediments (SA)	well lithology consistent with aquifer lithology (Salish Sediments)
258	Chilliwack-Rosedale		Fraser River Sediments	<i>Fluvial sand & gravel</i>	Recent fluvial sand & gravel of Fraser River Sediments (F?)	likely completed into recent fluvial sand & gravel deposits of Fraser River Sediments below Salish Sediments
259	Chilliwack-Rosedale		Fraser River Sediments	<i>Fluvial sand & gravel</i>	Recent fluvial sand & gravel of Fraser River Sediments (F?)	likely completed into recent fluvial sand & gravel deposits of Fraser River Sediments below Salish Sediments

Well	Aquifer (from Kreye & Wei, 1994)	Hydrostratigraphic Unit (Halstead, 1986)	Lithologic Units	Aquifer Materials	Geologic Materials Description	Rationale for aquifer selection
260	Columbia Valley	C	Sumas Drift	Glaciofluvial sand	Glaciofluvial deposits of Sumas Drift (Sa)	well lithology consistent with aquifer lithology (Sumas Drift)
261	Columbia Valley	C	Sumas Drift	Glaciofluvial sand	Glaciofluvial deposits of Sumas Drift (Sa)	well lithology consistent with aquifer lithology (Sumas Drift)
262	N/A		Fort Langley Formation	Glaciofluvial sand	Glaciofluvial sand & gravel in Fort Langley Formation (FLb,e); may be completed in southern extension of aquifer no. 26	aquifer not identified in Kreye & Wei (1994)
263	N/A		Sumas Drift	Glaciofluvial sand & gravel	Glaciofluvial sand & gravel in Sumas Drift (Sa)	aquifer not identified in Kreye & Wei (1994)
264	Norrish Creek		Salish Sediments	Fluvial sand & gravel	Recent sand & gravel fan deposits of Salish Sediments (SAo)	well lithology consistent with aquifer lithology (Salish Sediments)
265	Lake Erroch/Deroche Creek		Sumas Drift	Glaciofluvial sand	Glaciofluvial deposits of Sumas Drift (Sd)	well lithology consistent with aquifer lithology (Sumas Drift)
266	Abbotsford/Sumas	C	Sumas Drift	Glaciofluvial sand & gravel	Glaciofluvial deposits of Sumas Drift (Sa,j)	well lithology consistent with aquifer lithology (Sumas Drift)