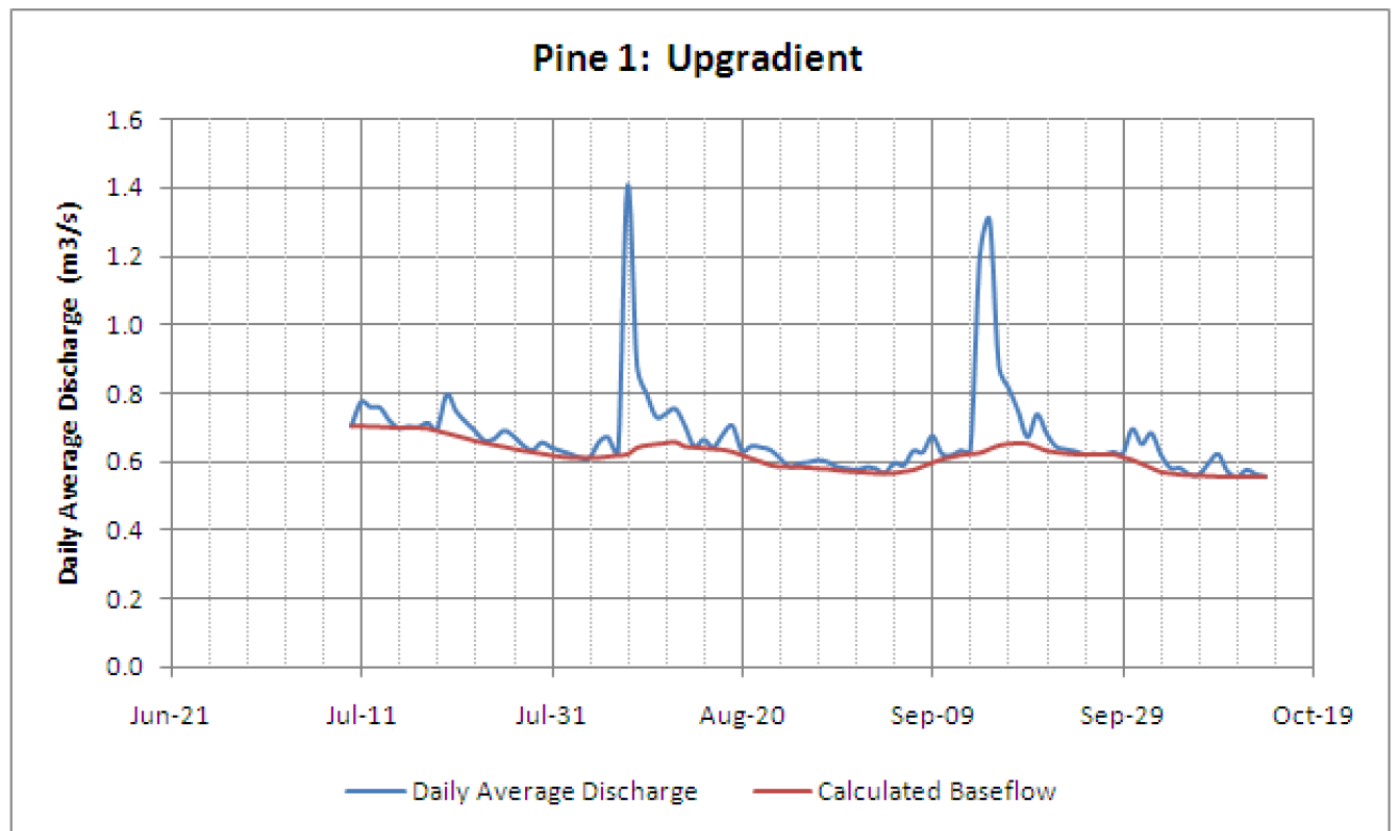


Streamflow and Water Quality Measurements

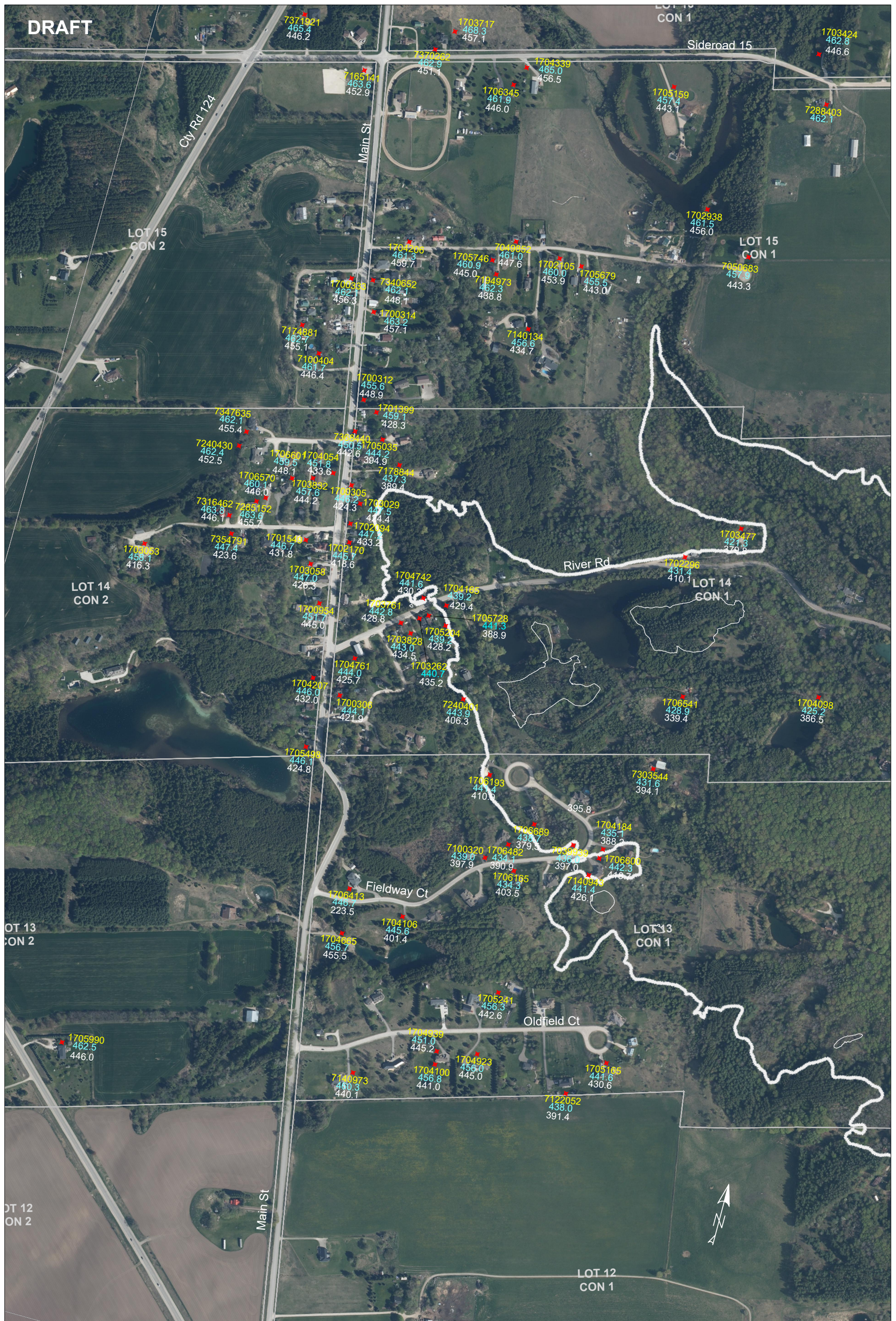
Pine River									
Site Name	Pine 1	Pine 2	Pine 3	Pine 1	Pine 2	Pine 3	Pine 1	Pine 2	Pine 3
Geological Reference	Upgradient	Contact	Downgradient	Upgradient	Contact	Downgradient	Upgradient	Contact	Downgradient
Date	15-Aug-08	15-Aug-08	15-Aug-08	8-Sep-08	8-Sep-08	8-Sep-08	2-Oct-08	2-Oct-08	2-Oct-08
Flow Condition	Low	Low	Low	Medium	Medium	Medium	High	High	High
Total Discharge (m3/s)	0.5975	0.5069	0.6248	0.6447	0.5707	0.6237	0.6748	0.7039	0.8395
Time	10:29	11:14	12:16	12:56	13:44	14:31	9:50	10:33	11:29
Temperature (°C)	15.36	15.58	16.06	14.43	14.78	15.02	10.63	10.45	10.52
Conductivity (µS/cm)	508.00	503.00	483.00	506.00	500.00	480.00	516.00	512.00	493.00
DO (mg/L)	9.70	9.64	9.81	11.14	11.42	11.45	11.10	11.15	11.26
pH	8.18	8.30	8.35	8.38	8.48	8.46	8.26	8.30	8.30
Chloride	35.98	35.25	31.05	110.30	109.40	120.40	59.68	64.46	63.25
Turbidity (NTU)	1.10	0.60	0.00	0.70	1.10	1.70	0.00	0.00	0.00
Chlorophyll (µg/L)	10.60	6.90	5.70	1.50	1.45	1.00	0.30	209.00	0.90



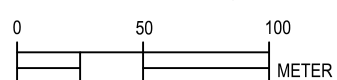
Source: Excerpts from Niagara Escarpment Baseflow Study, Nottawasaga Valley Conservation Authority, Jan 27, 2009

File Date: Jan 22, 2025





File Date: January 23, 2025
Horizontal Scale: 1:6,000 @ 11x17"

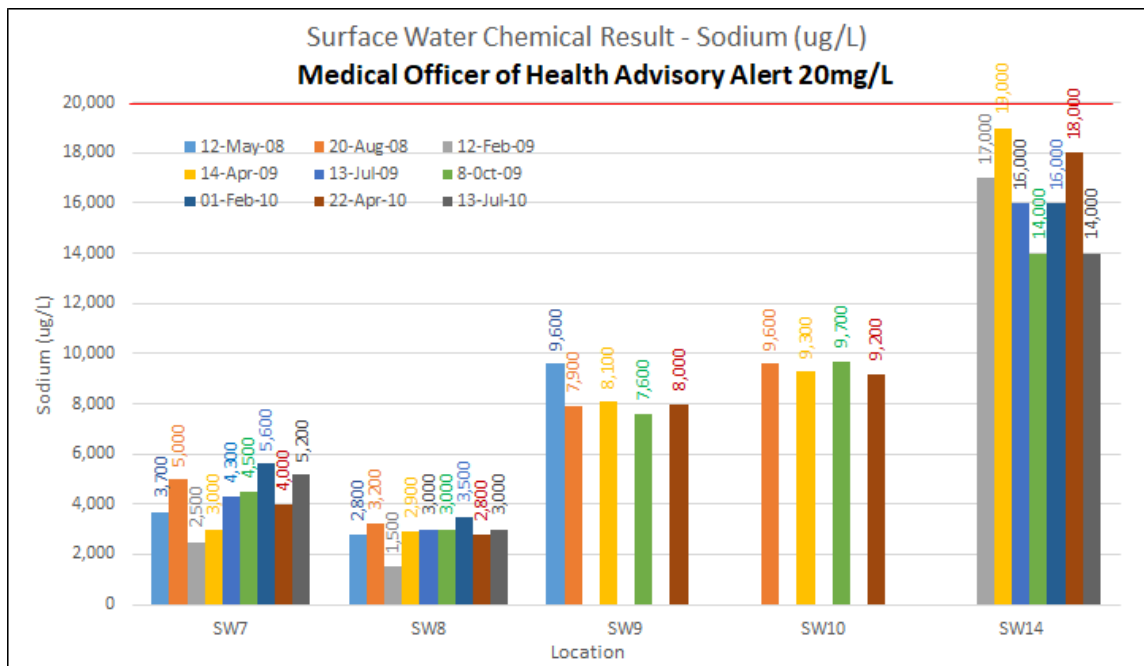
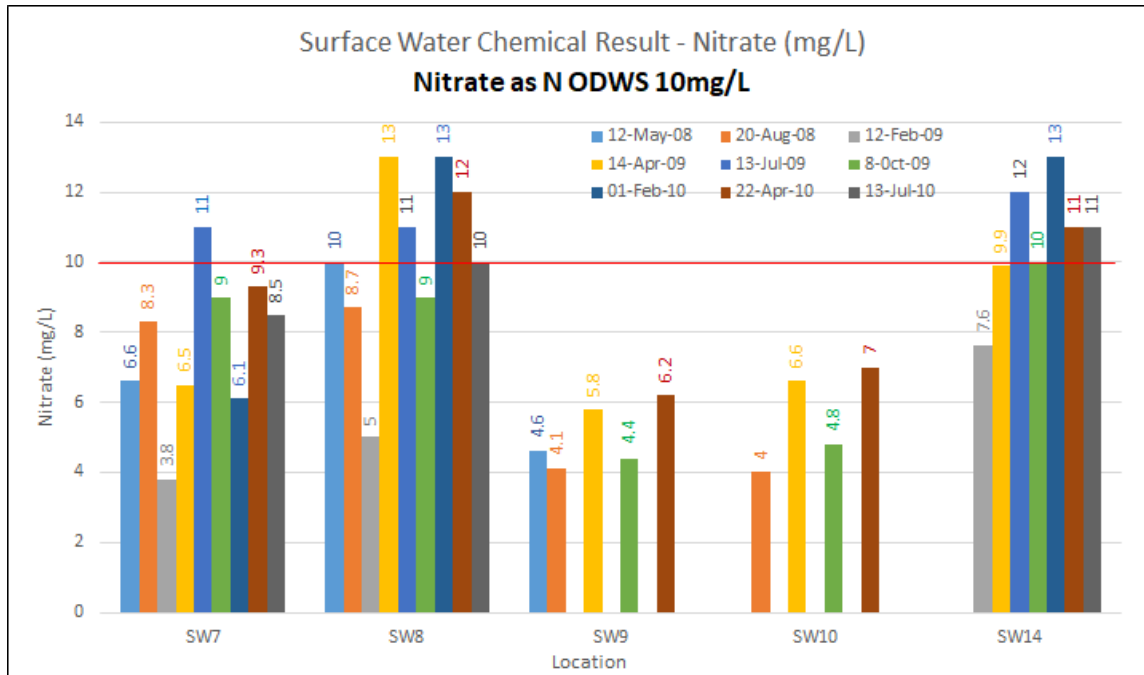



1704941 MOE Well ID
 492.2 Static Water Level (CGVD2013, m asl)
 166.6 Base of Water Well (CGVD2013, m asl)
 445 m asl (CGVD2013) Assumed Base of Gasport
 Strada Licence Area (MHBC Planning Ltd)

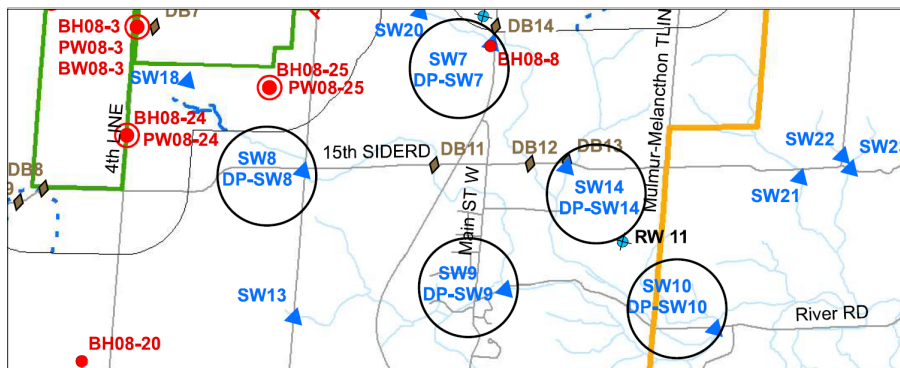
Data Source:

- 1) MOE Water Well Database
- 2) 2023 Orthophoto: Dufferin County
- 3) Ground Elevation from 2022 LiDAR DEM, LIO Geohub
- 4) Township Lot Fabric: LIO Geohub

Property of
HUNTER and ASSOCIATES
Environmental and Engineering Consultants
Website: www.hunter-aes.com



Data Source: Table E-6 General Chemical Results -Surface Water, The Highland Companies Proposed Melancthon Quarry Hydrogeologic and Hydrologic Assessment, Geographic Township of Melancthon, County of Dufferin, Volume 4 of 4, by Genivar Inc., January 2011



Source: Figure H-3 Monitoring Locations Map, The Highland Companies Proposed Melancthon Quarry Hydrogeologic and Hydrologic Assessment, Geographic Township of Melancthon, County of Dufferin, Volume 4 of 4, by Genivar Inc., January 2011

File: Strada
File Date: September 10, 2024



Site No. 1330 Pit#2 Date (YY.MM.DD) 08 11 01
Surveyor EJM Observation Type Pit

MODE OF DEPOSITION NO. 1 AL NO. 2 MT NO. 3
SLOPE CLASS A DRAINAGE CLASS W SLOPE POSITION 7 SLOPE % 0.5 LENGTH 100+
STONINESS 0 ROCKINESS 0

HORIZONS				DEPTH (cm)		COLOURS		%	LAB TEXTURE	CONSISTENCY
D	Ma	Suffix	Mod.	Upper	Lower	Matrix Colours	Mottle Colours	C.F.		
	A	p		0	20	10YR3/3		0.0	SiL	
	B	m		20	43	10YR4/4		0.0	SiL	
	B	t		43	86	10YR5/4		0.0	L	
II	B	t		86	123	7.5YR4/6		46.0	GrfSL	
II	C	k		123	150	10YR6/4		44.6	GrfSL	

Mode of Deposition		Slope Class		Drainage Class		Stoniness/Rockiness		Consistency	
MT	Morainal Till	Aa	0-0.5%	R	Rapidly	X	Non	L	Loose
LA	Lacustrine	Bb	0.5-2.0%	W	Well	1	Slightly	FR	Friable
GF	Glacial Fluvial	Cc	2-5%	MW	Mod. Well	2	Moderately	F	Firm
GL	Glacio Lacustrine	Dd	5-9%	I	Imperfectly	3	Very	VF	Very Firm
AL	Aluvial	Ee	9-15%	P	Poorly	4	Excessively		
		Ff	15-30%	VP	Very Poorly	5	Exceedingly		
		Gg	30-45%						
Depth to (cm):		Mottles		Abundance		Size		Contrast	
Bedrock	--	Horizon	Abun.	Size	Contrast				
Constricting Layer	--								
Carbonates	123								
Gley Colours	--								
Water Table	--								

NOTES: Test Pit 2
small grain - 2008-9
many stones (25-60cm) in IIBt soil horizon

