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Construction Materials
Building Science
Geotechnical
Metallurgy and Corrosion
Environmental
Analytical Chemistry
Physical Testing

March 19, 2007
File: 807-0016

Trackside Holdings Ltd.
#120 – 44488 South Sumas Road
Chilliwack, BC, V2R 5M3

Attention: Ms. Gina Spencer

Dear Ms. Spencer:

Re: Preliminary Geotechnical Information
Proposed Commercial/Industrial Subdivision
8250, 8290, 8340, 8418, 8500 Chilliwack Mountain Road
8180 Aitken Road , Chilliwack, BC

1.0 INTRODUCTION

As requested, Levelton Consultants Ltd. has conducted a preliminary geotechnical site assessment of the above referenced site. The location of the site is indicated on the attached aerial photograph/site location map, Figure 1. The total area of the site is approximately 80 Acres. The scope of work for this work is outlined in the Levelton proposal dated January 11th 2007. Written authorization to proceed with the geotechnical site assessment was received from Trackside Holdings was received on January 12, 2007.

Previous geotechnical investigations were conducted at the site by EKS Engineering (EKS). The EKS reports are as follows:

- "Soils and Foundation Investigation, Proposed Industrial Development, 8180 Aitken Road, Chilliwack, BC" – EKS project number G-2004-00, report dated October 18, 2005 (referred to in this letter as "EKS Report 1"); and

- "A Geotechnical Investigation, Proposed Industrial Subdivision, Lickman Road at Chilliwack Mountain Road, Chilliwack, BC" – EKS project number G-2322-00, report dated November 27, 2006 (referred to in this letter as "EKS Report 2").

Levelton conducted an independent geotechnical review of the EKS reports for Bentall Corporation. The specific review comments are provided in a letter dated December 21st 2006 (Levelton File: 1606-0869). However, a brief synopsis of the concerns was as follows:

1. Additional subsurface explorations and soil testing was needed to establish the soil strength and compressibility for the development of the site preparation strategy and building foundations design addressing both static and seismic loading.
2. A geotechnical seismic evaluation was needed for the site preparation and foundation design.
3. Further geotechnical exploration and analysis was needed to address the soil compressibility in the site area identified as having buried wood waste (hog fuel and wood chips).

Comments with regard to temporary excavation stability and dewatering during excavation of the hogfuel and wood chips were not provided by EKS. However, this issue no longer requires addressing, as these materials have been reported to have been removed. The presence of large surface piles of hogfuel and wood ships and the Levelton test holes support the claim that the hogfuel and wood chips have been removed.

The intent of this letter-report is to provide general preliminary information with regard to the site conditions and the three general concerns outlined above.

2.0 SITE DESCRIPTION

The majority of the site is flat lying to gently undulating and is vegetated with grass. However, several large stockpiles of wood waste were present on the surface eastern region of the site. Asphalt pavement was present over the southeast corner of the site. Much of the eastern third of the site area was surfaced with gravelly sand with cobbles. It is understood that this material was recently placed after removal of the subsurface wood waste documented in EKS Report 1. The east and west regions of the site are separated by McDermott Ditch. The west and east regions of the site are illustrated as Figure 2 and Figure 3, respectively.

3.0 FIELD WORK

The Levelton subsurface exploration program consisted of advancing 55 continuous auger holes (AH1 to AH 55) plus nine 10 foot deep supplemental auger holes (SAH1 to SAH9) to estimate the lateral extent of organic soils in the east-central region of the site. The locations of the auger holes are indicated on Figure 2 and Figure 3. Geotechnical technologists from Levelton located and staked the test holes, logged the holes and collected samples for moisture content, Atterberg Limits, and grain size analysis testing in our Abbotsford laboratory. Dynamic Cone Penetration testing was conducted adjacent to many of the auger holes to provide an indication of the density of the sandy soils. The DCPT N-values are illustrated on the soil logs.

Field Vane Shear testing was conducted at select locations to determine the undrained and remolded shear strength of the fine grained soil. The shear strength data is indicated on the soil logs. Pocket Penetrometer tests were also conducted on the disturbed soil samples, to provide a general approximation of the unconfined compressive strength of the fine grained soil. This data is also shown on the soil logs. The auger holes soil logs are provided in Appendix A. A detailed soil description was not logged for the supplemental auger holes, as they were drilled to assess the extent of organic soils. The supplemental auger holes are summarized in Table A1, Appendix A

Levelton installed six groundwater monitoring wells at the site at select locations. The locations of the monitoring wells are indicated with the "MW" designation on Figure 2 and Figure 3.

Levelton advanced nine electronic piezocone tests (CPT1 to CPT9) at the locations indicated on Figure 2 and Figure 3. The CPT provides detailed information with regard to the soil stratigraphy. The CPT is also considered to be one of the most accurate geotechnical in situ tools for assessing the soil strength, compressibility and for assessing the site resistance seismic induced liquefaction. Plots illustrating the results of the CPT soundings are provided in Appendix A.

The Levelton test hole locations were surveyed by Wedler Engineering after drilling. The surveyed test hole locations are indicated on Figure 2 and Figure 3.

4.0 SUBSURFACE CONDITIONS

4.1 Soil Conditions

The soil conditions can be generally described as consisting of varying depths of fine grained soil (clayey silt and silty clay), overlying silty sand and sand deposits at depth. A detailed description of the soil conditions are provided on the Levelton soil logs in Appendix A. AMEC soil logs from a previous geotechnical study at the west end of the site are provided in Appendix B. The AMEC soil logs were provided by Trackside Holdings via AMEC's client, Wedler Engineering.

Near surface fill, composed of well graded sand with varying concentrations of gravel and cobbles was present over the eastern region of the site (granular). The granular fill was generally compact, with DCPT N-values typically greater than 20 blows per foot. Levelton was not able to drill holes through the wood waste stockpiles to confirm whether the wood waste was removed beneath the piles.

The surficial fine grained soil deposits were of variable thickness, but commonly extended to greater than five metres below the ground surface with localized interbeds of compact silty sand to sandy silt. The fine grained typically of intermediate to high plasticity based on the Atterberg Limits testing conducted by Levelton. Field Vane Shear

testing and the CPT testing indicates that the undisturbed fine grained soils are generally stiff within a few metres of the ground surface, becoming firm below that depth. However, localized soft fine grained soil was encountered directly beneath subsurface organic soils. The remolded field vane shear testing indicated that the fine grained soils are sensitive to disturbance with sensitivities commonly the in range of 5 to 10.

Organic soils (organic silt and peat) were encountered at many of the auger holes located within the central region of the site, and north of Proposed Progress Way in the eastern region of the site. The approximate thickness of the organic soil is indicated in brackets on Figure 2 and Figure 3. The thickness of the organic was generally about 300 mm plus or minus 150 mm. The thickest organic was 900mm at AH47. The organic soil was generally encountered about 2 m plus or minus 500 mm from the existing ground surface. The organic soils had measured moisture contents in the range of 95 percent to 337 percent.

The granular soils (silty sand and sand) were commonly encountered at depth. The CPT testing and DCPT N-values indicated that the sand was compact (medium dense).

4.2 Groundwater Conditions

The groundwater levels were within one metre of the ground surface in all of the monitoring wells in early February 2007 in all of the wells. A review of the CPT pore pressure data (U2) suggests that the true groundwater table is about 2 to 3 m below the ground surface. The available data from the site and other nearby sites evaluated by the Levelton geotechnical personnel indicates that the groundwater table fluctuates seasonally between less than 1 m to about 3 m of the ground surface, with near surface perched water zones.

5.0 DISCUSSION

It is Levelton's opinion that the site is considered suitable to support a proposed light industrial subdivision consisting of tilt-up concrete warehouse structures. The specific site preparation strategy and foundation design for each building site will depend on the configuration and loading of the structure(s), the relative grade change and location within the 80 acre site. However, shallow footings are considered suitable for support of typical tilt-up warehouse structures at the site.

The subsurface explorations completed by Levelton in the east region of the site did not encounter any of the buried wood waste previously encountered by EKS. Levelton cannot confirm whether any buried wood waste is still present beneath the wood waste piles, as we were unable to advance any boreholes where these stockpiles are present. The material used to backfill the areas where the wood waste was removed consisted of compact to dense granular soils suitable for the support of buildings on conventional footings.

A layer of organic soil was encountered in many of the auger holes advanced within the central region of the site. Preloading with a surcharge fill is recommended prior to constructing buildings in any areas underlain with the organic soils. However, the height and duration of the preloading is not addressed in this preliminary report. Alternatively the organic layer must be removed from the building sites and the area backfilled with engineered fill prior to placing footings under the review of the geotechnical engineer. The Levelton soil logs indicate that the excavation depth to remove the organic soil will be on average about 2.5 m.

A geotechnical seismic evaluation was conducted to assess the liquefaction susceptibility of the site soils using the 2006 BCBC design basis earthquake. This earthquake has a return period of 2475 years (2% probability of occurrence over the next 50 years). This equates to the Peak horizontal Ground Acceleration (PGA) of 0.383g for the subject site.

The fine grained soils at the site are considered to have sufficient plasticity to resist liquefaction under seismic loading. However, the sand soils at depth are considered to be susceptible to shear strength loss and liquefaction under the design basis earthquake loading. The results of the assessment completed to assess the liquefaction potential of the granular soils at each of the CPTs is provided in Table 1.

Table 1: Liquefaction Assessment Results

CPT #	Closest Auger Hole	Liquefaction Zone (m)	Estimate of Liquefaction Induced Settlement (mm)	Thickness of Non-Liquefiable Crust (m)
1	AH-1	9.7~11.9, 14.2~18.1	115	9.7
2	AH-18	6.9~8.6, 11.4~12.1	135	6.9
3	AH-43	4.6~8.6, 11.7~18.1	215	4.6
4	AH-49	9.6~18.1	170	9.6
5	AH-21	7.1~18.1	200	7.1
6	AH-26	5.4~8.6, 11.4~18.1	200	5.4
7	AH-35	4.9~8.4, 10.6~18.1	240	4.9
8	AH-39	11.1~13.4, 16.1~18.1	100	11.1
9	AH-52	7.9~8.9, 12.9~13.9	65	7.9

Information from past earthquakes indicates that surface manifestations of liquefaction will not be significant for relatively lightly loaded structures on shallow foundations, provided the foundations are underlain by a sufficiently thick layer (crust) of non-liquefiable soil. The potential for footing punching failure is considered to be low for this site where the non-liquefiable surface deposits will be generally at least 7 m thick. Structural fill that is used to raise grades to meet the Minimum Floor Elevation may form

part of the non-liquefiable crust. The potential for ground disturbance associated with lateral spread, or the development of sand boils is expected to be low at this site given the crust thickness at this site.

Soil liquefaction will generate excess pore-water pressure, resulting in consolidation settlement occurring as the pore-water pressure dissipates. Based on the analysis of the CPT soundings, the total settlement induced by the design basis earthquake is anticipated to range from about 50 mm to 250 mm across the entire site. The seismic induced differential settlements are estimated to be in the range of 50 mm to 100 mm across individual buildings due to natural variations in the site soils.

Levelton recommends Site Class E be used for estimating the seismic site response, where the non-liquefiable crust is a minimum of 7 m at the building locations. It is recommended that the footings be structurally connected together with reinforced concrete grade beams to reduce the adverse affects of the seismic induced consolidation settlement. Site Class F is recommended where the non-liquefiable crust is less than 7 m. However, it is likely that Site Class E can be used for the design of the building foundations provided an appropriate amount of structural fill is placed on certain building sites to raise the grade to the design level to prevent surface manifestations of liquefaction at depth.

6.0 LIMITATIONS AND CLOSURE

This letter has been prepared by Levelton Consultants Ltd. exclusively for Trackside Holdings Ltd. and their appointed agents. The information presented in this letter reflects our judgement in light of the information provided to us at the time it was prepared.

Any use of this letter by third parties, or any reliance on or decisions made based on it, are the responsibility of such third parties. Levelton does not accept responsibility for damages suffered, if any, by a third party as a result of their use of this report.

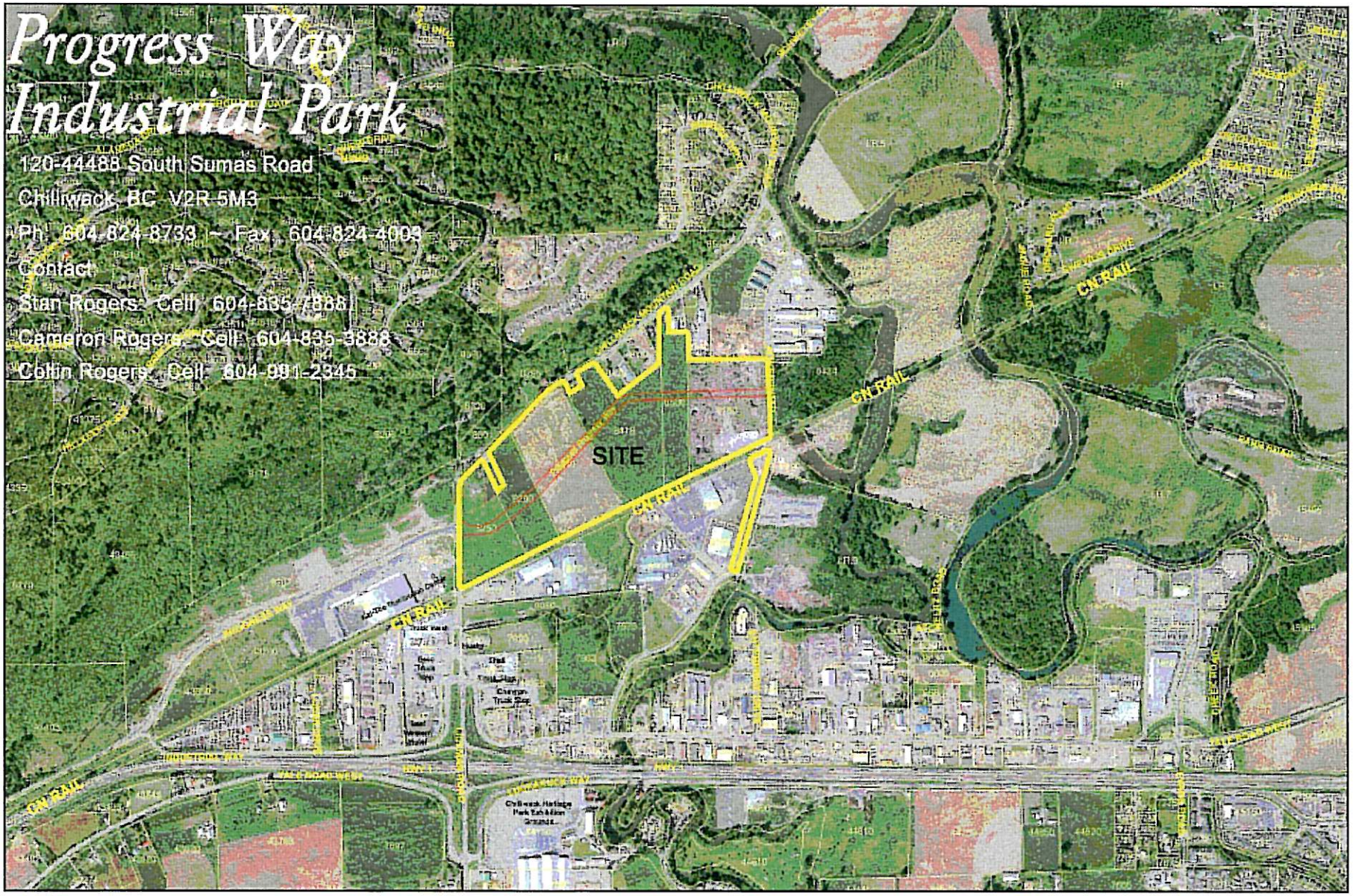
We trust this information meets your immediate requirements. If you have any questions or require further information, please contact the undersigned.

LEVELTON CONSULTANTS LTD.

PROFESSIONAL
PROVINCE OF BRITISH COLUMBIA
C. J. BUCHAN

Per: Calum Buchan, PE, P.Eng
Senior Geotechnical Engineer

Reviewed by:
Paul R. Ell, P.Eng.
Geotechnical Engineer



NOTE:
DRAWING ADAPTED FROM GOOGLE EARTH.

REV. :	ISSUED FOR:	DATE:

TITLE: SITE LOCATION MAP

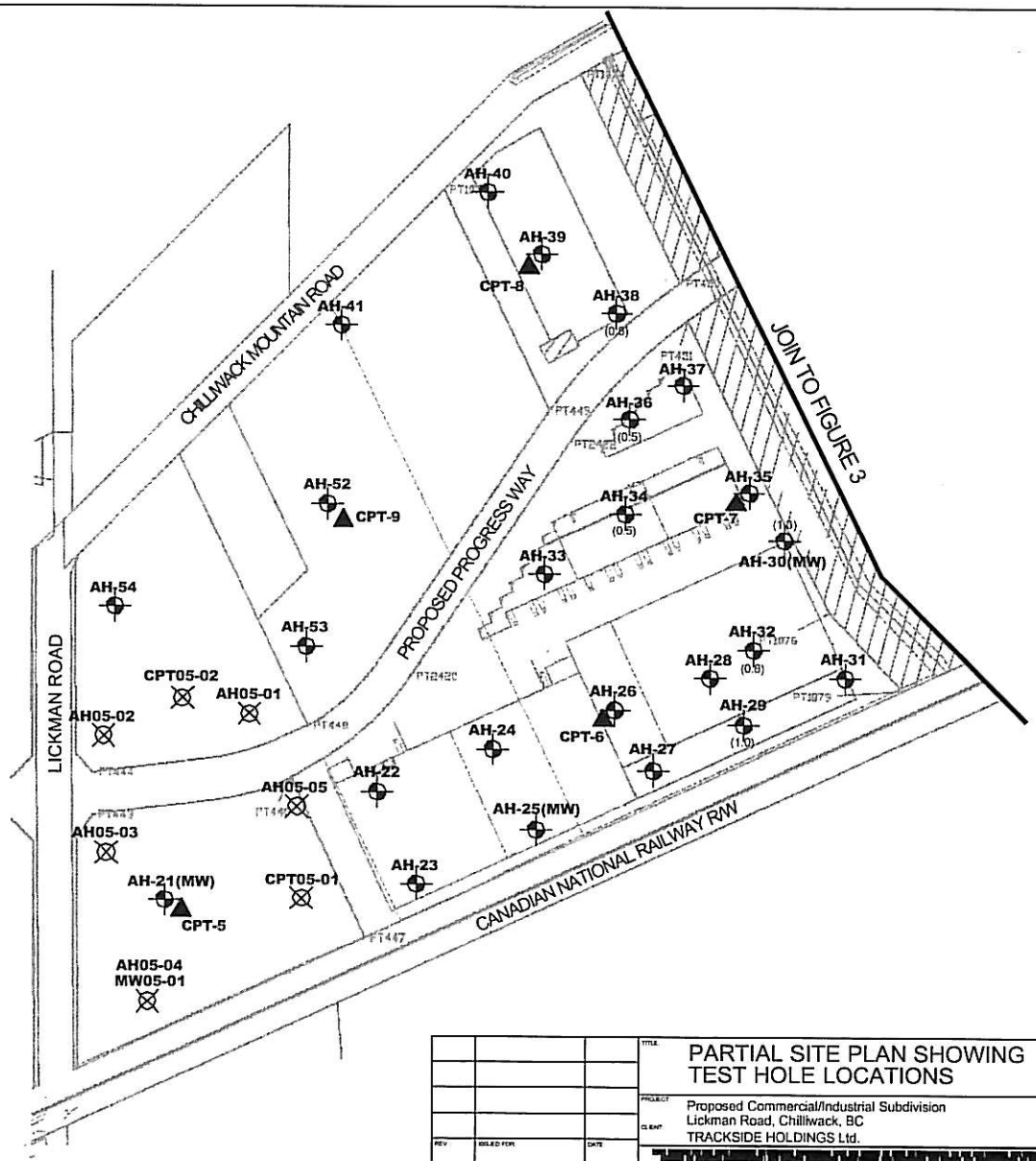
PROJECT: Proposed Commercial/Industrial Subdivision
Chilliwack, BC

CLIENT: TRACKSIDE HOLDINGS Ltd.

DATE: Feb. 2007
DESIGNED BY:
DRAWN BY: UY
SCALE: nts
PROJECT NO.: 807-0016

LEVELTON Engineering Solutions

DRAWING NO.: FIGURE 1



LEGEND

- AH-1 — APPROXIMATE AUGER HOLE LOCATIONS (LEVELTON JAN. 2007)
- SAH-1 — APPROXIMATE SUPPLEMENTAL AUGER HOLE LOCATIONS - PEAT DELINEATION (LEVELTON JAN. 2007)
- AH-12(MW) — APPROXIMATE MONITORING WELL LOCATIONS (LEVELTON JAN. 2007)
- CPT-7 — APPROXIMATE CONE PENETRATION TEST LOCATIONS (LEVELTON JAN. 2007)
- AH05-04 — APPROXIMATE AUGER HOLE LOCATIONS (AMEC SEPT. 2005)
- MW05-01 — APPROXIMATE MONITORING WELL LOCATIONS (AMEC SEPT. 2005)
- (1.0) — ORGANIC SOIL LAYER THICKNESS (FEET), WHERE APPLICABLE

REV	ISSUED FOR	DATE

TITLE: PARTIAL SITE PLAN SHOWING TEST HOLE LOCATIONS

PROJECT: Proposed Commercial/Industrial Subdivision
Lickman Road, Chilliwack, BC

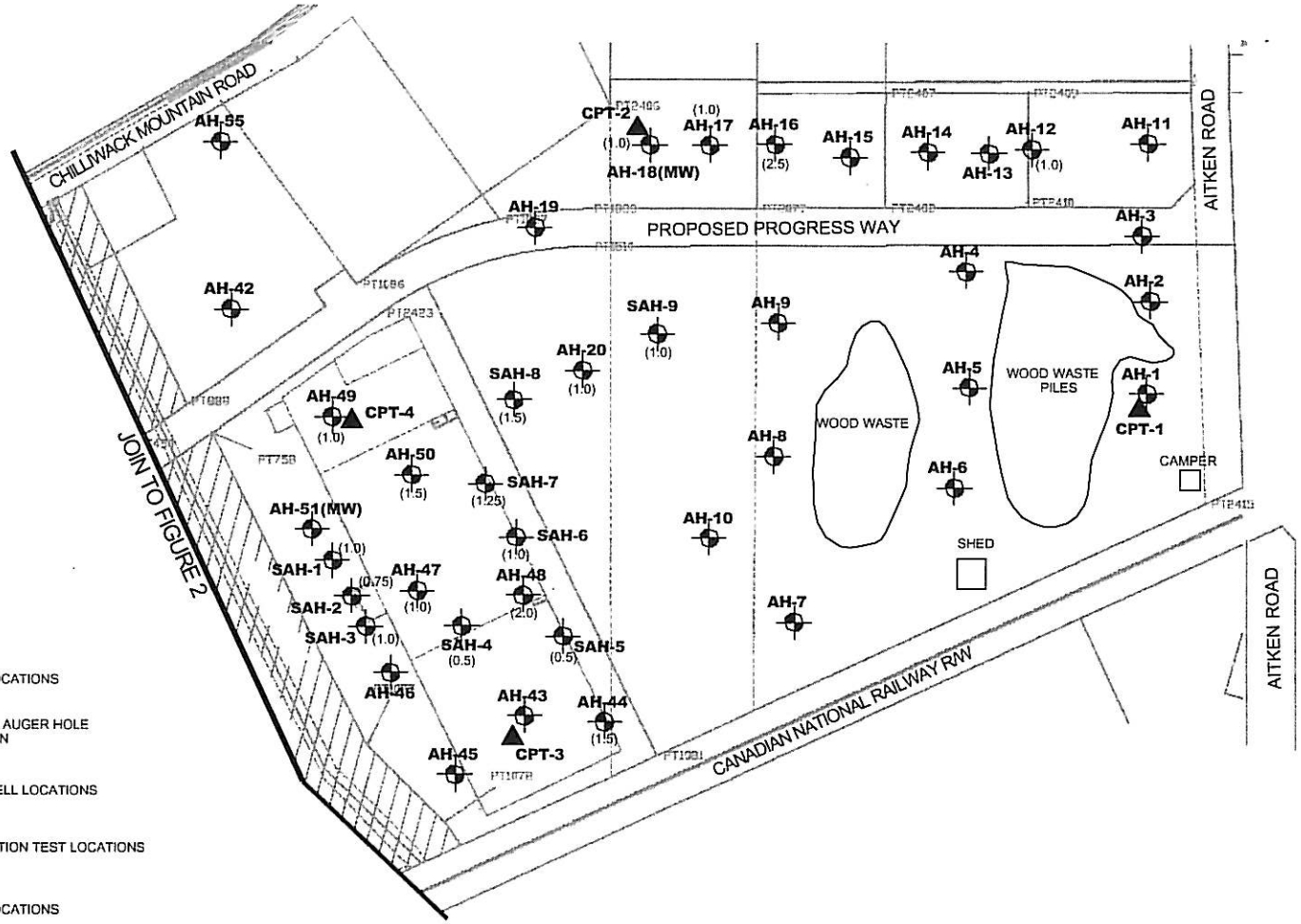
CLIENT: TRACKSIDE HOLDINGS Ltd.

[redacted]

DATE: Feb. 2007
DESIGNED BY:
DRAWN BY: JGV
CHECKED BY:
SCALE: nts
PROJECT No: 807-0016

LEVELTON

DRAWING No: FIGURE 2



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- CPT-7 — APPROXIMATE CONE PENETRATION TEST LOCATIONS (LEVELTON JAN. 2007)
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- MW05-01 — APPROXIMATE MONITORING WELL LOCATIONS (AMEC SEPT. 2005)
- (1.0) — ORGANIC SOIL LAYER THICKNESS (FEET), WHERE APPLICABLE

REV.	ISSUED FOR	DATE

TITLE: PARTIAL SITE PLAN SHOWING TEST HOLE LOCATIONS

PROJECT: Proposed Commercial/Industrial Subdivision
Lickman Road, Chilliwack, BC

CLIENT: TRACKSIDE HOLDINGS Ltd.

[redacted]

DATE: Feb. 2007
DESIGNED BY:
DRAWN BY: JGV
CHECKED BY:
SCALE: nts
PROJECT NO.: 807-0016

LEVELTON

DRAWING NO.: FIGURE 3

LEVELTON
Engineering Solutions
103-10292 60th Ave
Surrey BC V3S 3M2
Telephone: 604-533-2002
Fax: 604-533-0768

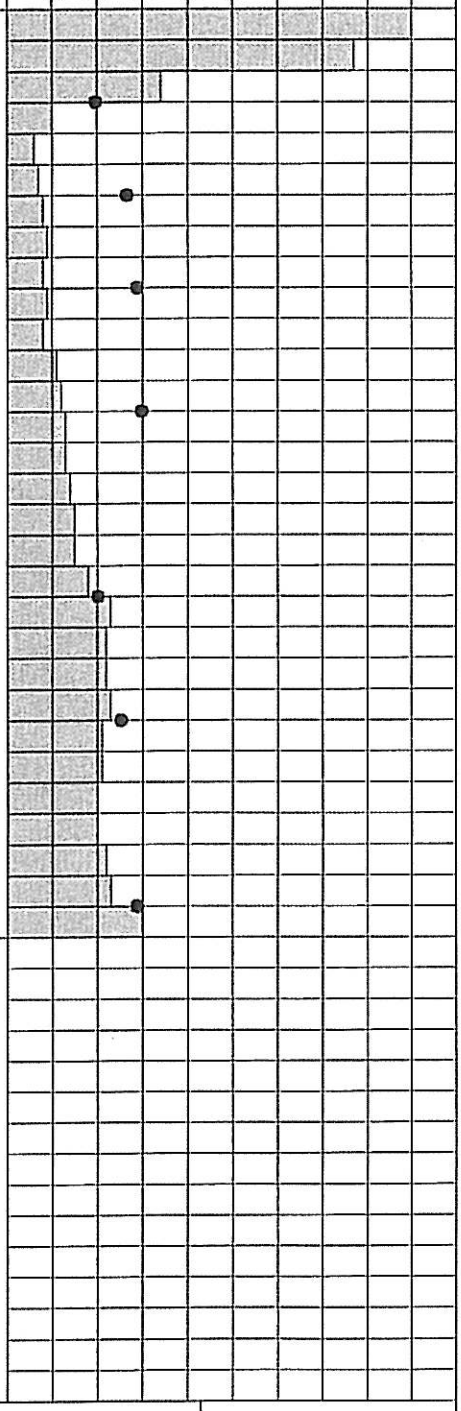
8180 Aitken Road
Chilliwack, BC
Proposed Commercial/Industrial Subdivision

AH1

Project No: 807-0016

Elev. 9.53 m

Depth (m)	Depth (ft)	Description	C	N	Type	Water Level
		Very dense, grey, gravel and sand, some cobble, FILL		90		
				77		
				34		
		Dense to compact, grey, sand, trace to some gravel, FILL		10	AU	
				6		
	5	Very stiff to stiff, grey, SILTY CLAY		7		
		pocket pen = 2.0 tsf at 6.0 feet		8	AU	
2				9		
		pocket pen = 2.5 tsf at 7.0 feet		8		
		pocket pen = 2.0 tsf at 8.0 feet		9	AU	
	10	pocket pen = 1.5 tsf at 9.0 feet		8		
				11		
		pocket pen = 1.0 tsf at 11.0 feet		12		
		pocket pen = 0.75 tsf at 12.0 feet				
4		pocket pen = 1.0 tsf at 13.0 feet		13	AU	
		Firm to stiff, grey, CLAYEY SILT, trace black organic silt at 14 feet		13		
	15	pocket pen = 0.75 tsf at 14.0 feet		14		
		pocket pen = 0.75 tsf at 15.0 feet		15		
		pocket pen = 0.75 tsf at 16.0 feet		15		
		pocket pen = 0.75 tsf at 17.0 feet		18		
		pocket pen = 0.5 tsf at 18.0 feet		23	AU	
6	20	pocket pen = 1.25 tsf at 19.0 feet		22		
				22		
		pocket pen = 0.75 tsf at 21.0 feet		23		
		pocket pen = 0.5 tsf at 22.0 feet		21	AU	
		pocket pen = 0.5 tsf at 23.0 feet		21		
	25	pocket pen = 0.75 tsf at 24.0 feet		20		
8				20		
				22		
				23		
		Compact, grey, SILTY SAND		30	AU	
	30	Bottom of hole at 9.14 meters				
10						
	35					
12						
	40					
	45					



C: Condition of Sample
Good
Disturbed
No Recovery

Type: Type of Sampler
SPT : 2 in. standard
S : Shelby
FP : Fixed Piston
G : Grab
CORE

N: Number of Blows
WH : Weight of Hammer
WR : Weight of Rod
Standard Penetration Test : ASTM D1586
Hammer Type:

DYNAMIC CONE PENETRATION TEST:
Blow count no. of blows of a 140 lb (64 kg) hammer dropped 30in. (750mm) to produce 12in (300mm) of a 2in (50mm) diameter cone.

- Moisture Content %
- Plastic Limit
- Liquid Limit
- Ground Water Level
- Shear strength in kPa (Torvane or Penetrometer)
- Shear strength in kPa (Unconfined)
- Shear strength in kPa (field vane)
- Remolded strength in kPa
- Percent Passing # 200 sieve

Drill Method: Solid Stem Auger / DCPT
Date Drilled: 1/22/2007
By: AA

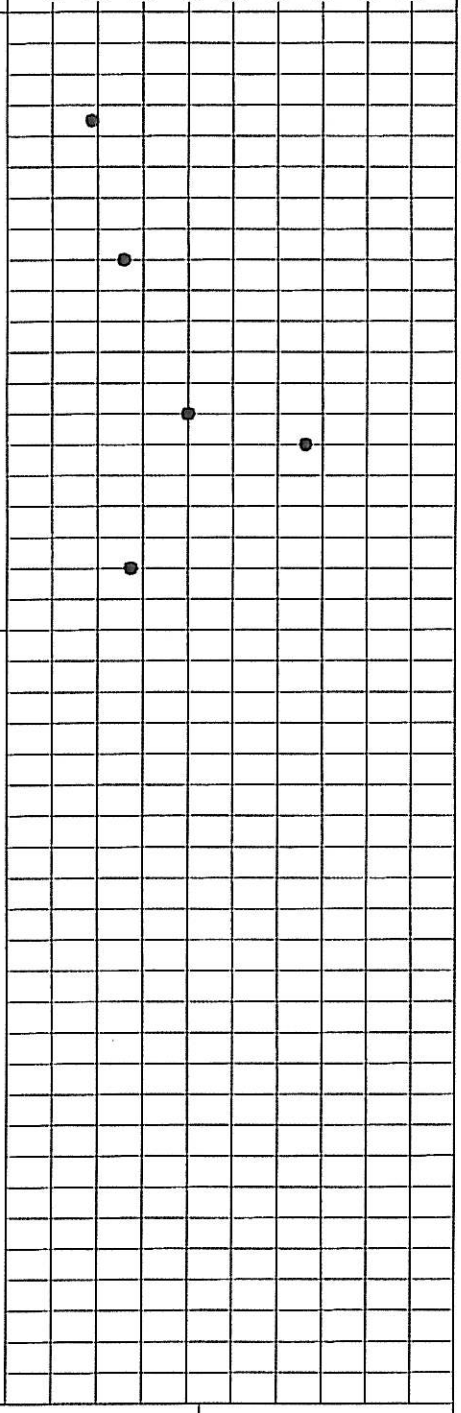
LEVELTON
Engineering Solutions
103-19292 60th Ave
Surrey BC V3S 3M2
Telephone: 604-533-2992
Fax: 604-533-0768

8180 Aitken Road
Chilliwack, BC
Proposed Commercial/Industrial Subdivision

AH2

Project No: 807-0016

Depth (m)	Depth (ft)	Description	C	N	Type	Water Level
Elev. 0.50 m						
		Dense, grey, gravel and sand FILL				
		Dense, brown, gravel and sand, some wood, FILL				
		Very stiff, brown grey, SILTY CLAY				
		pocket pen = 3.75 tsf at 3.0 feet			AU	
	5	Stiff, brown grey, SILTY CLAY				
		pocket pen = 1.5 tsf at 4.0 feet				
2		pocket pen = 1.5 tsf at 6.0 feet				
		pocket pen = 2.0 tsf at 7.0 feet				
		pocket pen = 1.5 tsf at 8.0 feet			AU	
	10	pocket pen = 3.0 tsf at 9.0 feet				
		pocket pen = 1.5 tsf at 11.0 feet				
4		Stiff to firm, grey, SILTY CLAY				
		pocket pen = 1.0 tsf at 12.0 feet			AU	
		pocket pen = 0.75 tsf at 13.0 feet			AU	
	15	trace to some brown organic silt at 14 feet				
		pocket pen = 1.5 tsf at 14.0 feet				
		pocket pen = 1.0 tsf at 15.0 feet				
		pocket pen = 0.75 tsf at 16.0 feet				
		pocket pen = 1.0 tsf at 17.0 feet				
		pocket pen = 1.25 tsf at 18.0 feet			AU	
6	20	pocket pen = 0.75 tsf at 19.0 feet				
		Bottom of hole at 6.10 meters				
	25					
8						
	30					
10						
	35					
12	40					
	45					



C: Condition of Sample
- Good
- Disturbed
- No Recovery

Type: Type of Sampler
- SPT : 2 in. standard
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- FP : Fixed Piston
- G : Grab
- CORE

N: Number of Blows
- WH : Weight of Hammer
- WR : Weight of Rod
- Standard Penetration Test : ASTM D1586
- Hammer Type:

- Moisture Content %
- Plastic Limit
- Liquid Limit
- Ground Water Level
- Shear strength in kPa (Torvane or Penetrometer)
- Shear strength in kPa (Unconfined)
- Shear strength in kPa (field vane)
- Remolded strength in kPa
- Percent Passing # 200 sieve

Drill Method: Solid Stem Auger

Date Drilled: 1/22/2007

By: AA

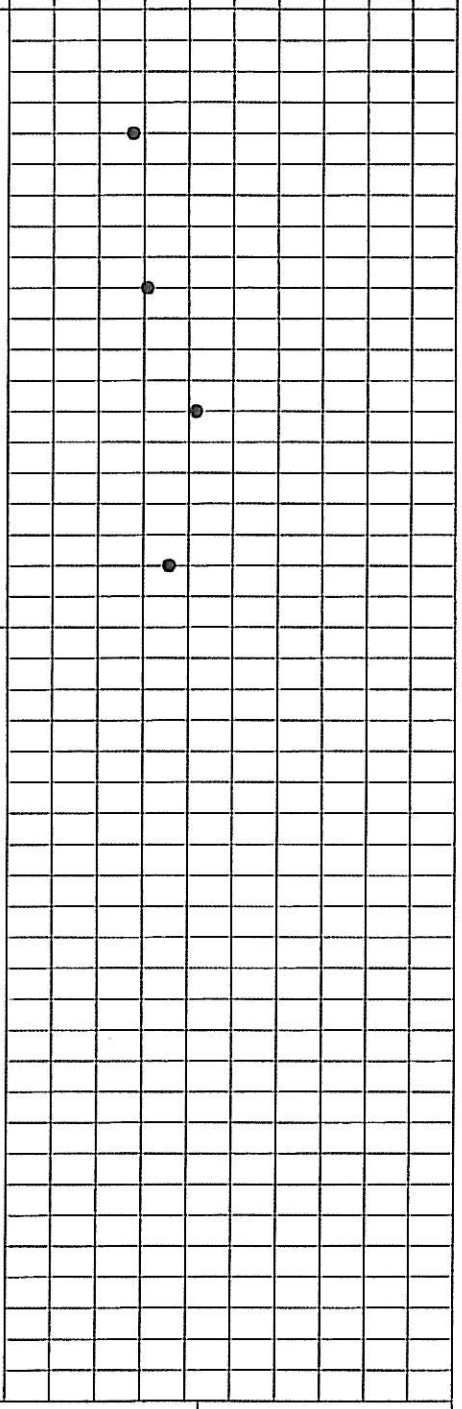
LEVELTON
Engineering Solutions
103-10292 00th Ave
Surrey BC V3S 3M2
Telephone: 604-533-2092
Fax: 604-533-0768

8180 Aitken Road
Chilliwack, BC
Proposed Commercial/Industrial Subdivision

AH3

Project No: 807-0016

Depth (m)	Depth (ft)	Description	C	N	Type	Water Level
Elev. 0.57 m						
		Dense, grey, gravel and sand, trace cobble, FILL				
		Stiff to firm, grey, SILTY CLAY pocket pen = 1.75 tsf at 4.0 feet			AU	
	5					
2		pocket pen = 1.25 tsf at 6.0 feet pocket pen = 1.5 tsf at 7.0 feet pocket pen = 1.0 tsf at 8.0 feet pocket pen = 2.0 tsf at 9.0 feet			AU	
	10					
		pocket pen = 1.75 tsf at 11.0 feet pocket pen = 0.75 tsf at 12.0 feet				
4		trace brown, organic silt pocket pen = 0.75 tsf at 13.0 feet			AU	
	15	pocket pen = 0.5 tsf at 14.0 feet pocket pen = 1.5 tsf at 16.0 feet pocket pen = 1.0 tsf at 17.0 feet				
		Loose to compact, grey, SILTY SAND			AU	
6	20					
		Bottom of hole at 6.10 meters				
	25					
8						
	30					
10						
	35					
12						
	40					
	45					



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- Shear strength in kPa (Torvane or Penetrometer)
- Shear strength in kPa (Unconfined)
- Shear strength in kPa (field vane)
- Remolded strength in kPa
- Percent Passing # 200 sieve

Drill Method: Solid Stem Auger
Date Drilled: 1/22/2007
By: AA

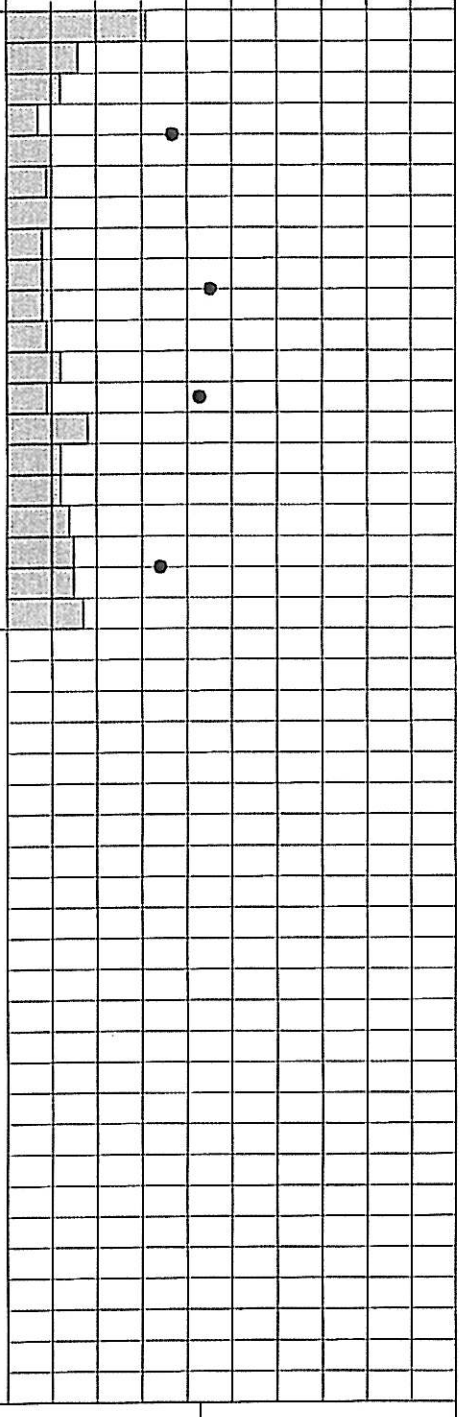
LEVELTON
Engineering Solutions
103-10202 80th Ave
Surrey BC V3S 3M2
Telephone: 604-533-2992
Fax: 604-533-0700

8180 Aitken Road
Chilliwack, BC
Proposed Commercial/Industrial Subdivision

AH4

Project No: 807-0016

Depth (m)	Depth (ft)	Description	C	N	Type	Water Level
Elev. 0.19 m						
		Dense, grey, gravel and sand, some cobble, **FILL**		31		
				16		
		Very stiff to stiff, grey, **SILTY CLAY**		12		
		pocket pen = 2.25 tsf at 2.0 feet		7		
		pocket pen = 2.25 tsf at 3.0 feet				
		pocket pen = 2.75 tsf at 4.0 feet		10	AU	
	5			9		
				10		
2		pocket pen = 2.5 tsf at 6.0 feet		8		
		pocket pen = 1.0 tsf at 7.0 feet		8		
		pocket pen = 1.25 tsf at 8.0 feet				
		pocket pen = 1.75 tsf at 9.0 feet		8	AU	
	10			9		
				12		
		Loose to compact, grey, **SILTY SAND**		9		
4				18	AU	
				12		
	15			12		
				14		
				15		
		Stiff, grey, **CLAYEY SILT**				
		pocket pen = 1.0 tsf at 18.0 feet		15	AU	
				17		
6	20					
		Bottom of hole at 6.10 meters				
	25					
8						
	30					
10						
	35					
12						
	40					
	45					



C: Condition of Sample
- Good
- Disturbed
- No Recovery

Type: Type of Sampler
- SPT : 2 in. standard
- S : Shelby
- FP : Fixed Piston
- G : Grab
- CORE

N: Number of Blows
- WH : Weight of Hammer
- WR : Weight of Rod
- Standard Penetration Test : ASTM D1586
- Hammer Type:

DYNAMIC CONE PENETRATION TEST: Blow count no. of blows of a 140 lb (64 kg) hammer dropped 30in. (750mm) to produce 12in (300mm) of a 2in (50mm) diameter cone.

- Moisture Content %
- Plastic Limit
- Liquid Limit
- Ground Water Level
- Shear strength in kPa (Torvane or Penetrometer)
- Shear strength in kPa (Unconfined)
- Shear strength in kPa (field vane)
- Remolded strength in kPa
- Percent Passing # 200 sieve

Drill Method: Solid Stem Auger / DCPT

Date Drilled: 1/22/2007

By: AA

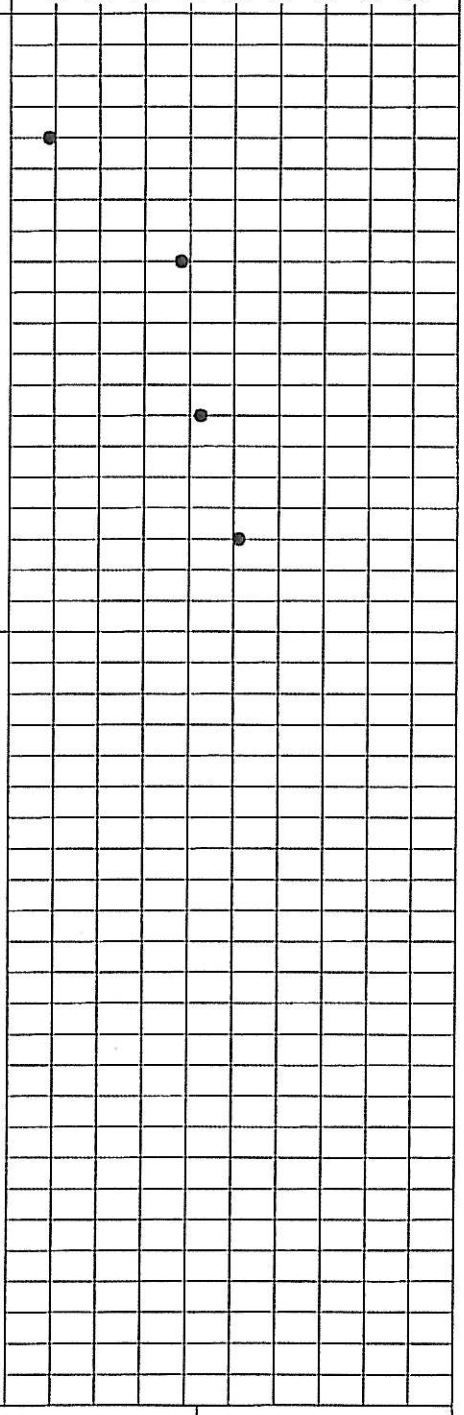
LEVELTON
Engineering Solutions
103-19292 60th Ave
Surrey BC V3S 3M2
Telephone: 604-533-2992
Fax: 604-533-0768

8180 Aitken Road
Chilliwack, BC
Proposed Commercial/Industrial Subdivision

AH5

Project No: 807-0016

Depth (m)	Depth (ft)	Description	C	N	Type	Water Level
Elev. 10.09 m						
		Dense, grey, gravel and sand, some cobble **FILL**				
	5				AU	
		Very stiff, grey, **SILTY CLAY** pocket pen = 2.25 tsf at 6.0 feet pocket pen = 3.5 tsf at 7.0 feet pocket pen = 2.0 tsf at 8.0 feet pocket pen = 2.5 tsf at 9.0 feet				
2					AU	
	10					
		Stiff, grey, **SILTY CLAY** pocket pen = 1.5 tsf at 11.0 feet pocket pen = 1.25 tsf at 12.0 feet pocket pen = 1.5 tsf at 13.0 feet				
4					AU	
		Firm, grey, **CLAYEY SILT** pocket pen = 0.5 tsf at 14.0 feet				
	15					
		Loose to compact, grey, **SILTY SAND**				
					AU	
6	20					
		Bottom of hole at 6.10 meters				
	25					
8						
	30					
10						
	35					
12	40					
	45					



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- Hammer Type:

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- Shear strength in kPa (Unconfined)
- Shear strength in kPa (field vane)
- Remolded strength in kPa
- Percent Passing # 200 sieve

Drill Method: Solid Stem Auger
Date Drilled: 1/22/2007
By: AA

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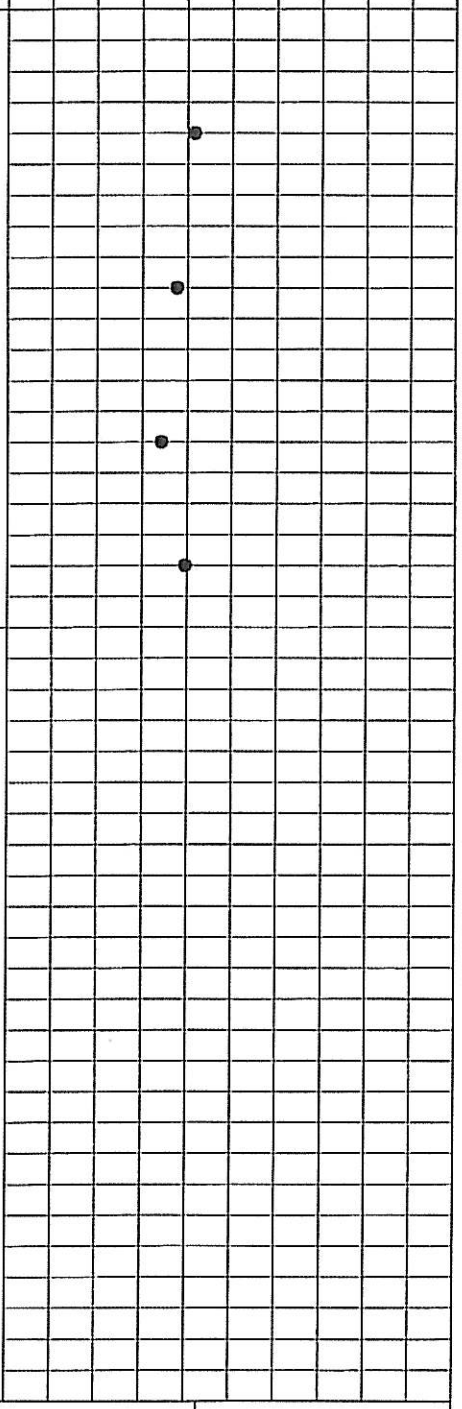
Chilliwack, BC
Proposed Commercial/Industrial Subdivision

AH6

Project No: 807-0016

Depth (m)	Depth (ft)	Description	C	N	Type	Water Level
Elev. 0.98 m						
		Dense, grey, sand, some gravel, trace cobble **FILL**				
		Dense, brown, sand, some gravel **FILL**				
		Stiff, grey, **SILTY CLAY**				
	5	pocket pen = 1.75 tsf at 4.0 feet			AU	
2		pocket pen = 1.75 tsf at 6.0 feet				
		pocket pen = 1.5 tsf at 7.0 feet				
		pocket pen = 2.25 tsf at 8.0 feet				
	10	pocket pen = 2.25 tsf at 9.0 feet			AU	
		pocket pen = 1.0 tsf at 11.0 feet				
4		Firm, grey, **SILTY CLAY**				
		Loose to compact, grey, **SILTY SAND**				
	15				AU	
					AU	
6	20					
		Bottom of hole at 6.10 meters				
	25					
8						
	30					
10						
	35					
12	40					
	45					



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Disturbed
No Recovery

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S : Shelby
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G : Grab
CORE

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WR : Weight of Rod
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Hammer Type:

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- Plastic Limit
- Liquid Limit
- Ground Water Level
- Shear strength in kPa (Torvane or Penetrometer)
- Shear strength in kPa (Unconfined)
- Shear strength in kPa (field vane)
- Remolded strength in kPa
- Percent Passing # 200 sieve

Drill Method: Solid Stem Auger
Date Drilled: 1/22/2007
By: AA

LEVELTON
Engineering Solutions
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Telephone: 604-533-2092
Fax: 604-533-0768

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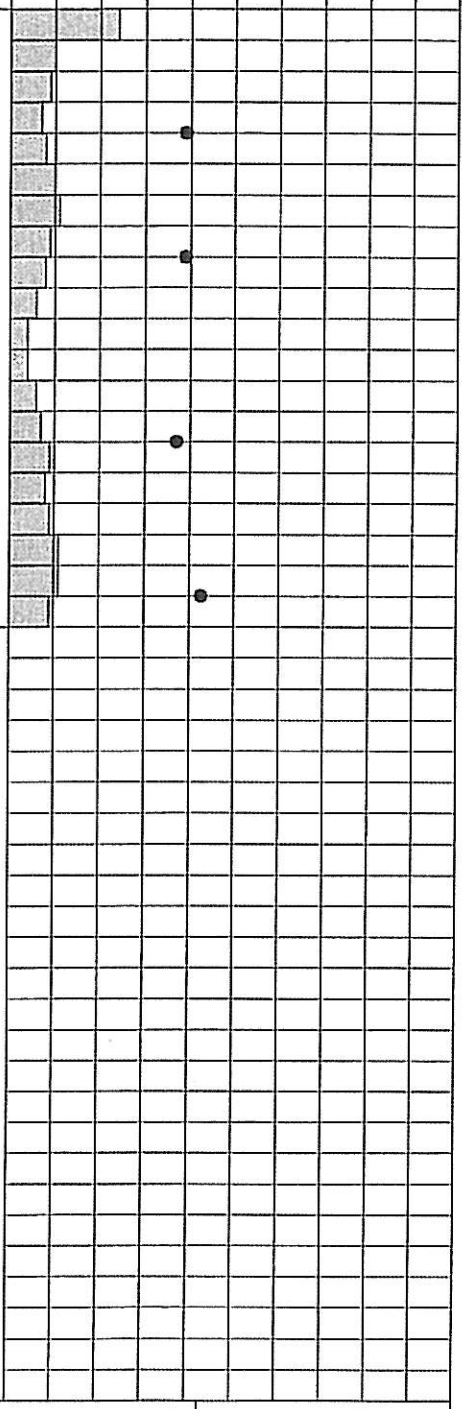
Chilliwack, BC
Proposed Commercial/Industrial Subdivision

AH7

Project No: 807-0016

Depth (m)	Depth (ft)	Description	C	N	Type	Water Level
Elev. 8.68 m						
		Compact, grey, gravel and sand, trace cobble **FILL**		24		
				10		
		Stiff, brown grey, **SILTY CLAY**		9		
		Very stiff, grey, **SILTY CLAY**		7		
		pocket pen = 2.25 tsf at 2.0 feet				
		pocket pen = 2.75 tsf at 3.0 feet				
		pocket pen = 3.0 tsf at 4.0 feet		8	AU	
1.5	5			10		
				11		
2		pocket pen = 3.0 tsf at 6.0 feet				
		pocket pen = 2.0 tsf at 7.0 feet		9		
		pocket pen = 2.75 tsf at 8.0 feet		8	AU	
		pocket pen = 2.0 tsf at 9.0 feet		6		
3	10	Firm, grey, **SILTY CLAY**		4		
		pocket pen = 0.75 tsf at 11.0 feet		4		
		pocket pen = 0.75 tsf at 12.0 feet		6		
4		Loose to compact, grey, **SILTY SAND**		7		
	15			9	AU	
				8		
				9		
		Firm to stiff, grey, **SILTY CLAY**		11		
		pocket pen = 0.75 tsf at 17.0 feet		11		
		pocket pen = 1.25 tsf at 18.0 feet				
		pocket pen = 1.25 tsf at 19.0 feet		9	AU	
6	20					
		Bottom of hole at 6.10 meters				
	25					
8						
	30					
10						
	35					
12						
	40					
	45					



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- Shear strength in kPa (field vane)
- Remolded strength in kPa
- Percent Passing # 200 sieve

Drill Method: Solid Stem Auger / DCPT
Date Drilled: 1/22/2007
By: AA

LOG PER PAGE PLUS HEADER PER LEVELTON GDT 2/12/07

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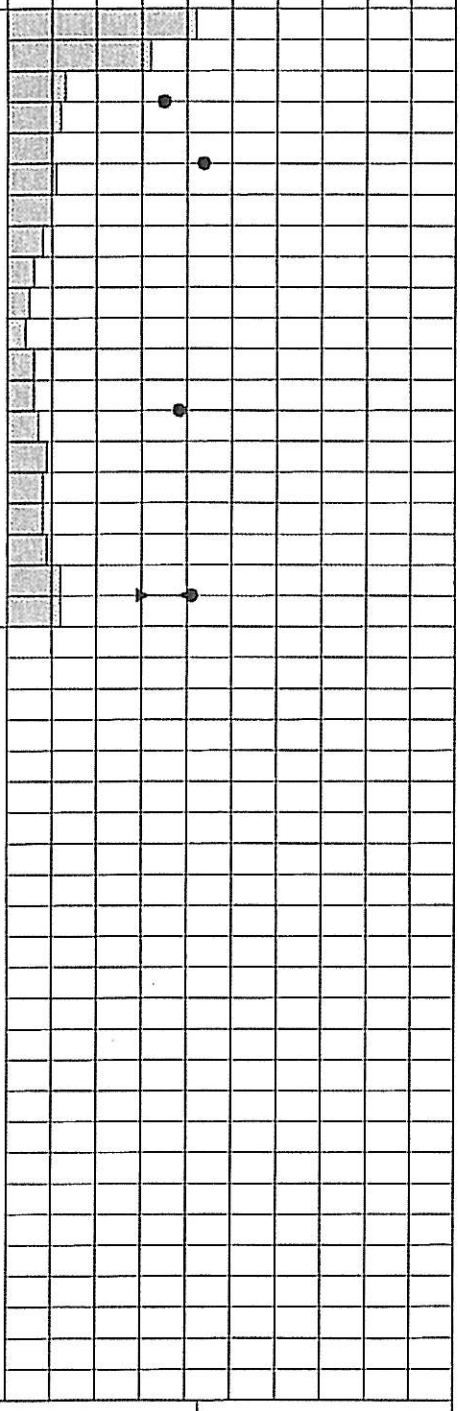
Proposed Commercial/Industrial Subdivision

AH8

Project No: 807-0016

Depth (m)	Depth (ft)	Description	C	N	Type	Water Level
Elev. 0.02 m						
		Dense, grey, gravel and sand, trace cobble **FILL**		42, 32		
		Very stiff, grey, **SILTY CLAY**		13		
		pocket pen = 3.0 tsf at 2.0 feet				
		pocket pen = 3.0 tsf at 3.0 feet		12, 10	AU	
	5	pocket pen = 2.75 tsf at 4.0 feet		11, 10	AU	
2		pocket pen = 2.5 tsf at 6.0 feet		8		
		pocket pen = 2.5 tsf at 7.0 feet		6		
		Stiff, grey, **SILTY CLAY**		5		
	10	pocket pen = 1.75 tsf at 8.0 feet		4		
		pocket pen = 1.75 tsf at 9.0 feet		6		
		pocket pen = 1.0 tsf at 11.0 feet		6		
4		Loose to compact, grey, **SILTY SAND**		7, 9	AU	
	15	Firm, grey, **SILTY CLAY**		8		
		pocket pen = 1.0 tsf at 17.0 feet		8		
		pocket pen = 1.25 tsf at 18.0 feet		9		
		pocket pen = 1.0 tsf at 19.0 feet		12		
		Soft, grey, **SILTY CLAY**				
6	20			12	AU	
		Bottom of hole at 6.10 meters				
	25					
8						
	30					
10						
	35					
12						
	40					
	45					



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- Shear strength in kPa (field vane)
- Remolded strength in kPa
- Percent Passing # 200 sieve

Drill Method: Solid Stem Auger / DCPT

Date Drilled: 1/23/2007

By: AA

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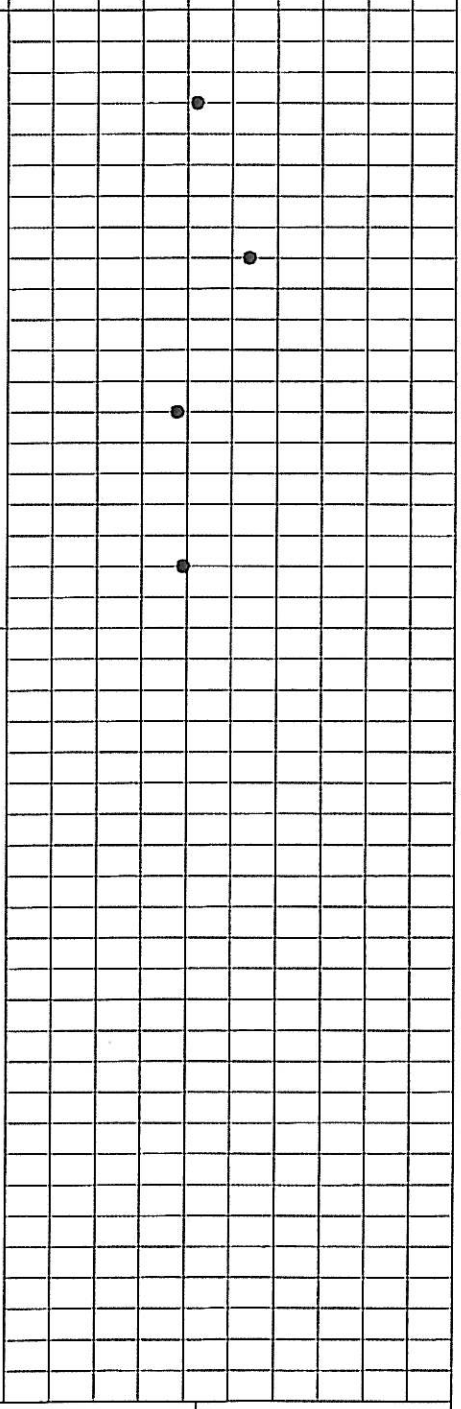
8180 Aitken Road
Chilliwack, BC
Proposed Commercial/Industrial Subdivision

AH9

Project No: 807-0016

Depth (m)	Depth (ft)	Description	C	N	Type	Water Level
Elev. 8.78 m		Dense, grey, gravelley sand, trace cobble **FILL**				
		Very stiff, grey, **SILTY CLAY** pocket pen = 2.75 tsf at 3.0 feet			AU	
	5	pocket pen = 2.0 tsf at 4.0 feet				
2		pocket pen = 2.5 tsf at 6.0 feet				
		Stiff, grey, **SILTY CLAY**, trace wood, trace dark brown, organic silt pocket pen = 1.5 tsf at 7.0 feet pocket pen = 1.0 tsf at 8.0 feet pocket pen = 1.0 tsf at 9.0 feet			AU	
	10					
		Loose to compact, grey, **SILTY SAND**				
4					AU	
	15					
		Firm to stiff, grey, **SILTY CLAY** pocket pen = 1.5 tsf at 19.0 feet			AU	
6	20					
		Bottom of hole at 6.10 meters				
	25					
8						
	30					
10						
	35					
12	40					
	45					



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Disturbed
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CORE

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- Liquid Limit
- Ground Water Level
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- Remolded strength in kPa
- Percent Passing # 200 sieve

Drill Method: Solid Stem Auger
Date Drilled: 1/23/2007
By: AA

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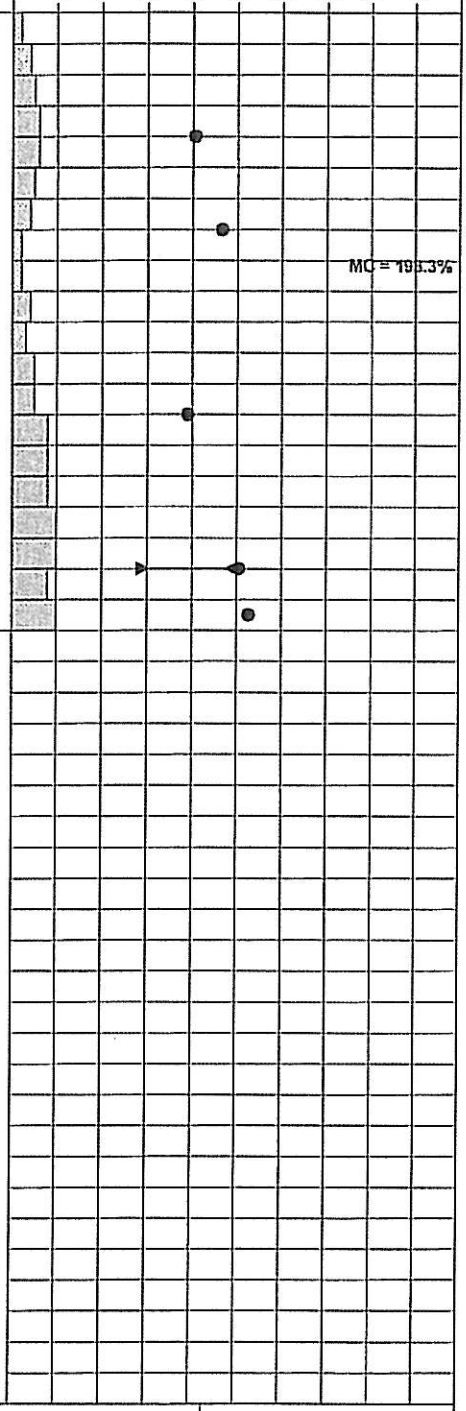
8180 Aitken Road
Chilliwack, BC
Proposed Commercial/Industrial Subdivision

AH10

Project No: 807-0016

Elev. 0.31 m

Depth (m)	Depth (ft)	Description	C	N	Type	Water Level
		TOPSOIL		2		
		Very stiff, brown, SILTY CLAY		4		
		pocket pen = 2.0 tsf at 2.0 feet		5		
		pocket pen = 2.25 tsf at 3.0 feet		6		
		Stiff, brown grey, SILTY CLAY				
		pocket pen = 1.5 tsf at 4.0 feet		6	AU	
	5	pocket pen = 1.0 tsf at 6.0 feet		5		
		pocket pen = 1.0 tsf at 7.0 feet		4		
2		pocket pen = 1.0 tsf at 8.0 feet				
				2	AU	
		PEAT		2	AU	
		Firm, grey, SILTY CLAY		4		
	10	pocket pen = 0.75 tsf at 11.5 feet		3		
				5		
				5		
4		Loose to compact, grey, SILTY SAND		8	AU	
				8		
	15	Firm, grey, SILTY CLAY		8		
		pocket pen = 1.25 tsf at 16.0 feet		10		
		pocket pen = 1.25 tsf at 17.0 feet		10		
		pocket pen = 0.75 tsf at 18.0 feet				
		pocket pen = 0.75 tsf at 19.0 feet				
		trace volcanic ash at 19.5 feet		8	AU	
				10		
6	20				AU	
		Bottom of hole at 6.10 meters				
	25					
8						
	30					
10						
	35					
12						
	40					
	45					



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- Remolded strength in kPa
- Percent Passing # 200 sieve

Drill Method: Solid Stem Auger / DCPT
Date Drilled: 1/23/2007
By: AA

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Engineering Solutions
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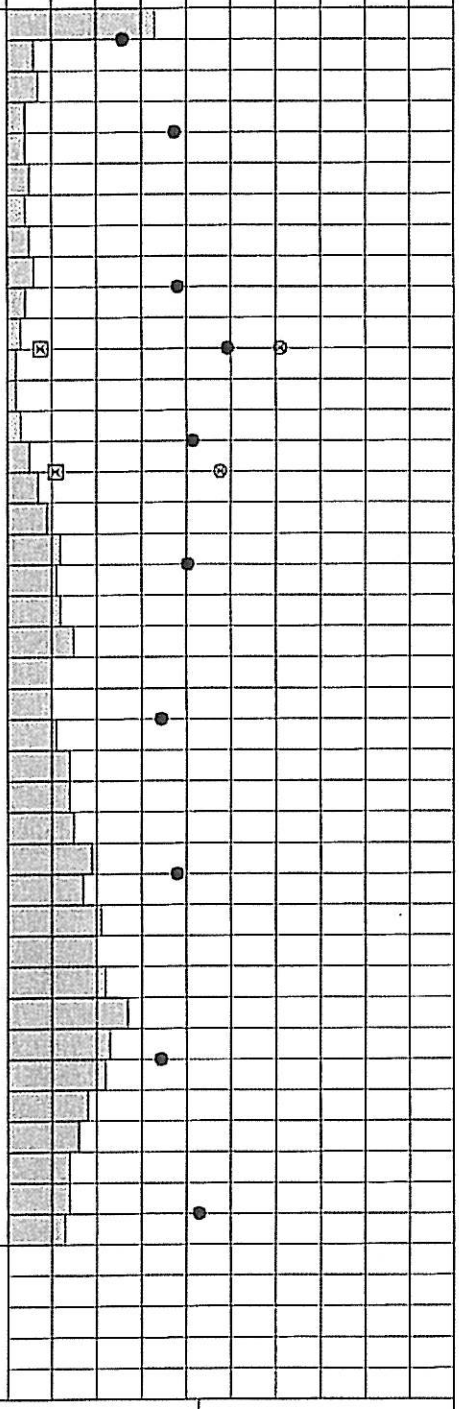
Proposed Commercial/Industrial Subdivision

AH11

Project No: 807-0016

Elev. 0.34 m

Depth (m)	Depth (ft)	Description	C	N	Type	Water Level
		Dense, grey, silty, gravelly sand, trace wood, trace cobble, FILL		33		
				6	AU	
		Stiff, grey, SILTY CLAY		7		
		pocket pen = 1.25 tsf at 2.0 feet		4		
		pocket pen = 1.0 tsf at 3.0 feet				
		pocket pen = 1.25 tsf at 4.0 feet		4	AU	
	5			5		
				4		
2		pocket pen = 1.25 tsf at 6.0 feet		5		
		pocket pen = 1.5 tsf at 7.0 feet		6		
		pocket pen = 1.5 tsf at 8.0 feet				
				4	AU	
	10			3		
		Shear Vane@11 feet=1275psf. Remold=157psf.		2	AU	
				2		
4				3		
		pocket pen = 0.75 tsf at 13.0 feet				
		Shear Vane@15 feet=995psf. Remold=227psf.		5	AU	
	15			7		
		Firm, grey, SANDY SILT, some clay		9		
				12		
				11	AU	
				12		
6	20			15		
				10		
		Firm to stiff, grey, SILTY CLAY, some sand		10		
				11	AU	
				14		
	25			14		
8				15		
		Compact, grey, SAND, some silt, some clay		19		
				17	AU	
		Stiff, grey, SILTY CLAY, some sand		21		
	30			20		
		Stiff, grey, SANDY SILT		22		
				27		
10		Compact, grey, SILTY SAND, trace wood at 34.0 and 35.0 feet		23		
				22	AU	
	35			18		
		Stiff, grey, SANDY SILT		16		
				14		
				14		
12		Stiff, grey, CLAYEY SILT		13	AU	
	40					
		Bottom of hole at 12.19 meters				
	45					



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Drill Method: Solid Stem Auger / DCPT
Date Drilled: 1/19/2007
By: AA

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Engineering Solutions
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8180 Aitken Road
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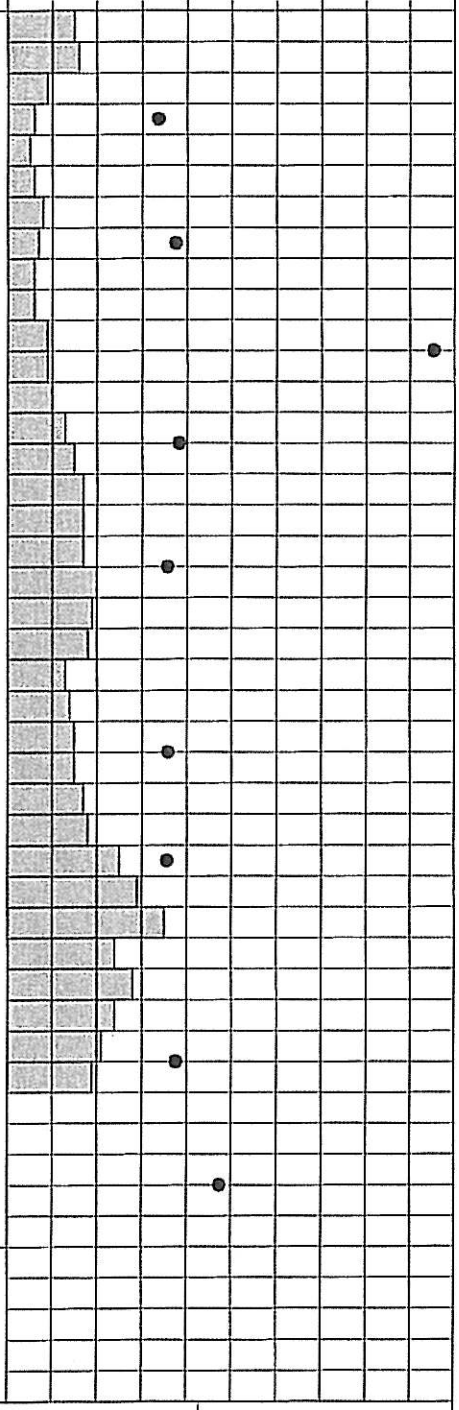
Proposed Commercial/Industrial Subdivision

AH12

Project No: 807-0016

Elev. 0.71 m

Depth (m)	Depth (ft)	Description	C	N	Type	Water Level
		Compact, grey, gravel and sand, some cobble FILL		15, 16, 9, 6		
		Very stiff, brown grey, SILTY CLAY pocket pen = 1.75 tsf at 3.5 feet pocket pen = 2.25 tsf at 4.5 feet pocket pen = 2.75 tsf at 6.0 feet pocket pen = 2.25 tsf at 7.0 feet		5, 6, 8, 7, 6	AU, AU	
		Stiff, brown grey, SILTY CLAY pocket pen = 1.0 tsf at 9.0 feet		6, 9		
		Stiff, grey, SILTY CLAY, trace brown organic silt pocket pen = 1.0 tsf at 12.0 feet		9, 10	AU	
		Stiff, grey, SILTY CLAY pocket pen = 1.0 tsf at 13.0 feet pocket pen = 1.25 tsf at 14.0 feet		13, 15	AU	
		Stiff, grey, SILTY CLAY, some sand		17, 17, 17, 20, 19, 18	AU	
		Stiff, grey, SILTY CLAY pocket pen = 1.0 tsf at 22.0 feet pocket pen = 1.25 tsf at 24.0 feet		13, 14, 15, 15, 17, 18	AU	
		Compact, grey, SILTY SAND to sandy silt		25, 29, 35	AU	
		Compact, grey, SILTY SAND		24, 28		
		Stiff, grey, SANDY SILT		24, 21, 19	AU	
		Firm, grey, SILTY CLAY				
		Firm to stiff, grey, SILTY CLAY pocket pen = 0.75 tsf at 37.0 feet pocket pen = 1.25 tsf at 38.0 feet pocket pen = 1.0 tsf at 39.0 feet trace organic silt at 38.5 feet			AU	
		Bottom of hole at 12.19 meters				



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- Percent Passing # 200 sieve

Drill Method: Solid Stem Auger / DCPT
Date Drilled: 1/19/2007
By: AA

LEVELTON
Engineering Solutions
103-19292 60th Ave
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Fax: 604-533-0760

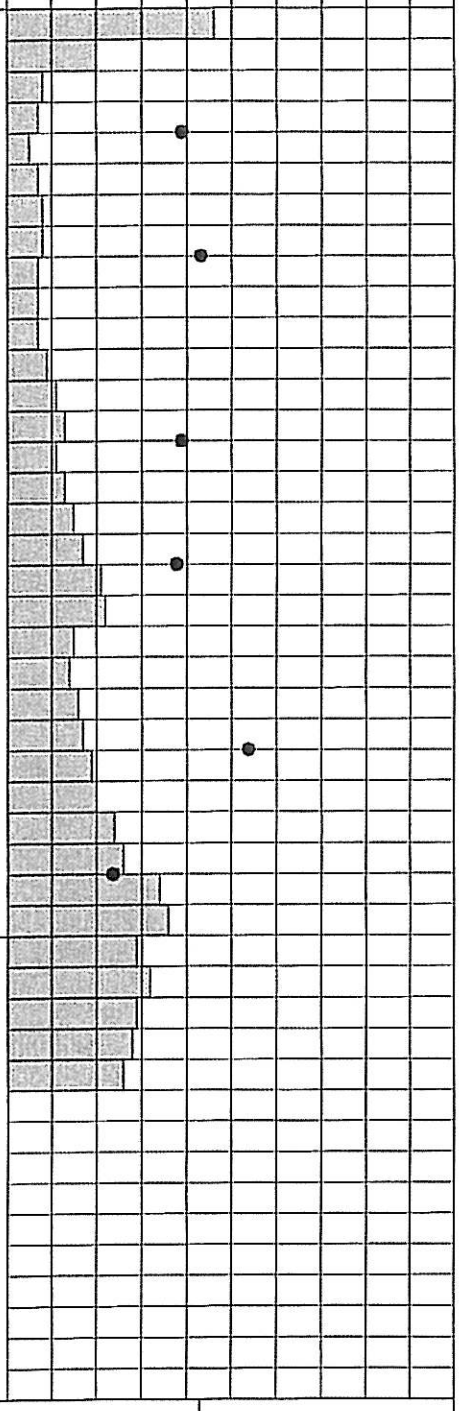
AH13

8180 Aitken Road
Chilliwack, BC
Proposed Commercial/Industrial Subdivision

Project No: 807-0016

Elev. 6.93 m

Depth (m)	Depth (ft)	Description	C	N	Type	Water Level
		Dense, grey, gravel and sand, trace cobble, FILL		46		
				20		
		Very stiff to stiff, brown grey, SILTY CLAY		8		
				7		
		pocket pen = 1.5 tsf at 3.0 feet				
		pocket pen = 1.25 tsf at 4.0 feet		5	AU	
	5			7		
				8		
2		pocket pen = 2.25 tsf at 6.0 feet		8		
		pocket pen = 2.0 tsf at 7.0 feet				
		pocket pen = 2.0 tsf at 8.0 feet		7	AU	
				7		
	10	pocket pen = 1.75 tsf at 9.0 feet		7		
				9		
		pocket pen = 0.75 tsf at 11.0 feet		11		
		pocket pen = 0.75 tsf at 12.0 feet				
4		pocket pen = 1.05 tsf at 13.0 feet		13		
		pocket pen = 1.25 tsf at 14.0 feet		11	AU	
	15			13		
		Compact, grey, SILTY SAND to sandy silt		15		
				17		
				21	AU	
				22		
6	20			15		
		Stiff, grey, SILTY CLAY		14		
		pocket pen = 1.0 tsf at 22.0 feet		16		
				17		
		pocket pen = 1.0 tsf at 23.0 feet				
		pocket pen = 1.25 tsf at 24.0 feet		19	AU	
	25			20		
		pocket pen = 1.0 tsf at 25.0 feet		24		
8				26		
		Compact, grey, SILTY SAND to sandy silt				
				34	AU	
				36		
	30			29		
		Bottom of hole at 9.14 meters		32		
				29		
10				28		
				26		
	35					
12						
	40					
	45					



C: Condition of Sample
- Good
- Disturbed
- No Recovery

Type: Type of Sampler
- SPT : 2 In. standard
- S : Shelby
- FP : Fixed Piston
- G : Grab
- CORE

N: Number of Blows
- WH : Weight of Hammer
- WR : Weight of Rod
- Standard Penetration Test : ASTM D1586
- Hammer Type:

DYNAMIC CONE PENETRATION TEST:
Blow count no. of blows of a 140 lb (64 kg) hammer dropped 30in. (750mm) to produce 12in (300mm) of a 2in (50mm) diameter cone.

- Moisture Content %
- Plastic Limit
- Liquid Limit
- Ground Water Level
- Shear strength in kPa (Torvane or Penetrometer)
- Shear strength in kPa (Unconfined)
- Shear strength in kPa (field vane)
- Remolded strength in kPa
- Percent Passing # 200 sieve

Drill Method: Solid Stem Auger / DCPT
Date Drilled: 1/19/2007
By: AA

LEVELTON
Engineering Solutions
103-19202 60th Ave
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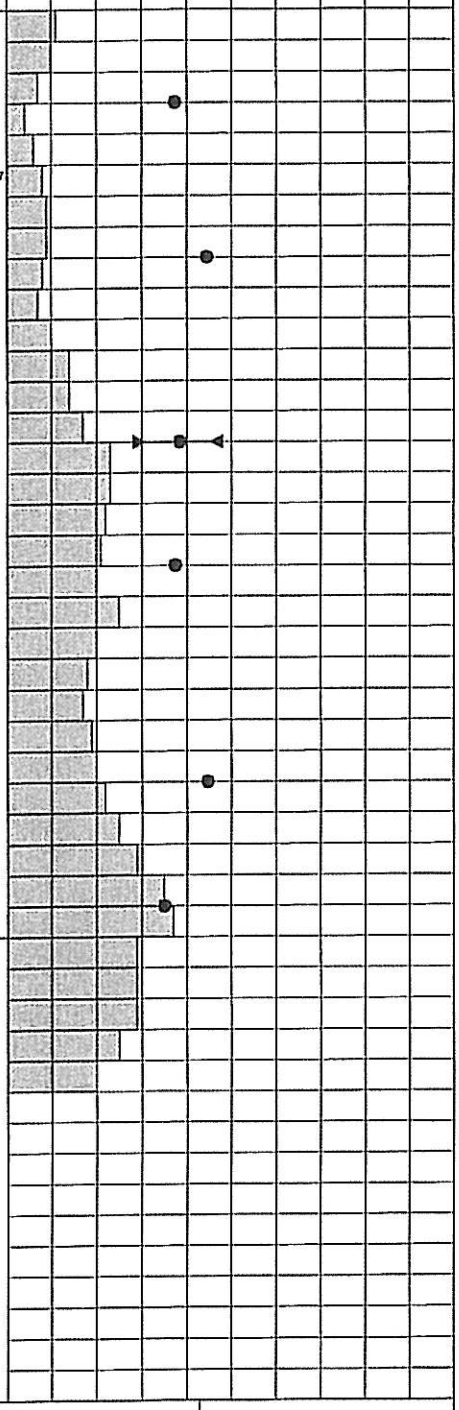
8180 Aitken Road
Chilliwack, BC
Proposed Commercial/Industrial Subdivision

AH14

Project No: 807-0016

Elev. 0.77 m

Depth (m)	Depth (ft)	Description	C	N	Type	Water Level
		Dense, brown, sand and gravel, some cobbles, trace silt, wet-saturated FILL		11, 10, 7		
		Stiff-firm, grey, CLAY, some silt, oxidation pockets throughout, some mottling, wet. PP=1.5tsf from 2.5-5.0 feet.		4, 6, 8, 9, 9	AU	Jan/22/07
	5					
2		PP=2.0tsf@7.0 feet.		8, 7, 10, 14, 14	AU	
	10	PP=1.5tsf@9 feet.				
		PP=1.0tsf@11 feet.				
4		Stiff, grey, CLAY, some silt, mottling present, wet-saturated.		17, 23	AU	
	15	Compact, grey, SILTY SAND to sandy silt, sand and silt lenses present, saturated.		23, 22, 21, 20, 25	AU	
6	20			20, 18		
		Stiff, grey, CLAY, trace silt, wet, uniform color.		17, 19, 20, 22, 25, 29, 35	AU	
	25					
8						
		Compact, saturated, grey, SANDY SILT, some sand lenses.		37, 29	AU	
	30	End Augerhole, hole flooded to 5 feet.		29, 29, 25, 20		
10		PP=Pocket Penetrometer. Bottom of hole at 9.14 meters				
	35					
12	40					
	45					



C: Condition of Sample
- Good
- Disturbed
- No Recovery

Type: Type of Sampler
- SPT : 2 in. standard
- S : Shelby
- FP : Fixed Piston
- G : Grab
- CORE

N: Number of Blows
- WH : Weight of Hammer
- WR : Weight of Rod
- Standard Penetration Test : ASTM D1586
- Hammer Type:

DYNAMIC CONE PENETRATION TEST: Blow count no. of blows of a 140 lb (64 kg) hammer dropped 30in. (750mm) to produce 12in (300mm) of a 2in (50mm) diameter cone.

- Moisture Content %
- Plastic Limit
- Liquid Limit
- Ground Water Level
- Shear strength in kPa (Torvane or Penetrometer)
- Shear strength in kPa (Unconfined)
- Shear strength in kPa (field vane)
- Remolded strength in kPa
- Percent Passing # 200 sieve

Drill Method: Solid Stem Auger / DCPT

Date Drilled: 1/22/2007

By: TBH

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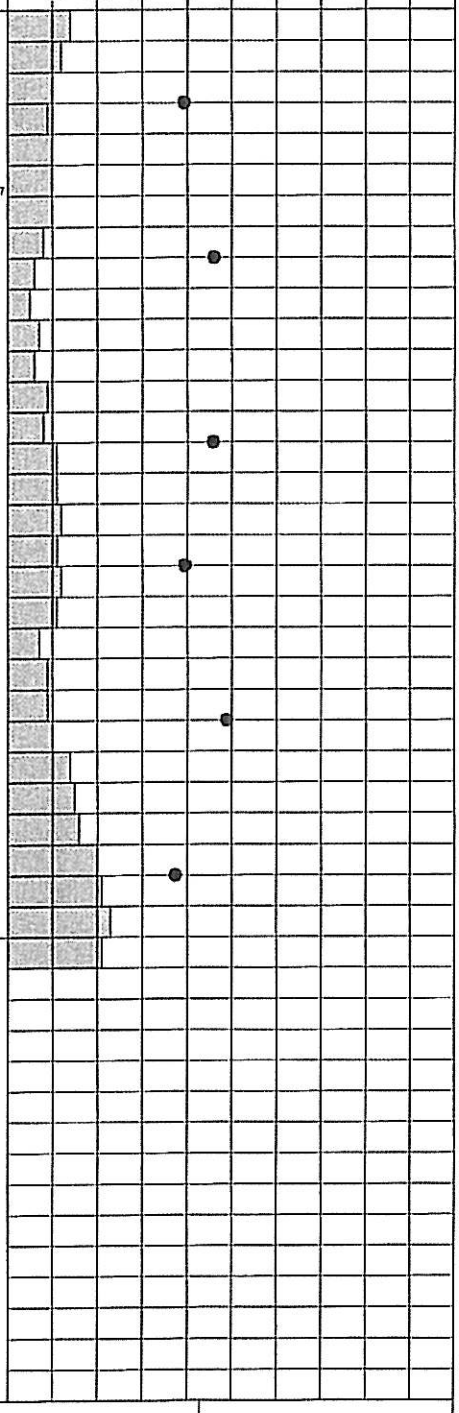
8180 Aitken Road
Chilliwack, BC
Proposed Commercial/Industrial Subdivision

AH15

Project No: 807-0016

Elev. 8.98 m

Depth (m)	Depth (ft)	Description	C	N	Type	Water Level
		Dense, brown, sand and gravel, trace of silt and cobbles, wet. FILL		14, 12, 10		
		Stiff-firm, grey, CLAY, some mottling and oxidation pockets, wet. PP=2.0tsf from 2-5 feet.		9, 10	AU	
	5	PP=1.0tsf from 5-7 feet.		10, 10		Jan/22/07
2		PP=0.5tsf from 7-10 feet.		8, 6, 5	AU	
	10			7, 6		
		Firm, grey, CLAY, some fine sand, trace of organics, traces of mottling, wet.		9, 8, 11	AU	
4	15	Stiff, grey, SANDY SILT, sand lenses present, wet.		11, 12, 11, 12	AU	
6	20	Stiff, grey, CLAY, trace of fine sand, some mottling, wet.		11, 7, 9, 9, 10	AU	
	25			14, 15, 16		
8		Compact, grey, SILTY FINE SAND, trace of silt lenses, saturated.		20, 21, 23	AU	
	30			21		
		End Auger Hole. Hole flooded to 5.5 feet. PP= Pocket Penetrometer. Bottom of hole at 9.14 meters				
10	35					
12	40					
	45					



C: Condition of Sample
- Good
- Disturbed
- No Recovery

Type: Type of Sampler
- SPT : 2 in. standard
- S : Shelby
- FP : Fixed Piston
- G : Grab
- CORE

N: Number of Blows
- WH : Weight of Hammer
- WR : Weight of Rod
- Standard Penetration Test : ASTM D1586
- Hammer Type:

DYNAMIC CONE PENETRATION TEST: Blow count no. of blows of a 140 lb (64 kg) hammer dropped 30in. (750mm) to produce 12in (300mm) of a 2in (50mm) diameter cone.

- Moisture Content %
- Plastic Limit
- Liquid Limit
- Ground Water Level
- Shear strength in kPa (Torvane or Penetrometer)
- Shear strength in kPa (Unconfined)
- Shear strength in kPa (field vane)
- Remolded strength in kPa
- Percent Passing # 200 sieve

Drill Method: Solid Stem Auger / DCPT
Date Drilled: 1/22/2007
By: TBH

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8180 Aitken Road
Chilliwack, BC
Proposed Commercial/Industrial Subdivision

AH16

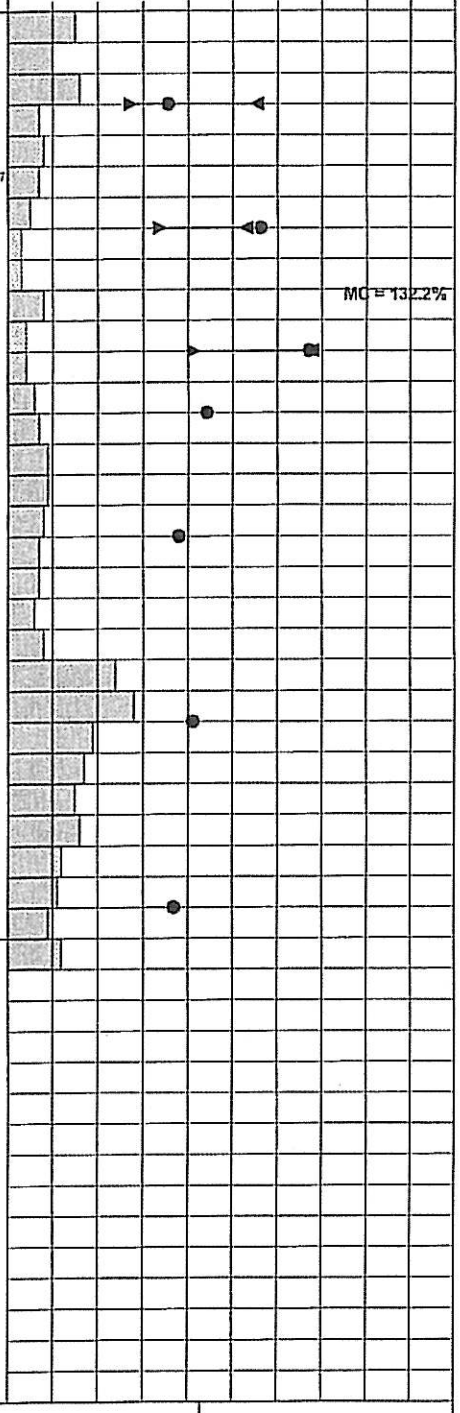
Project No: 807-0016

Elev. 8.47 m

Depth (m)	Depth (ft)	Description	C	N	Type
		Dense, grey/brown, sand and gravel, some cobbles, trace silt, wet. FILL		15, 10	
		Stiff-firm, grey, CLAY, wet, some mottling, traces of oxidation. PP=1.5-2.0taf from 1-5 feet.		16, 7, 8	AU
	5	PP=1.0tsf from 5-7 feet.		7, 5	
2		PP=0.5tsf from 7-9 feet.		3, 3	AU
	10	Soft, saturated dark brown PEAT, silty.		8	AU
		Soft, grey, ORGANIC SILT, saturated.		4, 4	AU
4		Firm, grey, CLAY, trace of fine sand, traces of mottling and oxidation. PP=0.5tsf throughout.		6, 7	AU
	15	Loose, grey, SILTY SAND to sandy silt, silt and sand lenses present, saturated.		9, 9, 8, 7	AU
6	20	Firm, grey, CLAY, traces of mottling, wet.		6, 6, 8	
		Compact, grey, SILTY SAND, saturated, silt lenses present.		24, 28, 19, 17, 15, 16, 12, 11, 9	AU
	30			12	
		End Auger Hole. Hole flooded to 5 feet. Bottom of hole at 9.14 meters			
8					
10	35				
12	40				
	45				

Water Level: Jan/22/07

MC = 132.2%



C: Condition of Sample
- Good
- Disturbed
- No Recovery

Type: Type of Sampler
- SPT : 2 in. standard
- S : Shelby
- FP : Fixed Piston
- G : Grab
- CORE

N: Number of Blows
- WH : Weight of Hammer
- WR : Weight of Rod
- Standard Penetration Test : ASTM D1586
- Hammer Type:

DYNAMIC CONE PENETRATION TEST:
Blow count no. of blows of a 140 lb (64 kg) hammer dropped 30in. (750mm) to produce 12in (300mm) of a 2in (50mm) diameter cone.

- Moisture Content %
- Plastic Limit
- Liquid Limit
- Ground Water Level
- Shear strength in kPa (Torvane or Penetrometer)
- Shear strength in kPa (Unconfined)
- Shear strength in kPa (field vane)
- Remolded strength in kPa
- Percent Passing # 200 sieve

Drill Method: Solid Stem Auger / DCPT
Date Drilled: 1/22/2007
By: TBH

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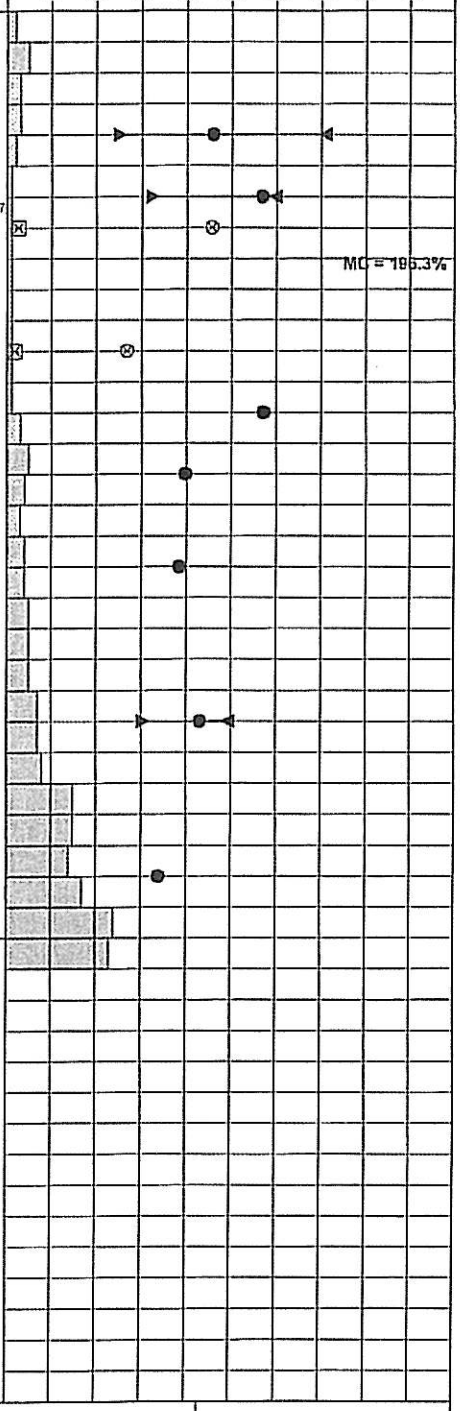
8180 Aitken Road
Chilliwack, BC
Proposed Commercial/Industrial Subdivision

AH17

Project No: 807-0016

Elev. 0.33 m

Depth (m)	Depth (ft)	Description	C	N	Type	Water Level
		Grass, rootlets, dark brown soft TOPSOIL, saturated.		2		
		Firm, grey, CLAY, some mottling, traces of oxidation, wet. PP=1.0tsf from 1-5 feet.		5		
				3		
				3		
				2	AU	
	5			1		
		Very soft, grey, CLAY, some mottling, saturated. Shear Vane@7 feet=952psf. Remold=52psf.		1	AU	Jan/22/07
2				1		
		Very soft, saturated grey, ORGANIC SILT/PEAT		1	AU	
		Firm, saturated, grey, CLAY, uniform color. Shear Vane@11 feet=559psf. Remold=35psf.		1		
	10			1		
				1		
				1		
4				3	AU	
		Firm, grey, SANDY SILT, saturated.		5		
	15			4	AU	
				3		
		Firm, grey, SILTY CLAY, mottling present, wet.		4		
				4	AU	
6	20			5		
				5		
				5		
				7		
				7	AU	
				8		
	25			15		
8		Compact, grey, SILTY SAND to sandy silt, interlayered, silt and sand lenses present.		15		
				14		
				17	AU	
				24		
	30			23		
		End Auger Hole. Hole flooded to 6 feet. Bottom of hole at 9.14 meters				
10						
	35					
12						
	40					
	45					



C: Condition of Sample
- Good
- Disturbed
- No Recovery

Type: Type of Sampler
- SPT : 2 in. standard
- S : Shelby
- FP : Fixed Piston
- G : Grab
- CORE

N: Number of Blows
- WH : Weight of Hammer
- WR : Weight of Rod
- Standard Penetration Test : ASTM D1586
- Hammer Type:

DYNAMIC CONE PENETRATION TEST:
Blow count no. of blows of a 140 lb (64 kg) hammer dropped 30in. (750mm) to produce 12in (300mm) of a 2in (50mm) diameter cone.

- Moisture Content %
- Plastic Limit
- Liquid Limit
- Ground Water Level
- Shear strength in kPa (Torvane or Penetrometer)
- Shear strength in kPa (Unconfined)
- Shear strength in kPa (field vane)
- Remolded strength in kPa
- Percent Passing # 200 sieve

Drill Method: Solid Stem Auger / DCPT
Date Drilled: 1/22/2007
By: TBH

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8180 Aitken Road
Chilliwack, BC
Proposed Commercial/Industrial Subdivision

AH18

Project No: 807-0016

Elev. 6.35 m

Depth (m)	Depth (ft)	Description	C	N	Type
		Grass, rootlets, dark brown, soft, TOPSOIL, saturated.		1, 3	
		Firm-very soft, grey, CLAY, trace of fine sand, wet-saturated, oxidation present. PP=1.5tsf from 1-3 feet. PP=1.0 tsf from 3-5 feet. PP=0.25tsf from 5-8 feet.		4, 4	AU
				3, 2	AU
				1	
				1	AU
		Very soft, brown, ORGANIC SILT, saturated.		1, 1	AU
		Firm, grey, CLAY, some silt, traces of mottling, wet-saturated.		2, 2	
				4, 4	AU
				7, 7	
				6, 6	AU
		Firm, grey, SILTY CLAY, traces of mottling, wet.		5, 6	
		Firm, grey, CLAY, trace-some silt, traces of mottling, wet.		6, 8	
				8, 9	AU
				8, 15	
		Compact, grey, SILTY SAND with silt lenses, saturated.		15, 15	
				15, 17	AU
		Stiff, grey, high plasticity CLAY, wet, traces of mottling.		17, 19	
				15, 13	AU
				10, 12	
				12, 14	AU
		Firm, grey/brown, CLAY, organic pockets present, wet.		12	
		Firm, grey, SILTY CLAY, wet.		12, 12, 13	

Piezo 1

Water Level: Jan/22/07

MC = 182.4%

End Auger Hole.
Hole flooded to 6 feet.
PP=Pocket Penetrometer.
Monitoring Well Installed to 15 feet.
Bottom of hole at 12.19 meters

C: Condition of Sample
- Good
- Disturbed
- No Recovery

Type: Type of Sampler
- SPT : 2 in. standard
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- FP : Fixed Piston
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- CORE

N: Number of Blows
- WH : Weight of Hammer
- WR : Weight of Rod
- Standard Penetration Test : ASTM D1586
- Hammer Type:

DYNAMIC CONE PENETRATION TEST: Blow count no. of blows of a 140 lb (64 kg) hammer dropped 30in. (750mm) to produce 12in (300mm) of a 2in (50mm) diameter cone.

- Moisture Content %
- Plastic Limit
- Liquid Limit
- Ground Water Level
- Shear strength in kPa (Torvane or Penetrometer)
- Shear strength in kPa (Unconfined)
- Shear strength in kPa (field vane)
- Remolded strength in kPa
- Percent Passing # 200 sieve

- Bentonite/Grout Plug
- Solid Pipe
- Cuttings
- Slotted Pipe
- Sand/Pea-Gravel

Drill Method: Solid Stem Auger / DCPT
Date Drilled: 1/22/2007
By: TBH

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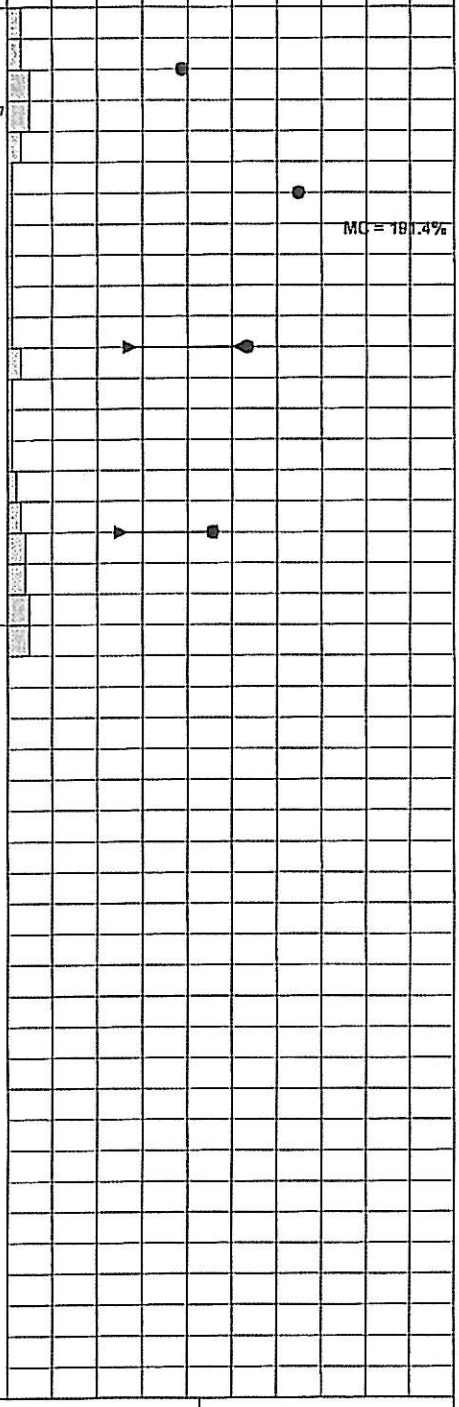
8180 Aitken Road
Chilliwack, BC
Proposed Commercial/Industrial Subdivision

AH19

Project No: 807-0016

Elev. 8.14 m

Depth (m)	Depth (ft)	Description	C	N	Type	Water Level
		Grass, rootlets, soft, dark brown, saturated, TOPSOIL		3, 3		
		Firm-very soft, grey, CLAY, trace of fine sand, oxidation pockets and mottling present, wet-saturated. PP=2.0tsf@ 1 foot. PP=1.0tsf from 2-3 feet. PP=0.5tsf from 3-5 feet.		5, 5, 3, 1	AU	Jan/23/07
2	5			1	AU	
				1	AU	MC = 181.4%
		Very soft, brown, PEAT, saturated.		1		
		Soft, grey, SILTY CLAY, saturated.		1, 1		
4	10			3, 1, 1, 1	AU	
6	15	Soft-firm, grey, CLAY, some silt, traces of mottling, saturated.		2, 3		
	20			4, 4, 5, 5	AU	
		End Auger Hole. Hole flooded to 3 feet. Bottom of hole at 6.10 meters				
8	25					
10	30					
12	35					
	40					
	45					



C: Condition of Sample
- Good
- Disturbed
- No Recovery

Type: Type of Sampler
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- CORE

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- Hammer Type:

DYNAMIC CONE PENETRATION TEST: Blow count no. of blows of a 140 lb (64 kg) hammer dropped 30in. (750mm) to produce 12in (300mm) of a 2in (50mm) diameter cone.

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- Plastic Limit
- Liquid Limit
- Ground Water Level
- Shear strength in kPa (Torvane or Penetrometer)
- Shear strength in kPa (Unconfined)
- Shear strength in kPa (field vane)
- Remolded strength in kPa
- Percent Passing # 200 sieve

Drill Method: Solid Stem Auger / DCPT

Date Drilled: 1/23/2007

By: TBH

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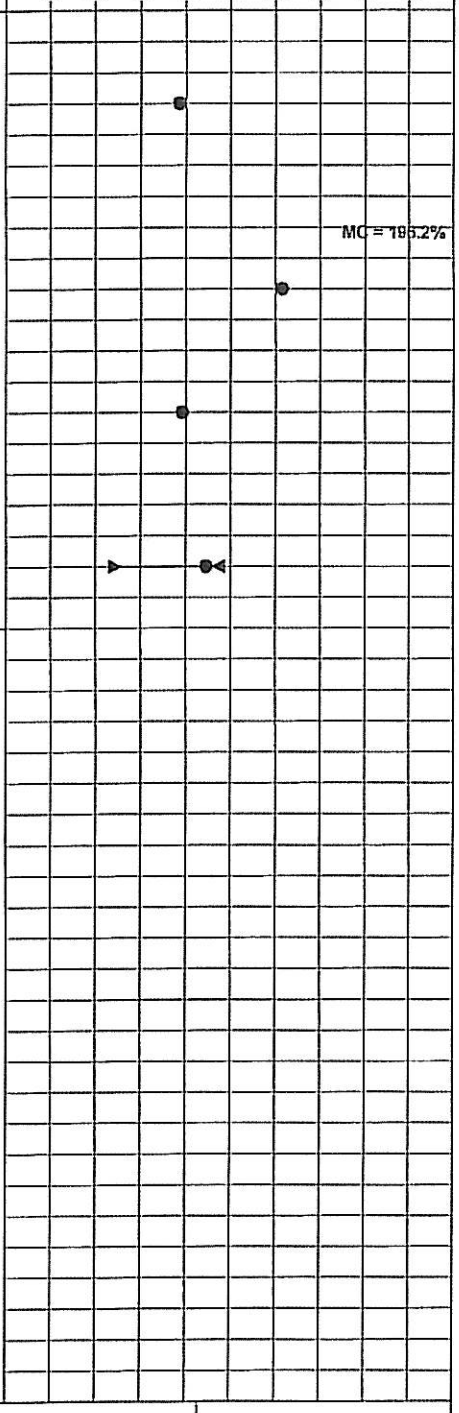
AH20

Project No: 807-0016

Depth (m)	Depth (ft)	Description	C	N	Type	Water Level
Elev. 0.15 m						
		TOPSOIL				
		Very stiff, brown, SILTY CLAY pocket pen = 1.75 tsf at 2.0 feet pocket pen = 2.25 tsf at 3.0 feet			G	
		Stiff, brown grey, SILTY CLAY pocket pen = 1.75 tsf at 4.0 feet				
	5	Firm, grey, SILTY CLAY pocket pen = 1.0 tsf at 6.0 feet pocket pen = 0.5 tsf at 7.0 feet			G	
2		PEAT				
		Soft, grey, SILTY CLAY			G	
	10	Firm, grey, CLAYEY SILT, trace sand				
4					G	
	15					
		Stiff, grey, SILTY CLAY pocket pen = 1.25 tsf at 18.0 feet			G	
6	20	Bottom of hole at 6.10 meters				
	25					
8						
	30					
10						
	35					
12	40					
	45					



C: Condition of Sample
Good
Disturbed
No Recovery

Type: Type of Sampler
SPT : 2 in. standard
S : Shelby
FP : Fixed Piston
G : Grab
CORE

N: Number of Blows
WH : Weight of Hammer
WR : Weight of Rod
Standard Penetration Test : ASTM D1586
Hammer Type:

- Moisture Content %
- Plastic Limit
- Liquid Limit
- Ground Water Level
- Shear strength in kPa (Torvane or Penetrometer)
- Shear strength in kPa (Unconfined)
- Shear strength in kPa (field vane)
- Remolded strength in kPa
- Percent Passing # 200 sieve

Drill Method: Solid Stem Auger
Date Drilled: 1/23/2007
By: AA

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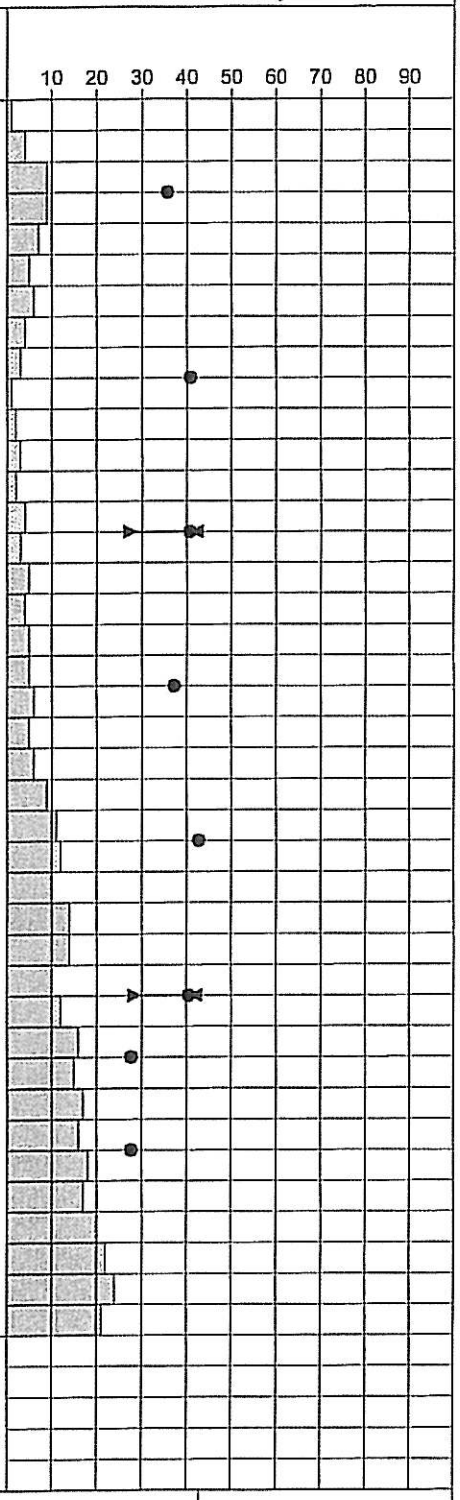
Proposed Commercial/Industrial Subdivision

AH21

Project No: 807-0016

Elev. 0.00 m

Depth (m)	Depth (ft)	Description	C	N	Type	Water Level
		TOPSOIL		1, 4		
		Very stiff, brown, SILTY CLAY		9		
		pocket pen = 4.5 tsf at 2.0 feet				
		Very stiff, brown grey, SILTY CLAY		9	AU	
		pocket pen = 2.5 tsf at 3.0 feet		7		
	5	pocket pen = 2.75 tsf at 4.0 feet		5		
		Stiff, brown grey, SILTY CLAY		6		
2		pocket pen = 1.0 tsf at 6.0 feet				
		pocket pen = 1.5 tsf at 7.0 feet		4		
				3		
		Firm, brown grey, SILTY CLAY				
		pocket pen = 0.75 tsf at 8.0 feet		1	AU	
	10	pocket pen = 0.5 tsf at 9.0 feet		2		
		Firm, grey, SILTY CLAY		3		
				2		
4				4		
		pocket pen = 0.5 tsf at 13.0 feet		3	AU	
	15			5		
		pocket pen = 1.0 tsf at 15.0 feet		4		
		pocket pen = 1.0 tsf at 16.0 feet				
		pocket pen = 1.0 tsf at 17.0 feet		5		
		Firm, grey, SANDY SILT to silty sand		5		
6				6	AU	
	20			5		
		Firm, grey, SILTY CLAY		6		
		pocket pen = 0.75 tsf at 20.5 feet				
		Compact, grey, SILTY SAND		9		
				11		
				12	AU	
	25			10		
8				14		
		Stiff, grey, SILTY CLAY		14		
				10		
		Compact, grey, SILTY SAND				
				12	AU	
	30	Stiff, grey, SILTY CLAY		16		
		Compact, grey, SAND				
				15	AU	
				17		
10				16		
				18	AU	
	35			17		
				20		
				22		
				24		
12				21		
	40	Bottom of hole at 12.19 meters				
	45					



C: Condition of Sample
- Good
- Disturbed
- No Recovery

Type: Type of Sampler
- SPT : 2 in. standard
- S : Shelby
- FP : Fixed Piston
- G : Grab
- CORE

N: Number of Blows
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- Standard Penetration Test : ASTM D1586
- Hammer Type:

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- Moisture Content %
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- Shear strength in kPa (Unconfined)
- Shear strength in kPa (field vane)
- Remolded strength in kPa
- Percent Passing # 200 sieve

Drill Method: Solid Stem Auger / DCPT

Date Drilled: 1/23/2007

By: AA

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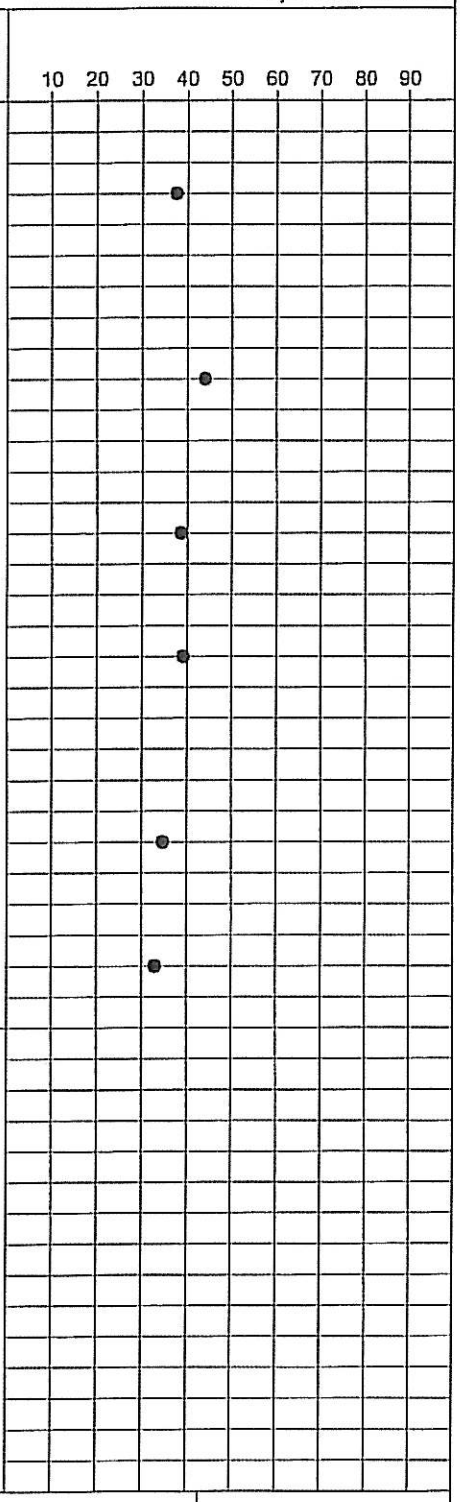
Fax: 604-533-0768

8180 Aitken Road
Chilliwack, BC
Proposed Commercial/Industrial Subdivision

AH22

Project No: 807-0016

Depth (m)	Depth (ft)	Description	C	N	Type	Water Level
Elev. 7.84 m						
		TOPSOIL				
		Very stiff to stiff, brown grey, SILTY CLAY pocket pen = 1.25 tsf at 1.0 feet pocket pen = 1.75 tsf at 2.0 feet pocket pen = 2.75 tsf at 3.0 feet pocket pen = 1.0 tsf at 4.0 feet			AU	
2	5	Firm, grey, SILTY CLAY, trace organic black silt at 6 to 7 feet pocket pen = 0.5 tsf at 8.0 feet			AU	
4	10	pocket pen = 0.75 tsf at 12.0 feet				
6	15	Loose to compact, grey, SILTY SAND			AU	
	20				AU	
8	25	Compact, grey, SAND some silt at 26 to 27 feet			AU	
	30				AU	
10	35	Bottom of hole at 9.14 meters				
12	40					
	45					



C: Condition of Sample
Good
Disturbed
No Recovery

Type: Type of Sampler
SPT : 2 in. standard
S : Shelby
FP : Fixed Piston
G : Grab
CORE

N: Number of Blows
WH : Weight of Hammer
WR : Weight of Rod
Standard Penetration Test : ASTM D1586
Hammer Type:

- Moisture Content %
- Plastic Limit
- Liquid Limit
- Ground Water Level
- Shear strength in kPa (Torvane or Penetrometer)
- Shear strength in kPa (Unconfined)
- Shear strength in kPa (field vane)
- Remolded strength in kPa
- Percent Passing # 200 sieve

Drill Method: Solid Stem Auger
Date Drilled: 1/24/2007
By: AA

LEVELTON
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103-10292 60th Ave
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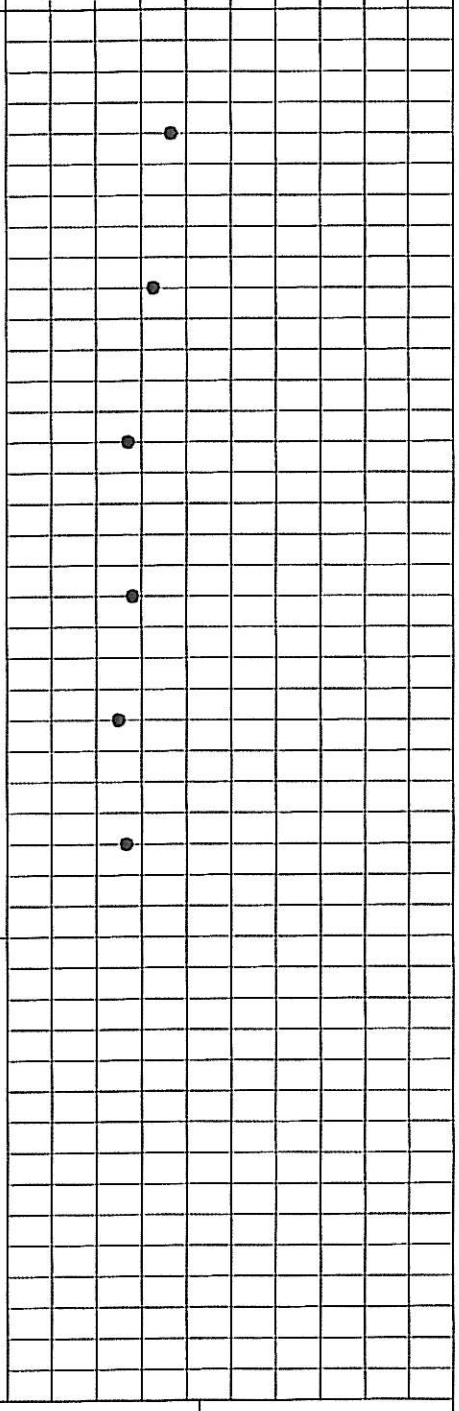
AH23

8180 Aitken Road
Chilliwack, BC
Proposed Commercial/Industrial Subdivision

Project No: 807-0016

Elev. 8.26 m

Depth (m)	Depth (ft)	Description	C	N	Type	Water Level
		TOPSOIL				
		Very stiff, brown, SILTY CLAY				
		Very stiff, brown grey, SILTY CLAY pocket pen = 1.75 tsf at 1.0 feet pocket pen =3.75 tsf at 2.0 feet pocket pen = 3.75 tsf at 3.0 feet pocket pen = 2.25 tsf at 4.0 feet			AU	
2	5	Stiff, grey, SILTY CLAY pocket pen = 1.25 tsf at 6.0 feet pocket pen = 1.25 tsf at 7.0 feet pocket pen = 1.0 tsf at 8.0 feet pocket pen = 1.0 tsf at 9.0 feet			AU	
4	10	Loose to compact, grey, SILTY SAND			AU	
6	15	Firm, grey, SILTY CLAY trace volcanic ash at 19.5 feet			AU	
8	20	Compact, grey, SILTY SAND			AU	
10	25	Compact, grey, SAND some silt at 28 feet			AU	
12	30	Bottom of hole at 9.14 meters				
	35					
	40					
	45					



C: Condition of Sample
Good
Disturbed
No Recovery

Type: Type of Sampler
SPT : 2 In. standard
S : Shelby
FP : Fixed Piston
G : Grab
CORE

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Standard Penetration Test : ASTM D1586
Hammer Type:

- Moisture Content %
- Plastic Limit
- Liquid Limit
- Ground Water Level
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- Shear strength in kPa (Unconfined)
- Shear strength in kPa (field vane)
- Remolded strength in kPa
- Percent Passing # 200 sieve

Drill Method: Solid Stem Auger
Date Drilled: 1/23/2007
By: AA

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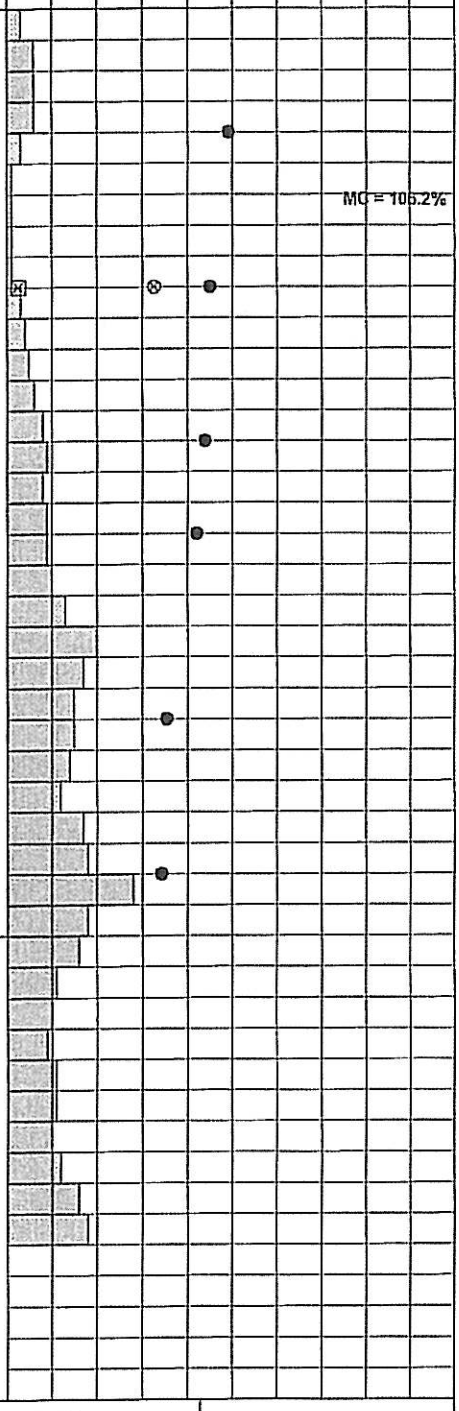
8180 Aitken Road
Chilliwack, BC
Proposed Commercial/Industrial Subdivision

AH24

Project No: 807-0016

Elev. 7.01 m

Depth (m)	Depth (ft)	Description	C	N	Type	Water Level
		TOPSOIL		3		
		Very stiff, brown grey, **SILTY CLAY**		6		
		pocket pen = 3.0 tsf at 1.0 feet		6		
		pocket pen = 2.5 tsf at 2.0 feet		6		
		Stiff, brown grey, **SILTY CLAY**				
		pocket pen = 1.75 tsf at 3.0 feet		3	AU	
	5	pocket pen = 1.25 tsf at 4.0 feet		1		
2		Firm, grey, **SILTY CLAY**, trace black organic at 6 feet		1	AU	
				1		
				1		
				3	AU	
	10	Shear Vane@9 feet=681psf. Remold=52psf.		4		
		Firm, grey, **SILTY CLAY**		5		
		pocket pen = 1.0 tsf at 11.0 feet		6		
		pocket pen = 0.75 tsf at 12.0 feet		8		
4		pocket pen = 1.0 tsf at 13.0 feet				
		pocket pen = 1.0 tsf at 14.0 feet		9	AU	
	15			8		
		Loose, grey, **SILTY SAND**		9		
				9	AU	
		Firm, grey, **SILTY CLAY**		10		
6		Compact, grey, **SILTY SAND**		13		
	20			20		
		Compact, grey, **SAND**		17		
				15		
				15	AU	
				14		
	25	some silt at 24 feet		12		
8				17		
				18		
				28	AU	
				18		
	30			16		
		Bottom of hole at 9.14 meters		11		
				10		
10				9		
				11		
	35			11		
				10		
				12		
				16		
12				18		
	40					
	45					



C: Condition of Sample
- Good
- Disturbed
- No Recovery

Type: Type of Sampler
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- S : Shelby
- FP : Fixed Piston
- G : Grab
- CORE

N: Number of Blows
- WH : Weight of Hammer
- WR : Weight of Rod
- Standard Penetration Test : ASTM D1586
- Hammer Type:

DYNAMIC CONE PENETRATION TEST: Blow count no. of blows of a 140 lb (64 kg) hammer dropped 30in. (750mm) to produce 12in (300mm) of a 2in (50mm) diameter cone.

- Moisture Content %
- Plastic Limit
- Liquid Limit
- Ground Water Level
- Shear strength in kPa (Torvane or Penetrometer)
- Shear strength in kPa (Unconfined)
- Shear strength in kPa (field vane)
- Remolded strength in kPa
- Percent Passing # 200 sieve

Drill Method: Solid Stem Auger / DCPT

Date Drilled: 1/24/2007

By: AA

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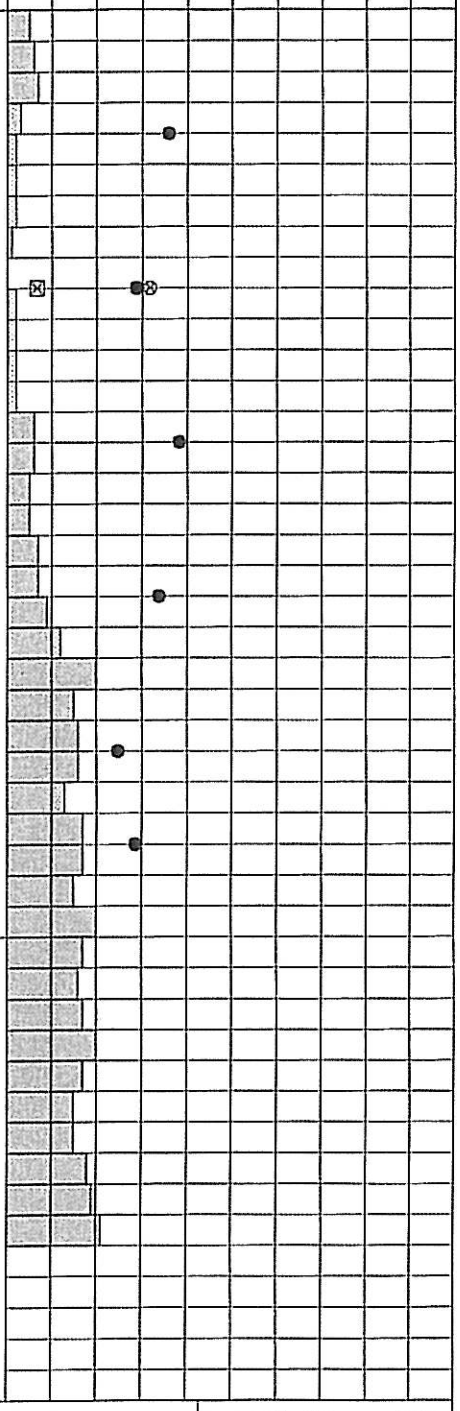
8180 Aitken Road
Chilliwack, BC
Proposed Commercial/Industrial Subdivision

AH25

Project No: 807-0016

Elev. 7.80 m

Depth (m)	Depth (ft)	Description	C	N	Type	Water Level
		TOPSOIL		5		
		Very stiff, brown, SILTY CLAY		6		
		pocket pen = 2.5 tsf at 1.0 feet		7		
		Very stiff, brown grey, SILTY CLAY		3		
		pocket pen = 2.5 at 2.0 feet				
		pocket pen = 2.0 at 3.0 feet		2	AU	
	5	pocket pen = 1.25 at 4.0 feet		2		
		Firm, grey, SILTY CLAY		2		
2		pocket pen = 1.0 tsf at 6.0 feet		1		
		pocket pen = 0.5 tsf at 7.0 feet				
		pocket pen = 1.0 tsf at 8.0 feet				
	10	Shear Vane@9 feet=663psf. Remold=140psf.		2	AU	
				2		
		pocket pen = 0.5 tsf at 12.0 feet		2		
		pocket pen = 0.75 tsf at 13.0 feet		2		
4		pocket pen = 1.0 tsf at 14.0 feet		6		
		pocket pen = 0.75 tsf at 15.0 feet		6	AU	
	15			5		
		Loose, grey, SILTY SAND		5		
				7		
				7		
6	20			9	AU	
				12		
				20		
		Compact, grey, SAND		15		
				16		
				16	AU	
	25			13		
8				17		
				17	AU	
				15		
				20		
	30			17		
		Bottom of hole at 9.14 meters		16		
				17		
10				20		
				17		
	35			15		
				15		
				18		
				19		
12				21		
	40					
	45					



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- Good
- Disturbed
- No Recovery

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- Plastic Limit
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- Ground Water Level
- Shear strength in kPa (Torvane or Penetrometer)
- Shear strength in kPa (Unconfined)
- Shear strength in kPa (field vane)
- Remolded strength in kPa
- Percent Passing # 200 sieve

- Bentonite/Grout Plug
- Solid Pipe
- Cuttings
- Slotted Pipe
- Sand/Pea-Gravel

Drill Method: Solid Stem Auger / DCPT

Date Drilled: 1/23/2007

By: AA

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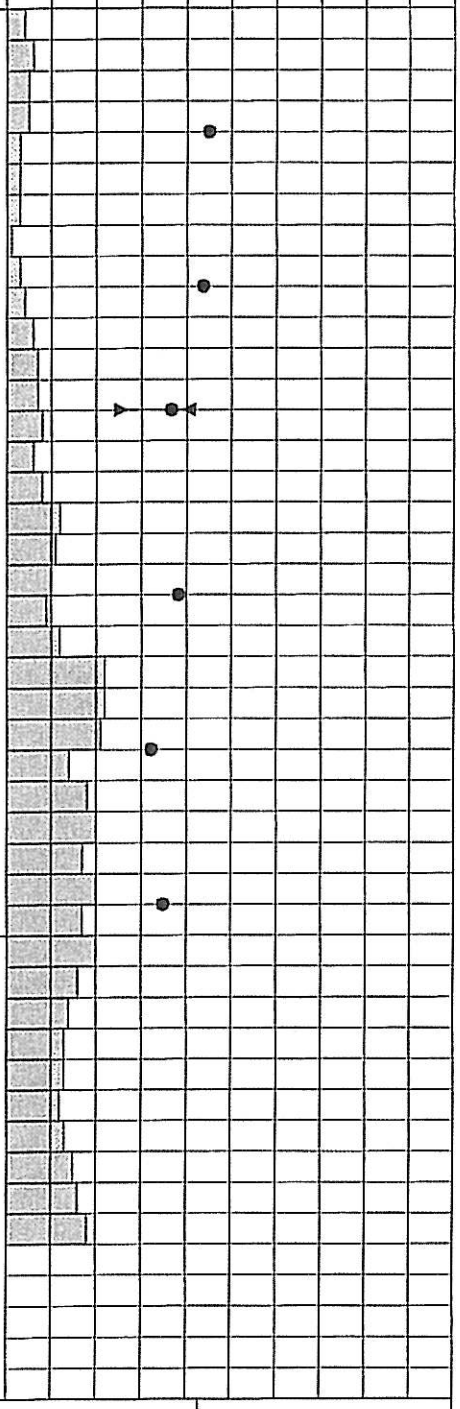
8180 Aitken Road
Chilliwack, BC
Proposed Commercial/Industrial Subdivision

AH26

Project No: 807-0016

Elev. 7.79 m

Depth (m)	Depth (ft)	Description	C	N	Type	Water Level
		TOPSOIL		4		
		Very stiff, brown, SILTY CLAY		6		
		pocket pen = 2.25 tsf at 1.0 feet		5		
		Stiff, brown grey, SILTY CLAY		5		
		pocket pen = 2.0 tsf at 2.0 feet				
		pocket pen = 2.0 tsf at 3.0 feet		3	AU	
	5	pocket pen = 1.5 tsf at 4.0 feet		3		
		Firm to soft, grey, SILTY CLAY		3		
2		pocket pen = 1.0 tsf at 6.0 feet				
		pocket pen = 0.5 tsf at 7.0 feet		1		
		pocket pen = 0.75 tsf at 8.0 feet		3		
				4	AU	
	10			6		
		Firm, grey, SILTY CLAY		7		
		pocket pen = 0.75 tsf at 11.0 feet				
		pocket pen = 0.5 tsf at 12.0 feet		7		
4		pocket pen = 0.5 tsf at 13.0 feet		8	AU	
		Loose to compact, grey, SILTY SAND		6		
	15			8		
				12		
				11		
		trace black organic silt at 18 feet		10		
		Firm to stiff, grey, SILTY CLAY				
6		pocket pen = 1.0 tsf at 19.0 feet		9	AU	
	20			12		
				22		
		Compact, grey, SAND		22		
				21		
				14	AU	
	25			18		
8		Compact, grey, SAND, some silt		20		
				17		
				20		
				17	AU	
	30			20		
		Bottom of hole at 9.14 meters		16		
				14		
10				13		
				13		
	35			12		
				13		
				15		
				16		
12				18		
	40					
	45					



C: Condition of Sample
- Good
- Disturbed
- No Recovery

Type: Type of Sampler
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- Moisture Content %
- Plastic Limit
- Liquid Limit
- Ground Water Level
- Shear strength in kPa (Torvane or Penetrometer)
- Shear strength in kPa (Unconfined)
- Shear strength in kPa (field vane)
- Remolded strength in kPa
- Percent Passing # 200 sieve

Drill Method: Solid Stem Auger / DCPT

Date Drilled: 1/24/2007

By: AA

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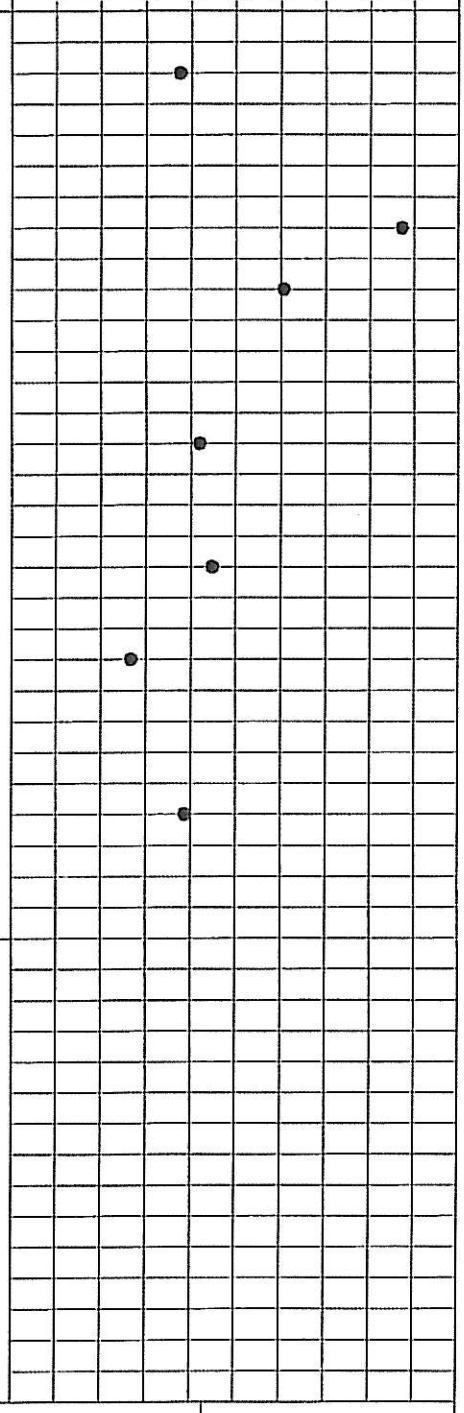
8180 Aitken Road
Chilliwack, BC
Proposed Commercial/Industrial Subdivision

AH27

Project No: 807-0016

Depth (m)	Depth (ft)	Description	C	N	Type	Water Level
Elev. 7.74 m						
		TOPSOIL				
		Very stiff, brown, SILTY CLAY				
		Very stiff to stiff, brown grey, SILTY CLAY pocket pen = 2.5 tsf at 2.0 feet pocket pen = 1.5 tsf at 3.0 feet pocket pen = 1.5 tsf at 4.0 feet			AU	
2	5	Stiff, grey, SILTY CLAY pocket pen = 1.0 tsf at 6.0 feet				
		ORGANIC SILT			AU	
4	10	Soft to firm, grey, SILTY CLAY			AU	
	15	Firm, grey, SILTY CLAY pocket pen = 0.75 tsf at 13.0 feet pocket pen = 1.0 tsf at 14.0 feet pocket pen = 0.75 tsf at 15.0 feet			AU	
6	20	Loose to compact, grey, SILTY SAND			AU	
	25	Compact, grey, SAND			AU	
8	30				AU	
10	35	Bottom of hole at 9.14 meters				
12	40					
	45					



C: Condition of Sample
- Good
- Disturbed
- No Recovery

Type: Type of Sampler
- SPT : 2 in. standard
- S : Shelby
- FP : Fixed Piston
- G : Grab
- CORE

N: Number of Blows
- WH : Weight of Hammer
- WR : Weight of Rod
- Standard Penetration Test : ASTM D1586
- Hammer Type:

- Moisture Content %
- Plastic Limit
- Liquid Limit
- Ground Water Level
- Shear strength in kPa (Torvane or Penetrometer)
- Shear strength in kPa (Unconfined)
- Shear strength in kPa (field vane)
- Remolded strength in kPa
- Percent Passing # 200 sieve

Drill Method: Solid Stem Auger

Date Drilled: 1/23/2007

By: AA

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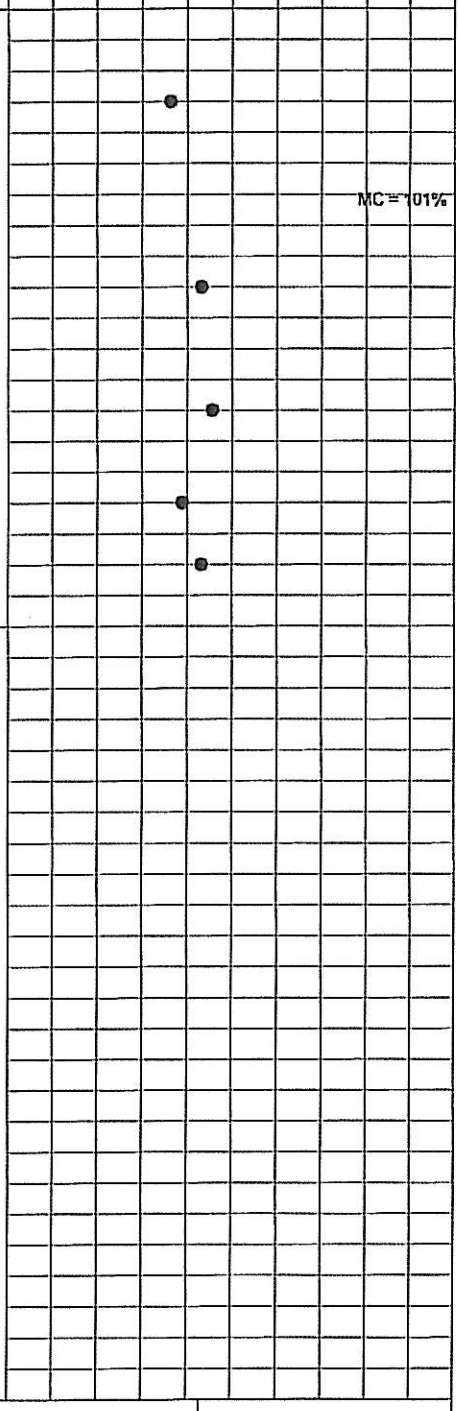
8180 Aitken Road
Chilliwack, BC
Proposed Commercial/Industrial Subdivision

AH28

Project No: 807-0016

Depth (m)	Depth (ft)	Description	C	N	Type	Water Level
Elev. 7.70 m						
		TOPSOIL				
		Very stiff, brown, SILTY CLAY				
		Very stiff to stiff, brown grey, SILTY CLAY pocket pen = 2.5 tsf at 2.0 feet pocket pen = 1.75 tsf at 3.0 feet pocket pen = 1.25 tsf at 4.0 feet			AU	
	5					
2		Firm, grey, SILTY CLAY, trace black organic silt at 6 to 7 feet pocket pen = 0.75 tsf at 6.0 feet pocket pen = 0.75 tsf at 7.0 feet pocket pen = 0.75 tsf at 8.0 feet pocket pen = 0.5 tsf at 9.0 feet			AU	
	10					
4		Stiff to firm, grey, SILTY CLAY pocket pen = 1.5 tsf at 11.0 feet pocket pen = 1.0 tsf at 12.0 feet pocket pen = 1.25 tsf at 13.0 feet pocket pen = 0.75 tsf at 14.0 feet			AU	
	15					
		Loose to compact, grey, SILTY SAND			AU	
		Firm, grey, SILTY CLAY pocket pen = 0.5 tsf at 18.0 feet			AU	
6	20					
		Bottom of hole at 6.10 meters				
	25					
8						
	30					
10						
	35					
12						
	40					
	45					



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Good
Disturbed
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Hammer Type:

- Moisture Content %
- Plastic Limit
- Liquid Limit
- Ground Water Level
- Shear strength in kPa (Torvane or Penetrometer)
- Shear strength in kPa (Unconfined)
- Shear strength in kPa (field vane)
- Remolded strength in kPa
- Percent Passing # 200 sieve

Drill Method: Solid Stem Auger
Date Drilled: 1/24/2007
By: AA

LEVELTON
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103-10202 60th Ave
Surrey BC V3S 3M2
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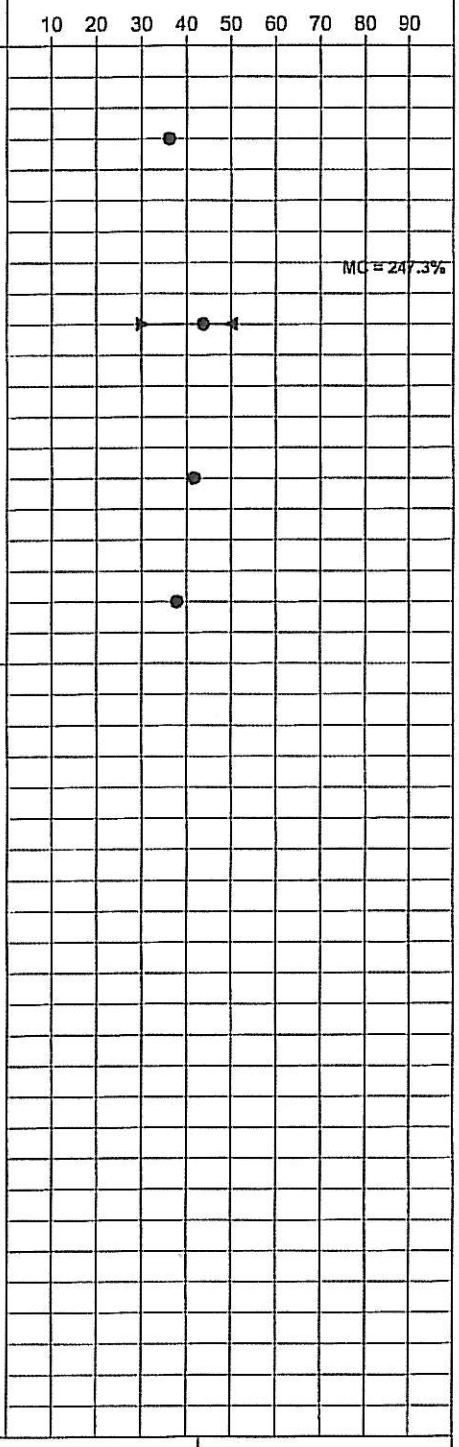
8180 Aitken Road
Chilliwack, BC
Proposed Commercial/Industrial Subdivision

AH29

Project No: 807-0016

Depth (m)	Depth (ft)	Description	C	N	Type	Water Level
Elev. 7.57 m						
		TOPSOIL				
		Very stiff, brown, SILTY CLAY				
		Very stiff to stiff, brown grey, SILTY CLAY				
		pocket pen = 3.5 tsf at 1.0 feet				
		pocket pen = 2.0 tsf at 2.0 feet			AU	
		pocket pen = 1.5 tsf at 3.0 feet				
	5	pocket pen = 1.25 tsf at 4.0 feet				
		pocket pen = 1.0 tsf at 5.5 feet				
2		PEAT			AU	
		Firm, grey, SILTY CLAY				
		pocket pen = 0.5 tsf at 8.0 feet				
		pocket pen = 1.0 tsf at 9.0 feet			AU	
	10					
		pocket pen = 0.5 tsf at 12.0 feet				
4		pocket pen = 1.75 tsf at 13.0 feet				
		pocket pen = 0.75 tsf at 14.0 feet			AU	
	15	Loose to compact, grey, SILTY SAND				
					AU	
6	20	Bottom of hole at 6.10 meters				
	25					
8						
	30					
10						
	35					
12	40					
	45					



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- Plastic Limit
- Liquid Limit
- Ground Water Level
- Shear strength in kPa (Torvane or Penetrometer)
- Shear strength in kPa (Unconfined)
- Shear strength in kPa (field vane)
- Remolded strength in kPa
- Percent Passing # 200 sieve

Drill Method: Solid Stem Auger

Date Drilled: 1/24/2007

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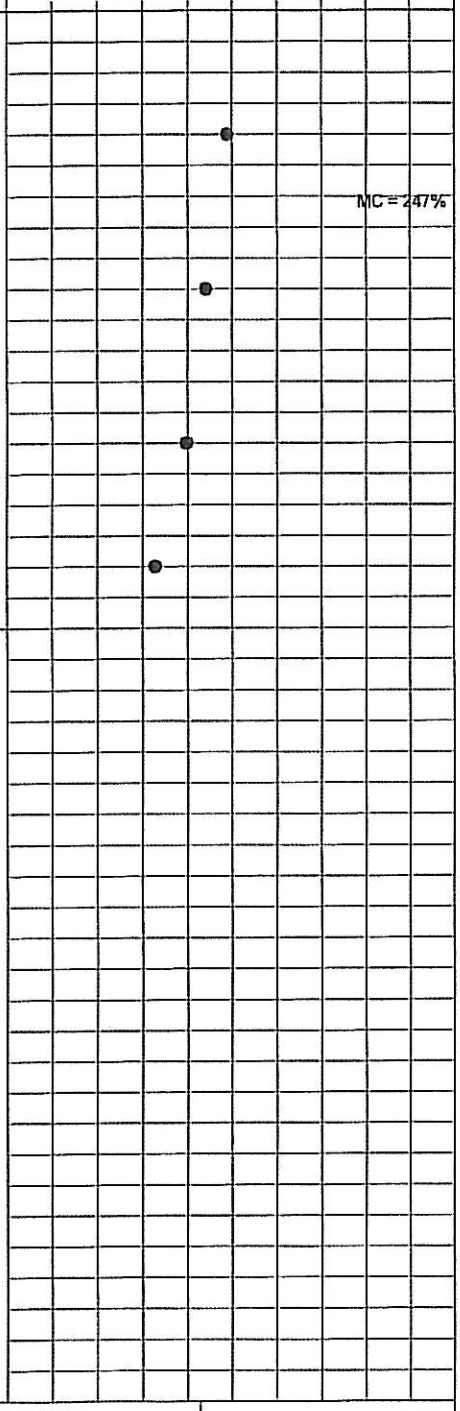
8180 Aitken Road
Chilliwack, BC
Proposed Commercial/Industrial Subdivision

AH30

Project No: 807-0016

Elev. 7.74 m

Depth (m)	Depth (ft)	Description	C	N	Type	Water Level
		TOPSOIL				
		Very stiff, brown, SILTY CLAY				
		Very stiff to stiff, brown grey, SILTY CLAY pocket pen = 2.5 tsf at 1.0 feet pocket pen = 2.5 tsf at 2.0 feet pocket pen = 2.0 tsf at 3.0 feet pocket pen = 1.5 tsf at 4.0 feet			AU	
2	5	PEAT			AU	
		Firm, grey, SILTY CLAY pocket pen = 0.5 tsf at 9.0 feet			AU	
4	10	pocket pen = 0.75 tsf at 11.0 feet pocket pen = 1.0 tsf at 12.0 feet pocket pen = 1.5 tsf at 13.0 feet pocket pen = 1.0 tsf at 14.0 feet pocket pen = 0.75 tsf at 15.0 feet			AU	
		Loose, grey, SILTY SAND				
6	20	Loose to compact, grey, SAND, some silt			AU	
		Bottom of hole at 6.10 meters				
8	25					
10	30					
12	35					
	40					
	45					



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- Hammer Type:

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- Plastic Limit
- Liquid Limit
- Ground Water Level
- Shear strength in kPa (Torvane or Penetrometer)
- Shear strength in kPa (Unconfined)
- Shear strength in kPa (field vane)
- Remolded strength in kPa
- Percent Passing # 200 sieve

- Bentonite/Grout Plug
- Solid Pipe
- Cuttings
- Slotted Pipe
- Sand/Pea-Gravel

Drill Method: Solid Stem Auger

Date Drilled: 1/24/2007

By: AA

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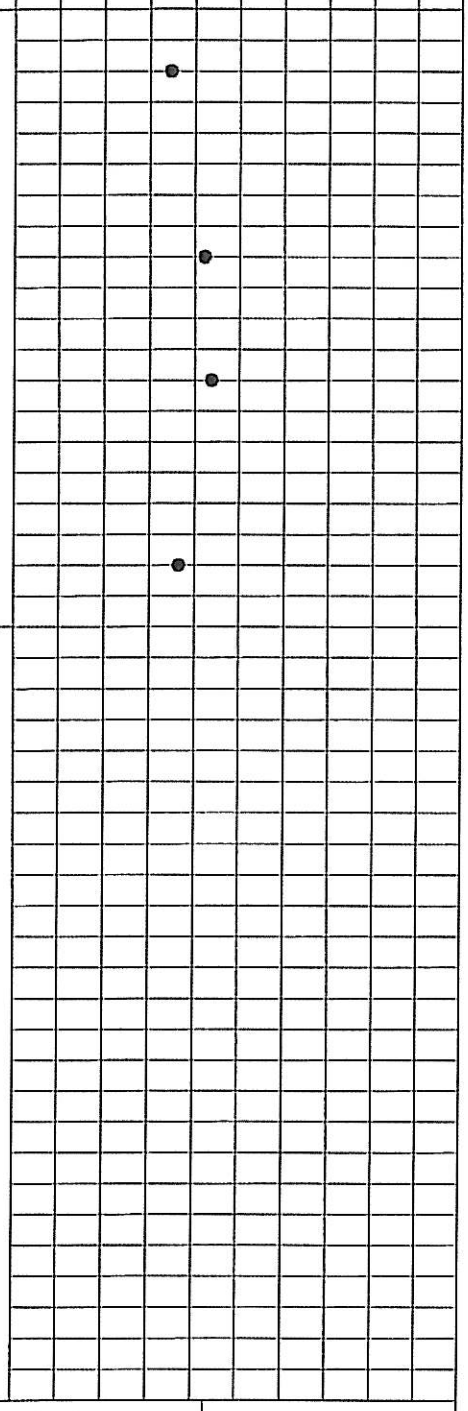
8180 Aitken Road
Chilliwack, BC
Proposed Commercial/Industrial Subdivision

AH31

Project No: 807-0016

Elev. 7.03 m

Depth (m)	Depth (ft)	Description	C	N	Type	Water Level
		TOPSOIL				
		Very stiff, brown, SILTY CLAY				
		Very stiff to stiff, brown grey, SILTY CLAY pocket pen = 2.5 tsf at 2.0 feet pocket pen = 1.75 tsf at 3.0 feet pocket pen = 1.75 tsf at 4.0 feet			AU	
	5					
2		Stiff to firm, grey, SILTY CLAY, some dark brown, organic silt at 6 feet				
		Firm, grey, SILTY CLAY pocket pen = 0.5 tsf at 7.0 feet pocket pen = 1.0 tsf at 8.0 feet pocket pen = 0.5 tsf at 9.0 feet			AU	
	10					
4		pocket pen = 0.75 tsf at 12.0 feet pocket pen = 0.75 tsf at 13.0 feet pocket pen = 0.75 tsf at 14.0 feet			AU	
	15					
		Loose to compact, grey, SILTY SAND				
6	20				AU	
		Bottom of hole at 6.10 meters				
	25					
8						
	30					
10						
	35					
12						
	40					
	45					



C: Condition of Sample
Good
Disturbed
No Recovery

Type: Type of Sampler
SPT : 2 In. standard
S : Shelby
FP : Fixed Piston
G : Grab
CORE

N: Number of Blows
WH : Weight of Hammer
WR : Weight of Rod
Standard Penetration Test : ASTM D1586
Hammer Type:

- Moisture Content %
- Plastic Limit
- Liquid Limit
- Ground Water Level
- Shear strength in kPa (Torvane or Penetrometer)
- Shear strength in kPa (Unconfined)
- Shear strength in kPa (field vane)
- Remolded strength in kPa
- Percent Passing # 200 sieve

Drill Method: Solid Stem Auger
Date Drilled: 1/24/2007
By: AA

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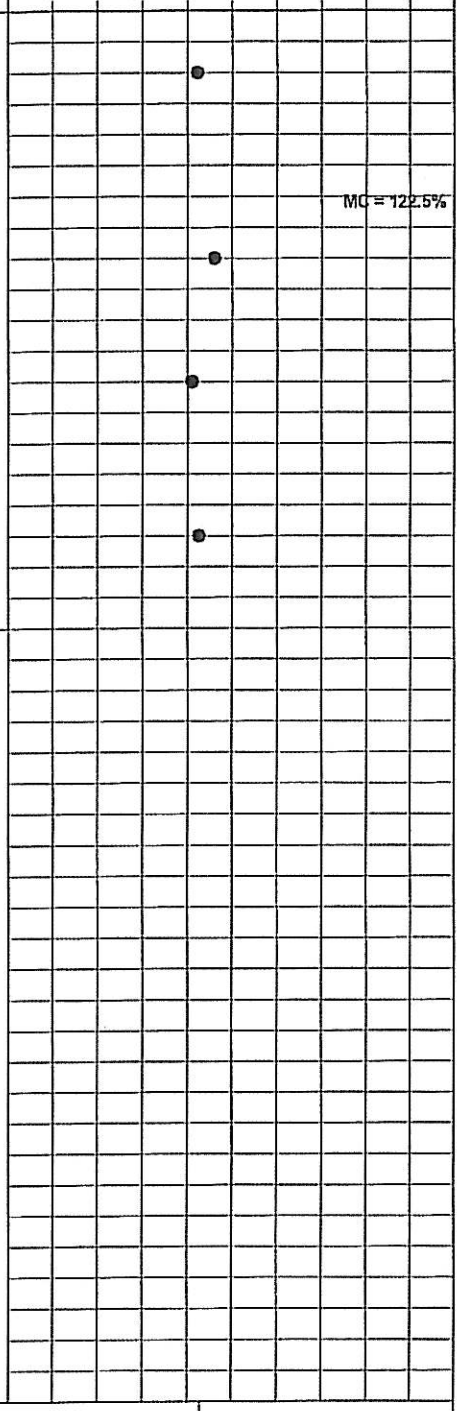
8180 Aitken Road
Chilliwack, BC
Proposed Commercial/Industrial Subdivision

AH32

Project No: 807-0016

Elev. 7.79 m

Depth (m)	Depth (ft)	Description	C	N	Type	Water Level
		TOPSOIL				
		Very stiff, brown, SILTY CLAY				
		Stiff, brown grey, SILTY CLAY pocket pen = 2.0 tsf at 2.0 feet pocket pen = 2.0 tsf at 3.0 feet pocket pen = 1.75 tsf at 4.0 feet			AU	
2	5	ORGANIC SILT			AU	
		Firm, grey, SILTY CLAY pocket pen = 0.5 tsf at 7.0 feet pocket pen = 0.5 tsf at 8.0 feet pocket pen = 1.0 tsf at 9.0 feet			AU	
4	10	pocket pen = 1.0 tsf at 11.0 feet pocket pen = 1.0 tsf at 12.0 feet pocket pen = 1.25 tsf at 13.0 feet pocket pen = 1.0 tsf at 14.0 feet			AU	
	15	Loose, grey, SILTY SAND				
6	20	Firm, grey, SILTY CLAY pocket pen = 0.75 tsf at 17.0 feet pocket pen = 0.75 tsf at 18.0 feet			AU	
		Bottom of hole at 6.10 meters				
8	25					
10	30					
12	35					
	40					
	45					



C: Condition of Sample
Good
Disturbed
No Recovery

Type: Type of Sampler
SPT : 2 In. standard
S : Shelby
FP : Fixed Piston
G : Grab
CORE

N: Number of Blows
WH : Weight of Hammer
WR : Weight of Rod
Standard Penetration Test : ASTM D1586
Hammer Type:

- Moisture Content %
- Plastic Limit
- Liquid Limit
- Ground Water Level
- Shear strength in kPa (Torvane or Penetrometer)
- Shear strength in kPa (Unconfined)
- Shear strength in kPa (field vane)
- Remolded strength in kPa
- Percent Passing # 200 sieve

Drill Method: Solid Stem Auger
Date Drilled: 1/24/2007
By: AA

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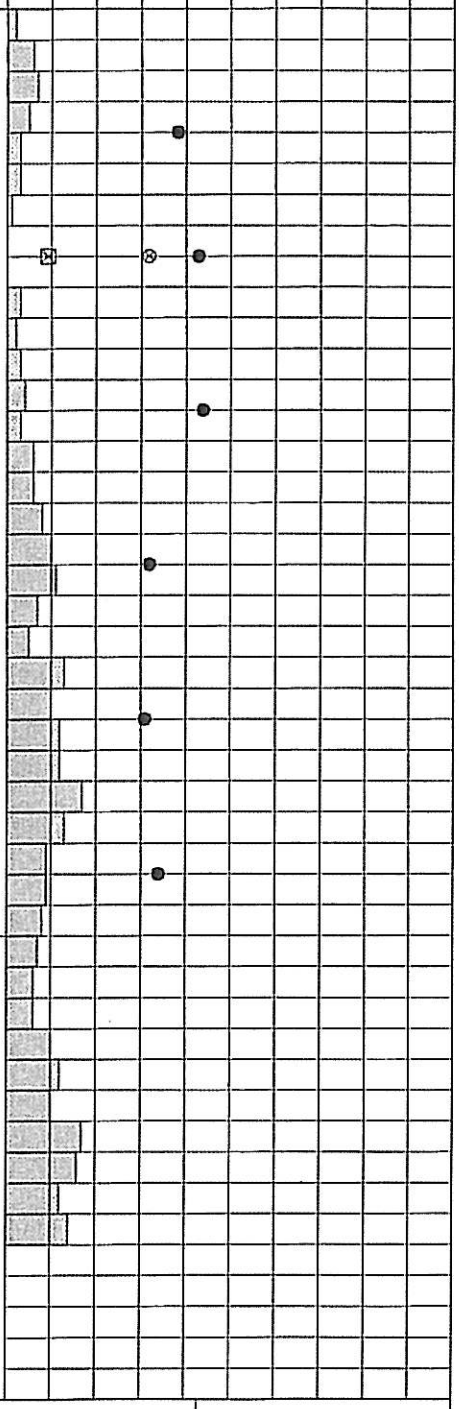
8180 Aitken Road
Chilliwack, BC
Proposed Commercial/Industrial Subdivision

AH33

Project No: 807-0016

Depth (m)	Depth (ft)	Description	C	N	Type	Water Level
Elev. 0.02 m						
		TOPSOIL		2		
		Very stiff to stiff, brown grey, **SILTY CLAY** pocket pen = 2.5 tsf at 1.0 feet pocket pen = 2.0 tsf at 2.0 feet pocket pen = 1.5 tsf at 3.0 feet pocket pen = 1.25 tsf at 4.0 feet		6 7 5		
	5			3 3 1	AU	
2		Firm, grey, **SILTY CLAY** Shear Vane@8.5 feet=663psf. Remold=192psf.			AU	
	10	Firm, grey, **SILTY CLAY** pocket pen = 0.75 tsf at 9.0 feet pocket pen = 0.5 tsf at 11.0 feet pocket pen = 0.5 tsf at 12.0 feet pocket pen = 1.0 tsf at 13.0 feet		3 2 3 4		
4				3 6	AU	
	15	Loose, grey, **SAND**, some silt		6 8 10		
				11 7	AU	
6	20	Loose to compact, grey, **SAND**, some silt		5 13 10		
				12 12	AU	
	25			17 13 9		
8		Loose, grey, **SAND**		9 8	AU	
	30	Bottom of hole at 9.14 meters		7 6 6		
10				10 12		
	35			10 17 16		
12				12 14		
	40					
	45					



C: Condition of Sample
- Good
- Disturbed
- No Recovery

Type: Type of Sampler
- SPT : 2 in. standard
- S : Shelby
- FP : Fixed Piston
- G : Grab
- CORE

N: Number of Blows
- WH : Weight of Hammer
- WR : Weight of Rod
- Standard Penetration Test : ASTM D1586
- Hammer Type:

DYNAMIC CONE PENETRATION TEST:
Blow count no. of blows of a 140 lb (64 kg) hammer dropped 30in. (750mm) to produce 12in (300mm) of a 2in (50mm) diameter cone.

- Moisture Content %
- Plastic Limit
- Liquid Limit
- Ground Water Level
- Shear strength in kPa (Torvane or Penetrometer)
- Shear strength in kPa (Unconfined)
- Shear strength in kPa (field vane)
- Remolded strength in kPa
- Percent Passing # 200 sieve

Drill Method: Solid Stem Auger / DCPT
Date Drilled: 1/25/2007
By: AA

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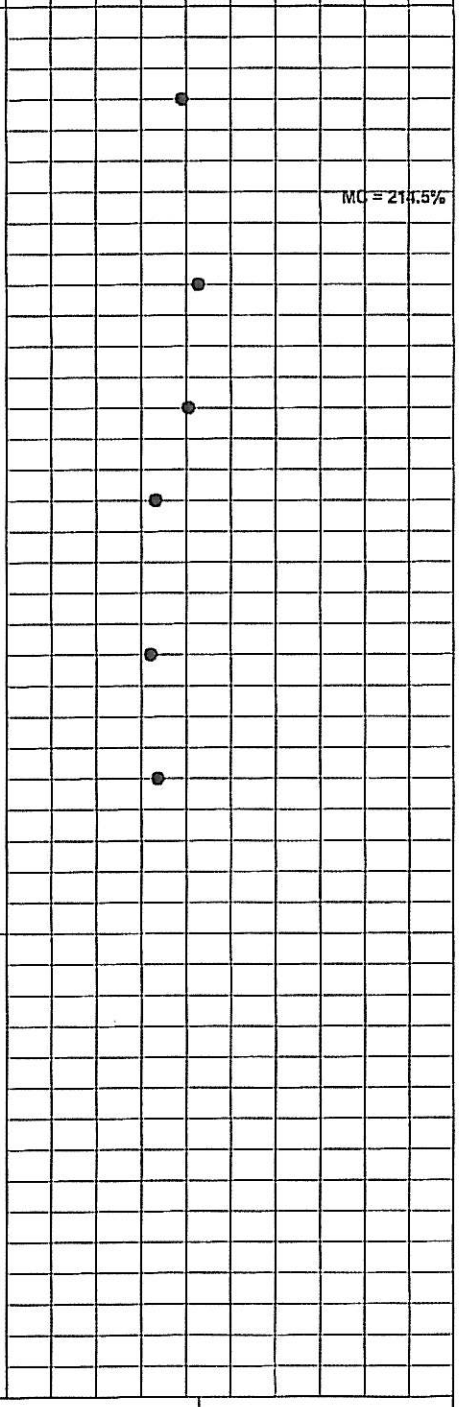
Chilliwack, BC
Proposed Commercial/Industrial Subdivision

AH34

Project No: 807-0016

Elev. 7.78 m

Depth (m)	Depth (ft)	Description	C	N	Type	Water Level
		TOPSOIL				
		Very stiff, brown, SILTY CLAY				
		Very stiff, brown grey, SILTY CLAY pocket pen = 2.5 tsf at 3.0 feet pocket pen = 1.75 tsf at 4.0 feet			AU	
	5	Stiff, brown grey, SILTY CLAY, trace organic			AU	
2		PEAT				
		Firm, grey, SILTY CLAY, trace organic				
		Firm, grey, SILTY CLAY pocket pen = 0.75 tsf at 9.0 feet			AU	
	10	Soft, grey, SILTY CLAY				
		Firm, grey, SILTY CLAY pocket pen = 0.5 tsf at 12.0 feet pocket pen = 1.0 tsf at 13.0 feet pocket pen = 0.75 tsf at 14.0 feet			AU	
4	15	Loose to compact, grey, SAND, some silt			AU	
		Soft, grey, SANDY SILT				
6	20	Loose to compact, grey, SILTY SAND			AU	
		Loose to compact, grey, SAND, trace silt				
8	25				AU	
	30	Bottom of hole at 9.14 meters				
10	35					
12	40					
	45					



C: Condition of Sample
- Good
- Disturbed
- No Recovery

Type: Type of Sampler
- SPT : 2 In. standard
- S : Shelby
- FP : Fixed Piston
- G : Grab
- CORE

N: Number of Blows
- WH : Weight of Hammer
- WR : Weight of Rod
- Standard Penetration Test : ASTM D1586
- Hammer Type:

- Moisture Content %
- Plastic Limit
- Liquid Limit
- Ground Water Level
- Shear strength in kPa (Torvane or Penetrometer)
- Shear strength in kPa (Unconfined)
- Shear strength in kPa (field vane)
- Remolded strength in kPa
- Percent Passing # 200 sieve

Drill Method: Solid Stem Auger

Date Drilled: 1/25/2007

By: AA

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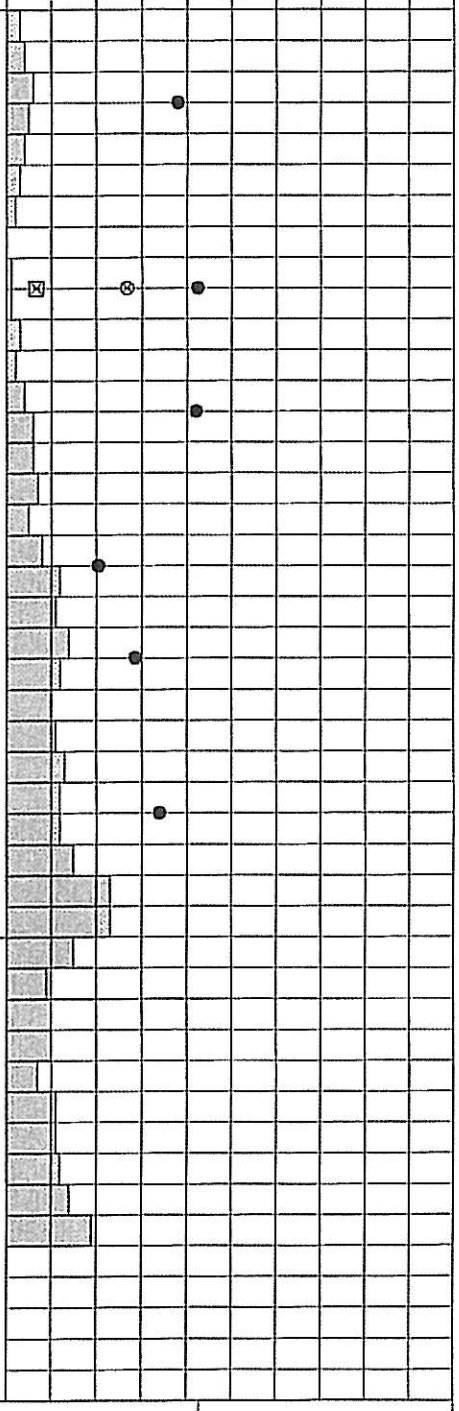
Chilliwack, BC
Proposed Commercial/Industrial Subdivision

AH35

Project No: 807-0016

Elev. 7.09 m

Depth (m)	Depth (ft)	Description	C	N	Type	Water Level
		TOPSOIL		3		
		Very stiff, brown, SILTY CLAY		4		
		Very stiff, brown grey, SILTY CLAY pocket pen = 2.75 tsf at 2.0 feet pocket pen = 2.25 tsf at 3.0 feet		6		
				5	AU	
		Stiff, brown grey, SILTY CLAY pocket pen = 1.5 tsf at 4.0 feet		4		
2	5			3		
		Firm, grey, SILTY CLAY pocket pen = 1.0 tsf at 6.0 feet		2		
		Firm, grey, SILTY CLAY Shear Vane@9 feet=559psf. Remold=140psf.		1		
				1	AU	
	10	Firm, grey, SILTY CLAY pocket pen = 0.5 tsf at 11.0 feet pocket pen = 0.5 tsf at 12.0 feet pocket pen = 1.75 tsf at 13.0 feet pocket pen = 1.0 tsf at 14.0 feet		3		
4				2		
				4		
				6	AU	
	15	Loose, grey, SILTY SAND		6		
				7		
				5		
		Firm, grey, SANDY SILT		8		
		Compact, grey, SAND, some silt		12	AU	
6	20			11		
		Compact, grey, SAND, trace to some silt		14		
				12	AU	
				10		
		Firm, grey, SANDY SILT		11		
				13		
	25			12		
8				12	AU	
				15		
		Compact, grey, SAND, some silt		23		
				23		
	30			15		
		Bottom of hole at 9.14 meters		9		
				10		
10				10		
				7		
	35			11		
				11		
				12		
				14		
12				19		
	40					
	45					



C: Condition of Sample
- Good
- Disturbed
- No Recovery

Type: Type of Sampler
- SPT : 2 in. standard
- S : Shelby
- FP : Fixed Piston
- G : Grab
- CORE

N: Number of Blows
- WH : Weight of Hammer
- WR : Weight of Rod
- Standard Penetration Test : ASTM D1586
- Hammer Type:

DYNAMIC CONE PENETRATION TEST:
Blow count no. of blows of a 140 lb (64 kg) hammer dropped 30in. (750mm) to produce 12in (300mm) of a 2in (50mm) diameter cone.

- Moisture Content %
- Plastic Limit
- Liquid Limit
- Ground Water Level
- Shear strength in kPa (Torvane or Penetrometer)
- Shear strength in kPa (Unconfined)
- Shear strength in kPa (field vane)
- Remolded strength in kPa
- Percent Passing # 200 sieve

Drill Method: Solid Stem Auger / DCPT
Date Drilled: 1/25/2007
By: AA

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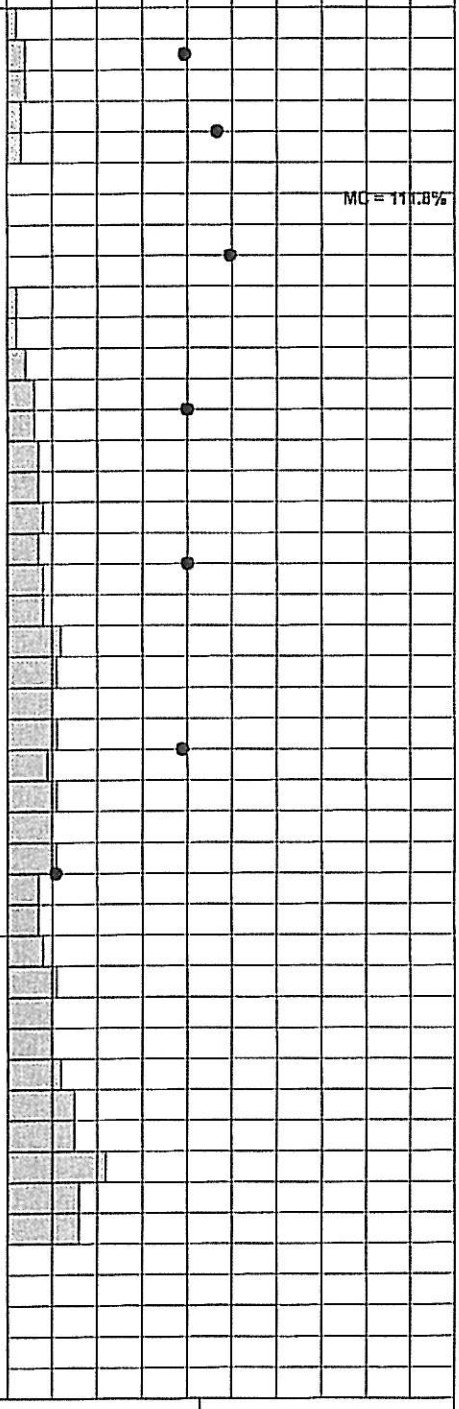
AH36

Project No: 807-0016

Elev. 7.84 m

Depth (m)	Depth (ft)	Description	C	N	Type	Water Level
		TOPSOIL		2		
		Very stiff to stiff, brown grey, SILTY CLAY		4		
		pocket pen = 2.5 tsf at 1.5 feet		4	AU	
		pocket pen = 2.0 tsf at 3.0 feet		3		
		pocket pen = 1.25 tsf at 4.0 feet		3	AU	
	5	Firm, grey, SILTY CLAY				
2		PEAT			AU	
		Soft, grey, SILTY CLAY, trace organic			AU	
		Firm to stiff, grey, SILTY CLAY		2		
	10	pocket pen = 0.75 tsf at 11.0 feet		2		
				4		
				6		
4		pocket pen = 1.0 tsf at 12.0 feet		6	AU	
		pocket pen = 1.5 tsf at 13.0 feet		7		
	15	pocket pen = 1.25 tsf at 14.0 feet		7		
				8		
		Loose, grey, SILTY SAND		7		
				8	AU	
6	20			8		
				12		
		Compact, grey, SILTY SAND, trace wood at 27.5 feet		11		
				10		
				11		
				9	AU	
	25			11		
6				10		
				11		
		Firm, grey, SILTY CLAY		7	AU	
				7		
	30			8		
		Bottom of hole at 9.14 meters		11		
				10		
10				10		
				12		
	35			15		
				15		
				22		
				16		
12				16		
	40					
	45					



C: Condition of Sample
- Good
- Disturbed
- No Recovery

Type: Type of Sampler
- SPT : 2 in. standard
- S : Shelby
- FP : Fixed Piston
- G : Grab
- CORE

N: Number of Blows
- WH : Weight of Hammer
- WR : Weight of Rod
- Standard Penetration Test : ASTM D1586
- Hammer Type:

DYNAMIC CONE PENETRATION TEST: Blow count no. of blows of a 140 lb (64 kg) hammer dropped 30in. (750mm) to produce 12in (300mm) of a 2in (50mm) diameter cone.

- Moisture Content %
- Plastic Limit
- Liquid Limit
- Ground Water Level
- Shear strength in kPa (Torvane or Penetrometer)
- Shear strength in kPa (Unconfined)
- Shear strength in kPa (field vane)
- Remolded strength in kPa
- Percent Passing # 200 sieve

Drill Method: Solid Stem Auger / DCPT

Date Drilled: 1/26/2007

By: AA

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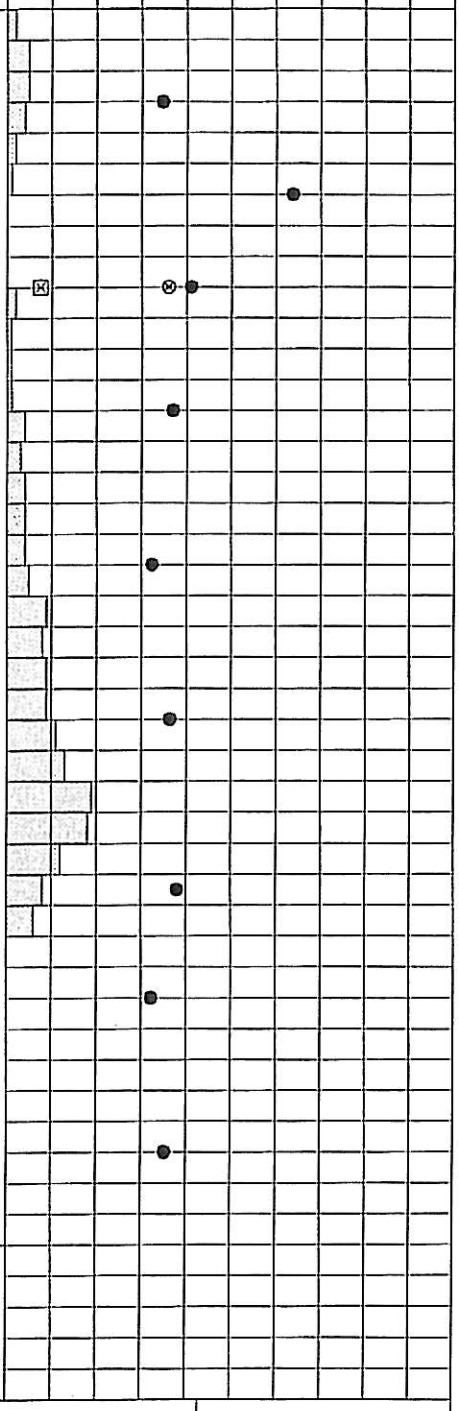
Chilliwack, BC
Proposed Commercial/Industrial Subdivision

AH37

Project No: 807-0016

Depth (m)	Depth (ft)	Description	C	N	Type	Water Level
Elev. 8.87 m						
		TOPSOIL		2		
		Very stiff, brown, SILTY CLAY		5		
		pocket pen = 2.25 tsf at 2.0 feet		5		
		Stiff, brown grey, SILTY CLAY				
		pocket pen = 1.5 tsf at 3.0 feet		4	AU	
		pocket pen = 1.0 tsf at 4.0 feet		2		
	5	trace black organic silt from 4.5 to 6.0 feet		1		
2		Soft, brown grey, SILTY CLAY			AU	
		Firm, grey, SILTY CLAY				
		Shear Vane@8.5 feet=751psf. Remold=157psf.		2	AU	
	10			1		
				1		
				1		
4		Firm to stiff, grey, SILTY CLAY		4	AU	
		pocket pen = 1.25 tsf at 13.0 feet		3		
	15	pocket pen = 1.25 tsf at 14.0 feet		4		
				4		
		Loose, grey, SILTY SAND		4		
				5	AU	
6	20			9		
				8		
				9		
				9		
		becomes compact		11	AU	
	25			13		
				19		
8		Compact, grey, SAND		18		
				12		
				8		
		Firm, grey, SILTY CLAY		6	AU	
	30					
		Firm, grey, SILT, some clay				
		pocket pen = 0.5 tsf at 32.0 feet				
10		Firm, grey, CLAY, some silt			AU	
		Firm, grey, SANDY SILT				
	35	Loose to compact, grey, SILTY SAND				
		Loose to compact, grey, SILTY SAND to sandy silt				
					AU	
12	40					
		Bottom of hole at 12.19 meters				
	45					



C: Condition of Sample
- Good
- Disturbed
- No Recovery

Type: Type of Sampler
- SPT : 2 in. standard
- S : Shelby
- FP : Fixed Piston
- G : Grab
- CORE

N: Number of Blows
- WH : Weight of Hammer
- WR : Weight of Rod
- Standard Penetration Test : ASTM D1586
- Hammer Type:

DYNAMIC CONE PENETRATION TEST:
Blow count no. of blows of a 140 lb (64 kg) hammer dropped 30in. (750mm) to produce 12in (300mm) of a 2in (50mm) diameter cone.

- ● Moisture Content %
- ► Plastic Limit
- ◄ Liquid Limit
- ▼ Ground Water Level
- ⊠ Shear strength in kPa (Torvane or Penetrometer)
- X Shear strength in kPa (Unconfined)
- ⊗ Shear strength in kPa (field vane)
- ⊠ Remolded strength in kPa
- ■ Percent Passing # 200 sieve

Drill Method: Solid Stem Auger / DCPT
Date Drilled: 1/25/2007
By: AA

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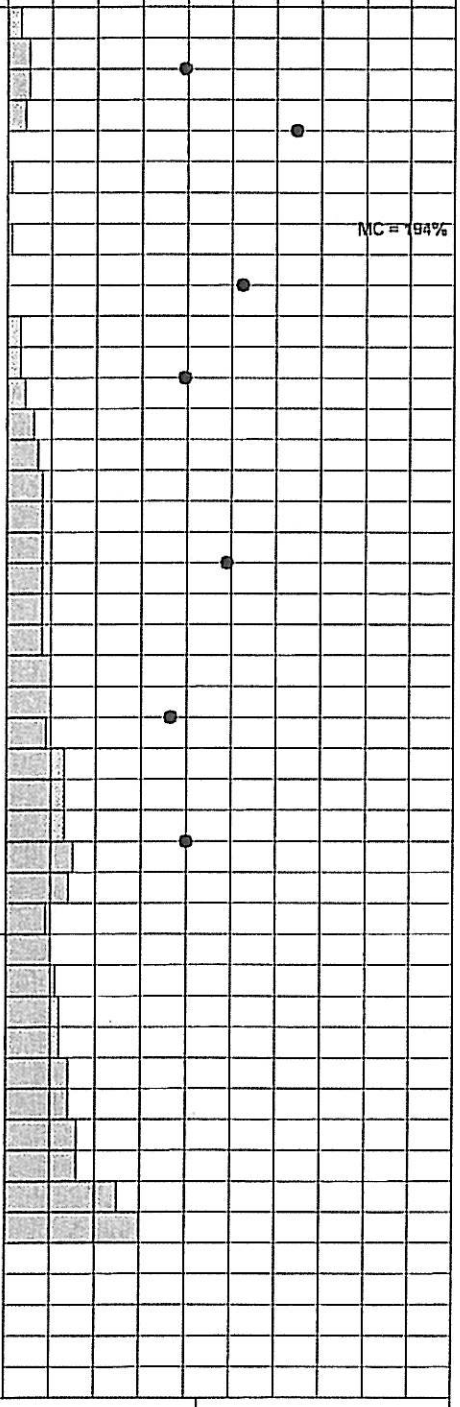
Chilliwack, BC
Proposed Commercial/Industrial Subdivision

AH38

Project No: 807-0016

Elev. 7.85 m

Depth (m)	Depth (ft)	Description	C	N	Type	Water Level
		TOPSOIL		3		
		Very stiff, brown grey, SILTY CLAY		5		
		pocket pen = 2.75 tsf at 2.0 feet		5	AU	
		pocket pen = 2.0 tsf at 3.0 feet		4		
		Firm, grey, SILTY CLAY			AU	
	5			1		
		Soft, brown grey, SILTY CLAY, trace organic silt				
2		PEAT		1	AU	
		Soft, brown grey, SILTY CLAY, trace organic silt				
		Soft to firm, grey, SILTY CLAY			AU	
	10			3		
		Firm, grey, SILTY CLAY		3		
		pocket pen = 0.75 tsf at 12.0 feet				
		pocket pen = 0.5 tsf at 13.0 feet		4	AU	
4		Firm, grey, SILTY CLAY, some to trace sand		6		
				7		
	15			8		
		Firm, grey, SANDY SILT		8		
		Firm, grey, SILTY CLAY to clayey silt		8		
		Firm, grey, CLAY, some silt				
		pocket pen = 0.75 tsf at 18.0 feet		8	AU	
		pocket pen = 0.5 tsf at 19.0 feet		8		
6	20			8		
				10		
		Firm, grey, SILTY CLAY, some sand		10		
				9	AU	
				13		
	25			13		
		Compact, grey, SAND, some silt		13		
8				15	AU	
				14		
		Stiff, grey, SILTY CLAY		9		
	30			10		
		Bottom of hole at 9.14 meters		11		
				12		
10				12		
				14		
	35			14		
				16		
				16		
				25		
12				30		
	40					
	45					



C: Condition of Sample
- Good
- Disturbed
- No Recovery

Type: Type of Sampler
- SPT : 2 in. standard
- S : Shelby
- FP : Fixed Piston
- G : Grab
- CORE

N: Number of Blows
- WH : Weight of Hammer
- WR : Weight of Rod
- Standard Penetration Test : ASTM D1586
- Hammer Type:
- DYNAMIC CONE PENETRATION TEST: Blow count no. of blows of a 140 lb (64 kg) hammer dropped 30in. (750mm) to produce 12in (300mm) of a 2in (50mm) diameter cone.

- Moisture Content %
- Plastic Limit
- Liquid Limit
- Ground Water Level
- Shear strength in kPa (Torvane or Penetrometer)
- Shear strength in kPa (Unconfined)
- Shear strength in kPa (field vane)
- Remolded strength in kPa
- Percent Passing # 200 sieve

Drill Method: Solid Stem Auger / DCPT
Date Drilled: 1/26/2007
By: AA

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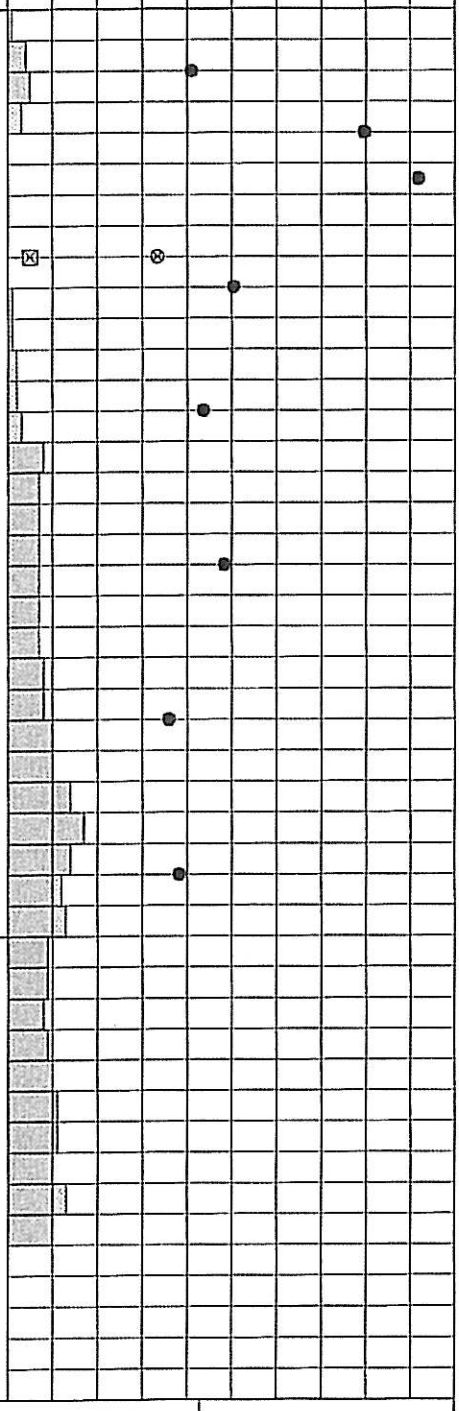
Proposed Commercial/Industrial Subdivision

AH39

Project No: 807-0016

Elev. 7.93 m

Depth (m)	Depth (ft)	Description	C	N	Type	Water Level
		TOPSOIL		1		
		Very stiff, brown grey, SILTY CLAY		4		
		pocket pen = 2.25 tsf at 2.0 feet		5	AU	
				3		
		Firm, grey, SILTY CLAY, trace organic			AU	
	5	Soft, grey, SILTY CLAY				
		Soft, grey, SILTY CLAY, some black organic silt			AU	
2		Firm, grey, SILTY CLAY				
		Shear Vane@7.5 feet=698psf. Remold=105psf.				
				1	AU	
	10			1		
		Soft to firm, grey, CLAYEY SILT		2		
				2		
		Soft to firm, grey, SILTY CLAY				
4				3	AU	
				8		
	15			7		
		Firm to stiff, grey, SILTY CLAY		7		
		pocket pen = 1.0 tsf at 16.0 feet				
		pocket pen = 1.0 tsf at 17.0 feet		7		
		pocket pen = 0.5 tsf at 18.0 feet				
		pocket pen = 0.5 tsf at 19.0 feet		7	AU	
				7		
6	20			7		
				8		
		pocket pen = 0.5 tsf at 21.0 feet		8		
		pocket pen = 0.5 tsf at 22.0 feet				
		pocket pen = 0.5 tsf at 23.0 feet		10	AU	
		Firm, grey, CLAY, some silt		10		
	25			14		
8		Compact, grey, SILTY SAND		17		
				14		
				12	AU	
				13		
	30			9		
		Bottom of hole at 9.14 meters		9		
				8		
10				9		
				10		
	35			11		
				11		
				10		
				13		
12				10		
	40					
	45					



C: Condition of Sample
- Good
- Disturbed
- No Recovery

Type: Type of Sampler
- SPT : 2 in. standard
- S : Shelby
- FP : Fixed Piston
- G : Grab
- CORE

N: Number of Blows
- WH : Weight of Hammer
- WR : Weight of Rod
- Standard Penetration Test : ASTM D1586
- Hammer Type:
- DYNAMIC CONE PENETRATION TEST: Blow count no. of blows of a 140 lb (64 kg) hammer dropped 30in. (750mm) to produce 12in (300mm) of a 2in (50mm) diameter cone.

- Moisture Content %
- Plastic Limit
- Liquid Limit
- Ground Water Level
- Shear strength in kPa (Torvane or Penetrometer)
- Shear strength in kPa (Unconfined)
- Shear strength in kPa (field vane)
- Remolded strength in kPa
- Percent Passing # 200 sieve

Drill Method: Solid Stem Auger / DCPT
Date Drilled: 1/26/2007
By: AA

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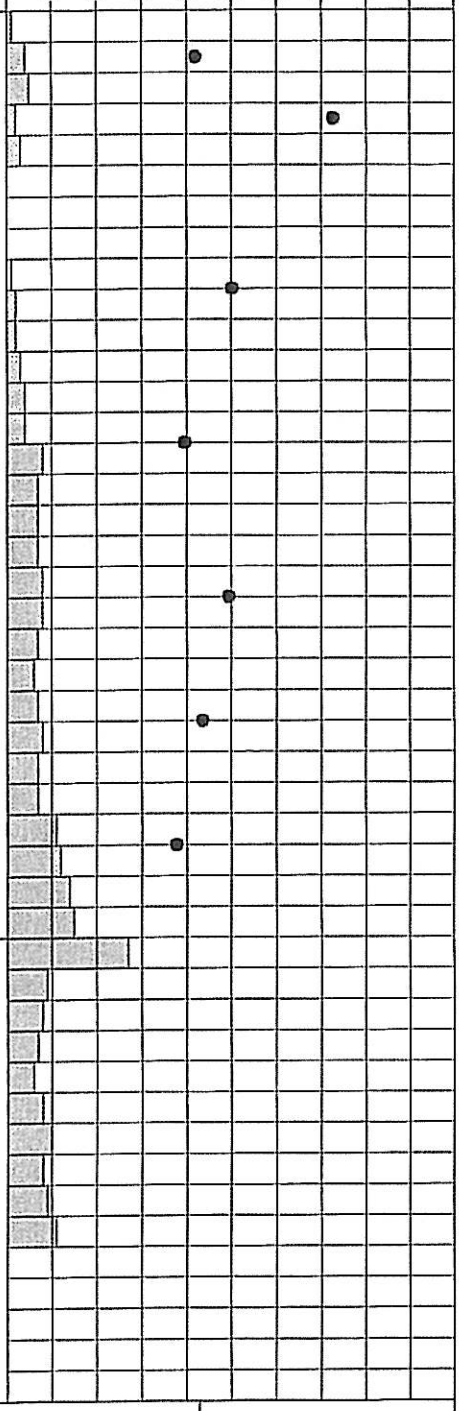
Chilliwack, BC
Proposed Commercial/Industrial Subdivision

AH40

Project No: 807-0016

Elev. 7.97 m

Depth (m)	Depth (ft)	Description	C	N	Type	Water Level
		TOPSOIL		1		
		Stiff, brown grey, **SILTY CLAY**		4		
		pocket pen = 2.0 tsf at 1.5 feet		5	AU	
		pocket pen = 1.0 tsf at 2.0 feet		2		
		pocket pen = 1.0 tsf at 3.0 feet		3	AU	
		Firm, grey, **SILTY CLAY**				
	5	pocket pen = 0.5 tsf at 4.0 feet				
		Soft to firm, grey, **SILTY CLAY**				
2						
				1		
				2	AU	
	10			2		
				3		
				4		
4				4		
		Firm, grey, **SILTY CLAY**				
		pocket pen = 0.75 tsf at 13.0 feet		8	AU	
	15	pocket pen = 0.75 tsf at 14.0 feet		7		
		pocket pen = 0.75 tsf at 16.0 feet		7		
				7		
		Stiff, grey, **SILTY CLAY** to clayey silt		8		
		pocket pen = 1.75 tsf at 17.0 feet				
		pocket pen = 1.0 tsf at 18.0 feet		8	AU	
6	20	pocket pen = 1.0 tsf at 19.0 feet		7		
		Firm, grey, **CLAYEY SILT**		6		
		pocket pen = 0.75 tsf at 25.0 feet		7		
				8	AU	
				7		
	25			7		
8				11		
		Compact, grey, **SILTY SAND**		12	AU	
				14		
				15		
	30			27		
		Bottom of hole at 9.14 meters		9		
				8		
10				7		
				6		
	35			8		
				10		
				8		
				9		
12				11		
	40					
	45					



C: Condition of Sample
- Good
- Disturbed
- No Recovery

Type: Type of Sampler
- SPT : 2 in. standard
- S : Shelby
- FP : Fixed Piston
- G : Grab
- CORE

N: Number of Blows
- WH : Weight of Hammer
- WR : Weight of Rod
- Standard Penetration Test : ASTM D1586
- Hammer Type:

DYNAMIC CONE PENETRATION TEST: Blow count no. of blows of a 140 lb (64 kg) hammer dropped 30in. (750mm) to produce 12in (300mm) of a 2in (50mm) diameter cone.

- Moisture Content %
- Plastic Limit
- Liquid Limit
- Ground Water Level
- Shear strength in kPa (Torvane or Penetrometer)
- Shear strength in kPa (Unconfined)
- Shear strength in kPa (field vane)
- Remolded strength in kPa
- Percent Passing # 200 sieve

Drill Method: Solid Stem Auger / DCPT

Date Drilled: 1/26/2007

By: AA

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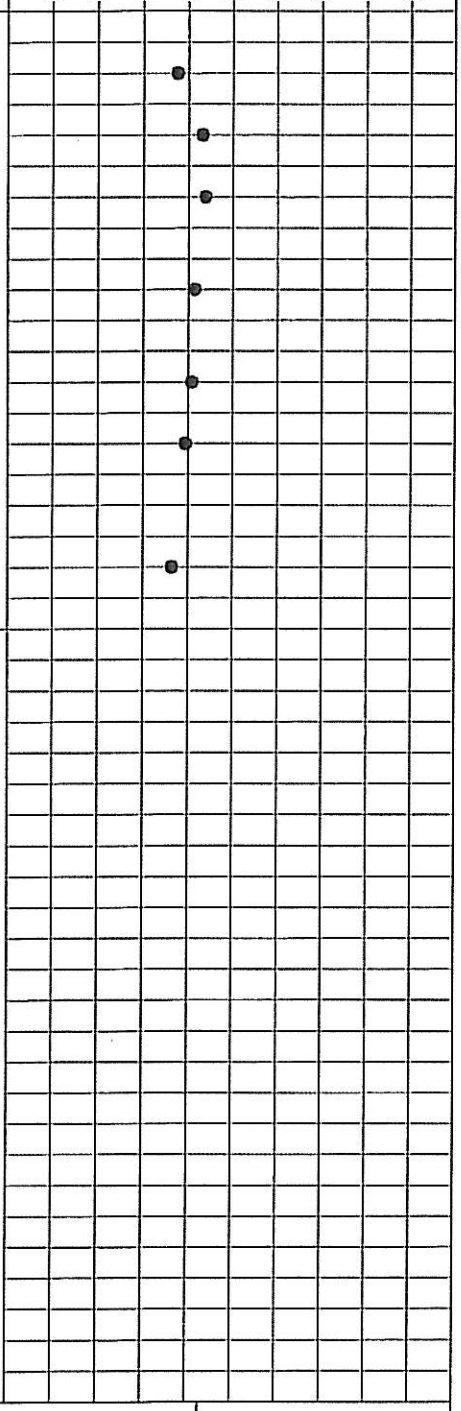
AH41

Project No: 807-0016

Depth (m)	Depth (ft)	Description	C	N	Type	Water Level
Elev. 0.00 m		**TOPSOIL**				
		Very stiff to stiff, brown grey, **SILTY CLAY** pocket pen = 2.5 tsf at 2.0 feet pocket pen = 1.0 tsf at 3.0 feet pocket pen = 1.75 tsf at 4.0 feet			AU AU	
	5	Firm, brown grey, **SILTY CLAY**			AU	
2						
	10	Firm, grey, **SANDY SILT**, some clay			AU	
		Firm to soft, grey, **CLAYEY SILT**			AU AU	
4						
	15	Firm, grey, **SILTY CLAY** pocket pen = 1.0 tsf at 16.0 feet pocket pen = 1.0 tsf at 17.0 feet pocket pen = 0.5 tsf at 18.0 feet pocket pen = 1.0 tsf at 19.0 feet			AU	
6	20	Bottom of hole at 6.10 meters				
	25					
8						
	30					
10						
	35					
12						
	40					
	45					



C: Condition of Sample
Good
Disturbed
No Recovery

Type: Type of Sampler
SPT : 2 in. standard
S : Shelby
FP : Fixed Piston
G : Grab
CORE

N: Number of Blows
WH : Weight of Hammer
WR : Weight of Rod
Standard Penetration Test : ASTM D1586
Hammer Type:

- Moisture Content %
- Plastic Limit
- Liquid Limit
- Ground Water Level
- Shear strength in kPa (Torvane or Penetrometer)
- Shear strength in kPa (Unconfined)
- Shear strength in kPa (field vane)
- Remolded strength in kPa
- Percent Passing # 200 sieve

Drill Method: Solid Stem Auger
Date Drilled: 1/26/2007
By: AA

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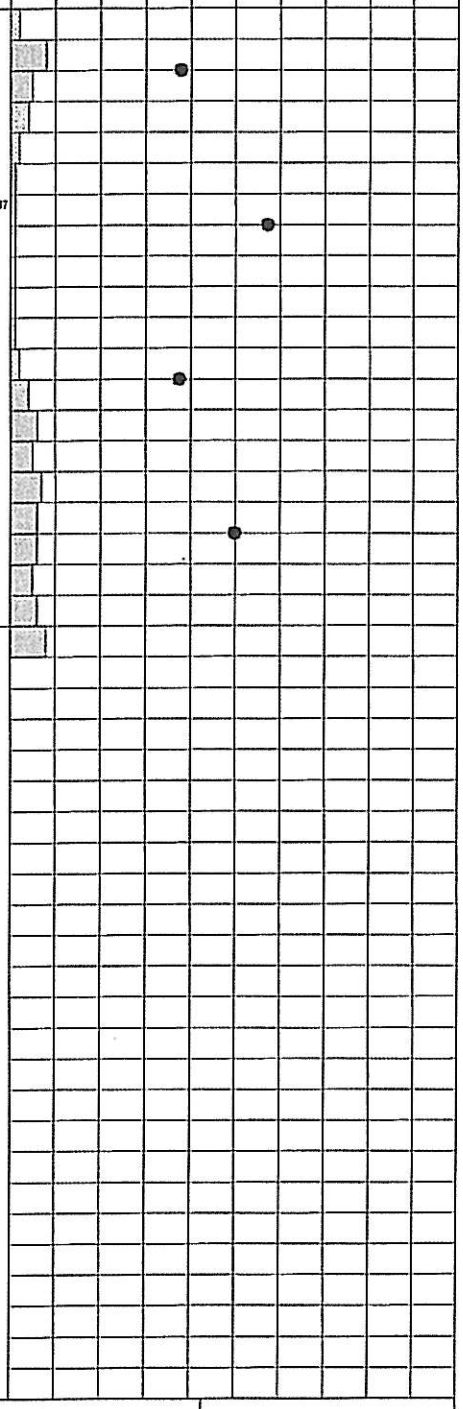
Proposed Commercial/Industrial Subdivision

AH42

Project No: 807-0016

Elev. 8.03 m

Depth (m)	Depth (ft)	Description	C	N	Type	Water Level
		Grass, rootlets, soft, dark brown, **TOPSOIL**, wet.		2		
		Stiff-firm, grey, **CLAY**, some silt,oxidation and mottling present, wet. PP=1.5-2.0tsf from 1-3 feet. PP=0.5tsf @ 4 feet.		8		
				5	AU	
				4		
				2		
	5	Soft, grey, **SILTY CLAY**, some mottling, saturated. Small organic pocket @ 5 feet.		1		
2				1		Jan/26/07
				1	AU	
				1		
				1		
	10			1		
				2		
				4	AU	
4		Firm, grey, **CLAYEY SILT**, clay lenses present, wet. PP=0.5tsf from 13.5-15 feet.		6		
				5		
	15			7		
		Firm, grey, **CLAY**, some silt and silt lenses, traces of mottling, wet. PP=0.5tsf throughout.		6		
				6	AU	
				5		
				6		
6	20			8		
		End Borehole. Hole flooded to 6 feet. PP=Pocket Penetrometer. Bottom of hole at 6.10 meters				
	25					
8						
	30					
10						
	35					
12						
	40					
	45					



C: Condition of Sample
Good
Disturbed
No Recovery

Type: Type of Sampler
SPT : 2 in. standard
S : Shelby
FP : Fixed Piston
G : Grab
CORE

N: Number of Blows
WH : Weight of Hammer
WR : Weight of Rod
Standard Penetration Test : ASTM D1586
Hammer Type:
DYNAMIC CONE PENETRATION TEST:
Blow count no. of blows of a 140 lb (64 kg) hammer dropped 30in. (750mm) to produce 12in (300mm) of a 2in (50mm) diameter cone.

- Moisture Content %
- Plastic Limit
- Liquid Limit
- Ground Water Level
- Shear strength in kPa (Torvane or Penetrometer)
- Shear strength in kPa (Unconfined)
- Shear strength in kPa (field vane)
- Remolded strength in kPa
- Percent Passing # 200 sieve

Drill Method: Solid Stem Auger / DCPT
Date Drilled: 1/26/2007
By: TBH

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Proposed Commercial/Industrial Subdivision

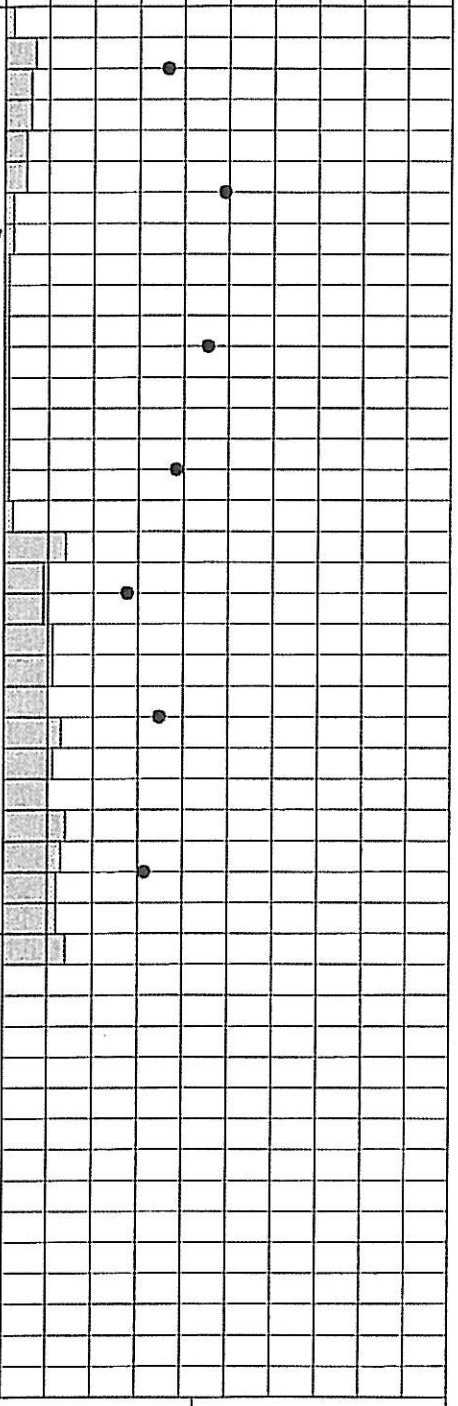
AH43

Project No: 807-0016

Elev. 7.06 m

Depth (m)	Depth (ft)	Description	C	N	Type
		Grass, rootlets, soft, brown, saturated, TOPSOIL.		2	
		Firm, grey, CLAY, trace of fine sand, oxidation present, traces of mottling, wet. PP=1.0tsf from 1-3 feet. PP=0.5 feet from 3-5 feet. PP=0.5tsf from 6-8 feet.		7	
				6	AU
				6	
				5	
	5			5	
2				2	AU
				2	
		Stiff, grey, CLAY, trace-some silt, some mottling, saturated. Shear Vane@7 feet=1431psf. Remold=332psf.		1	
				1	
	10			1	
				1	AU
				1	
4				1	
				1	
	15			2	AU
				14	
		Compact, fine-medium, SAND, trace of silt, saturated.		9	
				9	
6	20			11	AU
				11	
				10	
				13	
				11	AU
		Compac,t fine, SILTY SAND, silt lenses present, saturated.		10	
	25			14	
8				13	
				12	
				12	AU
				14	
	30			14	
		End Auger Hole. Hole flooded to 7 feet. PP=Pocket Penetrometer Bottom of hole at 9.14 meters			
10					
	35				
12					
	40				
	45				

Water Level: Jan23/07



C: Condition of Sample
- Good
- Disturbed
- No Recovery

Type: Type of Sampler
- SPT : 2 in. standard
- S : Shelby
- FP : Fixed Piston
- G : Grab
- CORE

N: Number of Blows
- WH : Weight of Hammer
- WR : Weight of Rod
- Standard Penetration Test : ASTM D1586
- Hammer Type:

DYNAMIC CONE PENETRATION TEST: Blow count no. of blows of a 140 lb (64 kg) hammer dropped 30in. (750mm) to produce 12in (300mm) of a 2in (50mm) diameter cone.

- Moisture Content %
- Plastic Limit
- Liquid Limit
- Ground Water Level
- Shear strength in kPa (Torvane or Penetrometer)
- Shear strength in kPa (Unconfined)
- Shear strength in kPa (field vane)
- Remolded strength in kPa
- Percent Passing # 200 sieve

Drill Method: Solid Stem Auger / DCPT

Date Drilled: 1/23/2007

By: TBH

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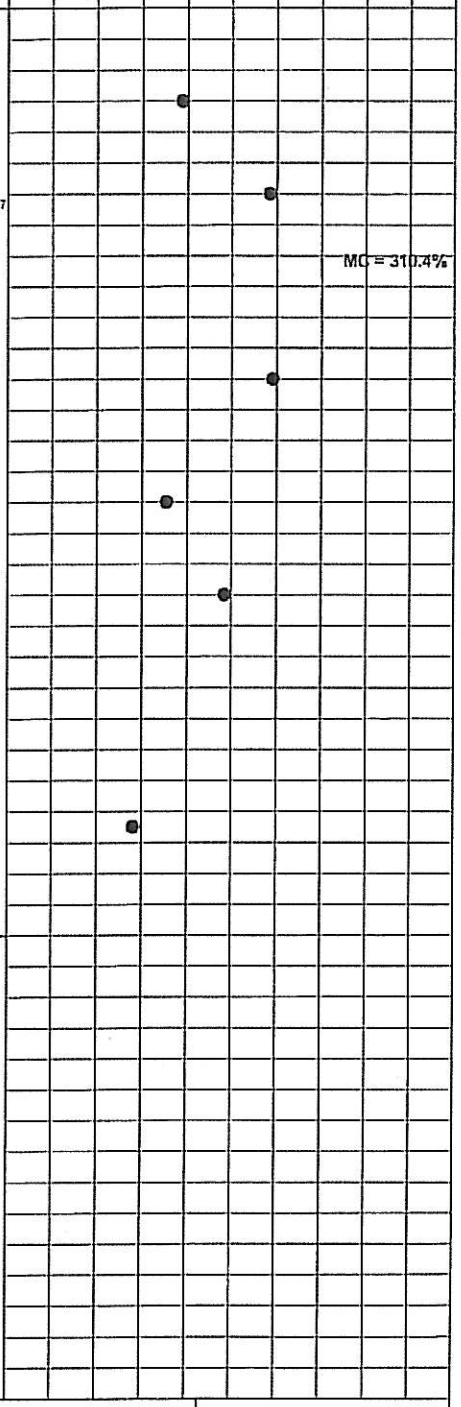
Proposed Commercial/Industrial Subdivision

AH44

Project No: 807-0016

Elev. 7.76 m

Depth (m)	Depth (ft)	Description	C	N	Type	Water Level
		Grass, rootlets, dark brown, soft, TOPSOIL, saturated.				
		Stiff-firm, grey, CLAY, trace of fine sand, oxidation pockets present, some mottling. PP=2.0tsf @ 2 feet. PP=1.0 @ 3 feet. PP=0.5tsf from 4-7 feet.			AU	
2	5				AU	Jan/23/07
		Very soft, saturated, brown, PEAT.			AU	
	10	Very soft, grey, CLAY, saturated, uniform.			AU	
4	15	Soft-firm, grey, CLAYEY SILT, wet, traces of mottling. PP=0.25tsf throughout.			AU	
6	20	Compact-loose, grey, SILTY SAND, wood pieces present,saturated.			AU	
8	25	Compact, grey, fine SAND, some silt, silt lenses present, saturated.			AU	
	30	End Auger Hole. Hole flooded to 6 feet. PP=Pocket Penetrometer. Bottom of hole at 9.14 meters				
10	35					
12	40					
	45					



C: Condition of Sample
Good
Disturbed
No Recovery

Type: Type of Sampler
SPT : 2 in. standard
S : Shelby
FP : Fixed Piston
G : Grab
CORE

N: Number of Blows
WH : Weight of Hammer
WR : Weight of Rod
Standard Penetration Test : ASTM D1586
Hammer Type:

- Moisture Content %
- Plastic Limit
- Liquid Limit
- Ground Water Level
- Shear strength in kPa (Torvane or Penetrometer)
- Shear strength in kPa (Unconfined)
- Shear strength in kPa (field vane)
- Remolded strength in kPa
- Percent Passing # 200 sieve

Drill Method: Solid Stem Auger
Date Drilled: 1/23/2007
By: TBH

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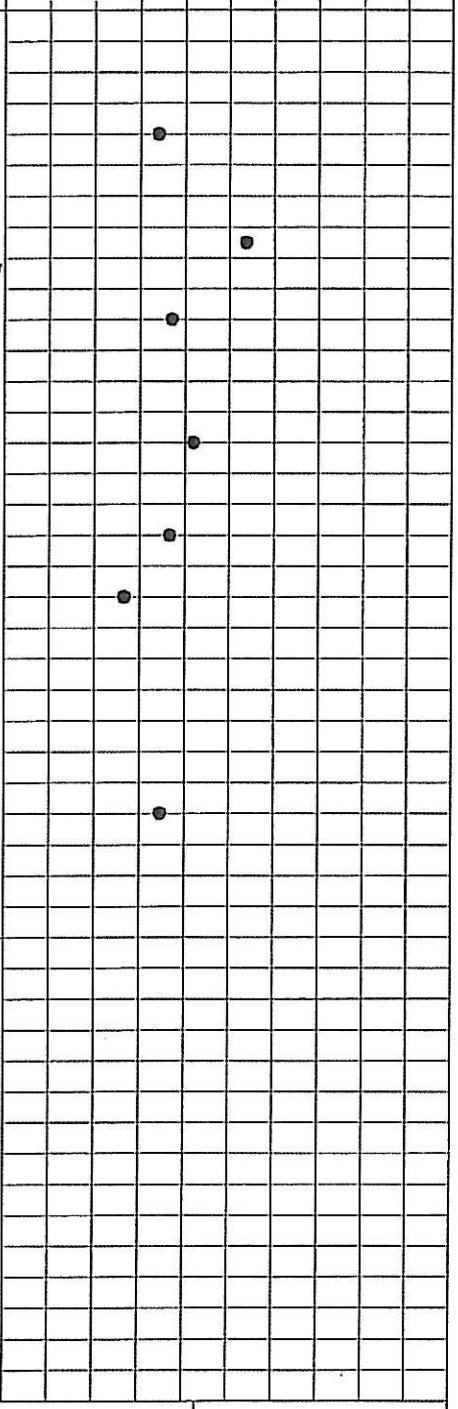
Proposed Commercial/Industrial Subdivision

AH45

Project No: 807-0016

Elev. 7.70 m

Depth (m)	Depth (ft)	Description	C	N	Type	Water Level
		Grass, rootlets, soft, brown, TOPSOIL, saturated.				
		Firm, grey, CLAY, some silt, oxidation pockets present, some mottling. PP=2.0tsf from 1-5 feet. PP=1.0tsf @ 6 feet. PP=0.5tsf @ 7 feet.			AU	
2	5					
		Soft, grey/brown, CLAY, some silt, some organics, saturated.			AU	Jan/23/07
		Soft, grey, CLAY, trace-some silt, traces of mottling, saturated. PP=0.25tsf throughout.			AU	
4	10					
					AU	
	15					
		Soft, grey, CLAYEY SILT, some fine sand, saturated.			AU	
		Compact, grey, fine SAND, trace of silt, saturated.			AU	
6	20					
		Loose to compact, grey, SILTY SAND to sandy silt, silt and sand lenses present, saturated.				
	25					
8					AU	
	30					
		End Auger Hole. Hole flooded to 8 feet. PP= Pocket Penetrometer. Bottom of hole at 9.14 meters				
10	35					
12	40					
	45					



C: Condition of Sample
- Good
- Disturbed
- No Recovery

Type: Type of Sampler
- SPT : 2 in. standard
- S : Shelby
- FP : Fixed Piston
- G : Grab
- CORE

N: Number of Blows
- WH : Weight of Hammer
- WR : Weight of Rod
- Standard Penetration Test : ASTM D1586
- Hammer Type:

- ● Moisture Content %
- ► Plastic Limit
- ◄ Liquid Limit
- ▼ Ground Water Level
- (X) Shear strength in kPa (Torvane or Penetrometer)
- X Shear strength in kPa (Unconfined)
- ⊗ Shear strength in kPa (field vane)
- ⊡ Remolded strength in kPa
- ■ Percent Passing # 200 sieve

Drill Method: Solid Stem Auger

Date Drilled: 1/23/2007

By: TBH

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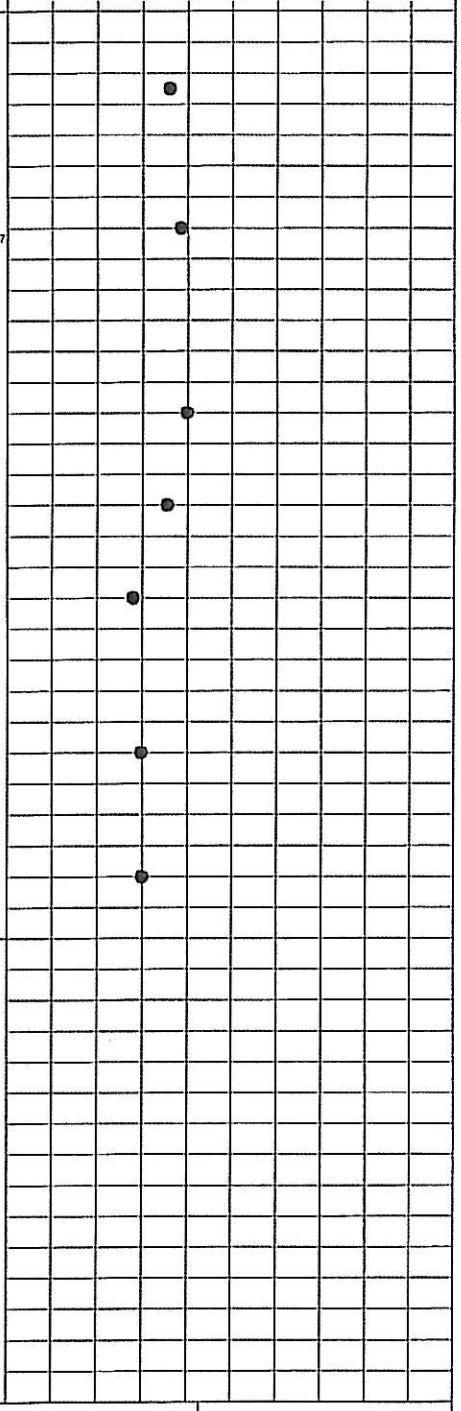
Proposed Commercial/Industrial Subdivision

AH46

Project No: 807-0016

Depth (m)	Depth (ft)	Description	C	N	Type	Water Level
Elev. 8.23 m						
		Grass, rootlets, soft, dark brown, **TOPSOIL**, saturated.				
		Stiff, grey, **SILTY CLAY**, trace of fine sand, oxidation pockets present, traces of mottling, wet. PP=3.0 tsf @ 2 feet. PP=2.5 tsf from 2-5 feet.			AU	
	5					
2		Firm, **CLAY**, some silt, traces of oxidation and mottling, wet-saturated. PP=0.5tsf throughout.			AU	Jan/23/07
	10					
4					AU	
	15					
		Compact-loose, grey, **SILTY SAND**, silt lenses present, saturated.			AU	
6	20				AU	
		Compact, grey, fine-medium **SAND**, some silt, occasional silt lense, saturated.			AU	
	25					
8		Loose to compact, grey, **SILTY FINE SAND**, silt and sand lenses present, saturated.			AU	
	30					
		End Auger Hole. Hole flooded to 7 feet. PP=Pocket Penetrometer. Bottom of hole at 9.14 meters				
10						
	35					
12						
	40					
	45					



C: Condition of Sample
Good
Disturbed
No Recovery

Type: Type of Sampler
SPT : 2 in. standard
S : Shelby
FP : Fixed Piston
G : Grab
CORE

N: Number of Blows
WH : Weight of Hammer
WR : Weight of Rod
Standard Penetration Test : ASTM D1586
Hammer Type:

- Moisture Content %
- Plastic Limit
- Liquid Limit
- Ground Water Level
- Shear strength in kPa (Torvane or Penetrometer)
- Shear strength in kPa (Unconfined)
- Shear strength in kPa (field vane)
- Remolded strength in kPa
- Percent Passing # 200 sieve

Drill Method: Solid Stem Auger
Date Drilled: 1/23/2007
By: TBH

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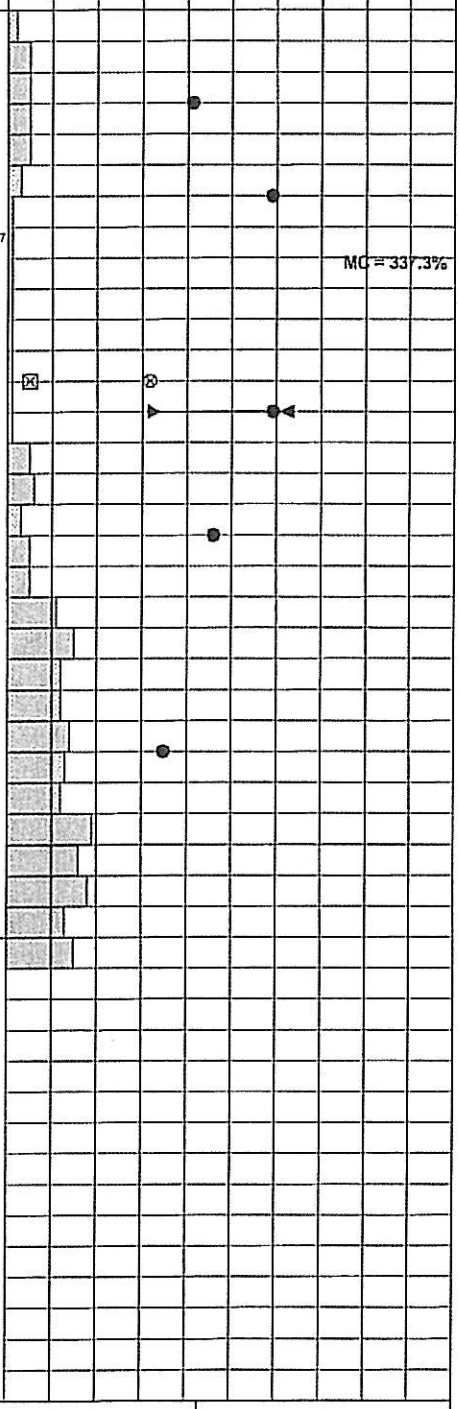
Proposed Commercial/Industrial Subdivision

AH47

Project No: 807-0016

Elev. 7.04 m

Depth (m)	Depth (ft)	Description	C	N	Type	Water Level
		Grass, rootlets, soft, dark brown, TOPSOIL, saturated.		2		
		Firm, grey, CLAY, some silt, oxidation pockets present, wet.		5		
		PP=1.5tsf from 1-5 feet.		5		
		PP=0.5tsf from 5-7 feet.		5	AU	
				3		
	5			1		
2				1	AU	
		Very soft, saturated, brown, PEAT, trace of clay.		1		Jan/27/07
				1	AU	
				1		
	10			1		
		Firm, saturated, grey, SILTY CLAY, uniform.		1		
		Shear Vane @ 12 feet = 663 psf. Remold = 105 psf.		1		
4				1	AU	
				5		
	15	Firm, grey, SILTY CLAY, traces of mottling, wet.		6		
				3		
				5	AU	
				5		
				11		
6	20			15		
		Compact, fine, grey, SAND, some silt and silt lenses, saturated.		12		
				12		
				14		
				13	AU	
	25			12		
8				19		
				16		
				18		
				13		
	30			15		
		End Auger Hole. Hole flooded to 7 feet. PP= Pocket penetrometer. Bottom of hole at 9.14 meters				
10						
	35					
12						
	40					
	45					



C: Condition of Sample
- Good
- Disturbed
- No Recovery

Type: Type of Sampler
- SPT : 2 in. standard
- S : Shelby
- FP : Fixed Piston
- G : Grab
- CORE

N: Number of Blows
- WH : Weight of Hammer
- WR : Weight of Rod
- Standard Penetration Test : ASTM D1586
- Hammer Type:

DYNAMIC CONE PENETRATION TEST: Blow count no. of blows of a 140 lb (64 kg) hammer dropped 30in. (750mm) to produce 12in (300mm) of a 2in (50mm) diameter cone.

- Moisture Content %
- Plastic Limit
- Liquid Limit
- Ground Water Level
- Shear strength in kPa (Torvane or Penetrometer)
- Shear strength in kPa (Unconfined)
- Shear strength in kPa (field vane)
- Remolded strength in kPa
- Percent Passing # 200 sieve

Drill Method: Solid Stem Auger / DCPT

Date Drilled: 1/24/2007

By: TBH

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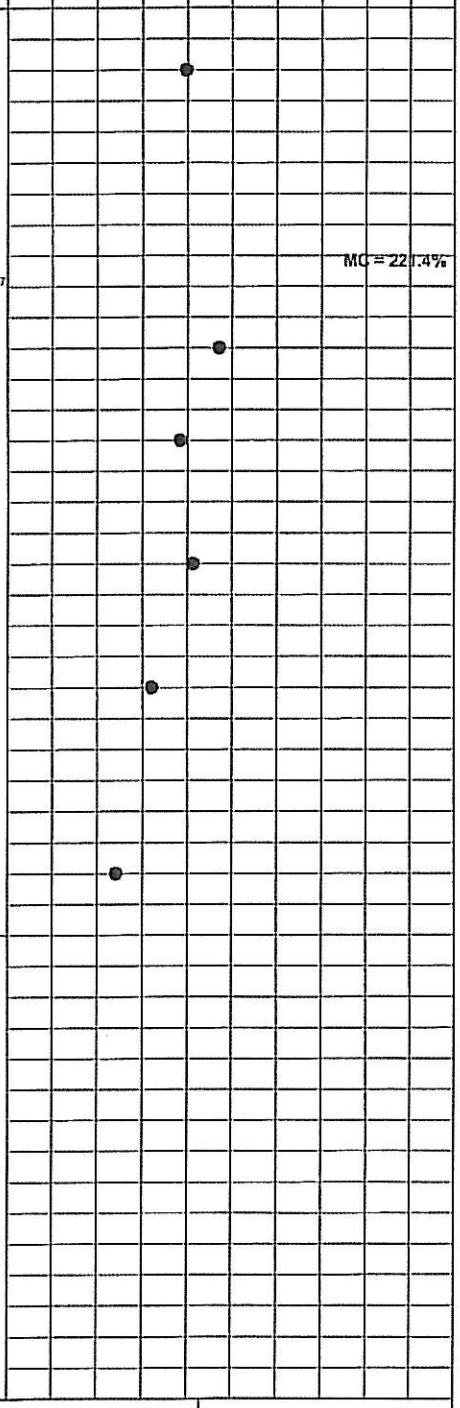
Chilliwack, BC
Proposed Commercial/Industrial Subdivision

AH48

Project No: 807-0016

Depth (m)	Depth (ft)	Description	C	N	Type	Water Level
Elev. 7.03 m						
		Grass, rootlets, soft, dark brown, TOPSOIL, wet.				
		Firm-soft, grey, SILTY CLAY, oxidation pockets present, wet. PP=1.5tsf from 1-5 feet. PP=0.5tsf from 5-7 feet.			AU	
2	5					
		Very soft, dark brown, PEAT, saturated.			AU	Jan/24/07
	10	Soft, grey, SILTY CLAY, saturated, traces of mottling.			AU	
4		Firm, grey, CLAYEY SILT, clay lenses present, saturated.			AU	
	15	Firm, grey, SILTY CLAY, traces of mottling, wet. PP=1.0tsf throughout.			AU	
6	20	Compact, grey, SAND, trace-some silt, occasional silt lense, saturated.			AU	
	25					
8					AU	
	30	End Auger Hole. Hole flooded to 8.5 feet. PP= Pocket Penetrometer. Bottom of hole at 9.14 meters				
10	35					
12	40					
	45					



C: Condition of Sample
- Good
- Disturbed
- No Recovery

Type: Type of Sampler
- SPT : 2 in. standard
- S : Shelby
- FP : Fixed Piston
- G : Grab
- CORE

N: Number of Blows
- WH : Weight of Hammer
- WR : Weight of Rod
- Standard Penetration Test : ASTM D1586
- Hammer Type:

- Moisture Content %
- Plastic Limit
- Liquid Limit
- Ground Water Level
- Shear strength in kPa (Torvane or Penetrometer)
- Shear strength in kPa (Unconfined)
- Shear strength in kPa (field vane)
- Remolded strength in kPa
- Percent Passing # 200 sieve

Drill Method: Solid Stem Auger
Date Drilled: 1/24/2007
By: TBH

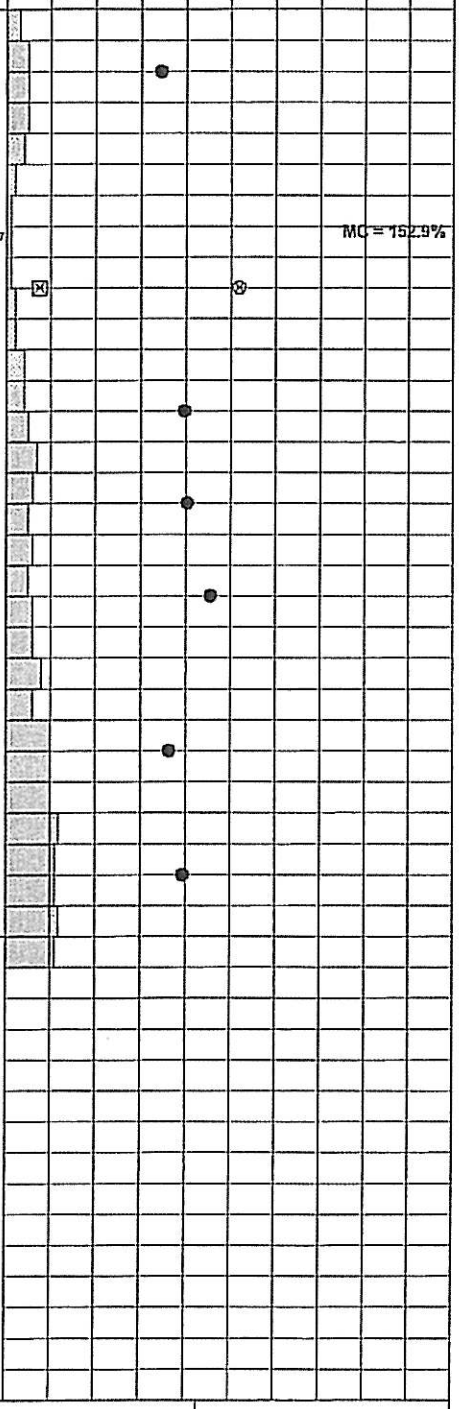
LEVELTON
Engineering Solutions
103-19292 60th Ave
Surrey BC V3S 3M2
Telephone: 604-533-2992
Fax: 604-533-0768

8180 Aitken Road
Chilliwack, BC
Proposed Commercial/Industrial Subdivision

AH49

Project No: 807-0016

Depth (m)	Depth (ft)	Description	C	N	Type	Water Level
Elev. 0.11 m						
		Grass, rootlets, dark brown, TOPSOIL, saturated.		3		
		Firm, grey, CLAYEY SILT, trace of fine sand, oxidation pockets present wet. PP=1.5tsf from 1-5 feet. PP=1.0tsf from 5-6.5 feet.		5		
				5	AU	
				5		
				4		
	5			2		
				1		
2		Very soft, saturated, dark brown, PEAT.		1	AU	Jan/27/07
		Firm to stiff, grey, SILTY CLAY, saturated, traces of mottling. Shear Vane @ 9 feet = 1082psf. Remold = 156psf.		1		
				2		
	10			2		
				4		
				4		
4				6	AU	
				7		
	15	Firm, grey, CLAYEY SILT, saturated.		6		
				5	AU	
		Soft-firm, grey, SILTY CLAY, wet-saturated, traces of mottling.		6		
				5		
6				6	AU	
	20			6		
				8		
				6		
				10		
				10	AU	
	25			10		
8		Compact, fine, SILTY SAND, some silt lenses, saturated.		12		
				11		
				11	AU	
				10		
	30			11		
		End Auger Hole. Hole flooded to 7 feet. PP=Pocket Penetrometer. Bottom of hole at 9.14 meters				
10						
	35					
12						
	40					
	45					



C: Condition of Sample
- Good
- Disturbed
- No Recovery

Type: Type of Sampler
- SPT : 2 in. standard
- S : Shelby
- FP : Fixed Piston
- G : Grab
- CORE

N: Number of Blows
- WH : Weight of Hammer
- WR : Weight of Rod
- Standard Penetration Test : ASTM D1586
- Hammer Type:

DYNAMIC CONE PENETRATION TEST:
Blow count no. of blows of a 140 lb (64 kg) hammer dropped 30in. (750mm) to produce 12in (300mm) of a 2in (50mm) diameter cone.

- Moisture Content %
- Plastic Limit
- Liquid Limit
- Ground Water Level
- Shear strength in kPa (Torvane or Penetrometer)
- Shear strength in kPa (Unconfined)
- Shear strength in kPa (field vane)
- Remolded strength in kPa
- Percent Passing # 200 sieve

Drill Method: Solid Stem Auger / DCPT
Date Drilled: 1/24/2007
By: TBH

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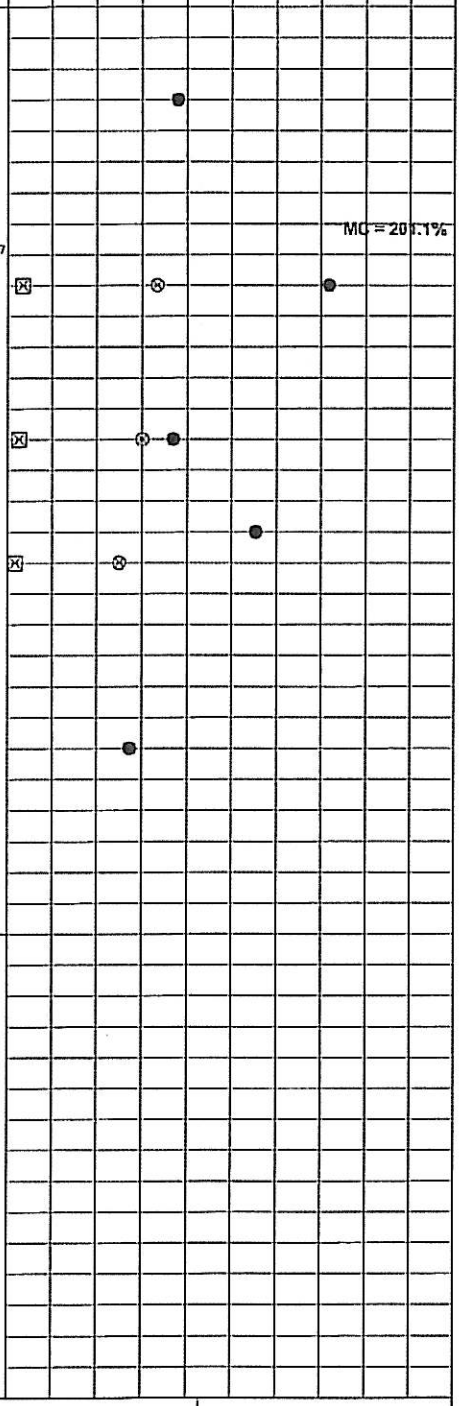
8180 Aitken Road
Chilliwack, BC
Proposed Commercial/Industrial Subdivision

AH50

Project No: 807-0016

Depth (m)	Depth (ft)	Description	C	N	Type	Water Level
Elev. 7.98 m						
		Grass, rootlets, dark brown soft TOPSOIL, saturated.				
		Firm to soft grey silty CLAY, trace of sand, oxidation pockets and mottling present, saturated. PP=1.5tsf @ 2 feet. PP=1.0tsf from 3-5 feet. PP=0.5tsf from 5-6.5 feet.			AU	
2	5	Very soft, saturated dark brown PEAT.			AU	Jan/24/07
	10	Soft grey CLAY, some silt, traces of organics, saturated. Shear Vane @ 9 feet=698psf. Remold=70psf.			AU	
4	15	Firm grey clayey SILT, saturated. Shear Vane @ 14 feet=628psf. Remold=52psf.			AU	
6	20	Soft-firm grey CLAY, some silt, occasional silt lense, saturated, some mottling. Shear Vane @ 18 feet=524psf. Remold=35psf.			AU	
8	25	Compact grey silty SAND, silt and sand lenses present, saturated.			AU	
10	30	End Auger Hole. Hole flooded to 7.5 feet. PP=Pocket Penetrometer. Bottom of hole at 9.14 meters				
12	35					
	40					
	45					



C: Condition of Sample
- Good
- Disturbed
- No Recovery

Type: Type of Sampler
- SPT : 2 in. standard
- S : Shelby
- FP : Fixed Piston
- G : Grab
- CORE

N: Number of Blows
- WH : Weight of Hammer
- WR : Weight of Rod
- Standard Penetration Test : ASTM D1586
- Hammer Type:

- Moisture Content %
- Plastic Limit
- Liquid Limit
- Ground Water Level
- Shear strength in kPa (Torvane or Penetrometer)
- Shear strength in kPa (Unconfined)
- Shear strength in kPa (field vane)
- Remolded strength in kPa
- Percent Passing # 200 sieve

Drill Method: Solid Stem Auger
Date Drilled: 1/24/2007
By: TBH

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8180 Aitken Road
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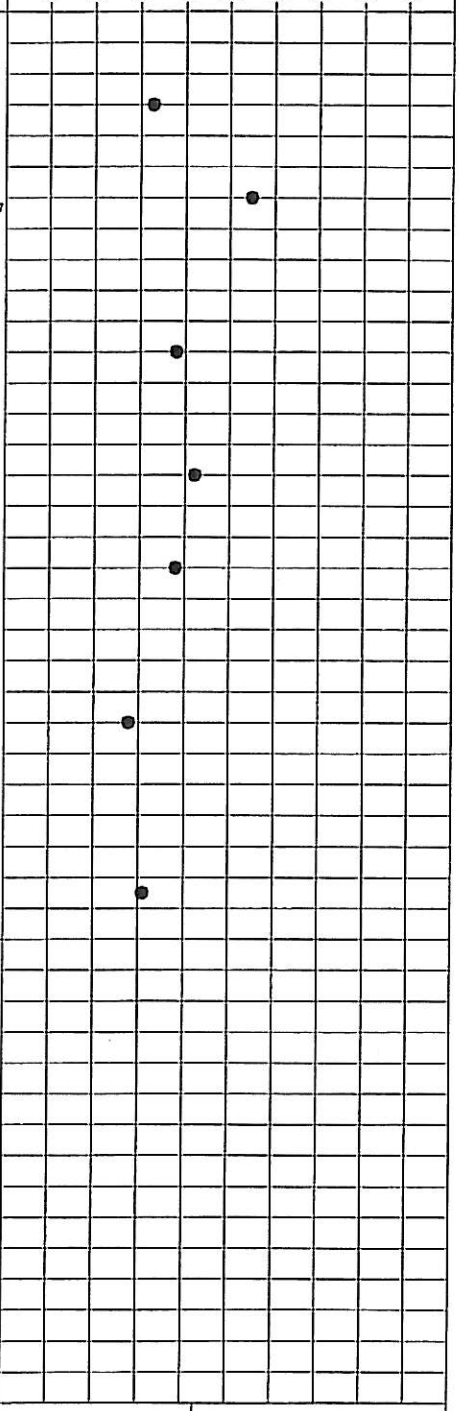
Proposed Commercial/Industrial Subdivision

AH51

Project No: 807-0016

Depth (m)	Depth (ft)	Description	Piezo 1	C	N	Type	Water Level
	Elev. 0.00 m	Grass, rootlets, soft, dark brown, TOPSOIL, wet.					
		Firm-soft, grey, SILTY CLAY, oxidation pockets present, some mottling, wet. PP=1.0tsf from 1-3 feet. PP=0.5tsf from 3-6 feet.				AU	
2	5	Soft, grey, SILTY CLAY, some organics, saturated.				AU	Jan/22/07
		Soft, grey, CLAY, some silt, traces of oxidation and mottling, saturated.				AU	
4	10	Firm, light grey, CLAY, trace-some silt, some mottling, saturated.				AU	
	15	Firm, grey, CLAYEY SILT, some mottling, saturated. PP=0.25tsf 16-19 feet.				AU	
6	20	Compact, fine-medium grey, SAND, some silt, trace of silt lenses, saturated.				AU	
8	25					AU	
	30	End Auger Hole. Hole Flooded to 6 feet. PP=Pocket Penetrometer. Monitoring Well installed to 15 feet. Bottom of hole at 9.14 meters					
10	35						
12	40						
	45						



C: Condition of Sample
- Good
- Disturbed
- No Recovery

Type: Type of Sampler
- SPT : 2 in. standard
- S : Shelby
- FP : Fixed Piston
- G : Grab
- CORE

N: Number of Blows
- WH : Weight of Hammer
- WR : Weight of Rod
- Standard Penetration Test : ASTM D1586
- Hammer Type:

- Moisture Content %
- Plastic Limit
- Liquid Limit
- Ground Water Level
- Shear strength in kPa (Torvane or Penetrometer)
- Shear strength in kPa (Unconfined)
- Shear strength in kPa (field vane)
- Remolded strength in kPa
- Percent Passing # 200 sieve

Bentonite/Grout Plug
Solid Pipe
Cuttings
Slotted Pipe
Sand/Pea-Gravel

Drill Method: Solid Stem Auger
Date Drilled: 1/24/2007
By: TBH

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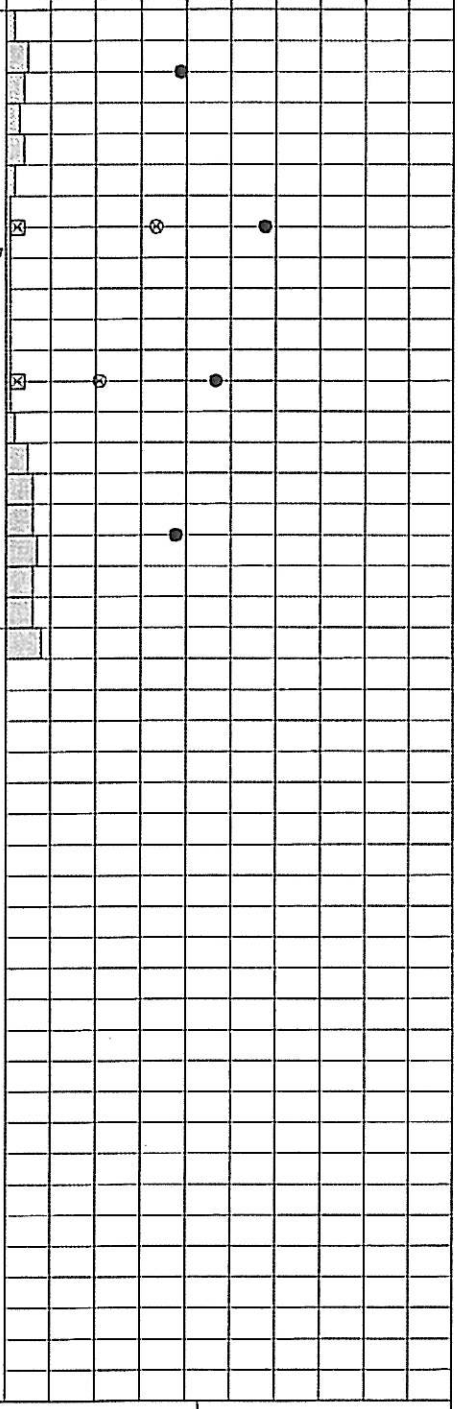
Proposed Commercial/Industrial Subdivision

AH52

Project No: 807-0016

Elev. 7.83 m

Depth (m)	Depth (ft)	Description	C	N	Type	Water Level
		Grass, rootlets, soft, dark brown, TOPSOIL, wet.		2 5		
		Firm, grey, SILTY CLAY, oxidation pockets and mottling present, wet. PP=1.5tsf @ 2 feet. PP=1.0tsf @ 3 feet. PP=0.5tsf from 4-6 feet.		4 3 4 2 1	AU	
2	5	Firm, grey, CLAY, some silt, mottling present, saturated. Shear Vane @ 7 feet =698psf. Remold = 52psf.		1 1 1 1	AU	Jan/25/07
4	10	Soft, grey, CLAYEY SILT, traces mottling, saturated. Shear Vane @ 12 feet = 437 psf. Remold = 52psf.		1 2	AU	
6	15	Firm, grey, SILTY CLAY, some silt lenses, wet.		5 6 7 6 6 5 8	AU	
8	20	End Auger Hole. Hole flooded to 7.5 feet. PP=Pocket Penetrometer. Bottom of hole at 6.10 meters				
10	25					
12	30					
	35					
	40					
	45					



C: Condition of Sample
Good
Disturbed
No Recovery

Type: Type of Sampler
SPT : 2 in. standard
S : Shelby
FP : Fixed Piston
G : Grab
CORE

N: Number of Blows
WH : Weight of Hammer
WR : Weight of Rod
Standard Penetration Test : ASTM D1586
Hammer Type:

DYNAMIC CONE PENETRATION TEST:
Blow count no. of blows of a 140 lb (64 kg) hammer dropped 30in. (750mm) to produce 12in (300mm) of a 2in (50mm) diameter cone.

- Moisture Content %
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- Liquid Limit
- Ground Water Level
- Shear strength in kPa (Torvane or Penetrometer)
- Shear strength in kPa (Unconfined)
- Shear strength in kPa (field vane)
- Remolded strength in kPa
- Percent Passing # 200 sieve

Drill Method: Solid Stem Auger / DCPT
Date Drilled: 1/26/2007
By: TBH

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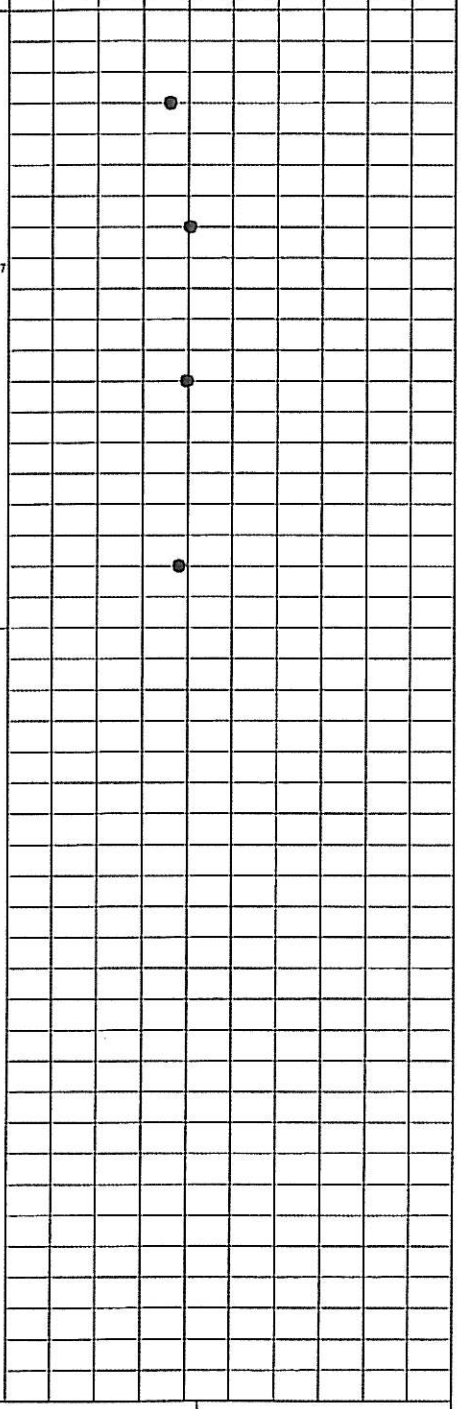
Proposed Commercial/Industrial Subdivision

AH53

Project No: 807-0016

Depth (m)	Depth (ft)	Description	C	N	Type	Water Level
Elev. 0.40 m						
		Grass, rootlets, soft, dark brown, **TOPSOIL**, saturated.				
		Stiff-firm, grey, **CLAY**, some silt, oxidation pockets and mottling present, wet. PP=1.5-2.0tsf from 2-5 feet. PP=1.0tsf @ 6 feet.			AU	
2	5					
		Firm-soft, grey, **SILTY CLAY**, traces of oxidation, saturated. PP=0.25tsf @ 7 feet. PP=0.12tsf @ 8 feet.			AU	Jan26/07
	10					
		Firm, grey, **SILT**, some clay, saturated.			AU	
4	15					
		Stiff, grey, **SILT**, some clay and clay lenses, wet. PP=1.0tsf from 17-20 feet.			AU	
6	20					
		End Auger Hole. Hole flooded to 8 feet. PP=Pocket Penetrometer. Bottom of hole at 6.10 meters				
	25					
8						
	30					
10						
	35					
12	40					
	45					



C: Condition of Sample
- Good
- Disturbed
- No Recovery

Type: Type of Sampler
- SPT : 2 in. standard
- S : Shelby
- FP : Fixed Piston
- G : Grab
- CORE

N: Number of Blows
- WH : Weight of Hammer
- WR : Weight of Rod
- Standard Penetration Test : ASTM D1586
- Hammer Type:

- Moisture Content %
- Plastic Limit
- Liquid Limit
- Ground Water Level
- Shear strength in kPa (Torvane or Penetrometer)
- Shear strength in kPa (Unconfined)
- Shear strength in kPa (field vane)
- Remolded strength in kPa
- Percent Passing # 200 sieve

Drill Method: Solid Stem Auger
Date Drilled: 1/26/2007
By: TBH

LEVELTON
Engineering Solutions
103-10202 60th Ave
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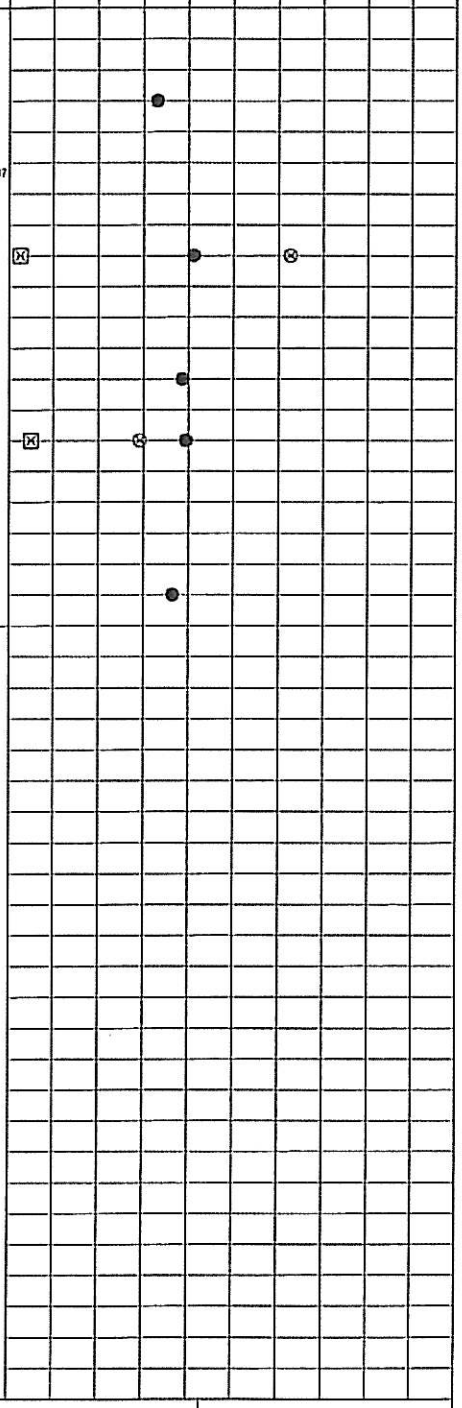
Fax: 604-533-0708

8180 Aitken Road
Chilliwack, BC
Proposed Commercial/Industrial Subdivision

AH54

Project No: 807-0016

Depth (m)	Depth (ft)	Description	C	N	Type	Water Level
Elev. 9.08 m						
		Grass, rootlets, soft, dark brown, **TOPSOIL**, saturated.				
		Stiff, grey, **CLAY**, trace-some silt, oxidation pockets and mottling present, wet. PP=1.5-2.0tsf from 1.5-5.5 feet.			AU	
	5					Jan/20/07
2		Firm to stiff, grey, **CLAYEY SILT**, saturated. PP=0.25tsf @ 7 feet. PP=0tsf below 8 feet. Shear Vane @ 9 feet=1310psf. Remold=52psf.			AU	
	10					
4					AU	
	15	Shear Vane @ 14 feet=611psf. Remold=105psf.			AU	
		Firm, grey, **CLAY**, some silt and silt lenses, wet. PP=1.0tsf from 17.5-20 feet.				
6	20				AU	
		End Auger Hole. Hole Flooded to 5 feet. PP=Pocket Penetrometer. Bottom of hole at 6.10 meters				
	25					
8						
	30					
10						
	35					
12						
	40					
	45					



C: Condition of Sample
Good
Disturbed
No Recovery

Type: Type of Sampler
SPT : 2 in. standard
S : Shelby
FP : Fixed Piston
G : Grab
CORE

N: Number of Blows
WH : Weight of Hammer
WR : Weight of Rod
Standard Penetration Test : ASTM D1586
Hammer Type:

- Moisture Content %
- Plastic Limit
- Liquid Limit
- Ground Water Level
- Shear strength in kPa (Torvane or Penetrometer)
- Shear strength in kPa (Unconfined)
- Shear strength in kPa (field vane)
- Remolded strength in kPa
- Percent Passing # 200 sieve

Drill Method: Solid Stem Auger
Date Drilled: 1/26/2007
By: TBH

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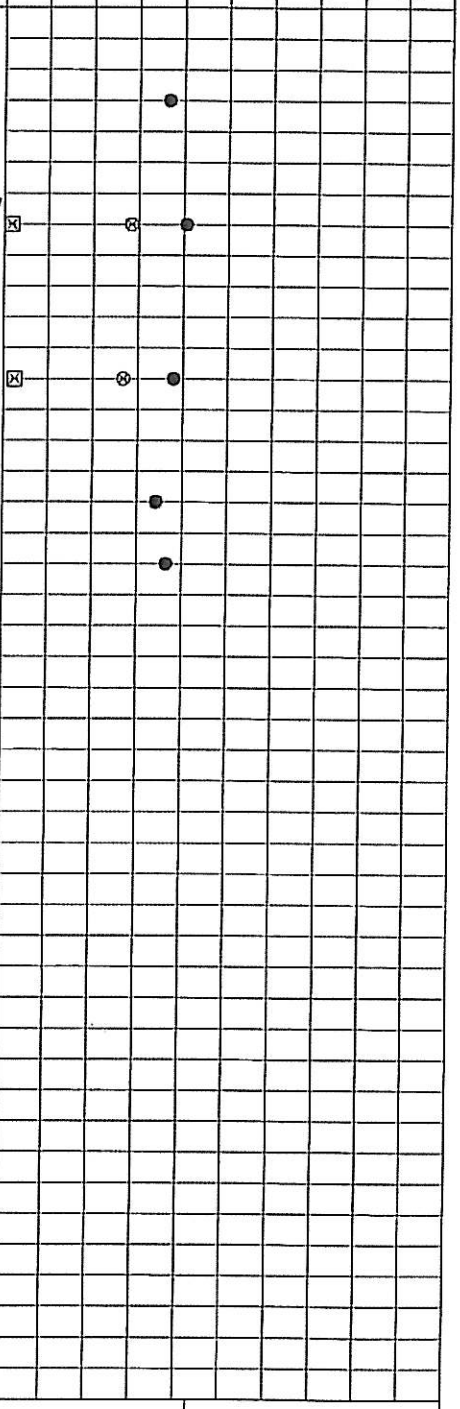
8180 Aitken Road
Chilliwack, BC
Proposed Commercial/Industrial Subdivision

AH55

Project No: 807-0016

Depth (m)	Depth (ft)	Description	C	N	Type	Water Level
		Grass, rootlets, soft, dark brown, **TOPSOIL**, wet.				
		Firm, grey, **CLAY**, trace-some silt, oxidation and mottling present, wet. PP=0.5-1.0tsf from 1-5 feet.			AU	
	5					
2		Firm, grey, **SILTY CLAY**, traces of mottling, saturated. Small organic pocket @ 6 feet. Shear Vane @ 8 feet=594psf. Remold=35psf.			AU	Jan/26/07
	10					
4		Shear Vane @ 13 feet=559psf. Remold=52psf.			AU	
	15					
		Compact, grey, **SILTY FINE SAND**, saturated.			AU	
		Firm, grey, **CLAY**, trace of sand, wet. PP=1.0tsf from 17.5-20 feet.			AU	
6	20					
		End Auger Hole. Hole Flooded to 6 feet. PP=Pocket Penetrometer. Bottom of hole at 6.10 meters				
	25					
8						
	30					
10						
	35					
12						
	40					
	45					



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- Disturbed
- No Recovery

Type: Type of Sampler
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- S : Shelby
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- Shear strength in kPa (Torvane or Penetrometer)
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- Shear strength in kPa (field vane)
- Remolded strength in kPa
- Percent Passing # 200 sieve

Drill Method: Solid Stem Auger
Date Drilled: 1/26/2007
By: TBH

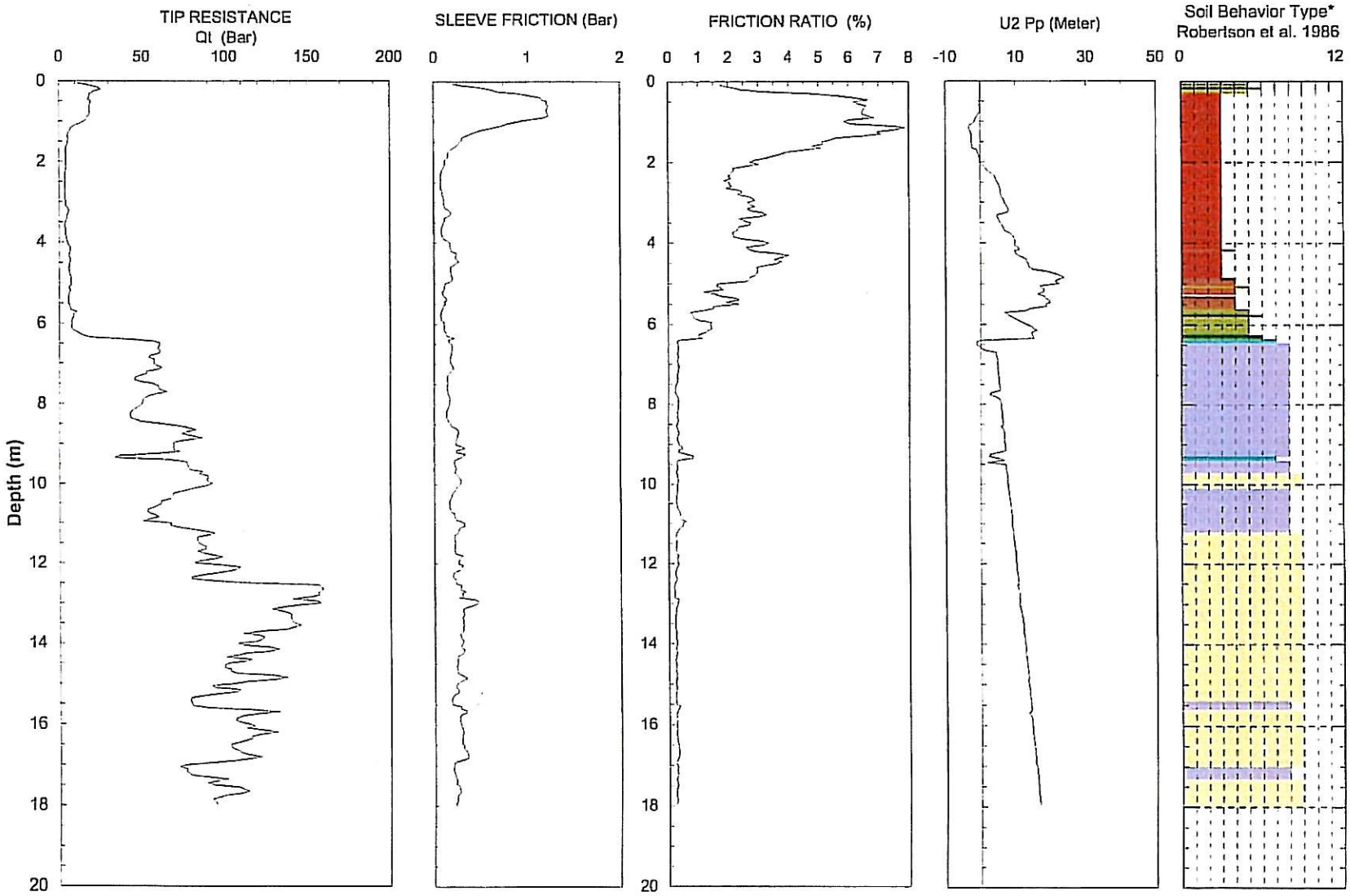
TABLE A1: Organic Soil at Suplemental Auger Holes

Auger Hole	Depth to top of Organic (ft)	Thickness of Organic (ft)	Moisture %	Organic Soil Description
SAH-1	6.5	1.00	167	Organic Silt
SAH-2	6.0	0.75	242	Peat
SAH-3	6.0	1.00	90	Organic Silt
SAH-4	6.5	0.50	218	Peat
SAH-5	7.0	0.50	189	Organic Silt
SAH-6	7.5	1.00	233	Peat
SAH-7	7.0	1.25	310	Peat
SAH-8	6.5	1.50	218	Peat
SAH-9	8.0	1.00	185	Organic Silt
Avg.	6.78	0.94	205.78	

Note: All supplemental auger holes advanced to a depth of 10 feet.

amec	Operator: Dynamic Drilling Inc. Sounding: CPT05 - 1 Cone ID: HT373 5 Ton	Date: September 26, 2005 Site: Lickman Road Industrial Park AMEC Project Number: KA20851

DYNAMIC DRILLING INC.
IN-SITU TESTING SERVICES



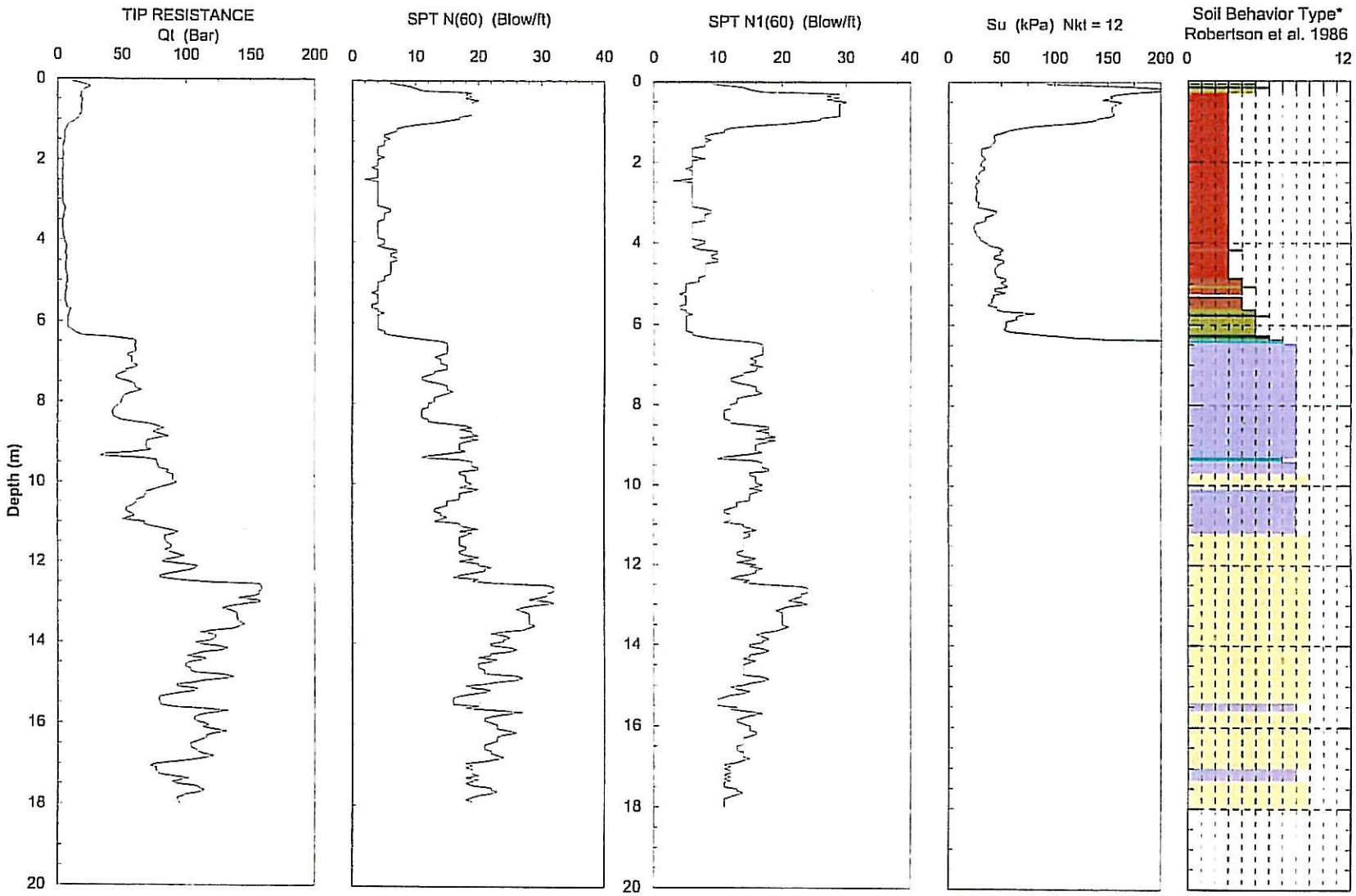
Maximum Depth = 18.00 meters

Depth Increment = 0.05 meters

1 sensitive fine grained
2 organic material
3 clay
4 silty clay to clay
5 clayey silt to silty clay
6 sandy silt to clayey silt
7 silty sand to sandy silt
8 sand to silty sand
9 sand
10 gravelly sand to sand
11 very stiff fine grained (*)
12 sand to clayey sand (*)

amec	Operator: Dynamic Drilling Inc. Sounding: CPT05 - 1 Cone ID: HT373 5 Ton	Date: September 26, 2005 Site: Lickman Road Industrial Park AMEC Project Number: KA20851

DYNAMIC DRILLING INC.
IN-SITU TESTING SERVICES



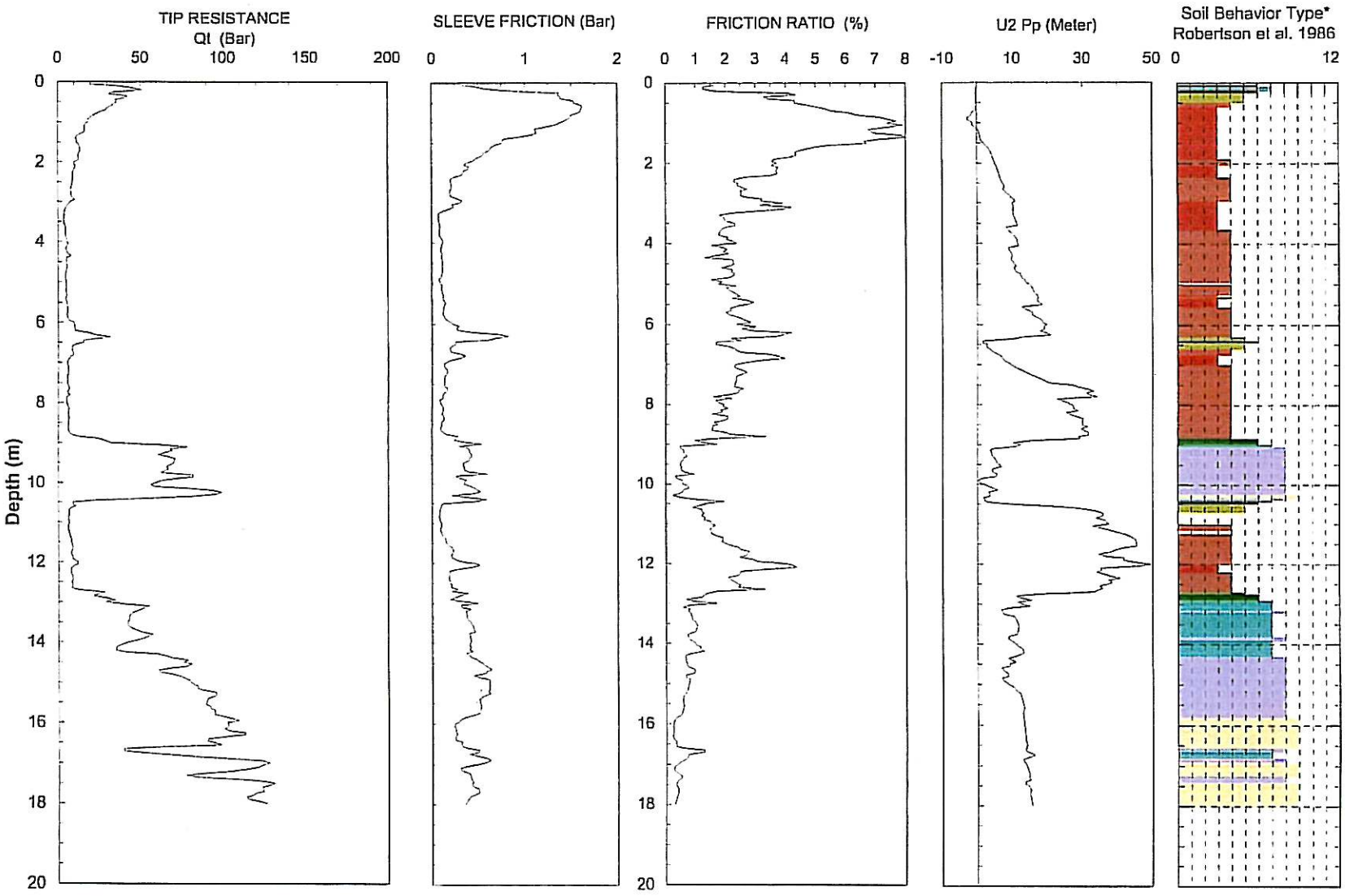
Maximum Depth = 18.00 meters

Depth Increment = 0.05 meters

1 sensitive fine grained
2 organic material
3 clay
4 silty clay to clay
5 clayey silt to silty clay
6 sandy silt to clayey silt
7 silty sand to sandy silt
8 sand to silty sand
9 sand
10 gravelly sand to sand
11 very stiff fine grained (*)
12 sand to clayey sand (*)

amec	Operator: Dynamic Drilling Inc. Sounding: CPT05 - 2 Cone ID: HT373 5 Ton	Date: September 26, 2005 Site: Lickman Road Industrial Park AMEC Project Number: KA20851

DYNAMIC DRILLING INC.
IN-SITU TESTING SERVICES



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1 sensitive fine grained
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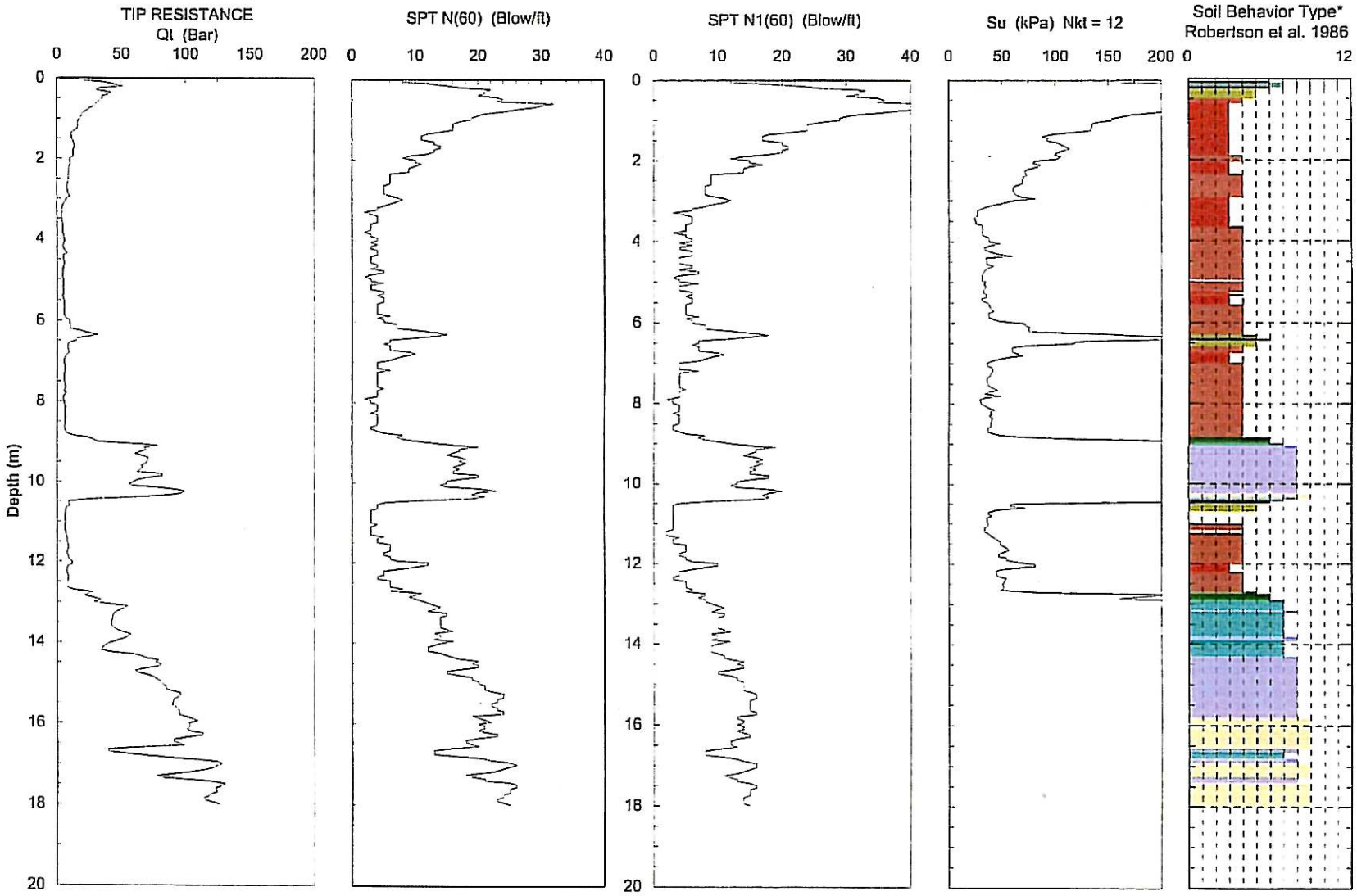
5 clayey silt to silty clay
6 sandy silt to clayey silt
7 silty sand to sandy silt
8 sand to silty sand
9 sand
10 gravelly sand to sand
11 very stiff fine grained (*)
12 sand to clayey sand (*)

amec	Operator: Dynamic Drilling Inc. Sounding: CPT05 - 2 Cone ID: HT373 5 Ton	Date: September 26, 2005 Site: Lickman Road Industrial Park AMEC Project Number: KA20851

DYNAMIC DRILLING INC.
IN-SITU TESTING SERVICES



Maximum Depth = 18.00 meters

Depth Increment = 0.05 meters

1 sensitive fine grained
2 organic material
3 clay
4 silty clay to clay
5 clayey silt to silty clay
6 sandy silt to clayey silt
7 silty sand to sandy silt
8 sand to silty sand
9 sand
10 gravelly sand to sand
11 very stiff fine grained (*)
12 sand to clayey sand (*)

AMEC - EARTH & ENVIRONMENTAL
ATTERBERG LIMITS

PROJECT NO.	KA20851	LAB NO.	L3199-B
CLIENT	Wedler Engineering - 7 lot Industrial subdivision		
SAMPLE	GS-5		
HOLE	AH-05-02	DEPTH	19'
DATE	30 Sept. 2005		

	LIQUID LIMIT			PLASTIC LIMIT	
TRIAL NO.	1	2	3	1	2
NO. OF BLOWS	16	23	29	A	B
WT.OF WET SAMPLE +TARE (GRMS.)	25.18	30.11	40.37	9.03	8.4
WT.OF DRY SAMPLE +TARE (GRMS.)	18.46	22.17	29.97	7.32	6.8
TARE (GRMS.)	1.28	1.27	1.27	1.27	1.28
MOISTURE CONTENT %	39.12	37.99	36.24	28.26	28.99

RESULT SUMMARY

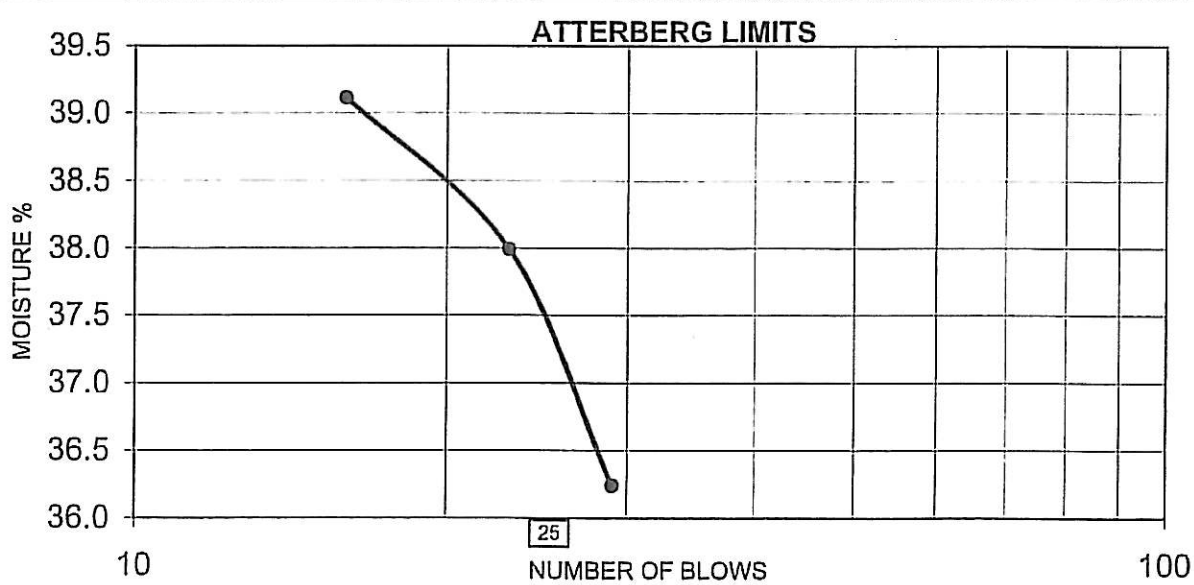
NATURAL WATER CONTENT 36.3 %

WI	37.61	%	FLOW INDEX	
WP	28.62	%	TOUGHNESS INDEX	
IP	8.98		LIQUIDITY INDEX (B VALUE)	

SOIL DESCRIPTION: Gray Silt

0.67 ORGANIC IF < 0.75

SOIL CLASSIFICATION - ML - Silt



AMEC - EARTH & ENVIRONMENTAL
ATTERBERG LIMITS

PROJECT NO.	KA20851	LAB NO.	L3199-D
CLIENT	Wedler Engineering - 7 lot Industrial subdivision		
SAMPLE	GS-1		
HOLE	AH-05-04	DEPTH	3'
DATE	October 3, 2005		

	LIQUID LIMIT			PLASTIC LIMIT	
TRIAL NO.	1	2	3	1	2
NO. OF BLOWS	34	25	15	A	B
WT.OF WET SAMPLE +TARE (GRMS.)	10.7	15.73	16.79	6	6.37
WT.OF DRY SAMPLE +TARE (GRMS.)	7.33	10.53	11.16	4.87	5.09
TARE (GRMS.)	1.28	1.28	1.28	1.28	1.27
MOISTURE CONTENT %	55.70	56.22	56.98	31.48	33.51

RESULT SUMMARY

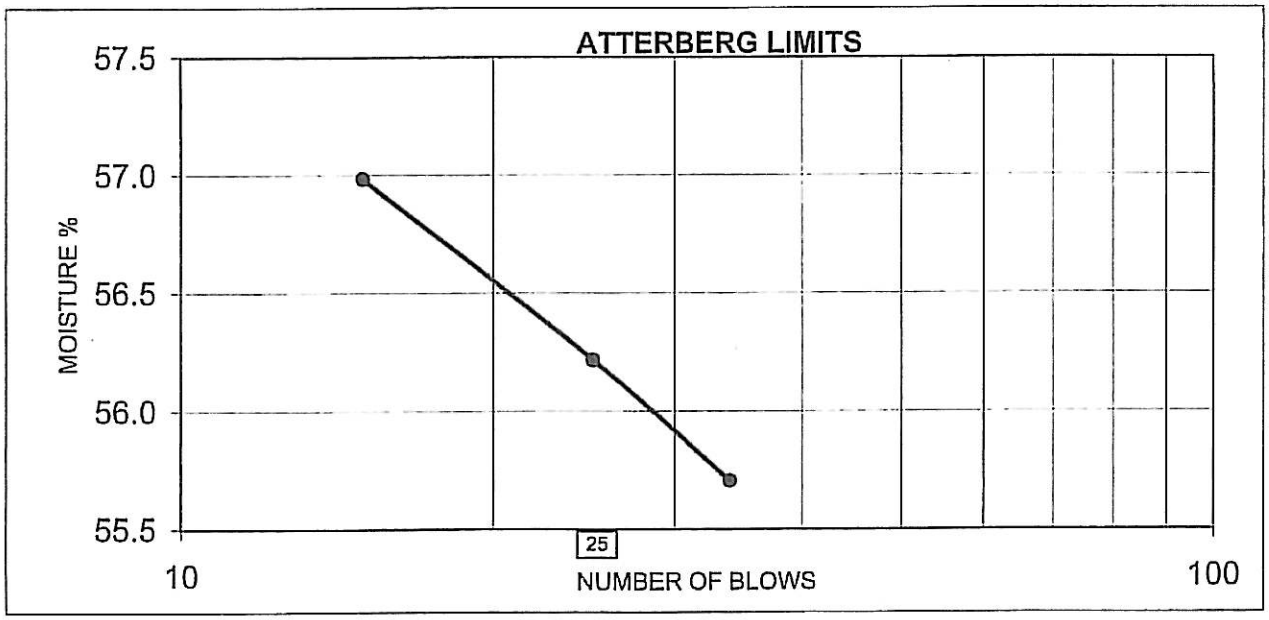
NATURAL WATER CONTENT 43 %

WI	56.22	%	FLOW INDEX	
WP	32.49	%	TOUGHNESS INDEX	
IP	23.72		LIQUIDITY INDEX (B VALUE)	

SOIL DESCRIPTION: Grayish brown elastic SILT

0.93 ORGANIC IF < 0.75

SOIL CLASSIFICATION - MH - Elastic SILT



AMEC - EARTH & ENVIRONMENTAL
ATTERBERG LIMITS

PROJECT NO.	KA20851	LAB NO.	L3199-C
CLIENT	Wedler Engineering - 7 lot Industrial subdivision		
SAMPLE	GS-2		
HOLE	AH-05-04	DEPTH	5.5'
DATE	30 Sept. 2005		

	LIQUID LIMIT			PLASTIC LIMIT	
TRIAL NO.	1	2	4	5	6
NO. OF BLOWS	40	28	21	A	B
WT.OF WET SAMPLE +TARE (GRMS.)	26.01	24.93	32.16	3.96	2.37
WT.OF DRY SAMPLE +TARE (GRMS.)	12.98	12.31	15.33	2.87	1.95
TARE (GRMS.)	1.27	1.28	1.27	1.28	1.28
MOISTURE CONTENT %	111.27	114.42	119.70	68.55	62.69

RESULT SUMMARY

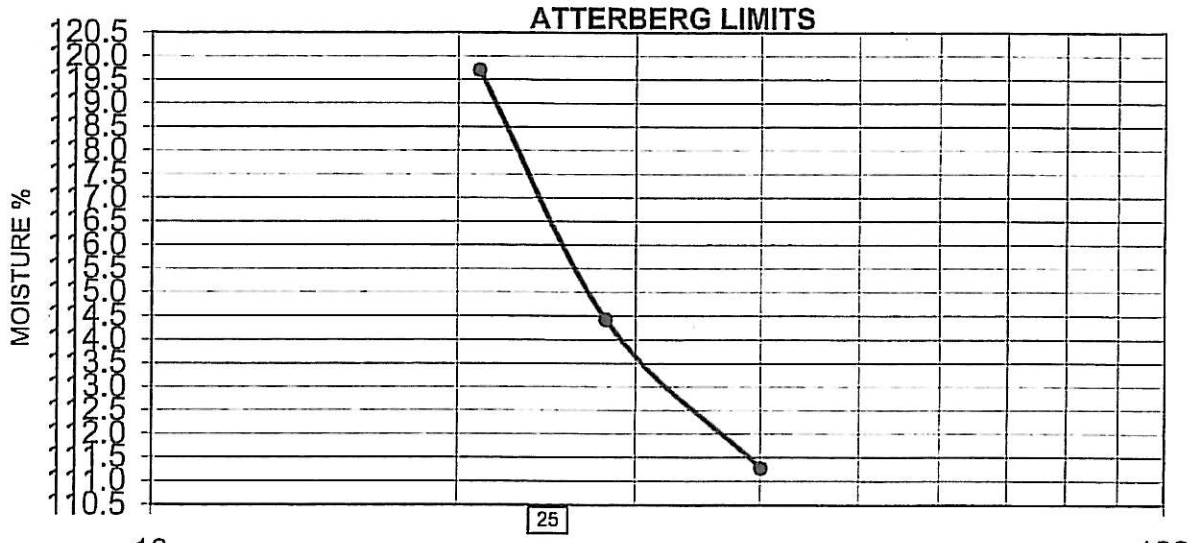
NATURAL WATER CONTENT 67.9 %

WI	115.99	%	FLOW INDEX	
WP	65.62	%	TOUGHNESS INDEX	
IP	50.37		LIQUIDITY INDEX (B VALUE)	

SOIL DESCRIPTION: Brown

0.87 ORGANIC IF < 0.75

SOIL CLASSIFICATION - OH - Organic Clay



AMEC - EARTH & ENVIRONMENTAL
ATTERBERG LIMITS

PROJECT NO.	KA20851	LAB NO.	L3199-A
CLIENT	Wedler Engineering - 7 lot Industrial subdivision		
SAMPLE	GS-5		
HOLE	AH-05-05	DEPTH	24'
DATE	October 3, 2005		

	LIQUID LIMIT			PLASTIC LIMIT	
TRIAL NO.	1	2	3	1	2
NO. OF BLOWS					
WT.OF WET SAMPLE +TARE (GRMS.)					
WT.OF DRY SAMPLE +TARE (GRMS.)					
TARE (GRMS.)					
MOISTURE CONTENT %					

RESULT SUMMARY

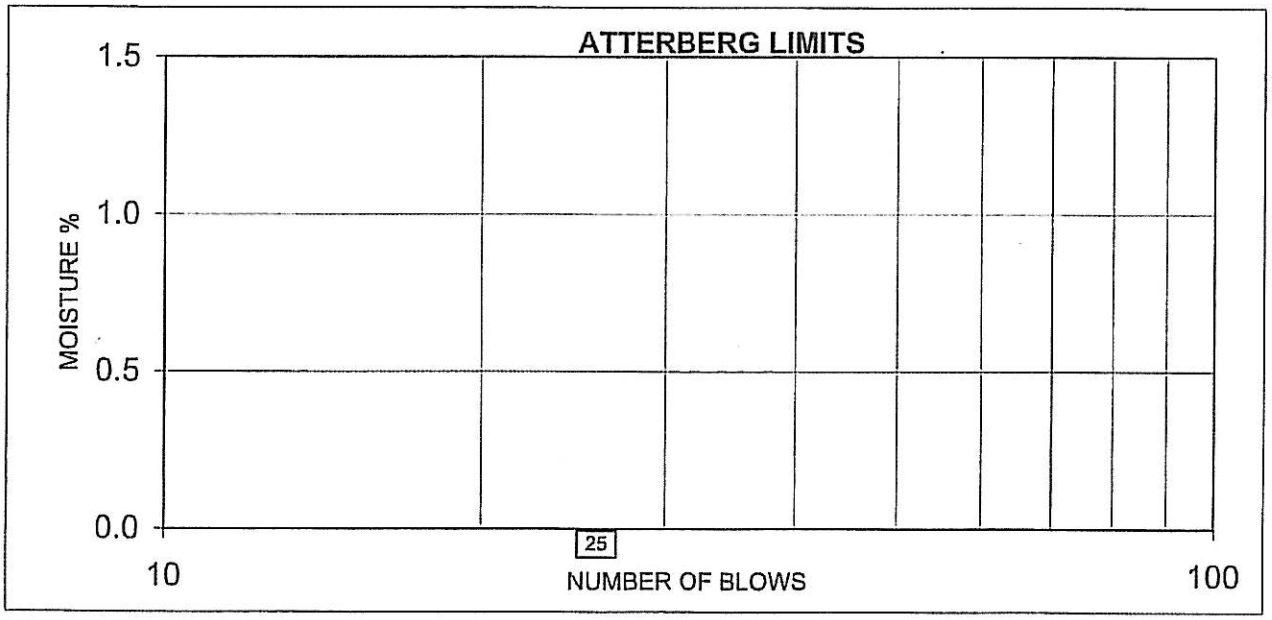
NATURAL WATER CONTENT 38 %

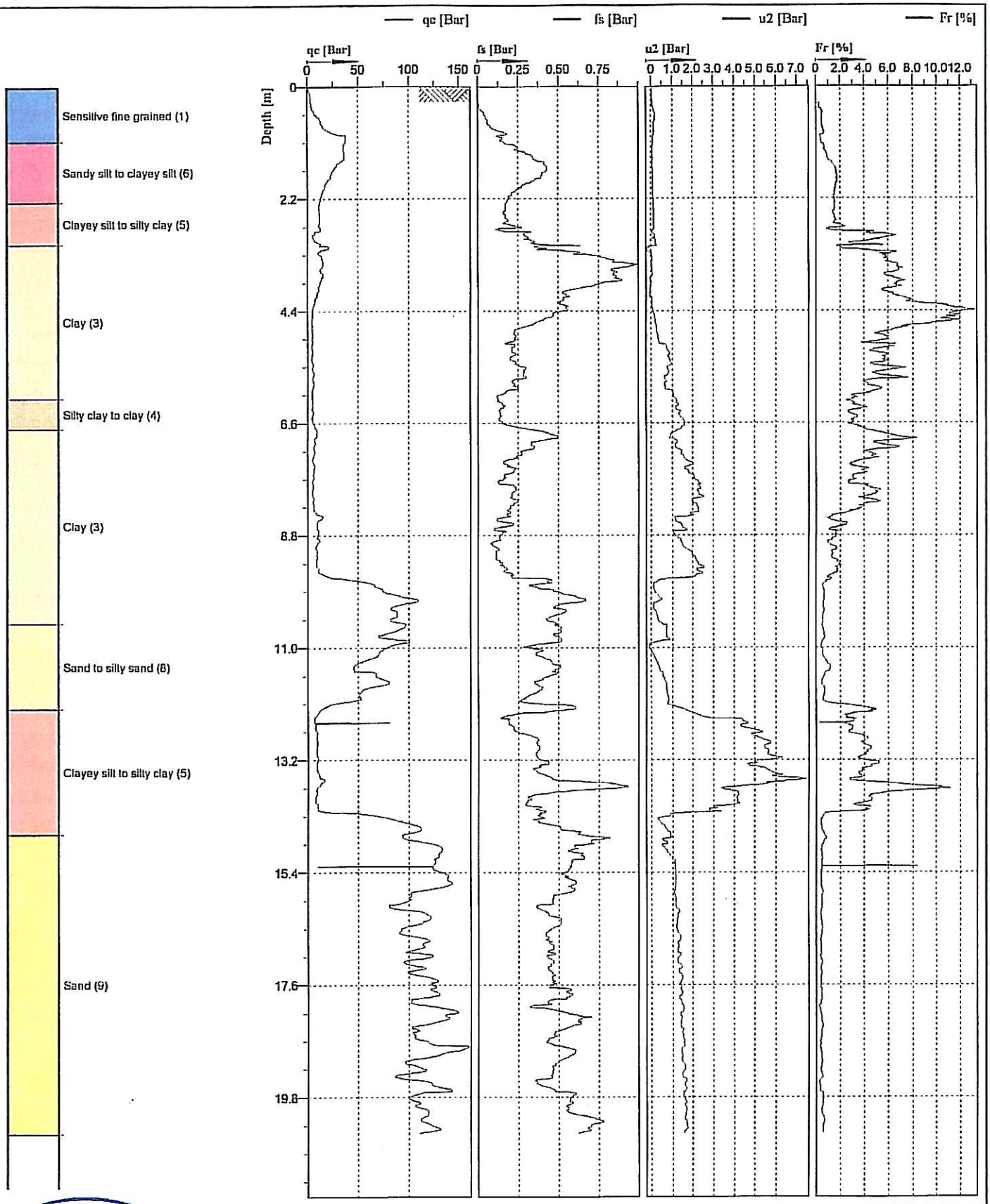
WI	0.00	%	FLOW INDEX	
WP	0.00	%	TOUGHNESS INDEX	
IP	0.00		LIQUIDITY INDEX (B VALUE)	

SOIL DESCRIPTION: Dark greenish/gray SILT

ORGANIC IF < 0.75

SOIL CLASSIFICATION - Non-Plastic SILT



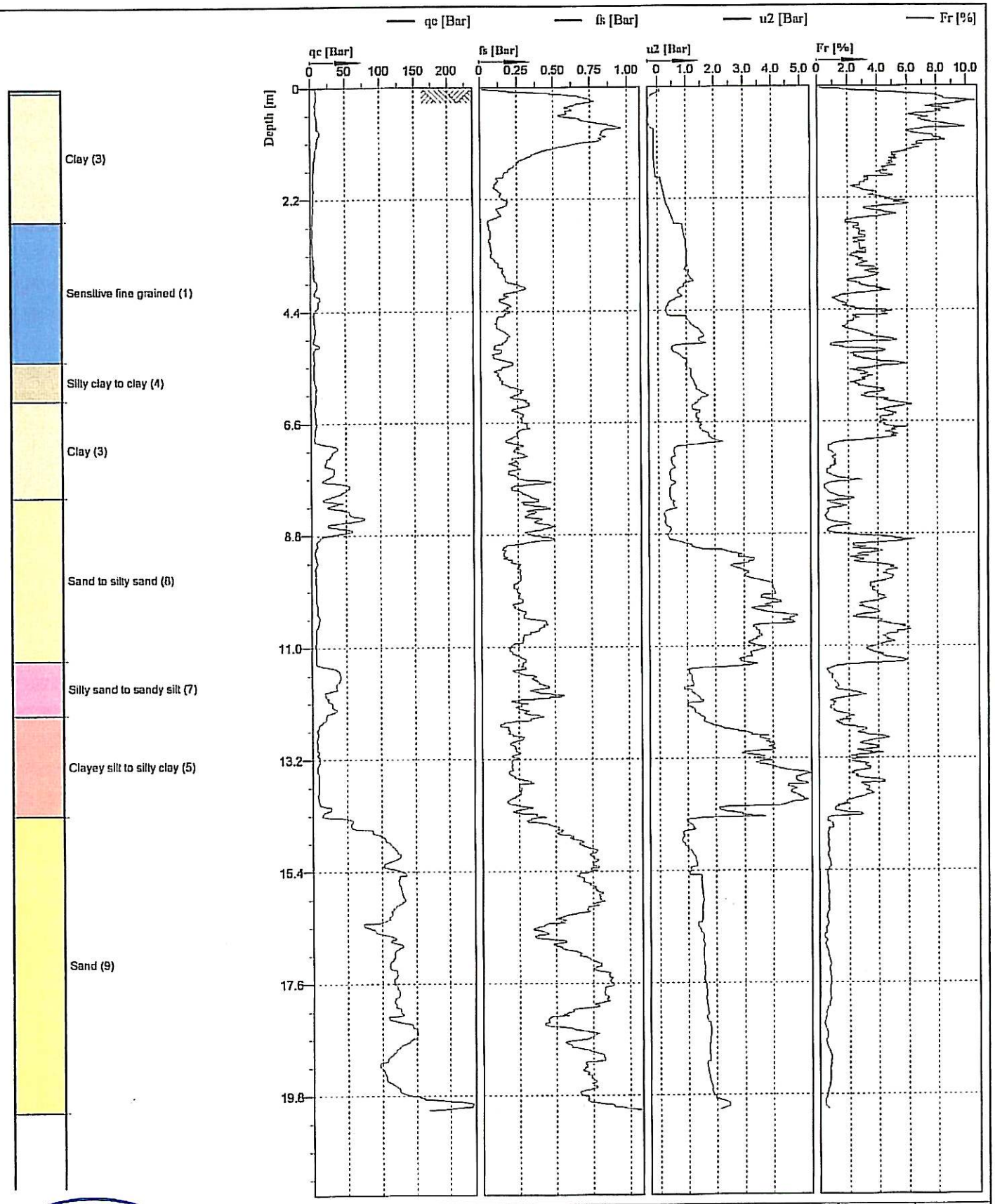


Since 1988 DOWNRIDE DRILLING Inc. 604-823-4086

u2

Cone No: 0
Tip area [cm2]: 10
Sleeve area [cm2]: 150

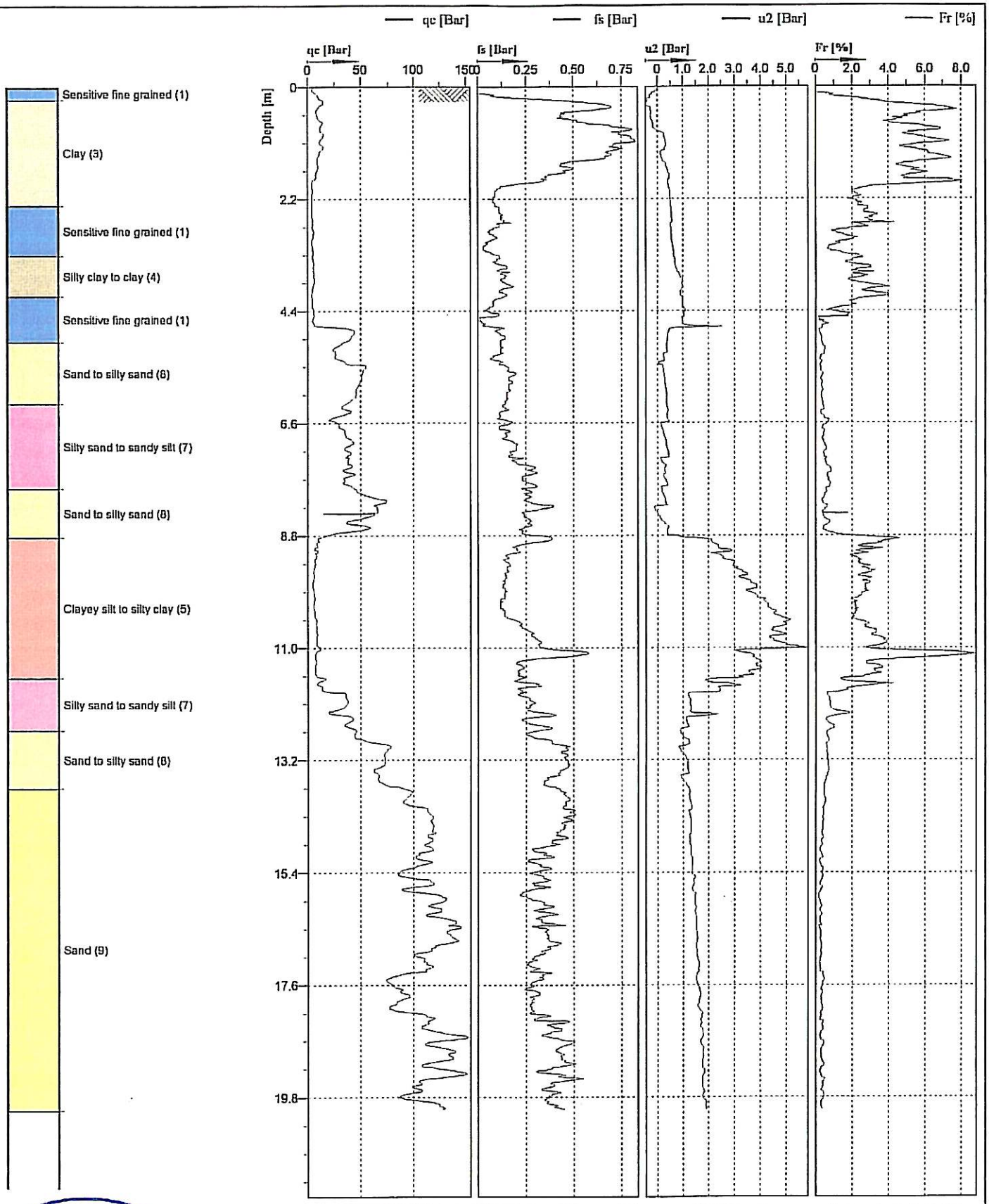
Location:	Position: X: 0.00 m, Y: 0.00 m	Ground level: 0.00	Test no: CPT-1
Project ID:	Client:	Date: 1/27/2007	Scale: 1 : 100
Project: 807-0016		Page: 1/1	Fig:
		File: Trackside #1.CPT	



Since 1988
DOWNRIDE DRILLING Ltd.
604-823-4086

Cone No: 0
Tip area [cm2]: 10
Sleeve area [cm2]: 150

Location:	Position: X: 0.00 m, Y: 0.00 m	Ground level: 0.00	Test no: CPT-2
Project ID:	Client:	Date: 1/27/2007	Scale: 1 : 100
Project: 807-0016		Page: 1/1	Fig:
		File: Trackside #2.CPT	

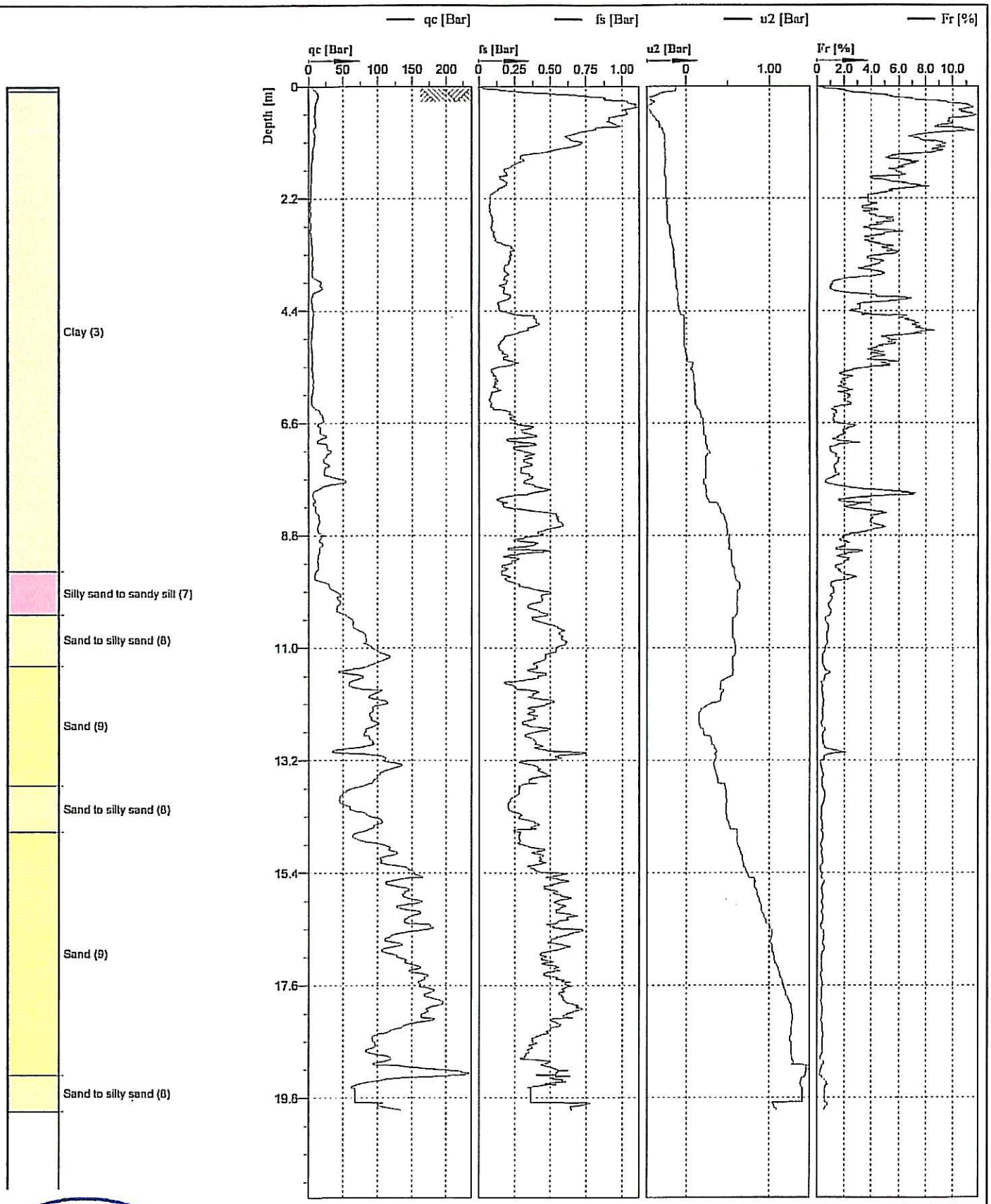


Since 1988 DOWNRIDE DRILLING ltd. 604-823-4036

u2

Cone No: 0
Tip area [cm2]: 10
Sleeve area [cm2]: 150

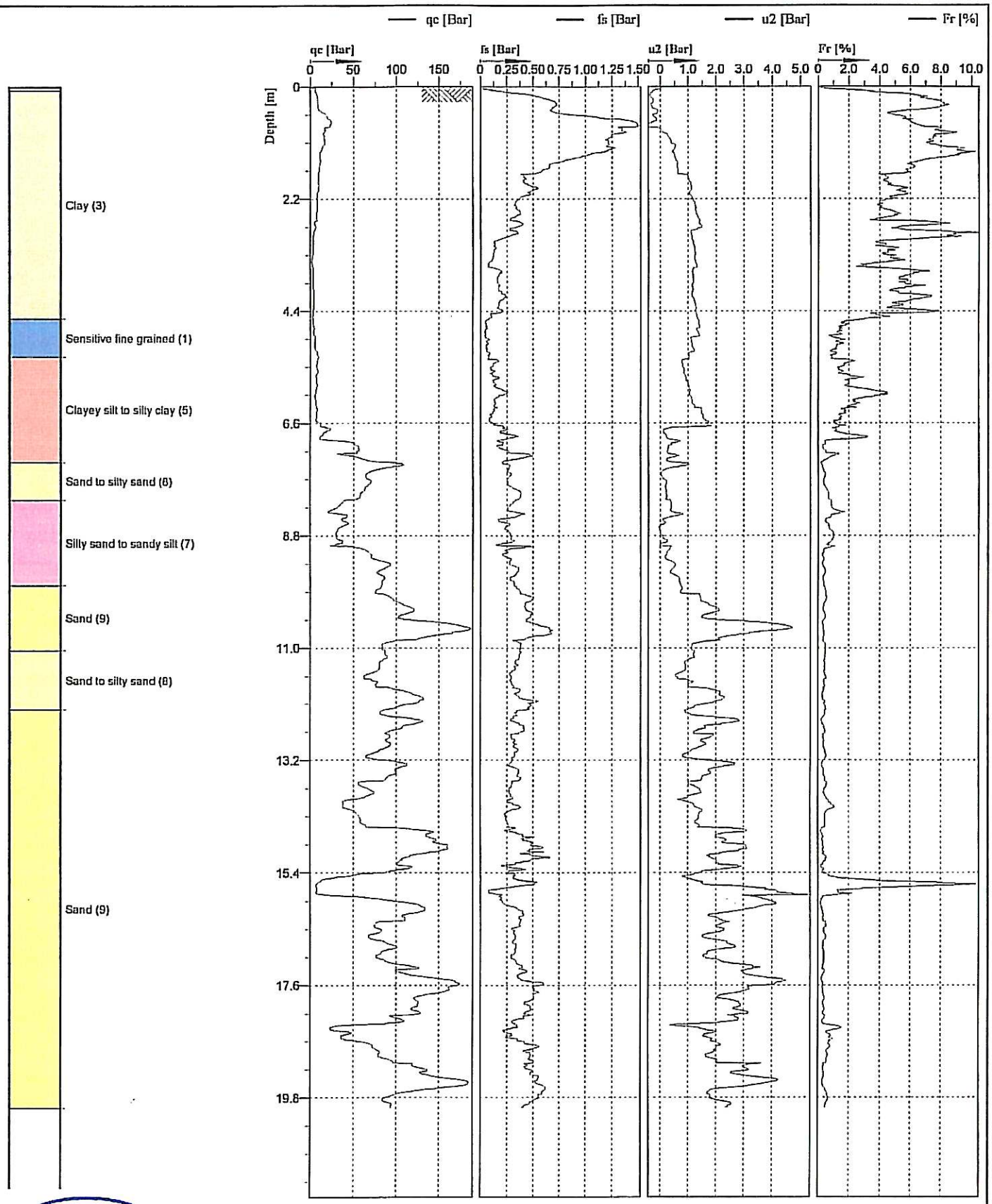
Location:	Position: X: 0.00 m, Y: 0.00 m	Ground level: 0.00	Test no: CPT/3
Project ID: 807-0016	Client:	Date: 1/19/2007	Scale: 1 : 100
Project:		Page: 1/1	Fig:
		File: trackside #3.CPT	



Since 1985 DOWNRIDE DRILLING ltd. 604-823-4096

Cone No: 0
Tip area [cm2]: 10
Sleeve area [cm2]: 150

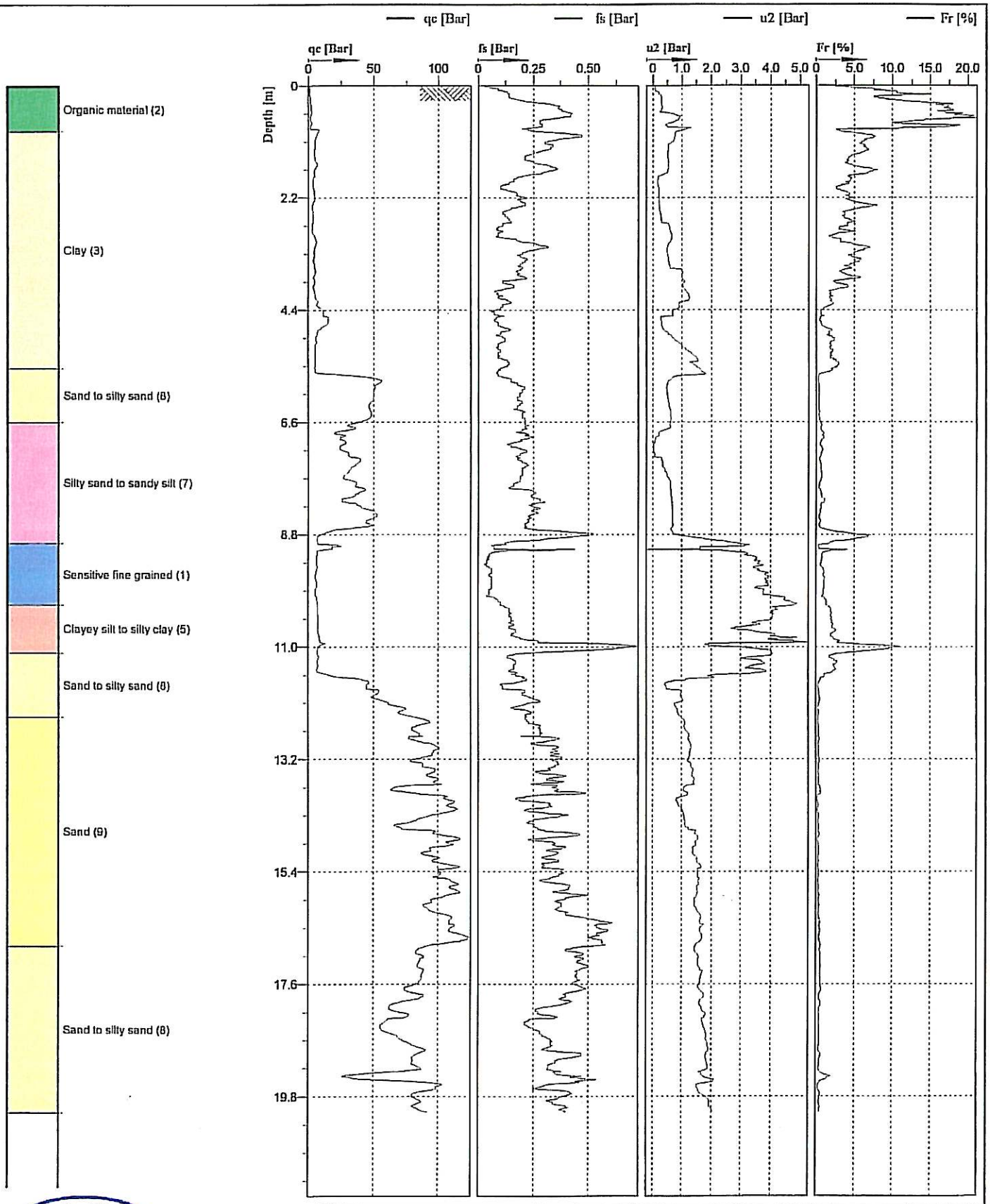
Location:	Position: X: 0.00 m, Y: 0.00 m	Ground level: 0.00	Test no: CPT/4
Project ID: 807-0016	Client:	Date: 1/19/2007	Scale: 1 : 100
Project:		Page: 1/1	Fig:
		File: trackside #4.CPT	



Since 1988 DOWNRITE DRILLING Ltd. 604-823-4066

Cone No: 0
Tip area [cm2]: 10
Sleeve area [cm2]: 150

Location:	Position: X: 0.00 m, Y: 0.00 m	Ground level: 0.00	Test no: CPT-5
Project ID: 807-0016	Client:	Date: 1/25/2007	Scale: 1 : 100
Project:		Page: 1/1	Fig:
		File: Trackside #5.CPT	

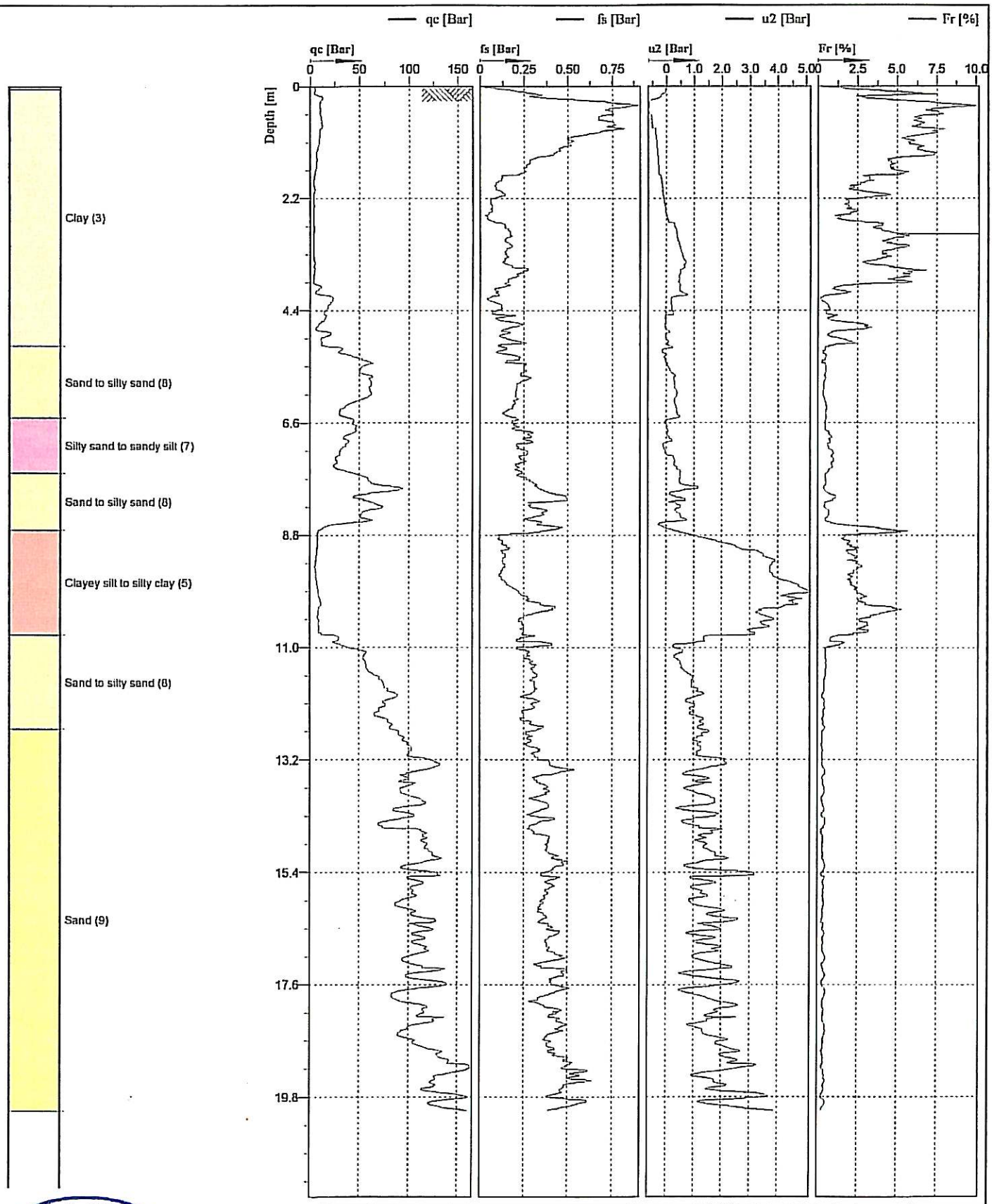


Since 1985 DOWNRIDE DRILLING Ltd. 604-823-4086

U2

Cone No: 0
Tip area [cm2]: 10
Sleeve area [cm2]: 150

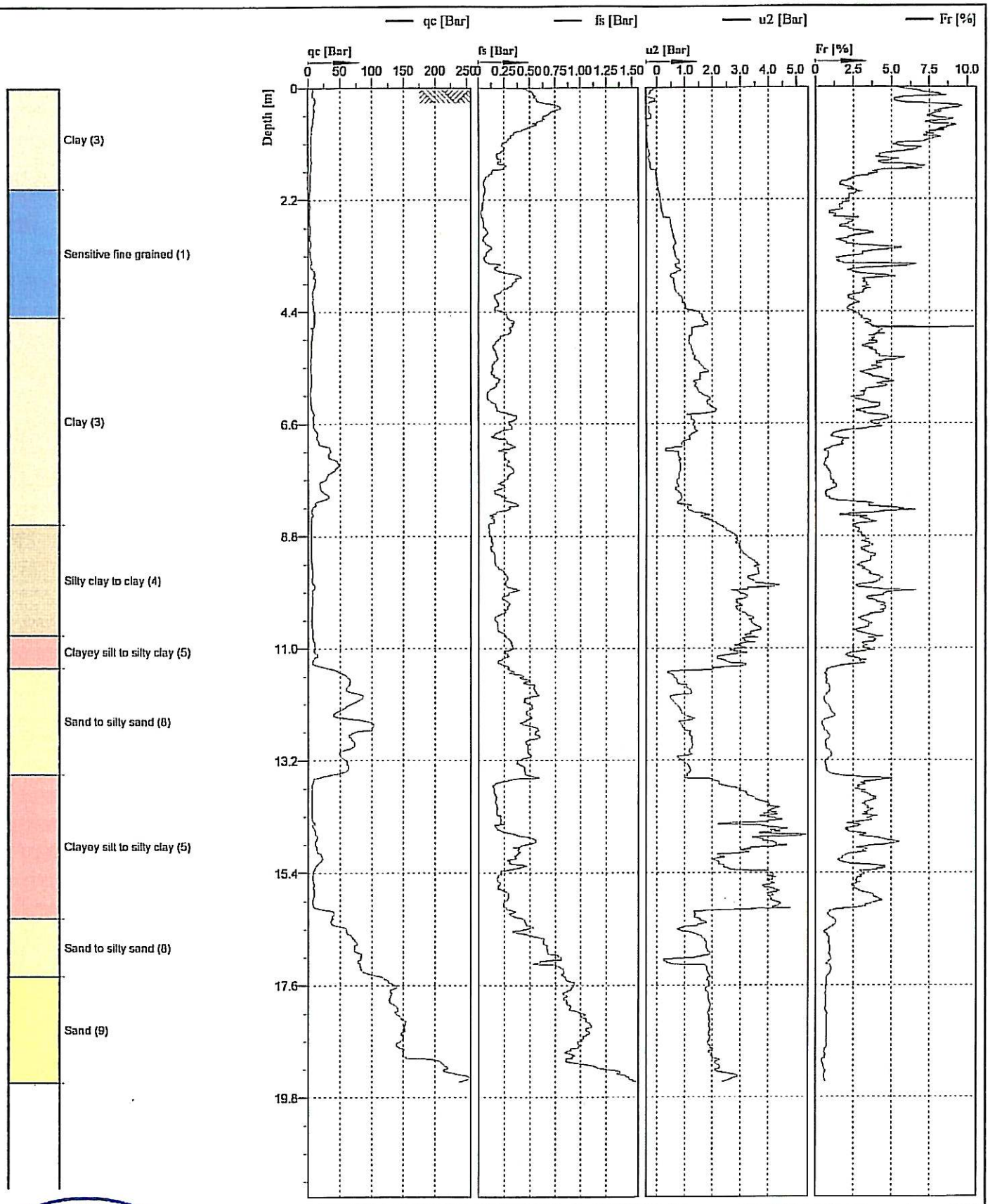
Location:	Position: X: 0.00 m, Y: 0.00 m	Ground level: 0.00	Test no: CPT-6
Project ID: 807-0016	Client:	Date: 1/25/2007	Scale: 1 : 100
Project:		Page: 1/1	Fig:
		File: Trackside #6.CPT	



Since 1985
DOWNRIDE DRILLING Ltd.
604-823-4066

Cone No: 0
Tip area [cm2]: 10
Sleeve area [cm2]: 150

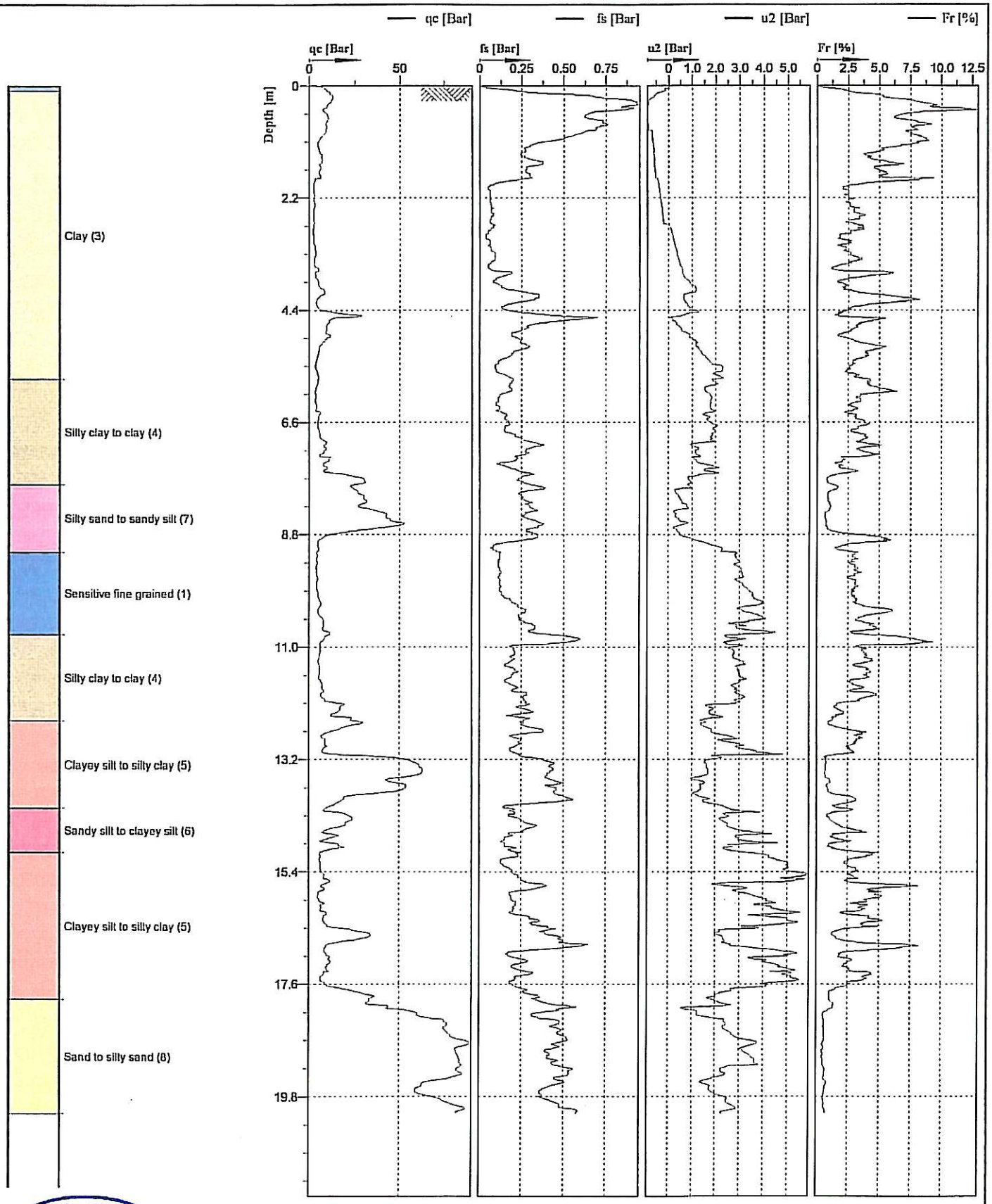
Location:	Position: X: 0.00 m, Y: 0.00 m	Ground level: 0.00	Test no: CPT-7
Project ID: 807-0016	Client:	Date: 1/25/2007	Scale: 1 : 100
Project:		Page: 1/1	Fig:
		File: Trackside #7.CPT	



Since 1988 DOWNRITE DRILLING Ltd. 604-823-4006

Cone No: 0
Tip area [cm2]: 10
Sleeve area [cm2]: 150

Location:	Position: X: 0.00 m, Y: 0.00 m	Ground level: 0.00	Test no: CPT-8
Project ID: 807-0016	Client:	Date: 1/26/2007	Scale: 1 : 100
Project: 807-0016		Page: 1/1	Fig:
		File: Trackside #8.CPT	

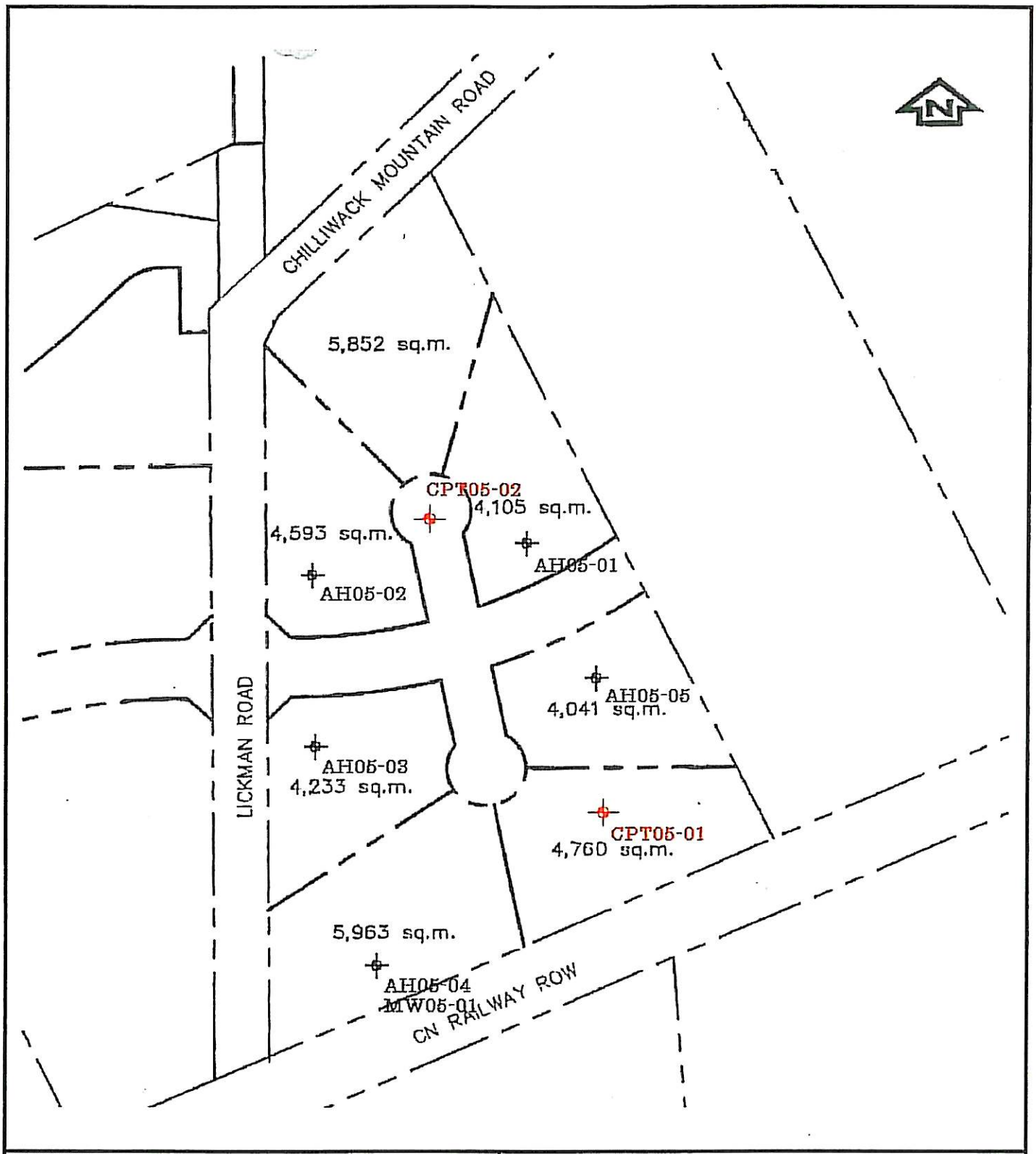


Since 1985 DOWNRITE DRILLING 604-823-4066

u2

Cone No: 0
Tip area [cm2]: 10
Sleeve area [cm2]: 150

Location:	Position: X: 0.00 m, Y: 0.00 m	Ground level: 0.00	Test no: CPT-9
Project ID: 807-0016	Client:	Date: 1/26/2007	Scale: 1 : 100
Project: 807-0016		Page: 1/1	Fig:
		File: Trackside #9.CPT	



CONSULTANT amec			PROJECT Seven Lot Industrial Park, Lickman Road		
CLIENT Wedler Engineering			TITLE Site Plan		
DRAWN: UNK	APPROVED: CB	SHEET SIZE: 8.5 x 11	PROJECT No.		REV.
CHECKED: CH	Date: September 26, 2005	SCALE: N.T.S.	KA20851	Figure 2	0

AUGER HOLE NUMBER AH05-01

amec

CLIENT Wedler Engineering
PROJECT NAME 7-Lot Industrial Subdivision
PROJECT NUMBER KA20851
PROJECT LOCATION Lickman Road, Chilliwack, BC

DATE STARTED 26/9/05 COMPLETED 26/9/05
GROUND ELEVATION UNK HOLE SIZE 150 mm Diameter
DRILLING CONTRACTOR Dynamic Drilling
GROUND WATER LEVELS:
DRILLING METHOD Continuous Flight Auger
∇ AT TIME OF DRILLING 2.50 m
LOGGED BY CH CHECKED BY CB
AT END OF DRILLING —
NOTES
AFTER DRILLING —

DEPTH (m)	SAMPLE TYPE NUMBER	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION
				(Topsoil) ORGANIC SILT, rootlets, light brown, dry. 0.45
		PP = 350 kPa		SILT, low plasticity, clayey, very stiff to stiff, grey with orange mottle, dry to moist.
	GB 1	MC = 36% PP = 150 kPa		
2		PP = 100 kPa		
	GB 2	MC = 40%		∇ 2.90
				SILT, low plasticity, clayey, trace sand, firm, dark grey, moist.
4	GB 3	MC = 40%		
				-Firm below 5.2 m.
6	GB 4	MC = 38%		-Stiff below 5.8 m.
	GB 5	MC = 46%		-No sand below 6.7 m.
				-Trace organics at 7.0 m to 7.3 m.
				-Lens of ash at 7.5 m, 100 mm thick. 7.60
				Bottom of hole at 7.60 m.

AUGER HOLE NUMBER AH05-02

amec

CLIENT Wedler Engineering
PROJECT NAME 7-Lot Industrial Subdivision
PROJECT NUMBER KA20851
PROJECT LOCATION Lickman Road, Chilliwack, BC

DATE STARTED 26/9/05 COMPLETED 26/9/05
GROUND ELEVATION UNK HOLE SIZE 150 mm Diameter
DRILLING CONTRACTOR Dynamic Drilling
GROUND WATER LEVELS:
DRILLING METHOD Continuous Flight Auger
∇ AT TIME OF DRILLING 2.50 m
LOGGED BY CH CHECKED BY CB
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (m)	SAMPLE TYPE NUMBER	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION
				(Topsoil) ORGANIC SILT, rootlets, light brown, dry. 0.45
	GB 1	MC = 27%		SILT, low plasticity, clayey, very stiff to stiff, grey with orange mottle, dry to moist.
	GB 2	MC = 37%		
2	GB 3	PP = 150 kPa MC = 39% PP = 75 kPa		∇ 2.90
				SILT, low plasticity, clayey, trace sand, firm, dark grey, damp to wet.
4	GB 4	MC = 41%		
				-No sand below 4.4 m.
				-Trace sand below 5.0 m.
6	GB 5	MC = 36% LL = 38 PL = 29		-Stiff at 5.79 m to 7.0 m.
	GB 6	MC = 38%		7.60 -Wet below 7.5 m.
				Bottom of hole at 7.60 m.

AUGER HOLE NUMBER AH05-03

amec

CLIENT Wedler Engineering
PROJECT NAME 7-Lot Industrial Subdivision
PROJECT NUMBER KA20851
PROJECT LOCATION Lickman Road, Chilliwack, BC

DATE STARTED 26/9/05 COMPLETED 26/9/05
GROUND ELEVATION UNK HOLE SIZE 150 mm Diameter
DRILLING CONTRACTOR Dynamic Drilling
GROUND WATER LEVELS:
DRILLING METHOD Continuous Flight Auger
∇ AT TIME OF DRILLING 2.50 m
LOGGED BY CH CHECKED BY CB
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (m)	SAMPLE TYPE NUMBER	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION
				(Topsoil) ORGANIC SILT, rootlets, brown, moist. 0.30
	GB 1	PP = 300 kPa MC = 34% PP = 250 kPa PP = 200 kPa		SILT, low plasticity, clayey, very stiff to firm, grey with orange mottle, dry to moist.
2		PP = 100 kPa		
	GB 2	MC = 42%		Shear Vane at 2.1 m (tip): undisturbed = 52 kPa, remoulded = 16 kPa ∇ -Firm below 2.13 m. 2.70
				SILT, low plasticity, clayey, firm, grey, moist to damp.
4	GB 3	MC = 44%		Shear Vane at 3.6 m (tip): undisturbed = 43 kPa, remoulded = 13 kPa
6	GB 4	MC = 36%		6.40
	GB 5	MC = 24% MC = 26%		SAND, fine to medium grained, some silt, compact, dark grey, wet. 7.00
				SILT, low plasticity, sandy, firm, dark grey, wet. 7.60
				Bottom of hole at 7.60 m.

amec

WELL NUMBER AH05-04

CLIENT Wedler Engineering
PROJECT NAME 7-Lot Industrial Subdivision
PROJECT NUMBER KA20851
PROJECT LOCATION Lickman Road, Chilliwack, BC

DATE STARTED 26/9/05 COMPLETED 26/9/05
GROUND ELEVATION UNK HOLE SIZE 150 mm Diameter
DRILLING CONTRACTOR Dynamic Drilling
GROUND WATER LEVELS:
DRILLING METHOD Continuous Flight Auger
AT TIME OF DRILLING 2.50 m
LOGGED BY CH CHECKED BY CB
AT END OF DRILLING —
NOTES
AFTER DRILLING —

DEPTH (m)	SAMPLE TYPE NUMBER	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
				(Topsoil) ORGANIC SILT, rootlets, dark brown, damp. 0.30	
	GB 1	PP = 175 kPa PP = 125 kPa MC = 43% LL = 56 PL = 32 PP = 75 kPa		SILT, low plasticity, clayey, very stiff to firm, grey with orange mottle, moist.	
	GB 2	MC = 68% LL = 116 PL = 66		1.60 1.80 ORGANIC SILT, very soft, brown, wet.	
2				SILT, low plasticity, clayey, very stiff to firm, grey with orange mottle, moist.	No backfill
	GB 3	MC = 53%		2.40 SILT, low plasticity, clayey, firm, dark grey, damp. -Trace organics at 2.6 m. -Trace Organics at 2.7 m.	
				-Trace sand below 3.5 m.	
4	GB 4	MC = 40%			Bentonole seal
				-Wood debris at 4.4 m.	Slotted PVC, 0.25 mm Diameter
6	GB 5	MC = 37%		-Sandy silt lens at 5.8 m.	
				6.40 SAND, fine to medium grained, some silt to silty, compact, dark grey, wet.	
8	GB 6	MC = 24%			
				9.10 Bottom of hole at 9.10 m.	

AUGER HOLE NUMBER AH05-05

CLIENT Wedler Engineering
PROJECT NAME 7-Lot Industrial Subdivision
PROJECT NUMBER KA20851
PROJECT LOCATION Lickman Road, Chilliwack, BC

DATE STARTED 26/9/05 COMPLETED 26/9/05
GROUND ELEVATION UNK HOLE SIZE 150 mm Diameter
DRILLING CONTRACTOR Dynamic Drilling
GROUND WATER LEVELS:
DRILLING METHOD Continuous Flight Auger
∇ AT TIME OF DRILLING 2.50 m
LOGGED BY CH CHECKED BY CB
AT END OF DRILLING ---
NOTES
AFTER DRILLING —

DEPTH (m)	SAMPLE TYPE NUMBER	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION
				(Topsoil) ORGANIC SILT, rootlets, light brown, dry. 0.45
	GB 1	PP = 400 kPa MC = 34% PP = 200 kPa PP = 100 kPa		SILT, low plasticity, clayey, very stiff to firm, light grey to grey with orange mottle, dry to moist.
2				Shear Vane at 2.1 m (tip): undisturbed = 45 kPa, remoulded = 16 kPa ∇ 2.90
				SILT, low plasticity, clayey, stiff to firm, grey, damp to wet.
4				Shear Vane at 3.7 m (tip): undisturbed = 24 kPa, remoulded = 5 kPa
	GB 2	MC = 45%		
6	GB 3	MC = 39%		-Trace to some sand below 6.1 m.
	GB 4	MC = 38%		7.60
				Bottom of hole at 7.60 m.