











Ministry of Transportation

# TEST PIT / HOLE SUMMARY SHEET

Pit: Haney #1707 Contract Area: Lower Mainland - 6 Equipment Type: Excavator

Test Pit/Hole Number	Layer Thickness (m)	Layer Top Elevation (m)	Layer Bottom Elevation (m)	Soil Classification	Gradation of Materials							Soundness Indicator				Density	Absorption		Water Table Elevation (m)	Remarks	Bag #						
					Gravel	Sand	Fines	75-150 mm	150-300 mm	> 300 mm	Maximum Size (mm)	Fracture		Micro Duval	Sand Eq.		MgSO4					C (%)	F (%)	C (%)	F (%)		
												A (%)	B (%)				C (%)	F (%)								C (%)	F (%)
14-1	6.0	165.4	159.4	GP	66	33	1	6	2		300	73	70	4	7.7							WSA	243				
14-2	1.5	164.3	162.8	SP	27	70	3	3	2	1	600											FVI; FILL BROUGHT IN					
	3.5	162.8	159.3	SM1	29	55	16	4	1	1	400											WSA; SILTY LUMPS	201				
	1.0	159.3	158.3	SM1		84	16															FVI					
14-3	1.0	164.8	163.8	SP	27	70	3	3	2		300											FVI					
	4.5	163.8	159.3	GP	53	46	1	2	4	2	300					90	0.2	4	2.8	2.7	0.5	1.0	WSA	202			
	0.5	159.3	158.8	SM1		84	16															FVI					
14-4	1.5	165.4	163.9	SP	44	55	1	4	1		300											FVI					
	1.0	163.9	162.9	SP	10	89	1	0														FVI					
	3.5	162.9	159.4	GP	64	34	2	2	4	1	250											WSA	203				
14-5	3.0	167.9	164.9	SPSM	27	66	7	0														WSA; FILL AREA	204				
	1.5	164.9	163.4	GP	70	29	1	10	5		300											FVI					
	1.5	163.4	161.9	SP																		FVI					

BRX= Bedrock  
 Layer Elevation = Possible Error

FVI= Field Visual Identification  
 WSA= Washed Sieve Analysis  
 LVI= Lab Visual Identification



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# TEST PIT / HOLE SUMMARY SHEET

Pit: Haney Contract Area: 6 Equipment Type: Sonic Drill

Testpit Number	Layer Thickness (m)	Soil Bound. (m)	Soil Classification	Gradation of Materials							Soundness Indicator					Density	Absorption		Watertable (m)	Remarks		
				75/150mm	150/225	+ 225mm	Maximum Size (mm)	Gravel	Sand	Fines	Fracture		Micro Duval	Sand Eq.	MgSO4		C (%)	F (%)				
											A (%)	B (%)			C (%)						F (%)	C (%)
																					DATE: 2009-06-10	
TH09-1	12.2	0.0/12.2	GP					44	49	5												WSA
	15.2	12.2/27.4	SP					30	63	7												WSA
	0.9	27.4/28.3	ML						15	85												FVI
	4.0	28.3/32.3	SP					2	95	3												FVI *FINE SAND*
TH09-2	2.7	0.0/2.7	GP					66	30	4												FVI
	14.7	2.7/17.4	SM2						76	24						2.7		0.7				WSA *FAA-42*
																						*Suspect water at 14.3 m
TH09-3	0.6	0.0/0.6	GP					65	33	2												FVI
	1.5	0.6/2.1	SP						98	2												FVI
	3.1	2.1/5.2	GP					65	34	1												FVI
	1.2	5.2/6.4	GPGM					75	15	10												FVI
	4.9	6.4/11.3	SPSM						90	10												WSA
	3.0	11.3/14.3	ML					10	10	80												FVI
																						*Possible boulder/bedrock at 14.3 m

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Pit: Haney Contract Area: 6 Equipment Type: Sonic Drill

Testpit Number	Layer Thickness (m)	Soil Bound. (m)	Soil Classification	Gradation of Materials							Soundness Indicator					Density	Absorption		Watertable (m)	Remarks			
				75/150mm	150/225	+ 225mm	Maximum Size (mm)	Gravel	Sand	Fines	Fracture		Micro Duval	Sand Eq.	MgSO4		C (%)	F (%)					
											A (%)	B (%)			C (%)						F (%)	C (%)	F (%)
TH09-4	3.0	0.0/3.0	SP					1	98	1											FVI *M-F SAND*		
	5.2	3.0/8.2	GPGM					45	44	11											WSA		
	1.2	8.2/9.4	SP					1	97	2											FVI *M-F SAND*		
	2.5	9.4/11.9	GPGC					70	20	10											FVI		
	6.1	11.9/18.0	GPGM1					60	28	12											WSA		
	1.2	18.0/19.2	ML					10	10	80											FVI		

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# TEST PIT / HOLE SUMMARY SHEET

Pit: **HANEY** Service Area: **6** Equipment Type: **EXCAVATOR**

Testpit Number	Overburden Depth	Soil Bound. (mm)	Soil Classification	Gradation of Materials							Soundness Indicator					Density	Absorption		Watertable (m)	Remarks		
				75/150mm	150/225	+ 225mm	Maximum Size (mm)	Gravel	Sand	Fines	Fracture		Micro Duval	Sand Eq.	MgSO4		C (%)	F (%)				
											A (%)	B (%)			C (%)						F (%)	C (%)
07-1		0.0/6.0	GP	4	1		175	52	46	2			4.8	11	80							WSA
07-2		0.0/1.5	SPSM					10	85	5												FVI, TRACE ORGANICS
		1.5/6.0	SP	1			125	25	72	3												WSA
07-3	0.1	0.0/0.1	TS																			FVI, ORGANICS
		0.1/1.5	SP					14	85	1												FVI, TRACE ORGANICS
		1.5/6.0	SP	3	1		175	47	52	1												WSA
07-4	0.1	0.0/0.1	TS																			FVI, ORGANICS
		0.1/1.0	GP					54	45	1												FVI
		1.0/6.0	GP	4	1	1	250	64	35	1												FVI
07-5	0.1	0.0/0.1	TS																			FVI, ORGANICS
		0.1/0.3	SPSM					25	65	10												FVI
		0.3/0.7	SP					4	95	1												FVI
		0.7/6.0	SP	2	1		175	46	53	1												WSA

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# TEST PIT / HOLE SUMMARY SHEET

Pit: Haney Contract Area: 6 Equipment Type: Sonic Drill

Testpit Number	Layer Thickness (m)	Soil Bound. (m)	Soil Classification	Gradation of Materials							Soundness Indicator					Density	Absorption		Watertable (m)	Remarks		
				75/150mm	150/225	+ 225mm	Maximum Size (mm)	Gravel	Sand	Fines	Fracture		Micro Duval	Sand Eq.	MgSO4		C (%)	F (%)				
											A (%)	B (%)			C (%)						F (%)	C (%)
																						DATE: 2009-06-10
TH09-1	12.2	0.0/12.2	GP					44	49	5												WSA
	15.2	12.2/27.4	SP					30	63	7												WSA
	0.9	27.4/28.3	ML						15	85												FVI
	4.0	28.3/32.3	SP					2	95	3												FVI *FINE SAND*
TH09-2	2.7	0.0/2.7	GP					66	30	4												FVI
	14.7	2.7/17.4	SM2						76	24						2.7		0.7				WSA *FAA-42*
																						*Suspect water at 14.3 m
TH09-3	0.6	0.0/0.6	GP					65	33	2												FVI
	1.5	0.6/2.1	SP						98	2												FVI
	3.1	2.1/5.2	GP					65	34	1												FVI
	1.2	5.2/6.4	GPGM					75	15	10												FVI
	4.9	6.4/11.3	SPSM						90	10												WSA
	3.0	11.3/14.3	ML					10	10	80												FVI
																						*Possible boulder/bedrock at 14.3 m

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Testpit Number	Overburden Depth	Soil Bound. (mm)	Soil Classification	Gradation of Materials							Soundness Indicator						Density	Absorption		Watertable (m)	Remarks	
				75/150mm	150/225	+ 225mm	Maximum Size (mm)	Gravel	Sand	Fines	Fracture		Micro Duval	Sand Eq.	MgSO4			C (%)	F (%)			
											A (%)	B (%)			C (%)	F (%)						C (%)
07-6	0.1	0.0/0.1	TS																		FVI, ORGANICS	
		0.1/0.3	SPSM					25	65	10												FVI
		0.3/2.3	GP	3	1		200	59	40	1												FVI
		2.3/6.0	SPSM					1	94	5												WSA, M-F SAND
07-7	0.1	0.0/0.1	TS																			FVI, ORGANICS
		0.1/6.0	GP	2	1		200	61	38	1			4.4	8.9	80							WSA
		6.0/?	SP					14	85	1												FVI
07-8	0.1	0.0/0.1	TS																			FVI, ORGANICS
		0.1/0.7	GPGM	6	1	1	300	60	35	5												FVI
		0.7/6.0	GP	4	1		175	50	49	1	88	81				3.4	4.9					WSA
07-9	0.1	0.0/0.1	TS																			FVI, ORGANICS
		0.1/0.4	SP					7	90	3												FVI
		0.4/1.2	SPSM					10	80	10												FVI
		1.2/6.0	SP					1	98	1												FVI, M-F SAND
07-10		0.0/2.0	GP	1	1		125	59	40	1												FVI
		2.0/4.5	SP					4	95	1												FVI, M-F SAND
		4.5/6.0	GP	50	15	5	300	90	9	1												FVI
			GP					54	43	3	92	90				3 LAYER COMPOSITE SAMPLE						WSA

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Testpit Number	Overburden Depth	Soil Bound. (mm)	Soil Classification	Gradation of Materials							Soundness Indicator					Density	Absorption		Watertable (m)	Remarks			
				75/150mm	150/225	+ 225mm	Maximum Size (mm)	Gravel	Sand	Fines	Fracture		Micro Duval	Sand Eq.	MgSO4		C (%)	F (%)					
											A (%)	B (%)			C (%)						F (%)	C (%)	F (%)
07-11		0.0/2.1	GP	4	3	1	300	64	35	1												FVI	
		2.1/4.0	SP						99	1													FVI, M-F SAND
		4.0/6.0	GP	4	2	1	300	57	39	4			48										WSA
07-12		0.0/1.3	CR																				FVI, 19MM CRUSH
		1.3/2.4	GPGM	2			150	54	40	6													FVI, FILL MATERIAL
		2.4/5.7	SPSM					24	66	10													FVI, SUSPECT FILL MATERIAL
		5.7/6.1	ML					30	20	50													FVI, HARDPAN LIKE
07-13		0.0/0.5	CR																				FVI, 19MM CRUSH
		0.5/1.4	GP	1			100	59	40	1													FVI, FILL
		1.4/4.5	ML					15	35	50													FVI, PIT OB
		4.5/6.0	ML					10	10	80													FVI, HARDPAN LIKE
07-14	0.1	0.0/0.1	TS																				FVI, ORGANICS
		0.1/0.4	SM2					20	60	20													FVI
		0.4/3.6	ML						20	80													FVI, HARDPAN LIKE
		3.6/4.0	GP					59	40	1													FVI
		4.0/6.0	SM3					10	60	30													FVI

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Testpit Number	Overburden Depth	Soil Bound. (mm)	Soil Classification	Gradation of Materials							Soundness Indicator						Density	Absorption		Watertable (m)	Remarks			
				75/150mm	150/225	+ 225mm	Maximum Size (mm)	Gravel	Sand	Fines	Fracture		Micro Duval	Sand Eq.	MgSO4			C (%)	F (%)					
											A (%)	B (%)			C (%)	F (%)								
																						C (%)	F (%)	
07-15	0.2	0.0/0.2	TS																				FVI, ORGANICS	
		0.2/1.2	SM1					40	48	12														FVI
		1.2/5.8	GP	5	3	1	375	63	33	4	89	86			60									WSA, 1/4 GAL/MIN.
07-16	0.2	0.0/0.2	TS																					FVI, ORGANICS
		0.2/1.3	SM1					20	65	15														FVI
		1.3/2.6	SPSM						95	5														FVI, TRICKLE, M-F SAND
		2.6/5.5	ML					5	30	65														HARDPAN LIKE
07-17		0.0/6.0	GP	7	3	1	250	65	34	1														WSA
07-18		0.0/6.0	GP	7	3	1	300	54	44	2			3.4	7.8										WSA
07-19		0.0/6.0	GPGM	4	2	1	300	50	43	7														WSA
07-20		0.0/1.8	GP	50	20	5	375	75	24	1														FVI
		1.8/6.0	SP	1			125	25	74	1	86	77					2.7	0.56	0.8					WSA
07-21		0.0/5.5	SPSM	3	1	1	250	41	52	7														WSA
		5.5/6.0	SP					25	74	1														FVI

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Pit: **HANEY** Service Area: **6** Equipment Type: **EXCAVATOR**

Testpit Number	Overburden Depth	Soil Bound. (mm)	Soil Classification	Gradation of Materials							Soundness Indicator						Density	Absorption		Watertable (m)	Remarks	
				75/150mm	150/225	+ 225mm	Maximum Size (mm)	Gravel	Sand	Fines	Fracture		Micro Duval	Sand Eq.	MgSO4			C (%)	F (%)			
											A (%)	B (%)			C (%)	F (%)						
																						C (%)
07-22		0.0/1.8	GP	4	1	1	300	59	40	1												FVI, FILL MATERIAL
		1.8/2.8	ML						10	90												FVI, TR ORGANICS, ORIG. GROUND
		2.8/6.0	SP	1			125	39	59	2												WSA
07-23		0.0/1.6	GPGM					50	40	10												FVI, MIXED FILL & BURIED GARBAGE
		1.6/2.3	SP					8	90	2												FVI
		2.3/6.0	SP	4	1	1	300	47	52	1												WSA
07-24		0.0/0.2	CR																			FVI, CRUSH
		0.2/0.3	TS																			FVI, ORGANICS
		0.3/0.5	SPSM					10	80	10												FVI
		0.5/6.0	SP	1			125	29	70	1												FVI
07-25	0.1	0.0/0.1	TS																			FVI, ORGANICS
		0.1/0.4	SPSM					10	80	10												FVI
		0.4/2.3	SP						99	1												FVI
		2.3/3.3	SP					39	60	1												FVI
		3.3/6.0	SP	1			125	23	75	2												WSA
07-26	0.2	0.0/0.2	TS																			FVI, ORGANICS
		0.2/0.7	GPGM	6	3	2	375	65	30	5												FVI
		0.7/6.0	GP	5	2	1	300	52	44	4			4.2	6.9	73			2.8	0.65	1.5		WSA

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Pit: **HANEY**

Service Area: **6**

Equipment Type: **EXCAVATOR**

Testpit Number	Overburden Depth	Soil Bound. (mm)	Soil Classification	Gradation of Materials							Soundness Indicator						Density	Absorption		Watertable (m)	Remarks
				75/150mm	150/225	+ 225mm	Maximum Size (mm)	Gravel	Sand	Fines	Fracture		Micro Duval	Sand Eq.	MgSO4			C (%)	F (%)		
											A (%)	B (%)			C (%)	F (%)					
07-27	0.2	0.0/0.2	TS																	FVI, ORGANICS	
		0.2/0.6	GPGM	6	3	2	300	65	30	5											FVI
		0.6/6.0	GPGM	5	2	1	300	55	40	5	87	89			2.1	2.6					WSA
07-28	0.2	0.0/0.2	TS																		FVI, ORGANICS
		0.2/0.8	SM1					5	80	15											FVI
		0.8/2.6	SPSM			1	300	20	70	10											FVI
		2.6/4.0	SM2					30	50	20											FVI
		4.0/?																			HUGE BLDR OR POSSIBLE BRX
07-29	0.2	0.0/0.2	TS																		FVI, ORGANICS
		0.2/0.6	SPSM					5	80	10											FVI
		0.6/1.4	SM1					10	75	15											FVI
		1.4/3.5	SM3					29	41	30				45							FVI, REFUSAL-HARDPAN LIKE
07-30	0.1	0.0/0.1	TS																		FVI, ORGANICS
		0.1/1.0	GPGM	30	20	10	300	70	20	10											FVI
		1.0/4.5	SP					22	75	3											FVI
		4.5/5.5	GP	4	2	1	250	59	40	1											FVI
		5.5/6.0	SP					4	95	1											FVI

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Pit: **HANEY** Service Area: **6** Equipment Type: **EXCAVATOR**

Testpit Number	Overburden Depth	Soil Bound. (mm)	Soil Classification	Gradation of Materials							Soundness Indicator						Density	Absorption		Watertable (m)	Remarks	
				75/150mm	150/225	+ 225mm	Maximum Size (mm)	Gravel	Sand	Fines	Fracture		Micro Duval	Sand Eq.	MgSO4			C (%)	F (%)			
											A (%)	B (%)			C (%)	F (%)						
																						C (%)
07-31		0.0/1.1	GP	5	3	2	250	64	35	1												FVI
		1.1/1.4	SP						99	1												FVI
		1.4/4.0	GP	2	1		175	56	40	4												WSA
		4.0/5.0	SP	1			100	29	70	1												FVI
		5.0/6.0	GP	3	1		175	59	40	1												FVI
07-32		0.0/1.0	GPGM	5	3	2	375	64	30	6												FVI
		1.0/2.3	GP	5	3	2	300	62	35	3												FVI
		2.3/6.0	GP	3	1	1	250	50	47	3			3.7	7.8							3.5	WSA, 1/4 GAL/MIN
07-33		0.0/0.2	GP					64	35	1												FVI
		0.2/0.3	TS																			FVI, ORGANICS
		0.3/1.3	GPGM					63	30	7												FVI
		1.3/2.5	GP					64	35	1											2.5	FVI, 1/4 GAL/MIN
		2.5/?	ML					30	20	50												FVI, REFUSAL-HARDPAN LIKE
07-34	0.3	0.0/0.3	TS																			FVI, ORGANICS
		0.3/0.6	SC4						60	40												FVI
		0.6/1.3	ML						30	70												FVI
		1.3/?	ROCK																			FVI, REFUSAL-POSSIBLE BRX

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Testpit Number	Overburden Depth	Soil Bound. (mm)	Soil Classification	Gradation of Materials							Soundness Indicator				Density	Absorption		Watertable (m)	Remarks			
				75/150mm	150/225	+ 225mm	Maximum Size (mm)	Gravel	Sand	Fines	Fracture		Micro Duval	Sand Eq.		MgSO4				C (%)	F (%)	
											A (%)	B (%)				C (%)	F (%)					C (%)
07-35	0.3	0.0/0.3	TS																	FVI, ORGANICS		
		0.3/0.7	SPSM					10	80	10											FVI	
		0.7/6.0	GP	7	3	1	375	61	37	2	89	84	4.4	11							WSA	
07-36	0.2	0.0/0.2	TS																		FVI, ORGANICS	
		0.2/1.0	GPGM	10	5	5	500	65	30	5											FVI	
		1.0/5.5	GP	5	3	1	250	64	32	4											WSA	
		5.5/6.0	SP					14	85	1											FVI	
		6.0/?	BLDR																		FVI, LG BOULDER	
07-37	0.2	0.0/0.2	TS																		FVI, ORGANICS	
		0.2/0.7	SM1					25	60	15											FVI	
		0.7/5.5	GC1					50	35	15										4.0	FVI, TRICKLE	
		5.5/6.0	GP	5	2	1	250	49	47	4											WSA	
TP07-38 to 52 are not located within the tenure area																						
07-53	0.2	0.0/0.2	TS																			FVI, ORGANICS
		0.2/0.8	SM1					30	55	15												FVI
		0.8/5.0	GPGM	3	2	1	375	60	35	5												WSA
		5.0/6.0	SP					29	70	1												FVI, M-F SAND

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Pit: **HANEY** Service Area: **6** Equipment Type: **EXCAVATOR**

Testpit Number	Overburden Depth	Soil Bound. (mm)	Soil Classification	Gradation of Materials							Soundness Indicator					Density	Absorption		Watertable (m)	Remarks				
				75/150mm	150/225	+ 225mm	Maximum Size (mm)	Gravel	Sand	Fines	Fracture		Micro Duval	Sand Eq.	MgSO4		C (%)	F (%)						
											A (%)	B (%)			C (%)						F (%)	C (%)	F (%)	
07-54	0.3	0.0/0.3	TS																			FVI, ORGANICS		
	0.6	0.3/0.6	ML					5	25	70													FVI	
		0.6/1.4	GPGM					50	40	10													FVI	
		1.4/5.9	SPSM	2	1		250	24	71	5													WSA	
		5.9/6.2	SM1					5	80	15												5.9	FVI, 1/2 GAL/MIN	
07-55	0.3	0.0/0.3	TS																				FVI, ORGANICS	
	0.6	0.3/0.6	ML					5	25	70													FVI	
		0.6/0.8	GPGM					50	40	10													FVI	
		0.8	BRX																				FVI, BEDROCK	
07-56	0.2	0.0/0.2	TS																				FVI, ORGANICS	
	0.5	0.2/0.5	ML					5	25	70													FVI	
		0.5/1.0	SM2						80	20													FVI	
		1	BRX																				FVI, BEDROCK	
TP07-57 to 65 are not located within the tenure area																								
07-66	0.2	0.0/0.2	TS																				FVI, ORGANICS	
		0.2/0.7	SM1					20	65	15													FVI	
		0.7/2.8	SPSM					10	80	10													FVI	
		2.8/4.0	SM3						70	30													FVI, VERY DENSE	
		4.0/4.5	GPGM					55	35	10													FVI	
		4.5/5.5	SPSM					5	85	10													FVI	

FVI= Field Visual Identification  
BRX= Bedrock

WSA= Washed Sieve Analysis

LVI= Lab Visual Identification