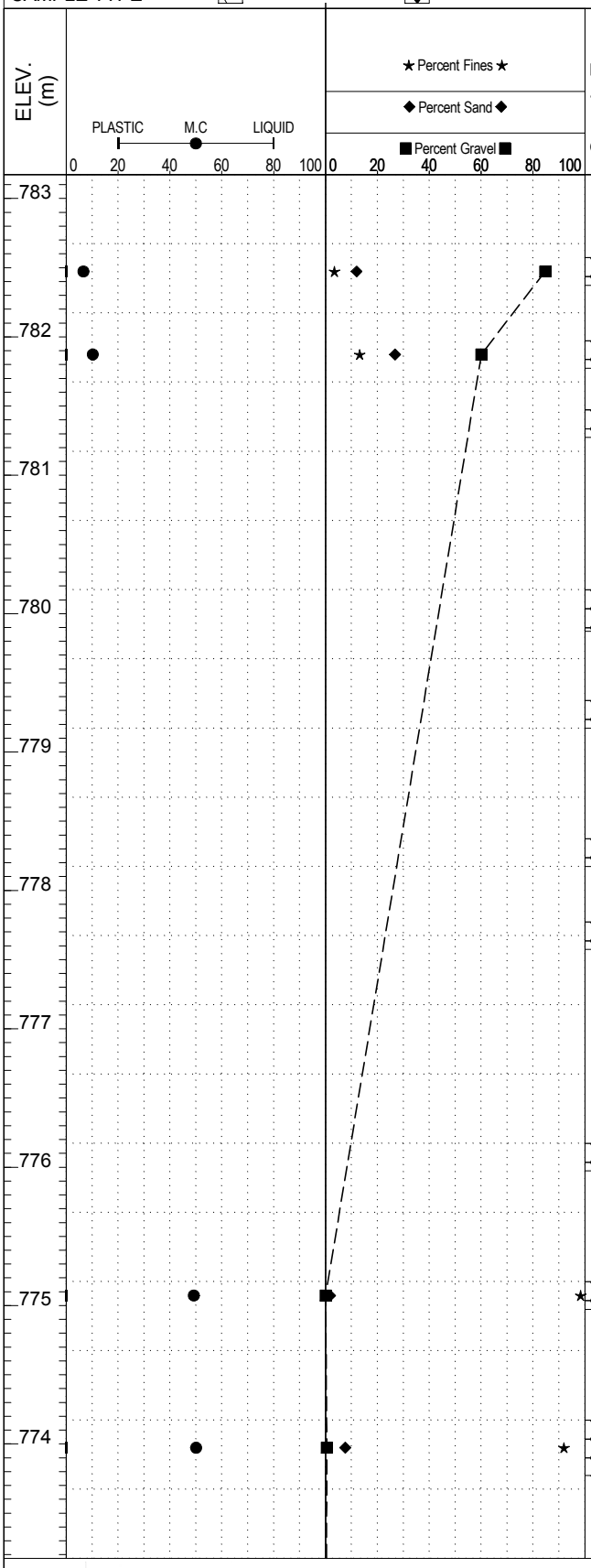
SUBSURFACE EXPLORATION AND TEST REPORT	Alaska Highway	SOURCE/TP#: **866-5307**
Boart Longyear	Establishment of Baseline Data, km 1897 LHS	PROJECT NO: 552-202021-0601-05-1
Sonic Drill	Coordinates: Z07V N6937697.596m E501919.2168m	ELEVATION: 783.172913m

SAMPLE TYPE: UNDISTURBED | DCPT | AUGER | BULK | SPT | CORE



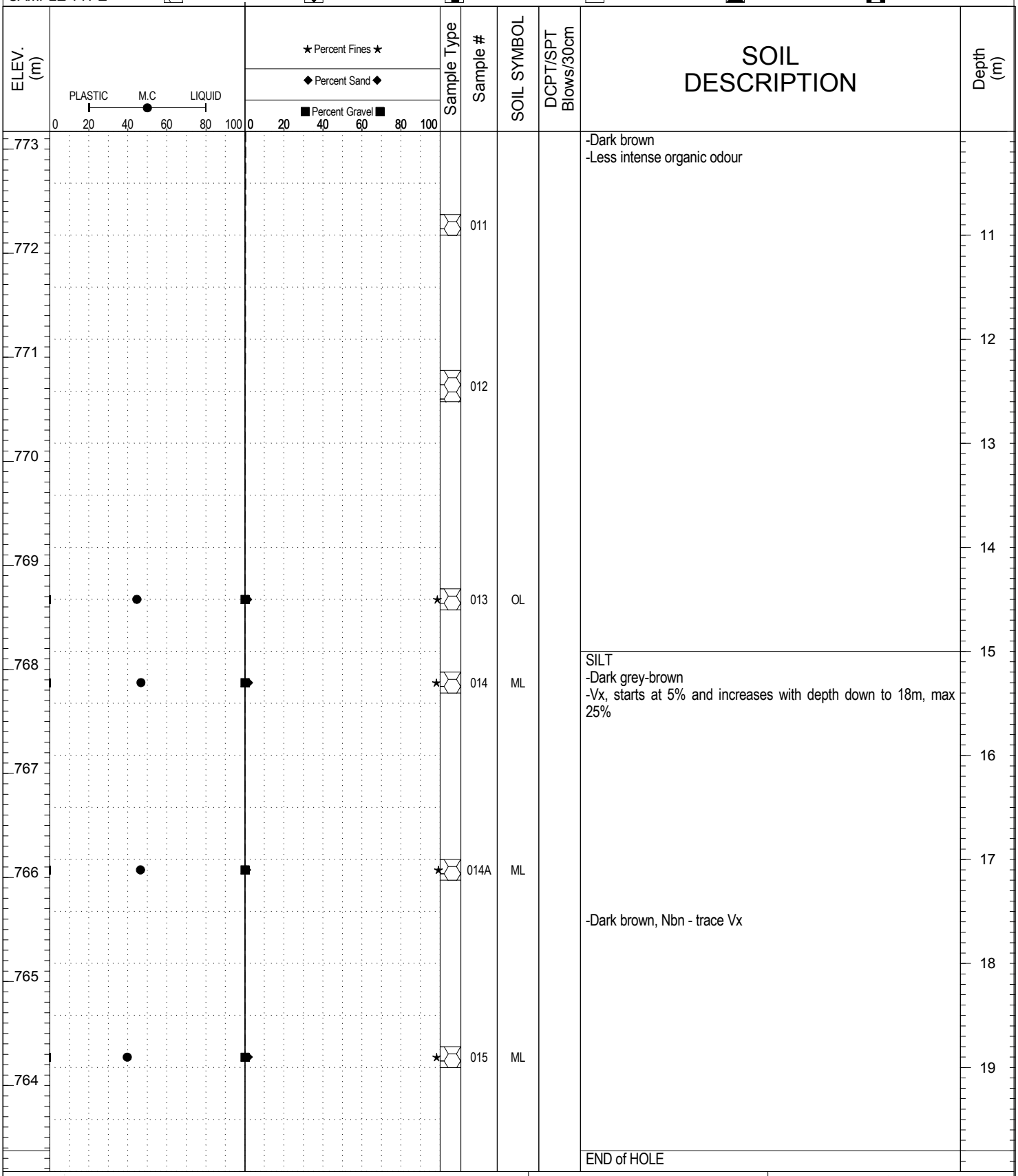
Sample Type	Sample #	SOIL SYMBOL	DCPT/SPT Blows/30cm	SOIL DESCRIPTION	Depth (m)
				ORGANICS -Black, fiberous, damp	
	001	GW		WELL-GRADED GRAVEL -Brown, free water, loose, angular	1
	002	GM		SILTY GRAVEL with SAND -Medium brown	
	003			PEAT -Woody, partially decomposed, moist, black	2
	004			ICE with ORGANIC SILT -Visible ice crystals (Vx), clear, white -Black, frozen bonded silt, organic odour	3
	005			-Random ice inclusions (Vr) -Clear, white, ~20%	4
	006			SANDY ORGANIC SILT -Dark brown, frozen (Nbn)	5
	007			-Random ice formations (Vr) , clear, white ~5%	
				-Trace gravel	6
				-Vx, black, <5%	
	008				7
	009	OL		ORGANIC SILT Dark grey, Nbe -Intense organic odour, some visible shell fragments	8
	010	OL		-Dark brown -Less intense organic odour	9

Yukon **Highways and Public Works**
Transportation Engineering Branch

LOGGED BY: R.Stilwell	Termination Depth: 19.8m
COMPILED BY: R.Stilwell	Complete: 9/11/2015 2:00:00 PM
REVIEWED BY: Dave Lorenzi	Pit #: Page 1 of 2

SUBSURFACE EXPLORATION AND TEST REPORT	Alaska Highway	SOURCE/TP#: **866-5307**
Boart Longyear	Establishment of Baseline Data, km 1897 LHS	PROJECT NO: 552-202021-0601-05-1
Sonic Drill	Coordinates: Z07V N6937697.596m E501919.2168m	ELEVATION: 783.172913m

SAMPLE TYPE: UNDISTURBED | DCPT | AUGER | BULK | SPT | CORE



SOIL DESCRIPTION

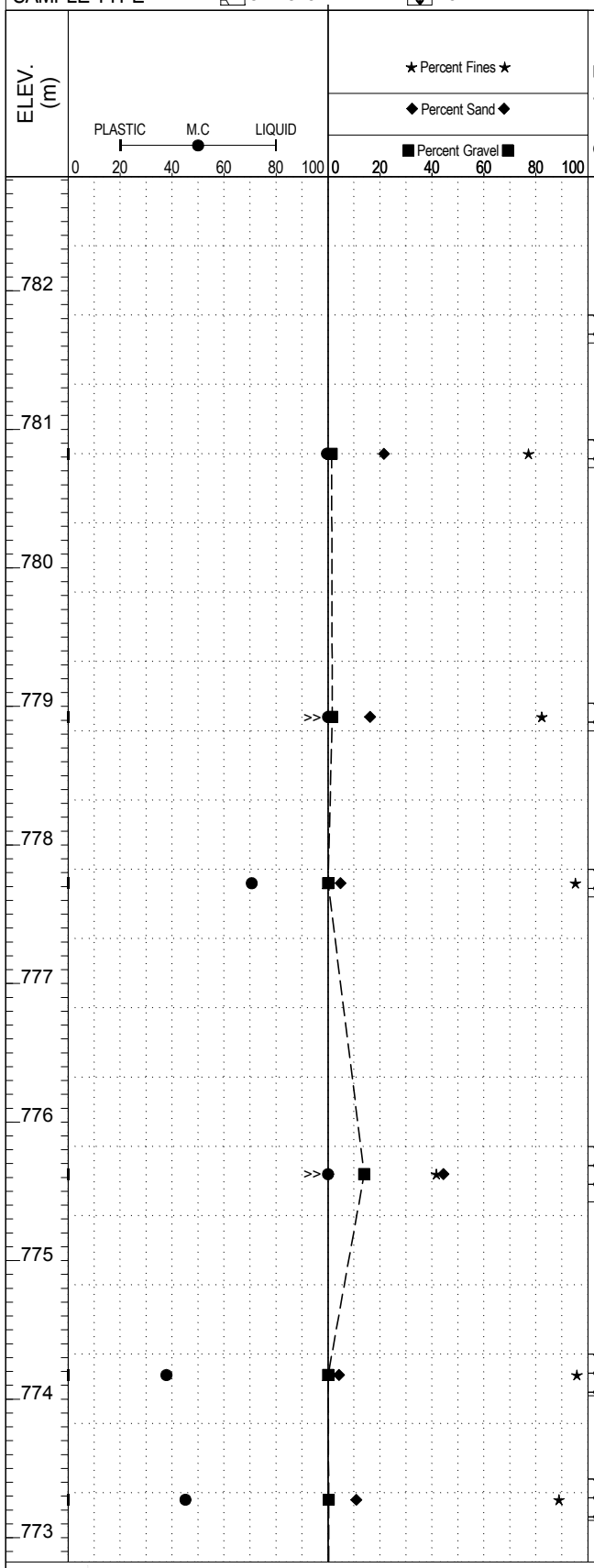
Depth (m)	
	-Dark brown -Less intense organic odour
11	
12	
13	
14	
15	SILT -Dark grey-brown -Vx, starts at 5% and increases with depth down to 18m, max 25%
16	
17	
18	-Dark brown, Nbn - trace Vx
19	
	END of HOLE

Yukon Highways and Public Works
Transportation Engineering Branch

LOGGED BY: R.Stilwell	Termination Depth: 19.8m
COMPILED BY: R.Stilwell	Complete: 9/11/2015 2:00:00 PM
REVIEWED BY: Dave Lorenzi	Pit #: Page 2 of 2

SUBSURFACE EXPLORATION AND TEST REPORT	Alaska Highway	SOURCE/TP#: **866-5308**
Boart Longyear	Establishment of Baseline Data, km 1894.5 LHS	PROJECT NO: 552-202021-0601-05-1
Sonic Drill	Coordinates: Z07V N6935938.693m E501315.2403m	ELEVATION: 782.824158m

SAMPLE TYPE: UNDISTURBED | DCPT | AUGER | BULK | SPT | CORE



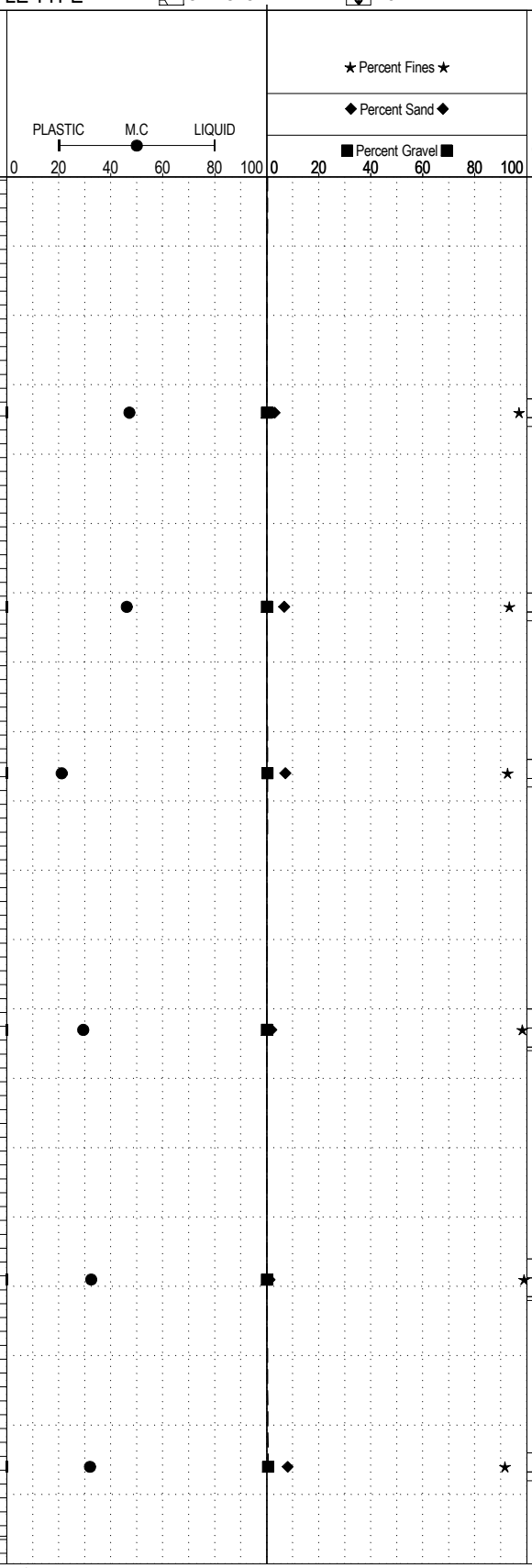
Sample Type	Sample #	SOIL SYMBOL	DCPT/SPT Blows/30cm	SOIL DESCRIPTION	Depth (m)
				ORGANICS -Dark brown, woody/fiberous	
				ORGANIC SILT with ICE -Dark brown, frozen -Vx-Nbe, 40%	1
	017	OL			
				-Some woody organic inclusions -Vx ~7%	2
	018				
				-Vx ~25%	3
				PEAT -Woody, black	
				ICE and PEAT -Vs, 8-10mm ice, 20-40mm peat	4
	019	OL			
				ICE and ORGANIC SILT -Vs, 10mm dark brown, cloudy ice -30mm Dark brown silt -Some organic inclusions, woody and fiberous	5
	020	OL			
					6
				ICE and SILTY SAND -Vr, clear, white ice. Vs ends -Some fiberous inclusions	7
	021	SM			
				ORGANIC SILT with ICE -Dark grey -Vx, ~20-40%, Clear, white	8
	022	OL			
				-Nbe	9
	023	ML			

Yukon **Highways and Public Works**
Transportation Engineering Branch

LOGGED BY: R.Stilwell	Termination Depth: 19.8m
COMPILED BY: R.Stilwell	Complete: 9/11/2015 7:00:00 PM
REVIEWED BY: Dave Lorenzi	Pit #: Page 1 of 2

SUBSURFACE EXPLORATION AND TEST REPORT	Alaska Highway	SOURCE/TP#: **866-5308**
Boart Longyear	Establishment of Baseline Data, km 1894.5 LHS	PROJECT NO: 552-202021-0601-05-1
Sonic Drill	Coordinates: Z07V N6935938.693m E501315.2403m	ELEVATION: 782.824158m

SAMPLE TYPE: UNDISTURBED | DCPT | AUGER | BULK | SPT | CORE



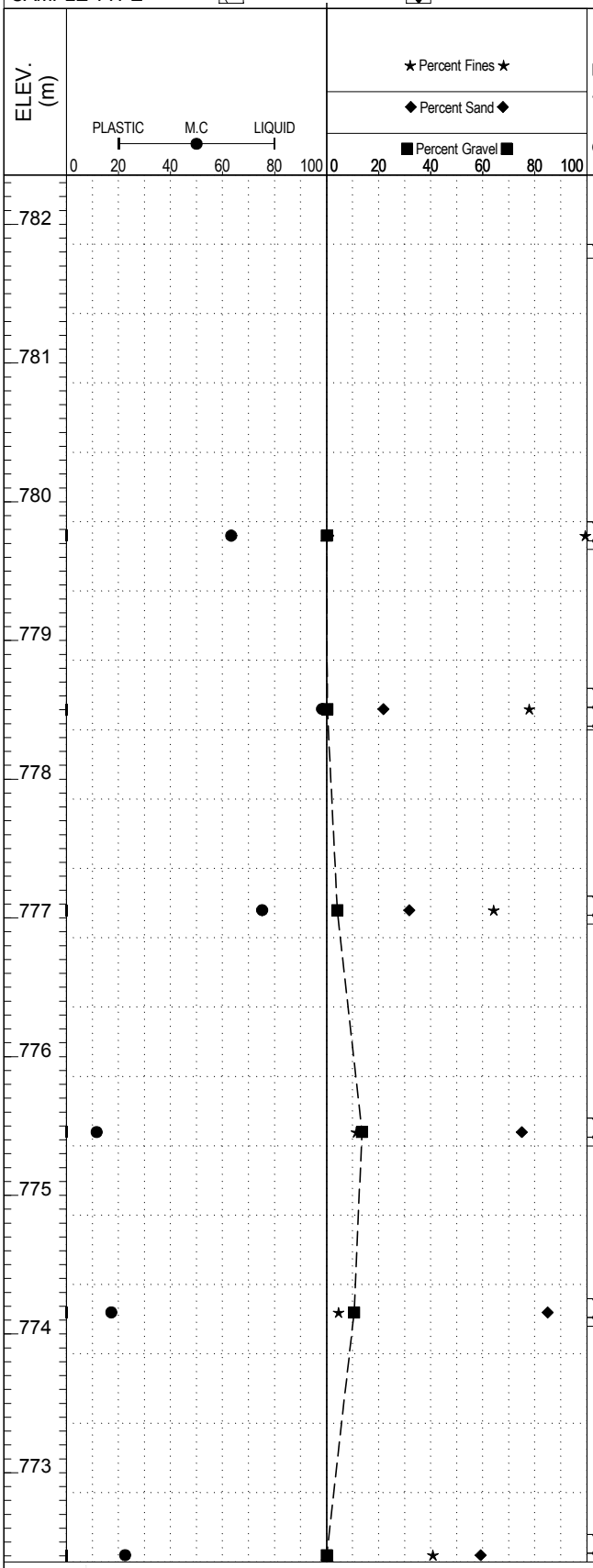
ELEV. (m)	Sample Type	Sample #	SOIL SYMBOL	DCPT/SPT Blows/30cm	SOIL DESCRIPTION	Depth (m)
					-Nbe	
772					-SILT -Dark grey, Nbe -Clay lenses	11
771		024	ML			12
770					-Organic inclusions	
		024A	ML		-Vx	13
769					-Dark grey, Nbn -No clay	14
		025	ML			
768						15
767						
		026	ML			16
766					-Some clay	17
765		027	ML			18
764						19
		028	ML			
763					END of HOLE	

Yukon **Highways and Public Works**
Transportation Engineering Branch

LOGGED BY: R.Stilwell	Termination Depth: 19.8m
COMPILED BY: R.Stilwell	Complete: 9/11/2015 7:00:00 PM
REVIEWED BY: Dave Lorenzi	Pit #: Page 2 of 2

SUBSURFACE EXPLORATION AND TEST REPORT	Alaska Highway	SOURCE/TP#: **866-5309**
Boart Longyear	Establishment of Baseline Data, km 1886 RHS	PROJECT NO: 552-202021-0601-05-1
Sonic Drill	Coordinates: Z07V N6931013.605m E505666.2165m	ELEVATION: 782.356018m

SAMPLE TYPE: UNDISTURBED | DCPT | AUGER | BULK | SPT | CORE



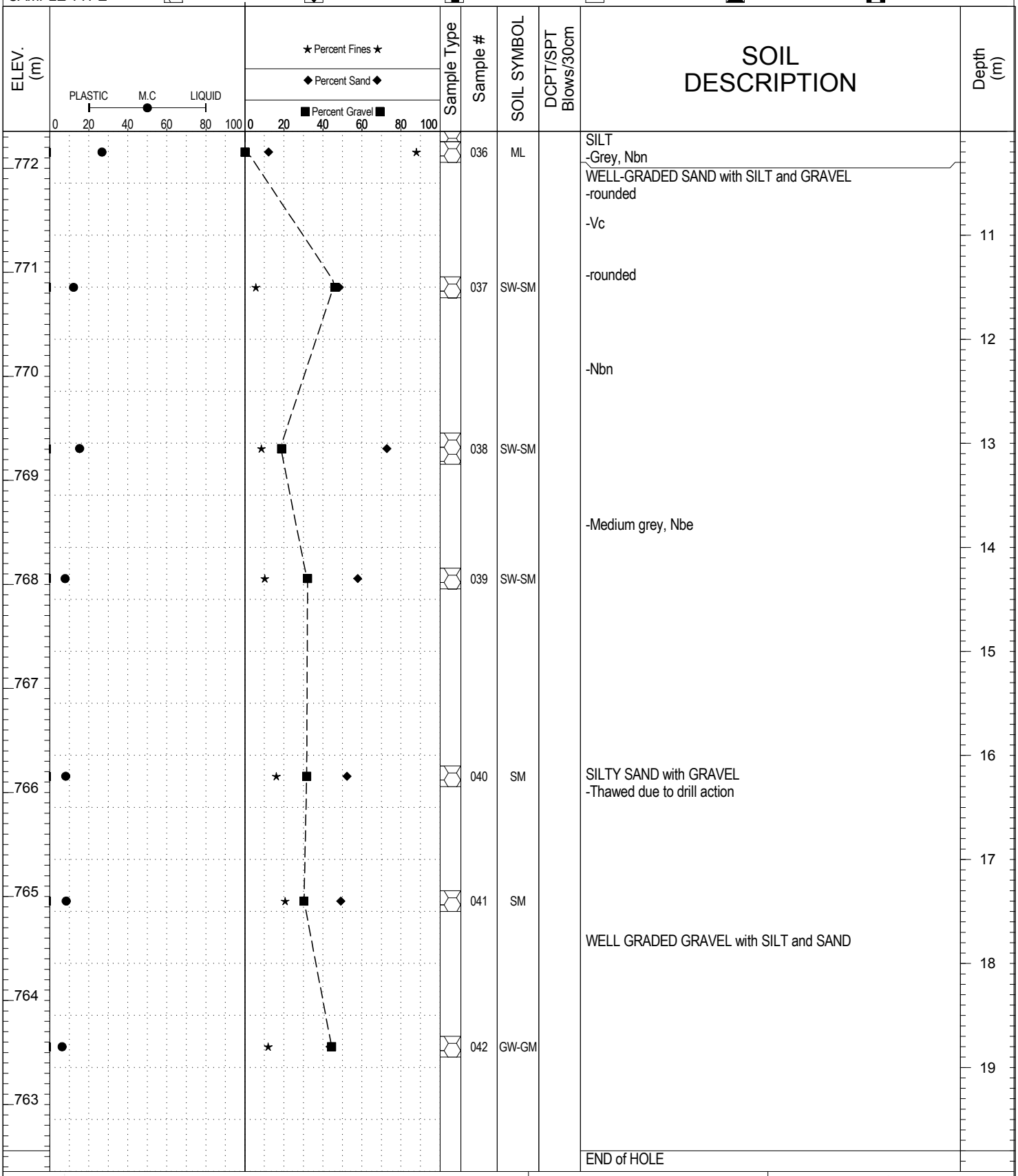
Sample Type	Sample #	SOIL SYMBOL	DCPT/SPT Blows/30cm	SOIL DESCRIPTION	Depth (m)
				PEAT -Mixture of fiberous and woody	
	029			ICE and PEAT -Vx ICE and ORGANIC SILT -Vs, 50% ice -White, clear ice, brown silt	1
				ICE and SILT -60-70% Ice -Crystaline, clear, white, highly fractured -Grey silt	2
	030	ML			3
				<<L>- Organic silt seam	
	031	ML		ICE with SILT and SAND -Clear, white, granular, highly fractured	4
				SANDY SILT with ICE -VxVr, 20% Ice	5
	032	ML			6
				WELL-GRADED SAND with SILT -Medium grained, dark grey -Frozen Nbn	
	033	SW-SM			7
					8
	034	SP		POORLY GRADED SAND -Coarse grained -10% Vc	
					9
				-Grey -Vc, ~1mm coating	
	035	SM		ICE and SILT -60% ice, clear, white, square crystals	

Yukon Highways and Public Works
Transportation Engineering Branch

LOGGED BY: R.Stilwell	Termination Depth: 19.8m
COMPILED BY: R.Stilwell	Complete: 9/12/2015
REVIEWED BY: Dave Lorenzi	Pit #:

SUBSURFACE EXPLORATION AND TEST REPORT	Alaska Highway	SOURCE/TP#: **866-5309**
Boart Longyear	Establishment of Baseline Data, km 1886 RHS	PROJECT NO: 552-202021-0601-05-1
Sonic Drill	Coordinates: Z07V N6931013.605m E505666.2165m	ELEVATION: 782.356018m

SAMPLE TYPE: UNDISTURBED | DCPT | AUGER | BULK | SPT | CORE



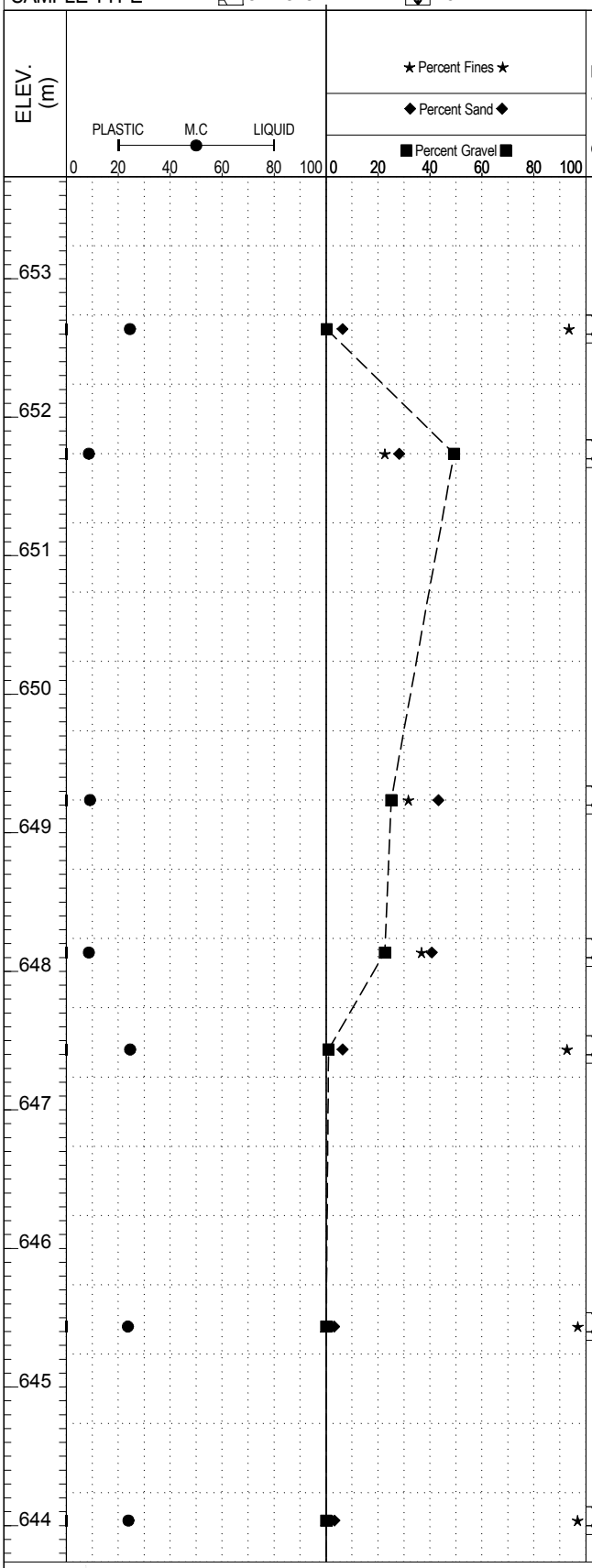
Sample Type	Sample #	SOIL SYMBOL	DCPT/SPT Blows/30cm	SOIL DESCRIPTION	Depth (m)
	036	ML		SILT -Grey, Nbn	
				WELL-GRADED SAND with SILT and GRAVEL -rounded	
				-Vc	11
	037	SW-SM		-rounded	12
				-Nbn	
	038	SW-SM			13
				-Medium grey, Nbe	14
	039	SW-SM			15
					16
	040	SM		SILTY SAND with GRAVEL -Thawed due to drill action	17
	041	SM			
				WELL GRADED GRAVEL with SILT and SAND	18
	042	GW-GM			19
				END of HOLE	

Yukon **Highways and Public Works**
Transportation Engineering Branch

LOGGED BY: R.Stilwell	Termination Depth: 19.8m
COMPILED BY: R.Stilwell	Complete: 9/12/2015
REVIEWED BY: Dave Lorenzi	Pit #: Page 2 of 2

SUBSURFACE EXPLORATION AND TEST REPORT	Alaska Highway	SOURCE/TP#: **866-5310**
Boart Longyear	Establishment of Baseline Data, km 1860 RHS	PROJECT NO: 552-202021-0601-05-1
Sonic Drill	Coordinates: Z07V N6910365.7m E509064.6717m	ELEVATION: 653.736267m

SAMPLE TYPE: UNDISTURBED | DCPT | AUGER | BULK | SPT | CORE



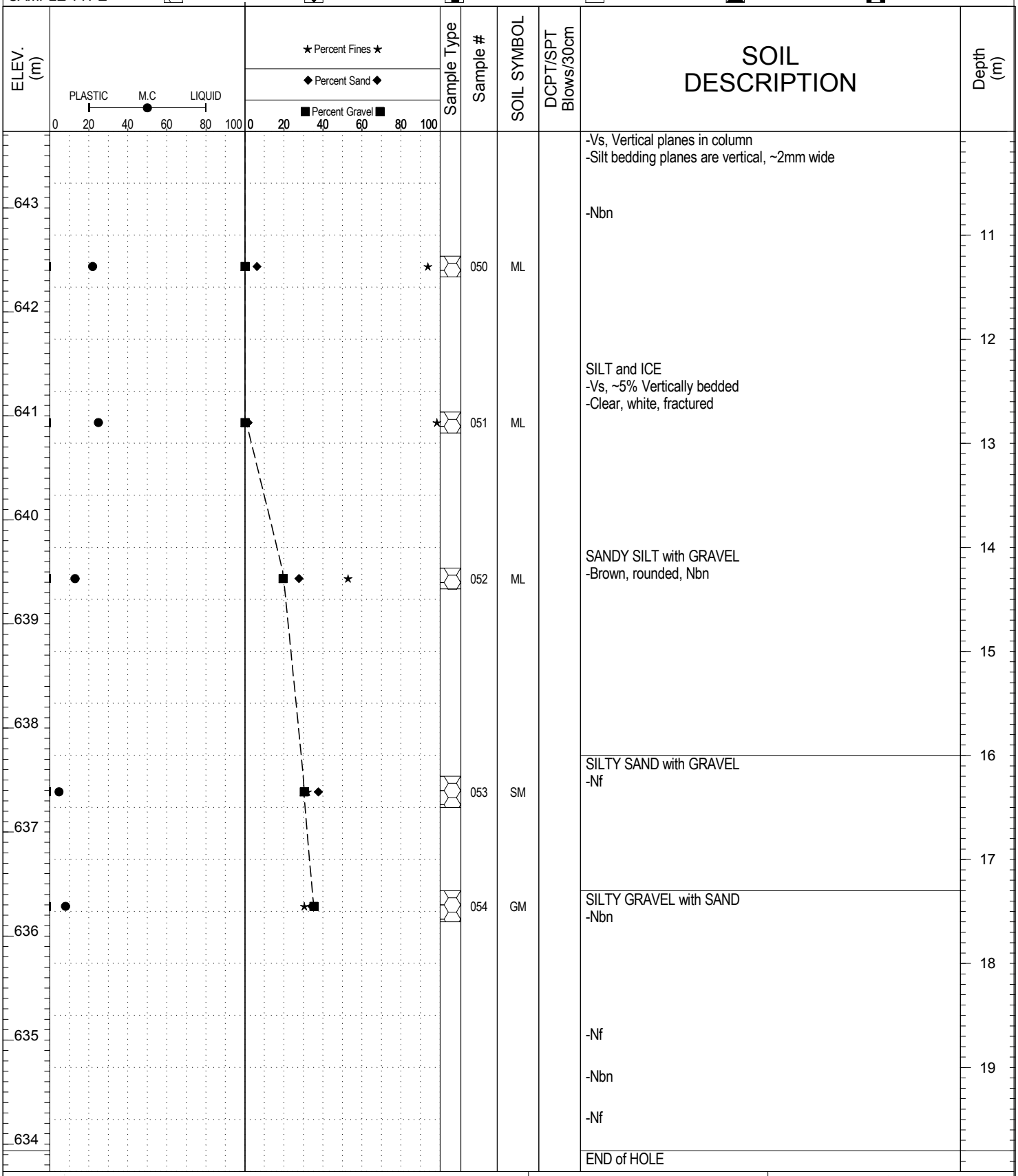
Sample Type	Sample #	SOIL SYMBOL	DCPT/SPT Blows/30cm	SOIL DESCRIPTION	Depth (m)
				ORGANICS -Fiberous inclusions PEAT ORGANIC SILT -Brown, saturated, firm -Woody/fiberous inclusions	1
	043	OL		-Frozen, Nbe	
				SILTY GRAVEL with SAND -Brown, subrounded, Vx	2
	044	GM		-Nf -Vx ~20%	3
				-Nbn -Nf	4
				SILTY SAND with GRAVEL -Highly weathered, Nbn	5
	045	SM			6
	046	SM			
				SILT -10% Vr - Clear, white, fractured -Brown silt	7
	047	ML		ICE and SILT -30% ice, clear, white, hard	
				SILT and ICE -10% Vr-Vx, individual crystals and sheets moving up in silt in curved planes	8
	048	ML		-Vs, Vertical planes in column -Silt bedding planes are vertical, ~2mm wide	9
	049	ML			

Yukon **Highways and Public Works**
Transportation Engineering Branch

LOGGED BY: R.Stilwell	Termination Depth: 19.8m
COMPILED BY: R.Stilwell	Complete: 9/12/2015
REVIEWED BY: Dave Lorenzi	Pit #:

SUBSURFACE EXPLORATION AND TEST REPORT	Alaska Highway	SOURCE/TP#: **866-5310**
Boart Longyear	Establishment of Baseline Data, km 1860 RHS	PROJECT NO: 552-202021-0601-05-1
Sonic Drill	Coordinates: Z07V N6910365.7m E509064.6717m	ELEVATION: 653.736267m

SAMPLE TYPE: UNDISTURBED | DCPT | AUGER | BULK | SPT | CORE



SOIL DESCRIPTION

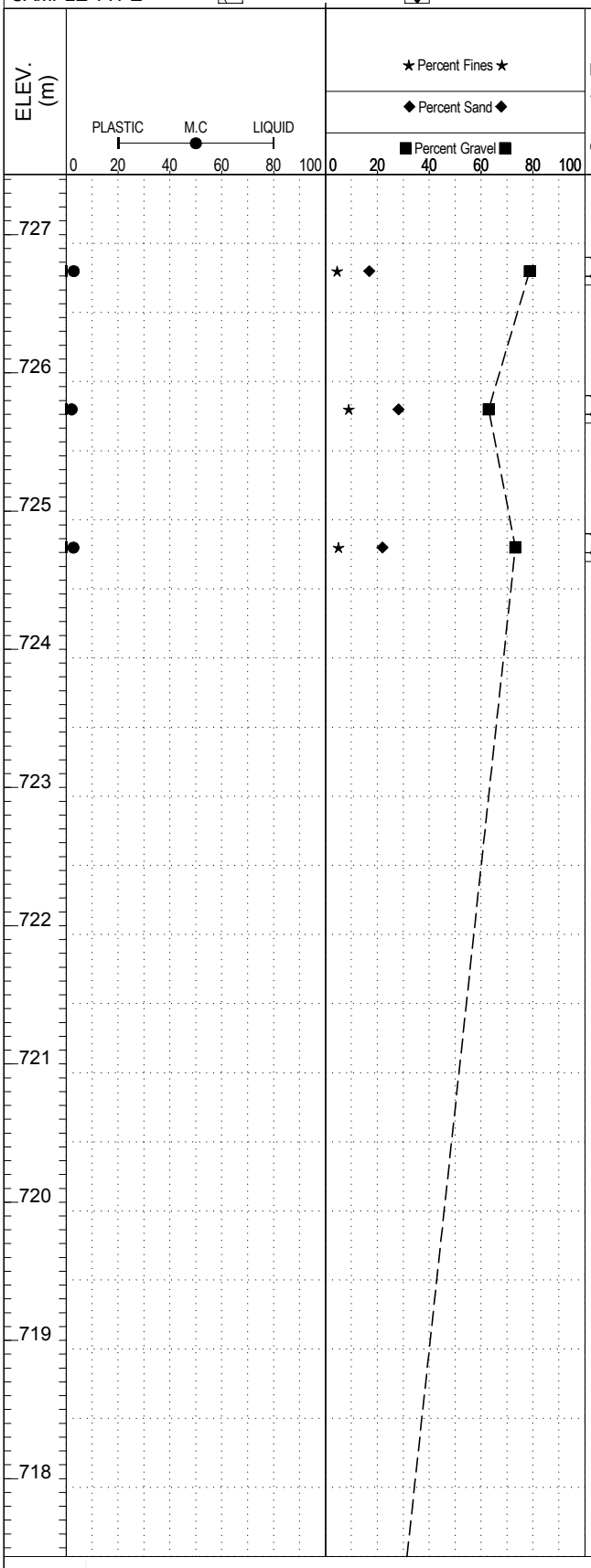
Depth (m)	
	-Vs, Vertical planes in column -Silt bedding planes are vertical, ~2mm wide
11	-Nbn
12	SILT and ICE -Vs, ~5% Vertically bedded -Clear, white, fractured
13	
14	SANDY SILT with GRAVEL -Brown, rounded, Nbn
15	
16	SILTY SAND with GRAVEL -Nf
17	
18	SILTY GRAVEL with SAND -Nbn
19	-Nf -Nbn -Nf
	END of HOLE

Yukon **Highways and Public Works**
Transportation Engineering Branch

LOGGED BY: R.Stilwell	Termination Depth: 19.8m
COMPILED BY: R.Stilwell	Complete: 9/12/2015
REVIEWED BY: Dave Lorenzi	Pit #:

SUBSURFACE EXPLORATION AND TEST REPORT	Alaska Highway	SOURCE/TP#: **866-5311**
Boart Longyear	Establishment of Baseline Data, km 1840 RHS	PROJECT NO: 552-202021-0601-05-1
Sonic Drill	Coordinates: Z07V N6892338.057m E516504.8468m	ELEVATION: 727.435852m

SAMPLE TYPE: UNDISTURBED | DCPT | AUGER | BULK | SPT | CORE



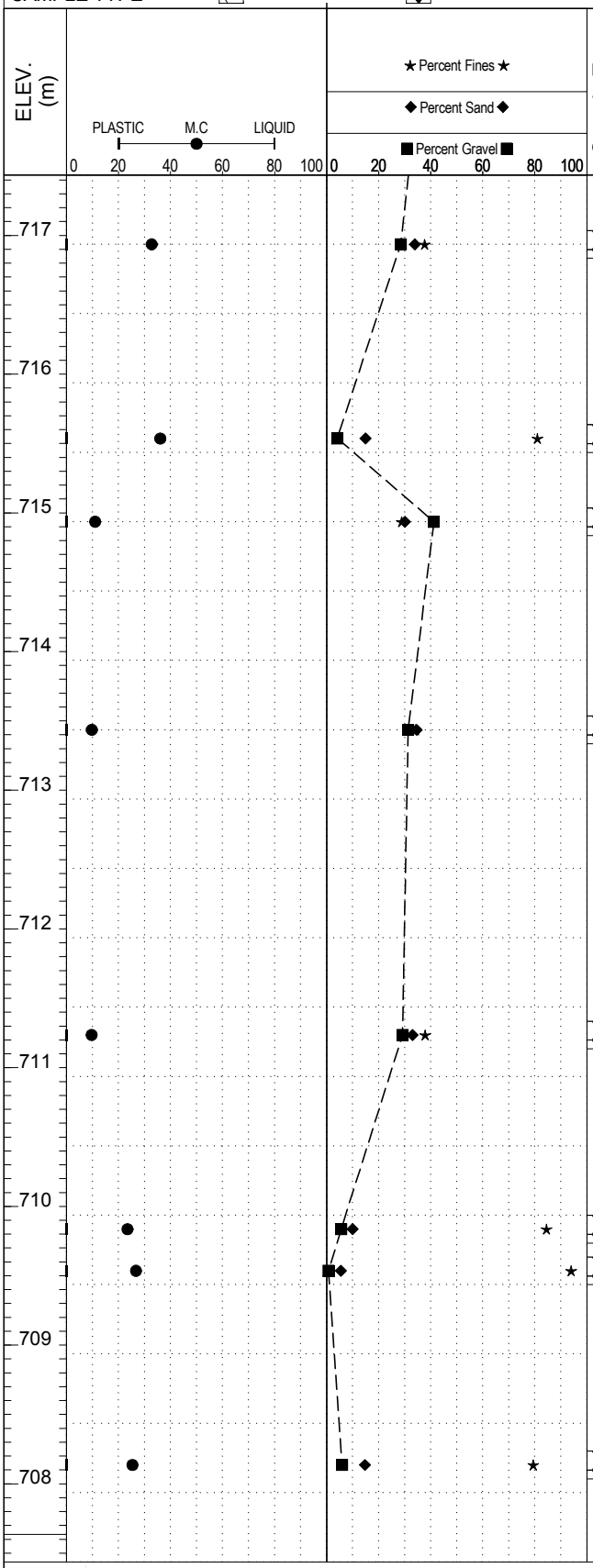
Sample Type	Sample #	SOIL SYMBOL	DCPT/SPT Blows/30cm	SOIL DESCRIPTION	Depth (m)
	055	GP		POORLY GRADED GRAVEL with SAND -Brown, loose, damp -Trace fiberous organics	1
	056	GP-GM		POORLY GRADED GRAVEL with SILT and SAND -Dark brown, moist, compact -Light brown, dry, loose	2
	057	GP		POORLY GRADED GRAVEL with SAND -Dark brown, moist, compact	3
				ICE and GRAVEL -~80% Grey-brown, highly fractured Ice ICE -Grey, cloudy, fractured -White -Brittle -Light brown, clear -Cloudy, highly fractured - individual crystals distinct	4 5
				ICE and SILT -Vs, white cloudy ice, 30mm thick -Grey silt, 10mm thick SNOW and ICE -Layerd, snow 20mm thick, and ice 5mm thick -White, clear, slight fracture in solid ice SILTY SNOW and ICE -Dirty grey snow, clear white ice Snow and ICE -Snow, white, cloudy, 2mm thick sections -Ice, white, clear, some bubbles, 2mm thick sections -Harder -Silt seam ICE and SILT -Vs, 2mm Ice, 10mm Silt (Nbe) -Ice is white, and clear -Grey silt	6 7 8 9

Yukon **Highways and Public Works**
Transportation Engineering Branch

LOGGED BY: R.Stilwell	Termination Depth: 19.8m
COMPILED BY: R.Stilwell	Complete: 9/13/2015
REVIEWED BY: Dave Lorenzi	Pit #:

SUBSURFACE EXPLORATION AND TEST REPORT	Alaska Highway	SOURCE/TP#: **866-5311**
Boart Longyear	Establishment of Baseline Data, km 1840 RHS	PROJECT NO: 552-202021-0601-05-1
Sonic Drill	Coordinates: Z07V N6892338.057m E516504.8468m	ELEVATION: 727.435852m

SAMPLE TYPE: UNDISTURBED | DCPT | AUGER | BULK | SPT | CORE



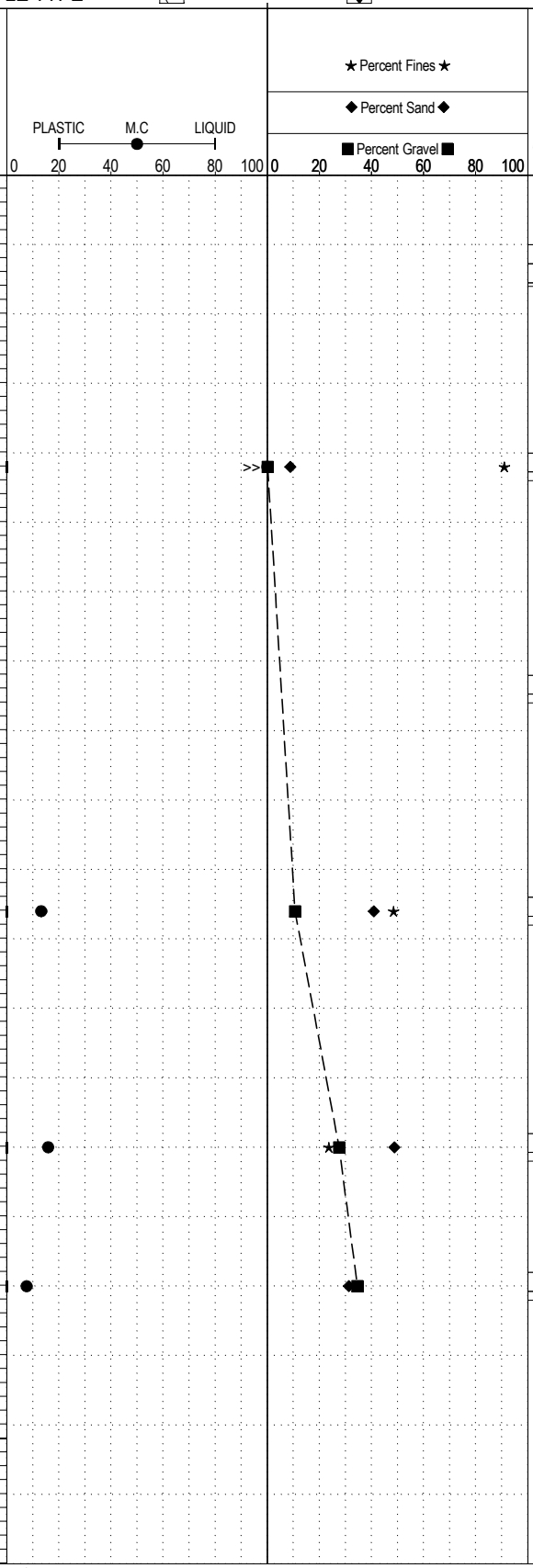
Sample Type	Sample #	SOIL SYMBOL	DCPT/SPT Blows/30cm	SOIL DESCRIPTION	Depth (m)
	058	SM		SILTY SAND with GRAVEL -Grey, subangular -Vx, white cloudy crystals	11
	059	ML		SILT with SAND -Dark grey, hard, Nbe	12
	060	GM		SILTY GRAVEL with SAND -Dark grey, hard, Nbe	13
	061	SM		SILTY SAND with GRAVEL -Dark grey, hard, Vx -Nbe -Nbn -Nbe	14 15
	062	SM		-Nbn -Nbe	16 17
	063	ML		SILT with SAND -Dark grey, Nbn	
	064	ML		SILT -Vr	18
	065	ML		SILT with SAND -Nbn	19
				END of HOLE	

Yukon **Highways and Public Works**
Transportation Engineering Branch

LOGGED BY: R.Stilwell	Termination Depth: 19.8m
COMPILED BY: R.Stilwell	Complete: 9/13/2015
REVIEWED BY: Dave Lorenzi	Pit #: Page 2 of 2

SUBSURFACE EXPLORATION AND TEST REPORT	Alaska Highway	SOURCE/TP#: **866-5312**
Boart Longyear	Establishment of Baseline Data, km 1810 RHS	PROJECT NO: 552-202021-0601-05-1
Sonic Drill	Coordinates: Z07V N6870311.637m E531256.0297m	ELEVATION: 714.99292m

SAMPLE TYPE: UNDISTURBED | DCPT | AUGER | BULK | SPT | CORE



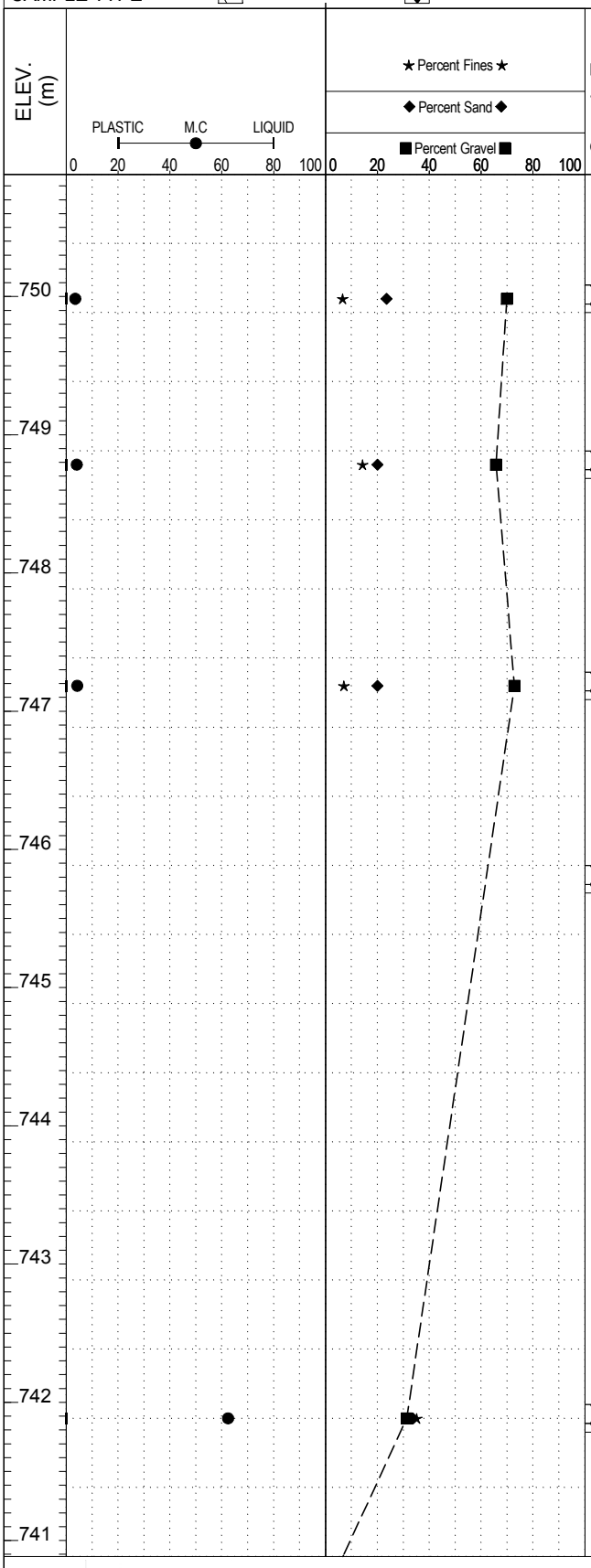
Sample Type	Sample #	SOIL SYMBOL	DCPT/SPT Blows/30cm	SOIL DESCRIPTION	Depth (m)
				PEAT -Dark brown, fiberous, saturated	
				ORGANIC SILT -Dark brown, Nbe	1
	065				
				ICE and ORGANIC SILT -50% Vr, Clear, white, fractured -Dark brown Silt	2
	066	OL			
				-Vx	3
	067				
				SILTY SAND -Dark brown, rounded -Vr, clear, white	4
					5
	068	SM			
					6
				SILTY SAND with GRAVEL -Highly fractured gravel -Angular, grey, oxidization evident	7
	069	SM			
				BEDROCK -Pulverized in drilling -Grey	8
	070	GM			
					9
				END of HOLE	

Yukon **Highways and Public Works**
Transportation Engineering Branch

LOGGED BY: R.Stilwell	Termination Depth: 9.1m
COMPILED BY: R.Stilwell	Complete: 9/13/2015
REVIEWED BY: Dave Lorenzi	Pit #: Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT	Alaska Highway	SOURCE/TP#: **868-5317**
Boart Longyear	Establishment of Baseline Data, km 1840 RHS	PROJECT NO: 552-202021-0601-05-1
Sonic Drill	Coordinates: Z07V N6892310.869m E516526.4966m	ELEVATION: 750.883789m

SAMPLE TYPE: UNDISTURBED | DCPT | AUGER | BULK | SPT | CORE



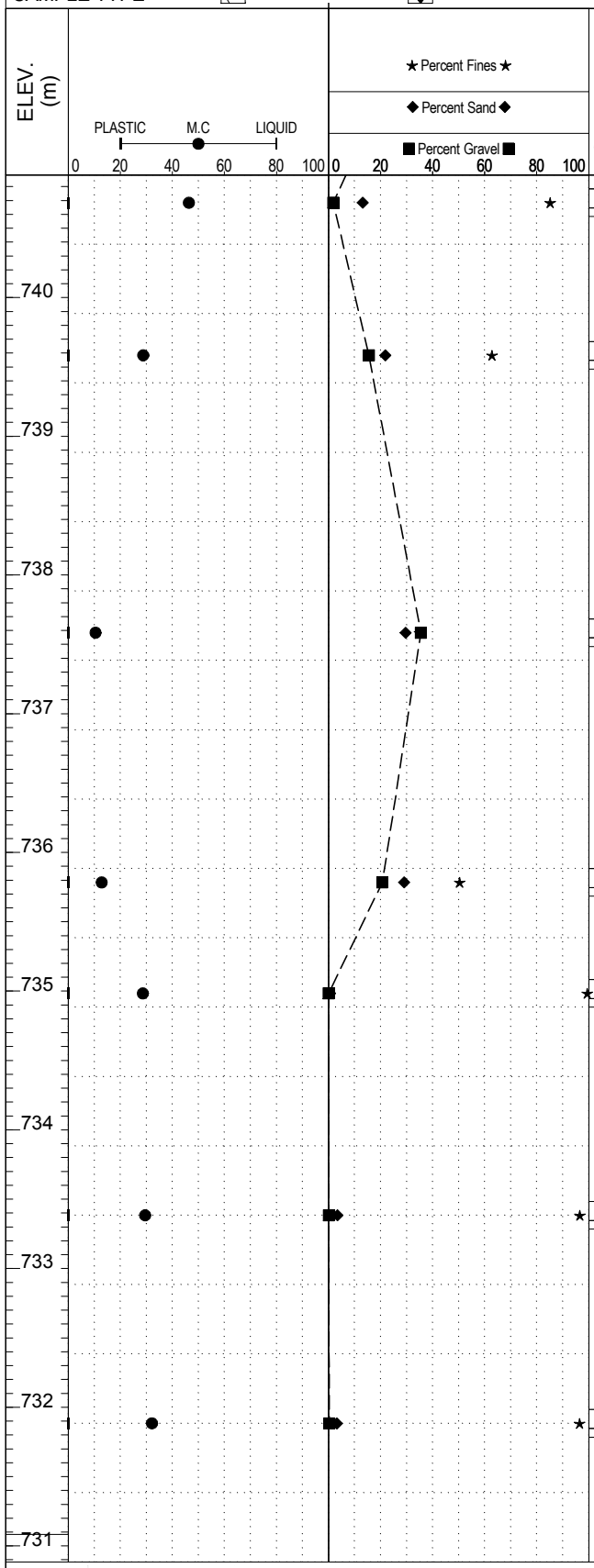
Sample Type	Sample #	SOIL SYMBOL	DCPT/SPT Blows/30cm	SOIL DESCRIPTION	Depth (m)
				WELL-GRADED GRAVEL with SILT and SAND -Dark brown, loose, moist	
	106	GW-GM			1
					2
	107	GM		SILTY GRAVEL with SAND -Dark brown, moist, compact	
					3
				WELL-GRADED GRAVEL with SILT and SAND -Dark brown, wet to saturated, compact	
	108	GW-GM			4
				ICE with SAND -Brown-grey, cloudy, highly fractured ice	
	109				5
				ICE -White, cloudy, fractured	
				ICE, trace SAND -Grey brown, clear, fractured	6
				ICE, trace SILT -Grey brown, fractured, clear	
				ICE -White, clear, hard, some bubbles	7
					8
				ICE, trace sand -Grey-brown. clear, fractured	
				ICE -White, cloudy-clear, semi fractured	
	110	SM		ICE with SILTY SAND with GRAVEL -Brown gravel, Clear white Ice (Vr) ~50%	9
				SILTY GRAVEL with ICE -Dark grey silty gravel -40% Vx, white, cloudy	

Yukon **Highways and Public Works**
Transportation Engineering Branch

LOGGED BY: R.Stilwell	Termination Depth: 19.8m
COMPILED BY: R.Stilwell	Complete: 9/16/2015
REVIEWED BY: Dave Lorenzi	Pit #:

SUBSURFACE EXPLORATION AND TEST REPORT	Alaska Highway	SOURCE/TP#: **868-5317**
Boart Longyear	Establishment of Baseline Data, km 1840 RHS	PROJECT NO: 552-202021-0601-05-1
Sonic Drill	Coordinates: Z07V N6892310.869m E516526.4966m	ELEVATION: 750.883789m

SAMPLE TYPE: UNDISTURBED | DCPT | AUGER | BULK | SPT | CORE



ELEV. (m)	Sample Type	Sample #	SOIL SYMBOL	DCPT/SPT Blows/30cm	SOIL DESCRIPTION	Depth (m)
		111	ML			
					SILT -Silt seam, Nbe, 20mm	
740					SANDY SILT with GRAVEL -Dark grey, hard -Vx	11
		112	ML			
739						12
738					<<L>SILTY GRAVEL with SAND -Dark grey, compact, Nbe	13
		113	GM			
737						14
736					-Nbn	15
		114	ML			
					SILT -Dark grey, firm, Nbn	
735		115	ML			16
					-Vr, Clear, white	
734					-Nbn	17
		116	ML			
733						18
					-Nbe	
732					-Vx, Cloudy, white	19
		117	ML			
					-Vx-Vr, Clear, to cloudy, white	
731					END of HOLE	

Yukon **Highways and Public Works**
Transportation Engineering Branch

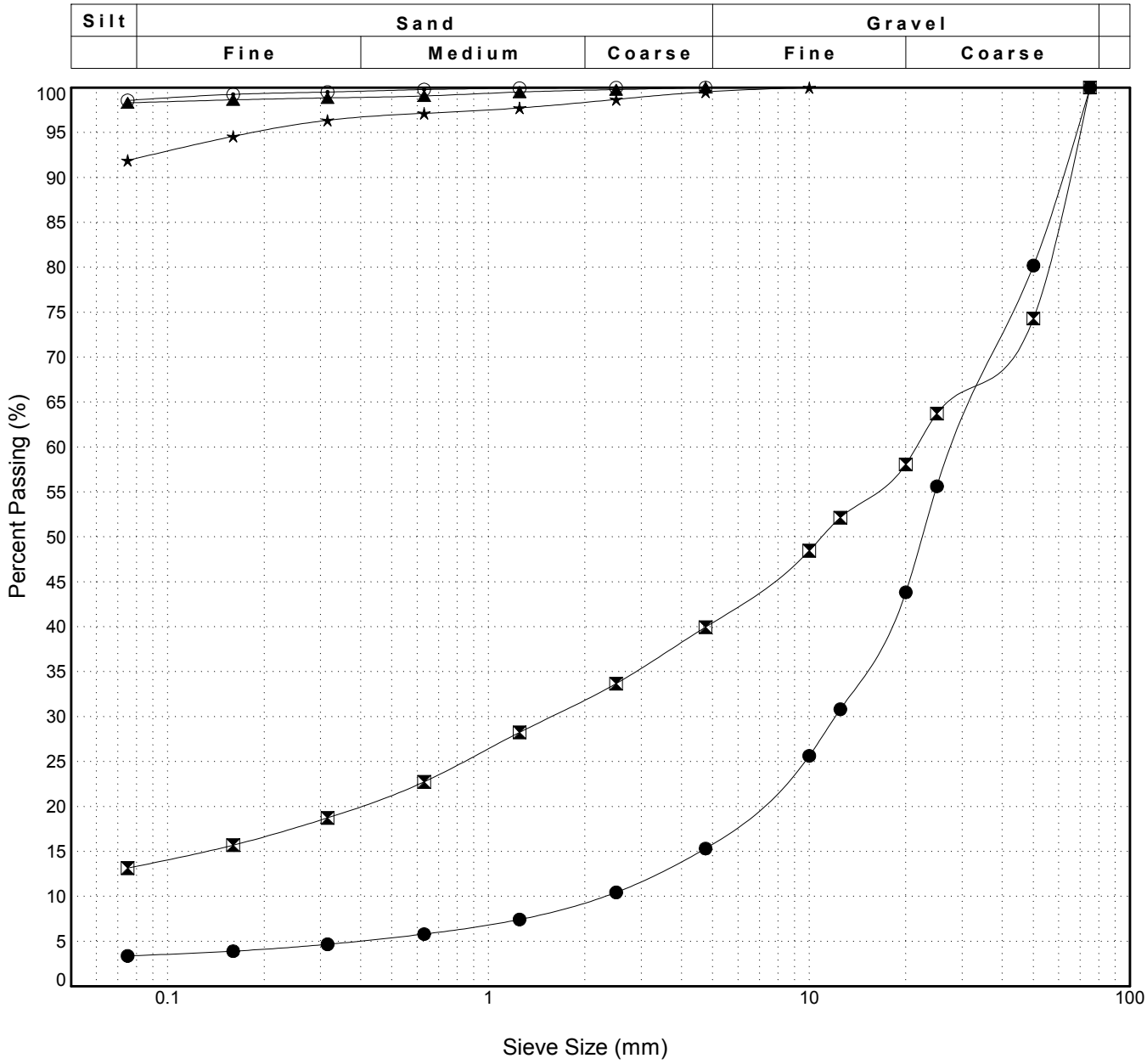
LOGGED BY: R.Stilwell	Termination Depth: 19.8m
COMPILED BY: R.Stilwell	Complete: 9/16/2015
REVIEWED BY: Dave Lorenzi	Pit #:

GRAIN SIZE ANALYSIS	Establishment of Baseline Data	SOURCE/TP#: **866-5307**
Boart Longyear	km 1897 LHS	PROJECT NO: 552-202021-0601-05-1
Sonic Drill	Coordinates:Z07V N6937697.596m E501919.2168m	ELEVATION: 783.172913m

Master Revised July 2013

	Field #	Lab #	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu
●	001	402	0.6 to 0.8	WELL-GRADED GRAVEL(GW)	**6.6**	NP	NP	NP	2.3	12.5
⊠	002	403	1.2 to 1.4	SILTY GRAVEL with SAND(GM)	**10.2**	NP	NP	NP		
▲	009	410	8.0 to 8.2	ORGANIC SILT(OL)	**49.2**	NP	NP	NP		
★	010	411	9.0 to 9.4	ORGANIC SILT(OL)	**50.1**	NP	NP	NP		
⊙	013	414	14.4 to 14.6	ORGANIC SILT(OL)	**44.6**	NP	NP	NP		

	Field #	Lab #	% PASSING	100.0	80.0	50.0	25.0	20.0	12.5	10.0	5.0	2.5	1.25	0.630	0.315	0.160	0.080	%Breakdown Gravel	Sand	Silt	Clay
●	001	402		100.0	100.0	80.2	55.6	43.8	30.8	25.6	15.3	10.4	7.4	5.8	4.7	3.9	3.4	**84.7**	**11.9**	**3.4**	
⊠	002	403		100.0	100.0	74.3	63.7	58.1	52.1	48.5	40.0	33.7	28.3	22.7	18.7	15.7	13.2	**60.0**	**26.8**	**13.2**	
▲	009	410		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.8	99.5	99.1	98.9	98.6	98.3	**0.0**	**1.7**	**98.3**	
★	010	411		100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.5	98.7	97.7	97.1	96.4	94.6	91.9	**0.5**	**7.6**	**91.9**	
⊙	013	414		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	99.8	99.5	99.2	98.6	**0.0**	**1.4**	**98.6**	



Yukon Highways and Public Works Transportation Engineering Branch	LOGGED BY: R.Stilwell	Pit #:
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	REVIEWED BY: Dave Lorenzi	Page 1 of 2

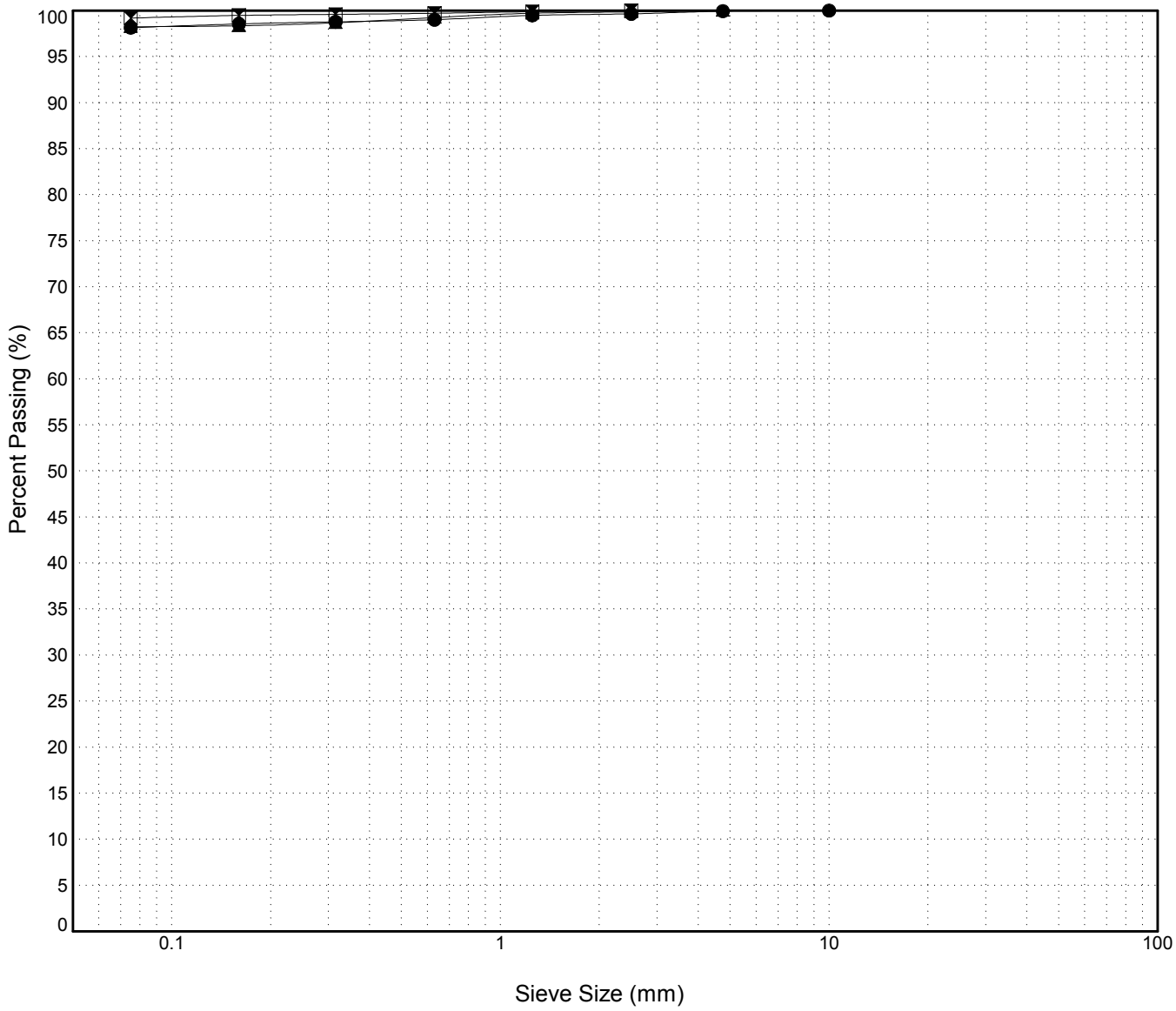
GRAIN SIZE ANALYSIS	Establishment of Baseline Data	SOURCE/TP#: **866-5307**
Boart Longyear	km 1897 LHS	PROJECT NO: 552-202021-0601-05-1
Sonic Drill	Coordinates:Z07V N6937697.596m E501919.2168m	ELEVATION: 783.172913m

Master Revised July 2013

	Field #	Lab #	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu
●	014	415	15.2 to 15.4	SILT(ML)	**46.7**	NP	NP	NP		
⊠	014A	416	17.0 to 17.2	SILT(ML)	**46.4**	NP	NP	NP		
▲	015	417	18.8 to 19.0	SILT(ML)	**39.7**	NP	NP	NP		

	Field #	Lab #		100.0	80.0	50.0	25.0	20.0	12.5	10.0	5.0	2.5	1.25	0.630	0.315	0.160	0.080	%Breakdown Gravel	Sand	Silt	Clay
●	014	415	%PASSING	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	99.7	99.5	99.0	98.8	98.6	98.1	**0.1**	**1.8**	**98.1**	
⊠	014A	416		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	99.7	99.6	99.5	99.2	**0.0**	**0.8**	**99.2**	
▲	015	417		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	99.7	99.2	98.7	98.4	98.2	**0.0**	**1.8**	**98.2**	

Silt	Sand			Gravel	
	Fine	Medium	Coarse	Fine	Coarse



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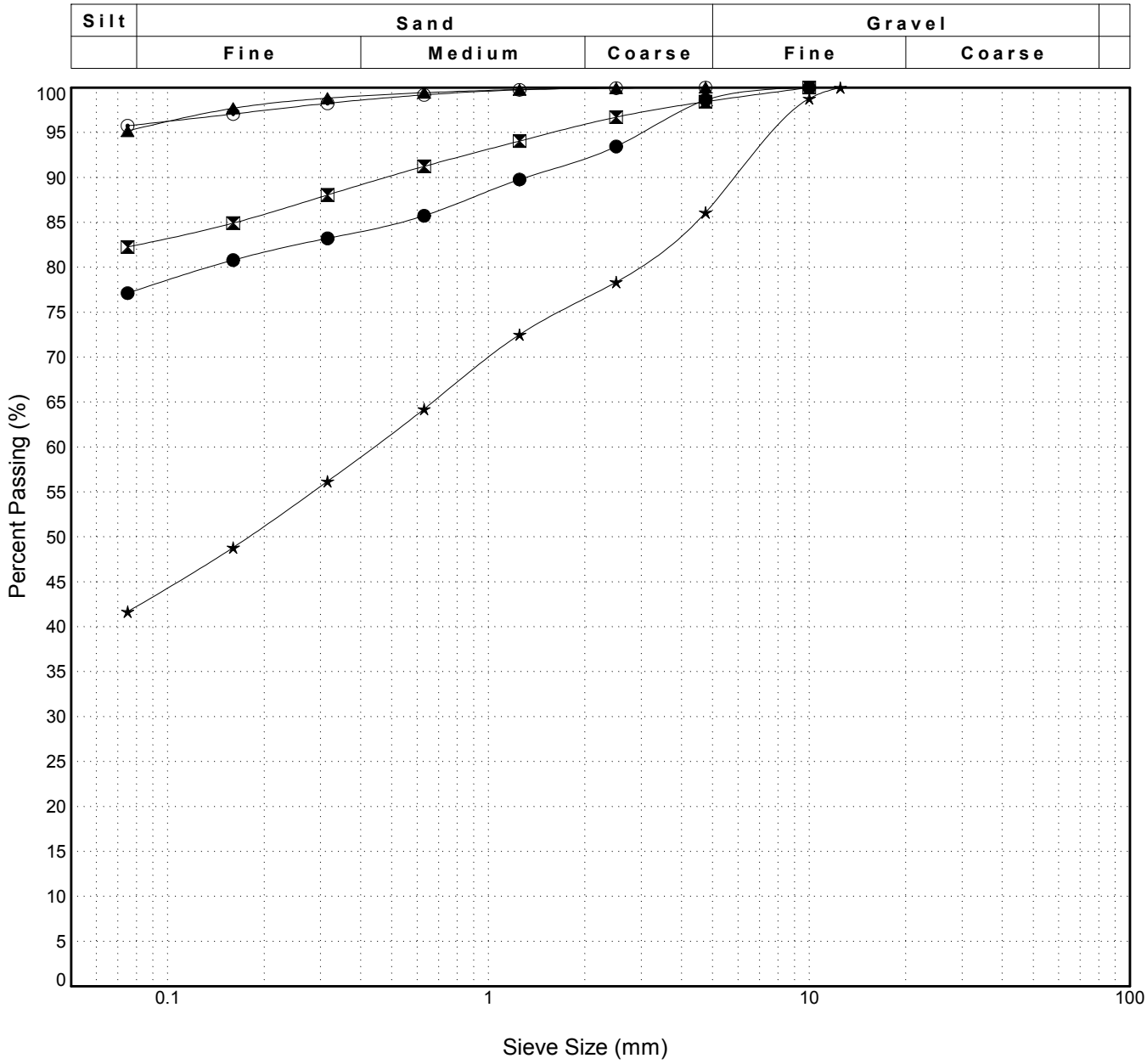
GRAIN SIZE ANALYSIS	Establishment of Baseline Data	SOURCE/TP#: **866-5308**
Boart Longyear	km 1894.5 LHS	PROJECT NO: 552-202021-0601-05-1
Sonic Drill	Coordinates:Z07V N6935938.693m E501315.2403m	ELEVATION: 782.824158m

Master Revised July 2013

	Field #	Lab #	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu
●	018	419	1.9 to 2.1	ORGANIC SILT with SAND(OL)	**99.6**	NP	NP	NP		
⊠	019	420	3.8 to 4.0	ORGANIC SILT with SAND(OL)	**607.3**	NP	NP	NP		
▲	020	421	5.0 to 5.4	ORGANIC SILT(OL)	**70.6**	NP	NP	NP		
★	021	422	7.0 to 7.4	SILTY SAND(SM)	**343.0**	NP	NP	NP		
⊙	022	423	8.5 to 8.8	ORGANIC SILT(OL)	**37.8**	NP	NP	NP		

	Field #	Lab #		100.0	80.0	50.0	25.0	20.0	12.5	10.0	5.0	2.5	1.25	0.630	0.315	0.160	0.080	%Breakdown Gravel	Sand	Silt	Clay
●	018	419	%PASSING	100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.7	93.5	89.8	85.7	83.2	80.8	77.1	**1.3**	**21.5**	**77.1**	
⊠	019	420		100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.4	96.7	94.1	91.2	88.1	84.9	82.3	**1.6**	**16.2**	**82.3**	
▲	020	421		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.8	99.4	98.8	97.7	95.2	**0.0**	**4.8**	**95.2**	
★	021	422		100.0	100.0	100.0	100.0	100.0	100.0	98.8	86.1	78.4	72.5	64.2	56.2	48.8	41.7	**13.9**	**44.4**	**41.7**	
⊙	022	423		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	99.8	99.2	98.3	97.1	95.8	**0.0**	**4.2**	**95.8**	



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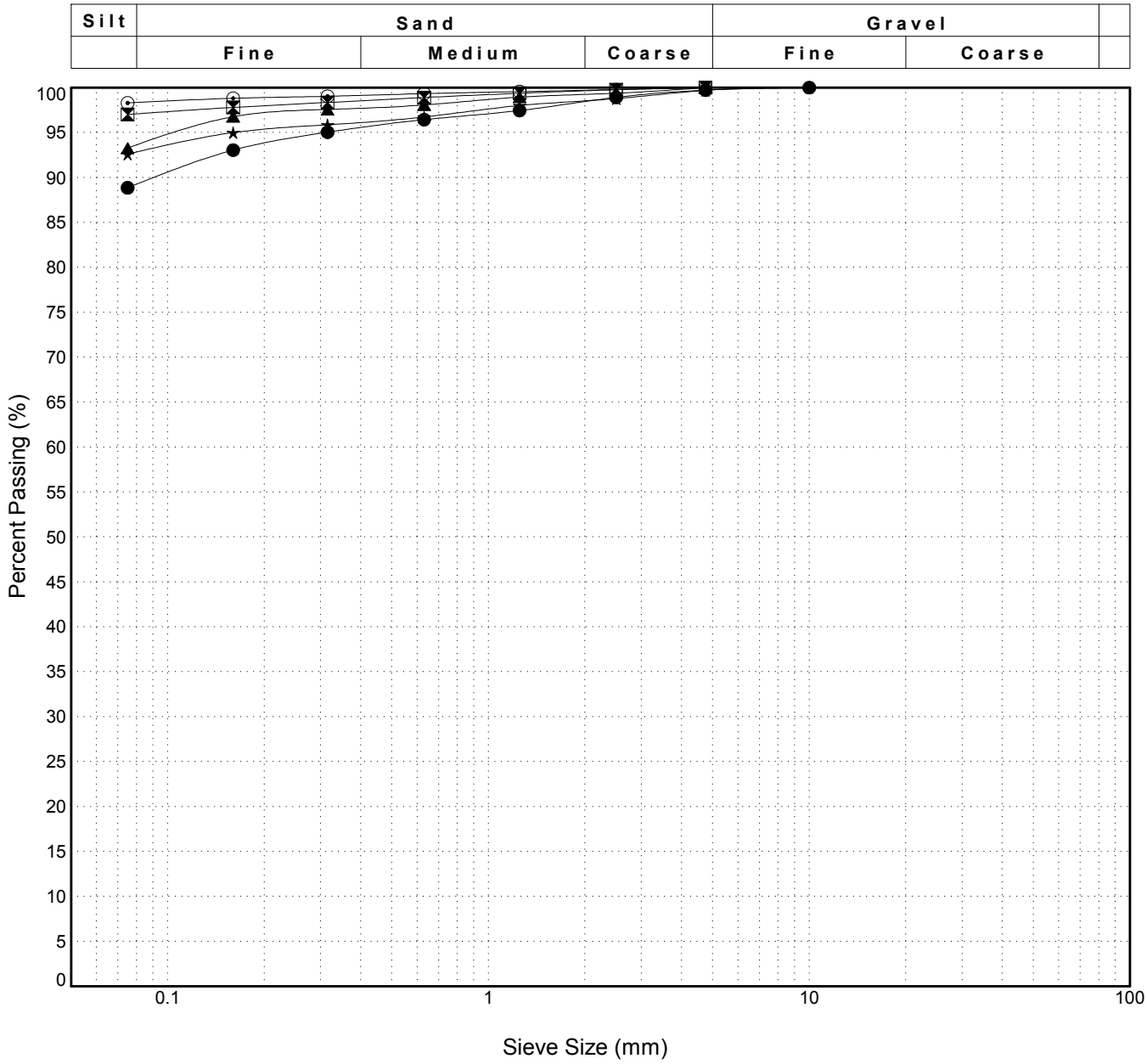
GRAIN SIZE ANALYSIS	Establishment of Baseline Data	SOURCE/TP#: **866-5308**
Boart Longyear	km 1894.5 LHS	PROJECT NO: 552-202021-0601-05-1
Sonic Drill	Coordinates:Z07V N6935938.693m E501315.2403m	ELEVATION: 782.824158m

Master Revised July 2013

	Field #	Lab #	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu
●	023	424	9.4 to 9.7	SILT(ML)	**45.1**	NP	NP	NP		
⊠	024	425	11.6 to 11.8	SILT(ML)	**47.1**	NP	NP	NP		
▲	024A	426	13.0 to 13.2	SILT(ML)	**46.1**	NP	NP	NP		
★	025	427	14.2 to 14.4	SILT(ML)	**21.1**	NP	NP	NP		
⊙	026	428	16.0 to 16.3	SILT(ML)	**29.4**	NP	NP	NP		

	Field #	Lab #		100.0	80.0	50.0	25.0	20.0	12.5	10.0	5.0	2.5	1.25	0.630	0.315	0.160	0.080	%Breakdown Gravel	Sand	Silt	Clay
●	023	424	%PASSING	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.7	98.9	97.4	96.4	95.0	93.0	88.9	**0.3**	**10.9**	**88.9**	
⊠	024	425		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.8	99.4	98.9	98.3	97.8	97.0	**0.0**	**3.0**	**97.0**	
▲	024A	426		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.4	98.9	98.1	97.6	96.8	93.3	**0.0**	**6.7**	**93.3**	
★	025	427		100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.7	98.8	98.0	96.7	95.9	95.0	92.6	**0.3**	**7.1**	**92.6**	
⊙	026	428		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.8	99.6	99.3	99.0	98.8	98.3	**0.0**	**1.7**	**98.3**	

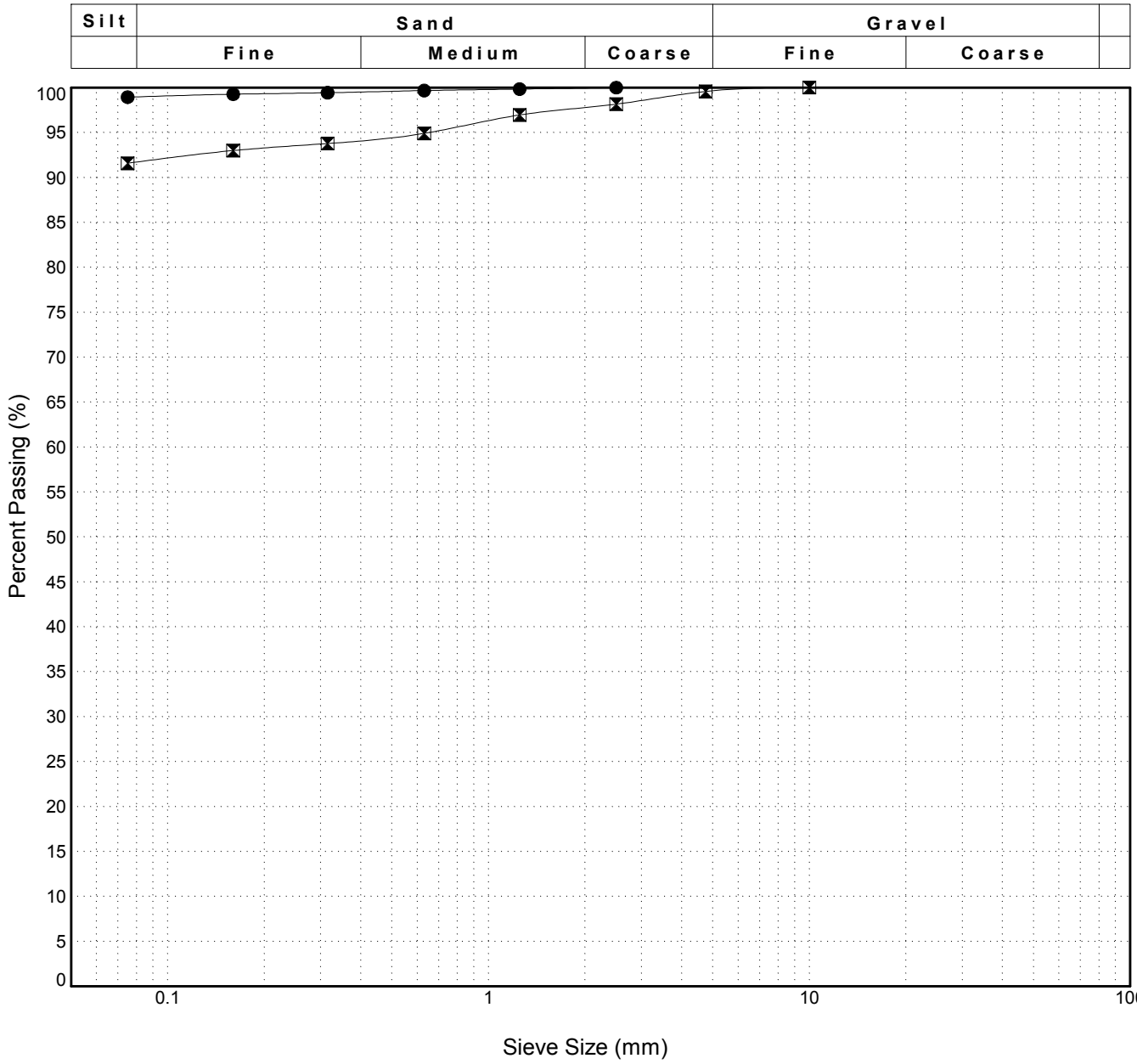


GRAIN SIZE ANALYSIS	Establishment of Baseline Data	SOURCE/TP#: **866-5308**
Boart Longyear	km 1894.5 LHS	PROJECT NO: 552-202021-0601-05-1
Sonic Drill	Coordinates:Z07V N6935938.693m E501315.2403m	ELEVATION: 782.824158m

Master Revised July 2013

	Field #	Lab #	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu
●	027	429	17.8 to 18.1	SILT(ML)	**32.5**	NP	NP	NP		
⊠	028	430	19.2 to 19.4	SILT(ML)	**32.0**	NP	NP	NP		

	Field #	Lab #		100.0	80.0	50.0	25.0	20.0	12.5	10.0	5.0	2.5	1.25	0.630	0.315	0.160	0.080	%Breakdown Gravel	Sand	Silt	Clay
●	027	429	%PASSING	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.8	99.7	99.4	99.3	98.9	**0.0**	**1.1**	**98.9**	
⊠	028	430		100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.6	98.2	97.0	94.9	93.8	93.0	91.6	**0.4**	**8.0**	**91.6**	



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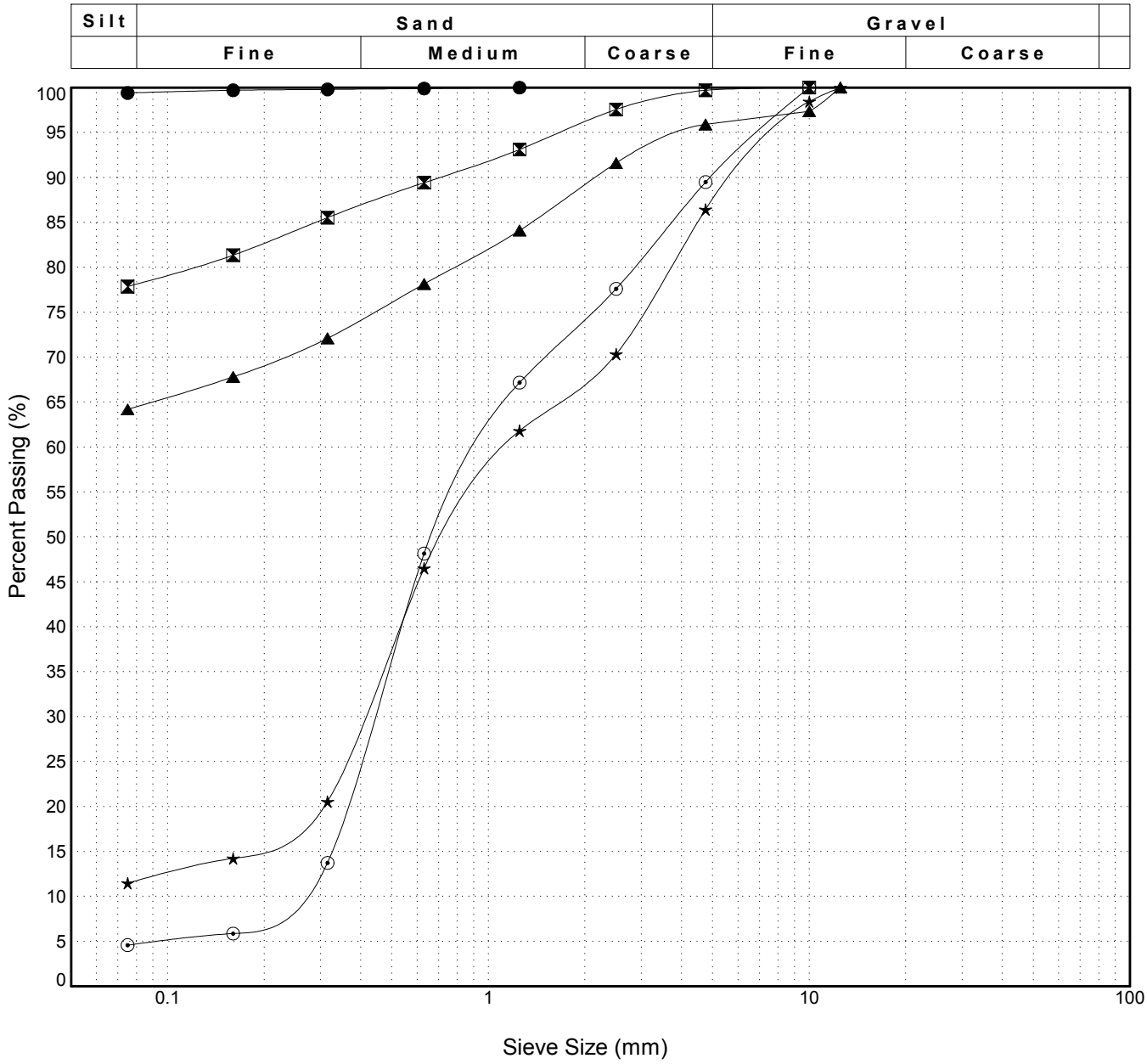
GRAIN SIZE ANALYSIS	Establishment of Baseline Data	SOURCE/TP#: **866-5309**
Boart Longyear	km 1886 RHS	PROJECT NO: 552-202021-0601-05-1
Sonic Drill	Coordinates:Z07V N6931013.605m E505666.2165m	ELEVATION: 782.356018m

Master Revised July 2013

	Field #	Lab #	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu
●	030	432	2.5 to 2.7	SILT(ML)	**63.3**	NP	NP	NP		
⊠	031	433	3.7 to 3.9	SILT with SAND(ML)	**98.2**	NP	NP	NP		
▲	032	434	5.2 to 5.4	SANDY SILT(ML)	**75.2**	NP	NP	NP		
★	033	435	6.8 to 7.0	WELL-GRADED SAND with SILT(SW-SM)	**11.6**	NP	NP	NP	2.9	23.1
⊙	034	436	8.1 to 8.3	POORLY GRADED SAND(SP)	**17.2**	NP	NP	NP	0.9	4.2

	Field #	Lab #	% PASSING	100.0	80.0	50.0	25.0	20.0	12.5	10.0	5.0	2.5	1.25	0.630	0.315	0.160	0.080	%Breakdown Gravel	Sand	Silt	Clay
●	030	432		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	99.8	99.7	99.4	**0.0**	**0.6**	**99.4**	
⊠	031	433		100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.7	97.6	93.1	89.4	85.5	81.4	77.9	**0.3**	**21.8**	**77.9**	
▲	032	434		100.0	100.0	100.0	100.0	100.0	100.0	97.4	95.9	91.6	84.1	78.1	72.1	67.8	64.2	**4.1**	**31.7**	**64.2**	
★	033	435		100.0	100.0	100.0	100.0	100.0	100.0	98.5	86.4	70.3	61.8	46.5	20.5	14.2	11.5	**13.6**	**75.0**	**11.5**	
⊙	034	436		100.0	100.0	100.0	100.0	100.0	100.0	100.0	89.5	77.6	67.2	48.2	13.7	5.9	4.6	**10.5**	**84.9**	**4.6**	



Yukon Highways and Public Works Transportation Engineering Branch	LOGGED BY: R.Stilwell	Pit #:
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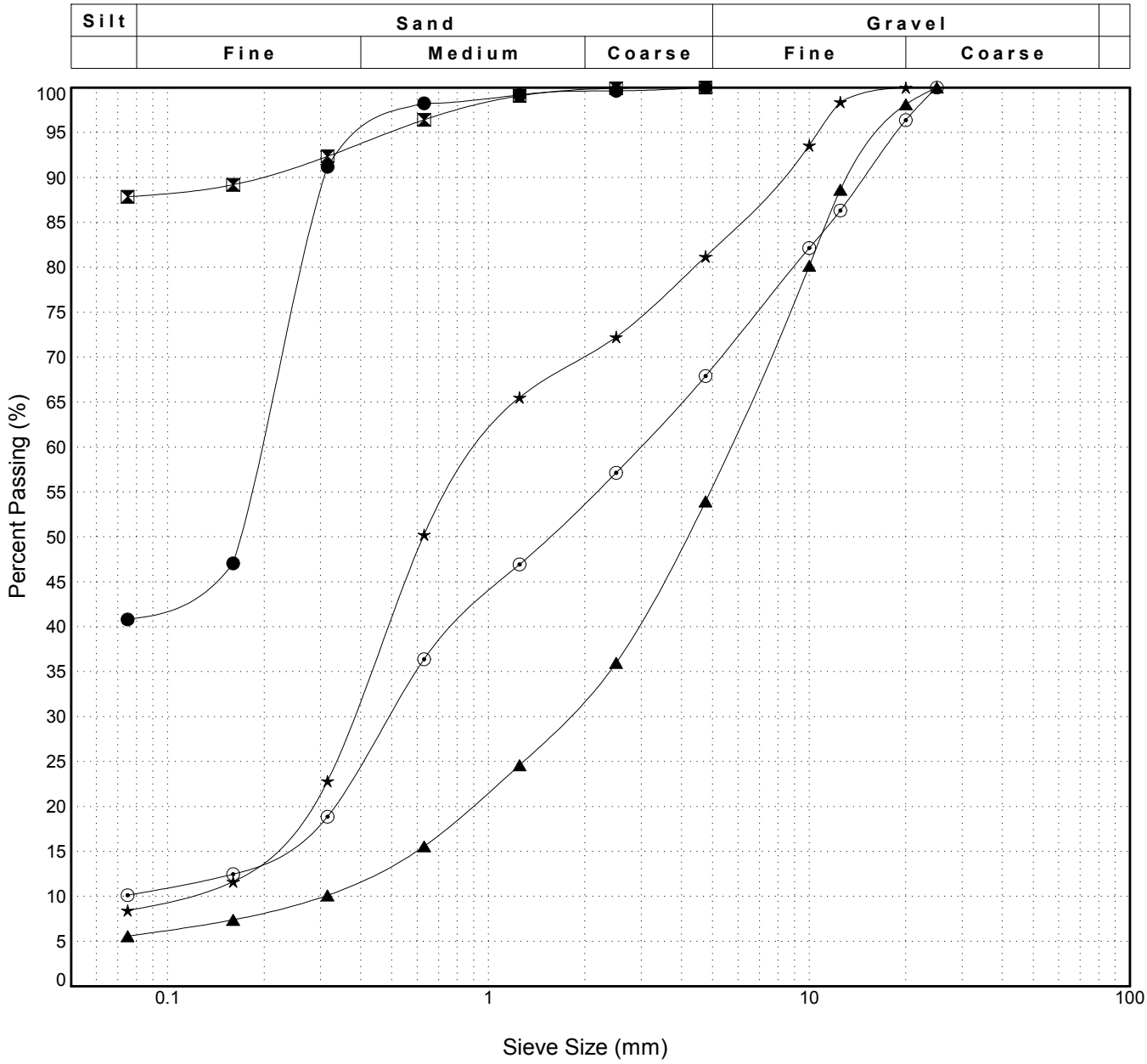
GRAIN SIZE ANALYSIS	Establishment of Baseline Data	SOURCE/TP#: **866-5309**
Boart Longyear	km 1886 RHS	PROJECT NO: 552-202021-0601-05-1
Sonic Drill	Coordinates:Z07V N6931013.605m E505666.2165m	ELEVATION: 782.356018m

Master Revised July 2013

	Field #	Lab #	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu
●	035	437	9.8 to 10.1	SILTY SAND(SM)	**22.5**	NP	NP	NP		
⊠	036	438	10.1 to 10.2	SILT(ML)	**26.7**	NP	NP	NP		
▲	037	439	11.4 to 11.8	WELL-GRADED SAND with SILT and GRAVEL(SW-SM)	**12.1**	NP	NP	NP	1.7	18.4
★	038	440	12.9 to 13.2	WELL-GRADED SAND with SILT and GRAVEL(SW-SM)	**15.2**	NP	NP	NP	1.3	9.0
⊙	039	441	14.2 to 14.4	WELL-GRADED SAND with SILT and GRAVEL(SW-SM)	**7.8**	NP	NP	NP	1.1	41.3

	Field #	Lab #		100.0	80.0	50.0	25.0	20.0	12.5	10.0	5.0	2.5	1.25	0.630	0.315	0.160	0.080	%Breakdown Gravel	Sand	Silt	Clay
●	035	437	%PASSING	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.6	99.2	98.3	91.2	47.1	40.8	**0.0**	**59.2**	**40.8**	
⊠	036	438		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	99.1	96.4	92.4	89.2	87.9	**0.0**	**12.1**	**87.9**	
▲	037	439		100.0	100.0	100.0	100.0	98.1	88.6	80.2	54.0	36.0	24.6	15.6	10.1	7.4	5.6	**46.0**	**48.4**	**5.6**	
★	038	440		100.0	100.0	100.0	100.0	100.0	98.4	93.6	81.2	72.2	65.5	50.3	22.8	11.6	8.4	**18.8**	**72.8**	**8.4**	
⊙	039	441		100.0	100.0	100.0	100.0	96.4	86.3	82.2	67.9	57.1	46.9	36.4	18.9	12.5	10.1	**32.1**	**57.8**	**10.1**	



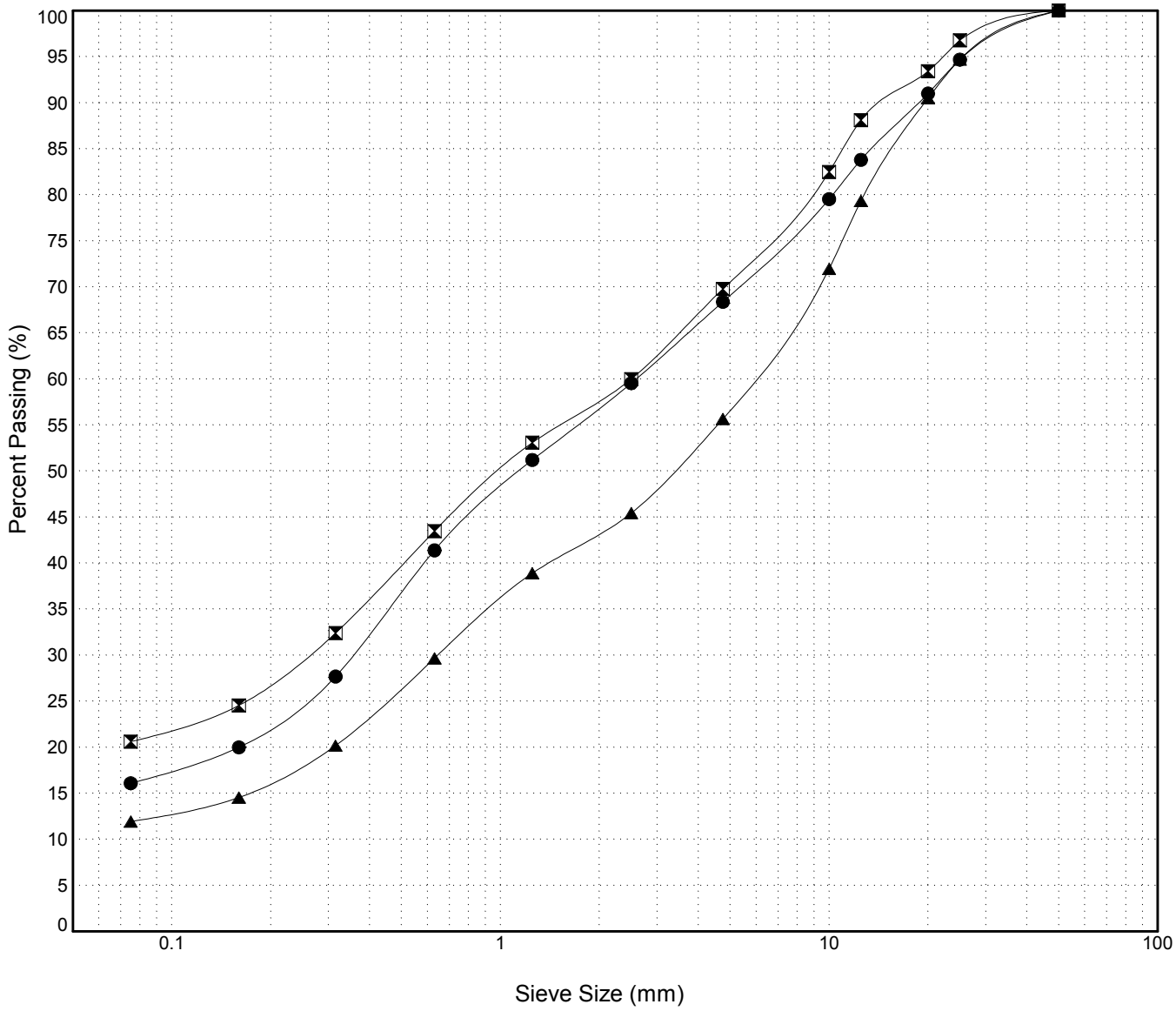
GRAIN SIZE ANALYSIS	Establishment of Baseline Data	SOURCE/TP#: **866-5309**
Boart Longyear	km 1886 RHS	PROJECT NO: 552-202021-0601-05-1
Sonic Drill	Coordinates:Z07V N6931013.605m E505666.2165m	ELEVATION: 782.356018m

Master Revised July 2013

	Field #	Lab #	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu
●	040	442	16.1 to 16.2	SILTY SAND with GRAVEL(SM)	**8.1**	NP	NP	NP		
⊠	041	443	17.3 to 17.5	SILTY SAND with GRAVEL(SM)	**8.4**	NP	NP	NP		
▲	042	444	18.7 to 18.9	WELL-GRADED GRAVEL with SILT and SAND(GW-GM)	**6.3**	NP	NP	NP	1.7	135.0

	Field #	Lab #		100.0	80.0	50.0	25.0	20.0	12.5	10.0	5.0	2.5	1.25	0.630	0.315	0.160	0.080	%Breakdown Gravel	Sand	Silt	Clay
●	040	442	%PASSING	100.0	100.0	100.0	94.7	91.0	83.8	79.5	68.4	59.5	51.2	41.4	27.7	20.0	16.1	**31.6**	**52.3**	**16.1**	
⊠	041	443		100.0	100.0	100.0	96.8	93.4	88.1	82.5	69.8	60.0	53.1	43.5	32.4	24.5	20.6	**30.2**	**49.2**	**20.6**	
▲	042	444		100.0	100.0	100.0	94.7	90.5	79.3	72.0	55.6	45.4	38.9	29.7	20.2	14.5	11.9	**44.4**	**43.7**	**11.9**	

Silt	Sand			Gravel	
	Fine	Medium	Coarse	Fine	Coarse



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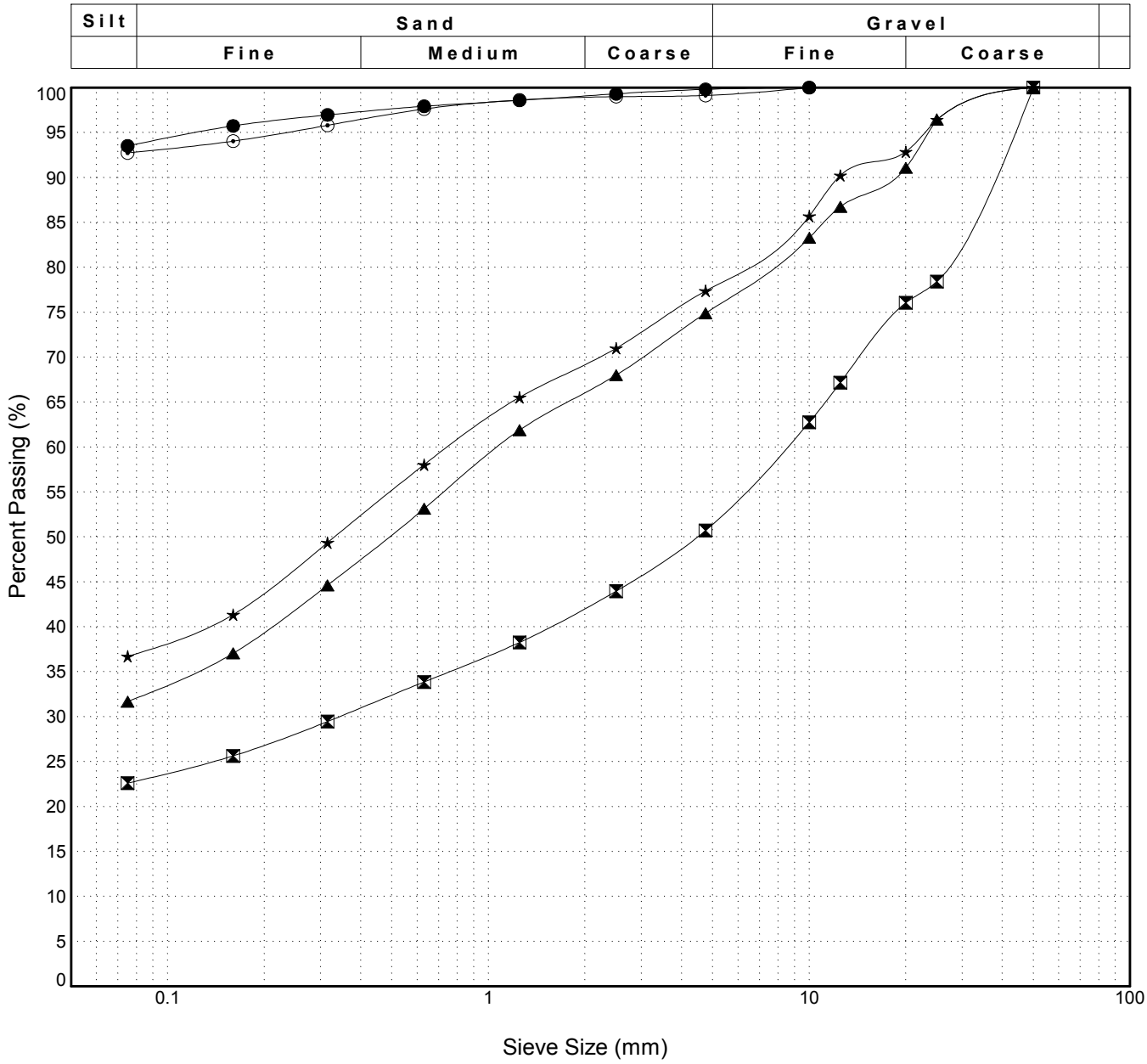
GRAIN SIZE ANALYSIS	Establishment of Baseline Data	SOURCE/TP#: **866-5310**
Boart Longyear	km 1860 RHS	PROJECT NO: 552-202021-0601-05-1
Sonic Drill	Coordinates:Z07V N6910365.7m E509064.6717m	ELEVATION: 653.736267m

Master Revised July 2013

	Field #	Lab #	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu
●	043	445	1.0 to 1.2	ORGANIC SILT(OL)	**24.5**	NP	NP	NP		
⊠	044	446	1.9 to 2.1	SILTY GRAVEL with SAND(GM)	**8.7**	NP	NP	NP		
▲	045	447	4.4 to 4.6	SILTY SAND with GRAVEL(SM)	**9.1**	NP	NP	NP		
★	046	448	5.5 to 5.7	SILTY SAND with GRAVEL(SM)	**8.6**	NP	NP	NP		
⊙	047	449	6.2 to 6.4	SILT(ML)	**24.5**	NP	NP	NP		

	Field #	Lab #		100.0	80.0	50.0	25.0	20.0	12.5	10.0	5.0	2.5	1.25	0.630	0.315	0.160	0.080	%Breakdown Gravel	Sand	Silt	Clay
●	043	445	%PASSING	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.8	99.3	98.6	97.9	97.0	95.7	93.5	**0.2**	**6.3**	**93.5**	
⊠	044	446		100.0	100.0	100.0	78.4	76.1	67.2	62.8	50.7	44.0	38.3	33.9	29.5	25.6	22.6	**49.3**	**28.1**	**22.6**	
▲	045	447		100.0	100.0	100.0	96.4	91.1	86.7	83.3	74.9	68.0	61.9	53.1	44.6	37.0	31.7	**25.1**	**43.2**	**31.7**	
★	046	448		100.0	100.0	100.0	96.4	92.9	90.2	85.7	77.4	71.0	65.5	58.0	49.4	41.3	36.7	**22.6**	**40.7**	**36.7**	
⊙	047	449		100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.1	99.0	98.6	97.6	95.8	94.0	92.7	**0.9**	**6.4**	**92.7**	



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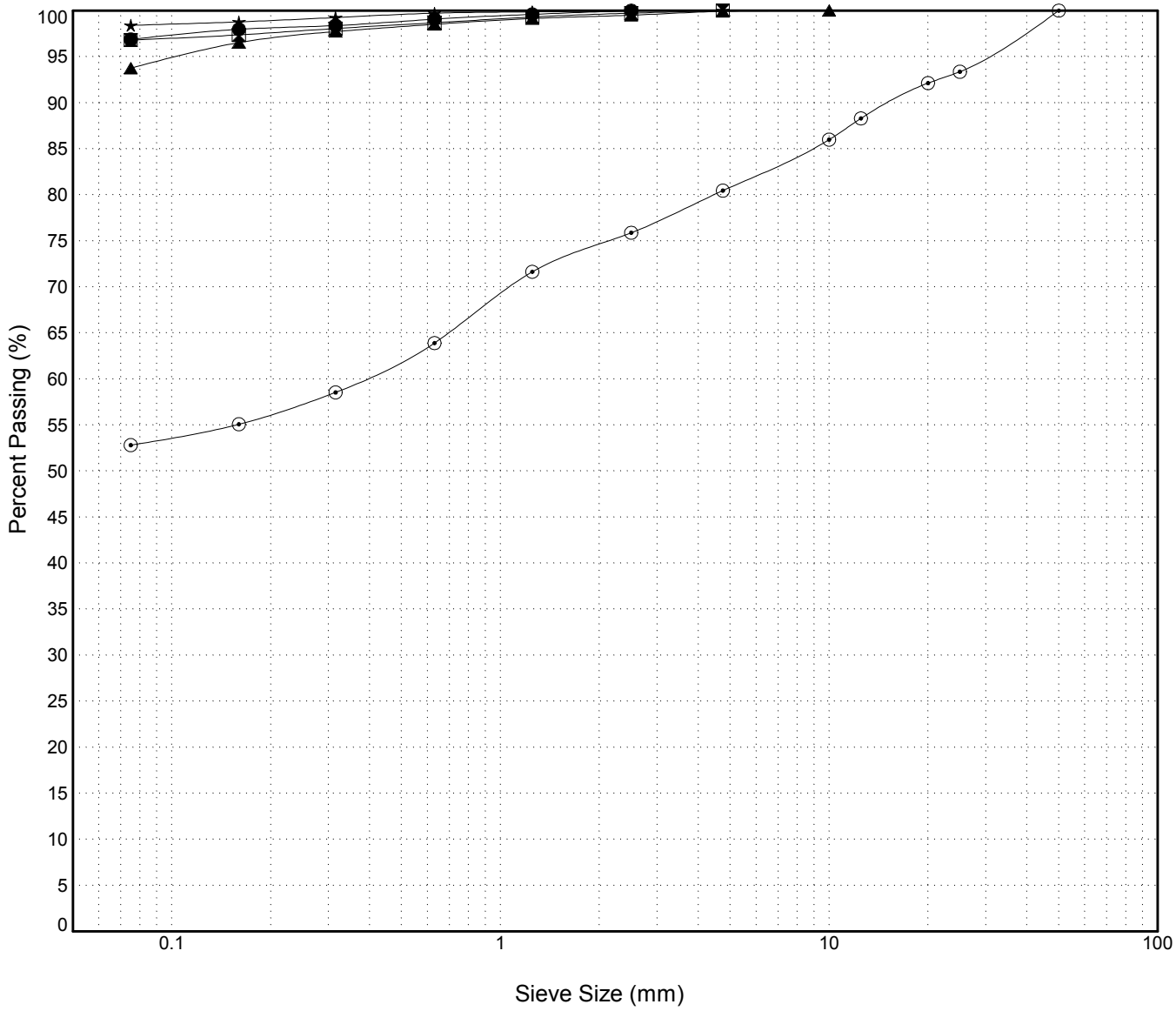
GRAIN SIZE ANALYSIS	Establishment of Baseline Data	SOURCE/TP#: **866-5310**
Boart Longyear	km 1860 RHS	PROJECT NO: 552-202021-0601-05-1
Sonic Drill	Coordinates:Z07V N6910365.7m E509064.6717m	ELEVATION: 653.736267m

Master Revised July 2013

	Field #	Lab #	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu
●	048	450	8.2 to 8.4	SILT(ML)	**23.7**	NP	NP	NP		
⊠	049	451	9.6 to 9.8	SILT(ML)	**23.9**	NP	NP	NP		
▲	050	452	11.2 to 11.4	SILT(ML)	**21.9**	NP	NP	NP		
★	051	453	12.7 to 12.9	SILT(ML)	**24.9**	NP	NP	NP		
⊙	052	454	14.2 to 14.4	SANDY SILT with GRAVEL(ML)	**12.9**	NP	NP	NP		

	Field #	Lab #		100.0	80.0	50.0	25.0	20.0	12.5	10.0	5.0	2.5	1.25	0.630	0.315	0.160	0.080	%Breakdown Gravel	Sand	Silt	Clay
●	048	450	%PASSING	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.6	99.1	98.4	98.0	96.9	**0.0**	**3.1**	**96.9**	
⊠	049	451		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.7	99.3	98.7	98.1	97.4	96.8	**0.0**	**3.2**	**96.8**	
▲	050	452		100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	99.5	99.1	98.5	97.7	96.5	93.8	**0.1**	**6.2**	**93.8**	
★	051	453		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	99.7	99.2	98.8	98.4	**0.0**	**1.6**	**98.4**	
⊙	052	454		100.0	100.0	100.0	93.4	92.1	88.3	86.0	80.4	75.9	71.6	63.9	58.5	55.1	52.8	**19.6**	**27.6**	**52.8**	

Silt	Sand			Gravel	
	Fine	Medium	Coarse	Fine	Coarse



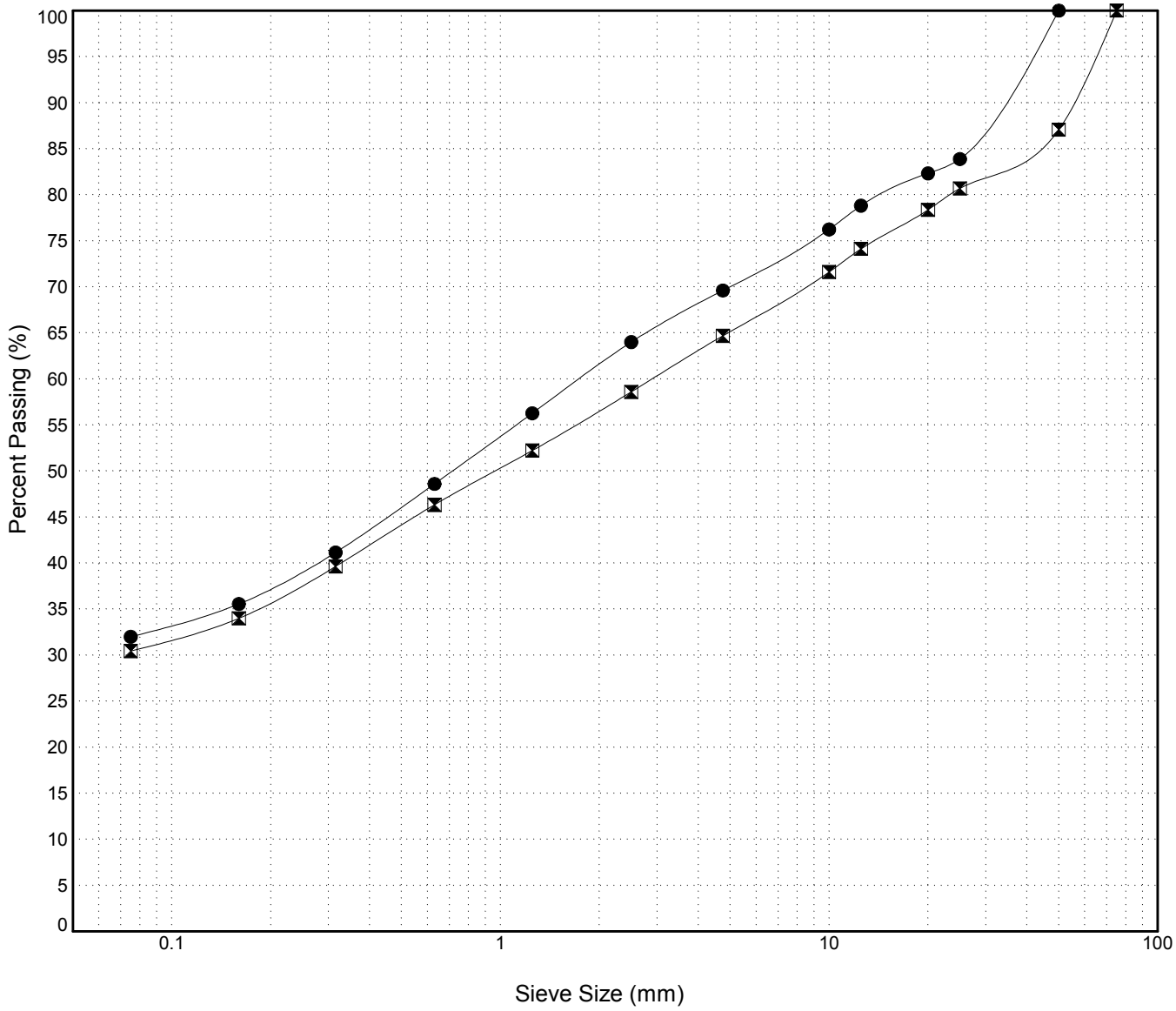
GRAIN SIZE ANALYSIS	Establishment of Baseline Data	SOURCE/TP#: **866-5310**
Boart Longyear	km 1860 RHS	PROJECT NO: 552-202021-0601-05-1
Sonic Drill	Coordinates:Z07V N6910365.7m E509064.6717m	ELEVATION: 653.736267m

Master Revised July 2013

	Field #	Lab #	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu
●	053	455	16.2 to 16.5	SILTY SAND with GRAVEL(SM)	**4.7**	NP	NP	NP		
⊠	054	456	17.3 to 17.6	SILTY GRAVEL with SAND(GM)	**8.0**	NP	NP	NP		

	Field #	Lab #		100.0	80.0	50.0	25.0	20.0	12.5	10.0	5.0	2.5	1.25	0.630	0.315	0.160	0.080	%Breakdown Gravel	Sand	Silt	Clay
●	053	455	%PASSING	100.0	100.0	100.0	83.9	82.3	78.8	76.2	69.6	64.0	56.3	48.6	41.1	35.6	32.0	**30.4**	**37.6**	**32.0**	
⊠	054	456		100.0	100.0	87.1	80.7	78.4	74.1	71.6	64.7	58.6	52.2	46.3	39.6	34.0	30.5	**35.3**	**34.2**	**30.5**	

Silt	Sand			Gravel	
	Fine	Medium	Coarse	Fine	Coarse

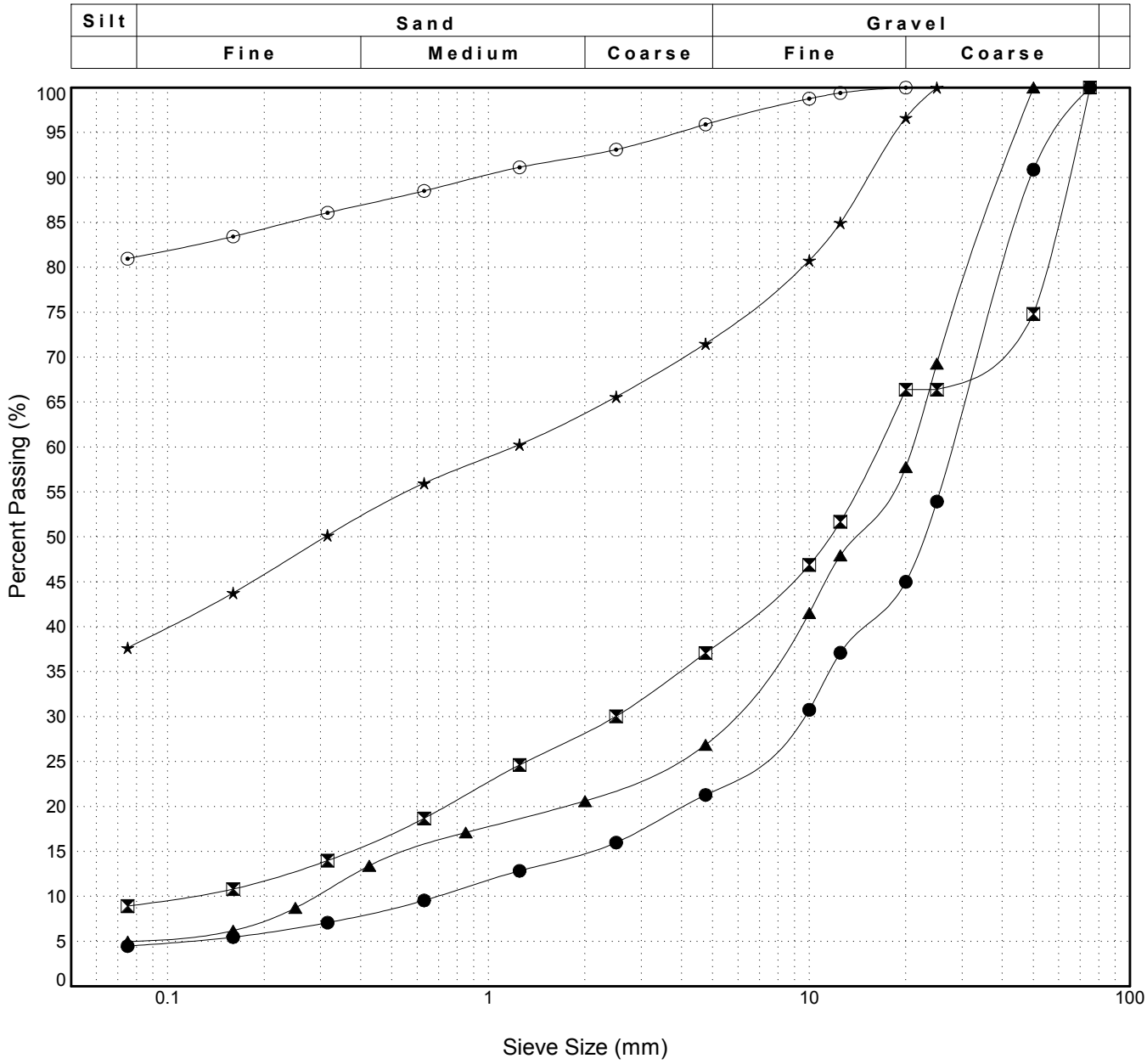


GRAIN SIZE ANALYSIS	Establishment of Baseline Data	SOURCE/TP#: **866-5311**
Boart Longyear	km 1840 RHS	PROJECT NO: 552-202021-0601-05-1
Sonic Drill	Coordinates:Z07V N6892338.057m E516504.8468m	ELEVATION: 727.435852m

Master Revised July 2013

	Field #	Lab #	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu
●	055	457	0.6 to 0.8	POORLY GRADED GRAVEL with SAND(GP)	**2.9**	NP	NP	NP	4.6	40.5
⊠	056	458	1.6 to 1.8	POORLY GRADED GRAVEL with SILT and SAND(GP-GM)	**2.1**	NP	NP	NP	3.3	141.3
▲	057	459	2.6 to 2.8	POORLY GRADED GRAVEL with SAND(GP)	**2.8**	NP	NP	NP	5.1	72.2
★	058	460	10.4 to 10.6	SILTY SAND with GRAVEL(SM)	**32.7**	NP	NP	NP		
⊙	059	461	11.8 to 12.0	SILT with SAND(ML)	**36.0**	NP	NP	NP		

	Field #	Lab #		100.0	80.0	50.0	25.0	20.0	12.5	10.0	5.0	2.5	1.25	0.630	0.315	0.160	0.080	%Breakdown Gravel	Sand	Silt	Clay
●	055	457	%PASSING	100.0	100.0	90.9	53.9	45.0	37.1	30.8	21.3	16.0	12.8	9.6	7.1	5.5	4.5	**78.7**	**16.8**	**4.5**	
⊠	056	458		100.0	100.0	74.8	66.4	66.4	51.7	46.9	37.1	30.0	24.6	18.7	14.0	10.8	8.9	**62.9**	**28.2**	**8.9**	
▲	057	459		100.0	100.0	100.0	69.3	57.8	47.9	41.5	26.9	22.2	18.7	15.5	10.8	6.2	5.0	**73.1**	**21.9**	**5.0**	
★	058	460		100.0	100.0	100.0	100.0	96.6	85.0	80.8	71.5	65.6	60.3	56.0	50.2	43.8	37.7	**28.5**	**33.8**	**37.7**	
⊙	059	461		100.0	100.0	100.0	100.0	100.0	99.4	98.8	95.9	93.1	91.1	88.5	86.1	83.4	81.0	**4.1**	**14.9**	**81.0**	



Yukon Highways and Public Works Transportation Engineering Branch	LOGGED BY: R.Stilwell	Pit #:
	COMPILED BY: R.Stilwell	Complete: 9/13/2015
	REVIEWED BY: Dave Lorenzi	Page 1 of 3

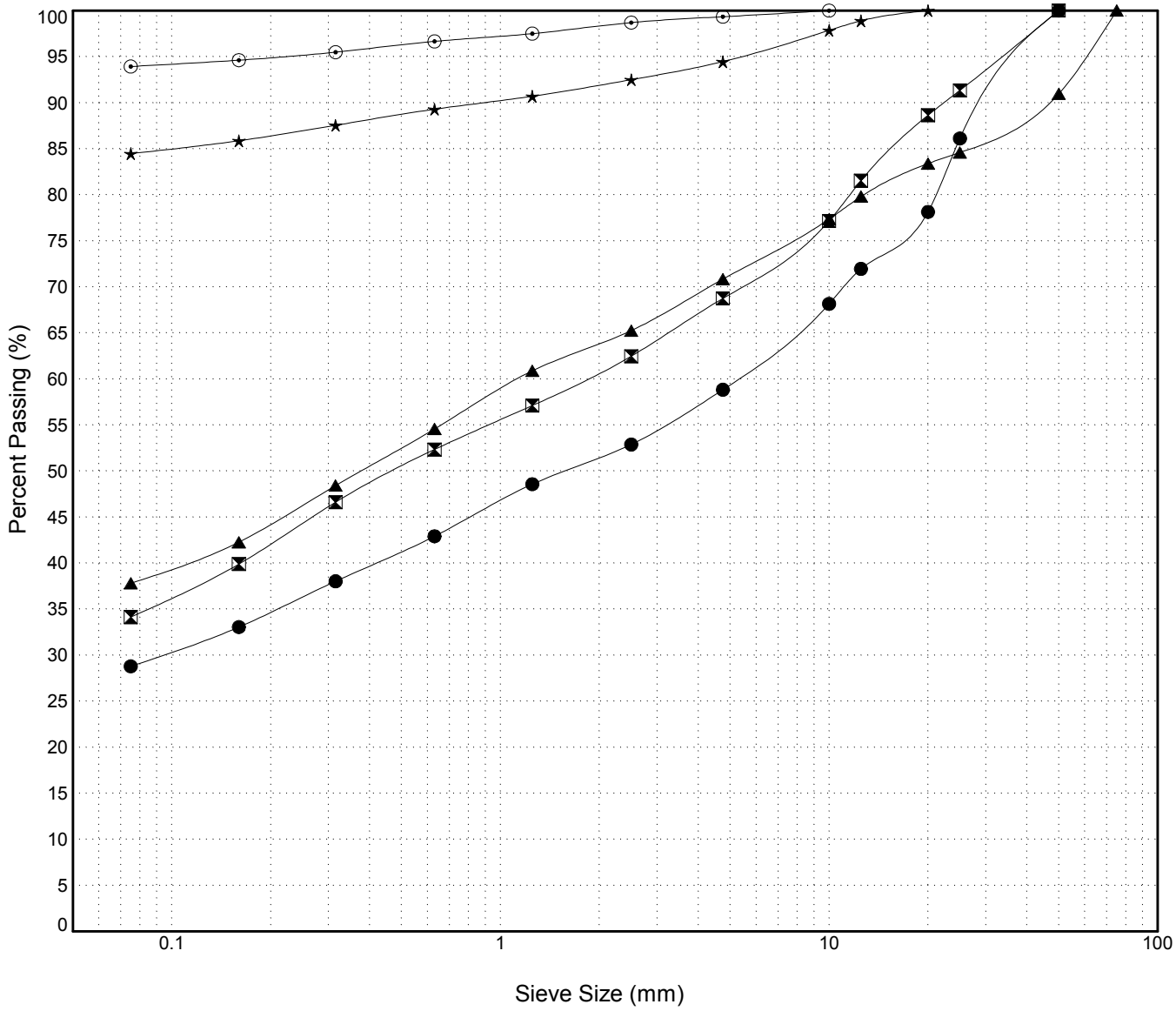
GRAIN SIZE ANALYSIS	Establishment of Baseline Data	SOURCE/TP#: **866-5311**
Boart Longyear	km 1840 RHS	PROJECT NO: 552-202021-0601-05-1
Sonic Drill	Coordinates:Z07V N6892338.057m E516504.8468m	ELEVATION: 727.435852m

Master Revised July 2013

	Field #	Lab #	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu
●	060	462	12.4 to 12.6	SILTY GRAVEL with SAND(GM)	**11.0**	NP	NP	NP		
⊠	061	463	13.9 to 14.1	SILTY SAND with GRAVEL(SM)	**9.7**	NP	NP	NP		
▲	062	464	16.1 to 16.3	SILTY SAND with GRAVEL(SM)	**9.6**	NP	NP	NP		
★	063	465	17.5 to 17.7	SILT with SAND(ML)	**23.5**	NP	NP	NP		
⊙	064	466	17.8 to 18.0	SILT(ML)	**26.7**	NP	NP	NP		

	Field #	Lab #		100.0	80.0	50.0	25.0	20.0	12.5	10.0	5.0	2.5	1.25	0.630	0.315	0.160	0.080	%Breakdown Gravel	Sand	Silt	Clay
●	060	462	%PASSING	100.0	100.0	100.0	86.1	78.1	71.9	68.2	58.8	52.9	48.6	42.9	38.0	33.0	28.8	**41.2**	**30.0**	**28.8**	
⊠	061	463		100.0	100.0	100.0	91.3	88.6	81.5	77.2	68.7	62.5	57.1	52.3	46.6	39.9	34.1	**31.3**	**34.6**	**34.1**	
▲	062	464		100.0	100.0	91.0	84.6	83.4	79.8	77.4	70.8	65.2	60.9	54.6	48.4	42.3	37.8	**29.2**	**33.0**	**37.8**	
★	063	465		100.0	100.0	100.0	100.0	100.0	98.9	97.9	94.5	92.5	90.7	89.3	87.5	85.9	84.5	**5.5**	**10.0**	**84.5**	
⊙	064	466		100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.3	98.7	97.5	96.7	95.5	94.6	93.9	**0.7**	**5.4**	**93.9**	

Silt	Sand			Gravel	
	Fine	Medium	Coarse	Fine	Coarse



Yukon Highways and Public Works Transportation Engineering Branch	LOGGED BY: R.Stilwell	Pit #:
	COMPILED BY: R.Stilwell	Complete: 9/13/2015
	REVIEWED BY: Dave Lorenzi	Page 2 of 3

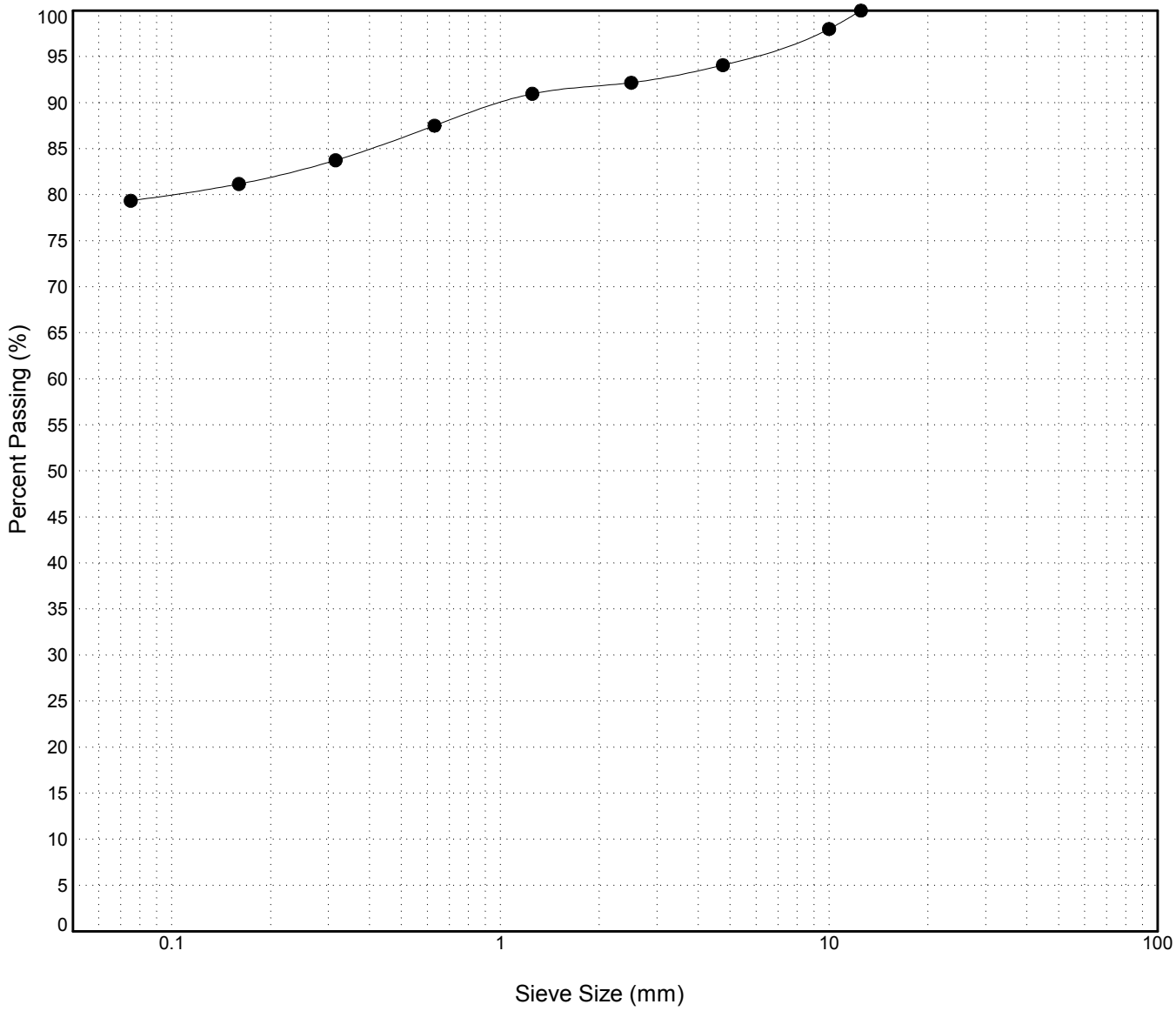
GRAIN SIZE ANALYSIS	Establishment of Baseline Data	SOURCE/TP#: **866-5311**
Boart Longyear	km 1840 RHS	PROJECT NO: 552-202021-0601-05-1
Sonic Drill	Coordinates:Z07V N6892338.057m E516504.8468m	ELEVATION: 727.435852m

Master Revised July 2013

	Field #	Lab #	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu
●	065	467	19.2 to 19.4	SILT with SAND(ML)	**25.4**	NP	NP	NP		

	Field #	Lab #		100.0	80.0	50.0	25.0	20.0	12.5	10.0	5.0	2.5	1.25	0.630	0.315	0.160	0.080	%Breakdown Gravel	Sand	Silt	Clay
●	065	467	%PASSING	100.0	100.0	100.0	100.0	100.0	100.0	98.0	94.1	92.2	91.0	87.5	83.7	81.2	79.3	**5.9**	**14.7**	**79.3**	

Silt	Sand			Gravel	
	Fine	Medium	Coarse	Fine	Coarse

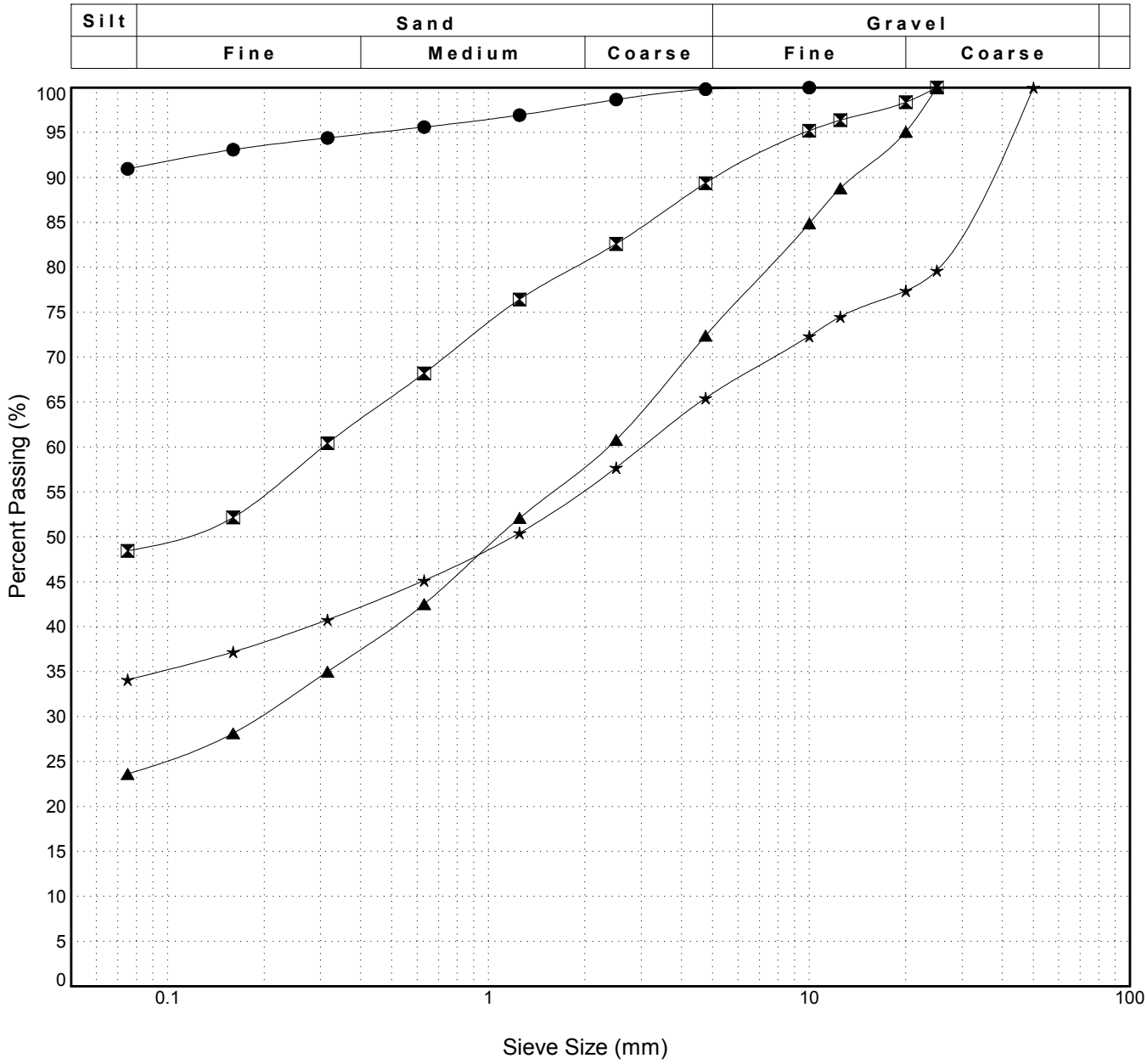


GRAIN SIZE ANALYSIS	Establishment of Baseline Data	SOURCE/TP#: **866-5312**
Boart Longyear	km 1810 RHS	PROJECT NO: 552-202021-0601-05-1
Sonic Drill	Coordinates:Z07V N6870311.637m E531256.0297m	ELEVATION: 714.99292m

Master Revised July 2013

	Field #	Lab #	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu
●	066	469	2.0 to 2.2	ORGANIC SILT(OL)	**131.7**	NP	NP	NP		
⊠	068	471	5.2 to 5.4	SILTY SAND(SM)	**13.2**	NP	NP	NP		
▲	069	472	6.9 to 7.2	SILTY SAND with GRAVEL(SM)	**15.9**	NP	NP	NP		
★	070	473	7.9 to 8.1	SILTY GRAVEL with SAND(GM)	**7.6**	NP	NP	NP		

	Field #	Lab #		100.0	80.0	50.0	25.0	20.0	12.5	10.0	5.0	2.5	1.25	0.630	0.315	0.160	0.080	%Breakdown Gravel	Sand	Silt	Clay
●	066	469	%PASSING	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.8	98.7	96.9	95.6	94.4	93.1	91.0	**0.2**	**8.9**	**91.0**	
⊠	068	471		100.0	100.0	100.0	100.0	98.4	96.4	95.2	89.4	82.6	76.4	68.2	60.4	52.2	48.5	**10.6**	**40.9**	**48.5**	
▲	069	472		100.0	100.0	100.0	100.0	95.1	88.8	84.9	72.4	60.8	52.1	42.5	35.0	28.2	23.6	**27.6**	**48.8**	**23.6**	
★	070	473		100.0	100.0	100.0	79.6	77.4	74.5	72.3	65.5	57.7	50.4	45.1	40.8	37.2	34.1	**34.5**	**31.3**	**34.1**	



Yukon Highways and Public Works Transportation Engineering Branch	LOGGED BY: R.Stilwell	Pit #:
	COMPILED BY: R.Stilwell	Complete: 9/13/2015
	REVIEWED BY: Dave Lorenzi	Page 1 of 1

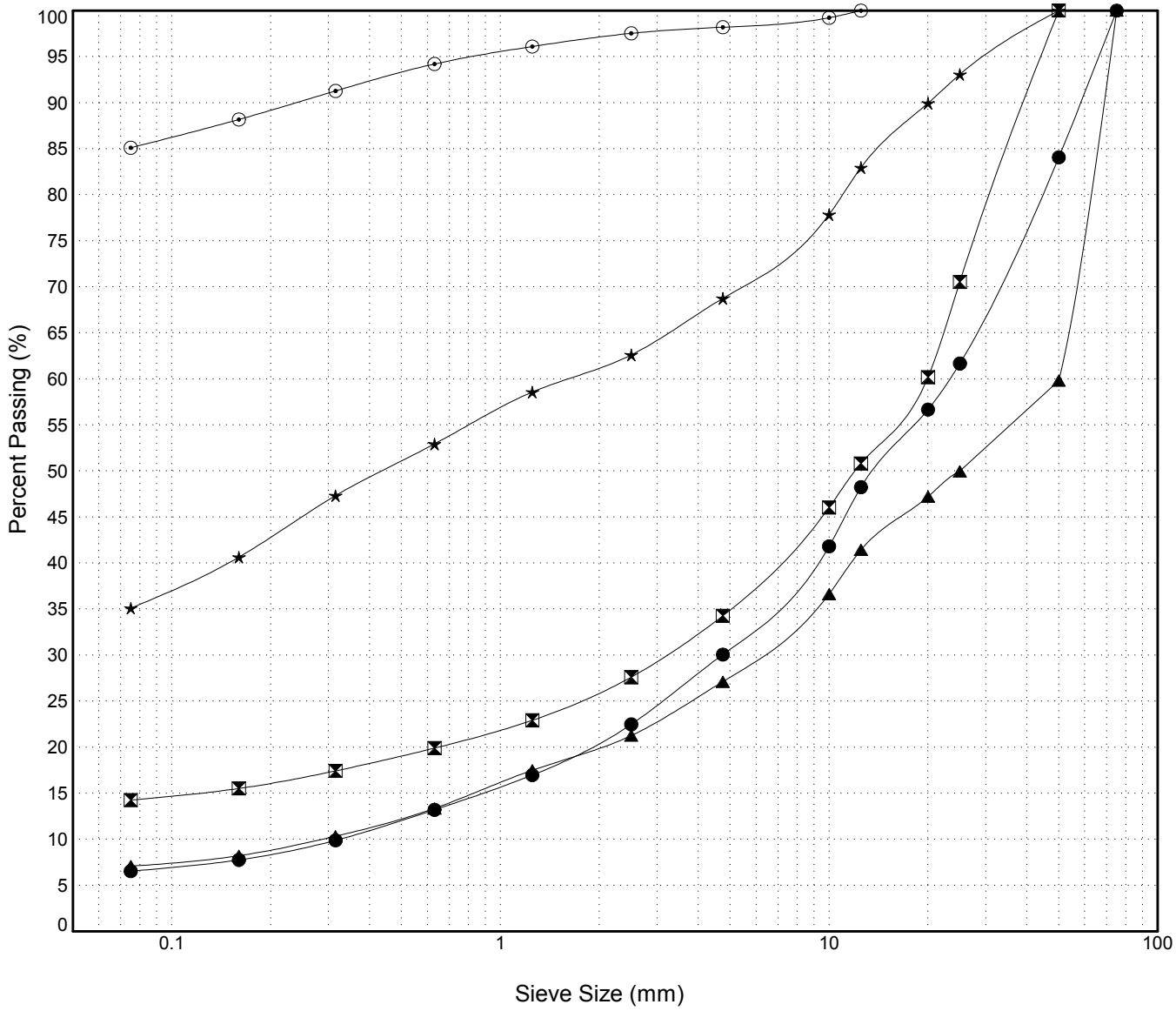
GRAIN SIZE ANALYSIS	Establishment of Baseline Data	SOURCE/TP#: **868-5317**
Boart Longyear	km 1840 RHS	PROJECT NO: 552-202021-0601-05-1
Sonic Drill	Coordinates:Z07V N6892310.869m E516526.4966m	ELEVATION: 750.883789m

Master Revised July 2013

	Field #	Lab #	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu
●	106	510	0.8 to 1.0	WELL-GRADED GRAVEL with SILT and SAND(GW-GM)	**3.5**	NP	NP	NP	3.0	71.8
⊠	107	511	2.0 to 2.2	SILTY GRAVEL with SAND(GM)	**4.1**	NP	NP	NP		
▲	108	512	3.6 to 3.8	WELL-GRADED GRAVEL with SILT and SAND(GW-GM)	**4.2**	NP	NP	NP	2.5	177.0
★	110	514	8.9 to 9.1	SILTY SAND with GRAVEL(SM)	**62.4**	NP	NP	NP		
⊙	111	515	10.1 to 10.3	SILT(ML)	**46.3**	NP	NP	NP		

	Field #	Lab #	% PASSING	100.0	80.0	50.0	25.0	20.0	12.5	10.0	5.0	2.5	1.25	0.630	0.315	0.160	0.080	%Breakdown Gravel	Sand	Silt	Clay
●	106	510		100.0	100.0	84.1	61.7	56.7	48.2	41.8	30.1	22.5	17.0	13.2	9.9	7.8	6.5	**69.9**	**23.5**	**6.5**	
⊠	107	511		100.0	100.0	100.0	70.5	60.2	50.8	46.0	34.3	27.6	22.9	19.9	17.4	15.5	14.3	**65.7**	**20.0**	**14.3**	
▲	108	512		100.0	100.0	59.8	50.0	47.2	41.4	36.6	27.1	21.3	17.5	13.4	10.3	8.2	7.1	**72.9**	**20.0**	**7.1**	
★	110	514		100.0	100.0	100.0	93.1	90.0	82.9	77.9	68.7	62.6	58.6	52.9	47.3	40.6	35.1	**31.3**	**33.6**	**35.1**	
⊙	111	515		100.0	100.0	100.0	100.0	100.0	100.0	99.2	98.2	97.5	96.1	94.2	91.3	88.2	85.1	**1.8**	**13.1**	**85.1**	

Silt	Sand			Gravel	
	Fine	Medium	Coarse	Fine	Coarse



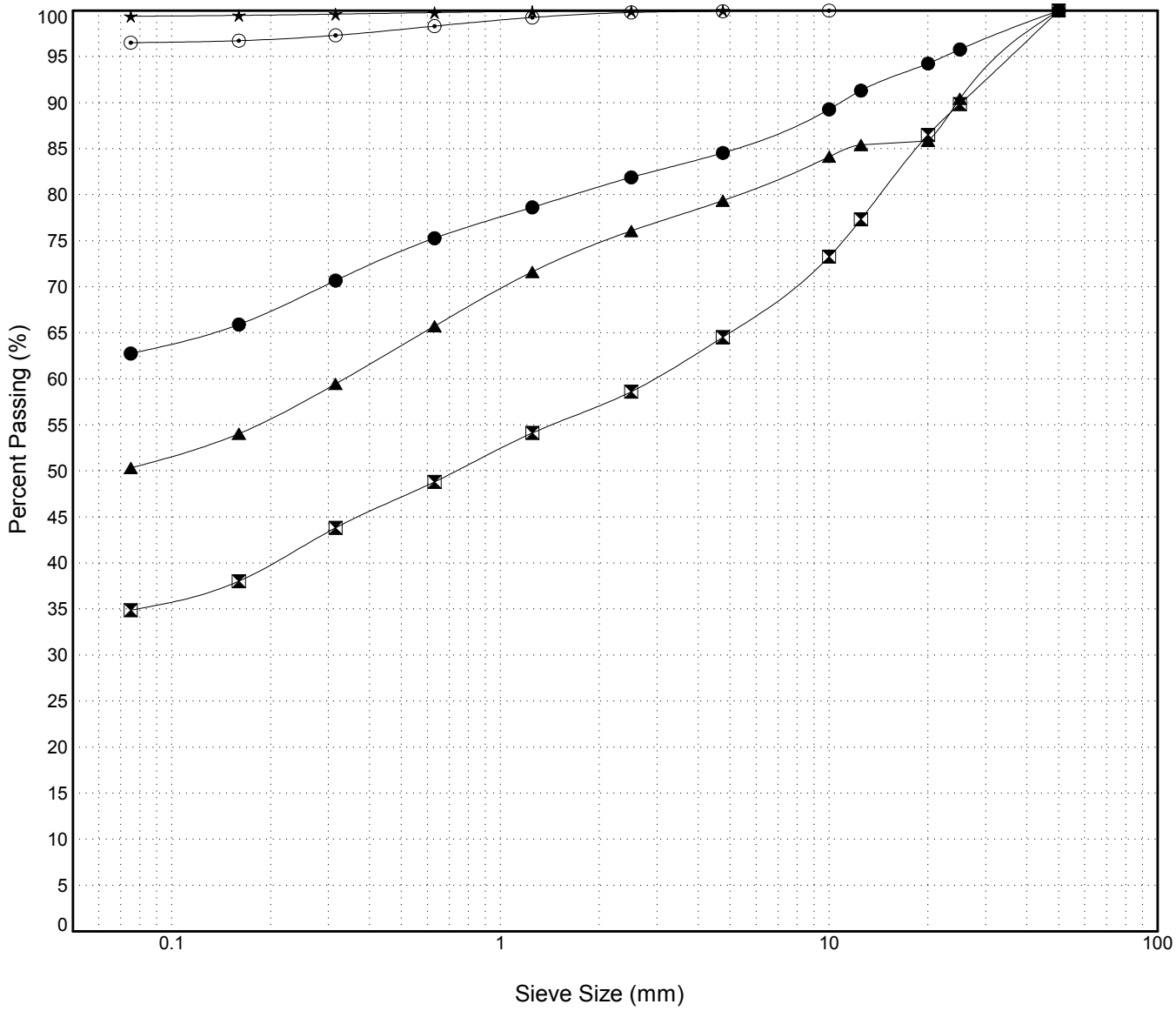
GRAIN SIZE ANALYSIS	Establishment of Baseline Data	SOURCE/TP#: **868-5317**
Boart Longyear	km 1840 RHS	PROJECT NO: 552-202021-0601-05-1
Sonic Drill	Coordinates:Z07V N6892310.869m E516526.4966m	ELEVATION: 750.883789m

Master Revised July 2013

	Field #	Lab #	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu
●	112	516	11.2 to 11.4	SANDY SILT with GRAVEL(ML)	**28.8**	NP	NP	NP		
⊠	113	517	13.2 to 13.4	SILTY GRAVEL with SAND(GM)	**10.5**	NP	NP	NP		
▲	114	518	15.0 to 15.2	SANDY SILT with GRAVEL(ML)	**12.8**	NP	NP	NP		
★	115	519	15.8 to 16.0	SILT(ML)	**28.7**	NP	NP	NP		
⊙	116	520	17.4 to 17.6	SILT(ML)	**29.5**	NP	NP	NP		

	Field #	Lab #		100.0	80.0	50.0	25.0	20.0	12.5	10.0	5.0	2.5	1.25	0.630	0.315	0.160	0.080	%Breakdown Gravel	Sand	Silt	Clay
●	112	516	%PASSING	100.0	100.0	100.0	95.8	94.3	91.3	89.3	84.5	81.9	78.6	75.3	70.7	65.9	62.8	**15.5**	**21.8**	**62.8**	
⊠	113	517		100.0	100.0	100.0	89.9	86.5	77.3	73.3	64.5	58.6	54.1	48.8	43.8	38.0	34.9	**35.5**	**29.6**	**34.9**	
▲	114	518		100.0	100.0	100.0	90.4	85.8	85.4	84.1	79.4	76.1	71.6	65.7	59.5	54.1	50.3	**20.6**	**29.0**	**50.3**	
★	115	519		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	99.9	99.8	99.6	99.5	99.4	**0.0**	**0.6**	**99.4**	
⊙	116	520		100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	99.8	99.3	98.3	97.3	96.7	96.5	**0.1**	**3.4**	**96.5**	

Silt	Sand			Gravel	
	Fine	Medium	Coarse	Fine	Coarse



GRAIN SIZE ANALYSIS	Establishment of Baseline Data	SOURCE/TP#: **868-5317**
Boart Longyear	km 1840 RHS	PROJECT NO: 552-202021-0601-05-1
Sonic Drill	Coordinates:Z07V N6892310.869m E516526.4966m	ELEVATION: 750.883789m

Master Revised July 2013

	Field #	Lab #	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu
●	117	521	18.9 to 19.2	SILT(ML)	**32.2**	NP	NP	NP		

	Field #	Lab #		100.0	80.0	50.0	25.0	20.0	12.5	10.0	5.0	2.5	1.25	0.630	0.315	0.160	0.080	%Breakdown Gravel	Sand	Silt	Clay
●	117	521	%PASSING	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.7	99.4	99.0	98.0	97.0	96.6	96.5	**0.3**	**3.2**	**96.5**	

Silt	Sand			Gravel	
	Fine	Medium	Coarse	Fine	Coarse