

SUBSURFACE EXPLORATION AND TEST REPORT		Dempster Highway		SOURCE/TP#: 926-5567		
Midnight Sun Drilling		Chapman Lake Thermistor Installation, km 116		PROJECT NO: 552-202105-0115-0664-1		
Terra Sonic		Coordinates: Z07N N7193287m E625727m		ELEVATION: m		
SAMPLE TYPE		<input type="checkbox"/> UNDISTURBED <input type="checkbox"/> DCPT <input type="checkbox"/> AUGER <input type="checkbox"/> BULK <input checked="" type="checkbox"/> SPT <input type="checkbox"/> CORE				
ELEV. (m)	Plastic M.C. Liquid 0 20 40 60 80 100	★ Percent Fines ★ ◆ Percent Sand ◆ ■ Percent Gravel ■	Sample Type Sample #	SOIL SYMBOL DCPT/SPT Blows/30cm	SOIL DESCRIPTION	Depth (m)
					ORGANICS SILT and Organic silt -Interbedded, grey	1
			19			
			20	ML	SILT -Gradual change	2
			21		ICE and SILT, sandy with gravel -Vs/Vr, > 50% Vx, 10% Vr, > 50%	3
			22	ML		4
			23		MASSIVE ICE (Wedge) -Foliated/wavy -Soil inclusions, some suspended coarse	5
			24			6
			25		-20% silt, harder drilling	7
			26		ORGANIC SILT, trace sand -Vs/Vr, 10-20% -Vs, 5-10%	8
			27		-Sulphuric/organic scent -Vr, 40-50%	9
			28		SAND, silty with gravel -Light brown, dry, dense -Potentially thawed by drill action	
			29		-moist -Trace cobbles,	10

SUBSURFACE EXPLORATION AND TEST REPORT		Dempster Highway		SOURCE/TP#: 926-5568				
Midnight Sun Drilling		Surfacing, Km 94		PROJECT NO: 552-202105-0115-0664-1				
Terra Sonic		Coordinates: Z07N N7173939m E624466m		ELEVATION: m				
SAMPLE TYPE		UNDISTURBED		DCPT				
		AUGER		BULK				
		SPT		CORE				
ELEV. (m)	★ Percent Fines ★		Sample Type	Sample #	SOIL SYMBOL	DCPT/SPT Blows/30cm	SOIL DESCRIPTION	Depth (m)
	◆ Percent Sand ◆							
	Plastic M.C. Liquid 0 20 40 60 80 100							
							Surfacing	
				039			GRAVEL, silty, trace sand -Subangular, damp, gap graded	1
				040				
				041			SAND, silty, trace gravel -Angular, elongate, flat, moist -Fine sand seam, 150mm -Frozen (Nbn) -Wet	2
				042			GRAVEL and SAND -Fine, gap graded -Flat, angular, brown -Water downhole -Metal pipe (20mm diameter)	3
				043			PEAT -Partial degradation, slight organic odour	4
				044	SM		SAND, silty with gravel -Gap graded, subrounded -Frozen (Nbn, thawed by drill action?) -Thawed Nbn	5
				045	GM			6
				046	GW-GM		SILT and ICE -Frozen (Vx) 20-30% microlenticular	
				047	GP-GM		GRAVEL, silty with sand and ice -Frozen (Vx) 20% GRAVEL, well-graded with silt, sand, and ice -Frozen (Vx) 20% ice	7
							-Poorly graded	
							END of HOLE -Target depth reached -Backfilled with bentonite and sand	8
								9
								10

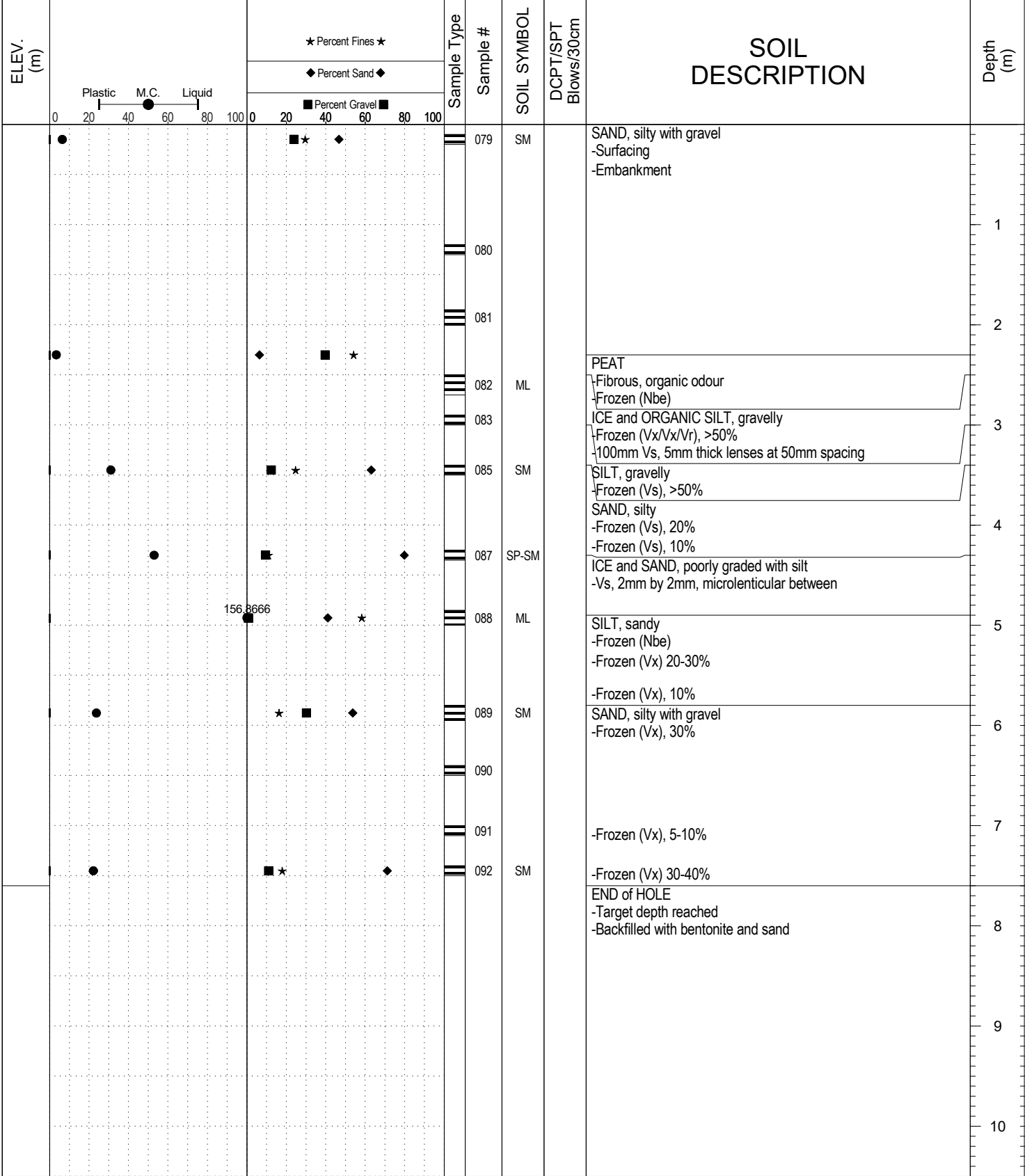
SUBSURFACE EXPLORATION AND TEST REPORT		Dempster Highway		SOURCE/TP#: 926-5569				
Midnight Sun Drilling		Surfacing, Km 94		PROJECT NO: 552-202105-0115-0664-1				
Terra Sonic		Coordinates: Z07N N7174275m E624380m		ELEVATION: m				
SAMPLE TYPE		<input type="checkbox"/> UNDISTURBED <input type="checkbox"/> DCPT <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input checked="" type="checkbox"/> SPT <input type="checkbox"/> CORE						
ELEV. (m)	Plastic M.C. Liquid 0 20 40 60 80 100		★ Percent Fines ★ ◆ Percent Sand ◆ ■ Percent Gravel ■		SOIL SYMBOL	DCPT/SPT Blows/30cm	SOIL DESCRIPTION	Depth (m)
	0 20 40 60 80 100		0 20 40 60 80 100					
					049	SM	SAND, silty with gravel -Subangular, surfacing	
					050			1
					051	SM	-Natural ground?	2
					052	GM	-Wet GRAVEL, silty with sand -Thawed, unfrozen ground	3
					053			4
					054		SAND, silty with gravel	5
					055	SM		6
					056		-Frozen (Vx), 20% ice -Frozen (Nf) -Frozen (Vx), 30% ice	7
							END of HOLE -Target depth reached -Backfilled with bentonite and sand	8
								9
								10

SUBSURFACE EXPLORATION AND TEST REPORT		Dempster Highway		SOURCE/TP#: 926-5570				
Midnight Sun Drilling		Surfacing, Km 94		PROJECT NO: 552-202105-0115-0664-1				
Terra Sonic		Coordinates: Z07N N7174484m E624321m		ELEVATION: m				
SAMPLE TYPE		<input type="checkbox"/> UNDISTURBED <input type="checkbox"/> DCPT <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input checked="" type="checkbox"/> SPT <input type="checkbox"/> CORE						
ELEV. (m)	★ Percent Fines ★ ◆ Percent Sand ◆ ■ Percent Gravel ■		Sample Type	Sample #	SOIL SYMBOL	DCPT/SPT Blows/30cm	SOIL DESCRIPTION	Depth (m)
	Plastic M.C. Liquid 0 20 40 60 80 100 0 20 40 60 80 100							
●	★			057	GP		Surfacing GRAVEL, poorly graded with sand -Subangular	0
				058			-Silt lense, 100mm	1
●	■ ◆			059	SM		SAND, silty with gravel -Angular, dry, hard drilling	2
				060			-Organic seam, 100mm -Subrounded, damp, brown	
				061			GRAVEL, well-graded, some sand, trace silt -Subangular	3
								4
								5
●	★ ■ ◆			062	SM		SAND, silty with gravel -Damp, brown	6
				063				7
							END of HOLE -Target depth reached -Backfilled with bentonite and sand	7
								8
								9
								10

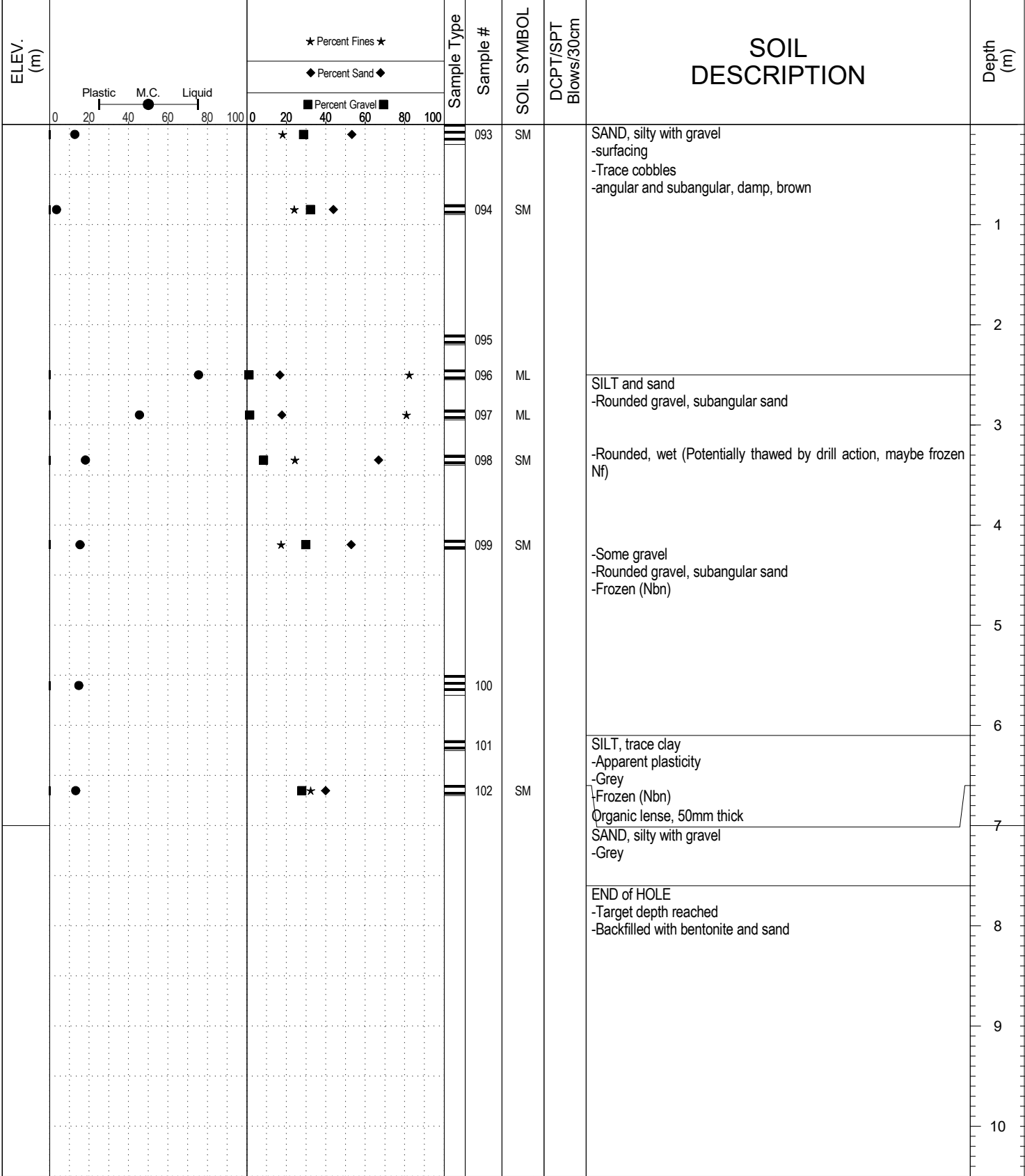
SUBSURFACE EXPLORATION AND TEST REPORT		Dempster Highway		SOURCE/TP#: 926-5571				
Midnight Sun Drilling		Surfacing, Km 94		PROJECT NO: 552-202105-0115-0664-1				
Terra Sonic		Coordinates: Z07N N7174885m E624205m		ELEVATION: m				
SAMPLE TYPE		<input type="checkbox"/> UNDISTURBED	<input type="checkbox"/> DCPT	<input type="checkbox"/> AUGER	<input type="checkbox"/> BULK	<input checked="" type="checkbox"/> SPT	<input type="checkbox"/> CORE	
ELEV. (m)	★ Percent Fines ★ ◆ Percent Sand ◆ ■ Percent Gravel ■		Sample Type	Sample #	SOIL SYMBOL	DCPT/SPT Blows/30cm	SOIL DESCRIPTION	Depth (m)
	Plastic M.C. Liquid 0 20 40 60 80 100 0 20 40 60 80 100							
							Surfacing	
							GRAVEL, sandy, trace silt, trace cobbles (Embankment)	1
							PEAT and organic inclusions	2
					ML		ORGANIC SILT	
							-Frozen (Nbe)	
							-Microlenticular ice (Vx/Vs), 20-30%	3
					ML		SILT	
							-Brown, thawed, easy drilling	
								4
								5
								6
							-Sand lense, Frozen (Nbn) 100mm	
								7
					SW-SM		SAND, well-graded with silt and gravel	
							-rounded	
							END of HOLE	
							-Target depth reached	
							-Backfilled with bentonite and sand	
								8
								9
								10

SUBSURFACE EXPLORATION AND TEST REPORT		Dempster Highway		SOURCE/TP#: 926-5572					
Midnight Sun Drilling		Surfacing, Km 94		PROJECT NO: 552-202105-0115-0664-1					
Terra Sonic		Coordinates: Z07N N7175211m E624109m		ELEVATION: m					
SAMPLE TYPE		UNDISTURBED		DCPT					
		AUGER		BULK					
		SPT		CORE					
ELEV. (m)	★ Percent Fines ★ ◆ Percent Sand ◆ ■ Percent Gravel ■			Sample Type	Sample #	SOIL SYMBOL	DCPT/SPT Blows/30cm	SOIL DESCRIPTION	Depth (m)
	Plastic M.C. Liquid 0 20 40 60 80 100								
0	0	0	0	GW	071	GW		GRAVEL, well-graded with sand -Surfacing -Sandy, some silt -Damp, brown, subrounded	1
					072				
					073				
					074			-Trace silt, trace cobbles	3
					075			SAND and GRAVEL, well-graded, trace silt -Subrounded, damp, brown	4
					076			-Seam organics/root fibers, 50mm	
				SM	077			PEAT, root inclusions	5
					078			SAND, silty with gravel -Beige, compact, wet, subrounded	
					079				6
					080		26		
								END of HOLE -Target depth reached -Backfilled with bentonite and sand	7
									8
									9
									10

SAMPLE TYPE UNDISTURBED DCPT AUGER BULK SPT CORE

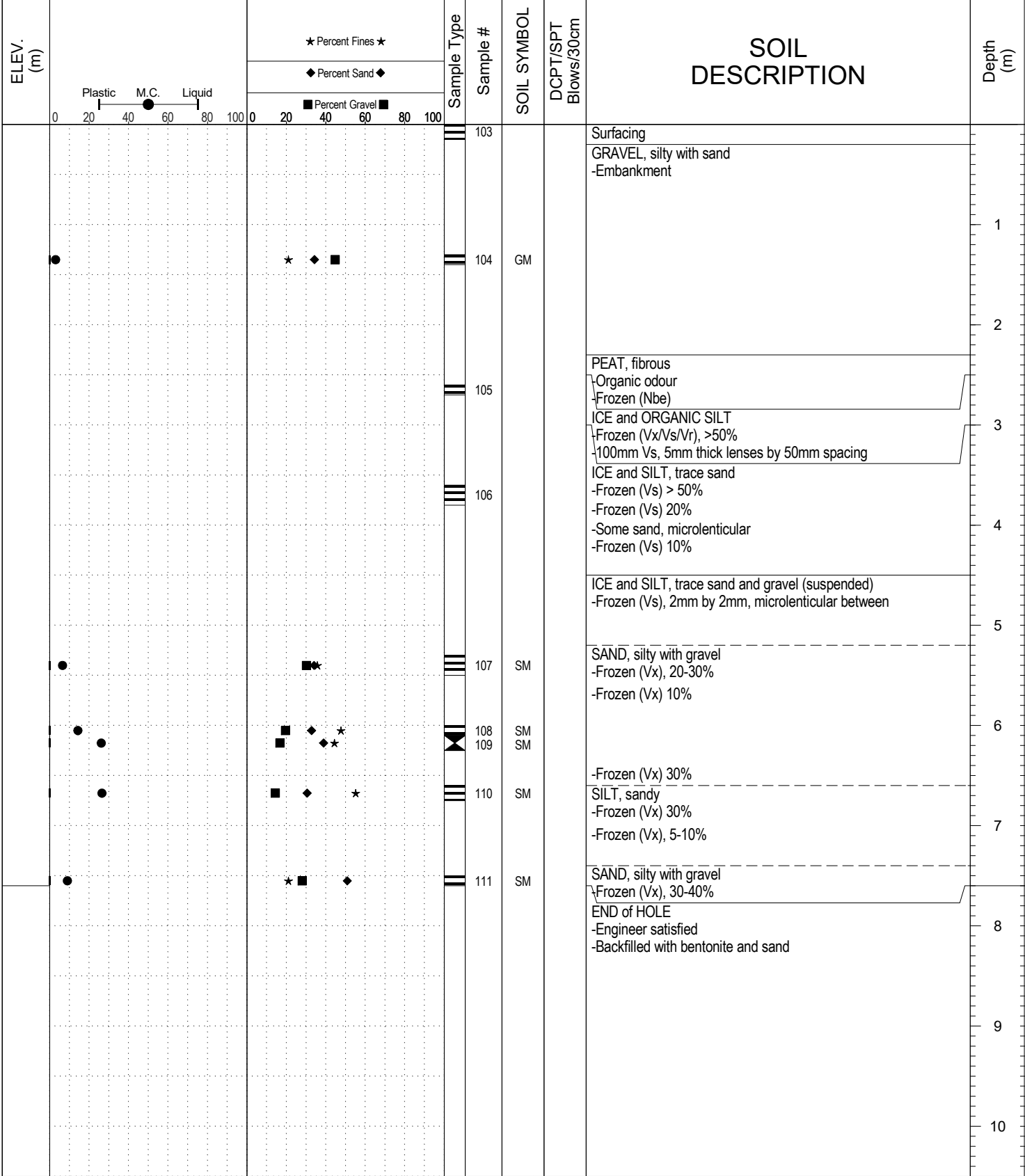


SAMPLE TYPE UNDISTURBED DCPT AUGER BULK SPT CORE




SUBSURFACE EXPLORATION AND TEST REPORT	Dempster Highway	SOURCE/TP#: 926-5575
Midnight Sun Drilling	Surfacing, Km 94	PROJECT NO: 552-202105-0115-0664-1
Terra Sonic	Coordinates: Z07N N7205465m E628647m	ELEVATION: m

SAMPLE TYPE UNDISTURBED DCPT AUGER BULK SPT CORE



SUBSURFACE EXPLORATION AND TEST REPORT		Dempster Highway		SOURCE/TP#: 926-5576				
Midnight Sun Drilling		Cache Creek, km 129		PROJECT NO: 552-202105-0115-0664-1				
Terra Sonic		Coordinates: Z07N N7205507m E628728m		ELEVATION: m				
SAMPLE TYPE		UNDISTURBED		DCPT				
		AUGER		BULK				
		SPT		CORE				
ELEV. (m)	★ Percent Fines ★ ◆ Percent Sand ◆ ■ Percent Gravel ■		Sample Type	Sample #	SOIL SYMBOL	DCPT/SPT Blows/30cm	SOIL DESCRIPTION	Depth (m)
	Plastic M.C. Liquid 0 20 40 60 80 100							
						14	ORGANICS (minimal) GRAVEL, well-graded with sand -Brown, wet, rounded	1
					GW			2
					GM		-Silty -Dark grey, moist	3
						14		4
					GM		-Wet	5
						27		6
								7
					SP-SM	14	SAND, poorly graded with silt -Dark grey, wet, dilates on contact	8
					ML		SILT with sand -Dark grey, moist, potentially plastic	9
								10
						3	SAND, silty -Dark grey, wet, dilates on contact	11
								12
								13
					ML		SILT -Dark grey, wet -Artesian well	14
						67		15
							END of HOLE -Artesian well identified -Casing brought to height of 2.4m above ground -Ground water flowed out of pipe for at least 10 minutes	16

SUBSURFACE EXPLORATION AND TEST REPORT		Dempster Highway		SOURCE/TP#: 926-5576					
Midnight Sun Drilling		Cache Creek, km 129		PROJECT NO: 552-202105-0115-0664-1					
Terra Sonic		Coordinates: Z07N N7205507m E628728m		ELEVATION: m					
SAMPLE TYPE		<input type="checkbox"/> UNDISTURBED <input type="checkbox"/> DCPT <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input checked="" type="checkbox"/> SPT <input type="checkbox"/> CORE							
ELEV. (m)	Plastic M.C. Liquid 0 20 40 60 80 100	★ Percent Fines ★ ◆ Percent Sand ◆ ■ Percent Gravel ■		Sample Type	Sample #	SOIL SYMBOL	DCPT/SPT Blows/30cm	SOIL DESCRIPTION	Depth (m)
		0 20 40 60 80 100							
								-Hole plugged with bentonite and sand -No groundwater seepage observed after moving equipment off borehole	11
									12
									13
									14
									15
									16
									17
									18
									19
									20
						LOGGED BY: KAE/DL		Termination Depth: 9.7m	
						COMPILED BY: R.Stilwell		Complete: 10/30/2017	
						REVIEWED BY: K.Elmer		Pit #:	

SUBSURFACE EXPLORATION AND TEST REPORT		Dempster Highway		SOURCE/TP#: 926-5577				
Midnight Sun Drilling		Cache Creek, km 129		PROJECT NO: 552-202105-0115-0664-1				
Terra Sonic		Coordinates: Z07N N7205465m E628647m		ELEVATION: m				
SAMPLE TYPE		<input type="checkbox"/> UNDISTURBED	<input type="checkbox"/> DCPT	<input type="checkbox"/> AUGER	<input type="checkbox"/> BULK			
		<input checked="" type="checkbox"/> SPT	<input type="checkbox"/> CORE					
ELEV. (m)	★ Percent Fines ★ ◆ Percent Sand ◆ ■ Percent Gravel ■		Sample Type	Sample #	SOIL SYMBOL	DCPT/SPT Blows/30cm	SOIL DESCRIPTION	Depth (m)
	Plastic M.C. Liquid 0 20 40 60 80 100 0 20 40 60 80 100							
				126	SM		ORGANICS	
				128			SAND, silty -Brown, moist, rounded	
				127			GRAVEL, gap graded, sandy, trace cobbles -Brown, damp, angular to subangular -Some rock powder from pulverizing cobbles -Organic lense, 80mm	1
				129				2
				130			-Boulder	
							END of HOLE -Refusal on hard ground. moved south 1.5m and redrilled hole	3
								4
								5
								6
								7
								8
								9
								10

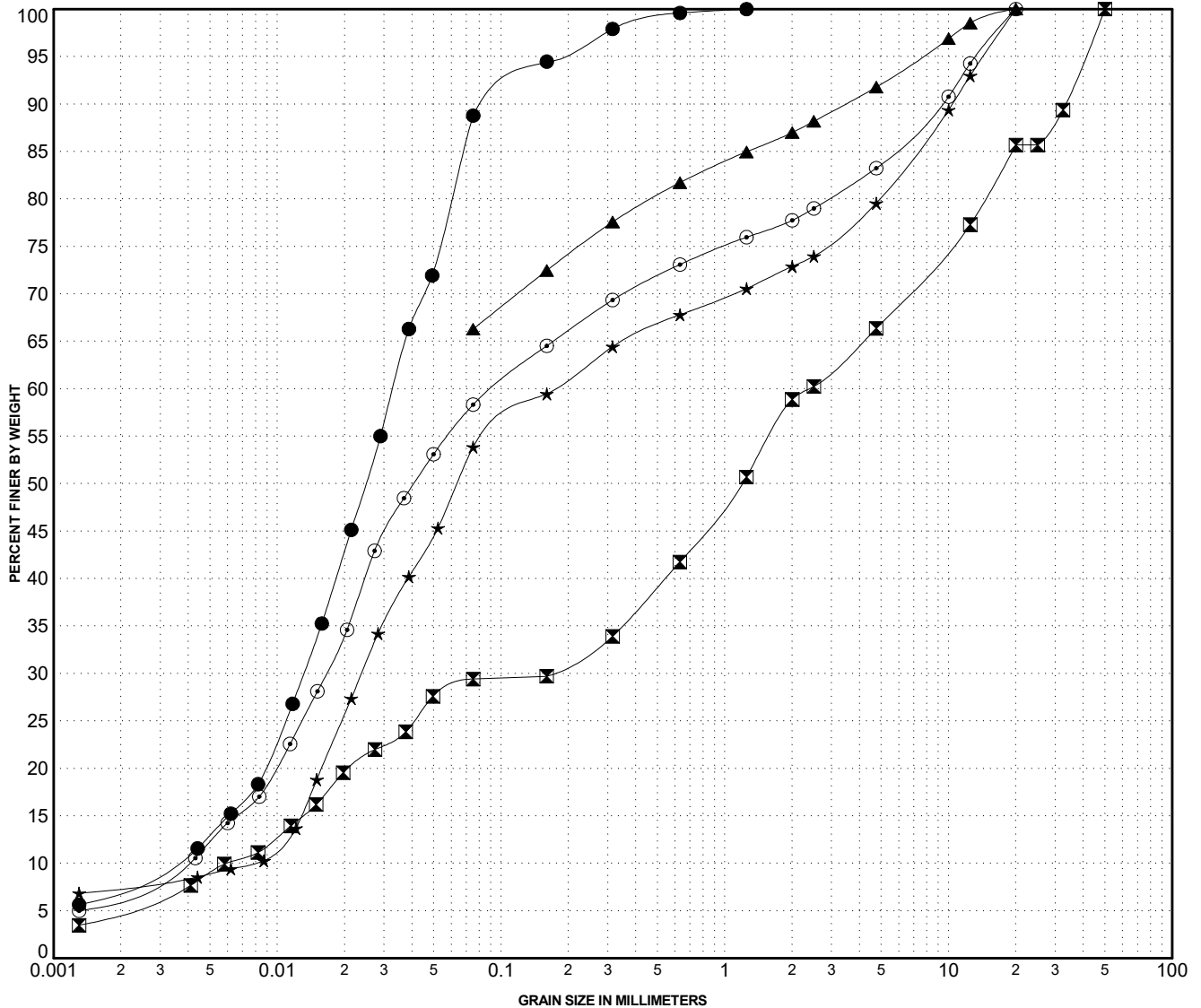
GRAIN SIZE ANALYSIS	Chapman Lake Thermistor Installation	SOURCE/TP#: 926-5566
Midnight Sun Drilling	km 116	PROJECT NO: 552-202105-0115-0664-1
Terra Sonic	Coordinates:Z07N N7193661m E626288m	ELEVATION: m

Master Revised June 2017

Field #	Lab #	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu	D10
● 001	1466	1.4 to 1.6	SILT(ML)	77.3	NP	NP	NP	1.6	10.3	0.00
☒ 004	1469	2.9 to 3.1	SILTY SAND with GRAVEL(SM)	11.1	NP	NP	NP	2.0	404.8	0.01
▲ 005	1470	3.5 to 3.8	SANDY SILT(ML)	116.8	NP	NP	NP			
★ 006	1471	4.2 to 4.3	SANDY SILT with GRAVEL(ML)	30.7	NP	NP	NP	0.4	21.9	0.01
⊙ 007	1472	5.0 to 5.2	SANDY SILT with GRAVEL(ML)	30.8	NP	NP	NP	0.8	24.1	0.00

Field #	Lab #	%PASSING	100.0	80.0	50.0	25.0	20.0	12.5	10.0	5.0	2.0	0.850	0.400	0.250	0.160	0.080	% Breakdown			
																	Gravel	Sand	Silt	Clay
● 001	1466	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.8	98.6	96.7	94.5	88.8	0.0	11.2	81.0	7.7
☒ 004	1469	100.0	100.0	100.0	85.7	85.7	77.3	74.8	66.4	58.9	45.7	37.3	32.5	29.7	29.4	33.6	36.9	24.4	5.0	
▲ 005	1470	100.0	100.0	100.0	100.0	100.0	98.5	96.9	91.8	87.0	83.1	79.4	75.8	72.5	66.3	8.2	25.5	66.3		
★ 006	1471	100.0	100.0	100.0	100.0	100.0	93.0	89.4	79.6	72.9	69.0	65.9	62.7	59.5	53.9	20.4	25.7	46.4	7.4	
⊙ 007	1472	100.0	100.0	100.0	100.0	100.0	94.3	90.8	83.2	77.7	74.3	71.0	67.7	64.5	58.3	16.8	24.9	51.3	7.0	

Clay	Silt		Fine	Medium	Coarse	Fine	Medium	Coarse
	Fine Soil		Sand			Gravel		



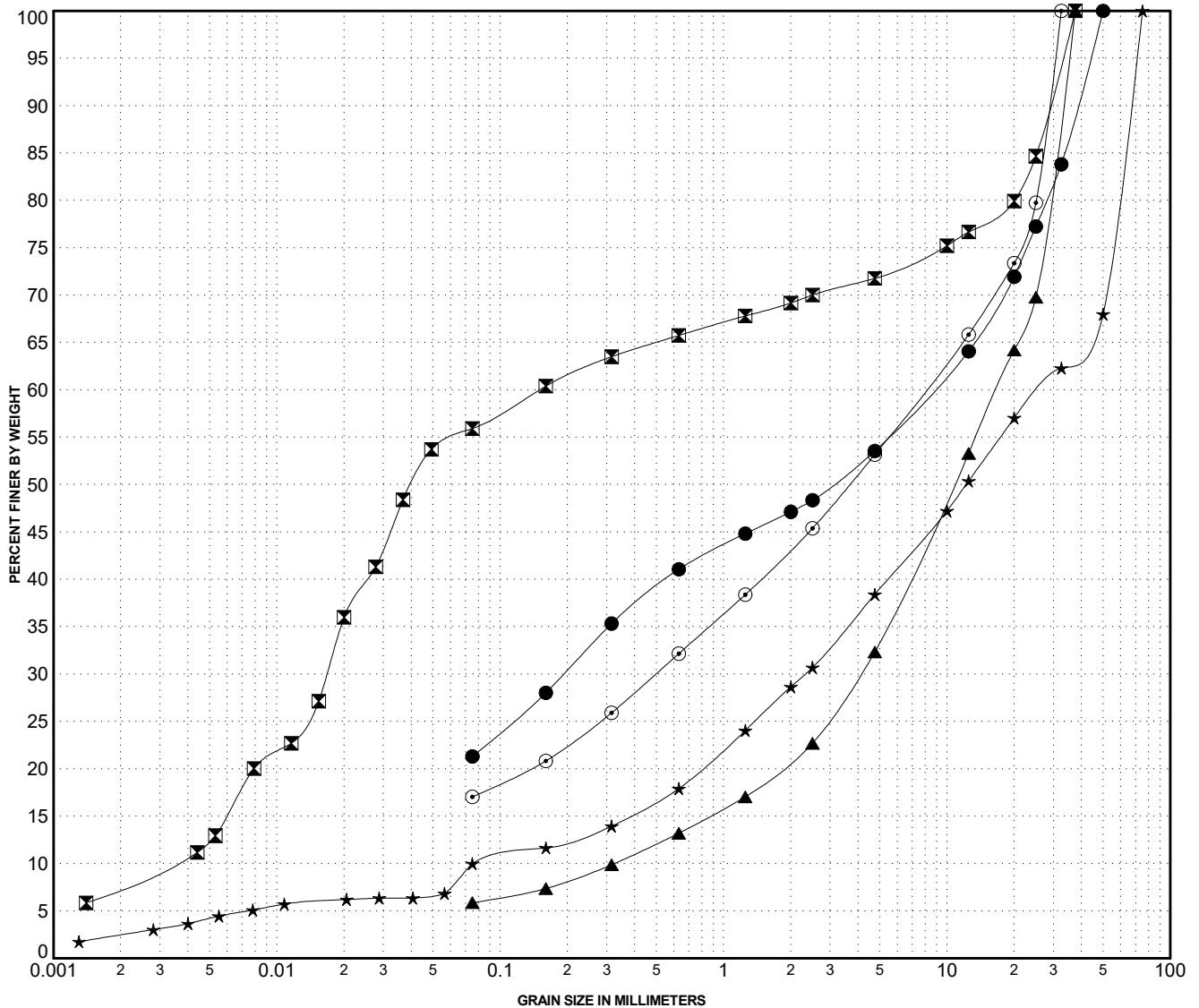
GRAIN SIZE ANALYSIS	Chapman Lake Thermistor Installation	SOURCE/TP#: 926-5566
Midnight Sun Drilling	km 116	PROJECT NO: 552-202105-0115-0664-1
Terra Sonic	Coordinates:Z07N N7193661m E626288m	ELEVATION: m

Master Revised June 2017

Field #	Lab #	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu	D10
● 008	1473	5.9 to 6.0	SILTY GRAVEL with SAND(GM)	16.3	NP	NP	NP			
☒ 009	1474	6.7 to 6.8	GRAVELLY SILT with SAND(ML)	28.0	NP	NP	NP	0.5	43.8	0.00
▲ 012	1477	8.8 to 9.1	POORLY GRADED GRAVEL with SILT and SAND(GP-GM)	4.5	NP	NP	NP	3.1	51.6	0.32
★ 013	1478	9.4 to 9.6	WELL-GRADED GRAVEL with SILT and SAND(GW-GM)	13.6	NP	NP	NP	2.7	350.5	0.07
⊙ 014	1479	10.4 to 10.6	SILTY GRAVEL with SAND(GM)	5.0	NP	NP	NP			

Field #	Lab #	%PASSING	Gravel																% Breakdown		
			100.0	80.0	50.0	25.0	20.0	12.5	10.0	5.0	2.0	0.850	0.400	0.250	0.160	0.080	Gravel	Sand	Silt	Clay	
●	008	1473	100.0	100.0	100.0	77.2	71.9	64.1	61.6	53.5	47.1	42.7	37.8	32.8	28.0	21.3	46.5	32.2	21.3		
☒	009	1474	100.0	100.0	100.0	84.7	79.9	76.7	75.2	71.8	69.2	66.6	64.5	62.4	60.4	55.9	28.2	15.8	48.4	7.5	
▲	012	1477	100.0	100.0	100.0	69.8	64.2	53.3	48.5	32.3	20.9	14.9	11.3	9.0	7.4	5.9	67.7	26.4	5.9		
★	013	1478	100.0	100.0	68.0	59.5	57.0	50.4	47.2	38.4	28.7	20.6	15.7	13.2	11.7	10.0	61.6	28.4	7.5	2.5	
⊙	014	1479	100.0	100.0	100.0	79.7	73.4	65.8	62.9	53.2	43.1	34.9	28.6	24.2	20.8	17.0	46.8	36.1	17.0		

Clay	Silt		Fine	Medium	Coarse	Fine	Medium	Coarse	
	Fine Soil		Sand			Gravel			

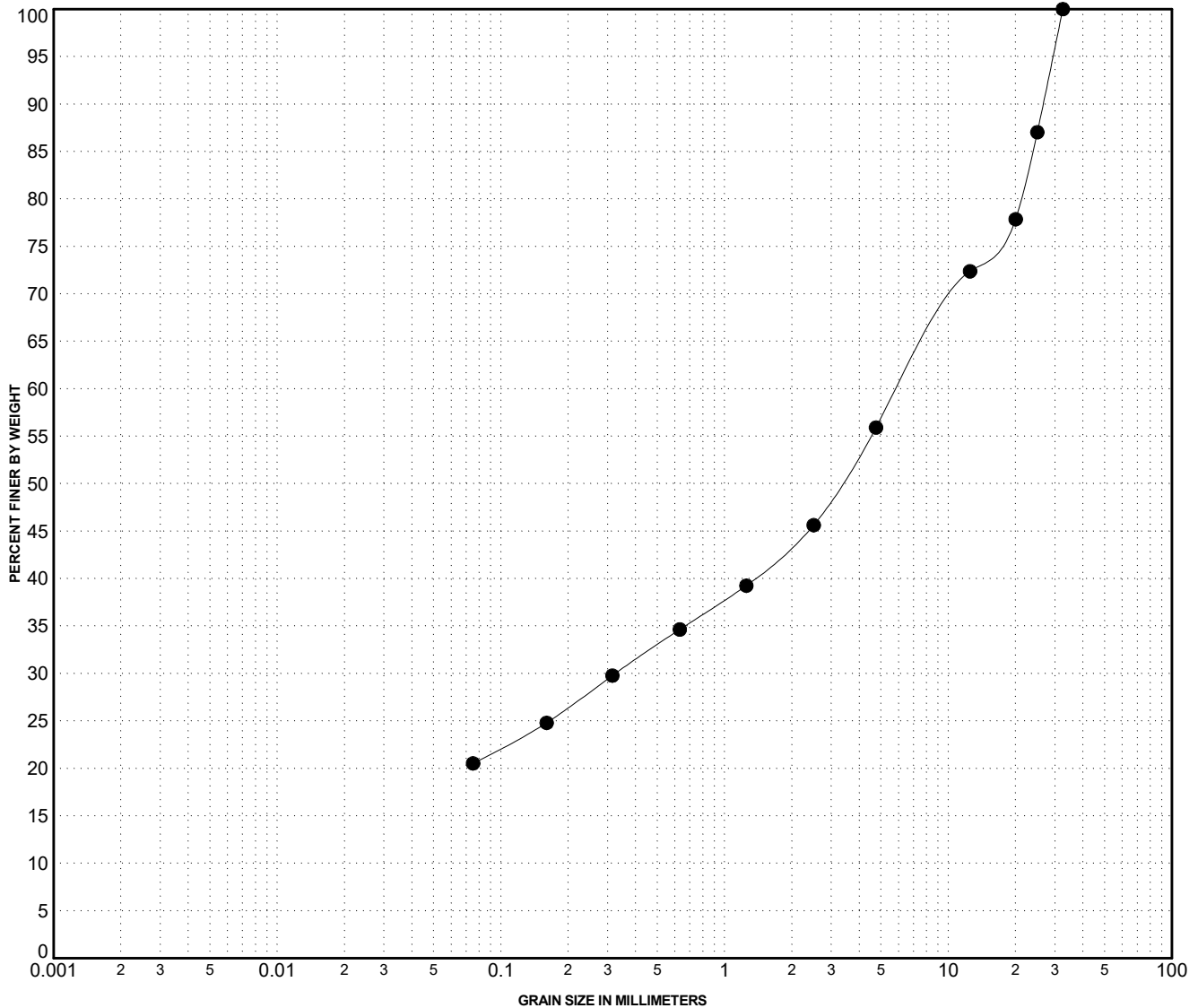


GRAIN SIZE ANALYSIS	Chapman Lake Thermistor Installation	SOURCE/TP#: 926-5566
Midnight Sun Drilling	km 116	PROJECT NO: 552-202105-0115-0664-1
Terra Sonic	Coordinates:Z07N N7193661m E626288m	ELEVATION: m

Master Revised June 2017

Field #	Lab #	Depth	Classification													%H2O	LL	PL	PI	Cc	Cu	D10
● 016	1481	12.5 to 12.6	SILTY GRAVEL with SAND(GM)													8.3	NP	NP	NP			
Field #	Lab #	100.0	80.0	50.0	25.0	20.0	12.5	10.0	5.0	2.0	0.850	0.400	0.250	0.160	0.080	% Breakdown						
● 016	1481	100.0	100.0	100.0	87.0	77.9	72.4	68.6	55.9	43.6	36.7	31.9	28.1	24.8	20.5	Gravel	Sand	Silt	Clay			
																44.1	35.4		20.5			

Clay	Silt		Fine	Medium	Coarse	Fine	Medium	Coarse
	Fine Soil		Sand			Gravel		



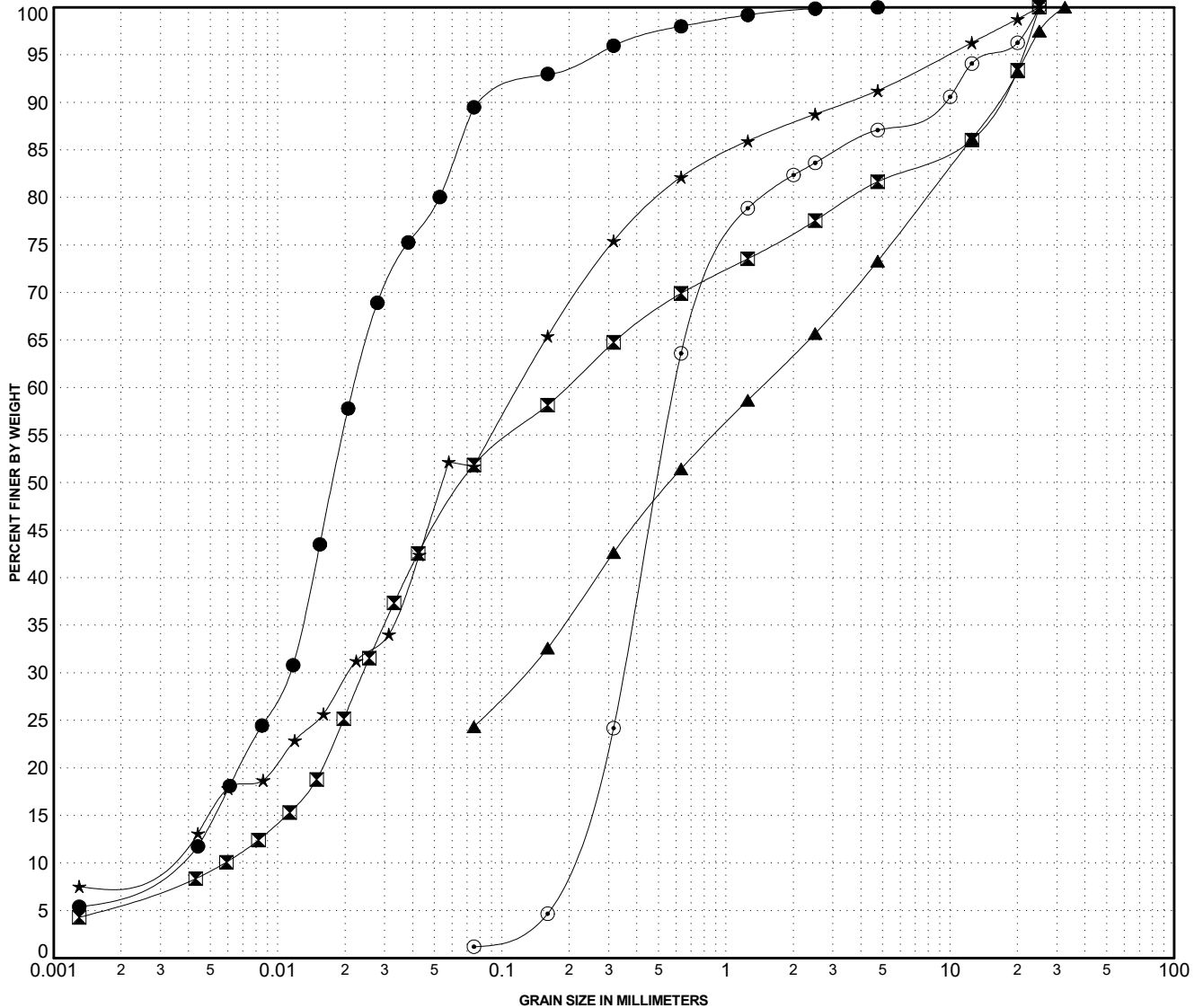
GRAIN SIZE ANALYSIS	Chapman Lake Thermistor Installation	SOURCE/TP#: 926-5567
Midnight Sun Drilling	km 116	PROJECT NO: 552-202105-0115-0664-1
Terra Sonic	Coordinates:Z07N N7193287m E625727m	ELEVATION: m

Master Revised June 2017

Field #	Lab #	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu	D10
● 20	1485	1.4 to 1.5	SILT(ML)	55.7	NP	NP	NP	1.8	7.0	0.00
☒ 22	1487	3.3 to 3.5	SANDY SILT with GRAVEL(ML)	38.5	NP	NP	NP	0.5	33.3	0.01
▲ 30	1495	10.8 to 11.0	SILTY SAND with GRAVEL(SM)	8.0	NP	NP	NP			
★ 31	1496	11.7 to 11.9	SANDY SILT(ML)	11.5	NP	NP	NP	1.8	47.4	0.00
⊙ 35	1500	15.1 to 15.2	POORLY GRADED SAND(SP)	17.9	NP	NP	NP	1.1	3.1	0.19

Field #	Lab #	%PASSING	Sieve Analysis													% Breakdown			
			100.0	80.0	50.0	25.0	20.0	12.5	10.0	5.0	2.0	0.850	0.400	0.250	0.160	0.080	Gravel	Sand	Silt
● 20	1485	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.7	98.5	96.8	95.0	93.0	89.5	0.0	10.5	81.9	7.6
☒ 22	1487	100.0	100.0	100.0	100.0	93.4	86.0	85.0	81.7	76.3	71.5	67.0	62.5	58.2	51.9	18.3	29.8	46.1	5.8
▲ 30	1495	100.0	100.0	100.0	97.5	93.2	86.2	83.2	73.3	63.4	54.6	46.4	39.2	32.6	24.3	26.7	49.0	24.3	
★ 31	1496	100.0	100.0	100.0	100.0	98.8	96.3	95.1	91.2	87.9	83.8	78.3	72.0	65.4	51.7	8.8	39.5	42.2	9.5
⊙ 35	1500	100.0	100.0	100.0	100.0	96.3	94.1	90.6	87.1	82.4	70.3	41.2	17.5	4.7	1.2	12.9	85.9	1.2	

Clay	Silt		Fine	Medium	Coarse	Fine	Medium	Coarse
	Fine Soil		Sand			Gravel		

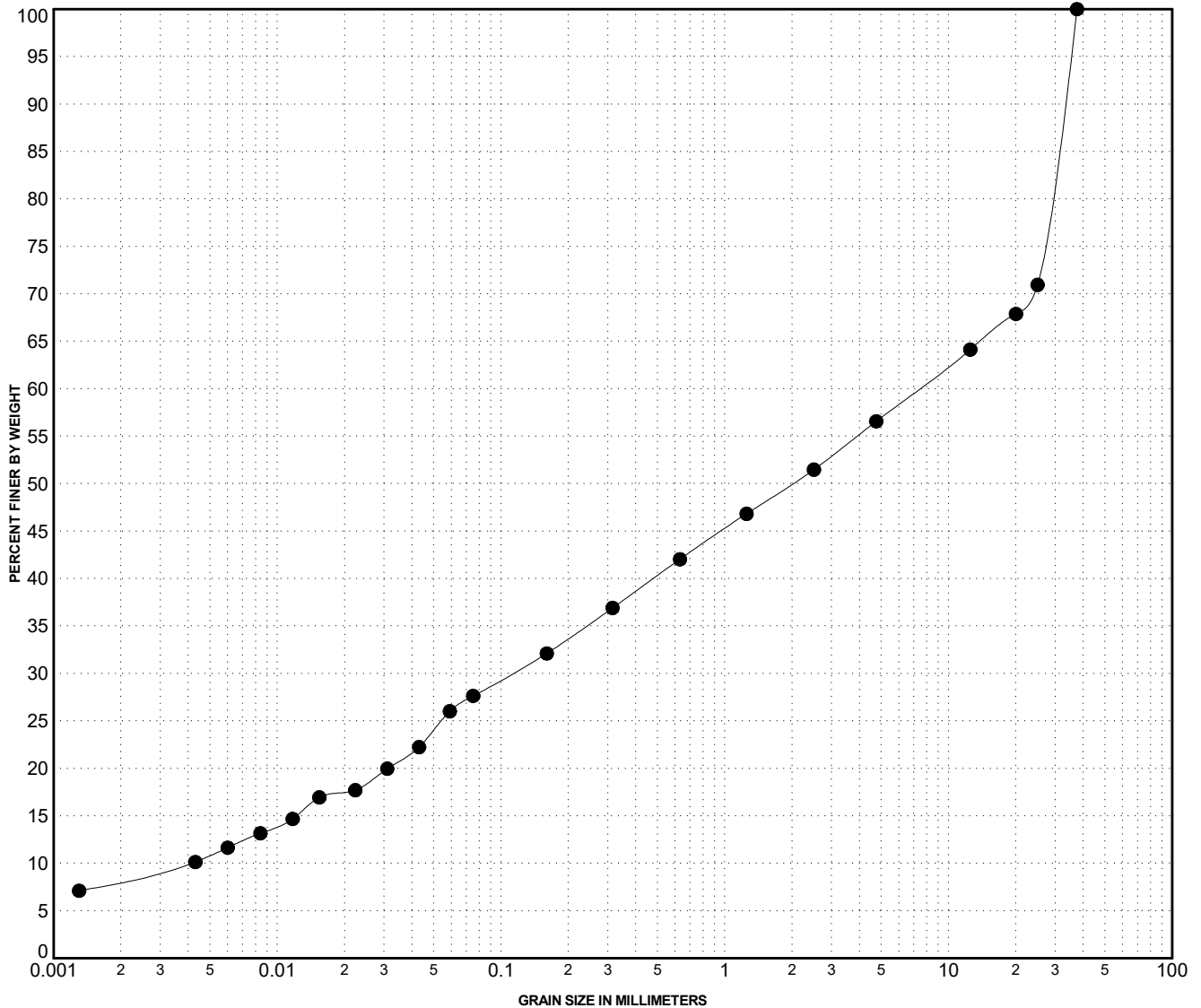


GRAIN SIZE ANALYSIS	Chapman Lake Thermistor Installation	SOURCE/TP#: 926-5567
Midnight Sun Drilling	km 116	PROJECT NO: 552-202105-0115-0664-1
Terra Sonic	Coordinates:Z07N N7193287m E625727m	ELEVATION: m

Master Revised June 2017

Field #	Lab #	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu	D10									
● 38	1503	19.4 to 19.5	SILTY GRAVEL with SAND(GM)	5.8	NP	NP	NP	0.4	1807.8	0.00									
Field #	Lab #	100.0	80.0	50.0	25.0	20.0	12.5	10.0	5.0	2.0	0.850	0.400	0.250	0.160	0.080	% Breakdown			
● 38	1503	100.0	100.0	100.0	71.0	67.9	64.1	62.4	56.6	50.0	44.1	39.1	35.3	32.1	27.6	Gravel	Sand	Silt	Clay
																43.4	28.9	19.4	8.2

Clay	Silt		Fine	Medium	Coarse	Fine	Medium	Coarse
	Fine Soil		Sand			Gravel		



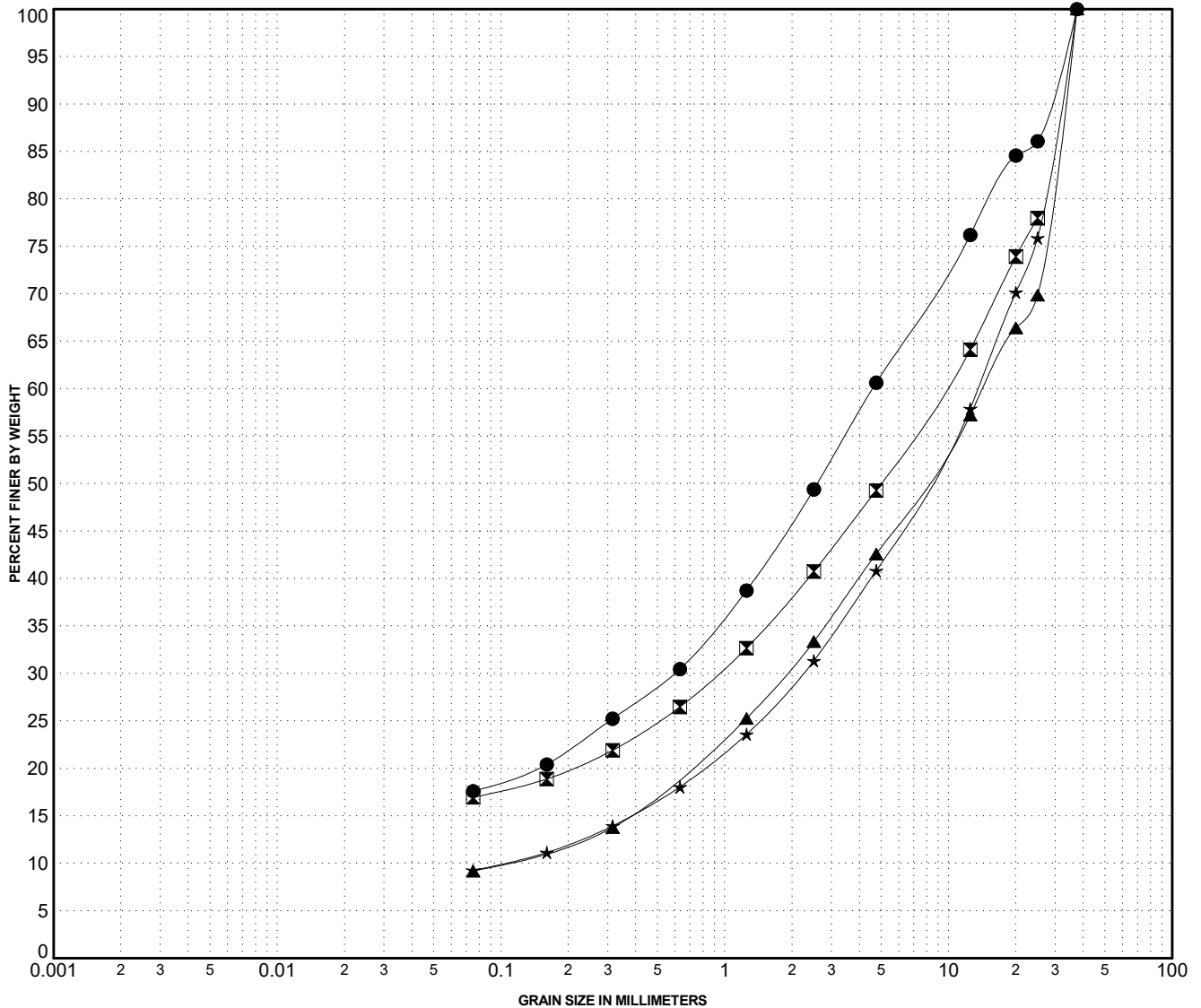
GRAIN SIZE ANALYSIS	Surfacing	SOURCE/TP#: 926-5568
Midnight Sun Drilling	Km 94	PROJECT NO: 552-202105-0115-0664-1
Terra Sonic	Coordinates:Z07N N7173939m E624466m	ELEVATION: m

Master Revised June 2017

Field #	Lab #	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu	D10
● 044	1509	5.6 to 5.7	SILTY SAND with GRAVEL(SM)		NP	NP	NP			
☒ 045	1510	6.2 to 6.3	SILTY GRAVEL with SAND(GM)		NP	NP	NP			
▲ 046	1511	6.4 to 6.5	WELL-GRADED GRAVEL with SILT and SAND(GW-GM)		NP	NP	NP	2.5	148.7	0.10
★ 047	1512	7.3 to 7.4	POORLY GRADED GRAVEL with SILT and SAND(GP-GM)		NP	NP	NP	3.6	133.6	0.10

Field #	Lab #	% PASSING	100.0	80.0	50.0	25.0	20.0	12.5	10.0	5.0	2.0	0.850	0.400	0.250	0.160	0.080	% Breakdown			
																	Gravel	Sand	Silt	Clay
●	044	1509	100.0	100.0	100.0	86.1	84.6	76.2	72.6	60.6	46.0	34.1	27.5	23.6	20.4	17.6	39.4	43.0	17.6	
☒	045	1510	100.0	100.0	100.0	78.0	73.9	64.1	60.7	49.3	38.1	29.2	23.9	20.9	18.9	16.9	28.7	32.3	16.9	
▲	046	1511	100.0	100.0	100.0	69.9	66.4	57.2	53.8	42.6	30.8	22.0	16.3	13.0	11.6	9.2	57.4	33.4	9.2	
★	047	1512	100.0	100.0	100.0	75.9	70.2	57.9	54.0	40.8	28.8	20.5	15.7	13.0	11.1	9.3	59.2	31.6	9.3	

Clay	Silt		Fine	Medium	Coarse	Fine	Medium	Coarse
	Fine Soil		Sand			Gravel		



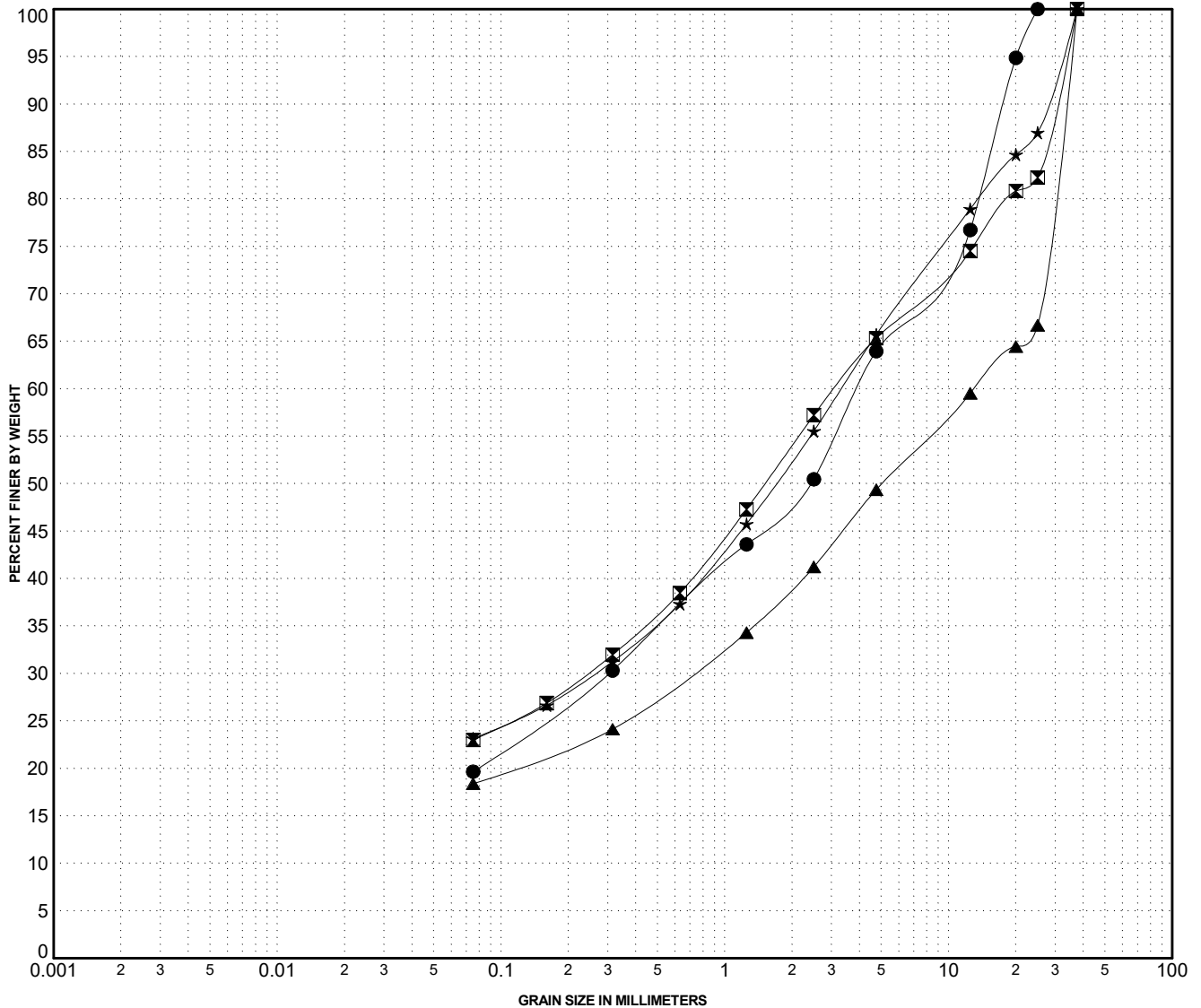
GRAIN SIZE ANALYSIS	Surfacing	SOURCE/TP#: 926-5569
Midnight Sun Drilling	Km 94	PROJECT NO: 552-202105-0115-0664-1
Terra Sonic	Coordinates:Z07N N7174275m E624380m	ELEVATION: m

Master Revised June 2017

Field #	Lab #	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu	D10
● 049	1513	0.0 to 0.2	SILTY SAND with GRAVEL(SM)	10.9	NP	NP	NP			
☒ 051	1515	2.0 to 2.2	SILTY SAND with GRAVEL(SM)	6.3	NP	NP	NP			
▲ 052	1516	2.7 to 2.8	SILTY GRAVEL with SAND(GM)	6.3	NP	NP	NP			
★ 055	1519	5.7 to 5.8	SILTY SAND with GRAVEL(SM)	6.0	NP	NP	NP			

Field #	Lab #	% PASSING	100.0	80.0	50.0	25.0	20.0	12.5	10.0	5.0	2.0	0.850	0.400	0.250	0.160	0.080	% Breakdown			
																	Gravel	Sand	Silt	Clay
●	049	1513	100.0	100.0	100.0	100.0	94.9	76.7	73.8	64.0	48.3	39.9	33.2	28.6	25.3	19.7	36.0	44.3	19.7	
☒	051	1515	100.0	100.0	100.0	82.3	80.8	74.5	72.4	65.3	54.0	42.3	34.8	30.2	26.9	23.0	34.7	42.3	23.0	
▲	052	1516	100.0	100.0	100.0	66.7	64.5	59.5	57.2	49.4	39.0	31.5	26.3	23.2	21.4	18.4	50.6	31.0	18.4	
★	055	1519	100.0	100.0	100.0	87.0	84.7	78.9	75.9	65.7	52.4	41.0	33.9	29.7	26.6	23.1	34.3	42.5	23.1	

Clay	Silt	Fine	Medium	Coarse	Fine	Medium	Coarse
Fine Soil		Sand			Gravel		



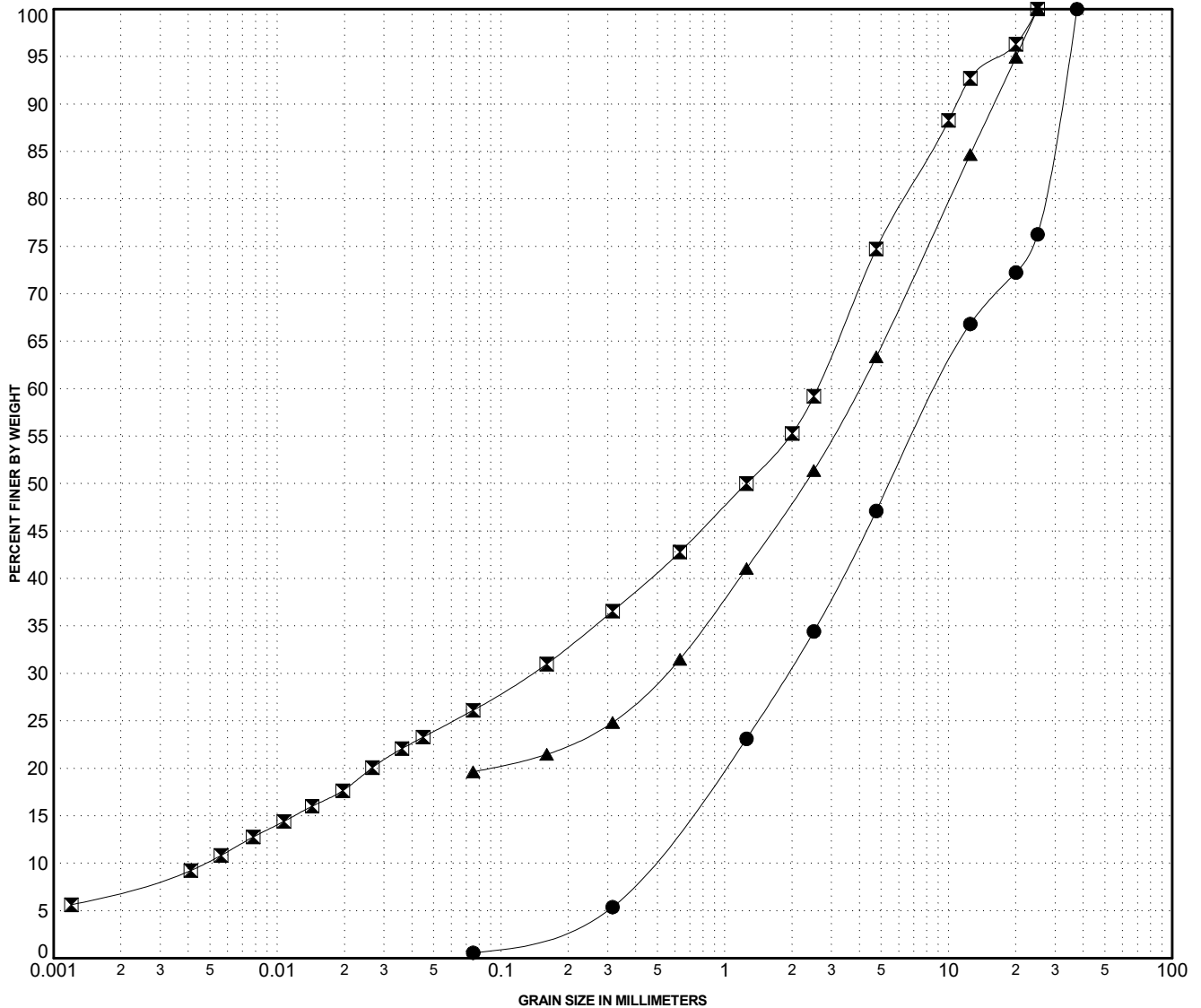
GRAIN SIZE ANALYSIS	Surfacing	SOURCE/TP#: 926-5570
Midnight Sun Drilling	Km 94	PROJECT NO: 552-202105-0115-0664-1
Terra Sonic	Coordinates:Z07N N7174484m E624321m	ELEVATION: m

Master Revised June 2017

Field #	Lab #	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu	D10
● 057	1521	0.2 to 0.3	POORLY GRADED GRAVEL with SAND(GP)	5.3	NP	NP	NP	0.9	19.8	0.45
☒ 059	1523	1.7 to 1.8	SILTY SAND with GRAVEL(SM)	4.1	NP	NP	NP	1.5	542.4	0.00
▲ 062	1526	5.4 to 5.5	SILTY SAND with GRAVEL(SM)	6.6	NP	NP	NP			

Field #	Lab #	100.0	80.0	50.0	25.0	20.0	12.5	10.0	5.0	2.0	0.850	0.400	0.250	0.160	0.080	% Breakdown			
		% PASSING														Gravel	Sand	Silt	Clay
●	057	1521	100.0	100.0	100.0	76.3	72.2	66.8	62.3	47.1	30.8	18.2	9.2	4.6	3.1	0.6	52.9	46.6	0.6
☒	059	1523	100.0	100.0	100.0	96.3	92.7	88.3	74.7	55.3	46.0	39.3	34.7	31.0	26.1	25.3	48.6	19.0	7.1
▲	062	1526	100.0	100.0	100.0	94.9	84.7	79.8	63.4	48.1	35.7	27.7	23.7	21.5	19.6	36.6	43.7	19.6	

Clay	Silt		Fine	Medium	Coarse	Fine	Medium	Coarse
	Fine Soil		Sand			Gravel		



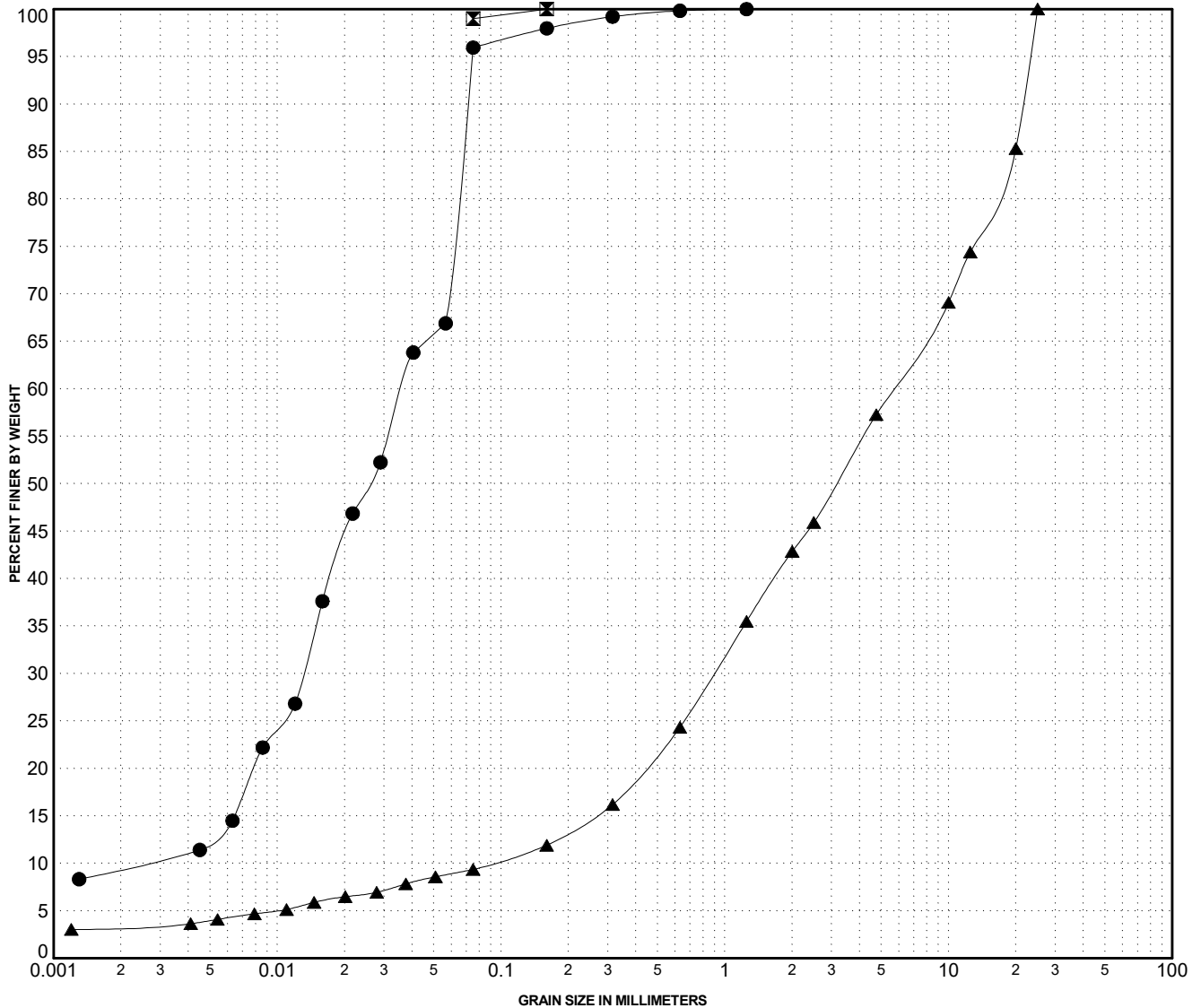
GRAIN SIZE ANALYSIS	Surfacing	SOURCE/TP#: 926-5571
Midnight Sun Drilling	Km 94	PROJECT NO: 552-202105-0115-0664-1
Terra Sonic	Coordinates:Z07N N7174885m E624205m	ELEVATION: m

Master Revised June 2017

Field #	Lab #	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu	D10
● 065	1529	2.5 to 2.6	ORGANIC SILT(OL)	67.0	NP	NP	NP	1.8	14.2	0.00
☒ 066	1530	3.0 to 3.1	SILT(ML)	61.3	NP	NP	NP			
▲ 070	1534	6.5 to 6.6	WELL-GRADED SAND with SILT and GRAVEL(SW-SM)	16.0	NP	NP	NP	1.6	62.1	0.09

Field #	Lab #	% PASSING	100.0	80.0	50.0	25.0	20.0	12.5	10.0	5.0	2.0	0.850	0.400	0.250	0.160	0.080	% Breakdown			
																	Gravel	Sand	Silt	Clay
●	065	1529	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	99.5	98.8	98.0	96.0	0.0	4.0	86.6	9.4
☒	066	1530	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.0		0.0	1.0	99.0	
▲	070	1534	100.0	100.0	100.0	100.0	85.3	74.4	69.1	57.3	42.8	29.2	19.7	14.7	11.9	9.4	42.7	47.9	6.1	3.3

Clay	Silt		Fine	Medium	Coarse	Fine	Medium	Coarse
	Fine Soil		Sand			Gravel		

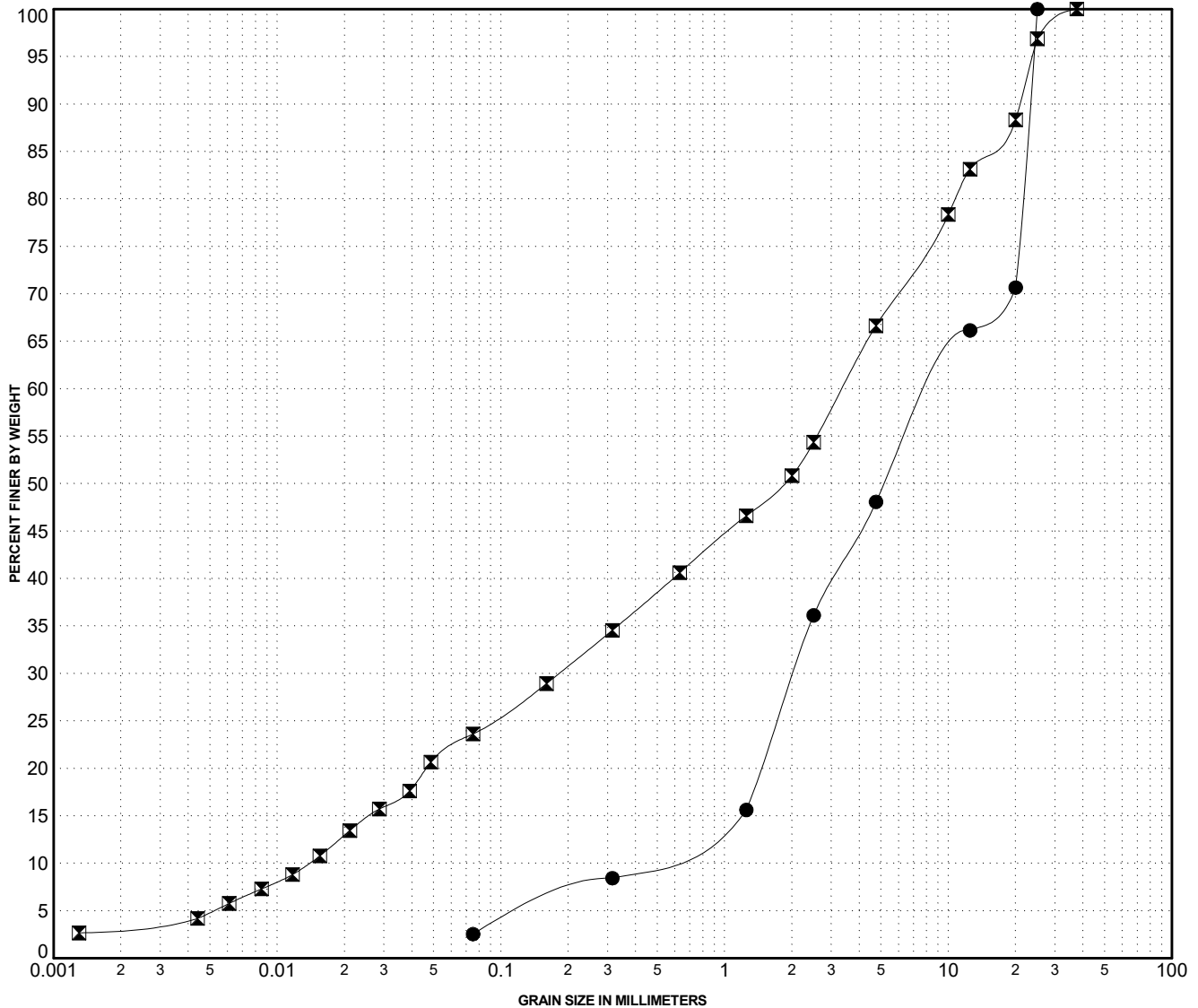


GRAIN SIZE ANALYSIS	Surfacing	SOURCE/TP#: 926-5572
Midnight Sun Drilling	Km 94	PROJECT NO: 552-202105-0115-0664-1
Terra Sonic	Coordinates:Z07N N7175211m E624109m	ELEVATION: m

Master Revised June 2017

Field #	Lab #	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu	D10										
● 071	1535	0.0 to 0.2	WELL-GRADED GRAVEL with SAND(GW)	6.5	NP	NP	NP	1.1	21.1	0.43										
☒ 078	1542	5.2 to 5.4	SILTY SAND with GRAVEL(SM)	17.5	NP	NP	NP	0.7	242.2	0.01										
Field #	Lab #	100.0	80.0	50.0	25.0	20.0	12.5	10.0	5.0	2.0	0.850	0.400	0.250	0.160	0.080	% Breakdown				
																Gravel	Sand	Silt	Clay	
● 071	1535	100.0	100.0	100.0	100.0	70.7	66.2	62.0	48.1	29.5	13.6	10.0	7.5	5.6	2.5	51.9	45.5		2.5	
☒ 078	1542	100.0	100.0	100.0	96.9	88.3	83.1	78.4	66.6	50.8	43.2	37.2	32.6	28.9	23.6	33.4	43.0	20.4	3.2	

Clay	Silt		Fine	Medium	Coarse	Fine	Medium	Coarse
	Fine Soil		Sand			Gravel		



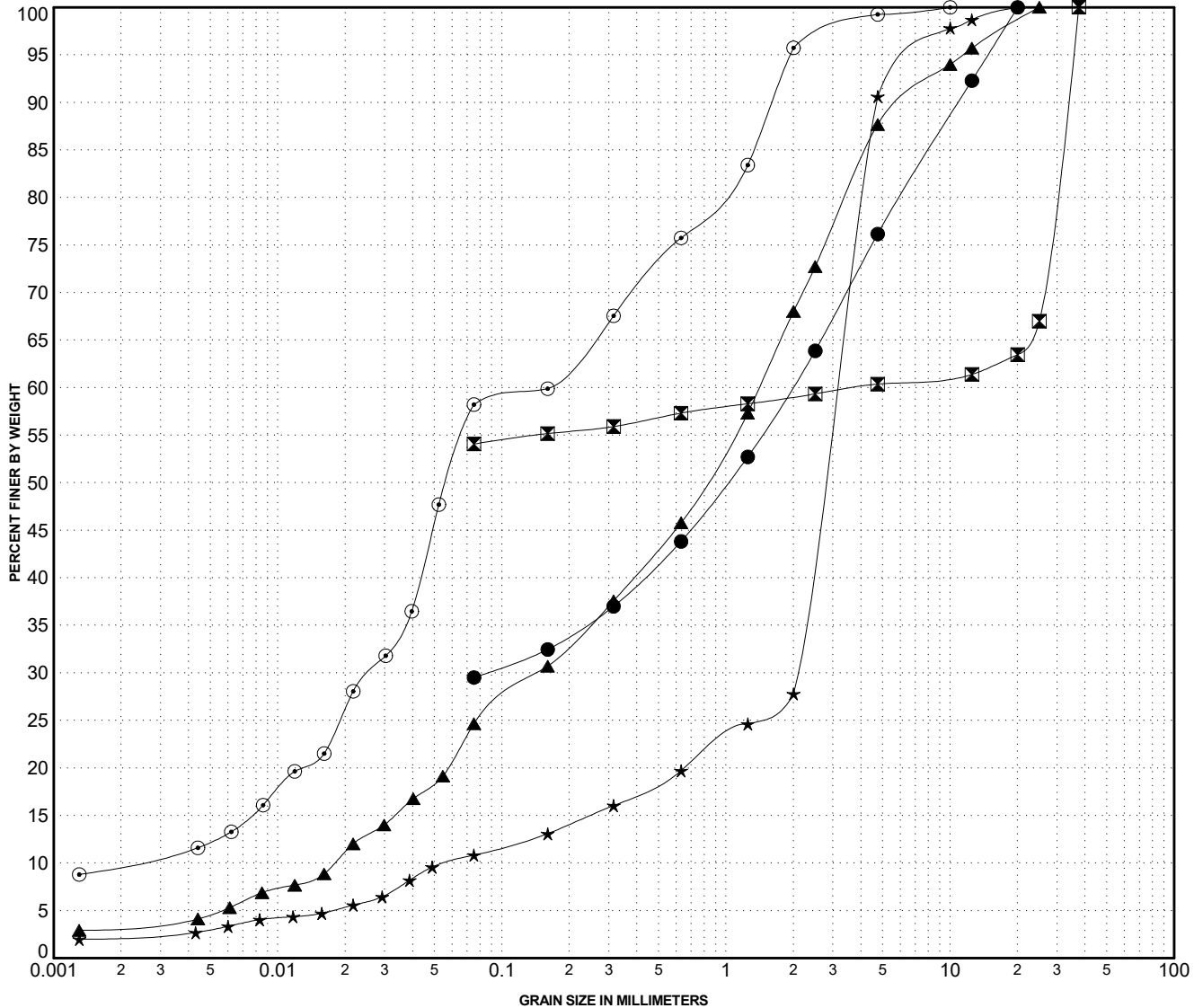
GRAIN SIZE ANALYSIS	Surfacing	SOURCE/TP#: 926-5573
Midnight Sun Drilling	Km 94	PROJECT NO: 552-202105-0115-0664-1
Terra Sonic	Coordinates:Z07N Nm Em	ELEVATION: m

Master Revised June 2017

Field #	Lab #	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu	D10
● 079	1545	0.1 to 0.2	SILTY SAND with GRAVEL(SM)	6.4	NP	NP	NP			
☒	1548	2.3 to 2.5	GRAVELLY ORGANIC SILT(OL)	3.3	NP	NP	NP			
▲ 085	1550	3.4 to 3.5	SILTY SAND(SM)	31.0	NP	NP	NP	0.8	78.4	0.02
★ 087	1551	4.3 to 4.4	POORLY GRADED SAND with SILT(SP-SM)	53.0	NP	NP	NP	24.2	55.2	0.06
⊙ 088	1552	4.9 to 5.0	SANDY SILT(ML)	156.9	NP	NP	NP	1.9	73.5	0.00

Field #	Lab #	100.0	80.0	50.0	25.0	20.0	12.5	10.0	5.0	2.0	0.850	0.400	0.250	0.160	0.080	% Breakdown			
																Gravel	Sand	Silt	Clay
● 079	1545	100.0	100.0	100.0	100.0	100.0	92.3	88.6	76.2	60.3	47.7	39.9	35.5	32.5	29.5	23.8	46.6	29.5	
☒	1548	100.0	100.0	100.0	67.0	63.5	61.4	61.2	60.4	59.0	57.7	56.5	55.7	55.2	54.1	39.6	6.3	54.1	
▲ 085	1550	100.0	100.0	100.0	100.0	98.6	95.7	94.0	87.7	68.0	50.8	41.1	35.2	30.7	24.7	12.3	63.0	21.3	3.3
★ 087	1551	100.0	100.0	100.0	100.0	100.0	98.7	97.8	90.6	27.8	21.9	17.6	15.0	13.1	10.8	9.4	79.8	8.6	2.2
⊙ 088	1552	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.3	95.7	79.1	71.1	64.9	59.9	58.2	0.7	41.0	48.4	9.8

Clay	Silt		Fine	Medium	Coarse	Fine	Medium	Coarse
	Fine Soil		Sand			Gravel		

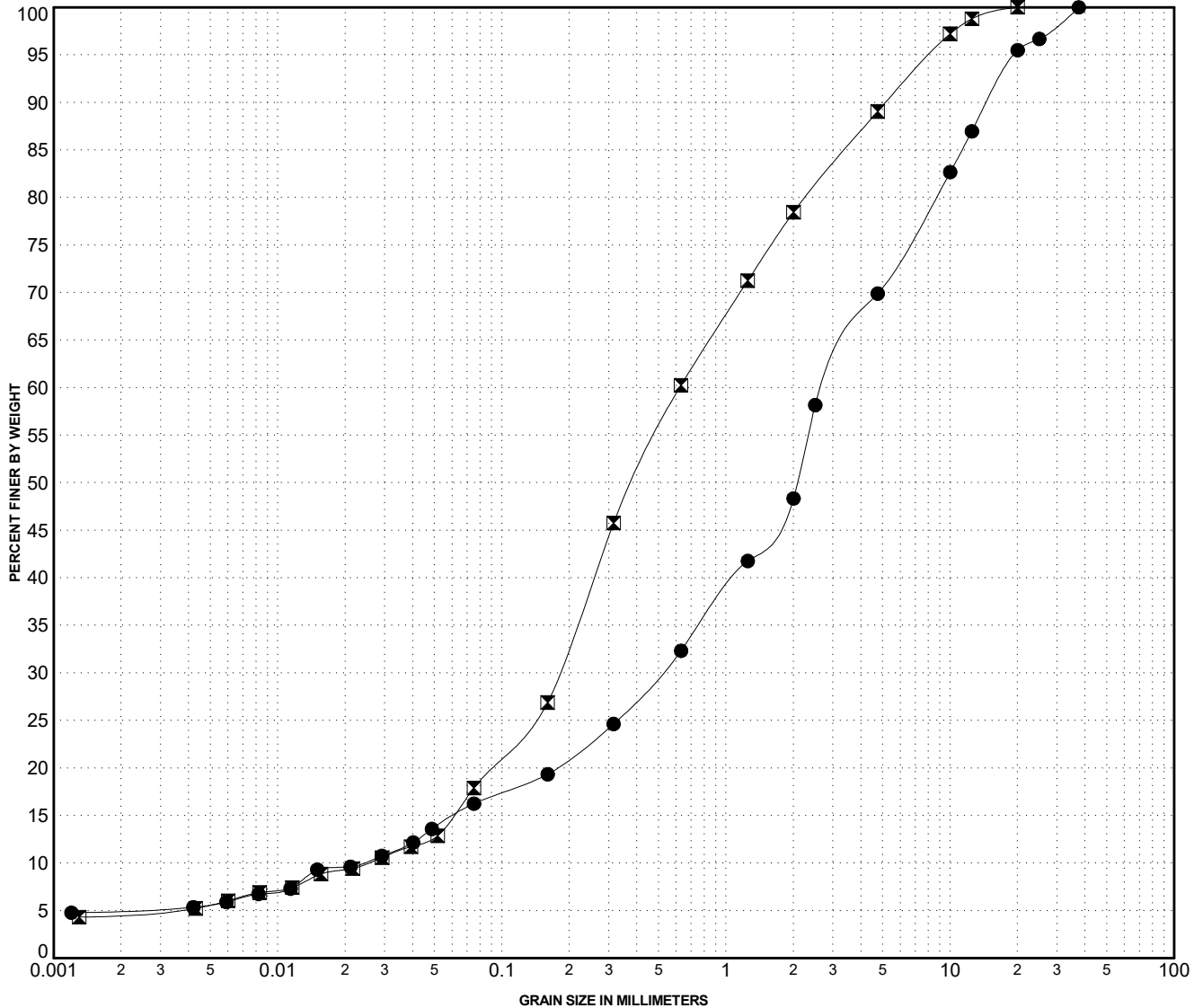


GRAIN SIZE ANALYSIS	Surfacing	SOURCE/TP#: 926-5573
Midnight Sun Drilling	Km 94	PROJECT NO: 552-202105-0115-0664-1
Terra Sonic	Coordinates:Z07N Nm Em	ELEVATION: m

Master Revised June 2017

Field #	Lab #	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu	D10										
● 089	1553	5.8 to 6.0	SILTY SAND with GRAVEL(SM)	23.7	NP	NP	NP	4.0	116.9	0.02										
☒ 092	1556	7.4 to 7.5	SILTY SAND(SM)	22.1	NP	NP	NP	2.0	24.8	0.03										
Field #	Lab #	100.0	80.0	50.0	25.0	20.0	12.5	10.0	5.0	2.0	0.850	0.400	0.250	0.160	0.080	% Breakdown				
● 089	1553	100.0	100.0	100.0	96.7	95.5	87.0	82.7	69.9	48.3	36.5	28.0	22.8	19.3	16.2	Gravel	Sand	Silt	Clay	
☒ 092	1556	100.0	100.0	100.0	100.0	100.0	98.8	97.2	89.0	78.5	65.1	52.0	39.3	26.9	17.9	11.0	71.2	13.3	4.6	

Clay	Silt		Fine	Medium	Coarse	Fine	Medium	Coarse
	Fine Soil		Sand			Gravel		



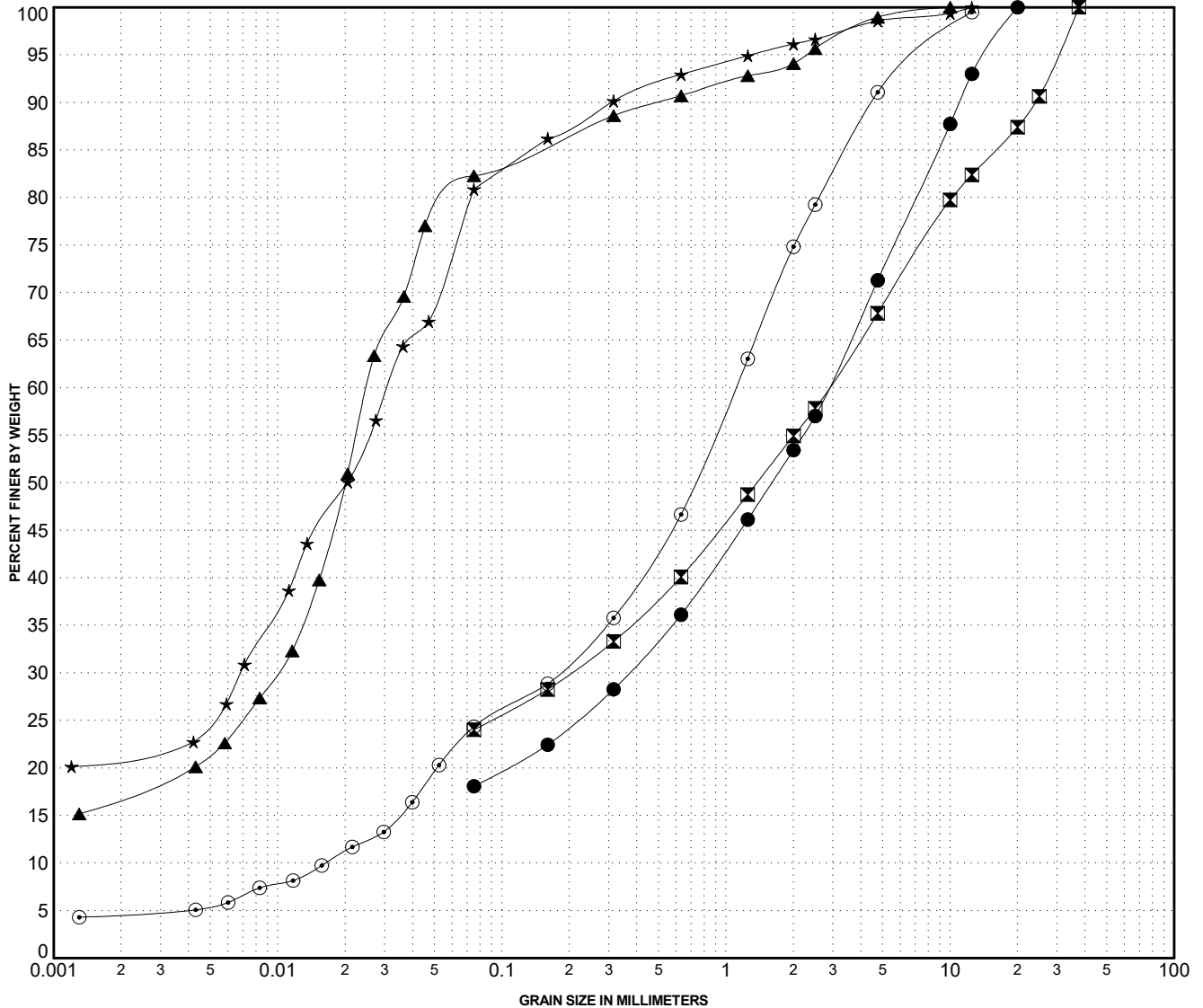
GRAIN SIZE ANALYSIS	Surfacing	SOURCE/TP#: 926-5574
Midnight Sun Drilling	Km 94	PROJECT NO: 552-202105-0115-0664-1
Terra Sonic	Coordinates:Z07N Nm Em	ELEVATION: m

Master Revised June 2017

Field #	Lab #	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu	D10
● 093	1557	0.0 to 0.2	SILTY SAND with GRAVEL(SM)	12.7	NP	NP	NP			
☒ 094	1558	0.8 to 0.9	SILTY SAND with GRAVEL(SM)	3.4	NP	NP	NP			
▲ 096	1560	2.5 to 2.6	SILT with SAND(ML)	75.4	NP	NP	NP			
★ 097	1561	2.9 to 3.0	SILT with SAND(ML)	45.5	NP	NP	NP			
⊙ 098	1562	3.3 to 3.4	SILTY SAND(SM)	18.1	NP	NP	NP	1.8	67.2	0.02

Field #	Lab #	100.0	80.0	50.0	25.0	20.0	12.5	10.0	5.0	2.0	0.850	0.400	0.250	0.160	0.080	% Breakdown			
																Gravel	Sand	Silt	Clay
● 093	1557	100.0	100.0	100.0	100.0	100.0	93.0	87.7	71.3	53.4	40.5	31.7	26.3	22.4	18.1	28.7	53.2	18.1	
☒ 094	1558	100.0	100.0	100.0	90.6	87.4	82.4	79.7	67.8	54.9	43.9	36.2	31.6	28.3	24.0	32.2	43.8	24.0	
▲ 096	1560	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.0	94.1	91.6	89.5	87.6	85.6	82.3	1.0	16.7	65.3	17.0
★ 097	1561	100.0	100.0	100.0	100.0	100.0	100.0	99.4	98.6	96.1	93.8	91.4	88.8	86.2	80.9	1.4	17.7	59.7	21.2
⊙ 098	1562	100.0	100.0	100.0	100.0	100.0	99.5	97.5	91.1	74.8	53.8	40.5	33.4	28.9	24.3	8.4	66.7	19.8	4.6

Clay	Silt		Fine	Medium	Coarse	Fine	Medium	Coarse
	Fine Soil		Sand			Gravel		

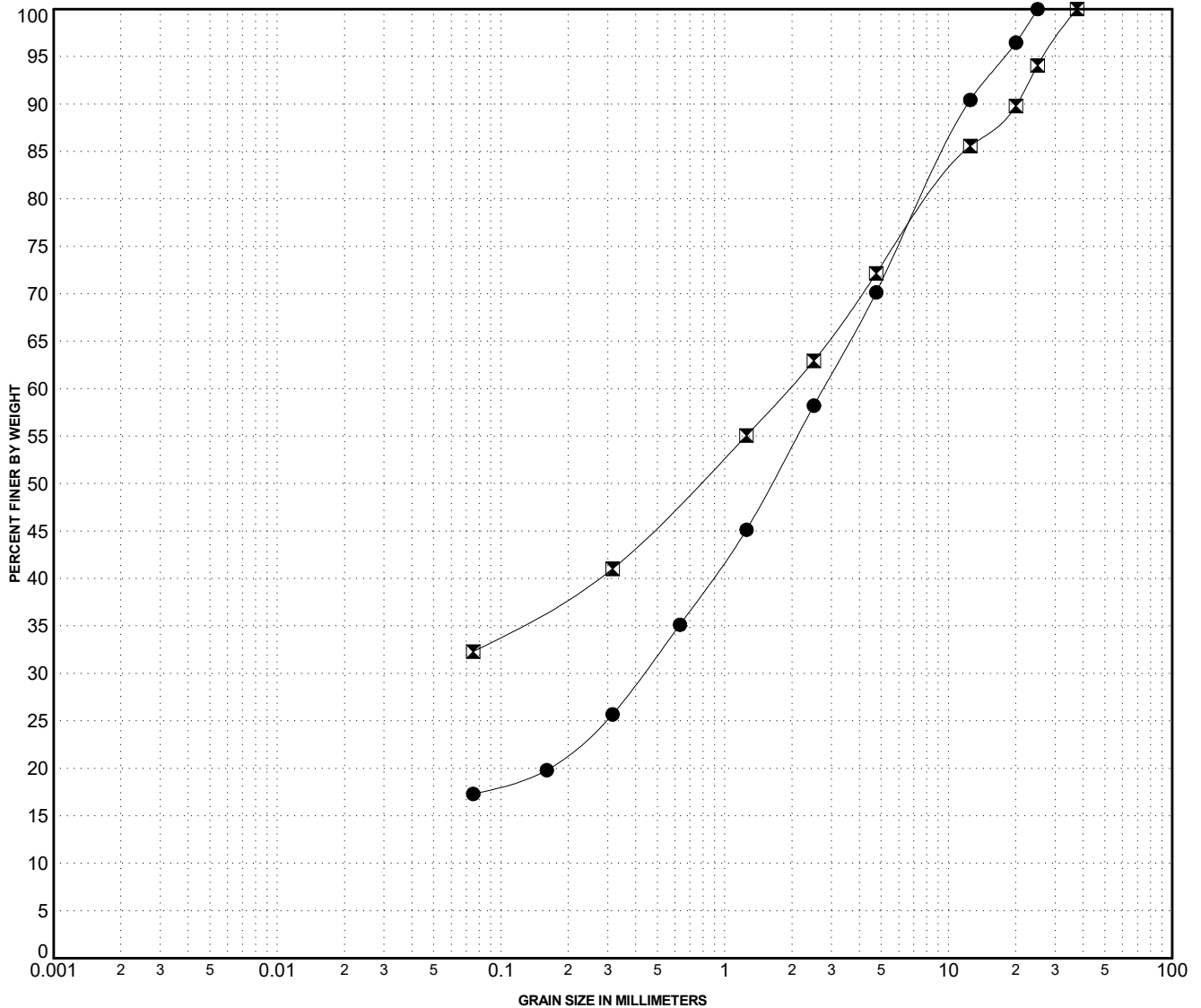


GRAIN SIZE ANALYSIS	Surfacing	SOURCE/TP#: 926-5574
Midnight Sun Drilling	Km 94	PROJECT NO: 552-202105-0115-0664-1
Terra Sonic	Coordinates:Z07N Nm Em	ELEVATION: m

Master Revised June 2017

Field #	Lab #	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu	D10										
● 099	1563	4.2 to 4.2	SILTY SAND with GRAVEL(SM)	15.4	NP	NP	NP													
☒ 102	1566	6.6 to 6.7	SILTY SAND with GRAVEL(SM)	13.2	NP	NP	NP													
Field #	Lab #	100.0	80.0	50.0	25.0	20.0	12.5	10.0	5.0	2.0	0.850	0.400	0.250	0.160	0.080	% Breakdown				
● 099	1563	100.0	100.0	100.0	100.0	96.5	90.4	85.8	70.2	54.0	39.5	29.8	23.7	19.8	17.3	Gravel	Sand	Silt	Clay	
☒ 102	1566	100.0	100.0	100.0	94.1	89.8	85.6	82.5	72.2	60.4	51.1	44.1	39.6	36.9	32.3	27.8	39.8		17.3	

Clay	Silt		Fine	Medium	Coarse	Fine	Medium	Coarse
	Fine Soil		Sand			Gravel		



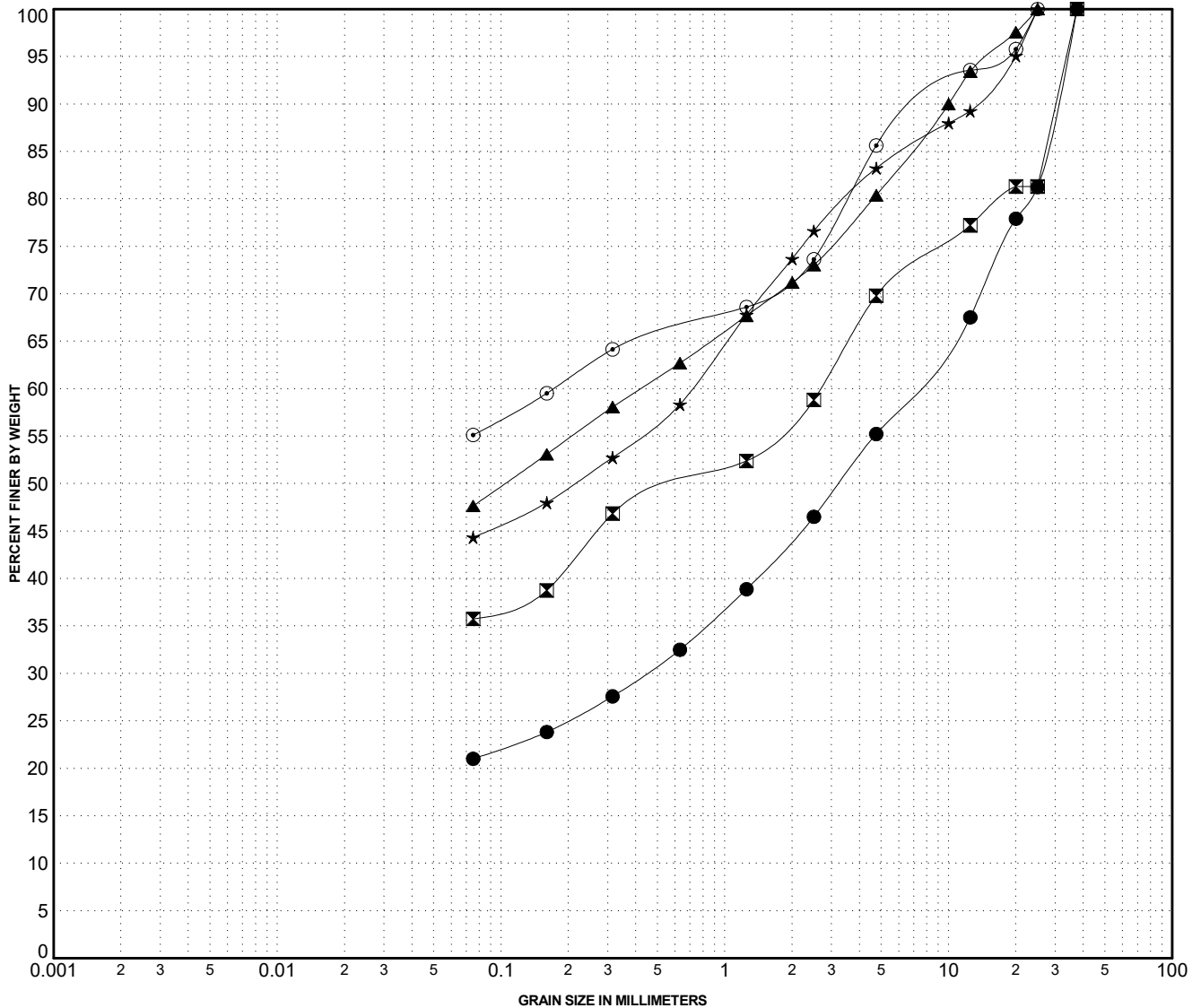
GRAIN SIZE ANALYSIS	Surfacing	SOURCE/TP#: 926-5575
Midnight Sun Drilling	Km 94	PROJECT NO: 552-202105-0115-0664-1
Terra Sonic	Coordinates:Z07N N7205465m E628647m	ELEVATION: m

Master Revised June 2017

Field #	Lab #	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu	D10
● 104	1568	1.3 to 1.4	SILTY GRAVEL with SAND(GM)	3.0	NP	NP	NP			
☒ 107	1571	5.3 to 5.5	SILTY SAND with GRAVEL(SM)	6.5	NP	NP	NP			
▲ 108	1572	6.0 to 6.1	SILTY SAND with GRAVEL(SM)	14.3	NP	NP	NP			
★ 109	1573	6.1 to 6.3	SILTY SAND with GRAVEL(SM)	26.1	NP	NP	NP			
⊙ 110	1574	6.6 to 6.8	SANDY SILT(ML)	26.5	NP	NP	NP			

Field #	Lab #	%PASSING														% Breakdown				
			100.0	80.0	50.0	25.0	20.0	12.5	10.0	5.0	2.0	0.850	0.400	0.250	0.160	0.080	Gravel	Sand	Silt	Clay
●	104	1568	100.0	100.0	100.0	81.3	77.9	67.5	64.7	55.2	44.1	35.3	29.7	26.3	23.8	21.0	44.8	34.2	21.0	
☒	107	1571	100.0	100.0	100.0	81.3	81.3	77.2	75.5	69.8	56.8	50.8	48.1	44.1	38.8	35.7	30.2	34.1	35.7	
▲	108	1572	100.0	100.0	100.0	100.0	97.6	93.4	90.0	80.4	71.2	64.9	60.1	56.4	53.1	47.7	19.6	32.7	47.7	
★	109	1573	100.0	100.0	100.0	100.0	95.1	89.3	88.0	83.2	73.7	62.5	55.2	51.1	48.0	44.3	16.8	38.9	44.3	
⊙	110	1574	100.0	100.0	100.0	100.0	95.8	93.6	91.7	85.6	72.0	67.4	65.1	62.6	59.5	55.1	14.4	30.5	55.1	

Clay	Silt	Fine	Medium	Coarse	Fine	Medium	Coarse
	Fine Soil	Sand			Gravel		

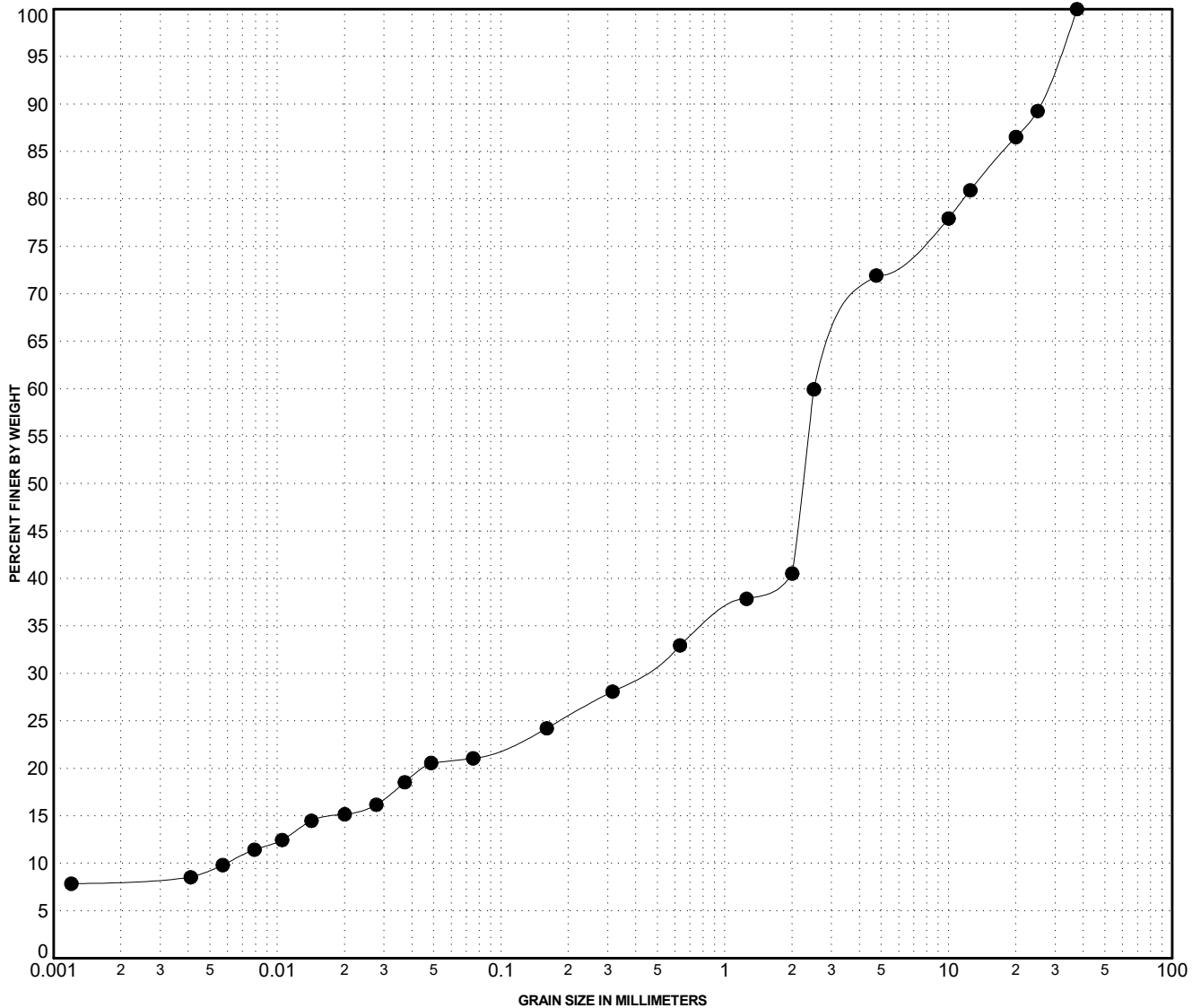


GRAIN SIZE ANALYSIS	Surfacing	SOURCE/TP#: 926-5575
Midnight Sun Drilling	Km 94	PROJECT NO: 552-202105-0115-0664-1
Terra Sonic	Coordinates:Z07N N7205465m E628647m	ELEVATION: m

Master Revised June 2017

Field #	Lab #	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu	D10									
● 111	1575	7.5 to 7.6	SILTY SAND with GRAVEL(SM)	9.0	NP	NP	NP	11.5	423.7	0.01									
Field #	Lab #	100.0	80.0	50.0	25.0	20.0	12.5	10.0	5.0	2.0	0.850	0.400	0.250	0.160	0.080	% Breakdown			
● 111	1575	100.0	100.0	100.0	89.3	86.5	80.9	77.9	71.9	40.5	35.1	30.2	26.8	24.2	21.1	Gravel	Sand	Silt	Clay
																28.1	50.9	12.9	8.1

Clay	Silt		Fine	Medium	Coarse	Fine	Medium	Coarse
	Fine Soil		Sand			Gravel		



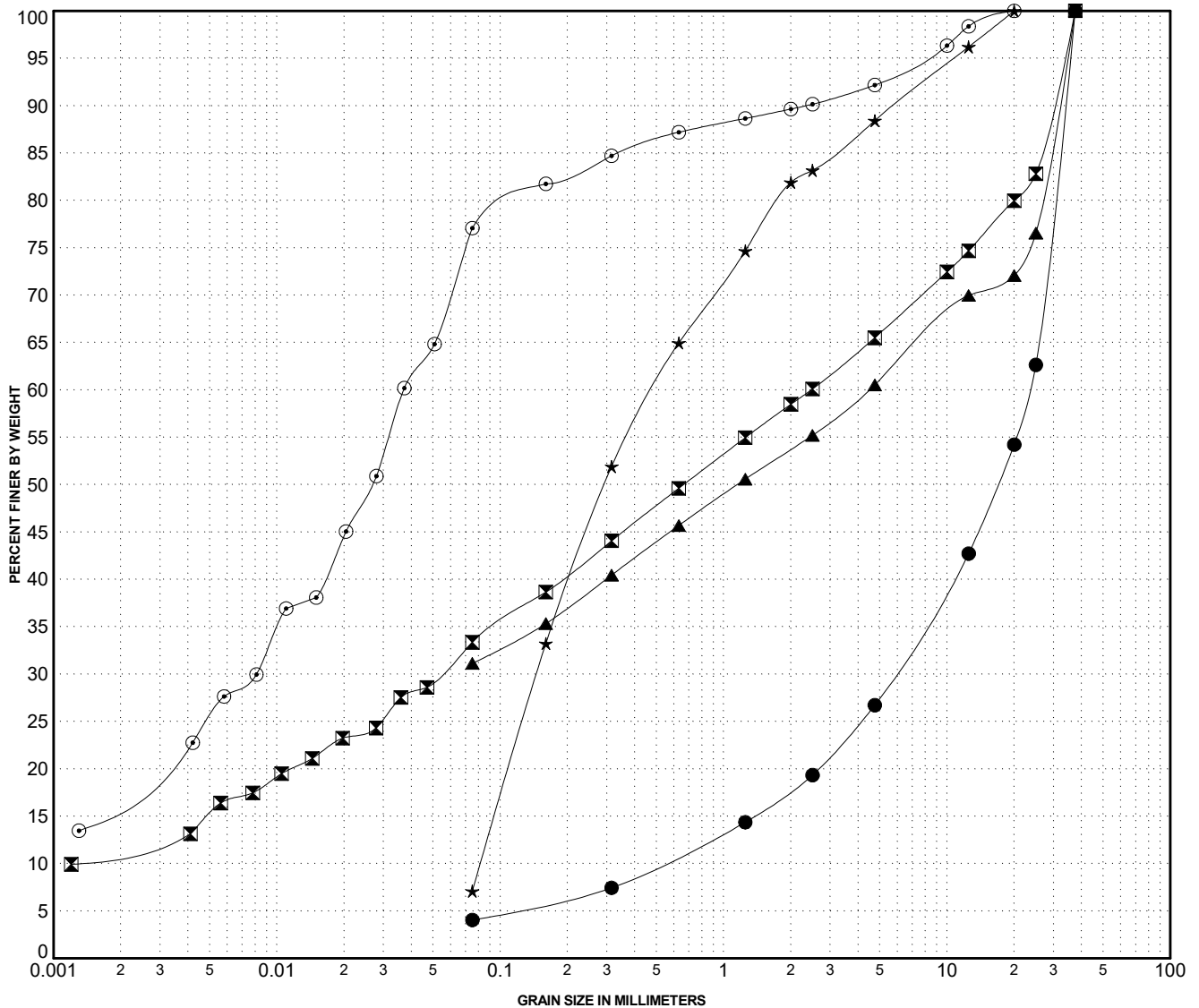
GRAIN SIZE ANALYSIS	Cache Creek	SOURCE/TP#: 926-5576
Midnight Sun Drilling	km 129	PROJECT NO: 552-202105-0115-0664-1
Terra Sonic	Coordinates:Z07N N7205507m E628728m	ELEVATION: m

Master Revised June 2017

Field #	Lab #	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu	D10
● 112	1577	1.8 to 1.9	WELL-GRADED GRAVEL with SAND(GW)	1.8	NP	NP	NP	2.7	44.4	0.52
☒ 113	1578	2.4 to 2.5	SILTY GRAVEL with SAND(GM)	8.0	NP	NP	NP	1.0	1992.4	0.00
▲ 115	1580	3.8 to 3.9	SILTY GRAVEL with SAND(GM)	7.3	NP	NP	NP			
★ 118	1583	6.1 to 6.6	POORLY GRADED SAND with SILT(SP-SM)	16.2	NP	NP	NP	0.5	5.9	0.08
⊙ 119	1584	6.7 to 6.8	SILT with SAND(ML)	18.8	NP	NP	NP			

Field #	Lab #	%PASSING	Sieve Analysis													% Breakdown				
			100.0	80.0	50.0	25.0	20.0	12.5	10.0	5.0	2.0	0.850	0.400	0.250	0.160	0.080	Gravel	Sand	Clay	
● 112	1577		100.0	100.0	100.0	62.6	54.2	42.7	39.0	26.7	17.7	12.4	8.9	6.9	5.8	4.0	73.3	22.7	4.0	
☒ 113	1578		100.0	100.0	100.0	82.8	80.0	74.7	72.4	65.5	58.5	51.9	46.5	42.2	38.7	33.3	34.5	32.1	22.1	11.3
▲ 115	1580		100.0	100.0	100.0	76.5	72.1	70.0	67.8	60.5	53.7	47.8	42.7	38.7	35.3	31.1	39.5	29.4		31.1
★ 118	1583		100.0	100.0	100.0	100.0	100.0	96.2	94.4	88.4	81.9	69.2	57.5	45.5	33.2	7.1	11.6	81.3		7.1
⊙ 119	1584		100.0	100.0	100.0	100.0	100.0	98.4	96.3	92.2	89.6	87.8	85.8	83.7	81.7	77.1	7.8	15.1	60.2	16.9

Clay	Silt		Fine	Medium	Coarse	Fine	Medium	Coarse
	Fine Soil		Sand			Gravel		

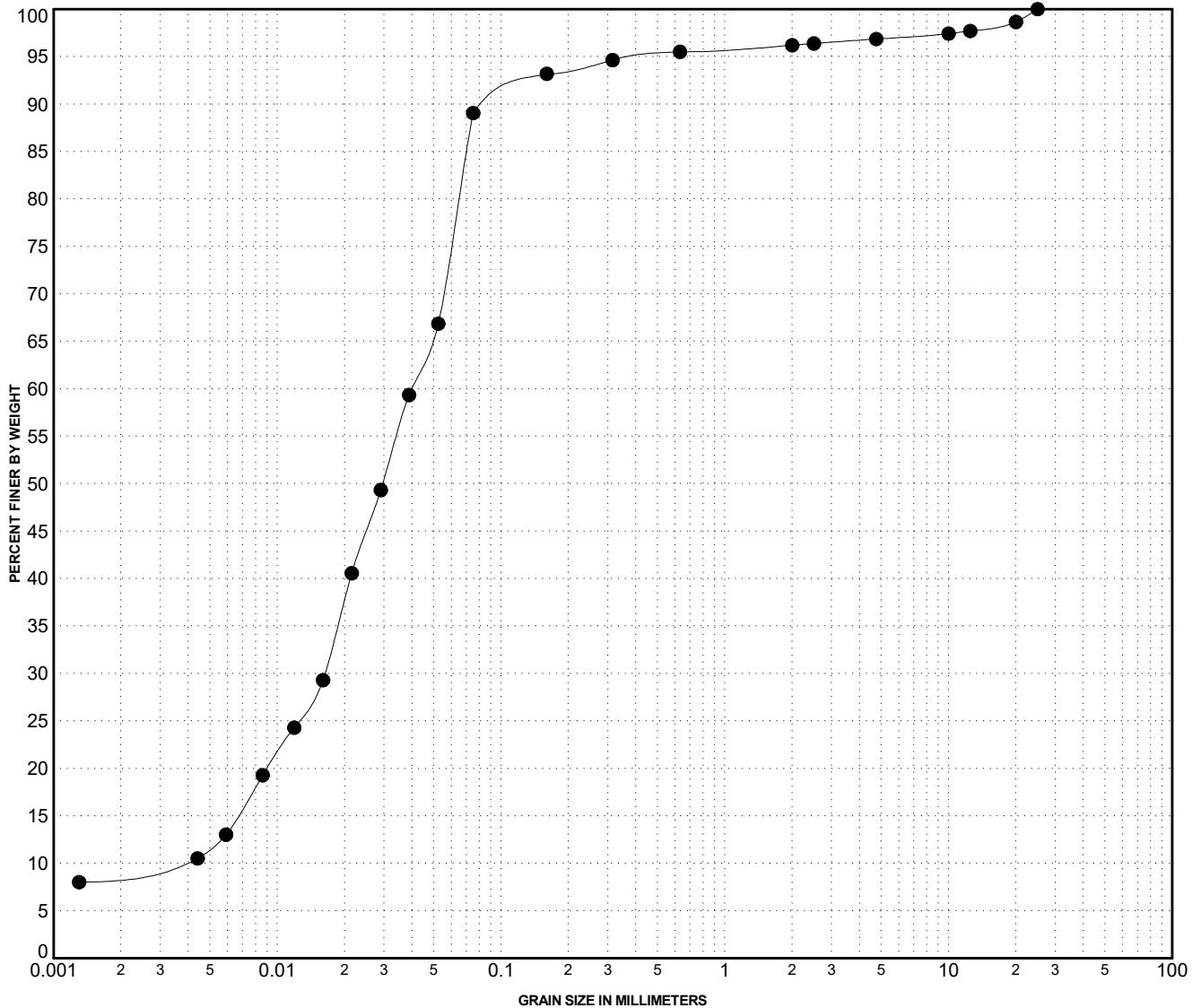


GRAIN SIZE ANALYSIS	Cache Creek	SOURCE/TP#: 926-5576
Midnight Sun Drilling	km 129	PROJECT NO: 552-202105-0115-0664-1
Terra Sonic	Coordinates:Z07N N7205507m E628728m	ELEVATION: m

Master Revised June 2017

Field #	Lab #	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu	D10										
● 123	1588	8.6 to 8.7	SILT(ML)	21.7	NP	NP	NP	1.9	11.6	0.00										
Field #	Lab #	100.0	80.0	50.0	25.0	20.0	12.5	10.0	5.0	2.0	0.850	0.400	0.250	0.160	0.080	% Breakdown				
● 123	1588	100.0	100.0	100.0	100.0	98.7	97.7	97.4	96.9	96.2	95.7	95.0	94.1	93.2	89.1	Gravel	Sand	Silt	Clay	
																3.1	7.8	80.2	8.9	

Clay	Silt		Fine	Medium	Coarse	Fine	Medium	Coarse
	Fine Soil		Sand			Gravel		

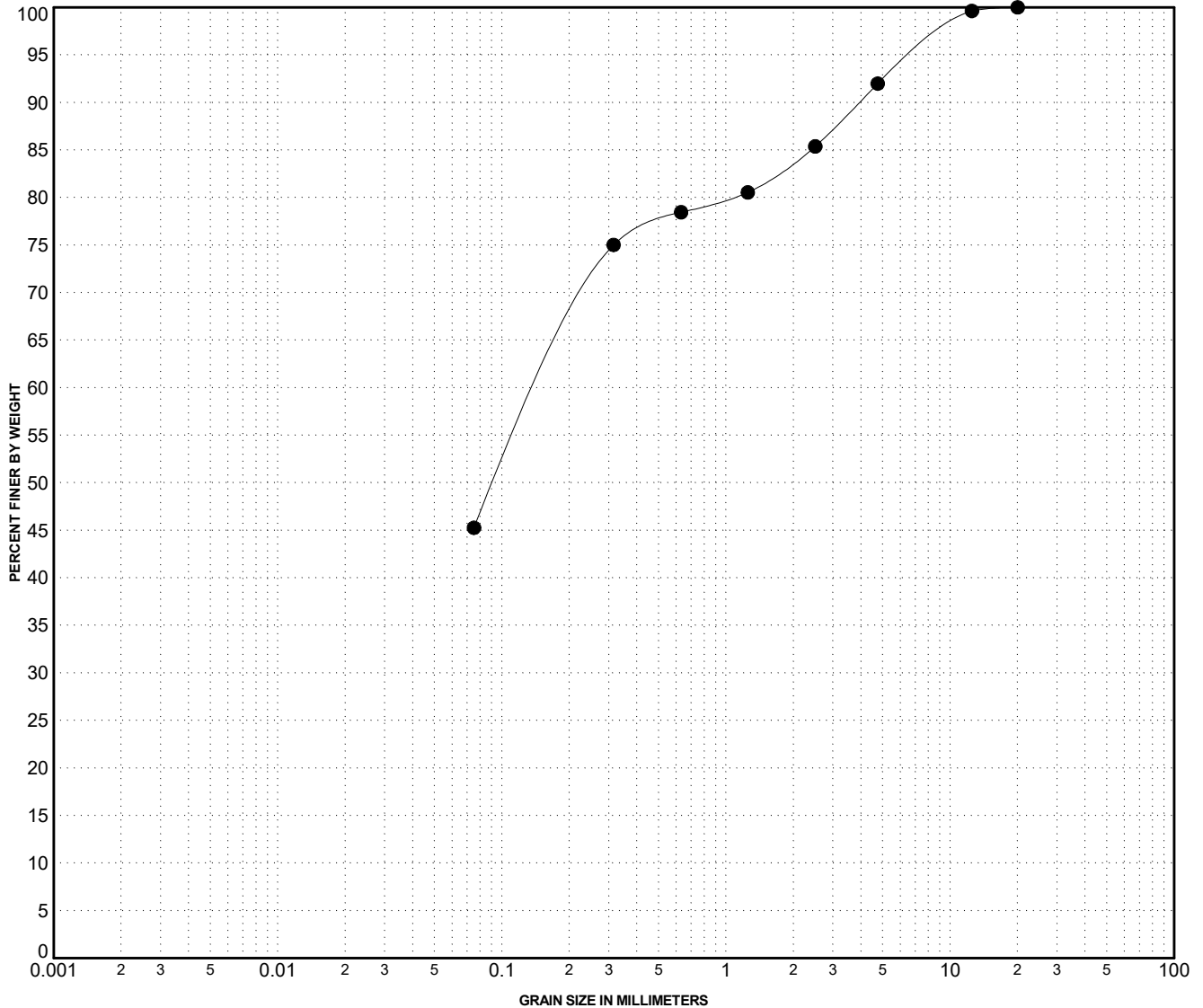


GRAIN SIZE ANALYSIS	Cache Creek	SOURCE/TP#: 926-5577
Midnight Sun Drilling	km 129	PROJECT NO: 552-202105-0115-0664-1
Terra Sonic	Coordinates:Z07N N7205465m E628647m	ELEVATION: m

Master Revised June 2017

Field #	Lab #	Depth	Classification													%H2O	LL	PL	PI	Cc	Cu	D10
● 126	1590	0.4 to 0.6	SILTY SAND(SM)													24.1	NP	NP	NP			
Field #	Lab #	100.0	80.0	50.0	25.0	20.0	12.5	10.0	5.0	2.0	0.850	0.400	0.250	0.160	0.080	% Breakdown						
● 126	1590	100.0	100.0	100.0	100.0	100.0	99.6	97.9	92.0	83.8	79.4	76.5	70.2	61.0	45.3	Gravel	Sand	Silt	Clay			
																8.0	46.7		45.3			

Clay	Silt		Fine	Medium	Coarse	Fine	Medium	Coarse
	Fine Soil		Sand			Gravel		



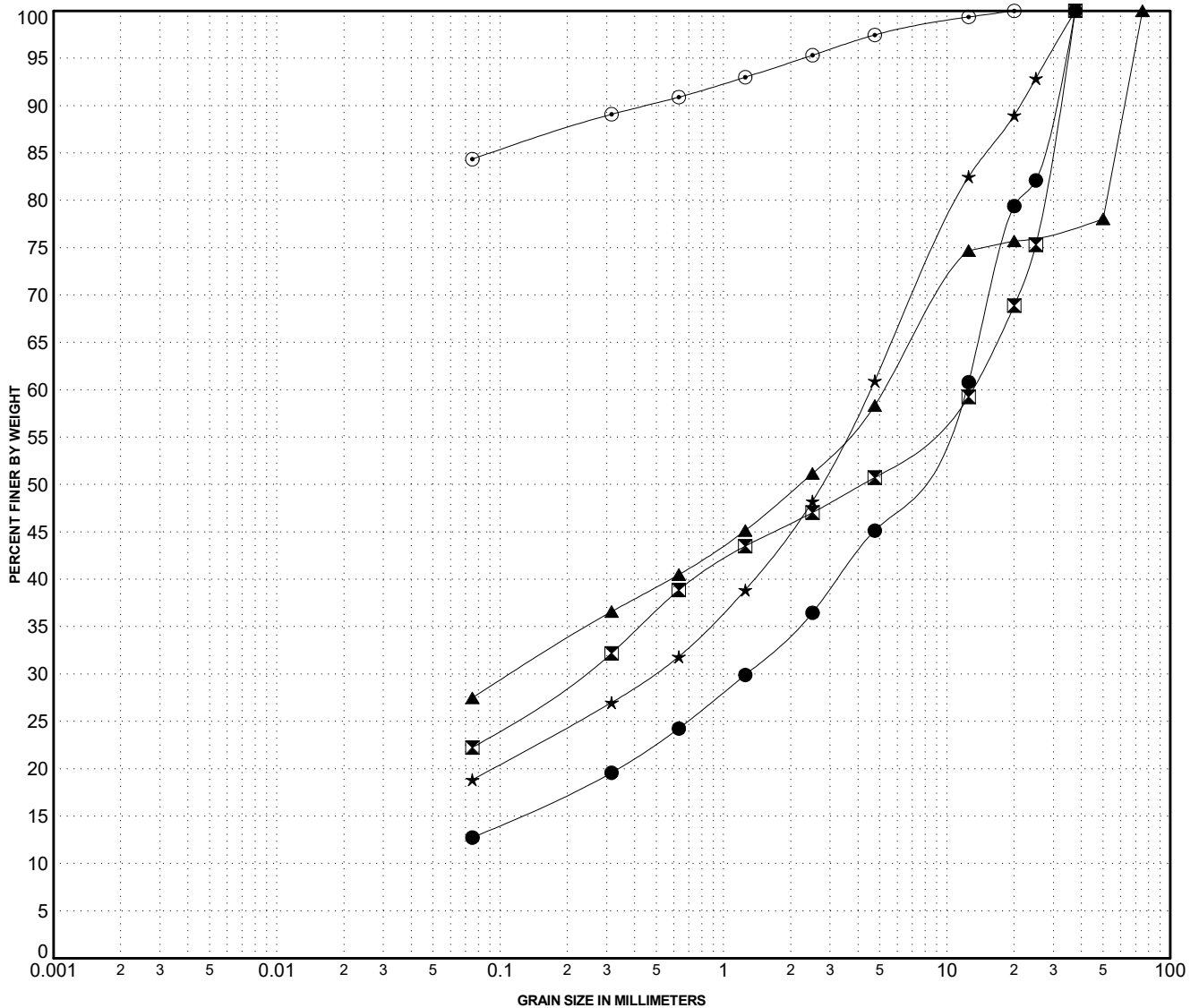
GRAIN SIZE ANALYSIS	Cache Creek	SOURCE/TP#: 926-5578
Midnight Sun Drilling	km 129	PROJECT NO: 552-202105-0115-0664-1
Terra Sonic	Coordinates:Z07N N7205465m E628647m	ELEVATION: m

Master Revised June 2017

Field #	Lab #	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu	D10
● 132	1596	1.1 to 1.2	SILTY GRAVEL with SAND(GM)	3.9	NP	NP	NP			
☒ 133	1597	1.7 to 1.8	SILTY GRAVEL with SAND(GM)	8.5	NP	NP	NP			
▲ 135	1599	2.7 to 2.8	SILTY GRAVEL with SAND(GM)	5.7	NP	NP	NP			
★ 138	1602	4.3 to 4.4	SILTY SAND with GRAVEL(SM)	9.2	NP	NP	NP			
⊙ 140	1604	5.1 to 5.2	SILT with SAND(ML)	19.2	NP	NP	NP			

Field #	Lab #	%PASSING													% Breakdown				
			100.0	80.0	50.0	25.0	20.0	12.5	10.0	5.0	2.0	0.850	0.400	0.250	0.160	0.080	Gravel	Sand	Silt
● 132	1596	100.0	100.0	100.0	100.0	82.1	79.4	60.8	57.2	45.1	34.4	26.7	21.6	18.5	16.4	12.7	54.9	32.4	12.7
☒ 133	1597	100.0	100.0	100.0	75.3	68.9	59.3	57.3	50.7	45.9	40.9	35.1	30.6	27.5	22.2	49.3	28.5	22.2	
▲ 135	1599	100.0	100.0	78.0	76.3	75.7	74.7	70.9	58.3	49.2	42.5	38.3	35.1	32.3	27.5	41.7	30.9	27.5	
★ 138	1602	100.0	100.0	100.0	92.9	89.0	82.5	77.5	61.0	45.2	34.9	29.1	25.7	23.1	18.9	39.0	42.1	18.9	
⊙ 140	1604	100.0	100.0	100.0	100.0	100.0	99.4	98.9	97.5	94.6	91.8	89.9	88.3	86.9	84.4	2.5	13.1	84.4	

Clay	Silt		Fine	Medium	Coarse	Fine	Medium	Coarse
	Fine Soil		Sand			Gravel		



GRAIN SIZE ANALYSIS	Cache Creek	SOURCE/TP#: 926-5578
Midnight Sun Drilling	km 129	PROJECT NO: 552-202105-0115-0664-1
Terra Sonic	Coordinates:Z07N N7205465m E628647m	ELEVATION: m

Master Revised June 2017

Field #	Lab #	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu	D10
● 142	1606	5.7 to	SILTY SAND with GRAVEL(SM)	10.0	NP	NP	NP			
☒ 144	1608	6.2 to 6.3	SILTY SAND with GRAVEL(SM)	14.1	NP	NP	NP	1.2	477.6	0.00
▲ 145	1609	6.7 to 6.9	SILTY SAND with GRAVEL(SM)	13.8	NP	NP	NP			
★	1612	7.6 to 7.8	SILTY SAND with GRAVEL(SM)	12.8	NP	NP	NP			
⊙ 149	1614	8.8 to 9.0	SILTY SAND with GRAVEL(SM)	11.4	NP	NP	NP			

Field #	Lab #	100.0	80.0	50.0	25.0	20.0	12.5	10.0	5.0	2.0	0.850	0.400	0.250	0.160	0.080	% Breakdown			
																Gravel	Sand	Silt	Clay
●	142	100.0	100.0	100.0	84.4	82.2	80.0	77.7	70.3	62.2	55.9	50.4	46.0	42.6	36.7	29.7	33.6		36.7
☒	144	100.0	100.0	100.0	95.5	93.9	91.1	87.9	76.1	59.3	48.0	41.6	37.0	33.2	27.1	23.9	49.0	19.5	7.6
▲	145	100.0	100.0	100.0	94.5	94.2	93.3	91.4	84.8	74.3	64.6	56.2	49.1	42.6	31.5	15.2	53.3		31.5
★	1612	100.0	100.0	100.0	95.5	94.1	89.8	88.0	81.8	75.2	69.1	61.6	53.8	46.6	34.3	18.2	47.6		34.3
⊙	149	100.0	100.0	100.0	93.2	87.5	79.6	76.3	65.4	54.9	49.4	43.5	37.5	32.2	23.1	34.6	42.3		23.1

Clay	Silt	Fine	Medium	Coarse	Fine	Medium	Coarse
	Fine Soil	Sand			Gravel		

