

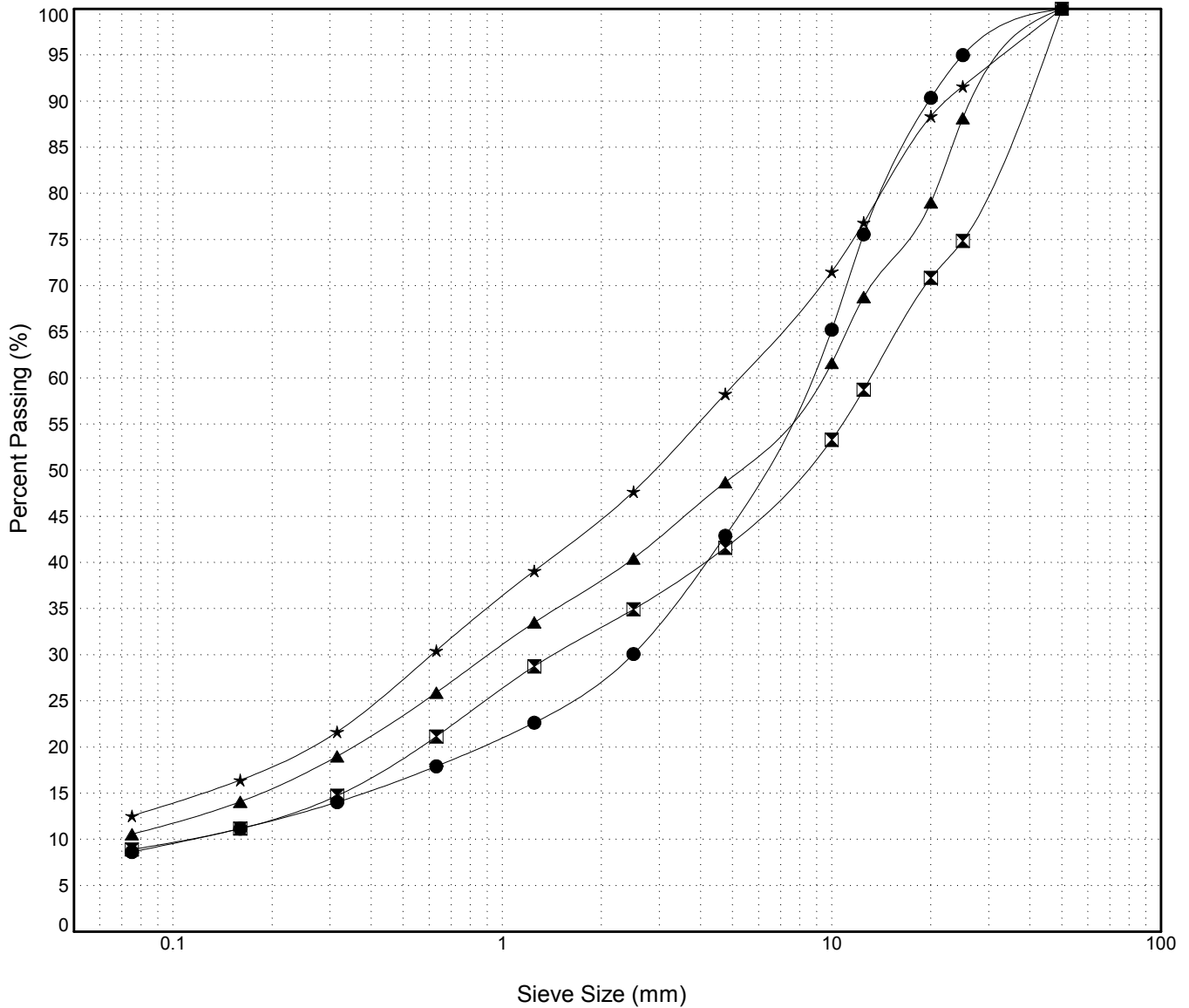
GRAIN SIZE ANALYSIS	Hunker Creek CL Drilling	SOURCE/TP#: 850-4911
Midnight Sun Drilling	km 701.9 LHS	PROJECT NO: 552-202102-1209-1-1
MARL M4CT	Coordinates:Z07W N7101942m E587850.6m	ELEVATION: m

Master Revised July 2013

Field #	Lab #	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu
● 001		0.2 to 0.6	POORLY GRADED GRAVEL with SILT and SAND(GP-GM)	11.1	NP	NP	NP	6.5	74.4
☒ 002		2.1 to 2.6	WELL-GRADED GRAVEL with SILT and SAND(GW-GM)	2.2	NP	NP	NP	1.5	121.4
▲ 003		3.2 to 4.0	WELL-GRADED GRAVEL with SILT and SAND(GW-GM)	3.8	NP	NP	NP	1.4	136.9
★ 004		5.0 to 5.4	SILTY SAND with GRAVEL(SM)	9.3	NP	NP	NP		

Field #	Lab #	% PASSING														% Breakdown			
		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	Gravel	Sand	Silt	Clay
● 001		100.0	100.0	100.0	95.0	90.4	75.6	65.2	42.9	30.1	22.6	17.9	14.0	11.2	8.6	57.1	34.3	8.6	
☒ 002		100.0	100.0	100.0	74.9	70.9	58.7	53.3	41.6	34.9	28.8	21.2	14.7	11.2	8.9	58.4	32.7	8.9	
▲ 003		100.0	100.0	100.0	88.2	79.0	68.8	61.6	48.7	40.5	33.5	25.9	19.0	14.1	10.6	51.3	38.1	10.6	
★ 004		100.0	100.0	100.0	91.6	88.4	76.8	71.5	58.3	47.7	39.1	30.4	21.7	16.4	12.5	41.7	45.7	12.5	

Silt	Sand			Gravel	
	Fine	Medium	Coarse	Fine	Coarse



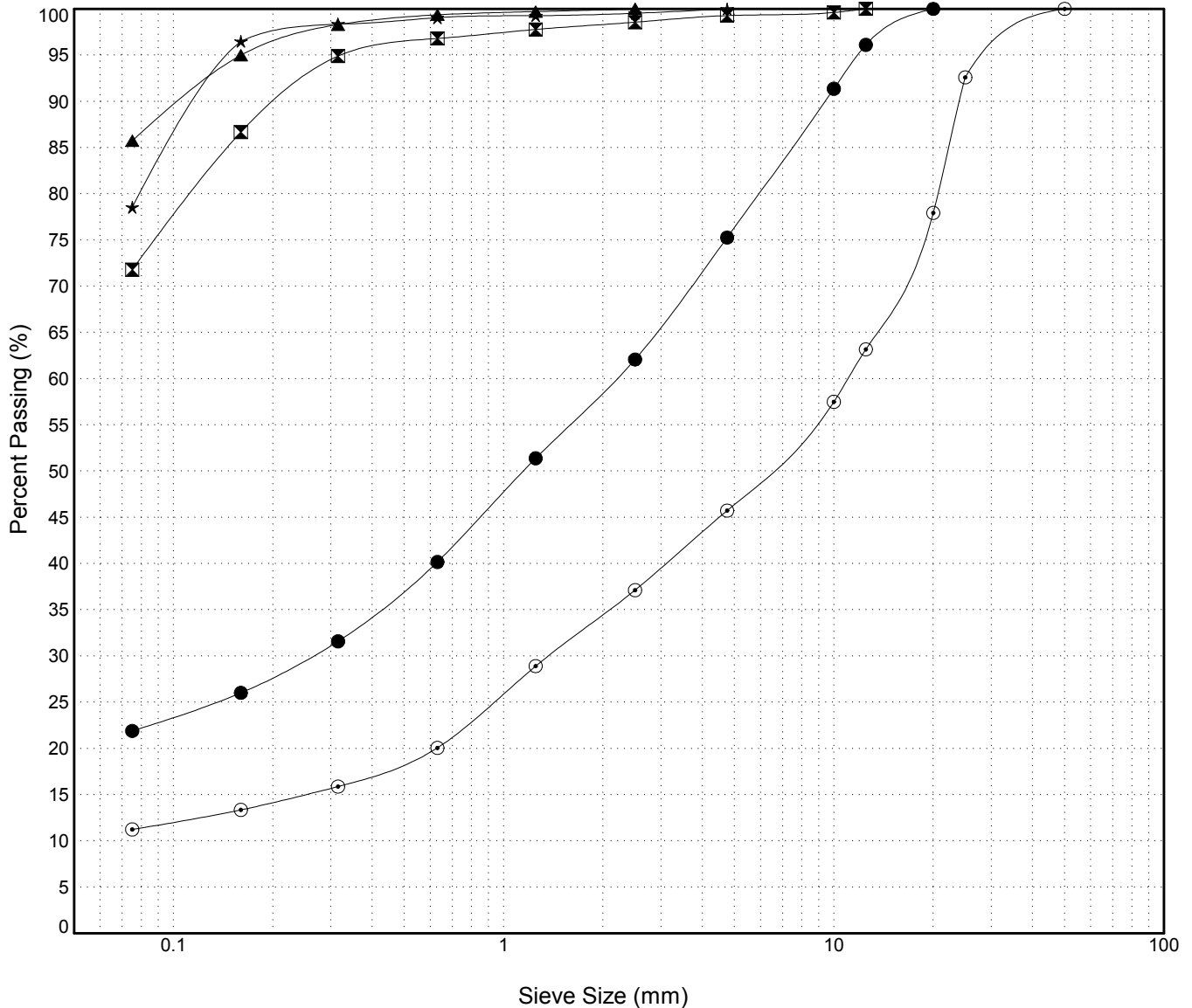
GRAIN SIZE ANALYSIS	Hunker Creek CL Drilling	SOURCE/TP#: 850-4912
Midnight Sun Drilling	km 701.8 LHS	PROJECT NO: 552-202102-1209-1-1
MARL M4CT	Coordinates:Z07W N7101945m E587950.4m	ELEVATION: m

Master Revised July 2013

Field #	Lab #	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu
● 005		0.2 to 0.6	SILTY SAND with GRAVEL(SM)	4.5	NP	NP	NP		
☒ 006		1.0 to 1.3	SILT with SAND(ML)	23.9	NP	NP	NP		
▲ 007		2.5 to 2.8	ORGANIC SILT(OL)	33.4	NP	NP	NP		
★ 008		3.6 to 4.0	ORGANIC SILT with SAND(OL)	42.4	NP	NP	NP		
⊙ 009		5.2 to 5.6	POORLY GRADED GRAVEL with SILT and SAND(GP-GM)	10.5	NP	NP	NP	3.5	228.5

Field #	Lab #	%PASSING	Sieve Size (mm)													% Breakdown			
			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	Gravel	Sand	Silt
● 005		100.0	100.0	100.0	100.0	100.0	96.1	91.4	75.3	62.1	51.4	40.2	31.6	26.0	21.9	24.7	53.4	21.9	
☒ 006		100.0	100.0	100.0	100.0	100.0	100.0	99.6	99.3	98.6	97.8	96.8	94.9	86.7	71.8	0.7	27.5	71.8	
▲ 007		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.7	99.4	98.3	95.0	85.7	0.0	14.3	85.7	
★ 008		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.5	99.3	99.1	98.4	96.5	78.6	0.0	21.4	78.6	
⊙ 009		100.0	100.0	100.0	92.6	77.9	63.2	57.5	45.7	37.1	28.9	20.1	15.9	13.4	11.2	54.3	34.5	11.2	

Silt	Sand			Gravel	
	Fine	Medium	Coarse	Fine	Coarse



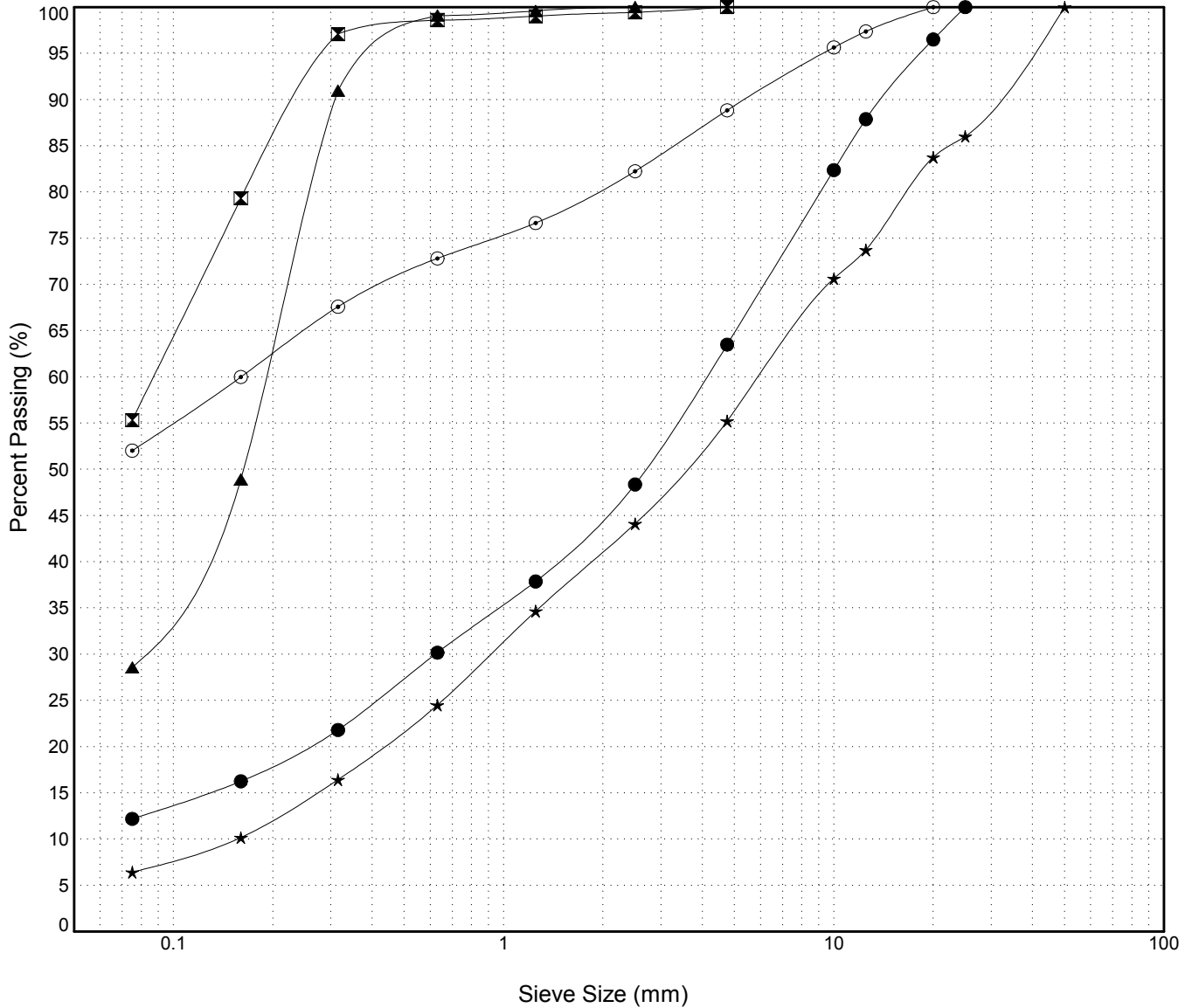
GRAIN SIZE ANALYSIS	Hunker Creek CL Drilling	SOURCE/TP#: 850-4913
Midnight Sun Drilling	km 701.7 LHS	PROJECT NO: 552-202102-1209-1-1
MARL M4CT	Coordinates:Z07W N7101937m E588046.4m	ELEVATION: m

Master Revised July 2013

Field #	Lab #	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu
● 010		0.6 to 0.9	SILTY SAND with GRAVEL(SM)	2.2	NP	NP	NP	1.9	82.2
☒ 011		1.4 to 1.8	SANDY SILT(ML)	20.3	NP	NP	NP		
▲ 012		2.2 to 2.6	SILTY SAND(SM)	22.5	NP	NP	NP		
★ 013		3.2 to 3.6	POORLY GRADED SAND with SILT and GRAVEL(SP-SM)	9.6	NP	NP	NP	0.9	38.6
⊙ 014		4.2 to 4.4	SANDY SILT(ML)	34.0	NP	NP	NP		

Field #	Lab #	%PASSING	Sieve Size (mm)													% Breakdown			
			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	Gravel	Sand	Silt
● 010		100.0	100.0	100.0	100.0	96.5	87.9	82.4	63.5	48.4	37.9	30.2	21.8	16.3	12.2	36.5	51.3	12.2	
☒ 011		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.4	99.0	98.6	97.1	79.3	55.3	0.0	44.7	55.3	
▲ 012		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.6	99.1	91.0	48.9	28.6	0.0	71.4	28.6	
★ 013		100.0	100.0	100.0	86.0	83.8	73.7	70.6	55.2	44.1	34.7	24.5	16.4	10.2	6.4	44.8	48.8	6.4	
⊙ 014		100.0	100.0	100.0	100.0	100.0	97.4	95.6	88.8	82.2	76.6	72.8	67.6	60.0	52.0	11.2	36.8	52.0	

Silt	Sand			Gravel	
	Fine	Medium	Coarse	Fine	Coarse

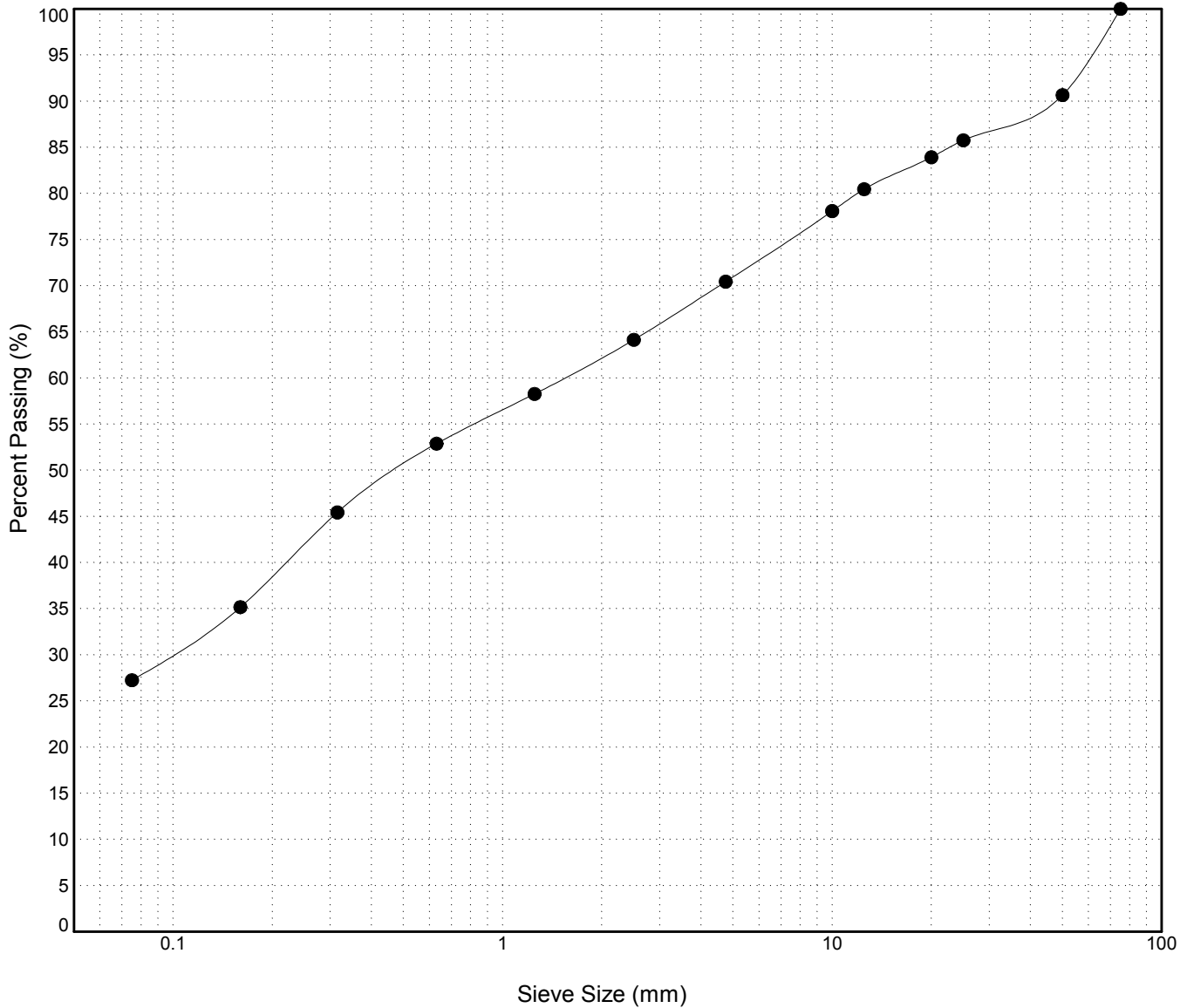


GRAIN SIZE ANALYSIS	Hunker Creek CL Drilling	SOURCE/TP#: 850-4913
Midnight Sun Drilling	km 701.7 LHS	PROJECT NO: 552-202102-1209-1-1
MARL M4CT	Coordinates:Z07W N7101937m E588046.4m	ELEVATION: m

Master Revised July 2013

Field #	Lab #	Depth	Classification											%H2O	LL	PL	PI	Cc	Cu
● 015		5.0 to 5.3	SILTY SAND with GRAVEL(SM)											18.2	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			
● 015		100.0	100.0	90.7	85.8	83.9	80.5	78.1	70.4	64.1	58.3	52.9	45.4	35.2	27.2	Gravel	Sand	Silt	Clay
																29.6	43.2	27.2	

Silt	Sand			Gravel	
	Fine	Medium	Coarse	Fine	Coarse



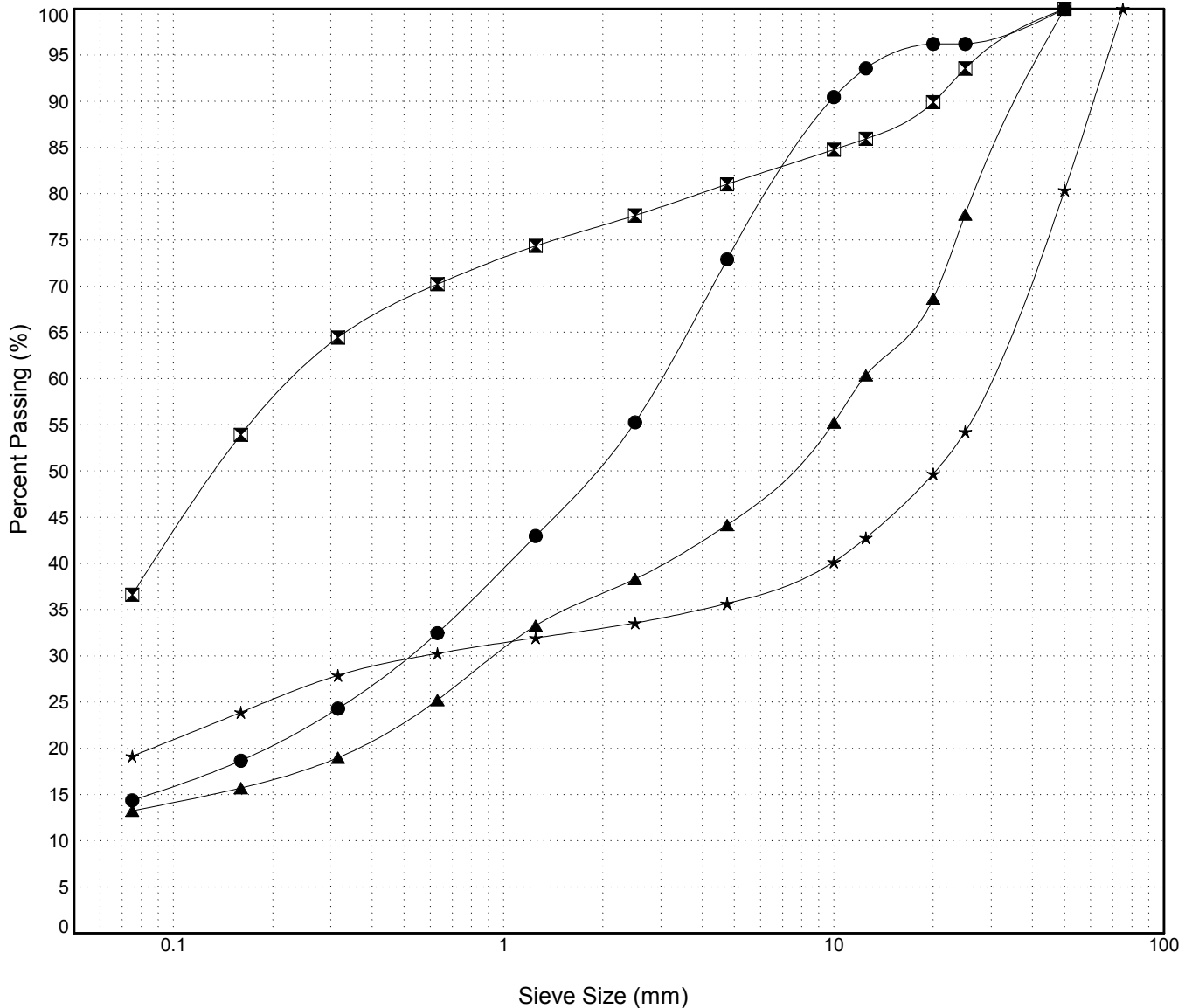
GRAIN SIZE ANALYSIS	Hunker Creek CL Drilling	SOURCE/TP#: 850-4914
Midnight Sun Drilling	km 701.6 LHS	PROJECT NO: 552-202102-1209-1-1
MARL M4CT	Coordinates:Z07W N7101918m E588141.3m	ELEVATION: m

Master Revised July 2013

Field #	Lab #	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu
● 016		0.0 to 0.6	SILTY SAND with GRAVEL(SM)	13.4	NP	NP	NP		
☒ 017		2.2 to 2.6	SILTY SAND with GRAVEL(SM)	24.0	NP	NP	NP		
▲ 018		3.6 to 4.2	SILTY GRAVEL with SAND(GM)	10.0	NP	NP	NP		
★ 019		5.5 to 5.8	SILTY GRAVEL with SAND(GM)	12.8	NP	NP	NP		

Field #	Lab #	%PASSING	Sieve Size (mm)													% Breakdown		
			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	Gravel	Sand
● 016		100.0	100.0	100.0	96.2	96.2	93.6	90.5	72.9	55.3	43.0	32.5	24.3	18.7	14.4	27.1	58.5	14.4
☒ 017		100.0	100.0	100.0	93.6	89.9	85.9	84.8	81.0	77.7	74.4	70.2	64.5	53.9	36.6	19.0	44.4	36.6
▲ 018		100.0	100.0	100.0	77.8	68.7	60.4	55.2	44.2	38.3	33.3	25.2	19.0	15.7	13.3	55.8	30.9	13.3
★ 019		100.0	100.0	80.4	54.3	49.7	42.8	40.2	35.7	33.6	32.0	30.3	27.9	23.9	19.2	64.3	16.5	19.2

Silt	Sand			Gravel	
	Fine	Medium	Coarse	Fine	Coarse



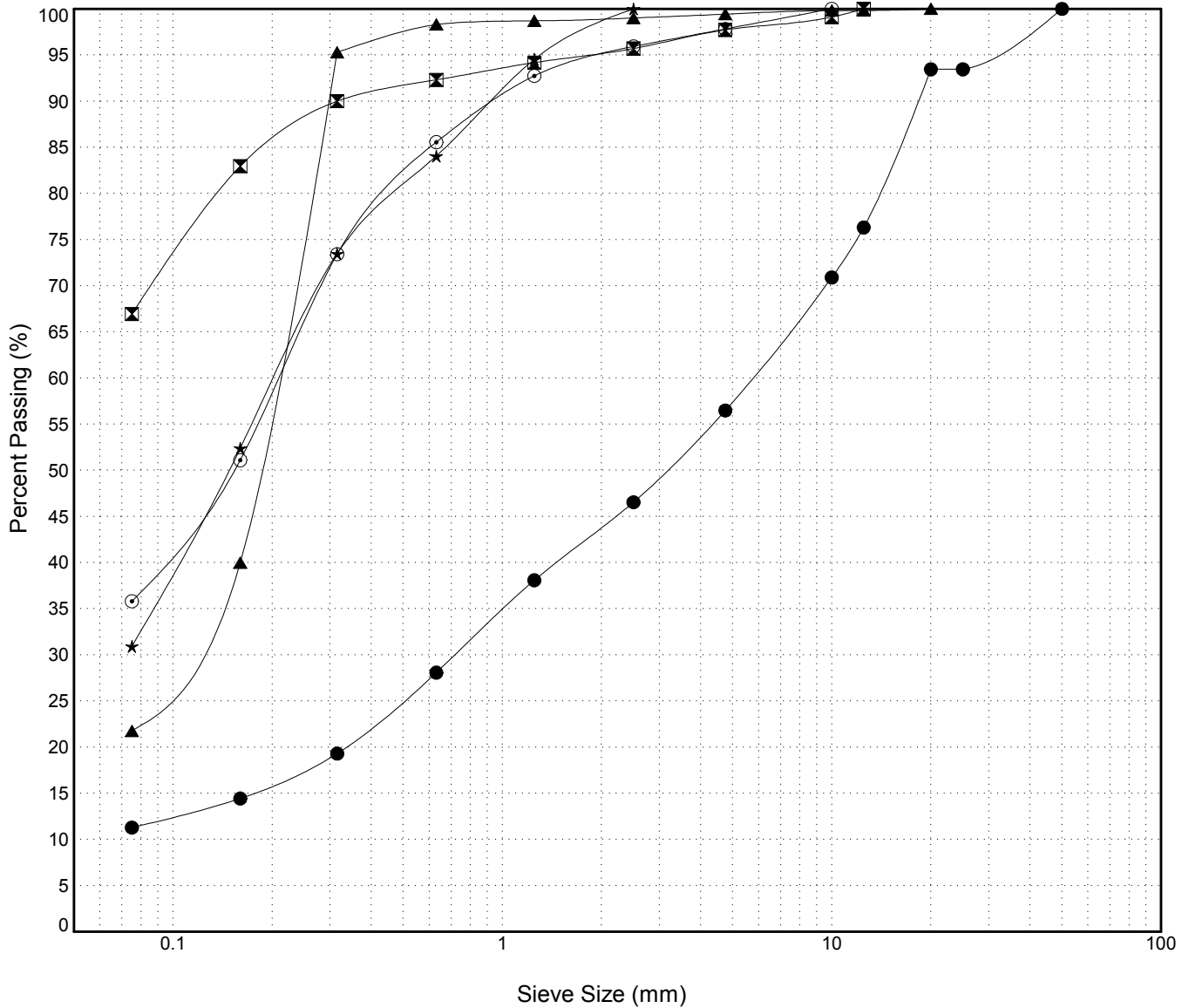
GRAIN SIZE ANALYSIS	Hunker Creek CL Drilling	SOURCE/TP#: 850-4916
Midnight Sun Drilling	km 701.4 LHS	PROJECT NO: 552-202102-1209-1-1
MARL M4CT	Coordinates:Z07W N7101838m E588317.9m	ELEVATION: m

Master Revised July 2013

Field #	Lab #	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu
● 025		0.0 to 0.9	WELL-GRADED SAND with SILT and GRAVEL(SW-SM)	3.2	NP	NP	NP	1.6	103.3
☒ 026		1.4 to 1.8	SANDY SILT(ML)	23.7	NP	NP	NP		
▲ 027		2.4 to 2.8	SILTY SAND(SM)	12.2	NP	NP	NP		
★ 028		3.2 to 3.4	SILTY SAND(SM)	51.9	NP	NP	NP		
⊙ 029		3.6 to 3.8	SILTY SAND(SM)	32.5	NP	NP	NP		

Field #	Lab #	%PASSING														% Breakdown			
		100.0	80.0	50.0	25.0	20.0	12.5	10.0	5.0	2.5	1.25	0.630	0.315	0.160	0.080	Gravel	Sand	Silt	Clay
● 025		100.0	100.0	100.0	93.5	93.5	76.3	70.9	56.5	46.5	38.1	28.1	19.3	14.4	11.3	43.5	45.2	11.3	
☒ 026		100.0	100.0	100.0	100.0	100.0	100.0	99.1	97.7	95.7	94.2	92.3	90.0	83.0	66.9	2.3	30.8	66.9	
▲ 027		100.0	100.0	100.0	100.0	100.0	99.8	99.8	99.4	99.0	98.7	98.3	95.3	40.0	21.8	0.6	77.7	21.8	
★ 028		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	94.5	84.0	73.5	52.4	30.9	0.0	69.1	30.9	
⊙ 029		100.0	100.0	100.0	100.0	100.0	100.0	100.0	97.8	95.9	92.7	85.6	73.4	51.1	35.8	2.2	62.0	35.8	

Silt	Sand			Gravel	
	Fine	Medium	Coarse	Fine	Coarse

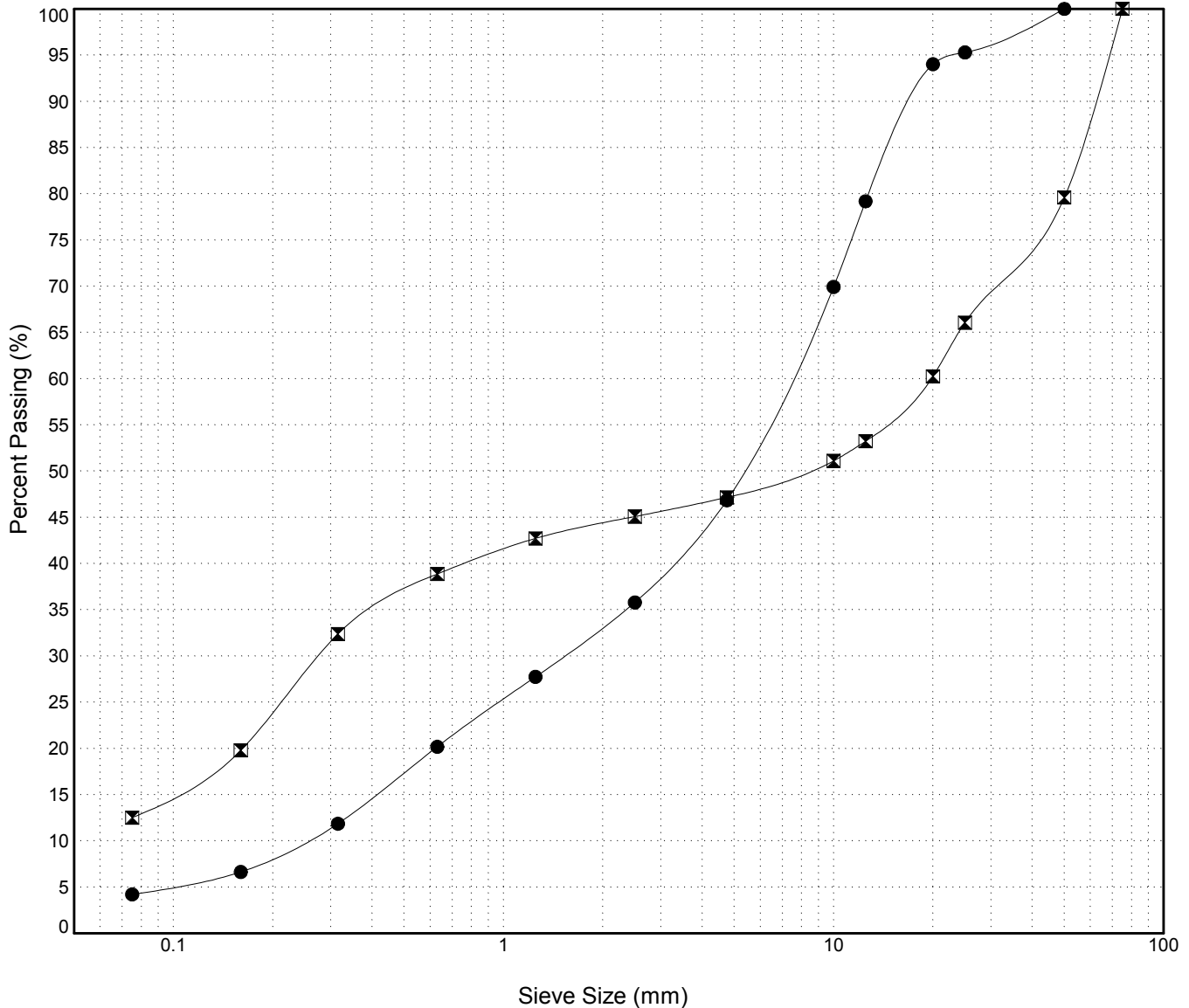


GRAIN SIZE ANALYSIS	Hunker Creek CL Drilling	SOURCE/TP#: 850-4916
Midnight Sun Drilling	km 701.4 LHS	PROJECT NO: 552-202102-1209-1-1
MARL M4CT	Coordinates:Z07W N7101838m E588317.9m	ELEVATION: m

Master Revised July 2013

Field #	Lab #	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu											
● 030		4.6 to 5.0	WELL-GRADED GRAVEL with SAND(GW)	9.2	NP	NP	NP	1.3	29.3											
☒ 031		5.4 to 5.6	SILTY GRAVEL with SAND(GM)	13.8	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				
● 030		100.0	100.0	100.0	95.3	94.0	79.2	69.9	46.8	35.8	27.7	20.2	11.9	6.6	4.2	Gravel	Sand	Silt	Clay	
☒ 031		100.0	100.0	79.6	66.1	60.2	53.2	51.1	47.2	45.1	42.7	38.9	32.4	19.8	12.5	52.8	34.6	12.5		

Silt	Sand			Gravel	
	Fine	Medium	Coarse	Fine	Coarse



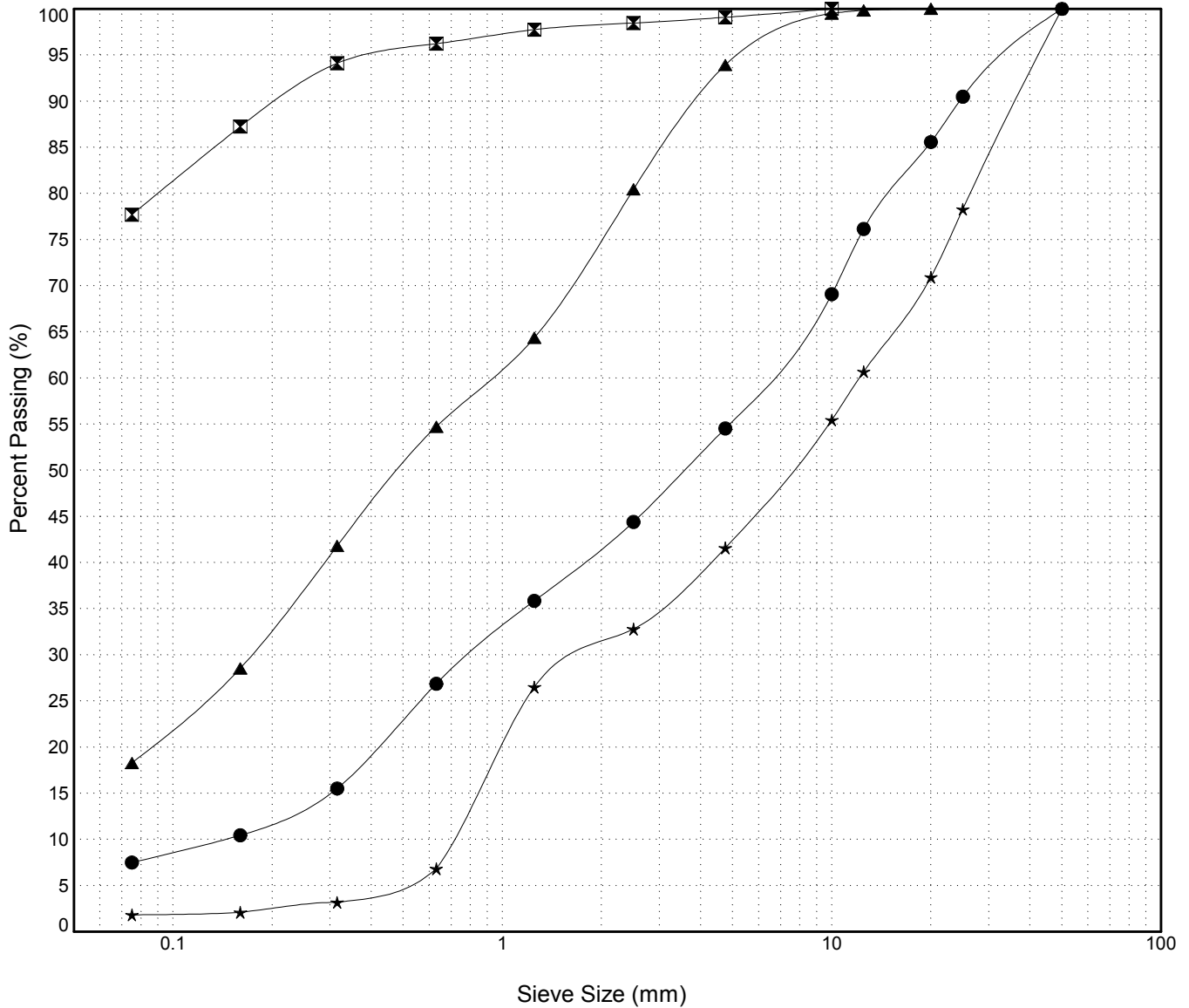
GRAIN SIZE ANALYSIS	Hunker Creek CL Drilling	SOURCE/TP#: 850-4917
Midnight Sun Drilling	km 701.3 LHS	PROJECT NO: 552-202102-1209-1-1
MARL M4CT	Coordinates:Z07W N7101792m E588401.8m	ELEVATION: m

Master Revised July 2013

Field #	Lab #	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu
● 032		0.0 to 1.2	POORLY GRADED SAND with SILT and GRAVEL(SP-SM)	2.2	NP	NP	NP	0.7	44.0
☒ 033		2.0 to 2.2	SILT with SAND(ML)	26.6	NP	NP	NP		
▲ 034		3.0 to 3.2	SILTY SAND(SM)	15.7	NP	NP	NP		
★ 036		5.0 to 5.2	POORLY GRADED GRAVEL with SAND(GP)	8.7	NP	NP	NP	0.4	17.2

Field #	Lab #	%PASSING														% Breakdown			
			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	Gravel	Sand	Silt
● 032		100.0	100.0	100.0	100.0	90.5	85.6	76.2	69.1	54.5	44.4	35.9	26.9	15.5	10.4	7.5	45.5	47.0	7.5
☒ 033		100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.1	98.5	97.8	96.2	94.1	87.2	77.7	0.9	21.4	77.7	
▲ 034		100.0	100.0	100.0	100.0	99.8	99.5	93.9	80.4	64.4	54.7	41.8	28.5	18.3	6.1	75.6	18.3		
★ 036		100.0	100.0	100.0	78.3	70.9	60.7	55.5	41.6	32.8	26.5	6.8	3.2	2.1	1.8	58.4	39.8	1.8	

Silt	Sand			Gravel	
	Fine	Medium	Coarse	Fine	Coarse



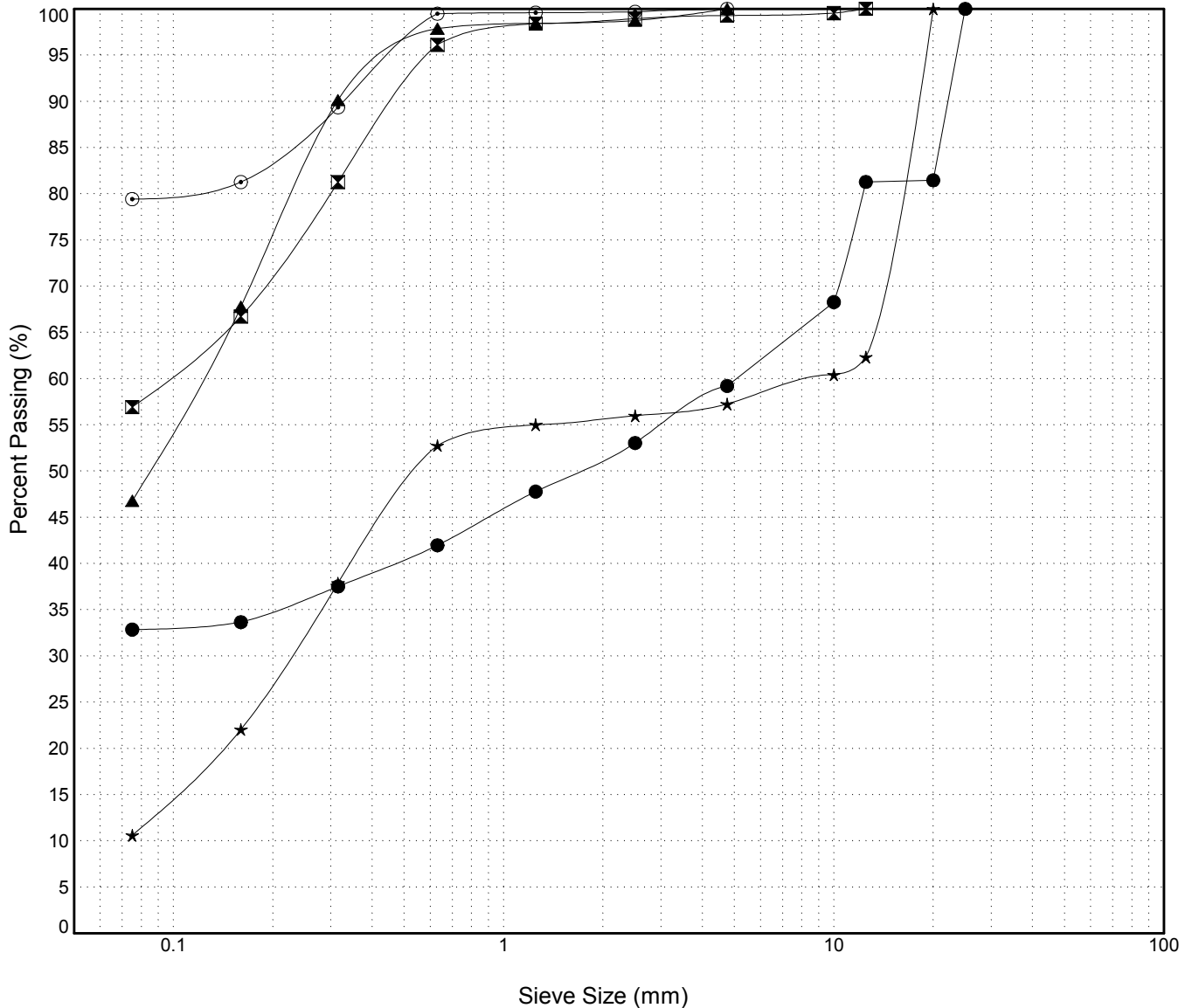
GRAIN SIZE ANALYSIS	Hunker Creek CL Drilling	SOURCE/TP#: 850-4918
Midnight Sun Drilling	km 701.2 LHS	PROJECT NO: 552-202102-1209-1-1
MARL M4CT	Coordinates:Z07W N7101743m E588484.9m	ELEVATION: m

Master Revised July 2013

Field #	Lab #	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu
● 037		0.0 to 0.6	SILTY GRAVEL with SAND(GM)	4.9	NP	NP	NP		
☒ 038		1.2 to 1.4	SANDY SILT(ML)	27.3	NP	NP	NP		
▲ 039		1.8 to 2.0	SILTY SAND(SM)	17.0	NP	NP	NP		
★ 040		2.4 to 2.6	POORLY GRADED SAND with SILT and GRAVEL(SP-SM)	42.8	NP	NP	NP	0.1	125.6
⊙ 041		3.6 to 3.8	SILT with SAND(ML)	23.0	NP	NP	NP		

Field #	Lab #	%PASSING															% Breakdown			
		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	Gravel	Sand	Silt	Clay	
● 037		100.0	100.0	100.0	100.0	81.5	81.3	68.3	59.2	53.0	47.8	42.0	37.5	33.7	32.9	40.8	26.4	32.9		
☒ 038		100.0	100.0	100.0	100.0	100.0	100.0	99.5	99.3	98.9	98.4	96.1	81.3	66.7	56.9	0.7	42.3	56.9		
▲ 039		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.7	98.5	97.9	90.1	67.8	46.8	0.0	53.2	46.8		
★ 040		100.0	100.0	100.0	100.0	100.0	62.3	60.4	57.3	56.0	55.0	52.8	37.9	22.0	10.6	42.7	46.7	10.6		
⊙ 041		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.7	99.6	99.5	89.4	81.3	79.4	0.0	20.6	79.4		

Silt	Sand			Gravel	
	Fine	Medium	Coarse	Fine	Coarse

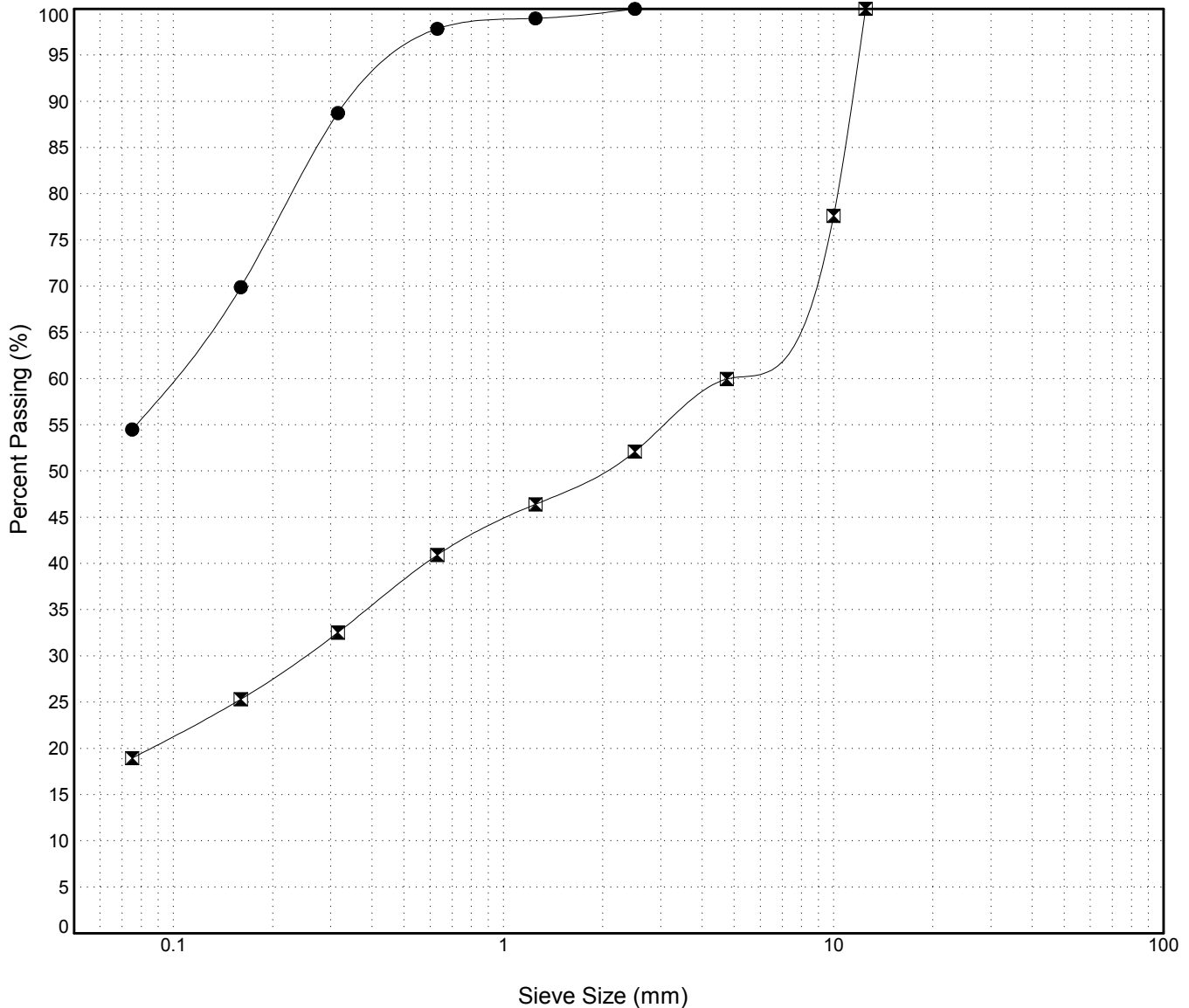


GRAIN SIZE ANALYSIS	Hunker Creek CL Drilling	SOURCE/TP#: 850-4918
Midnight Sun Drilling	km 701.2 LHS	PROJECT NO: 552-202102-1209-1-1
MARL M4CT	Coordinates:Z07W N7101743m E588484.9m	ELEVATION: m

Master Revised July 2013

Field #	Lab #	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu											
● 042		4.0 to 4.2	SANDY SILT (ML)	32.8	NP	NP	NP													
☒ 043		5.2 to 5.5	SILTY SAND with GRAVEL (SM)	16.9	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	
● 042		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.0	97.8	88.7	69.9	54.5	0.0	45.5	54.5		
☒ 043		100.0	100.0	100.0	100.0	100.0	100.0	77.6	60.0	52.1	46.4	40.9	32.5	25.3	19.0	40.0	41.0	19.0		

Silt	Sand			Gravel	
	Fine	Medium	Coarse	Fine	Coarse

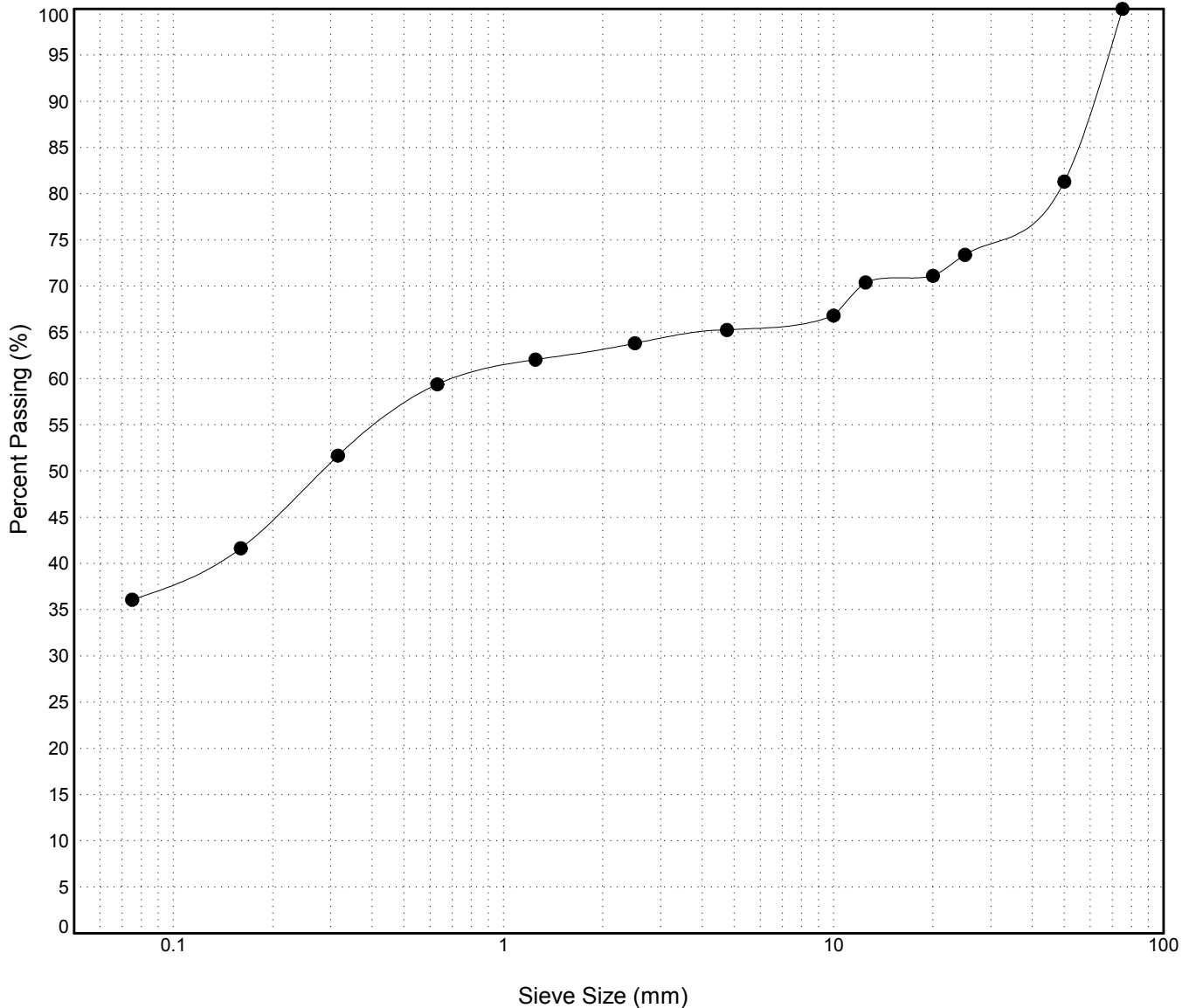


GRAIN SIZE ANALYSIS	Hunker Creek CL Drilling	SOURCE/TP#: 850-4919
Midnight Sun Drilling	km 701.1 LHS	PROJECT NO: 552-202102-1209-1-1
MARL M4CT	Coordinates:Z07W N7101691m E588573.9m	ELEVATION: m

Master Revised July 2013

Field #	Lab #	Depth	Classification											%H2O	LL	PL	PI	Cc	Cu	
● 046		5.4 to 5.8	SILTY GRAVEL with SAND(GM)											24.0	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			
● 046		% PASSING	100.0	100.0	81.3	73.4	71.1	70.4	66.8	65.3	63.8	62.1	59.4	51.7	41.6	36.1	34.7	29.2	36.1	

Silt	Sand			Gravel	
	Fine	Medium	Coarse	Fine	Coarse



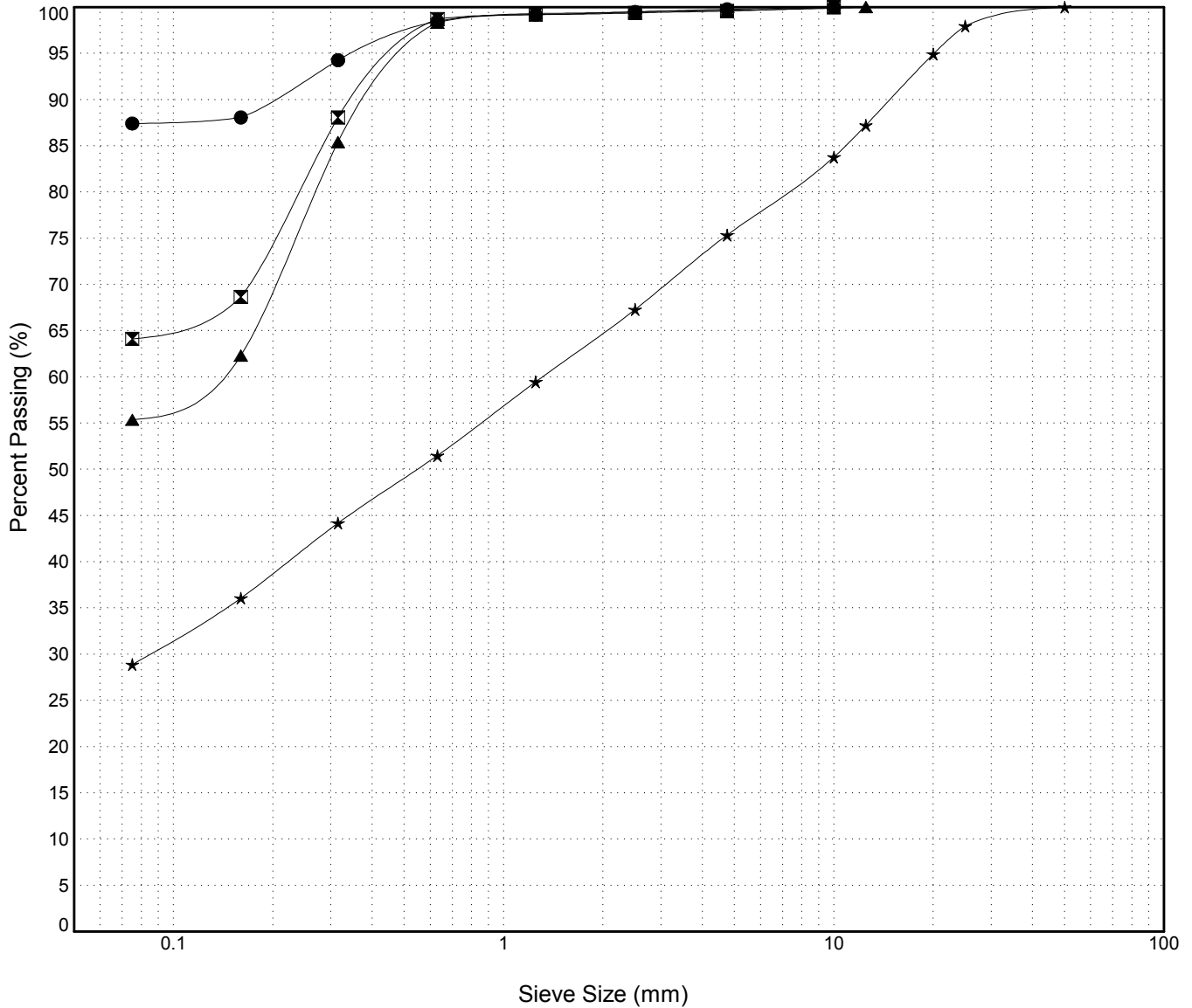
GRAIN SIZE ANALYSIS	Hunker Creek CL Drilling	SOURCE/TP#: 850-4922
Midnight Sun Drilling	km 700.9 LHS	PROJECT NO: 552-202102-1209-1-1
MARL M4CT	Coordinates:Z07W N7101618m E588756.5m	ELEVATION: m

Master Revised July 2013

Field #	Lab #	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu
● 052		1.2 to 1.5	SILT(ML)	19.7	NP	NP	NP		
☒ 053		2.4 to 2.6	SANDY SILT(ML)	16.4	NP	NP	NP		
▲ 054		3.3 to 3.6	SANDY ORGANIC SILT(OL)	28.9	NP	NP	NP		
★ 055		5.4 to 5.6	SILTY SAND with GRAVEL(SM)	5.6	NP	NP	NP		

Field #	Lab #	%PASSING															% Breakdown			
			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	Gravel	Sand	Silt	Clay
● 052		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.8	99.5	99.2	98.5	94.3	88.1	87.4	0.2	12.4	87.4	
☒ 053		100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.6	99.4	99.2	98.7	88.1	68.7	64.1	0.4	35.5	64.1		
▲ 054		100.0	100.0	100.0	100.0	100.0	99.9	99.7	99.5	99.3	98.3	85.4	62.3	55.4	0.3	44.3	55.4			
★ 055		100.0	100.0	100.0	98.0	94.9	87.2	83.8	75.3	67.3	59.5	51.5	44.2	36.1	28.9	24.7	46.5	28.9		

Silt	Sand			Gravel	
	Fine	Medium	Coarse	Fine	Coarse



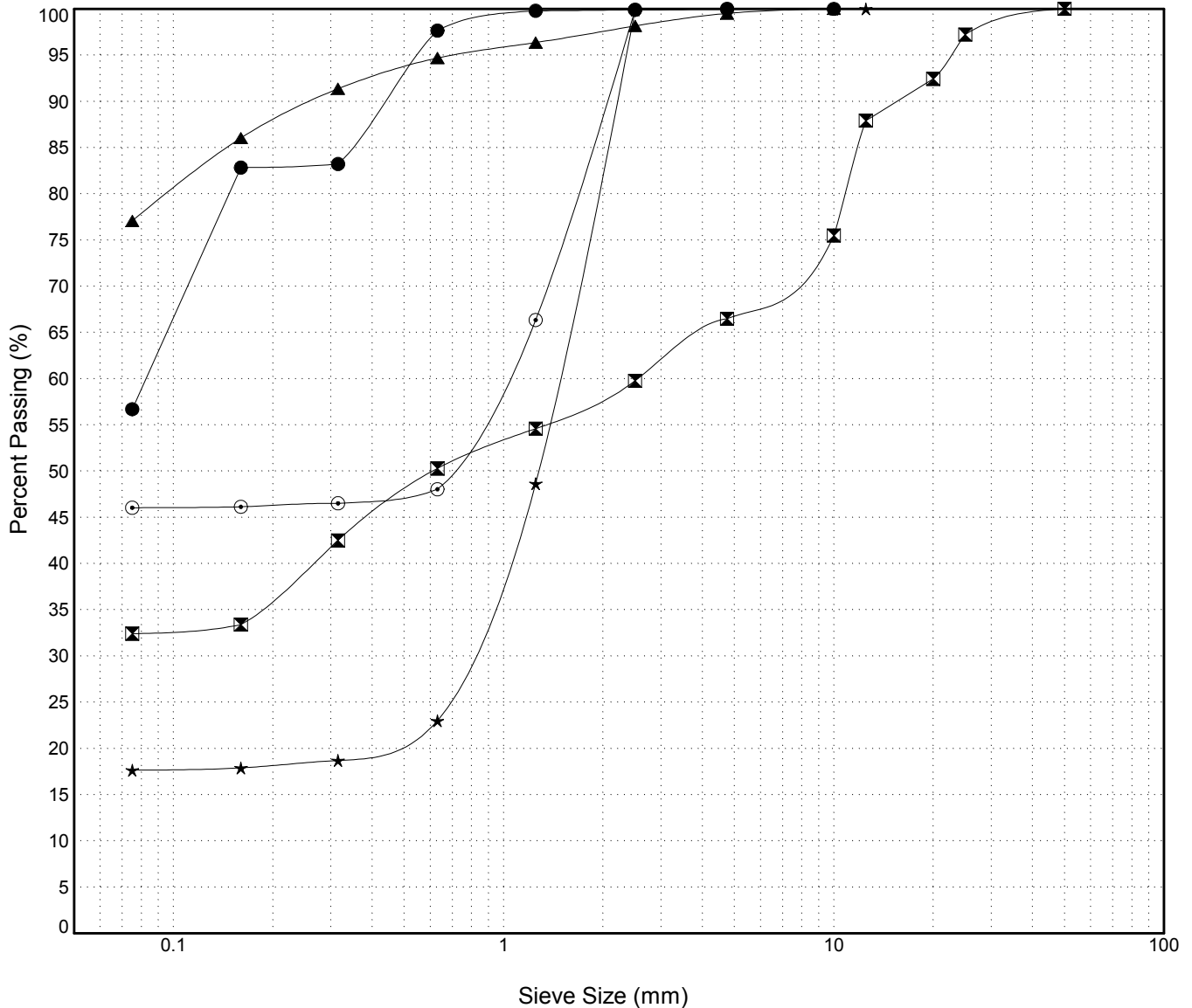
GRAIN SIZE ANALYSIS	Hunker Creek CL Drilling	SOURCE/TP#: 850-4923
Midnight Sun Drilling	km 700.8 LHS	PROJECT NO: 552-202102-1209-1-1
MARL M4CT	Coordinates:Z07W N7101619m E588850.9m	ELEVATION: m

Master Revised July 2013

Field #	Lab #	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu
● 055B		0.0 to 0.5	SANDY SILT(ML)	34.0	NP	NP	NP		
☒ 056		0.8 to 1.2	SILTY SAND with GRAVEL(SM)	8.2	NP	NP	NP		
▲ 057		1.5 to 1.7	ORGANIC SILT with SAND(OL)	22.6	NP	NP	NP		
★ 058		2.4 to 2.6	SILTY SAND(SM)	6.4	NP	NP	NP		
⊙ 059		3.6 to 4.0	SILTY SAND(SM)	29.9	NP	NP	NP		

Field #	Lab #	%PASSING	Sieve Size (mm)													% Breakdown			
			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	Gravel	Sand	Silt
● 055B		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	99.8	97.7	83.2	82.8	56.7	0.0	43.3	56.7	
☒ 056		100.0	100.0	100.0	97.2	92.4	87.9	75.5	66.5	59.8	54.6	50.3	42.5	33.4	32.4	33.5	34.1	32.4	
▲ 057		100.0	100.0	100.0	100.0	100.0	100.0	99.5	98.2	96.4	94.7	91.4	86.0	77.1	0.5	22.4	77.1		
★ 058		100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	48.6	23.0	18.7	17.9	17.6	0.0	82.3	17.6		
⊙ 059		100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	66.3	48.0	46.5	46.1	46.0	0.0	54.0	46.0		

Silt	Sand			Gravel	
	Fine	Medium	Coarse	Fine	Coarse

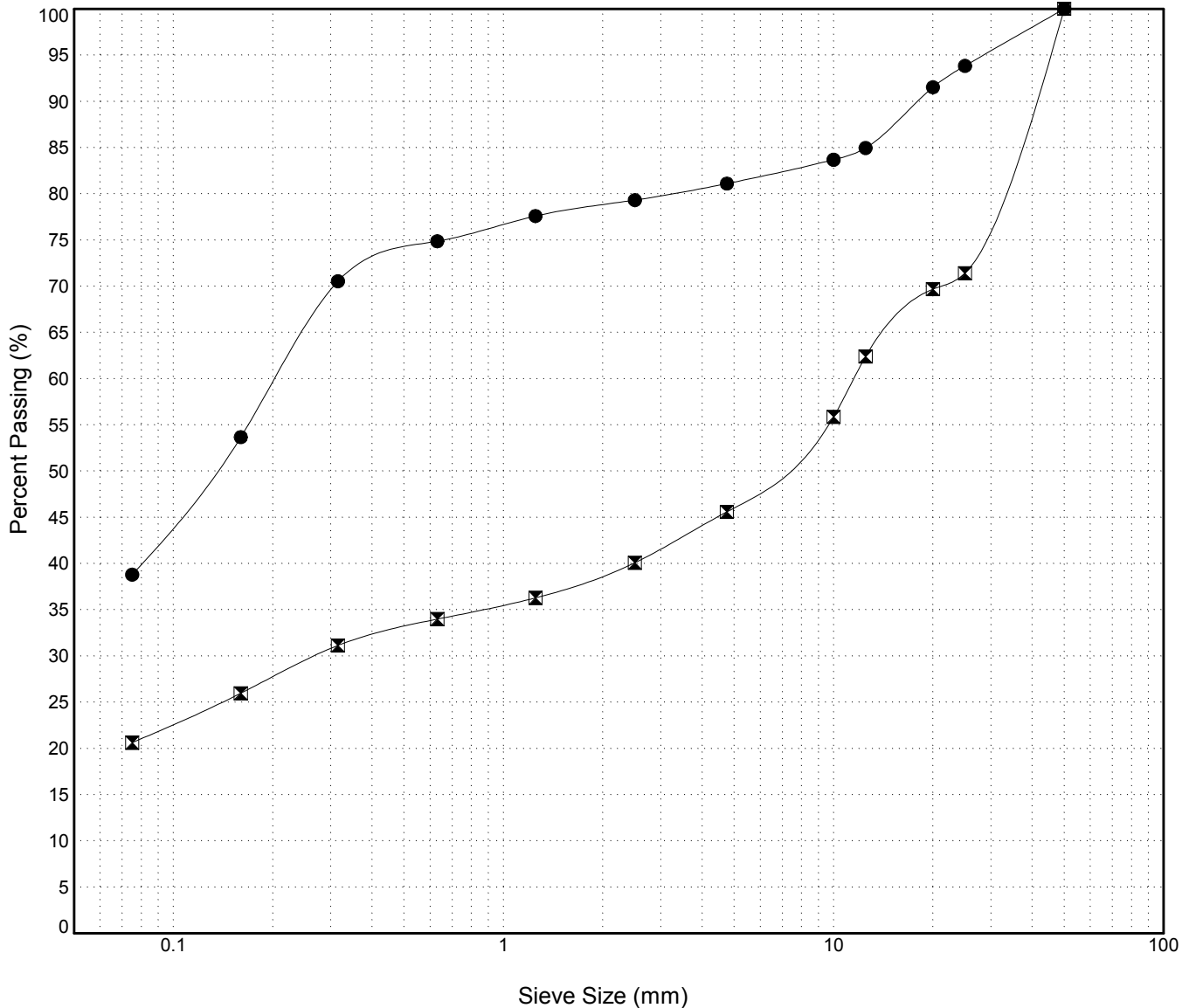


GRAIN SIZE ANALYSIS	Hunker Creek CL Drilling	SOURCE/TP#: 850-4923
Midnight Sun Drilling	km 700.8 LHS	PROJECT NO: 552-202102-1209-1-1
MARL M4CT	Coordinates:Z07W N7101619m E588850.9m	ELEVATION: m

Master Revised July 2013

Field #	Lab #	Depth	Classification											%H2O	LL	PL	PI	Cc	Cu	
● 061		5.6 to 5.8	SILTY SAND with GRAVEL(SM)											21.7	NP	NP	NP			
☒ 062		6.8 to 7.0	SILTY GRAVEL with SAND(GM)											43.8	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			
● 061		% PASSING	100.0	100.0	100.0	93.8	91.5	85.0	83.7	81.1	79.3	77.6	74.9	70.5	53.7	38.8	18.9	42.3	38.8	
☒ 062			100.0	100.0	100.0	71.4	69.7	62.4	55.9	45.6	40.1	36.3	34.0	31.1	26.0	20.6	54.4	25.0	20.6	

Silt	Sand			Gravel	
	Fine	Medium	Coarse	Fine	Coarse



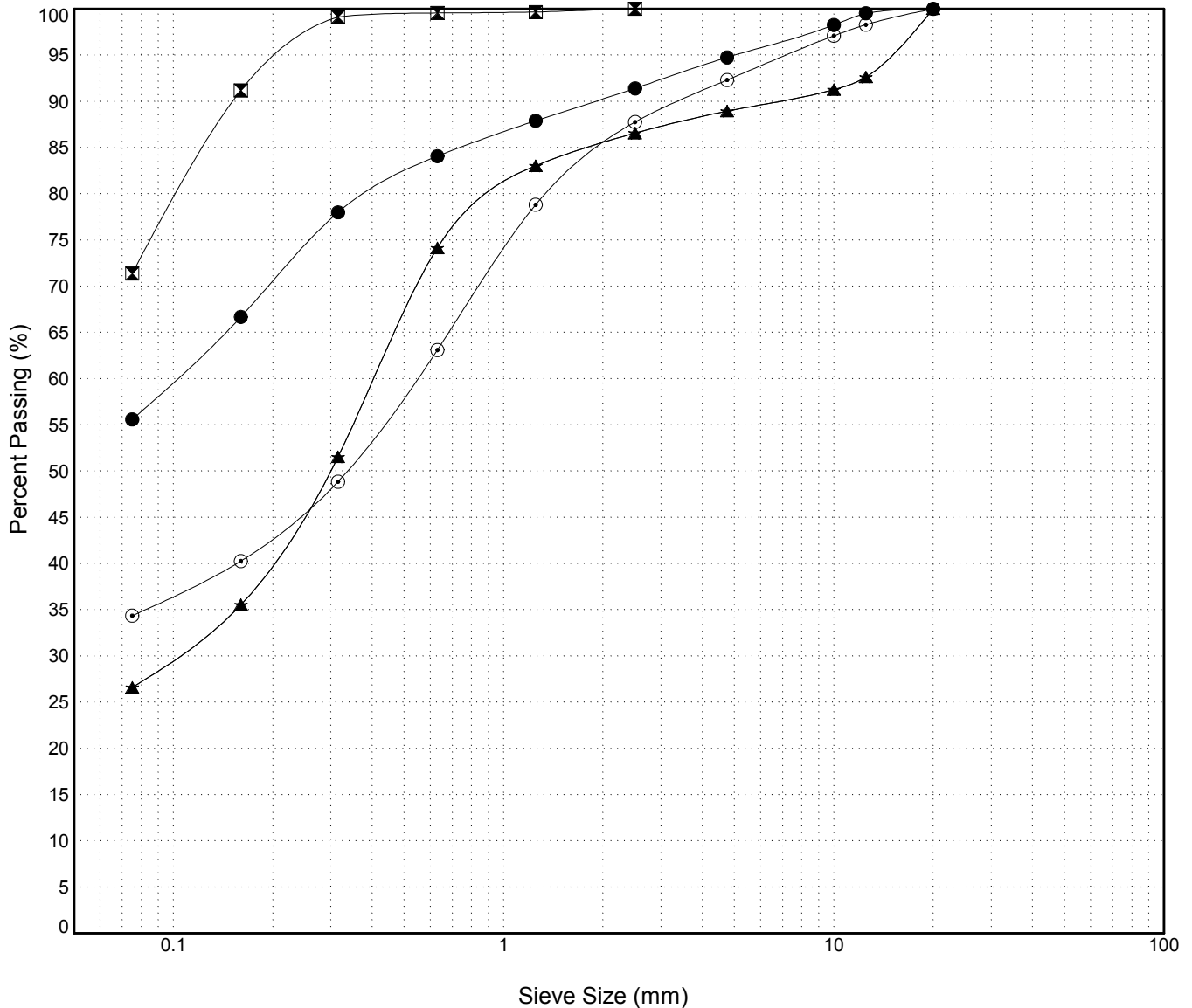
GRAIN SIZE ANALYSIS	Hunker Creek CL Drilling	SOURCE/TP#: 850-5114
Midnight Sun Drilling	km 700.7 LHS	PROJECT NO: 552-202102-1209-1-1
MARL M4CT	Coordinates:Z07W N7101639m E588943m	ELEVATION: m

Master Revised July 2013

Field #	Lab #	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu
● 063		1.0 to 1.2	SANDY SILT(ML)	21.4	NP	NP	NP		
☒ 064		2.0 to 2.3	SILT with SAND(ML)	18.7	NP	NP	NP		
▲ 065		3.0 to 3.2	SILTY SAND(SM)	10.5	NP	NP	NP		
★ 066		3.8 to 4.0	SILTY SAND(SM)	16.4	NP	NP	NP		
⊙ 067		5.4 to 5.7	SILTY SAND(SM)	14.8	NP	NP	NP		

Field #	Lab #	%PASSING															% Breakdown			
		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	Gravel	Sand	Silt	Clay	
● 063		100.0	100.0	100.0	100.0	100.0	99.5	98.3	94.8	91.4	87.9	84.1	78.0	66.7	55.6	5.2	39.2	55.6		
☒ 064		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.7	99.6	99.1	91.2	71.4	0.0	28.6	71.4		
▲ 065		100.0	100.0	100.0	100.0	100.0	92.6	91.3	88.9	86.6	83.0	74.1	51.5	35.5	26.6	11.1	62.3	26.6		
★ 066		100.0	100.0	100.0	100.0	100.0	92.6	91.3	88.9	86.6	83.0	74.1	51.5	35.5	26.6	11.1	62.3	26.6		
⊙ 067		100.0	100.0	100.0	100.0	100.0	98.3	97.1	92.3	87.8	78.8	63.1	48.8	40.3	34.4	7.7	57.9	34.4		

Silt	Sand			Gravel	
	Fine	Medium	Coarse	Fine	Coarse

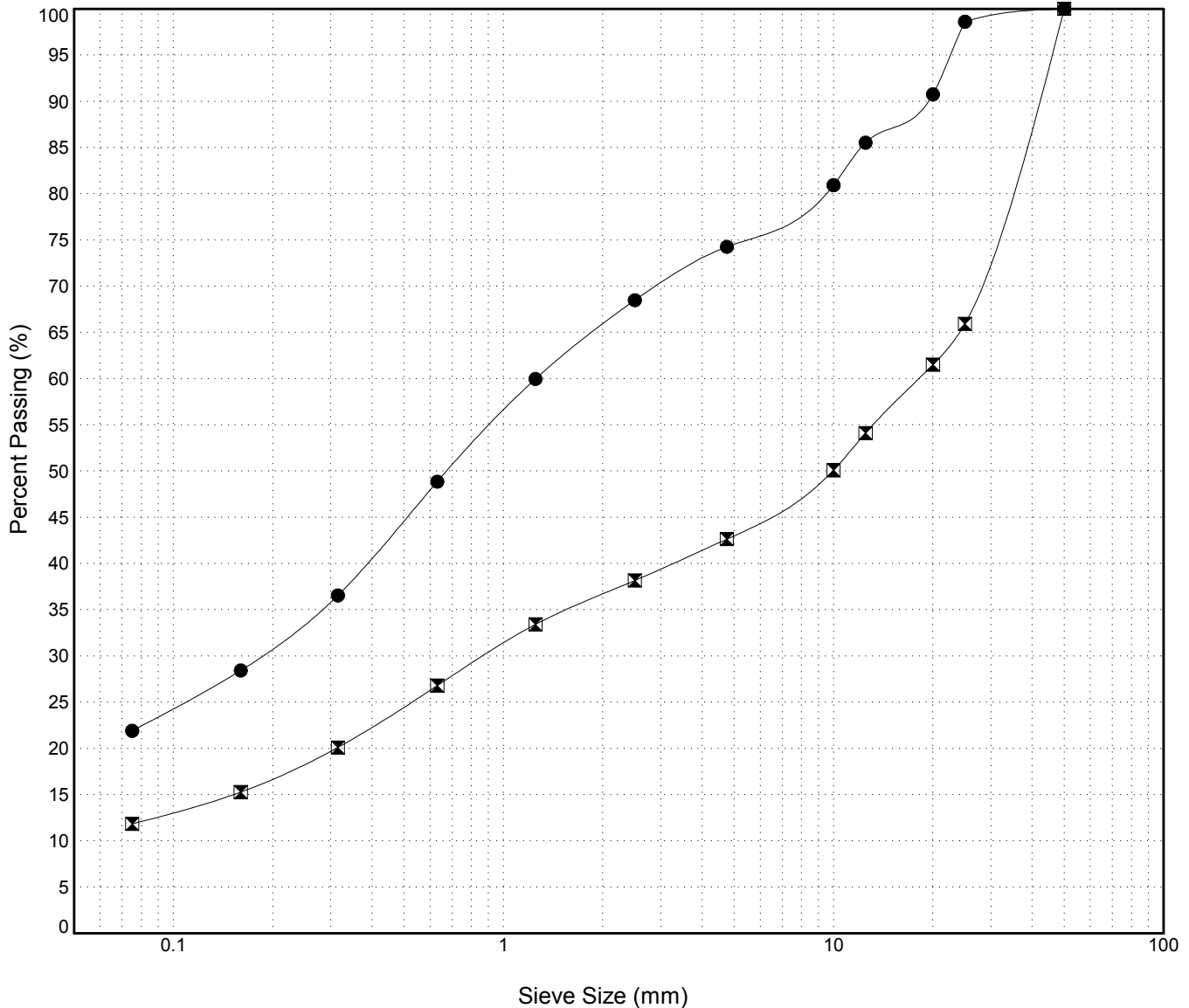


GRAIN SIZE ANALYSIS	Hunker Creek CL Drilling	SOURCE/TP#: 850-5114
Midnight Sun Drilling	km 700.7 LHS	PROJECT NO: 552-202102-1209-1-1
MARL M4CT	Coordinates:Z07W N7101639m E588943m	ELEVATION: m

Master Revised July 2013

Field #	Lab #	Depth	Classification											%H2O	LL	PL	PI	Cc	Cu	
● 068		6.8 to 7.1	SILTY SAND with GRAVEL(SM)											14.2	NP	NP	NP			
☒ 069		8.0 to 8.3	POORLY GRADED GRAVEL with SILT and SAND(GP-GM)											8.6	NP	NP	NP	0.8	362.3	
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			
● 068		% PASSING	100.0	100.0	100.0	98.6	90.8	85.5	80.9	74.3	68.5	60.0	48.9	36.5	28.4	21.9	25.7	52.4	21.9	
☒ 069			100.0	100.0	100.0	65.9	61.5	54.1	50.1	42.6	38.2	33.4	26.8	20.1	15.3	11.8	57.4	30.8	11.8	

Silt	Sand			Gravel	
	Fine	Medium	Coarse	Fine	Coarse



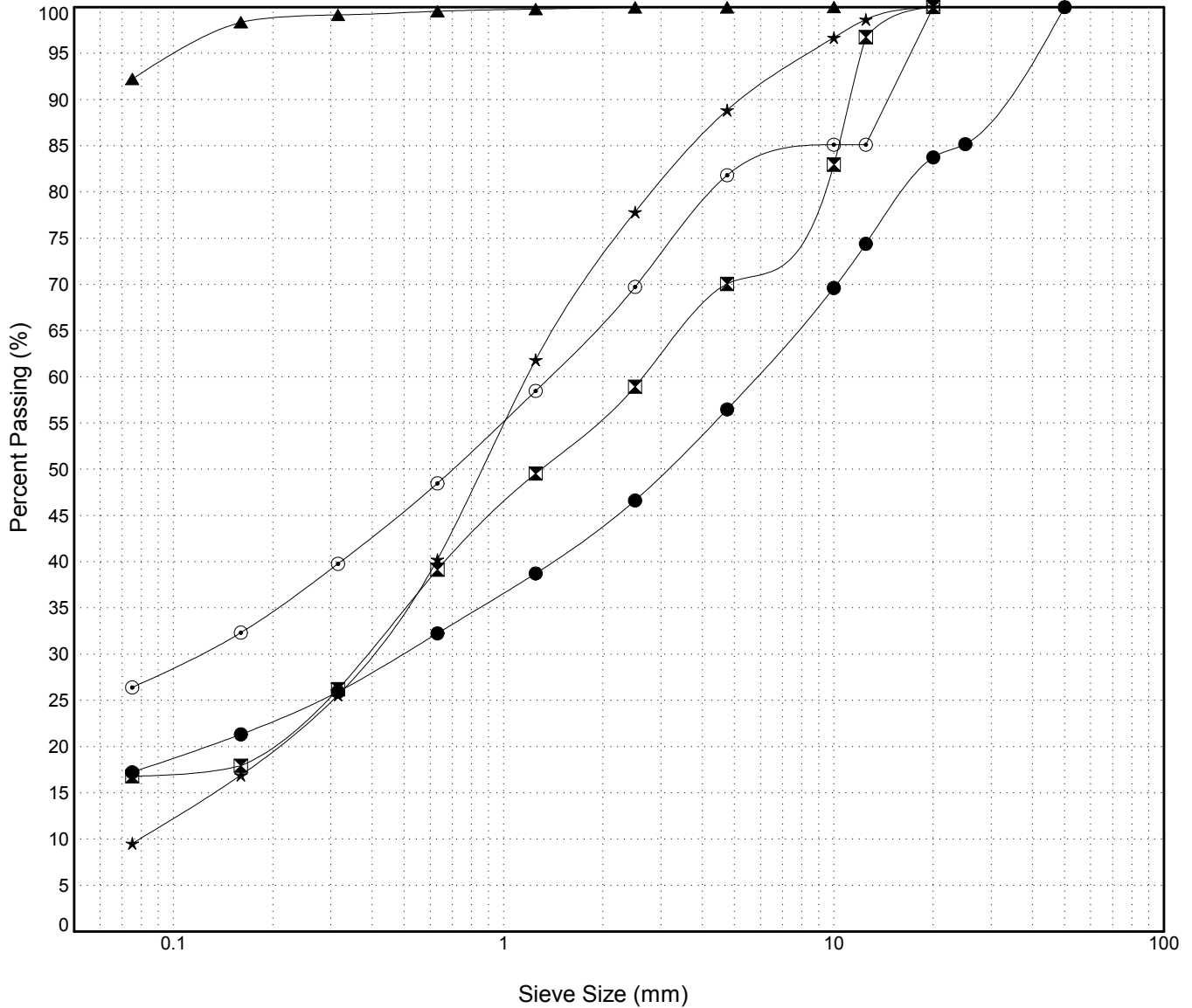
GRAIN SIZE ANALYSIS	Hunker Creek CL Drilling	SOURCE/TP#: 851-5115
Midnight Sun Drilling	km 700.6 LHS	PROJECT NO: 552-202102-1209-1-1
MARL M4CT	Coordinates:Z07W N7101664m E589033.9m	ELEVATION: m

Master Revised July 2013

Field #	Lab #	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu
● 070		0.1 to 0.6	SILTY GRAVEL with SAND(GM)	3.3	NP	NP	NP		
☒ 071		0.9 to 1.2	SILTY SAND with GRAVEL(SM)	4.3	NP	NP	NP		
▲ 072		2.2 to 2.5	ORGANIC SILT(OL)	24.6	NP	NP	NP		
★ 074		4.7 to 5.0	WELL-GRADED SAND with SILT(SW-SM)	13.6	NP	NP	NP	1.6	15.0
⊙ 075		6.2 to 6.8	SILTY SAND with GRAVEL(SM)	13.5	NP	NP	NP		

Field #	Lab #	%PASSING	Sieve Size (mm)													% Breakdown			
			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	Gravel	Sand	Silt
● 070		100.0	100.0	100.0	85.2	83.7	74.4	69.6	56.5	46.6	38.7	32.3	25.9	21.3	17.2	43.5	39.2	17.2	
☒ 071		100.0	100.0	100.0	100.0	100.0	96.8	83.0	70.1	58.9	49.5	39.1	26.2	17.9	16.8	29.9	53.3	16.8	
▲ 072		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.8	99.6	99.2	98.4	92.2	0.0	7.8	92.2	
★ 074		100.0	100.0	100.0	100.0	100.0	98.7	96.7	88.9	77.8	61.8	40.2	25.6	16.9	9.5	11.1	79.3	9.5	
⊙ 075		100.0	100.0	100.0	100.0	100.0	85.1	85.1	81.8	69.7	58.5	48.5	39.8	32.3	26.4	18.2	55.4	26.4	

Silt	Sand			Gravel	
	Fine	Medium	Coarse	Fine	Coarse

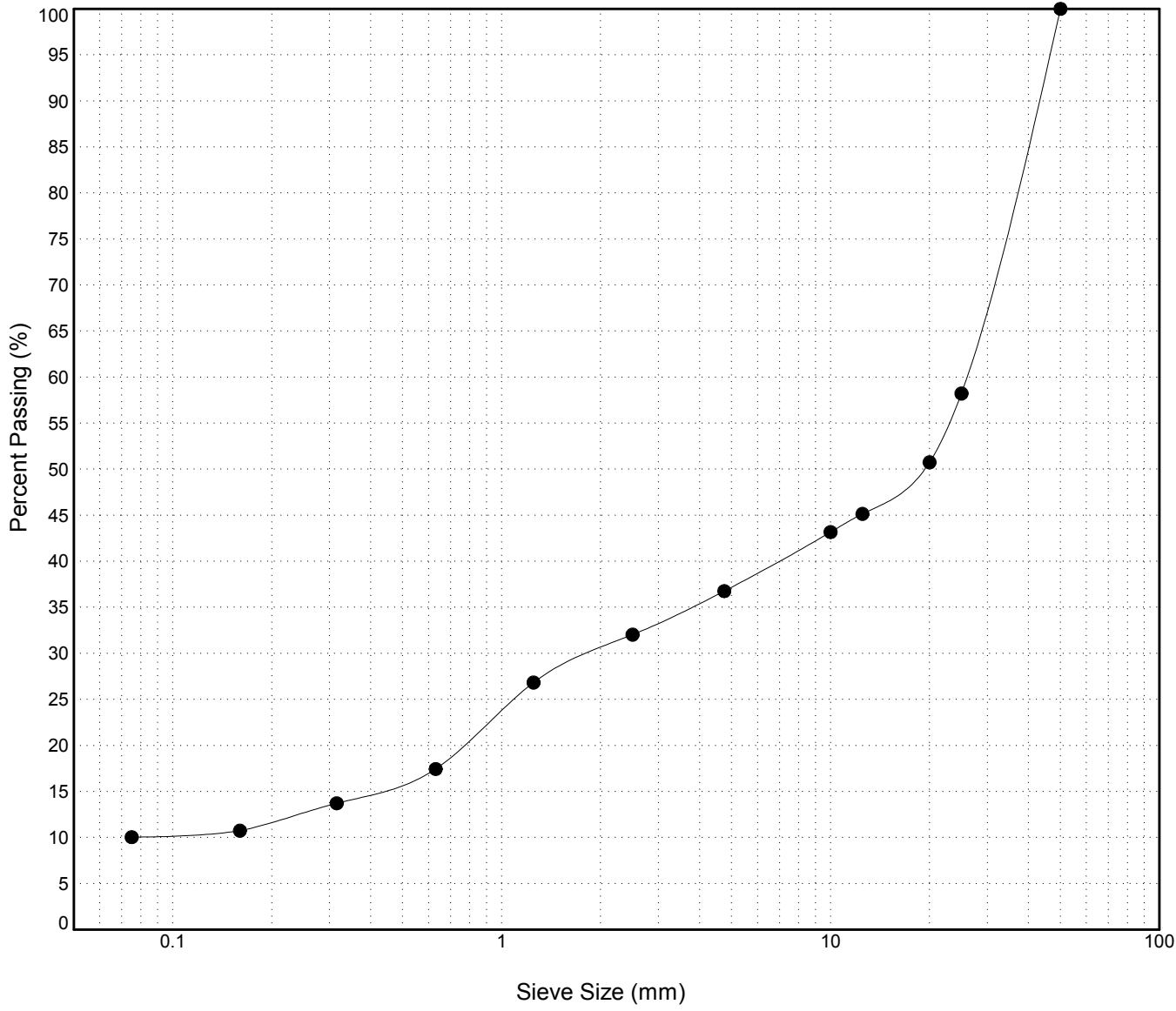


GRAIN SIZE ANALYSIS	Hunker Creek CL Drilling	SOURCE/TP#: 851-5115
Midnight Sun Drilling	km 700.6 LHS	PROJECT NO: 552-202102-1209-1-1
MARL M4CT	Coordinates:Z07W N7101664m E589033.9m	ELEVATION: m

Master Revised July 2013

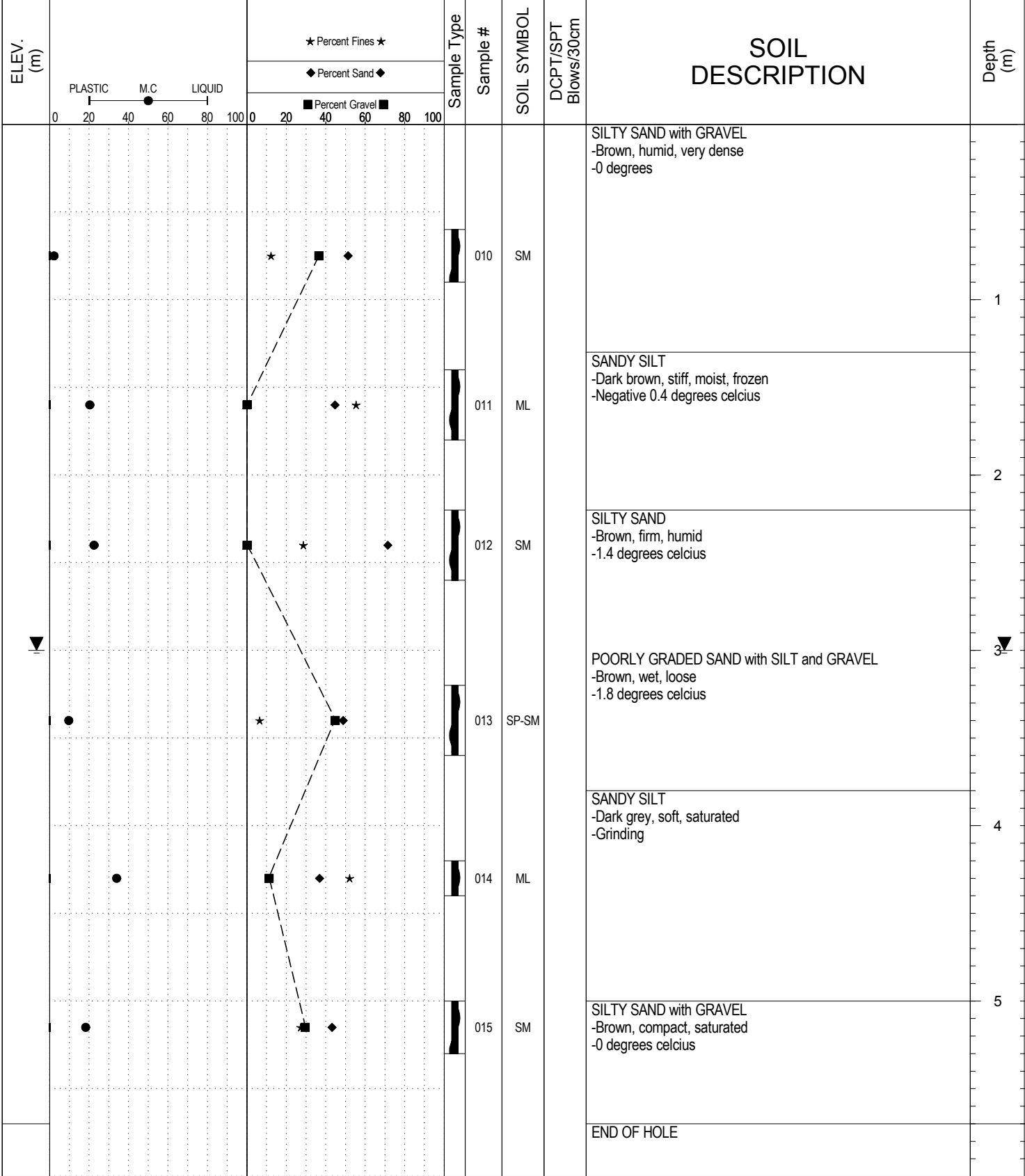
Field #	Lab #	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu										
● 076		7.6 to 7.8	WELL-GRADED GRAVEL with SILT and SAND(GW-GM)	6.9	NP	NP	NP	2.0	359.1										
Field #	Lab #	100.0	80.0	50.0	25.0	20.0	12.5	10.0	5.0	2.5	1.25	0.630	0.315	0.160	0.080	% Breakdown			
● 076		100.0	100.0	100.0	58.2	50.8	45.2	43.2	36.8	32.0	26.8	17.4	13.7	10.7	10.0	Gravel	Sand	Silt	Clay
																63.2	26.7	10.0	

Silt	Sand			Gravel	
	Fine	Medium	Coarse	Fine	Coarse



SUBSURFACE EXPLORATION AND TEST REPORT		N.Klondike Highway		SOURCE/TP#: 850-4912					
Midnight Sun Drilling		Hunker Creek CL Drilling, km 701.8 LHS		PROJECT NO: 552-202102-1209-1-1					
MARL M4CT		Coordinates: Z07W N7101945m E587950.4m		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)
					005	SM		SILTY SAND with GRAVEL -Brown, humid, very dense -Frozen, negative 1.4 degrees celcius -Some bouncing	
					006	ML		-SILT with SAND -Dark grey, moist, very stiff -Frozen, heaving -Negative 1.4 degrees celcius	1
					007	OL		ORGANIC SILT -Brown, stiff, moist, organic odour -0.6 degrees celcius	2
					008	OL		ORGANIC SILT with SAND -Dark grey, saturated, stiff, organic -Grinding	3
					009	GP-GM		POORLY GRADED GRAVEL with SILT and SAND -Dark brown, free water, loose, contaminated silt -3.9 degrees celcius	4
								END OF HOLE	5

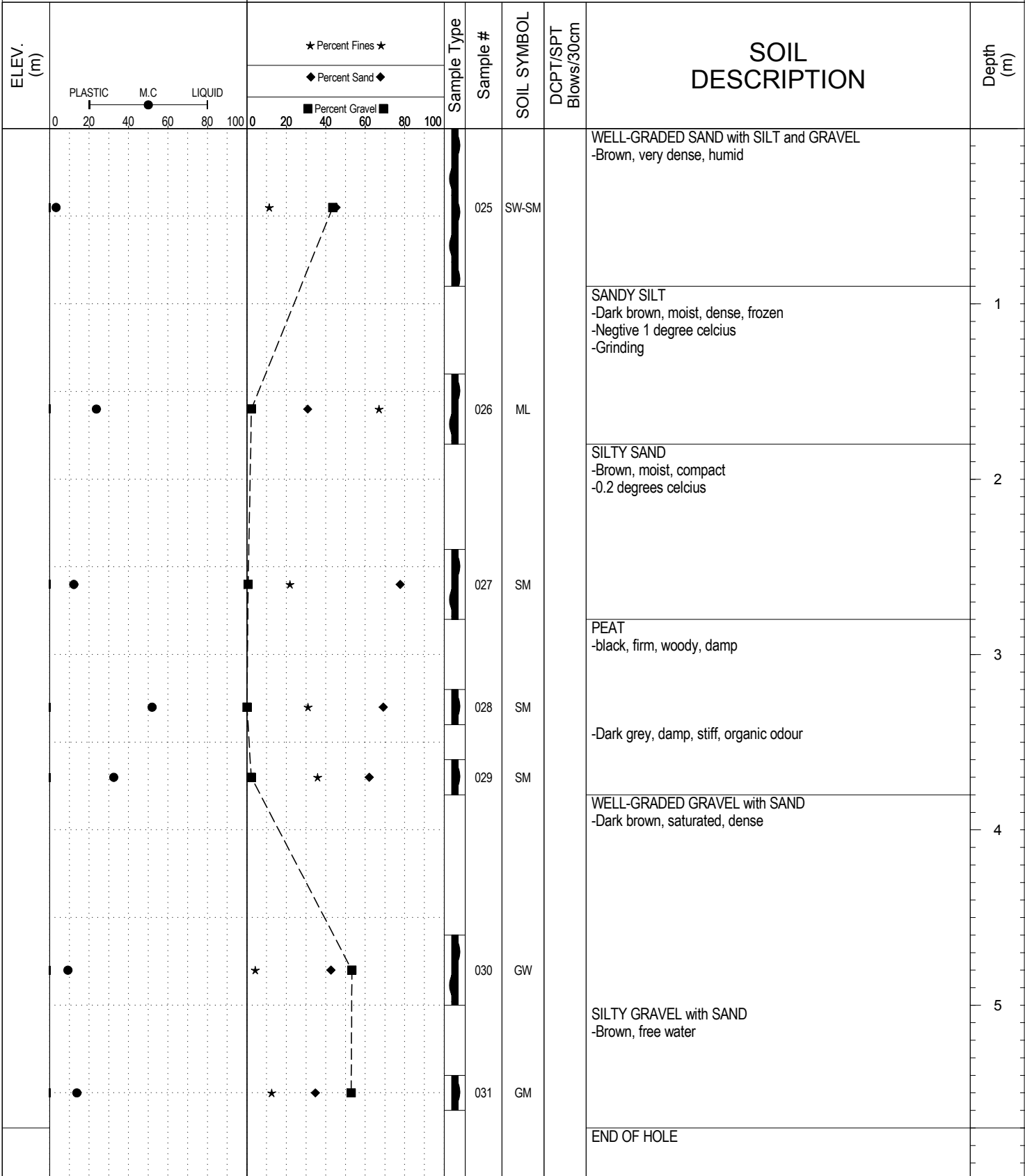
SAMPLE TYPE UNDISTURBED DCPT AUGER BULK SPT CORE



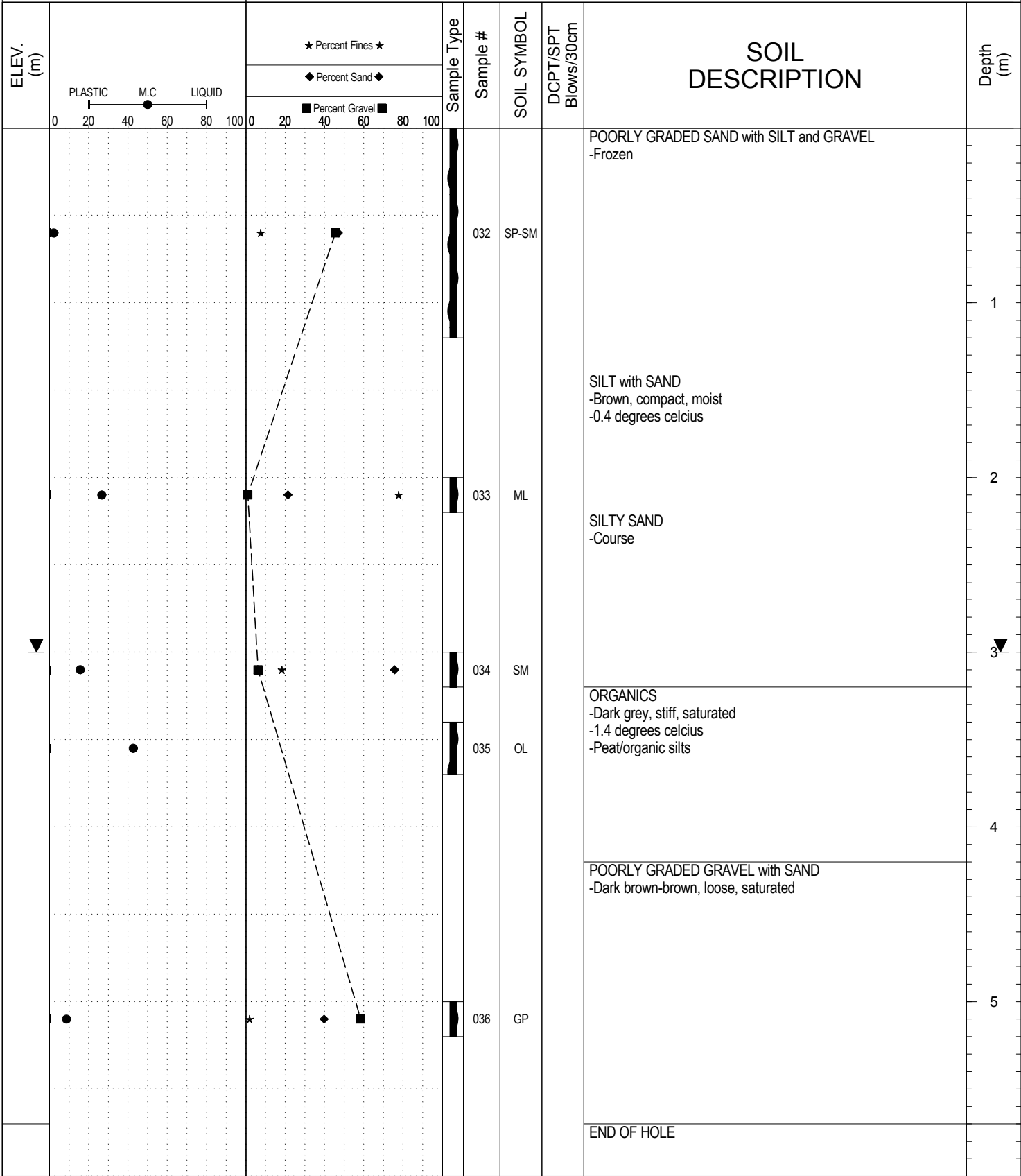
SUBSURFACE EXPLORATION AND TEST REPORT		N.Klondike Highway		SOURCE/TP#: 850-4914				
Midnight Sun Drilling		Hunker Creek CL Drilling, km 701.6 LHS		PROJECT NO: 552-202102-1209-1-1				
MARL M4CT		Coordinates: Z07W N7101918m E588141.3m		ELEVATION: m				
SAMPLE TYPE		<input type="checkbox"/> UNDISTURBED <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					
					016	SM	SILTY SAND with GRAVEL -Brown, humid, very dense -Bouncing-grinding -Change to fishtail -Stiff, organic odour -3.4 degrees celcius -End of frozen at 1.8m, smooth drilling	1
					017	SM	SILTY GRAVEL with SAND -Brown, saturated, compact -Grinding, gravel is getting courser	2
					018	GM	-Refusal at 5.1m due to boulder	3
					019	GM	END OF HOLE	4
								5

SUBSURFACE EXPLORATION AND TEST REPORT		N.Klondike Highway		SOURCE/TP#: 850-4915					
Midnight Sun Drilling		Hunker Creek CL Drilling, km 701.5 LHS		PROJECT NO: 552-202102-1209-1-1					
MARL M4CT		Coordinates: Z07W N7101884m E588231m		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)
					020	SM		SILTY SAND with GRAVEL -Brown, humid, dense -Bouncing at 0.3m	
					021	ML		SILT with SAND -Dark grey, very stiff, moist -0.2 degrees celcius	1
					022	ML		SILT -Dark grey, firm, damp -1.2 degrees celcius	2
					023	GM		SILTY GRAVEL with SAND -Dark brown, saturated, firm -Grinding -0.8 degrees celcius	3
					024	GM		SILTY GRAVEL -Dark brown-brown, mottled, firm, saturated to-moist -0.2 to negtive 0.4 degrees celcius	4
								END OF HOLE	5
				LOGGED BY: R.Stilwell		Termination Depth: 5.7m			
				COMPILED BY: R.Stilwell		Complete: 12/9/2014 10:05:00 AM			
				REVIEWED BY:		Pit #: Page 1 of 1			

SAMPLE TYPE UNDISTURBED DCPT AUGER BULK SPT CORE



SAMPLE TYPE UNDISTURBED DCPT AUGER BULK SPT CORE



SUBSURFACE EXPLORATION AND TEST REPORT		N.Klondike Highway		SOURCE/TP#: 850-4920					
Midnight Sun Drilling		Hunker Creek CL Drilling, km 701.0 LHS		PROJECT NO: 552-202102-1209-1-1					
MARL M4CT		Coordinates: Z07W N7101647m E588658.1m		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)
					047	GM		SILTY GRAVEL with SAND -Brown, very dense, humid -Very hard drilling -Refusal at 0.6m, moved back 1m	
					048	ML		SILT with SAND -Brown, dense, humid -Grinding SANDY SILT -Dark grey, moist, stiff, organic odour -0.4 degrees celcius	1
					049	ML		SILT -Dark grey, damp, firm -2.2 degrees celcius	2
					050	ML		SILT with SAND -Dark grey, soft, wet	3
					051	ML		END OF HOLE	4
									5

SUBSURFACE EXPLORATION AND TEST REPORT		N.Klondike Highway		SOURCE/TP#: 850-4922					
Midnight Sun Drilling		Hunker Creek CL Drilling, km 700.9 LHS		PROJECT NO: 552-202102-1209-1-1					
MARL M4CT		Coordinates: Z07W N7101618m E588756.5m		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)
					052	ML		SILT -Dark brown, very dense, moist, very course, frozen -Negative 0.6 degrees celcius -Heavy grinding at 0.1m, bouncing at 0.2m, smooth at 0.6m, grinding at 0.7m, smooth at 0.8m, slight grinding at 1m	1
					053	ML		SANDY SILT -Dark brown, moist, firm -1 degree celcius, very smooth	2
					054	OL		SANDY ORGANIC SILT -Dark grey, damp -2.6 degrees celcius -Peat, woddy	3
					055	SM		SILTY SAND with GRAVEL -Dark grey, saturated, firm -Significant sand swell at 5m	4
								END OF HOLE	5

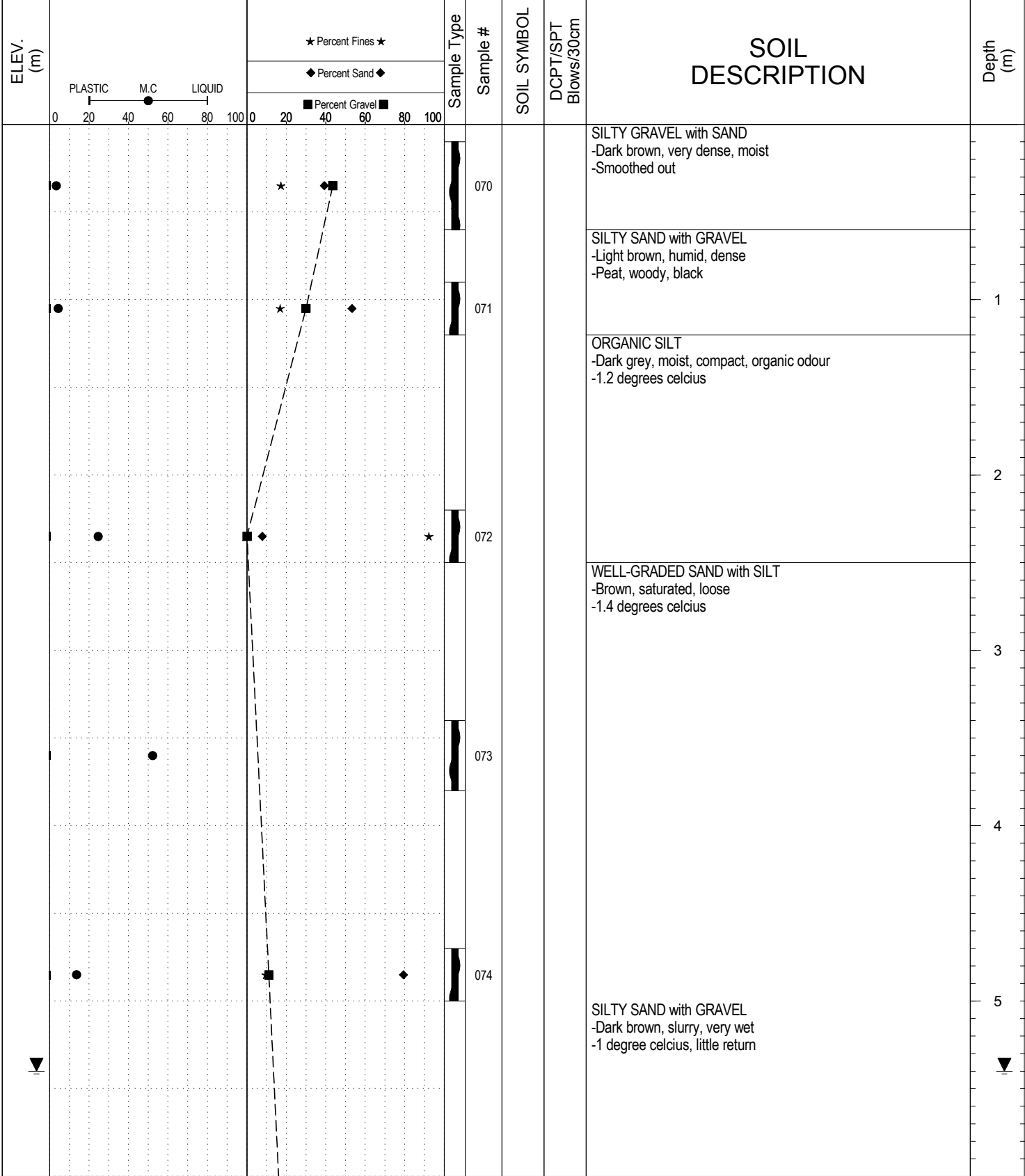
SUBSURFACE EXPLORATION AND TEST REPORT		N.Klondike Highway		SOURCE/TP#: 850-4923			
Midnight Sun Drilling		Hunker Creek CL Drilling, km 700.8 LHS		PROJECT NO: 552-202102-1209-1-1			
MARL M4CT		Coordinates: Z07W N7101619m E588850.9m		ELEVATION: m			
SAMPLE TYPE		<input type="checkbox"/> UNDISTURBED <input 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 ■		SOIL SYMBOL	SOIL DESCRIPTION	Depth (m)
	0 20 40 60 80 100		0 20 40 60 80 100				
					055B ML	SANDY SILT -Steady drilling to 0.3m, grinding after that	
					056 SM	SILTY SAND with GRAVEL -Light brown, dense, humid -Smooth drilling again at 0.5m	1
					057 OL	ORGANIC SILT with SAND -Dark grey, stiff, organic -Negative 0.3 degrees celcius -Brown, compact, moist -3.4 degrees	2
					058 SM	SILTY SAND -Dark grey, compact, damp, organic odour -3.4 degrees celcius	3
					059 SM	-Black, saturated, stiff -2.3 degrees celcius -Peat -Grinding	4
					060		5
					061 SM	SILTY SAND with GRAVEL -Mottled, Brown-dark grey -4.8 degrees celcius -Grinding	

SUBSURFACE EXPLORATION AND TEST REPORT		N.Klondike Highway		SOURCE/TP#: 850-4923					
Midnight Sun Drilling		Hunker Creek CL Drilling, km 700.8 LHS		PROJECT NO: 552-202102-1209-1-1					
MARL M4CT		Coordinates: Z07W N7101619m E588850.9m		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)
					062	GM		SILTY SAND with GRAVEL -Mottled, Brown-dark grey -4.8 degrees celcius -Grinding	
								SILTY GRAVEL with SAND -Dark grey, saturated, loose -3.4 degrees celcius -Grindy drilling -Some peat contamination	7
								END OF HOLE	8
									9
									10
									11

SUBSURFACE EXPLORATION AND TEST REPORT		N.Klondike Highway		SOURCE/TP#: 850-5114				
Midnight Sun Drilling		Hunker Creek CL Drilling, km 700.7 LHS		PROJECT NO: 552-202102-1209-1-1				
MARL M4CT		Coordinates: Z07W N7101639m E588943m		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							
							SILTY GRAVEL -Dark brown, very dense, frozen -Negative 0.6 degrees celcius -Steady grinding to bouncing at 0.1m, bouncing stops at 0.2m, grinding at 0.3m, bouncing at 0.4m, no bouncing at 0.5m	1
					063			
							SILT with SAND -Dark grey, compact, moist, not frozen -0.6 degrees celcius	2
					064			
							SILTY SAND -Brown, moist, compact -2.4 degrees celcius	3
					065			
							-Saturated, loose -3.4 degrees celcius -Clumps of gravel	4
					066			
							-Dark brown, compact -Grinding-bouncing	5
					067			
							SILTY SAND with GRAVEL -Dark brown, saturated, loose -0.4 degrees celcius	

SUBSURFACE EXPLORATION AND TEST REPORT		N.Klondike Highway		SOURCE/TP#: 850-5114						
Midnight Sun Drilling		Hunker Creek CL Drilling, km 700.7 LHS		PROJECT NO: 552-202102-1209-1-1						
MARL M4CT		Coordinates: Z07W N7101639m E588943m		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		0 20 40 60 80 100							
									SILTY SAND with GRAVEL -Dark brown, saturated, loose -0.4 degrees celcius	7
						068			-Dark brown, saturated, loose -1 degree celcius	8
						069			POORLY GRADED GRAVEL with SILT and SAND -Clean gravel with cobbels, no return on auger -1.4 degree celcius	9
										10
									END OF HOLE	11

SAMPLE TYPE UNDISTURBED DCPT AUGER BULK SPT CORE



SUBSURFACE EXPLORATION AND TEST REPORT		N.Klondike Highway		SOURCE/TP#: 851-5115					
Midnight Sun Drilling		Hunker Creek CL Drilling, km 700.6 LHS		PROJECT NO: 552-202102-1209-1-1					
MARL M4CT		Coordinates: Z07W N7101664m E589033.9m		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)
		0 20 40 60 80 100							
		0 20 40 60 80 100			075			SILTY SAND with GRAVEL -Dark brown, slurry, very wet -1 degree celcius, little return	
								WELL-GRADED GRAVEL with SILT and SAND -Dark brown, compact, free water -1 degree celcius	7
					076				8
								END OF HOLE	9
									10
									11
		LOGGED BY: R.Stilwell			Termination Depth: 8.1m				
		COMPILED BY: R.Stilwell			Complete: 12/10/2014 3:15:00 PM				
		REVIEWED BY:			Pit #: Page 2 of 2				