

SUBSURFACE EXPLORATION AND TEST REPORT		Klondike Highway		SOURCE/TP#: 887-5583					
Midnight Sun Drilling		Pelly Hill,		PROJECT NO: 552-202102-0301-1					
MARL MACT		Coordinates: Z08V N6967966.7m E419917.9m		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      MC      LIQUID 0    20    40    60    80    100			Sample Type	Sample #	SOIL SYMBOL	DCPT/SPT Blows/30cm	SOIL DESCRIPTION	Depth (m)
	Percent Fines *      Percent Sand ◆      Percent Gravel ■								
					007	ML		SILT - sandy -trace gravel, damp, light brown	
					008	ML	67	-trace clay -non-plastic, moist, hard	1
					009	ML	7	-loose, weathering on coarse material	2
					010	ML	22	-no gravel -@4.1m (50mm clay lens)	3
								-EOH (Target depth)	4

SUBSURFACE EXPLORATION AND TEST REPORT		Klondike Highway		SOURCE/TP#: 887-5584					
Midnight Sun Drilling		Pelly Hill,		PROJECT NO: 552-202102-0301-1					
MARL MACT		Coordinates: Z08V N6967956.2m E419918.1m		ELEVATION: m					
SAMPLE TYPE		UNDISTURBED		DCPT					
		AUGER		BULK					
		SPT		CORE					
ELEV. (m)	PLASTIC      MC      LIQUID 0      20      40      60      80      100		Percent Fines    * Percent Sand    ♦ Percent Gravel   ■		SOIL SYMBOL	DCPT/SPT Blows/30cm	SOIL DESCRIPTION	Depth (m)	
					010	ML		SILT and SAND -fine grained, loose, damp, light brown -easy drilling	
					011	SM	28	SAND and SILT -fine sand, damp, loose, light brown	1
					012	SM	20	-SAND - silty -damp, loose, light brown	2
					013	ML	31	-SILT -fine grained, dense, light brown	3
					014	ML		-@ 4.2m - 10mm varved clay lens -@ 4.4m - 10mm varved clay lens, indent with thumb easy drilling	4
					015	ML	48	-CLAY (TILL) - some sand -trace gravel, hard, light brown	5
					016	ML	52	-EOH (Target depth)	6
									7
									8

SUBSURFACE EXPLORATION AND TEST REPORT		Klondike Highway		SOURCE/TP#: 887-5585								
Midnight Sun Drilling		Pelly Hill,		PROJECT NO: 552-202102-0301-1								
MARL MACT		Coordinates: Z08V N6967961.6m E419868.1m		ELEVATION: m								
SAMPLE TYPE		UNDISTURBED		DCPT								
		AUGER		BULK								
		SPT		CORE								
ELEV. (m)	PLASTIC	MC	LIQUID	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								
								017	ML		-SILT and SAND -trace gravel, damp, light brown	
								018	ML	73	-moist, very dense	1
								019	ML	4	-SILT - sandy, trace gravel -damp, very loose, light brown	2
								020	ML	23	-some clay, some gravel -compact, dark grey brown, easy drilling	3
								021	ML	36	-some oxidation on coarse particles	4
								022	GM		-hard drilling, grinding on coarse material, potential cobbles	5
											-EOH (hit target depth)	6
												7
												8

SUBSURFACE EXPLORATION AND TEST REPORT		Klondike Highway		SOURCE/TP#: 887-5586								
Midnight Sun Drilling		Pelly Hill,		PROJECT NO: 552-202102-0301-1								
MARL MACT		Coordinates: Z08V N6967964.8m E419810.5m		ELEVATION: m								
SAMPLE TYPE		UNDISTURBED		DCPT								
		AUGER		BULK								
		SPT		CORE								
ELEV. (m)	PLASTIC	MC	LIQUID	Percent Fines *	Percent Sand ◆	Percent Gravel ■	Sample Type	Sample #	SOIL SYMBOL	DCPT/SPT Blows/30cm	SOIL DESCRIPTION	Depth (m)
0	0	40	80	0	0	0						
0.5	10	50	85	45	55	0	SM	023	SM		SAND and SILT - trace clay -fine grained, damp, light brown -easy drilling	
1.0	10	50	85	45	55	0	ML	024	ML	68	SILT and SAND - trace gravel -damp, very dense, light brown	1
2.5	10	50	85	45	55	0	SM	025	SM	37	-some gravel, dense, matrix supported	3
4.0	10	50	85	45	55	0	SM	026	SM	49		4
5.5	10	50	85	45	55	0	SM	027	SM	64	-very dense, dark brown	6
7.0	10	50	85	45	55	0	SM	028	SM	73		7
8.0											-EOH (Target depth)	8

GRAIN SIZE ANALYSIS	Pelly Hill	SOURCE/TP#: 887-5582
Midnight Sun Drilling		PROJECT NO: 552-202102-0301-1
MARL M4CT	Coordinates:Z08V N6967945.3m E419975.2m	ELEVATION: m

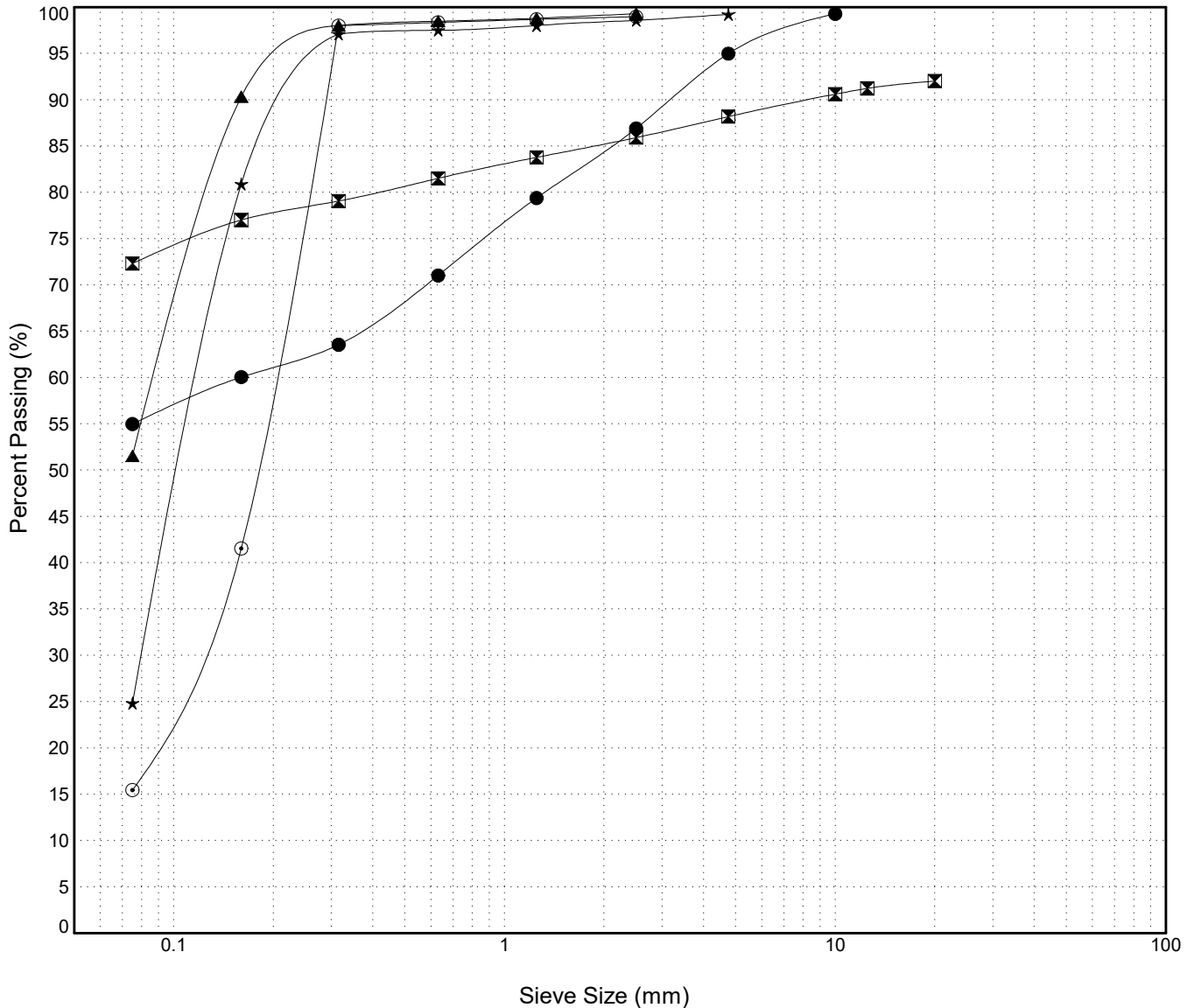
Master Revised July 2013

Field #	Lab #	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu
● 001	2016-886	0.0 to 0.9	SANDY SILT(ML)	13.4	NP	NP	NP		
☒ 002	2016-887	0.9 to 1.4	SILT with SAND(ML)	14.6	NP	NP	NP		
▲ 003	2016-888	2.4 to 2.8	SANDY SILT(ML)	5.8	NP	NP	NP		
★ 004	2016-889	4.0 to 4.4	SILTY SAND(SM)	4.3	NP	NP	NP		
⊙ 005	2016-890	5.5 to 5.9	SILTY SAND(SM)	3.3	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	2016-886	100.0	100.0	100.0	100.0	100.0	100.0	99.3	95.0	86.9	79.4	71.0	63.5	60.1	55.0	4.3	40.0	55.0		
☒ 002	2016-887	100.0	100.0	100.0	100.0	92.0	91.2	90.6	88.2	85.9	83.8	81.5	79.1	77.0	72.3	3.8	15.9	72.3		
▲ 003	2016-888	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.3	98.8	98.5	98.0	90.3	51.5		47.8	51.5		
★ 004	2016-889	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.2	98.6	98.0	97.5	97.1	80.9	24.8		74.4	24.8		
⊙ 005	2016-890	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.0	98.7	98.3	98.0	41.5	15.5		83.5	15.5		

Silt	Sand			Gravel	
	Fine	Medium	Coarse	Fine	Coarse

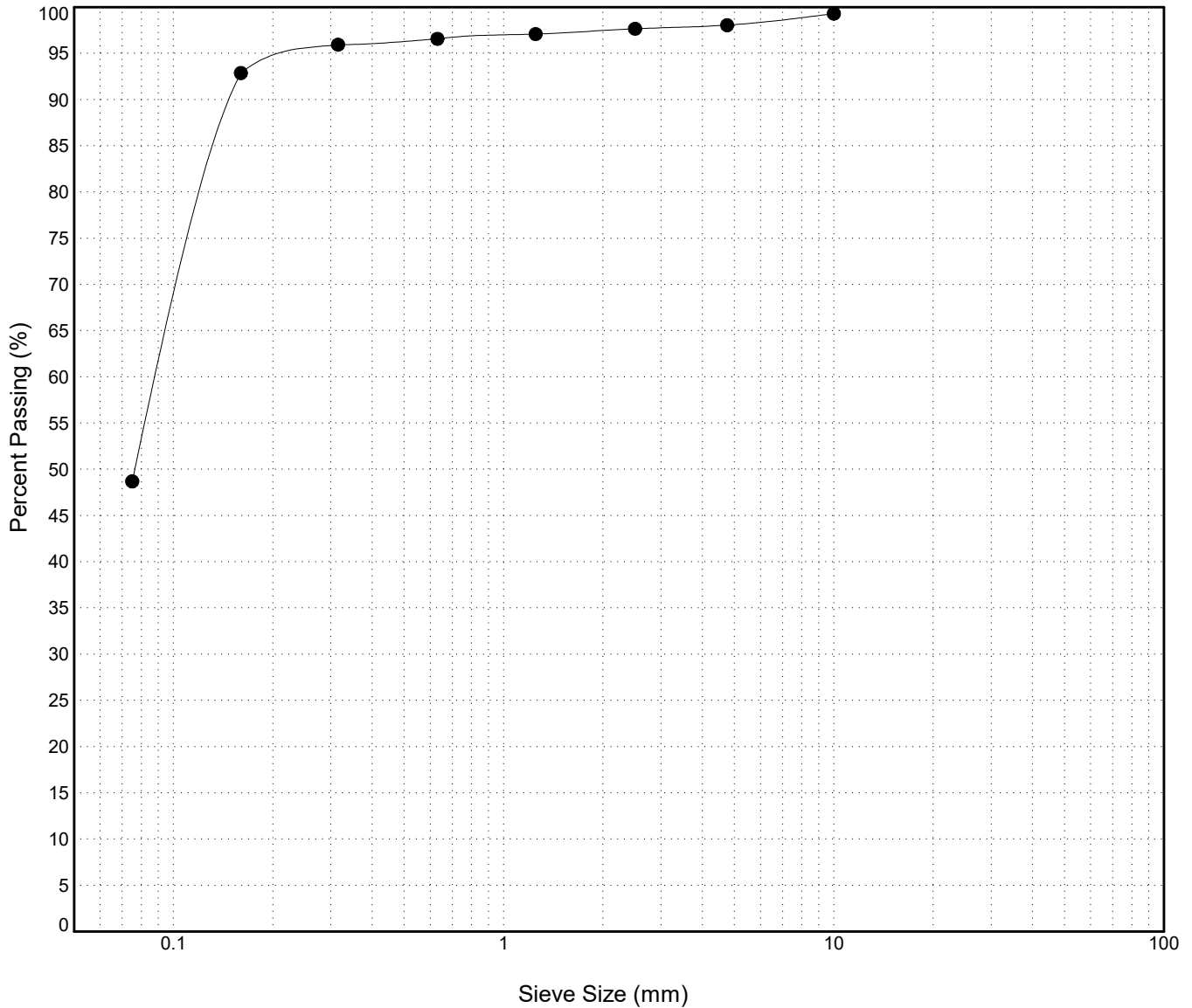


GRAIN SIZE ANALYSIS	Pelly Hill	SOURCE/TP#: 887-5582
Midnight Sun Drilling		PROJECT NO: 552-202102-0301-1
MARL M4CT	Coordinates:Z08V N6967945.3m E419975.2m	ELEVATION: m

Master Revised July 2013

Field #	Lab #	Depth	Classification													%H2O	LL	PL	PI	Cc	Cu	
● 006	2016-891	7.0 to 7.4	SILTY SAND(SM)													3.9	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					
● 006	2016-891	% PASSING	100.0	100.0	100.0	100.0	100.0	100.0	99.3	98.1	97.7	97.1	96.6	95.9	92.9	48.7	1.2	49.3	48.7			

Silt	Sand			Gravel	
	Fine	Medium	Coarse	Fine	Coarse





GRAIN SIZE ANALYSIS	Pelly Hill	SOURCE/TP#: 887-5584
Midnight Sun Drilling		PROJECT NO: 552-202102-0301-1
MARL M4CT	Coordinates:Z08V N6967956.2m E419918.1m	ELEVATION: m

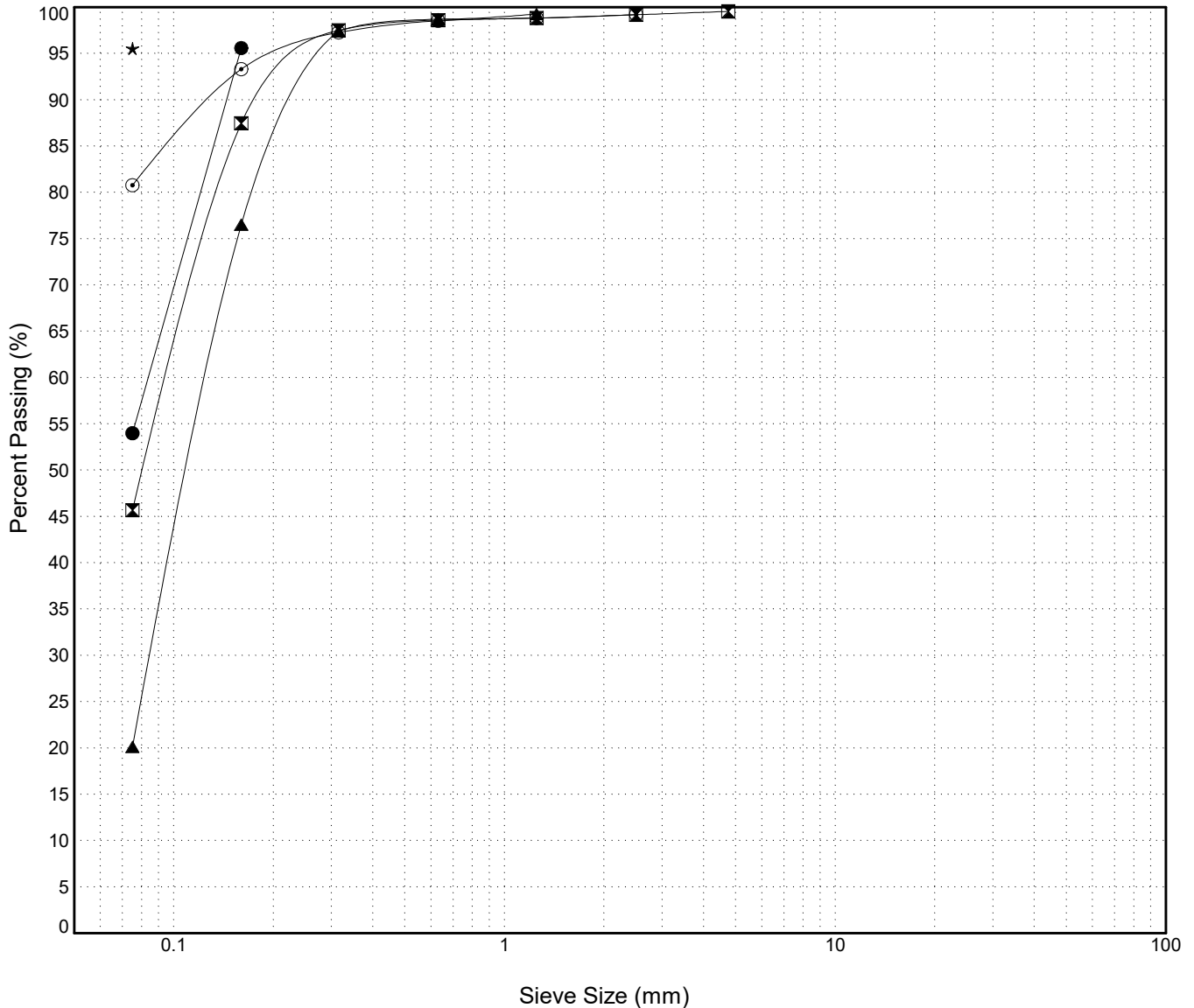
Master Revised July 2013

Field #	Lab #	Depth	Classification	%H <sub>2</sub> O	LL	PL	PI	C <sub>c</sub>	C <sub>u</sub>
● 010	2016-897	0.4 to 0.6	SANDY SILT(ML)	11.5	NP	NP	NP		
☒ 011	2016-898	0.9 to 1.4	SILTY SAND(SM)	6.2	NP	NP	NP		
▲ 012	2016-899	2.4 to 2.8	SILTY SAND(SM)	4.0	NP	NP	NP		
★ 013	2015-900	4.0 to 4.2	SILT(ML)	20.1	NP	NP	NP		
⊙ 014	2016-901	4.2 to 4.4	SILT with SAND(ML)	14.0	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		
● 010	2016-897		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	95.6	54.0	41.6	54.0		
☒ 011	2016-898		100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.5	99.2	98.8	98.6	97.5	87.5	45.7			53.9	45.7		
▲ 012	2016-899		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.3	98.7	97.4	76.5	20.1			79.1	20.1		
★ 013	2015-900		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	95.5				95.5		
⊙ 014	2016-901		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.2	98.8	98.5	97.3	93.3	80.8			18.4	80.8		

Silt	Sand			Gravel	
	Fine	Medium	Coarse	Fine	Coarse

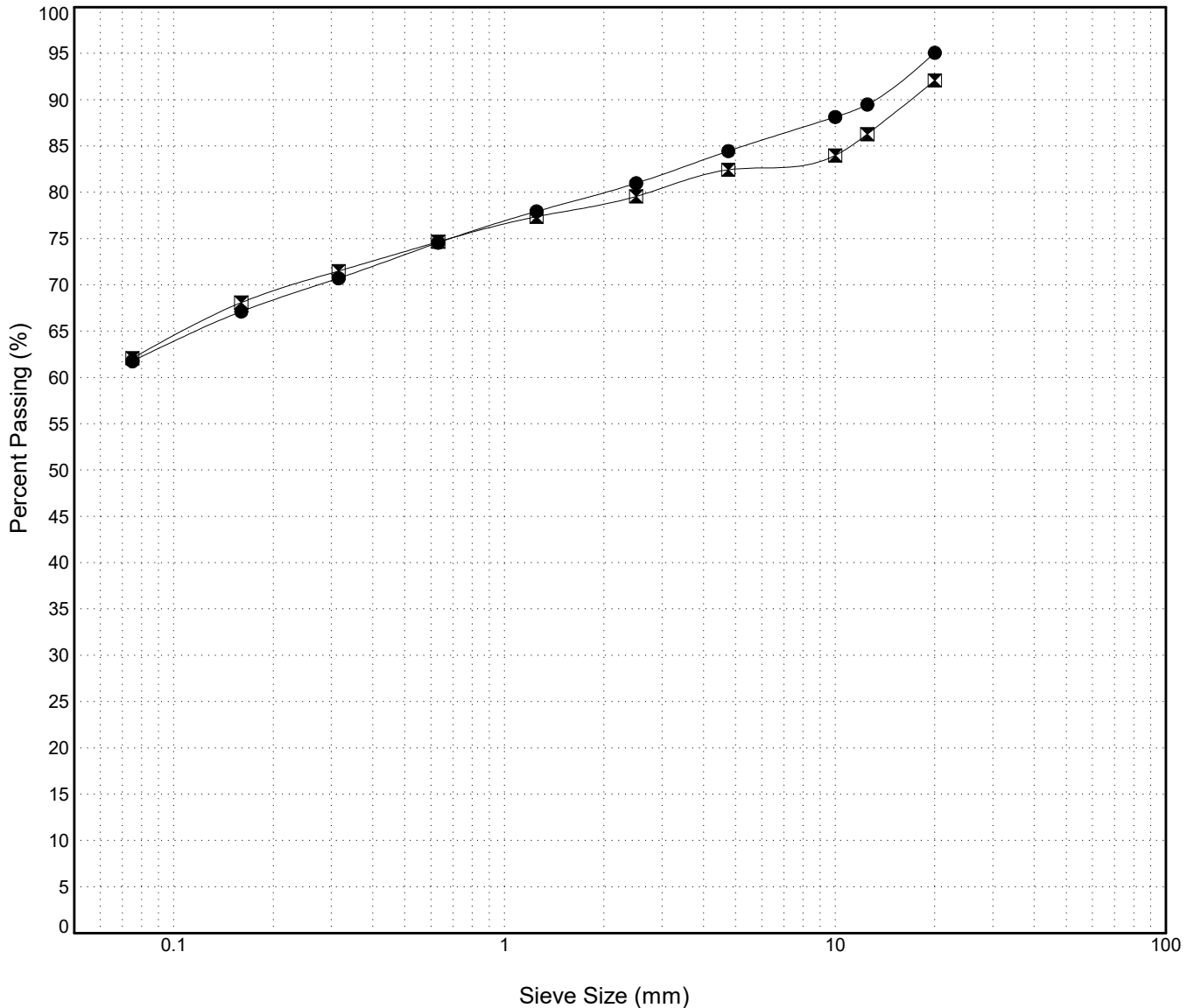


GRAIN SIZE ANALYSIS	Pelly Hill	SOURCE/TP#: 887-5584
Midnight Sun Drilling		PROJECT NO: 552-202102-0301-1
MARL M4CT	Coordinates:Z08V N6967956.2m E419918.1m	ELEVATION: m

Master Revised July 2013

Field #	Lab #	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu										
● 015	2016-902	5.5 to 5.9	SANDY SILT with GRAVEL(ML)	11.6	NP	NP	NP												
☒ 016	2016-903	7.0 to 7.4	SANDY SILT with GRAVEL(ML)	11.5	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			
● 015	2016-902	100.0	100.0	100.0	100.0	95.1	89.5	88.1	84.5	81.0	78.0	74.6	70.7	67.1	61.8	10.6	22.7	61.8	
☒ 016	2016-903	100.0	100.0	100.0	100.0	92.1	86.3	84.0	82.4	79.6	77.4	74.7	71.5	68.1	62.1	9.6	20.4	62.1	

Silt	Sand			Gravel	
	Fine	Medium	Coarse	Fine	Coarse



GRAIN SIZE ANALYSIS	Pelly Hill	SOURCE/TP#: 887-5585
Midnight Sun Drilling		PROJECT NO: 552-202102-0301-1
MARL M4CT	Coordinates:Z08V N6967961.6m E419868.1m	ELEVATION: m

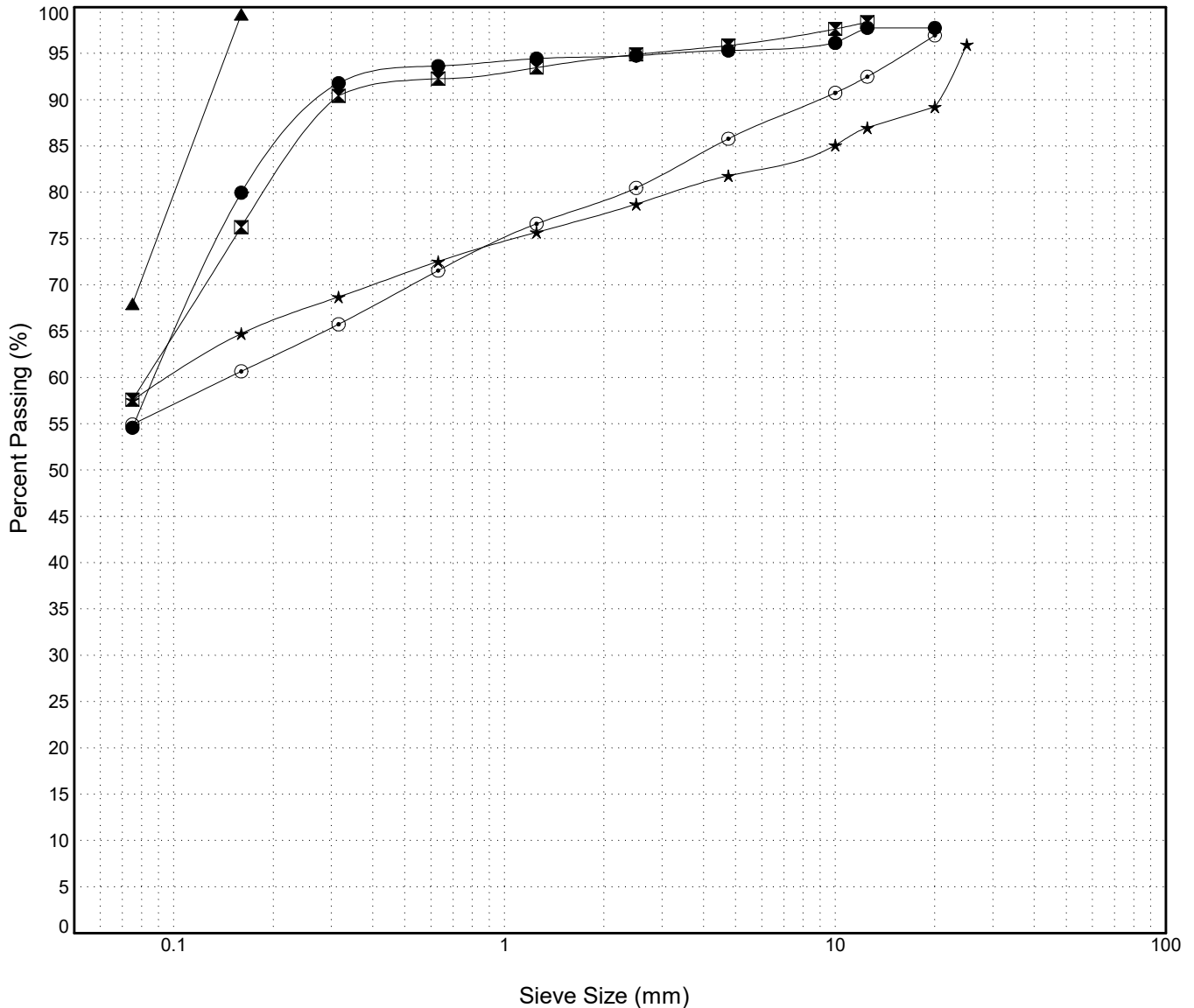
Master Revised July 2013

Field #	Lab #	Depth	Classification	%H <sub>2</sub> O	LL	PL	PI	C <sub>c</sub>	C <sub>u</sub>
● 017	2016-904	0.6 to 0.7	SANDY SILT(ML)	9.2	NP	NP	NP		
☒ 018	2016-905	0.9 to 1.4	SANDY SILT(ML)	14.3	NP	NP	NP		
▲ 019	2016-906	2.4 to 2.8	SANDY SILT(ML)	7.4	NP	NP	NP		
★ 020	2016-907	4.0 to 4.4	SANDY SILT with GRAVEL(ML)	10.9	NP	NP	NP		
⊙ 021	2016-908	5.4 to 5.9	SANDY SILT(ML)	11.8	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
● 017	2016-904	100.0	100.0	100.0	100.0	97.8	97.8	96.1	95.3	94.8	94.5	93.6	91.8	80.0	54.6	2.4	40.7	54.6	
☒ 018	2016-905	100.0	100.0	100.0	100.0	100.0	98.4	97.6	95.9	94.9	93.5	92.3	90.4	76.3	57.6	2.5	38.2	57.6	
▲ 019	2016-906	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.2	68.0		31.3	68.0	
★ 020	2016-907	100.0	100.0	100.0	96.0	89.2	87.0	85.1	81.8	78.7	75.7	72.5	68.7	64.7	57.6	14.2	24.2	57.6	
⊙ 021	2016-908	100.0	100.0	100.0	100.0	97.0	92.5	90.8	85.8	80.5	76.6	71.6	65.8	60.7	54.9	11.2	30.9	54.9	

Silt	Sand			Gravel	
	Fine	Medium	Coarse	Fine	Coarse

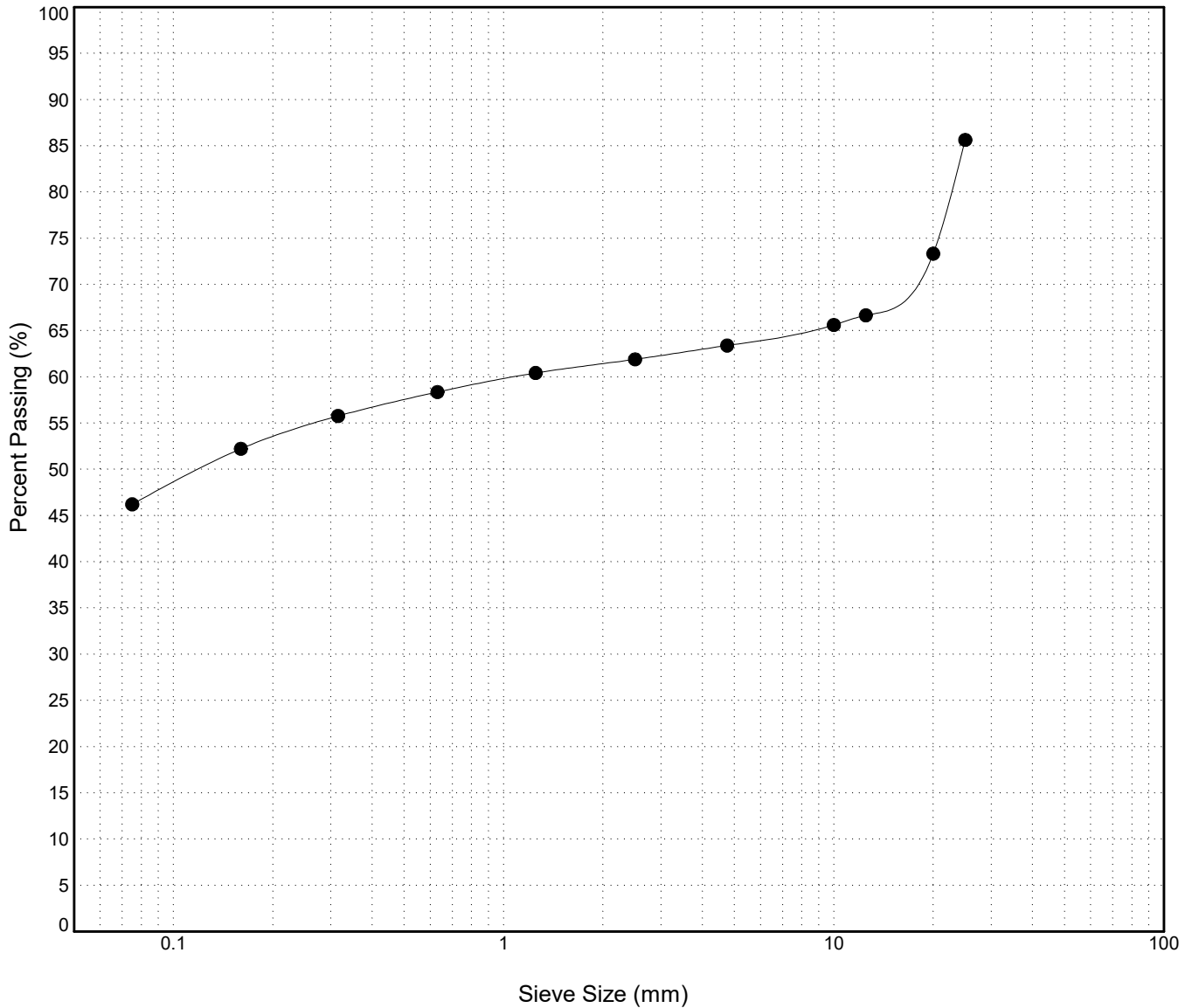


GRAIN SIZE ANALYSIS	Pelly Hill	SOURCE/TP#: 887-5585
Midnight Sun Drilling		PROJECT NO: 552-202102-0301-1
MARL M4CT	Coordinates:Z08V N6967961.6m E419868.1m	ELEVATION: m

Master Revised July 2013

Field #	Lab #	Depth	Classification													%H2O	LL	PL	PI	Cc	Cu	
● 022	2016-909	7.0 to 7.4	SILTY GRAVEL with SAND(GM)													8.6	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					
● 022	2016-909	% PASSING	100.0	100.0	100.0	85.6	73.3	66.7	65.6	63.4	61.9	60.4	58.4	55.8	52.2	46.2	Gravel	Sand	Silt	Clay		
																		22.2	17.2	46.2		

Silt	Sand			Gravel	
	Fine	Medium	Coarse	Fine	Coarse



GRAIN SIZE ANALYSIS	Pelly Hill	SOURCE/TP#: 887-5586
Midnight Sun Drilling		PROJECT NO: 552-202102-0301-1
MARL M4CT	Coordinates:Z08V N6967964.8m E419810.5m	ELEVATION: m

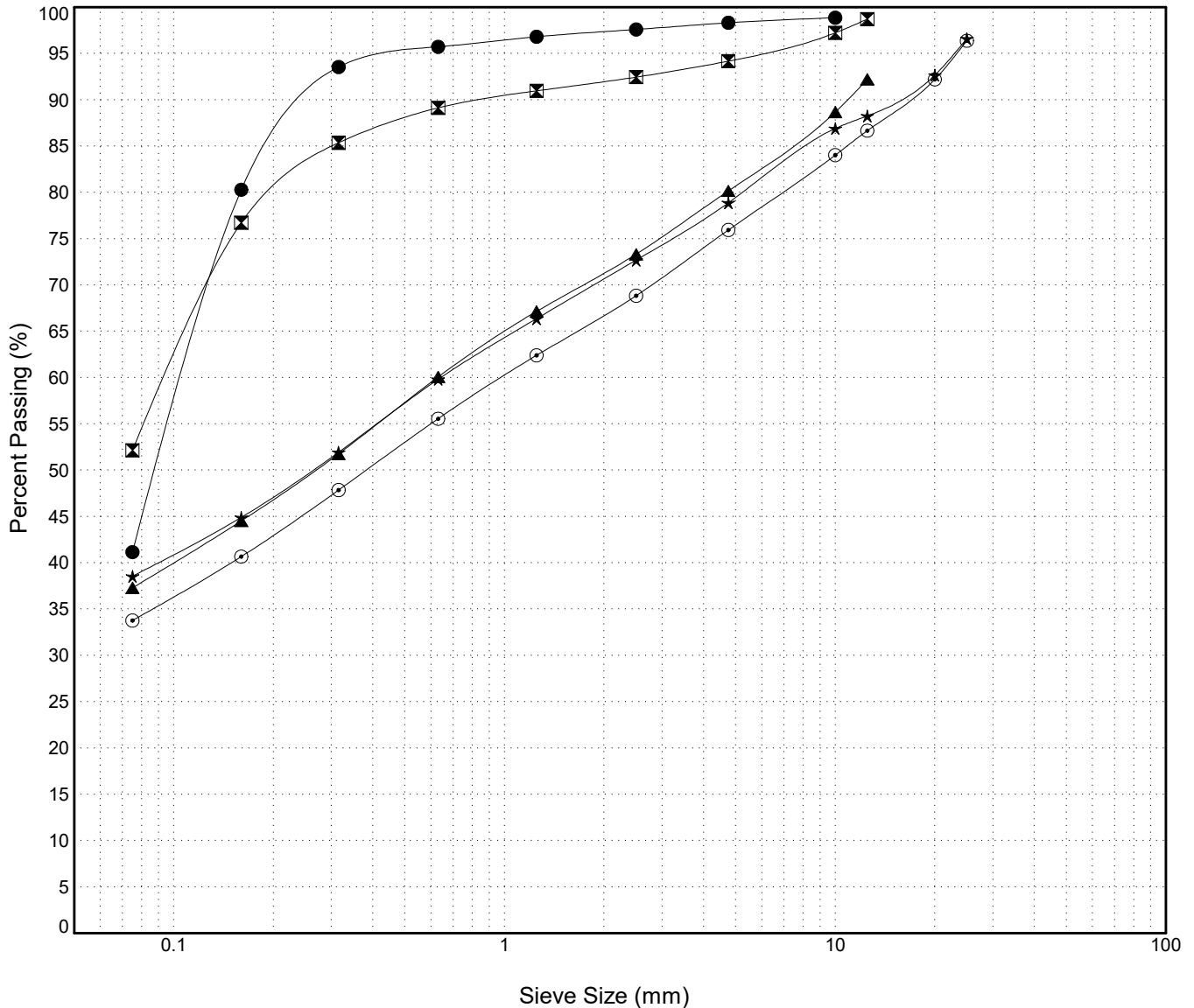
Master Revised July 2013

Field #	Lab #	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu
● 023	2016-910	0.3 to 0.4	SILTY SAND(SM)	6.2	NP	NP	NP		
☒ 024	2016-911	0.9 to 1.4	SANDY SILT(ML)	10.8	NP	NP	NP		
▲ 025	2016-912	2.4 to 2.8	SILTY SAND with GRAVEL(SM)	6.7	NP	NP	NP		
★ 026	2016-913	4.0 to 4.4	SILTY SAND with GRAVEL(SM)	6.7	NP	NP	NP		
⊙ 027	2016-914	5.4 to 5.9	SILTY SAND with GRAVEL(SM)	5.9	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
● 023	2016-910	100.0	100.0	100.0	100.0	100.0	100.0	98.9	98.3	97.6	96.8	95.7	93.5	80.3	41.1	0.5	57.2	41.1	
☒ 024	2016-911	100.0	100.0	100.0	100.0	100.0	98.7	97.2	94.2	92.4	91.0	89.1	85.4	76.7	52.2	4.5	42.0	52.2	
▲ 025	2016-912	100.0	100.0	100.0	100.0	100.0	92.2	88.7	80.2	73.3	67.1	60.1	51.8	44.5	37.3	12.0	42.9	37.3	
★ 026	2016-913	100.0	100.0	100.0	96.6	92.7	88.3	86.9	78.9	72.7	66.4	59.8	51.9	44.9	38.5	17.7	40.3	38.5	
⊙ 027	2016-914	100.0	100.0	100.0	96.4	92.2	86.7	84.0	75.9	68.8	62.4	55.5	47.8	40.7	33.8	20.4	42.2	33.8	

Silt	Sand			Gravel	
	Fine	Medium	Coarse	Fine	Coarse



GRAIN SIZE ANALYSIS	Pelly Hill	SOURCE/TP#: 887-5586
Midnight Sun Drilling		PROJECT NO: 552-202102-0301-1
MARL M4CT	Coordinates:Z08V N6967964.8m E419810.5m	ELEVATION: m

Master Revised July 2013

Field #	Lab #	Depth	Classification													%H2O	LL	PL	PI	Cc	Cu
● 028	2016-915	7.0 to 7.4	SILTY SAND with GRAVEL(SM)													5.8	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					
● 028	2016-915	100.0	100.0	100.0	100.0	94.5	87.7	85.0	75.8	68.5	61.6	53.8	45.5	38.1	31.2	Gravel	Sand	Silt	Clay		
																18.7	44.7	31.2			

Silt	Sand			Gravel	
	Fine	Medium	Coarse	Fine	Coarse

