

SUBSURFACE EXPLORATION AND TEST REPORT		Alaska Highway		SOURCE/TP#: 909-5672					
Ken Roberts		Trouts Place Gravel Exploration, km 1736.6 LHS		PROJECT NO: 552-202101					
4 Solid Stem		Coordinates: Z7N N6828465m E586175m		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							
					001	SP-SM		ORGANICS -Roots, silt SAND - poorly graded with silt and gravel -Grey, loose, damp, sub-angular to sub-rounded -Silty -Dark brown	1
					002	SM			2
					003	SM			4
								END of HOLE -Target depth reached	

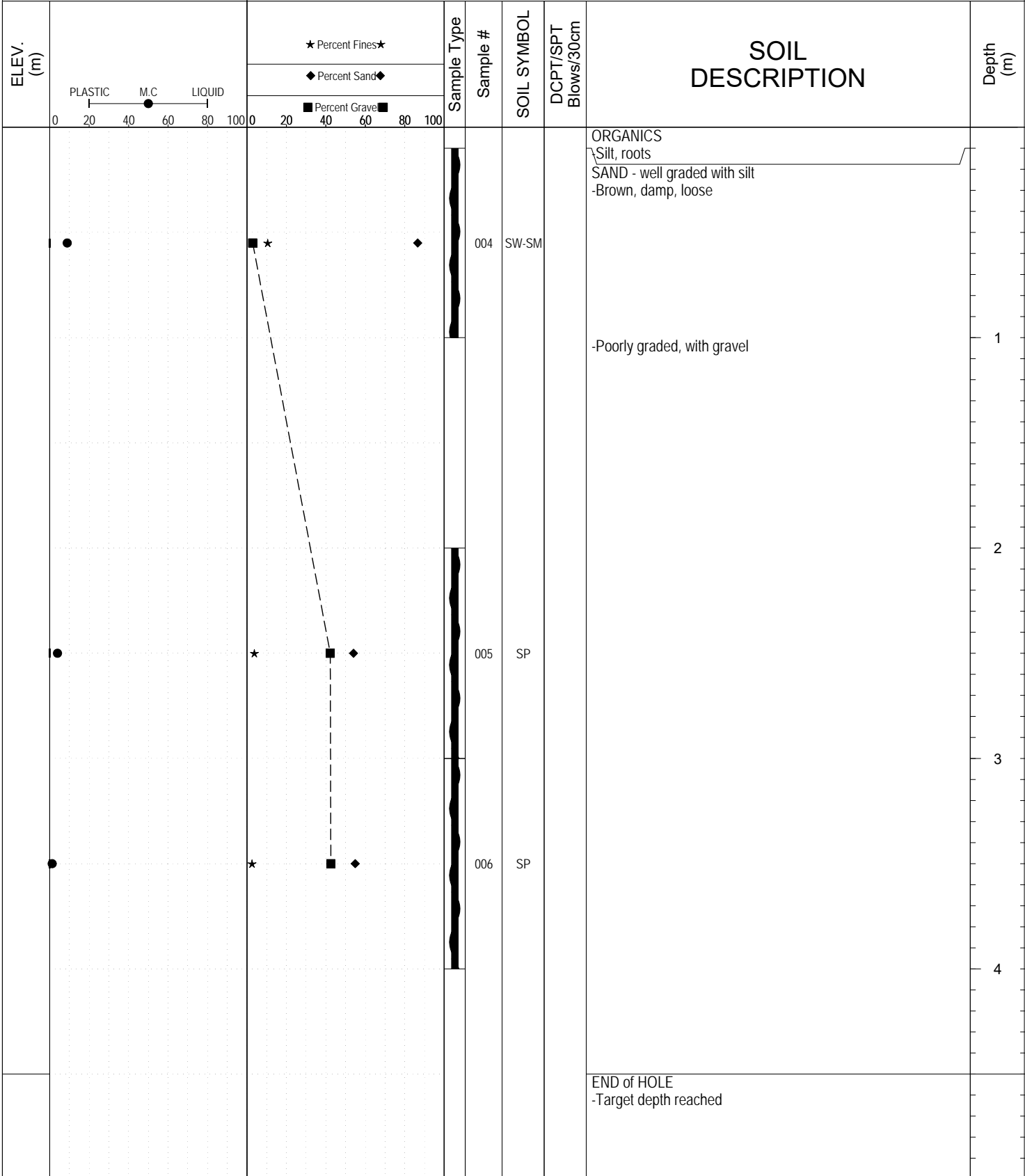


SUBSURFACE EXPLORATION AND TEST REPORT Alaska Highway SOURCE/TP#: 909-5673

Ken Roberts Trouts Place Gravel Exploration, km 1736.6 LHS PROJECT NO: 552-202101


4 Solid Stem Coordinates: Z7N N6828372m E586167m ELEVATION: m

SAMPLE TYPE UNDISTURBED DCPT AUGER BULK SPT CORE



Highways and Public Works
Transportation Engineering Branch

LOGGED BY: D.Lorenzi	Termination Depth: 4.5m
COMPILED BY: R.Stilwell	Complete: 12/14/2016 2:45:00 PM
REVIEWED BY:	Pit #: 115 G-01 Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT		Alaska Highway		SOURCE/TP#: 909-5674							
Ken Roberts		Trouts Place Gravel Exploration, km 1736.6 LHS		PROJECT NO: 552-202101							
4 Solid Stem		Coordinates: Z7N N6828254m E586230m		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)	
	0	20	40	60							80
									ORGANICS Silt SAND - silty -Brown, damp, loose	1	
						007	SM				
									-With subrounded gravel -Brown/grey	2	
						008	SM				
									-Brown	3	
						009	SM			4	
									END of HOLE -Target depth reached		
 Highways and Public Works Transportation Engineering Branch		LOGGED BY: D.Lorenzi			Termination Depth: 4.5m						
		COMPILED BY: R.Stilwell			Complete: 12/14/2016 4:20:00 PM						
		REVIEWED BY:			Pit #: 115 G-01 Page 1 of 1						

SUBSURFACE EXPLORATION AND TEST REPORT		Alaska Highway		SOURCE/TP#: 909-5676				
Ken Roberts		Trouts Place Gravel Exploration, km 1736.6 LHS		PROJECT NO: 552-202101				
4 Solid Stem		Coordinates: Z7N N6828314m E586026m		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		Sample Type	Sample #	SOIL SYMBOL	DCPT/SPT Blows/30cm	SOIL DESCRIPTION	Depth (m)
	★ Percent Fines★ ◆ Percent Sand◆ ■ Percent Gravel■							
							ORGANICS Silt, roots SILT - some sand -Light brown, loose, damp	
				012	SM		SAND - silty with gravel -Brown, loose, damp -Sub-angular to sub-rounded	1
				013	GW-GM		GRAVEL - well graded with silt and sand -Brown, loose, damp -Sub-angular to sub-rounded	2
				014	SW-SM		SAND - well graded with silt -Brown, loose, damp -Sub-angular to sub-rounded	3
							END of HOLE -Target depth reached	4



SUBSURFACE EXPLORATION AND TEST REPORT		Alaska Highway		SOURCE/TP#: 909-5677					
Ken Roberts		Trouts Place Gravel Exploration, km 1736.6 LHS		PROJECT NO: 552-202101					
4 Solid Stem		Coordinates: Z7N N6828388m E586086m		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★		Sample Type	Sample #	SOIL SYMBOL	DCPT/SPT Blows/30cm	SOIL DESCRIPTION	Depth (m)
		◆ Percent Sand◆	■ Percent Gravel■						
					015	SM		ORGANICS -Roots, silt SAND - silty -Brown, damp, loose	1
					016	SM			2
					017	SM		-With sub-rounded gravel -Dark brown	3
									4
								END of HOLE -Target depth reached	
		Highways and Public Works Transportation Engineering Branch				LOGGED BY: D.Lorenzi		Termination Depth: 4.5m	
						COMPILED BY: R.Stilwell		Complete: 12/15/2016 1:10:00 PM	
						REVIEWED BY:		Pit #: 115 G-01 Page 1 of 1	

SUBSURFACE EXPLORATION AND TEST REPORT		Alaska Highway		SOURCE/TP#: 909-5678						
Ken Roberts		Trouts Place Gravel Exploration, km 1736.6 LHS		PROJECT NO: 552-202101						
4 Solid Stem		Coordinates: Z7N N6828256m E586151m		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)
	0 20 40 60 80 100		0 20 40 60 80 100							
									ORGANICS Silt, roots SAND - silty -Light brown, loose, damp	0
	●	■	★	◆		018	SM			1
									-With gravel -Brown, moist	2
	●	■	★	◆		019	SM			3
									END of HOLE -Refusal	4



SUBSURFACE EXPLORATION AND TEST REPORT		Alaska Highway		SOURCE/TP#: 909-5679					
Ken Roberts		Trouts Place Gravel Exploration, km 1736.6 LHS		PROJECT NO: 552-202101					
4 Solid Stem		Coordinates: Z7N N6828315m E586887m		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★		Sample Type	Sample #	SOIL SYMBOL	DCPT/SPT Blows/30cm	SOIL DESCRIPTION	Depth (m)
		◆ Percent Sand◆							
					021	GW-GM		<p>ORGANICS</p> <p>Silt, roots</p> <p>GRAVEL - well graded with silt and sand</p> <p>-Grey, damp, compact</p> <p>-Sub-angular to sub-rounded</p>	1
								<p>END of HOLE</p> <p>-Refusal, Cobbles/boulders</p>	4



SUBSURFACE EXPLORATION AND TEST REPORT Alaska Highway SOURCE/TP#: 909-5680

Ken Roberts Trouts Place Gravel Exploration, km 1736.6 LHS PROJECT NO: 552-202101

4 Solid Stem Coordinates: Z7N N6828374m E586839m ELEVATION: m


SAMPLE TYPE UNDISTURBED DCPT AUGER BULK SPT 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									
									ORGANICS -Roots, silt	
						022	SP		SAND, poorly graded with gravel -Grey, damp, compact -Sub-rounded -Some cobbles	1
						023	SP			
						024	GP		GRAVEL, poorly graded with sand -Grey, damp, compact -Sub-rounded	2
									END of HOLE -Refusal due to cobble	3
										4




Highways and Public Works
Transportation Engineering Branch

LOGGED BY: D.Lorenzi	Termination Depth: 3m
COMPILED BY: R.Stilwell	Complete: 12/15/2016 7:20:00 PM
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SUBSURFACE EXPLORATION AND TEST REPORT		Alaska Highway		SOURCE/TP#: 909-5681							
Ken Roberts		Trouts Place Gravel Exploration, km 1736.6 LHS		PROJECT NO: 552-202101							
4 Solid Stem		Coordinates: Z7N N6828476m E586718m		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)	
						025	SP-SM		ORGANICS Silt, roots SAND - poorly graded with gravel -Brown, damp, loose -Sub-rounded	1	
										2	
									-With silt -Well graded	3	
						027	SW-SM			4	
									END of HOLE -Target depth reached		
		Highways and Public Works Transportation Engineering Branch				LOGGED BY: D.Lorenzi		Termination Depth: 4.5m			
						COMPILED BY: R.Stilwell		Complete: 12/17/2016 9:15:00 AM			
						REVIEWED BY:		Pit #: 115 G-01		Page 1 of 1	

SUBSURFACE EXPLORATION AND TEST REPORT		Alaska Highway		SOURCE/TP#: 909-5683																	
Ken Roberts		Trouts Place Gravel Exploration, km 1736.6 LHS		PROJECT NO: 552-202101																	
4 Solid Stem		Coordinates: Z7N N6828456m E586502m		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	0	20	40	60	80	100	Sample Type	Sample #	SOIL SYMBOL	DCPT/SPT Blows/30cm	SOIL DESCRIPTION	Depth (m)
																				ORGANICS -Roots, silt GRAVEL - poorly graded with silt and sand -Grey, damp, compact -Sub-angular to sub-rounded	1
																	029	GP-GM		-Well graded, trace silt -Trace cobbles	2
																	030	GW		-Poorly graded	3
																	031	GP			4
																				END of HOLE -Target depth reached	



SUBSURFACE EXPLORATION AND TEST REPORT		Alaska Highway		SOURCE/TP#: 909-5684				
Ken Roberts		Trouts Place Gravel Exploration, km 1736.6 LHS		PROJECT NO: 552-202101				
4 Solid Stem		Coordinates: Z7N N6828310m E586606m		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	DCPT/SPT Blows/30cm	SOIL DESCRIPTION	Depth (m)
	0 20 40 60 80 100		0 20 40 60 80 100					
					032	ML	ORGANICS -Roots, silt SILT - sandy -Dark brown, damp, loose	1
					033	SP-SM	SAND - poorly graded with silt and gravel -Brown, damp, loose -Trace cobbles	3
							END of HOLE -Target depth reached	4
 Highways and Public Works Transportation Engineering Branch		LOGGED BY: D.Lorenzi		Termination Depth: 3.2m				
		COMPILED BY: R.Stilwell		Complete: 12/17/2016 1:55:00 PM				
		REVIEWED BY:		Pit #: 115 G-01 Page 1 of 1				

SUBSURFACE EXPLORATION AND TEST REPORT		Alaska Highway		SOURCE/TP#: 909-5685	
Ken Roberts		Trouts Place Gravel Exploration, km 1736.6 LHS		PROJECT NO: 552-202101	
4 Solid Stem		Coordinates: Z7N N6827736m E586689m		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★		Sample Type	Sample #
		◆ Percent Sand◆			
		■ Percent Gravel■		SOIL SYMBOL	DCPT/SPT Blows/30cm
				SOIL DESCRIPTION	
					Depth (m)
				035	SM
				ORGANICS -Roots, silt SAND - silty -Brown, damp, loose	
				END of HOLE -Refusal on rock	
					1
					2
					3
					4
		LOGGED BY: D.Lorenzi		Termination Depth: 0.5m	
		COMPILED BY: R.Stilwell		Complete: 12/17/2016 3:10:00 PM	
		REVIEWED BY:		Pit #: 115 G-01 Page 1 of 1	
Highways and Public Works Transportation Engineering Branch					

SUBSURFACE EXPLORATION AND TEST REPORT		Alaska Highway		SOURCE/TP#: 909-5686				
Ken Roberts		Trouts Place Gravel Exploration, km 1736.6 LHS		PROJECT NO: 552-202101				
4 Solid Stem		Coordinates: Z7N N6827566m E586742m		ELEVATION: m				
SAMPLE TYPE		UNDISTURBED		DCPT				
		AUGER		BULK				
		SPT		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				
							ORGANICS -Roots, silt SAND, silty -Brown, damp, very loose	1
					036	SM		
							GRAVEL - silty with sand -Grey/brown, moist, compact	2
					037	GM		
							SAND - silty with gravel -Grey/brown, moist, compact	3
					038	SM		
							END of HOLE -Target depth reached	4



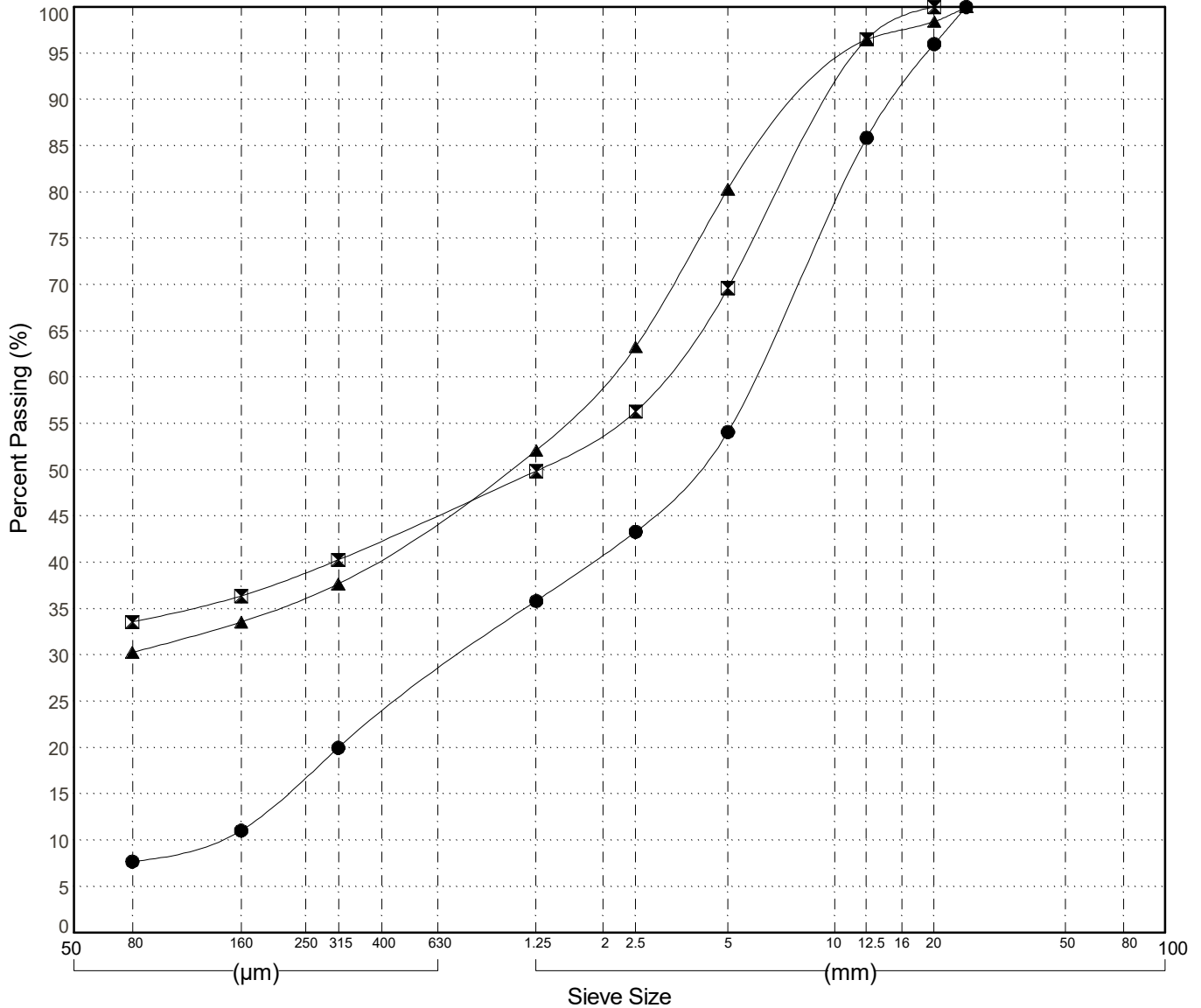
GRAIN SIZE ANALYSIS	Trouts Place Gravel Exploration	SOURCE/TP#: 909-5672
Ken Roberts	km 1736.6 LHS	PROJECT NO: 552-202101
4 Solid Stem	Coordinates: Z7N N6828465m E586175m	ELEVATION: m

Master Revised June 2017

Field#	Lab#	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu	D10
● 001	688	0.2 to 1.0	POORLY GRADED SAND with SILT and GRAVEL(SP-SM)	1.9	NP	NP	NP	0.8	45.1	0.126
☒ 002	689	1.0 to 2.0	SILTY SAND with GRAVEL(SM)	16.2	NP	NP	NP			
▲ 003	690	3.5 to 4.5	SILTY SAND with GRAVEL(SM)	12.7	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	688	100.0	100.0	100.0	100.0	96.0	85.9	78.5	54.1	43.3	35.8	28.0	20.0	11.1	7.7	45.9	46.4	7.7	
☒	002	689	100.0	100.0	100.0	100.0	100.0	96.5	90.3	69.6	56.3	49.9	45.1	40.3	36.4	33.6	30.4	36.1	33.6	
▲	003	690	100.0	100.0	100.0	100.0	98.4	96.5	92.7	80.3	63.3	52.1	44.9	37.7	33.6	30.3	19.7	50.0	30.3	

Silt	Sand			Gravel	
	Fine	Medium	Coarse	Fine	Coarse



Highways and Public Works
Transportation Engineering Branch

LOGGED BY: D.Lorenzi
COMPILED BY: R.Stilwell
REVIEWED BY:

Pit # 115 G-01
Complete: 12/14/2016 1:10:00 PM

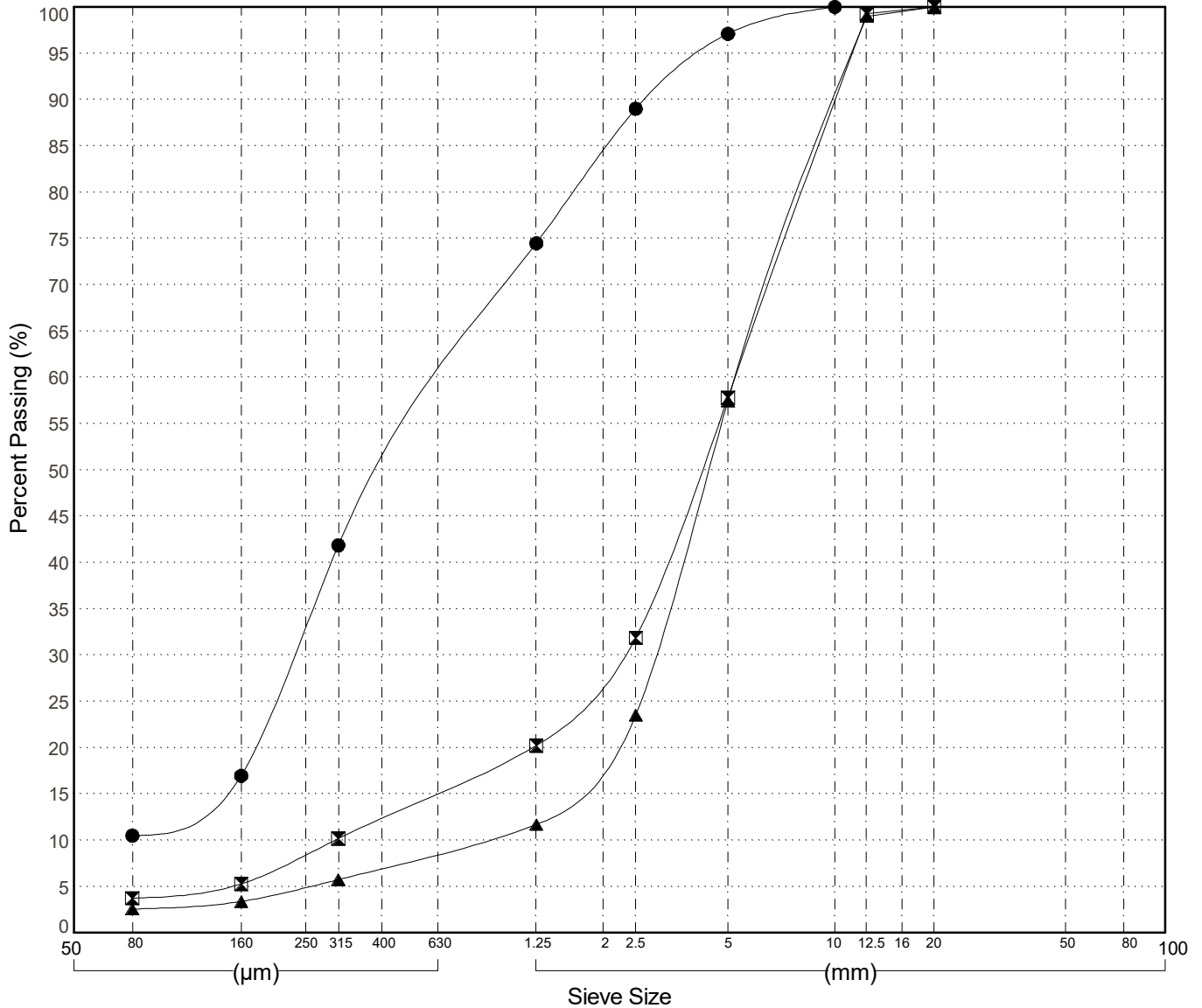
GRAIN SIZE ANALYSIS	Trouts Place Gravel Exploration	SOURCE/TP#: 909-5673
Ken Roberts	km 1736.6 LHS	PROJECT NO: 552-202101
4 Solid Stem	Coordinates: Z7N N6828372m E586167m	ELEVATION: m

Master Revised June 2017

Field #	Lab #	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu	D10
● 004	691	0.1 to 1.0	WELL-GRADED SAND with SILT (SW-SM)	8.9	NP	NP	NP	1.1	9.6	
☒ 005	692	2.0 to 3.0	POORLY GRADED SAND with GRAVEL (SP)	3.9	NP	NP	NP	3.3	16.3	0.307
▲ 006	693	3.0 to 4.0	POORLY GRADED SAND with GRAVEL (SP)	1.3	NP	NP	NP	1.9	6.0	0.843

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
●	004	691	100.0	100.0	100.0	100.0	100.0	100.0	100.0	97.1	89.0	74.5	58.3	41.9	17.0	10.5	2.9	86.6	10.5	
☒	005	692	100.0	100.0	100.0	100.0	100.0	99.2	89.7	57.8	31.9	20.2	15.2	10.2	5.3	3.7	42.2	54.0	3.7	
▲	006	693	100.0	100.0	100.0	100.0	100.0	99.0	89.4	57.5	23.5	11.7	8.7	5.8	3.4	2.6	42.5	54.9	2.6	

Silt	Sand			Gravel	
	Fine	Medium	Coarse	Fine	Coarse

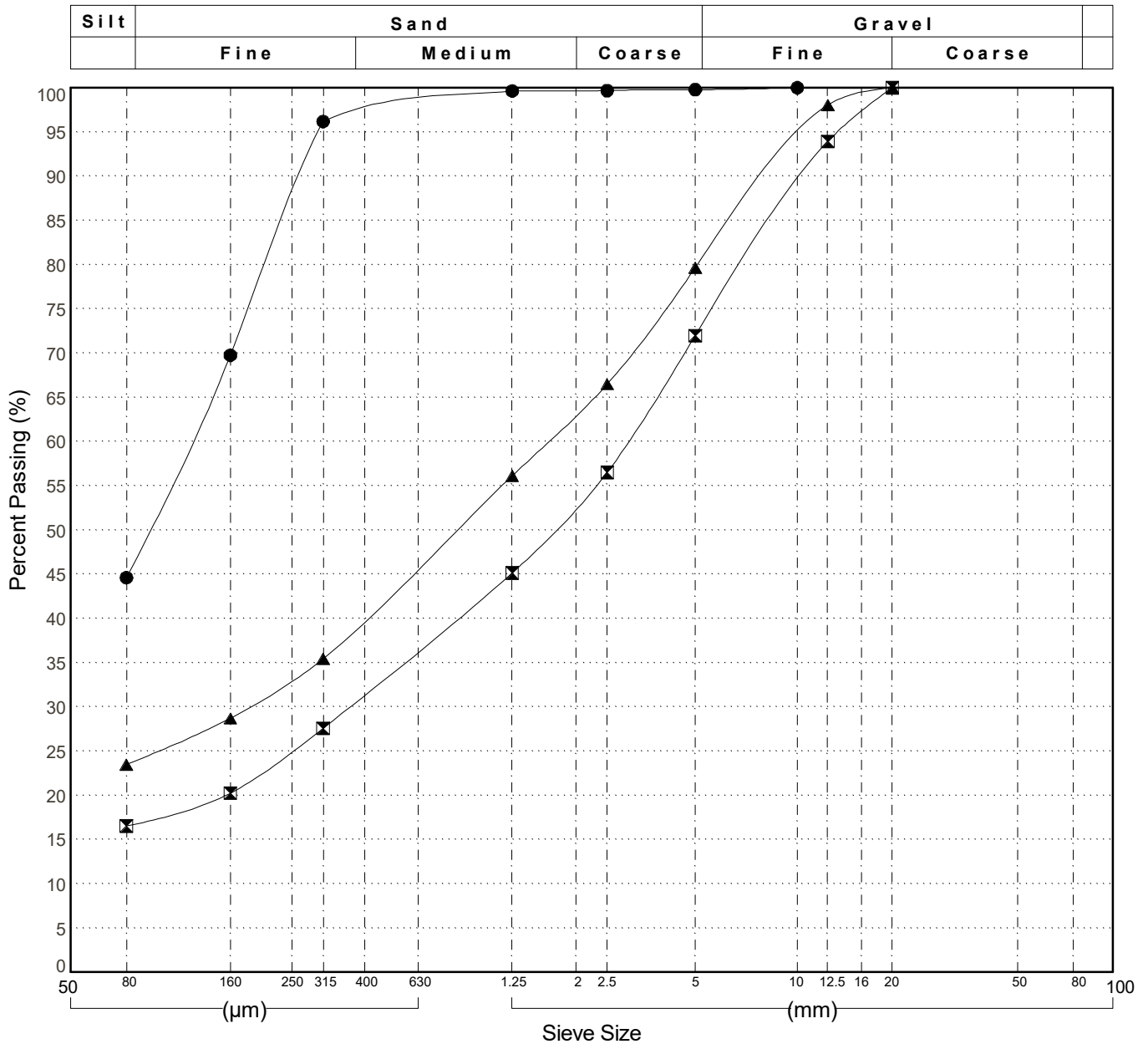


GRAIN SIZE ANALYSIS	Trouts Place Gravel Exploration	SOURCE/TP#: 909-5674
Ken Roberts	km 1736.6 LHS	PROJECT NO: 552-202101
4 Solid Stem	Coordinates: Z7N N6828254m E586230m	ELEVATION: m

Master Revised June 2017

Field#	Lab#	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu	D10
● 007	694	0.1 to 1.0	SILTY SAND(SM)	33.8	NP	NP	NP			
☒ 008	695	1.5 to 3.0	SILTY SAND with GRAVEL(SM)	14.2	NP	NP	NP			
▲ 009	696	3.0 to 4.0	SILTY SAND with GRAVEL(SM)	10.1	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			
		% PASSING														Gravel	Sand	Silt	Clay
●	007	694	100.0	100.0	100.0	100.0	100.0	100.0	99.8	99.7	99.6	97.9	96.2	69.7	44.6	0.2	55.2	44.6	
☒	008	695	100.0	100.0	100.0	100.0	93.9	88.9	72.0	56.5	45.1	36.4	27.6	20.3	16.5	28.0	55.5	16.5	
▲	009	696	100.0	100.0	100.0	100.0	98.0	93.8	79.6	66.5	56.1	45.8	35.4	28.7	23.5	20.4	56.2	23.5	

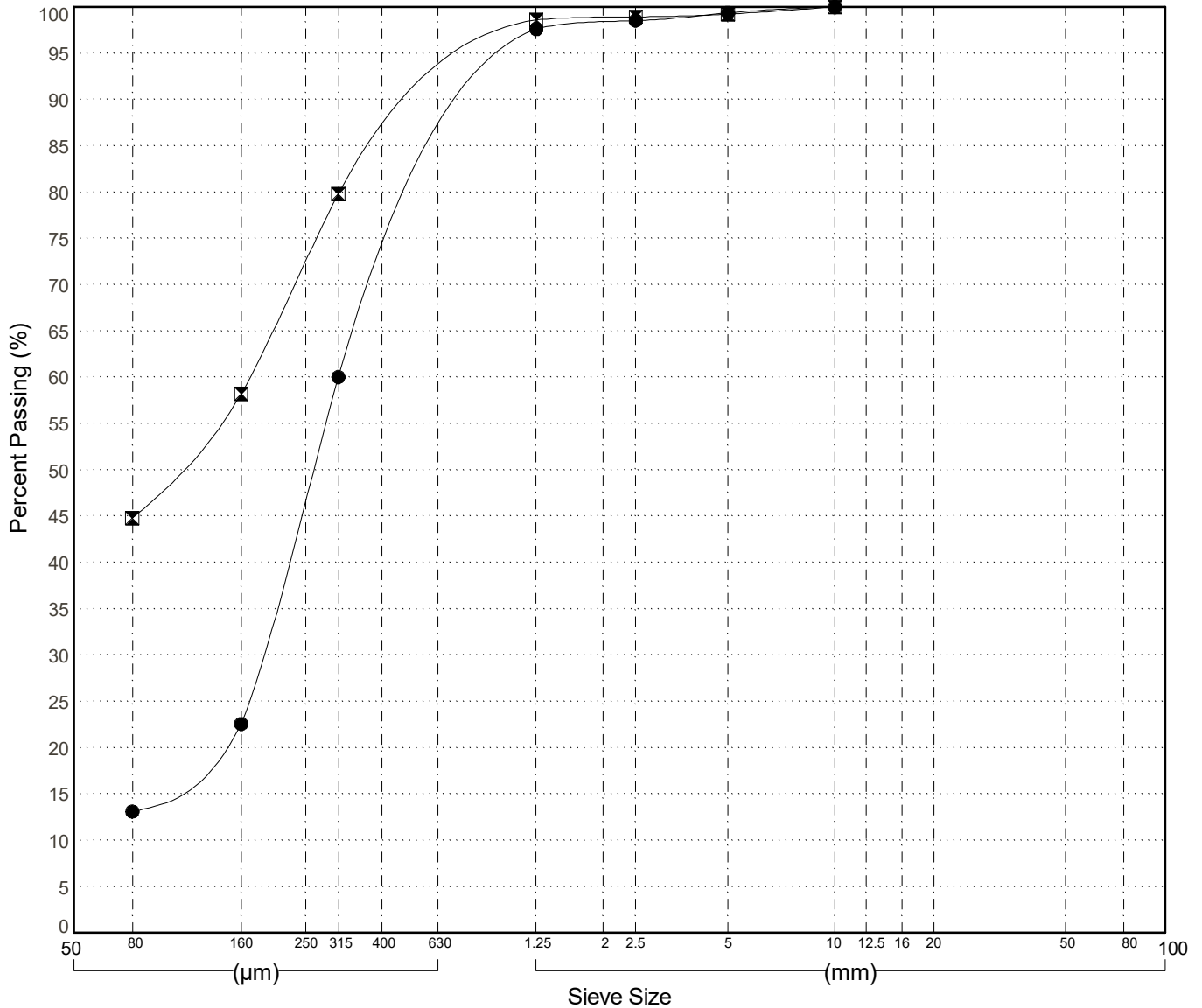


GRAIN SIZE ANALYSIS	Trouts Place Gravel Exploration	SOURCE/TP#: 909-5675
Ken Roberts	km 1736.6 LHS	PROJECT NO: 552-202101
4 Solid Stem	Coordinates: Z7N N6828309m E586103m	ELEVATION: m

Master Revised June 2017

Field #	Lab #	Depth	Classification													%H2O	LL	PL	PI	Cc	Cu	D10
● 010	697	0.1 to 1.0	SILTY SAND(SM)														NP	NP	NP			
☒ 011	698	2.0 to 3.0	SILTY SAND(SM)														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																
● 010	697	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.4	98.5	97.6	78.9	60.0	22.6	13.1	0.6	86.2	13.1			
☒ 011	698	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.2	98.9	98.6	89.3	79.8	58.2	44.8	0.8	54.4	44.8			

Silt	Sand			Gravel	
	Fine	Medium	Coarse	Fine	Coarse



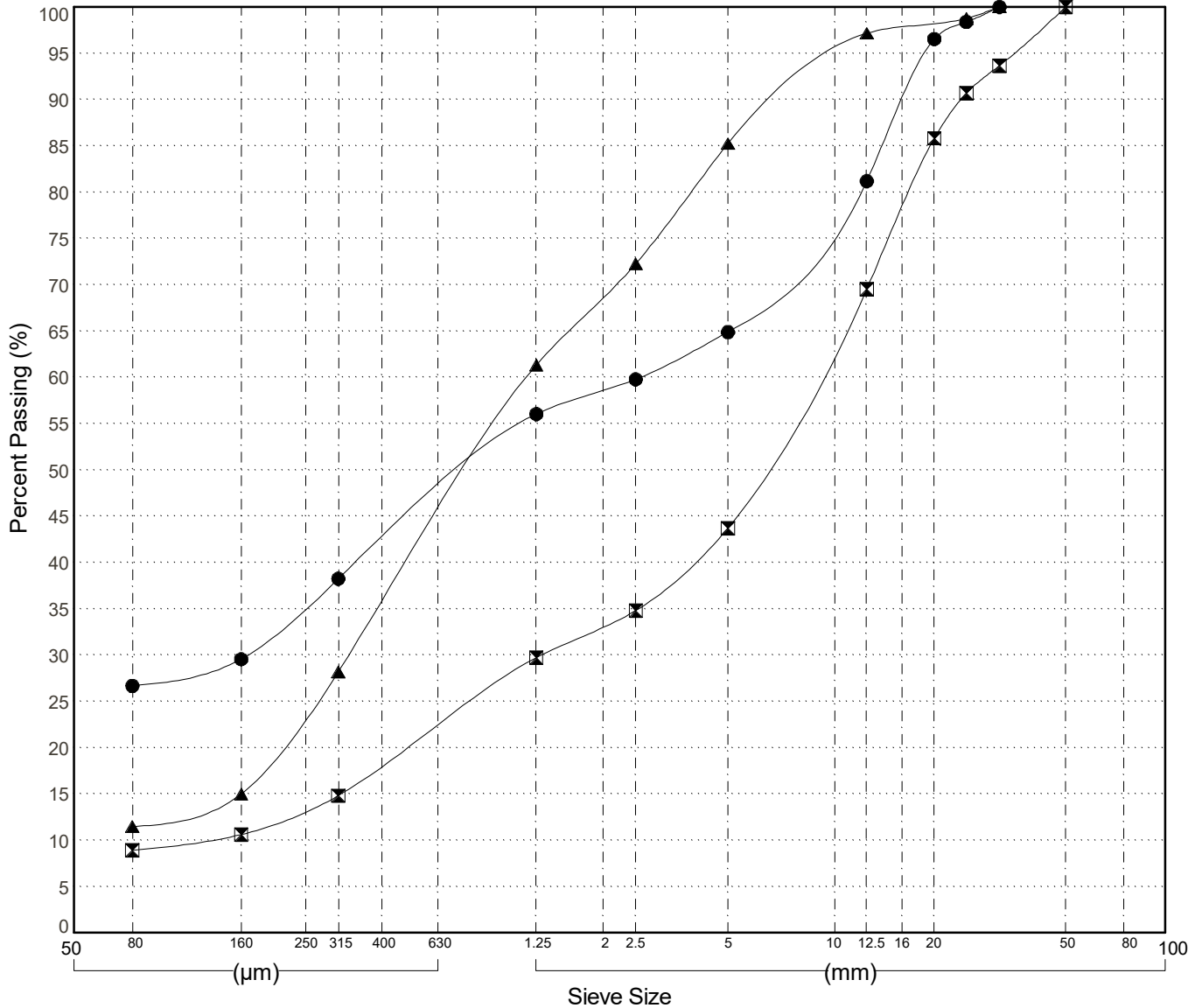
GRAIN SIZE ANALYSIS	Trouts Place Gravel Exploration	SOURCE/TP#: 909-5676
Ken Roberts	km 1736.6 LHS	PROJECT NO: 552-202101
4 Solid Stem	Coordinates: Z7N N6828314m E586026m	ELEVATION: m

Master Revised June 2017

Field#	Lab#	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu	D10
● 012	699	0.7 to 1.0	SILTY SAND with GRAVEL(SM)	15.7	NP	NP	NP			
☒ 013	700	2.0 to 3.0	WELL-GRADED GRAVEL with SILT and SAND(GW-GM)	3.5	NP	NP	NP	1.6	71.9	0.122
▲ 014	701	3.1 to 4.0	WELL-GRADED SAND with SILT(SW-SM)	8.3	NP	NP	NP	1.8	21.7	

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	Clay
●	012	699	100.0	100.0	100.0	98.4	96.5	81.2	77.4	64.9	59.8	56.0	47.2	38.2	29.6	26.7	35.1	38.2	26.7	
☒	013	700	100.0	100.0	100.0	90.7	85.8	69.5	63.6	43.7	34.8	29.7	22.3	14.8	10.6	8.9	56.3	34.8	8.9	
▲	014	701	100.0	100.0	100.0	98.8	98.2	97.1	94.4	85.2	72.3	61.3	44.8	28.2	15.0	11.5	14.8	73.8	11.5	

Silt	Sand			Gravel	
	Fine	Medium	Coarse	Fine	Coarse



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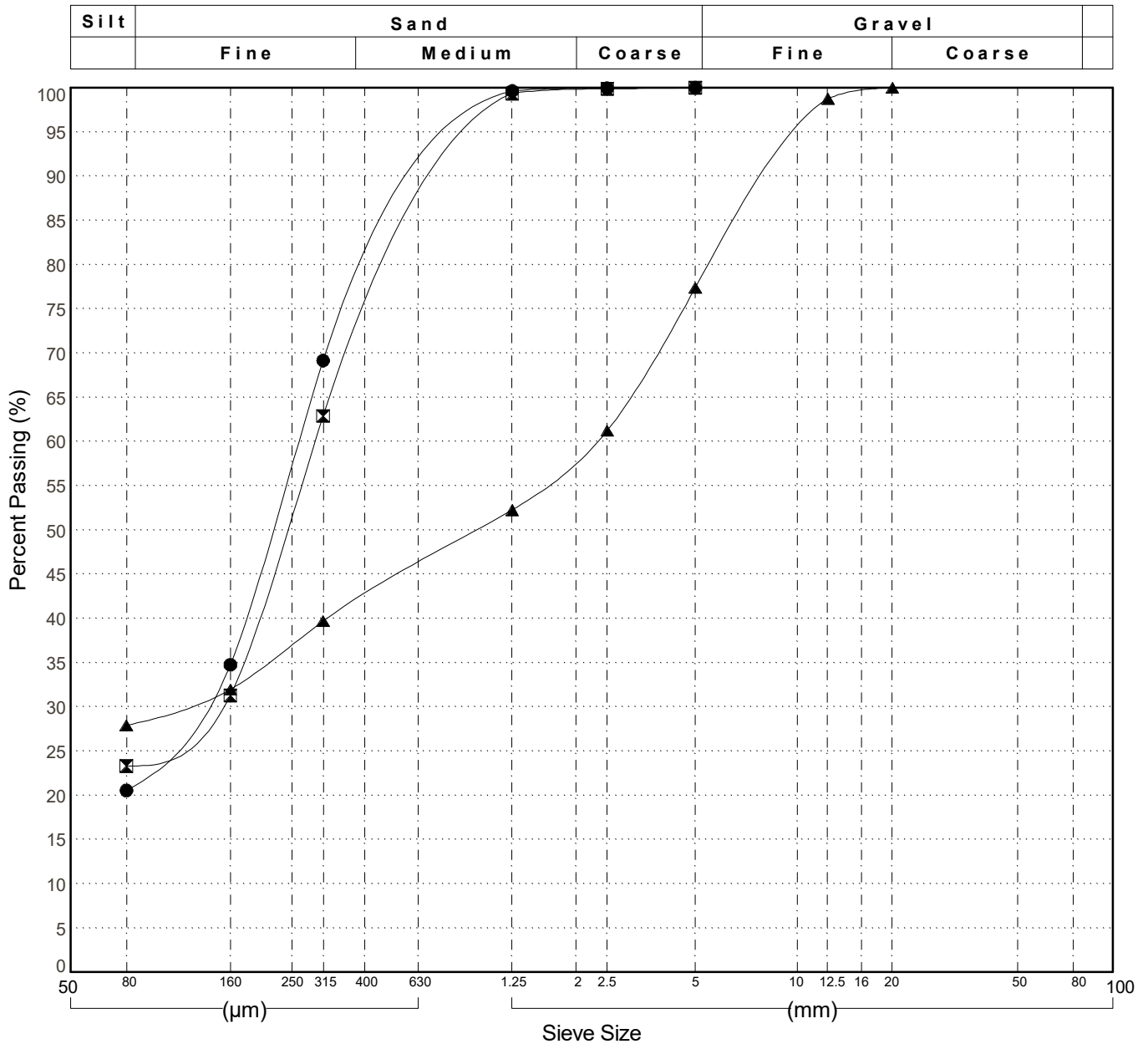
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GRAIN SIZE ANALYSIS	Trouts Place Gravel Exploration	SOURCE/TP#: 909-5677
Ken Roberts	km 1736.6 LHS	PROJECT NO: 552-202101
4 Solid Stem	Coordinates: Z7N N6828388m E586086m	ELEVATION: m

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Field#	Lab#	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu	D10
● 015	702	0.1 to 1.0	SILTY SAND(SM)	14.7	NP	NP	NP			
☒ 016	703	1.5 to 3.0	SILTY SAND(SM)	51.7	NP	NP	NP			
▲ 017	704	3.2 to 4.0	SILTY SAND with GRAVEL(SM)	11.6	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			
		% PASSING														Gravel	Sand	Silt	Clay
●	015	702	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.6	84.5	69.2	34.8	20.6	0.0	79.4	20.6
☒	016	703	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	99.3	81.2	62.9	31.3	23.3	0.0	76.7	23.3
▲	017	704	100.0	100.0	100.0	100.0	100.0	98.8	93.8	77.4	61.2	52.3	46.0	39.7	32.0	27.9	22.6	49.5	27.9



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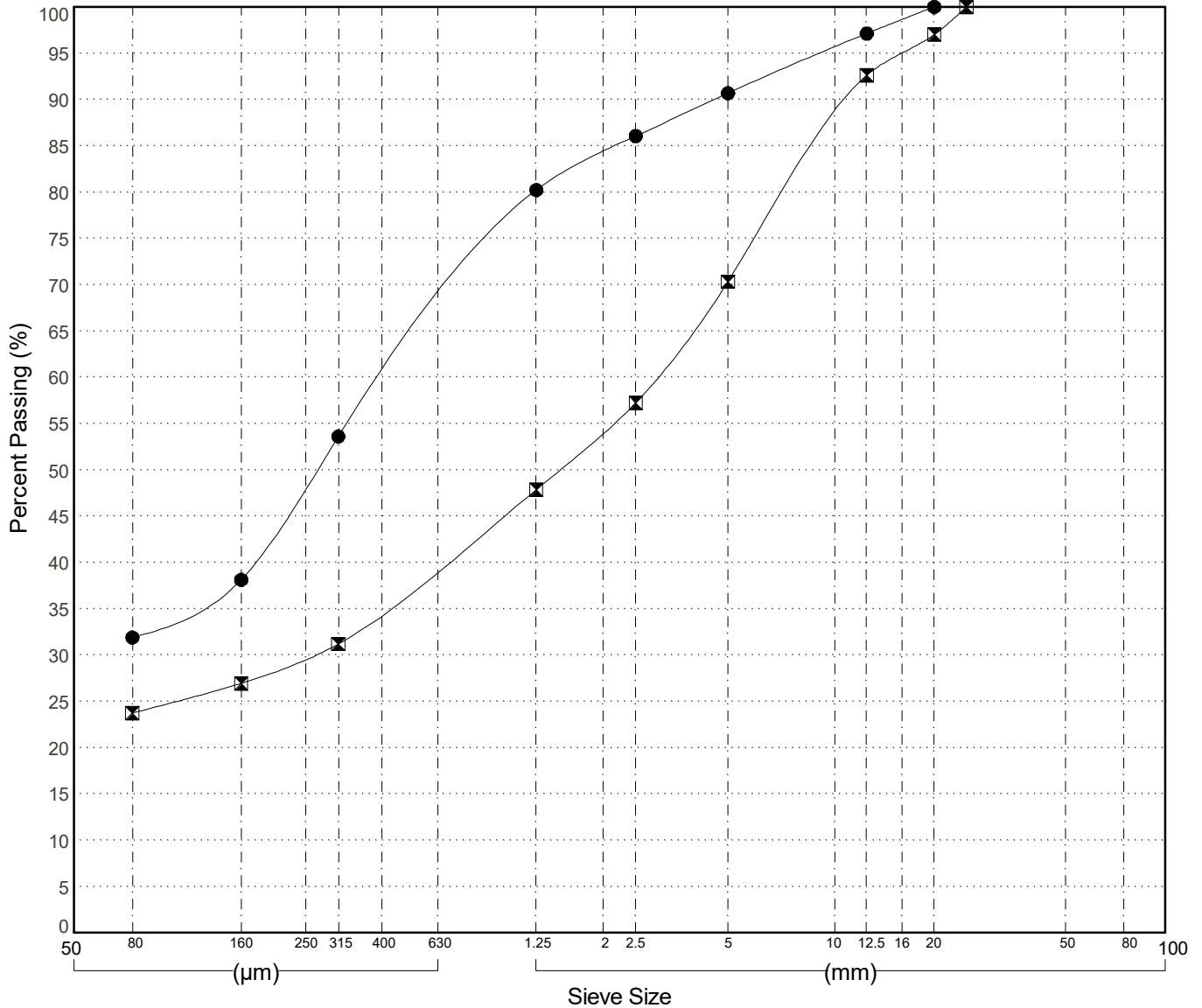
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GRAIN SIZE ANALYSIS	Trouts Place Gravel Exploration	SOURCE/TP#: 909-5678
Ken Roberts	km 1736.6 LHS	PROJECT NO: 552-202101
4 Solid Stem	Coordinates: Z7N N6828256m E586151m	ELEVATION: m

Master Revised June 2017

Field #	Lab #	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu	D10										
● 018	705	0.1 to 1.0	SILTY SAND(SM)	37.4	NP	NP	NP													
☒ 019	706	1.5 to 3.0	SILTY SAND with GRAVEL(SM)	11.1	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	705	100.0	100.0	100.0	100.0	100.0	97.1	95.6	90.7	86.1	80.2	67.0	53.6	38.1	31.9	9.3	58.8	31.9		
☒ 019	706	100.0	100.0	100.0	100.0	97.0	92.6	87.5	70.3	57.2	47.9	39.6	31.2	27.0	23.7	29.7	46.6	23.7		

Silt	Sand			Gravel	
	Fine	Medium	Coarse	Fine	Coarse



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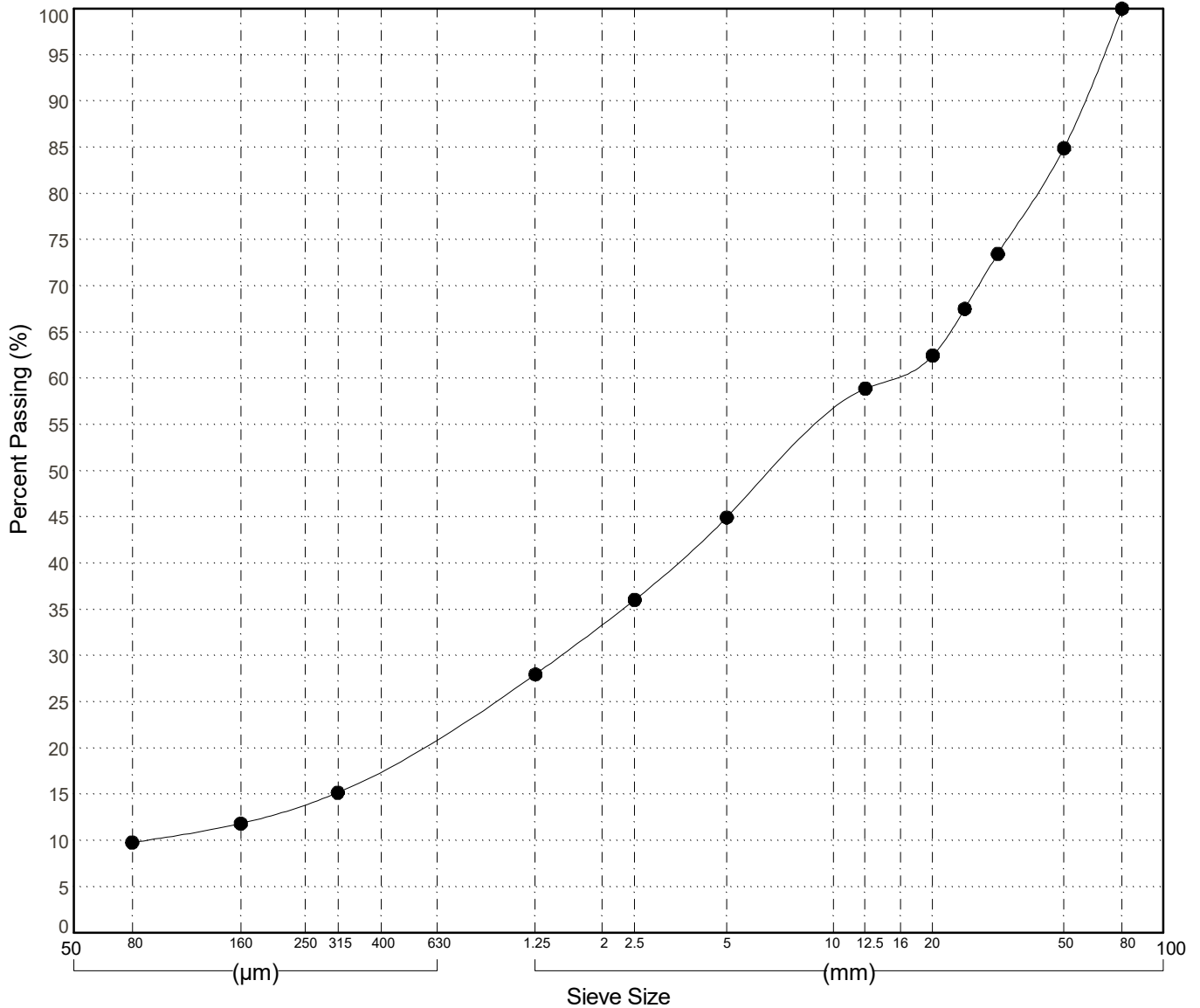
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GRAIN SIZE ANALYSIS	Trouts Place Gravel Exploration	SOURCE/TP#: 909-5679
Ken Roberts	km 1736.6 LHS	PROJECT NO: 552-202101
4 Solid Stem	Coordinates: Z7N N6828315m E586887m	ELEVATION: m

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Field#	Lab#	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu	D10									
● 021	708	0.1 to 1.0	WELL-GRADED GRAVEL with SILT and SAND(GW-GM)	7.4	NP	NP	NP	1.9	178.5	0.081									
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			
● 021	708	100.0	100.0	84.9	67.5	62.5	58.9	55.7	45.0	36.0	28.0	21.6	15.2	11.8	9.8	Gravel	Sand	Silt	Clay
																55.0	35.2		9.8

Silt	Sand			Gravel	
	Fine	Medium	Coarse	Fine	Coarse



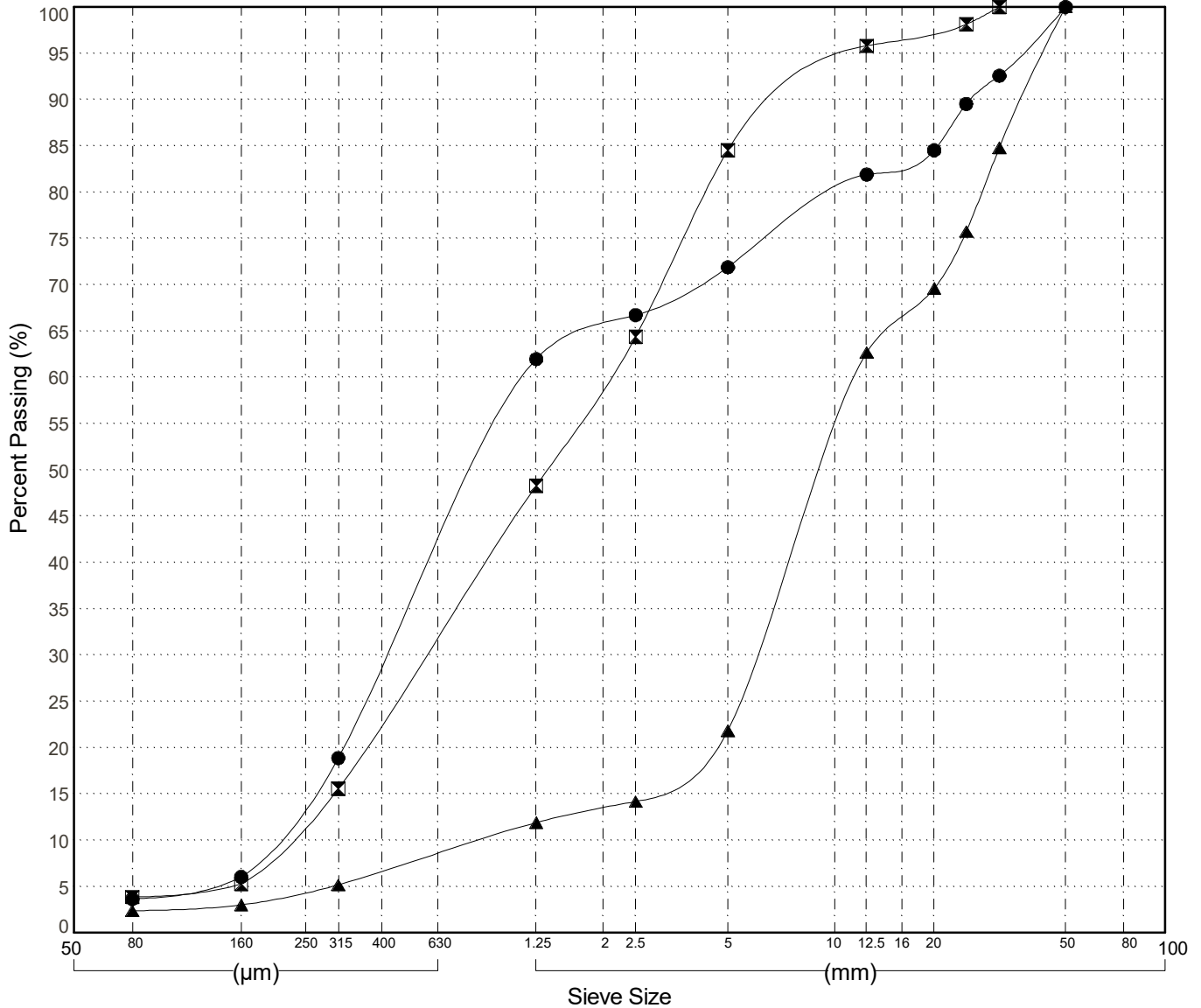
GRAIN SIZE ANALYSIS	Trouts Place Gravel Exploration	SOURCE/TP#: 909-5680
Ken Roberts	km 1736.6 LHS	PROJECT NO: 552-202101
4 Solid Stem	Coordinates: Z7N N6828374m E586839m	ELEVATION: m

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Field #	Lab #	Depth	Classification	%H ₂ O	LL	PL	PI	C _c	C _u	D ₁₀
● 022	709	0.2 to 1.0	POORLY GRADED SAND with GRAVEL(SP)	2.5	NP	NP	NP	0.9	6.0	0.197
☒ 023	710	1.5 to 2.0	POORLY GRADED SAND with GRAVEL(SP)	1.7	NP	NP	NP	0.7	9.5	0.218
▲ 024	711	2.0 to 3.0	POORLY GRADED GRAVEL with SAND(GP)	2.0	NP	NP	NP	3.4	13.9	0.845

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	Clay
●	022	709	100.0	100.0	100.0	89.5	84.5	81.9	79.6	71.9	66.7	62.0	40.5	18.9	6.0	3.7	28.1	68.2		3.7
☒	023	710	100.0	100.0	100.0	98.1	97.4	95.8	93.2	84.5	64.4	48.3	32.0	15.6	5.3	3.9	15.5	80.6		3.9
▲	024	711	100.0	100.0	100.0	75.7	69.6	62.7	53.3	21.8	14.2	11.9	8.6	5.2	3.0	2.4	78.2	19.4		2.4

Silt	Sand			Gravel	
	Fine	Medium	Coarse	Fine	Coarse



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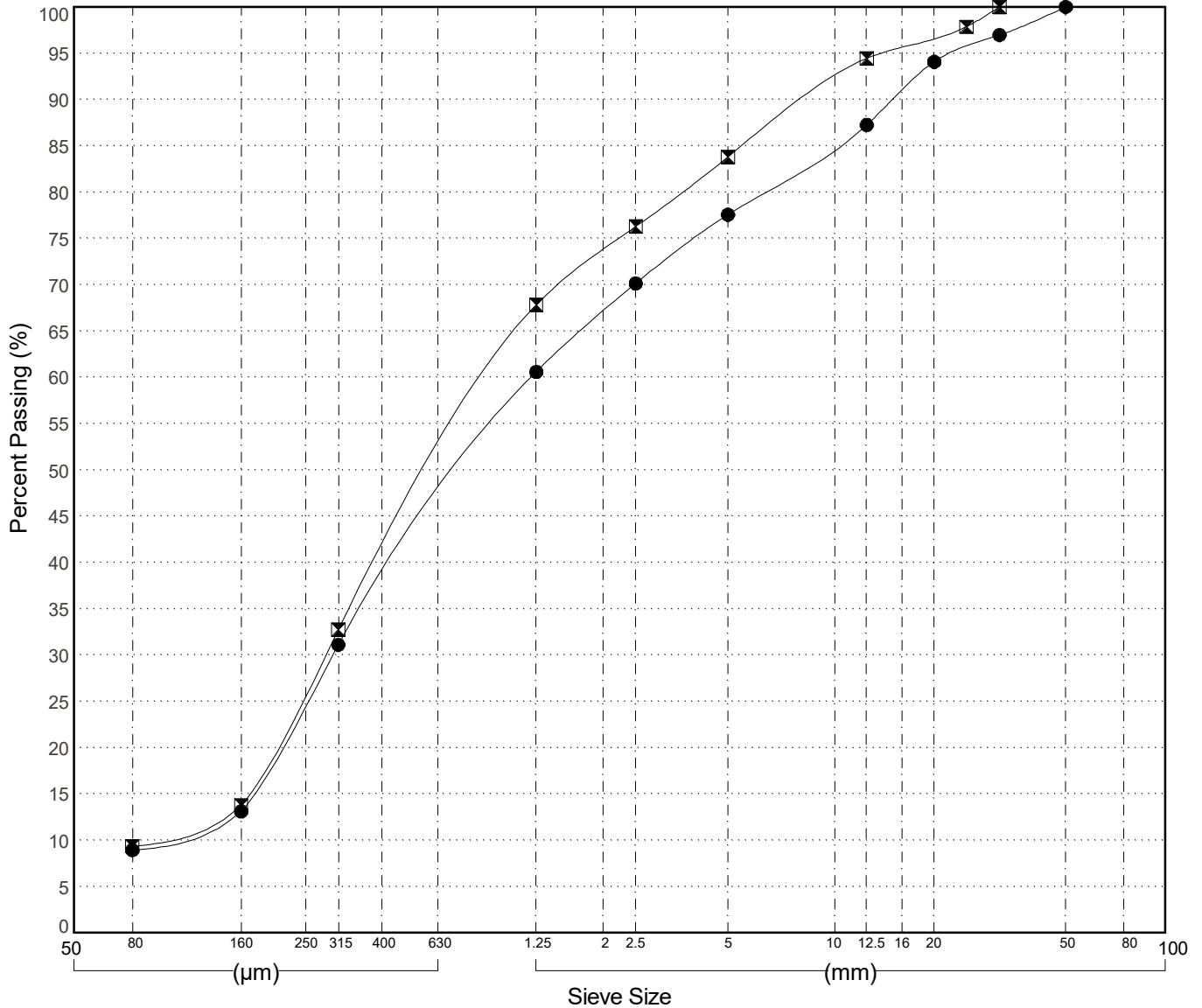
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GRAIN SIZE ANALYSIS	Trouts Place Gravel Exploration	SOURCE/TP#: 909-5681
Ken Roberts	km 1736.6 LHS	PROJECT NO: 552-202101
4 Solid Stem	Coordinates: Z7N N6828476m E586718m	ELEVATION: m

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Field #	Lab #	Depth	Classification	%H ₂ O	LL	PL	PI	C _c	C _u	D ₁₀										
● 025	712	0.1 to 1.0	POORLY GRADED SAND with SILT and GRAVEL(SP-SM)	3.2	NP	NP	NP	0.8	13.4	0.091										
☒ 027	714	3.0 to 4.0	WELL-GRADED SAND with SILT and GRAVEL(SW-SM)	3.3	NP	NP	NP	1.1	11.0	0.084										
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				
● 025	712	100.0	100.0	100.0	95.5	94.1	87.3	85.0	77.6	70.1	60.6	45.9	31.1	13.1	8.9	Gravel	Sand	Silt	Clay	
☒ 027	714	100.0	100.0	100.0	97.9	96.8	94.4	92.0	83.8	76.3	67.8	50.4	32.7	13.8	9.4	16.2	74.4	8.9	9.4	

Silt	Sand			Gravel	
	Fine	Medium	Coarse	Fine	Coarse



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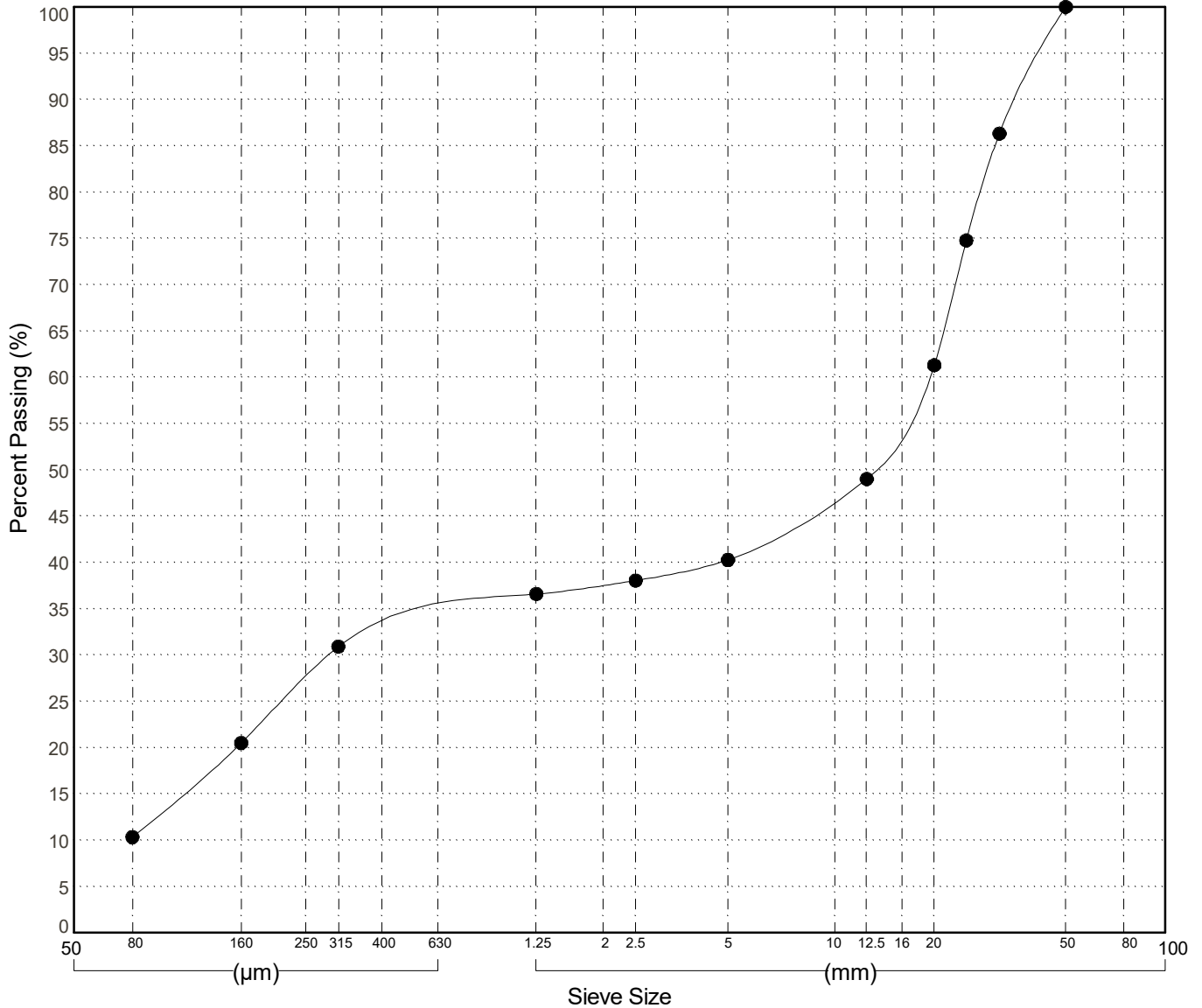
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GRAIN SIZE ANALYSIS	Trouts Place Gravel Exploration	SOURCE/TP#: 909-5682
Ken Roberts	km 1736.6 LHS	PROJECT NO: 552-202101
4 Solid Stem	Coordinates: Z7N N6828530m E586431m	ELEVATION: m

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Field#	Lab#	Depth	Classification											%H2O	LL	PL	PI	Cc	Cu	D10
● 028	715	0.2 to 1.0	POORLY GRADED GRAVEL with SILT and SAND(GP-GM)											3.6	NP	NP	NP	0.1	260.3	
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				
● 028	715	100.0	100.0	100.0	74.8	61.3	49.0	47.0	40.3	38.0	36.6	33.8	30.9	20.5	10.3	Gravel	Sand	Silt	Clay	
																59.7	29.9	10.3		

Silt	Sand			Gravel	
	Fine	Medium	Coarse	Fine	Coarse



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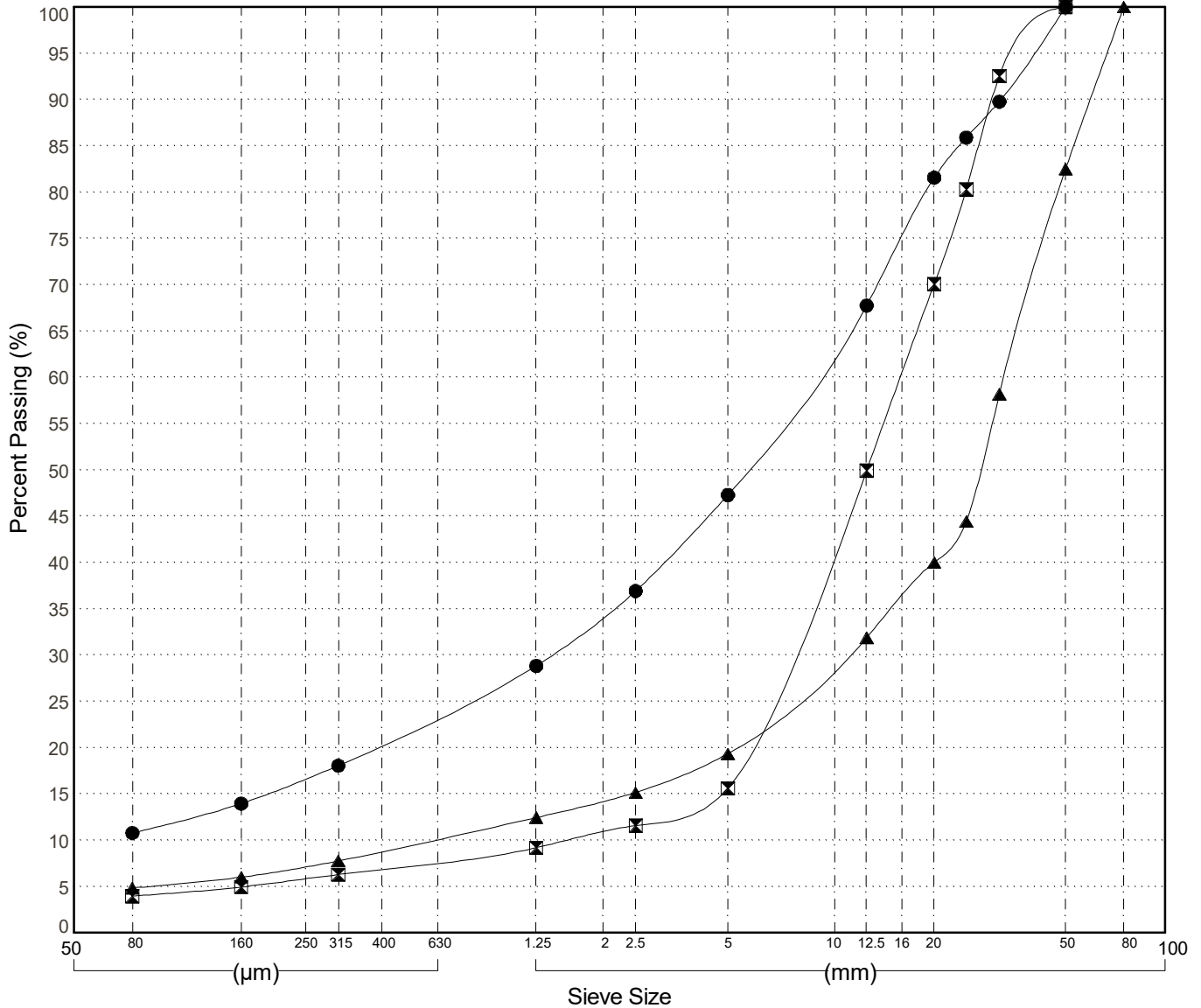
GRAIN SIZE ANALYSIS	Trouts Place Gravel Exploration	SOURCE/TP#: 909-5683
Ken Roberts	km 1736.6 LHS	PROJECT NO: 552-202101
4 Solid Stem	Coordinates: Z7N N6828456m E586502m	ELEVATION: m

Master Revised June 2017

Field#	Lab#	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu	D10
● 029	716	0.1 to 1.0	POORLY GRADED GRAVEL with SILT and SAND(GP-GM)	2.5	NP	NP	NP	3.5	139.2	
☒ 030	717	1.5 to 3.0	WELL-GRADED GRAVEL(GW)	1.1	NP	NP	NP	2.0	10.0	1.581
▲ 031	718	3.0 to 4.0	POORLY GRADED GRAVEL(GP)	2.6	NP	NP	NP	5.9	53.6	0.608

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	Clay
●	029	716	100.0	100.0	100.0	85.9	81.6	67.7	63.0	47.3	36.9	28.8	23.5	18.1	14.0	10.8	52.7	36.5	10.8	
☒	030	717	100.0	100.0	100.0	80.3	70.1	49.9	42.0	15.6	11.6	9.2	7.8	6.3	5.0	4.0	84.4	11.6	4.0	
▲	031	718	100.0	100.0	82.5	44.4	40.0	31.9	29.0	19.3	15.2	12.4	10.1	7.8	6.0	4.8	80.7	14.5	4.8	

Silt	Sand			Gravel	
	Fine	Medium	Coarse	Fine	Coarse



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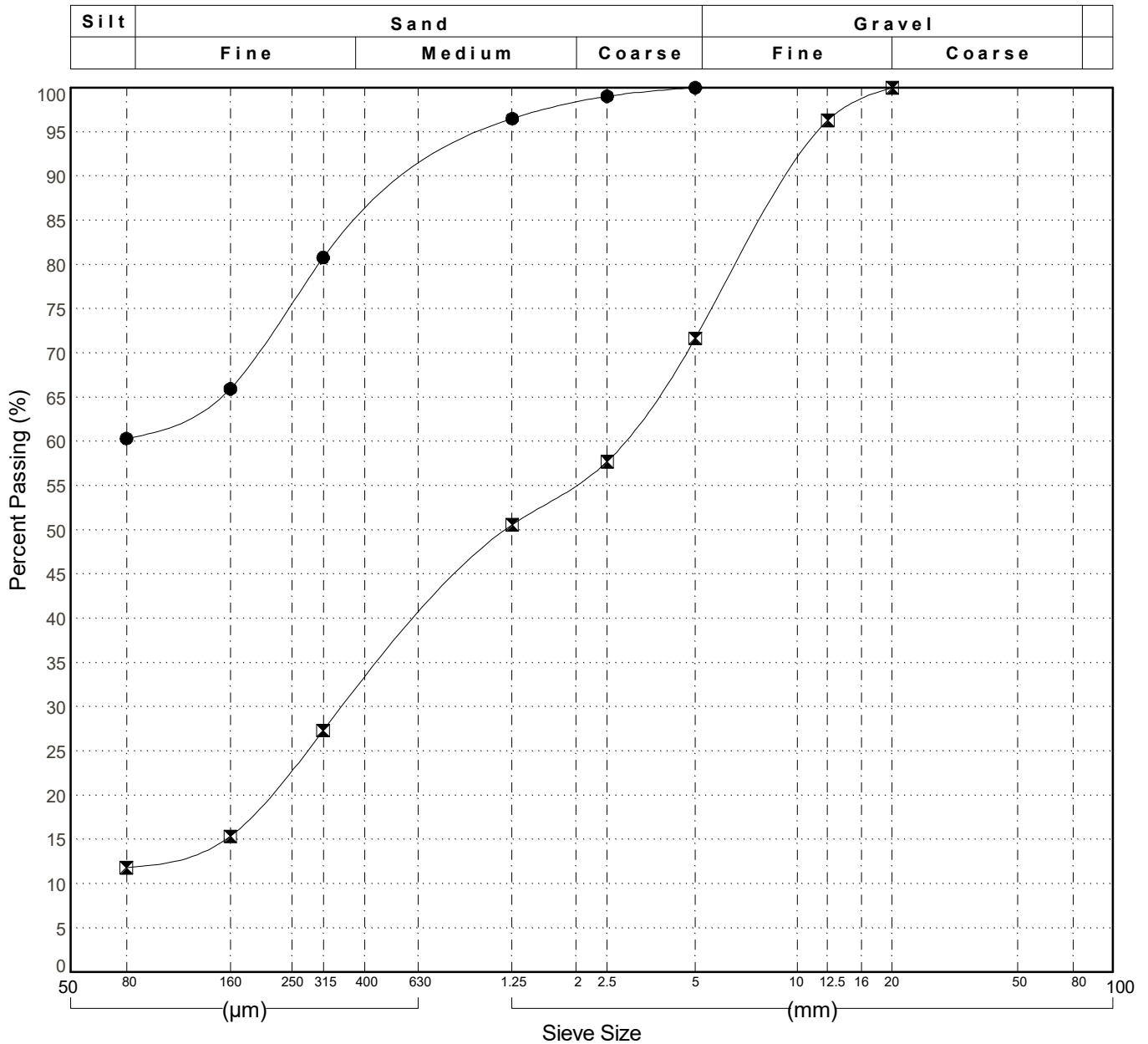
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GRAIN SIZE ANALYSIS	Trouts Place Gravel Exploration	SOURCE/TP#: 909-5684
Ken Roberts	km 1736.6 LHS	PROJECT NO: 552-202101
4 Solid Stem	Coordinates: Z7N N6828310m E586606m	ELEVATION: m

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Field#	Lab#	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu	D10										
● 032	719	0.1 to 1.0	SANDY SILT (ML)	57.6	NP	NP	NP													
☒ 033	720	2.2 to 3.0	POORLY GRADED SAND with SILT and GRAVEL (SP-SM)	9.9	NP	NP	NP	1.0	54.8											
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				
● 032	719	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.0	96.5	88.7	80.8	65.9	60.3	Gravel	Sand	Silt	Clay	
☒ 033	720	100.0	100.0	100.0	100.0	100.0	96.3	90.6	71.7	57.7	50.6	39.0	27.3	15.4	11.8	28.3	59.8	11.8		

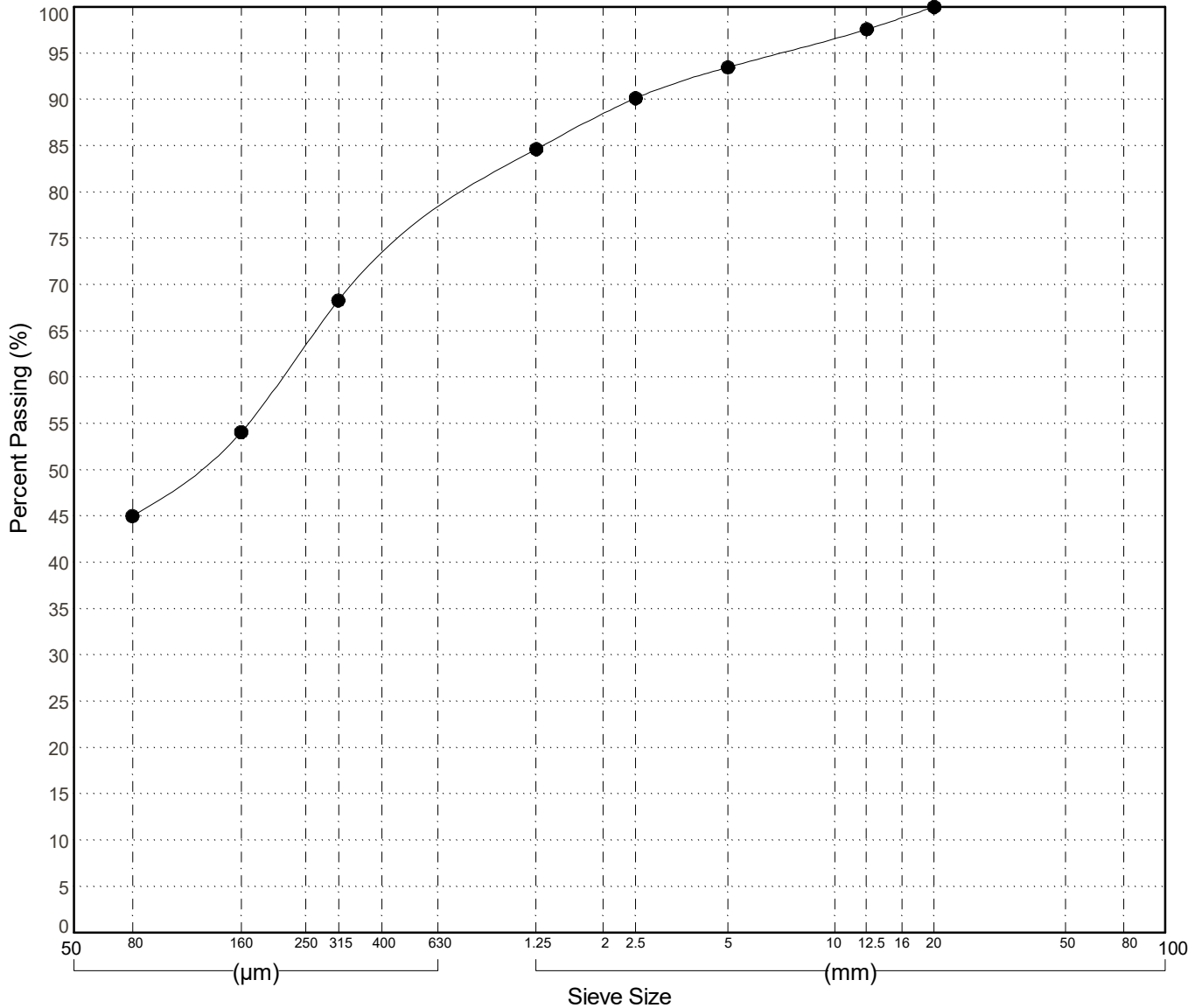


GRAIN SIZE ANALYSIS	Trouts Place Gravel Exploration	SOURCE/TP#: 909-5685
Ken Roberts	km 1736.6 LHS	PROJECT NO: 552-202101
4 Solid Stem	Coordinates: Z7N N6827736m E586689m	ELEVATION: m

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Field#	Lab#	Depth	Classification											%H2O	LL	PL	PI	Cc	Cu	D10
● 035	722	0.1 to 0.5	SILTY SAND(SM)											41.2	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			
● 035	722	% PASSING	100.0	100.0	100.0	100.0	100.0	97.6	96.6	93.5	90.1	84.6	76.5	68.3	54.1	45.0	Gravel	Sand	Silt	Clay
																	6.5	48.5		45.0

Silt	Sand			Gravel	
	Fine	Medium	Coarse	Fine	Coarse



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GRAIN SIZE ANALYSIS	Trouts Place Gravel Exploration	SOURCE/TP#: 909-5686
Ken Roberts	km 1736.6 LHS	PROJECT NO: 552-202101
4 Solid Stem	Coordinates: Z7N N6827566m E586742m	ELEVATION: m

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Field #	Lab #	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu	D10
● 036	723	0.1 to 1.0	SILTY SAND(SM)	37.7	NP	NP	NP			
☒ 037	724	1.5 to 3.0	SILTY GRAVEL with SAND(GM)	13.0	NP	NP	NP			
▲ 038	725	3.0 to 4.0	SILTY SAND with GRAVEL(SM)	11.7	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			
		% PASSING														Gravel	Sand	Silt	Clay
●	036	723	100.0	100.0	100.0	100.0	100.0	100.0	99.9	99.0	95.4	84.3	73.1	47.3	41.7	0.1	58.2	41.7	
☒	037	724	100.0	100.0	100.0	96.5	89.5	73.5	72.1	67.2	62.6	53.1	51.6	50.1	46.7	40.4	32.8	26.9	40.4
▲	038	725	100.0	100.0	100.0	100.0	97.7	93.4	91.4	84.9	78.6	72.6	65.4	58.1	50.0	41.8	15.1	43.1	41.8

