

SUBSURFACE EXPLORATION AND TEST REPORT		Alaska Highway		SOURCE/TP#: 901-6579				
Source Motors Ltd.		Ibex Valley Pit, km 1468.3 LHS		PROJECT NO: 552-202101-1001-1-1				
Hitachi 200 LC		Coordinates: Z08V N6743728m E458319m		ELEVATION: 686m				
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							
685				001	SP		ORGANICS POORLY GRADED SAND -Light brown, moist	1
684				002	ML		SILT -Light brown, loose, damp	1
684				003	GP		POORLY GRADED GRAVEL with SAND -Light brown, loose, damp -5% Cobbles	2
683				004	GP		-Dark grey	3
682							END of HOLE -Target depth reached	4



SUBSURFACE EXPLORATION AND TEST REPORT	Alaska Highway	SOURCE/TP#: 901-6579
Source Motors Ltd.	Ibex Valley Pit, km 1468.3 LHS	PROJECT NO: 552-202101-1001-1-1
Hitachi 200 LC	Coordinates: Z08V N6743728m E458319m	ELEVATION: 686m


## PHOTOS



Figure 901-6579.1  
Photo of test pit 901-6579



Figure 901-6579.2  
Photo of sample piles from test pit 901-6579

SUBSURFACE EXPLORATION AND TEST REPORT		Alaska Highway		SOURCE/TP#: 901-6580				
Source Motors Ltd.		Ibex Valley Pit, km 1468.3 LHS		PROJECT NO: 552-202101-1001-1-1				
Hitachi 200 LC		Coordinates: Z08V N6743703m E458246m		ELEVATION: 684m				
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							
683				005	SP		ORGANICS POORLY GRADED SAND -Light brown, loose, damp	1
683				006	SP		POORLY GRADED SAND with GRAVEL -5% Cobbles	1
682							POORLY GRADED GRAVEL with SAND -Light brown, loose, damp -5-10% Cobbles	2
681				007	GP			3
680							END of HOLE -Target depth reached	4
 Highways and Public Works Transportation Engineering Branch				LOGGED BY: G.Kennedy COMPILED BY: R.Stilwell REVIEWED BY:		Termination Depth: 4.5m Complete: 10/20/2016 11:15:00 AM Pit #: 105 D-13		Page 1 of 2

SUBSURFACE EXPLORATION AND TEST REPORT	Alaska Highway	SOURCE/TP#: 901-6580
Source Moters Ltd.	Ibex Valley Pit, km 1468.3 LHS	PROJECT NO: 552-202101-1001-1-1
Hitachi 200 LC	Coordinates: Z08V N6743703m E458246m	ELEVATION: 684m


## PHOTOS



Figure 901-6580.1  
Photo of test pit 901-6580



Figure 901-6580.2  
Photo of sample piles from test pit 901-6580

SUBSURFACE EXPLORATION AND TEST REPORT		Alaska Highway		SOURCE/TP#: 901-6581					
Source Motors Ltd.		Ibex Valley Pit, km 1468.3 LHS		PROJECT NO: 552-202101-1001-1-1					
Hitachi 200 LC		Coordinates: Z08V N6743677m E458181m		ELEVATION: 681m					
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								
680					008	GP		ORGANICS	
								POORLY GRADED GRAVEL with SAND -Light brown, loose, damp -5-10% Cobbles	
679					009	SP		POORLY GRADED SAND with GRAVEL -Light brown, loose, damp	1
								POORLY GRADED GRAVEL with SAND -Light brown, loose, damp -5-10% Cobbles	2
678					010	GP			
									3
677								END of HOLE -Target depth reached	4
		Highways and Public Works Transportation Engineering Branch			LOGGED BY: G.Kennedy		Termination Depth: 4.5m		
					COMPILED BY: R.Stilwell		Complete: 10/20/2016 12:00:00 PM		
					REVIEWED BY:		Pit #: 105 D-13      Page 1 of 2		

SUBSURFACE EXPLORATION AND TEST REPORT	Alaska Highway	SOURCE/TP#: 901-6581
Source Motors Ltd.	Ibex Valley Pit, km 1468.3 LHS	PROJECT NO: 552-202101-1001-1-1
Hitachi 200 LC	Coordinates: Z08V N6743677m E458181m	ELEVATION: 681m

## PHOTOS



Figure 901-6581.1  
Photo of test pit 901-6581



Figure 901-6581.2  
Photo of sample piles from test pit 901-6581

SUBSURFACE EXPLORATION AND TEST REPORT		Alaska Highway		SOURCE/TP#: 901-6582				
Source Motors Ltd.		Ibex Valley Pit, km 1468.3 LHS		PROJECT NO: 552-202101-1001-1-1				
Hitachi 200 LC		Coordinates: Z08V N6743647m E458105m		ELEVATION: 679m				
SAMPLE TYPE		<input type="checkbox"/> UNDISTURBED <input checked="" type="checkbox"/> DCPT <input type="checkbox"/> AUGER <input type="checkbox"/> BULK <input checked="" type="checkbox"/> SPT <input type="checkbox"/> CORE						
ELEV. (m)	<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>★ Percent Fines★</p> <p>◆ Percent Sand◆</p> <p>■ Percent Gravel■</p> </div> <div style="width: 45%;"> <p>Sample Type</p> <p>Sample #</p> <p>SOIL SYMBOL</p> <p>DCPT/SPT Blows/30cm</p> </div> </div>		SOIL DESCRIPTION		Depth (m)			
	<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>PLASTIC    M.C    LIQUID</p> <p>0    20    40    60    80    100</p> </div> <div style="width: 45%;"> <p>0    20    40    60    80    100</p> </div> </div>							
678	★	◆	■	011	SP	ORGANICS		
678	★	◆	■	012	GP	POORLY GRADED SAND with GRAVEL -Light brown, loose, damp		1
677	★	◆	■	013	GW	POORLY GRADED GRAVEL with SAND -Light brown, loose, damp -5% Cobbles		2
676						WELL-GRADED GRAVEL with SAND -Light brown, loose, damp -%5-10 Cobbles		3
675						END of HOLE -Target depth reached		4



SUBSURFACE EXPLORATION AND TEST REPORT	Alaska Highway	SOURCE/TP#: 901-6582
Source Motors Ltd.	Ibex Valley Pit, km 1468.3 LHS	PROJECT NO: 552-202101-1001-1-1
Hitachi 200 LC	Coordinates: Z08V N6743647m E458105m	ELEVATION: 679m


## PHOTOS



Figure 901-6582.1  
Photo of test pit 901-6582



Figure 901-6582.2  
Photo of sample piles from test pit 901-6582

SUBSURFACE EXPLORATION AND TEST REPORT		Alaska Highway		SOURCE/TP#: 901-6583				
Source Motors Ltd.		Ibex Valley Pit, km 1468.3 LHS		PROJECT NO: 552-202101-1001-1-1				
Hitachi 200 LC		Coordinates: Z08V N6743727m E458086m		ELEVATION: 680m				
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							
679				014	GP		ORGANICS  POORLY GRADED GRAVEL with SAND -Brownish grey, loose, damp -10-15% Cobbles	1
678				015	GP		-5-10% Cobbles	2
677				016	ML		SILT -Greyish brown, firm, damp	3
676							END of HOLE Target depth reached	4
 Highways and Public Works Transportation Engineering Branch				LOGGED BY: G.Kennedy		Termination Depth: 4.5m		
				COMPILED BY: R.Stilwell		Complete: 10/20/2016 1:56:00 PM		
				REVIEWED BY:		Pit #: 105 D-13      Page 1 of 2		

SUBSURFACE EXPLORATION AND TEST REPORT	Alaska Highway	SOURCE/TP#: 901-6583
Source Motors Ltd.	Ibex Valley Pit, km 1468.3 LHS	PROJECT NO: 552-202101-1001-1-1
Hitachi 200 LC	Coordinates: Z08V N6743727m E458086m	ELEVATION: 680m


## PHOTOS



Figure 901-6583.1  
Photo of test pit 901-6583



Figure 901-6583.2  
Photo of sample piles from test pit 901-6583

SUBSURFACE EXPLORATION AND TEST REPORT		Alaska Highway		SOURCE/TP#: 901-6584					
Source Motors Ltd.		Ibex Valley Pit, km 1468.3 LHS		PROJECT NO: 552-202101-1001-1-1					
Hitachi 200 LC		Coordinates: Z08V N6743747m E458155m		ELEVATION: 682m					
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								
681				017	GP		ORGANICS  POORLY GRADED GRAVEL with SAND -Light brown, loose, damp -0-5% Cobbles	1	
							Sand Seam - 0.4m		
680				018	GP		5-10% Cobbles	2	
							POORLY GRADED GRAVEL with SILT and SAND		
679				019	GP-GM			3	
678							END of HOLE -Target depth reached	4	
		Highways and Public Works Transportation Engineering Branch				LOGGED BY: G.Kennedy		Termination Depth: 4.5m	
						COMPILED BY: R.Stilwell		Complete: 10/20/2016 2:35:00 PM	
						REVIEWED BY:		Pit #: 105 D-13      Page 1 of 2	

SUBSURFACE EXPLORATION AND TEST REPORT	Alaska Highway	SOURCE/TP#: 901-6584
Source Motors Ltd.	Ibex Valley Pit, km 1468.3 LHS	PROJECT NO: 552-202101-1001-1-1
Hitachi 200 LC	Coordinates: Z08V N6743747m E458155m	ELEVATION: 682m

## PHOTOS



Figure 901-6584.1  
Photo of test pit 901-6584



Figure 901-6584.2  
Photo of sample piles from test pit 901-6584

SUBSURFACE EXPLORATION AND TEST REPORT		Alaska Highway		SOURCE/TP#: 901-6585				
Source Motors Ltd.		Ibex Valley Pit, km 1468.3 LHS		PROJECT NO: 552-202101-1001-1-1				
Hitachi 200 LC		Coordinates: Z08V N6743776m E458222m		ELEVATION: 684m				
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							
683				020	SP		ORGANICS POORLY GRADED SAND -Light brown, loose, damp	1
682				021	GP		POORLY GRADED GRAVEL with SAND -Light brown, loose, damp -5% Cobbles  Sand Seam - 0.6m  -5-10% Cobbles	2
681				022	GP			3
680							END of HOLE -Target depth reached	4



SUBSURFACE EXPLORATION AND TEST REPORT	Alaska Highway	SOURCE/TP#: 901-6585
Source Motors Ltd.	Ibex Valley Pit, km 1468.3 LHS	PROJECT NO: 552-202101-1001-1-1
Hitachi 200 LC	Coordinates: Z08V N6743776m E458222m	ELEVATION: 684m


## PHOTOS



Figure 901-6585.1  
Photo of test pit 901-6585



Figure 901-6585.2  
Photo of sample piles from test pit 901-6585

SUBSURFACE EXPLORATION AND TEST REPORT		Alaska Highway		SOURCE/TP#: 901-6586					
Source Motors Ltd.		Ibex Valley Pit, km 1468.3 LHS		PROJECT NO: 552-202101-1001-1-1					
Hitachi 200 LC		Coordinates: Z08V N6743846m E458197m		ELEVATION: 685m					
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								
684				023	SP		ORGANICS POORLY GRADED SAND with GRAVEL -Light brown, loose, damp	1	
683				024	GP		POORLY GRADED GRAVEL with SAND -Light brown, loose, damp -0.5% Cobbles  -Silt Seam 0.3m  -5-10% Cobbles	2	
682				025	GP			3	
681							END of HOLE -Target depth reached	4	
				Highways and Public Works Transportation Engineering Branch		LOGGED BY: G.Kennedy COMPILED BY: R.Stilwell REVIEWED BY:		Termination Depth: 4.5m Complete: 10/20/2016 3:50:00 PM Pit #: 105 D-13      Page 1 of 2	

SUBSURFACE EXPLORATION AND TEST REPORT	Alaska Highway	SOURCE/TP#: 901-6586
Source Motors Ltd.	Ibex Valley Pit, km 1468.3 LHS	PROJECT NO: 552-202101-1001-1-1
Hitachi 200 LC	Coordinates: Z08V N6743846m E458197m	ELEVATION: 685m

## PHOTOS



Figure 901-6586.1  
Photo of test pit 901-6586



Figure 901-6586.2  
Photo of sample piles from test pit 901-6586

SUBSURFACE EXPLORATION AND TEST REPORT		Alaska Highway		SOURCE/TP#: 901-6587				
Source Motors Ltd.		Ibex Valley Pit, km 1468.3 LHS		PROJECT NO: 552-202101-1001-1-1				
Hitachi 200 LC		Coordinates: Z08V N6743812m E458123m		ELEVATION: 682m				
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							
681				026	SP-SM		ORGANICS  POORLY GRADED SAND with SILT and GRAVEL -Light brown, loose, damp	1
680				027	SP		POORLY GRADED SAND with GRAVEL -Light brownish grey, loose, damp -0-5% Cobbles	2
679								3
678				028	GP		POORLY GRADED GRAVEL with SAND -Light brown, loose, damp -5-10% Cobbles	4
							END of HOLE -Target depth reached	
				LOGGED BY: G.Kennedy		Termination Depth: 4.5m		
				COMPILED BY: R.Stilwell		Complete: 10/20/2016 4:23:00 PM		
				REVIEWED BY:		Pit #: 105 D-13      Page 1 of 2		

SUBSURFACE EXPLORATION AND TEST REPORT	Alaska Highway	SOURCE/TP#: 901-6587
Source Motors Ltd.	Ibex Valley Pit, km 1468.3 LHS	PROJECT NO: 552-202101-1001-1-1
Hitachi 200 LC	Coordinates: Z08V N6743812m E458123m	ELEVATION: 682m

## PHOTOS



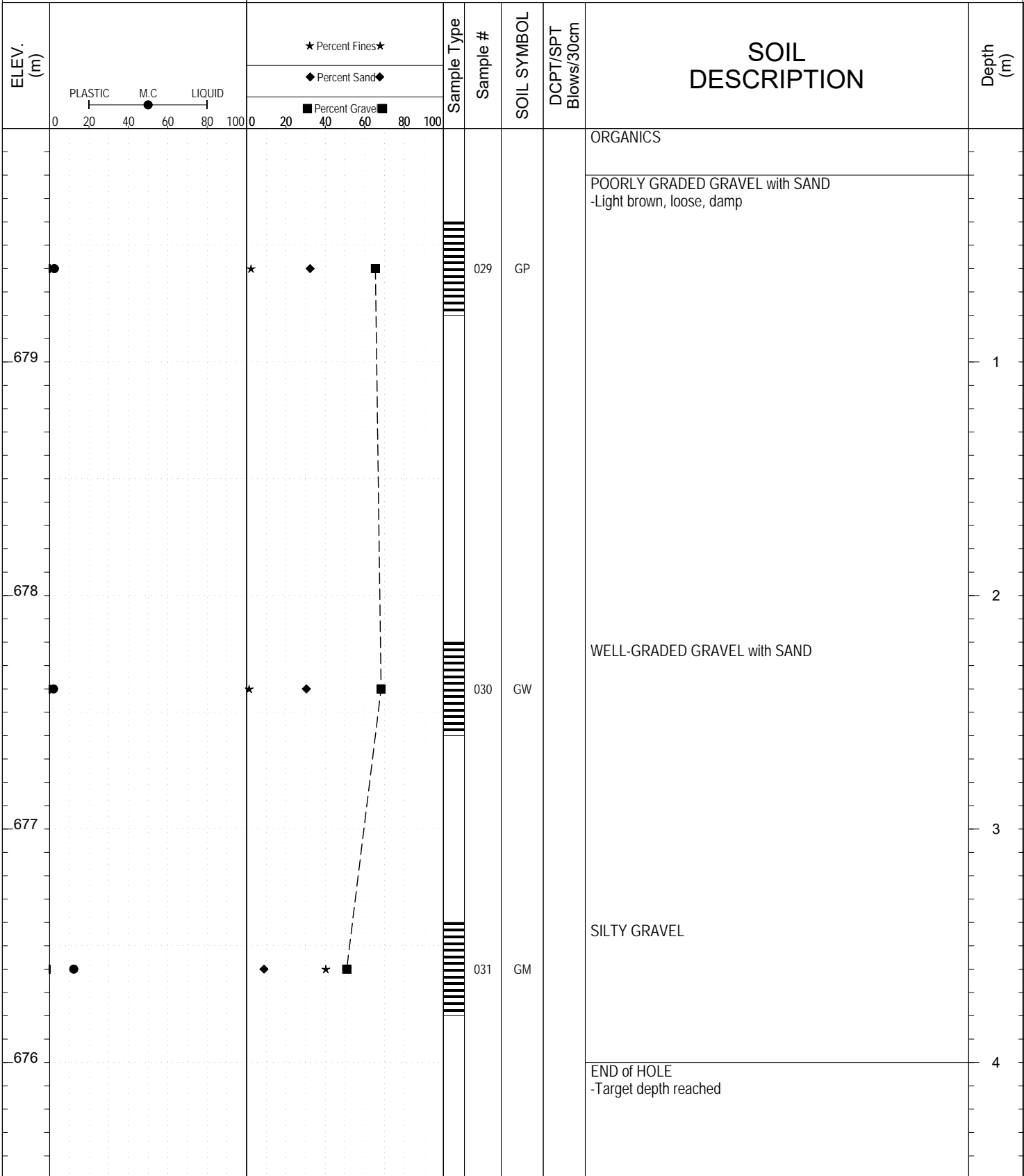
Figure 901-6587.1  
Photo of test pit 901-6587



Figure 901-6587.2  
Photo of sample piles from test pit 901-6587

SUBSURFACE EXPLORATION AND TEST REPORT		Alaska Highway	SOURCE/TP#: 901-6588
Source Motors Ltd.		Ibex Valley Pit, km 1468.3 LHS	PROJECT NO: 552-202101-1001-1-1
Hitachi 200 LC		Coordinates: Z08V N6743791m E458054m	ELEVATION: 680m

SAMPLE TYPE     UNDISTURBED     DCPT     AUGER     BULK     SPT     CORE



Highways and Public Works  
Transportation Engineering Branch

LOGGED BY: G.Kennedy	Termination Depth: 4.5m
COMPILED BY: R.Stilwell	Complete: 10/20/2016 4:55:00 PM
REVIEWED BY:	Pit #: 105 D-13      Page 1 of 2

SUBSURFACE EXPLORATION AND TEST REPORT	Alaska Highway	SOURCE/TP#: 901-6588
Source Motors Ltd.	Ibex Valley Pit, km 1468.3 LHS	PROJECT NO: 552-202101-1001-1-1
Hitachi 200 LC	Coordinates: Z08V N6743791m E458054m	ELEVATION: 680m


## PHOTOS



Figure 901-6588.1  
Photo of test pit 901-6588



Figure 901-6588.2  
Photo of sample piles from test pit 901-6588

SUBSURFACE EXPLORATION AND TEST REPORT		Alaska Highway		SOURCE/TP#: 901-6589				
Source Motors Ltd.		Ibex Valley Pit, km 1468.3 LHS		PROJECT NO: 552-202101-1001-1-1				
Hitachi 200 LC		Coordinates: Z08V N6743865m E458035m		ELEVATION: 682m				
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							
681				032	SP-SM		ORGANICS  POORLY GRADED SAND with SILT and GRAVEL -Dark brown, compact, frozen	
681				033	GW		WELL-GRADED GRAVEL with SAND -Light brown, loose, damp -5-10% Cobbles	1
680								2
679							POORLY GRADED GRAVEL with SAND -10-15% Cobbles	3
678				034	GP			4
							END of HOLE -Target depth reached	
 Highways and Public Works Transportation Engineering Branch				LOGGED BY: G.Kennedy COMPILED BY: R.Stilwell REVIEWED BY:		Termination Depth: 4.5m Complete: 10/20/2016 7:28:00 PM Pit #: 105 D-13		Page 1 of 2

SUBSURFACE EXPLORATION AND TEST REPORT	Alaska Highway	SOURCE/TP#: 901-6589
Source Moters Ltd.	Ibex Valley Pit, km 1468.3 LHS	PROJECT NO: 552-202101-1001-1-1
Hitachi 200 LC	Coordinates: Z08V N6743865m E458035m	ELEVATION: 682m

## PHOTOS



Figure 901-6589.1  
Photo of test pit 901-6589



Figure 901-6589.2  
Photo of sample piles from test pit 901-6589

SUBSURFACE EXPLORATION AND TEST REPORT		Alaska Highway		SOURCE/TP#: 901-6590				
Source Motors Ltd.		Ibex Valley Pit, km 1468.3 LHS		PROJECT NO: 552-202101-1001-1-1				
Hitachi 200 LC		Coordinates: Z08V N6743884m E458099m		ELEVATION: 683m				
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					
							ORGANICS	
							POORLY GRADED GRAVEL with SAND -Light brown, compact, damp	
							-Loose -5-10% Cobbles	
682								1
681								2
680								3
679								4
							END of HOLE -Target depth reached	



SUBSURFACE EXPLORATION AND TEST REPORT	Alaska Highway	SOURCE/TP#: 901-6590
Source Motors Ltd.	Ibex Valley Pit, km 1468.3 LHS	PROJECT NO: 552-202101-1001-1-1
Hitachi 200 LC	Coordinates: Z08V N6743884m E458099m	ELEVATION: 683m

## PHOTOS



Figure 901-6590.1  
Photo of test pit 901-6590



Figure 901-6590.2  
Photo of sample piles from test pit 901-6590

SUBSURFACE EXPLORATION AND TEST REPORT		Alaska Highway		SOURCE/TP#: 901-6591				
Source Motors Ltd.		Ibex Valley Pit, km 1468.3 LHS		PROJECT NO: 552-202101-1001-1-1				
Hitachi 200 LC		Coordinates: Z08V N6743909m E458170m		ELEVATION: 685m				
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							
684				038	SP		ORGANICS	1
							POORLY GRADED SAND with GRAVEL -Light brown, loose, damp	
							-0-5% Cobbles	
683				039	SP			2
							POORLY GRADED GRAVEL with SAND -Darker brown, loose, damp -10-15% Cobbles	
682				040	GP			3
681							END of HOLE -Target depth reached	4



SUBSURFACE EXPLORATION AND TEST REPORT	Alaska Highway	SOURCE/TP#: 901-6591
Source Motors Ltd.	Ibex Valley Pit, km 1468.3 LHS	PROJECT NO: 552-202101-1001-1-1
Hitachi 200 LC	Coordinates: Z08V N6743909m E458170m	ELEVATION: 685m

## PHOTOS



Figure 901-6591.1  
Photo of test pit 901-6591



Figure 901-6591.2  
Photo of sample piles from test pit 901-6591

GRAIN SIZE ANALYSIS	Ibex Valley Pit	SOURCE/TP#: 901-6579
Source Motors Ltd.	km 1468.3 LHS	PROJECT NO: 552-202101-1001-1-1
Hitachi 200 LC	Coordinates: Z08V N6743728m E458319m	ELEVATION: 686m

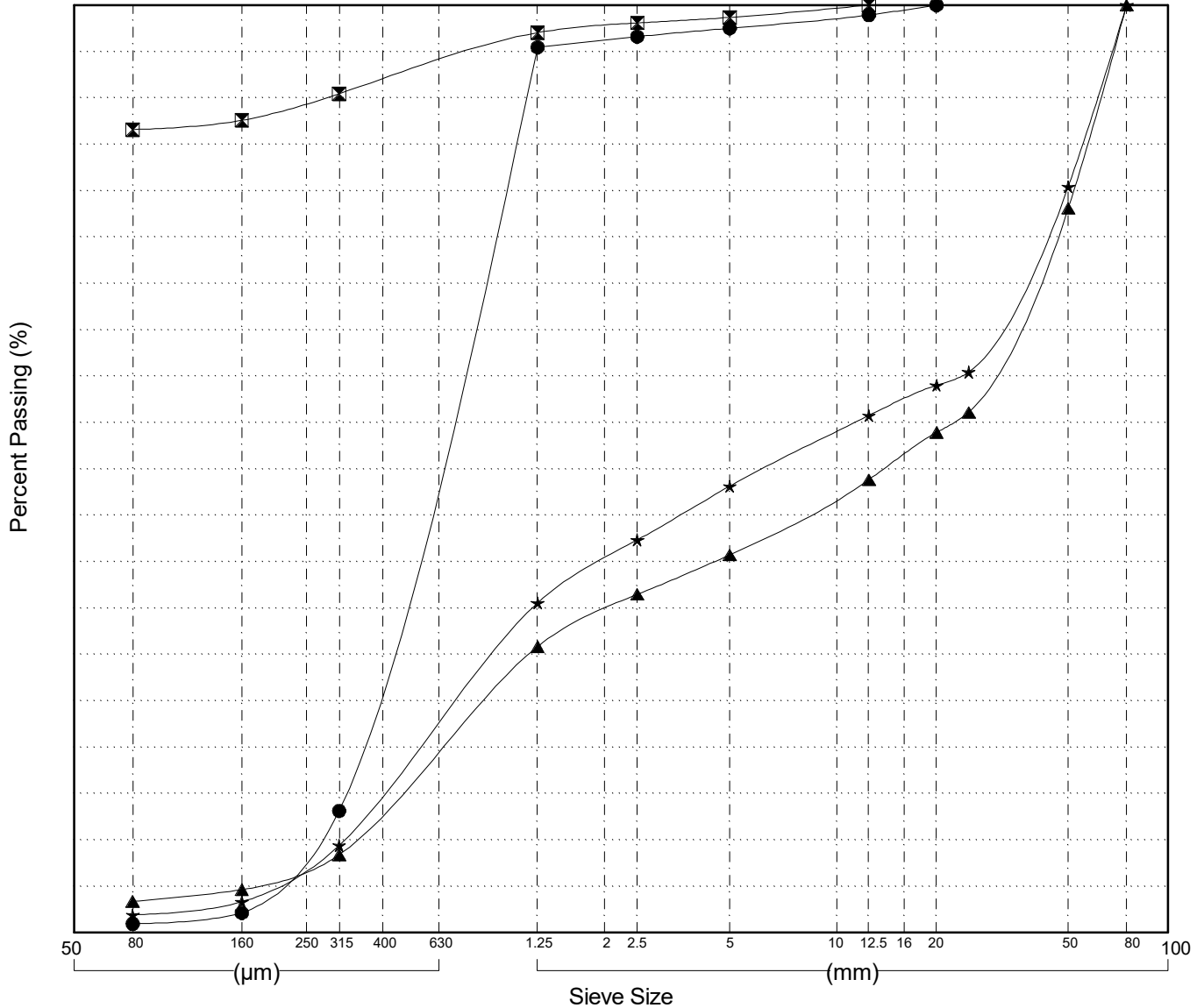
Master Revised July 2013

Field#	Lab#	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu
● 001	457	0.2 to 0.6	POORLY GRADED SAND(SP)	1.5	NP	NP	NP	1.0	2.7
☒ 002	458	1.0 to 1.4	SILT(ML)	21.8	NP	NP	NP		
▲ 003	459	2.0 to 2.4	POORLY GRADED GRAVEL with SAND(GP)	2.7	NP	NP	NP	0.1	81.4
★ 004	460	3.2 to 3.6	POORLY GRADED GRAVEL with SAND(GP)	1.3	NP	NP	NP	0.1	71.8

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			
																Gravel	Sand	Silt	Clay
● 001	457	100.0	100.0	100.0	100.0	100.0	98.9	98.6	97.5	96.6	95.5	54.5	13.1	2.1	1.0	2.5	96.5	1.0	
☒ 002	458	100.0	100.0	100.0	100.0	100.0	100.0	99.7	98.7	98.1	97.0	93.8	90.5	87.6	86.6	1.3	12.1	86.6	
▲ 003	459	100.0	100.0	78.1	56.1	53.9	48.8	47.0	40.7	36.5	30.8	19.7	8.4	4.6	3.4	59.3	37.3	3.4	
★ 004	460	100.0	100.0	80.4	60.4	59.0	55.8	54.0	48.1	42.4	35.5	22.6	9.4	3.3	1.9	51.9	46.2	1.9	

Silt	Sand			Gravel	
	Fine	Medium	Coarse	Fine	Coarse



GRAIN SIZE ANALYSIS	Ibex Valley Pit	SOURCE/TP#: 901-6580
Source Motors Ltd.	km 1468.3 LHS	PROJECT NO: 552-202101-1001-1-1
Hitachi 200 LC	Coordinates: Z08V N6743703m E458246m	ELEVATION: 684m

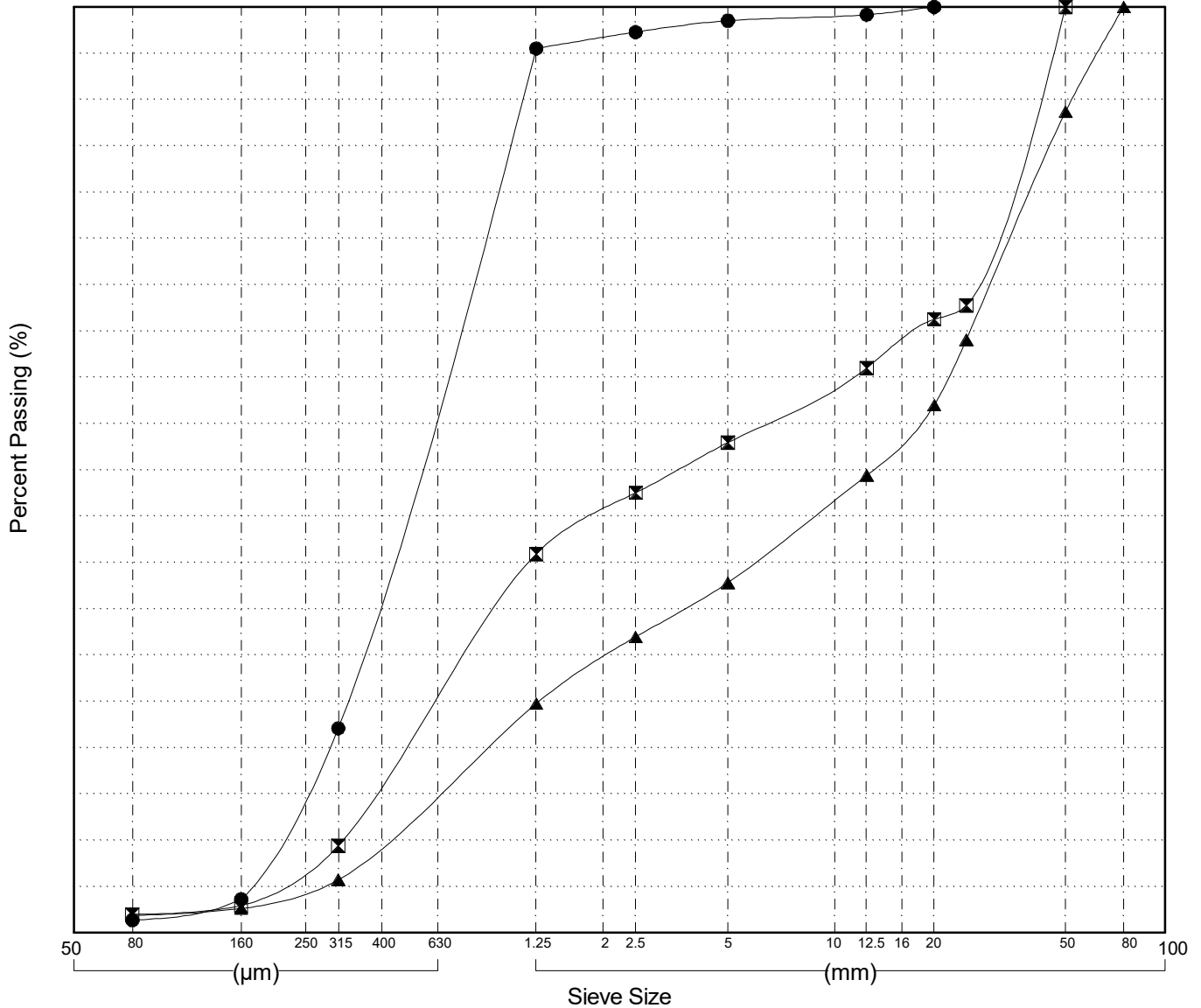
Master Revised July 2013

Field#	Lab#	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu
● 005	461	0.4 to 0.8	POORLY GRADED SAND(SP)	2.0	NP	NP	NP	1.0	3.2
☒ 006	462	1.0 to 1.4	POORLY GRADED SAND with GRAVEL(SP)	2.0	NP	NP	NP	0.2	34.3
▲ 007	463	3.2 to 3.6	POORLY GRADED GRAVEL with SAND(GP)	2.2	NP	NP	NP	0.5	51.2

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
● 005	461	100.0	100.0	100.0	100.0	100.0	99.2	99.0	98.5	97.3	95.5	59.0	22.1	3.6	1.4	1.5	97.1	1.4	
☒ 006	462	100.0	100.0	100.0	67.8	66.3	61.0	59.1	52.9	47.5	40.9	25.3	9.4	2.9	2.0	47.1	51.0	2.0	
▲ 007	463	100.0	100.0	88.7	64.0	57.0	49.4	46.7	37.8	32.0	24.8	15.3	5.7	2.6	1.9	62.2	35.9	1.9	

Silt	Sand			Gravel	
	Fine	Medium	Coarse	Fine	Coarse



GRAIN SIZE ANALYSIS	Ibex Valley Pit	SOURCE/TP#: 901-6581
Source Motors Ltd.	km 1468.3 LHS	PROJECT NO: 552-202101-1001-1-1
Hitachi 200 LC	Coordinates: Z08V N6743677m E458181m	ELEVATION: 681m

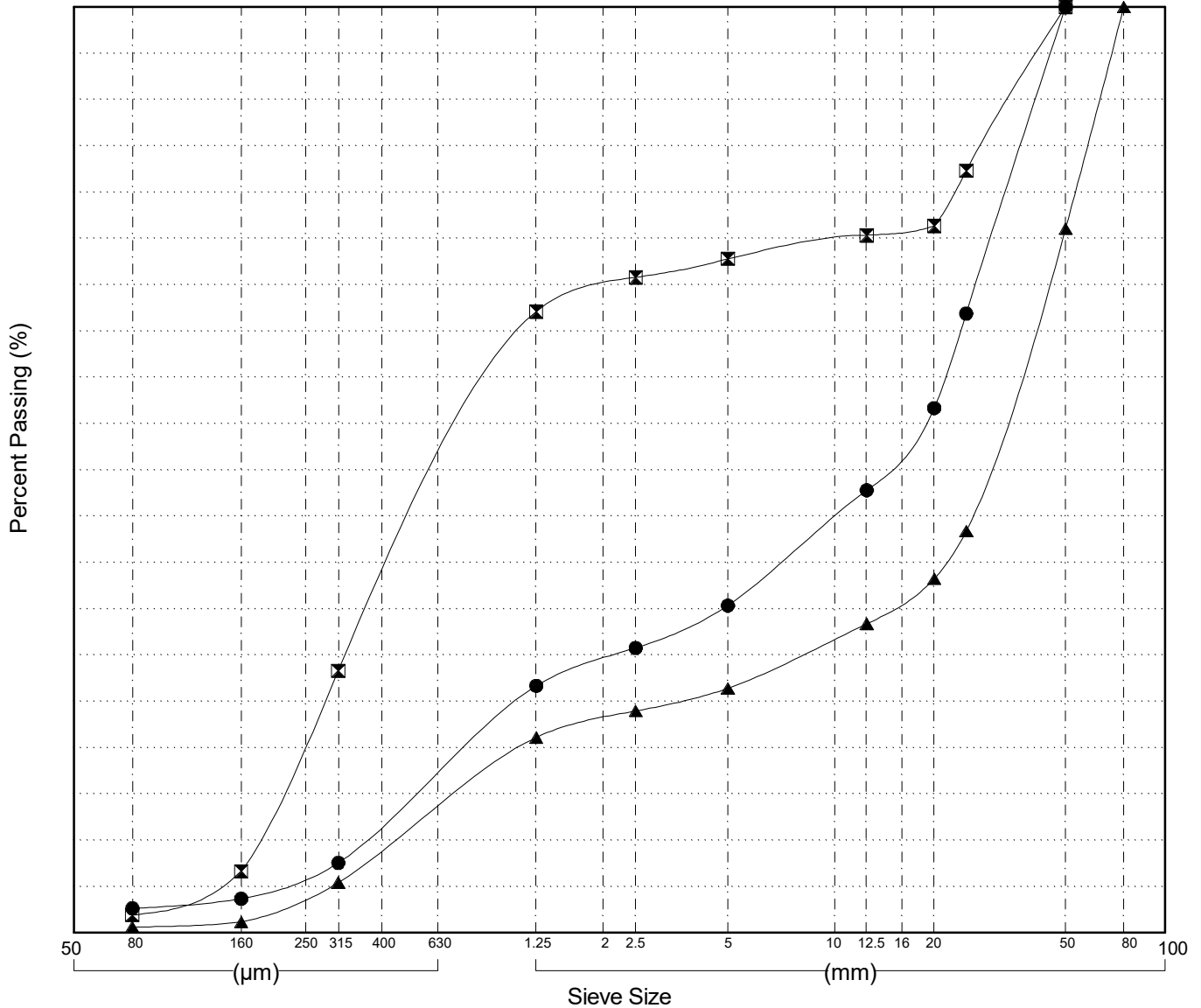
Master Revised July 2013

Field#	Lab#	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu
● 008	464	0.4 to 0.8	POORLY GRADED GRAVEL with SAND(GP)	2.2	NP	NP	NP	0.6	57.3
☒ 009	465	1.2 to 1.6	POORLY GRADED SAND with GRAVEL(SP)	2.2	NP	NP	NP	0.6	5.5
▲ 010	466	2.0 to 2.4	POORLY GRADED GRAVEL with SAND(GP)	1.8	NP	NP	NP	3.7	75.6

Field#	Lab#	% PASSING	Sieve Size													% 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
● 008	464	100.0	100.0	100.0	100.0	66.9	56.7	47.8	44.9	35.4	30.8	26.7	17.2	7.6	3.7	2.7	64.6	32.7	2.7
☒ 009	465	100.0	100.0	100.0	82.3	76.4	75.3	74.7	72.8	70.8	67.1	47.8	28.3	6.7	1.9		27.2	70.9	1.9
▲ 010	466	100.0	100.0	76.0	43.4	38.3	33.4	31.8	26.4	24.0	21.1	13.3	5.4	1.2	0.6		73.6	25.8	0.6

Silt	Sand			Gravel	
	Fine	Medium	Coarse	Fine	Coarse





GRAIN SIZE ANALYSIS	Ibex Valley Pit	SOURCE/TP#: 901-6582
Source Motors Ltd.	km 1468.3 LHS	PROJECT NO: 552-202101-1001-1-1
Hitachi 200 LC	Coordinates: Z08V N6743647m E458105m	ELEVATION: 679m

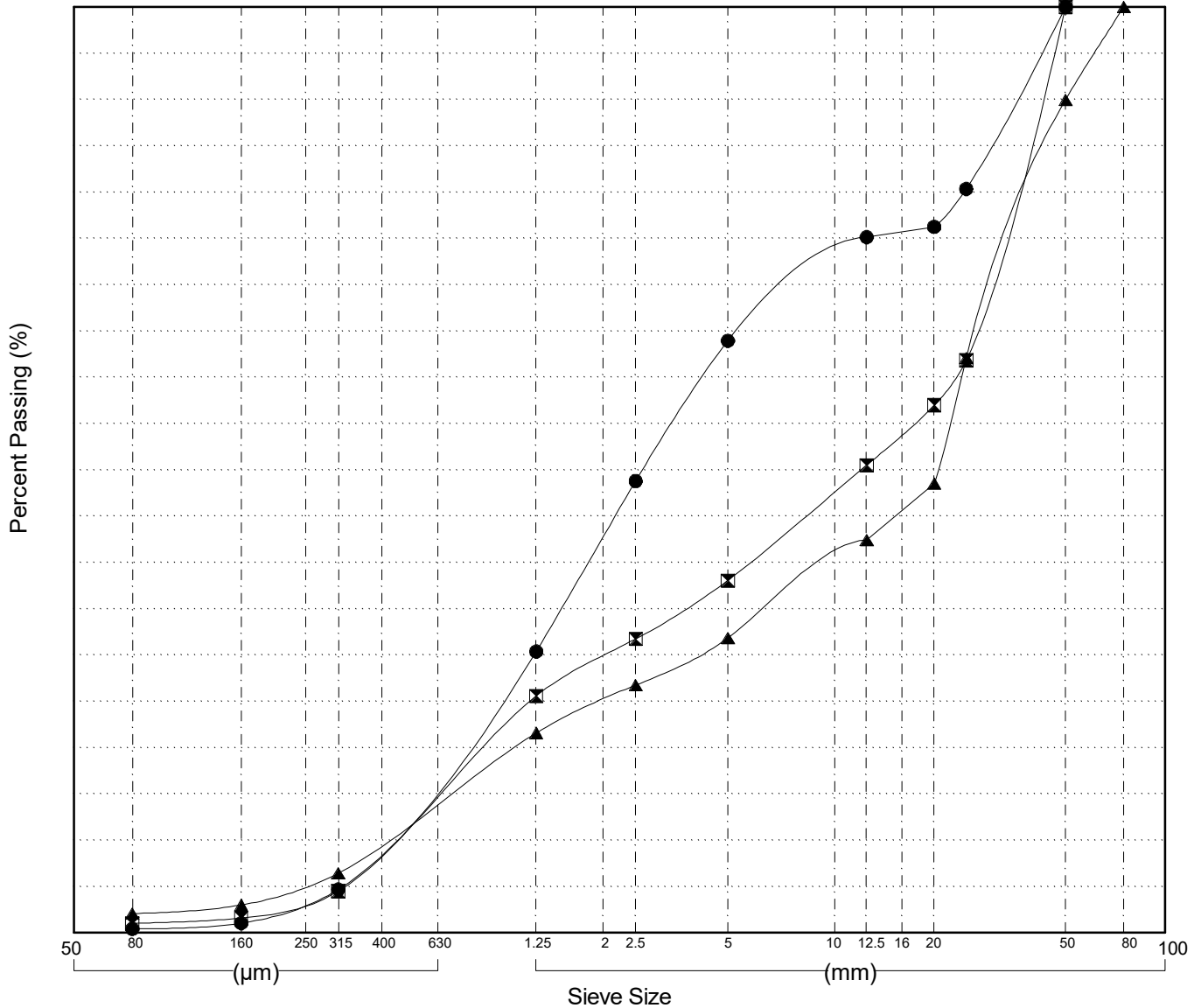
Master Revised July 2013

Field#	Lab#	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu
● 011	467	0.2 to 0.6	POORLY GRADED SAND with GRAVEL(SP)	1.5	NP	NP	NP	0.9	9.6
☒ 012	468	1.0 to 1.4	POORLY GRADED GRAVEL with SAND(GP)	1.4	NP	NP	NP	0.4	50.9
▲ 013	469	1.8 to 2.2	WELL-GRADED GRAVEL with SAND(GW)	1.5	NP	NP	NP	1.3	55.5

Field#	Lab#	% PASSING	Sieve Size													% 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	Clay
● 011	467	100.0	100.0	100.0	100.0	80.3	76.3	75.1	72.6	63.9	48.8	30.4	17.6	4.7	1.1	0.4	36.1	63.5	0.4
☒ 012	468	100.0	100.0	100.0	61.8	57.0	50.5	47.6	38.0	31.7	25.6	15.1	4.5	1.6	1.0	62.0	37.0	1.0	
▲ 013	469	100.0	100.0	90.0	62.1	48.5	42.4	40.0	31.8	26.8	21.6	14.1	6.4	3.0	2.1	68.2	29.8	2.1	

Silt	Sand			Gravel	
	Fine	Medium	Coarse	Fine	Coarse



GRAIN SIZE ANALYSIS	Ibex Valley Pit	SOURCE/TP#: 901-6583
Source Motors Ltd.	km 1468.3 LHS	PROJECT NO: 552-202101-1001-1-1
Hitachi 200 LC	Coordinates: Z08V N6743727m E458086m	ELEVATION: 680m

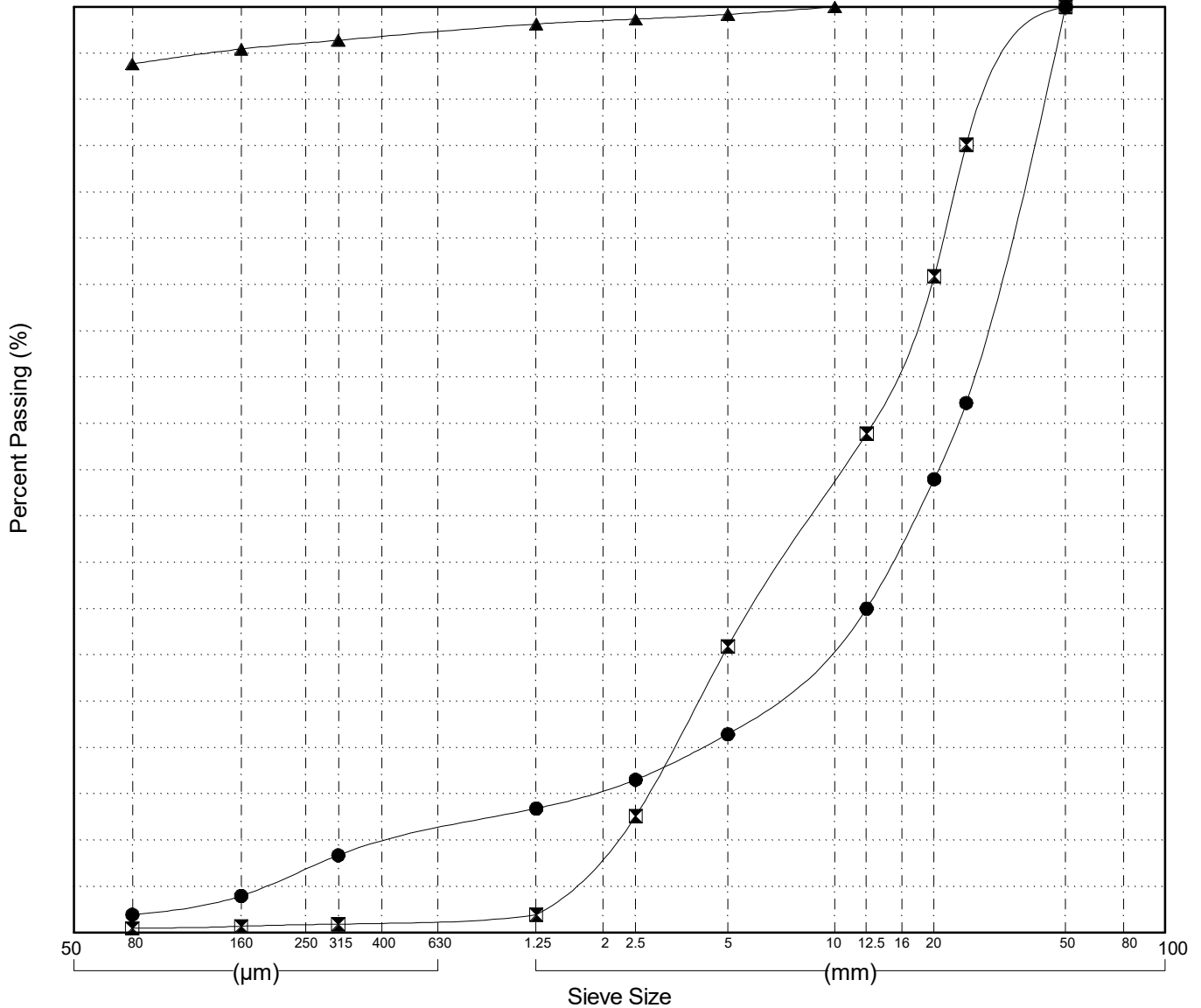
Master Revised July 2013

Field#	Lab#	Depth	Classification	%H <sub>2</sub> O	LL	PL	PI	C <sub>c</sub>	C <sub>u</sub>
● 014	470	0.4 to 0.8	POORLY GRADED GRAVEL with SAND(GP)	1.8	NP	NP	NP	5.9	53.3
☒ 015	471	1.6 to 2.0	POORLY GRADED GRAVEL with SAND(GP)	2.3	NP	NP	NP	0.7	7.0
▲ 016	472	3.0 to 3.4	SILT(ML)	28.2	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	Clay
● 014	470	100.0	100.0	100.0	100.0	57.2	49.0	35.0	31.9	21.5	16.5	13.4	10.9	8.4	4.0	2.0	78.5	19.5	2.0	
☒ 015	471	100.0	100.0	100.0	85.1	70.9	53.9	48.6	30.9	12.6	2.0	1.4	0.9	0.7	0.5		69.1	30.4	0.5	
▲ 016	472	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.2	98.7	98.1	97.3	96.4	95.4	93.8		0.8	5.3	93.8	

Silt	Sand			Gravel	
	Fine	Medium	Coarse	Fine	Coarse



Highways and Public Works  
Transportation Engineering Branch

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COMPILED BY: R.Stilwell  
REVIEWED BY:

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GRAIN SIZE ANALYSIS	Ibex Valley Pit	SOURCE/TP#: 901-6584
Source Motors Ltd.	km 1468.3 LHS	PROJECT NO: 552-202101-1001-1-1
Hitachi 200 LC	Coordinates: Z08V N6743747m E458155m	ELEVATION: 682m

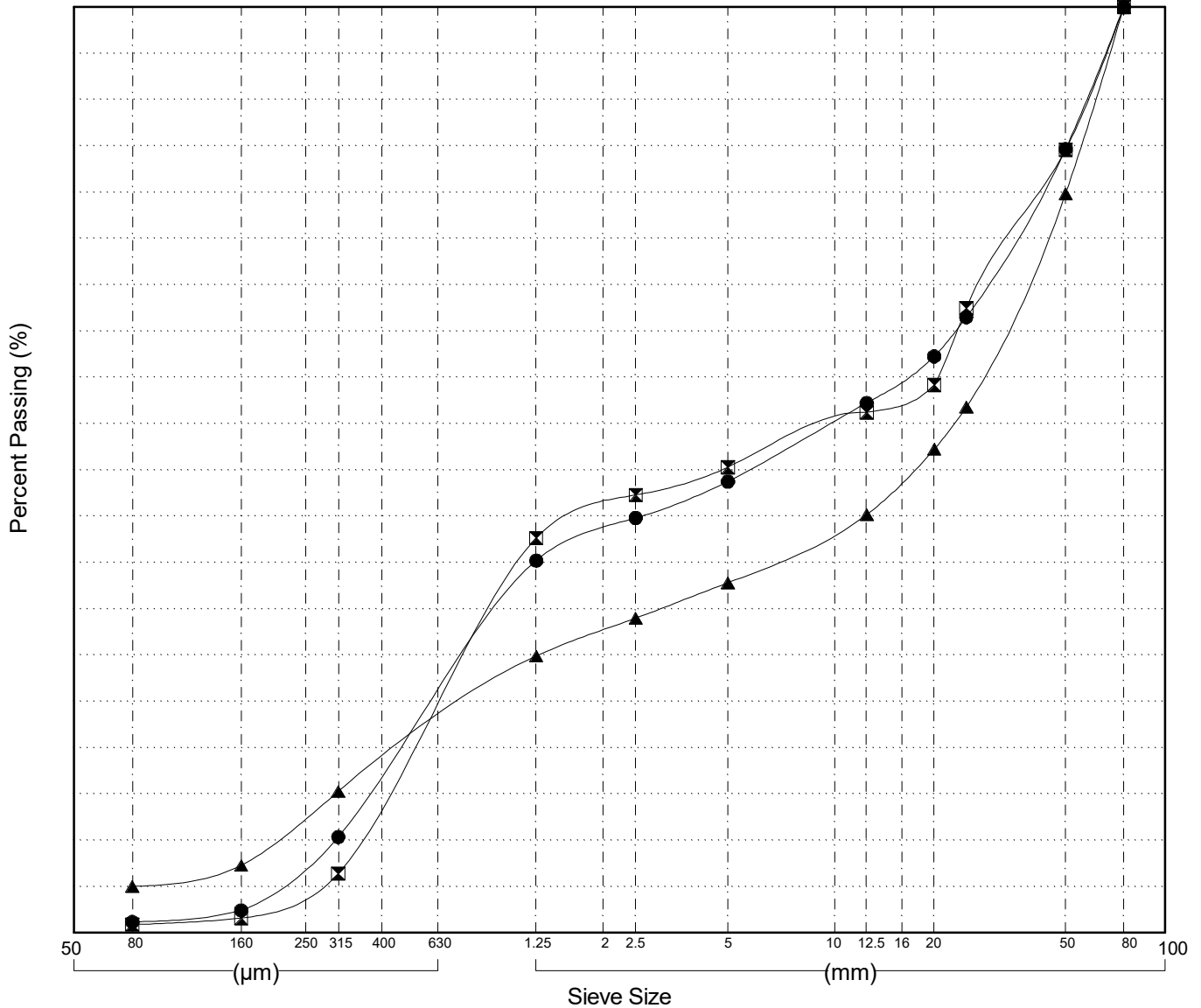
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Field#	Lab#	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu
● 017	473	0.4 to 0.8	POORLY GRADED GRAVEL with SAND(GP)	1.3	NP	NP	NP	0.1	53.0
☒ 018	474	1.6 to 2.0	POORLY GRADED GRAVEL with SAND(GP)	1.8	NP	NP	NP	0.1	56.6
▲ 019	475	3.0 to 3.4	POORLY GRADED GRAVEL with SILT and SAND(GP-GM)	1.8	NP	NP	NP	0.3	136.8

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
● 017	473	100.0	100.0	84.7	66.5	62.3	57.2	55.3	48.7	44.8	40.2	25.4	10.4	2.4	1.2	51.3	47.6	1.2	
☒ 018	474	100.0	100.0	84.6	67.5	59.2	56.2	54.9	50.3	47.3	42.6	24.6	6.4	1.6	0.9	49.7	49.4	0.9	
▲ 019	475	100.0	100.0	79.8	56.8	52.2	45.2	43.5	37.8	34.0	29.9	22.6	15.3	7.3	5.0	62.2	32.8	5.0	

Silt	Sand			Gravel	
	Fine	Medium	Coarse	Fine	Coarse



GRAIN SIZE ANALYSIS	Ibex Valley Pit	SOURCE/TP#: 901-6585
Source Motors Ltd.	km 1468.3 LHS	PROJECT NO: 552-202101-1001-1-1
Hitachi 200 LC	Coordinates: Z08V N6743776m E458222m	ELEVATION: 684m

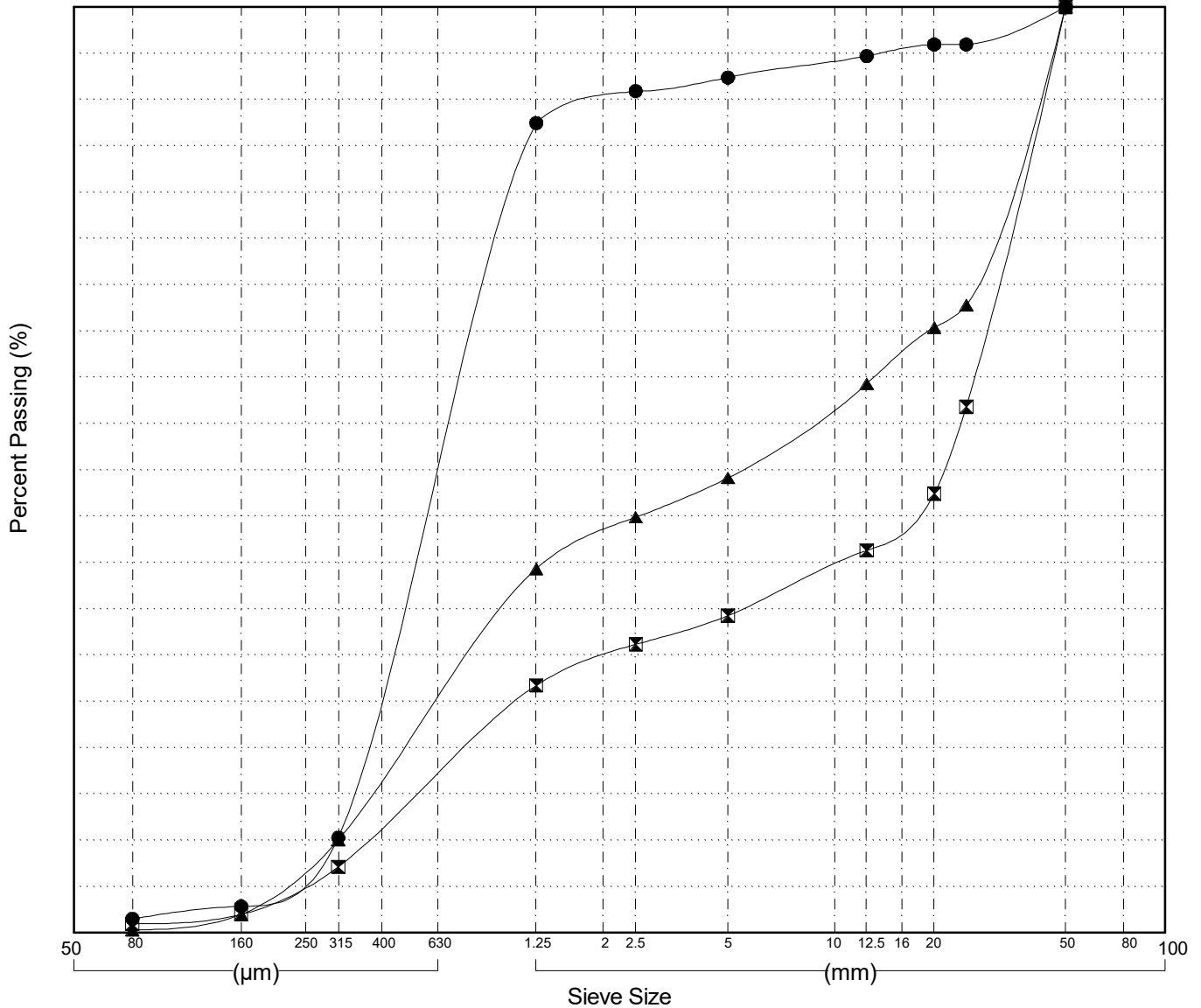
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Field#	Lab#	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu
● 020	476	0.4 to 0.8	POORLY GRADED SAND(SP)	1.0	NP	NP	NP	0.9	2.5
☒ 021	477	1.0 to 1.4	POORLY GRADED GRAVEL with SAND(GP)	1.3	NP	NP	NP	0.4	68.2
▲ 022	478	2.4 to 2.8	POORLY GRADED GRAVEL with SAND(GP)	0.5	NP	NP	NP	0.2	42.0

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
● 020	476	100.0	100.0	100.0	100.0	95.9	95.9	94.7	94.2	92.4	90.9	87.5	49.1	10.3	2.9	1.5	7.6	90.8	1.5	
☒ 021	477	100.0	100.0	100.0	56.8	47.4	41.3	39.7	34.3	31.2	26.7	17.0	7.1	2.0	1.0	65.7	33.3	1.0		
▲ 022	478	100.0	100.0	100.0	67.8	65.4	59.3	57.0	49.1	44.9	39.3	24.8	10.0	2.0	0.3	50.9	48.8	0.3		

Silt	Sand			Gravel	
	Fine	Medium	Coarse	Fine	Coarse



GRAIN SIZE ANALYSIS	Ibex Valley Pit	SOURCE/TP#: 901-6586
Source Motors Ltd.	km 1468.3 LHS	PROJECT NO: 552-202101-1001-1-1
Hitachi 200 LC	Coordinates: Z08V N6743846m E458197m	ELEVATION: 685m

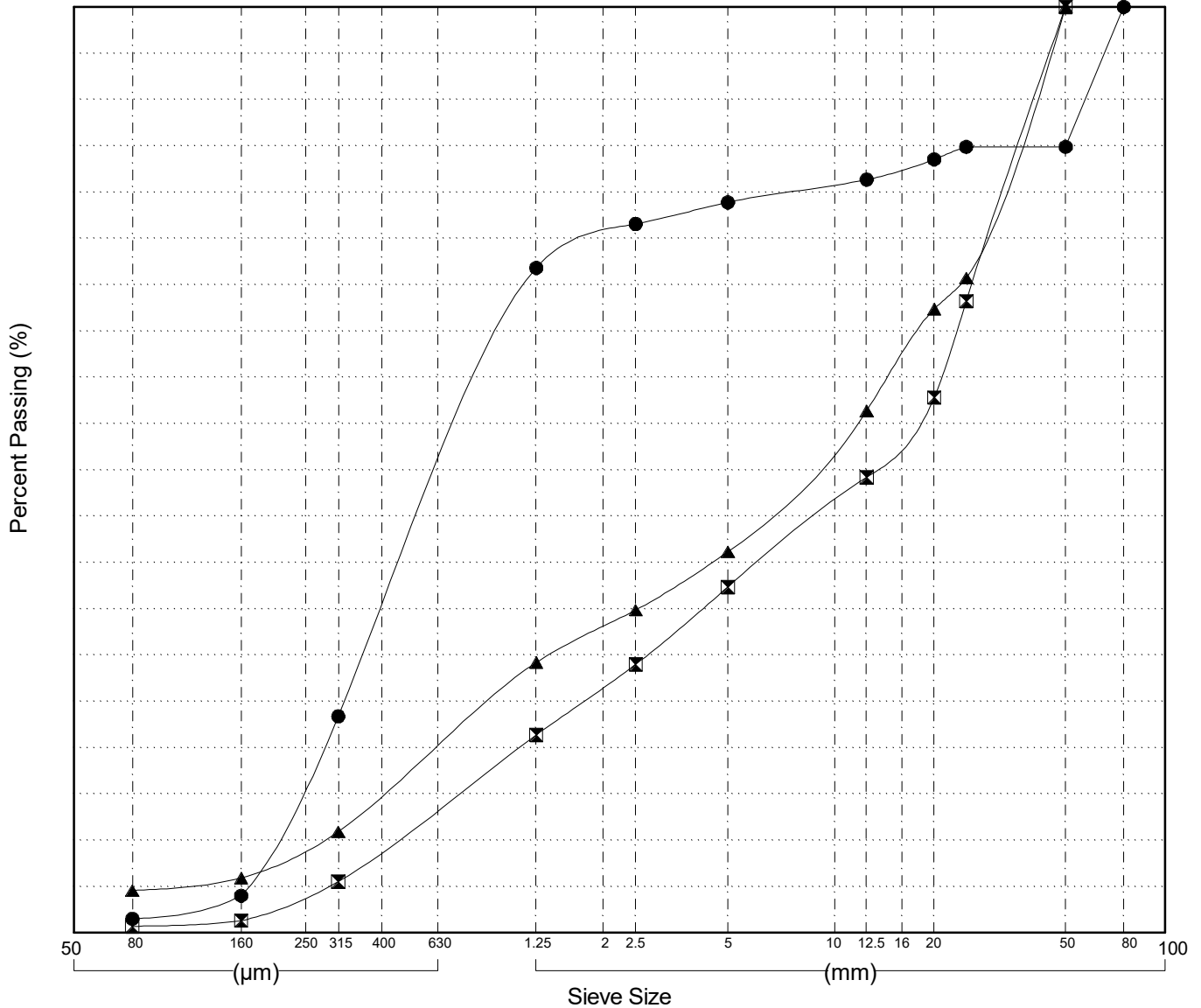
Master Revised July 2013

Field#	Lab#	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu
● 023	479	0.2 to 0.6	POORLY GRADED SAND with GRAVEL(SP)	1.2	NP	NP	NP	0.8	4.5
☒ 024	480	1.0 to 1.4	POORLY GRADED GRAVEL with SAND(GP)	0.5	NP	NP	NP	0.8	45.1
▲ 025	481	2.2 to 2.6	POORLY GRADED GRAVEL with SAND(GP)	2.0	NP	NP	NP	0.5	52.6

Field#	Lab#	% PASSING	Sieve Size													% 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
● 023	479	100.0	100.0	84.9	84.9	83.5	81.4	80.8	78.9	76.6	71.8	47.7	23.4	4.0	1.5	21.1	77.4	1.5	
☒ 024	480	100.0	100.0	100.0	68.2	57.8	49.2	46.5	37.4	29.0	21.4	13.5	5.6	1.3	0.7	62.6	36.6	0.7	
▲ 025	481	100.0	100.0	100.0	70.7	67.4	56.4	52.9	41.1	34.9	29.2	20.1	10.9	5.9	4.6	58.9	36.6	4.6	

Silt	Sand			Gravel	
	Fine	Medium	Coarse	Fine	Coarse



Highways and Public Works  
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REVIEWED BY:

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Complete: 10/20/2016 3:50:00 PM

GRAIN SIZE ANALYSIS	Ibex Valley Pit	SOURCE/TP#: 901-6587
Source Motors Ltd.	km 1468.3 LHS	PROJECT NO: 552-202101-1001-1-1
Hitachi 200 LC	Coordinates: Z08V N6743812m E458123m	ELEVATION: 682m

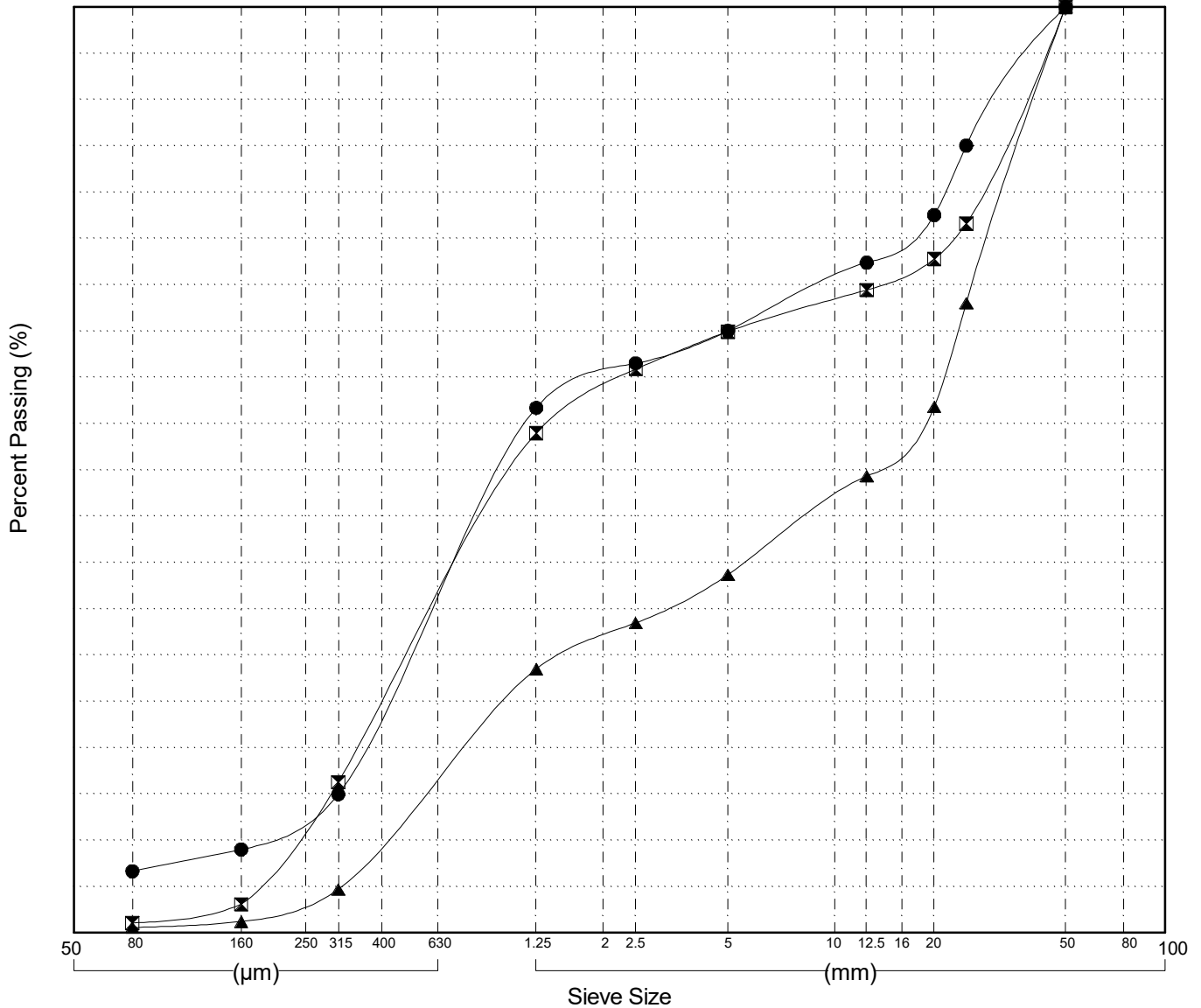
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Field#	Lab#	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu
● 026	482	0.2 to 0.6	POORLY GRADED SAND with SILT and GRAVEL(SP-SM)	1.5	NP	NP	NP	0.7	11.2
☒ 027	483	1.0 to 1.4	POORLY GRADED SAND with GRAVEL(SP)	0.7	NP	NP	NP	0.5	10.0
▲ 028	484	3.4 to 3.8	POORLY GRADED GRAVEL with SAND(GP)	0.8	NP	NP	NP	0.3	49.8

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
● 026	482	100.0	100.0	100.0	100.0	85.0	77.5	72.4	70.7	65.0	61.5	56.7	36.0	15.0	9.0	6.7	35.0	58.4	6.7	
☒ 027	483	100.0	100.0	100.0	76.6	72.8	69.4	68.4	64.9	60.9	54.0	35.2	16.3	3.1	1.1		35.1	63.9	1.1	
▲ 028	484	100.0	100.0	100.0	68.0	56.8	49.3	46.9	38.7	33.5	28.5	16.7	4.7	1.2	0.6		61.3	38.1	0.6	

Silt	Sand			Gravel	
	Fine	Medium	Coarse	Fine	Coarse



GRAIN SIZE ANALYSIS	Ibex Valley Pit	SOURCE/TP#: 901-6588
Source Motors Ltd.	km 1468.3 LHS	PROJECT NO: 552-202101-1001-1-1
Hitachi 200 LC	Coordinates: Z08V N6743791m E458054m	ELEVATION: 680m

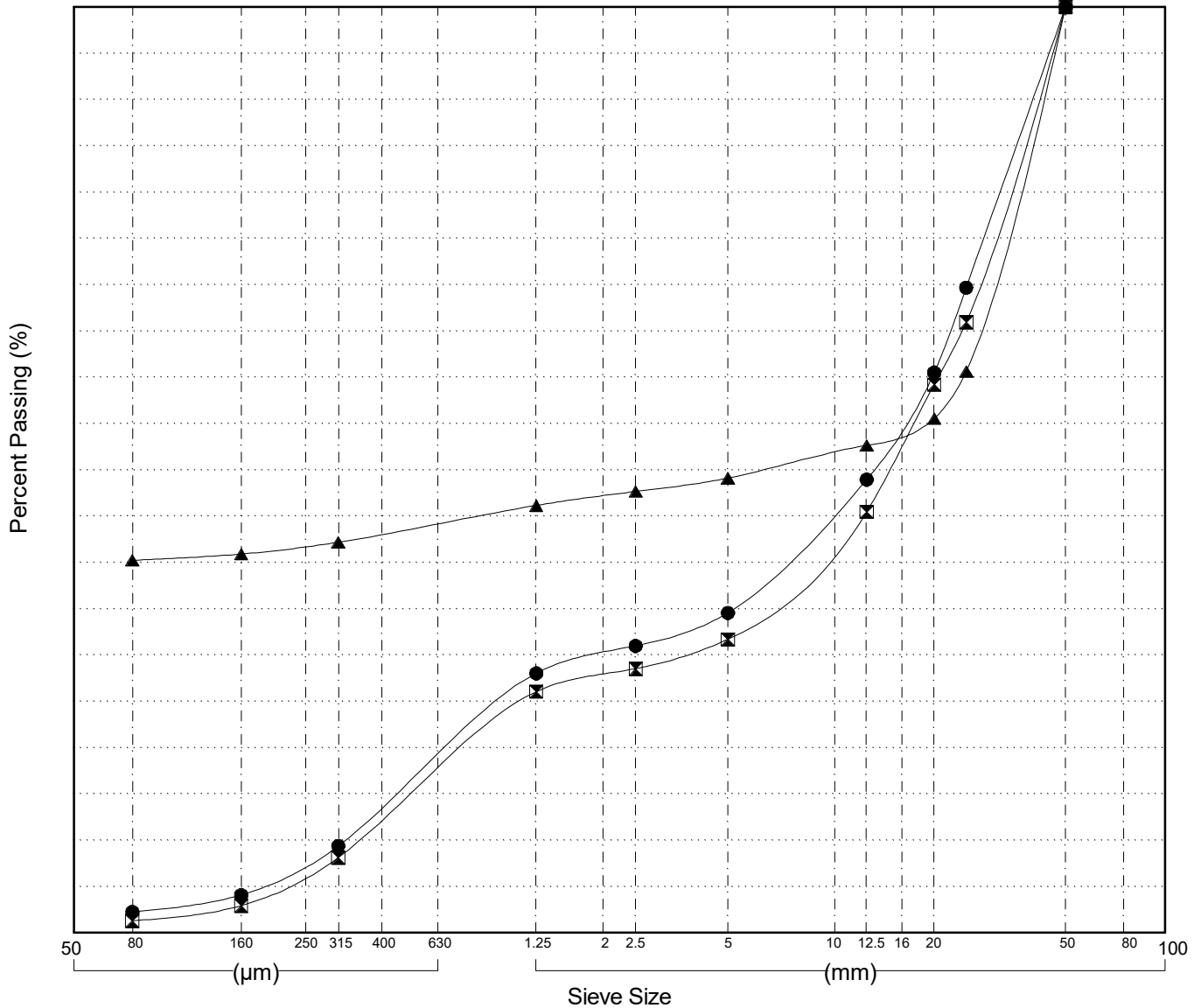
Master Revised July 2013

Field#	Lab#	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu
● 029	485	0.4 to 0.8	POORLY GRADED GRAVEL with SAND(GP)	2.4	NP	NP	NP	0.6	59.4
☒ 030	486	2.2 to 2.6	WELL-GRADED GRAVEL with SAND(GW)	2.0	NP	NP	NP	1.5	56.4
▲ 031	487	3.4 to 3.8	SILTY GRAVEL(GM)	12.2	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
● 029	485	100.0	100.0	100.0	100.0	69.7	60.5	49.0	45.6	34.6	31.0	28.0	18.8	9.4	4.1	2.3	65.4	32.3	2.3
☒ 030	486	100.0	100.0	100.0	66.0	59.2	45.5	42.3	31.7	28.5	26.1	17.1	8.1	2.9	1.3	68.3	30.4	1.3	
▲ 031	487	100.0	100.0	100.0	60.6	55.6	52.6	51.8	49.1	47.7	46.2	44.2	42.2	40.9	40.2	50.9	8.9	40.2	

Silt	Sand			Gravel	
	Fine	Medium	Coarse	Fine	Coarse



Highways and Public Works  
Transportation Engineering Branch

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REVIEWED BY:

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GRAIN SIZE ANALYSIS	Ibex Valley Pit	SOURCE/TP#: 901-6589
Source Motors Ltd.	km 1468.3 LHS	PROJECT NO: 552-202101-1001-1-1
Hitachi 200 LC	Coordinates: Z08V N6743865m E458035m	ELEVATION: 682m

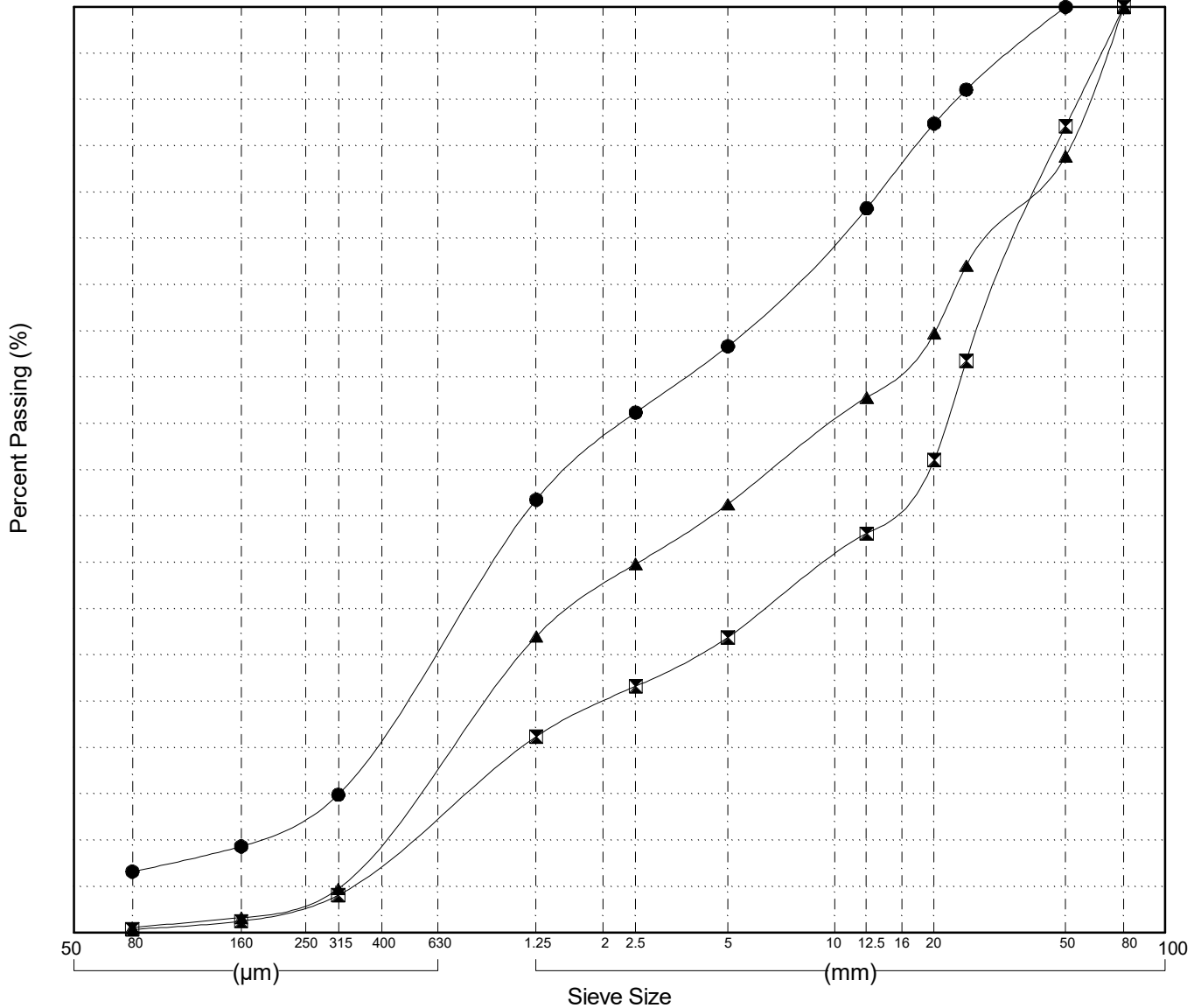
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Field#	Lab#	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu
● 032	488	0.2 to 0.6	POORLY GRADED SAND with SILT and GRAVEL(SP-SM)	2.0	NP	NP	NP	0.6	20.3
☒ 033	489	0.8 to 1.2	WELL-GRADED GRAVEL with SAND(GW)	0.8	NP	NP	NP	1.2	47.5
▲ 034	490	3.2 to 3.6	POORLY GRADED GRAVEL with SAND(GP)	3.7	NP	NP	NP	0.2	35.3

Field#	Lab#	100.0	80.0	50.0	25.0	20.0	12.5	10.0	5.0	2.5	1.25	0.630	0.315	0.160	0.080	% Breakdown		
																Gravel	Sand	Silt/Clay
● 032	488	100.0	100.0	100.0	91.1	87.4	78.2	74.8	63.3	56.2	46.8	30.9	14.9	9.3	6.6	36.7	56.7	6.6
☒ 033	489	100.0	100.0	87.1	61.8	51.1	43.1	40.5	31.9	26.6	21.2	12.7	4.1	1.3	0.4	68.1	31.5	0.4
▲ 034	490	100.0	100.0	83.9	72.1	64.8	57.8	55.2	46.3	39.8	32.0	18.5	4.8	1.6	0.6	53.7	45.7	0.6

Silt	Sand			Gravel	
	Fine	Medium	Coarse	Fine	Coarse



GRAIN SIZE ANALYSIS	Ibex Valley Pit	SOURCE/TP#: 901-6590
Source Motors Ltd.	km 1468.3 LHS	PROJECT NO: 552-202101-1001-1-1
Hitachi 200 LC	Coordinates: Z08V N6743884m E458099m	ELEVATION: 683m

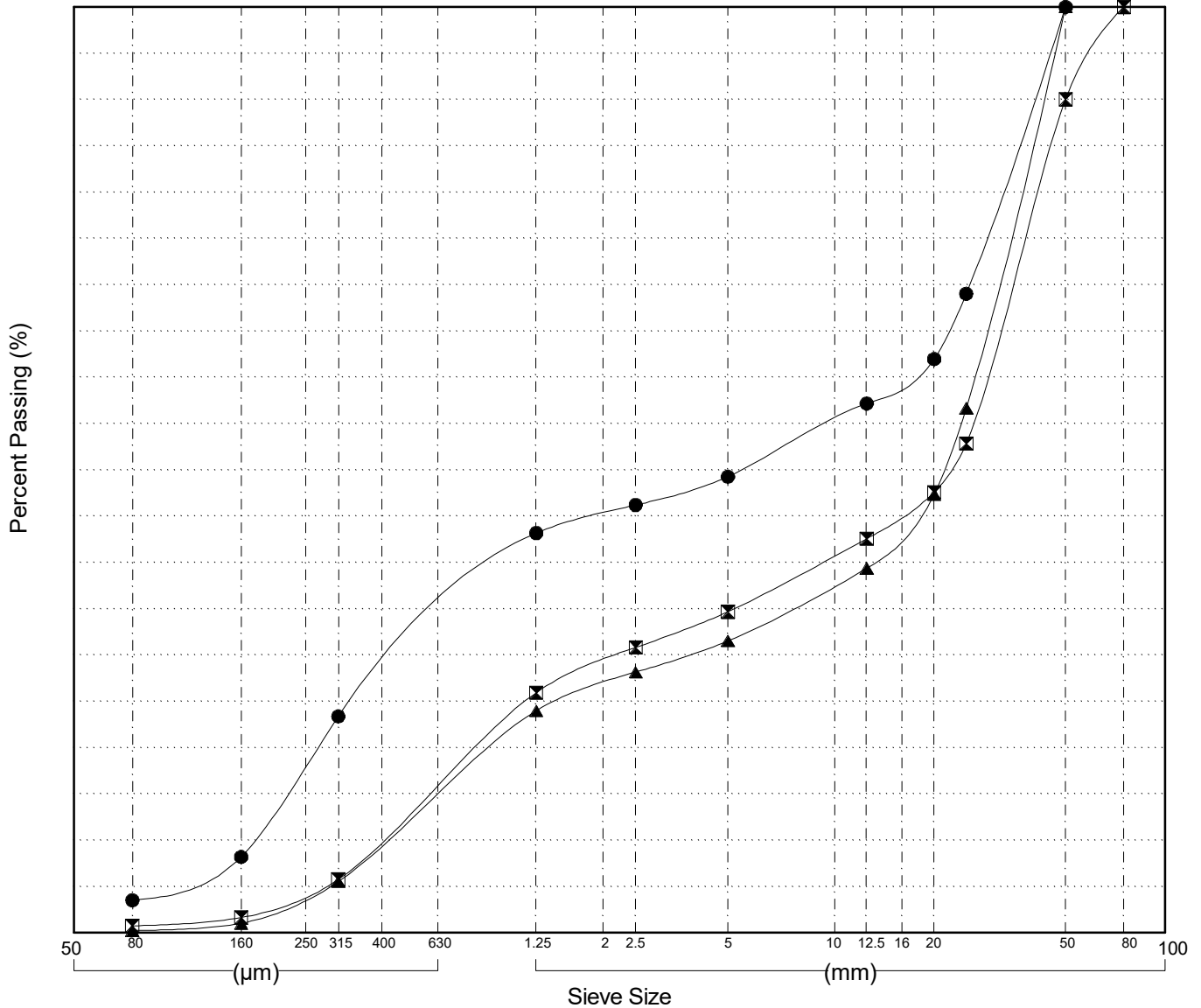
Master Revised July 2013

Field#	Lab#	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu
● 035	491	0.2 to 0.6	POORLY GRADED GRAVEL with SAND(GP)	2.5	NP	NP	NP	0.1	95.2
☒ 036	492	0.8 to 1.2	POORLY GRADED GRAVEL with SAND(GP)	1.1	NP	NP	NP	0.4	67.9
▲ 037	493	3.4 to 3.8	WELL-GRADED GRAVEL with SAND(GW)	1.0	NP	NP	NP	1.1	59.9

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
● 035	491	100.0	100.0	100.0	100.0	69.0	62.0	57.2	55.3	49.3	46.2	43.2	33.3	23.4	8.2	3.5	50.7	45.7	3.5
☒ 036	492	100.0	100.0	90.0	52.8	47.6	42.6	40.8	34.7	30.8	25.9	15.9	5.8	1.7	0.8	65.3	33.9	0.8	
▲ 037	493	100.0	100.0	100.0	56.7	47.4	39.4	37.6	31.5	28.2	24.0	14.8	5.5	1.0	0.2	68.5	31.3	0.2	

Silt	Sand			Gravel	
	Fine	Medium	Coarse	Fine	Coarse



Highways and Public Works  
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COMPILED BY: R.Stilwell  
REVIEWED BY:

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GRAIN SIZE ANALYSIS	Ibex Valley Pit	SOURCE/TP#: 901-6591
Source Motors Ltd.	km 1468.3 LHS	PROJECT NO: 552-202101-1001-1-1
Hitachi 200 LC	Coordinates:Z08V N6743909m E458170m	ELEVATION: 685m

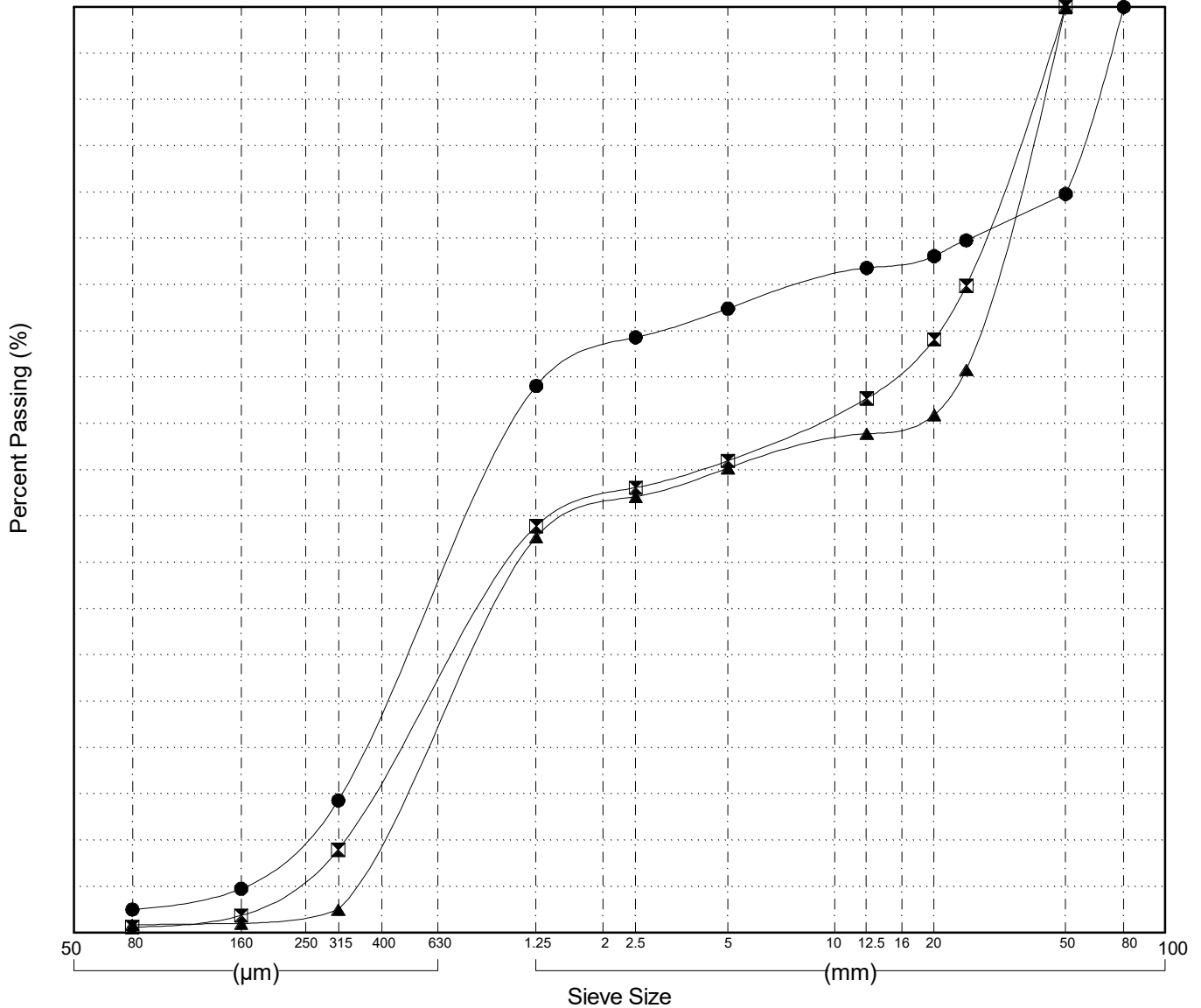
Master Revised July 2013

Field#	Lab#	Depth	Classification	%H2O	LL	PL	PI	Cc	Cu
● 038	494	0.4 to 0.8	POORLY GRADED SAND with GRAVEL(SP)	2.2	NP	NP	NP	0.8	6.1
☒ 039	495	1.0 to 1.4	POORLY GRADED SAND with GRAVEL(SP)	4.2	NP	NP	NP	0.1	45.1
▲ 040	496	2.4 to 2.8	POORLY GRADED GRAVEL with SAND(GP)	5.1	NP	NP	NP	0.1	59.1

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
● 038	494	100.0	100.0	79.8	74.8	73.1	71.8	70.8	67.4	64.3	59.1	36.8	14.3	4.8	2.5	32.6	64.9	2.5	
☒ 039	495	100.0	100.0	100.0	69.9	64.1	57.7	56.2	51.0	48.1	43.9	26.6	9.0	1.9	0.6	49.0	50.4	0.6	
▲ 040	496	100.0	100.0	100.0	60.8	56.0	53.9	53.1	50.2	47.1	42.7	22.7	2.5	1.0	0.9	49.8	49.3	0.9	

Silt	Sand			Gravel	
	Fine	Medium	Coarse	Fine	Coarse



Highways and Public Works  
Transportation Engineering Branch

LOGGED BY: G.Kennedy  
COMPILED BY: R.Stilwell  
REVIEWED BY:

Pit # 105 D-13  
Complete: 10/20/2016 6:18:00 PM