LABERGE ENVIRONMENTAL
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Date Received: 16-SEP-16
Report Date: 21-DEC-16 09:03 (MT)
Version: FINAL REV. 4

Client Phone: 867-668-6838

Certificate of Analysis

Lab Work Order #: L1829672

Project P.O. #: NOT SUBMITTED
Job Reference: CLINTON CREEK
C of C Numbers: 14-470676, 14-470677, 14-470939
Legal Site Desc:

Comments: ADDITIONAL 21-OCT-16 13:36

Taryn Williams, B.Sc.
Account Manager

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample ID	L1829672-1	L1829672-2	L1829672-3	L1829672-4	L1829672-5
Description	SOIL	SOIL	SOIL	SOIL	SOIL
Sampled Date	06-SEP-16	06-SEP-16	06-SEP-16	06-SEP-16	06-SEP-16
Sampled Time					
Client ID	E-1A	E-1B	E-1C	E-2A	E-2B
Grouping / **Analyte**					
BULK					
Asbestos/Quartz/ Other Fibres					
Asbestos: Actinolite (%)					
Asbestos By Point Count (%)					
Other Fibres: Cellulose (%)	1-5	1-5	Trace <1	Trace <1	
Asbestos: Chrysotile (%)	1-5	1-5	1-5	1-5	1-5
Other Fibres: MMVF (%)					
Mica (%)	Trace <1	Trace <1	Trace <1	Trace <1	Trace <1
Asbestos: Tremolite (%)					

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	Sample ID / Description / Sampled Date / Sampled Time / Client ID				
		L1829672-6 SOIL 06-SEP-16 E-2C	L1829672-7 SOIL 06-SEP-16 E-3A	L1829672-8 SOIL 06-SEP-16 E-3B	L1829672-9 SOIL 06-SEP-16 E-3C	L1829672-10 SOIL 06-SEP-16 E-4A
BULK						
Asbestos/Quartz/ Other Fibres	Asbestos: Actinolite (%)					
	Asbestos By Point Count (%)					
	Other Fibres: Cellulose (%)		1-5		1-5	
	Asbestos: Chrysotile (%)	1-5	1-5	1-5	1-5	1-5
	Other Fibres: MMVF (%)					
	Mica (%)	Trace <1	1-5	Trace <1	1-5	Trace <1
	Asbestos: Tremolite (%)					

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample ID Description Sampled Date Sampled Time Client ID	L1829672-11 SOIL 06-SEP-16 E-4B	L1829672-12 SOIL 06-SEP-16 E-4C	L1829672-13 SOIL 06-SEP-16 E-8A	L1829672-14 SOIL 06-SEP-16 E-8B	L1829672-15 SOIL 06-SEP-16 E-8C
Grouping **Analyte**					
BULK					
Asbestos/Quartz/ Other Fibres Asbestos: Actinolite (%)			0.10	0.10	0.10
Asbestos By Point Count (%)					
Other Fibres: Cellulose (%)			1-5	1-5	1-5
Asbestos: Chrysotile (%)	1-5	1-5	0.10		
Other Fibres: MMVF (%)			Trace <1	Trace <1	Trace <1
Mica (%)	1-5	Trace <1	1-5	1-5	1-5
Asbestos: Tremolite (%)					0.10

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L1829672-16 SOIL 06-SEP-16 PORCUPINE CR-A	L1829672-17 SOIL 06-SEP-16 PORCUPINE CR-B	L1829672-18 SOIL 06-SEP-16 PORCUPINE CR-C	L1829672-19 SOIL 06-SEP-16 R-1A	L1829672-20 SOIL 06-SEP-16 R-1B
BULK						
Asbestos/Quartz/ Other Fibres	Asbestos: Actinolite (%)					
	Asbestos By Point Count (%)				<0.10	<0.10
	Other Fibres: Cellulose (%)			1-5	Trace <1	
	Asbestos: Chrysotile (%)	1-5	1-5	1-5		
	Other Fibres: MMVF (%)				Trace <1	Trace <1
	Mica (%)	Trace <1	Trace <1	Trace <1	1-5	1-5
	Asbestos: Tremolite (%)					

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample ID	L1829672-21	L1829672-22	L1829672-23	L1829672-24	L1829672-25
Description	SOIL	SOIL	SOIL	SOIL	SOIL
Sampled Date	06-SEP-16	06-SEP-16	06-SEP-16	06-SEP-16	06-SEP-16
Sampled Time					
Client ID	R-1C	R-2A	R-2B	R-2C	R-3A
Grouping / **Analyte**					
BULK					
Asbestos/Quartz/ Other Fibres					
Asbestos: Actinolite (%)		0.10	0.10		
Asbestos By Point Count (%)	<0.10			<0.10	
Other Fibres: Cellulose (%)	Trace <1	1-5	Trace <1	Trace <1	1-5
Asbestos: Chrysotile (%)		0.30	0.20		0.20
Other Fibres: MMVF (%)	Trace <1	Trace <1	Trace <1	Trace <1	Trace <1
Mica (%)	1-5	1-5	1-5	1-5	1-5
Asbestos: Tremolite (%)					

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L1829672-26 SOIL 06-SEP-16 R-3B	L1829672-27 SOIL 06-SEP-16 R-3C	L1829672-28 SOIL 06-SEP-16 R-4A	L1829672-29 SOIL 06-SEP-16 R-4B	L1829672-30 SOIL 06-SEP-16 R-4C
BULK						
Asbestos/Quartz/ Other Fibres	Asbestos: Actinolite (%)			0.20		0.10
	Asbestos By Point Count (%)	<.1			<0.10	
	Other Fibres: Cellulose (%)	Trace <1	1-5			Trace <1
	Asbestos: Chrysotile (%)		0.10			
	Other Fibres: MMVF (%)	Trace <1			Trace <1	
	Mica (%)	1-5	1-5	1-5	1-5	1-5
	Asbestos: Tremolite (%)					

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Grouping	Analyte	L1829672-31 SOIL 06-SEP-16 R-6A	L1829672-32 SOIL 06-SEP-16 R-6B	L1829672-33 SOIL 06-SEP-16 R-6C	L1829672-34 SOIL 06-SEP-16 E-6A	L1829672-35 SOIL 06-SEP-16 E-6B
BULK						
Asbestos/Quartz/ Other Fibres	Asbestos: Actinolite (%)					
	Asbestos By Point Count (%)		<0.10	<0.10		
	Other Fibres: Cellulose (%)	Trace <1	Trace <1	Trace <1	Trace <1	
	Asbestos: Chrysotile (%)	0.10			0.50	0.80
	Other Fibres: MMVF (%)		Trace <1	Trace <1		
	Mica (%)	Trace <1	1-5	1-5	1-5	1-5
	Asbestos: Tremolite (%)					

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID	L1829672-36				
	Description	SOIL				
	Sampled Date	06-SEP-16				
	Sampled Time					
	Client ID	E-6C				
Grouping	**Analyte**					
BULK						
Asbestos/Quartz/ Other Fibres	Asbestos: Actinolite (%)					
	Asbestos By Point Count (%)					
	Other Fibres: Cellulose (%)					
	Asbestos: Chrysotile (%)	1-5				
	Other Fibres: MMVF (%)					
	Mica (%)	5-10				
	Asbestos: Tremolite (%)					

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID	L1829672-19	L1829672-20	L1829672-21	L1829672-24	L1829672-26
	Description	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled Date	06-SEP-16	06-SEP-16	06-SEP-16	06-SEP-16	06-SEP-16
	Sampled Time					
	Client ID	R-1A	R-1B	R-1C	R-2C	R-3B
Grouping	**Analyte**					
SOIL						
Physical Tests	Loss On Ignition @ 420 C (%)	6	9	14	6	6
Particle Size	% Gravel (>2mm) (%)	<1.0	<1.0	<1.0	<1.0	8.1
	% Sand (2.00mm - 1.00mm) (%)	1.3	<1.0	<1.0	<1.0	<1.0
	% Sand (1.00mm - 0.50mm) (%)	1.9	<1.0	<1.0	<1.0	<1.0
	% Sand (0.50mm - 0.25mm) (%)	5.9	<1.0	<1.0	<1.0	<1.0
	% Sand (0.25mm - 0.125mm) (%)	9.5	1.1	<1.0	<1.0	<1.0
	% Sand (0.125mm - 0.063mm) (%)	9.4	7.2	3.7	13.0	<1.0
	% Silt (0.063mm - 0.0312mm) (%)	33.3	40.2	40.9	39.6	34.3
	% Silt (0.0312mm - 0.004mm) (%)	34.2	45.5	48.7	41.0	47.3
	% Clay (<4um) (%)	3.8	5.8	6.3	5.5	9.4
	Texture	Silt loam	Silt	Silt	Silt loam / Silt	Silt
Metals	Aluminum (Al) (mg/kg)	10300	11000	11100	11800	12700
	Antimony (Sb) (mg/kg)	1.48	1.33	1.35	1.42	0.80
	Arsenic (As) (mg/kg)	13.2	10.9	11.6	11.2	7.95
	Barium (Ba) (mg/kg)	172	228	269	265	419
	Beryllium (Be) (mg/kg)	0.32	0.36	0.39	0.36	0.38
	Bismuth (Bi) (mg/kg)	<0.20	<0.20	<0.20	<0.20	<0.20
	Boron (B) (mg/kg)	<5.0	<5.0	<5.0	<5.0	<5.0
	Cadmium (Cd) (mg/kg)	0.691	0.849	1.04	0.359	0.437
	Calcium (Ca) (mg/kg)	6070	8500	11100	6520	7100
	Chromium (Cr) (mg/kg)	38.9	33.4	35.5	34.5	28.5
	Cobalt (Co) (mg/kg)	13.2	11.3	12.1	10.7	9.48
	Copper (Cu) (mg/kg)	31.3	33.0	38.9	20.9	26.0
	Iron (Fe) (mg/kg)	28300	24200	25300	22500	22500
	Lead (Pb) (mg/kg)	13.1	14.2	14.4	8.66	10.1
	Lithium (Li) (mg/kg)	9.4	9.0	9.3	10.4	11.3
	Magnesium (Mg) (mg/kg)	7540	6200	6590	5660	5550
	Manganese (Mn) (mg/kg)	646	498	606	434	412
	Mercury (Hg) (mg/kg)	0.150	0.191	0.221	0.0351	0.0748
	Molybdenum (Mo) (mg/kg)	4.96	3.78	3.85	0.99	1.54
	Nickel (Ni) (mg/kg)	46.2	37.6	41.1	38.5	29.9
	Phosphorus (P) (mg/kg)	787	732	767	740	660
	Potassium (K) (mg/kg)	700	780	810	550	870
	Selenium (Se) (mg/kg)	1.78	1.90	2.30	0.55	0.87
	Silver (Ag) (mg/kg)	0.23	0.35	0.45	0.11	0.17
	Sodium (Na) (mg/kg)	75	141	131	182	216

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	Sample ID	L1829672-29	L1829672-32	L1829672-33		
	Description	SOIL	SOIL	SOIL		
	Sampled Date	06-SEP-16	06-SEP-16	06-SEP-16		
	Sampled Time					
	Client ID	R-4B	R-6B	R-6C		
Grouping	**Analyte**					
SOIL						
Physical Tests	Loss On Ignition @ 420 C (%)	2	11	10		
Particle Size	% Gravel (>2mm) (%)	<1.0	6.2	<1.0		
	% Sand (2.00mm - 1.00mm) (%)	2.3	<1.0	<1.0		
	% Sand (1.00mm - 0.50mm) (%)	6.0	<1.0	<1.0		
	% Sand (0.50mm - 0.25mm) (%)	10.2	<1.0	<1.0		
	% Sand (0.25mm - 0.125mm) (%)	9.5	3.8	2.3		
	% Sand (0.125mm - 0.063mm) (%)	15.8	8.6	8.0		
	% Silt (0.063mm - 0.0312mm) (%)	26.4	30.6	35.6		
	% Silt (0.0312mm - 0.004mm) (%)	25.7	41.3	45.7		
	% Clay (<4um) (%)	3.8	9.2	8.2		
	Texture	Silt loam / Sandy loam	Silt loam	Silt		
Metals	Aluminum (Al) (mg/kg)	9290	16400	18100		
	Antimony (Sb) (mg/kg)	1.84	0.68	0.69		
	Arsenic (As) (mg/kg)	18.5	9.80	10.5		
	Barium (Ba) (mg/kg)	246	272	280		
	Beryllium (Be) (mg/kg)	0.27	0.49	0.47		
	Bismuth (Bi) (mg/kg)	<0.20	<0.20	<0.20		
	Boron (B) (mg/kg)	<5.0	<5.0	<5.0		
	Cadmium (Cd) (mg/kg)	0.784	0.396	0.406		
	Calcium (Ca) (mg/kg)	7680	8560	9230		
	Chromium (Cr) (mg/kg)	48.5	37.9	40.1		
	Cobalt (Co) (mg/kg)	13.2	13.3	14.3		
	Copper (Cu) (mg/kg)	27.3	28.8	30.5		
	Iron (Fe) (mg/kg)	27100	28200	29800		
	Lead (Pb) (mg/kg)	10.7	9.85	10.1		
	Lithium (Li) (mg/kg)	10.2	15.2	14.3		
	Magnesium (Mg) (mg/kg)	8230	7940	8420		
	Manganese (Mn) (mg/kg)	639	540	626		
	Mercury (Hg) (mg/kg)	0.0631	0.0615	0.0581		
	Molybdenum (Mo) (mg/kg)	3.17	0.80	0.85		
	Nickel (Ni) (mg/kg)	77.3	33.6	35.8		
	Phosphorus (P) (mg/kg)	992	644	686		
	Potassium (K) (mg/kg)	440	1320	1440		
	Selenium (Se) (mg/kg)	1.48	0.48	0.49		
	Silver (Ag) (mg/kg)	0.19	0.14	0.14		
	Sodium (Na) (mg/kg)	102	232	257		

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample ID	L1829672-19	L1829672-20	L1829672-21	L1829672-24	L1829672-26
Description	SOIL	SOIL	SOIL	SOIL	SOIL
Sampled Date	06-SEP-16	06-SEP-16	06-SEP-16	06-SEP-16	06-SEP-16
Sampled Time					
Client ID	R-1A	R-1B	R-1C	R-2C	R-3B
Grouping / **Analyte**					
SOIL					
Metals Strontium (Sr) (mg/kg)	41.6	53.6	63.9	41.8	47.8
Thallium (Tl) (mg/kg)	0.102	0.136	0.136	0.075	0.109
Tin (Sn) (mg/kg)	<2.0	<2.0	<2.0	<2.0	<2.0
Titanium (Ti) (mg/kg)	266	338	286	419	467
Uranium (U) (mg/kg)	1.18	1.30	1.47	1.06	1.53
Vanadium (V) (mg/kg)	34.8	37.1	37.8	42.0	42.7
Zinc (Zn) (mg/kg)	117	98.5	99.9	67.9	84.2
Zirconium (Zr) (mg/kg)	3.0	2.7	3.3	1.7	2.6

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	Sample ID / Description / Sampled Date / Sampled Time / Client ID	L1829672-29 SOIL 06-SEP-16 R-4B	L1829672-32 SOIL 06-SEP-16 R-6B	L1829672-33 SOIL 06-SEP-16 R-6C		
SOIL							
Metals	Strontium (Sr) (mg/kg)		47.6	54.3	54.7		
	Thallium (Tl) (mg/kg)		0.073	0.121	0.126		
	Tin (Sn) (mg/kg)		<2.0	<2.0	<2.0		
	Titanium (Ti) (mg/kg)		311	786	874		
	Uranium (U) (mg/kg)		0.771	1.50	1.54		
	Vanadium (V) (mg/kg)		34.0	54.6	59.3		
	Zinc (Zn) (mg/kg)		102	93.2	99.8		
	Zirconium (Zr) (mg/kg)		2.7	2.5	2.6		

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	Sample ID: L1829672-1 Description: SOIL Sampled Date: 06-SEP-16 Sampled Time: Client ID: E-1A	L1829672-2 SOIL 06-SEP-16 E-1B	L1829672-3 SOIL 06-SEP-16 E-1C	L1829672-4 SOIL 06-SEP-16 E-2A	L1829672-5 SOIL 06-SEP-16 E-2B
WASTE						
Metals	Aluminum (Al) (mg/kg wwt)	4980	5200	4570	3580	5160
	Antimony (Sb) (mg/kg wwt)	4.84	5.69	4.79	3.22	4.08
	Arsenic (As) (mg/kg wwt)	17.3	20.9	16.8	14.3	15.7
	Barium (Ba) (mg/kg wwt)	369	223	241	74.2	165
	Beryllium (Be) (mg/kg wwt)	0.30	0.37	0.31	0.24	0.30
	Bismuth (Bi) (mg/kg wwt)	<0.20	0.21	<0.20	<0.20	<0.20
	Boron (B) (mg/kg wwt)	16.3	14.8	19.9	16.6	17.3
	Cadmium (Cd) (mg/kg wwt)	1.01	1.36	1.01	0.752	0.849
	Calcium (Ca) (mg/kg wwt)	16800	22200	17500	14100	13400
	Chromium (Cr) (mg/kg wwt)	264	266	269	258	248
	Cobalt (Co) (mg/kg wwt)	29.4	31.3	28.2	25.4	24.1
	Copper (Cu) (mg/kg wwt)	28.1	35.4	30.6	21.1	27.9
	Iron (Fe) (mg/kg wwt)	30200	36100	32900	28100	26600
	Lead (Pb) (mg/kg wwt)	11.2	13.6	11.4	9.68	10.0
	Lithium (Li) (mg/kg wwt)	6.0	7.1	6.1	4.5	7.3
	Magnesium (Mg) (mg/kg wwt)	37100	31900	36200	35400	33600
	Manganese (Mn) (mg/kg wwt)	682	950	503	655	351
	Mercury (Hg) (mg/kg wwt)	0.273	0.251	0.262	0.105	0.169
	Molybdenum (Mo) (mg/kg wwt)	4.65	7.19	5.92	3.93	4.95
	Nickel (Ni) (mg/kg wwt)	448	452	408	425	362
	Phosphorus (P) (mg/kg wwt)	818	1040	715	491	597
	Potassium (K) (mg/kg wwt)	520	530	480	270	510
	Selenium (Se) (mg/kg wwt)	2.82	3.99	3.20	2.24	2.41
	Silver (Ag) (mg/kg wwt)	0.25	0.34	0.26	0.18	0.23
	Sodium (Na) (mg/kg wwt)	65	51	<50	<50	53
	Strontium (Sr) (mg/kg wwt)	86.9	107	86.1	67.3	71.9
	Thallium (Tl) (mg/kg wwt)	0.184	0.203	0.162	0.079	0.132
	Tin (Sn) (mg/kg wwt)	<2.0	<2.0	<2.0	<2.0	<2.0
	Titanium (Ti) (mg/kg wwt)	55.3	48.2	35.4	29.8	61.4
	Uranium (U) (mg/kg wwt)	1.44	1.72	1.34	1.17	1.32
	Vanadium (V) (mg/kg wwt)	21.1	22.5	19.7	16.3	18.9
	Zinc (Zn) (mg/kg wwt)	83.4	112	92.3	82.0	80.4
	Zirconium (Zr) (mg/kg wwt)	5.0	5.4	6.9	4.2	7.4

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L1829672-6 SOIL 06-SEP-16 E-2C	L1829672-7 SOIL 06-SEP-16 E-3A	L1829672-8 SOIL 06-SEP-16 E-3B	L1829672-9 SOIL 06-SEP-16 E-3C	L1829672-10 SOIL 06-SEP-16 E-4A
WASTE						
Metals	Aluminum (Al) (mg/kg wwt)	5470	7570	7650	7590	6180
	Antimony (Sb) (mg/kg wwt)	4.34	1.18	1.23	1.30	2.15
	Arsenic (As) (mg/kg wwt)	17.4	7.81	7.38	8.26	10.8
	Barium (Ba) (mg/kg wwt)	190	184	185	215	217
	Beryllium (Be) (mg/kg wwt)	0.34	0.23	0.23	0.25	0.23
	Bismuth (Bi) (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Boron (B) (mg/kg wwt)	18.1	<5.0	5.2	5.3	10.1
	Cadmium (Cd) (mg/kg wwt)	1.02	0.501	0.473	0.485	0.525
	Calcium (Ca) (mg/kg wwt)	17000	3540	3350	3640	7650
	Chromium (Cr) (mg/kg wwt)	264	28.5	54.6	52.4	171
	Cobalt (Co) (mg/kg wwt)	27.0	8.12	9.32	10.2	21.7
	Copper (Cu) (mg/kg wwt)	32.5	23.0	21.3	23.8	20.7
	Iron (Fe) (mg/kg wwt)	30600	18400	18300	20700	26600
	Lead (Pb) (mg/kg wwt)	12.0	9.99	9.22	9.93	7.77
	Lithium (Li) (mg/kg wwt)	7.9	6.2	6.5	7.4	6.9
	Magnesium (Mg) (mg/kg wwt)	36900	5050	7720	7000	20200
	Manganese (Mn) (mg/kg wwt)	547	298	272	316	527
	Mercury (Hg) (mg/kg wwt)	0.175	0.080	0.071	0.080	0.081
	Molybdenum (Mo) (mg/kg wwt)	6.02	4.42	4.87	4.98	3.65
	Nickel (Ni) (mg/kg wwt)	418	39.9	69.9	65.6	246
	Phosphorus (P) (mg/kg wwt)	769	621	578	658	557
	Potassium (K) (mg/kg wwt)	510	710	700	790	460
	Selenium (Se) (mg/kg wwt)	2.85	1.51	1.47	1.54	1.83
	Silver (Ag) (mg/kg wwt)	0.26	0.19	0.18	0.17	0.17
	Sodium (Na) (mg/kg wwt)	<50	96	99	88	61
	Strontium (Sr) (mg/kg wwt)	83.9	29.7	28.8	30.1	48.1
	Thallium (Tl) (mg/kg wwt)	0.154	0.074	0.073	0.074	0.072
	Tin (Sn) (mg/kg wwt)	<2.0	<2.0	<2.0	<2.0	<2.0
	Titanium (Ti) (mg/kg wwt)	49.0	203	248	257	185
	Uranium (U) (mg/kg wwt)	1.66	0.963	0.999	0.994	0.963
	Vanadium (V) (mg/kg wwt)	20.5	26.1	26.9	28.7	24.2
	Zinc (Zn) (mg/kg wwt)	91.5	85.5	80.8	87.3	82.3
	Zirconium (Zr) (mg/kg wwt)	7.3	4.0	4.3	5.2	4.1

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample ID	L1829672-11	L1829672-12	L1829672-13	L1829672-14	L1829672-15
Description	SOIL	SOIL	SOIL	SOIL	SOIL
Sampled Date	06-SEP-16	06-SEP-16	06-SEP-16	06-SEP-16	06-SEP-16
Sampled Time					
Client ID	E-4B	E-4C	E-8A	E-8B	E-8C
Grouping / **Analyte**					
WASTE					
Metals Aluminum (Al) (mg/kg wwt)	6380	5340	3880	5660	4340
Antimony (Sb) (mg/kg wwt)	1.11	1.42	0.29	0.49	0.25
Arsenic (As) (mg/kg wwt)	9.19	7.32	18.1	5.12	13.4
Barium (Ba) (mg/kg wwt)	172	153	54.4	88.4	90.6
Beryllium (Be) (mg/kg wwt)	0.25	0.20	0.12	0.15	0.14
Bismuth (Bi) (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
Boron (B) (mg/kg wwt)	5.9	6.2	<5.0	<5.0	<5.0
Cadmium (Cd) (mg/kg wwt)	0.577	0.512	0.084	0.119	0.266
Calcium (Ca) (mg/kg wwt)	6080	5560	1870	2870	2130
Chromium (Cr) (mg/kg wwt)	73.2	75.2	10.5	16.9	10.7
Cobalt (Co) (mg/kg wwt)	11.5	10.1	4.12	6.15	6.82
Copper (Cu) (mg/kg wwt)	21.2	16.7	13.0	9.77	12.7
Iron (Fe) (mg/kg wwt)	18800	15200	8830	14600	14800
Lead (Pb) (mg/kg wwt)	8.00	6.15	2.55	3.62	6.22
Lithium (Li) (mg/kg wwt)	6.4	5.0	3.7	6.0	4.4
Magnesium (Mg) (mg/kg wwt)	11100	10800	2370	3600	2660
Manganese (Mn) (mg/kg wwt)	405	367	239	323	347
Mercury (Hg) (mg/kg wwt)	0.084	0.069	<0.050	<0.050	0.071
Molybdenum (Mo) (mg/kg wwt)	3.41	2.41	0.34	0.72	0.75
Nickel (Ni) (mg/kg wwt)	110	108	9.80	12.6	15.3
Phosphorus (P) (mg/kg wwt)	597	483	269	326	331
Potassium (K) (mg/kg wwt)	480	410	420	490	500
Selenium (Se) (mg/kg wwt)	1.64	1.38	<0.20	0.35	0.77
Silver (Ag) (mg/kg wwt)	0.19	0.15	<0.10	<0.10	<0.10
Sodium (Na) (mg/kg wwt)	80	72	90	87	77
Strontium (Sr) (mg/kg wwt)	39.7	37.2	12.9	21.6	13.3
Thallium (Tl) (mg/kg wwt)	0.076	0.060	<0.050	<0.050	<0.050
Tin (Sn) (mg/kg wwt)	<2.0	<2.0	<2.0	<2.0	<2.0
Titanium (Ti) (mg/kg wwt)	126	178	196	224	196
Uranium (U) (mg/kg wwt)	0.885	0.795	0.459	0.562	0.581
Vanadium (V) (mg/kg wwt)	23.2	20.1	15.6	20.3	16.9
Zinc (Zn) (mg/kg wwt)	74.0	57.5	27.8	37.2	75.4
Zirconium (Zr) (mg/kg wwt)	3.6	2.4	<1.0	1.0	<1.0

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample ID	L1829672-16	L1829672-17	L1829672-18	L1829672-22	L1829672-23
Description	SOIL	SOIL	SOIL	SOIL	SOIL
Sampled Date	06-SEP-16	06-SEP-16	06-SEP-16	06-SEP-16	06-SEP-16
Sampled Time					
Client ID	PORCUPINE CR-A	PORCUPINE CR-B	PORCUPINE CR-C	R-2A	R-2B
Grouping / **Analyte**					
WASTE					
Metals Aluminum (Al) (mg/kg wwt)	2590	4490	2460	6000	6260
Antimony (Sb) (mg/kg wwt)	2.16	2.45	4.73	1.42	3.21
Arsenic (As) (mg/kg wwt)	11.9	13.5	17.5	9.43	15.9
Barium (Ba) (mg/kg wwt)	121	119	55.0	147	159
Beryllium (Be) (mg/kg wwt)	0.15	0.24	0.19	0.20	0.25
Bismuth (Bi) (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
Boron (B) (mg/kg wwt)	8.6	15.4	21.4	<5.0	<5.0
Cadmium (Cd) (mg/kg wwt)	0.509	0.727	1.26	0.238	0.355
Calcium (Ca) (mg/kg wwt)	8940	16800	31700	3180	2010
Chromium (Cr) (mg/kg wwt)	150	250	279	22.1	40.0
Cobalt (Co) (mg/kg wwt)	15.4	21.3	25.2	6.96	12.9
Copper (Cu) (mg/kg wwt)	13.7	19.5	22.5	12.8	19.2
Iron (Fe) (mg/kg wwt)	17200	24100	26500	13700	22300
Lead (Pb) (mg/kg wwt)	4.61	6.46	6.39	5.61	9.69
Lithium (Li) (mg/kg wwt)	3.4	6.0	4.0	5.5	7.6
Magnesium (Mg) (mg/kg wwt)	19500	31400	38900	3470	6340
Manganese (Mn) (mg/kg wwt)	238	362	404	380	761
Mercury (Hg) (mg/kg wwt)	0.091	0.090	0.155	<0.050	<0.050
Molybdenum (Mo) (mg/kg wwt)	2.07	2.47	4.50	0.89	2.16
Nickel (Ni) (mg/kg wwt)	234	361	474	30.8	92.8
Phosphorus (P) (mg/kg wwt)	333	499	516	384	473
Potassium (K) (mg/kg wwt)	240	390	210	380	460
Selenium (Se) (mg/kg wwt)	1.37	1.66	2.26	0.42	0.78
Silver (Ag) (mg/kg wwt)	0.13	0.14	0.28	<0.10	<0.10
Sodium (Na) (mg/kg wwt)	<50	98	<50	93	<50
Strontium (Sr) (mg/kg wwt)	44.6	83.0	123	22.8	19.1
Thallium (Tl) (mg/kg wwt)	0.077	0.093	0.114	<0.050	0.051
Tin (Sn) (mg/kg wwt)	<2.0	<2.0	<2.0	<2.0	<2.0
Titanium (Ti) (mg/kg wwt)	65.5	116	29.4	206	107
Uranium (U) (mg/kg wwt)	0.567	0.914	1.17	0.591	0.732
Vanadium (V) (mg/kg wwt)	12.0	20.9	13.2	22.6	21.8
Zinc (Zn) (mg/kg wwt)	45.5	65.4	85.5	43.5	71.9
Zirconium (Zr) (mg/kg wwt)	2.9	2.4	3.9	1.4	2.6

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L1829672-25 SOIL 06-SEP-16 R-3A	L1829672-27 SOIL 06-SEP-16 R-3C	L1829672-28 SOIL 06-SEP-16 R-4A	L1829672-30 SOIL 06-SEP-16 R-4C	L1829672-31 SOIL 06-SEP-16 R-6A
WASTE						
Metals	Aluminum (Al) (mg/kg wwt)	4300	7360	6640	7380	10100
	Antimony (Sb) (mg/kg wwt)	0.94	0.47	1.55	1.72	0.44
	Arsenic (As) (mg/kg wwt)	3.15	4.71	14.3	17.5	6.57
	Barium (Ba) (mg/kg wwt)	125	243	169	175	153
	Beryllium (Be) (mg/kg wwt)	0.17	0.24	0.20	0.23	0.26
	Bismuth (Bi) (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Boron (B) (mg/kg wwt)	6.3	<5.0	<5.0	<5.0	<5.0
	Cadmium (Cd) (mg/kg wwt)	0.293	0.270	0.595	0.717	0.222
	Calcium (Ca) (mg/kg wwt)	4970	4170	5370	5470	7370
	Chromium (Cr) (mg/kg wwt)	68.1	17.3	36.1	40.2	26.3
	Cobalt (Co) (mg/kg wwt)	6.96	5.72	9.86	10.9	7.76
	Copper (Cu) (mg/kg wwt)	13.4	15.7	21.2	23.1	16.1
	Iron (Fe) (mg/kg wwt)	9870	13800	19700	21900	17600
	Lead (Pb) (mg/kg wwt)	3.51	6.19	8.36	9.14	6.45
	Lithium (Li) (mg/kg wwt)	3.8	7.3	7.6	9.1	9.4
	Magnesium (Mg) (mg/kg wwt)	9960	3300	5700	6700	4870
	Manganese (Mn) (mg/kg wwt)	173	229	494	640	364
	Mercury (Hg) (mg/kg wwt)	0.051	0.075	0.063	0.054	<0.050
	Molybdenum (Mo) (mg/kg wwt)	0.51	0.91	2.68	2.60	0.52
	Nickel (Ni) (mg/kg wwt)	82.8	18.2	58.1	70.0	20.7
	Phosphorus (P) (mg/kg wwt)	290	459	768	905	479
	Potassium (K) (mg/kg wwt)	410	520	380	440	780
	Selenium (Se) (mg/kg wwt)	0.80	0.56	1.29	1.42	0.34
	Silver (Ag) (mg/kg wwt)	<0.10	0.12	0.19	0.16	0.12
	Sodium (Na) (mg/kg wwt)	70	127	64	79	154
	Strontium (Sr) (mg/kg wwt)	29.6	29.2	35.9	37.4	41.1
	Thallium (Tl) (mg/kg wwt)	<0.050	0.063	0.056	0.063	0.068
	Tin (Sn) (mg/kg wwt)	<2.0	<2.0	<2.0	<2.0	<2.0
	Titanium (Ti) (mg/kg wwt)	104	169	146	220	457
	Uranium (U) (mg/kg wwt)	2.55	0.914	0.591	0.794	0.696
	Vanadium (V) (mg/kg wwt)	13.9	24.8	24.8	27.4	34.0
	Zinc (Zn) (mg/kg wwt)	38.6	50.4	73.0	83.9	60.1
	Zirconium (Zr) (mg/kg wwt)	1.6	2.1	2.8	3.3	1.6

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample ID	L1829672-34	L1829672-35	L1829672-36		
Description	SOIL	SOIL	SOIL		
Sampled Date	06-SEP-16	06-SEP-16	06-SEP-16		
Sampled Time					
Client ID	E-6A	E-6B	E-6C		
Grouping / **Analyte**					
WASTE					
Metals					
Aluminum (Al) (mg/kg wwt)	6020	5580	5530		
Antimony (Sb) (mg/kg wwt)	0.99	1.10	1.55		
Arsenic (As) (mg/kg wwt)	9.46	10.8	16.3		
Barium (Ba) (mg/kg wwt)	130	124	161		
Beryllium (Be) (mg/kg wwt)	0.18	0.18	0.19		
Bismuth (Bi) (mg/kg wwt)	<0.20	<0.20	<0.20		
Boron (B) (mg/kg wwt)	<5.0	<5.0	<5.0		
Cadmium (Cd) (mg/kg wwt)	0.290	0.326	0.391		
Calcium (Ca) (mg/kg wwt)	4680	3960	4140		
Chromium (Cr) (mg/kg wwt)	36.8	42.3	72.7		
Cobalt (Co) (mg/kg wwt)	8.70	8.85	13.4		
Copper (Cu) (mg/kg wwt)	15.9	17.3	19.5		
Iron (Fe) (mg/kg wwt)	15500	16200	20800		
Lead (Pb) (mg/kg wwt)	7.92	7.87	9.07		
Lithium (Li) (mg/kg wwt)	5.8	5.0	5.5		
Magnesium (Mg) (mg/kg wwt)	6140	6860	11600		
Manganese (Mn) (mg/kg wwt)	382	362	632		
Mercury (Hg) (mg/kg wwt)	<0.050	<0.050	0.050		
Molybdenum (Mo) (mg/kg wwt)	1.62	1.77	2.54		
Nickel (Ni) (mg/kg wwt)	50.3	60.2	108		
Phosphorus (P) (mg/kg wwt)	545	540	518		
Potassium (K) (mg/kg wwt)	480	490	500		
Selenium (Se) (mg/kg wwt)	0.71	0.78	1.02		
Silver (Ag) (mg/kg wwt)	<0.10	0.11	0.11		
Sodium (Na) (mg/kg wwt)	79	62	<50		
Strontium (Sr) (mg/kg wwt)	28.2	25.5	27.9		
Thallium (Tl) (mg/kg wwt)	0.054	0.055	0.057		
Tin (Sn) (mg/kg wwt)	<2.0	<2.0	<2.0		
Titanium (Ti) (mg/kg wwt)	207	158	121		
Uranium (U) (mg/kg wwt)	0.604	0.676	0.836		
Vanadium (V) (mg/kg wwt)	23.0	20.7	21.6		
Zinc (Zn) (mg/kg wwt)	58.0	61.9	77.7		
Zirconium (Zr) (mg/kg wwt)	2.2	2.1	3.5		

Reference Information

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
ASBESTOS-BULK-ED	Bulk	Bulk Asbestos Content	NIOSH 9002-Polarized Microscopy

Bulk samples are examined under a stereoscopic microscope. Individual fibers or fibre bundles are mounted in refractive index liquids and are observed under a polarized light microscope with a special dispersion staining objective. The dispersion staining colours are compared to reference samples of known asbestiforms.

Note: For non-friable organically bound asbestos (eg. floor tile) Polarized Light microscopy is not a definitive technique when negative results are obtained. Transmission electron microscopy is recommended to confirm the asbestos in these materials.

Asbestos results reported as <1% indicates that no asbestos fibers were observed.

ASBESTOS-PTCT-ED	Bulk	Quantitation of asbestos by point count	EPA/600/R-93/116

Bulk samples are examined under a stereoscopic microscope. Individual fibers or fiber bundles are mounted in refractive index liquids and are observed under a polarized light microscope, with a special dispersion staining objective. The dispersion staining colors are compared to reference samples of known asbestiforms.

Polarized microscopy is not a definitive technique for negative results for non-friable organically bound material (i.e.floor tiles). Transmission electron microscopy is recommended to confirm the asbestos in these materials.
Asbestos results reported as <0.10% indicates that no asbestos fibers were observed.

HG-200.2-CVAA-ED	Soil	Mercury in Soil by CVAAS	EPA 200.2/1631E (Mod)

Soil samples are digested with nitric and hydrochloric acids, followed by analysis by CVAAS.

HG-WET-200.2-CVAA-ED	Waste	Mercury (Hg) in waste	EPA 200.2/245.1

Waste samples are prepared for analysis by mixing to homogenize the as-received waste, then subsampling. The subsample is digested according to the EPA 200.2 method, using nitric and hydrochloric acids. Analysis is carried out by cold vapour atomic absorption. Results are reported on a wet basis (not corrected for any moisture content).

LOI-420-SK	Soil	Loss on Ignition @ 420 C	CSSS (1978) METHOD 3.81

The dry-ash method involves the removal of organic matter by combustion at 420OC for 2 hours. Samples are dried prior to combustion.

Reference: McKeague, J.A. Soil Sampling and Methods of Analysis. Can. Soc. Soil Sci.(1978) method 3.81

MET-200.2-CCMS-ED	Soil	Metals in Soil by CRC ICPMS	EPA 200.2/6020A (mod)

Soil samples are digested with nitric and hydrochloric acids, followed by analysis by CRC ICPMS.

Method Limitation: This method is not a total digestion technique. It is a very strong acid digestion that is intended to dissolve those metals that may be environmentally available. This method does not dissolve all silicate materials and may result in a partial extraction. depending on the sample matrix, for some metals, including, but not limited to Al, Ba, Be, Cr, Sr, Ti, Tl, and V.

MET-WET200.2-CCMS-ED	Waste	Metals in Waste by CRC ICPMS	EPA 200.2/6020A

This analysis is carried out using procedures from CSR Analytical Method: "Strong Acid Leachable Metals (SALM) in Soil", BC Ministry of Environment, 26 June 2009, and procedures adapted from EPA Method 200.2. The sample is manually homogenized, dried at 60 degrees Celsius, sieved through a 2 mm (10 mesh) sieve, and a representative subsample of the dry material is weighed. The sample is then digested at 95 degrees Celsius for 2 hours by block digester using concentrated nitric and hydrochloric acids. Instrumental analysis is by inductively coupled plasma - mass spectrometry (EPA Method 6020A).

Method Limitation: This method is not a total digestion technique. It is a very strong acid digestion that is intended to dissolve those metals that may be environmentally available. By design, elements bound in silicate structures are not normally dissolved by this procedure as they are not usually mobile in the environment.

PSA-PIPET-DETAIL-SK	Soil	Particle size - Sieve and Pipette	SSIR-51 METHOD 3.2.1

Particle size distribution is determined by a combination of techniques. Dry sieving is performed for coarse particles, wet sieving for sand particles and the pipette sedimentation method for clay particles.

Reference:

Burt, R. (2009). Soil Survey Field and Laboratory Methods Manual. Soil Survey Investigations Report No. 5. Method 3.2.1.2.2. United States Department of Agriculture Natural Resources Conservation Service.

** ALS test methods may incorporate modifications from specified reference methods to improve performance.

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code	Laboratory Location
	ALS ENVIRONMENTAL - EDMONTON, ALBERTA, CANADA

Reference Information

ED SK

ALS ENVIRONMENTAL - SASKATOON, SASKATCHEWAN, CANADA

Chain of Custody Numbers:

14-470676 14-470677 14-470939

GLOSSARY OF REPORT TERMS

Surrogate - A compound that is similar in behaviour to target analyte(s), but that does not occur naturally in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery.
mg/kg - milligrams per kilogram based on dry weight of sample.
mg/kg wwt - milligrams per kilogram based on wet weight of sample.
mg/kg lwt - milligrams per kilogram based on lipid-adjusted weight of sample.
mg/L - milligrams per litre.
< - Less than.
D.L. - The reported Detection Limit, also known as the Limit of Reporting (LOR).
N/A - Result not available. Refer to qualifier code and definition for explanation.

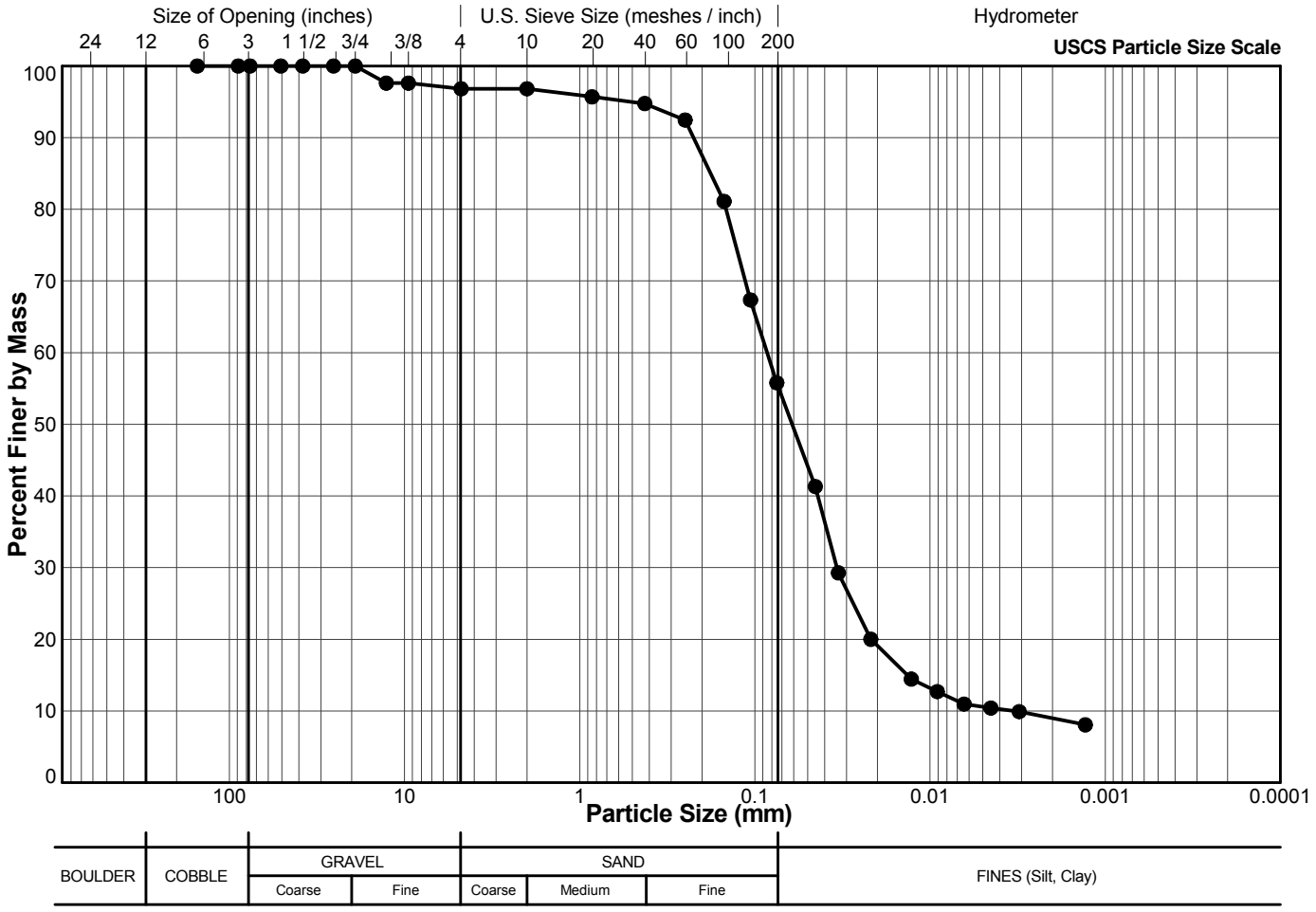
Test results reported relate only to the samples as received by the laboratory.
UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.
Analytical results in unsigned test reports with the DRAFT watermark are subject to change, pending final QC review.

SUMMARY OF PARTICLE SIZE DISTRIBUTION

ASTM D 422

Client: ALS
Project: L1829679 - LaBerge
Location: Clinton Creek, Yukon
Project No.: 1667729 **Phase:** 1000

Sample Location: LaBerge
Sample No.: E-1A
Depth (m): N/A
Lab Schedule No.:



Legend

Sieve Size (USS)	(mm)	Particle Size (mm)	Percent Passing
6"	152.4		100.0
3.5"	88.9		100.0
3"	76.2		100.0
2"	50.8		100.0
1 1/2"	38.1		100.0
1"	25.4		100.0
3/4"	19.1		100.0
1/2"	12.7		97.6
3/8"	9.5		97.6
#4 US MESH	4.75		96.8
#10 US MESH	2		96.8
#20 US MESH	0.85		95.7
#40 US MESH	0.425		94.8
#60 US MESH	0.25		92.5
#100 US MESH	0.15		81.1
#140 US MESH	0.106		67.4
#200 US MESH	0.075		55.8
		0.0452	41.3
		0.0334	29.3
		0.0218	20.0
		0.0128	14.4
		0.0091	12.7
		0.0064	11.0
		0.0045	10.4
		0.0031	9.9
		0.0013	8.1

LH/OA	11/8/2016	LH	11/15/2016
Tech	Date	Checked	Date

National IM Server:GINT_GAL_NATIONALIM Unique Project ID:1467 Output Form:_LAB_PARTICLE SIZE (W/ GRADATIONS) 2015 lhu 15/11/16

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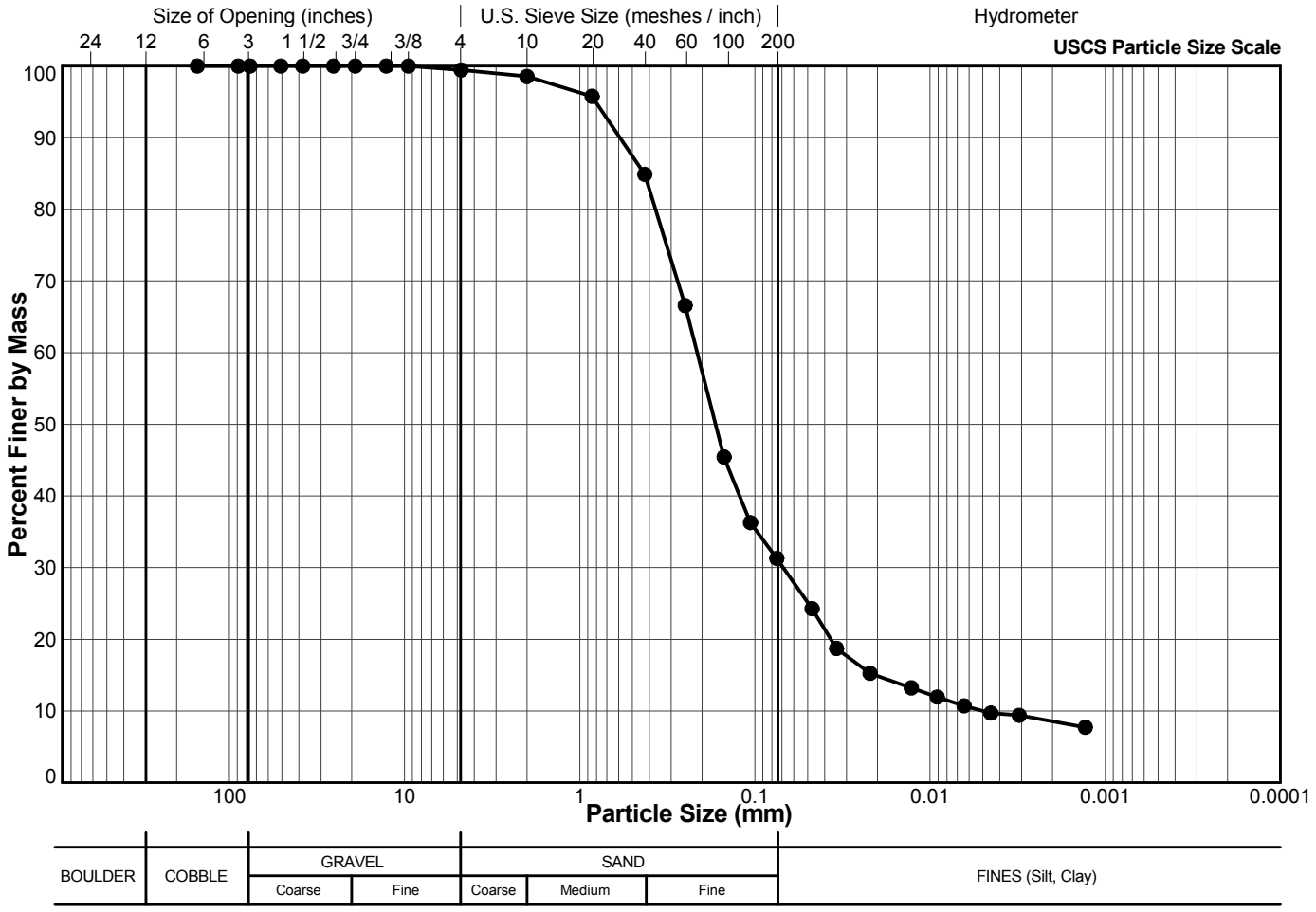
Tel: +1 (604) 412 6899 Fax: +1 (604) 412 6816 www.golder.com

SUMMARY OF PARTICLE SIZE DISTRIBUTION

ASTM D 422

Client: ALS
Project: L1829679 - LaBerge
Location: Clinton Creek, Yukon
Project No.: 1667729 **Phase:** 1000

Sample Location: LaBerge
Sample No.: E-1B
Depth (m): N/A
Lab Schedule No.:



Legend

Sieve Size (USS)	(mm)	Particle Size (mm)	Percent Passing
6"	152.4		100.0
3.5"	88.9		100.0
3"	76.2		100.0
2"	50.8		100.0
1 1/2"	38.1		100.0
1"	25.4		100.0
3/4"	19.1		100.0
1/2"	12.7		100.0
3/8"	9.5		100.0
#4 US MESH	4.75		99.4
#10 US MESH	2		98.5
#20 US MESH	0.85		95.8
#40 US MESH	0.425		84.9
#60 US MESH	0.25		66.6
#100 US MESH	0.15		45.4
#140 US MESH	0.106		36.3
#200 US MESH	0.075		31.3
		0.0472	24.3
		0.0342	18.7
		0.0220	15.3
		0.0128	13.2
		0.0091	11.9
		0.0064	10.7
		0.0045	9.7
		0.0031	9.4
		0.0013	7.7

LH/OA	11/8/2016	LH	11/15/2016
Tech	Date	Checked	Date

National IM Server:GINT_GAL_NATIONALIM Unique Project ID:1467 Output Form:_LAB_PARTICLE SIZE (W/ GRADATIONS) 2015 lhu 15/11/16

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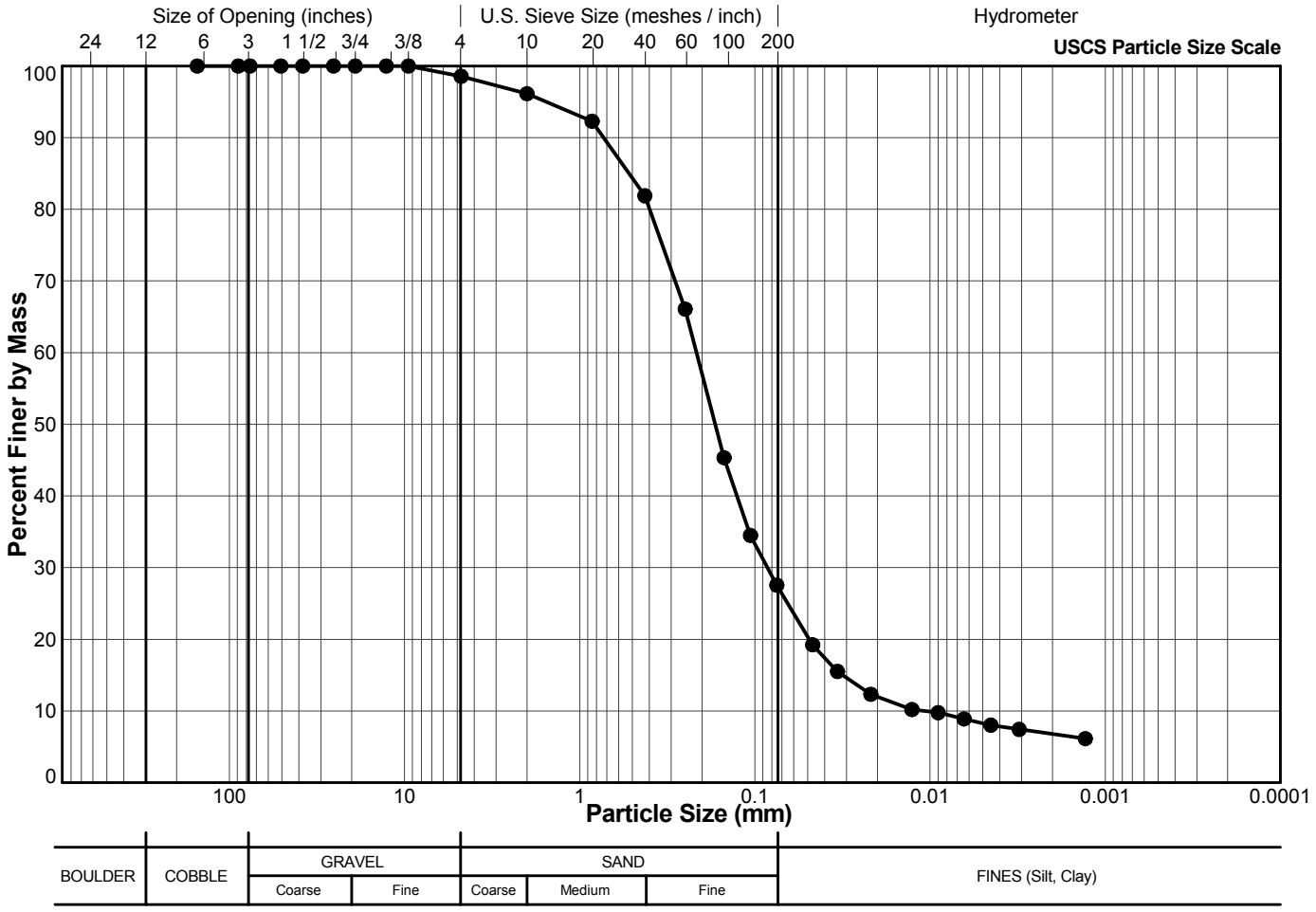
SUMMARY OF PARTICLE SIZE DISTRIBUTION

ASTM D 422

Client: ALS
Project: L1829679 - LaBerge
Location: Clinton Creek, Yukon
Project No.: 1667729 **Phase:** 1000

Sample Location: LaBerge
Sample No.: E-1C
Depth (m): N/A
Lab Schedule No.:



Legend

Sieve Size (USS)	(mm)	Particle Size (mm)	Percent Passing
6"	152.4		100.0
3.5"	88.9		100.0
3"	76.2		100.0
2"	50.8		100.0
1 1/2"	38.1		100.0
1"	25.4		100.0
3/4"	19.1		100.0
1/2"	12.7		100.0
3/8"	9.5		100.0
#4 US MESH	4.75		98.6
#10 US MESH	2		96.1
#20 US MESH	0.85		92.3
#40 US MESH	0.425		81.9
#60 US MESH	0.25		66.1
#100 US MESH	0.15		45.3
#140 US MESH	0.106		34.5
#200 US MESH	0.075		27.6
		0.0468	19.2
		0.0338	15.5
		0.0218	12.3
		0.0127	10.2
		0.0090	9.8
		0.0064	8.9
		0.0045	8.0
		0.0031	7.4
		0.0013	6.1

LH/OA	11/8/2016	LH	11/15/2016
Tech	Date	Checked	Date

National IM Server:GINT_GAL_NATIONALIM Unique Project ID:1467 Output Form:_LAB_PARTICLE SIZE (W/ GRADATIONS) 2015 lhu 15/11/16

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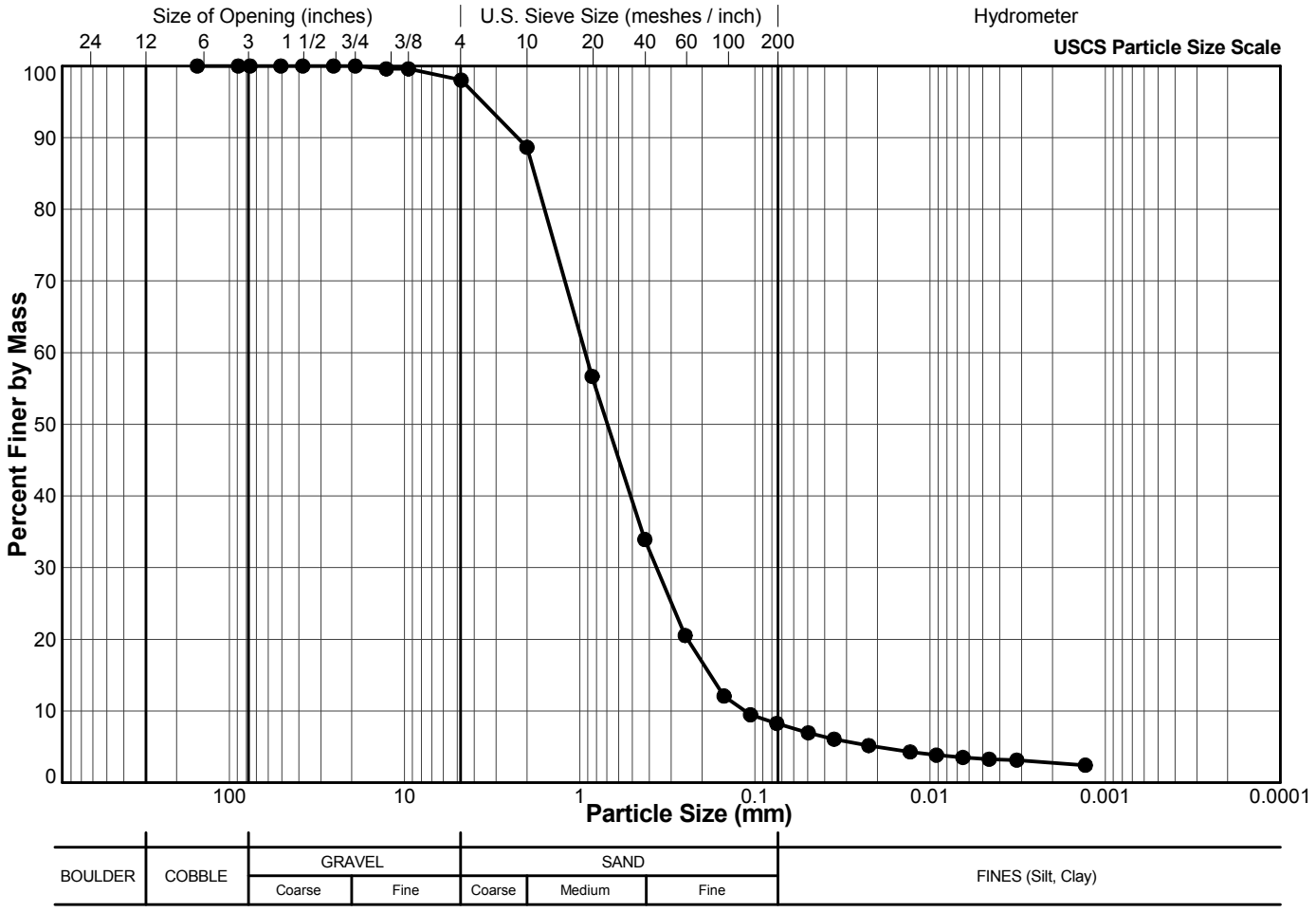
SUMMARY OF PARTICLE SIZE DISTRIBUTION

ASTM D 422

Client: ALS
Project: L1829679 - LaBerge
Location: Clinton Creek, Yukon
Project No.: 1667729 **Phase:** 1000

Sample Location: LaBerge
Sample No.: E-2A
Depth (m): N/A
Lab Schedule No.:



Legend

Sieve Size (USS)	(mm)	Particle Size (mm)	Percent Passing
6"	152.4		100.0
3.5"	88.9		100.0
3"	76.2		100.0
2"	50.8		100.0
1 1/2"	38.1		100.0
1"	25.4		100.0
3/4"	19.1		100.0
1/2"	12.7		99.6
3/8"	9.5		99.6
#4 US MESH	4.75		98.0
#10 US MESH	2		88.7
#20 US MESH	0.85		56.7
#40 US MESH	0.425		33.9
#60 US MESH	0.25		20.5
#100 US MESH	0.15		12.1
#140 US MESH	0.106		9.5
#200 US MESH	0.075		8.3
		0.0496	6.9
		0.0353	6.1
		0.0224	5.2
		0.0130	4.3
		0.0092	3.8
		0.0065	3.5
		0.0046	3.3
		0.0032	3.1
		0.0013	2.4

LH/OA	11/9/2016	LH	11/15/2016
Tech	Date	Checked	Date

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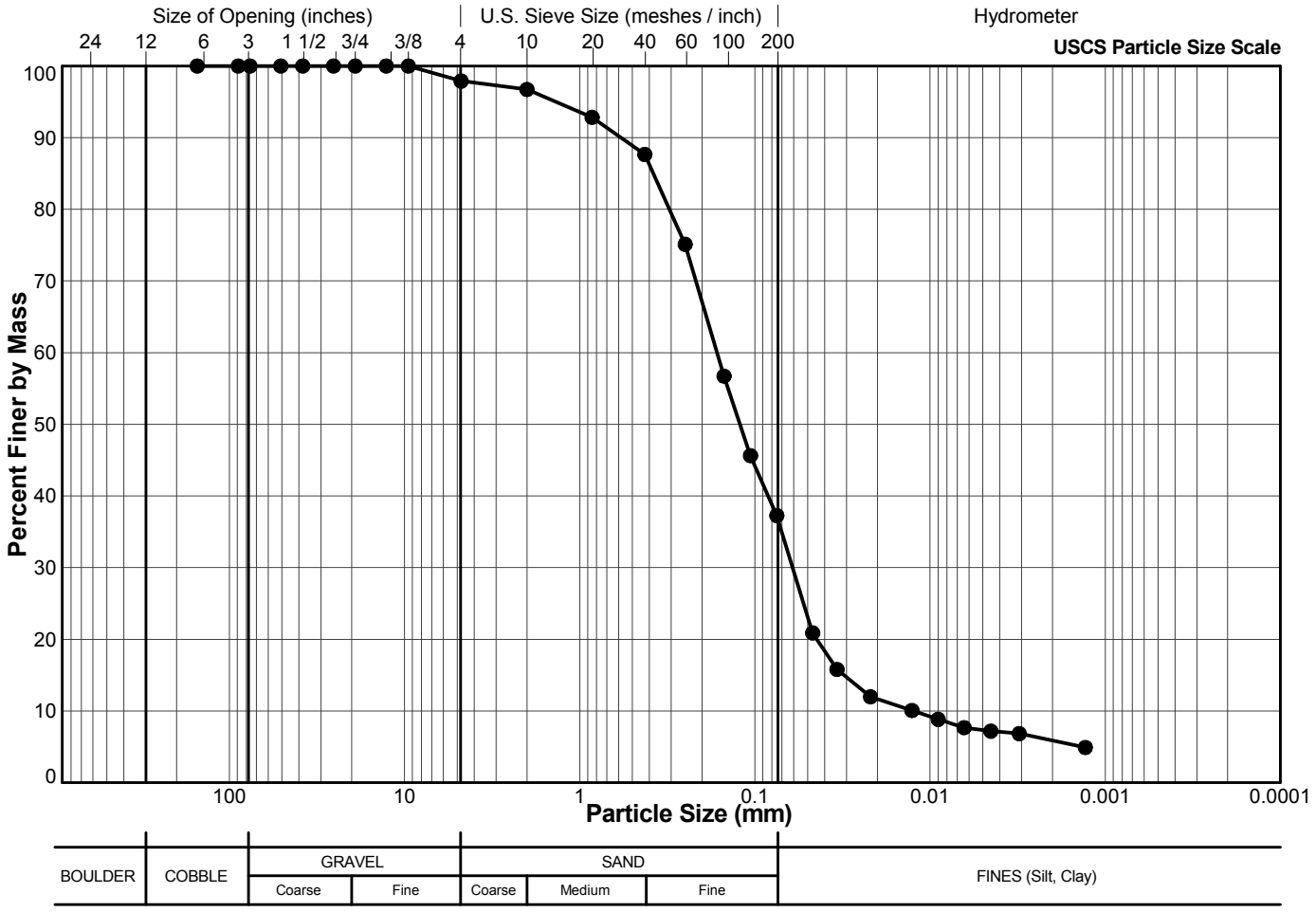
SUMMARY OF PARTICLE SIZE DISTRIBUTION

ASTM D 422

Client: ALS
Project: L1829679 - LaBerge
Location: Clinton Creek, Yukon
Project No.: 1667729 **Phase:** 1000

Sample Location: LaBerge
Sample No.: E-2B
Depth (m): N/A
Lab Schedule No.:



Legend

Sieve Size (USS)	(mm)	Particle Size (mm)	Percent Passing
6"	152.4		100.0
3.5"	88.9		100.0
3"	76.2		100.0
2"	50.8		100.0
1 1/2"	38.1		100.0
1"	25.4		100.0
3/4"	19.1		100.0
1/2"	12.7		100.0
3/8"	9.5		100.0
#4 US MESH	4.75		97.9
#10 US MESH	2		96.7
#20 US MESH	0.85		92.8
#40 US MESH	0.425		87.7
#60 US MESH	0.25		75.1
#100 US MESH	0.15		56.7
#140 US MESH	0.106		45.6
#200 US MESH	0.075		37.3
		0.0468	20.9
		0.0340	15.8
		0.0219	12.0
		0.0127	10.1
		0.0090	8.8
		0.0064	7.7
		0.0045	7.2
		0.0031	6.8
		0.0013	4.9

LH/OA	11/9/2016	LH	11/15/2016
Tech	Date	Checked	Date

National IM Server:GINT_GAL_NATIONALIM Unique Project ID:1467 Output Form:_LAB_PARTICLE SIZE (W/ GRADATIONS) 2015 lhu 15/11/16

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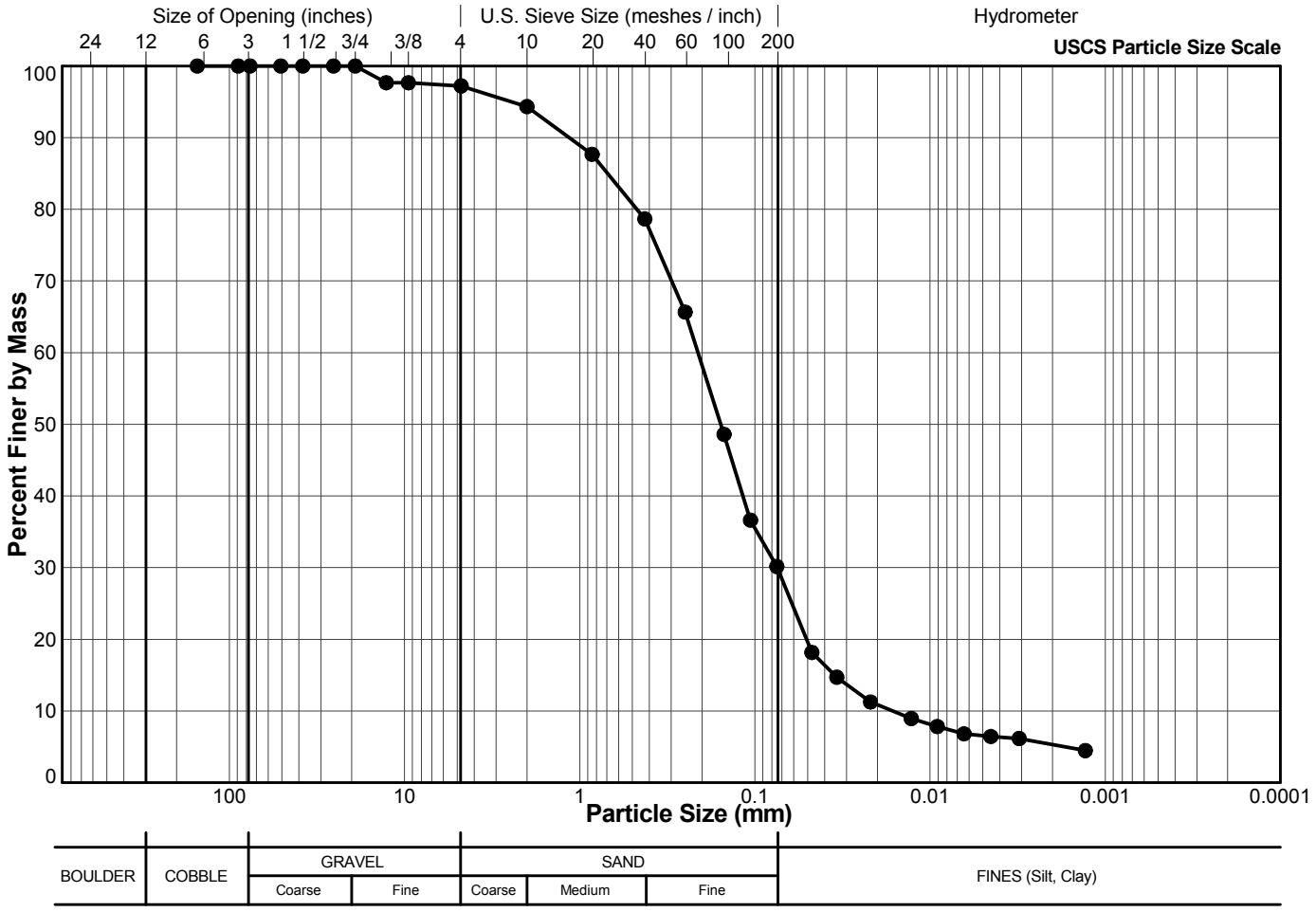
SUMMARY OF PARTICLE SIZE DISTRIBUTION

ASTM D 422

Client: ALS
Project: L1829679 - LaBerge
Location: Clinton Creek, Yukon
Project No.: 1667729 **Phase:** 1000

Sample Location: LaBerge
Sample No.: E-2C
Depth (m): N/A
Lab Schedule No.:



Legend

Sieve Size (USS)	(mm)	Particle Size (mm)	Percent Passing
6"	152.4		100.0
3.5"	88.9		100.0
3"	76.2		100.0
2"	50.8		100.0
1 1/2"	38.1		100.0
1"	25.4		100.0
3/4"	19.1		100.0
1/2"	12.7		97.7
3/8"	9.5		97.7
#4 US MESH	4.75		97.2
#10 US MESH	2		94.3
#20 US MESH	0.85		87.7
#40 US MESH	0.425		78.7
#60 US MESH	0.25		65.7
#100 US MESH	0.15		48.6
#140 US MESH	0.106		36.6
#200 US MESH	0.075		30.2
		0.0473	18.2
		0.0341	14.7
		0.0219	11.3
		0.0128	8.9
		0.0091	7.8
		0.0064	6.8
		0.0045	6.4
		0.0031	6.2
		0.0013	4.5

LH/OA	11/8/2016	LH	11/15/2016
Tech	Date	Checked	Date

National IM Server:GINT_GAL_NATIONALIM Unique Project ID:1467 Output Form:_LAB_PARTICLE SIZE (W/ GRADATIONS) 2015 lhu 15/11/16

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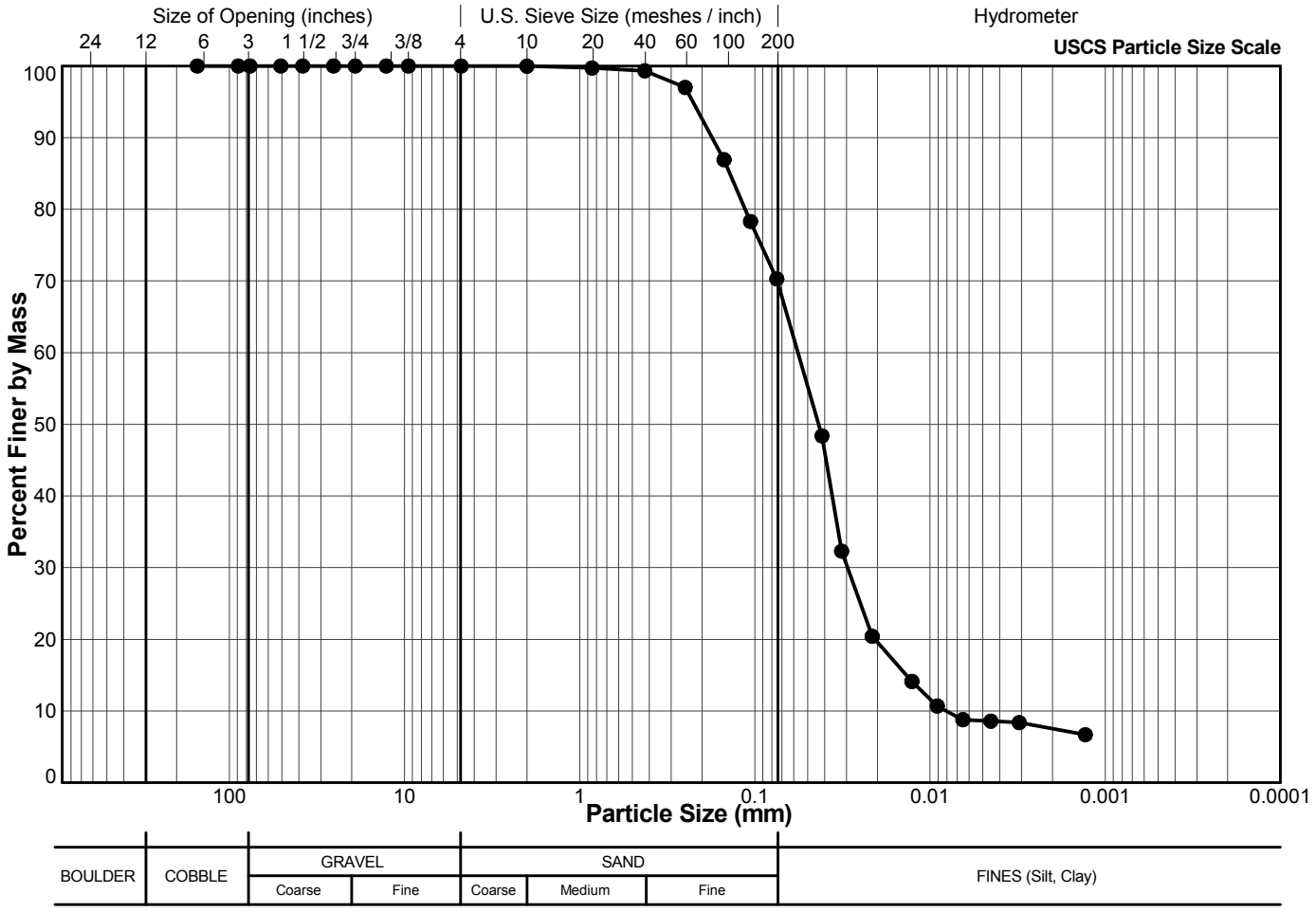
SUMMARY OF PARTICLE SIZE DISTRIBUTION

ASTM D 422

Client: ALS
Project: L1829679 - LaBerge
Location: Clinton Creek, Yukon
Project No.: 1667729 **Phase:** 1000

Sample Location: LaBerge
Sample No.: E-3A
Depth (m): N/A
Lab Schedule No.:



Legend

Sieve Size (USS)	(mm)	Particle Size (mm)	Percent Passing
6"	152.4		100.0
3.5"	88.9		100.0
3"	76.2		100.0
2"	50.8		100.0
1 1/2"	38.1		100.0
1"	25.4		100.0
3/4"	19.1		100.0
1/2"	12.7		100.0
3/8"	9.5		100.0
#4 US MESH	4.75		100.0
#10 US MESH	2		100.0
#20 US MESH	0.85		99.7
#40 US MESH	0.425		99.3
#60 US MESH	0.25		97.0
#100 US MESH	0.15		86.9
#140 US MESH	0.106		78.3
#200 US MESH	0.075		70.3
		0.0414	48.4
		0.0320	32.3
		0.0214	20.4
		0.0127	14.1
		0.0091	10.7
		0.0065	8.8
		0.0045	8.6
		0.0031	8.4
		0.0013	6.7

LH/OA	11/8/2016	LH	11/15/2016
Tech	Date	Checked	Date

National IM Server:GINT_GAL_NATIONALIM Unique Project ID:1467 Output Form:_LAB_PARTICLE SIZE (W/ GRADATIONS) 2015 lhu 15/11/16

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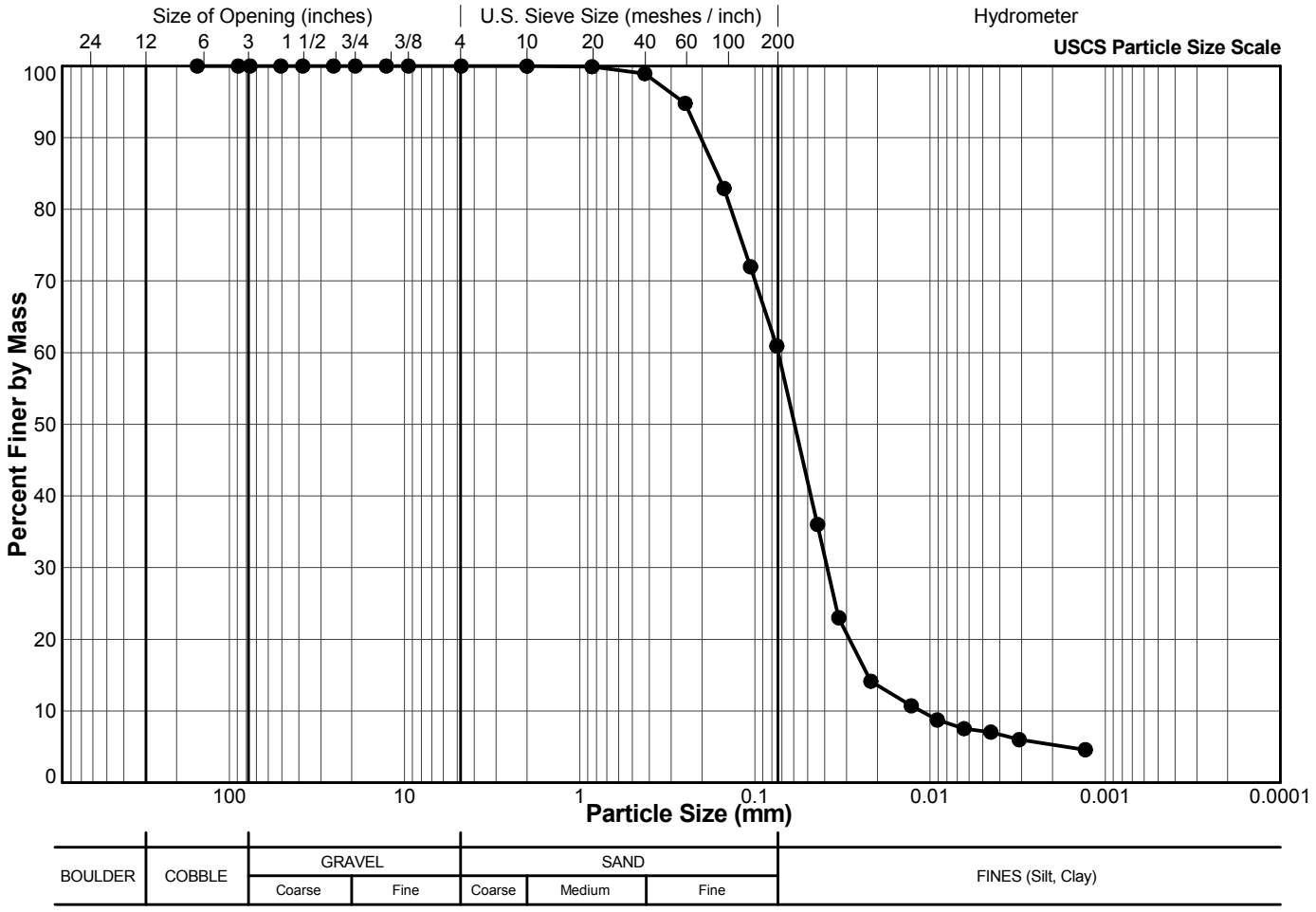
SUMMARY OF PARTICLE SIZE DISTRIBUTION

ASTM D 422

Client: ALS
Project: L1829679 - LaBerge
Location: Clinton Creek, Yukon
Project No.: 1667729 **Phase:** 1000

Sample Location: LaBerge
Sample No.: E-3B
Depth (m): N/A
Lab Schedule No.:



Legend

Sieve Size (USS)	(mm)	Particle Size (mm)	Percent Passing
6"	152.4		100.0
3.5"	88.9		100.0
3"	76.2		100.0
2"	50.8		100.0
1 1/2"	38.1		100.0
1"	25.4		100.0
3/4"	19.1		100.0
1/2"	12.7		100.0
3/8"	9.5		100.0
#4 US MESH	4.75		100.0
#10 US MESH	2		100.0
#20 US MESH	0.85		99.9
#40 US MESH	0.425		98.9
#60 US MESH	0.25		94.8
#100 US MESH	0.15		82.9
#140 US MESH	0.106		72.0
#200 US MESH	0.075		60.9
		0.0439	36.0
		0.0332	23.0
		0.0218	14.1
		0.0128	10.7
		0.0091	8.7
		0.0064	7.5
		0.0045	7.0
		0.0031	6.0
		0.0013	4.6

LH/OA	11/8/2016	LH	11/15/2016
Tech	Date	Checked	Date

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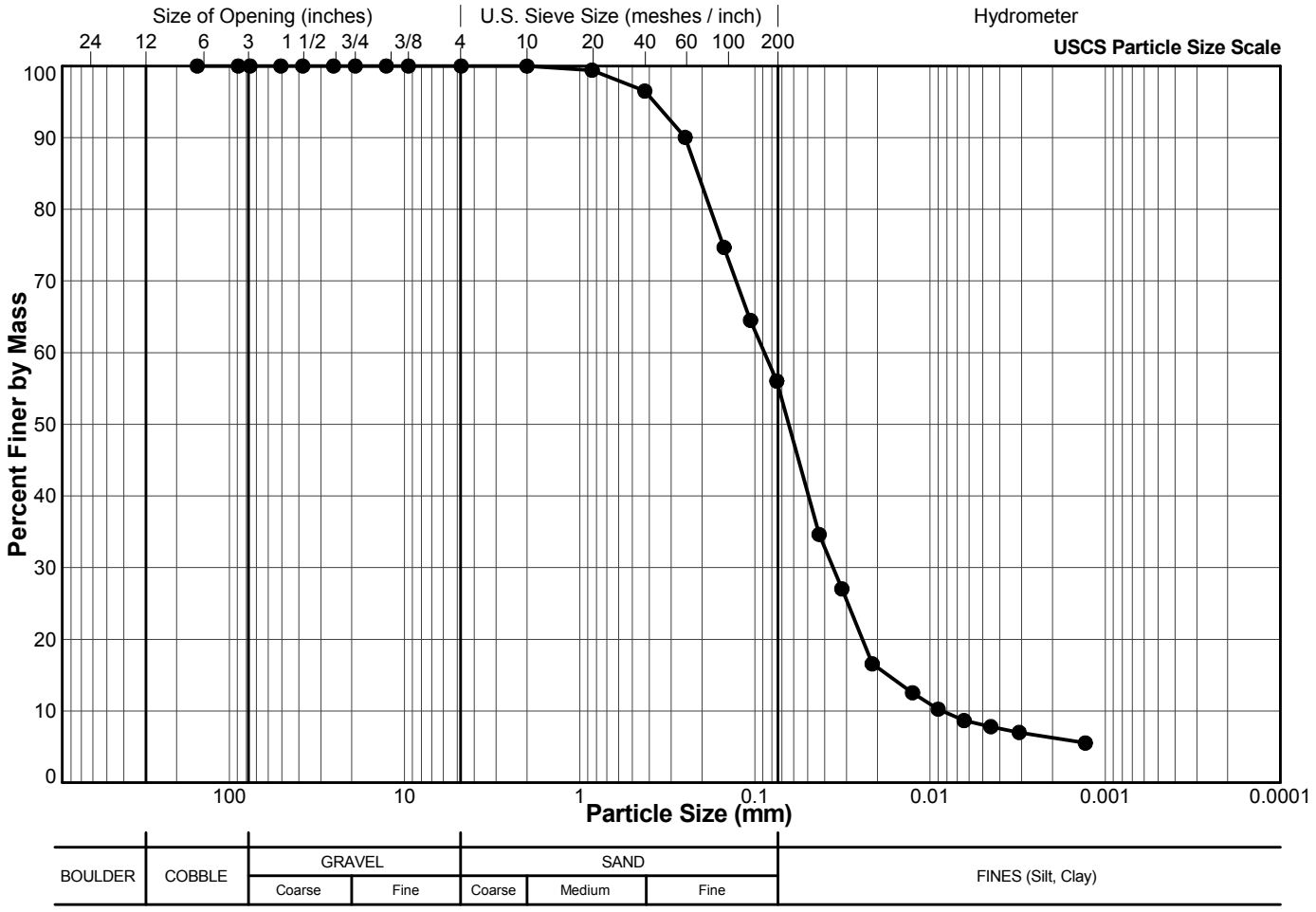
SUMMARY OF PARTICLE SIZE DISTRIBUTION

ASTM D 422

Client: ALS
Project: L1829679 - LaBerge
Location: Clinton Creek, Yukon
Project No.: 1667729 **Phase:** 1000

Sample Location: LaBerge
Sample No.: E-3C
Depth (m): N/A
Lab Schedule No.:



Legend

Sieve Size (USS)	(mm)	Particle Size (mm)	Percent Passing
6"	152.4		100.0
3.5"	88.9		100.0
3"	76.2		100.0
2"	50.8		100.0
1 1/2"	38.1		100.0
1"	25.4		100.0
3/4"	19.1		100.0
1/2"	12.7		100.0
3/8"	9.5		100.0
#4 US MESH	4.75		100.0
#10 US MESH	2		100.0
#20 US MESH	0.85		99.4
#40 US MESH	0.425		96.5
#60 US MESH	0.25		90.0
#100 US MESH	0.15		74.7
#140 US MESH	0.106		64.5
#200 US MESH	0.075		56.0
		0.0430	34.6
		0.0319	27.0
		0.0214	16.6
		0.0126	12.5
		0.0090	10.3
		0.0064	8.7
		0.0045	7.8
		0.0031	7.0
		0.0013	5.5

LH/OA	11/8/2016	LH	11/15/2016
Tech	Date	Checked	Date

National IM Server:GINT_GAL_NATIONALIM Unique Project ID:1467 Output Form:_LAB_PARTICLE SIZE (W/ GRADATIONS) 2015 lhu 15/11/16

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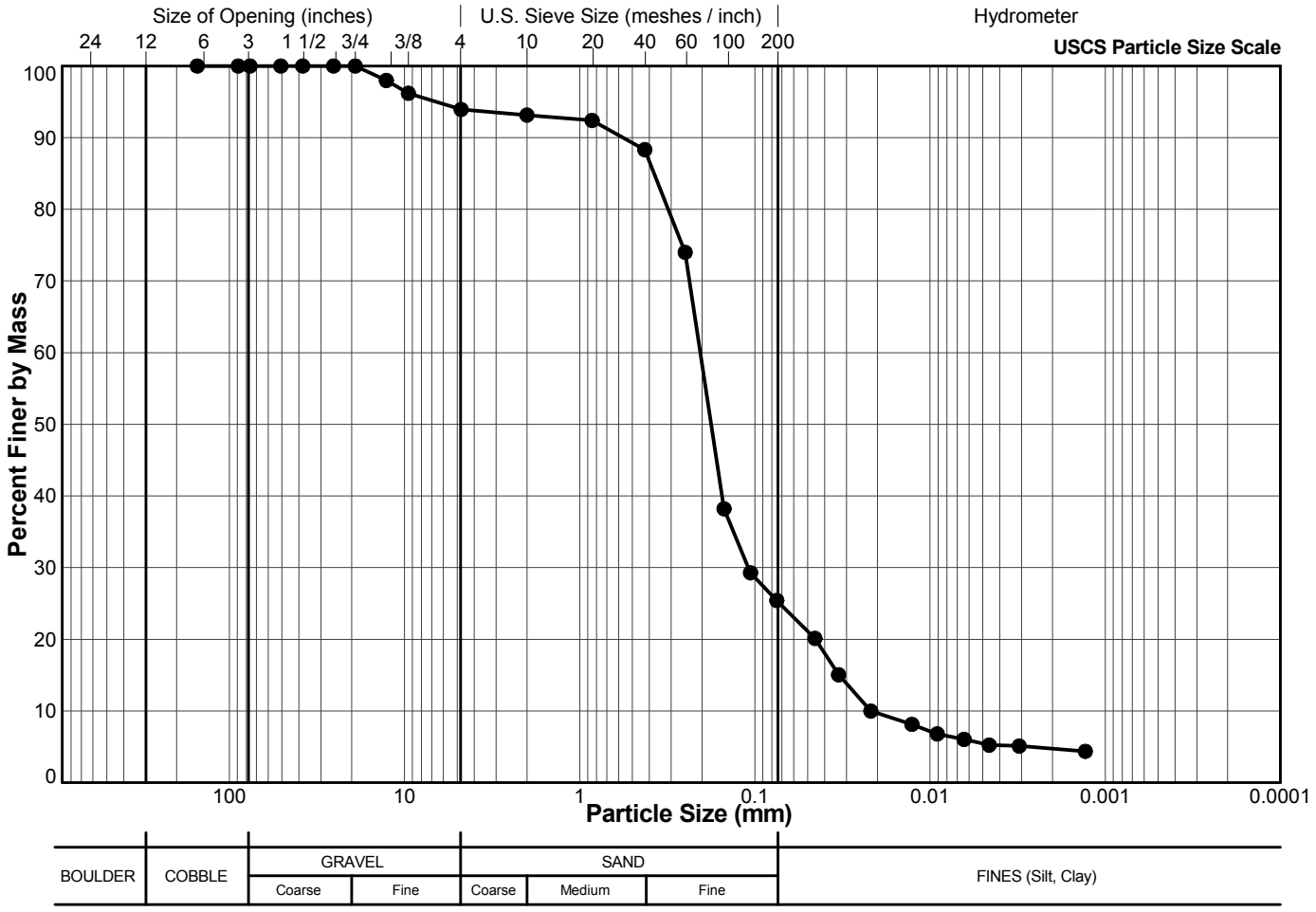
SUMMARY OF PARTICLE SIZE DISTRIBUTION

ASTM D 422

Client: ALS
Project: L1829679 - LaBerge
Location: Clinton Creek, Yukon
Project No.: 1667729 **Phase:** 1000

Sample Location: LaBerge
Sample No.: E-4A
Depth (m): N/A
Lab Schedule No.:



Legend

Sieve Size (USS)	(mm)	Particle Size (mm)	Percent Passing
6"	152.4		100.0
3.5"	88.9		100.0
3"	76.2		100.0
2"	50.8		100.0
1 1/2"	38.1		100.0
1"	25.4		100.0
3/4"	19.1		100.0
1/2"	12.7		98.0
3/8"	9.5		96.2
#4 US MESH	4.75		93.9
#10 US MESH	2		93.1
#20 US MESH	0.85		92.4
#40 US MESH	0.425		88.3
#60 US MESH	0.25		74.0
#100 US MESH	0.15		38.2
#140 US MESH	0.106		29.3
#200 US MESH	0.075		25.4
		0.0454	20.1
		0.0333	15.1
		0.0218	10.0
		0.0127	8.1
		0.0091	6.8
		0.0064	6.0
		0.0046	5.2
		0.0031	5.1
		0.0013	4.4

LH/OA	11/9/2016	LH	11/15/2016
Tech	Date	Checked	Date

National IM Server:GINT_GAL_NATIONALIM Unique Project ID:1467 Output Form:_LAB_PARTICLE SIZE (W/ GRADATIONS) 2015 lhu 15/11/16

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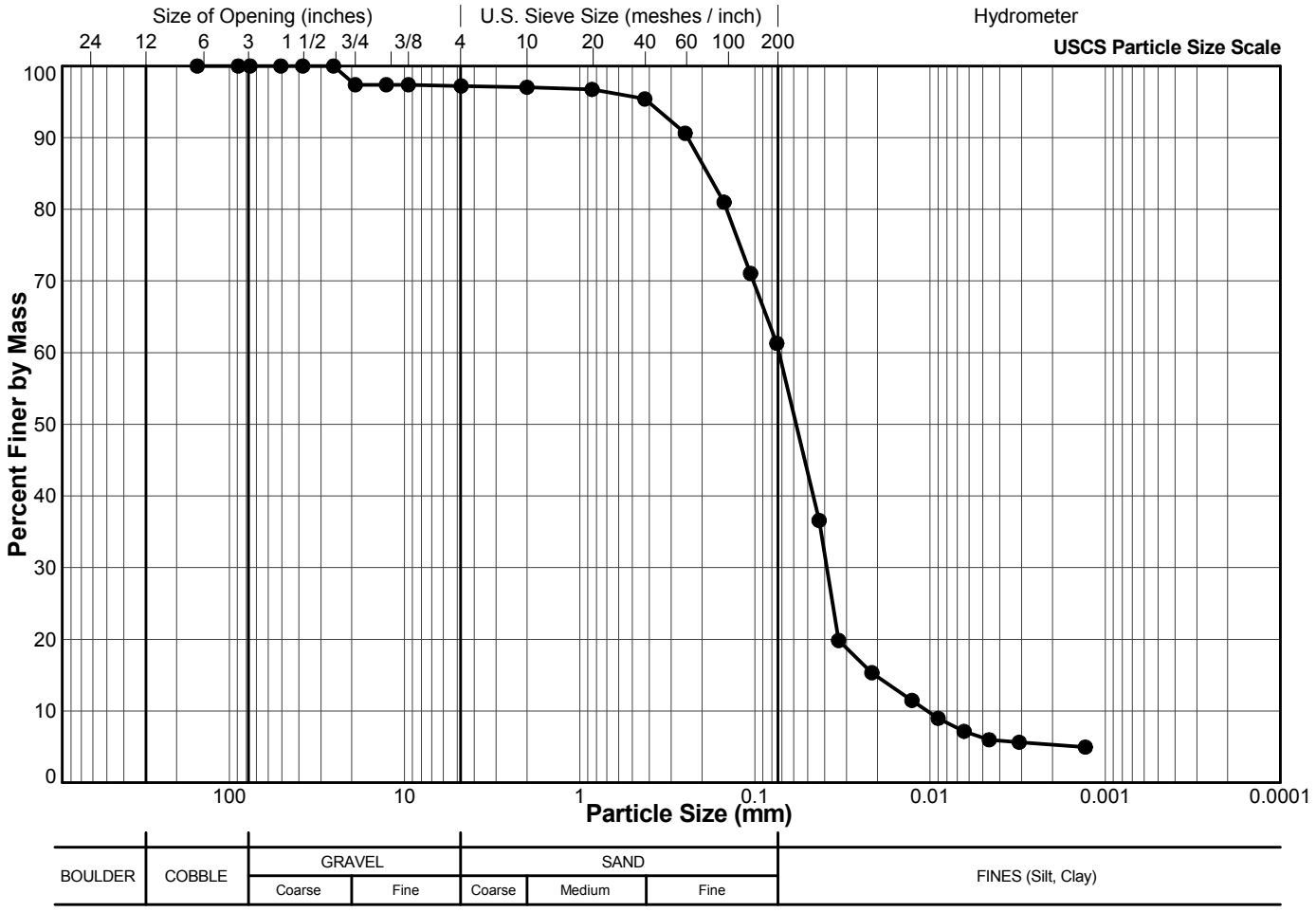
SUMMARY OF PARTICLE SIZE DISTRIBUTION

ASTM D 422

Client: ALS
Project: L1829679 - LaBerge
Location: Clinton Creek, Yukon
Project No.: 1667729 **Phase:** 1000

Sample Location: LaBerge
Sample No.: E-4B
Depth (m): N/A
Lab Schedule No.:



Legend

Sieve Size (USS)	(mm)	Particle Size (mm)	Percent Passing
6"	152.4		100.0
3.5"	88.9		100.0
3"	76.2		100.0
2"	50.8		100.0
1 1/2"	38.1		100.0
1"	25.4		100.0
3/4"	19.1		97.4
1/2"	12.7		97.4
3/8"	9.5		97.4
#4 US MESH	4.75		97.2
#10 US MESH	2		97.0
#20 US MESH	0.85		96.7
#40 US MESH	0.425		95.4
#60 US MESH	0.25		90.6
#100 US MESH	0.15		81.0
#140 US MESH	0.106		71.1
#200 US MESH	0.075		61.3
		0.0430	36.6
		0.0333	19.8
		0.0215	15.3
		0.0127	11.5
		0.0090	9.0
		0.0064	7.2
		0.0046	6.0
		0.0031	5.6
		0.0013	5.0

LH/OA	11/9/2016	LH	11/15/2016
Tech	Date	Checked	Date

National IM Server:GINT_GAL_NATIONALIM Unique Project ID:1467 Output Form:_LAB_PARTICLE SIZE (W/ GRADATIONS) 2015 lhu 15/11/16

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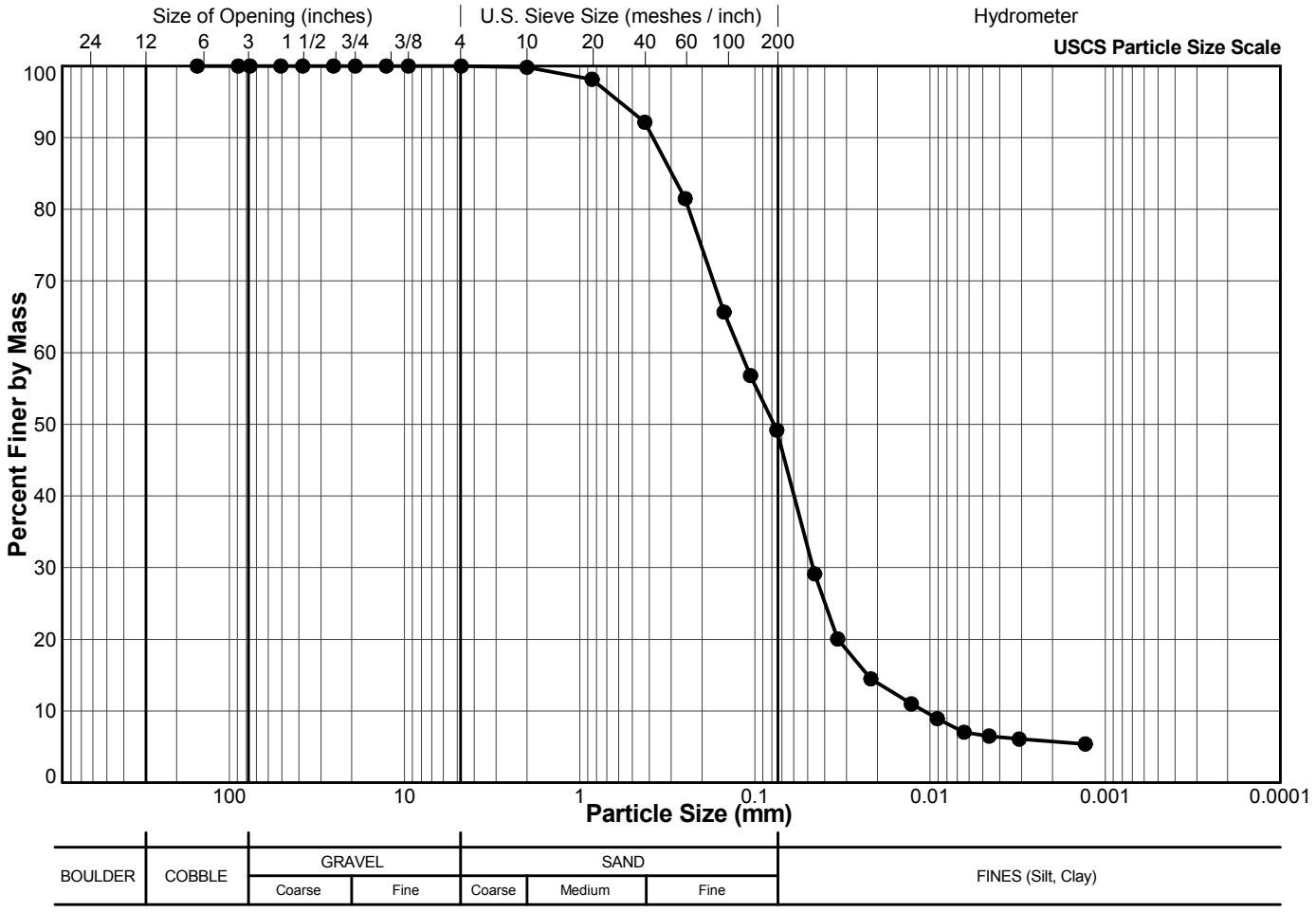
SUMMARY OF PARTICLE SIZE DISTRIBUTION

ASTM D 422

Client: ALS
Project: L1829679 - LaBerge
Location: Clinton Creek, Yukon
Project No.: 1667729 **Phase:** 1000

Sample Location: LaBerge
Sample No.: E-4C
Depth (m): N/A
Lab Schedule No.:



Legend

Sieve Size (USS)	(mm)	Particle Size (mm)	Percent Passing
6"	152.4		100.0
3.5"	88.9		100.0
3"	76.2		100.0
2"	50.8		100.0
1 1/2"	38.1		100.0
1"	25.4		100.0
3/4"	19.1		100.0
1/2"	12.7		100.0
3/8"	9.5		100.0
#4 US MESH	4.75		100.0
#10 US MESH	2		99.8
#20 US MESH	0.85		98.1
#40 US MESH	0.425		92.2
#60 US MESH	0.25		81.5
#100 US MESH	0.15		65.7
#140 US MESH	0.106		56.8
#200 US MESH	0.075		49.2
		0.0456	29.1
		0.0337	20.0
		0.0218	14.5
		0.0128	11.0
		0.0091	8.9
		0.0064	7.0
		0.0046	6.5
		0.0031	6.1
		0.0013	5.4

LH/OA	11/8/2016	LH	11/15/2016
Tech	Date	Checked	Date

National IM Server:GINT_GAL_NATIONALIM Unique Project ID:1467 Output Form:_LAB_PARTICLE SIZE (W/ GRADATIONS) 2015 lhu 15/11/16

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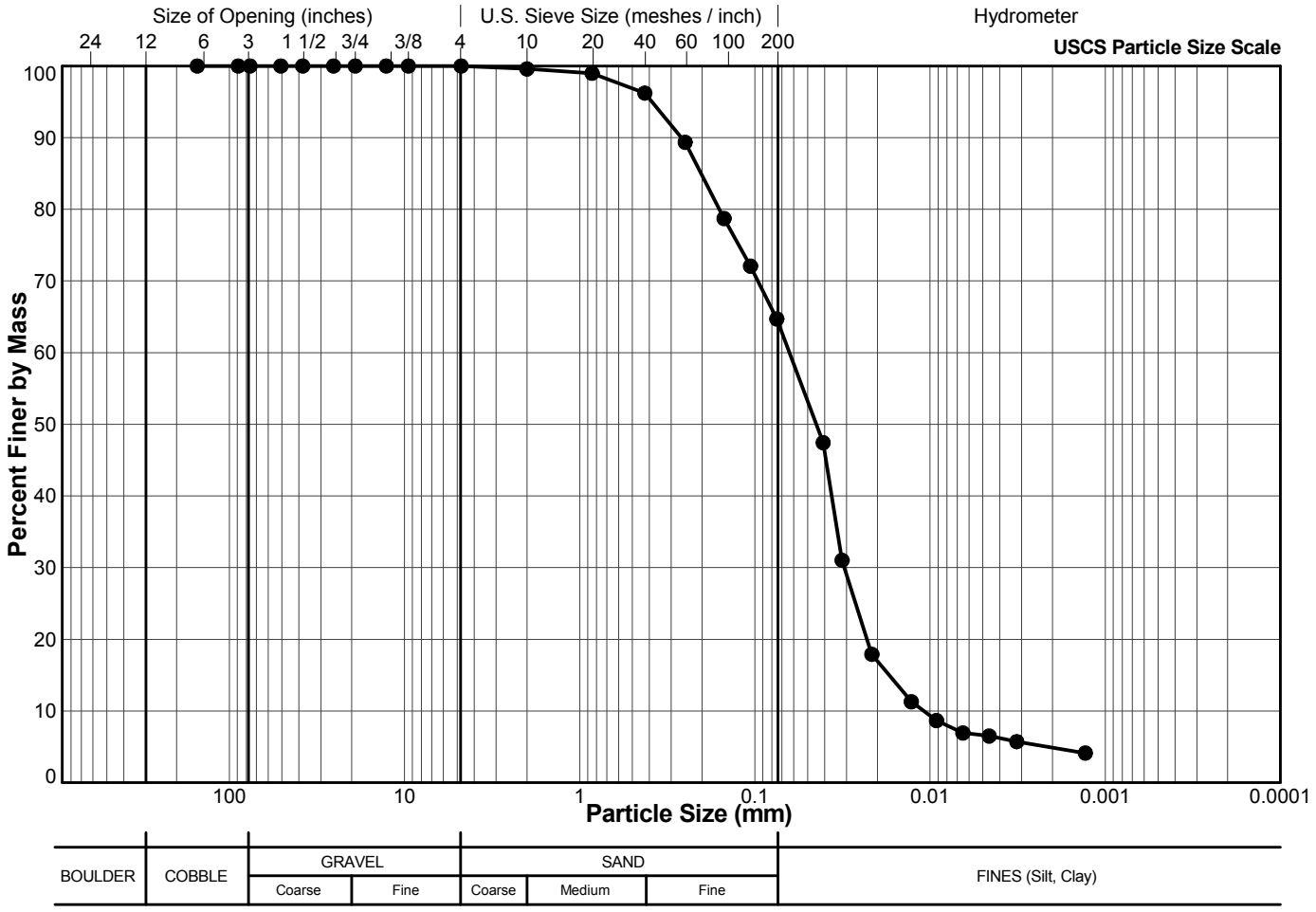
SUMMARY OF PARTICLE SIZE DISTRIBUTION

ASTM D 422

Client: ALS
Project: L1829679 - LaBerge
Location: Clinton Creek, Yukon
Project No.: 1667729 **Phase:** 1000

Sample Location: LaBerge
Sample No.: E-6A
Depth (m): N/A
Lab Schedule No.:



Legend

Sieve Size (USS)	(mm)	Particle Size (mm)	Percent Passing
6"	152.4		100.0
3.5"	88.9		100.0
3"	76.2		100.0
2"	50.8		100.0
1 1/2"	38.1		100.0
1"	25.4		100.0
3/4"	19.1		100.0
1/2"	12.7		100.0
3/8"	9.5		100.0
#4 US MESH	4.75		100.0
#10 US MESH	2		99.6
#20 US MESH	0.85		99.0
#40 US MESH	0.425		96.2
#60 US MESH	0.25		89.4
#100 US MESH	0.15		78.7
#140 US MESH	0.106		72.1
#200 US MESH	0.075		64.7
		0.0408	47.4
		0.0318	31.0
		0.0215	17.9
		0.0128	11.3
		0.0092	8.7
		0.0065	6.9
		0.0046	6.5
		0.0032	5.7
		0.0013	4.1

LH/OA	11/10/2016	LH	11/15/2016
Tech	Date	Checked	Date

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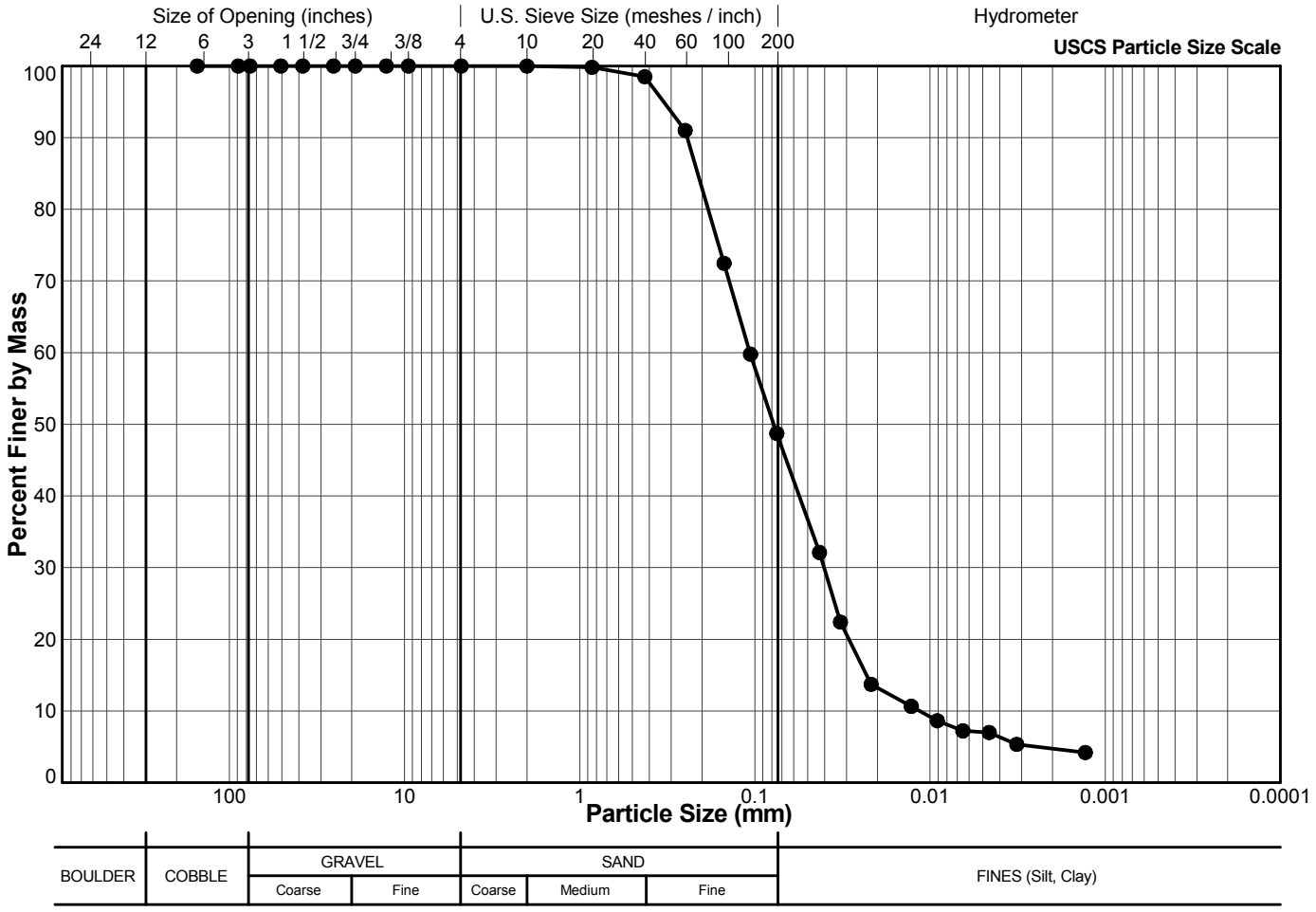
SUMMARY OF PARTICLE SIZE DISTRIBUTION

ASTM D 422

Client: ALS
Project: L1829679 - LaBerge
Location: Clinton Creek, Yukon
Project No.: 1667729 **Phase:** 1000

Sample Location: LaBerge
Sample No.: E-6B
Depth (m): N/A
Lab Schedule No.:



Legend

Sieve Size (USS)	(mm)	Particle Size (mm)	Percent Passing
6"	152.4		100.0
3.5"	88.9		100.0
3"	76.2		100.0
2"	50.8		100.0
1 1/2"	38.1		100.0
1"	25.4		100.0
3/4"	19.1		100.0
1/2"	12.7		100.0
3/8"	9.5		100.0
#4 US MESH	4.75		100.0
#10 US MESH	2		100.0
#20 US MESH	0.85		99.8
#40 US MESH	0.425		98.5
#60 US MESH	0.25		91.0
#100 US MESH	0.15		72.5
#140 US MESH	0.106		59.8
#200 US MESH	0.075		48.7
		0.0428	32.1
		0.0325	22.4
		0.0217	13.7
		0.0128	10.6
		0.0091	8.6
		0.0065	7.2
		0.0046	7.0
		0.0032	5.3
		0.0013	4.2

LH/OA	11/8/2016	LH	11/15/2016
Tech	Date	Checked	Date

National IM Server:GINT_GAL_NATIONALIM Unique Project ID:1467 Output Form:_LAB_PARTICLE SIZE (W/ GRADATIONS) 2015 lhu 15/11/16

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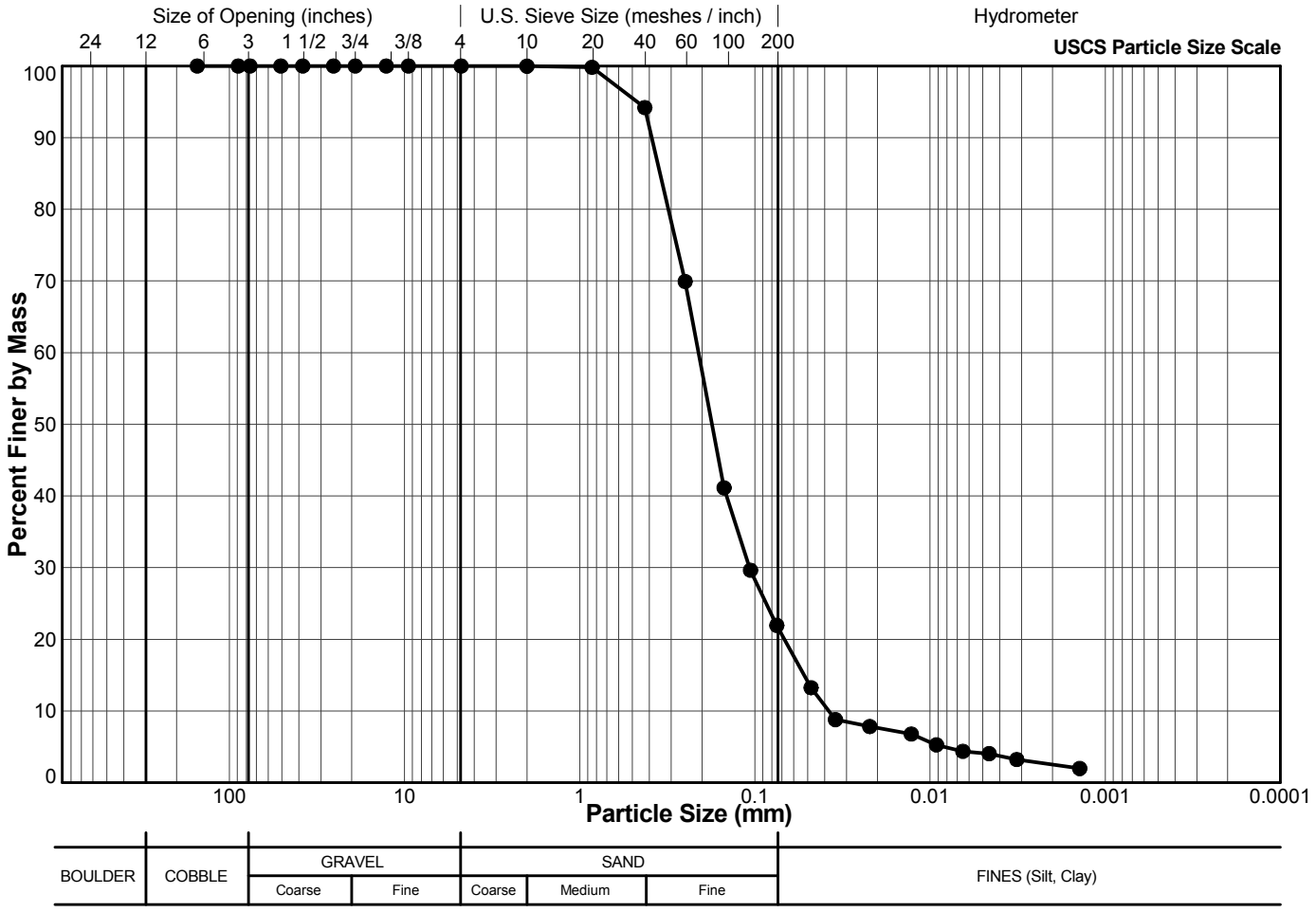
SUMMARY OF PARTICLE SIZE DISTRIBUTION

ASTM D 422

Client: ALS
Project: L1829679 - LaBerge
Location: Clinton Creek, Yukon
Project No.: 1667729 **Phase:** 1000

Sample Location: LaBerge
Sample No.: E-6C
Depth (m): N/A
Lab Schedule No.:



Legend

Sieve Size (USS)	(mm)	Particle Size (mm)	Percent Passing
6"	152.4		100.0
3.5"	88.9		100.0
3"	76.2		100.0
2"	50.8		100.0
1 1/2"	38.1		100.0
1"	25.4		100.0
3/4"	19.1		100.0
1/2"	12.7		100.0
3/8"	9.5		100.0
#4 US MESH	4.75		100.0
#10 US MESH	2		100.0
#20 US MESH	0.85		99.8
#40 US MESH	0.425		94.2
#60 US MESH	0.25		69.9
#100 US MESH	0.15		41.1
#140 US MESH	0.106		29.6
#200 US MESH	0.075		21.9
		0.0478	13.2
		0.0347	8.8
		0.0221	7.8
		0.0128	6.8
		0.0092	5.3
		0.0065	4.4
		0.0046	4.0
		0.0032	3.2
		0.0014	2.0

LH/OA	11/10/2016	LH	11/15/2016
Tech	Date	Checked	Date

National IM Server:GINT_GAL_NATIONALIM Unique Project ID:1467 Output Form:_LAB_PARTICLE SIZE (W/ GRADATIONS) 2015 lhu 15/11/16

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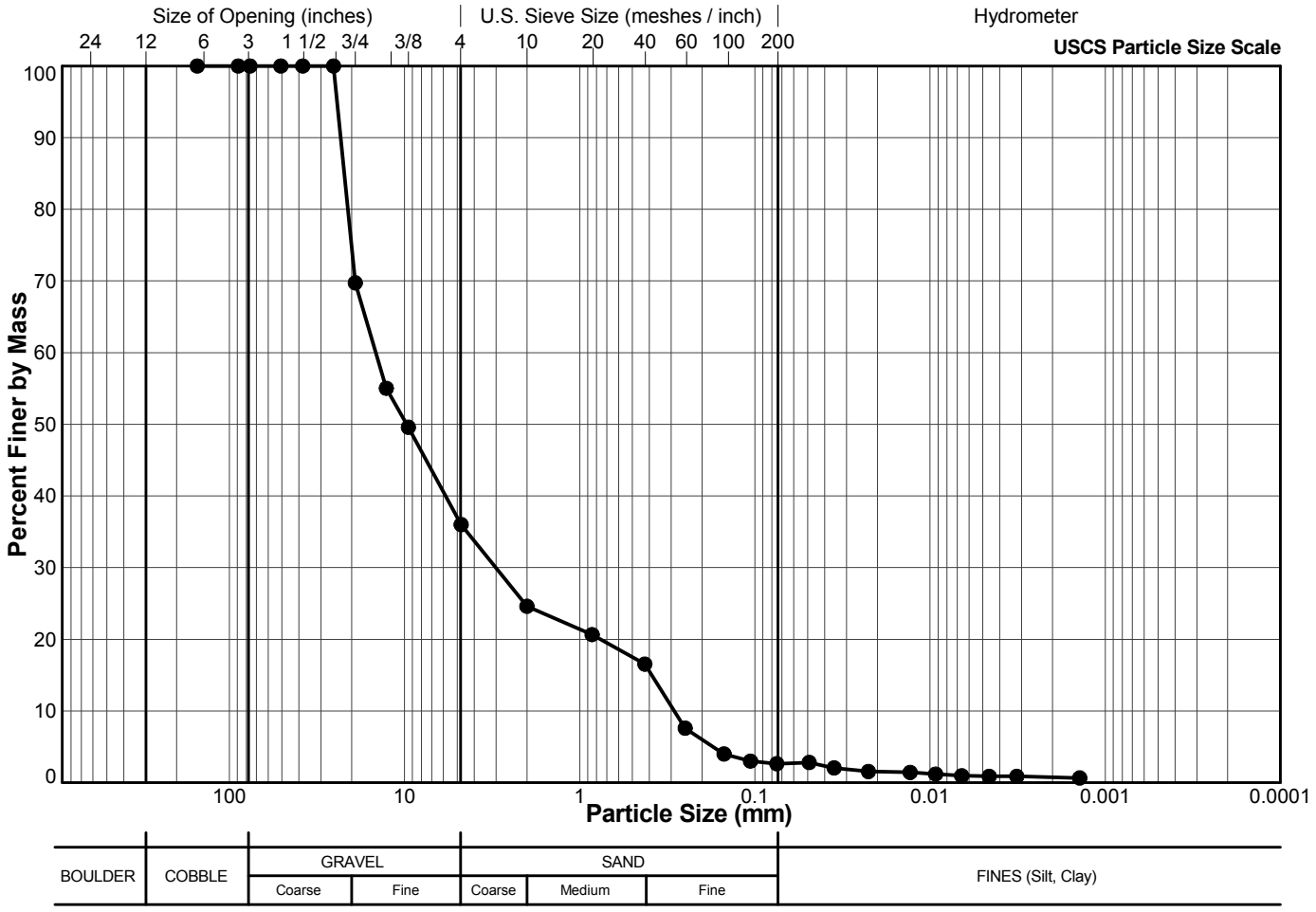
SUMMARY OF PARTICLE SIZE DISTRIBUTION

ASTM D 422

Client: ALS
Project: L1829679 - LaBerge
Location: Clinton Creek, Yukon
Project No.: 1667729 **Phase:** 1000

Sample Location: LaBerge
Sample No.: E-8A
Depth (m): N/A
Lab Schedule No.:



Legend

Sieve Size (USS)	(mm)	Particle Size (mm)	Percent Passing
6"	152.4		100.0
3.5"	88.9		100.0
3"	76.2		100.0
2"	50.8		100.0
1 1/2"	38.1		100.0
1"	25.4		100.0
3/4"	19.1		69.7
1/2"	12.7		55.0
3/8"	9.5		49.6
#4 US MESH	4.75		36.0
#10 US MESH	2		24.6
#20 US MESH	0.85		20.7
#40 US MESH	0.425		16.5
#60 US MESH	0.25		7.6
#100 US MESH	0.15		4.0
#140 US MESH	0.106		3.0
#200 US MESH	0.075		2.6
		0.0490	2.8
		0.0353	2.1
		0.0225	1.6
		0.0130	1.4
		0.0093	1.2
		0.0066	1.0
		0.0046	0.9
		0.0032	0.9
		0.0014	0.7

LH/OA	11/8/2016	LH	11/15/2016
Tech	Date	Checked	Date

National IM Server:GINT_GAL_NATIONALIM Unique Project ID:1467 Output Form:_LAB_PARTICLE SIZE (W/ GRADATIONS) 2015 lhu 15/11/16

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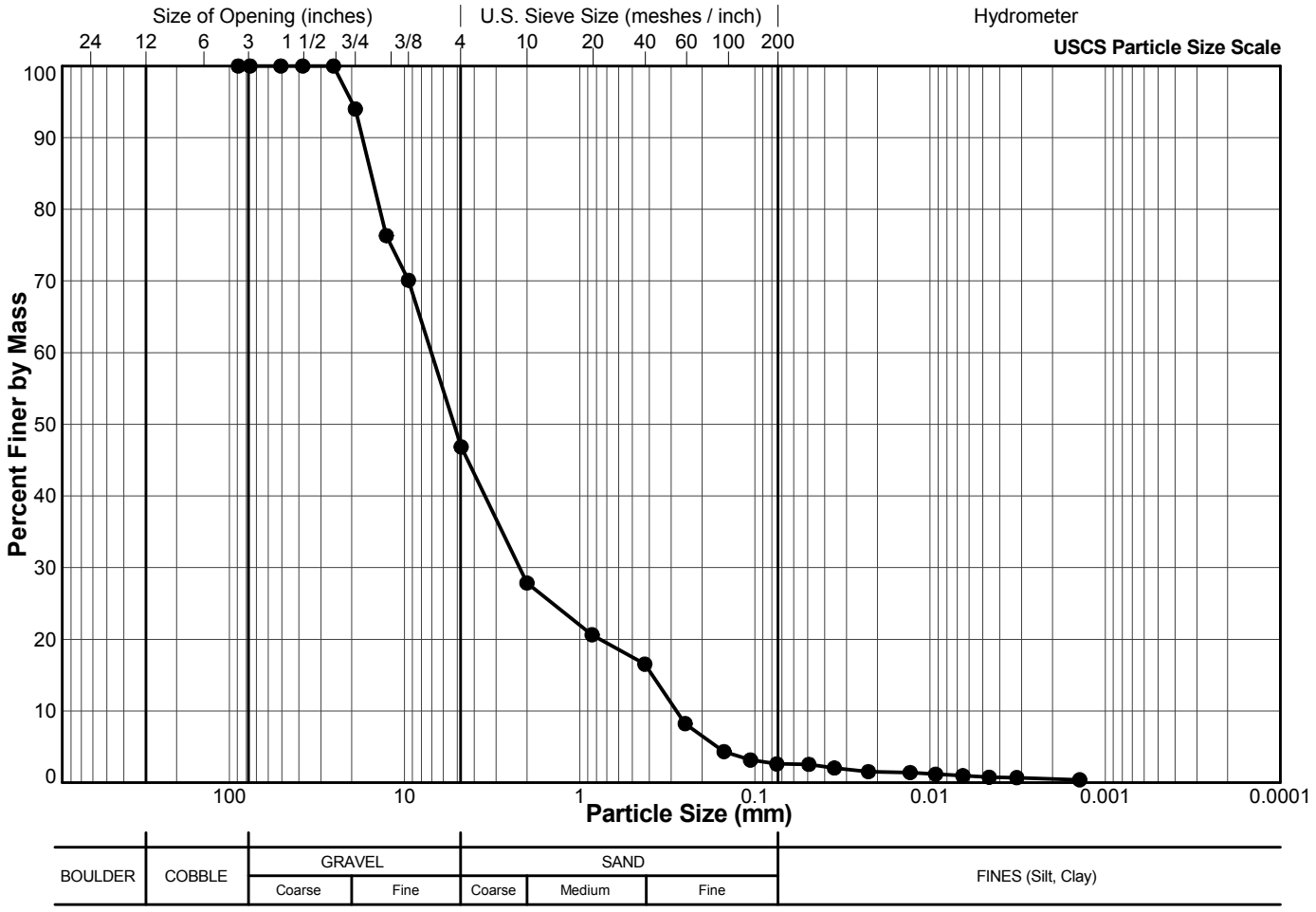
SUMMARY OF PARTICLE SIZE DISTRIBUTION

ASTM D 422

Client: ALS
Project: L1829679 - LaBerge
Location: Clinton Creek, Yukon
Project No.: 1667729 **Phase:** 1000

Sample Location: LaBerge
Sample No.: E-8B
Depth (m): N/A
Lab Schedule No.:



Legend

Sieve Size (USS)	(mm)	Particle Size (mm)	Percent Passing
3.5"	88.9		100.0
3"	76.2		100.0
2"	50.8		100.0
1 1/2"	38.1		100.0
1"	25.4		100.0
3/4"	19.1		94.0
1/2"	12.7		76.3
3/8"	9.5		70.1
#4 US MESH	4.75		46.8
#10 US MESH	2		27.9
#20 US MESH	0.85		20.6
#40 US MESH	0.425		16.5
#60 US MESH	0.25		8.2
#100 US MESH	0.15		4.3
#140 US MESH	0.106		3.2
#200 US MESH	0.075		2.6
		0.0492	2.5
		0.0352	2.0
		0.0225	1.5
		0.0130	1.4
		0.0093	1.2
		0.0065	1.0
		0.0046	0.8
		0.0032	0.7
		0.0014	0.4

LH/OA	11/9/2016	LH	11/15/2016
Tech	Date	Checked	Date

National IM Server:GINT_GAL_NATIONALIM Unique Project ID:1467 Output Form:_LAB_PARTICLE SIZE (W/ GRADATIONS) 2015 lhu 15/11/16

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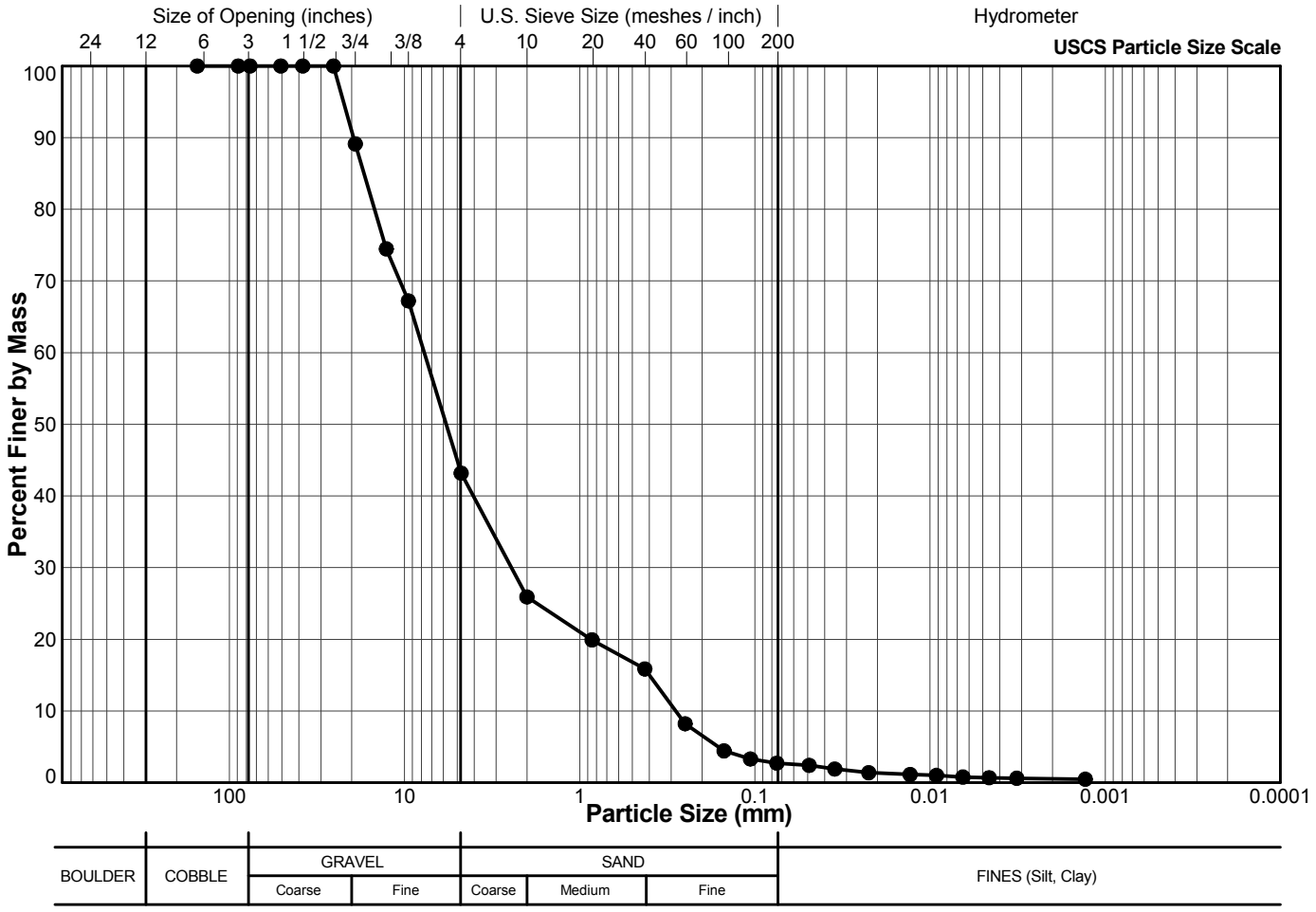
SUMMARY OF PARTICLE SIZE DISTRIBUTION

ASTM D 422

Client: ALS
Project: L1829679 - LaBerge
Location: Clinton Creek, Yukon
Project No.: 1667729 **Phase:** 1000

Sample Location: LaBerge
Sample No.: E-8C
Depth (m): N/A
Lab Schedule No.:



Legend

Sieve Size (USS)	(mm)	Particle Size (mm)	Percent Passing
6"	152.4		100.0
3.5"	88.9		100.0
3"	76.2		100.0
2"	50.8		100.0
1 1/2"	38.1		100.0
1"	25.4		100.0
3/4"	19.1		89.1
1/2"	12.7		74.5
3/8"	9.5		67.2
#4 US MESH	4.75		43.2
#10 US MESH	2		25.9
#20 US MESH	0.85		19.9
#40 US MESH	0.425		15.9
#60 US MESH	0.25		8.2
#100 US MESH	0.15		4.4
#140 US MESH	0.106		3.3
#200 US MESH	0.075		2.7
		0.0490	2.4
		0.0350	1.9
		0.0224	1.4
		0.0130	1.1
		0.0092	1.0
		0.0065	0.8
		0.0046	0.7
		0.0032	0.6
		0.0013	0.5

LH/OA	11/9/2016	LH	11/15/2016
Tech	Date	Checked	Date

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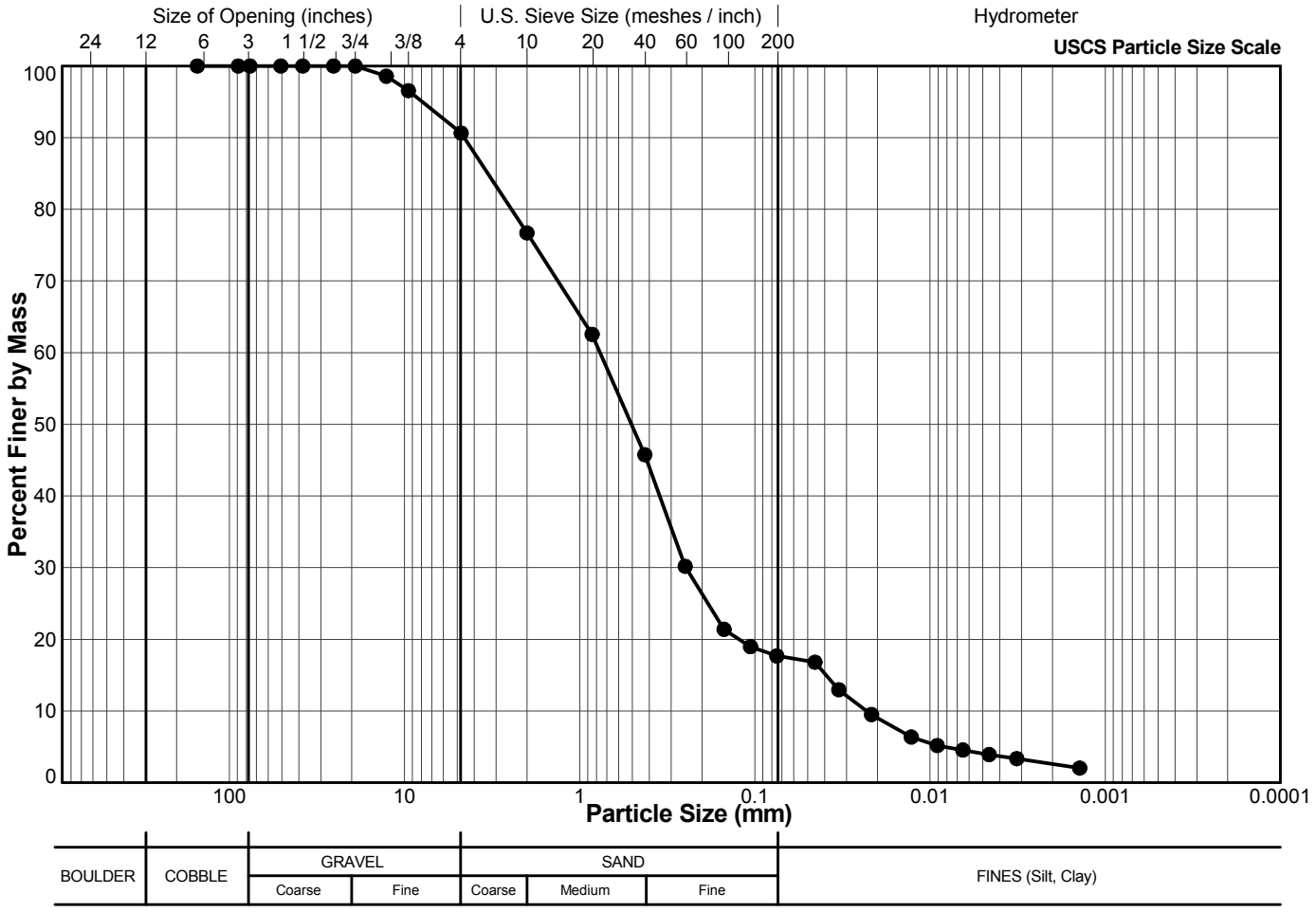
SUMMARY OF PARTICLE SIZE DISTRIBUTION

ASTM D 422

Client: ALS
Project: L1829679 - LaBerge
Location: Clinton Creek, Yukon
Project No.: 1667729 **Phase:** 1000

Sample Location: LaBerge
Sample No.: PORCUPINE CR-A
Depth (m): N/A
Lab Schedule No.:



Legend

Sieve Size (USS)	(mm)	Particle Size (mm)	Percent Passing
6"	152.4		100.0
3.5"	88.9		100.0
3"	76.2		100.0
2"	50.8		100.0
1 1/2"	38.1		100.0
1"	25.4		100.0
3/4"	19.1		100.0
1/2"	12.7		98.6
3/8"	9.5		96.6
#4 US MESH	4.75		90.6
#10 US MESH	2		76.7
#20 US MESH	0.85		62.6
#40 US MESH	0.425		45.8
#60 US MESH	0.25		30.2
#100 US MESH	0.15		21.4
#140 US MESH	0.106		19.0
#200 US MESH	0.075		17.7
		0.0454	16.8
		0.0332	13.0
		0.0216	9.5
		0.0128	6.4
		0.0091	5.2
		0.0065	4.5
		0.0046	3.9
		0.0032	3.3
		0.0014	2.0

LH/OA	11/10/2016	LH	11/15/2016
Tech	Date	Checked	Date

National IM Server:GINT_GAL_NATIONALIM Unique Project ID:1467 Output Form:_LAB_PARTICLE SIZE (W/ GRADATIONS) 2015 lhu 15/11/16

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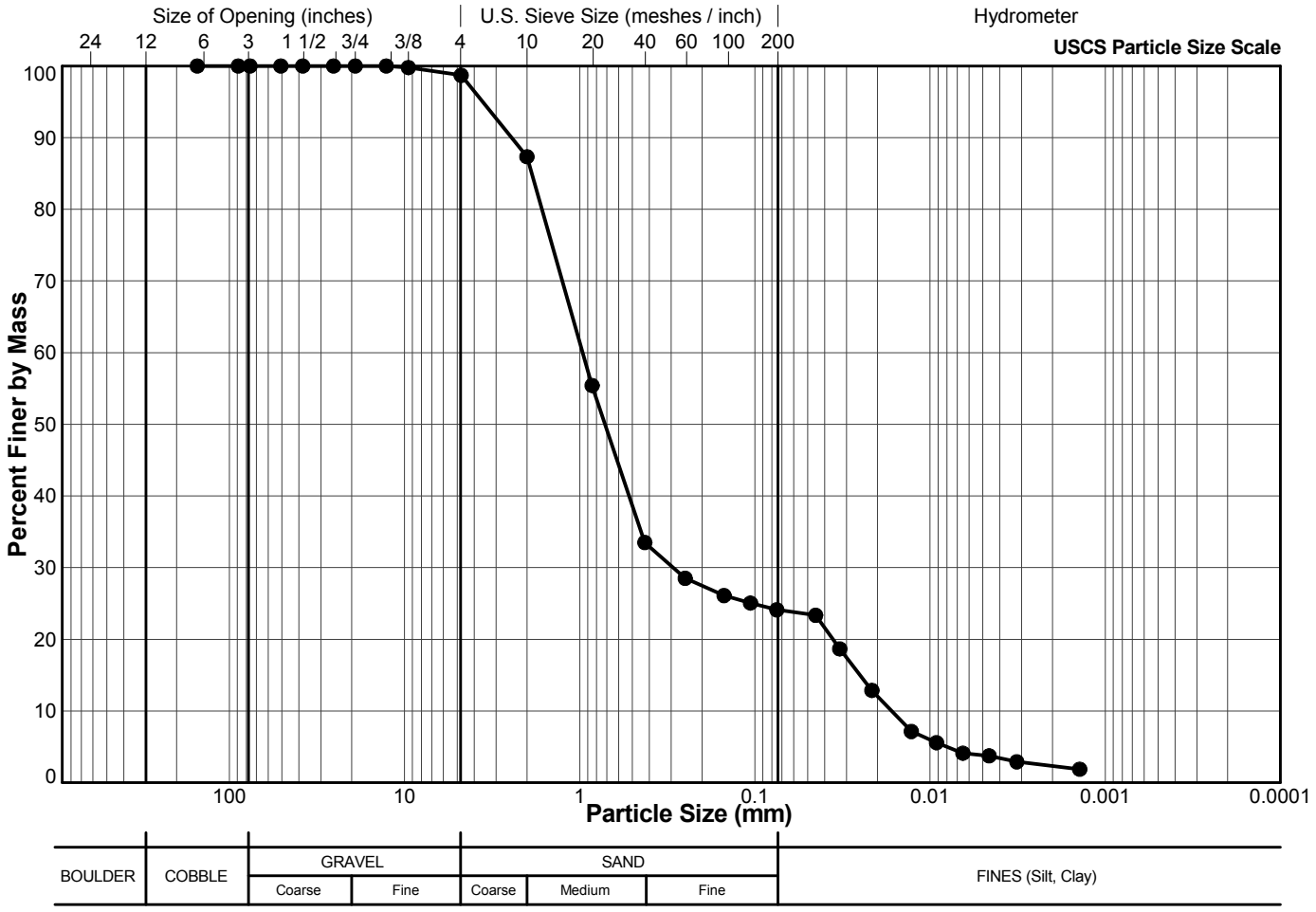
SUMMARY OF PARTICLE SIZE DISTRIBUTION

ASTM D 422

Client: ALS
Project: L1829679 - LaBerge
Location: Clinton Creek, Yukon
Project No.: 1667729 **Phase:** 1000

Sample Location: LaBerge
Sample No.: PORCUPINE CR-B
Depth (m): N/A
Lab Schedule No.:



Legend

Sieve Size (USS)	(mm)	Particle Size (mm)	Percent Passing
6"	152.4		100.0
3.5"	88.9		100.0
3"	76.2		100.0
2"	50.8		100.0
1 1/2"	38.1		100.0
1"	25.4		100.0
3/4"	19.1		100.0
1/2"	12.7		100.0
3/8"	9.5		99.8
#4 US MESH	4.75		98.7
#10 US MESH	2		87.3
#20 US MESH	0.85		55.4
#40 US MESH	0.425		33.5
#60 US MESH	0.25		28.5
#100 US MESH	0.15		26.1
#140 US MESH	0.106		25.1
#200 US MESH	0.075		24.1
		0.0450	23.4
		0.0328	18.7
		0.0215	12.9
		0.0128	7.1
		0.0092	5.6
		0.0065	4.1
		0.0046	3.7
		0.0032	2.9
		0.0014	1.9

LH/OA	11/10/2016	LH	11/15/2016
Tech	Date	Checked	Date

National IM Server:GINT_GAL_NATIONALIM Unique Project ID:1467 Output Form:_LAB_PARTICLE SIZE (W/ GRADATIONS) 2015 lhu 15/11/16

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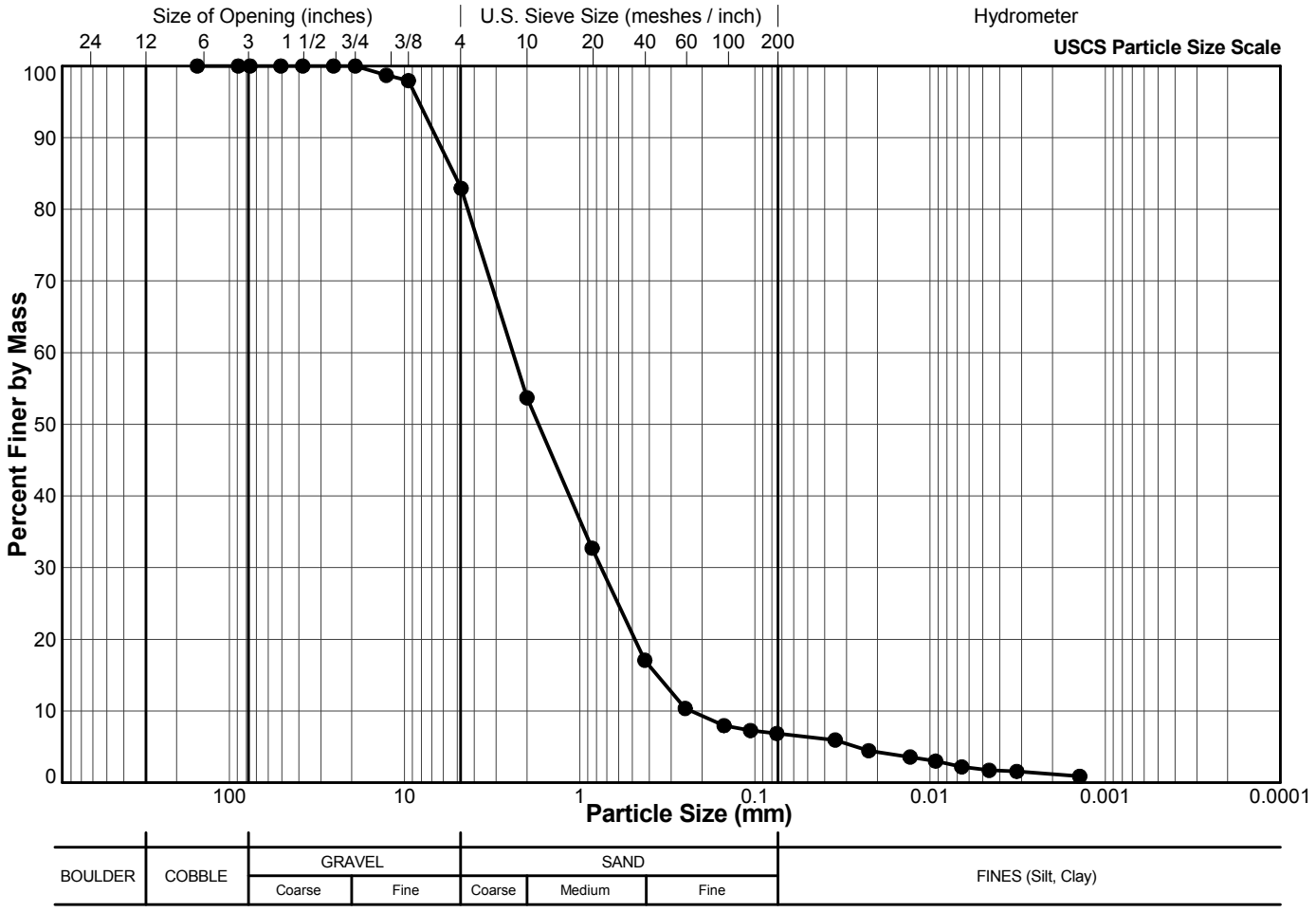
SUMMARY OF PARTICLE SIZE DISTRIBUTION

ASTM D 422

Client: ALS
Project: L1829679 - LaBerge
Location: Clinton Creek, Yukon
Project No.: 1667729 **Phase:** 1000

Sample Location: LaBerge
Sample No.: PORCUPINE CR-C
Depth (m): N/A
Lab Schedule No.:



Legend

Sieve Size (USS)	(mm)	Particle Size (mm)	Percent Passing
6"	152.4		100.0
3.5"	88.9		100.0
3"	76.2		100.0
2"	50.8		100.0
1 1/2"	38.1		100.0
1"	25.4		100.0
3/4"	19.1		100.0
1/2"	12.7		98.7
3/8"	9.5		98.0
#4 US MESH	4.75		82.9
#10 US MESH	2		53.7
#20 US MESH	0.85		32.7
#40 US MESH	0.425		17.1
#60 US MESH	0.25		10.4
#100 US MESH	0.15		7.9
#140 US MESH	0.106		7.3
#200 US MESH	0.075		6.9
		0.0348	5.9
		0.0224	4.5
		0.0130	3.6
		0.0093	3.0
		0.0066	2.2
		0.0046	1.7
		0.0032	1.6
		0.0014	0.9

LH/OA	11/10/2016	LH	11/15/2016
Tech	Date	Checked	Date

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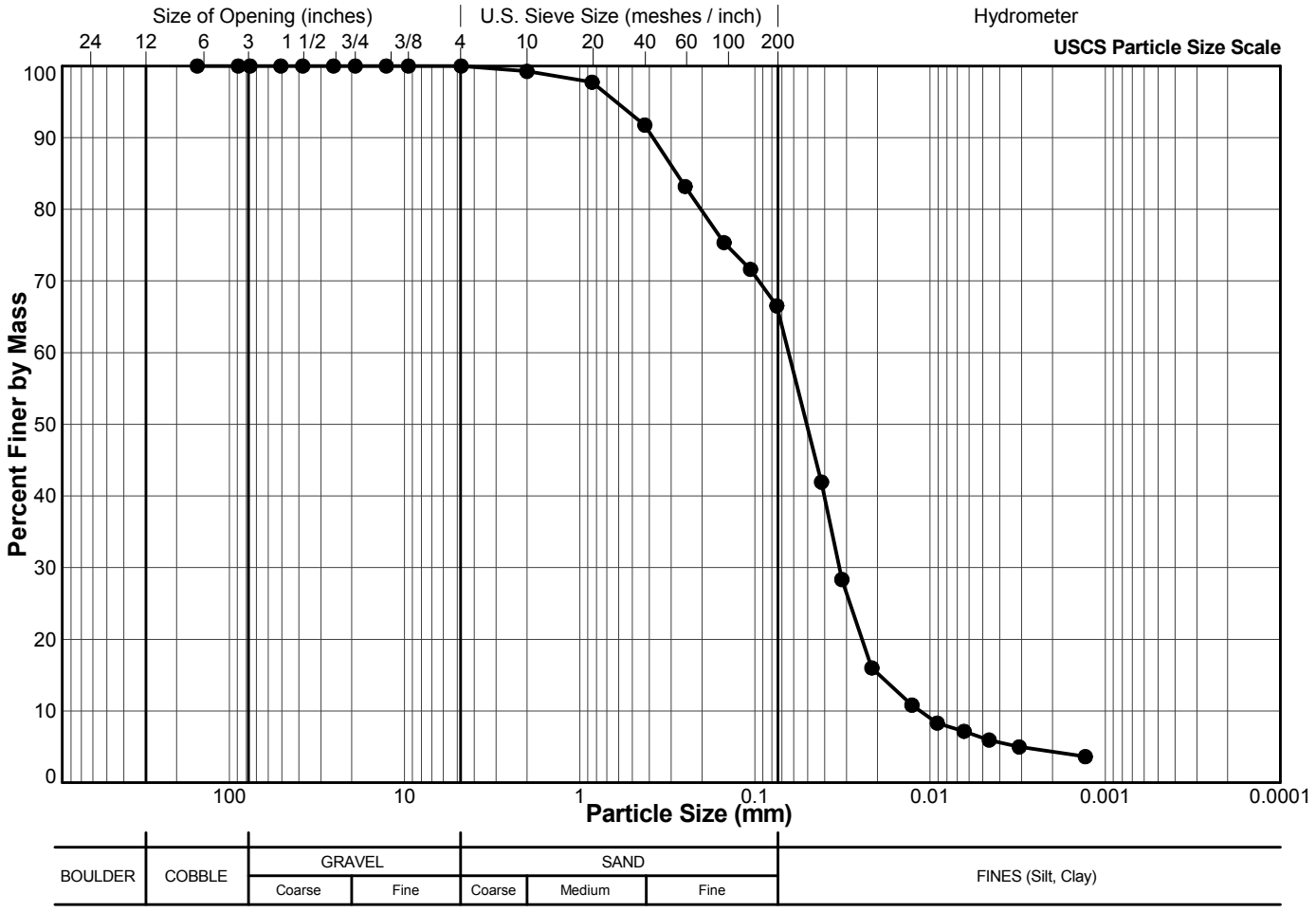
SUMMARY OF PARTICLE SIZE DISTRIBUTION

ASTM D 422

Client: ALS
Project: L1829679 - LaBerge
Location: Clinton Creek, Yukon
Project No.: 1667729 **Phase:** 1000

Sample Location: LaBerge
Sample No.: R-2A
Depth (m): N/A
Lab Schedule No.:



Legend

Sieve Size (USS)	(mm)	Particle Size (mm)	Percent Passing
6"	152.4		100.0
3.5"	88.9		100.0
3"	76.2		100.0
2"	50.8		100.0
1 1/2"	38.1		100.0
1"	25.4		100.0
3/4"	19.1		100.0
1/2"	12.7		100.0
3/8"	9.5		100.0
#4 US MESH	4.75		100.0
#10 US MESH	2		99.3
#20 US MESH	0.85		97.7
#40 US MESH	0.425		91.8
#60 US MESH	0.25		83.2
#100 US MESH	0.15		75.4
#140 US MESH	0.106		71.6
#200 US MESH	0.075		66.5
		0.0417	41.9
		0.0319	28.3
		0.0215	16.0
		0.0127	10.8
		0.0091	8.3
		0.0064	7.2
		0.0046	5.9
		0.0031	5.0
		0.0013	3.6

LH/OA	11/10/2016	LH	11/15/2016
Tech	Date	Checked	Date

National IM Server:GINT_GAL_NATIONALIM Unique Project ID:1467 Output Form:_LAB_PARTICLE SIZE (W/ GRADATIONS) 2015 lhu 15/11/16

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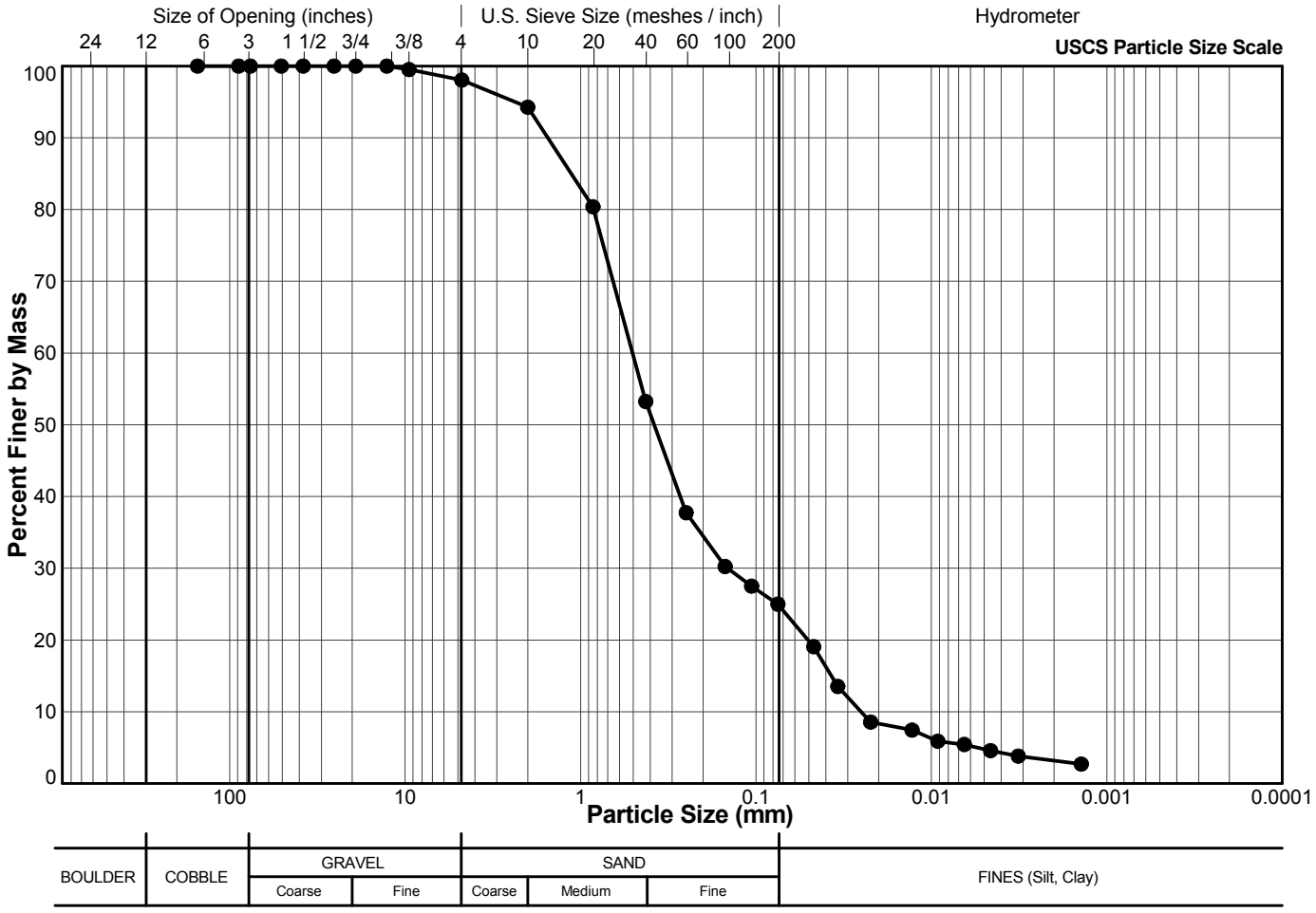
SUMMARY OF PARTICLE SIZE DISTRIBUTION

ASTM D 422

Client: ALS
Project: L1829679 - LaBerge
Location: Clinton Creek, Yukon
Project No.: 1667729 **Phase:** 1000

Sample Location: LaBerge
Sample No.: R-2B
Depth (m): N/A
Lab Schedule No.:



Legend

Sieve Size (USS)	(mm)	Particle Size (mm)	Percent Passing
6"	152.4		100.0
3.5"	88.9		100.0
3"	76.2		100.0
2"	50.8		100.0
1 1/2"	38.1		100.0
1"	25.4		100.0
3/4"	19.1		100.0
1/2"	12.7		100.0
3/8"	9.5		99.5
#4 US MESH	4.75		98.1
#10 US MESH	2		94.3
#20 US MESH	0.85		80.4
#40 US MESH	0.425		53.2
#60 US MESH	0.25		37.7
#100 US MESH	0.15		30.2
#140 US MESH	0.106		27.5
#200 US MESH	0.075		25.0
		0.0469	19.1
		0.0342	13.5
		0.0222	8.6
		0.0129	7.4
		0.0092	5.9
		0.0065	5.4
		0.0046	4.6
		0.0032	3.8
		0.0014	2.7

LH/OA	11/10/2016	LH	11/15/2016
Tech	Date	Checked	Date

National IM Server:GINT_GAL_NATIONALIM Unique Project ID:1467 Output Form:_LAB_PARTICLE SIZE (W/ GRADATIONS) 2015 lhu 15/11/16

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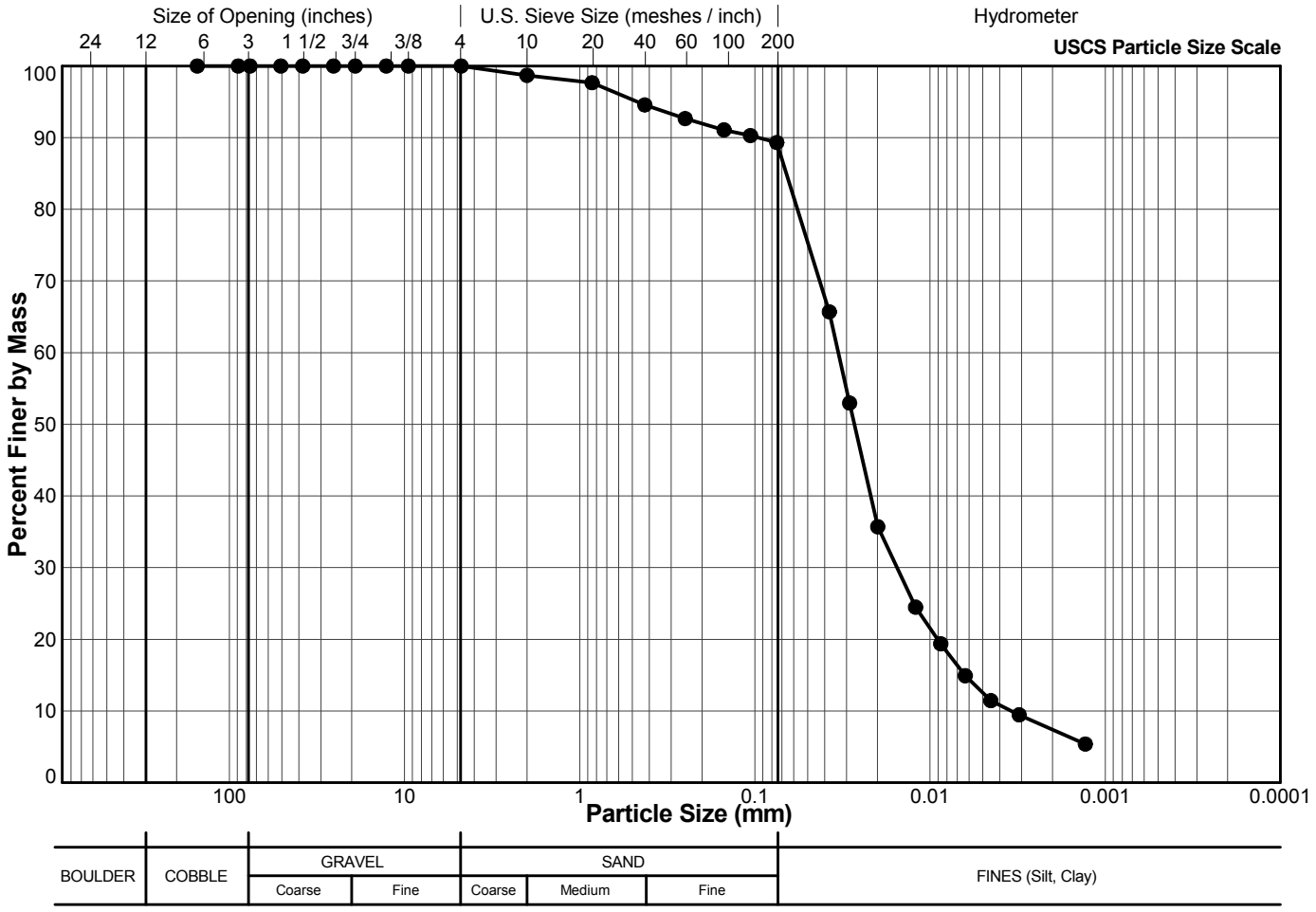
SUMMARY OF PARTICLE SIZE DISTRIBUTION

ASTM D 422

Client: ALS
Project: L1829679 - LaBerge
Location: Clinton Creek, Yukon
Project No.: 1667729 **Phase:** 1000

Sample Location: LaBerge
Sample No.: R-2C
Depth (m): N/A
Lab Schedule No.:



Legend

Sieve Size (USS)	(mm)	Particle Size (mm)	Percent Passing
6"	152.4		100.0
3.5"	88.9		100.0
3"	76.2		100.0
2"	50.8		100.0
1 1/2"	38.1		100.0
1"	25.4		100.0
3/4"	19.1		100.0
1/2"	12.7		100.0
3/8"	9.5		100.0
#4 US MESH	4.75		100.0
#10 US MESH	2		98.7
#20 US MESH	0.85		97.7
#40 US MESH	0.425		94.6
#60 US MESH	0.25		92.7
#100 US MESH	0.15		91.1
#140 US MESH	0.106		90.3
#200 US MESH	0.075		89.3
		0.0376	65.7
		0.0288	53.0
		0.0199	35.7
		0.0121	24.5
		0.0087	19.4
		0.0063	14.9
		0.0045	11.4
		0.0031	9.5
		0.0013	5.4

LH/OA	11/10/2016	LH	11/15/2016
Tech	Date	Checked	Date

National IM Server:GINT_GAL_NATIONALIM Unique Project ID:1467 Output Form:_LAB_PARTICLE SIZE (W/ GRADATIONS) 2015 lhu 15/11/16

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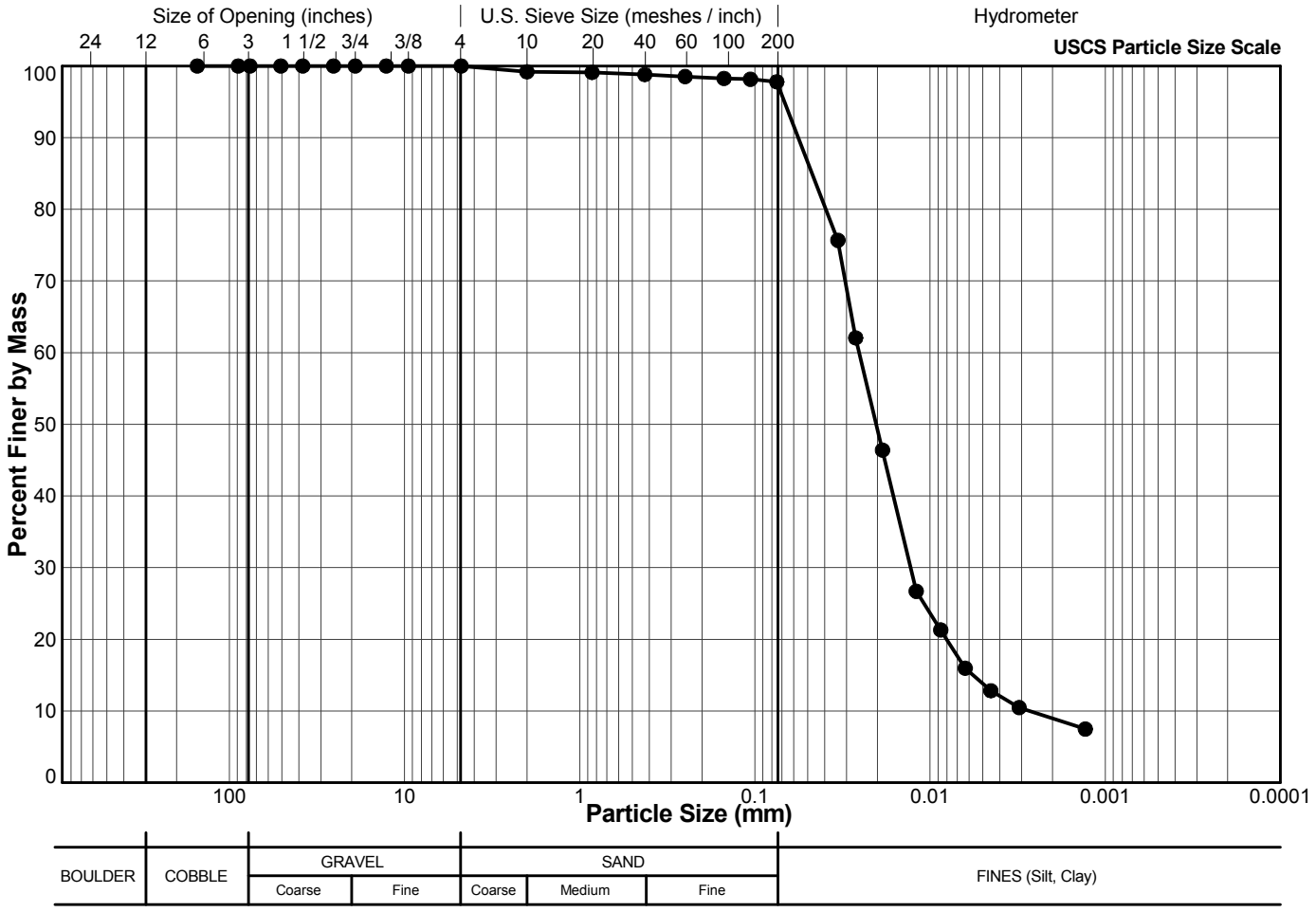
SUMMARY OF PARTICLE SIZE DISTRIBUTION

ASTM D 422

Client: ALS
Project: L1829679 - LaBerge
Location: Clinton Creek, Yukon
Project No.: 1667729 **Phase:** 1000

Sample Location: LaBerge
Sample No.: R-3C
Depth (m): N/A
Lab Schedule No.:



Legend

Sieve Size (USS)	(mm)	Particle Size (mm)	Percent Passing
6"	152.4		100.0
3.5"	88.9		100.0
3"	76.2		100.0
2"	50.8		100.0
1 1/2"	38.1		100.0
1"	25.4		100.0
3/4"	19.1		100.0
1/2"	12.7		100.0
3/8"	9.5		100.0
#4 US MESH	4.75		100.0
#10 US MESH	2		99.2
#20 US MESH	0.85		99.1
#40 US MESH	0.425		98.8
#60 US MESH	0.25		98.5
#100 US MESH	0.15		98.3
#140 US MESH	0.106		98.2
#200 US MESH	0.075		97.8
		0.0336	75.7
		0.0266	62.1
		0.0187	46.4
		0.0120	26.7
		0.0087	21.3
		0.0063	16.0
		0.0045	12.8
		0.0031	10.5
		0.0013	7.5

LH/OA	11/10/2016	LH	11/15/2016
Tech	Date	Checked	Date

National IM Server:GINT_GAL_NATIONALIM Unique Project ID:1467 Output Form:_LAB_PARTICLE SIZE (W/ GRADATIONS) 2015 lhu 15/11/16

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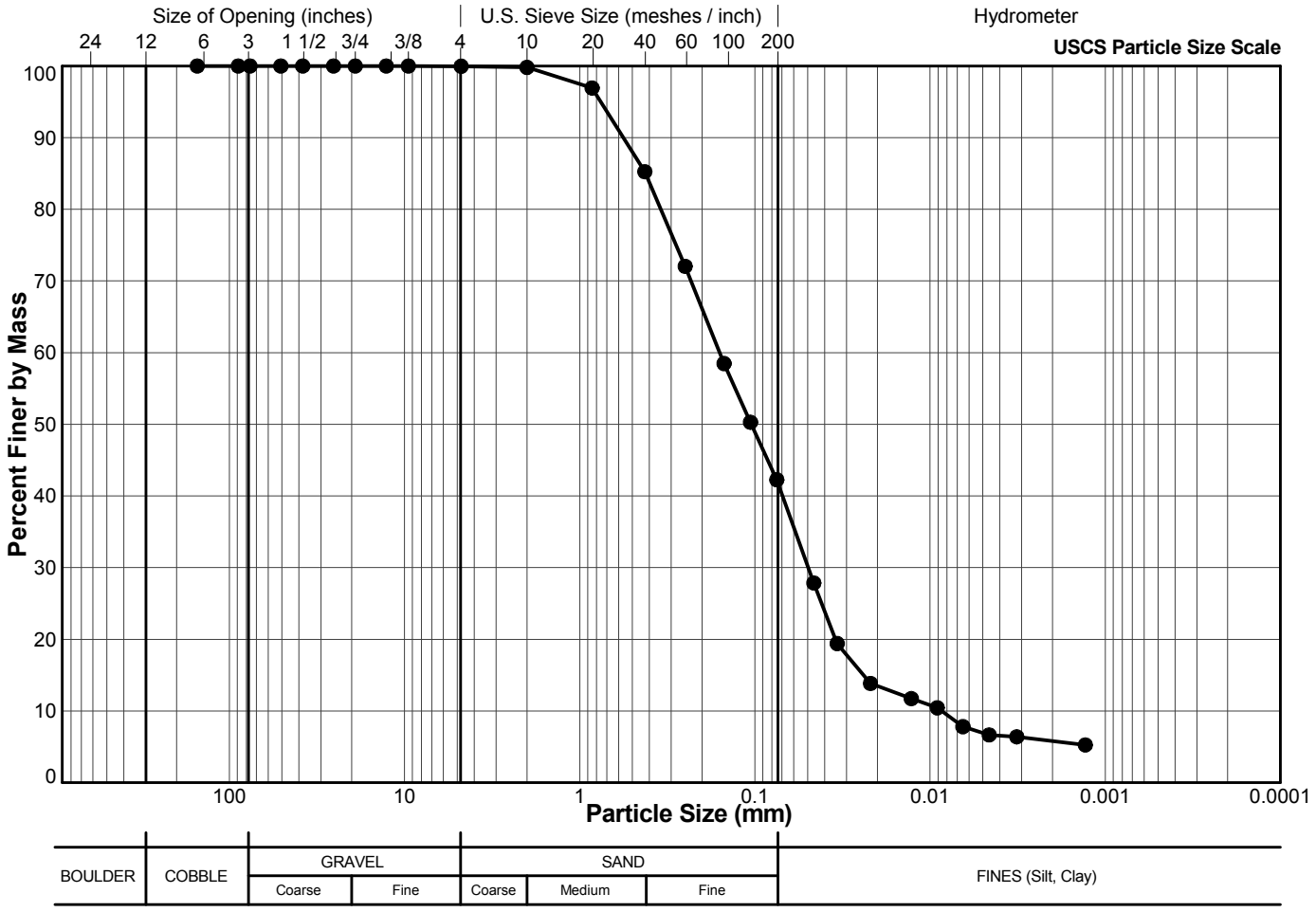
SUMMARY OF PARTICLE SIZE DISTRIBUTION

ASTM D 422

Client: ALS
Project: L1829679 - LaBerge
Location: Clinton Creek, Yukon
Project No.: 1667729 **Phase:** 1000

Sample Location: LaBerge
Sample No.: R-4A
Depth (m): N/A
Lab Schedule No.:



Legend

Sieve Size (USS)	(mm)	Particle Size (mm)	Percent Passing
6"	152.4		100.0
3.5"	88.9		100.0
3"	76.2		100.0
2"	50.8		100.0
1 1/2"	38.1		100.0
1"	25.4		100.0
3/4"	19.1		100.0
1/2"	12.7		100.0
3/8"	9.5		100.0
#4 US MESH	4.75		100.0
#10 US MESH	2		99.8
#20 US MESH	0.85		96.9
#40 US MESH	0.425		85.3
#60 US MESH	0.25		72.0
#100 US MESH	0.15		58.5
#140 US MESH	0.106		50.3
#200 US MESH	0.075		42.3
		0.0461	27.9
		0.0339	19.4
		0.0219	13.8
		0.0128	11.7
		0.0091	10.4
		0.0065	7.8
		0.0046	6.7
		0.0032	6.4
		0.0013	5.3

LH/OA	11/9/2016	LH	11/15/2016
Tech	Date	Checked	Date

National IM Server:GINT_GAL_NATIONALIM Unique Project ID:1467 Output Form:_LAB_PARTICLE SIZE (W/ GRADATIONS) 2015 lhu 15/11/16

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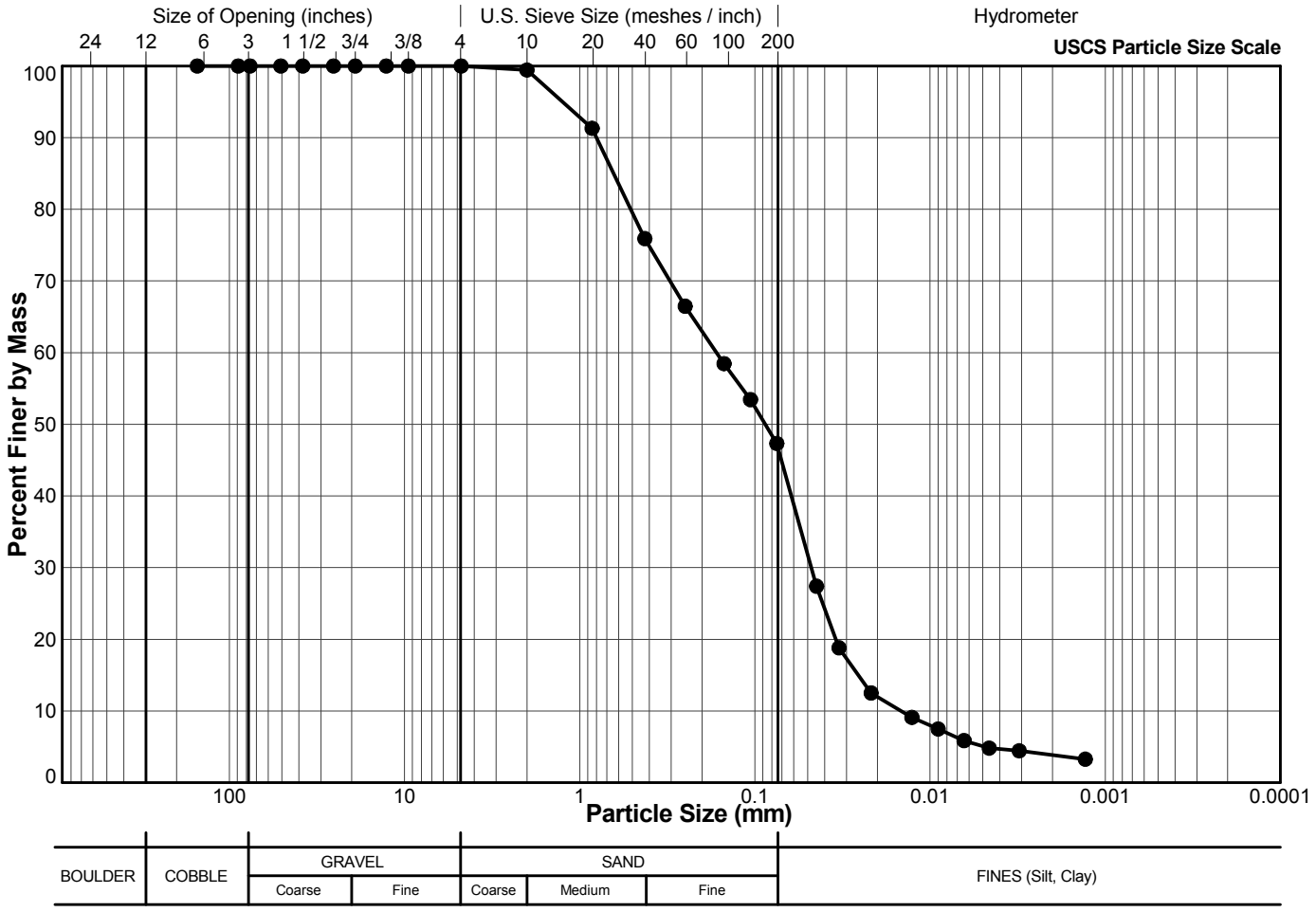
SUMMARY OF PARTICLE SIZE DISTRIBUTION

ASTM D 422

Client: ALS
Project: L1829679 - LaBerge
Location: Clinton Creek, Yukon
Project No.: 1667729 **Phase:** 1000

Sample Location: LaBerge
Sample No.: R-4C
Depth (m): N/A
Lab Schedule No.:



Legend

Sieve Size (USS)	(mm)	Particle Size (mm)	Percent Passing
6"	152.4		100.0
3.5"	88.9		100.0
3"	76.2		100.0
2"	50.8		100.0
1 1/2"	38.1		100.0
1"	25.4		100.0
3/4"	19.1		100.0
1/2"	12.7		100.0
3/8"	9.5		100.0
#4 US MESH	4.75		100.0
#10 US MESH	2		99.4
#20 US MESH	0.85		91.3
#40 US MESH	0.425		75.9
#60 US MESH	0.25		66.5
#100 US MESH	0.15		58.5
#140 US MESH	0.106		53.5
#200 US MESH	0.075		47.3
		0.0445	27.4
		0.0331	18.8
		0.0217	12.5
		0.0127	9.1
		0.0090	7.5
		0.0064	5.9
		0.0046	4.8
		0.0031	4.4
		0.0013	3.3

LH/OA	11/9/2016	LH	11/15/2016
Tech	Date	Checked	Date

National IM Server:GINT_GAL_NATIONALIM Unique Project ID:1467 Output Form:_LAB_PARTICLE SIZE (W/ GRADATIONS) 2015 lhu 15/11/16

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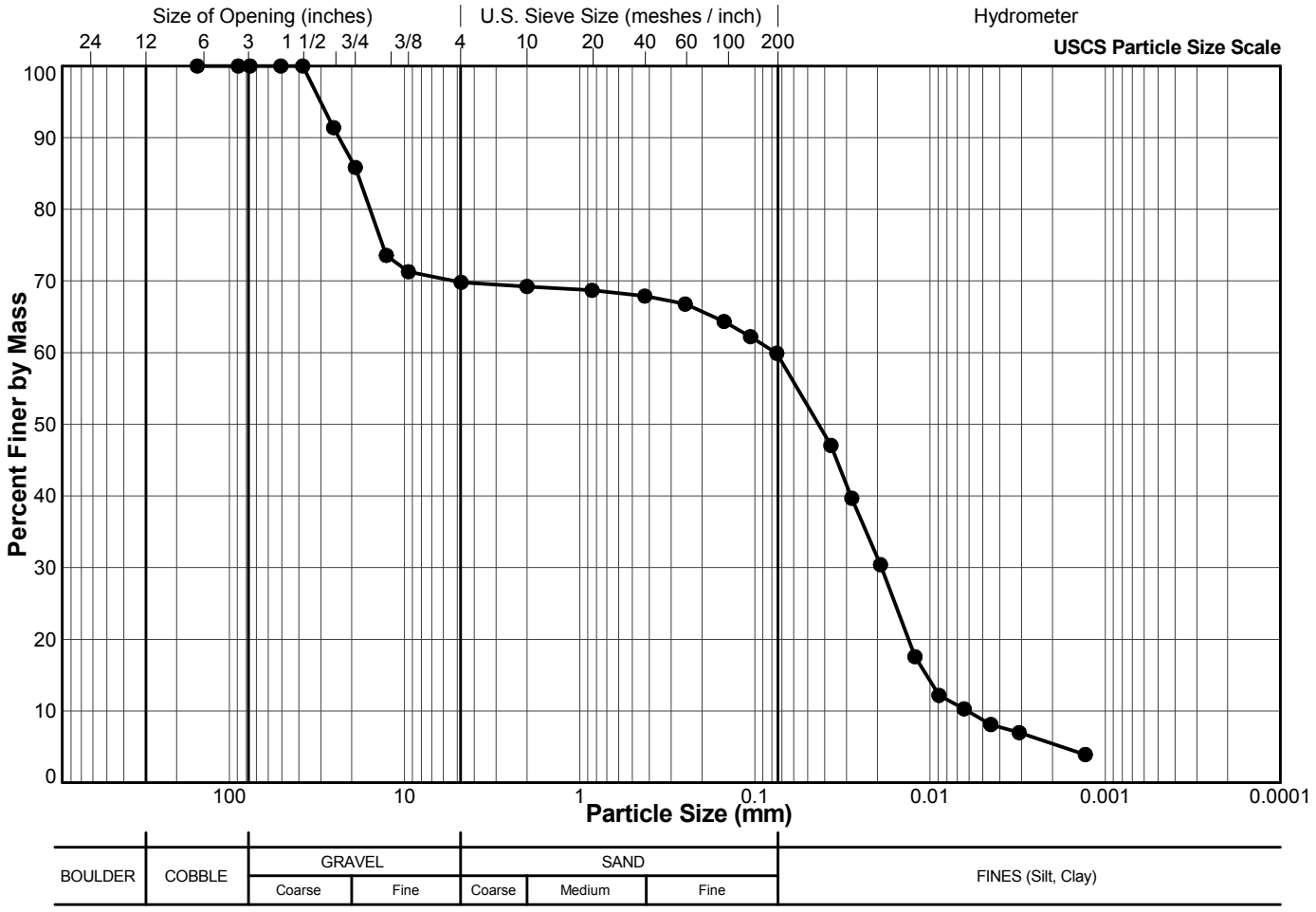
SUMMARY OF PARTICLE SIZE DISTRIBUTION

ASTM D 422

Client: ALS
Project: L1829679 - LaBerge
Location: Clinton Creek, Yukon
Project No.: 1667729 **Phase:** 1000

Sample Location: LaBerge
Sample No.: R-6A
Depth (m): N/A
Lab Schedule No.:



Legend

Sieve Size (USS)	(mm)	Particle Size (mm)	Percent Passing
6"	152.4		100.0
3.5"	88.9		100.0
3"	76.2		100.0
2"	50.8		100.0
1 1/2"	38.1		100.0
1"	25.4		91.4
3/4"	19.1		85.8
1/2"	12.7		73.6
3/8"	9.5		71.3
#4 US MESH	4.75		69.8
#10 US MESH	2		69.2
#20 US MESH	0.85		68.7
#40 US MESH	0.425		67.9
#60 US MESH	0.25		66.8
#100 US MESH	0.15		64.4
#140 US MESH	0.106		62.2
#200 US MESH	0.075		59.9
		0.0368	47.1
		0.0280	39.7
		0.0192	30.4
		0.0122	17.6
		0.0089	12.2
		0.0064	10.3
		0.0045	8.1
		0.0031	7.0
		0.0013	3.9

LH/OA	11/10/2016	LH	11/15/2016
Tech	Date	Checked	Date

National IM Server:GINT_GAL_NATIONALIM Unique Project ID:1467 Output Form:_LAB_PARTICLE SIZE (W/ GRADATIONS) 2015 lhu 15/11/16

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MOISTURE, ASH, AND ORGANIC MATTER OF ORGANIC SOILS		Reference(s) ASTM D2974
Client:	ALS	**Test Pit:** -
Project:	L1829672 - LaBerge	**Sample:** E-1A
Location:	Clinton Creek, Yukon	**Depth (m):** N/A
Project No.:	1667729-1000	**Lab ID No:** 440
Preparation Method:	Method A	**Other Remarks:**
Oven Temperature:	110±5°C	
Furnace Temperature:	440±22°C	

Moisture Content %	35.8
Ash Content %	97.5
Organic Matter %	2.5

Note: percentages are based on oven-dried soil mass

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OA/LH	November 8, 2016	LH	November 12, 2016
TESTED BY	DATE	CHECKED BY	DATE

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MOISTURE, ASH, AND ORGANIC MATTER OF ORGANIC SOILS		Reference(s) ASTM D2974
Client:	ALS	**Test Pit:** -
Project:	L1829672 - LaBerge	**Sample:** E-1B
Location:	Clinton Creek, Yukon	**Depth (m):** N/A
Project No.:	1667729-1000	**Lab ID No:** 440
Preparation Method:	Method A	**Other Remarks:**
Oven Temperature:	110±5°C	
Furnace Temperature:	440±22°C	

Moisture Content %	22.0
Ash Content %	97.6
Organic Matter %	2.4

Note: percentages are based on oven-dried soil mass

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MOISTURE, ASH, AND ORGANIC MATTER OF ORGANIC SOILS		Reference(s) ASTM D2974
Client:	ALS	**Test Pit:** -
Project:	L1829672 - LaBerge	**Sample:** E-1C
Location:	Clinton Creek, Yukon	**Depth (m):** N/A
Project No.:	1667729-1000	**Lab ID No:** 440
Preparation Method:	Method A	**Other Remarks:**
Oven Temperature:	110±5°C	
Furnace Temperature:	440±22°C	

Moisture Content %	22.1
Ash Content %	98.4
Organic Matter %	1.6

Note: percentages are based on oven-dried soil mass

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MOISTURE, ASH, AND ORGANIC MATTER OF ORGANIC SOILS		Reference(s) ASTM D2974
Client:	ALS	**Test Pit:** -
Project:	L1829672 - LaBerge	**Sample:** E-2A
Location:	Clinton Creek, Yukon	**Depth (m):** N/A
Project No.:	1667729-1000	**Lab ID No:** 440
Preparation Method:	Method A	**Other Remarks:**
Oven Temperature:	110±5°C	
Furnace Temperature:	440±22°C	

Moisture Content %	27.5
Ash Content %	98.5
Organic Matter %	1.5

Note: percentages are based on oven-dried soil mass

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MOISTURE, ASH, AND ORGANIC MATTER OF ORGANIC SOILS		Reference(s) ASTM D2974
Client:	ALS	**Test Pit:** -
Project:	L1829672 - LaBerge	**Sample:** E-2B
Location:	Clinton Creek, Yukon	**Depth (m):** N/A
Project No.:	1667729-1000	**Lab ID No:** 440
Preparation Method:	Method A	**Other Remarks:**
Oven Temperature:	110±5°C	
Furnace Temperature:	440±22°C	

Moisture Content %	32.0
Ash Content %	97.6
Organic Matter %	2.4

Note: percentages are based on oven-dried soil mass

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MOISTURE, ASH, AND ORGANIC MATTER OF ORGANIC SOILS		Reference(s) ASTM D2974
Client:	ALS	**Test Pit:** -
Project:	L1829672 - LaBerge	**Sample:** E-2C
Location:	Clinton Creek, Yukon	**Depth (m):** N/A
Project No.:	1667729-1000	**Lab ID No:** 440
Preparation Method:	Method A	**Other Remarks:**
Oven Temperature:	110±5°C	
Furnace Temperature:	440±22°C	

Moisture Content %	29.8
Ash Content %	97.8
Organic Matter %	2.2

Note: percentages are based on oven-dried soil mass

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MOISTURE, ASH, AND ORGANIC MATTER OF ORGANIC SOILS		Reference(s) ASTM D2974
Client:	ALS	**Test Pit:** -
Project:	L1829672 - LaBerge	**Sample:** E-3A
Location:	Clinton Creek, Yukon	**Depth (m):** N/A
Project No.:	1667729-1000	**Lab ID No:** 440
Preparation Method:	Method A	**Other Remarks:**
Oven Temperature:	110±5°C	
Furnace Temperature:	440±22°C	

Moisture Content %	30.3
Ash Content %	96.7
Organic Matter %	3.3

Note: percentages are based on oven-dried soil mass

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MOISTURE, ASH, AND ORGANIC MATTER OF ORGANIC SOILS		Reference(s) ASTM D2974
Client:	ALS	**Test Pit:** -
Project:	L1829672 - LaBerge	**Sample:** E-3B
Location:	Clinton Creek, Yukon	**Depth (m):** N/A
Project No.:	1667729-1000	**Lab ID No:** 440
Preparation Method:	Method A	**Other Remarks:**
Oven Temperature:	110±5°C	
Furnace Temperature:	440±22°C	

Moisture Content %	27.0
Ash Content %	97.2
Organic Matter %	2.8

Note: percentages are based on oven-dried soil mass

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OA/LH	November 8, 2016	LH	November 12, 2016
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MOISTURE, ASH, AND ORGANIC MATTER OF ORGANIC SOILS		Reference(s) ASTM D2974
Client:	ALS	**Test Pit:** -
Project:	L1829672 - LaBerge	**Sample:** E-3C
Location:	Clinton Creek, Yukon	**Depth (m):** N/A
Project No.:	1667729-1000	**Lab ID No:** 440
Method:	Method A	**Other Remarks:**
Oven Temperature	110±5°C	
Furnace Temperature	440±22°C	

Moisture Content %	26.7
Ash Content %	97.3
Organic Matter %	2.7

Note: Moisture content as a percentage of oven-dried mass

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OA/LH	November 8, 2016	NAME	DATE
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MOISTURE, ASH, AND ORGANIC MATTER OF ORGANIC SOILS		Reference(s) ASTM D2974
Client:	ALS	**Test Pit:** -
Project:	L1829672 - LaBerge	**Sample:** E-4A
Location:	Clinton Creek, Yukon	**Depth (m):** N/A
Project No.:	1667729-1000	**Lab ID No:** 440
Preparation Method:	Method A	**Other Remarks:**
Oven Temperature:	110±5°C	
Furnace Temperature:	440±22°C	

Moisture Content %	25.8
Ash Content %	97.8
Organic Matter %	2.2

Note: percentages are based on oven-dried soil mass

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MOISTURE, ASH, AND ORGANIC MATTER OF ORGANIC SOILS		Reference(s) ASTM D2974
Client:	ALS	**Test Pit:** -
Project:	L1829672 - LaBerge	**Sample:** E-4B
Location:	Clinton Creek, Yukon	**Depth (m):** N/A
Project No.:	1667729-1000	**Lab ID No:** 440
Preparation Method:	Method A	**Other Remarks:**
Oven Temperature:	110±5°C	
Furnace Temperature:	440±22°C	

Moisture Content %	30.7
Ash Content %	96.4
Organic Matter %	3.6

Note: percentages are based on oven-dried soil mass

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MOISTURE, ASH, AND ORGANIC MATTER OF ORGANIC SOILS		Reference(s) ASTM D2974
Client:	ALS	**Test Pit:** -
Project:	L1829672 - LaBerge	**Sample:** E-4C
Location:	Clinton Creek, Yukon	**Depth (m):** N/A
Project No.:	1667729-1000	**Lab ID No:** 440
Preparation Method:	Method A	**Other Remarks:**
Oven Temperature:	110±5°C	
Furnace Temperature:	440±22°C	

Moisture Content %	29.7
Ash Content %	96.3
Organic Matter %	3.7

Note: percentages are based on oven-dried soil mass

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MOISTURE, ASH, AND ORGANIC MATTER OF ORGANIC SOILS		Reference(s) ASTM D2974
Client:	ALS	**Test Pit:** -
Project:	L1829672 - LaBerge	**Sample:** E-8A
Location:	Clinton Creek, Yukon	**Depth (m):** N/A
Project No.:	1667729-1000	**Lab ID No:** 440
Preparation Method:	Method A	**Other Remarks:**
Oven Temperature:	110±5°C	
Furnace Temperature:	440±22°C	

Moisture Content %	10.0
Ash Content %	99.4
Organic Matter %	0.6

Note: percentages are based on oven-dried soil mass

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MOISTURE, ASH, AND ORGANIC MATTER OF ORGANIC SOILS		Reference(s) ASTM D2974
Client:	ALS	**Test Pit:** -
Project:	L1829672 - LaBerge	**Sample:** E-8B
Location:	Clinton Creek, Yukon	**Depth (m):** N/A
Project No.:	1667729-1000	**Lab ID No:** 440
Preparation Method:	Method A	**Other Remarks:**
Oven Temperature:	110±5°C	
Furnace Temperature:	440±22°C	

Moisture Content %	5.6
Ash Content %	99.6
Organic Matter %	0.4

Note: percentages are based on oven-dried soil mass

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MOISTURE, ASH, AND ORGANIC MATTER OF ORGANIC SOILS		Reference(s) ASTM D2974
Client:	ALS	**Test Pit:** -
Project:	L1829672 - LaBerge	**Sample:** E-8C
Location:	Clinton Creek, Yukon	**Depth (m):** N/A
Project No.:	1667729-1000	**Lab ID No:** 440
Preparation Method:	Method A	**Other Remarks:**
Oven Temperature:	110±5°C	
Furnace Temperature:	440±22°C	

Moisture Content %	6.5
Ash Content %	99.5
Organic Matter %	0.5

Note: percentages are based on oven-dried soil mass

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MOISTURE, ASH, AND ORGANIC MATTER OF ORGANIC SOILS		Reference(s): ASTM D2974
Client:	ALS	**Test Pit:** -
Project:	L1829672 - LaBerge	**Sample:** PORCUPINE CR-A
Location:	Clinton Creek, Yukon	**Depth (m):** N/A
Project No.:	1667729-1000	**Lab ID No:** 440
Preparation Method:	Method A	**Other Remarks:**
Oven Temperature:	110±5°C	
Furnace Temperature:	440±22°C	

Moisture Content %	19.1
Ash Content %	97.9
Organic Matter %	2.1

Note: percentages are based on oven-dried soil mass

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MOISTURE, ASH, AND ORGANIC MATTER OF ORGANIC SOILS		Reference(s) ASTM D2974
Client:	ALS	**Test Pit:** -
Project:	L1829672 - LaBerge	**Sample:** PORCUPINE CR-B
Location:	Clinton Creek, Yukon	**Depth (m):** N/A
Project No.:	1667729-1000	**Lab ID No:** 440
Preparation Method:	Method A	**Other Remarks:**
Oven Temperature:	110±5°C	
Furnace Temperature:	440±22°C	

Moisture Content %	24.4
Ash Content %	97.5
Organic Matter %	2.5

Note: percentages are based on oven-dried soil mass

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MOISTURE, ASH, AND ORGANIC MATTER OF ORGANIC SOILS		Reference(s) ASTM D2974
Client:	ALS	**Test Pit:** -
Project:	L1829672 - LaBerge	**Sample:** PORCUPINE CR-C
Location:	Clinton Creek, Yukon	**Depth (m):** N/A
Project No.:	1667729-1000	**Lab ID No:** 440
Preparation Method:	Method A	**Other Remarks:**
Oven Temperature:	110±5°C	
Furnace Temperature:	440±22°C	

Moisture Content %	18.1
Ash Content %	98.3
Organic Matter %	1.7

Note: percentages are based on oven-dried soil mass

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MOISTURE, ASH, AND ORGANIC MATTER OF ORGANIC SOILS		Reference(s) ASTM D2974
Client:	ALS	**Test Pit:** -
Project:	L1829672 - LaBerge	**Sample:** R-2A
Location:	Clinton Creek, Yukon	**Depth (m):** N/A
Project No.:	1667729-1000	**Lab ID No:** 440
Preparation Method:	Method A	**Other Remarks:**
Oven Temperature:	110±5°C	
Furnace Temperature:	440±22°C	

Moisture Content %	44.7
Ash Content %	94.3
Organic Matter %	5.7

Note: percentages are based on oven-dried soil mass

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MOISTURE, ASH, AND ORGANIC MATTER OF ORGANIC SOILS		Reference(s) ASTM D2974
Client:	ALS	**Test Pit:** -
Project:	L1829672 - LaBerge	**Sample:** R-2B
Location:	Clinton Creek, Yukon	**Depth (m):** N/A
Project No.:	1667729-1000	**Lab ID No:** 440
Preparation Method:	Method A	**Other Remarks:**
Oven Temperature:	110±5°C	
Furnace Temperature:	440±22°C	

Moisture Content %	23.1
Ash Content %	97.6
Organic Matter %	2.4

Note: percentages are based on oven-dried soil mass

** The test data given herein pertain to the sample provided only. This report constitutes a testing service only. Interpretation of the data can be provided upon request.*

OA/LH	November 8, 2016	LH	November 12, 2016
TESTED BY	DATE	CHECKED BY	DATE

Golder Associates Ltd
#300 - 3811 North Fraser Way Burnaby, British Columbia Canada V5J 5J2
Tel: (604) 412 6899 Fax: (604) 412 6812 www.golder.com

Golder Associates: Operations in Africa, Asia, Australasia, Europe, North America and South America

Golder Associates

MOISTURE, ASH, AND ORGANIC MATTER OF ORGANIC SOILS		Reference(s) ASTM D2974
Client:	ALS	**Test Pit:** -
Project:	L1829672 - LaBerge	**Sample:** R-2C
Location:	Clinton Creek, Yukon	**Depth (m):** N/A
Project No.:	1667729-1000	**Lab ID No:** 440
Preparation Method:	Method A	**Other Remarks:**
Oven Temperature:	110±5°C	
Furnace Temperature:	440±22°C	

Moisture Content %	95.5
Ash Content %	83.6
Organic Matter %	16.4

Note: percentages are based on oven-dried soil mass

** The test data given herein pertain to the sample provided only. This report constitutes a testing service only. Interpretation of the data can be provided upon request.*

OA/LH	November 8, 2016	LH	November 12, 2016
TESTED BY	DATE	CHECKED BY	DATE

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MOISTURE, ASH, AND ORGANIC MATTER OF ORGANIC SOILS		Reference(s) ASTM D2974
Client:	ALS	**Test Pit:** -
Project:	L1829672 - LaBerge	**Sample:** R-3C
Location:	Clinton Creek, Yukon	**Depth (m):** N/A
Project No.:	1667729-1000	**Lab ID No:** 440
Preparation Method:	Method A	**Other Remarks:**
Oven Temperature:	110±5°C	
Furnace Temperature:	440±22°C	

Moisture Content %	49.9
Ash Content %	91.2
Organic Matter %	8.8

Note: percentages are based on oven-dried soil mass

** The test data given herein pertain to the sample provided only. This report constitutes a testing service only. Interpretation of the data can be provided upon request.*

OA/LH	November 8, 2016	LH	November 12, 2016
TESTED BY	DATE	CHECKED BY	DATE

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MOISTURE, ASH, AND ORGANIC MATTER OF ORGANIC SOILS		Reference(s) ASTM D2974
Client:	ALS	**Test Pit:** -
Project:	L1829672 - LaBerge	**Sample:** R-4A
Location:	Clinton Creek, Yukon	**Depth (m):** N/A
Project No.:	1667729-1000	**Lab ID No:** 440
Preparation Method:	Method A	**Other Remarks:**
Oven Temperature:	110±5°C	
Furnace Temperature:	440±22°C	

Moisture Content %	23.6
Ash Content %	97.8
Organic Matter %	2.2

Note: percentages are based on oven-dried soil mass

** The test data given herein pertain to the sample provided only. This report constitutes a testing service only. Interpretation of the data can be provided upon request.*

OA/LH	November 8, 2016	LH	November 12, 2016
TESTED BY	DATE	CHECKED BY	DATE

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Golder Associates

MOISTURE, ASH, AND ORGANIC MATTER OF ORGANIC SOILS		Reference(s) ASTM D2974
Client:	ALS	**Test Pit:** -
Project:	L1829672 - LaBerge	**Sample:** R-4C
Location:	Clinton Creek, Yukon	**Depth (m):** N/A
Project No.:	1667729-1000	**Lab ID No:** 440
Preparation Method:	Method A	**Other Remarks:**
Oven Temperature:	110±5°C	
Furnace Temperature:	440±22°C	

Moisture Content %	20.2
Ash Content %	97.9
Organic Matter %	2.1

Note: percentages are based on oven-dried soil mass

** The test data given herein pertain to the sample provided only. This report constitutes a testing service only. Interpretation of the data can be provided upon request.*

OA/LH	November 8, 2016	LH	November 12, 2016
TESTED BY	DATE	CHECKED BY	DATE

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Tel: (604) 412 6899 Fax: (604) 412 6812 www.golder.com

Golder Associates

MOISTURE, ASH, AND ORGANIC MATTER OF ORGANIC SOILS		Reference(s) ASTM D2974
Client:	ALS	**Test Pit:** -
Project:	L1829672 - LaBerge	**Sample:** R-6A
Location:	Clinton Creek, Yukon	**Depth (m):** N/A
Project No.:	1667729-1000	**Lab ID No:** 440
Preparation Method:	Method A	**Other Remarks:**
Oven Temperature:	110±5°C	
Furnace Temperature:	440±22°C	

Moisture Content %	46.1
Ash Content %	92.8
Organic Matter %	7.2

Note: percentages are based on oven-dried soil mass

** The test data given herein pertain to the sample provided only. This report constitutes a testing service only. Interpretation of the data can be provided upon request.*

OA/LH	November 8, 2016	LH	November 12, 2016
TESTED BY	DATE	CHECKED BY	DATE

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Golder Associates

MOISTURE, ASH, AND ORGANIC MATTER OF ORGANIC SOILS		Reference(s) ASTM D2974
Client:	ALS	**Test Pit:** -
Project:	L1829672 - LaBerge	**Sample:** E-6A
Location:	Clinton Creek, Yukon	**Depth (m):** N/A
Project No.:	1667729-1000	**Lab ID No:** 440
Preparation Method:	Method A	**Other Remarks:**
Oven Temperature:	110±5°C	
Furnace Temperature:	440±22°C	

Moisture Content %	28.3
Ash Content %	96.7
Organic Matter %	3.3

Note: percentages are based on oven-dried soil mass

** The test data given herein pertain to the sample provided only. This report constitutes a testing service only. Interpretation of the data can be provided upon request.*

OA/LH	November 8, 2016	LH	November 12, 2016
TESTED BY	DATE	CHECKED BY	DATE

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MOISTURE, ASH, AND ORGANIC MATTER OF ORGANIC SOILS		Reference(s) ASTM D2974
Client:	ALS	**Test Pit:** -
Project:	L1829672 - LaBerge	**Sample:** E-6B
Location:	Clinton Creek, Yukon	**Depth (m):** N/A
Project No.:	1667729-1000	**Lab ID No:** 440
Preparation Method:	Method A	**Other Remarks:**
Oven Temperature:	110±5°C	
Furnace Temperature:	440±22°C	

Moisture Content %	27.5
Ash Content %	97.5
Organic Matter %	2.5

Note: percentages are based on oven-dried soil mass

** The test data given herein pertain to the sample provided only. This report constitutes a testing service only. Interpretation of the data can be provided upon request.*

OA/LH	November 8, 2016	LH	November 12, 2016
TESTED BY	DATE	CHECKED BY	DATE

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MOISTURE, ASH, AND ORGANIC MATTER OF ORGANIC SOILS		Reference(s) ASTM D2974
Client:	ALS	**Test Pit:** -
Project:	L1829672 - LaBerge	**Sample:** E-6C
Location:	Clinton Creek, Yukon	**Depth (m):** N/A
Project No.:	1667729-1000	**Lab ID No:** 440
Preparation Method:	Method A	**Other Remarks:**
Oven Temperature:	110±5°C	
Furnace Temperature:	440±22°C	

Moisture Content %	28.9
Ash Content %	98.1
Organic Matter %	1.9

Note: percentages are based on oven-dried soil mass

** The test data given herein pertain to the sample provided only. This report constitutes a testing service only. Interpretation of the data can be provided upon request.*

OA/LH	November 8, 2016	LH	November 12, 2016
TESTED BY	DATE	CHECKED BY	DATE

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WATER CONTENT DETERMINATION

Reference(s)
ASTM D 2216

Client:	ALS	**Project No.:** 1667729 **Phase:** 1000	
Project:	L1829679 - LaBerge	**Lab Schedule No.:**	
Location:	Clinton Creek, Yukon		

Sample Location	Sample No.	Specimen No.	Depth Interval		Water Content (%)
			Depth (m)	Bottom (m)	
LaBerge	**E-1A**		0.00	0.00	**35.8**
LaBerge	**E-1B**		0.00	0.00	**22.0**
LaBerge	**E-1C**		0.00	0.00	**22.1**
LaBerge	**E-2A**		0.00	0.00	**27.5**
LaBerge	**E-2B**		0.00	0.00	**32.0**
LaBerge	**E-2C**		0.00	0.00	**29.8**
LaBerge	**E-3A**		0.00	0.00	**30.3**
LaBerge	**E-3B**		0.00	0.00	**27.0**
LaBerge	**E-3C**		0.00	0.00	**26.7**
LaBerge	**E-4A**		0.00	0.00	**25.8**
LaBerge	**E-4B**		0.00	0.00	**30.7**
LaBerge	**E-4C**		0.00	0.00	**29.7**
LaBerge	**E-6A**		0.00	0.00	**28.3**
LaBerge	**E-6B**		0.00	0.00	**27.5**
LaBerge	**E-6C**		0.00	0.00	**28.9**
LaBerge	**E-8A**		0.00	0.00	**10.0**
LaBerge	**E-8B**		0.00	0.00	**5.6**
LaBerge	**E-8C**		0.00	0.00	**6.5**
LaBerge	**PORCUPINE CR-A**		0.00	0.00	**19.1**
LaBerge	**PORCUPINE CR-B**		0.00	0.00	**24.4**
LaBerge	**PORCUPINE CR-C**		0.00	0.00	**18.1**
LaBerge	**R-2A**		0.00	0.00	**44.7**
LaBerge	**R-2B**		0.00	0.00	**23.1**
LaBerge	**R-3A**		0.00	0.00	**95.5**
LaBerge	**R-3C**		0.00	0.00	**49.9**
LaBerge	**R-4A**		0.00	0.00	**23.6**
LaBerge	**R-4C**		0.00	0.00	**20.2**
LaBerge	**R-6A**		0.00	0.00	**46.1**

LH	11/12/2016
Checked	Date

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WATER CONTENT DETERMINATION

Reference(s)
ASTM D 2216

Client:	ALS	**Project No.:** 1667729 **Phase:** 1000	
Project:	L1829679 - LaBerge	**Lab Schedule No.:**	
Location:	Clinton Creek, Yukon		

Sample Location	Sample No.	Specimen No.	Depth Interval		Water Content (%)
			Depth (m)	Bottom (m)	
LaBerge	**E-1A**		0.00	0.00	**35.8**
LaBerge	**E-1B**		0.00	0.00	**22.0**
LaBerge	**E-1C**		0.00	0.00	**22.1**
LaBerge	**E-2A**		0.00	0.00	**27.5**
LaBerge	**E-2B**		0.00	0.00	**32.0**
LaBerge	**E-2C**		0.00	0.00	**29.8**
LaBerge	**E-3A**		0.00	0.00	**30.3**
LaBerge	**E-3B**		0.00	0.00	**27.0**
LaBerge	**E-3C**		0.00	0.00	**26.7**
LaBerge	**E-4A**		0.00	0.00	**25.8**
LaBerge	**E-4B**		0.00	0.00	**30.7**
LaBerge	**E-4C**		0.00	0.00	**29.7**
LaBerge	**E-6A**		0.00	0.00	**28.3**
LaBerge	**E-6B**		0.00	0.00	**27.5**
LaBerge	**E-6C**		0.00	0.00	**28.9**
LaBerge	**E-8A**		0.00	0.00	**10.0**
LaBerge	**E-8B**		0.00	0.00	**5.6**
LaBerge	**E-8C**		0.00	0.00	**6.5**
LaBerge	**PORCUPINE CR-A**		0.00	0.00	**19.1**
LaBerge	**PORCUPINE CR-B**		0.00	0.00	**24.4**
LaBerge	**PORCUPINE CR-C**		0.00	0.00	**18.1**
LaBerge	**R-2A**		0.00	0.00	**44.7**
LaBerge	**R-2B**		0.00	0.00	**23.1**
LaBerge	**R-2C**		0.00	0.00	**95.5**
LaBerge	**R-3C**		0.00	0.00	**49.9**
LaBerge	**R-4A**		0.00	0.00	**23.6**
LaBerge	**R-4C**		0.00	0.00	**20.2**
LaBerge	**R-6A**		0.00	0.00	**46.1**

	LH	11/12/2016
	Checked	Date

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Chain of Custody (COC) / Analytical Request Form

Canada Toll Free: 1 800 668 9878

Affix ALS barcode label here (lab use only)

COC Number: 14 - 470676

Page 1 of 3

Report To		Report Format / Distribution		Select Service Level Below (Rush Turnaround Time (TAT) is not available for all tests)
Company:	Laberge Environmental Services	Select Report Format:	☑ PDF ☑ EXCEL ☐ EDD (DIGITAL)	R ☑ Regular (Standard TAT if received by 3pm)
Contact:	Bonnie Burns	Quality Control (QC) Report with Report	☐ Yes ☐ No	P ☐ Priority (2-4 business days if received by 3pm)
Address:	P.O. Box 21072, Whitehorse, YT	☑ Criteria on Report - provide details below if box checked		E ☐ Emergency (1-2 business days if received by 3pm)
		Select Distribution:	☑ EMAIL ☐ MAIL ☐ FAX	E2 ☐ Same day or weekend emergency if received by 10am – contact ALS for surcharge.
Phone:	867-668-6838	Email 1 or Fax	bonnieburns@northwestel.net	Specify Date Required for E2,E or P:
		Email 2		

Invoice To		Invoice Distribution	
	Same as Report To ☑ Yes ☐ No	Select Invoice Distribution:	☑ EMAIL ☐ MAIL ☐ FAX
	Copy of Invoice with Report ☐ Yes ☐ No	Email 1 or Fax	bonnieburns@northwestel.net
Company:	Laberge Environmental Services	Email 2	
Contact:	Bonnie Burns		

Project Information		Oil and Gas Required Fields (client use)	
ALS Quote #:	141612DN	Approver ID:	Cost Center:
Job #:	Clinton Creek	GL Account:	Routing Code:
PO / AFE:		Activity Code:	
LSD:		Location:	
ALS Lab Work Order # (lab use only)	L1829672	ALS Contact:	Sampler:

Analysis Request — Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below

ALS Sample # (lab use only)	Sample Identification and/or Coordinates (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	Metals, incl Hg	LOI	asbestos	particle size analysis	Number of Containers
	E-1A	6/9/16		Soil	✓	✓	✓	✓	2
	E-1B	6/9/16		"	✓	✓	✓	✓	2
	E-1C	6/9/16		"	✓	✓	✓	✓	2
	E-2A	6/9/16		"	✓	✓	✓	✓	2
	E-2B	6/9/16		"	✓	✓	✓	✓	2
	E-2C	6/9/16		"	✓	✓	✓	✓	2
	E-3A	6/9/16		"	✓	✓	✓	✓	2
	E-3B	6/9/16		"	✓	✓	✓	✓	2
	E-3C	6/9/16		"	✓	✓	✓	✓	2
	E-4A	5/9/16		"	✓	✓	✓	✓	2
	E-4B	5/9/16		"	✓	✓	✓	✓	2
	E-4C	5/9/16		"	✓	✓	✓	✓	2

L1829672-COFC

Drinking Water (DW) Samples[1] (client use)	Special Instructions / Specify Criteria to add on report (client Use)
Are samples taken from a Regulated DW System? ☐ Yes ☐ No	to meet CCME freshwater aquatic life guidelines
Are samples for human drinking water use? ☐ Yes ☐ No	

SAMPLE CONDITION AS RECEIVED (lab use only)

Frozen	☐	SIF Observations	Yes ☐	No ☐
Ice packs	Yes ☑	No ☐	Custody seal intact	Yes ☐	No ☐
Cooling Initiated	☑			

INITIAL COOLER TEMPERATURES °C	FINAL COOLER TEMPERATURES °C
7.0, NP	

SHIPMENT RELEASE (client use)			INITIAL SHIPMENT RECEPTION (lab use only)			FINAL SHIPMENT RECEPTION (lab use only)		
Released by:	Date:	Time:	Received by:	Date:	Time:	Received by:	Date:	Time:
Bonnie Burns	Sept 12/16		EHF	12 Sep 2016	10:09	RM	9/16/16	8:30am

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION — WHITE - LABORATORY COPY — YELLOW - CLIENT COPY

NA-FM-0326e v09 Front/04 January 2014

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY. By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.

1. If any water samples are taken from a **Regulated Drinking Water (DW) System**, please submit using an **Authorized DW COC form**.

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Chain of Custody (COC) / Analytical Request Form

Canada Toll Free: 1 800 668 9878

Affix ALS barcode label here (lab use only)

COC Number: 14 - 470677

Page 2 of 3

Report To
Company: Laberge Env. Services
Contact: Bonnie Burns
Address: PO Box 21092, Whitehorse, YT
Phone: 867-668-6838

Report Format / Distribution
Select Report Format: ☑ PDF ☑ EXCEL ☐ EDD (DIGITAL)
Quality Control (QC) Report with Report ☑ Yes ☐ No
☑ Criteria on Report - provide details below if box checked
Select Distribution: ☐ EMAIL ☐ MAIL ☐ FAX
Email 1 or Fax: bonnieburns@northwestel.net
Email 2

Select Service Level Below (Rush Turnaround Time (TAT) is not available for all tests)
R ☑ Regular (Standard TAT if received by 3pm)
P ☐ Priority (2-4 business days if received by 3pm)
E ☐ Emergency (1-2 business days if received by 3pm)
E2 ☐ Same day or weekend emergency if received by 10am – contact ALS for surcharge.
Specify Date Required for E2,E or P:

Invoice To Same as Report To ☑ Yes ☐ No
Copy of Invoice with Report ☑ Yes ☐ No
Company: Laberge Env. Serv.
Contact: Bonnie Burns

Invoice Distribution
Select Invoice Distribution: ☑ EMAIL ☐ MAIL ☐ FAX
Email 1 or Fax
Email 2

Project Information
ALS Quote #: 141612 DN
Job #: Clinton Creek
PO / AFE:
LSD:

Oil and Gas Required Fields (client use)
Approver ID: Cost Center:
GL Account: Routing Code:
Activity Code:
Location:

ALS Lab Work Order # (lab use only):
ALS Contact: Sampler:

Analysis Request
Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below

ALS Sample # (lab use only)	Sample Identification and/or Coordinates (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	Metals incl Hg	LOI	Asbestos	Particle size analysis	Number of Containers
	E-8A	8/9/16		Soil	✓	✓	L	✓	2
	E-8B	8/9/16		"	✓	✓	✓	✓	2
	E-8C	8/9/16		"	✓	✓	✓	✓	2
	Porcupine Cr - A	7/9/16		"	✓	✓	✓	✓	2
	Porcupine Cr - B	7/9/16		"	✓	✓	✓	✓	2
	Porcupine Cr - C	7/9/16		"	✓	✓	✓	✓	2
	R-1A	7/9/16		"	✓	✓	✓	✓	2
	R-1B	7/9/16		"	✓	✓	✓	✓	2
	R-1C	7/9/16		"	✓	✓	✓	✓	2
	R-2A	7/9/16		"	✓	✓	✓	✓	2
	R-2B	7/9/16		"	✓	✓	✓	✓	2
	R-2C	7/9/16		"	✓	✓	✓	✓	2

L1829672-COFC

Drinking Water (DW) Samples[1] (client use)
Are samples taken from a Regulated DW System? ☐ Yes ☐ No
Are samples for human drinking water use? ☐ Yes ☐ No

Special Instructions / Specify Criteria to add on report (client Use)

SAMPLE CONDITION AS RECEIVED (lab use only)
Frozen ☐ SIF Observations Yes ☐ No ☐
Ice packs Yes ☑ No ☐ Custody seal intact Yes ☐ No ☐
Cooling Initiated ☑

INITIAL COOLER TEMPERATURES °C		FINAL COOLER TEMPERATURES °C	
7.0	10.0		

SHIPMENT RELEASE (client use)
Released by: Date: Time:

INITIAL SHIPMENT RECEPTION (lab use only)
Received by: EHF Date: 12 Sep 2016 Time: 10:09

FINAL SHIPMENT RECEPTION (lab use only)
Received by: Date: Time:

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY. By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.

1. If any water samples are taken from a **Regulated Drinking Water (DW) System**, please submit using an **Authorized DW COC form.**

WHITE - LABORATORY COPY YELLOW - CLIENT COPY

NA-FM-0326e v09 Front/04 January 2014

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Chain of Custody (COC) / Analytical Request Form

Canada Toll Free: 1 800 668 9878

Affix ALS barcode label here (lab use only)

COC Number: 14 - 470939

Page 3 of 3

Report To
Company:
Contact: Same as 1 PJ
Address:
Phone:

Report Format / Distribution
Select Report Format: [x] PDF [x] EXCEL [ ] EDD (DIGITAL)
Quality Control (QC) Report with Report [x] Yes [ ] No
[x] Criteria on Report - provide details below if box checked
Select Distribution: [ ] EMAIL [ ] MAIL [ ] FAX
Email 1 or Fax
Email 2

Select Service Level Below (Rush Turnaround Time (TAT) is not available for all tests)
R [x] Regular (Standard TAT if received by 3pm)
P [ ] Priority (2-4 business days if received by 3pm)
E [ ] Emergency (1-2 business days if received by 3pm)
E2 [ ] Same day or weekend emergency if received by 10am – contact ALS for surcharge.
Specify Date Required for E2,E or P:

Invoice To Same as Report To [ ] Yes [ ] No
Copy of Invoice with Report [ ] Yes [ ] No
Company:
Contact: Same

Invoice Distribution
Select Invoice Distribution: [x] EMAIL [ ] MAIL [ ] FAX
Email 1 or Fax
Email 2

Project Information
ALS Quote #:
Job #: PJ
PO / AFE:
LSD:

Oil and Gas Required Fields (client use)
Approver ID: Cost Center:
GL Account: Routing Code:
Activity Code:
Location:

ALS Lab Work Order # (lab use only)

ALS Contact: **Sampler:**

Analysis Request
Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below

ALS Sample # (lab use only)	Sample Identification and/or Coordinates (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	Metals incl Hg	LO1	asbestos	particle size analysis	Number of Containers
	R-3A	6/9/16		Soil	✓	✓	✓	✓	2
	R-3B	6/9/16		"	✓	✓	✓		2
	R-3C	6/9/16		"	✓	✓	✓	✓	2
	R-4A	5/9/16		"	✓	✓	✓	✓	2
	R-4B	5/9/16		"	✓	✓	✓	✓	2
	R-4C	5/9/16		"	✓	✓	✓	✓	2
	R-6A	8/9/16		"	✓	✓	✓	✓	2
	R-6B	8/9/16		"	✓	✓	✓	✓	2
	R-6C	8/9/16		"	✓	✓	✓	✓	2
	E-6A	5/9/16		"	✓	✓	✓	✓	2
	E-6B	5/9/16		"	✓	✓	✓	✓	2
	E-6C	5/9/16		"	✓	✓	✓	✓	2

L1829672-COFC

Drinking Water (DW) Samples[1] (client use)
Are samples taken from a Regulated DW System? [ ] Yes [ ] No
Are samples for human drinking water use? [ ] Yes [ ] No

Special Instructions / Specify Criteria to add on report (client Use)
to meet CCME Freshwater aquatic life guidelines

SAMPLE CONDITION AS RECEIVED (lab use only)
Frozen [ ] SIF Observations Yes [ ] No [ ]
Ice packs Yes [x] No [ ] Custody seal intact Yes [ ] No [ ]
Cooling Initiated [x]

INITIAL COOLER TEMPERATURES °C		FINAL COOLER TEMPERATURES °C			
7.0	10.0				

SHIPMENT RELEASE (client use)
Released by: Date: Time:

INITIAL SHIPMENT RECEPTION (lab use only)
Received by: EHF Date: 12 Sep 2016 Time: 10:09

FINAL SHIPMENT RECEPTION (lab use only)
Received by: Date: Time:

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

WHITE - LABORATORY COPY YELLOW - CLIENT COPY

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Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY. By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.

1. If any water samples are taken from a **Regulated Drinking Water (DW) System**, please submit using an **Authorized DW COC form**.