



APPENDIX G – LABORATORY TEST RESULTS

APPENDIX G.1 – STRUCTURAL FILL LABORATORY TEST RESULTS

APPENDIX G.2 – SELECT STRUCTURAL FILL LABORATORY TEST RESULTS

APPENDIX G.3 – LEAK DETECTION FILL LABORATORY TEST RESULTS

APPENDIX G.4 – SOIL LINER FILL LABORATORY TEST RESULTS

APPENDIX G.5 – LOW VOLUME SOLUTION COLLECTION FILL LABORATORY TEST RESULTS

APPENDIX G.6 – DRAIN COVER FILL (CRUSHED ORE) LABORATORY TEST RESULTS

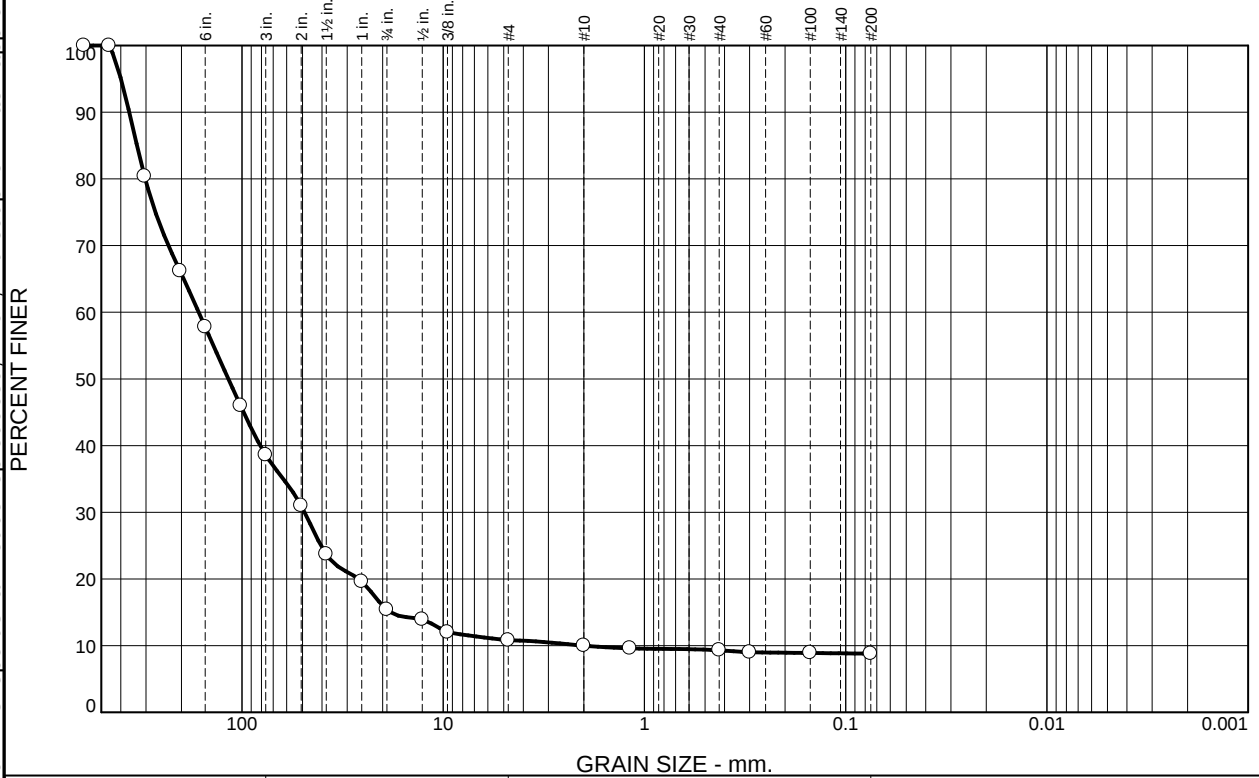
APPENDIX G.7 – SELECT DRAIN COVER FILL LABORATORY TEST RESULTS



APPENDIX G.1 – STRUCTURAL FILL LABORATORY TEST RESULTS

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Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
61.4	23.2	4.6	0.8	0.7	0.5	8.8	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
24"	100.0		
18"	100.0		
12"	80.4		
8"	66.2		
6"	57.8		
4"	46.0		
3"	38.6		
2"	31.0		
1.5"	23.7		
1"	19.6		
.75"	15.4		
.5"	13.9		
.375"	12.0		
#4	10.8		
#10	10.0		
#16	9.6		
#40	9.3		
#50	9.0		
#100	8.9		
#200	8.8		

* (no specification provided)

Material Description

Brown silty gravel

Atterberg Limits

PL= NP

LL= NV

PI= NP

Coefficients

D₉₀= 363.0265

D₈₅= 332.2578

D₆₀= 164.2011

D₅₀= 116.7783

D₃₀= 48.8177

D₁₅= 18.2501

D₁₀= 2.0000

C_u= 82.10

C_c= 7.26

Classification

USCS= GM

AASHTO= A-1-b

Remarks

Location: Test Pad #1; STA 5+00 West Containment Berm
Sample Number: SF-1-R Depth: 8' BFG

Date: 6/6/2022

NewFields

Client: Newmont-Cripple Creek & Victor Goldmine
Project: VLF2 Phase 3

Project No: 475.0106.056

Figure SF-1-R

Tested By: GF/BV

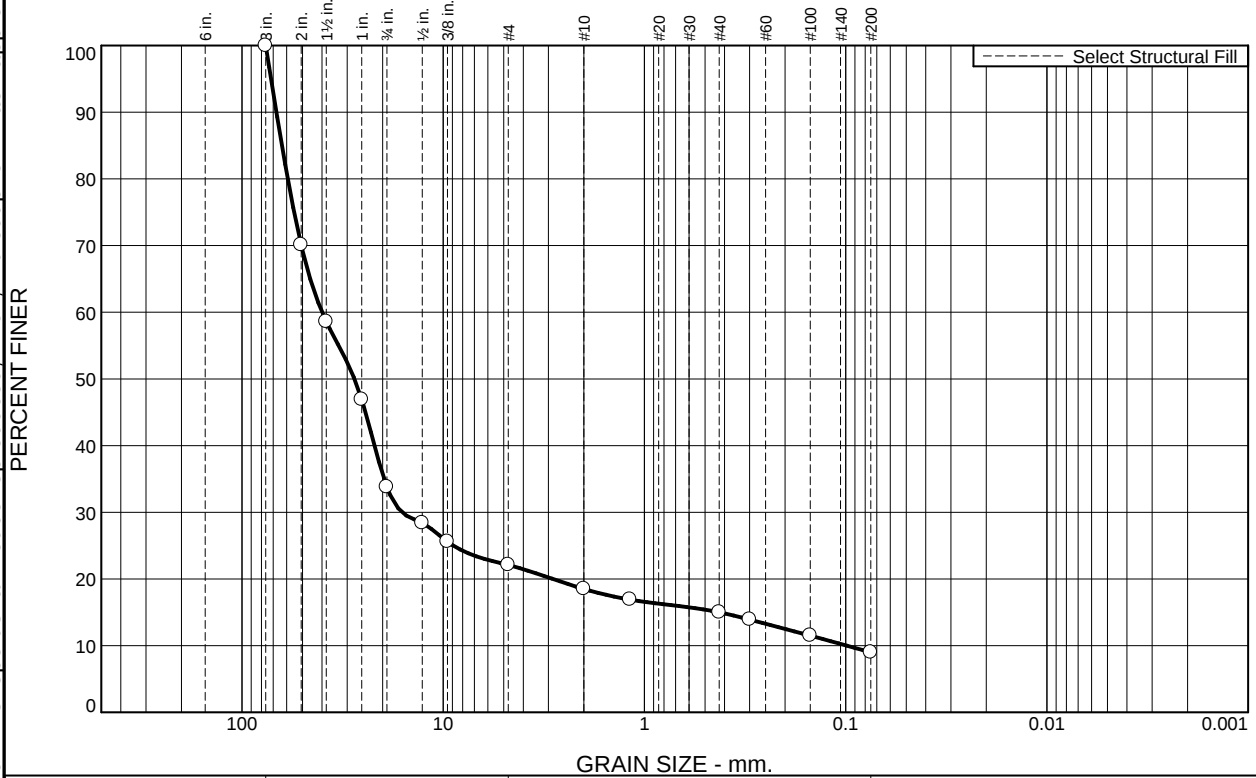
Checked By: TW



APPENDIX G.2 – SELECT STRUCTURAL FILL LABORATORY TEST RESULTS

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Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	66.2	11.7	3.6	3.5	6.0	9.0	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0	100.0	
2	70.1		
1.5	58.6		
1	46.9		
.75	33.8		
0.5	28.4		
.375	25.6		
#4	22.1		
#10	18.5		
#16	16.9		
#40	15.0		
#50	13.9		
#100	11.5		
#200	9.0		

* Select Structural Fill

Material Description

Light brown poorly graded gravel with silt

Atterberg Limits

PL= NP LL= NV PI= NP

Coefficients

D₉₀= 67.4514 D₈₅= 63.3072 D₆₀= 39.9505
D₅₀= 27.6021 D₃₀= 16.0028 D₁₅= 0.4250
D₁₀= 0.0988 C_u= 404.54 C_c= 64.91

Classification

USCS= GP-GM AASHTO= A-1-a

Remarks

Location: N59,248.2 E35,067.2
Sample Number: SSF-1-R

Depth: 10,005'

Date: 04/06/2022



Client: Newmont-Cripple Creek & Victor Goldmine
Project: VLF2 Phase 3

Project No: 475.0106.056

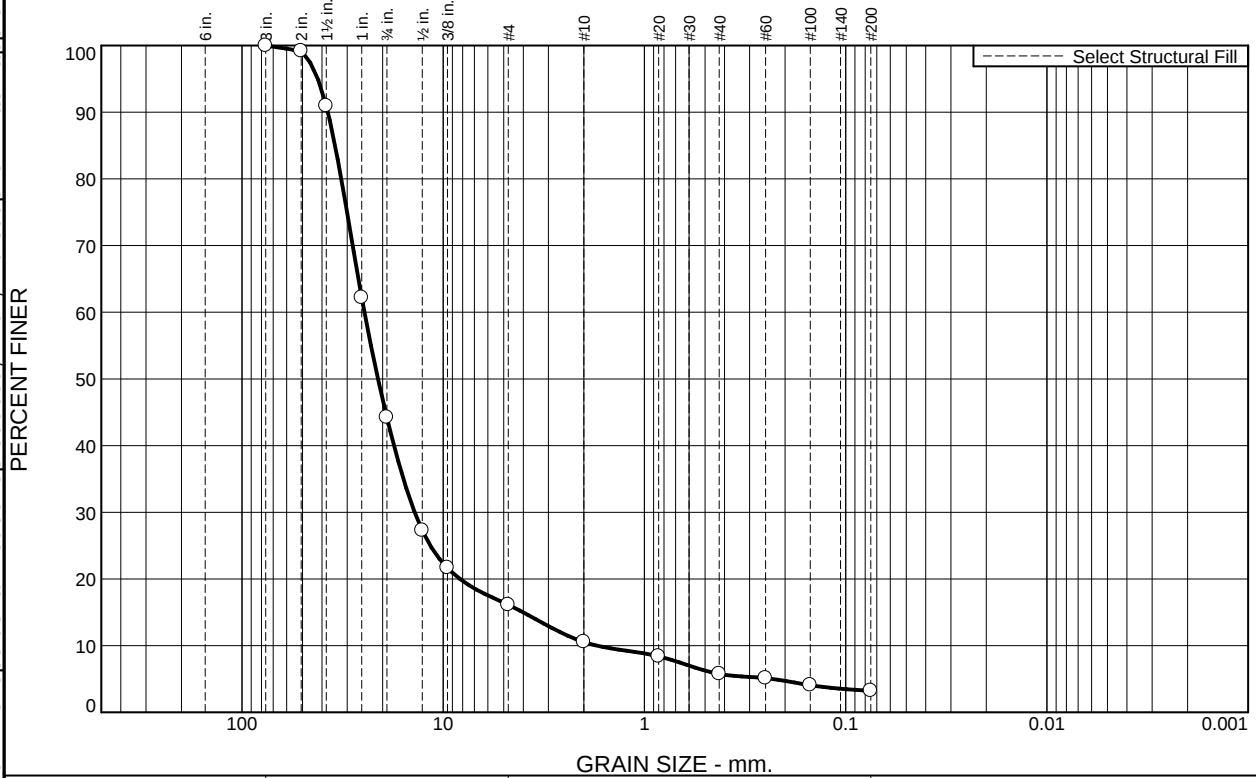
Figure SSF-1-R

Tested By: TW

Checked By: TW

Test results included in this report relate only to the items inspected or tested. This report shall not be reproduced, in full, without prior written approval of NewFields.

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	55.8	28.1	5.6	4.7	2.6	3.2	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0	100.0	
2	99.2		
1.5	90.9		
1	62.2		
.75	44.2		
0.5	27.3		
.375	21.7		
#4	16.1		
#10	10.5		
#20	8.4		
#40	5.8		
#60	5.1		
#100	4.1		
#200	3.2		

* Select Structural Fill

Material Description

Gray poorly graded gravel

Atterberg Limits

PL= 19 LL= 29 PI= 10

Coefficients

D₉₀= 37.4152 D₈₅= 34.4548 D₆₀= 24.6382
D₅₀= 21.1003 D₃₀= 13.8536 D₁₅= 4.0138
D₁₀= 1.7261 C_u= 14.27 C_c= 4.51

Classification

USCS= GP AASHTO= A-2-4(0)

Remarks

Location: N58,917.8 E35,620.8
Sample Number: SSF-2-R

Depth: 10,028'

Date: 7/6/2022



Client: Newmont-Cripple Creek & Victor Goldmine
Project: VLF2 Phase 3

Project No: 475.0106.056

Figure SSF-2-R

Tested By: BV

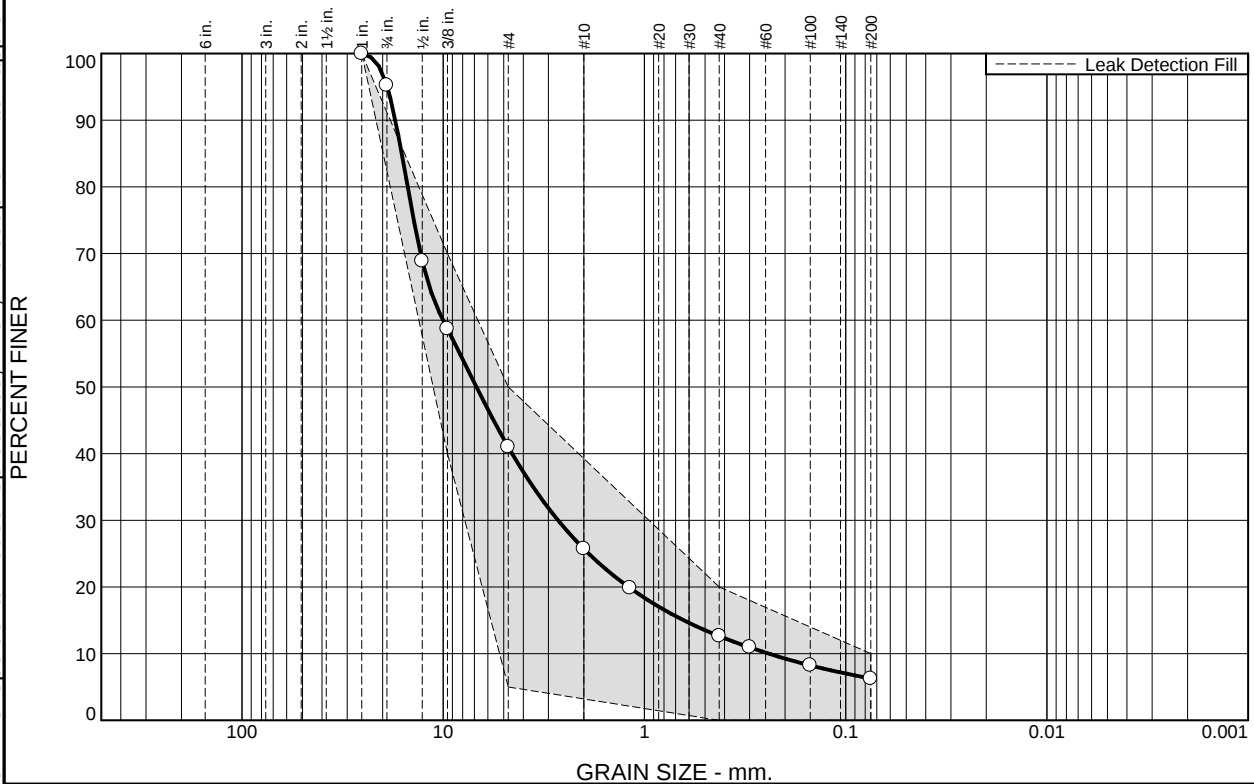
Checked By: GF



APPENDIX G.3 – LEAK DETECTION FILL LABORATORY TEST RESULTS

Test results included in this report relate only to the items inspected or tested. This report shall not be reproduced, in full, without prior written approval of NewFields.

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	4.8	54.2	15.3	13.1	6.3	6.3	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1	100.0	100.0	
.75	95.2		
0.5	68.9		
.375	58.7	40.0 - 70.0	
#4	41.0	5.0 - 50.0	
#10	25.7		
#16	19.8		
#40	12.6	0.0 - 20.0	
#50	10.9		
#100	8.2		
#200	6.3	0.0 - 10.0	

* Leak Detection Fill

Material Description

Light brown poorly graded gravel with silt and sand

Atterberg Limits

PL= NP LL= NV PI= NP

Coefficients

D₉₀= 17.2848 D₈₅= 16.0582 D₆₀= 10.0146
D₅₀= 6.8356 D₃₀= 2.6866 D₁₅= 0.6371
D₁₀= 0.2412 C_u= 41.51 C_c= 2.99

Classification

USCS= GW-GM AASHTO= A-1-a

Remarks

Source of Sample: Leak Detection Fill (LDF)
Sample Number: LDF-01-R

Date: 8/31/22



Client: Newmont-Cripple Creek & Victor Goldmine
Project: VLF2 Phase 3

Project No: 475.0106.056

Figure LDF-01-R

Tested By: GF

Checked By: TW



APPENDIX G.4 – SOIL LINER FILL LABORATORY TEST RESULTS

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Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	9.0	12.0	11.6	14.4	13.5	39.5	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2"	100.0		
1.5"	98.2		
1"	93.4		
.75"	91.0		
.5"	88.6		
.375"	86.9		
#4	79.0		
#10	67.4		
#16	61.8		
#40	53.0		
#50	50.1		
#100	44.7		
#200	39.5		

* (no specification provided)

Soil Description

Brown clayey sand with gravel

Atterberg Limits

PL= 15 LL= 41 PI= 26

Coefficients

D₉₀= 16.1972 D₈₅= 7.6588 D₆₀= 0.9765
D₅₀= 0.2948 D₃₀= D₁₅=
D₁₀= C_u= C_c=

Classification

USCS= SC AASHTO= A-7-6(5)

Remarks

Location: SLF-1-C
Sample Number: 21-332-01

Date: 10/14/2021



Client: Newmont-Cripple Creek & Victor Gold Mine
Project: VLF2 Phase 3 Stage A Site Support 2021

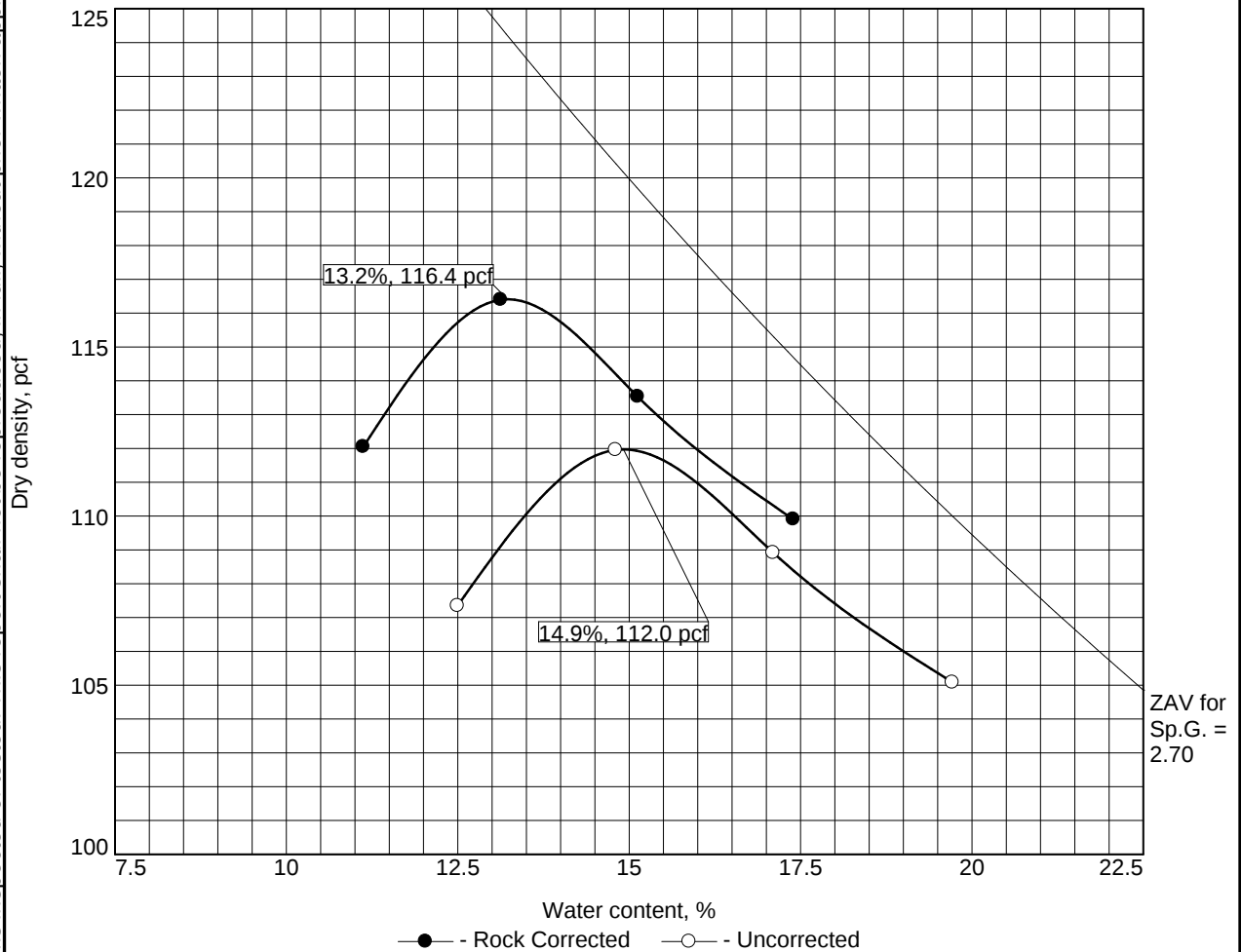
Project No: 475.0106.053

Figure 21-332-01

Tested By: AR

Checked By: JH

Test results included in this report relate only to the items inspected or tested. This report shall not be reproduced, in full, without prior written approval of NewFields.



Test specification: ASTM D 698-12 Method B Standard
 ASTM D4718-15 Oversize Corr. Applied to Each Test Point

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > 3/8 in.	% < No.200
	USCS	AASHTO						
	SC	A-7-6(5)		2.70	41	26	13.1	39.5
ROCK CORRECTED TEST RESULTS			UNCORRECTED		MATERIAL DESCRIPTION			
Maximum dry density = 116.4 pcf			112.0 pcf		Brown clayey sand with gravel			
Optimum moisture = 13.2 %			14.9 %					
Project No. 475.0106.053 Client: Newmont-Cripple Creek & Victor Gold Mine					Remarks: *Assumed Specific Gravity			
Project: VLF2 Phase 3 Stage A Site Support 2021								
Date: 10/15/								
Location: SLF-1-C Sample Number: 21-332-01					Figure 21-332-01			
NewFields								

Figure 21-332-01

Tested By: AR Checked By: JH

Flexible Wall Hydraulic Conductivity ASTM D5084

Client:	Newmont Cripple Creek & Victor	Lab Sample No.:	21-332-01
Project:	VLF2 Phase 3 Stage A Site Support	Field Sample No.:	SLF-1-C
Project No.:	475.0106.053	Location:	SLF-1-C
Phase:	2	Elevation/Depth:	-
Requested By:	Tyler Wendlandt	Tested By:	KE
Test Started:	10/27/2021	Checked By:	KM
Test Finished:	11/8/2021	Sample Description:	Brown clayey sand w/ gravel

Test Boundary Conditions

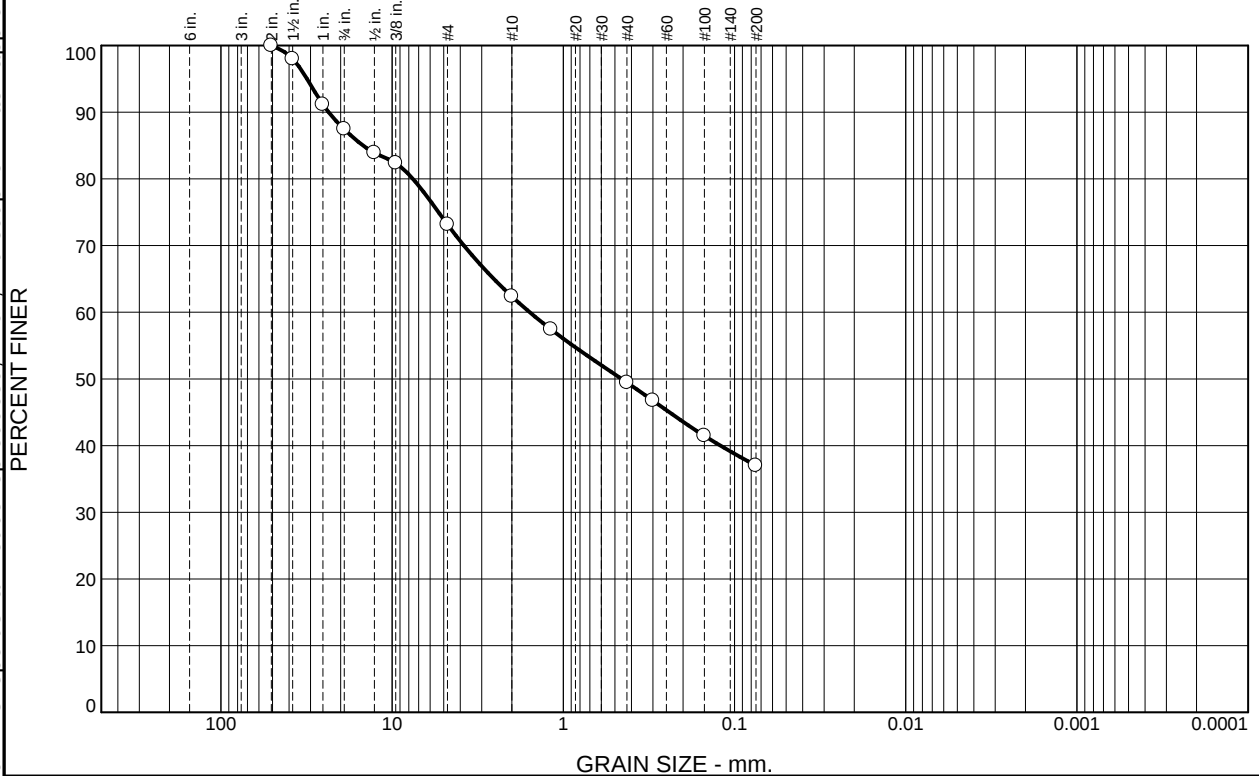
Type of Permeant	De-aired Bottled
Magnitude of Back pressure (psi)	50
Saturated (Y/N):	Yes
Stage 2: Effective Stress (psi)	20
Sample Type	Remolded
Burrete Area (cm ²)	0.877

Test Specimen Data	Initial	During k Testing	Final
Wet Soil + Tare (g)	610.51		774.70
Dry Soil + Tare (g)	539.39		672.19
Tare (g)	0.00		133.82
Wt. of Water (g)	71.12		102.51
Dry Soil (g)	539.39		538.37
Moisture Content (%)	13.2		19.0
Sample Volume (ft ³)	0.01048	0.01030	
Dry Density (pcf)	111.8	115.3	
Wet Density (pcf)	133.8	135.0	
Saturation (%)	100.0%	100.0	
Percent Compaction	96.1	99.1	
Height (in)	2.986	2.976	
Diameter (in)	2.756	2.747	
Area (in ²)	5.967	5.926	
Est. Moisture Content after Consolidation (%)		17.1%	
Est. Void Ratio after Consolidation		0.462	
Specific Gravity*	2.70		

*Specific gravity is assumed Maximum Dry Density: ASTM D 1557	Maximum Dry Density (pcf):	116.4
	Initial Remolded Dry Density (pcf):	110.2
	Initial Percent Compaction:	95%
	Initial Void Ratio:	0.529
	Optimum Moisture Content(%):	13.2
	Initial Water Content (%):	13.2
	Confining Pressure (psi):	20.0
	Hydraulic Conductivity, k₂₀ (cm/s):	3.0E-07
	Gradient Range (h/L):	5.5 5.5

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Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	12.5	14.3	10.8	13.0	12.4	37.0	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2"	100.0		
1.5"	98.0		
1"	91.2		
.75"	87.5		
.5"	83.9		
.375"	82.4		
#4	73.2		
#10	62.4		
#16	57.4		
#40	49.4		
#50	46.7		
#100	41.5		
#200	37.0		

* (no specification provided)

Soil Description

Brown clayey sand with gravel

Atterberg Limits

PL= 15 LL= 41 PI= 26

Coefficients

D₉₀= 23.5200 D₈₅= 14.8022 D₆₀= 1.5722
D₅₀= 0.4568 D₃₀= D₁₅=
D₁₀= C_u= C_c=

Classification

USCS= SC AASHTO= A-7-6(4)

Remarks

Location: SLF-2-C
Sample Number: 21-332-02

Date: 10/14/2021



Client: Newmont-Cripple Creek & Victor Gold Mine
Project: VLF2 Phase 3 Stage A Site Support 2021

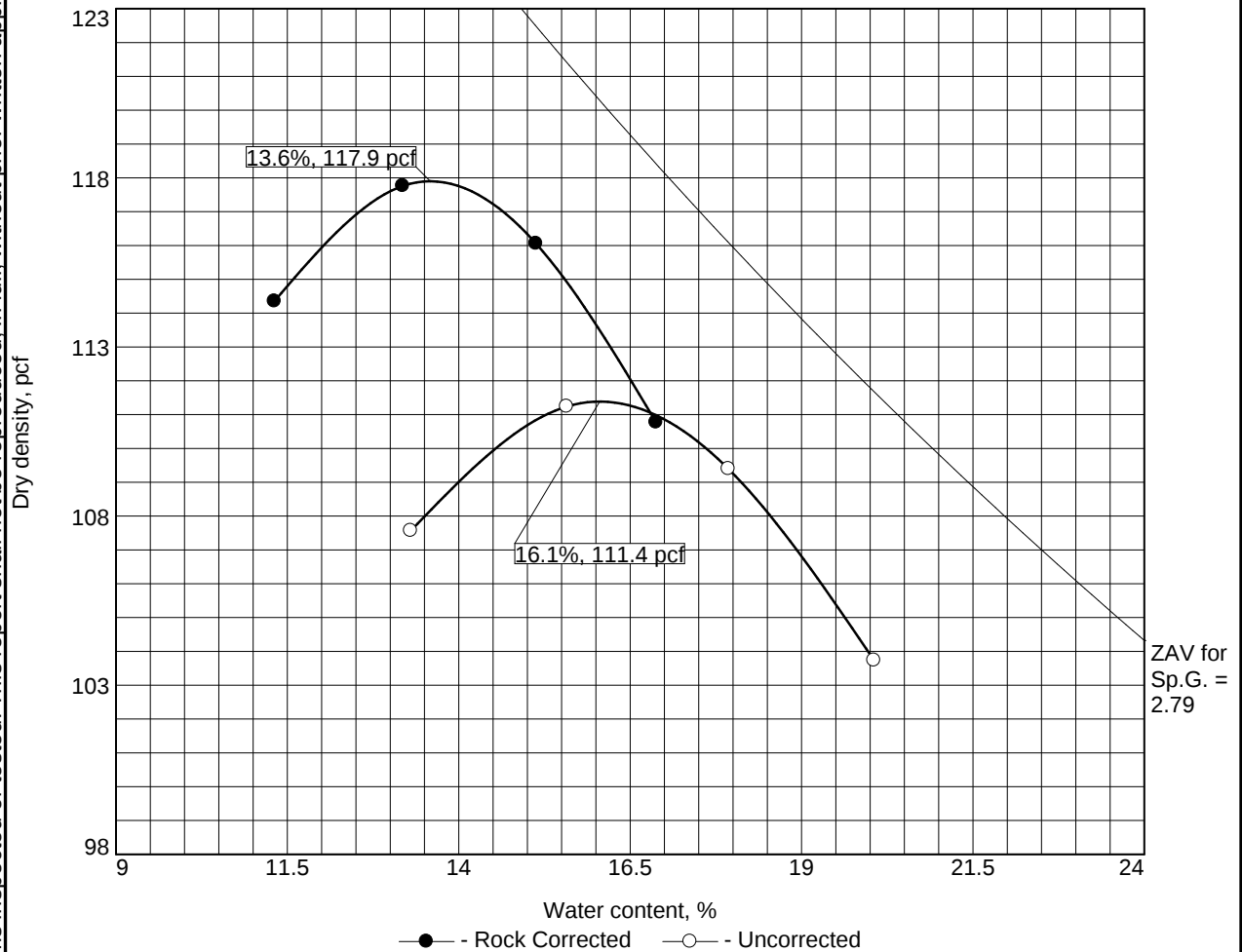
Project No: 475.0106.053

Figure 21-332-02

Tested By: AR

Checked By: JH

Test results included in this report relate only to the items inspected or tested. This report shall not be reproduced, in full, without prior written approval of NewFields.



Test specification: ASTM D 698-12 Method B Standard
 ASTM D4718-15 Oversize Corr. Applied to Each Test Point

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > 3/8 in.	% < No.200
	USCS	AASHTO						
	SC	A-7-6(4)		2.79	41	26	17.6	37.0
ROCK CORRECTED TEST RESULTS			UNCORRECTED		MATERIAL DESCRIPTION			
Maximum dry density = 117.9 pcf			111.4 pcf		Brown clayey sand with gravel			
Optimum moisture = 13.6 %			16.1 %					
Project No. 475.0106.053 Client: Newmont-Cripple Creek & Victor Gold Mine					Remarks: *Assumed Specific Gravity			
Project: VLF2 Phase 3 Stage A Site Support 2021								
Date: 10/15/								
Location: SLF-2-C Sample Number: 21-332-02								
NewFields								
					Figure 21-332-02			

Figure 21-332-02

Tested By: AR Checked By: JH

Flexible Wall Hydraulic Conductivity ASTM D5084

Client:	Newmont Cripple Creek & Victor	Lab Sample No.:	21-332-02
Project:	VLF2 Phase 3 Stage A Site Support	Field Sample No.:	SLF-2-C
Project No.:	475.0106.053	Location:	SLF-2-C
Phase:	2	Elevation/Depth:	-
Requested By:	Tyler Wendlandt	Tested By:	KE
Test Started:	10/27/2021	Checked By:	KM
Test Finished:	11/8/2021	Sample Description:	Brown clayey sand w/ gravel

Test Boundary Conditions

Type of Permeant	De-aired Bottled
Magnitude of Back pressure (psi)	45
Saturated (Y/N):	Yes
Stage 1: Effective Stress (psi)	5
Sample Type	Remolded
Burrete Area (cm ²)	0.877

Test Specimen Data	Initial	During k Testing	Final
Wet Soil + Tare (g)	619.54		776.22
Dry Soil + Tare (g)	545.20		676.01
Tare (g)	0.00		131.68
Wt. of Water (g)	74.34		100.21
Dry Soil (g)	545.20		544.33
Moisture Content (%)	13.6		18.4
Sample Volume (ft ³)	0.01075	0.01069	
Dry Density (pcf)	111.9	112.1	
Wet Density (pcf)	127.1	134.5	
Saturation (%)	68.2	100.0	
Percent Compaction	94.9	95.1	
Height (in)	3.022	3.018	
Diameter (in)	2.797	2.793	
Area (in ²)	6.146	6.128	
Est. Moisture Content after Consolidation (%)		19.7%	
Est. Void Ratio after Consolidation		0.550	
Specific Gravity*	2.79		

*Specific gravity is assumed Maximum Dry Density: ASTM D 1557	Maximum Dry Density (pcf):	117.9
	Initial Remolded Dry Density (pcf):	111.9
	Initial Percent Compaction:	95%
	Initial Void Ratio:	0.556
	Optimum Moisture Content(%):	13.6
	Initial Water Content (%):	13.6
	Confining Pressure (psi):	5.0
	Hydraulic Conductivity, k₂₀ (cm/s):	5.8E-07
	Gradient Range (h/L):	5.5 5.5

Flexible Wall Hydraulic Conductivity ASTM D5084

Client:	Newmont Cripple Creek & Victor	Lab Sample No.:	21-332-02
Project:	VLF2 Phase 3 Stage A Site Support	Field Sample No.:	SLF-2-C
Project No.:	475.0106.053	Location:	SLF-2-C
Phase:	2	Elevation/Depth:	-
Requested By:	Tyler Wendlandt	Tested By:	KE
Test Started:	10/27/2021	Checked By:	KM
Test Finished:	11/8/2021	Sample Description:	Brown clayey sand w/ gravel

Test Boundary Conditions

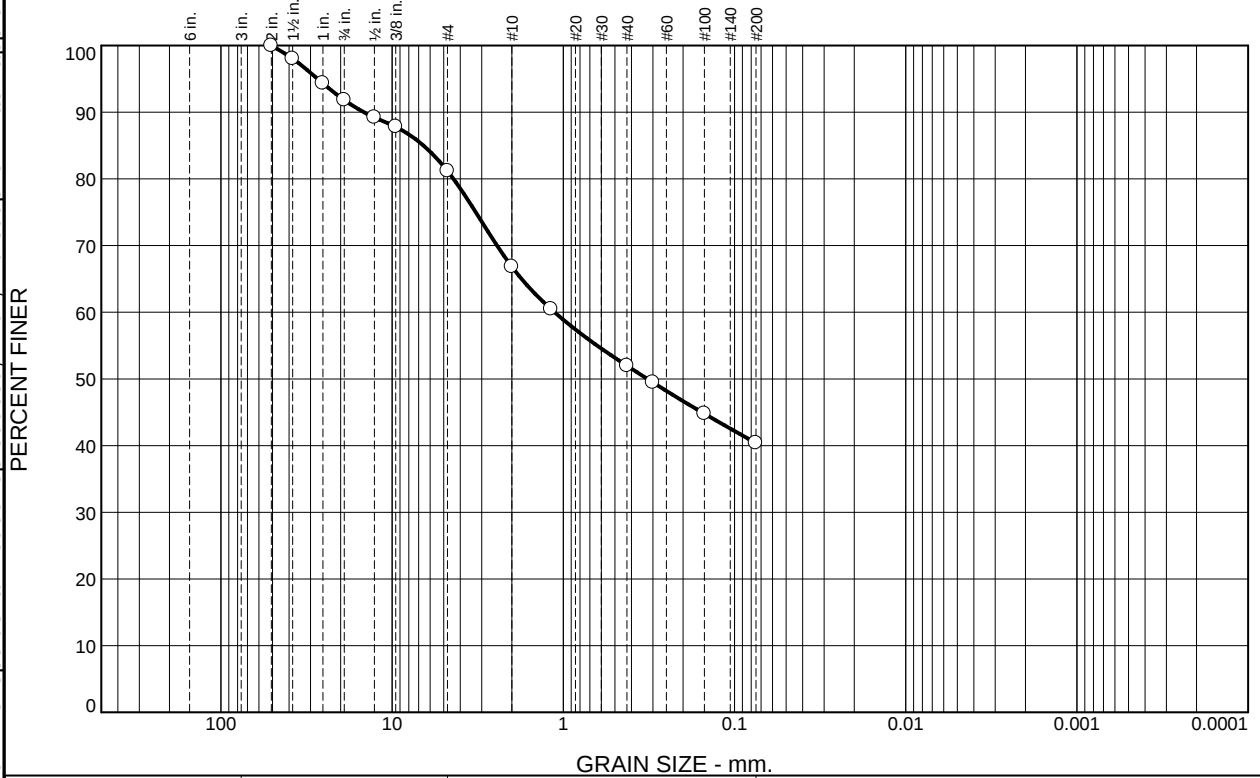
Type of Permeant	De-aired Bottled
Magnitude of Back pressure (psi)	45
Saturated (Y/N):	Yes
Stage 2: Effective Stress (psi)	20
Sample Type	Remolded
Burrete Area (cm ²)	0.877

Test Specimen Data	Initial	During k Testing	Final
Wet Soil + Tare (g)	619.54		776.22
Dry Soil + Tare (g)	545.20		676.01
Tare (g)	0.00		131.68
Wt. of Water (g)	74.34		100.21
Dry Soil (g)	545.20		544.33
Moisture Content (%)	13.6		18.4
Sample Volume (ft ³)	0.01069	0.01048	
Dry Density (pcf)	112.1	114.5	
Wet Density (pcf)	134.5	135.9	
Saturation (%)	100.0%	100.0	
Percent Compaction	95.1	97.1	
Height (in)	2.998	2.988	
Diameter (in)	2.775	2.766	
Area (in ²)	6.050	6.009	
Est. Moisture Content after Consolidation (%)		18.7%	
Est. Void Ratio after Consolidation		0.521	
Specific Gravity*	2.79		

*Specific gravity is assumed Maximum Dry Density: ASTM D 1557	Maximum Dry Density (pcf):	117.9
	Initial Remolded Dry Density (pcf):	111.9
	Initial Percent Compaction:	95%
	Initial Void Ratio:	0.556
	Optimum Moisture Content(%):	13.6
	Initial Water Content (%):	13.6
	Confining Pressure (psi):	20.0
	Hydraulic Conductivity, k₂₀ (cm/s):	9.3E-08
	Gradient Range (h/L):	5.5 5.5

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Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	8.2	10.6	14.4	14.8	11.6	40.4	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2"	100.0		
1.5"	98.0		
1"	94.3		
.75"	91.8		
.5"	89.2		
.375"	87.8		
#4	81.2		
#10	66.8		
#16	60.5		
#40	52.0		
#50	49.5		
#100	44.8		
#200	40.4		

* (no specification provided)

Soil Description

Dark brown clayey sand with gravel

Atterberg Limits

PL= 14 LL= 43 PI= 29

Coefficients

D₉₀= 14.6189 D₈₅= 6.5536 D₆₀= 1.1242
D₅₀= 0.3232 D₃₀= D₁₅=
D₁₀= C_u= C_c=

Classification

USCS= SC AASHTO= A-7-6(6)

Remarks

Location: SLF-3-C
Sample Number: 22-001-01

Date: 1/5/2022



Client: Newmont- Cripple Creek & Victor Gold Mine
Project: VLF2 Phase 3 Stage A Site Support 2021

Project No: 475.0106.053

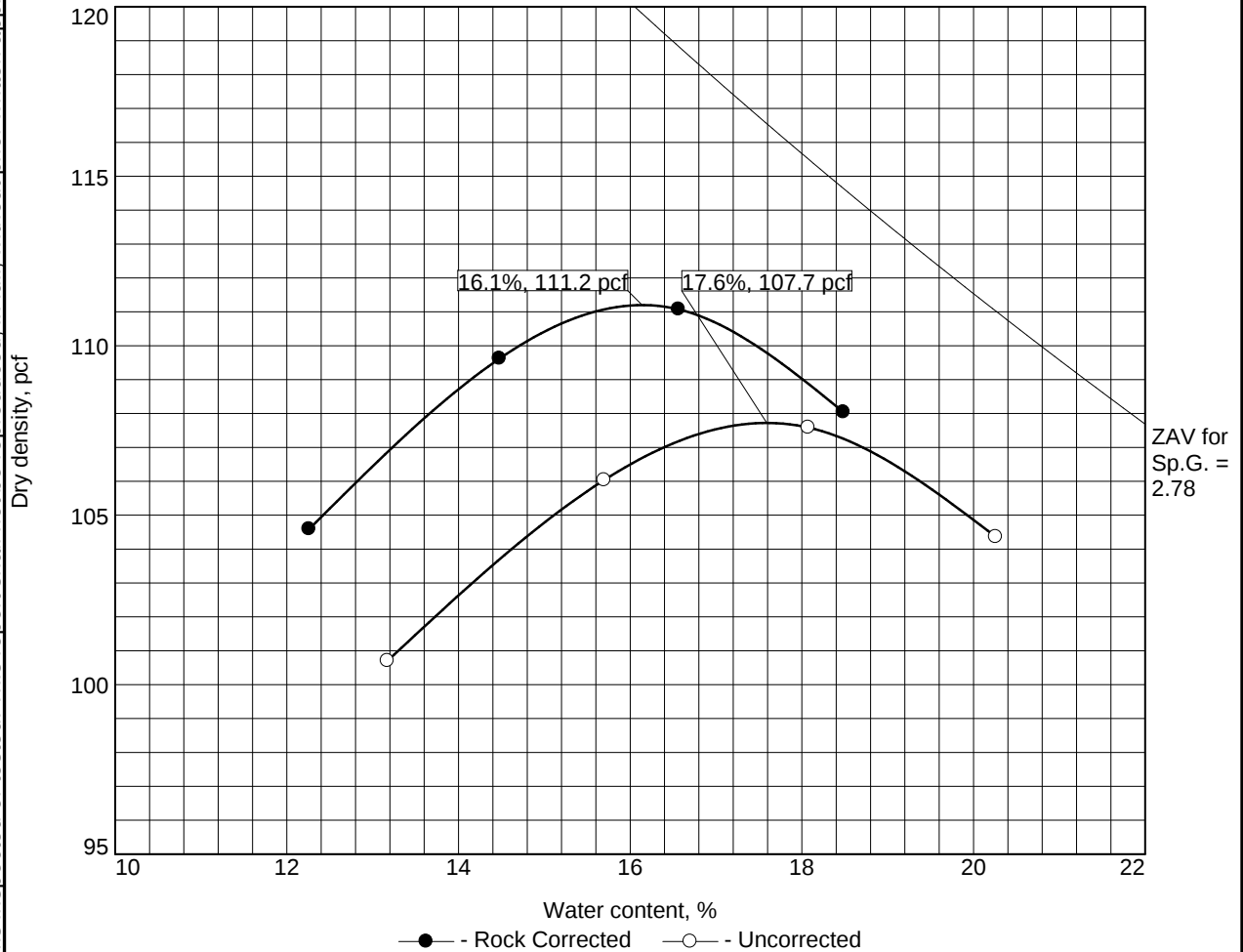
Figure 22-001-01

Tested By: EG/AR

Checked By: JW

Test results included in this report relate only to the items inspected or tested. This report shall not be reproduced, in full, without prior written approval of NewFields.

COMPACTION TEST REPORT



Test specification: ASTM D 698-12 Method B Standard
ASTM D4718-15 Oversize Corr. Applied to Each Test Point

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > 3/8 in.	% < No.200
	USCS	AASHTO						
	SC	A-7-6(6)		2.78	43	29	12.2	40.4
ROCK CORRECTED TEST RESULTS			UNCORRECTED		MATERIAL DESCRIPTION			
Maximum dry density = 111.2 pcf			107.7 pcf		Dark brown clayey sand with gravel			
Optimum moisture = 16.1 %			17.6 %					
Project No. 475.0106.053 Client: Newmont- Cripple Creek & Victor Gold Mine					Remarks: *Assumed Specific Gravity			
Project: VLF2 Phase 3 Stage A Site Support 2021								
Date: 1/7/2022								
Location: SLF-3-C Sample Number: 22-001-01								
NewFields								
					Figure 22-001-01			

Tested By: EG

Checked By: JW

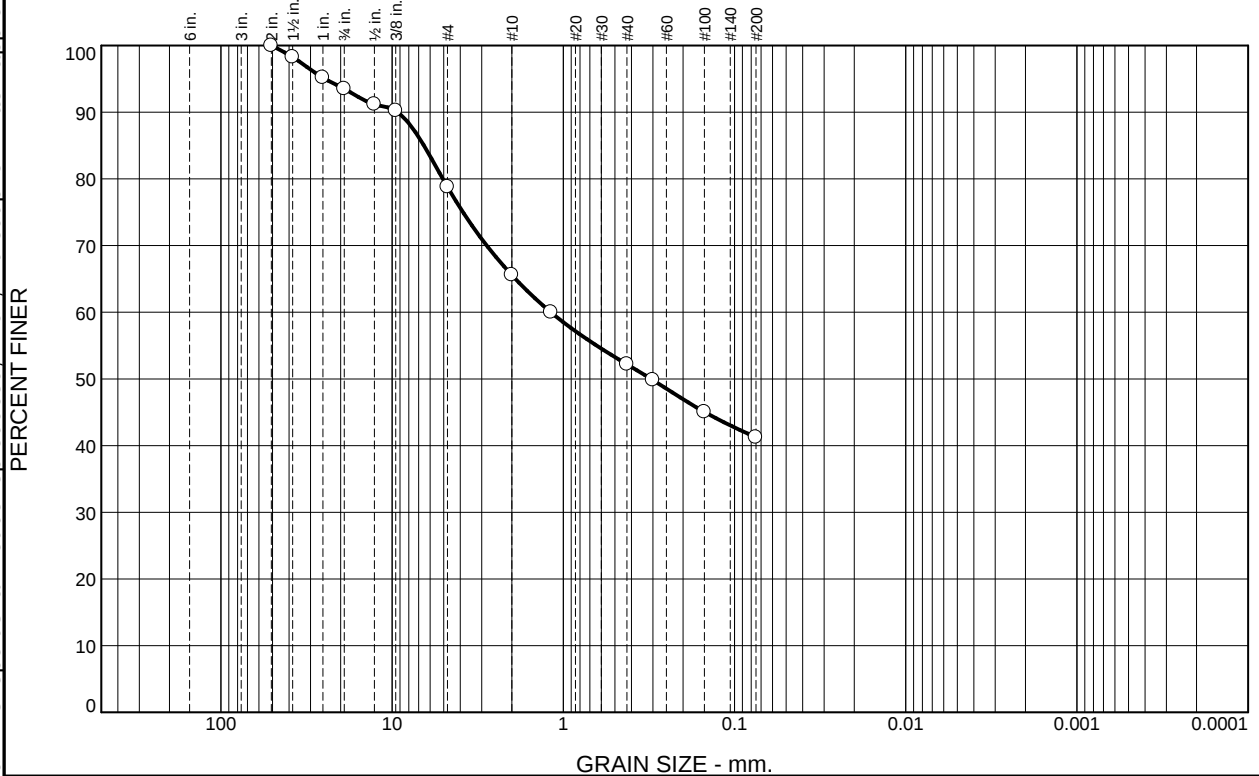
Flexible Wall Hydraulic Conductivity ASTM D5084

Client:	New Mont- Cripple Creek & Victor Gold Mine Lab Sample No.:	22-019-01
Project:	VLF2 Stage A Site Support 2021	Field Sample No.: SLF-3-C
Project No.:	475.0106.053	Location: SLF-3-C
Phase:	Phase 3	Elevation/Depth: -
Requested By:	Jay Moore	Tested By: KE
Test Started:	2/7/2022	Checked By: KM
Test Finished:	2/14/2022	Sample Description: Dark brown clayey sand with gravel

Test Boundary Conditions			
Type of Permeant	De-aired Bottled		
Magnitude of Back pressure (psi)	40		
Saturated (Y/N):	Yes		
Stage 2: Effective Stress (psi)	20		
Sample Type	Remolded		
Burrete Area (cm ²)	0.877		
Test Specimen Data	Initial	During k Testing	Final
Wet Soil + Tare (g)	605.82		883.40
Dry Soil + Tare (g)	513.13		781.62
Tare (g)	0.00		266.85
Wt. of Water (g)	92.69		101.78
Dry Soil (g)	513.13		514.77
Moisture Content (%)	18.1		19.8
Sample Volume (ft ³)	0.01063	0.01063	
Dry Density (pcf)	106.1	106.3	
Wet Density (pcf)	130.5	130.5	
Saturation (%)	100.0%	100.0	
Percent Compaction	95.4	95.6	
Height (in)	3.019	3.019	
Diameter (in)	2.785	2.785	
Area (in ²)	6.093	6.093	
Est. Moisture Content after Consolidation (%)		22.8%	
Est. Void Ratio after Consolidation		0.633	
Specific Gravity*	2.78		
*Specific gravity is assumed Maximum Dry Density: ASTM D 1557	Maximum Dry Density (pcf):		111.2
	Initial Remolded Dry Density (pcf):		105.9
	Initial Percent Compaction:		95%
	Initial Void Ratio:		0.638
	Optimum Moisture Content(%):		16.1
	Initial Water Content (%):		18.1
	Confining Pressure (psi):		20.0
	Hydraulic Conductivity, k ₂₀ (cm/s):		2.0E-08
	Gradient Range (h/L):		5.5 5.5

Test results included in this report relate only to the items inspected or tested. This report shall not be reproduced, in full, without prior written approval of NewFields.

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	6.5	14.7	13.2	13.4	11.0	41.2	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2"	100.0		
1.5"	98.3		
1"	95.2		
.75"	93.5		
.5"	91.2		
.375"	90.2		
#4	78.8		
#10	65.6		
#16	60.0		
#40	52.2		
#50	49.8		
#100	45.0		
#200	41.2		

* (no specification provided)

Soil Description

Dark brown clayey sand with gravel

Atterberg Limits

PL= 14 LL= 42 PI= 28

Coefficients

D₉₀= 9.2579 D₈₅= 6.5164 D₆₀= 1.1825
D₅₀= 0.3078 D₃₀= D₁₅=
D₁₀= C_u= C_c=

Classification

USCS= SC AASHTO= A-7-6(6)

Remarks

Location: SLF-4-C
Sample Number: 22-001-02

Date: 1/6/2022



Client: Newmont- Cripple Creek & Victor Gold Mine
Project: VLF2 Phase 3 Stage A Site Support 2021

Project No: 475.0106.053

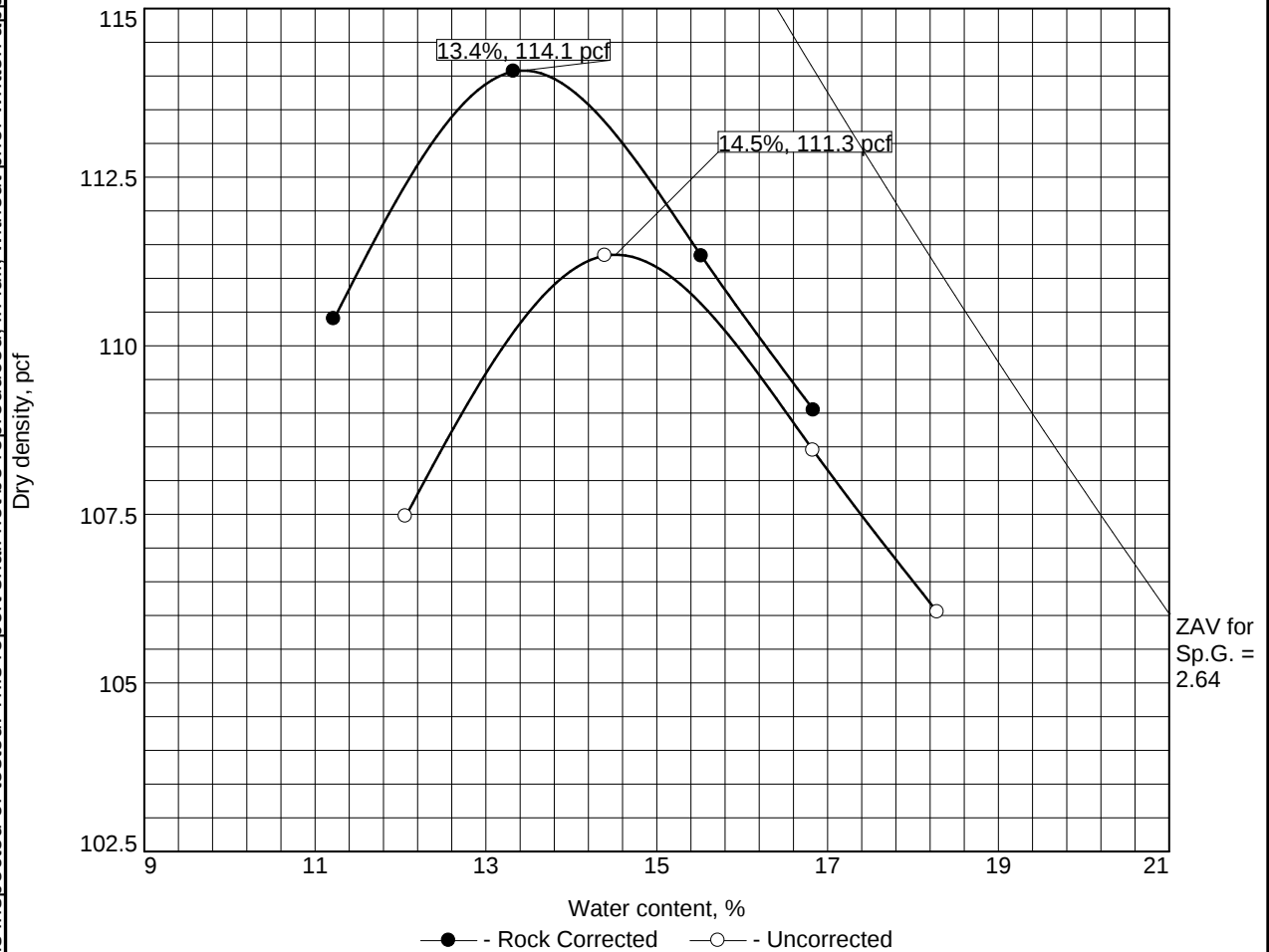
Figure 22-001-02

Tested By: AR

Checked By: JW

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COMPACTION TEST REPORT



Test specification: ASTM D 698-12 Method B Standard
ASTM D4718-15 Oversize Corr. Applied to Each Test Point

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > 3/8 in.	% < No.200
	USCS	AASHTO						
	SC	A-7-6(6)		2.64	42	28	9.8	41.2

ROCK CORRECTED TEST RESULTS	UNCORRECTED	MATERIAL DESCRIPTION
Maximum dry density = 114.1 pcf	111.3 pcf	Dark brown clayey sand with gravel
Optimum moisture = 13.4 %	14.5 %	

Project No. 475.0106.053 Client: Newmont- Cripple Creek & Victor Gold Mine	Remarks: *Assumed Specific Gravity
Project: VLF2 Phase 3 Stage A Site Support 2021	
Date: 1/7/2022	

Location: SLF-4-C Sample Number: 22-001-02
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NewFields

Figure 22-001-02

Tested By: AR Checked By: JW

Flexible Wall Hydraulic Conductivity ASTM D5084

Client:	New Mont- Cripple Creek & Victor Gold Mine Lab Sample No.:	22-019-02
Project:	VLF2 Stage A Site Support 2021	Field Sample No.: SLF-4-C
Project No.:	475.0106.053	Location: SLF-4-C
Phase:	Phase 3	Elevation/Depth: -
Requested By:	Jay Moore	Tested By: KE
Test Started:	2/7/2022	Checked By: KM
Test Finished:	2/14/2022	Sample Description: Dark brown clayey sand with gravel

Test Boundary Conditions			
Type of Permeant	De-aired Bottled		
Magnitude of Back pressure (psi)	40		
Saturated (Y/N):	Yes		
Stage 1: Effective Stress (psi)	5		
Sample Type	Remolded		
Burrete Area (cm ²)	0.877		
Test Specimen Data	Initial	During k Testing	Final
Wet Soil + Tare (g)	607.62		760.10
Dry Soil + Tare (g)	526.50		661.60
Tare (g)	0.00		132.33
Wt. of Water (g)	81.12		98.50
Dry Soil (g)	526.50		529.27
Moisture Content (%)	15.4		18.6
Sample Volume (ft ³)	0.01065	0.01061	
Dry Density (pcf)	109.0	109.1	
Wet Density (pcf)	125.8	130.3	
Saturation (%)	79.5	100.0	
Percent Compaction	95.5	95.6	
Height (in)	3.017	3.015	
Diameter (in)	2.787	2.785	
Area (in ²)	6.100	6.090	
Est. Moisture Content after Consolidation (%)		19.3%	
Est. Void Ratio after Consolidation		0.508	
Specific Gravity*	2.64		
*Specific gravity is assumed Maximum Dry Density: ASTM D 1557	Maximum Dry Density (pcf):		114.1
	Initial Remolded Dry Density (pcf):		109.0
	Initial Percent Compaction:		96%
	Initial Void Ratio:		0.512
	Optimum Moisture Content(%):		13.4
	Initial Water Content (%):		15.4
	Confining Pressure (psi):		5.0
	Hydraulic Conductivity, k ₂₀ (cm/s):		4.2E-07
	Gradient Range (h/L):		5.5 5.5

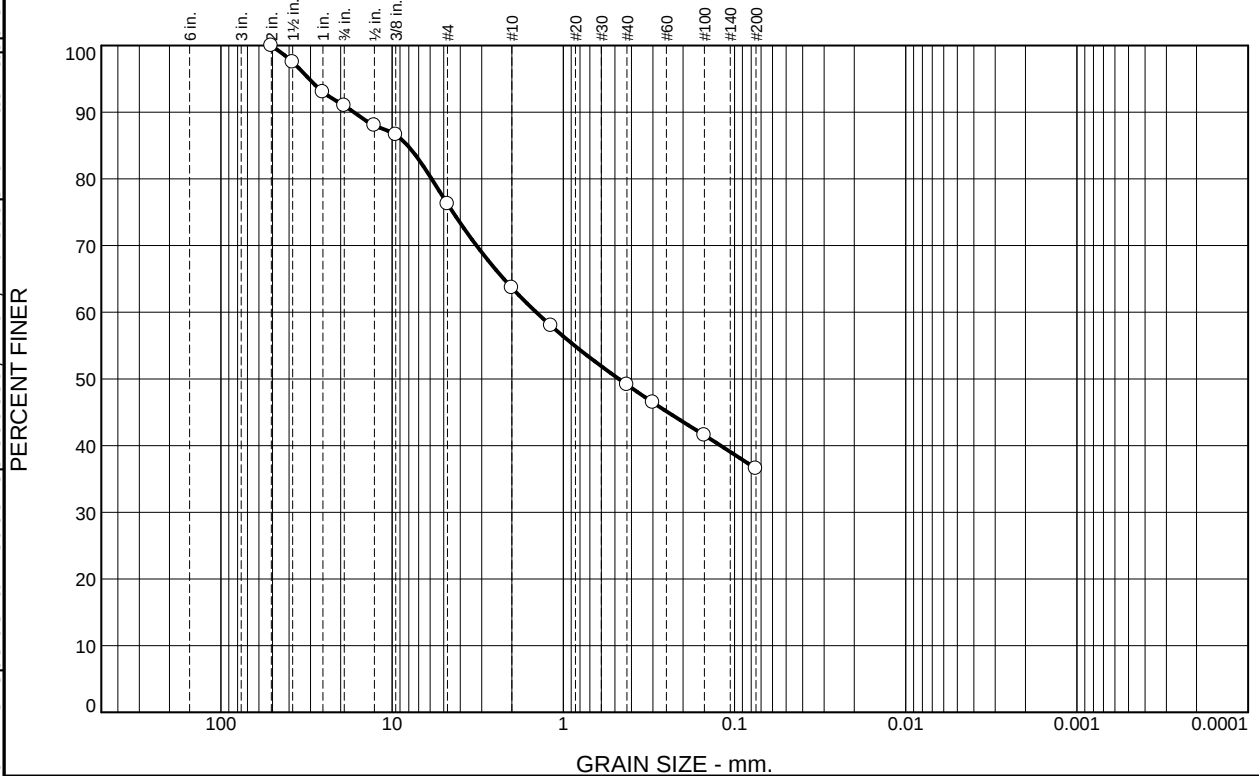
Flexible Wall Hydraulic Conductivity ASTM D5084

Client:	New Mont- Cripple Creek & Victor Gold Mine Lab Sample No.:	22-019-02
Project:	VLF2 Stage A Site Support 2021	Field Sample No.: SLF-4-C
Project No.:	475.0106.053	Location: SLF-4-C
Phase:	Phase 3	Elevation/Depth: -
Requested By:	Jay Moore	Tested By: KE
Test Started:	2/7/2022	Checked By: KM
Test Finished:	2/14/2022	Sample Description: Dark brown clayey sand with gravel

Test Boundary Conditions			
Type of Permeant	De-aired Bottled		
Magnitude of Back pressure (psi)	40		
Saturated (Y/N):	Yes		
Stage 2: Effective Stress (psi)	20		
Sample Type	Remolded		
Burrete Area (cm ²)	0.877		
Test Specimen Data	Initial	During k Testing	Final
Wet Soil + Tare (g)	607.62		760.10
Dry Soil + Tare (g)	526.50		661.60
Tare (g)	0.00		132.33
Wt. of Water (g)	81.12		98.50
Dry Soil (g)	526.50		529.27
Moisture Content (%)	15.4		18.6
Sample Volume (ft ³)	0.01061	0.01036	
Dry Density (pcf)	109.1	111.9	
Wet Density (pcf)	130.3	131.9	
Saturation (%)	100.0%	100.0	
Percent Compaction	95.6	98.0	
Height (in)	3.015	2.991	
Diameter (in)	2.785	2.763	
Area (in ²)	6.090	5.994	
Est. Moisture Content after Consolidation (%)		17.9%	
Est. Void Ratio after Consolidation		0.473	
Specific Gravity*	2.64		
*Specific gravity is assumed Maximum Dry Density: ASTM D 1557	Maximum Dry Density (pcf):		114.1
	Initial Remolded Dry Density (pcf):		109.0
	Initial Percent Compaction:		96%
	Initial Void Ratio:		0.512
	Optimum Moisture Content(%):		13.4
	Initial Water Content (%):		15.4
	Confining Pressure (psi):		20.0
	Hydraulic Conductivity, k ₂₀ (cm/s):		4.8E-08
	Gradient Range (h/L):		5.5 5.5

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Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	9.0	14.8	12.5	14.6	12.6	36.5	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2"	100.0		
1.5"	97.5		
1"	93.0		
.75"	91.0		
.5"	88.0		
.375"	86.6		
#4	76.2		
#10	63.7		
#16	58.0		
#40	49.1		
#50	46.5		
#100	41.5		
#200	36.5		

* (no specification provided)

Soil Description

Dark brown clayey sand with gravel

Atterberg Limits

PL= 14 LL= 41 PI= 27

Coefficients

D₉₀= 16.7304 D₈₅= 8.1070 D₆₀= 1.4403
D₅₀= 0.4744 D₃₀= D₁₅=
D₁₀= C_u= C_c=

Classification

USCS= SC AASHTO= A-7-6(4)

Remarks

Location: SLF-5-C
Sample Number: 22-001-03

Date: 1/6/2022



Client: Newmont- Cripple Creek & Victor Gold Mine
Project: VLF2 Phase 3 Stage A Site Support 2021

Project No: 475.0106.053

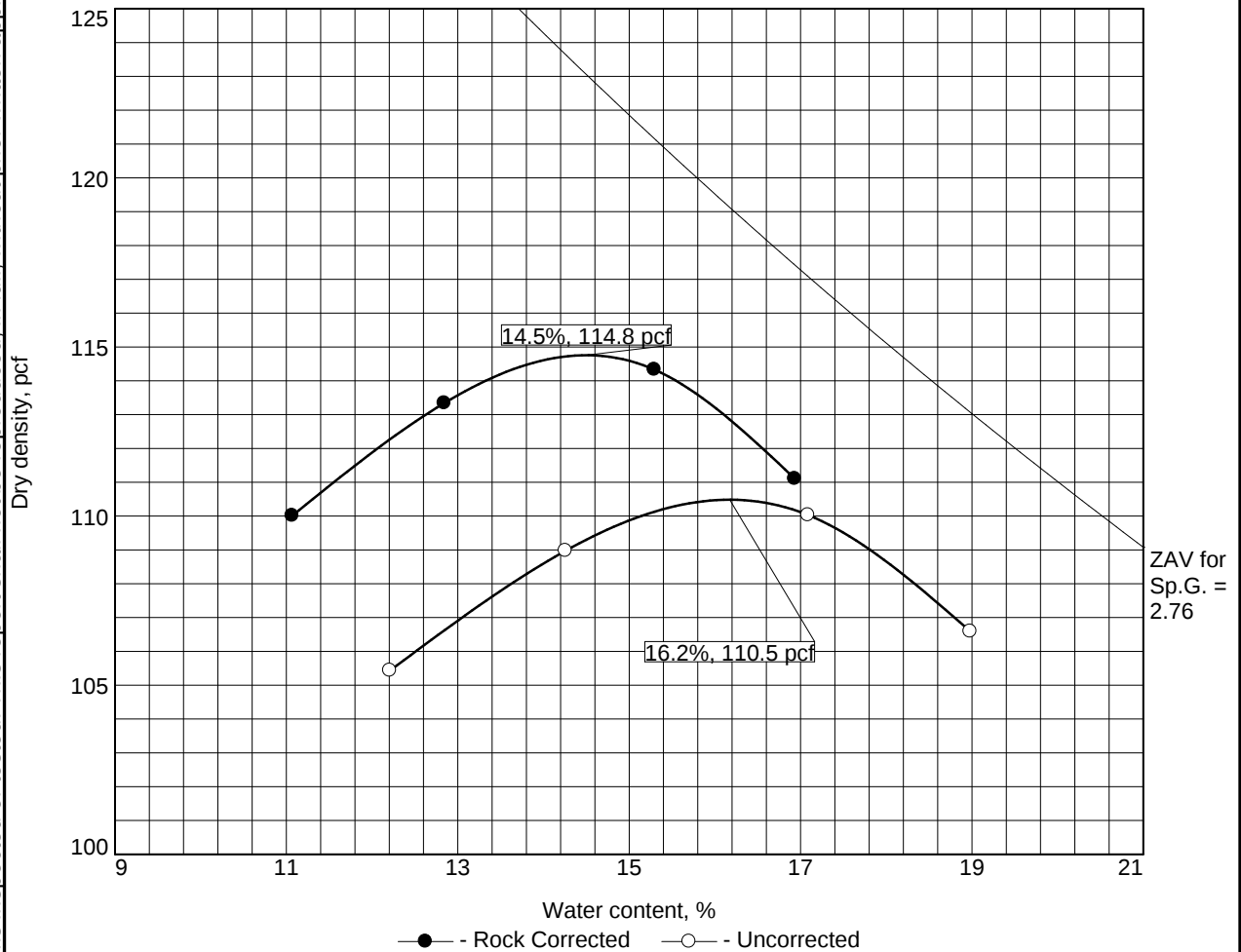
Figure 22-001-03

Tested By: AR

Checked By: JW

Test results included in this report relate only to the items inspected or tested. This report shall not be reproduced, in full, without prior written approval of NewFields.

COMPACTION TEST REPORT



Test specification: ASTM D 698-12 Method B Standard
ASTM D4718-15 Oversize Corr. Applied to Each Test Point

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > 3/8 in.	% < No.200
	USCS	AASHTO						
	SC	A-7-6(4)		2.76	41	27	13.4	36.5
ROCK CORRECTED TEST RESULTS			UNCORRECTED		MATERIAL DESCRIPTION			
Maximum dry density = 114.8 pcf			110.5 pcf		Dark brown clayey sand with gravel			
Optimum moisture = 14.5 %			16.2 %					
Project No. 475.0106.053 Client: Newmont- Cripple Creek & Victor Gold Mine					Remarks: *Assumed Specific Gravity			
Project: VLF2 Phase 3 Stage A Site Support 2021								
Date: 1/10/2022								
Location: SLF-5-C Sample Number: 22-001-03								
NewFields					Figure 22-001-03			

Tested By: QH

Checked By: JW

Flexible Wall Hydraulic Conductivity ASTM D5084

Client:	New Mont- Cripple Creek & Victor Gold Mine Lab Sample No.:	22-019-03
Project:	VLF2 Stage A Site Support 2021	Field Sample No.: SLF-5-C
Project No.:	475.0106.053	Location: SLF-5-C
Phase:	Phase 3	Elevation/Depth: -
Requested By:	Jay Moore	Tested By: KE
Test Started:	2/7/2022	Checked By: KM
Test Finished:	2/14/2022	Sample Description: Dark brown clayey sand with gravel

Test Boundary Conditions			
Type of Permeant	De-aired Bottled		
Magnitude of Back pressure (psi)	40		
Saturated (Y/N):	Yes		
Stage 1: Effective Stress (psi)	5		
Sample Type	Remolded		
Burrete Area (cm ²)	0.877		
Test Specimen Data	Initial	During k Testing	Final
Wet Soil + Tare (g)	617.48		899.50
Dry Soil + Tare (g)	530.11		801.68
Tare (g)	0.00		268.66
Wt. of Water (g)	87.37		97.82
Dry Soil (g)	530.11		533.02
Moisture Content (%)	16.5		18.4
Sample Volume (ft ³)	0.01068	0.01062	
Dry Density (pcf)	109.5	109.7	
Wet Density (pcf)	127.5	132.5	
Saturation (%)	79.4	100.0	
Percent Compaction	95.3	95.6	
Height (in)	3.023	3.019	
Diameter (in)	2.787	2.783	
Area (in ²)	6.102	6.084	
Est. Moisture Content after Consolidation (%)		20.6%	
Est. Void Ratio after Consolidation		0.567	
Specific Gravity*	2.76		
*Specific gravity is assumed Maximum Dry Density: ASTM D 1557	Maximum Dry Density (pcf):		114.8
	Initial Remolded Dry Density (pcf):		109.5
	Initial Percent Compaction:		95%
	Initial Void Ratio:		0.573
	Optimum Moisture Content(%):		14.5
	Initial Water Content (%):		16.5
	Confining Pressure (psi):		5.0
	Hydraulic Conductivity, k ₂₀ (cm/s):		9.9E-07
	Gradient Range (h/L):		5.5 5.5

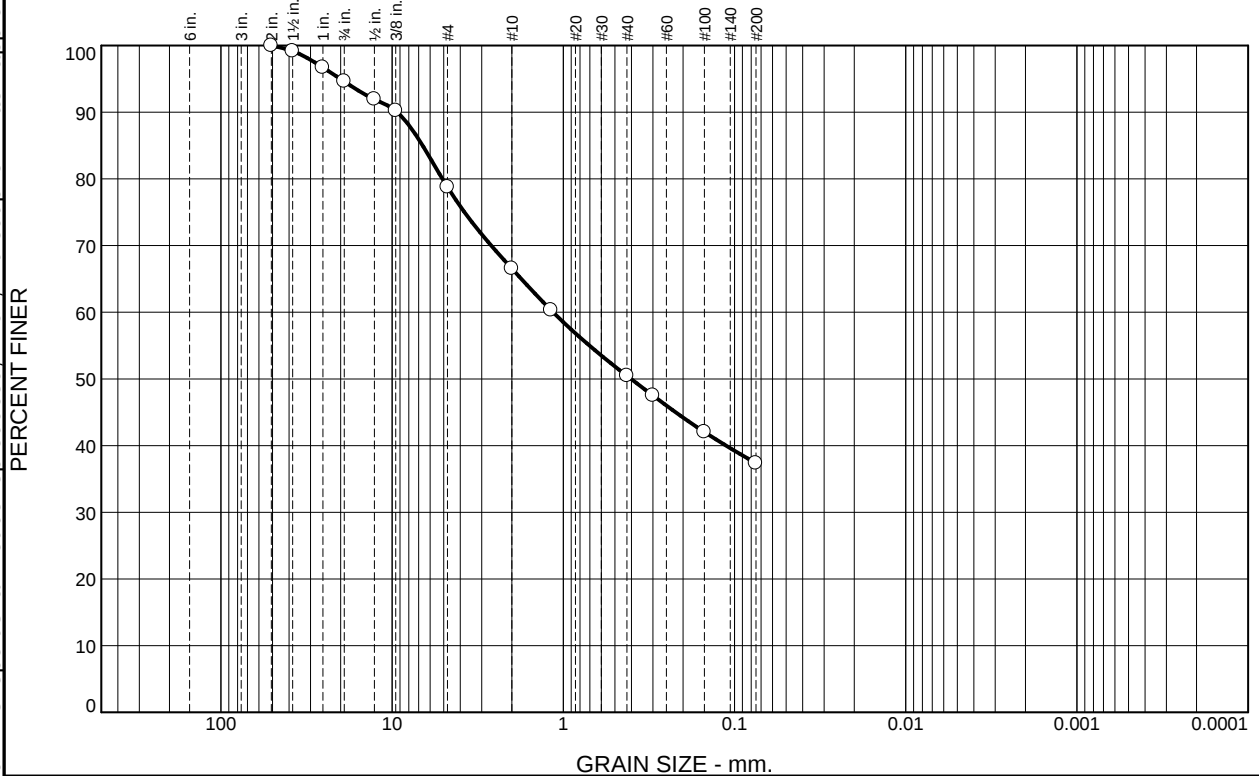
Flexible Wall Hydraulic Conductivity ASTM D5084

Client:	New Mont- Cripple Creek & Victor Gold Mine Lab Sample No.:	22-019-03
Project:	VLF2 Stage A Site Support 2021	Field Sample No.: SLF-5-C
Project No.:	475.0106.053	Location: SLF-5-C
Phase:	Phase 3	Elevation/Depth: -
Requested By:	Jay Moore	Tested By: KE
Test Started:	2/7/2022	Checked By: KM
Test Finished:	2/14/2022	Sample Description: Dark brown clayey sand with gravel

Test Boundary Conditions			
Type of Permeant	De-aired Bottled		
Magnitude of Back pressure (psi)	40		
Saturated (Y/N):	Yes		
Stage 2: Effective Stress (psi)	20		
Sample Type	Remolded		
Burrete Area (cm ²)	0.877		
Test Specimen Data	Initial	During k Testing	Final
Wet Soil + Tare (g)	617.48		899.50
Dry Soil + Tare (g)	530.11		801.68
Tare (g)	0.00		268.66
Wt. of Water (g)	87.37		97.82
Dry Soil (g)	530.11		533.02
Moisture Content (%)	16.5		18.4
Sample Volume (ft ³)	0.01062	0.01038	
Dry Density (pcf)	109.7	112.4	
Wet Density (pcf)	132.5	134.1	
Saturation (%)	100.0%	100.0	
Percent Compaction	95.6	97.9	
Height (in)	3.019	2.997	
Diameter (in)	2.783	2.763	
Area (in ²)	6.084	5.995	
Est. Moisture Content after Consolidation (%)		19.3%	
Est. Void Ratio after Consolidation		0.533	
Specific Gravity*	2.76		
*Specific gravity is assumed Maximum Dry Density: ASTM D 1557	Maximum Dry Density (pcf):		114.8
	Initial Remolded Dry Density (pcf):		109.5
	Initial Percent Compaction:		95%
	Initial Void Ratio:		0.573
	Optimum Moisture Content(%):		14.5
	Initial Water Content (%):		16.5
	Confining Pressure (psi):		20.0
	Hydraulic Conductivity, k ₂₀ (cm/s):		2.2E-08
	Gradient Range (h/L):		5.5 5.5

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Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	5.4	15.8	12.2	16.1	13.1	37.4	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2"	100.0		
1.5"	99.2		
1"	96.7		
.75"	94.6		
.5"	91.9		
.375"	90.2		
#4	78.8		
#10	66.6		
#16	60.3		
#40	50.5		
#50	47.5		
#100	42.0		
#200	37.4		

* (no specification provided)

Soil Description

Dark brown clayey sand with gravel

Atterberg Limits

PL= 14 LL= 43 PI= 29

Coefficients

D₉₀= 9.3148 D₈₅= 6.6329 D₆₀= 1.1469
D₅₀= 0.4028 D₃₀= D₁₅=
D₁₀= C_u= C_c=

Classification

USCS= SC AASHTO= A-7-6(5)

Remarks

Location: SLF-6-C
Sample Number: 22-001-04

Date: 1/6/2022



Client: Newmont- Cripple Creek & Victor Gold Mine
Project: VLF2 Phase 3 Stage A Site Support 2021

Project No: 475.0106.053

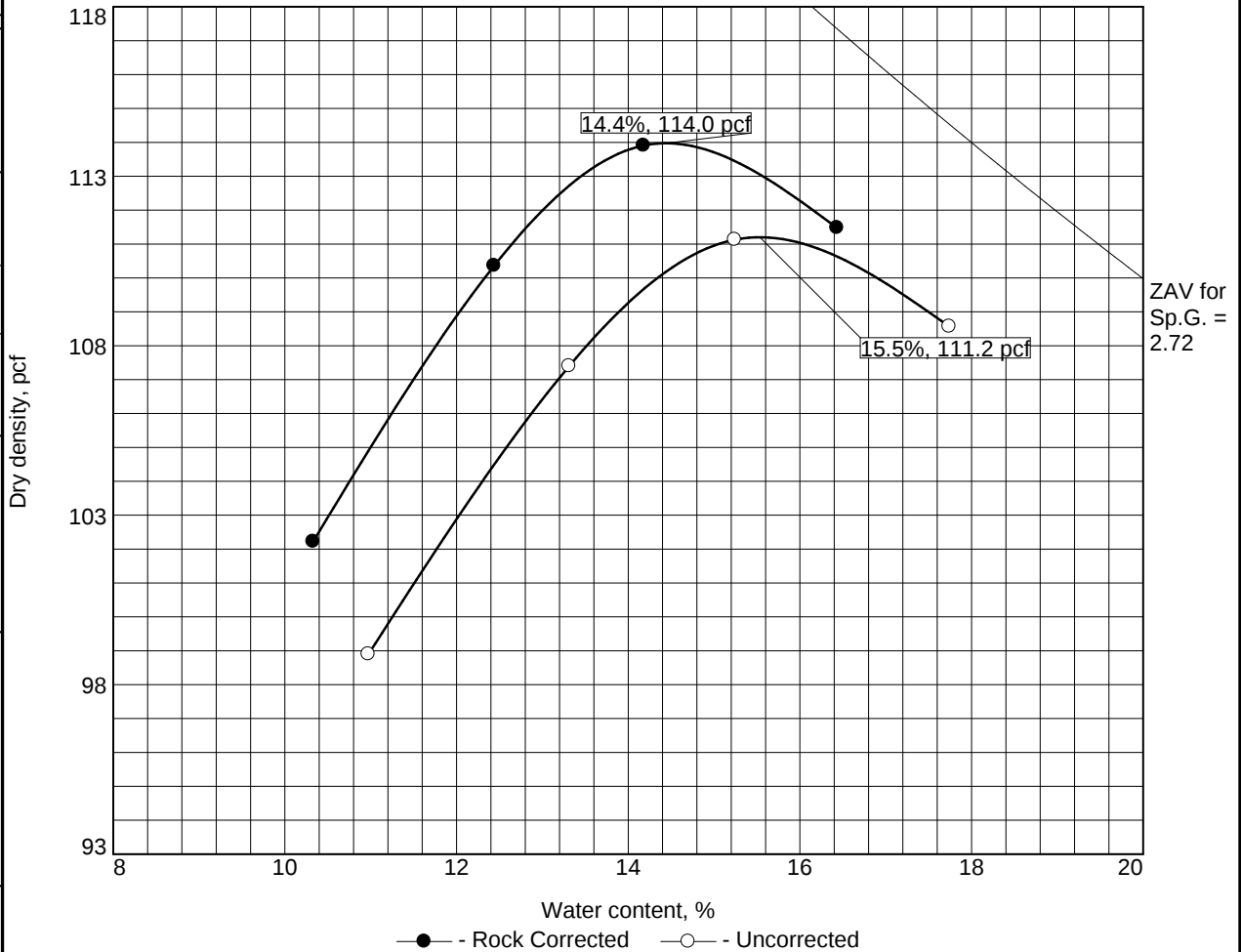
Figure 22-001-04

Tested By: AR/ZM

Checked By: JW

Test results included in this report relate only to the items inspected or tested. This report shall not be reproduced, in full, without prior written approval of NewFields.

COMPACTION TEST REPORT



Test specification: ASTM D 698-12 Method B Standard
ASTM D4718-15 Oversize Corr. Applied to Each Test Point

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > 3/8 in.	% < No.200
	USCS	AASHTO						
	SC	A-7-6(5)		2.72	43	29	9.8	37.4
ROCK CORRECTED TEST RESULTS			UNCORRECTED		MATERIAL DESCRIPTION			
Maximum dry density = 114.0 pcf			111.2 pcf		Dark brown clayey sand with gravel			
Optimum moisture = 14.4 %			15.5 %					
Project No. 475.0106.053 Client: Newmont- Cripple Creek & Victor Gold Mine					Remarks: *Assumed Specific Gravity			
Project: VLF2 Phase 3 Stage A Site Support 2021								
Date: 1/10/2022								
Location: SLF-6-C Sample Number: 22-001-04								
NewFields								
					Figure 22-001-04			

Tested By: ZM

Checked By: JW

Flexible Wall Hydraulic Conductivity ASTM D5084

Client:	New Mont- Cripple Creek & Victor Gold Mine Lab Sample No.:	22-019-04
Project:	VLF2 Stage A Site Support 2021	Field Sample No.: SLF-6-C
Project No.:	475.0106.053	Location: SLF-6-C
Phase:	Phase 3	Elevation/Depth: -
Requested By:	Jay Moore	Tested By: KE
Test Started:	2/7/2022	Checked By: KM
Test Finished:	2/14/2022	Sample Description: Dark brown clayey sand with gravel

Test Boundary Conditions			
Type of Permeant	De-aired Bottled		
Magnitude of Back pressure (psi)	40		
Saturated (Y/N):	Yes		
Stage 2: Effective Stress (psi)	20		
Sample Type	Remolded		
Burrete Area (cm ²)	0.877		
Test Specimen Data	Initial	During k Testing	Final
Wet Soil + Tare (g)	612.8		761.17
Dry Soil + Tare (g)	526.40		659.68
Tare (g)	0.00		132.57
Wt. of Water (g)	86.40		101.49
Dry Soil (g)	526.40		527.11
Moisture Content (%)	16.4		19.3
Sample Volume (ft ³)	0.01061	0.01034	
Dry Density (pcf)	109.0	112.1	
Wet Density (pcf)	131.5	133.3	
Saturation (%)	100.0%	100.0	
Percent Compaction	95.7	98.4	
Height (in)	3.016	2.990	
Diameter (in)	2.783	2.760	
Area (in ²)	6.085	5.981	
Est. Moisture Content after Consolidation (%)		18.9%	
Est. Void Ratio after Consolidation		0.514	
Specific Gravity*	2.72		
*Specific gravity is assumed Maximum Dry Density: ASTM D 1557	Maximum Dry Density (pcf):		114
	Initial Remolded Dry Density (pcf):		108.8
	Initial Percent Compaction:		95%
	Initial Void Ratio:		0.560
	Optimum Moisture Content(%):		14.4
	Initial Water Content (%):		16.4
	Confining Pressure (psi):		20.0
	Hydraulic Conductivity, k ₂₀ (cm/s):		2.7E-08
	Gradient Range (h/L):		5.5 5.5

Test results included in this report relate only to the items inspected or tested. This report shall not be reproduced, in full, without prior written approval of NewFields.

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	7.4	15.6	12.9	15.5	13.6	35.0	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2"	100.0		
1.5"	99.1		
1"	95.1		
.75"	92.6		
.5"	88.2		
.375"	85.5		
#4	77.0		
#10	64.1		
#16	58.2		
#40	48.6		
#50	45.6		
#100	40.3		
#200	35.0		

* (no specification provided)

Soil Description

Dark brown clayey sand with gravel

Atterberg Limits

PL= 14 LL= 39 PI= 25

Coefficients

D₉₀= 14.9257 D₈₅= 9.0549 D₆₀= 1.4051
D₅₀= 0.4998 D₃₀= D₁₅=
D₁₀= C_u= C_c=

Classification

USCS= SC AASHTO= A-2-6(3)

Remarks

Location: SLF-7-C
Sample Number: 22-001-05

Date: 1/6/2022



Client: Newmont- Cripple Creek & Victor Gold Mine
Project: VLF2 Phase 3 Stage A Site Support 2021

Project No: 475.0106.053

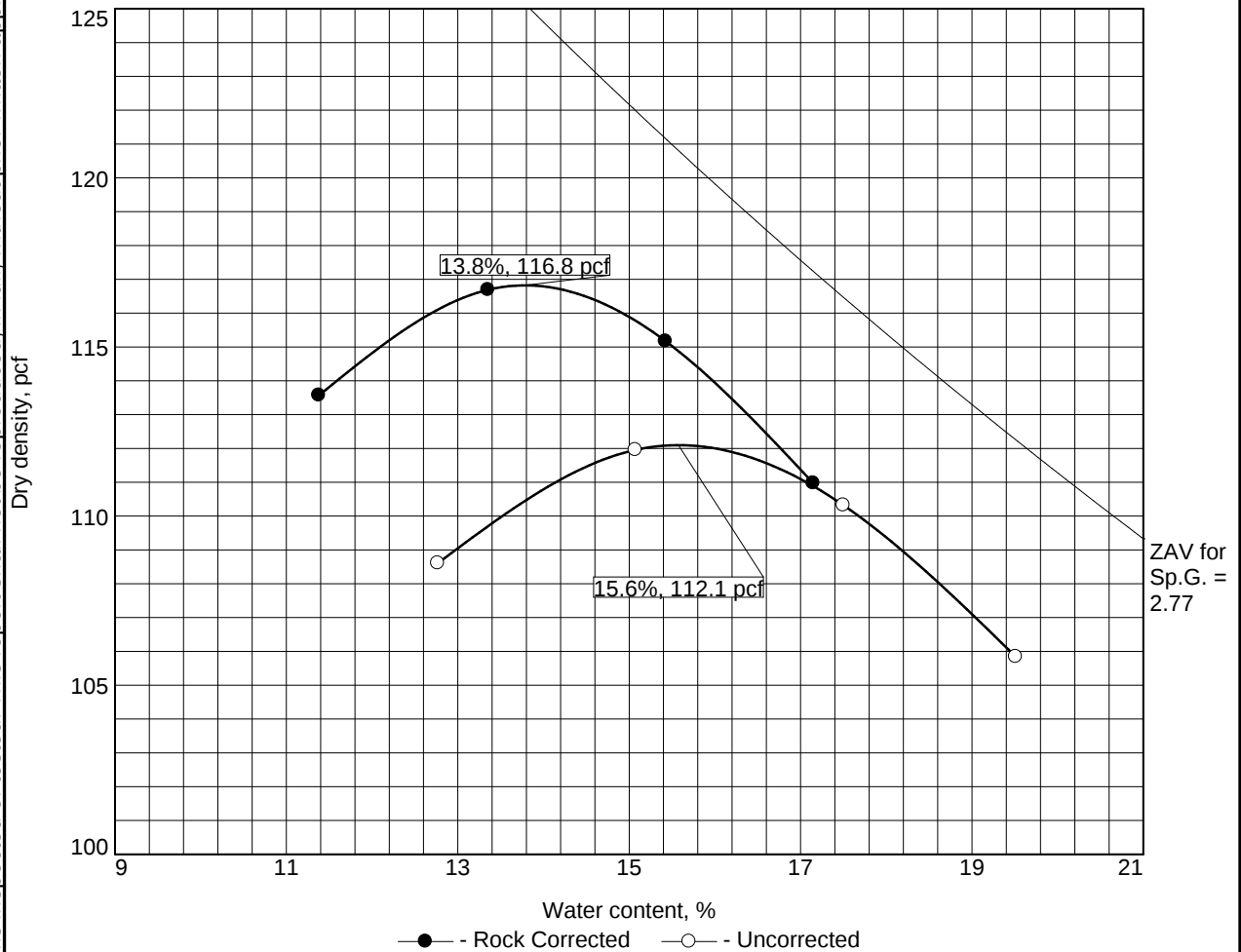
Figure 22-001-05

Tested By: AR

Checked By: JW

Test results included in this report relate only to the items inspected or tested. This report shall not be reproduced, in full, without prior written approval of NewFields.

COMPACTION TEST REPORT



Test specification: ASTM D 698-12 Method B Standard
ASTM D4718-15 Oversize Corr. Applied to Each Test Point

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > 3/8 in.	% < No.200
	USCS	AASHTO						
	SC	A-2-6(3)		2.77	39	25	14.5	35.0

ROCK CORRECTED TEST RESULTS	UNCORRECTED	MATERIAL DESCRIPTION
Maximum dry density = 116.8 pcf	112.1 pcf	Dark brown clayey sand with gravel
Optimum moisture = 13.8 %	15.6 %	

Project No. 475.0106.053 Client: Newmont- Cripple Creek & Victor Gold Mine	Remarks: *Assumed Specific Gravity
Project: VLF2 Phase 3 Stage A Site Support 2021	
Date: 1/6/2022	

Location: SLF-7-C Sample Number: 22-001-05
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NewFields

Figure 22-001-05

Tested By: ZM

Checked By: JW

Flexible Wall Hydraulic Conductivity ASTM D5084

Client:	New Mont- Cripple Creek & Victor Gold Mine Lab Sample No.:	22-019-05
Project:	VLF2 Stage A Site Support 2021	Field Sample No.: SLF-7-C
Project No.:	475.0106.053	Location: SLF-7-C
Phase:	Phase 3	Elevation/Depth: -
Requested By:	Jay Moore	Tested By: KE
Test Started:	2/7/2022	Checked By: KM
Test Finished:	2/14/2022	Sample Description: Dark brown clayey sand with gravel

Test Boundary Conditions			
Type of Permeant	De-aired Bottled		
Magnitude of Back pressure (psi)	40		
Saturated (Y/N):	Yes		
Stage 1: Effective Stress (psi)	5		
Sample Type	Remolded		
Burrete Area (cm ²)	0.877		
Test Specimen Data	Initial	During k Testing	Final
Wet Soil + Tare (g)	624.59		787.90
Dry Soil + Tare (g)	539.33		690.70
Tare (g)	0.00		150.58
Wt. of Water (g)	85.26		97.20
Dry Soil (g)	539.33		540.12
Moisture Content (%)	15.8		18.0
Sample Volume (ft ³)	0.01070	0.01063	
Dry Density (pcf)	111.1	111.4	
Wet Density (pcf)	128.7	133.8	
Saturation (%)	78.8	100.0	
Percent Compaction	95.1	95.4	
Height (in)	3.022	3.017	
Diameter (in)	2.791	2.786	
Area (in ²)	6.118	6.096	
Est. Moisture Content after Consolidation (%)		19.8%	
Est. Void Ratio after Consolidation		0.548	
Specific Gravity*	2.77		
*Specific gravity is assumed Maximum Dry Density: ASTM D 1557	Maximum Dry Density (pcf):		116.8
	Initial Remolded Dry Density (pcf):		111.1
	Initial Percent Compaction:		95%
	Initial Void Ratio:		0.556
	Optimum Moisture Content(%):		13.8
	Initial Water Content (%):		15.8
	Confining Pressure (psi):		5.0
	Hydraulic Conductivity, k ₂₀ (cm/s):		2.1E-07
	Gradient Range (h/L):		5.5 5.5

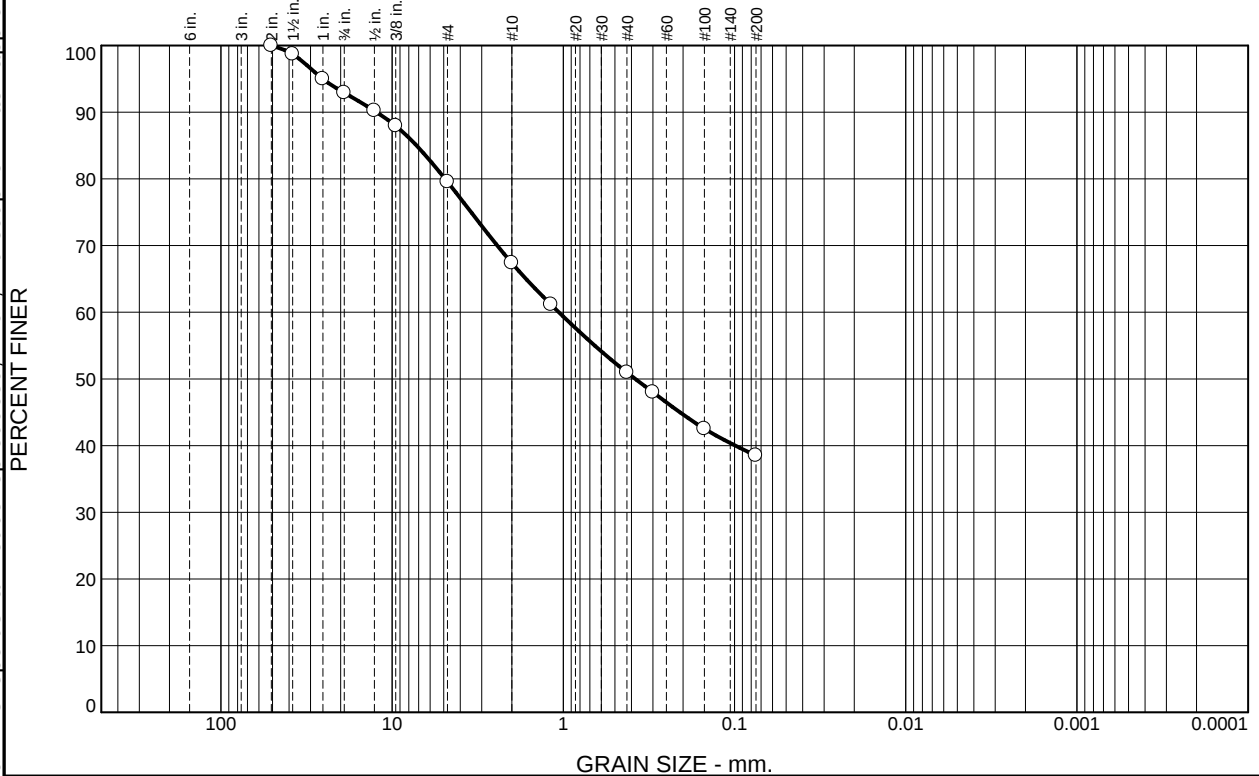
Flexible Wall Hydraulic Conductivity ASTM D5084

Client:	New Mont- Cripple Creek & Victor Gold Mine Lab Sample No.:	22-019-05
Project:	VLF2 Stage A Site Support 2021	Field Sample No.: SLF-7-C
Project No.:	475.0106.053	Location: SLF-7-C
Phase:	Phase 3	Elevation/Depth: -
Requested By:	Jay Moore	Tested By: KE
Test Started:	2/7/2022	Checked By: KM
Test Finished:	2/14/2022	Sample Description: Dark brown clayey sand with gravel

Test Boundary Conditions			
Type of Permeant	De-aired Bottled		
Magnitude of Back pressure (psi)	40		
Saturated (Y/N):	Yes		
Stage 2: Effective Stress (psi)	20		
Sample Type	Remolded		
Burrete Area (cm ²)	0.877		
Test Specimen Data	Initial	During k Testing	Final
Wet Soil + Tare (g)	624.59		787.90
Dry Soil + Tare (g)	539.33		690.70
Tare (g)	0.00		150.58
Wt. of Water (g)	85.26		97.20
Dry Soil (g)	539.33		540.12
Moisture Content (%)	15.8		18.0
Sample Volume (ft ³)	0.01063	0.01041	
Dry Density (pcf)	111.4	114.1	
Wet Density (pcf)	133.8	135.3	
Saturation (%)	100.0%	100.0	
Percent Compaction	95.4	97.7	
Height (in)	3.017	2.996	
Diameter (in)	2.786	2.767	
Area (in ²)	6.096	6.012	
Est. Moisture Content after Consolidation (%)		18.6%	
Est. Void Ratio after Consolidation		0.516	
Specific Gravity*	2.77		
*Specific gravity is assumed Maximum Dry Density: ASTM D 1557	Maximum Dry Density (pcf):		116.8
	Initial Remolded Dry Density (pcf):		111.1
	Initial Percent Compaction:		95%
	Initial Void Ratio:		0.556
	Optimum Moisture Content(%):		13.8
	Initial Water Content (%):		15.8
	Confining Pressure (psi):		20.0
	Hydraulic Conductivity, k ₂₀ (cm/s):		2.3E-08
	Gradient Range (h/L):		5.5 5.5

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Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	7.1	13.4	12.1	16.4	12.5	38.5	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2"	100.0		
1.5"	98.7		
1"	95.0		
.75"	92.9		
.5"	90.2		
.375"	88.0		
#4	79.5		
#10	67.4		
#16	61.1		
#40	51.0		
#50	48.0		
#100	42.5		
#200	38.5		

* (no specification provided)

Soil Description

Dark brown clayey sand with gravel

Atterberg Limits

PL= 17 LL= 42 PI= 25

Coefficients

D₉₀= 12.3251 D₈₅= 7.1962 D₆₀= 1.0623
D₅₀= 0.3801 D₃₀= D₁₅=
D₁₀= C_u= C_c=

Classification

USCS= SC AASHTO= A-7-6(4)

Remarks

Location: SLF-8-C
Sample Number: 22-001-06

Date: 1/6/2022



Client: Newmont- Cripple Creek & Victor Gold Mine
Project: VLF2 Phase 3 Stage A Site Support 2021

Project No: 475.0106.053

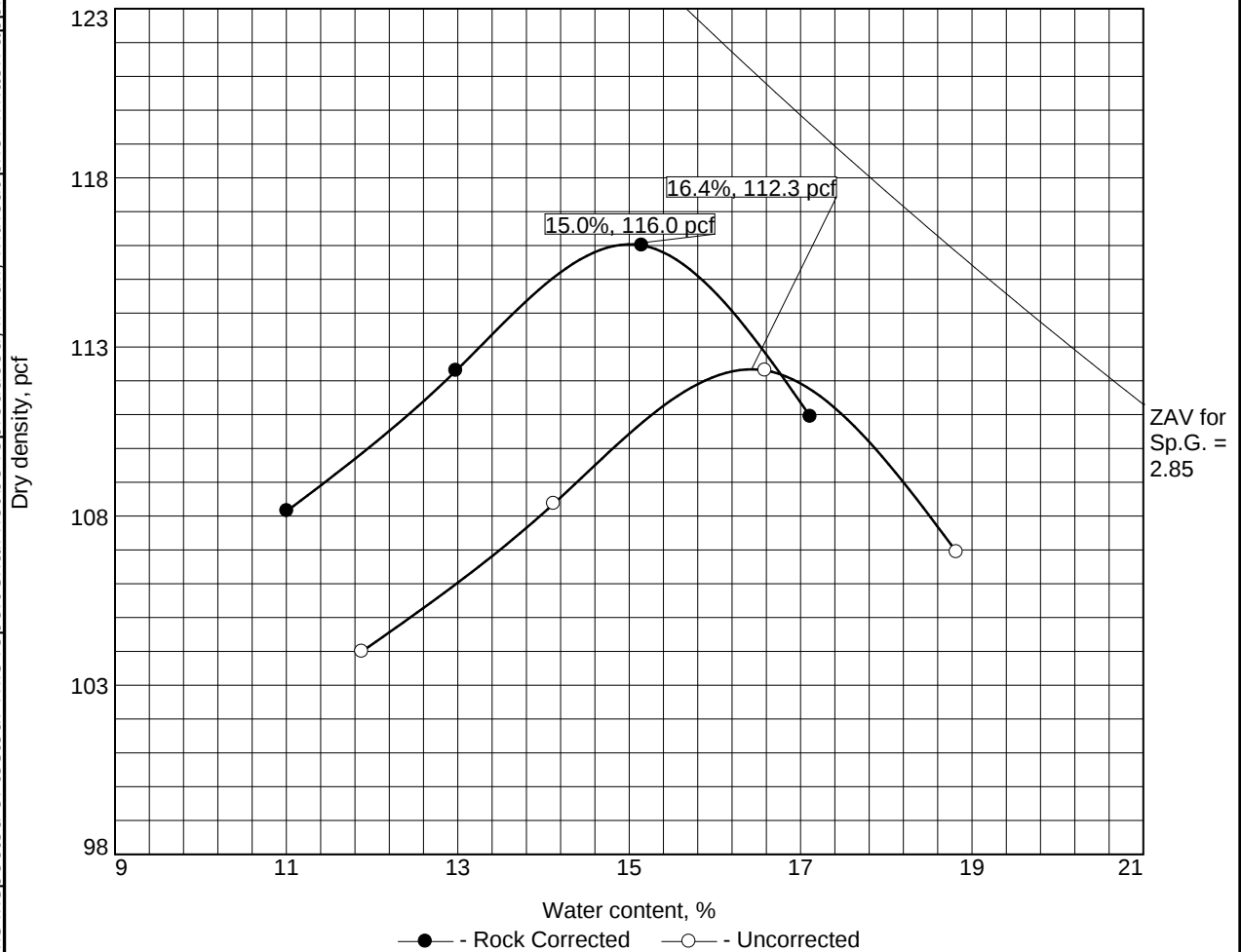
Figure 22-001-06

Tested By: EG/ZM

Checked By: JW

Test results included in this report relate only to the items inspected or tested. This report shall not be reproduced, in full, without prior written approval of NewFields.

COMPACTION TEST REPORT



Test specification: ASTM D 698-12 Method B Standard
ASTM D4718-15 Oversize Corr. Applied to Each Test Point

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > 3/8 in.	% < No.200
	USCS	AASHTO						
	SC	A-7-6(4)		2.85	42	25	12.0	38.5
ROCK CORRECTED TEST RESULTS			UNCORRECTED		MATERIAL DESCRIPTION			
Maximum dry density = 116.0 pcf			112.3 pcf		Dark brown clayey sand with gravel			
Optimum moisture = 15.0 %			16.4 %					
Project No. 475.0106.053 Client: Newmont- Cripple Creek & Victor Gold Mine					Remarks: *Assumed Specific Gravity			
Project: VLF2 Phase 3 Stage A Site Support 2021								
Date: 1/10/2022								
Location: SLF-8-C Sample Number: 22-001-06								
NewFields								
					Figure 22-001-06			

Figure 22-001-06

Tested By: QH Checked By: JW

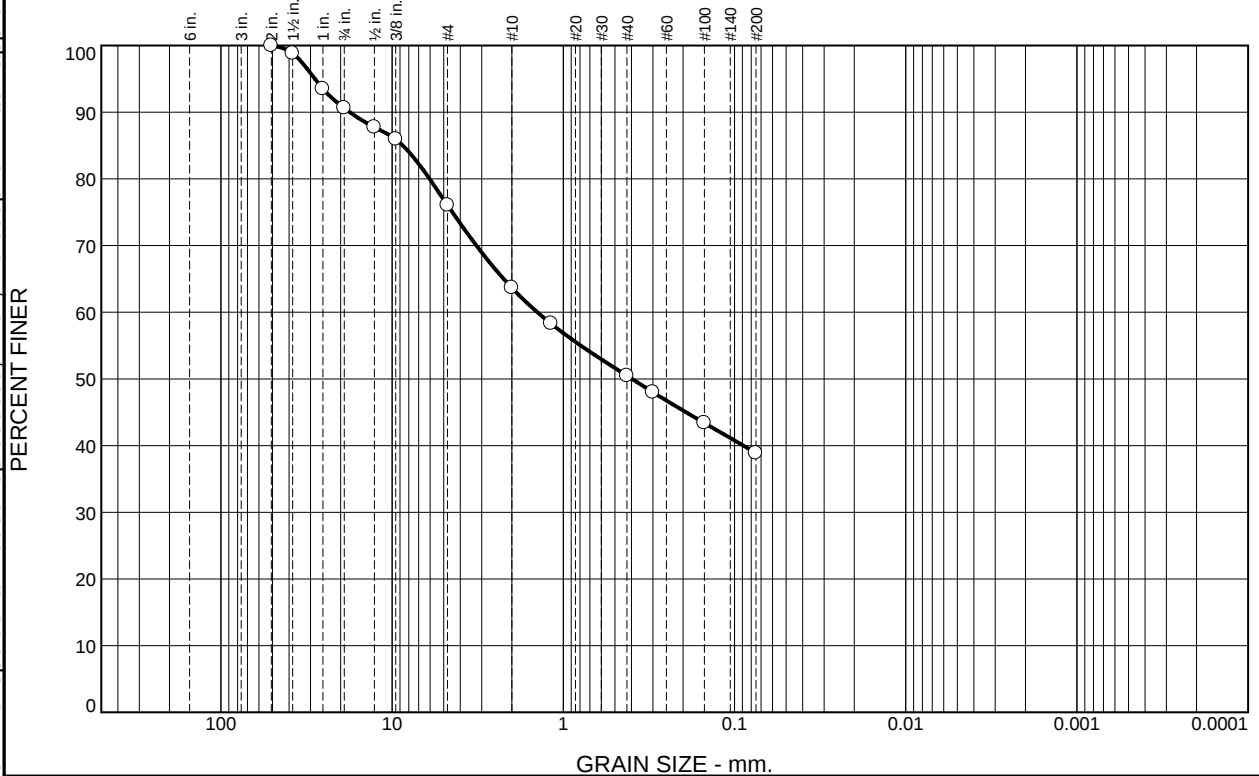
Flexible Wall Hydraulic Conductivity ASTM D5084

Client:	New Mont- Cripple Creek & Victor Gold Mine Lab Sample No.:	22-001-06
Project:	VLF2 Stage A Site Support 2021	Field Sample No.: SLF-8-C
Project No.:	475.0106.053	Location: SLF-8-C
Phase:	Phase 3	Elevation/Depth: -
Requested By:	Jay Moore	Tested By: KE
Test Started:	1/14/2022	Checked By: KM
Test Finished:	1/25/2022	Sample Description: Dark brown clayey sand with gravel

Test Boundary Conditions			
Type of Permeant	De-aired Bottled		
Magnitude of Back pressure (psi)	40		
Saturated (Y/N):	Yes		
Stage 1: Effective Stress (psi)	5		
Sample Type	Remolded		
Burrete Area (cm ²)	0.877		
Test Specimen Data	Initial	During k Testing	Final
Wet Soil + Tare (g)	615.68		689.93
Dry Soil + Tare (g)	535.33		580.19
Tare (g)	0.00		44.84
Wt. of Water (g)	80.35		109.74
Dry Soil (g)	535.33		535.35
Moisture Content (%)	15.0		20.5
Sample Volume (ft ³)	0.01069	0.01061	
Dry Density (pcf)	110.4	110.8	
Wet Density (pcf)	127.0	134.5	
Saturation (%)	70.1	100.0	
Percent Compaction	95.2	95.5	
Height (in)	3.021	3.015	
Diameter (in)	2.790	2.785	
Area (in ²)	6.114	6.090	
Est. Moisture Content after Consolidation (%)		21.1%	
Est. Void Ratio after Consolidation		0.602	
Specific Gravity*	2.85		
*Specific gravity is assumed Maximum Dry Density: ASTM D 1557	Maximum Dry Density (pcf):		116
	Initial Remolded Dry Density (pcf):		110.4
	Initial Percent Compaction:		95%
	Initial Void Ratio:		0.610
	Optimum Moisture Content(%):		15.0
	Initial Water Content (%):		15.0
	Confining Pressure (psi):		5.0
	Hydraulic Conductivity, k ₂₀ (cm/s):		2.6E-07
	Gradient Range (h/L):		5.5 5.5

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Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	9.4	14.6	12.3	13.2	11.6	38.9	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2"	100.0		
1.5"	98.8		
1"	93.5		
.75"	90.6		
.5"	87.7		
.375"	85.9		
#4	76.0		
#10	63.7		
#16	58.3		
#40	50.5		
#50	48.0		
#100	43.4		
#200	38.9		

* (no specification provided)

Soil Description

Dark brown clayey sand with gravel

Atterberg Limits

PL= 17 LL= 43 PI= 26

Coefficients

D₉₀= 17.6557 D₈₅= 8.6437 D₆₀= 1.4181
D₅₀= 0.3973 D₃₀= D₁₅=
D₁₀= C_u= C_c=

Classification

USCS= SC AASHTO= A-7-6(5)

Remarks

Location: SLF-9-C
Sample Number: 22-001-07

Date: 1/6/2022



Client: Newmont- Cripple Creek & Victor Gold Mine
Project: VLF2 Phase 3 Stage A Site Support 2021

Project No: 475.0106.053

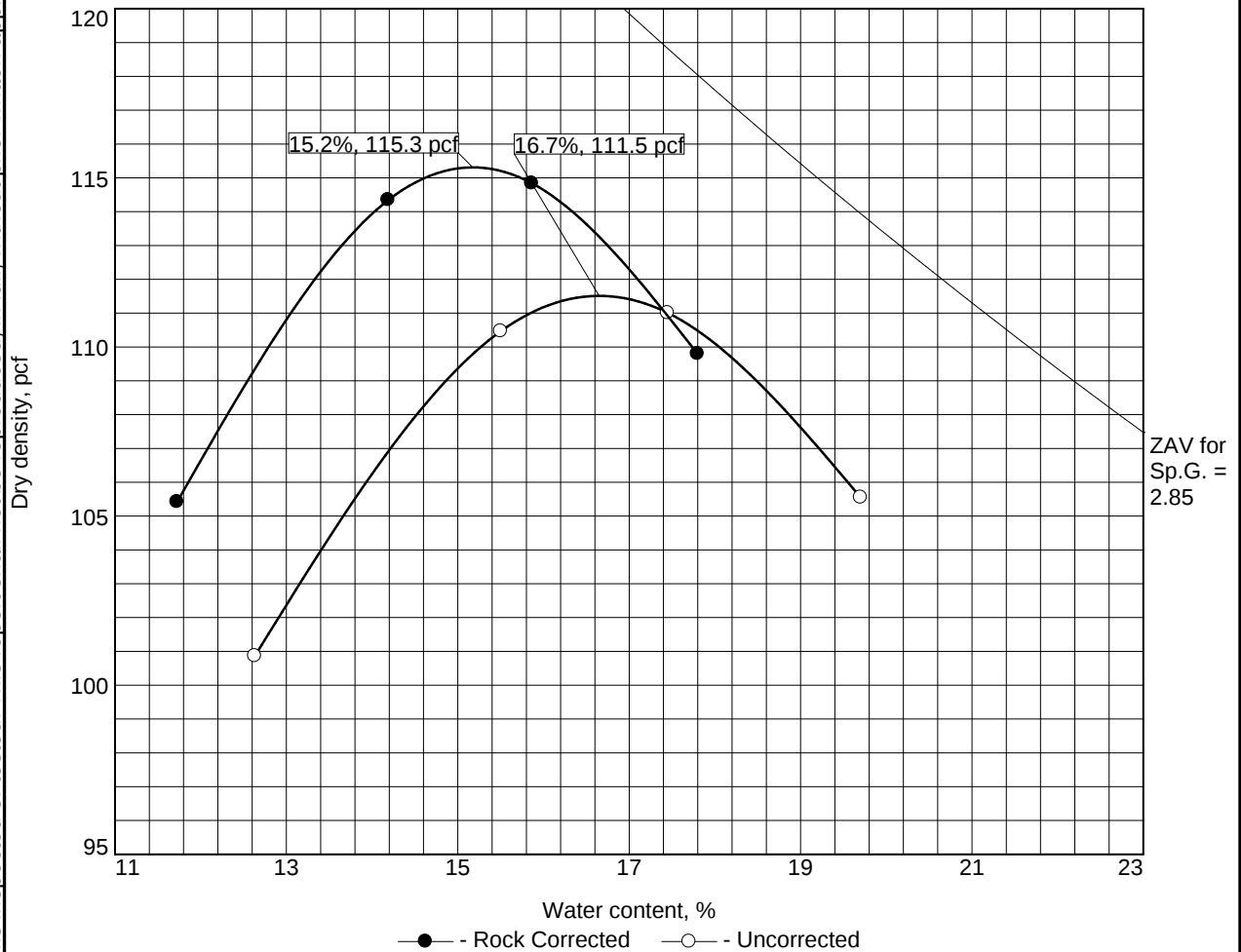
Figure 22-001-07

Tested By: AR/ZM

Checked By: JW

Test results included in this report relate only to the items inspected or tested. This report shall not be reproduced, in full, without prior written approval of NewFields.

COMPACTION TEST REPORT



Test specification: ASTM D 698-12 Method B Standard
ASTM D4718-15 Oversize Corr. Applied to Each Test Point

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > 3/8 in.	% < No.200
	USCS	AASHTO						
	SC	A-7-6(5)		2.85	43	26	14.1	38.9
ROCK CORRECTED TEST RESULTS			UNCORRECTED		MATERIAL DESCRIPTION			
Maximum dry density = 115.3 pcf			111.5 pcf		Dark brown clayey sand with gravel			
Optimum moisture = 15.2 %			16.7 %					
Project No. 475.0106.053 Client: Newmont- Cripple Creek & Victor Gold Mine					Remarks: *Assumed Specific Gravity			
Project: VLF2 Phase 3 Stage A Site Support 2021								
Date: 1/10/2022								
Location: SLF-9-C Sample Number: 22-001-07								
NewFields					Figure 22-001-07			

Tested By: ZM

Checked By: JW

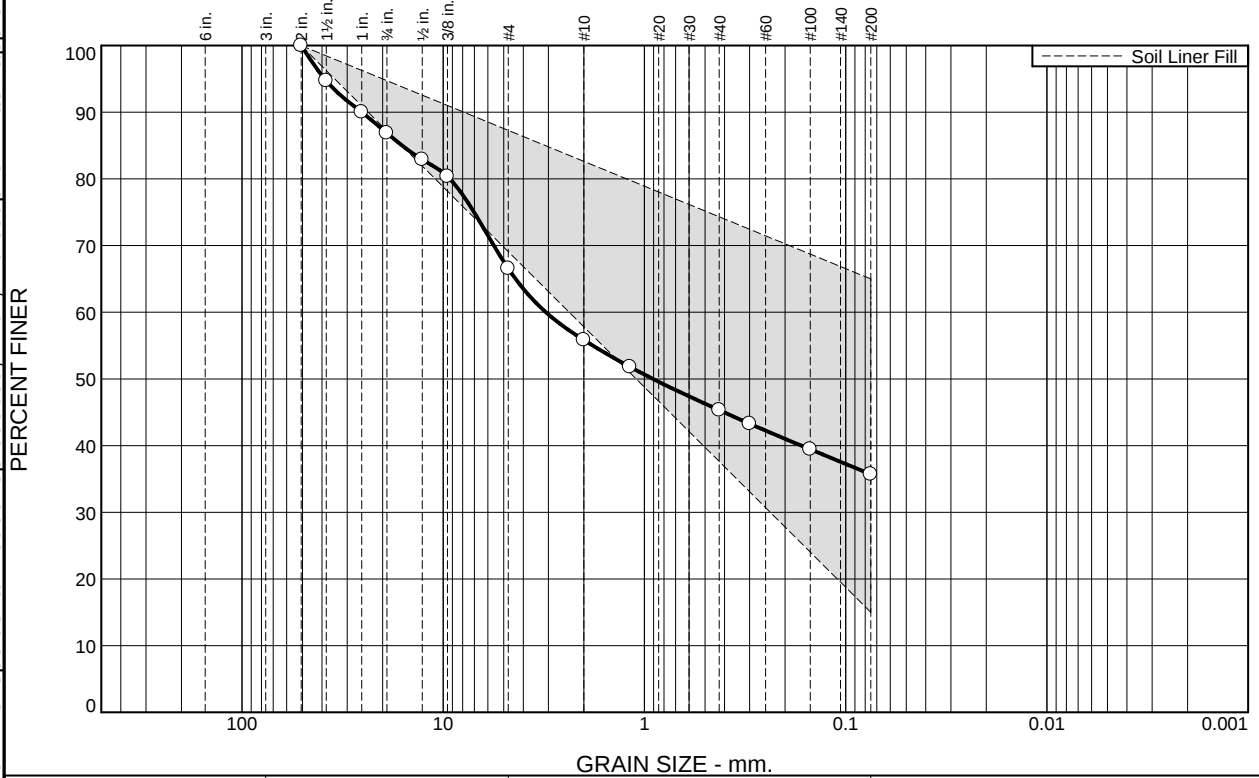
Flexible Wall Hydraulic Conductivity ASTM D5084

Client:	New Mont- Cripple Creek & Victor Gold Mine Lab Sample No.:	22-001-07
Project:	VLF2 Stage A Site Support 2021	Field Sample No.: SLF-9-C
Project No.:	475.0106.053	Location: SLF-9-C
Phase:	Phase 3	Elevation/Depth: -
Requested By:	Jay Moore	Tested By: KE
Test Started:	1/14/2022	Checked By: KM
Test Finished:	1/25/2022	Sample Description: Dark brown clayey sand with gravel

Test Boundary Conditions			
Type of Permeant	De-aired Bottled		
Magnitude of Back pressure (psi)	40		
Saturated (Y/N):	Yes		
Stage 1: Effective Stress (psi)	5		
Sample Type	Remolded		
Burrete Area (cm ²)	0.877		
Test Specimen Data	Initial	During k Testing	Final
Wet Soil + Tare (g)	613.03		766.67
Dry Soil + Tare (g)	532.11		664.96
Tare (g)	0.00		132.37
Wt. of Water (g)	80.92		101.71
Dry Soil (g)	532.11		532.59
Moisture Content (%)	15.2		19.1
Sample Volume (ft ³)	0.01068	0.01062	
Dry Density (pcf)	109.9	110.1	
Wet Density (pcf)	126.6	134.1	
Saturation (%)	70.0	100.0	
Percent Compaction	95.3	95.5	
Height (in)	3.016	3.012	
Diameter (in)	2.791	2.787	
Area (in ²)	6.118	6.099	
Est. Moisture Content after Consolidation (%)		21.5%	
Est. Void Ratio after Consolidation		0.612	
Specific Gravity*	2.85		
*Specific gravity is assumed Maximum Dry Density: ASTM D 1557	Maximum Dry Density (pcf):		115.3
	Initial Remolded Dry Density (pcf):		109.9
	Initial Percent Compaction:		95%
	Initial Void Ratio:		0.619
	Optimum Moisture Content(%):		15.2
	Initial Water Content (%):		15.2
	Confining Pressure (psi):		5.0
	Hydraulic Conductivity, k ₂₀ (cm/s):		3.6E-08
	Gradient Range (h/L):		5.5 5.5

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Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	13.1	20.4	10.7	10.5	9.6	35.7	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2	100.0	100.0	
1.5	94.7		
1	90.0		
.75	86.9		
0.5	82.9		
.375	80.4		
#4	66.5		
#10	55.8		
#16	51.8		
#40	45.3		
#50	43.3		
#100	39.4		
#200	35.7	15.0 - 65.0	

* Soil Liner Fill

Material Description

Brown clayey gravel with sand

Atterberg Limits

PL= 16 LL= 39 PI= 23

Coefficients

D₉₀= 25.3876 D₈₅= 15.9822 D₆₀= 3.0889
D₅₀= 0.9065 D₃₀= D₁₅=
D₁₀= C_u= C_c=

Classification

USCS= GC AASHTO= A-6(3)

Remarks

Location: Lower Dump 1 Stockpile
Sample Number: SLF-10-C

Date: 5/20/2022

NewFields

Client: Newmont-Cripple Creek & Victor Goldmine
Project: VLF2 Phase 3

Project No: 475.0106.056

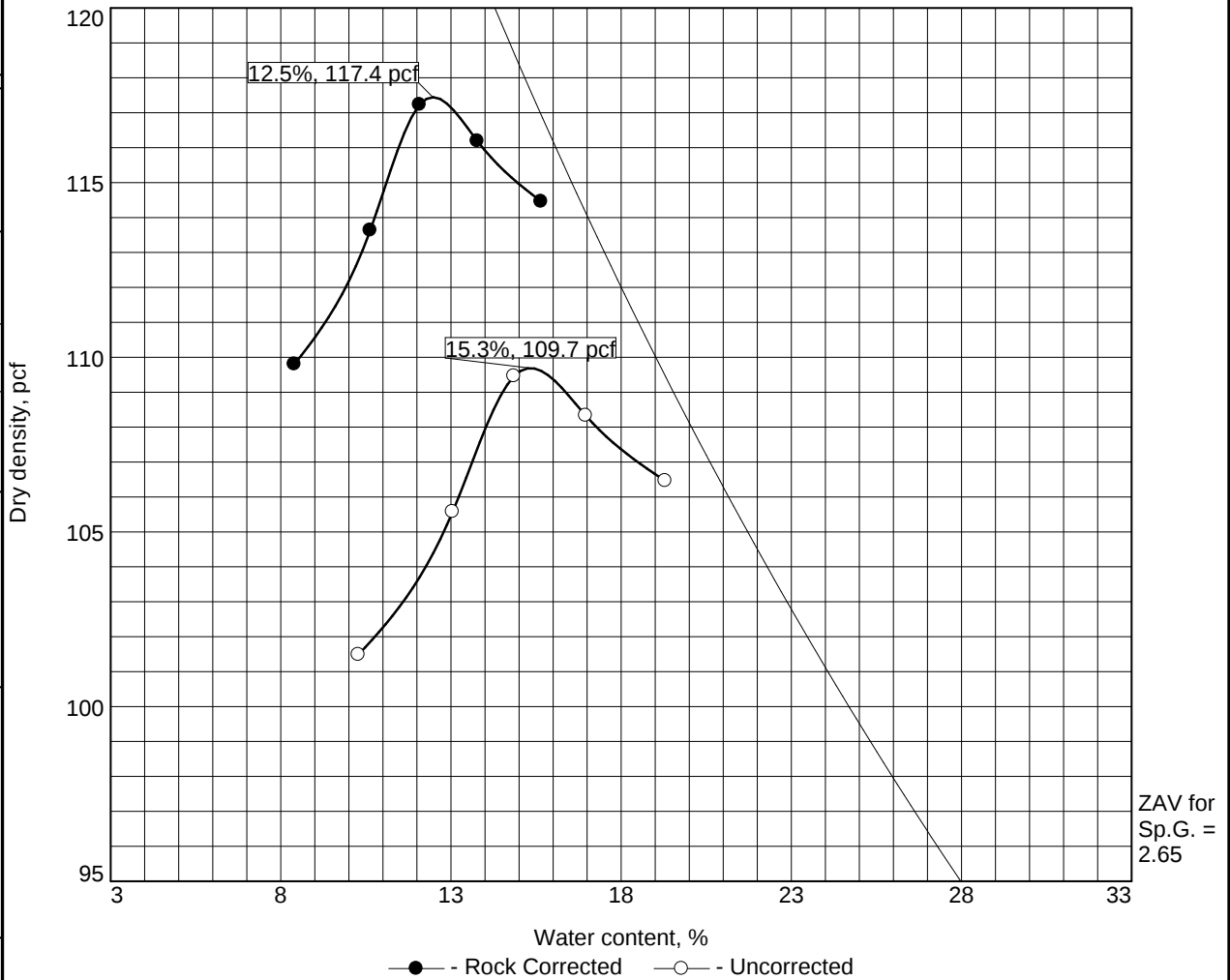
Figure SLF-10-C

Tested By: GF

Checked By: GF

Test results included in this report relate only to the items inspected or tested. This report shall not be reproduced, in full, without prior written approval of NewFields.

COMPACTION TEST REPORT



Test specification: ASTM D 698-12 Method B Standard
ASTM D4718-15 Oversize Corr. Applied to Each Test Point

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > 3/8 in.	% < No.200
	USCS	AASHTO						
	GC	A-6(3)		2.65	39	23	19.6	35.7
ROCK CORRECTED TEST RESULTS			UNCORRECTED		MATERIAL DESCRIPTION			
Maximum dry density = 117.4 pcf			109.7 pcf		Brown clayey gravel with sand			
Optimum moisture = 12.5 %			15.3 %					
Project No. 475.0106.056 Client: Newmont-Cripple Creek & Victor Goldmine Project: VLF2 Phase 3					Remarks:			
Location: Lower Dump 1 Stockpile Sample Number: SLF-10-C								
NewFields								
					Figure SLF-10-C			

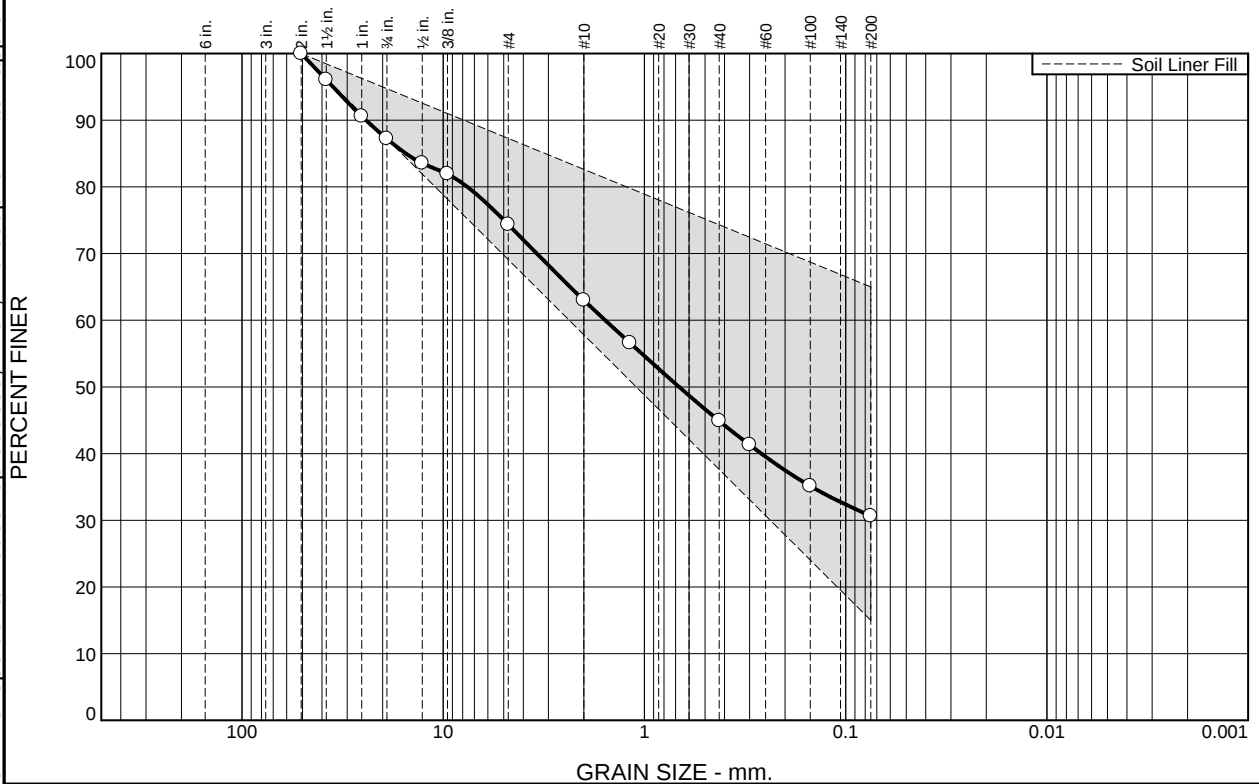
Flexible Wall Hydraulic Conductivity ASTM D5084

Client: Cripple Creek and Victor Gold Mines	Lab Sample No.: SLF-10-C
Project: VLF2 PH3	Field Sample No.: SLF-10-C
Project No.: 475.0106.056	Location: Lower Dump 1 Stockpile
Phase: A	Elevation/Depth: Stockpile
Requested By: RL	Tested By: TW
Test Started: 6/20/2022	Checked By: TW
Test Finished: 7/6/2022	Sample Description: Brown clayey gravel with sand

Test Boundary Conditions			
Type of Permeant	De-aired Bottled		
Magnitude of Back pressure (psi)	46		
Saturated (Y/N):	Yes		
Stage 2: Effective Stress (psi)	20		
Sample Type	Remolded		
Burette Area (cm ²)	0.877		
Test Specimen Data	Initial	During k Testing	Final
Wet Soil + Tare (g)	606.4		786.70
Dry Soil + Tare (g)	537.88		689.40
Tare (g)	0.00		145.70
Wt. of Water (g)	68.52		97.30
Dry Soil (g)	537.88		543.70
Moisture Content (%)	12.7		17.9
Sample Volume (ft ³)	0.01049	0.01041	
Dry Density (pcf)	113.0	113.9	
Wet Density (pcf)	132.8	133.3	
Saturation (%)	100.0%	100.0	
Percent Compaction	95.9	96.7	
Height (in)	2.992	2.981	
Diameter (in)	2.769	2.759	
Area (in ²)	6.021	5.980	
Est. Moisture Content after Consolidation (%)		17.1%	
Est. Void Ratio after Consolidation		0.452	
Specific Gravity*	2.65		
*Specific gravity is assumed	Maximum Dry Density (pcf):		117.8
Maximum Dry Density:	Initial Remolded Dry Density (pcf):		112.9
ASTM D 698	Initial Percent Compaction:		96%
	Initial Void Ratio:		0.464
	Optimum Moisture Content(%):		12.6
	Initial Water Content (%):		12.7
	Confining Pressure (psi):		20.0
	Hydraulic Conductivity, k₂₀ (cm/s):		2.2E-07
	Gradient Range (h/L):		1.8 3.1

Test results included in this report relate only to the items inspected or tested. This report shall not be reproduced, in full, without prior written approval of NewFields.

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	12.8	12.8	11.4	18.1	14.3	30.6	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2	100.0	100.0	
1.5	96.1		
1	90.6		
.75	87.2		
0.5	83.5		
.375	81.9		
#4	74.4		
#10	63.0		
#16	56.6		
#40	44.9		
#50	41.3		
#100	35.1		
#200	30.6	15.0 - 65.0	

* Soil Liner Fill

Material Description

Brown clayey sand with gravel

Atterberg Limits

PL= 14 LL= 37 PI= 23

Coefficients

D₉₀= 24.2300 D₈₅= 15.3004 D₆₀= 1.5671
D₅₀= 0.6722 D₃₀= C_u=
D₁₀= C_c=

Classification

USCS= SC AASHTO= A-2-6(2)

Remarks

Location: Lower Dump 1 Stockpile
Sample Number: SLF-11-C

Date: 5/20/2022

NewFields

Client: Newmont-Cripple Creek & Victor Goldmine
Project: VLF2 Phase 3

Project No: 475.0106.056

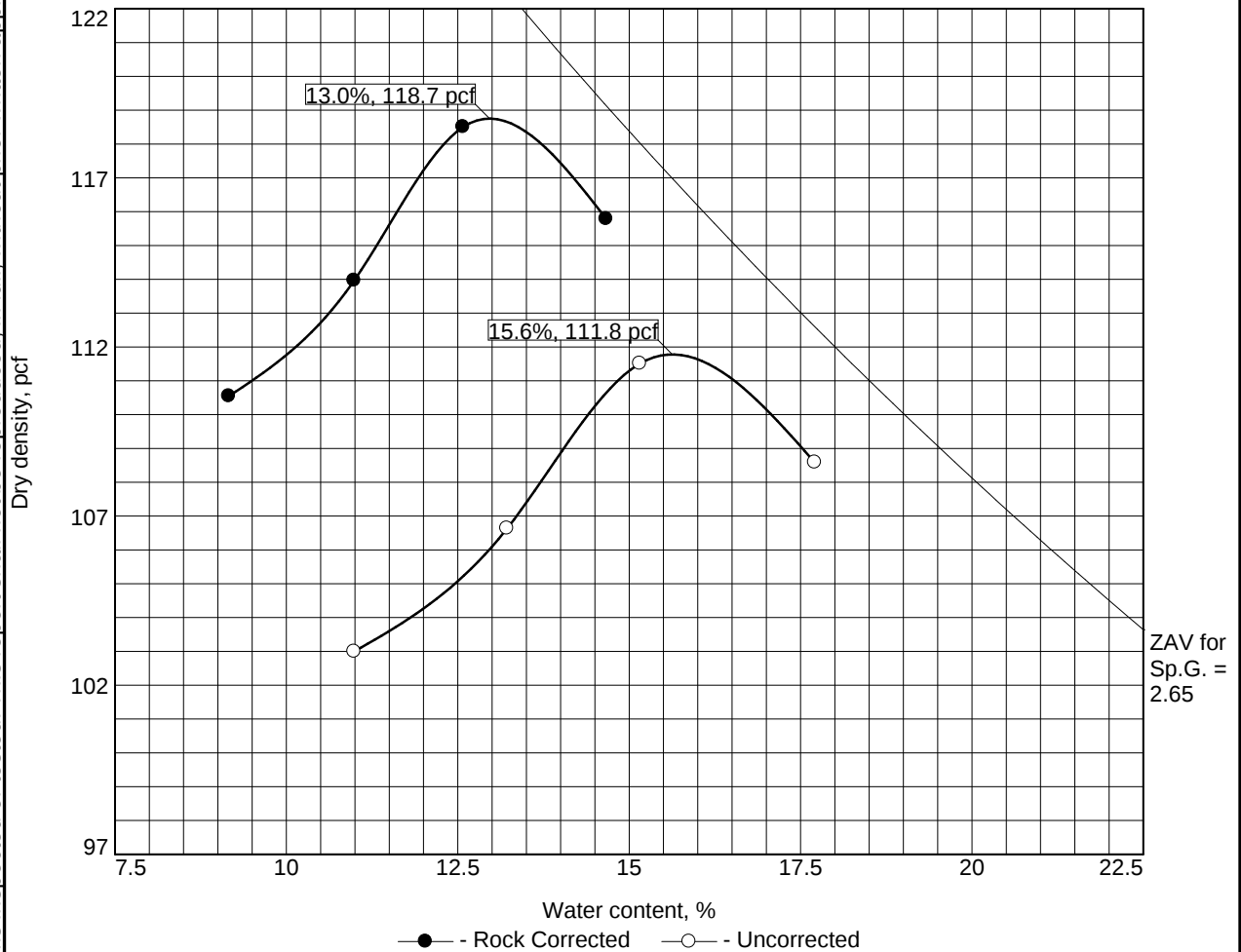
Figure SLF-11-C

Tested By: GF

Checked By: GF

Test results included in this report relate only to the items inspected or tested. This report shall not be reproduced, in full, without prior written approval of NewFields.

COMPACTION TEST REPORT



Test specification: ASTM D 698-12 Method B Standard
ASTM D4718-15 Oversize Corr. Applied to Each Test Point

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > 3/8 in.	% < No.200
	USCS	AASHTO						
	SC	A-2-6(2)		2.65	37	23	18.1	30.6
ROCK CORRECTED TEST RESULTS			UNCORRECTED		MATERIAL DESCRIPTION			
Maximum dry density = 118.7 pcf			111.8 pcf		Brown clayey sand with gravel			
Optimum moisture = 13.0 %			15.6 %					
Project No. 475.0106.056 Client: Newmont-Cripple Creek & Victor Goldmine Project: VLF2 Phase 3					Remarks:			
Location: Lower Dump 1 Stockpile Sample Number: SLF-11-C								
NewFields								
					Figure SLF-11-C			

Tested By: GF Checked By: GF

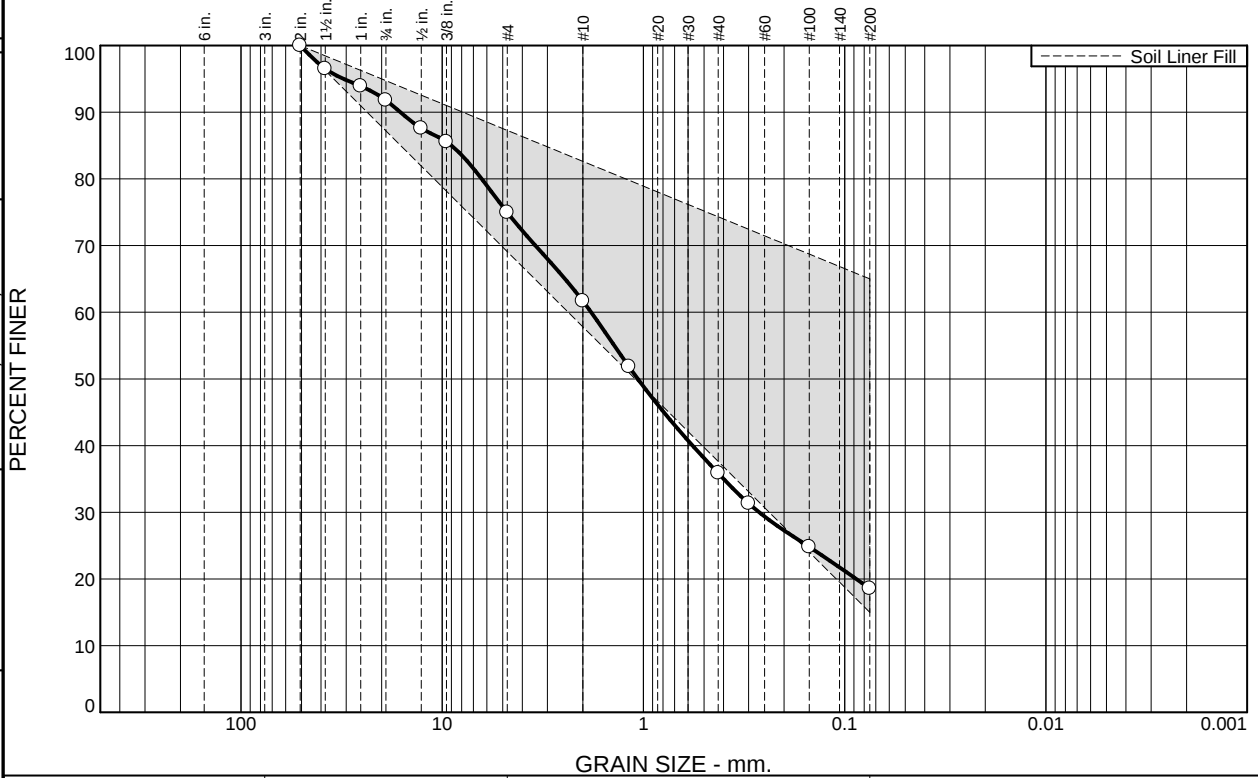
Flexible Wall Hydraulic Conductivity ASTM D5084

Client: Cripple Creek and Victor Gold Mines	Lab Sample No.: SLF-11-C	
Project: VLF2 PH3		
Project No.: 475.0106.056	Location: Lower Dump 1 Stockpile	
Phase: A	Elevation/Depth: Stockpile	
Requested By: RL	Tested By: TW	
Test Started: 6/20/2022	Checked By: TW	
Test Finished: 7/7/2022	Sample Description: Brown clayey sand with gravel	

Test Boundary Conditions			
Type of Permeant	De-aired Bottled		
Magnitude of Back pressure (psi)	46		
Saturated (Y/N):	Yes		
Stage 1: Effective Stress (psi)	5		
Sample Type	Remolded		
Burette Area (cm ²)	0.877		
Test Specimen Data	Initial	During k Testing	Final
Wet Soil + Tare (g)	612.9		755.90
Dry Soil + Tare (g)	542.78		656.30
Tare (g)	0.00		120.10
Wt. of Water (g)	70.12		99.60
Dry Soil (g)	542.78		536.20
Moisture Content (%)	12.9		18.6
Sample Volume (ft ³)	0.01065	0.01065	
Dry Density (pcf)	112.2	112.2	
Wet Density (pcf)	126.8	132.3	
Saturation (%)	72.8	100.0	
Percent Compaction	94.6	94.5	
Height (in)	3.026	3.026	
Diameter (in)	2.783	2.784	
Area (in ²)	6.084	6.087	
Est. Moisture Content after Consolidation (%)		17.9%	
Est. Void Ratio after Consolidation		0.475	
Specific Gravity*	2.65		
*Specific gravity is assumed	Maximum Dry Density (pcf):		118.7
Maximum Dry Density:	Initial Remolded Dry Density (pcf):		112.2
ASTM D 698	Initial Percent Compaction:		95%
	Initial Void Ratio:		0.473
	Optimum Moisture Content(%):		13.0
	Initial Water Content (%):		12.9
	Confining Pressure (psi):		5.0
	Hydraulic Conductivity, k₂₀ (cm/s):		2.6E-07
	Gradient Range (h/L):		5.6 5.9

Test results included in this report relate only to the items inspected or tested. This report shall not be reproduced, in full, without prior written approval of NewFields.

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	8.2	16.8	13.3	25.8	17.3	18.6	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2	100.0	100.0	
1.5	96.5		
1	93.9		
.75	91.8		
0.5	87.6		
.375	85.6		
#4	75.0		
#10	61.7		
#16	51.8		
#40	35.9		
#50	31.3		
#100	24.8		
#200	18.6	15.0 - 65.0	

* Soil Liner Fill

Material Description

Brown clayey sand with gravel

Atterberg Limits

PL= 17 LL= 42 PI= 25

Coefficients

D₉₀= 16.1077 D₈₅= 8.9959 D₆₀= 1.8191
D₅₀= 1.0663 D₃₀= 0.2661 D₁₅=
D₁₀= C_u= C_c=

Classification

USCS= SC AASHTO= A-2-7(1)

Remarks

Location: Lower Dump 1 Stockpile
Sample Number: SLF-12-C

Date: 6/6/2022



Client: Newmont-Cripple Creek & Victor Goldmine
Project: VLF2 Phase 3

Project No: 475.0106.056

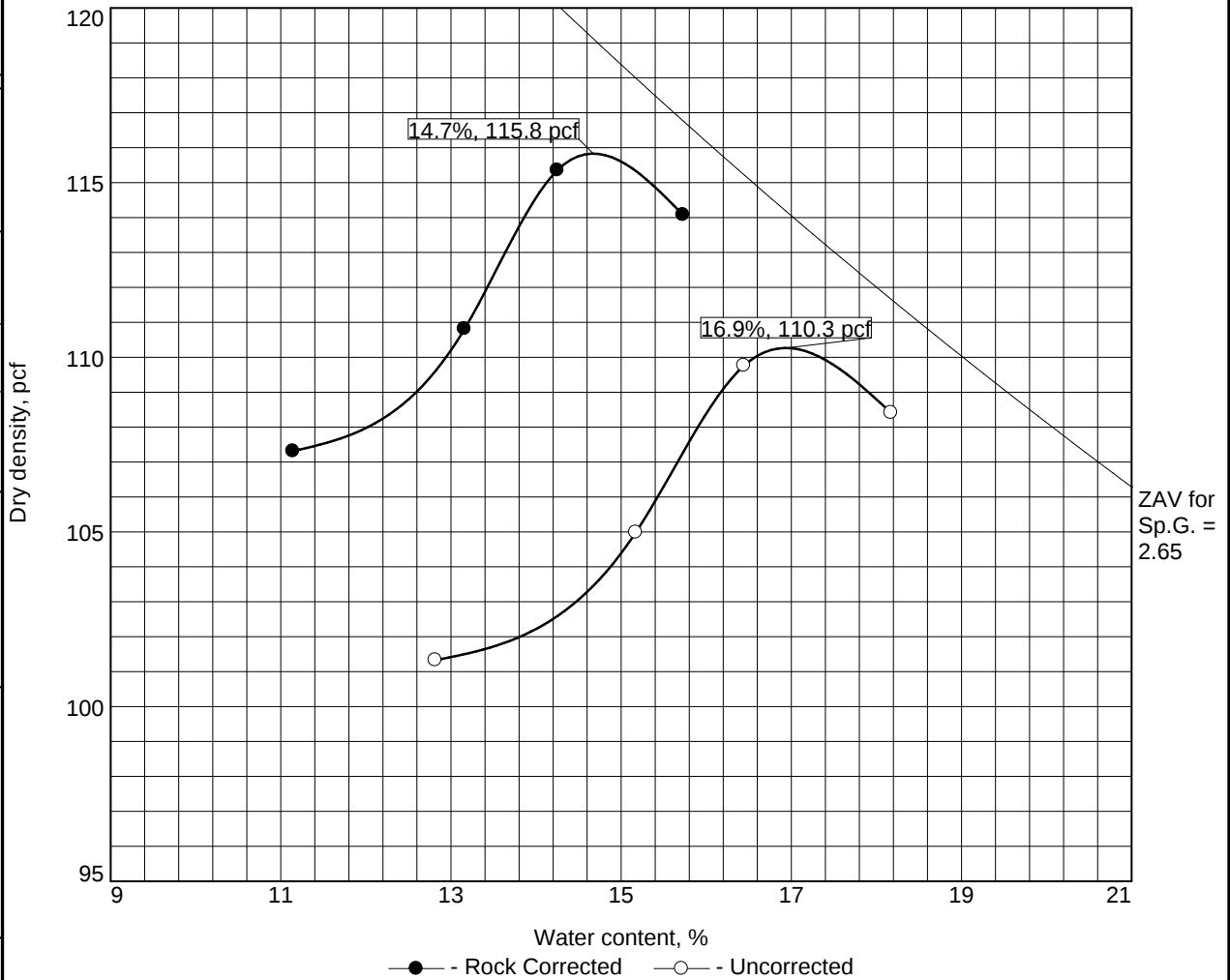
Figure SLF-12-C

Tested By: GF

Checked By: GF

Test results included in this report relate only to the items inspected or tested. This report shall not be reproduced, in full, without prior written approval of NewFields.

COMPACTION TEST REPORT



Test specification: ASTM D 698-12 Method B Standard
ASTM D4718-15 Oversize Corr. Applied to Each Test Point

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > 3/8 in.	% < No.200
	USCS	AASHTO						
	SC	A-2-7(1)		2.65	42	25	14.4	18.6
ROCK CORRECTED TEST RESULTS			UNCORRECTED		MATERIAL DESCRIPTION			
Maximum dry density = 115.8 pcf			110.3 pcf		Brown clayey sand with gravel			
Optimum moisture = 14.7 %			16.9 %					
Project No. 475.0106.056 Client: Newmont-Cripple Creek & Victor Goldmine Project: VLF2 Phase 3					Remarks:			
Location: Lower Dump 1 Stockpile Sample Number: SLF-12-C								
NewFields								
					Figure SLF-12-C			

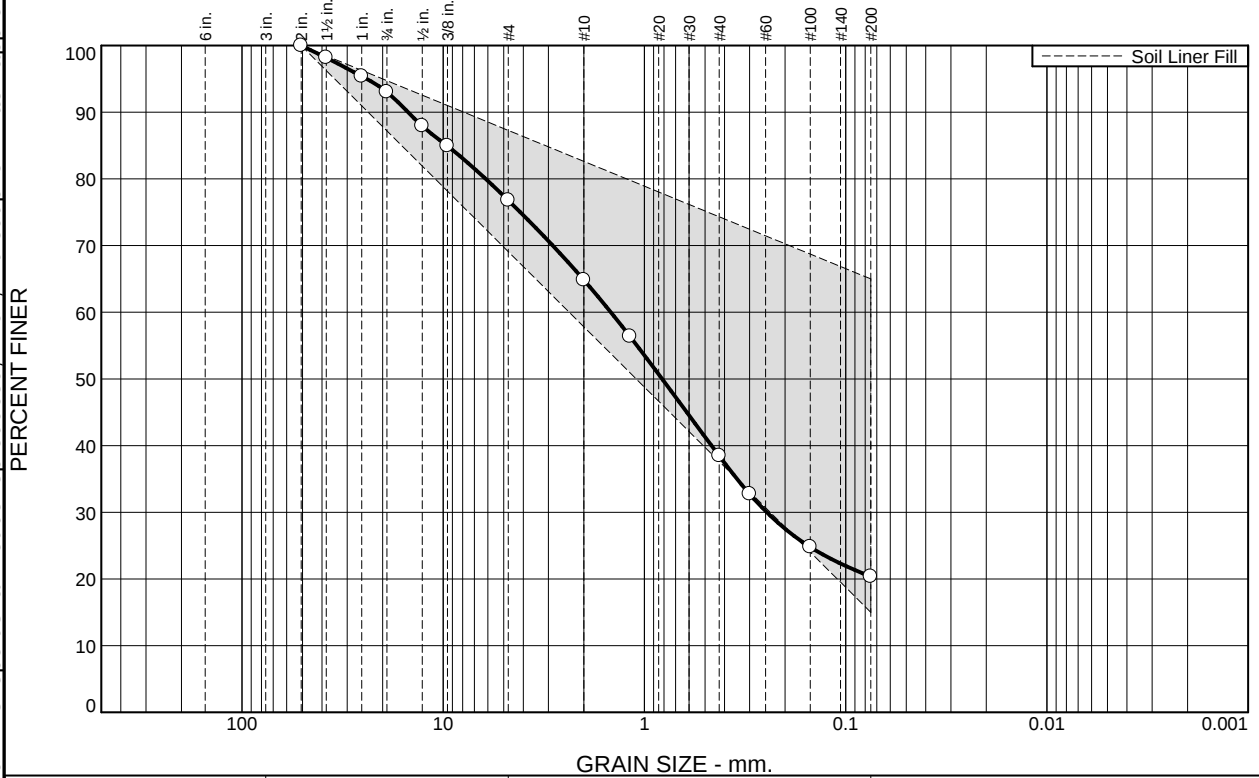
Flexible Wall Hydraulic Conductivity ASTM D5084

Client: Cripple Creek and Victor Gold Mines	Lab Sample No.: SLF-12-C
Project: VLF2 PH3	
Project No.: 475.0106.056	Location: Lower Dump 1 Stockpile
Phase: A	Elevation/Depth: Stockpile
Requested By: RL	Tested By: GF
Test Started: 7/13/2022	Checked By: TW
Test Finished: 7/26/2022	Sample Description: Brown clayey sand with gravel

Test Boundary Conditions			
Type of Permeant	De-aired Bottled		
Magnitude of Back pressure (psi)	51		
Saturated (Y/N):	Yes		
Stage 1: Effective Stress (psi)	5		
Sample Type	Remolded		
Burette Area (cm ²)	0.877		
Test Specimen Data	Initial	During k Testing	Final
Wet Soil + Tare (g)	606.7		729.60
Dry Soil + Tare (g)	529.25		634.00
Tare (g)	0.00		120.00
Wt. of Water (g)	77.45		95.60
Dry Soil (g)	529.25		514.00
Moisture Content (%)	14.6		18.6
Sample Volume (ft ³)	0.01056	0.01046	
Dry Density (pcf)	110.5	110.9	
Wet Density (pcf)	126.7	131.8	
Saturation (%)	78.4	100.0	
Percent Compaction	95.4	95.8	
Height (in)	3.020	3.012	
Diameter (in)	2.773	2.766	
Area (in ²)	6.041	6.007	
Est. Moisture Content after Consolidation (%)		18.3%	
Est. Void Ratio after Consolidation		0.485	
Specific Gravity*	2.65		
*Specific gravity is assumed	Maximum Dry Density (pcf):		115.8
Maximum Dry Density:	Initial Remolded Dry Density (pcf):		110.5
ASTM D 698	Initial Percent Compaction:		95%
	Initial Void Ratio:		0.497
	Optimum Moisture Content(%):		14.7
	Initial Water Content (%):		14.6
	Confining Pressure (psi):		5.0
	Hydraulic Conductivity, k₂₀ (cm/s):		2.5E-07
	Gradient Range (h/L):		9.7 10.5

Test results included in this report relate only to the items inspected or tested. This report shall not be reproduced, in full, without prior written approval of NewFields.

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	7.0	16.2	12.0	26.3	18.2	20.3	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2	100.0	100.0	
1.5	98.2		
1	95.4		
.75	93.0		
0.5	87.9		
.375	84.9		
#4	76.8		
#10	64.8		
#16	56.4		
#40	38.5		
#50	32.7		
#100	24.8		
#200	20.3	15.0 - 65.0	

* Soil Liner Fill

Material Description

Brown clayey sand with gravel

Atterberg Limits

PL= 17 LL= 43 PI= 26

Coefficients

D₉₀= 14.9300 D₈₅= 9.5921 D₆₀= 1.4696
D₅₀= 0.8163 D₃₀= 0.2467 D₁₅=
D₁₀= C_u= C_c=

Classification

USCS= SC AASHTO= A-2-7(1)

Remarks

Location: Lower Dump 1 Stockpile
Sample Number: SLF-13-C

Date: 6/7/2022



Client: Newmont-Cripple Creek & Victor Goldmine
Project: VLF2 Phase 3

Project No: 475.0106.056

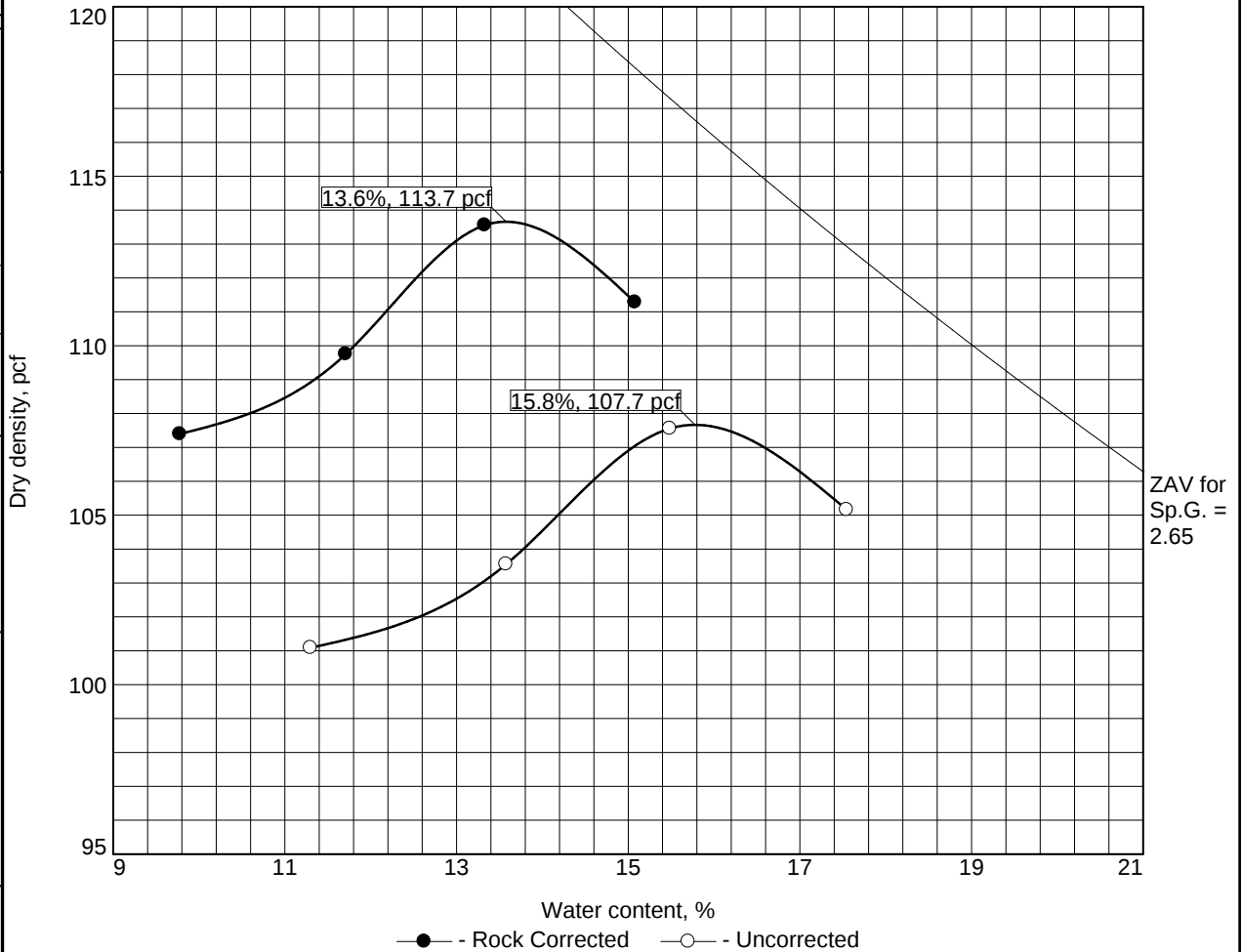
Figure SLF-13-C

Tested By: GF/BV

Checked By: GF

Test results included in this report relate only to the items inspected or tested. This report shall not be reproduced, in full, without prior written approval of NewFields.

COMPACTION TEST REPORT



Test specification: ASTM D 698-12 Method B Standard
ASTM D4718-15 Oversize Corr. Applied to Each Test Point

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > 3/8 in.	% < No.200
	USCS	AASHTO						
	SC	A-2-7(1)		2.65	43	26	15.1	20.3

ROCK CORRECTED TEST RESULTS		UNCORRECTED	MATERIAL DESCRIPTION
Maximum dry density = 113.7 pcf		107.7 pcf	Brown clayey sand with gravel
Optimum moisture = 13.6 %		15.8 %	
Project No. 475.0106.056 Client: Newmont-Cripple Creek & Victor Goldmine Project: VLF2 Phase 3			Remarks:
Location: Lower Dump 1 Stockpile Sample Number: SLF-13-C			
NewFields			

Figure SLF-13-C

Tested By: GF Checked By: GF

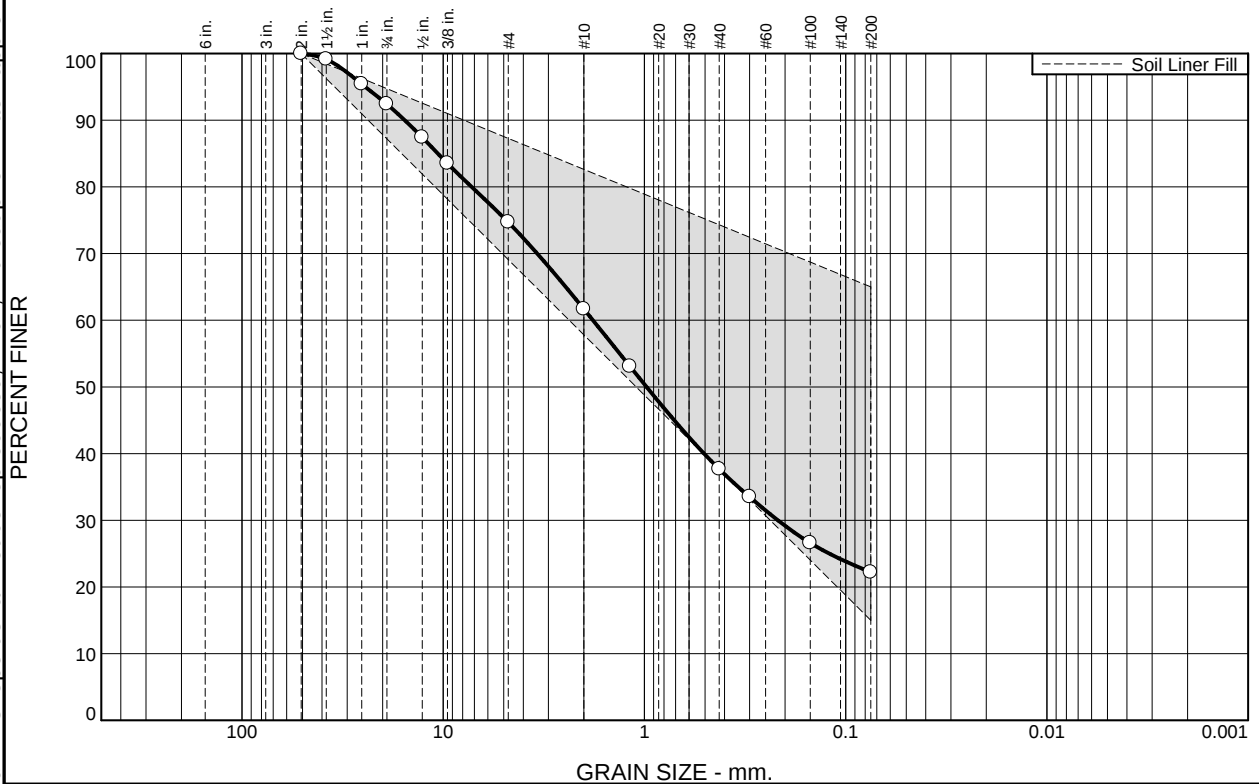
Flexible Wall Hydraulic Conductivity ASTM D5084

Client: Cripple Creek and Victor Gold Mines	Lab Sample No.: SLF-13-C	
Project: VLF2 PH3		
Project No.: 475.0106.056	Location: Lower Dump 1 Stockpile	
Phase: A	Elevation/Depth: Stockpile	
Requested By: RL	Tested By: GF	
Test Started: 7/27/2022	Checked By: TW	
Test Finished: 8/9/2022	Sample Description: Brown clayey sand with gravel	

Test Boundary Conditions			
Type of Permeant	De-aired Bottled		
Magnitude of Back pressure (psi)	51		
Saturated (Y/N):	Yes		
Stage 1: Effective Stress (psi)	5		
Sample Type	Remolded		
Burette Area (cm ²)	0.877		
Test Specimen Data	Initial	During k Testing	Final
Wet Soil + Tare (g)	590.1		705.80
Dry Soil + Tare (g)	519.29		613.00
Tare (g)	0.00		119.80
Wt. of Water (g)	70.81		92.80
Dry Soil (g)	519.29		493.20
Moisture Content (%)	13.6		18.8
Sample Volume (ft ³)	0.01053	0.01047	
Dry Density (pcf)	108.8	109.0	
Wet Density (pcf)	123.6	130.4	
Saturation (%)	69.3	100.0	
Percent Compaction	95.7	95.9	
Height (in)	3.021	3.017	
Diameter (in)	2.769	2.765	
Area (in ²)	6.022	6.006	
Est. Moisture Content after Consolidation (%)		19.4%	
Est. Void Ratio after Consolidation		0.515	
Specific Gravity*	2.65		
*Specific gravity is assumed	Maximum Dry Density (pcf):		113.7
Maximum Dry Density:	Initial Remolded Dry Density (pcf):		108.8
ASTM D 698	Initial Percent Compaction:		96%
	Initial Void Ratio:		0.520
	Optimum Moisture Content(%):		13.6
	Initial Water Content (%):		13.6
	Confining Pressure (psi):		5.0
	Hydraulic Conductivity, k₂₀ (cm/s):		2.8E-07
	Gradient Range (h/L):		9.2 10.5

Test results included in this report relate only to the items inspected or tested. This report shall not be reproduced, in full, without prior written approval of NewFields.

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	7.6	17.7	13.0	24.0	15.5	22.2	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2	100.0	100.0	
1.5	99.2		
1	95.4		
.75	92.4		
0.5	87.4		
.375	83.5		
#4	74.7		
#10	61.7		
#16	53.1		
#40	37.7		
#50	33.5		
#100	26.6		
#200	22.2	15.0 - 65.0	

* Soil Liner Fill

Material Description

Brown clayey sand with gravel

Atterberg Limits

PL= 17 LL= 35 PI= 18

Coefficients

D₉₀= 15.5052 D₈₅= 10.6287 D₆₀= 1.8033
D₅₀= 0.9756 D₃₀= 0.2172 D₁₅=
D₁₀= C_u= C_c=

Classification

USCS= SC AASHTO= A-2-6(1)

Remarks

Location: Lower Dump 1 Stockpile
Sample Number: SLF-16-C

Date: 6/16/2022

NewFields

Client: Newmont-Cripple Creek & Victor Goldmine
Project: VLF2 Phase 3

Project No: 475.0106.056

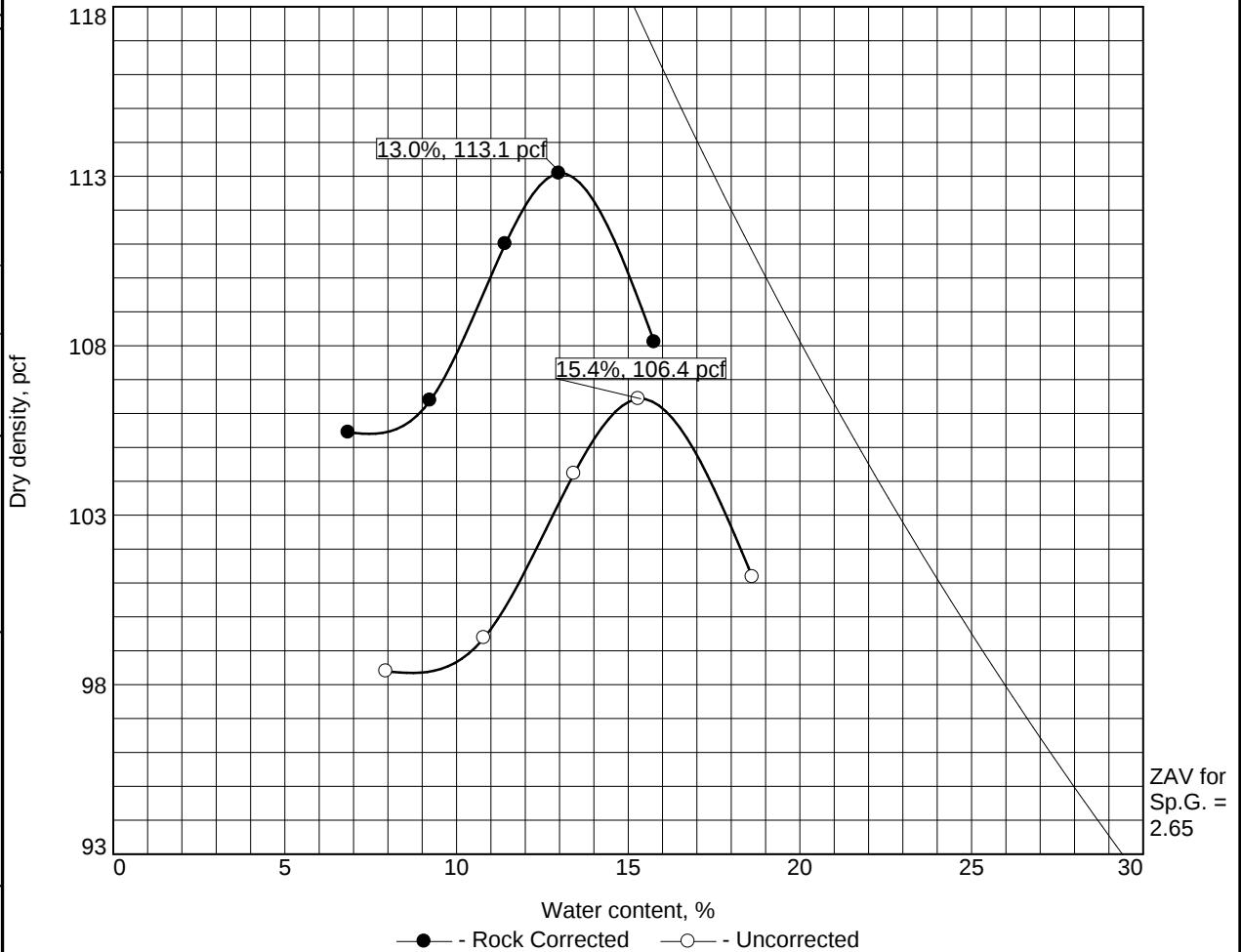
Figure SLF-16-C

Tested By: GF/BV

Checked By: GF

Test results included in this report relate only to the items inspected or tested. This report shall not be reproduced, in full, without prior written approval of NewFields.

COMPACTION TEST REPORT



Test specification: ASTM D 698-12 Method B Standard
ASTM D4718-15 Oversize Corr. Applied to Each Test Point

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > 3/8 in.	% < No.200
	USCS	AASHTO						
	SC	A-2-6(1)		2.65	35	18	16.5	22.2

ROCK CORRECTED TEST RESULTS		UNCORRECTED	MATERIAL DESCRIPTION
Maximum dry density = 113.1 pcf		106.4 pcf	Brown clayey sand with gravel
Optimum moisture = 13.0 %		15.4 %	
Project No. 475.0106.056 Client: Newmont-Cripple Creek & Victor Goldmine Project: VLF2 Phase 3			Remarks:
Location: Lower Dump 1 Stockpile Sample Number: SLF-16-C			
NewFields			

Figure SLF-16-C

Figure SLF-16-C

Tested By: BV Checked By: GF

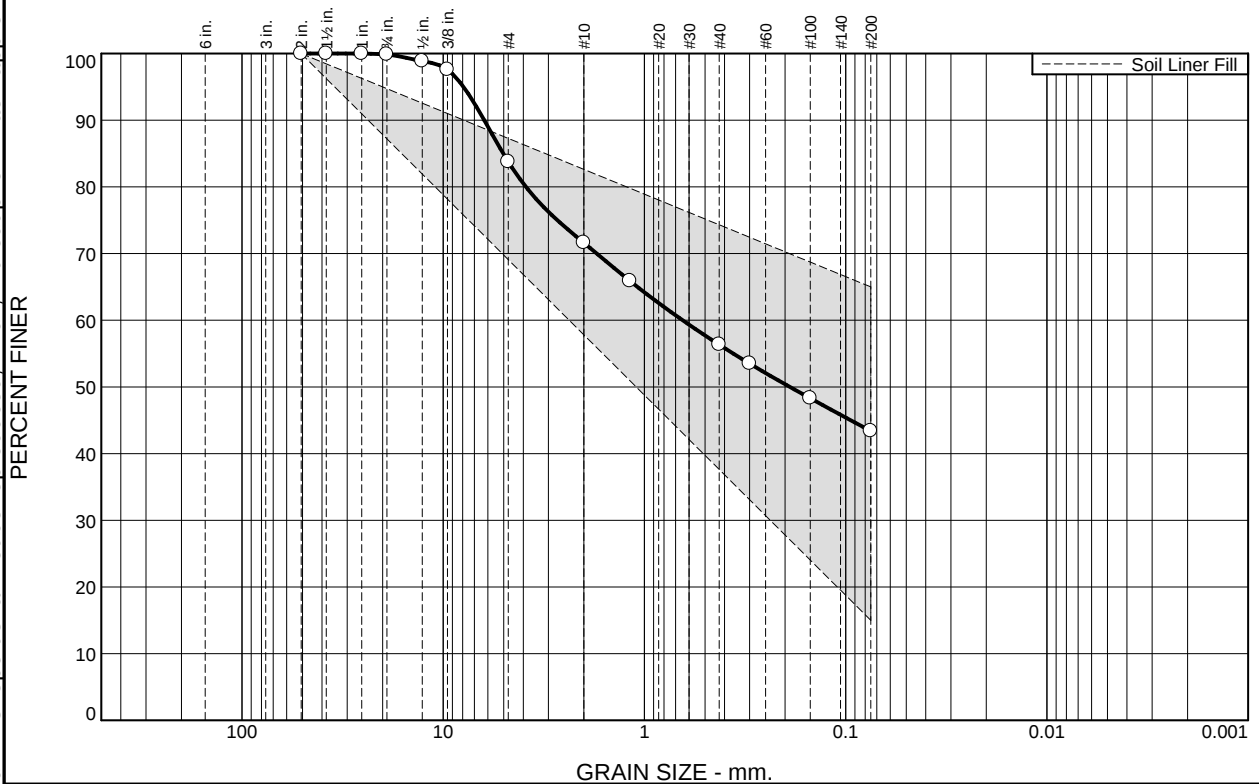
Flexible Wall Hydraulic Conductivity ASTM D5084

Client: Cripple Creek and Victor Gold Mines	Lab Sample No.: SLF-16-C	
Project: VLF2 PH3		
Project No.: 475.0106.056	Location: Lower Dump 1 Stockpile	
Phase: A	Elevation/Depth: Stockpile	
Requested By: RL	Tested By: TW	
Test Started: 8/17/2022	Checked By: TW	
Test Finished: 9/7/2022	Sample Description: Brown clayey gravel with sand	

Test Boundary Conditions			
Type of Permeant	De-aired Bottled		
Magnitude of Back pressure (psi)	51		
Saturated (Y/N):	Yes		
Stage 1: Effective Stress (psi)	5		
Sample Type	Remolded		
Burette Area (cm ²)	0.877		
Test Specimen Data	Initial	During k Testing	Final
Wet Soil + Tare (g)	583.51		754.80
Dry Soil + Tare (g)	516.41		655.70
Tare (g)	0.00		120.00
Wt. of Water (g)	67.10		99.10
Dry Soil (g)	516.41		535.70
Moisture Content (%)	13.0		18.5
Sample Volume (ft ³)	0.01059	0.01052	
Dry Density (pcf)	107.5	107.8	
Wet Density (pcf)	121.5	129.7	
Saturation (%)	64.0	100.0	
Percent Compaction	95.0	95.3	
Height (in)	3.020	3.015	
Diameter (in)	2.778	2.773	
Area (in ²)	6.060	6.038	
Est. Moisture Content after Consolidation (%)		20.0%	
Est. Void Ratio after Consolidation		0.531	
Specific Gravity*	2.65		
*Specific gravity is assumed	Maximum Dry Density (pcf):		113.1
Maximum Dry Density:	Initial Remolded Dry Density (pcf):		107.5
ASTM D 698	Initial Percent Compaction:		95%
	Initial Void Ratio:		0.538
	Optimum Moisture Content(%):		13.0
	Initial Water Content (%):		13.0
	Confining Pressure (psi):		5.0
	Hydraulic Conductivity, k₂₀ (cm/s):		1.2E-07
	Gradient Range (h/L):		9.3 10.5

Test results included in this report relate only to the items inspected or tested. This report shall not be reproduced, in full, without prior written approval of NewFields.

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.1	16.1	12.2	15.3	12.9	43.4	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2	100.0	100.0	
1.5	100.0		
1	100.0		
.75	99.9		
0.5	98.9		
.375	97.6		
#4	83.8		
#10	71.6		
#16	65.9		
#40	56.3		
#50	53.5		
#100	48.3		
#200	43.4	15.0 - 65.0	

* Soil Liner Fill

Material Description

Brown clayey sand with gravel

Atterberg Limits

PL= 18 LL= 44 PI= 26

Coefficients

D₉₀= 6.2514 D₈₅= 5.0311 D₆₀= 0.6455
D₅₀= 0.1893 D₃₀= C_u=
D₁₀= C_c=

Classification

USCS= SC AASHTO= A-7-6(6)

Remarks

Location: N:35563 E:59807
Sample Number: SLF-20-R

Depth: 9985'

Date: 6/24/2022



Client: Newmont-Cripple Creek & Victor Goldmine
Project: VLF2 Phase 3

Project No: 475.0106.056

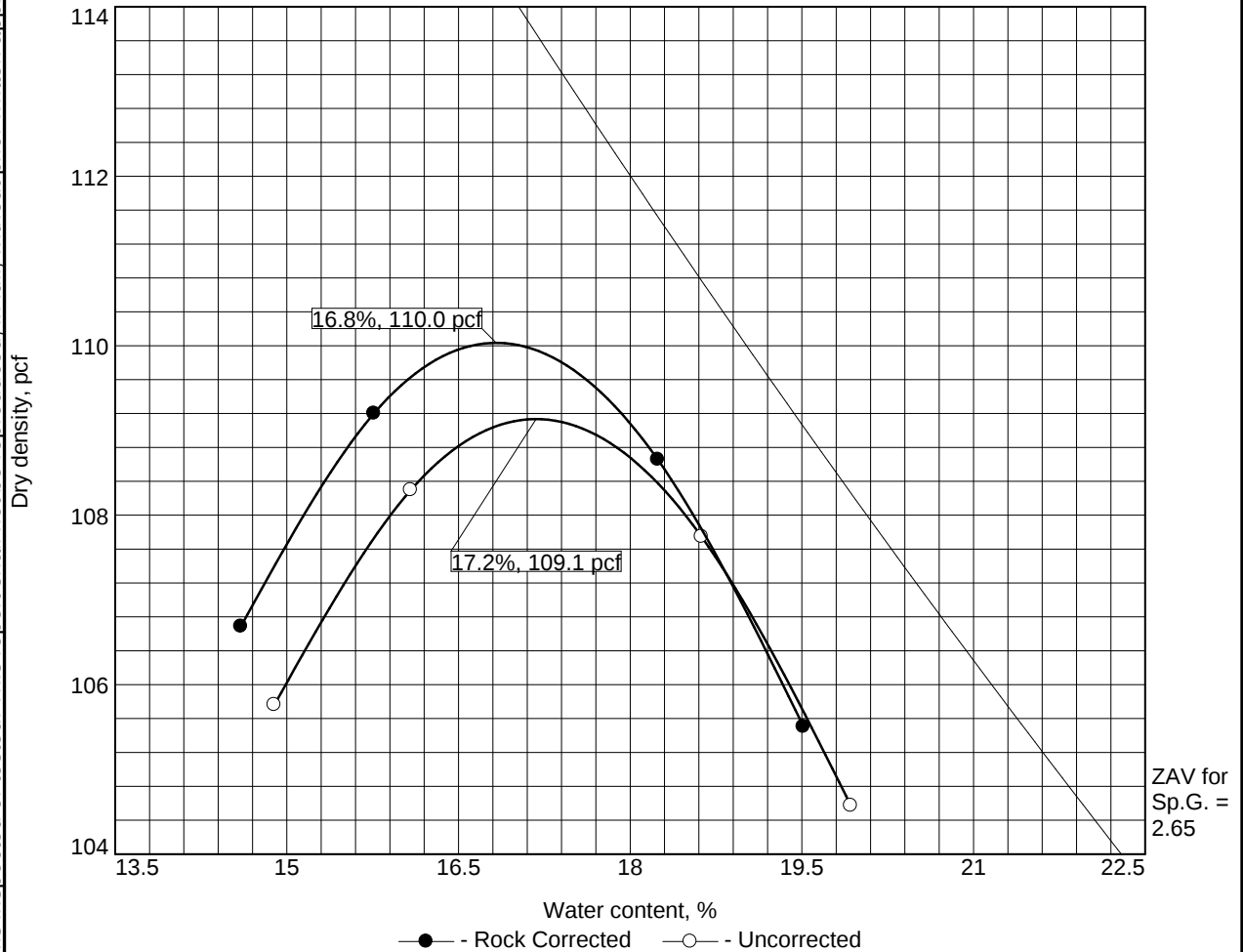
Figure SLF-20-R

Tested By: GF

Checked By: GF

Test results included in this report relate only to the items inspected or tested. This report shall not be reproduced, in full, without prior written approval of NewFields.

COMPACTION TEST REPORT



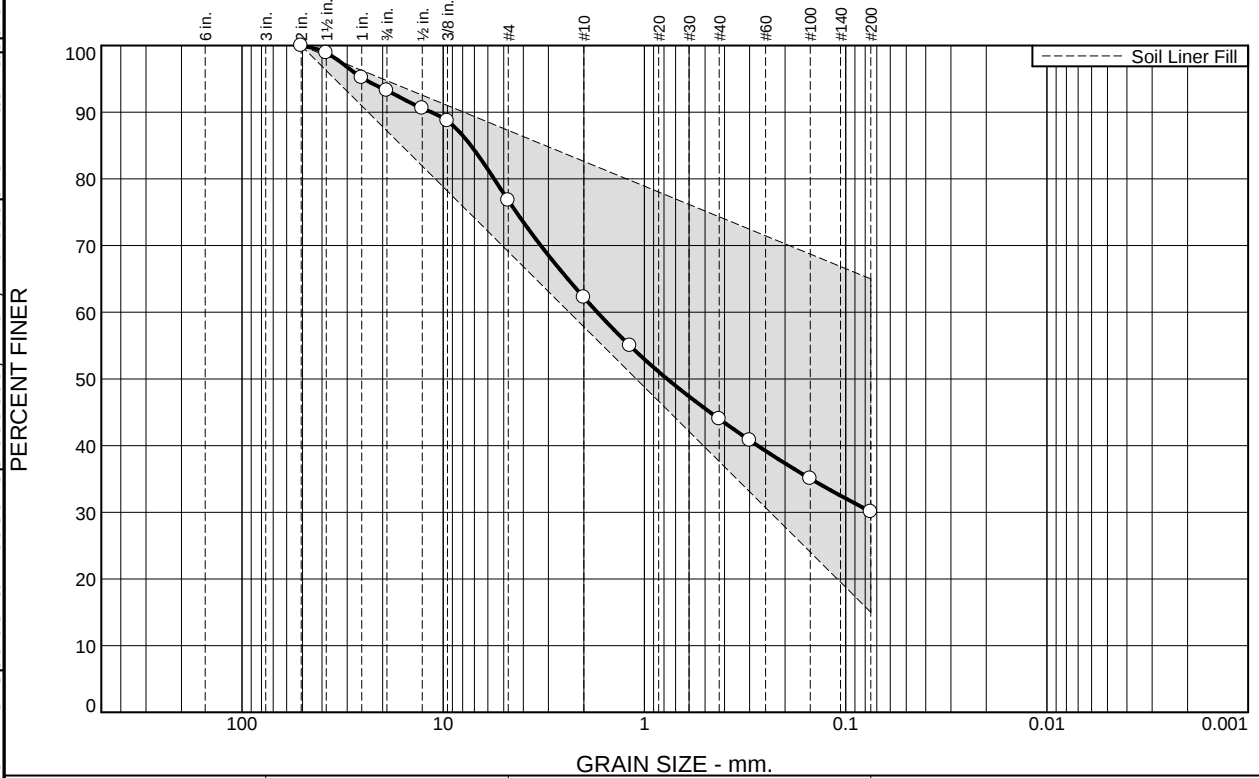
Test specification: ASTM D 698-12 Method B Standard
ASTM D4718-15 Oversize Corr. Applied to Each Test Point

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > 3/8 in.	% < No.200
	USCS	AASHTO						
9985'	SC	A-7-6(6)		2.65	44	26	2.4	43.4
ROCK CORRECTED TEST RESULTS			UNCORRECTED		MATERIAL DESCRIPTION			
Maximum dry density = 110.0 pcf			109.1 pcf		Brown clayey sand with gravel			
Optimum moisture = 16.8 %			17.2 %					
Project No. 475.0106.056 Client: Newmont-Cripple Creek & Victor Goldmine Project: VLF2 Phase 3					Remarks:			
Location: N:35563 E:59807 Sample Number: SLF-20-R								
NewFields								
					Figure SLF-20-R			

Tested By: GF Checked By: GF

Test results included in this report relate only to the items inspected or tested. This report shall not be reproduced, in full, without prior written approval of NewFields.

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	6.7	16.5	14.6	18.2	13.9	30.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2	100.0	100.0	
1.5	98.9		
1	95.2		
.75	93.3		
0.5	90.6		
.375	88.7		
#4	76.8		
#10	62.2		
#16	55.0		
#40	44.0		
#50	40.8		
#100	35.1		
#200	30.1	15.0 - 65.0	

* Soil Liner Fill

Material Description

Brown clayey sand with gravel

Atterberg Limits

PL= 18 LL= 41 PI= 23

Coefficients

D₉₀= 11.4433 D₈₅= 7.2771 D₆₀= 1.7145
D₅₀= 0.7708 D₃₀= C_u=
D₁₀= C_c=

Classification

USCS= SC AASHTO= A-2-7(2)

Remarks

Location: N59,397.8 E35,755.8
Sample Number: SLF-25-R

Depth: 9955'

Date: 7/13/2022



Client: Newmont-Cripple Creek & Victor Goldmine
Project: VLF2 Phase 3

Project No: 475.0106.056

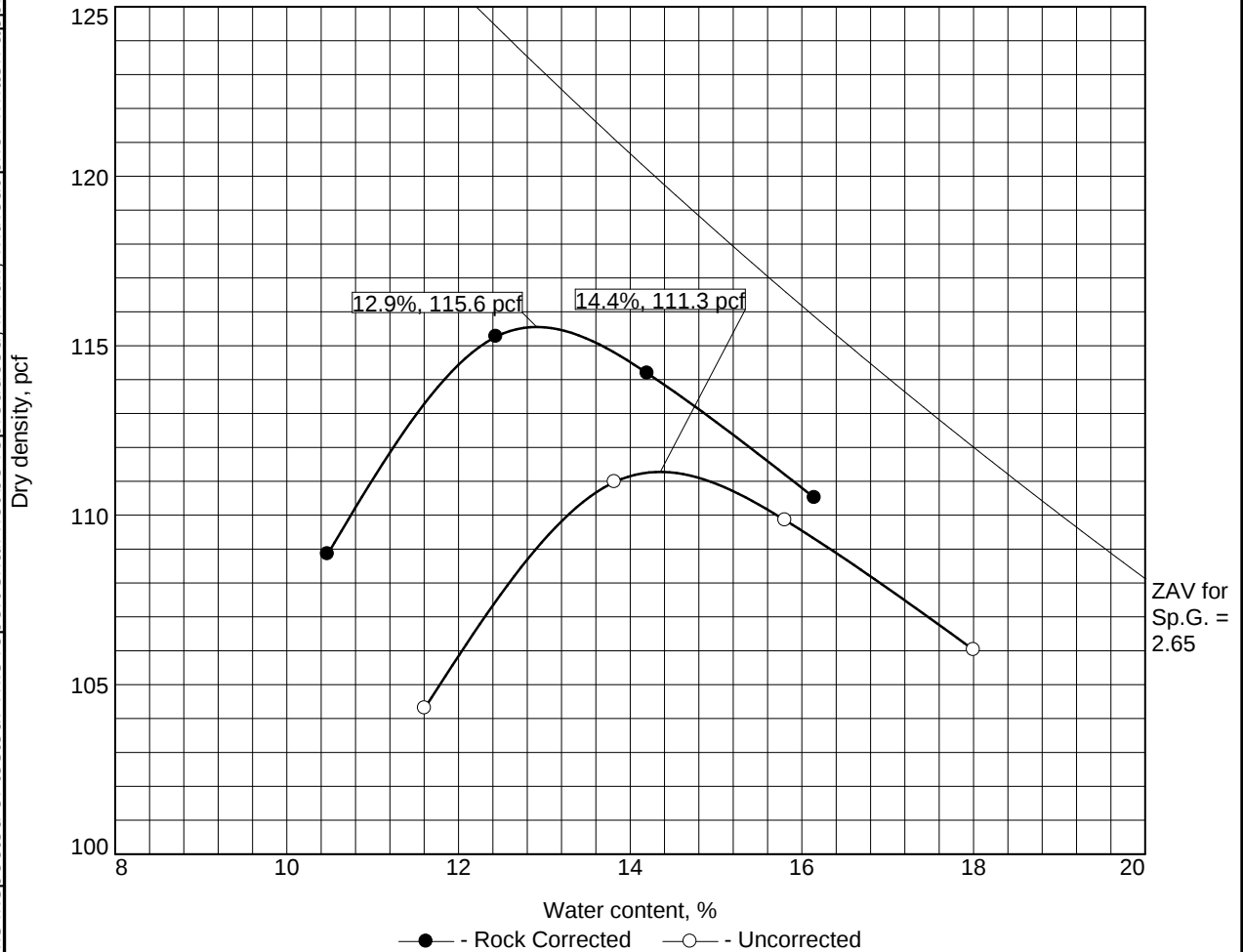
Figure SLF-25-R

Tested By: AB

Checked By: GF

Test results included in this report relate only to the items inspected or tested. This report shall not be reproduced, in full, without prior written approval of NewFields.

COMPACTION TEST REPORT



Test specification: ASTM D 698-12 Method B Standard
ASTM D4718-15 Oversize Corr. Applied to Each Test Point

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > 3/8 in.	% < No.200
	USCS	AASHTO						
9955'	SC	A-2-7(2)		2.65	41	23	11.3	30.1

ROCK CORRECTED TEST RESULTS		UNCORRECTED	MATERIAL DESCRIPTION
Maximum dry density = 115.6 pcf		111.3 pcf	Brown clayey sand with gravel
Optimum moisture = 12.9 %		14.4 %	

Project No. 475.0106.056 Client: Newmont-Cripple Creek & Victor Goldmine Project: VLF2 Phase 3		Remarks:
Location: N59,397.8 E35,755.8 Sample Number: SLF-25-R		
NewFields		

Figure SLF-25-R

Figure SLF-25-R

Tested By: AB Checked By: GF

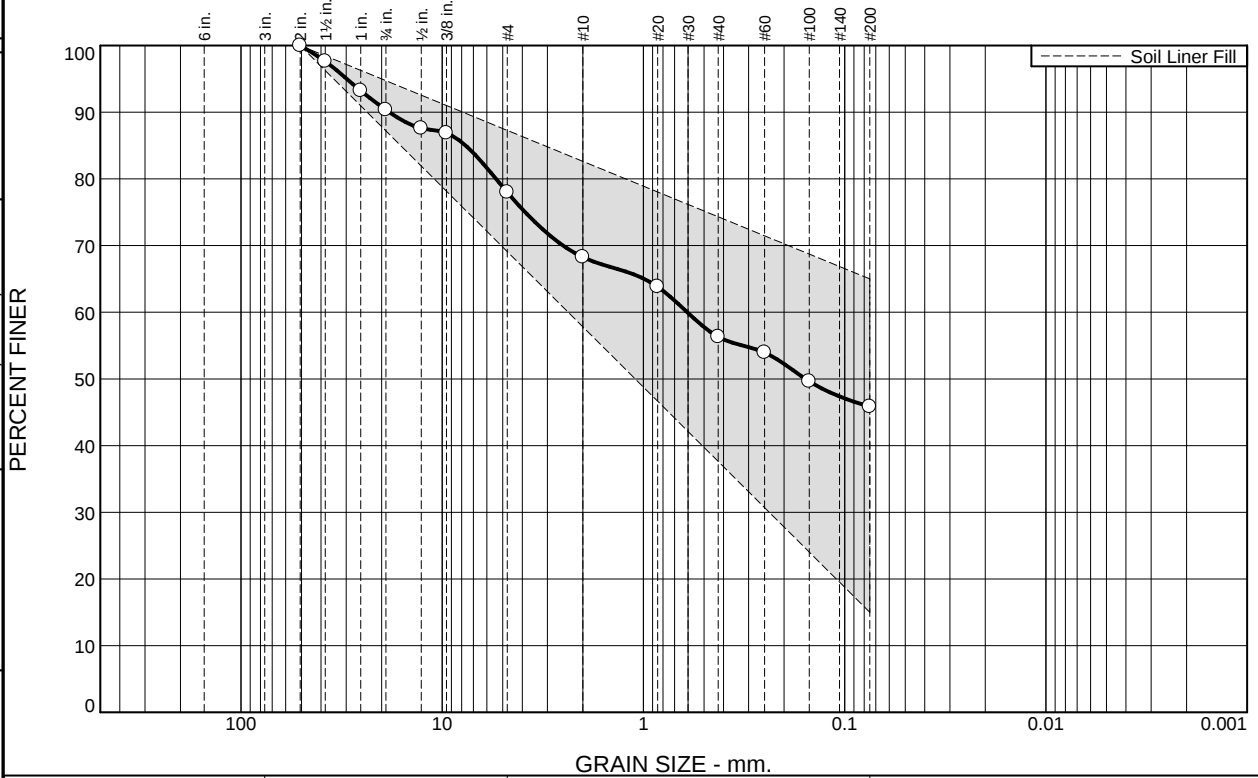
Flexible Wall Hydraulic Conductivity ASTM D5084

Client: Cripple Creek and Victor Gold Mines	Lab Sample No.: SLF-25-R	
Project: VLF2 PH3		
Project No.: 475.0106.056	Location: Tezak Processing Plant	
Phase: A	Elevation/Depth: FG	
Requested By: TW	Tested By: TW	
Test Started: 11/28/2022	Checked By: TW	
Test Finished: 12/5/2022	Sample Description: Brown clayey gravel with sand	

Test Boundary Conditions			
Type of Permeant	De-aired Bottled		
Magnitude of Back pressure (psi)	46		
Saturated (Y/N):	Yes		
Stage 1: Effective Stress (psi)	5		
Sample Type	Remolded		
Burette Area (cm ²)	0.877		
Test Specimen Data	Initial	During k Testing	Final
Wet Soil + Tare (g)	595.8		738.50
Dry Soil + Tare (g)	527.61		642.20
Tare (g)	0.00		120.40
Wt. of Water (g)	68.19		96.30
Dry Soil (g)	527.61		521.80
Moisture Content (%)	12.9		18.5
Sample Volume (ft ³)	0.01051	0.01031	
Dry Density (pcf)	110.7	111.8	
Wet Density (pcf)	124.9	132.6	
Saturation (%)	69.2	100.0	
Percent Compaction	95.7	96.7	
Height (in)	3.022	3.003	
Diameter (in)	2.767	2.749	
Area (in ²)	6.012	5.937	
Est. Moisture Content after Consolidation (%)		17.6%	
Est. Void Ratio after Consolidation		0.467	
Specific Gravity*	2.65		
*Specific gravity is assumed	Maximum Dry Density (pcf):		115.6
Maximum Dry Density:	Initial Remolded Dry Density (pcf):		110.7
ASTM D 698	Initial Percent Compaction:		96%
	Initial Void Ratio:		0.494
	Optimum Moisture Content(%):		12.9
	Initial Water Content (%):		12.9
	Confining Pressure (psi):		5.0
	Hydraulic Conductivity, k₂₀ (cm/s):		2.7E-07
	Gradient Range (h/L):		9.4 10.5

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Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	9.6	12.4	9.7	12.0	10.5	45.8	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2	100.0	100.0	
1.5	97.6		
1	93.2		
.75	90.4		
0.5	87.6		
.375	86.9		
#4	78.0		
#10	68.3		
#20	63.8		
#40	56.3		
#60	54.0		
#100	49.6		
#200	45.8	15.0 - 65.0	

* Soil Liner Fill

Material Description

Brown clayey sand with gravel

Atterberg Limits

PL= 20 LL= 41 PI= 21

Coefficients

D₉₀= 18.2989 D₈₅= 7.6454 D₆₀= 0.6056
D₅₀= 0.1564 D₃₀= C_u=
D₁₀= C_c=

Classification

USCS= SC AASHTO= A-7-6(6)

Remarks

Location: N59,481.0 E35,156.5
Sample Number: SLF-26-R

Depth: 9970'

Date: 7/13/2022



Client: Newmont-Cripple Creek & Victor Goldmine
Project: VLF2 Phase 3

Project No: 475.0106.056

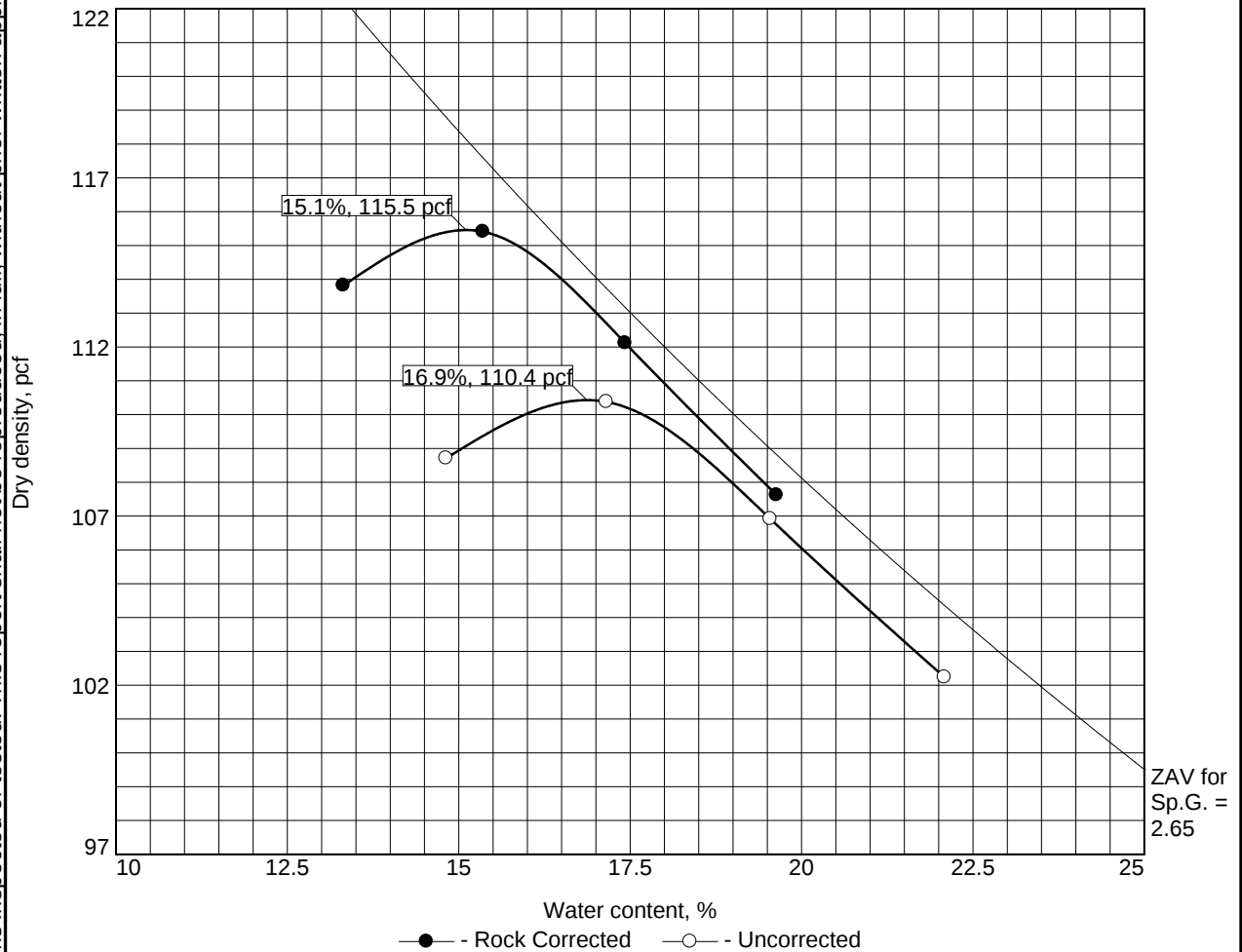
Figure SLF-26-R

Tested By: AB

Checked By: GF

Test results included in this report relate only to the items inspected or tested. This report shall not be reproduced, in full, without prior written approval of NewFields.

COMPACTION TEST REPORT



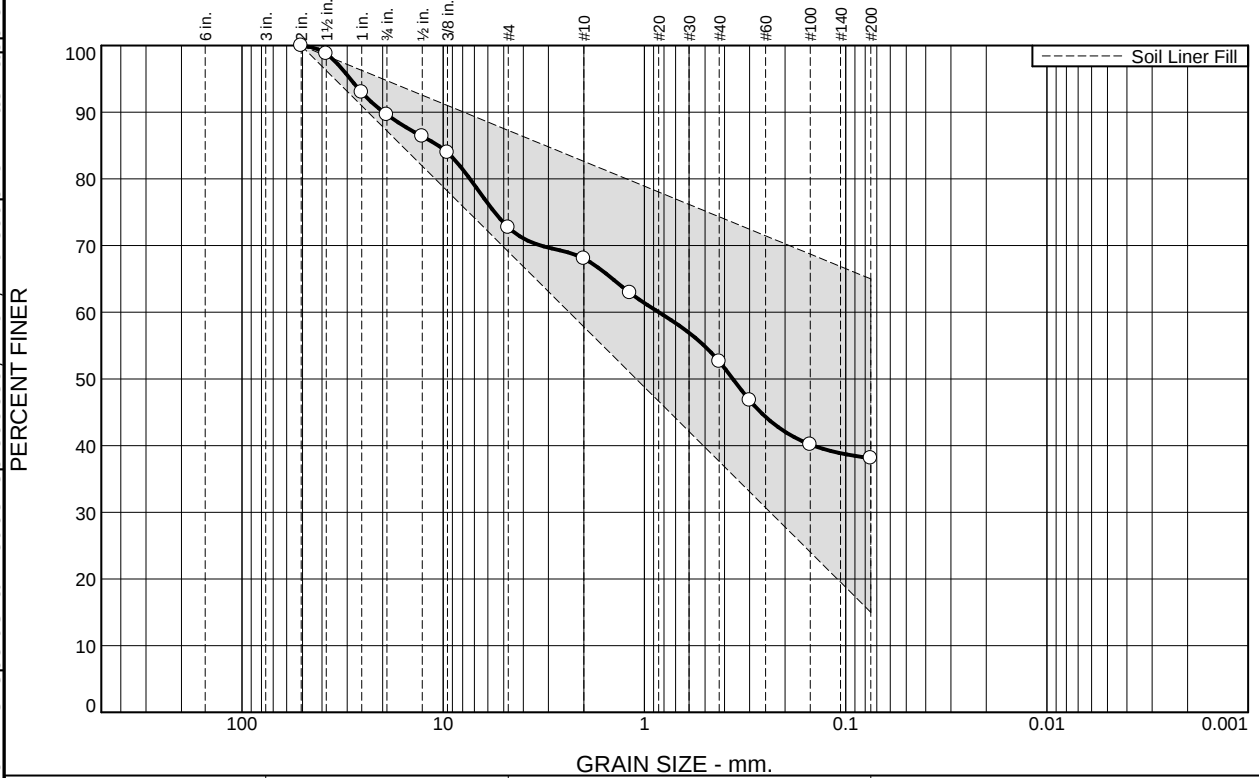
Test specification: ASTM D 698-12 Method B Standard
ASTM D4718-15 Oversize Corr. Applied to Each Test Point

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > 3/8 in.	% < No.200
	USCS	AASHTO						
9970'	SC	A-7-6(6)		2.65	41	21	13.1	45.8
ROCK CORRECTED TEST RESULTS			UNCORRECTED		MATERIAL DESCRIPTION			
Maximum dry density = 115.5 pcf			110.4 pcf		Brown clayey sand with gravel			
Optimum moisture = 15.1 %			16.9 %					
Project No. 475.0106.056 Client: Newmont-Cripple Creek & Victor Goldmine Project: VLF2 Phase 3					Remarks:			
Location: N59,481.0 E35,156.5 Sample Number: SLF-26-R								
NewFields								
					Figure SLF-26-R			

Tested By: AB Checked By: GF

Test results included in this report relate only to the items inspected or tested. This report shall not be reproduced, in full, without prior written approval of NewFields.

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	10.4	16.9	4.7	15.4	14.5	38.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2	100.0	100.0	
1.5	98.8		
1	93.0		
.75	89.6		
0.5	86.4		
.375	83.9		
#4	72.7		
#10	68.0		
#16	62.9		
#40	52.6		
#50	46.8		
#100	40.2		
#200	38.1	15.0 - 65.0	

* Soil Liner Fill

Material Description

Brown clayey sand with gravel

Atterberg Limits

PL= 13 LL= 37 PI= 24

Coefficients

D₉₀= 19.7655 D₈₅= 10.5691 D₆₀= 0.8482
D₅₀= 0.3633 D₃₀= C_u=
D₁₀= C_c=

Classification

USCS= SC AASHTO= A-6(4)

Remarks

Location: N59,010.2 E35,325.7
Sample Number: SLF-29-R

Depth: 10015'

Date: 8/8/22



Client: Newmont-Cripple Creek & Victor Goldmine
Project: VLF2 Phase 3

Project No: 475.0106.056

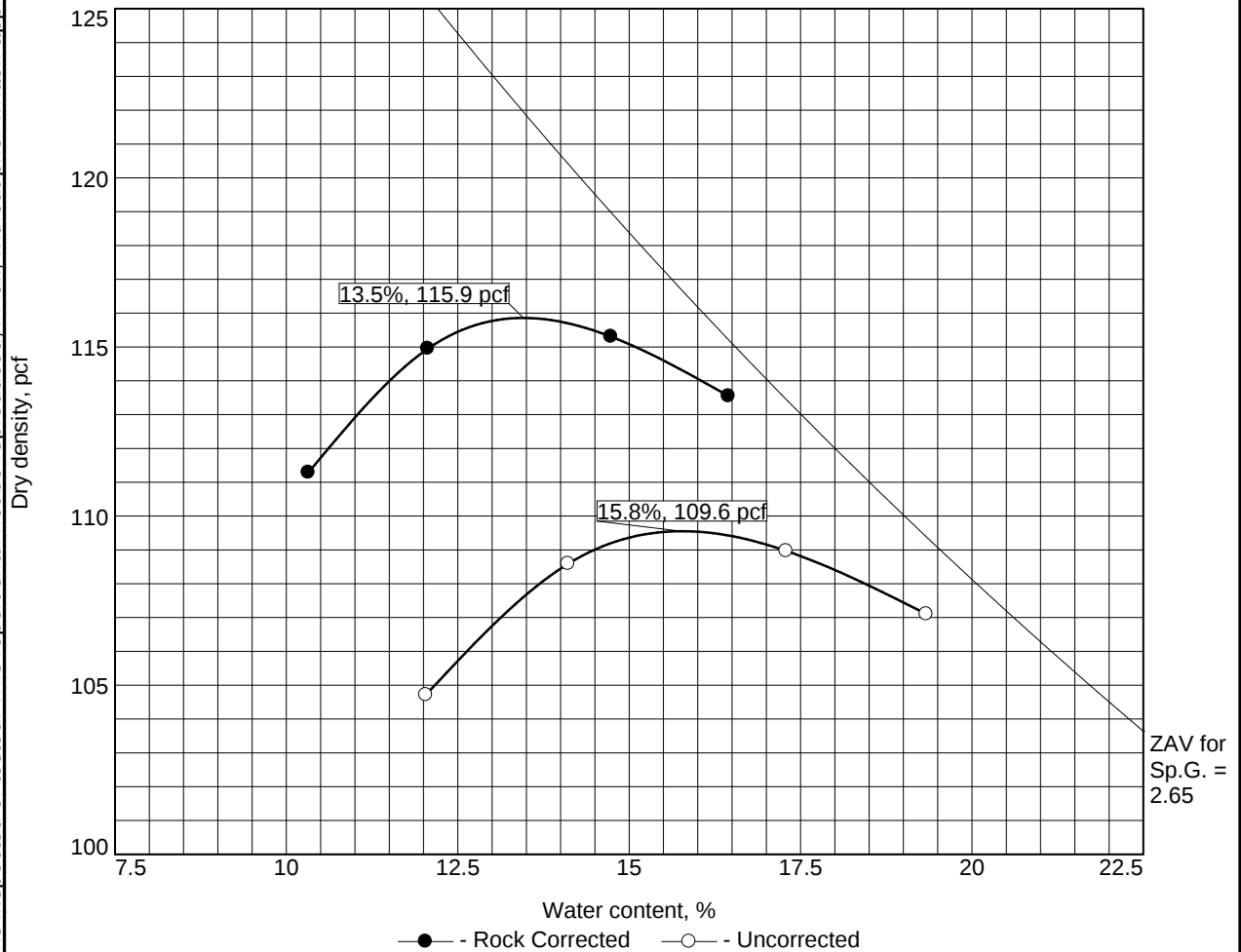
Figure SLF-29-R

Tested By: GF

Checked By: GF

Test results included in this report relate only to the items inspected or tested. This report shall not be reproduced, in full, without prior written approval of NewFields.

COMPACTION TEST REPORT



Test specification: ASTM D 698-12 Method B Standard
ASTM D4718-15 Oversize Corr. Applied to Each Test Point

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > 3/8 in.	% < No.200
	USCS	AASHTO						
10015'	SC	A-6(4)		2.65	37	24	16.1	38.1
ROCK CORRECTED TEST RESULTS			UNCORRECTED		MATERIAL DESCRIPTION			
Maximum dry density = 115.9 pcf			109.6 pcf		Brown clayey sand with gravel			
Optimum moisture = 13.5 %			15.8 %					
Project No. 475.0106.056 Client: Newmont-Cripple Creek & Victor Goldmine Project: VLF2 Phase 3					Remarks:			
Location: N59,010.2 E35,325.7 Sample Number: SLF-29-R								
NewFields								
					Figure SLF-29-R			

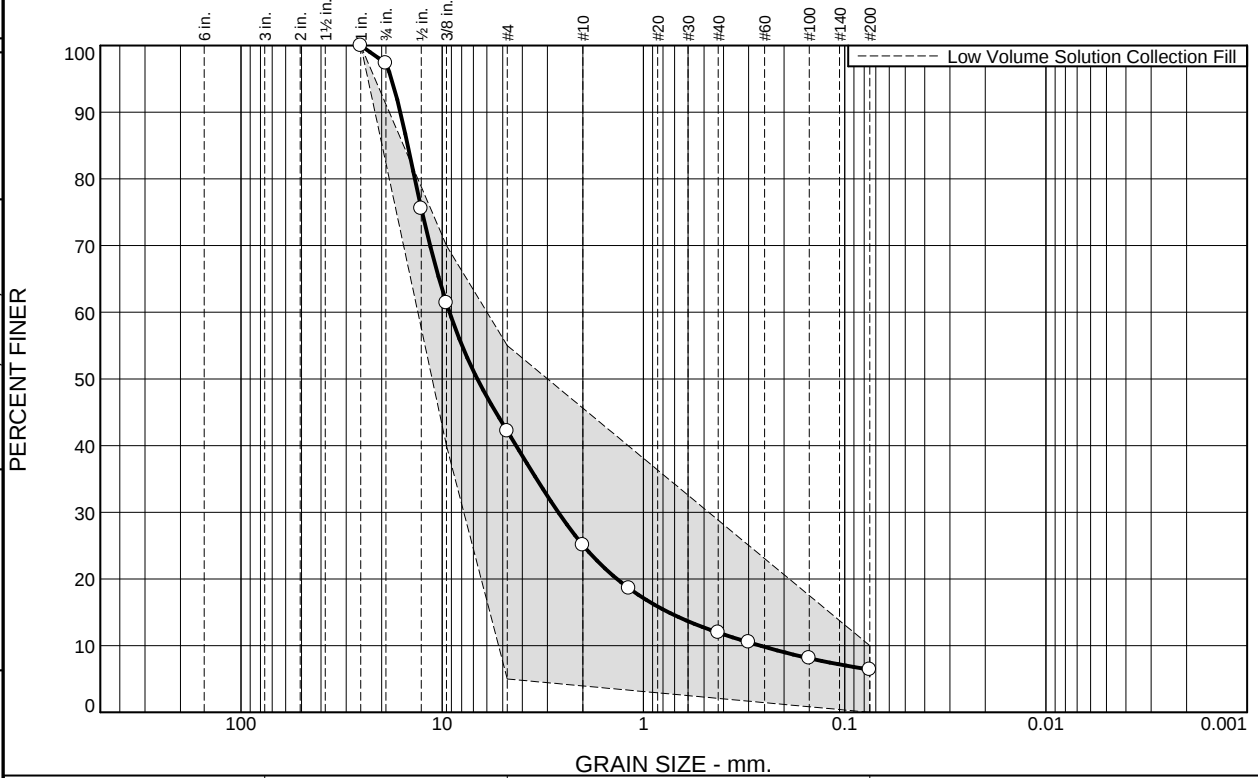
Tested By: AB Checked By: GF



APPENDIX G.5 – LOW VOLUME SOLUTION COLLECTION FILL LABORATORY TEST RESULTS

Test results included in this report relate only to the items inspected or tested. This report shall not be reproduced, in full, without prior written approval of NewFields.

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	2.7	55.1	17.1	13.1	5.6	6.4	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1	100.0	100.0	
.75	97.3		
0.5	75.6		
.375	61.4	40.0 - 70.0	
#4	42.2	5.0 - 55.0	
#10	25.1		
#16	18.6		
#40	12.0		
#50	10.5		
#100	8.1		
#200	6.4	0.0 - 10.0	

* Low Volume Solution Collection Fill

Material Description

Light brown poorly graded gravel with silt and sand

Atterberg Limits

PL= NP LL= NV PI= NP

Coefficients

D₉₀= 16.1327 D₈₅= 14.8159 D₆₀= 9.1932
D₅₀= 6.6909 D₃₀= 2.6495 D₁₅= 0.7500
D₁₀= 0.2631 C_u= 34.94 C_c= 2.90

Classification

USCS= GW-GM AASHTO= A-1-a

Remarks

Location: LVSCF Stockpile
Sample Number: LVSCF-01-C

Depth: Stockpile

Date: 7/11/2022



Client: Newmont-Cripple Creek & Victor Goldmine
Project: VLF2 Phase 3

Project No: 475.0106.056

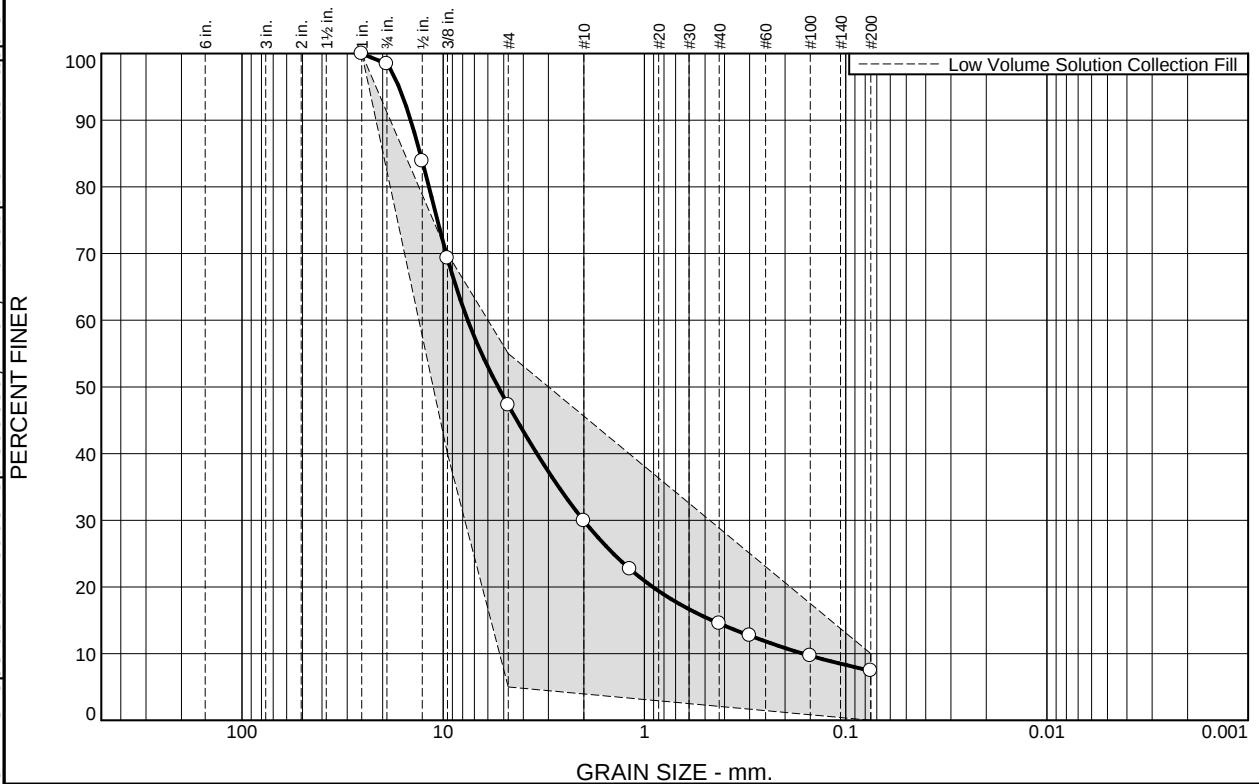
Figure LVSCF-01-C

Tested By: GF

Checked By: GF

Test results included in this report relate only to the items inspected or tested. This report shall not be reproduced, in full, without prior written approval of NewFields.

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	1.6	51.1	17.4	15.4	7.1	7.4	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1	100.0	100.0	
.75	98.4		
0.5	83.9		
.375	69.3	40.0 - 70.0	
#4	47.3	5.0 - 55.0	
#10	29.9		
#16	22.7		
#40	14.5		
#50	12.7		
#100	9.7		
#200	7.4	0.0 - 10.0	

* Low Volume Solution Collection Fill

Material Description

Light brown poorly graded gravel with silt and sand

Atterberg Limits

PL= NP LL= NV PI= NP

Coefficients

D₉₀= 14.5003 D₈₅= 12.9983 D₆₀= 7.5536
D₅₀= 5.3305 D₃₀= 2.0100 D₁₅= 0.4618
D₁₀= 0.1630 C_u= 46.34 C_c= 3.28

Classification

USCS= GP-GM AASHTO= A-1-a

Remarks

Location: LVSCF Stockpile
Sample Number: LVSCF-02-C

Depth: Stockpile

Date: 7/12/2022



Client: Newmont-Cripple Creek & Victor Goldmine
Project: VLF2 Phase 3

Project No: 475.0106.056

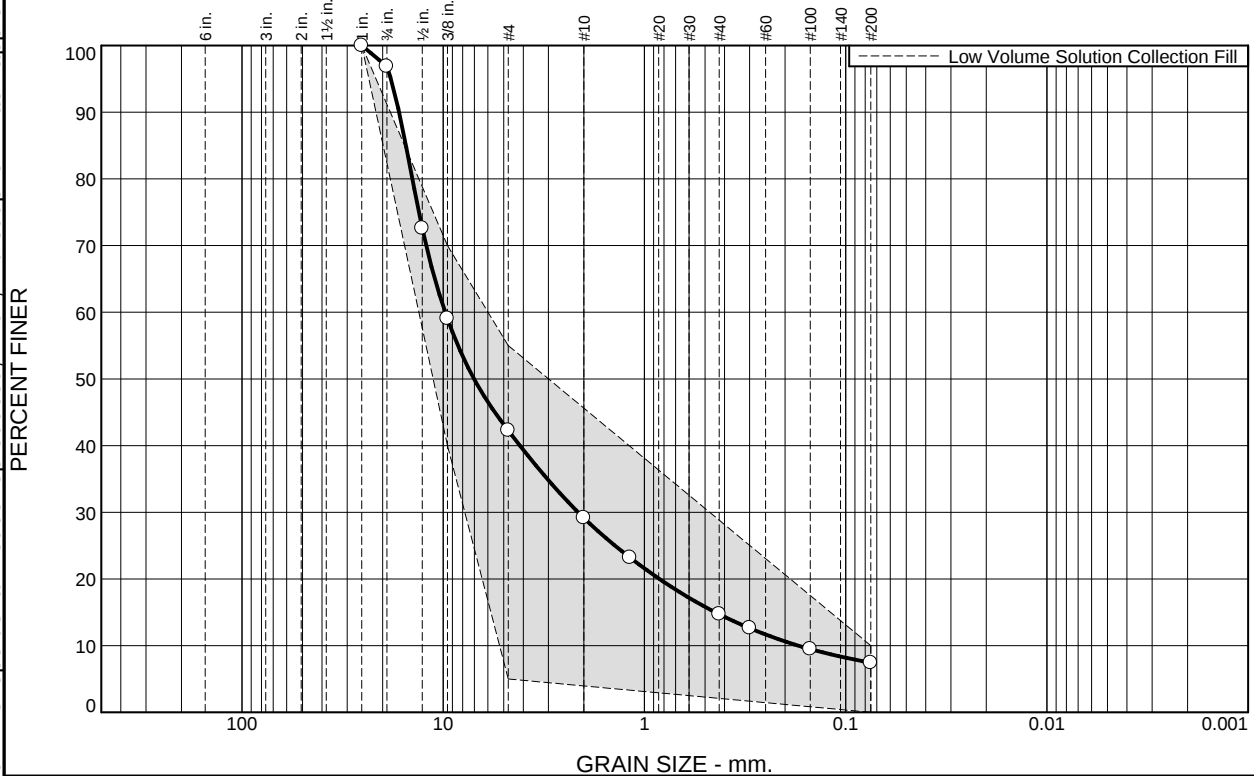
Figure LVSCF-02-C

Tested By: AB

Checked By: GF

Test results included in this report relate only to the items inspected or tested. This report shall not be reproduced, in full, without prior written approval of NewFields.

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	3.1	54.6	13.1	14.5	7.3	7.4	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1	100.0	100.0	
.75	96.9		
0.5	72.6		
.375	59.1	40.0 - 70.0	
#4	42.3	5.0 - 55.0	
#10	29.2		
#16	23.2		
#40	14.7		
#50	12.6		
#100	9.5		
#200	7.4	0.0 - 10.0	

* Low Volume Solution Collection Fill

Material Description

Light brown well-graded gravel with silt and sand

Atterberg Limits

PL= NP LL= NV PI= NP

Coefficients

D₉₀= 16.5512 D₈₅= 15.3081 D₆₀= 9.7710
D₅₀= 7.0265 D₃₀= 2.1358 D₁₅= 0.4440
D₁₀= 0.1721 C_u= 56.77 C_c= 2.71

Classification

USCS= GW-GM AASHTO= A-1-a

Remarks

Location: LVSCF Stockpile
Sample Number: LVSCF-03-C

Depth: Stockpile

Date: 7/14/2022



Client: Newmont-Cripple Creek & Victor Goldmine
Project: VLF2 Phase 3

Project No: 475.0106.056

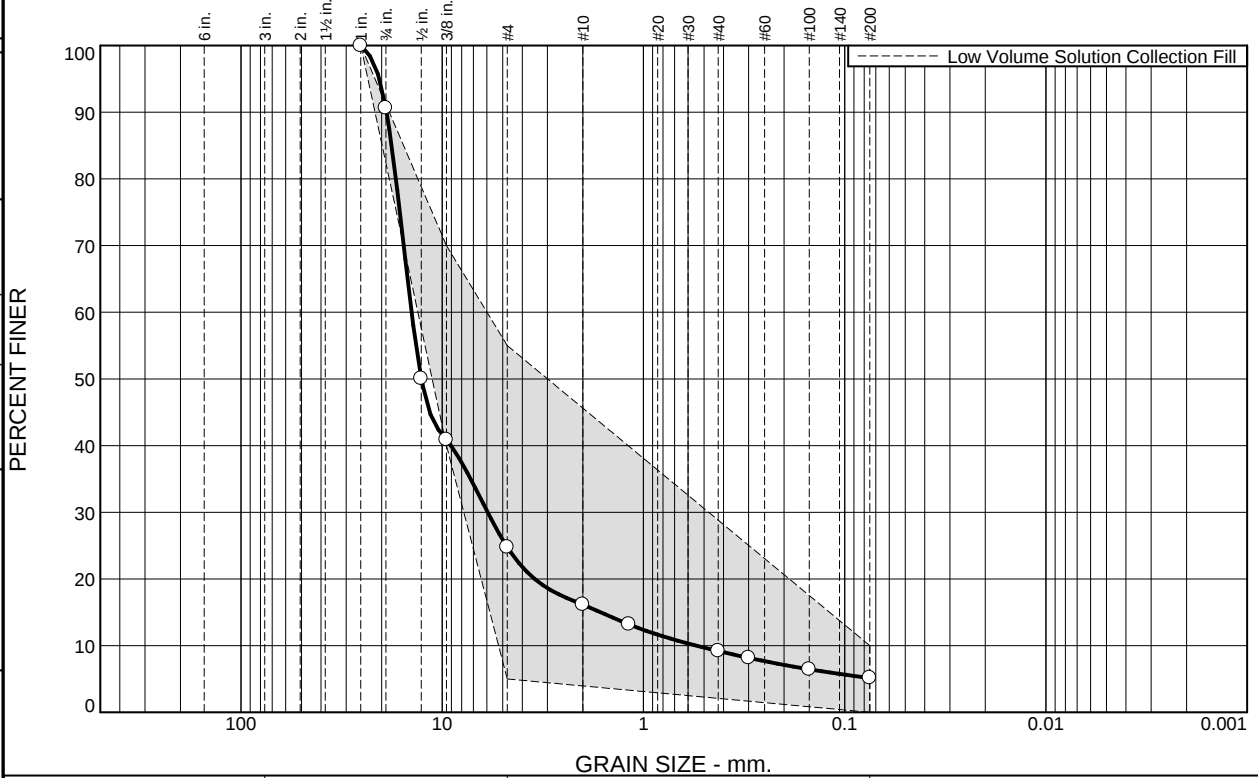
Figure LVSCF-03-C

Tested By: AB

Checked By: GF

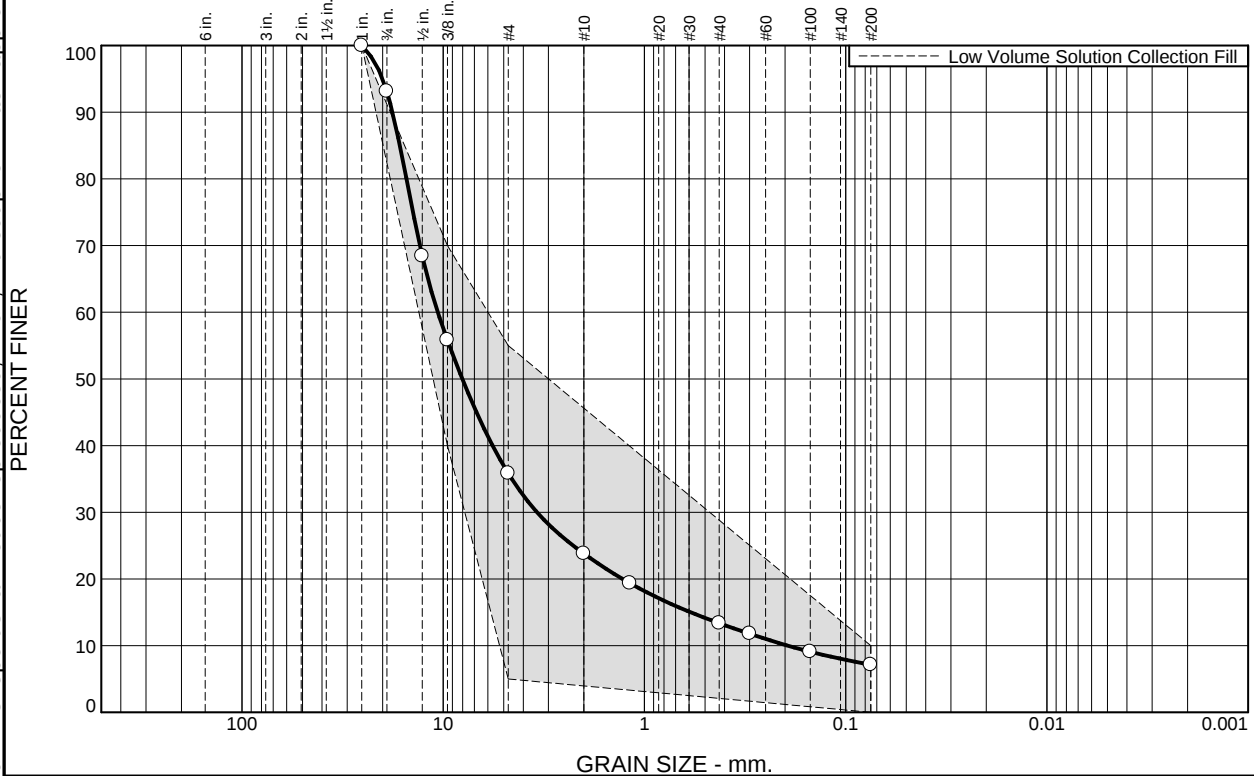
Test results included in this report relate only to the items inspected or tested. This report shall not be reproduced, in full, without prior written approval of NewFields.

Particle Size Distribution Report



Test results included in this report relate only to the items inspected or tested. This report shall not be reproduced, in full, without prior written approval of NewFields.

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	6.9	57.3	12.0	10.4	6.3	7.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1	100.0	100.0	
.75	93.1		
0.5	68.4		
.375	55.8	40.0 - 70.0	
#4	35.8	5.0 - 55.0	
#10	23.8		
#16	19.4		
#40	13.4		
#50	11.8		
#100	9.1		
#200	7.1	0.0 - 10.0	

* Low Volume Solution Collection Fill

Material Description

Light Brown poorly graded gravel with silt and sand

Atterberg Limits

PL= NP

LL= NV

PI= NP

Coefficients

D₉₀= 17.8646

D₈₅= 16.4157

D₆₀= 10.6425

D₅₀= 8.0336

D₃₀= 3.4170

D₁₅= 0.5888

D₁₀= 0.1941

C_u= 54.82

C_c= 5.65

Classification

USCS= GP-GM

AASHTO= A-1-a

Remarks

Location: LVSCF Stockpile
Sample Number: LVSCF-05-C

Depth: Stockpile

Date: 7/26/2022

NewFields

Client: Newmont-Cripple Creek & Victor Goldmine
Project: VLF2 Phase 3

Project No: 475.0106.056

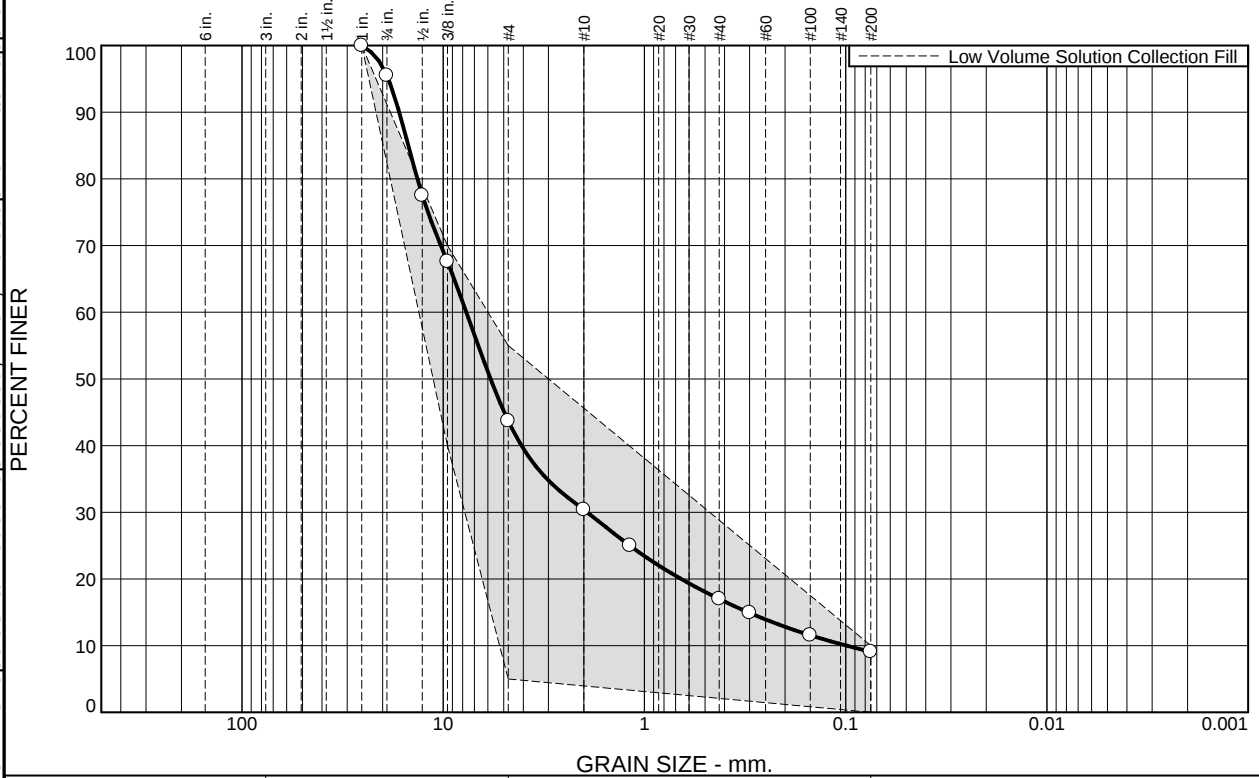
Figure LVSCF-05-C

Tested By: GF

Checked By: GF

Test results included in this report relate only to the items inspected or tested. This report shall not be reproduced, in full, without prior written approval of NewFields.

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	4.5	51.8	13.3	13.4	7.9	9.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1	100.0	100.0	
.75	95.5		
0.5	77.5		
.375	67.6	40.0 - 70.0	
#4	43.7	5.0 - 55.0	
#10	30.4		
#16	25.0		
#40	17.0		
#50	14.9		
#100	11.6		
#200	9.1	0.0 - 10.0	

* Low Volume Solution Collection Fill

Material Description

Light Brown poorly graded gravel with silt and sand

Atterberg Limits

PL= NP LL= NV PI= NP

Coefficients

D₉₀= 16.5304 D₈₅= 14.8934 D₆₀= 7.6749
D₅₀= 5.8145 D₃₀= 1.9275 D₁₅= 0.3047
D₁₀= 0.0988 C_u= 77.68 C_c= 4.90

Classification

USCS= GP-GM AASHTO= A-1-a

Remarks

Location: S-232 100-mil
Sample Number: LVSCF-06-R

Date: 8/29/22

 NewFields

Client: Newmont-Cripple Creek & Victor Goldmine
Project: VLF2 Phase 3

Project No: 475.0106.056

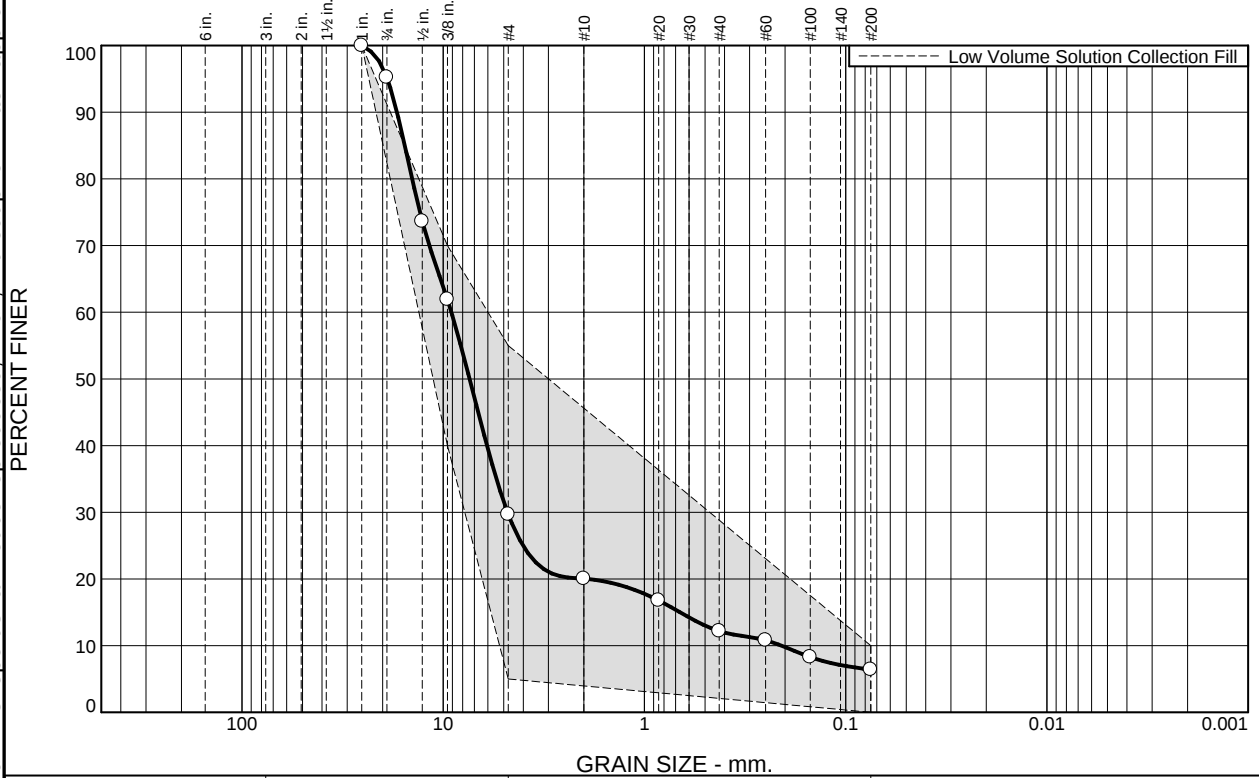
Figure LVSCF-06-R

Tested By: GF

Checked By: GF

Test results included in this report relate only to the items inspected or tested. This report shall not be reproduced, in full, without prior written approval of NewFields.

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	4.8	65.5	9.7	7.8	5.8	6.4	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1	100.0	100.0	
.75	95.2		
0.5	73.6		
.375	61.9	40.0 - 70.0	
#4	29.7	5.0 - 55.0	
#10	20.0		
#20	16.8		
#40	12.2		
#60	10.8		
#100	8.3		
#200	6.4	0.0 - 10.0	

* Low Volume Solution Collection Fill

Material Description

Light Brown poorly graded gravel with silt and sand

Atterberg Limits

PL= NP LL= NV PI= NP

Coefficients

D₉₀= 16.9594 D₈₅= 15.5137 D₆₀= 9.1094
D₅₀= 7.3934 D₃₀= 4.7927 D₁₅= 0.6654
D₁₀= 0.2087 C_u= 43.64 C_c= 12.08

Classification

USCS= GP-GM AASHTO= A-1-a

Remarks

Location: S-77 100-mil
Sample Number: LVSCF-07-R

Date: 9/1/22

NewFields

Client: Newmont-Cripple Creek & Victor Goldmine
Project: VLF2 Phase 3

Project No: 475.0106.056

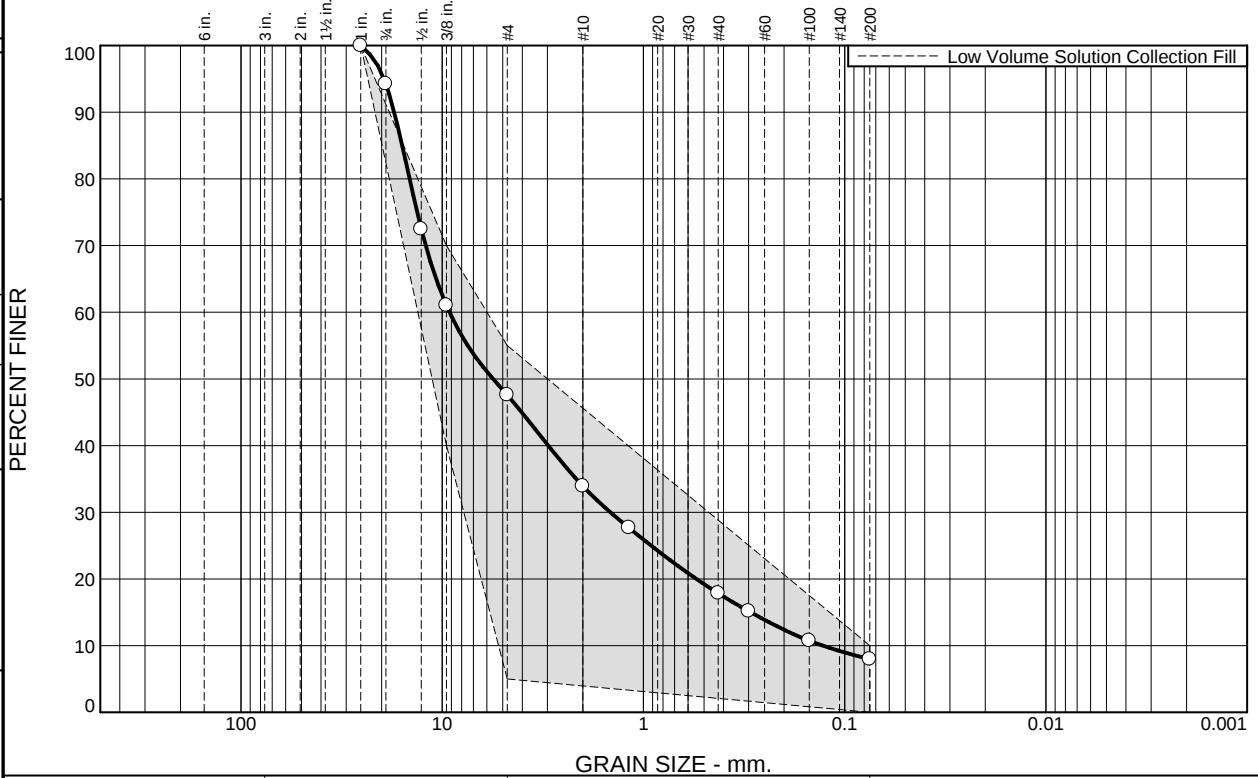
Figure LVSCF-07-R

Tested By: GF

Checked By: GF

Test results included in this report relate only to the items inspected or tested. This report shall not be reproduced, in full, without prior written approval of NewFields.

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	5.8	46.6	13.7	16.0	9.9	8.0	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1	100.0	100.0	
.75	94.2		
0.5	72.5		
.375	61.0	40.0 - 70.0	
#4	47.6	5.0 - 55.0	
#10	33.9		
#16	27.7		
#40	17.9		
#50	15.2		
#100	10.7		
#200	8.0	0.0 - 10.0	

* Low Volume Solution Collection Fill

Material Description

Light brown poorly graded gravel with silt and sand

Atterberg Limits

PL= NP LL= NV PI= NP

Coefficients

D₉₀= 17.3056 D₈₅= 15.7915 D₆₀= 9.1898
D₅₀= 5.5803 D₃₀= 1.4600 D₁₅= 0.2931
D₁₀= 0.1285 C_u= 71.52 C_c= 1.81

Classification

USCS= GW-GM AASHTO= A-1-a

Remarks

Location: S-175 100-mil
Sample Number: LVSCF-08-R

Date: 9/19/22



Client: Newmont-Cripple Creek & Victor Goldmine
Project: VLF2 Phase 3

Project No: 475.0106.056

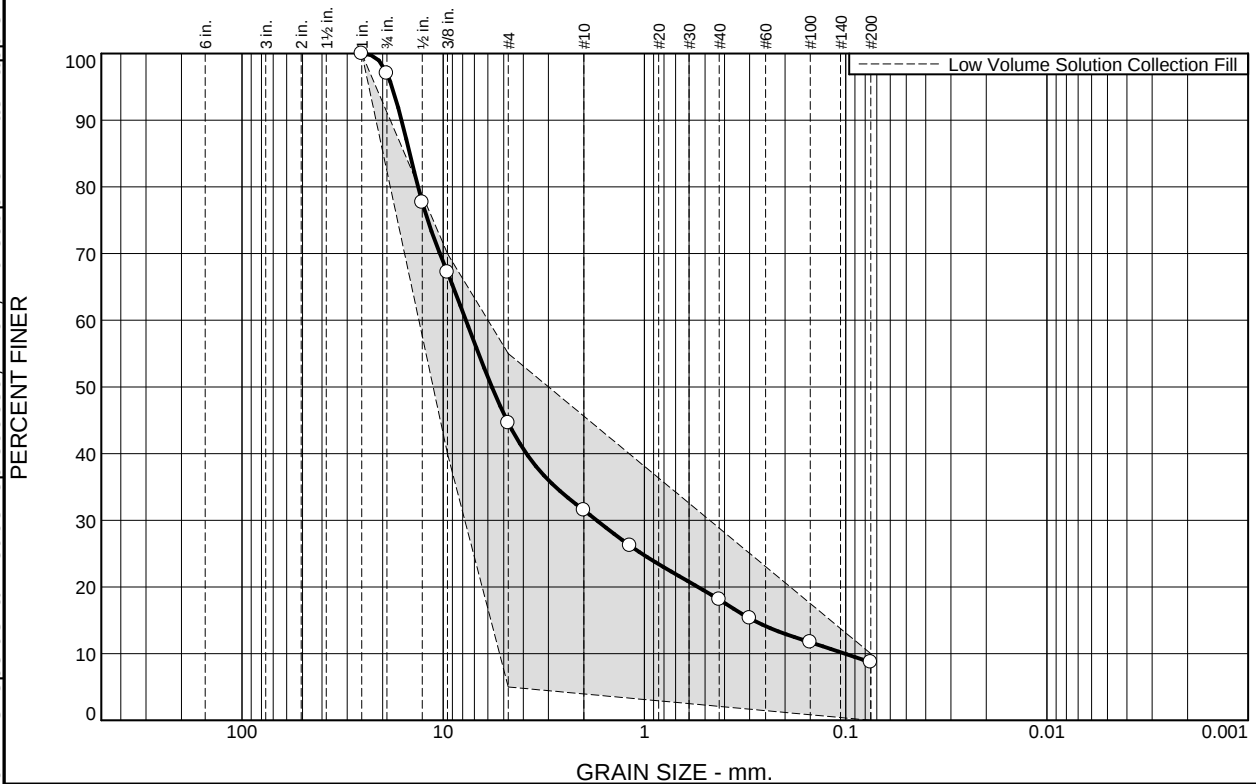
Figure LVSCF-08-R

Tested By: GF

Checked By: GF

Test results included in this report relate only to the items inspected or tested. This report shall not be reproduced, in full, without prior written approval of NewFields.

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	3.0	52.4	13.1	13.4	9.4	8.7	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1	100.0	100.0	
.75	97.0		
0.5	77.7		
.375	67.2	40.0 - 70.0	
#4	44.6	5.0 - 55.0	
#10	31.5		
#16	26.2		
#40	18.1		
#50	15.3		
#100	11.7		
#200	8.7	0.0 - 10.0	

* Low Volume Solution Collection Fill

Material Description

Gray well-graded gravel with silt and sand

Atterberg Limits

PL= NP LL= NV PI= NP

Coefficients

D₉₀= 16.0958 D₈₅= 14.6512 D₆₀= 7.7125
D₅₀= 5.7286 D₃₀= 1.7278 D₁₅= 0.2875
D₁₀= 0.1010 C_u= 76.37 C_c= 3.83

Classification

USCS= GP-GM AASHTO= A-1-a

Remarks

Location: S-188 100-mil
Sample Number: LVSCF-09-R

Date: 9/22/22



Client: Newmont-Cripple Creek & Victor Goldmine
Project: VLF2 Phase 3

Project No: 475.0106.056

Figure LVSCF-09-R

Tested By: GF

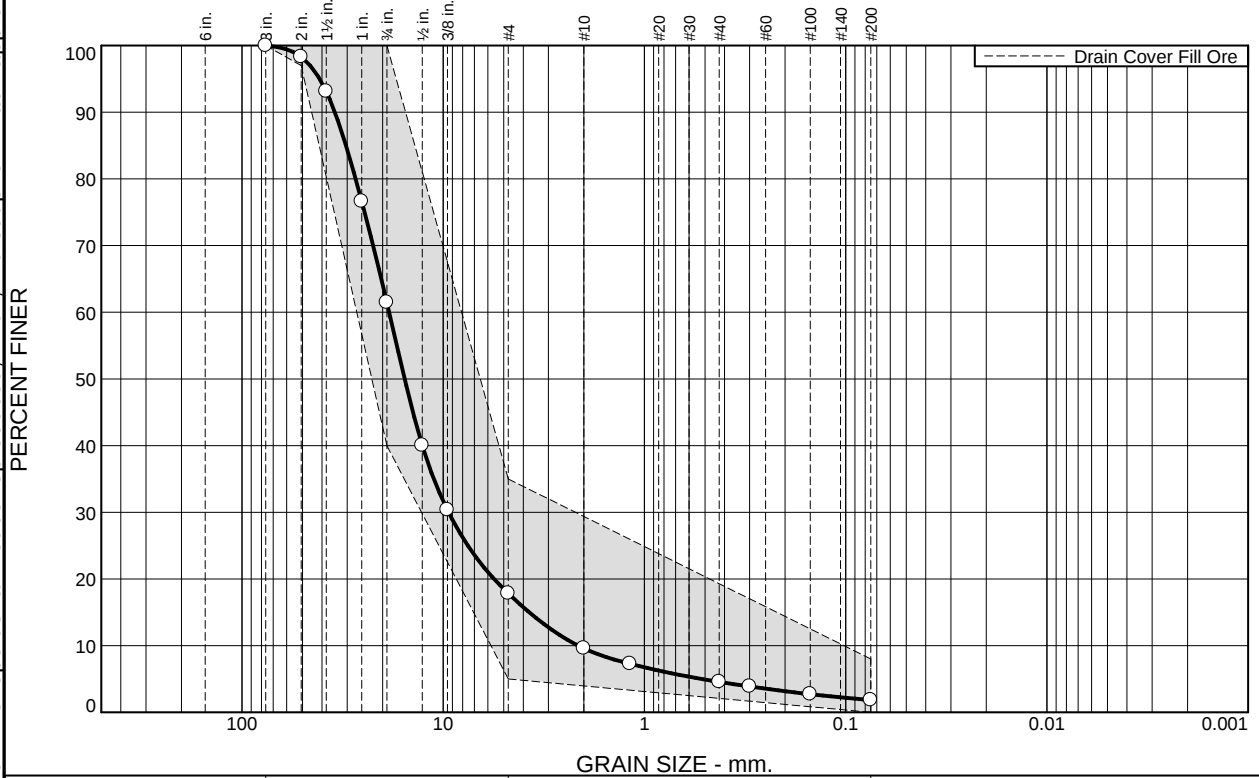
Checked By: GF



APPENDIX G.6 – DRAIN COVER FILL (CRUSHED ORE) LABORATORY TEST RESULTS

Test results included in this report relate only to the items inspected or tested. This report shall not be reproduced, in full, without prior written approval of NewFields.

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	38.5	43.7	8.2	5.0	2.8	1.8	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0	100.0	
2	98.3	97.0 - 100.0	
1.5	93.1		
1	76.6		
.75	61.5	40.0 - 100.0	
0.5	40.0		
.375	30.3		
#4	17.8	5.0 - 35.0	
#10	9.6		
#16	7.3		
#40	4.6		
#50	3.9		
#100	2.7		
#200	1.8	0.0 - 8.0	

* Drain Cover Fill Ore

Material Description

Gray well-graded gravel with sand

Atterberg Limits

PL= NP LL= NV PI= NP

Coefficients

D₉₀= 34.5334 D₈₅= 30.4115 D₆₀= 18.5591
D₅₀= 15.5258 D₃₀= 9.4017 D₁₅= 3.7371
D₁₀= 2.1362 C_u= 8.69 C_c= 2.23

Classification

USCS= GW AASHTO= A-1-a

Remarks

Location: DCFO Stockpile
Sample Number: DCFO-01-C

Depth: Stockpile

Date: 10/5/2022



Client: Newmont-Cripple Creek & Victor Goldmine
Project: VLF2 Phase 3

Project No: 475.0106.056

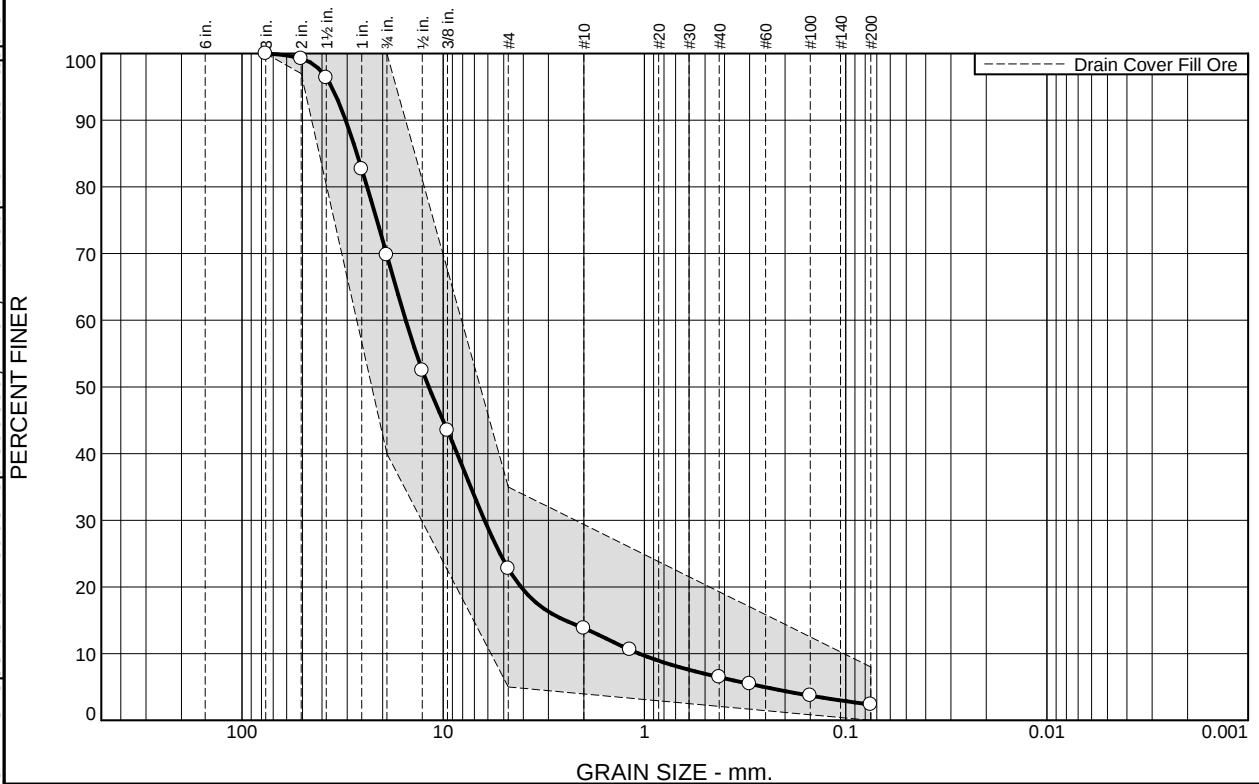
Figure DCFO-01-C

Tested By: GF

Checked By: TW

Test results included in this report relate only to the items inspected or tested. This report shall not be reproduced, in full, without prior written approval of NewFields.

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	30.2	47.0	9.0	7.3	4.2	2.3	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0	100.0	
2	99.2	97.0 - 100.0	
1.5	96.4		
1	82.7		
.75	69.8	40.0 - 100.0	
0.5	52.5		
.375	43.5		
#4	22.8	5.0 - 35.0	
#10	13.8		
#16	10.6		
#40	6.5		
#50	5.5		
#100	3.7		
#200	2.3	0.0 - 8.0	

* Drain Cover Fill Ore

Material Description

Gray well-graded gravel with sand

Atterberg Limits

PL= NP LL= NV PI= NP

Coefficients

D₉₀= 30.5164 D₈₅= 26.8460 D₆₀= 15.3402
D₅₀= 11.8022 D₃₀= 6.2305 D₁₅= 2.4792
D₁₀= 1.0614 C_u= 14.45 C_c= 2.38

Classification

USCS= GW AASHTO= A-1-a

Remarks

Location: P-4017 80-mil
Sample Number: DCFO-02-R

Depth: FG

Date: 10/20/2022



Client: Newmont-Cripple Creek & Victor Goldmine
Project: VLF2 Phase 3

Project No: 475.0106.056

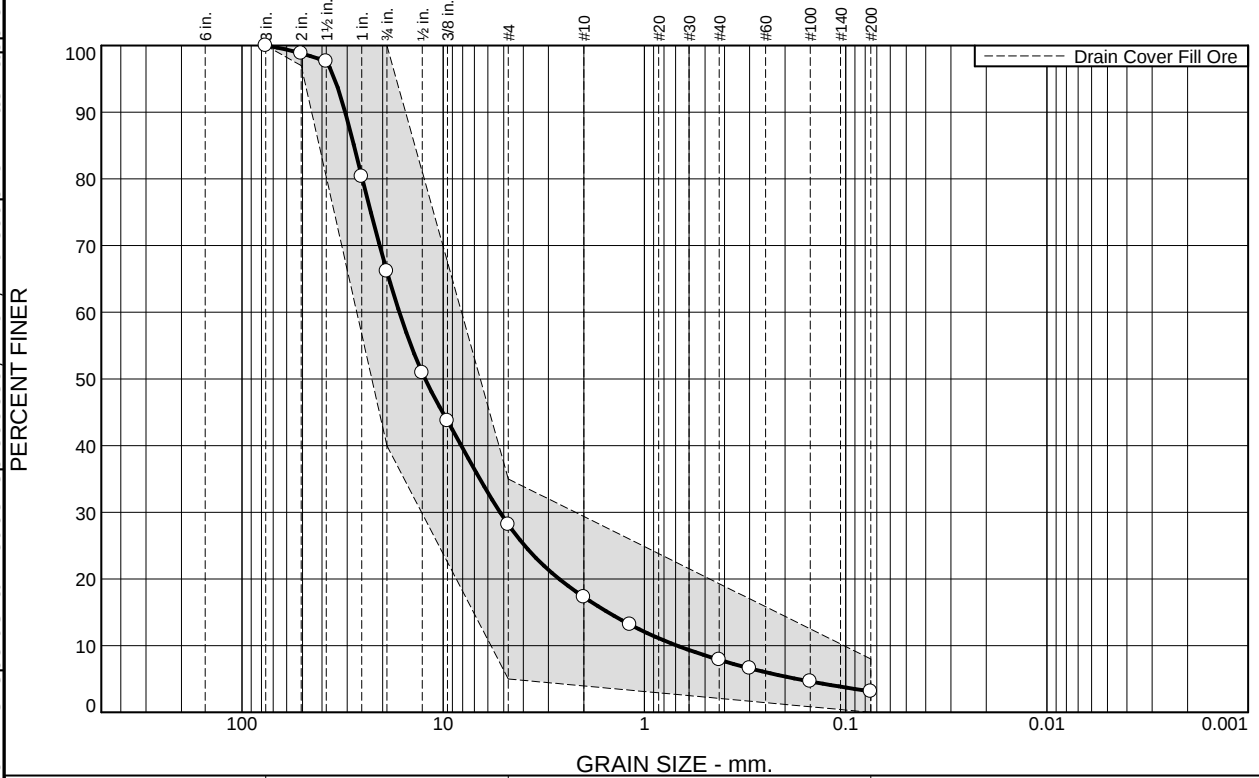
Figure DCFO-02-R

Tested By: TW

Checked By: TW

Test results included in this report relate only to the items inspected or tested. This report shall not be reproduced, in full, without prior written approval of NewFields.

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	33.9	37.9	10.9	9.4	4.8	3.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0	100.0	
2	98.8	97.0 - 100.0	
1.5	97.6		
1	80.3		
.75	66.1	40.0 - 100.0	
0.5	50.9		
.375	43.7		
#4	28.2	5.0 - 35.0	
#10	17.3		
#16	13.2		
#40	7.9		
#50	6.6		
#100	4.6		
#200	3.1	0.0 - 8.0	

* Drain Cover Fill Ore

Material Description

Gray well-graded gravel with sand

Atterberg Limits

PL= NP LL= NV PI= NP

Coefficients

D₉₀= 30.6793 D₈₅= 27.7518 D₆₀= 16.5023
D₅₀= 12.3016 D₃₀= 5.2194 D₁₅= 1.5185
D₁₀= 0.6875 C_u= 24.00 C_c= 2.40

Classification

USCS= GW AASHTO= A-1-a

Remarks

Location: P-208 100-mil
Sample Number: DCFO-03-R

Depth: FG

Date: 10/24/2022



Client: Newmont-Cripple Creek & Victor Goldmine
Project: VLF2 Phase 3

Project No: 475.0106.056

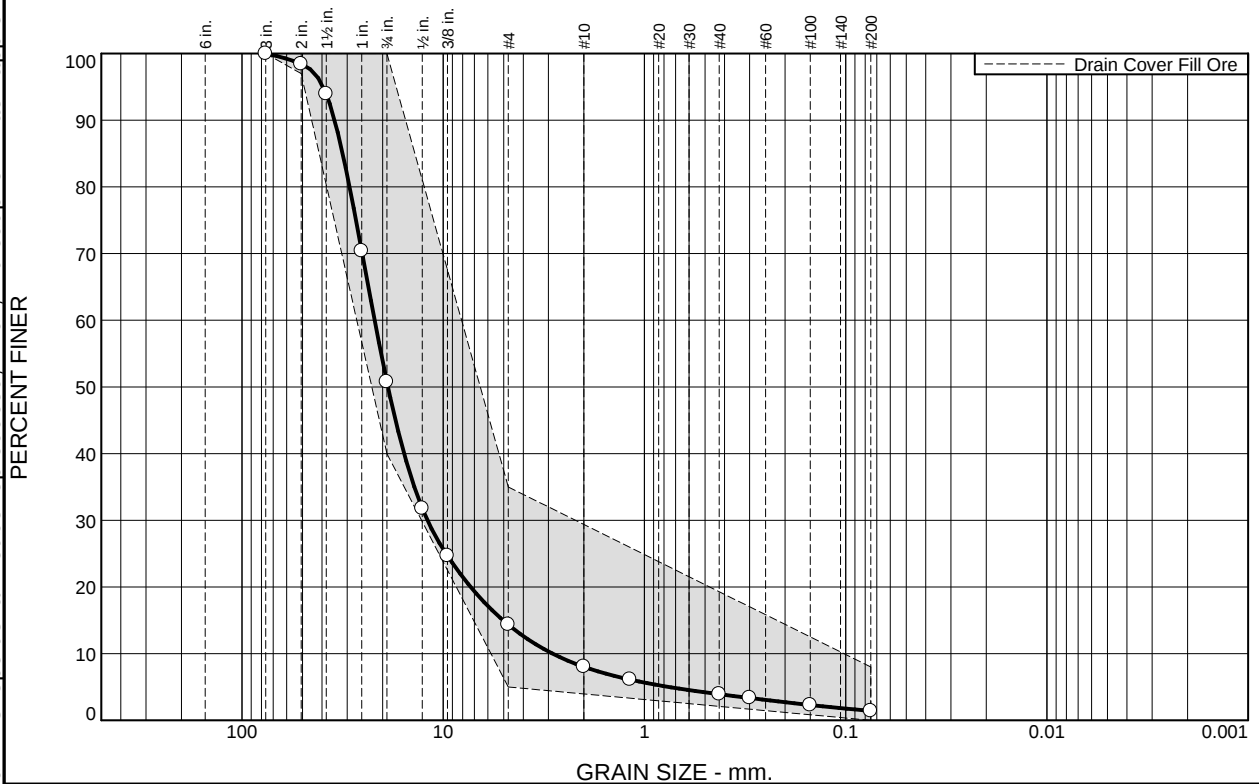
Figure DCFO-03-R

Tested By: TW

Checked By: TW

Test results included in this report relate only to the items inspected or tested. This report shall not be reproduced, in full, without prior written approval of NewFields.

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	49.2	36.5	6.3	4.1	2.5	1.4	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0	100.0	
2	98.4	97.0 - 100.0	
1.5	93.9		
1	70.4		
.75	50.8	40.0 - 100.0	
.5	31.8		
.375	24.7		
#4	14.3	5.0 - 35.0	
#10	8.0		
#16	6.1		
#40	3.9		
#50	3.4		
#100	2.3		
#200	1.4	0.0 - 8.0	

* Drain Cover Fill Ore

Material Description

Gray well-graded gravel

Atterberg Limits

PL= NP LL= NV PI= NP

Coefficients

D₉₀= 34.6422 D₈₅= 31.5974 D₆₀= 21.9253
D₅₀= 18.8138 D₃₀= 11.9771 D₁₅= 5.0404
D₁₀= 2.8594 C_u= 7.67 C_c= 2.29

Classification

USCS= GW AASHTO= A-1-a

Remarks

Location: P-102 100-mil
Sample Number: DCFO-04-R

Depth: FG

Date: 10/26/2022



Client: Newmont-Cripple Creek & Victor Goldmine
Project: VLF2 Phase 3

Project No: 475.0106.056

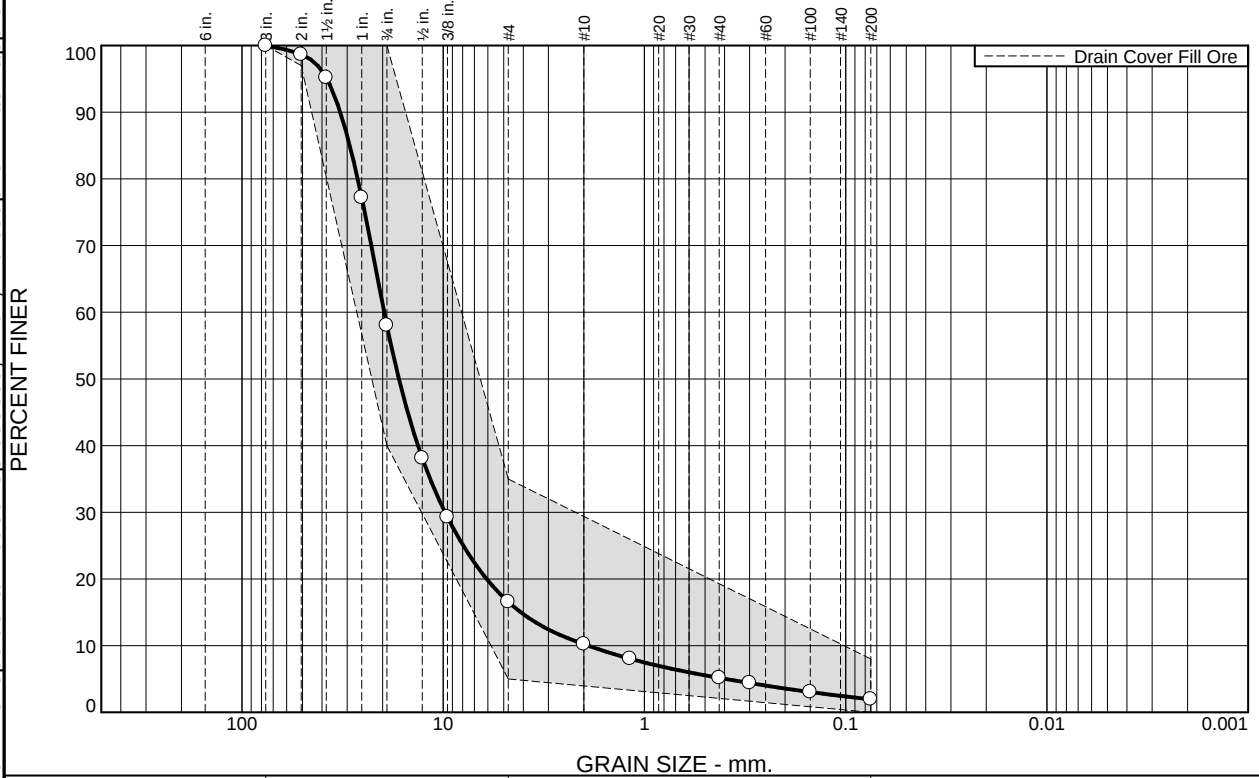
Figure DCFO-04-R

Tested By: TW

Checked By: TW

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Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	42.0	41.4	6.4	5.0	3.3	1.9	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0	100.0	
2	98.6	97.0 - 100.0	
1.5	95.2		
1	77.2		
.75	58.0	40.0 - 100.0	
0.5	38.1		
.375	29.3		
#4	16.6	5.0 - 35.0	
#10	10.2		
#16	8.0		
#40	5.2		
#50	4.4		
#100	3.0		
#200	1.9	0.0 - 8.0	

* Drain Cover Fill Ore

Material Description

Gray well-graded gravel

Atterberg Limits

PL= NP

LL= NV

PI= NP

Coefficients

D₉₀= 32.4596

D₈₅= 29.1176

D₆₀= 19.6488

D₅₀= 16.5883

D₃₀= 9.7930

D₁₅= 4.1154

D₁₀= 1.9085

C_u= 10.30

C_c= 2.56

Classification

USCS= GW

AASHTO= A-1-a

Remarks

Location: P-68 100-mil
Sample Number: DCFO-05-R

Depth: FG

Date: 10/27/2022



Client: Newmont-Cripple Creek & Victor Goldmine
Project: VLF2 Phase 3

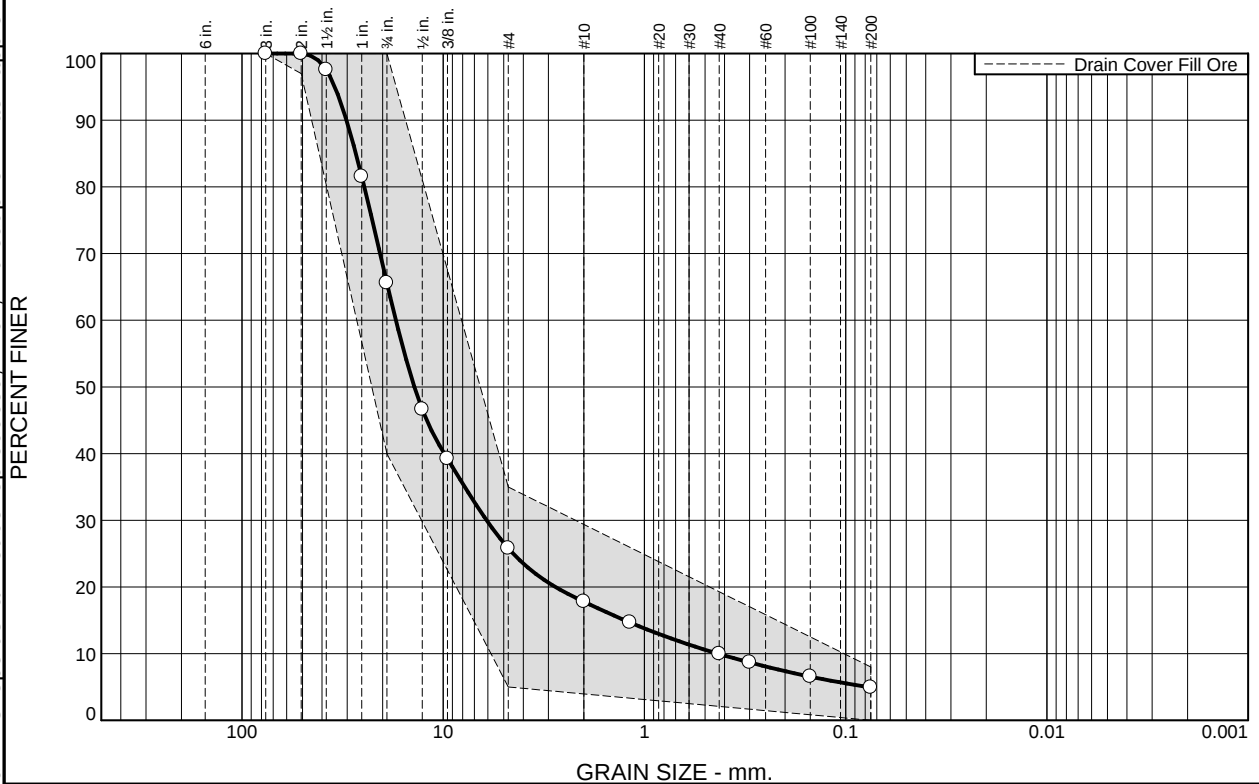
Project No: 475.0106.056

Figure DCFO-05-R

Tested By: TW

Checked By: TW

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	34.4	39.8	8.0	7.9	5.0	4.9	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0	100.0	
2	100.0	97.0 - 100.0	
1.5	97.6		
1	81.6		
.75	65.6	40.0 - 100.0	
0.5	46.6		
.375	39.2		
#4	25.8	5.0 - 35.0	
#10	17.8		
#16	14.7		
#40	9.9		
#50	8.7		
#100	6.5		
#200	4.9	0.0 - 8.0	

* Drain Cover Fill Ore

Material Description

Light brown poorly graded gravel with sand

$$PL = NP$$

Atterberg Limits

$$LL = NV$$
$$P \mid = NP$$

Coefficients

$$D_{90} = 30.2392$$
$$D_{85} = 27.1625$$
$$D_{60} = 17.1718$$
$$D_{50} = 13.8980$$
$$D_{30} = 6.0838$$
$$D_{15}^{00} = 1.2512$$
$$D_{10}^{\text{ss}} = 0.4316$$
$$C_u = 39.79$$
$$C_C = 4.99$$

Classification

USCS= GP

AASHTO= A-1-a

Remarks

Client: Newmont-Cripple Creek & Victor Goldmine

Project: VLF2 Phase 3

Project No: 475.0106.056

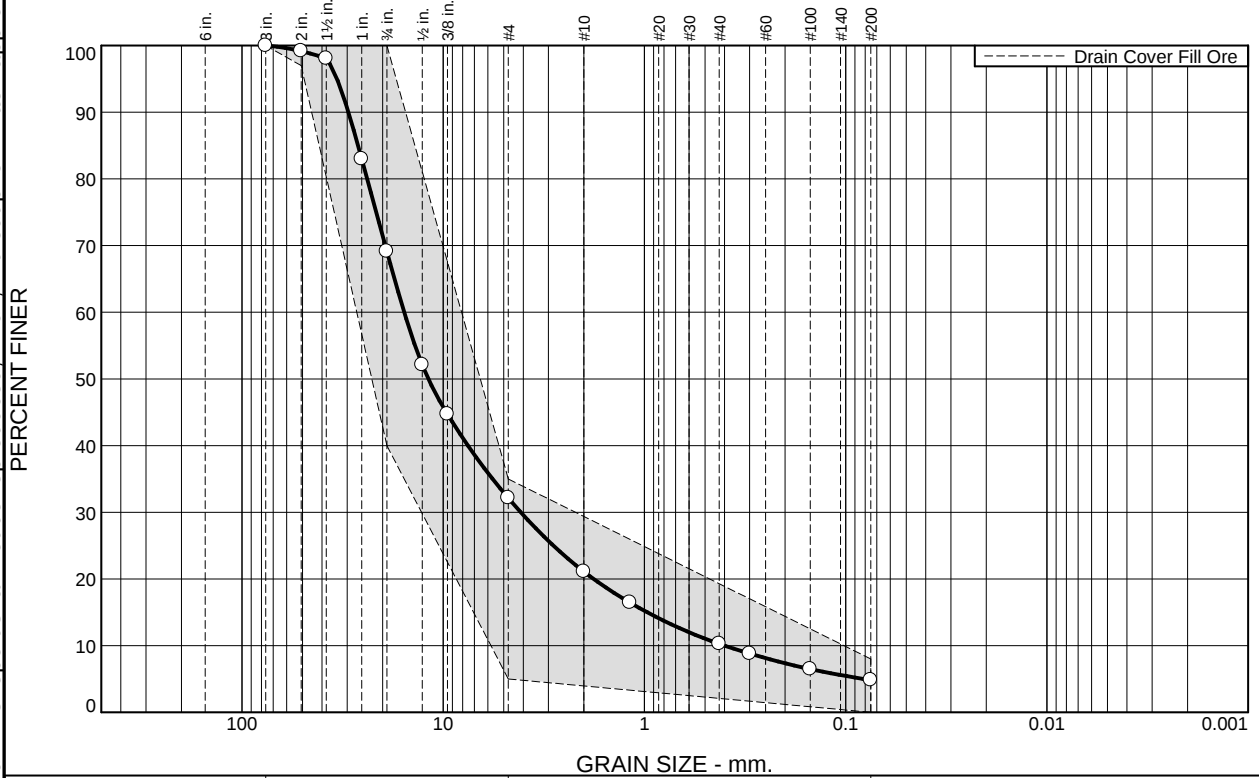
Figure DCFO-06-R

Tested By: DK

Checked By: TW

Test results included in this report relate only to the items inspected or tested. This report shall not be reproduced, in full, without prior written approval of NewFields.

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	30.9	37.0	11.0	10.8	5.5	4.8	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0	100.0	
2	99.2	97.0 - 100.0	
1.5	98.1		
1	83.0		
.75	69.1	40.0 - 100.0	
0.5	52.1		
.375	44.7		
#4	32.1	5.0 - 35.0	
#10	21.1		
#16	16.5		
#40	10.3		
#50	8.8		
#100	6.5		
#200	4.8	0.0 - 8.0	

* Drain Cover Fill Ore

Material Description

Light gray well-graded gravel with sand

Atterberg Limits

PL= NP LL= NV PI= NP

Coefficients

D₉₀= 29.5748 D₈₅= 26.5001 D₆₀= 15.6093
D₅₀= 11.8522 D₃₀= 4.1165 D₁₅= 0.9675
D₁₀= 0.4004 C_u= 38.99 C_c= 2.71

Classification

USCS= GW AASHTO= A-1-a

Remarks

Location: P-4032 80-mil
Sample Number: DCFO-07-R

Depth: FG

Date: 11/22/2022



Client: Newmont-Cripple Creek & Victor Goldmine
Project: VLF2 Phase 3

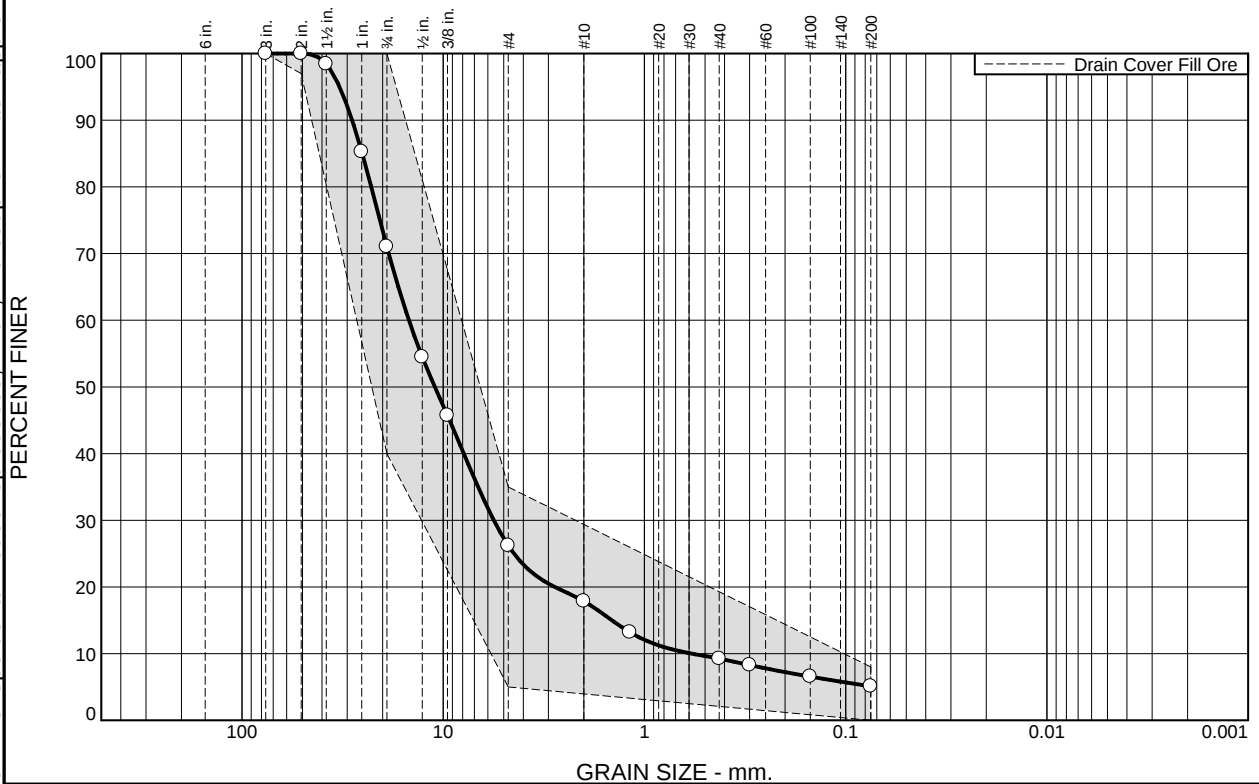
Project No: 475.0106.056

Figure DCFO-07-R

Tested By: DK/TW

Checked By: TW

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	29.0	44.8	8.3	8.7	4.1	5.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0	100.0	
2	100.0	97.0 - 100.0	
1.5	98.4		
1	85.3		
.75	71.0	40.0 - 100.0	
0.5	54.5		
.375	45.7		
#4	26.2	5.0 - 35.0	
#10	17.9		
#16	13.2		
#40	9.2		
#50	8.3		
#100	6.5		
#200	5.1	0.0 - 8.0	

* Drain Cover Fill Ore

Material Description

Brown poorly graded gravel with silt and sand

$$PL = NP$$

Atterberg Limits

$$LL = NV$$
$$P \models NP$$

Coefficients

$$D_{90} = 28.3480$$
$$D_{85} = 25.2598$$
$$D_{60} = 14.7937$$
$$D_{50} = 11.0046$$
$$D_{30} = 5.6047$$
$$D_{15} = 1.4502$$
$$D_{10}^{00} = 0.5816$$
$$C_u = 25.44$$
$$C_c = 3.65$$

Classification

USCS= GP-GM

AASHTO= A-1-a

Remarks

Client: Newmont-Cripple Creek & Victor Goldmine

Project: VLF2 Phase 3

Project No: 475.0106.056

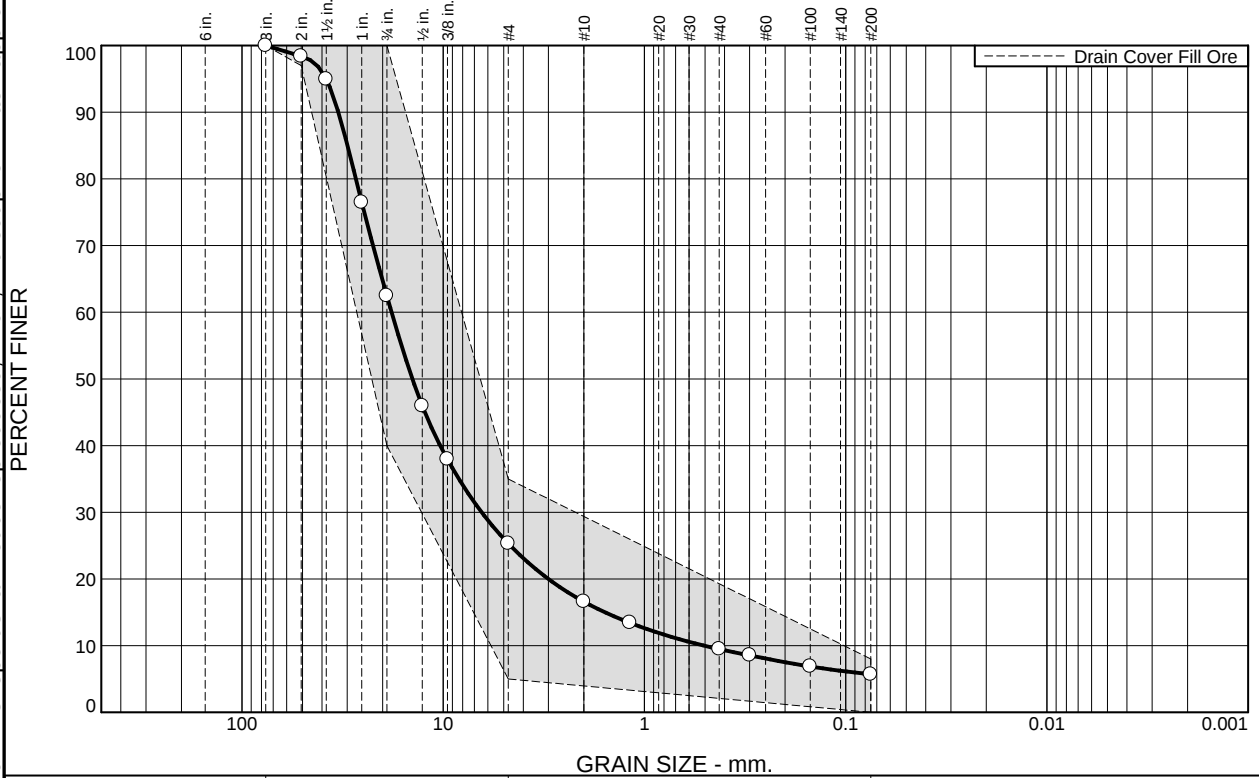
Figure DCFO-08-R

Tested By: TW/DK

Checked By: TW

Test results included in this report relate only to the items inspected or tested. This report shall not be reproduced, in full, without prior written approval of NewFields.

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	37.5	37.2	8.7	7.1	3.8	5.7	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0	100.0	
2	98.4	97.0 - 100.0	
1.5	95.0		
1	76.5		
.75	62.5	40.0 - 100.0	
0.5	46.0		
.375	37.9		
#4	25.3	5.0 - 35.0	
#10	16.6		
#16	13.4		
#40	9.5		
#50	8.5		
#100	6.9		
#200	5.7	0.0 - 8.0	

* Drain Cover Fill Ore

Material Description

Reddish brown poorly graded gravel with silt and sand

Atterberg Limits

PL= NP LL= NV PI= NP

Coefficients

D₉₀= 33.1869 D₈₅= 29.8836 D₆₀= 18.0425
D₅₀= 14.2179 D₃₀= 6.4414 D₁₅= 1.5709
D₁₀= 0.5056 C_u= 35.69 C_c= 4.55

Classification

USCS= GP-GM AASHTO= A-1-a

Remarks

Location: P-208 100-mil
Sample Number: DCFO-09-R

Depth: FG

Date: 12/2/2022



Client: Newmont-Cripple Creek & Victor Goldmine
Project: VLF2 Phase 3

Project No: 475.0106.056

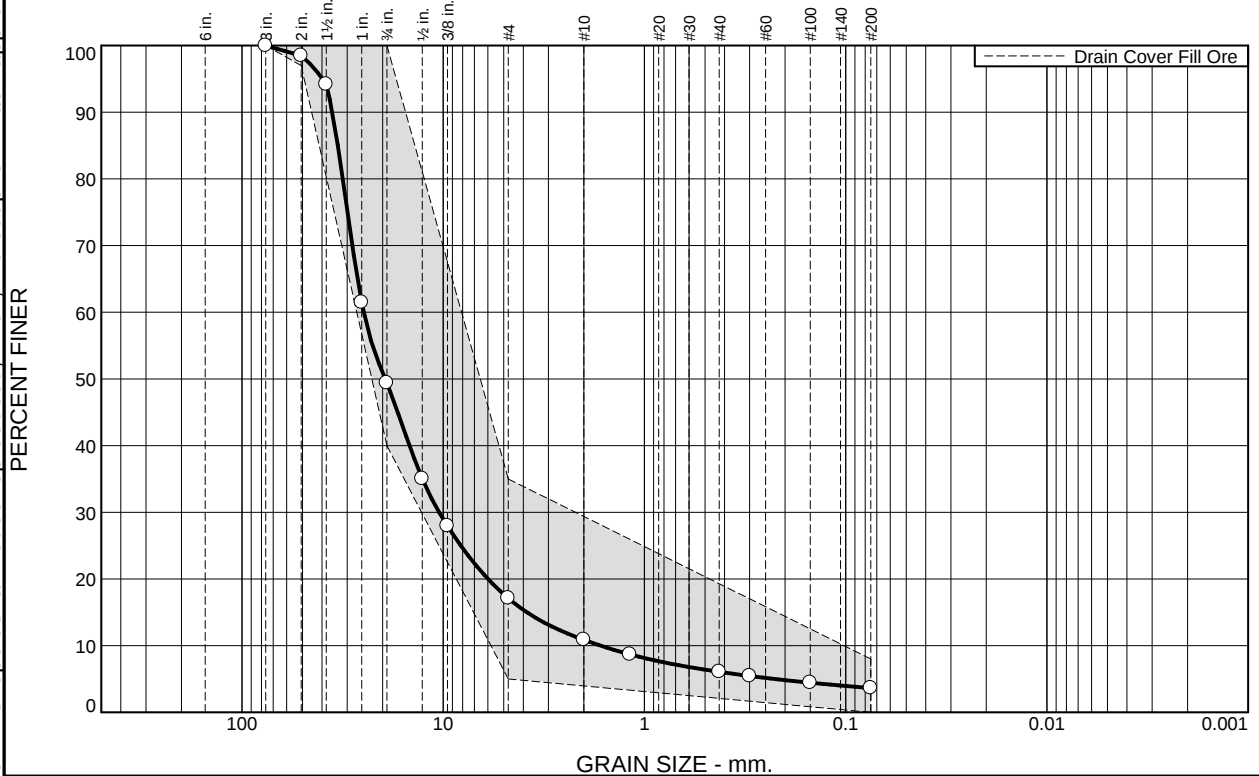
Figure DCFO-09-R

Tested By: DK/TW

Checked By: TW

Test results included in this report relate only to the items inspected or tested. This report shall not be reproduced, in full, without prior written approval of NewFields.

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	50.6	32.3	6.2	4.8	2.5	3.6	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0	100.0	
2	98.5	97.0 - 100.0	
1.5	94.2		
1	61.5		
.75	49.4	40.0 - 100.0	
.5	35.0		
.375	28.0		
#4	17.1	5.0 - 35.0	
#10	10.9		
#16	8.7		
#40	6.1		
#50	5.4		
#100	4.4		
#200	3.6	0.0 - 8.0	

* Drain Cover Fill Ore

Material Description

Reddish brown well-graded gravel

Atterberg Limits

PL= NP LL= NV PI= NP

Coefficients

D₉₀= 35.5781 D₈₅= 33.3835 D₆₀= 24.8258
D₅₀= 19.4214 D₃₀= 10.4808 D₁₅= 3.8352
D₁₀= 1.6524 C_u= 15.02 C_c= 2.68

Classification

USCS= GW AASHTO= A-1-a

Remarks

Location: P-171 100-mil
Sample Number: DCFO-10-R

Depth: FG

Date: 12/07/2022



Client: Newmont-Cripple Creek & Victor Goldmine
Project: VLF2 Phase 3

Project No: 475.0106.056

Figure DCFO-10-R

Tested By: DK

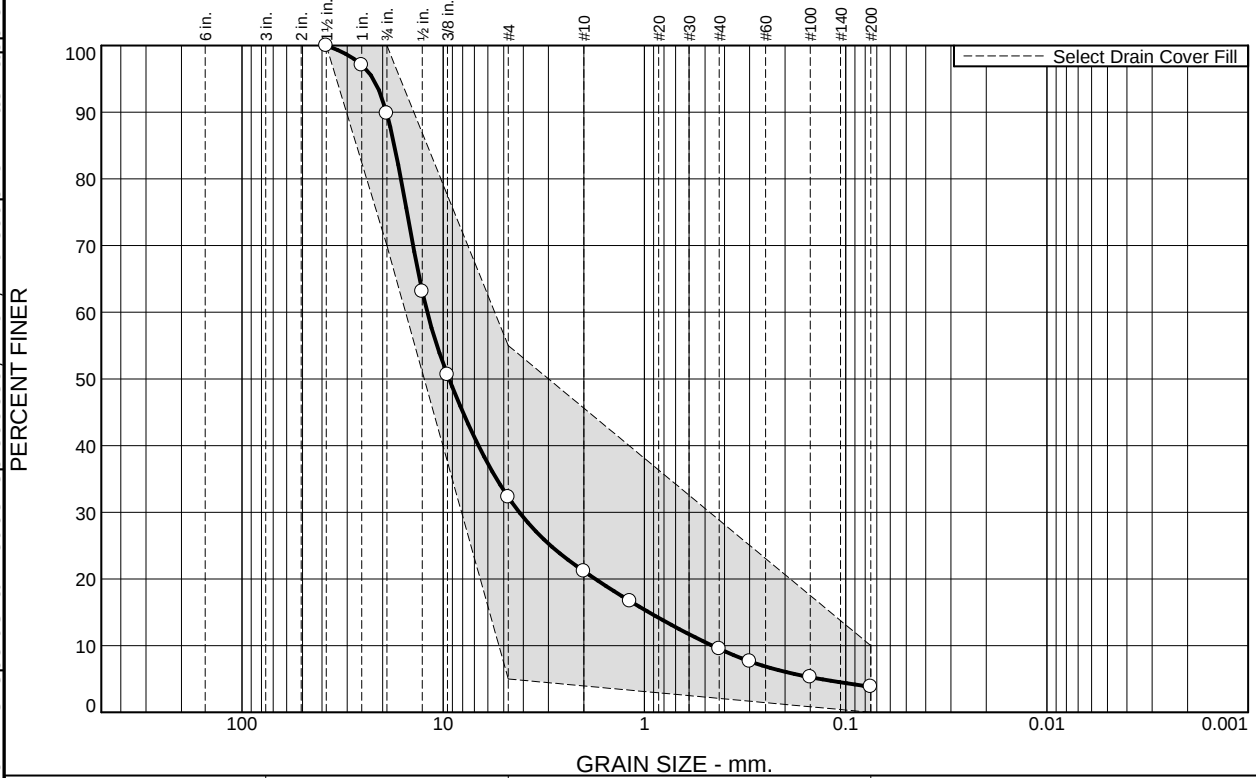
Checked By: TW



APPENDIX G.7 – SELECT DRAIN COVER FILL LABORATORY TEST RESULTS

Test results included in this report relate only to the items inspected or tested. This report shall not be reproduced, in full, without prior written approval of NewFields.

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	10.2	57.5	11.1	11.7	5.7	3.8	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1.5	100.0	100.0	
1	97.1		
.75	89.8	70.0 - 100.0	
.5	63.1		
.375	50.6		
#4	32.3	5.0 - 55.0	
#10	21.2		
#16	16.7		
#40	9.5		
#50	7.6		
#100	5.3		
#200	3.8	0.0 - 10.0	

* Select Drain Cover Fill

Material Description

Grayish brown poorly graded gravel with sand

Atterberg Limits

PL= NP LL= NV PI= NP

Coefficients

D₉₀= 19.1269 D₈₅= 17.4695 D₆₀= 12.0031
D₅₀= 9.3439 D₃₀= 4.1850 D₁₅= 0.9494
D₁₀= 0.4593 C_u= 26.13 C_c= 3.18

Classification

USCS= GP AASHTO= A-1-a

Remarks

Location: SDCF Stockpile
Sample Number: SDCF-01-C

Date: 10/6/22



Client: Newmont-Cripple Creek & Victor Goldmine
Project: VLF2 Phase 3

Project No: 475.0106.056

Figure SDCF-01-C

Tested By: GF

Checked By: TW