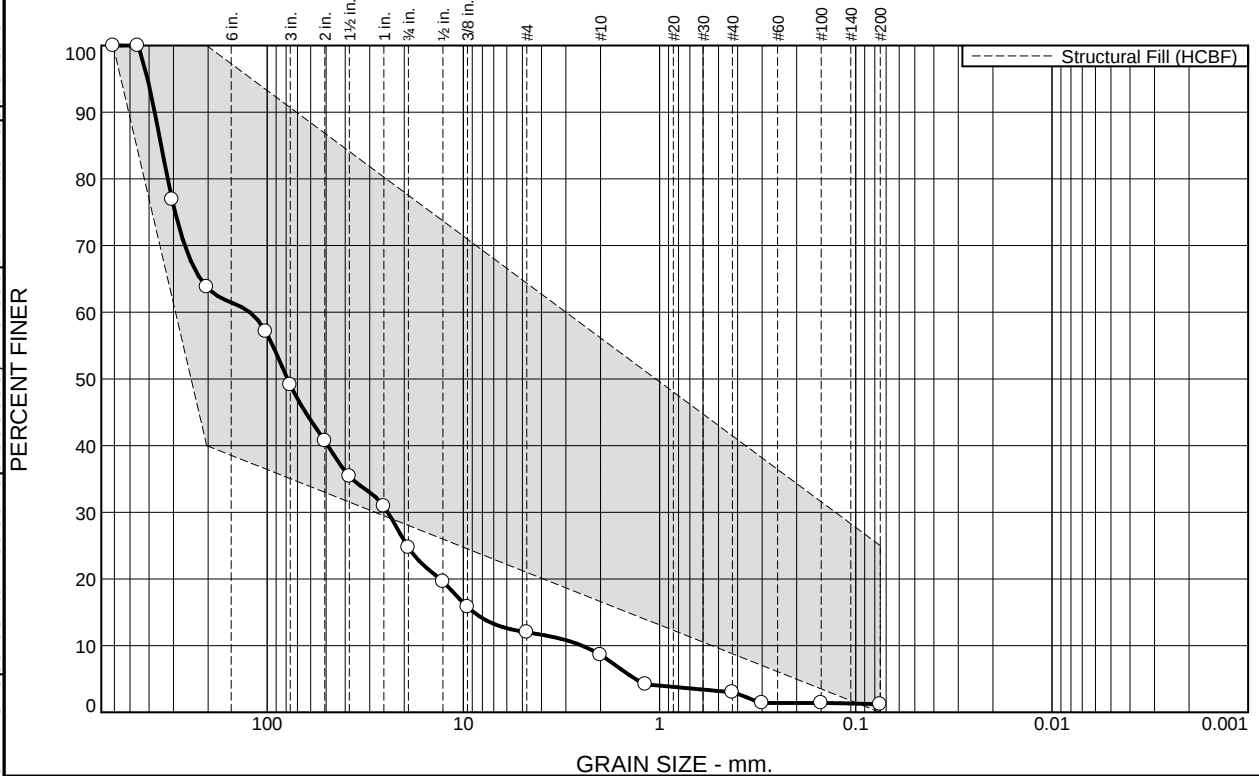




APPENDIX G.1 – OWNER PLACED STRUCTURAL FILL LABORATORY TEST RESULTS

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

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
50.9	24.4	12.7	3.4	5.6	1.8	1.2	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
24"	100.0	100.0	
18"	100.0		
12"	76.9		
8"	63.8	40.0 - 100.0	
4"	57.1		
3"	49.1		
2"	40.7		
1.5"	35.4		
1"	30.9		
.75"	24.7		
.5"	19.6		
.375"	15.8		
#4	12.0		
#10	8.6		
#16	4.2		
#40	3.0		
#50	1.4		
#100	1.4		
#200	1.2	0.0 - 25.0	

* Structural Fill (HCBF)

Material Description

Brown well-graded gravel with sand

Atterberg Limits

PL= NP

LL= NV

PI= NP

Coefficients

D₉₀= 373.8563

D₈₅= 346.5722

D₆₀= 122.4915

D₅₀= 78.7310

D₃₀= 24.2218

D₁₅= 8.8511

D₁₀= 2.4835

C_u= 49.32

C_c= 1.93

Classification

USCS= GW

AASHTO= A-1-a

Remarks

Location: N 59,230 E 36,200
Sample Number: HCBF-22-R

Depth: 10,010

Date: 02/08/2022

 NewFields

Client: Newmont CC&V Gold Company

Project: VLF2 P3 Stage A

Project No: 475.0106.053

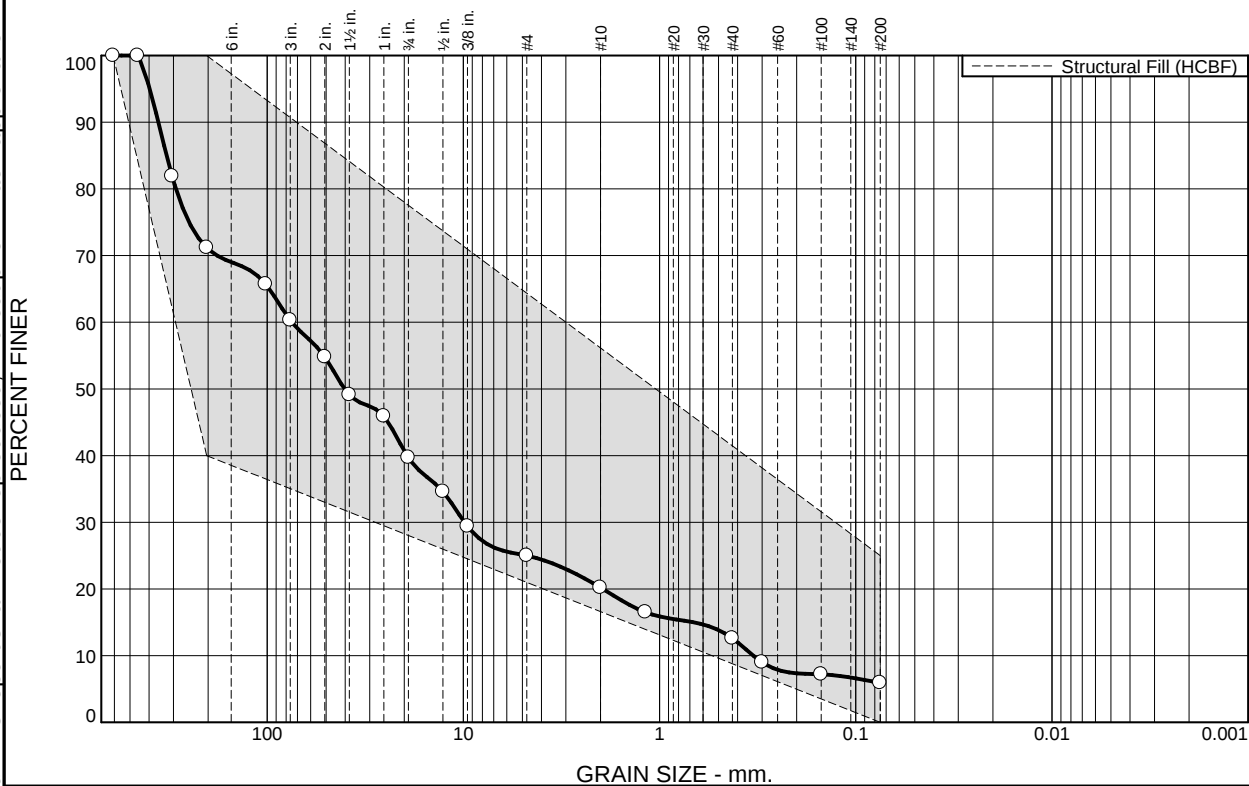
Figure HCBF-22-R

Tested By: TW

Checked By: TW

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

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
39.7	20.6	14.7	4.8	7.6	6.7	5.9	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
24"	100.0	100.0	
18"	100.0		
12"	81.9		
8"	71.2	40.0 - 100.0	
4"	65.7		
3"	60.3		
2"	54.8		
1.5"	49.1		
1"	45.9		
.75"	39.7		
.5"	34.6		
.375"	29.4		
#4	25.0		
#10	20.2		
#16	16.5		
#40	12.6		
#50	9.0		
#100	7.2		
#200	5.9	0.0 - 25.0	

* Structural Fill (HCBF)

Material Description

Reddish brown poorly graded gravel with clay and sand

Atterberg Limits

PL= 21 LL= 31 PI= 10

Coefficients

D₉₀= 358.1811 D₈₅= 325.2146 D₆₀= 74.7858
D₅₀= 40.2922 D₃₀= 9.8669 D₁₅= 0.6720
D₁₀= 0.3329 C_u= 224.68 C_c= 3.91

Classification

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

Remarks

Location: N 59,520 E 36,100
Sample Number: HCBF-24-R

Depth: 10,045

Date: 04/01/2022

NewFields

Client: Newmont CC&V Gold Company

Project: VLF2 P3 Stage A

Project No: 475.0106.053

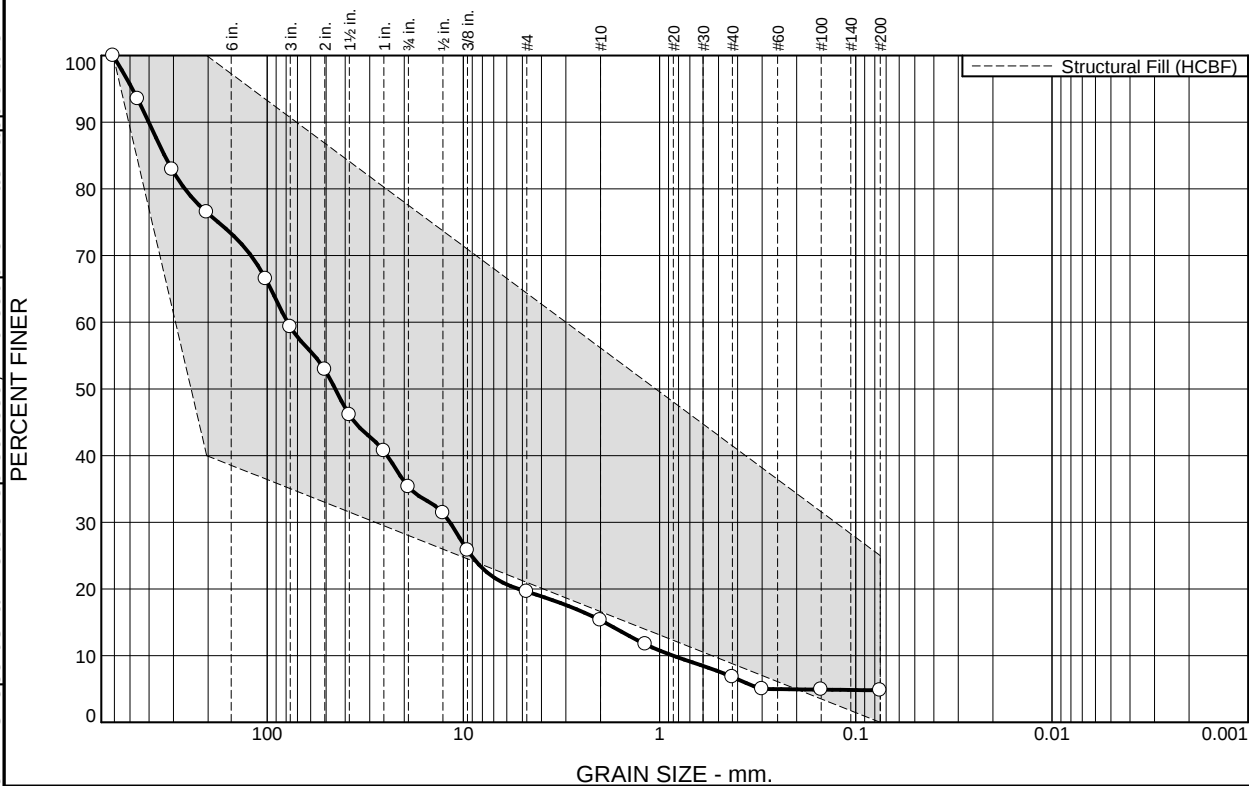
Figure HCBF-24-R

Tested By: TW

Checked By: TW

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

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
40.7	24.0	15.7	4.3	8.5	2.0	4.8	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
24"	100.0	100.0	
18"	93.5		
12"	82.9		
8"	76.5	40.0 - 100.0	
4"	66.5		
3"	59.3		
2"	52.9		
1.5"	46.1		
1"	40.7		
.75"	35.3		
.5"	31.4		
.375"	25.8		
#4	19.6		
#10	15.3		
#16	11.7		
#40	6.8		
#50	5.0		
#100	4.9		
#200	4.8	0.0 - 25.0	

* Structural Fill (HCBF)

Material Description

Gray well-graded gravel with silt and sand

Atterberg Limits

PL= NP

LL= NV

PI= NP

Coefficients

D₉₀= 400.8186

D₈₅= 332.7834

D₆₀= 78.7119

D₅₀= 44.9298

D₃₀= 11.6998

D₁₅= 1.9114

D₁₀= 0.8540

C_u= 92.17

C_c= 2.04

Classification

USCS= GW-GM

AASHTO= A-1-a

Remarks

Location: N 58,960 E 36,400
Sample Number: HCBF-25-R

Depth: 10,095

Date: 04/01/2022

 NewFields

Client: Newmont CC&V Gold Company

Project: VLF2 P3 Stage A

Project No: 475.0106.053

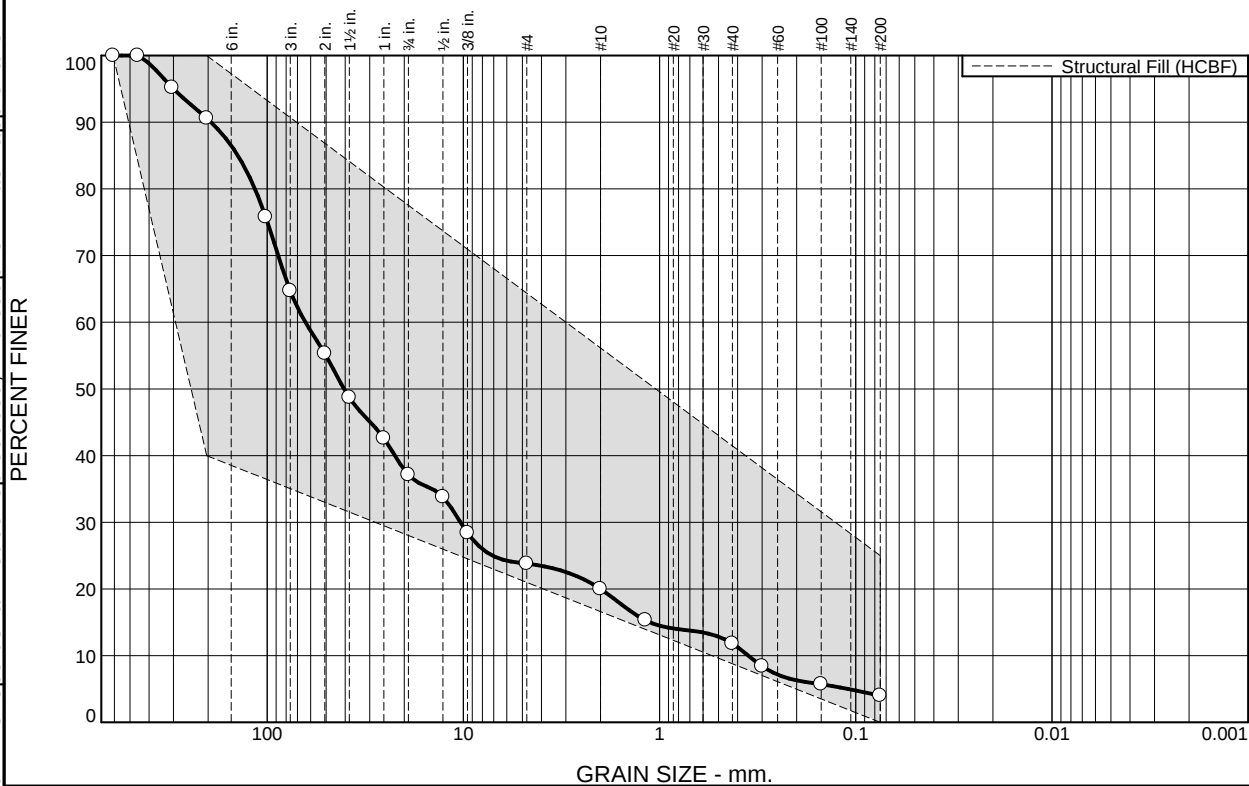
Figure HCBF-25-R

Tested By: TW

Checked By: TW

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

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
35.3	27.6	13.3	3.8	8.2	7.8	4.0	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
24"	100.0	100.0	
18"	100.0		
12"	95.2		
8"	90.6	40.0 - 100.0	
4"	75.8		
3"	64.7		
2"	55.3		
1.5"	48.7		
1"	42.6		
.75"	37.1		
.5"	33.8		
.375"	28.4		
#4	23.8		
#10	20.0		
#16	15.3		
#40	11.8		
#50	8.4		
#100	5.7	0.0 - 25.0	
#200	4.0		

* Structural Fill (HCBF)

Material Description

Brown poorly graded gravel with silt and sand

Atterberg Limits

PL= NP LL= NV PI= NP

Coefficients

D₉₀= 193.2142 D₈₅= 140.8800 D₆₀= 63.8267
D₅₀= 40.5531 D₃₀= 10.3451 D₁₅= 1.1209
D₁₀= 0.3530 C_u= 180.82 C_c= 4.75

Classification

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

Remarks

Location: N 58,780 E 36,025
Sample Number: HCBF-26-R

Depth: 10,060

Date: 04/26/2022



Client: Newmont CC&V Gold Company
Project: VLF2 P3 Stage A

Project No: 475.0106.053

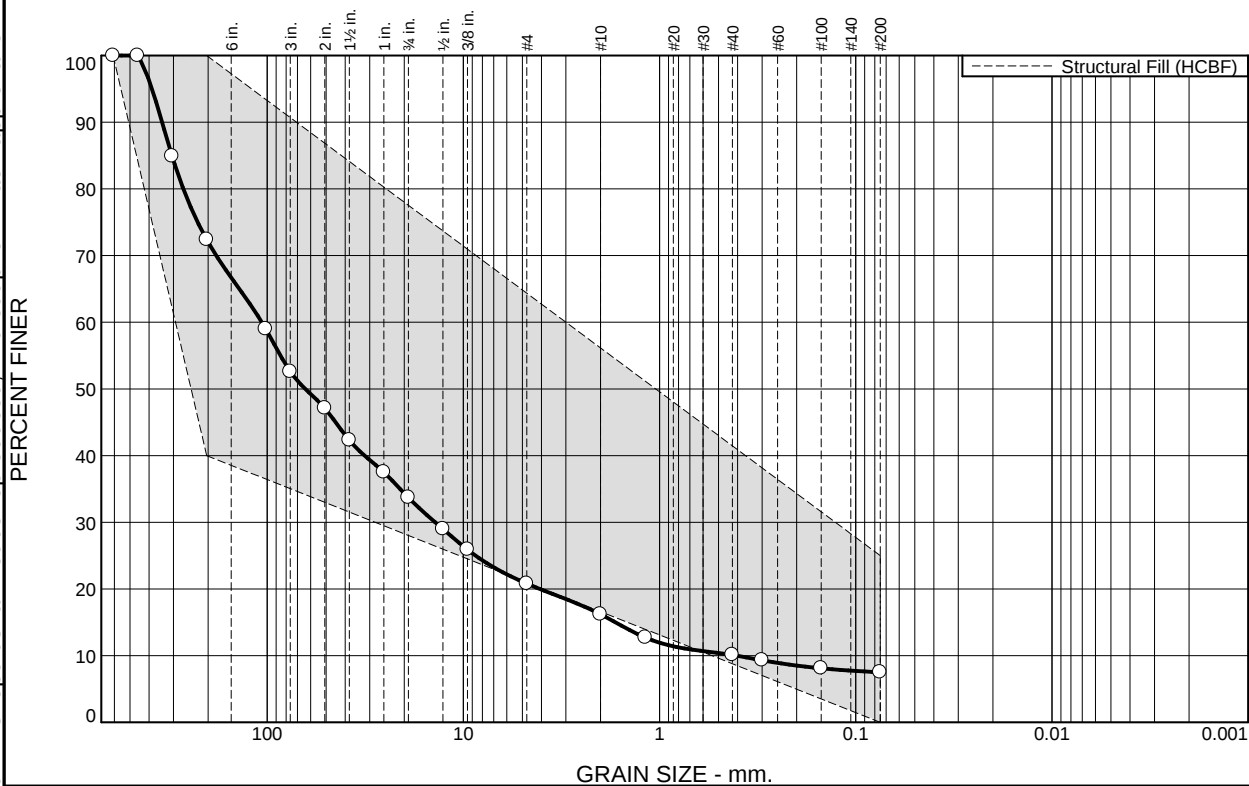
Figure HCBF-26-R

Tested By: TW

Checked By: TW

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

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
47.4	18.9	12.9	4.6	6.1	2.6	7.5	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
24"	100.0	100.0	
18"	100.0		
12"	84.9		
8"	72.4	40.0 - 100.0	
4"	59.0		
3"	52.6		
2"	47.1		
1.5"	42.3		
1"	37.5		
.75"	33.7		
.5"	29.0		
.375"	25.9		
#4	20.8		
#10	16.2		
#16	12.7		
#40	10.1		
#50	9.3		
#100	8.1		
#200	7.5	0.0 - 25.0	

* Structural Fill (HCBF)

Material Description

Light brown silty gravel with sand

Atterberg Limits

PL= NP

LL= NV

PI= NP

Coefficients

D₉₀= 342.9046

D₈₅= 305.5420

D₆₀= 106.4021

D₅₀= 63.9241

D₃₀= 13.9051

D₁₅= 1.6787

D₁₀= 0.4050

C_u= 262.71

C_c= 4.49

Classification

USCS= GM

AASHTO= A-1-a

Remarks

Location: N 58,750 E 36,100
Sample Number: HCBF-27-R

Depth: 10,070

Date: 04/28/2022



Client: Newmont CC&V Gold Company

Project: VLF2 P3 Stage A

Project No: 475.0106.053

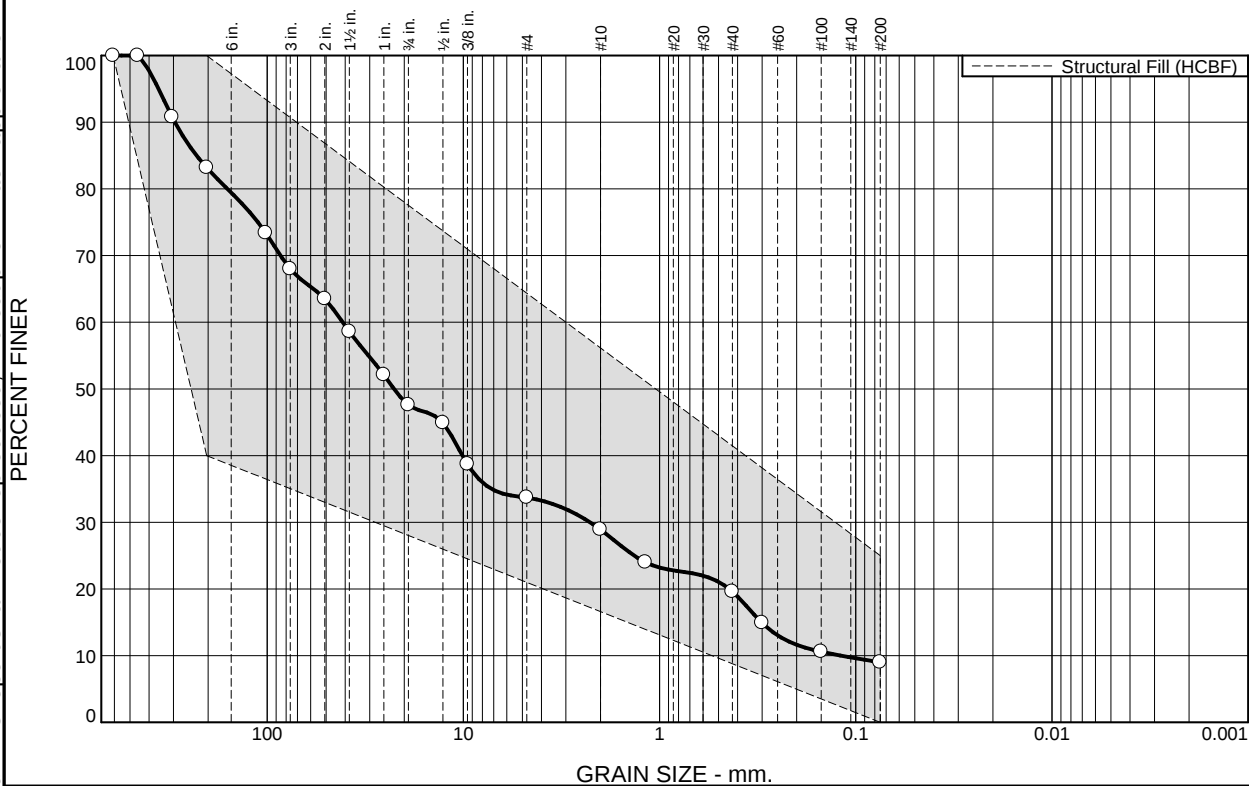
Figure HCBF-27-R

Tested By: TW

Checked By: TW

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

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
32.0	20.4	13.9	4.8	9.3	10.6	9.0	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
24"	100.0	100.0	
18"	100.0		
12"	90.8		
8"	83.2	40.0 - 100.0	
4"	73.4		
3"	68.0		
2"	63.5		
1.5"	58.6		
1"	52.1		
.75"	47.6		
.5"	44.9		
.375"	38.7		
#4	33.7		
#10	28.9		
#16	24.0		
#40	19.6		
#50	14.9		
#100	10.6	0.0 - 25.0	
#200	9.0		

* Structural Fill (HCBF)

Material Description

Brown silty gravel with sand

Atterberg Limits

PL= NP

LL= NV

PI= NP

Coefficients

D₉₀= 294.9133

D₈₅= 228.6967

D₆₀= 41.2049

D₅₀= 22.5501

D₃₀= 2.2638

D₁₅= 0.3024

D₁₀= 0.1187

C_u= 347.02

C_c= 1.05

Classification

USCS= GM

AASHTO= A-1-a

Remarks

Location: N 58,725 E 36,200
Sample Number: HCBF-28-R

Depth: 10,105

Date: 05/18/2022

NewFields

Client: Newmont CC&V Gold Company

Project: VLF2 P3 Stage A

Project No: 475.0106.053

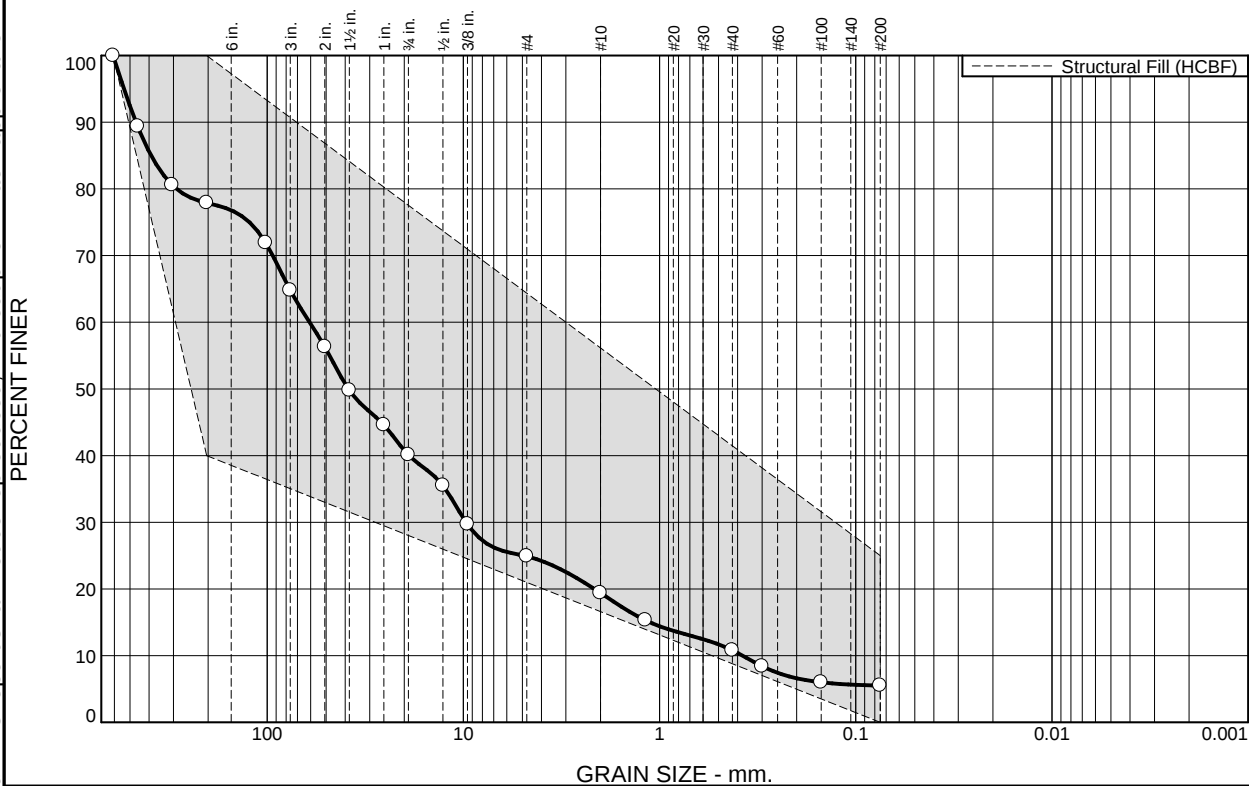
Figure HCBF-28-R

Tested By: TW

Checked By: TW

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

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
35.2	24.7	15.2	5.5	8.6	5.3	5.5	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
24"	100.0	100.0	
18"	89.4		
12"	80.6		
8"	77.9	40.0 - 100.0	
4"	71.9		
3"	64.8		
2"	56.3		
1.5"	49.8		
1"	44.6		
.75"	40.1		
.5"	35.5		
.375"	29.7		
#4	24.9		
#10	19.4		
#16	15.3		
#40	10.8		
#50	8.4		
#100	6.0		
#200	5.5	0.0 - 25.0	

* Structural Fill (HCBF)

Material Description

Brown poorly graded gravel with silt and sand

Atterberg Limits

PL= NP LL= NV PI= NP

Coefficients

D₉₀= 465.7984 D₈₅= 389.7701 D₆₀= 60.7132
D₅₀= 38.5117 D₃₀= 9.6811 D₁₅= 1.1211
D₁₀= 0.3775 C_u= 160.81 C_c= 4.09

Classification

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

Remarks

Location: N 58,680 E 36,320
Sample Number: HCBF-29-R

Depth: 10,115

Date: 05/24/2022



Client: Newmont CC&V Gold Company
Project: VLF2 P3 Stage A

Project No: 475.0106.053

Figure HCBF-29-R

Tested By: TW

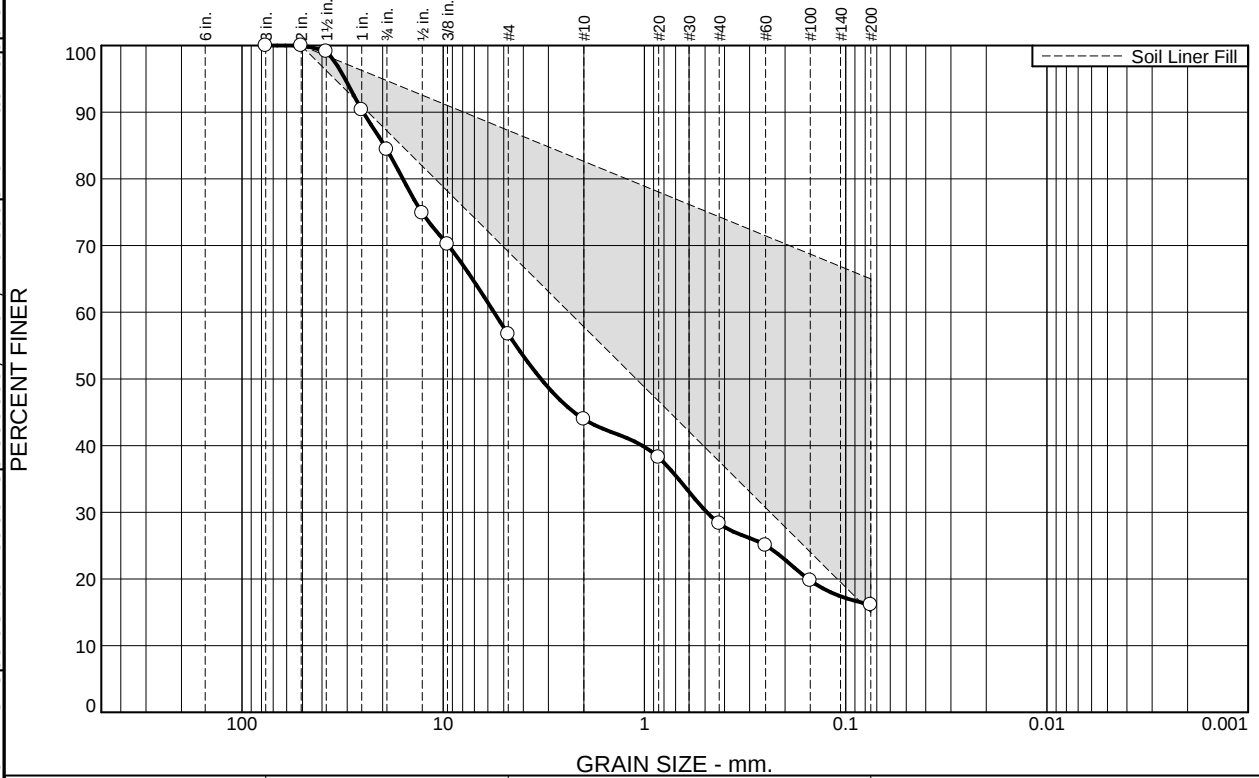
Checked By: TW



APPENDIX G.5 – SOIL LINER 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	15.6	27.7	12.7	15.7	12.2	16.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0	100.0	
2	100.0		
1.5	99.1		
1	90.4		
.75	84.4		
0.5	74.9	15.0 - 65.0	
.375	70.2		
#4	56.7		
#10	44.0		
#20	38.2		
#40	28.3		
#60	25.0		
#100	19.8		
#200	16.1		

* Soil Liner Fill

Material Description

Brown clayey gravel with sand

Atterberg Limits

PL= 15 LL= 34 PI= 19

Coefficients

D₉₀= 24.9988 D₈₅= 19.5818 D₆₀= 5.5925
D₅₀= 3.2677 D₃₀= 0.4895 D₁₅=
D₁₀= C_u= C_c=

Classification

USCS= GC AASHTO= A-2-6(0)

Remarks

Location: Upper Dump 1 Stockpile
Sample Number: SLF-14-C

Date: 6/9/2022

NewFields

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

Project No: 475.0106.056

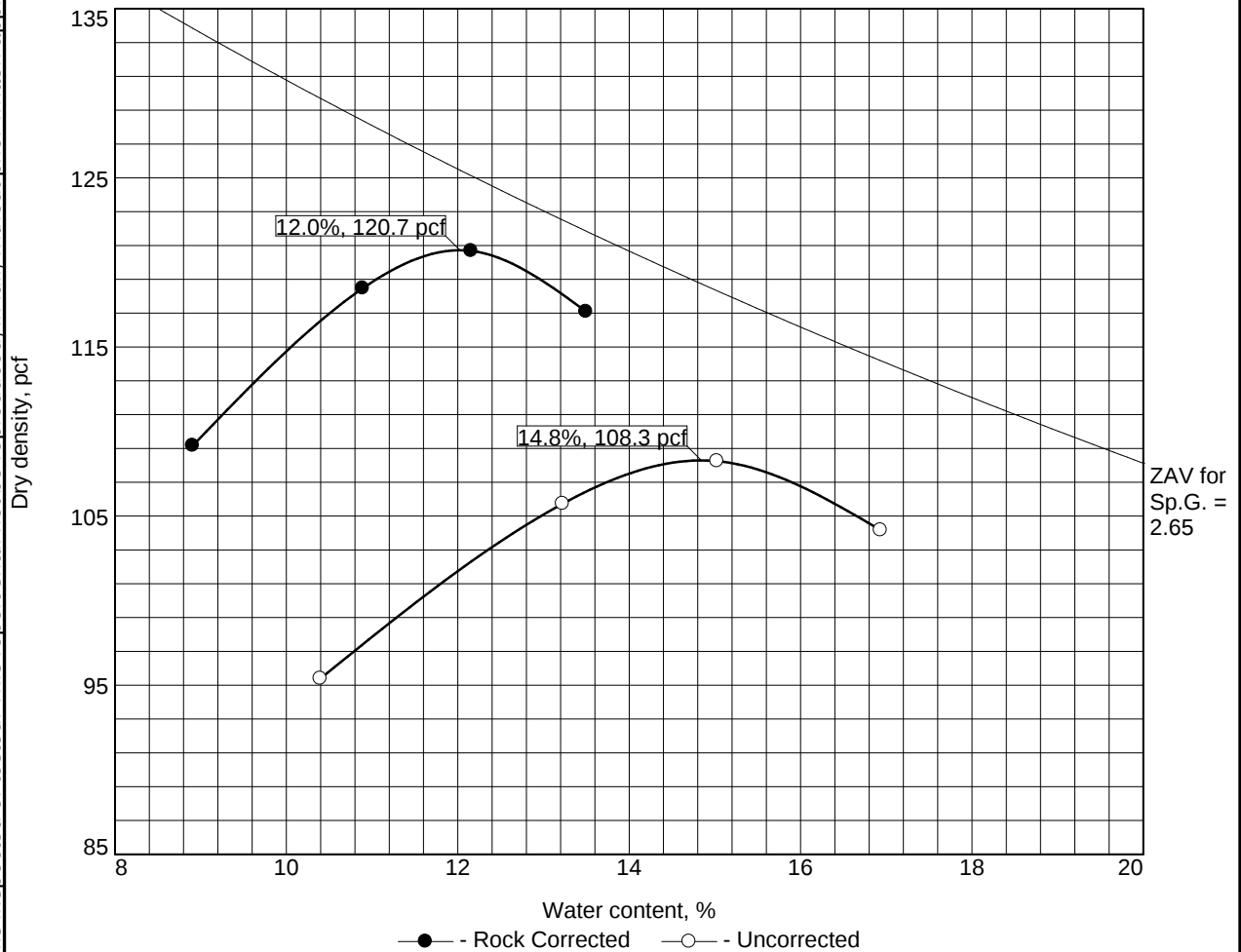
Figure SLF-14-C

Tested By: GF/MM

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-2-6(0)		2.65	34	19	29.8	16.1

ROCK CORRECTED TEST RESULTS		UNCORRECTED	MATERIAL DESCRIPTION
Maximum dry density = 120.7 pcf		108.3 pcf	
Optimum moisture = 12.0 %		14.8 %	

Project No. 475.0106.056 Client: Newmont-Cripple Creek & Victor Goldmine	Remarks:
Project: VLF2 Phase 3	
Date: 06/06/22	
Location: Upper Dump 1 Stockpile Sample Number: SLF-14-C	

NewFields	Figure SLF-14-C

Tested By: BV Checked By: GF

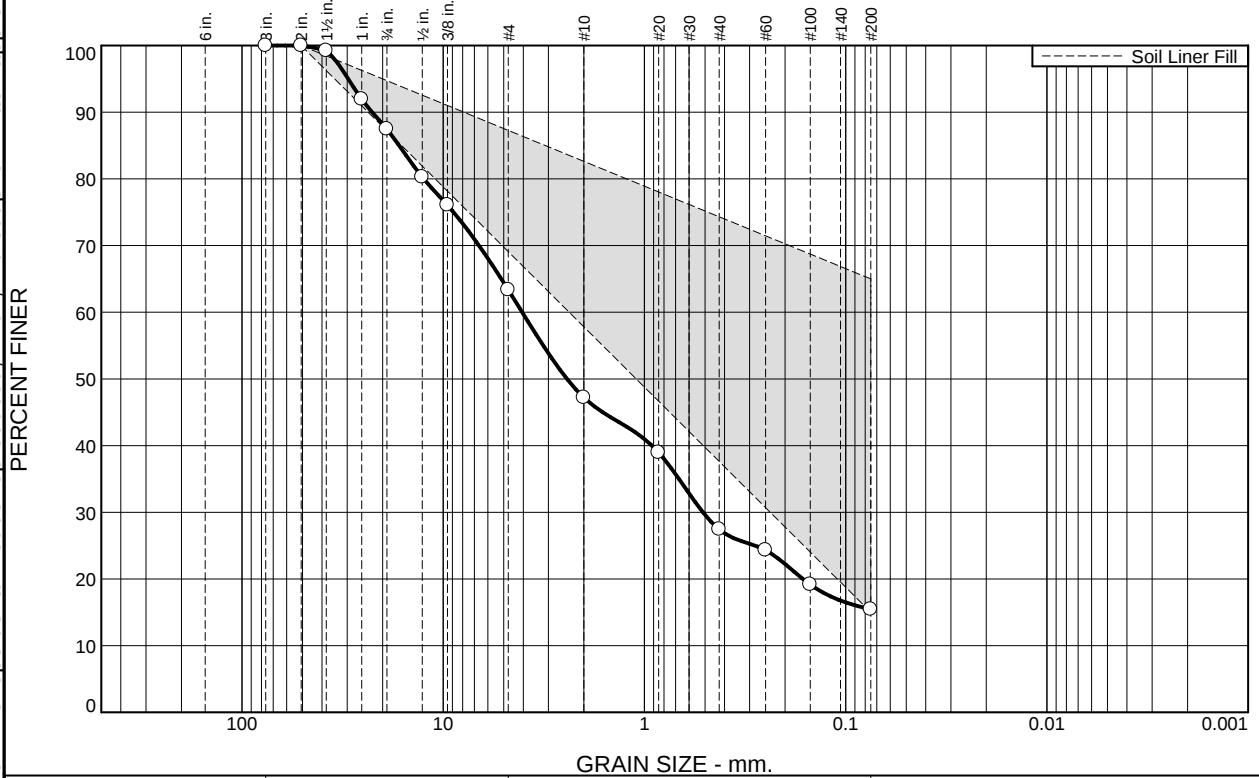
Flexible Wall Hydraulic Conductivity ASTM D5084

Client: Cripple Creek and Victor Gold Mines	Lab Sample No.: SLF-14-C
Project: VLF2 PH3	
Project No.: 475.0106.056	Location: Upper SLF Dump 1 Stockpile
Phase: A	Elevation/Depth: Stockpile
Requested By: RL	Tested By: TW
Test Started: 7/27/2022	Checked By: TW
Test Finished: 8/9/2022	Sample Description: Brown clayey gravel with sand

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		
Burette Area (cm ²)	0.877		
Test Specimen Data	Initial	During k Testing	Final
Wet Soil + Tare (g)	616.79		556.30
Dry Soil + Tare (g)	551.41		495.80
Tare (g)	0.00		119.40
Wt. of Water (g)	65.38		60.50
Dry Soil (g)	551.41		376.40
Moisture Content (%)	11.9		16.1
Sample Volume (ft ³)	0.01049	0.01050	
Dry Density (pcf)	115.7	115.6	
Wet Density (pcf)	129.6	134.3	
Saturation (%)	74.1	100.0	
Percent Compaction	95.9	95.8	
Height (in)	3.016	3.018	
Diameter (in)	2.767	2.769	
Area (in ²)	6.012	6.020	
Est. Moisture Content after Consolidation (%)		16.3%	
Est. Void Ratio after Consolidation		0.433	
Specific Gravity*	2.65		
*Specific gravity is assumed	Maximum Dry Density (pcf):		120.7
Maximum Dry Density:	Initial Remolded Dry Density (pcf):		115.7
ASTM D 698	Initial Percent Compaction:		96%
	Initial Void Ratio:		0.429
	Optimum Moisture Content(%):		12.0
	Initial Water Content (%):		11.9
	Confining Pressure (psi):		5.0
	Hydraulic Conductivity, k₂₀ (cm/s):		1.5E-07
	Gradient Range (h/L):		1.2 1.3

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	12.5	24.1	16.2	19.8	12.0	15.4	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0	100.0	
2	100.0		
1.5	99.2		
1	91.9		
.75	87.5		
0.5	80.3	15.0 - 65.0	
.375	76.1		
#4	63.4		
#10	47.2		
#20	39.0		
#40	27.4		
#60	24.3		
#100	19.2		
#200	15.4		

* Soil Liner Fill

Material Description

Brown clayey sand with gravel

Atterberg Limits

PL= 12 LL= 39 PI= 27

Coefficients

D₉₀= 22.5698 D₈₅= 16.5396 D₆₀= 4.0502
D₅₀= 2.4252 D₃₀= 0.5118 D₁₅=
D₁₀= C_u= C_c=

Classification

USCS= SC AASHTO= A-2-6(0)

Remarks

Location: Upper Dump 1 Stockpile
Sample Number: SLF-15-C

Date: 6/9/2022



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

Project No: 475.0106.056

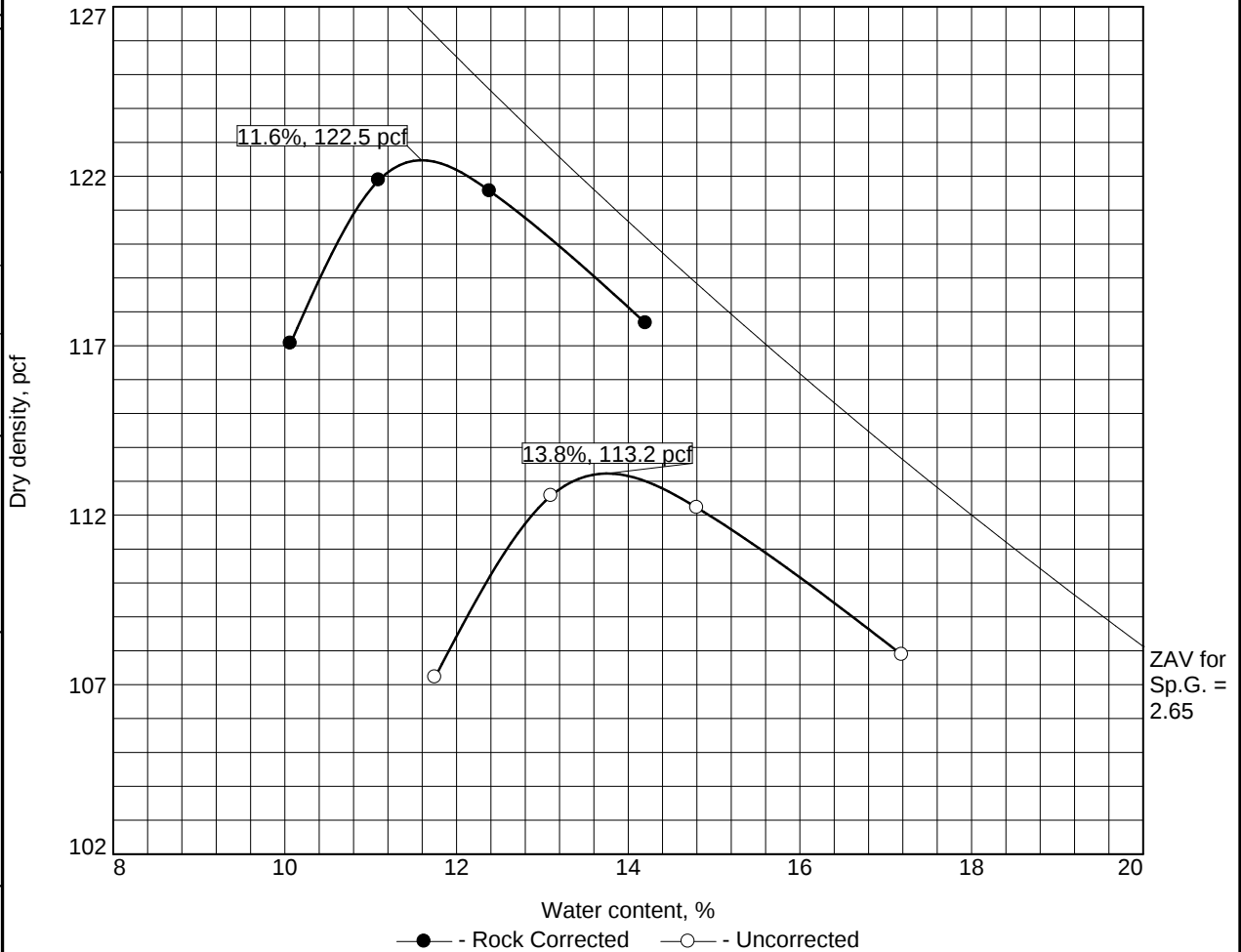
Figure SLF-15-C

Tested By: GF/MM

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 698-07 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(0)		2.65	39	27	23.9	15.4

ROCK CORRECTED TEST RESULTS		UNCORRECTED	MATERIAL DESCRIPTION
Maximum dry density = 122.5 pcf		113.2 pcf	
Optimum moisture = 11.6 %		13.8 %	

Project No. 475.0106.056 Project: VLF2 Phase 3 Date: 06/24/22 Location: Upper Dump 1 Stockpile Sample Number: SLF-15-C	Client: Newmont-Cripple Creek & Victor Goldmine Remarks:
---	---

Figure SLF-15-C

Tested By: GF Checked By: TW

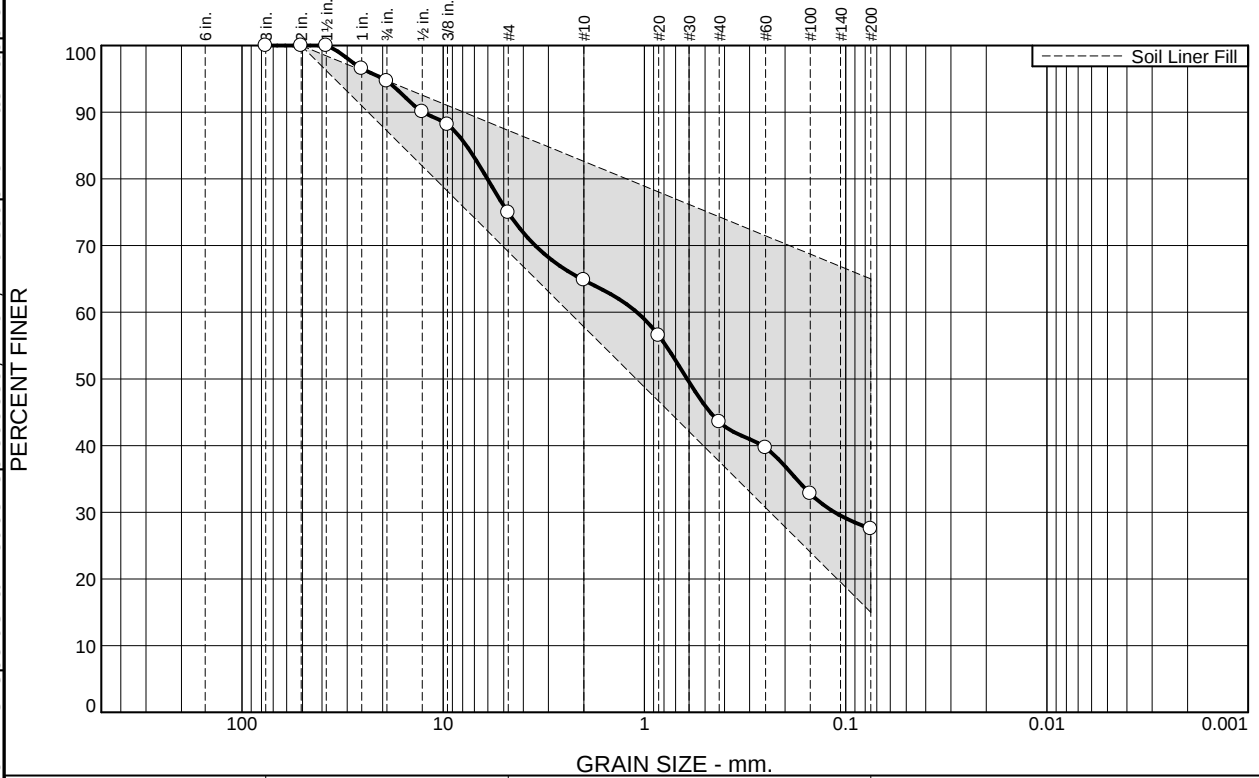
Flexible Wall Hydraulic Conductivity ASTM D5084

Client: Cripple Creek and Victor Gold Mines	Lab Sample No.: SLF-15-C
Project: VLF2 PH3	
Project No.: 475.0106.056	Location: Upper SLF Dump 1 Stockpile
Phase: A	Elevation/Depth: Stockpile
Requested By: RL	Tested By: TW
Test Started: 8/9/2022	Checked By: TW
Test Finished: 8/16/2022	Sample Description: 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)	623.9		590.50
Dry Soil + Tare (g)	559.64		525.00
Tare (g)	0.00		119.50
Wt. of Water (g)	64.26		65.50
Dry Soil (g)	559.64		405.50
Moisture Content (%)	11.5		16.2
Sample Volume (ft ³)	0.01065	0.01067	
Dry Density (pcf)	115.7	115.5	
Wet Density (pcf)	129.1	134.2	
Saturation (%)	71.6	100.0	
Percent Compaction	94.5	94.3	
Height (in)	3.018	3.021	
Diameter (in)	2.787	2.790	
Area (in ²)	6.099	6.112	
Est. Moisture Content after Consolidation (%)		16.4%	
Est. Void Ratio after Consolidation		0.434	
Specific Gravity*	2.65		
*Specific gravity is assumed	Maximum Dry Density (pcf):		122.5
Maximum Dry Density:	Initial Remolded Dry Density (pcf):		115.7
ASTM D 698	Initial Percent Compaction:		94%
	Initial Void Ratio:		0.429
	Optimum Moisture Content(%):		11.6
	Initial Water Content (%):		11.5
	Confining Pressure (psi):		5.0
	Hydraulic Conductivity, k₂₀ (cm/s):		4.8E-07
	Gradient Range (h/L):		1.1 1.3

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	5.3	19.8	10.1	21.3	16.0	27.5	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0	100.0	
2	100.0		
1.5	100.0		
1	96.6		
.75	94.7		
0.5	90.1	15.0 - 65.0	
.375	88.1		
#4	74.9		
#10	64.8		
#20	56.5		
#40	43.5		
#60	39.7		
#100	32.8		
#200	27.5		

* Soil Liner Fill

Material Description

Brown clayey sand with gravel

Atterberg Limits

PL= 18 LL= 38 PI= 20

Coefficients

D₉₀= 12.5776 D₈₅= 7.6663 D₆₀= 1.0895
D₅₀= 0.6132 D₃₀= 0.1134 D₁₅=
D₁₀= C_u= C_c=

Classification

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

Remarks

Location: Lower Dump 1 Stockpile
Sample Number: SLF-17-C

Date: 6/17/2022



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

Project No: 475.0106.056

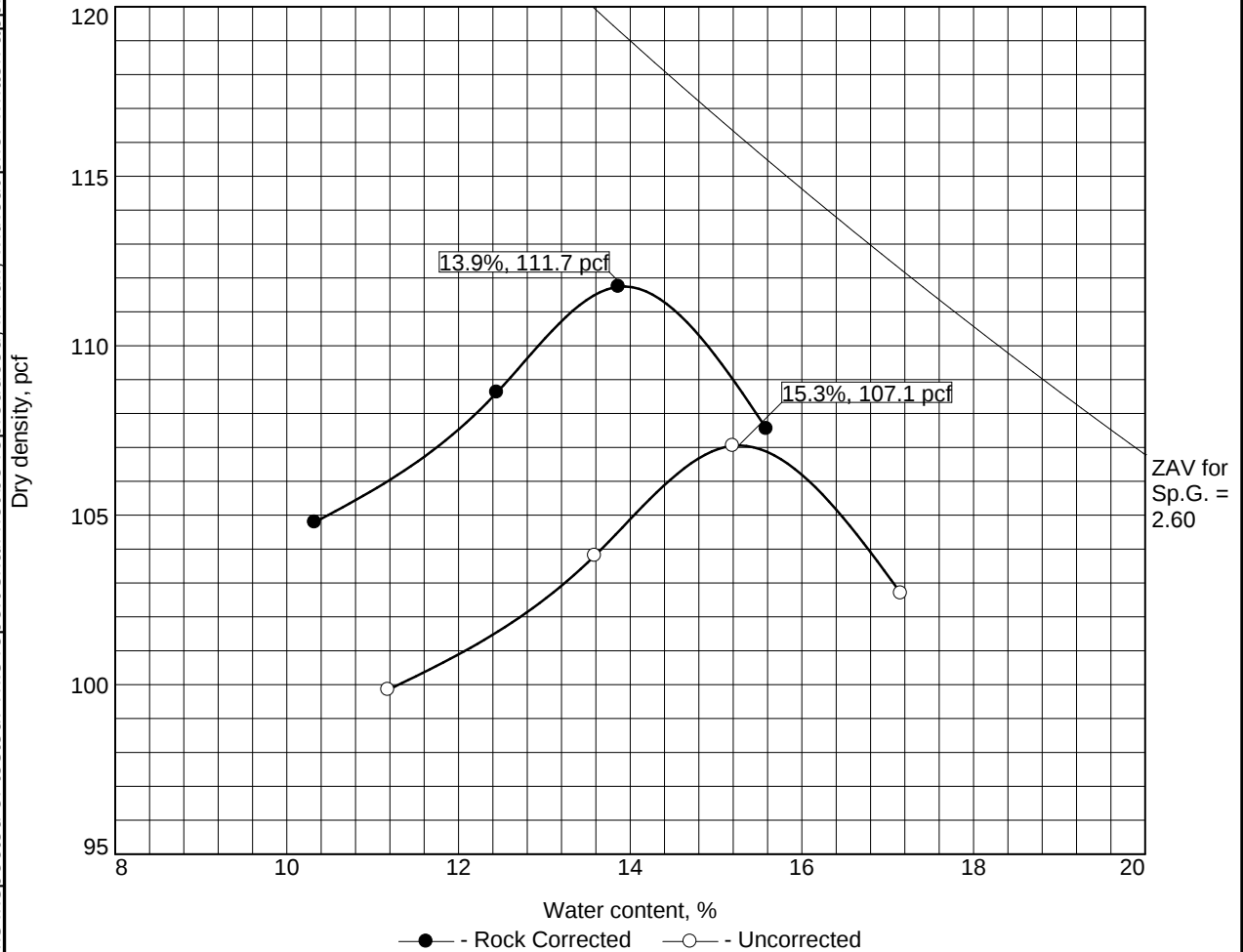
Figure SLF-17-C

Tested By: 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	38	20	11.9	27.5
ROCK CORRECTED TEST RESULTS			UNCORRECTED		MATERIAL DESCRIPTION			
Maximum dry density = 111.7 pcf			107.1 pcf		Brown clayey sand with gravel			
Optimum moisture = 13.9 %			15.3 %					
Project No. 475.0106.056 Client: Newmont-Cripple Creek & Victor Goldmine					Remarks:			
Project: VLF2 Phase 3								
Date: 06/17/22								
Location: Lower Dump 1 Stockpile Sample Number: SLF-17-C								
NewFields					Figure SLF-17-C			

Figure SLF-17-C

Tested By: GF Checked By: TW

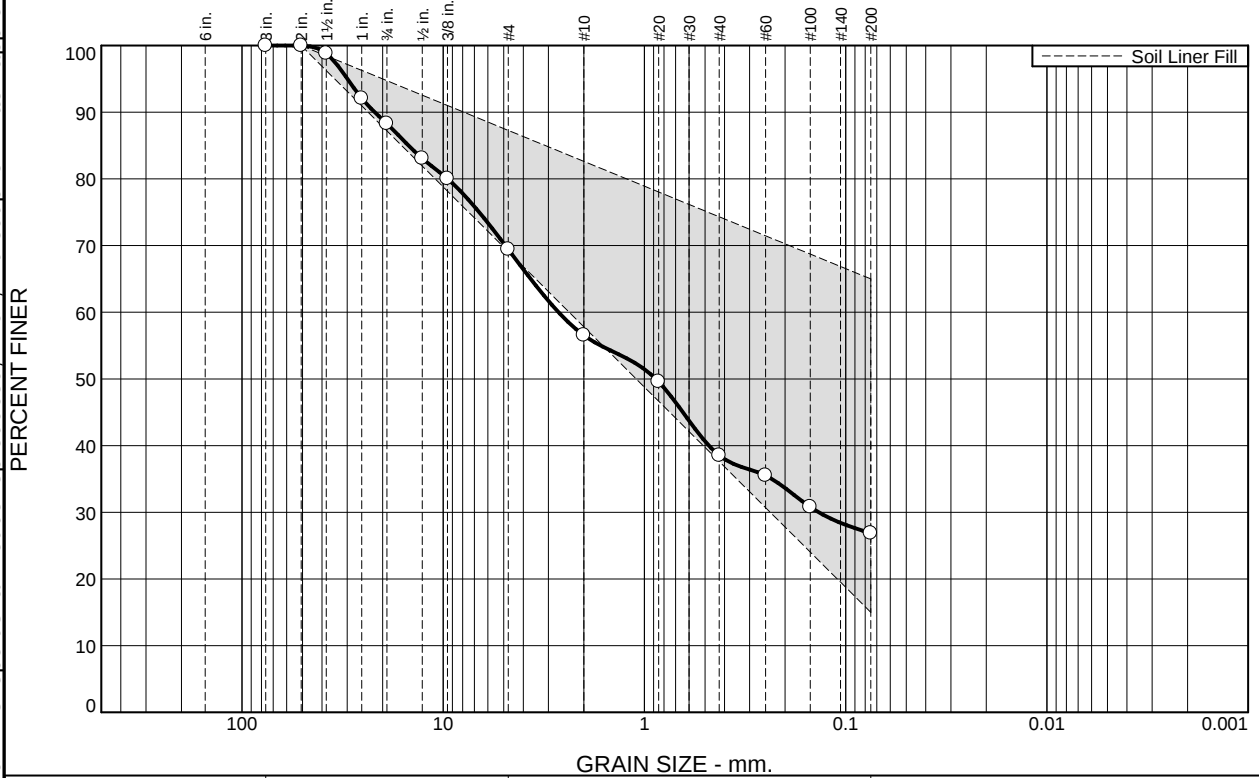
Flexible Wall Hydraulic Conductivity ASTM D5084

Client: Cripple Creek and Victor Gold Mines	Lab Sample No.: SLF-17-C
Project: VLF2 PH3	
Project No.: 475.0106.056	Location: Upper SLF Dump 1 Stockpile
Phase: A	Elevation/Depth: Stockpile
Requested By: RL	Tested By: TW
Test Started: 8/18/2022	Checked By: TW
Test Finished: 8/26/2022	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		
Burrete Area (cm ²)	0.877		
Test Specimen Data	Initial	During k Testing	Final
Wet Soil + Tare (g)	581		600.50
Dry Soil + Tare (g)	510.70		518.40
Tare (g)	0.00		119.50
Wt. of Water (g)	70.30		82.10
Dry Soil (g)	510.70		398.90
Moisture Content (%)	13.8		20.6
Sample Volume (ft ³)	0.01055	0.01053	
Dry Density (pcf)	106.7	106.8	
Wet Density (pcf)	121.4	128.9	
Saturation (%)	66.5	100.0	
Percent Compaction	95.5	95.6	
Height (in)	3.018	3.017	
Diameter (in)	2.773	2.772	
Area (in ²)	6.041	6.037	
Est. Moisture Content after Consolidation (%)		20.7%	
Est. Void Ratio after Consolidation		0.549	
Specific Gravity*	2.65		
*Specific gravity is assumed	Maximum Dry Density (pcf):		111.7
Maximum Dry Density:	Initial Remolded Dry Density (pcf):		106.7
ASTM D 698	Initial Percent Compaction:		96%
	Initial Void Ratio:		0.550
	Optimum Moisture Content(%):		13.8
	Initial Water Content (%):		13.8
	Confining Pressure (psi):		5.0
	Hydraulic Conductivity, k₂₀ (cm/s):		1.7E-07
	Gradient Range (h/L):		9.9 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	11.7	18.9	12.9	18.0	11.6	26.9	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0	100.0	
2	100.0		
1.5	98.8		
1	92.1		
.75	88.3		
0.5	83.1	15.0 - 65.0	
.375	80.0		
#4	69.4		
#10	56.5		
#20	49.6		
#40	38.5		
#60	35.5		
#100	30.8		
#200	26.9		

* Soil Liner Fill

Material Description

Brown clayey sand with gravel

Atterberg Limits

PL= 15 LL= 42 PI= 27

Coefficients

D₉₀= 21.9048 D₈₅= 14.8513 D₆₀= 2.6726
D₅₀= 0.8777 D₃₀= 0.1361 D₁₅=
D₁₀= C_u= C_c=

Classification

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

Remarks

Location: Upper Dump 1 Stockpile
Sample Number: SLF-18-C

Date: 6/21/2022

NewFields

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

Project No: 475.0106.056

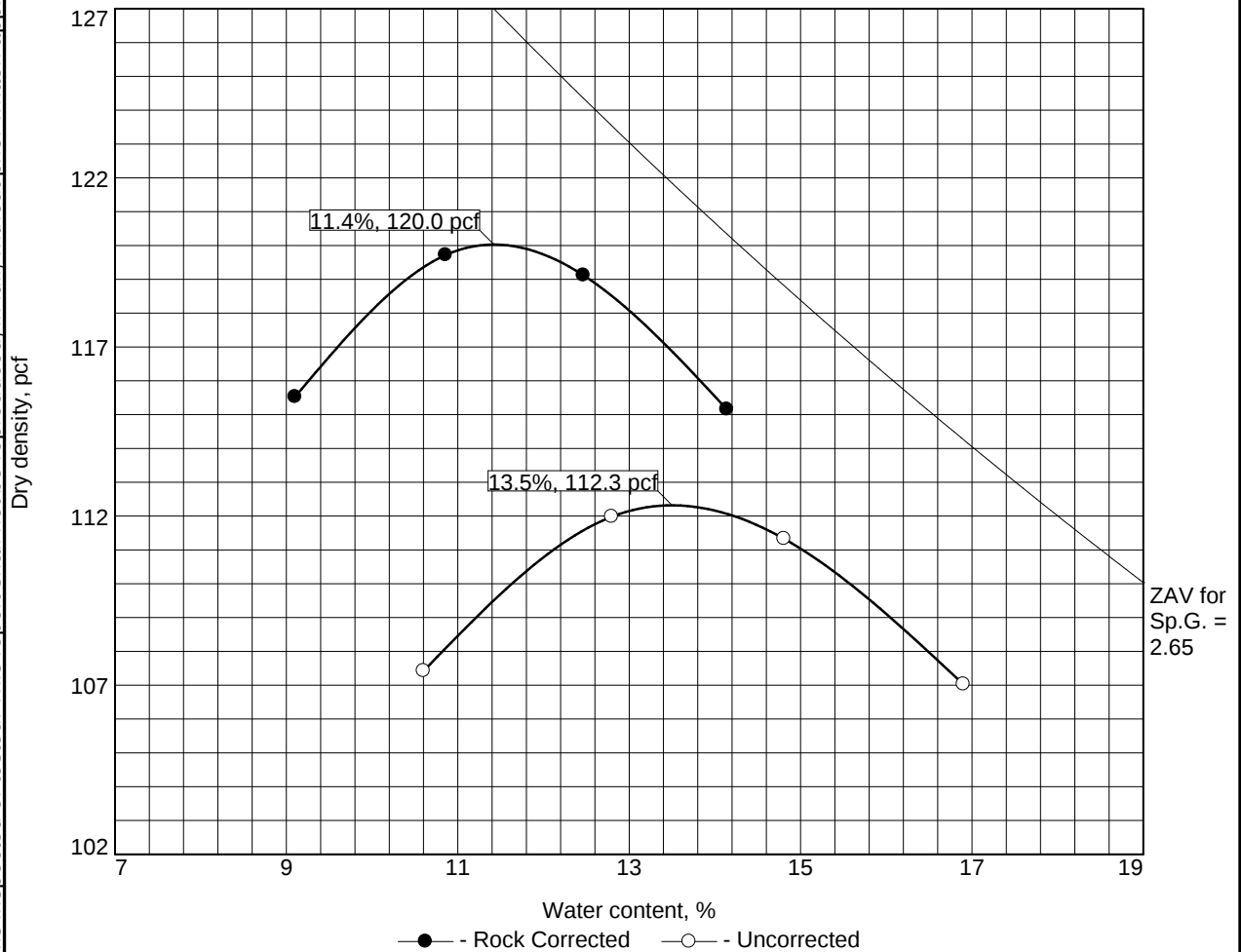
Figure SLF-18-C

Tested By: 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 698-07 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(2)		2.65	42	27	20.0	26.9

ROCK CORRECTED TEST RESULTS		UNCORRECTED	MATERIAL DESCRIPTION
Maximum dry density = 120.0 pcf		112.3 pcf	
Optimum moisture = 11.4 %		13.5 %	

Project No. 475.0106.056 Client: Newmont-Cripple Creek & Victor Goldmine			Remarks:
Project: VLF2 Phase 3			
Date: 06/21/22			
Location: Upper Dump 1 Stockpile Sample Number: SLF-18-C			
			Figure SLF-18-C

Tested By: BV Checked By: TW

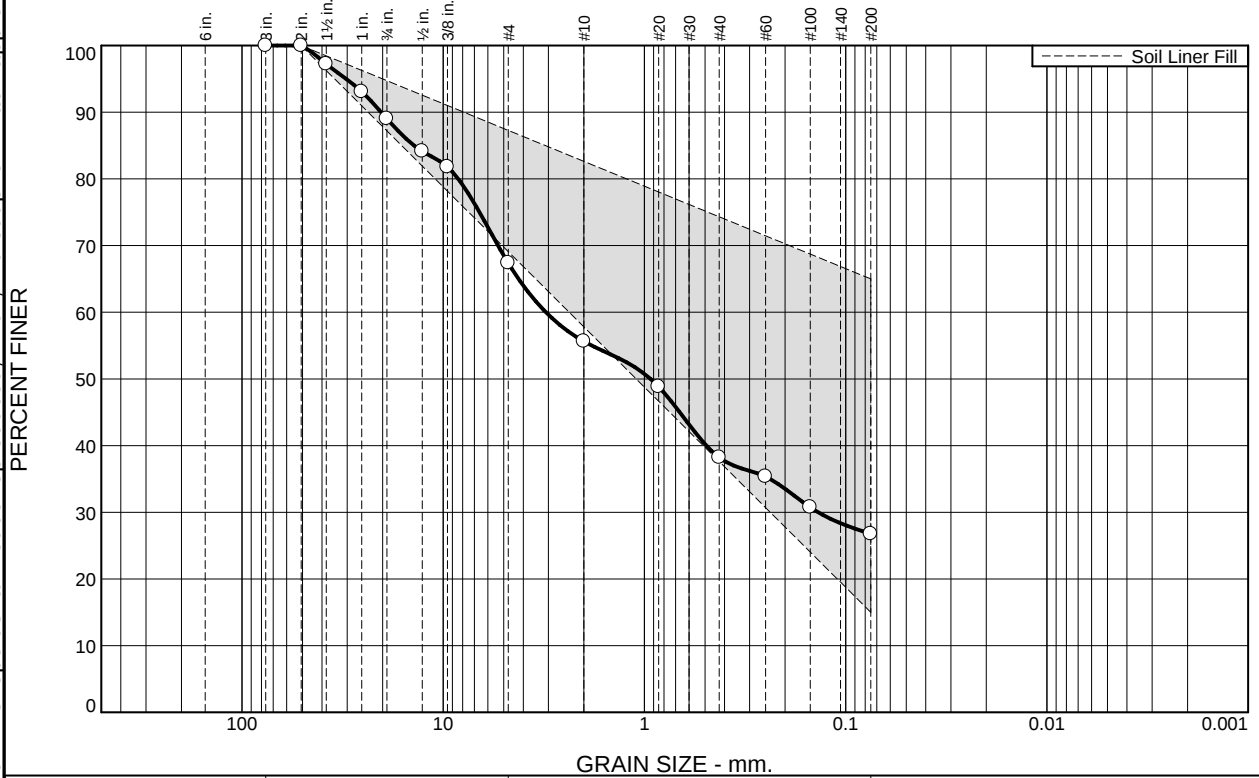
Flexible Wall Hydraulic Conductivity ASTM D5084

Client: Cripple Creek and Victor Gold Mines	Lab Sample No.: SLF-18-C
Project: VLF2 PH3	
Project No.: 475.0106.056	Location: Upper SLF Dump 1 Stockpile
Phase: A	Elevation/Depth: Stockpile
Requested By: RL	Tested By: TW
Test Started: 8/18/2022	Checked By: TW
Test Finished: 8/26/2022	Sample Description: Brown clayey sand with 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		
Burette Area (cm ²)	0.877		
Test Specimen Data	Initial	During k Testing	Final
Wet Soil + Tare (g)	610.6		588.90
Dry Soil + Tare (g)	547.71		523.40
Tare (g)	0.00		119.50
Wt. of Water (g)	62.89		65.50
Dry Soil (g)	547.71		403.90
Moisture Content (%)	11.5		16.2
Sample Volume (ft ³)	0.01057	0.01054	
Dry Density (pcf)	114.3	114.4	
Wet Density (pcf)	127.3	133.7	
Saturation (%)	67.6	100.0	
Percent Compaction	95.2	95.3	
Height (in)	3.017	3.016	
Diameter (in)	2.777	2.775	
Area (in ²)	6.055	6.049	
Est. Moisture Content after Consolidation (%)		16.8%	
Est. Void Ratio after Consolidation		0.445	
Specific Gravity*	2.65		
*Specific gravity is assumed	Maximum Dry Density (pcf):		120
Maximum Dry Density:	Initial Remolded Dry Density (pcf):		114.3
ASTM D 698	Initial Percent Compaction:		95%
	Initial Void Ratio:		0.447
	Optimum Moisture Content(%):		11.4
	Initial Water Content (%):		11.5
	Confining Pressure (psi):		5.0
	Hydraulic Conductivity, k₂₀ (cm/s):		5.3E-07
	Gradient Range (h/L):		1.9 2.2

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	11.0	21.6	11.8	17.4	11.4	26.8	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0	100.0	
2	100.0		
1.5	97.2		
1	93.1		
.75	89.0	15.0 - 65.0	
0.5	84.1		
.375	81.8		
#4	67.4		
#10	55.6		
#20	48.8		
#40	38.2		
#60	35.3		
#100	30.7		
#200	26.8		

* Soil Liner Fill

Material Description

Brown clayey sand with gravel

Atterberg Limits

PL= 13 LL= 39 PI= 26

Coefficients

D₉₀= 20.3542 D₈₅= 13.9368 D₆₀= 3.0873
D₅₀= 0.9323 D₃₀= 0.1370 D₁₅=
D₁₀= C_u= C_c=

Classification

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

Remarks

Location: Upper Dump 1 Stockpile
Sample Number: SLF-19-C

Date: 6/21/2022



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

Project No: 475.0106.056

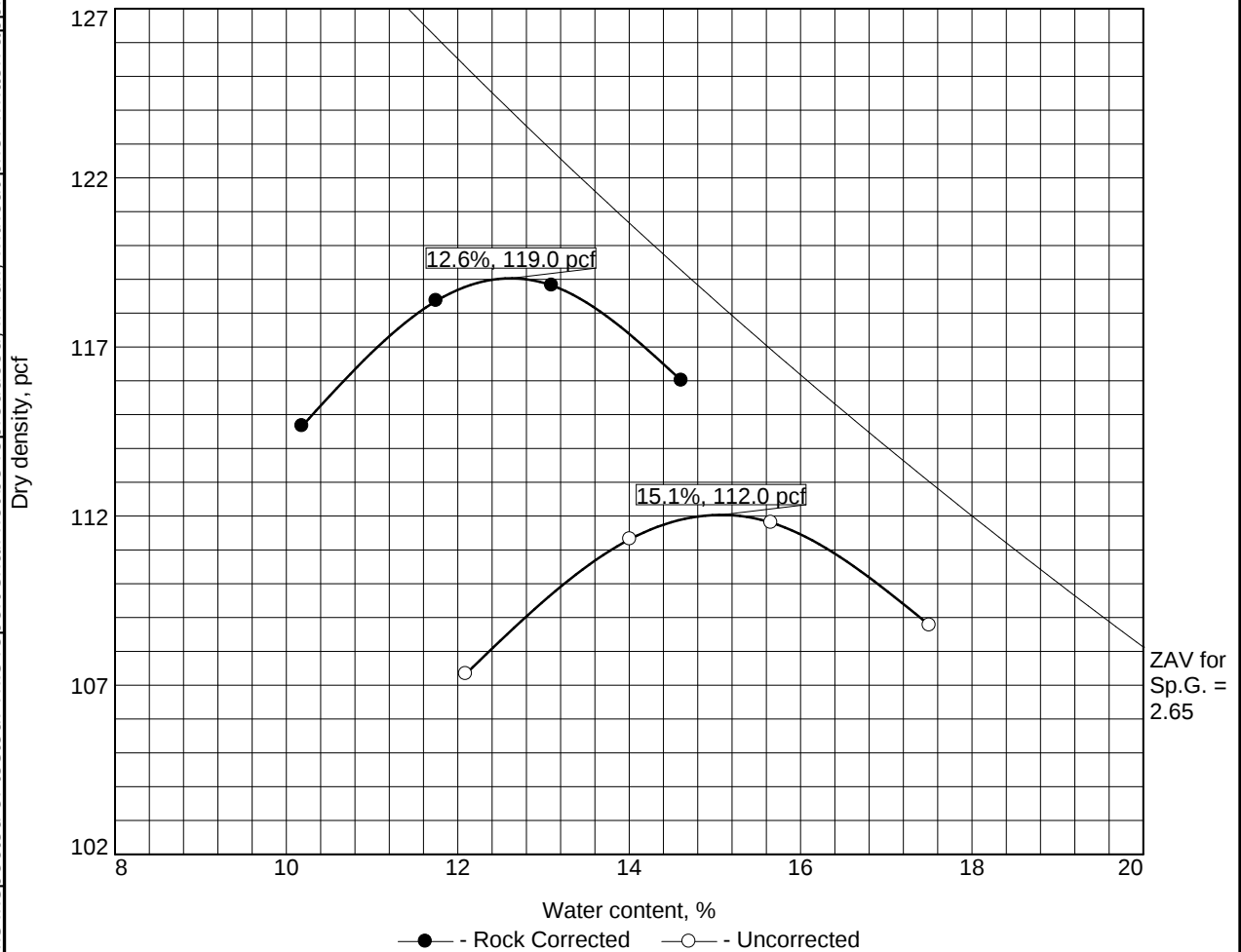
Figure SLF-19-C

Tested By: 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 698-07 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	39	26	18.2	26.8

ROCK CORRECTED TEST RESULTS	UNCORRECTED	MATERIAL DESCRIPTION
Maximum dry density = 119.0 pcf	112.0 pcf	Brown clayey sand with gravel
Optimum moisture = 12.6 %	15.1 %	

Project No. 475.0106.056 Client: Newmont-Cripple Creek & Victor Goldmine		Remarks:
Project: VLF2 Phase 3		
Date: 06/21/22		
Location: Upper Dump 1 Stockpile Sample Number: SLF-19-C		
NewFields		

Figure SLF-19-C

Tested By: GF Checked By: TW

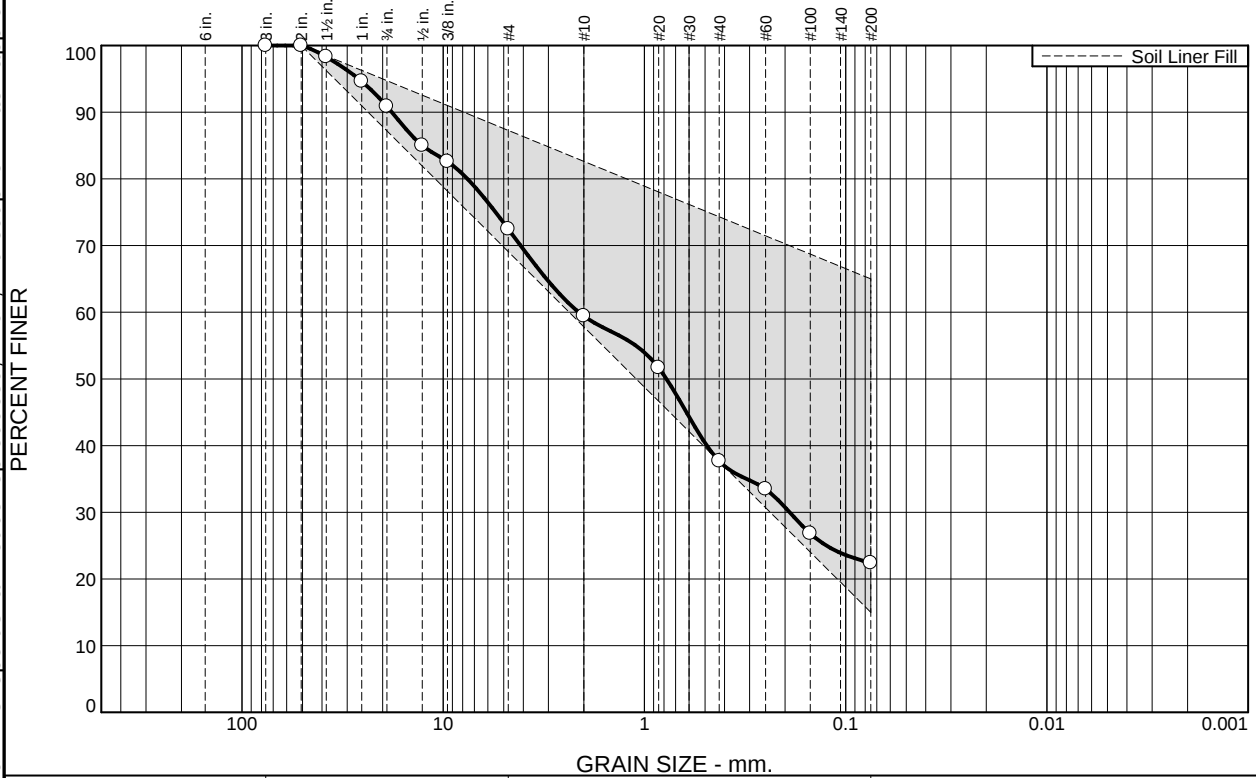
Flexible Wall Hydraulic Conductivity ASTM D5084

Client: Cripple Creek and Victor Gold Mines	Lab Sample No.: SLF-19-C
Project: VLF2 PH3	
Project No.: 475.0106.056	Location: Upper SLF Dump 1 Stockpile
Phase: A	Elevation/Depth: Stockpile
Requested By: RL	Tested By: TW
Test Started: 8/30/2022	Checked By: TW
Test Finished: 9/9/2022	Sample Description: Brown clayey sand with 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)	611.8		558.00
Dry Soil + Tare (g)	543.89		494.00
Tare (g)	0.00		119.50
Wt. of Water (g)	67.91		64.00
Dry Soil (g)	543.89		374.50
Moisture Content (%)	12.5		17.1
Sample Volume (ft ³)	0.01057	0.01055	
Dry Density (pcf)	113.3	113.4	
Wet Density (pcf)	127.6	133.1	
Saturation (%)	72.6	100.0	
Percent Compaction	95.2	95.3	
Height (in)	3.017	3.016	
Diameter (in)	2.777	2.775	
Area (in ²)	6.055	6.050	
Est. Moisture Content after Consolidation (%)		17.3%	
Est. Void Ratio after Consolidation		0.458	
Specific Gravity*	2.65		
*Specific gravity is assumed	Maximum Dry Density (pcf):		119
Maximum Dry Density:	Initial Remolded Dry Density (pcf):		113.3
ASTM D 698	Initial Percent Compaction:		95%
	Initial Void Ratio:		0.460
	Optimum Moisture Content(%):		12.6
	Initial Water Content (%):		12.5
	Confining Pressure (psi):		5.0
	Hydraulic Conductivity, k₂₀ (cm/s):		5.1E-07
	Gradient Range (h/L):		1.1 1.3

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	9.1	18.4	13.1	21.7	15.3	22.4	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0	100.0	
2	100.0		
1.5	98.3		
1	94.6		
.75	90.9		
0.5	85.0	15.0 - 65.0	
.375	82.6		
#4	72.5		
#10	59.4		
#20	51.7		
#40	37.7		
#60	33.5		
#100	26.8		
#200	22.4		

* Soil Liner Fill

Material Description

Brown clayey sand with gravel

Atterberg Limits

PL= 19 LL= 36 PI= 17

Coefficients

D₉₀= 17.9906 D₈₅= 12.6936 D₆₀= 2.1181
D₅₀= 0.7769 D₃₀= 0.1898 D₁₅=
D₁₀= C_u= C_c=

Classification

USCS= SC AASHTO= A-2-6(0)

Remarks

Location: Upper Dump 1 Stockpile
Sample Number: SLF-21-C

Date: 6/28/2022



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

Project No: 475.0106.056

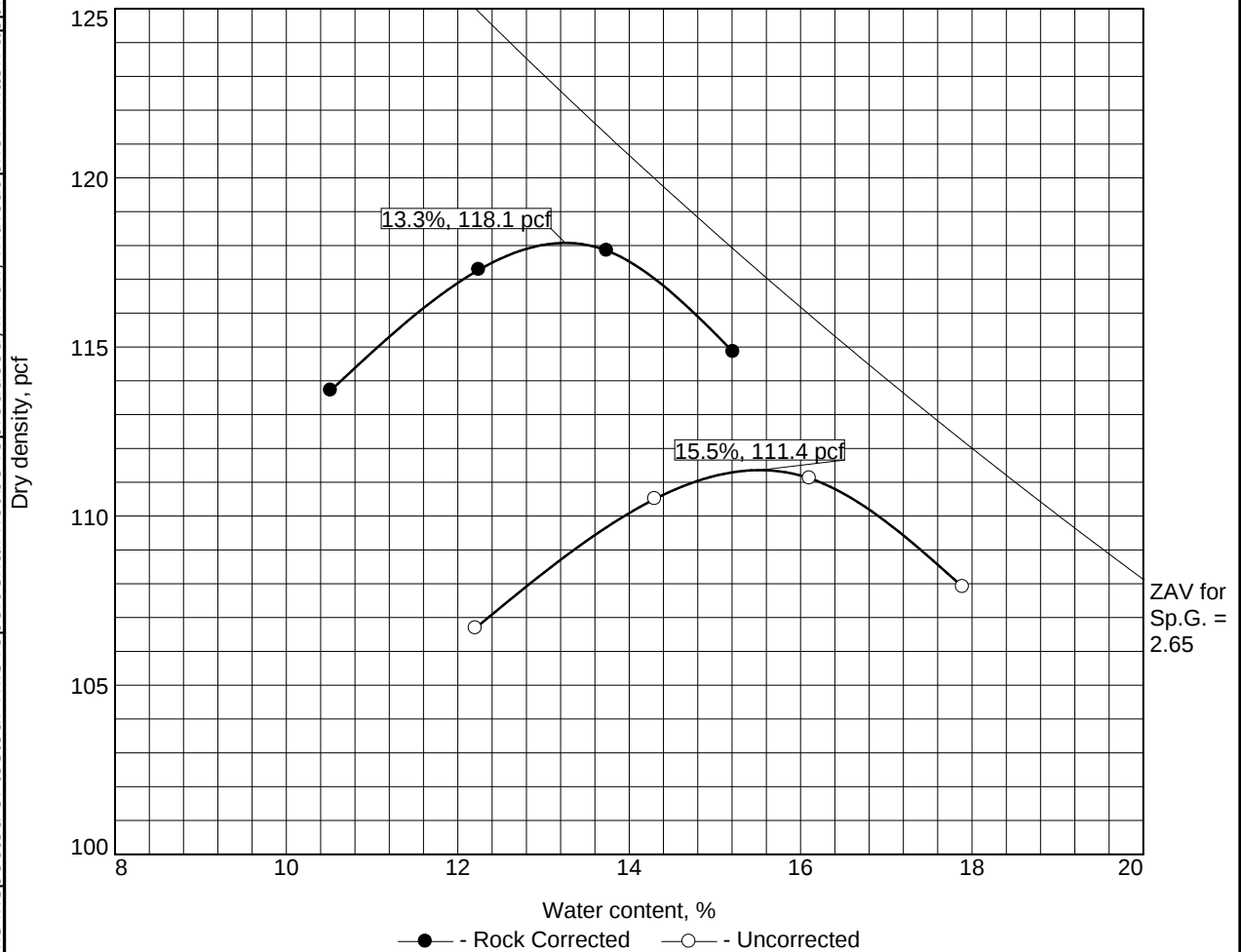
Figure SLF-21-C

Tested By: MM

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(0)		2.65	36	17	17.4	22.4

ROCK CORRECTED TEST RESULTS	UNCORRECTED	MATERIAL DESCRIPTION
Maximum dry density = 118.1 pcf	111.4 pcf	Brown clayey sand with gravel
Optimum moisture = 13.3 %	15.5 %	

Project No. 475.0106.056	Client: Newmont-Cripple Creek & Victor Goldmine	Remarks:
Project: VLF2 Phase 3		
Date: 06/28/22		
Location: Upper Dump 1 Stockpile	Sample Number: SLF-21-C	

NewFields	Figure SLF-21-C
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Tested By: GF Checked By: TW

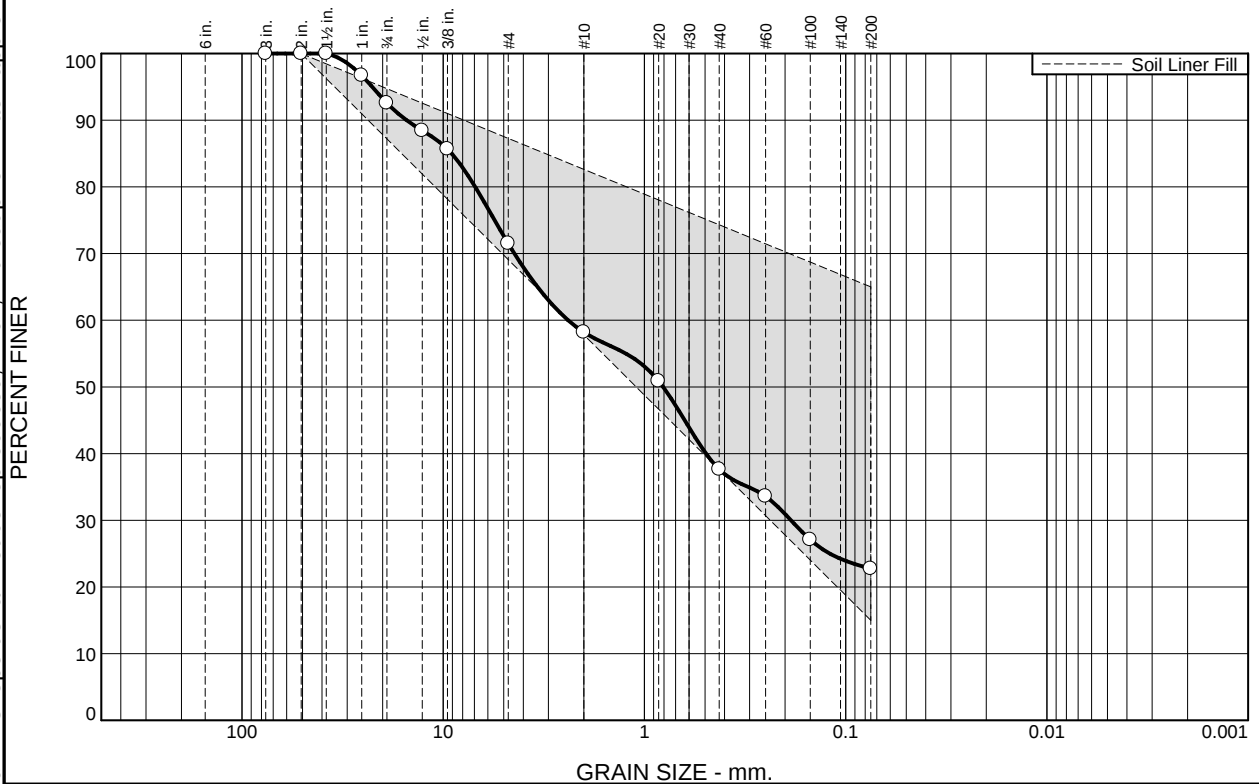
Flexible Wall Hydraulic Conductivity ASTM D5084

Client: Cripple Creek and Victor Gold Mines	Lab Sample No.: SLF-21-C
Project: VLF2 PH3	
Project No.: 475.0106.056	Location: Upper SLF Dump 1 Stockpile
Phase: A	Elevation/Depth: Stockpile
Requested By: RL	Tested By: TW
Test Started: 10/19/2022	Checked By: TW
Test Finished: 10/26/2023	Sample Description: Brown clayey sand with 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)	611.8		574.60
Dry Soil + Tare (g)	540.22		508.40
Tare (g)	0.00		119.50
Wt. of Water (g)	71.58		66.20
Dry Soil (g)	540.22		388.90
Moisture Content (%)	13.3		17.0
Sample Volume (ft ³)	0.01057	0.01053	
Dry Density (pcf)	112.6	112.7	
Wet Density (pcf)	127.6	132.7	
Saturation (%)	75.2	100.0	
Percent Compaction	95.3	95.5	
Height (in)	3.017	3.015	
Diameter (in)	2.777	2.774	
Area (in ²)	6.055	6.045	
Est. Moisture Content after Consolidation (%)		17.6%	
Est. Void Ratio after Consolidation		0.465	
Specific Gravity*	2.65		
*Specific gravity is assumed Maximum Dry Density: ASTM D 698	Maximum Dry Density (pcf):		118.1
	Initial Remolded Dry Density (pcf):		112.6
	Initial Percent Compaction:		95%
	Initial Void Ratio:		0.469
	Optimum Moisture Content(%):		13.3
	Initial Water Content (%):		13.3
	Confining Pressure (psi):		5.0
	Hydraulic Conductivity, k₂₀ (cm/s):		3.4E-07
	Gradient Range (h/L):		1.1 1.3

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	21.1	13.3	20.6	14.9	22.7	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0	100.0	
2	100.0		
1.5	100.0		
1	96.7		
.75	92.6		
0.5	88.4	15.0 - 65.0	
.375	85.7		
#4	71.5		
#10	58.2		
#20	50.9		
#40	37.6		
#60	33.6		
#100	27.1		
#200	22.7		

* Soil Liner Fill

Material Description

Brown clayey sand with gravel

Atterberg Limits

PL= 19 LL= 34 PI= 15

Coefficients

D₉₀= 15.1823 D₈₅= 9.0702 D₆₀= 2.3943
D₅₀= 0.8072 D₃₀= 0.1870 D₁₅=
D₁₀= C_u= C_c=

Classification

USCS= SC AASHTO= A-2-6(0)

Remarks

Location: Upper Dump 1 Stockpile
Sample Number: SLF-22-C

Date: 6/28/2022



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

Project No: 475.0106.056

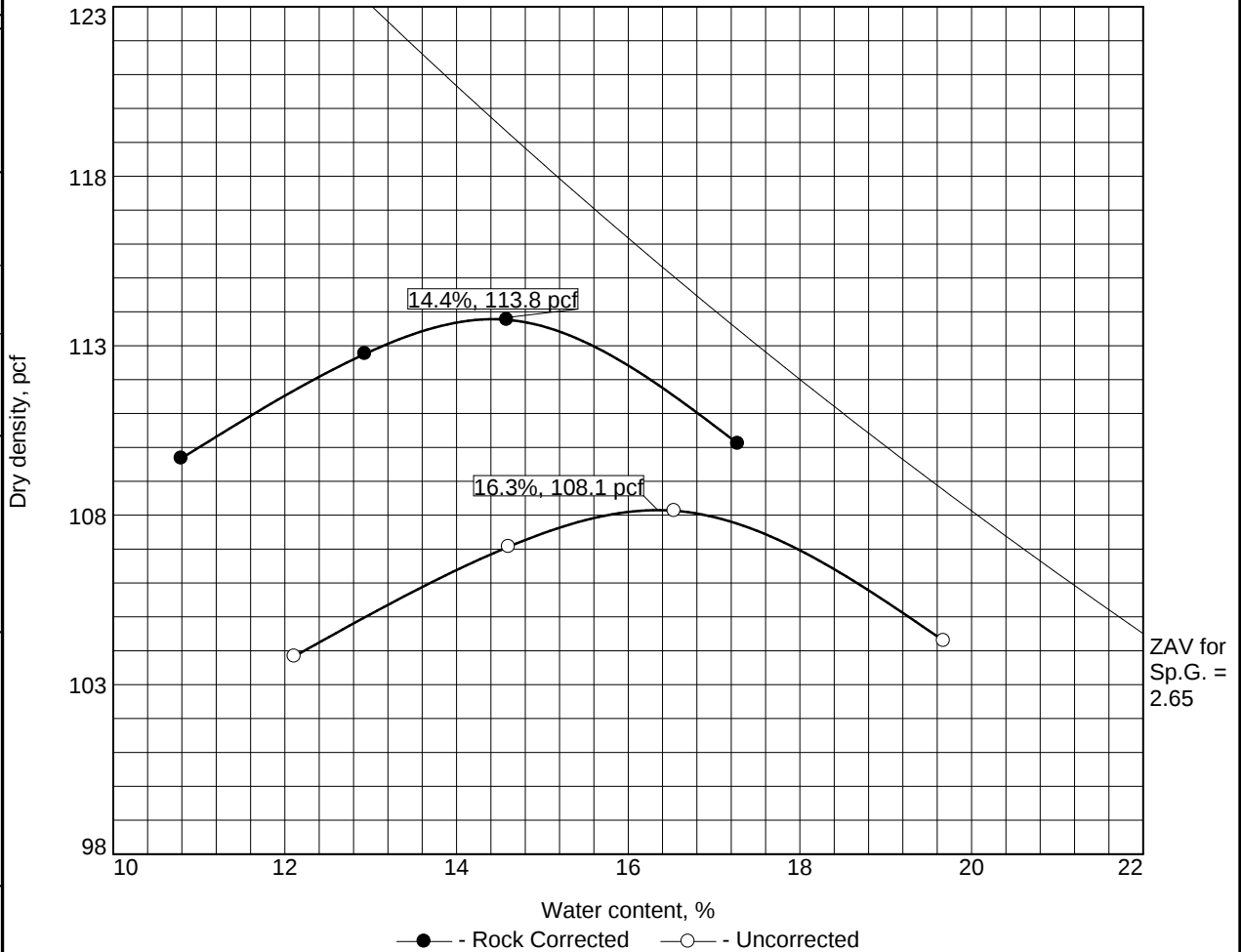
Figure SLF-22-C

Tested By: MM

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(0)		2.65	34	15	14.3	22.7
ROCK CORRECTED TEST RESULTS			UNCORRECTED		MATERIAL DESCRIPTION			
Maximum dry density = 113.8 pcf			108.1 pcf		Brown clayey sand with gravel			
Optimum moisture = 14.4 %			16.3 %					
Project No. 475.0106.056 Client: Newmont-Cripple Creek & Victor Goldmine					Remarks:			
Project: VLF2 Phase 3								
Date: 06/28/22								
Location: Upper Dump 1 Stockpile Sample Number: SLF-22-C								
NewFields					Figure SLF-22-C			

Figure SLF-22-C

Tested By: BV Checked By: TW

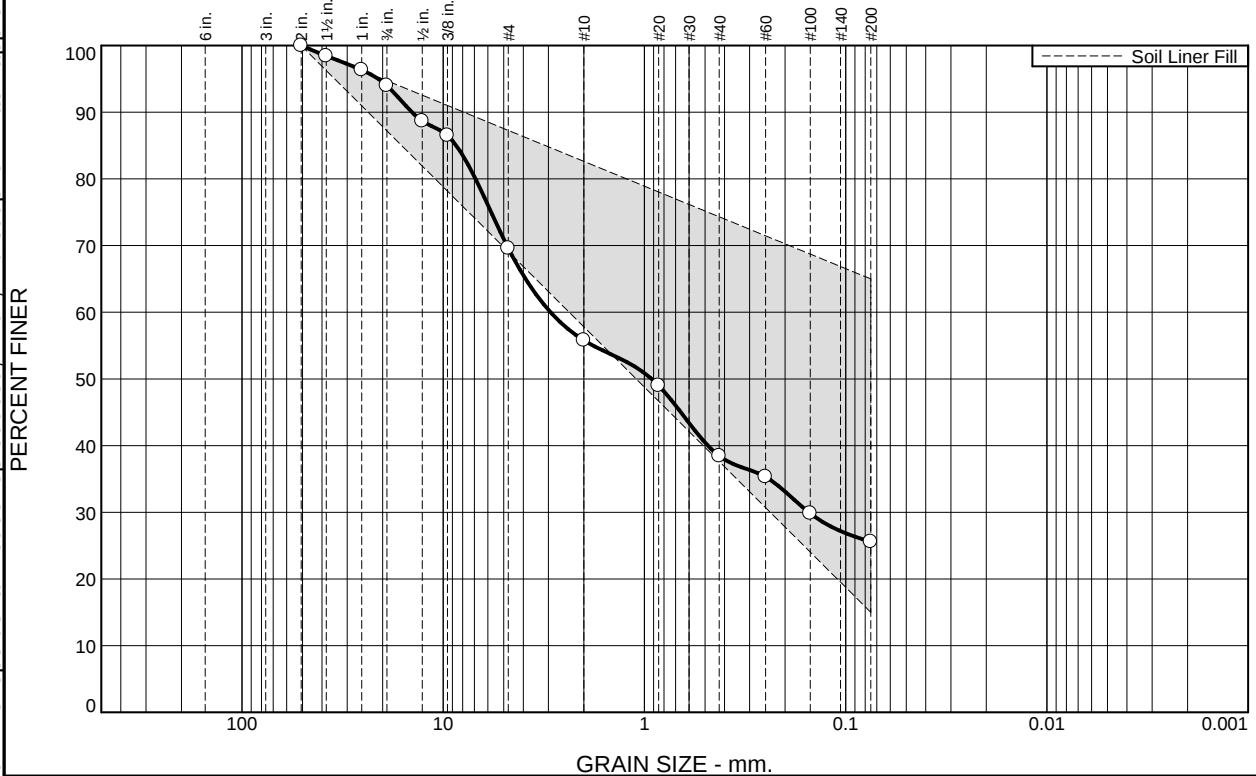
Flexible Wall Hydraulic Conductivity ASTM D5084

Client: Cripple Creek and Victor Gold Mines	Lab Sample No.: SLF-22-C
Project: VLF2 PH3	
Project No.: 475.0106.056	Location: Upper SLF Dump 1 Stockpile
Phase: A	Elevation/Depth: Stockpile
Requested By: RL	Tested By: TW
Test Started: 10/19/2022	Checked By: TW
Test Finished: 10/26/2022	Sample Description: Brown clayey sand with 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		
Burette Area (cm ²)	0.877		
Test Specimen Data	Initial	During k Testing	Final
Wet Soil + Tare (g)	594.68		585.90
Dry Soil + Tare (g)	520.35		507.40
Tare (g)	0.00		119.50
Wt. of Water (g)	74.33		78.50
Dry Soil (g)	520.35		387.90
Moisture Content (%)	14.3		20.2
Sample Volume (ft ³)	0.01057	0.01057	
Dry Density (pcf)	108.4	108.3	
Wet Density (pcf)	124.0	129.9	
Saturation (%)	72.6	100.0	
Percent Compaction	95.2	95.2	
Height (in)	3.017	3.018	
Diameter (in)	2.777	2.777	
Area (in ²)	6.055	6.058	
Est. Moisture Content after Consolidation (%)		19.9%	
Est. Void Ratio after Consolidation		0.527	
Specific Gravity*	2.65		
*Specific gravity is assumed	Maximum Dry Density (pcf):		113.8
Maximum Dry Density:	Initial Remolded Dry Density (pcf):		108.4
ASTM D 698	Initial Percent Compaction:		95%
	Initial Void Ratio:		0.526
	Optimum Moisture Content(%):		14.4
	Initial Water Content (%):		14.3
	Confining Pressure (psi):		5.0
	Hydraulic Conductivity, k₂₀ (cm/s):		1.2E-07
	Gradient Range (h/L):		1.2 1.3

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	6.0	24.4	13.8	17.4	12.8	25.6	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2	100.0	100.0	
1.5	98.4		
1	96.3		
.75	94.0		
0.5	88.7		
.375	86.5		
#4	69.6		
#10	55.8		
#20	49.0		
#40	38.4		
#60	35.3		
#100	29.8		
#200	25.6	15.0 - 65.0	

* Soil Liner Fill

Material Description

Brown clayey sand with gravel

Atterberg Limits

PL= 17 LL= 31 PI= 14

Coefficients

D₉₀= 14.2944 D₈₅= 8.6039 D₆₀= 2.9279
D₅₀= 0.9210 D₃₀= 0.1525 D₁₅=
D₁₀= C_u= C_c=

Classification

USCS= SC AASHTO= A-2-6(0)

Remarks

Location: Upper Dump 1 Stockpile
Sample Number: SLF-23-C

Date: 7/6/2022



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

Project No: 475.0106.056

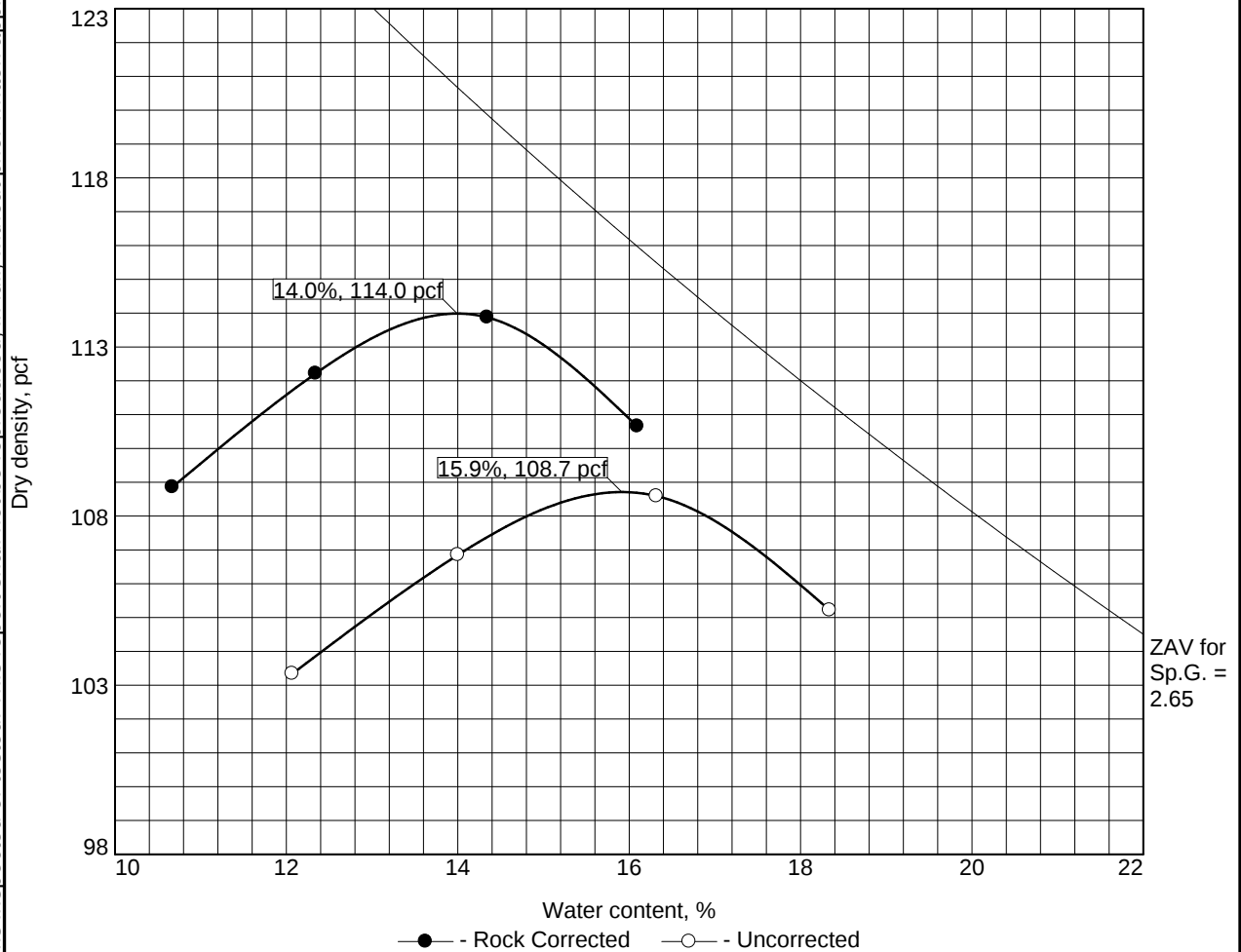
Figure SLF-23-C

Tested By: 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(0)		2.65	31	14	13.5	25.6

ROCK CORRECTED TEST RESULTS		UNCORRECTED	MATERIAL DESCRIPTION
Maximum dry density = 114.0 pcf		108.7 pcf	Brown clayey sand with gravel
Optimum moisture = 14.0 %		15.9 %	

Project No. 475.0106.056 Client: Newmont-Cripple Creek & Victor Goldmine			Remarks:
Project: VLF2 Phase 3			
Date:			
Location: Upper Dump 1 Stockpile Sample Number: SLF-23-C			
NewFields			Figure SLF-23-C

Tested By: GF Checked By: GF

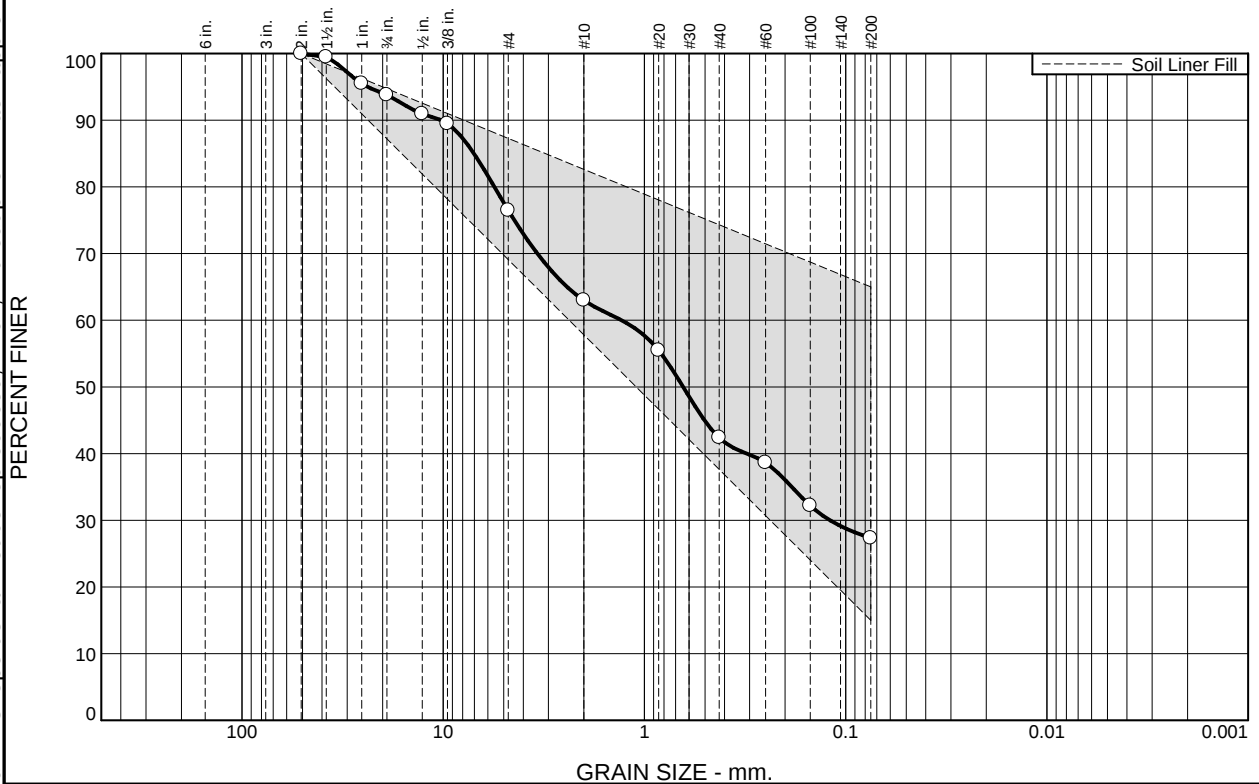
Flexible Wall Hydraulic Conductivity ASTM D5084

Client: Cripple Creek and Victor Gold Mines	Lab Sample No.: SLF-23-C
Project: VLF2 PH3	
Project No.: 475.0106.056	Location: Upper SLF Dump 1 Stockpile
Phase: A	Elevation/Depth: Stockpile
Requested By: RL	Tested By: TW
Test Started: 12/5/2022	Checked By: TW
Test Finished: 10/26/2022	Sample Description: Brown clayey sand with 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		
Burette Area (cm ²)	0.877		
Test Specimen Data	Initial	During k Testing	Final
Wet Soil + Tare (g)	593.6		576.40
Dry Soil + Tare (g)	521.18		502.00
Tare (g)	0.00		119.50
Wt. of Water (g)	72.42		74.40
Dry Soil (g)	521.18		382.50
Moisture Content (%)	13.9		19.5
Sample Volume (ft ³)	0.01057	0.01057	
Dry Density (pcf)	108.6	108.5	
Wet Density (pcf)	123.8	130.0	
Saturation (%)	70.9	100.0	
Percent Compaction	95.2	95.2	
Height (in)	3.018	3.018	
Diameter (in)	2.777	2.777	
Area (in ²)	6.055	6.058	
Est. Moisture Content after Consolidation (%)		19.8%	
Est. Void Ratio after Consolidation		0.525	
Specific Gravity*	2.65		
*Specific gravity is assumed	Maximum Dry Density (pcf):		114
Maximum Dry Density:	Initial Remolded Dry Density (pcf):		108.6
ASTM D 698	Initial Percent Compaction:		95%
	Initial Void Ratio:		0.523
	Optimum Moisture Content(%):		14.0
	Initial Water Content (%):		13.9
	Confining Pressure (psi):		5.0
	Hydraulic Conductivity, k₂₀ (cm/s):		2.0E-07
	Gradient Range (h/L):		1.2 1.3

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	6.2	17.3	13.5	20.6	15.1	27.3	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2	100.0	100.0	
1.5	99.5		
1	95.5		
.75	93.8		
0.5	90.9		
.375	89.5		
#4	76.5		
#10	63.0		
#20	55.5		
#40	42.4		
#60	38.6		
#100	32.2		
#200	27.3	15.0 - 65.0	

* Soil Liner Fill

Material Description

Brown clayey sand with gravel

Atterberg Limits

PL= 17 LL= 31 PI= 14

Coefficients

D₉₀= 10.2547 D₈₅= 7.0351 D₆₀= 1.2992
D₅₀= 0.6420 D₃₀= 0.1196 D₁₅=
D₁₀= C_u= C_c=

Classification

USCS= SC AASHTO= A-2-6(0)

Remarks

Location: Upper Dump 1 Stockpile
Sample Number: SLF-24-C

Date: 7/6/2022

NewFields

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

Project No: 475.0106.056

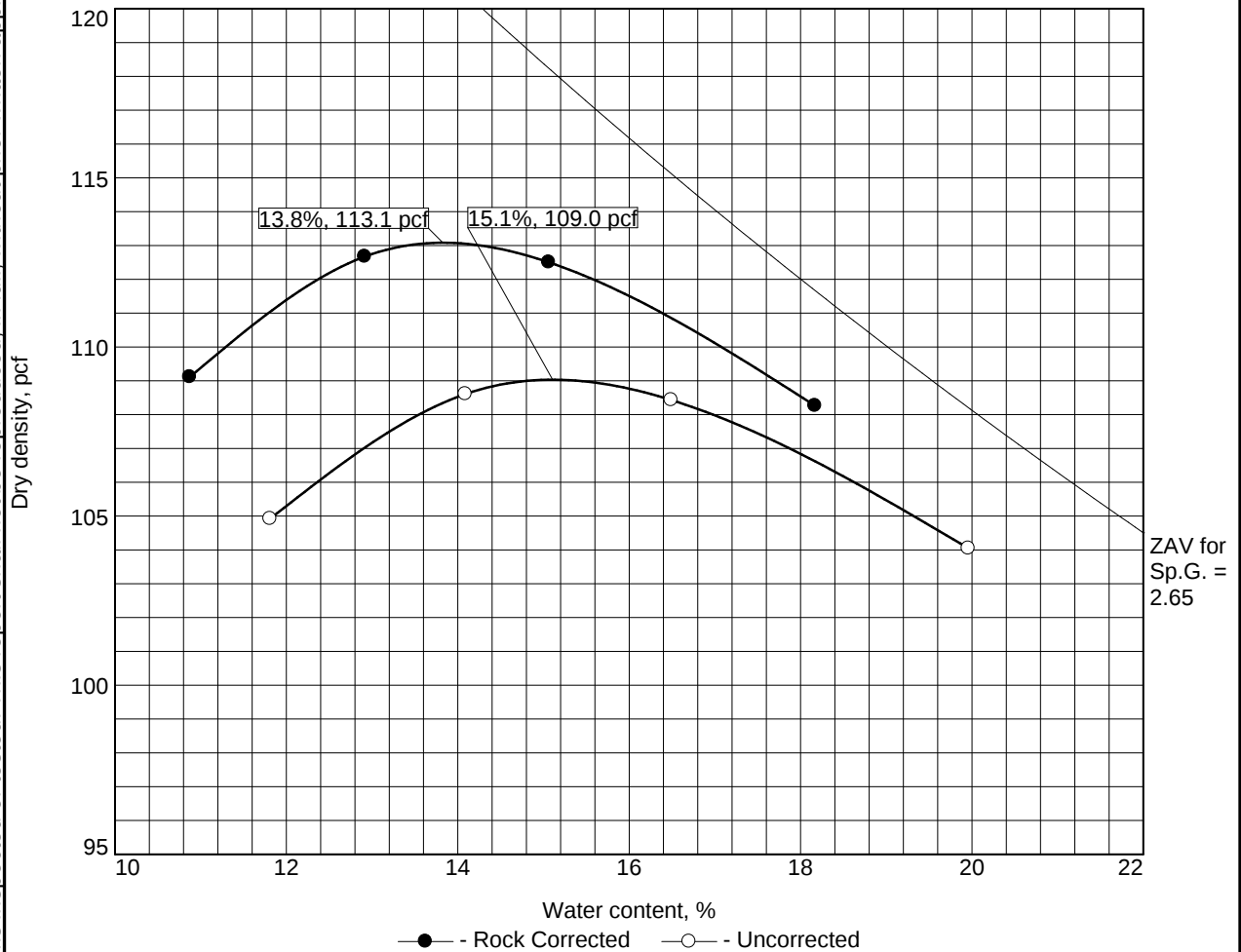
Figure SLF-24-C

Tested By: 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(0)		2.65	31	14	10.5	27.3

ROCK CORRECTED TEST RESULTS	UNCORRECTED	MATERIAL DESCRIPTION
Maximum dry density = 113.1 pcf	109.0 pcf	Brown clayey sand with gravel
Optimum moisture = 13.8 %	15.1 %	

Project No. 475.0106.056	Client: Newmont-Cripple Creek & Victor Goldmine	Remarks:
Project: VLF2 Phase 3		
Date: 07/06/22		
Location: Upper Dump 1 Stockpile	Sample Number: SLF-24-C	

	Figure SLF-24-C
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Tested By: BV Checked By: TW

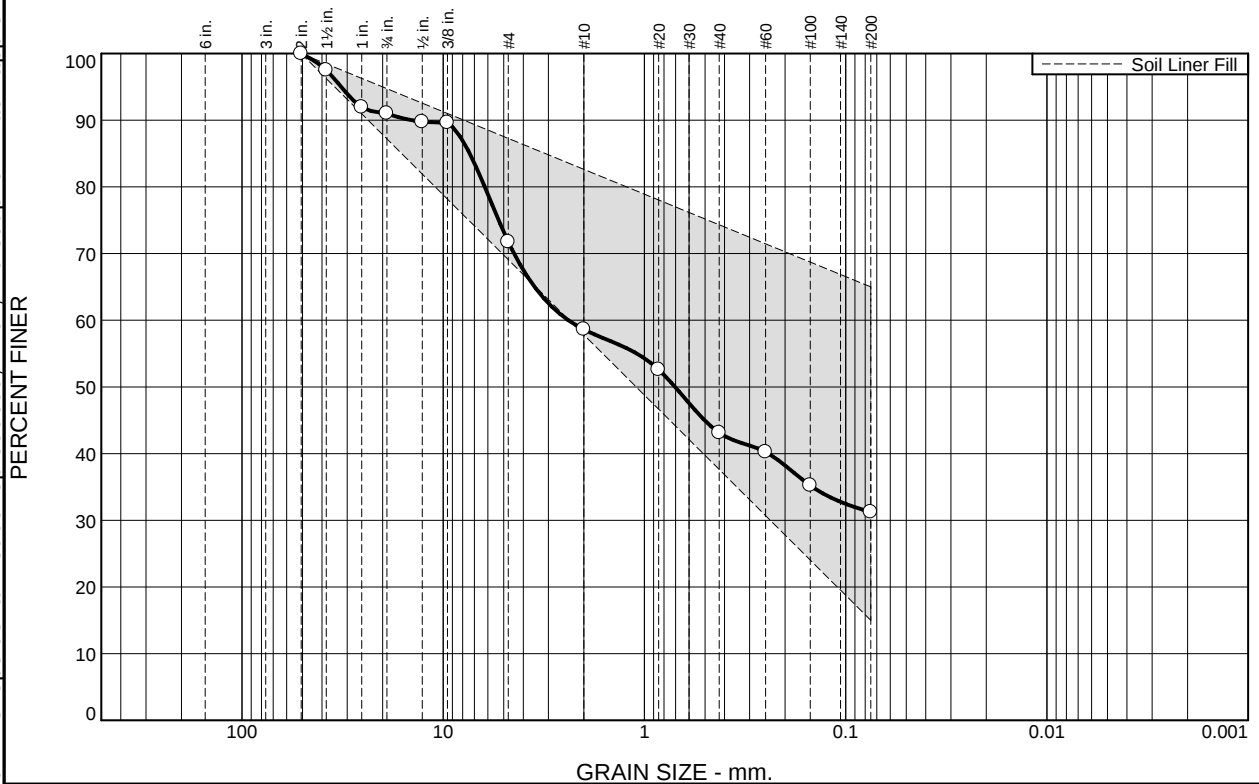
Flexible Wall Hydraulic Conductivity ASTM D5084

Client: Cripple Creek and Victor Gold Mines	Lab Sample No.: SLF-24-C
Project: VLF2 PH3	
Project No.: 475.0106.056	Location: Upper SLF Dump 1 Stockpile
Phase: A	Elevation/Depth: Stockpile
Requested By: TW	Tested By: TW
Test Started: 12/5/2022	Checked By: TW
Test Finished: 12/13/2022	Sample Description: Brown clayey sand with 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)	587.1		568.50
Dry Soil + Tare (g)	515.47		496.30
Tare (g)	0.00		119.50
Wt. of Water (g)	71.63		72.20
Dry Soil (g)	515.47		376.80
Moisture Content (%)	13.9		19.2
Sample Volume (ft ³)	0.01057	0.01055	
Dry Density (pcf)	107.6	107.6	
Wet Density (pcf)	122.4	129.5	
Saturation (%)	68.0	100.0	
Percent Compaction	95.1	95.2	
Height (in)	3.018	3.016	
Diameter (in)	2.777	2.775	
Area (in ²)	6.055	6.050	
Est. Moisture Content after Consolidation (%)		20.2%	
Est. Void Ratio after Consolidation		0.536	
Specific Gravity*	2.65		
*Specific gravity is assumed	Maximum Dry Density (pcf):		113.1
Maximum Dry Density:	Initial Remolded Dry Density (pcf):		107.6
ASTM D 698	Initial Percent Compaction:		95%
	Initial Void Ratio:		0.537
	Optimum Moisture Content(%):		13.8
	Initial Water Content (%):		13.9
	Confining Pressure (psi):		5.0
	Hydraulic Conductivity, k₂₀ (cm/s):		4.0E-07
	Gradient Range (h/L):		0.8 1.3

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	9.0	19.2	13.2	15.5	11.9	31.2	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2	100.0	100.0	
1.5	97.5		
1	92.0		
.75	91.0		
0.5	89.8		
.375	89.6		
#4	71.8		
#10	58.6		
#20	52.6		
#40	43.1		
#60	40.2		
#100	35.2		
#200	31.2	15.0 - 65.0	

* Soil Liner Fill

Material Description

Brown clayey sand with gravel

Atterberg Limits

PL= 15 LL= 32 PI= 17

Coefficients

D₉₀= 14.2997 D₈₅= 7.3774 D₆₀= 2.3868
D₅₀= 0.7041 D₃₀= C_u=
D₁₀= C_c=

Classification

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

Remarks

Location: Upper Dump 1 Stockpile
Sample Number: SLF-27-C

Date: 7/13/2022

NewFields

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

Project No: 475.0106.056

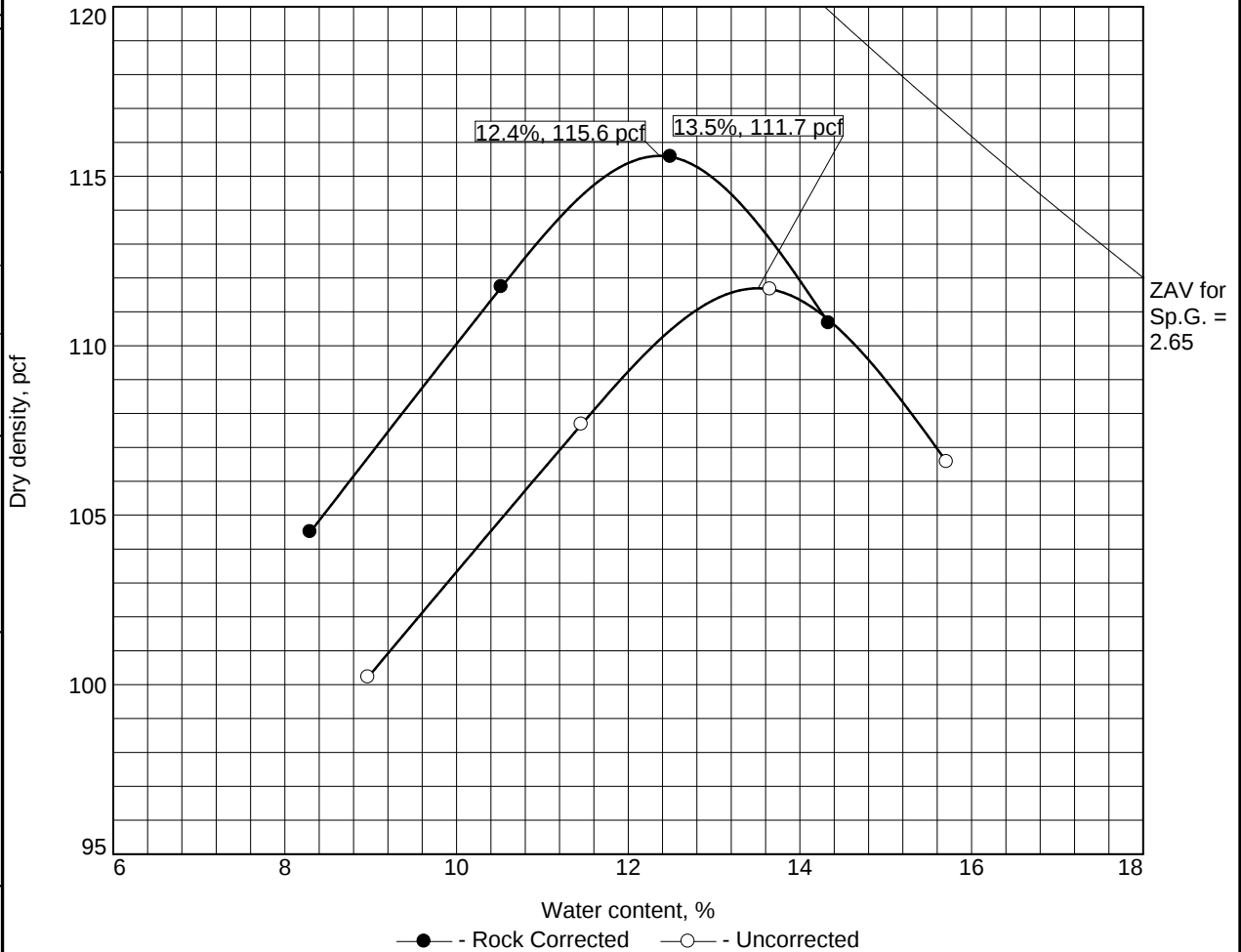
Figure SLF-27-C

Tested By: 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	32	17	10.4	31.2
ROCK CORRECTED TEST RESULTS			UNCORRECTED		MATERIAL DESCRIPTION			
Maximum dry density = 115.6 pcf			111.7 pcf		Brown clayey sand with gravel			
Optimum moisture = 12.4 %			13.5 %					
Project No. 475.0106.056 Client: Newmont-Cripple Creek & Victor Goldmine					Remarks:			
Project: VLF2 Phase 3								
Date: 07/13/22								
Location: Upper Dump 1 Stockpile Sample Number: SLF-27-C								
NewFields					Figure SLF-27-C			

Figure SLF-27-C

Tested By: BV Checked By: TW

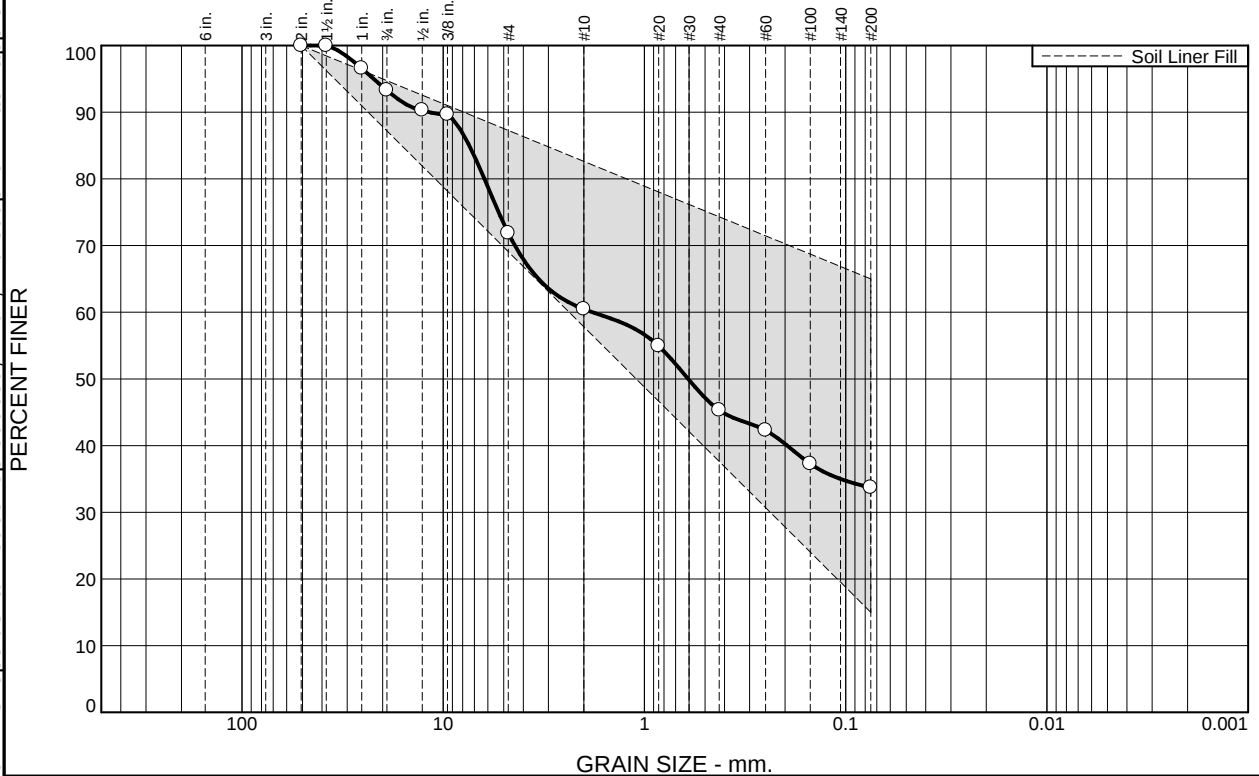
Flexible Wall Hydraulic Conductivity ASTM D5084

Client: Cripple Creek and Victor Gold Mines	Lab Sample No.: SLF-27-C
Project: VLF2 PH3	
Project No.: 475.0106.056	Location: Upper SLF Dump 1 Stockpile
Phase: A	Elevation/Depth: Stockpile
Requested By: TW	Tested By: TW
Test Started: 12/5/2022	Checked By: TW
Test Finished: 12/16/2022	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		
Burrete Area (cm ²)	0.877		
Test Specimen Data	Initial	During k Testing	Final
Wet Soil + Tare (g)	590.2		584.20
Dry Soil + Tare (g)	524.10		512.50
Tare (g)	0.00		119.50
Wt. of Water (g)	66.10		71.70
Dry Soil (g)	524.10		393.00
Moisture Content (%)	12.6		18.2
Sample Volume (ft ³)	0.01057	0.01058	
Dry Density (pcf)	109.1	109.0	
Wet Density (pcf)	123.0	130.2	
Saturation (%)	65.7	100.0	
Percent Compaction	95.0	94.9	
Height (in)	3.018	3.019	
Diameter (in)	2.777	2.778	
Area (in ²)	6.055	6.062	
Est. Moisture Content after Consolidation (%)		19.6%	
Est. Void Ratio after Consolidation		0.519	
Specific Gravity*	2.65		
*Specific gravity is assumed	Maximum Dry Density (pcf):		114.8
Maximum Dry Density:	Initial Remolded Dry Density (pcf):		109.1
ASTM D 698	Initial Percent Compaction:		95%
	Initial Void Ratio:		0.516
	Optimum Moisture Content(%):		12.8
	Initial Water Content (%):		12.6
	Confining Pressure (psi):		5.0
	Hydraulic Conductivity, k₂₀ (cm/s):		1.5E-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	6.7	21.4	11.4	15.2	11.6	33.7	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2	100.0	100.0	
1.5	100.0		
1	96.6		
.75	93.3		
0.5	90.3		
.375	89.7		
#4	71.9		
#10	60.5		
#20	54.9		
#40	45.3		
#60	42.3		
#100	37.3		
#200	33.7	15.0 - 65.0	

* Soil Liner Fill

Material Description

Brown clayey sand with gravel

Atterberg Limits

PL= 14 LL= 37 PI= 23

Coefficients

D₉₀= 11.7305 D₈₅= 7.4169 D₆₀= 1.8110
D₅₀= 0.6060 D₃₀= D₁₅=
D₁₀= C_u= C_c=

Classification

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

Remarks

Location: Upper Dump 1 Stockpile
Sample Number: SLF-28-C

Date: 7/27/2022

NewFields

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

Project No: 475.0106.056

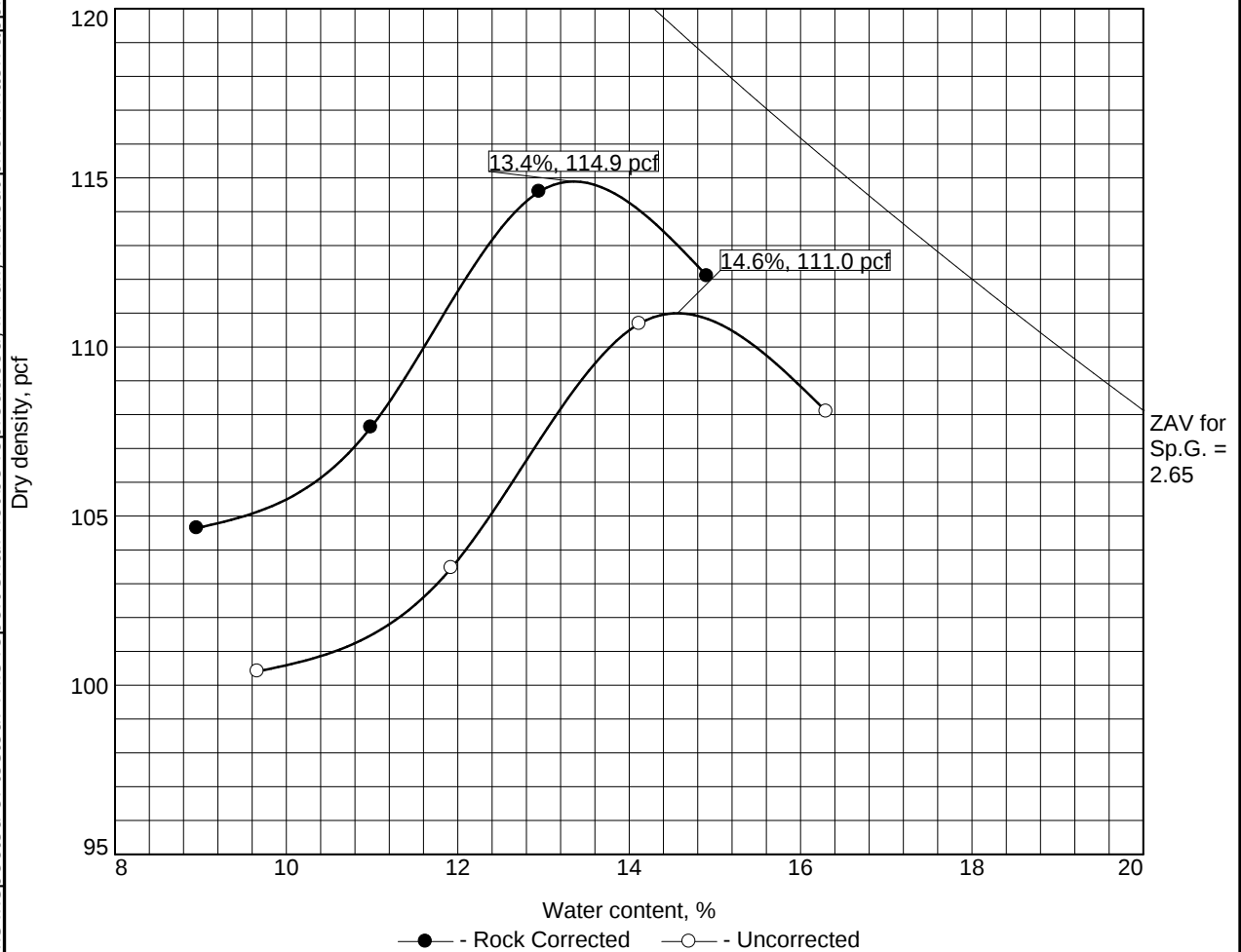
Figure SLF-28-C

Tested By: 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(2)		2.65	37	23	10.3	33.7

ROCK CORRECTED TEST RESULTS	UNCORRECTED	MATERIAL DESCRIPTION
Maximum dry density = 114.9 pcf	111.0 pcf	Brown clayey sand with gravel
Optimum moisture = 13.4 %	14.6 %	

Project No. 475.0106.056 Client: Newmont-Cripple Creek & Victor Goldmine		Remarks:
Project: VLF2 Phase 3		
Date: 07/27/22		
Location: Upper Dump 1 Stockpile Sample Number: SLF-28-C		
 NewFields		Figure SLF-28-C

Tested By: BV Checked By: TW

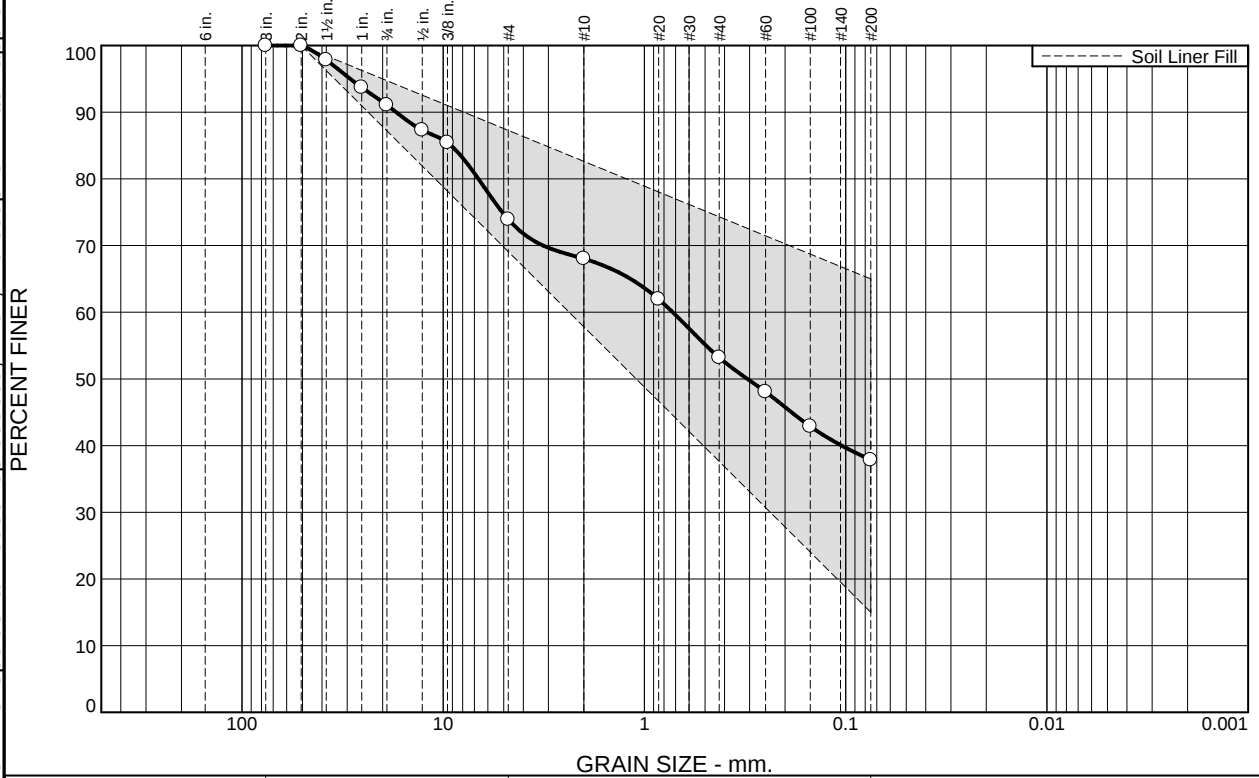
Flexible Wall Hydraulic Conductivity ASTM D5084

Client: Cripple Creek and Victor Gold Mines	Lab Sample No.: SLF-28-C
Project: VLF2 PH3	
Project No.: 475.0106.056	Location: Upper SLF Dump 1 Stockpile
Phase: A	Elevation/Depth: Stockpile
Requested By: TW	Tested By: TW
Test Started: 12/14/2022	Checked By: TW
Test Finished: 12/21/2022	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		
Burrete Area (cm ²)	0.877		
Test Specimen Data	Initial	During k Testing	Final
Wet Soil + Tare (g)	592.2		576.30
Dry Soil + Tare (g)	523.50		501.00
Tare (g)	0.00		119.50
Wt. of Water (g)	68.70		75.30
Dry Soil (g)	523.50		381.50
Moisture Content (%)	13.1		19.7
Sample Volume (ft ³)	0.01063	0.01060	
Dry Density (pcf)	108.3	108.4	
Wet Density (pcf)	122.9	130.0	
Saturation (%)	67.5	100.0	
Percent Compaction	94.3	94.4	
Height (in)	3.018	3.016	
Diameter (in)	2.783	2.782	
Area (in ²)	6.084	6.078	
Est. Moisture Content after Consolidation (%)		19.8%	
Est. Void Ratio after Consolidation		0.524	
Specific Gravity*	2.65		
*Specific gravity is assumed	Maximum Dry Density (pcf):		114.9
Maximum Dry Density:	Initial Remolded Dry Density (pcf):		108.3
ASTM D 698	Initial Percent Compaction:		94%
	Initial Void Ratio:		0.526
	Optimum Moisture Content(%):		13.4
	Initial Water Content (%):		13.1
	Confining Pressure (psi):		5.0
	Hydraulic Conductivity, k₂₀ (cm/s):		5.8E-07
	Gradient Range (h/L):		5.3 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	8.9	17.2	5.9	14.8	15.4	37.8	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0	100.0	
2	100.0		
1.5	97.8		
1	93.7		
.75	91.1		
0.5	87.3	15.0 - 65.0	
.375	85.4		
#4	73.9		
#10	68.0		
#20	62.0		
#40	53.2		
#60	48.1		
#100	42.9		
#200	37.8		

* Soil Liner Fill

Material Description

Brown clayey sand with gravel

Atterberg Limits

PL= 16 LL= 37 PI= 21

Coefficients

D₉₀= 17.1034 D₈₅= 9.1401 D₆₀= 0.7224
D₅₀= 0.3078 D₃₀= C_u=
D₁₀= C_c=

Classification

USCS= SC AASHTO= A-6(3)

Remarks

Location: Upper Dump 1 Stockpile
Sample Number: SLF-30-C

Date: 8/10/2022



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

Project No: 475.0106.056

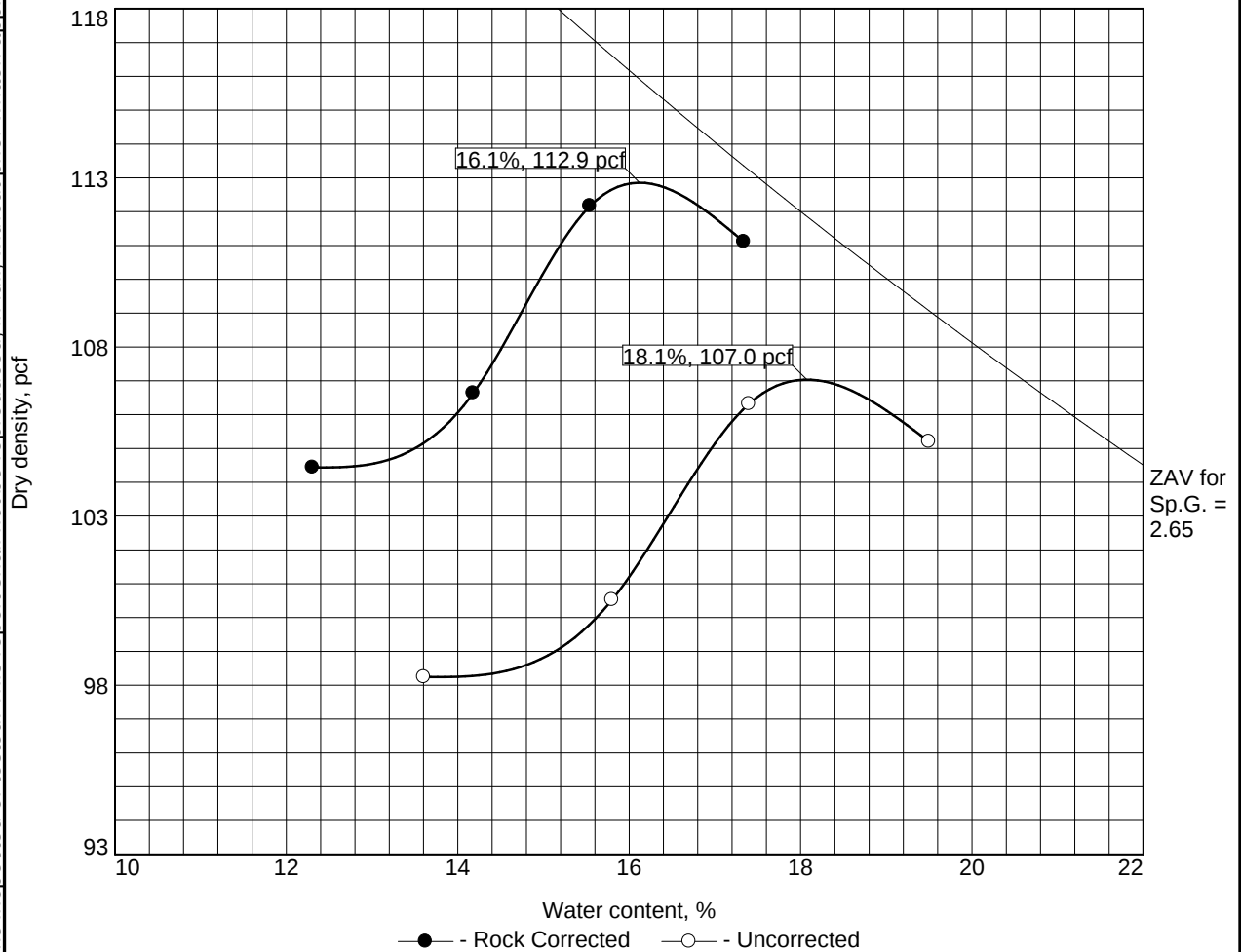
Figure SLF-30-C

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.

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-6(3)		2.65	37	21	14.6	37.8

ROCK CORRECTED TEST RESULTS	UNCORRECTED	MATERIAL DESCRIPTION
Maximum dry density = 112.9 pcf	107.0 pcf	Brown clayey sand with gravel
Optimum moisture = 16.1 %	18.1 %	

Project No. 475.0106.056 Client: Newmont-Cripple Creek & Victor Goldmine		Remarks:
Project: VLF2 Phase 3		
Date: 08/10/22		
Location: Upper Dump 1 Stockpile Sample Number: SLF-30-C		
NewFields		Figure SLF-30-C

Tested By: AB Checked By: TW

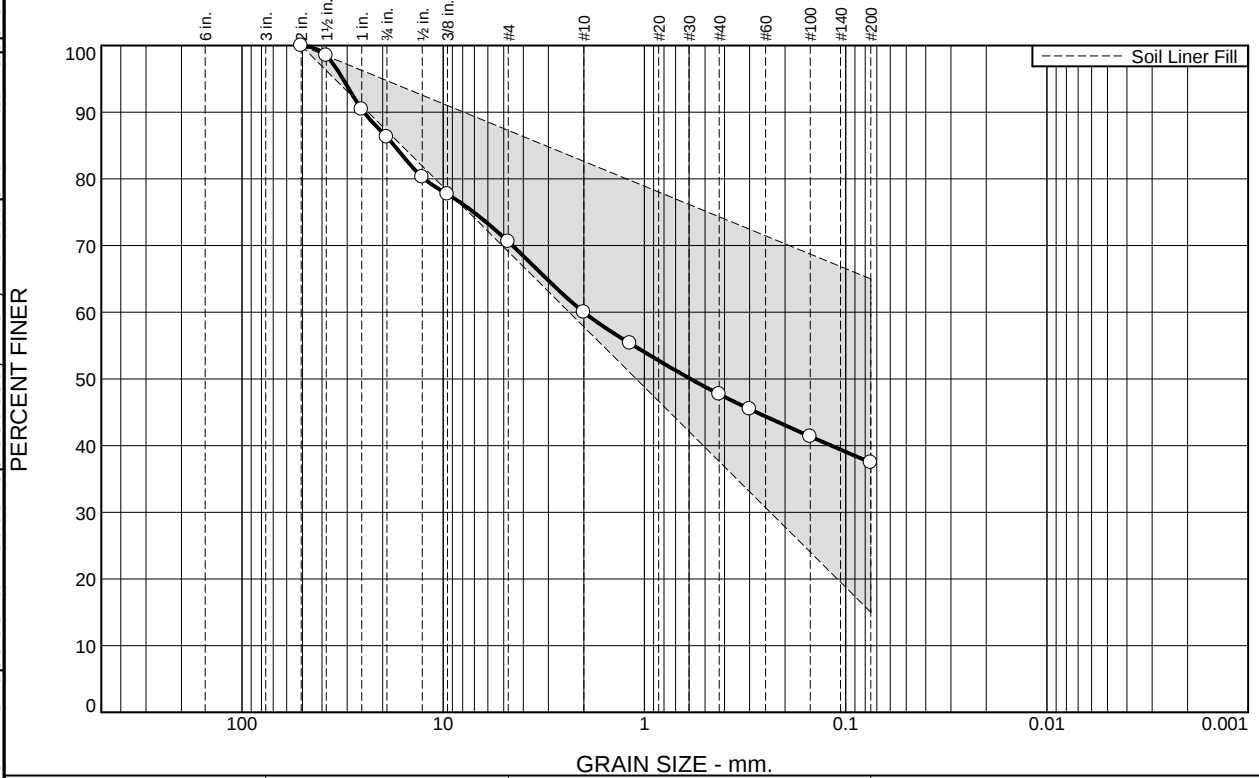
Flexible Wall Hydraulic Conductivity ASTM D5084

Client: Cripple Creek and Victor Gold Mines	Lab Sample No.: SLF-30-C
Project: VLF2 PH3	
Project No.: 475.0106.056	Location: Upper SLF Dump 1 Stockpile
Phase: A	Elevation/Depth: Stockpile
Requested By: TW	Tested By: TW
Test Started: 1/9/2023	Checked By: TW
Test Finished: 1/18/2023	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)	597.6		594.10
Dry Soil + Tare (g)	515.73		510.80
Tare (g)	0.00		119.50
Wt. of Water (g)	81.87		83.30
Dry Soil (g)	515.73		391.30
Moisture Content (%)	15.9		21.3
Sample Volume (ft ³)	0.01063	0.01067	
Dry Density (pcf)	106.8	106.5	
Wet Density (pcf)	124.0	128.5	
Saturation (%)	77.8	100.0	
Percent Compaction	94.6	94.3	
Height (in)	3.018	3.024	
Diameter (in)	2.783	2.789	
Area (in ²)	6.084	6.107	
Est. Moisture Content after Consolidation (%)		21.1%	
Est. Void Ratio after Consolidation		0.558	
Specific Gravity*	2.65		
*Specific gravity is assumed	Maximum Dry Density (pcf):		112.9
Maximum Dry Density:	Initial Remolded Dry Density (pcf):		106.8
ASTM D 698	Initial Percent Compaction:		95%
	Initial Void Ratio:		0.549
	Optimum Moisture Content(%):		16.1
	Initial Water Content (%):		15.9
	Confining Pressure (psi):		5.0
	Hydraulic Conductivity, k₂₀ (cm/s):		2.2E-07
	Gradient Range (h/L):		5.5 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	13.7	15.7	10.6	12.3	10.2	37.5	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2	100.0	100.0	
1.5	98.5		
1	90.4		
.75	86.3		
0.5	80.3		
.375	77.7		
#4	70.6		
#10	60.0		
#16	55.3		
#40	47.7		
#50	45.5		
#100	41.4		
#200	37.5	15.0 - 65.0	

* Soil Liner Fill

Material Description

Dark brown clayey sand with gravel

Atterberg Limits

PL= 13 LL= 37 PI= 24

Coefficients

D₉₀= 24.8027 D₈₅= 17.4969 D₆₀= 2.0004
D₅₀= 0.5894 D₃₀= D₁₅=
D₁₀= C_u= C_c=

Classification

USCS= SC AASHTO= A-6(4)

Remarks

Location: Upper Dump 1 Stockpile
Sample Number: SLF-31-C

Date: 11/30/2022



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

Project No: 475.0106.056

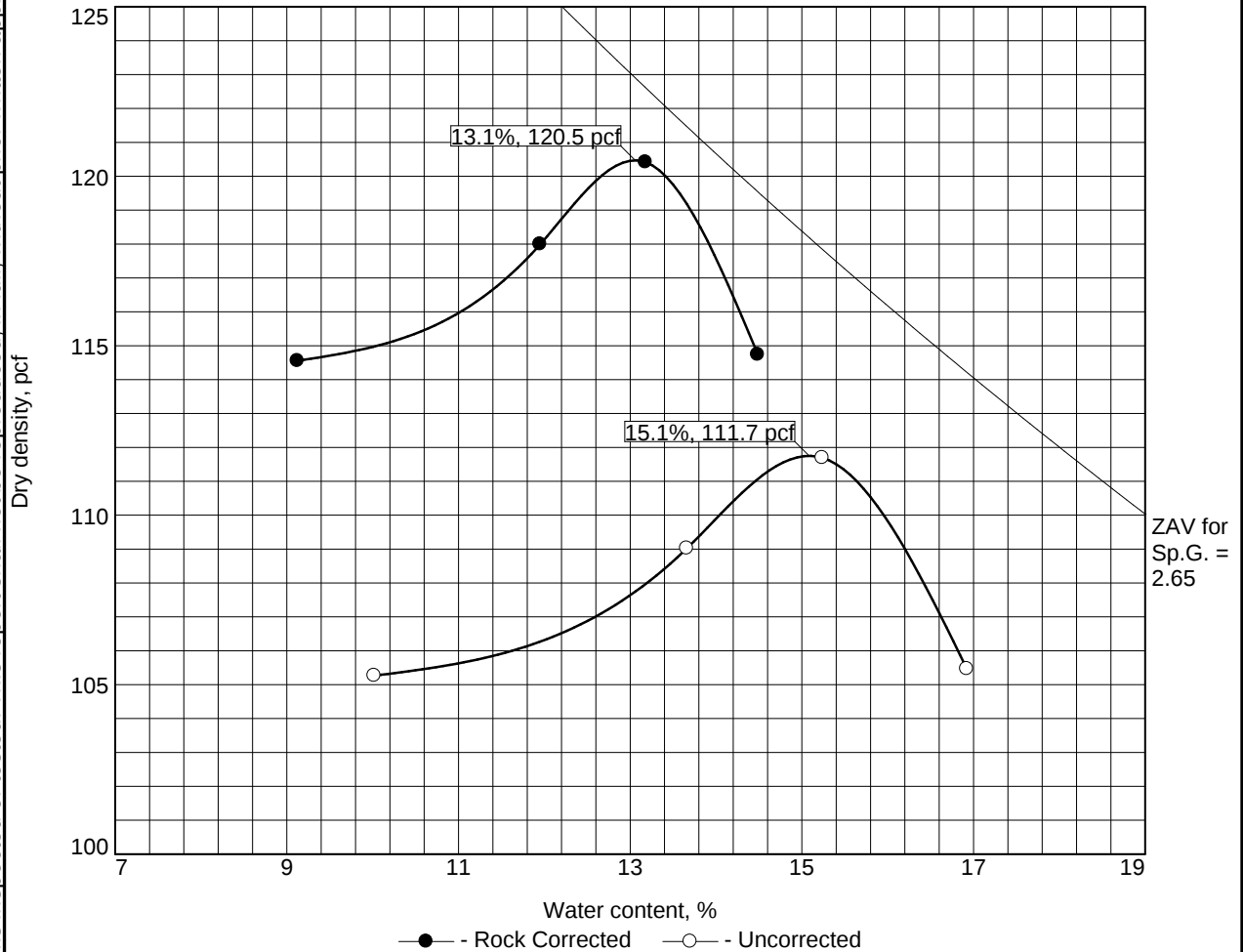
Figure SLF-31-C

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.

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-6(4)		2.65	37	24	22.3	37.5
ROCK CORRECTED TEST RESULTS			UNCORRECTED		MATERIAL DESCRIPTION			
Maximum dry density = 120.5 pcf			111.7 pcf		Dark brown clayey sand with gravel			
Optimum moisture = 13.1 %			15.1 %					
Project No. 475.0106.056 Client: Newmont-Cripple Creek & Victor Goldmine					Remarks:			
Project: VLF2 Phase 3								
Date: 11/30/22								
Location: Upper Dump 1 Stockpile Sample Number: SLF-31-C								
NewFields					Figure SLF-31-C			

Figure SLF-31-C

Tested By: DK Checked By: TW

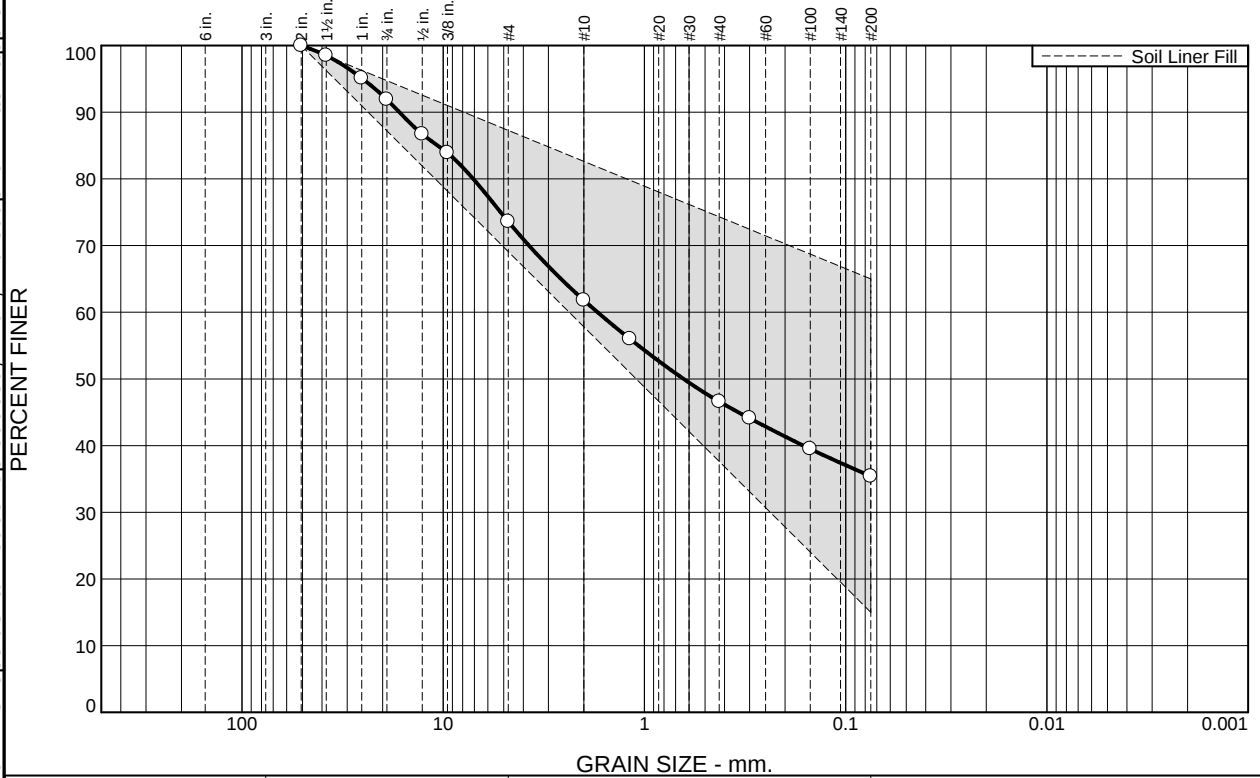
Flexible Wall Hydraulic Conductivity ASTM D5084

Client: Cripple Creek and Victor Gold Mines	Lab Sample No.: SLF-31-C
Project: VLF2 PH3	
Project No.: 475.0106.056	Location: Upper SLF Dump 1 Stockpile
Phase: A	Elevation/Depth: Stockpile
Requested By: TW	Tested By: TW
Test Started: 1/9/2023	Checked By: TW
Test Finished: 1/18/2023	Sample Description: Brown clayey sand with 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)	622.4		584.60
Dry Soil + Tare (g)	550.20		515.90
Tare (g)	0.00		119.50
Wt. of Water (g)	72.20		68.70
Dry Soil (g)	550.20		396.40
Moisture Content (%)	13.1		17.3
Sample Volume (ft ³)	0.01065	0.01065	
Dry Density (pcf)	113.9	113.9	
Wet Density (pcf)	128.8	133.3	
Saturation (%)	76.8	100.0	
Percent Compaction	94.5	94.5	
Height (in)	3.019	3.019	
Diameter (in)	2.787	2.787	
Area (in ²)	6.099	6.100	
Est. Moisture Content after Consolidation (%)		17.1%	
Est. Void Ratio after Consolidation		0.453	
Specific Gravity*	2.65		
*Specific gravity is assumed Maximum Dry Density: ASTM D 698	Maximum Dry Density (pcf):	120.5	
	Initial Remolded Dry Density (pcf):	113.9	
	Initial Percent Compaction:	94%	
	Initial Void Ratio:	0.452	
	Optimum Moisture Content(%):	13.1	
	Initial Water Content (%):	13.1	
	Confining Pressure (psi):	5.0	
	Hydraulic Conductivity, k₂₀ (cm/s):	6.4E-07	
	Gradient Range (h/L):	1.1	1.3

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	8.1	18.3	11.8	15.2	11.2	35.4	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2	100.0	100.0	
1.5	98.5		
1	95.1		
.75	91.9		
0.5	86.7		
.375	83.9		
#4	73.6		
#10	61.8		
#16	56.0		
#40	46.6		
#50	44.1		
#100	39.5		
#200	35.4	15.0 - 65.0	

* Soil Liner Fill

Material Description

Dark brown clayey sand with gravel

Atterberg Limits

PL= 16 LL= 38 PI= 22

Coefficients

D₉₀= 16.4950 D₈₅= 10.6514 D₆₀= 1.7102
D₅₀= 0.6385 D₃₀= D₁₅=
D₁₀= C_u= C_c=

Classification

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

Remarks

Material discarded before Proctor

Location: Upper Dump 1 Stockpile
Sample Number: SLF-32-C

Date: 12/15/2022

NewFields

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

Project No: 475.0106.056

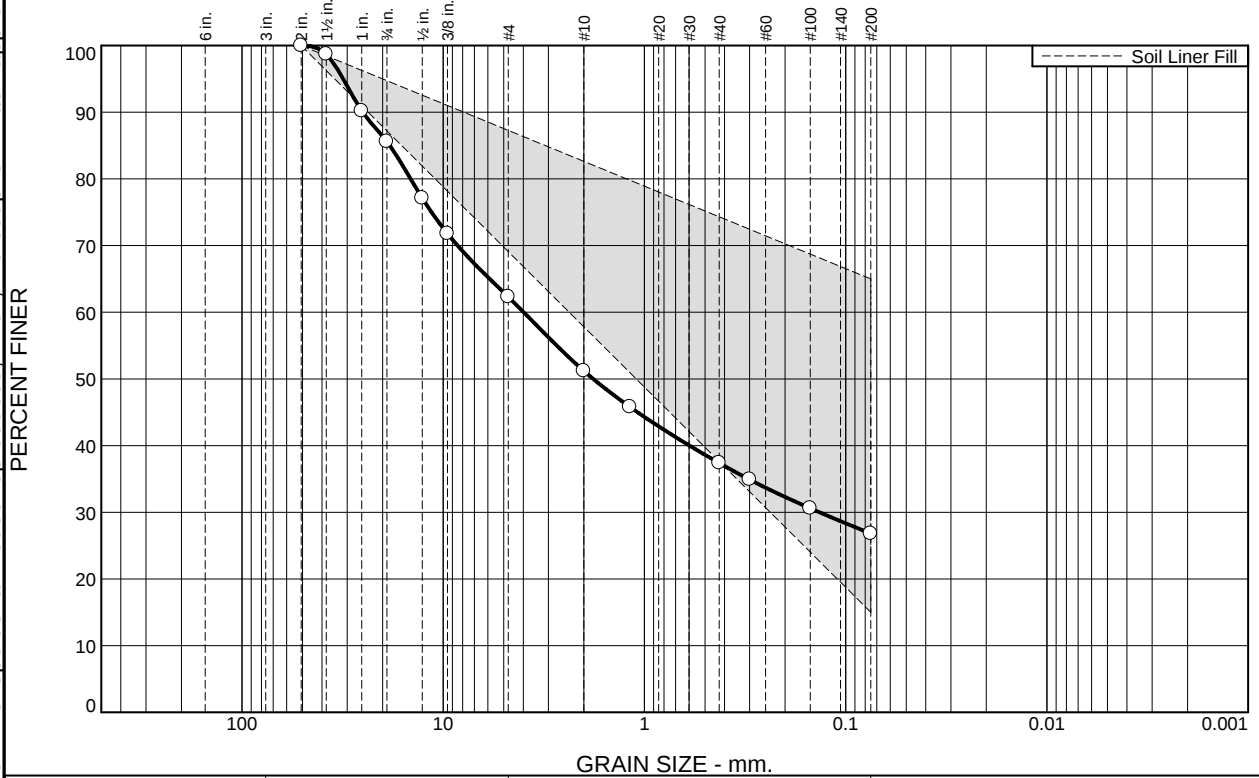
Figure SLF-32-C

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	14.4	23.3	11.1	13.8	10.6	26.8	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2	100.0	100.0	
1.5	98.7		
1	90.2		
.75	85.6		
0.5	77.1		
.375	71.8		
#4	62.3		
#10	51.2		
#16	45.8		
#40	37.4		
#50	34.9		
#100	30.6		
#200	26.8	15.0 - 65.0	

* Soil Liner Fill

Material Description

Brown clayey gravel with sand

Atterberg Limits

PL= 14 LL= 38 PI= 24

Coefficients

D₉₀= 25.1359 D₈₅= 18.4147 D₆₀= 3.9831
D₅₀= 1.7969 D₃₀= 0.1349 D₁₅=
D₁₀= C_u= C_c=

Classification

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

Remarks

Material discarded before Proctor

Location: Upper Dump 1 Stockpile
Sample Number: SLF-33-C

Date: 12/15/2022

NewFields

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

Project No: 475.0106.056

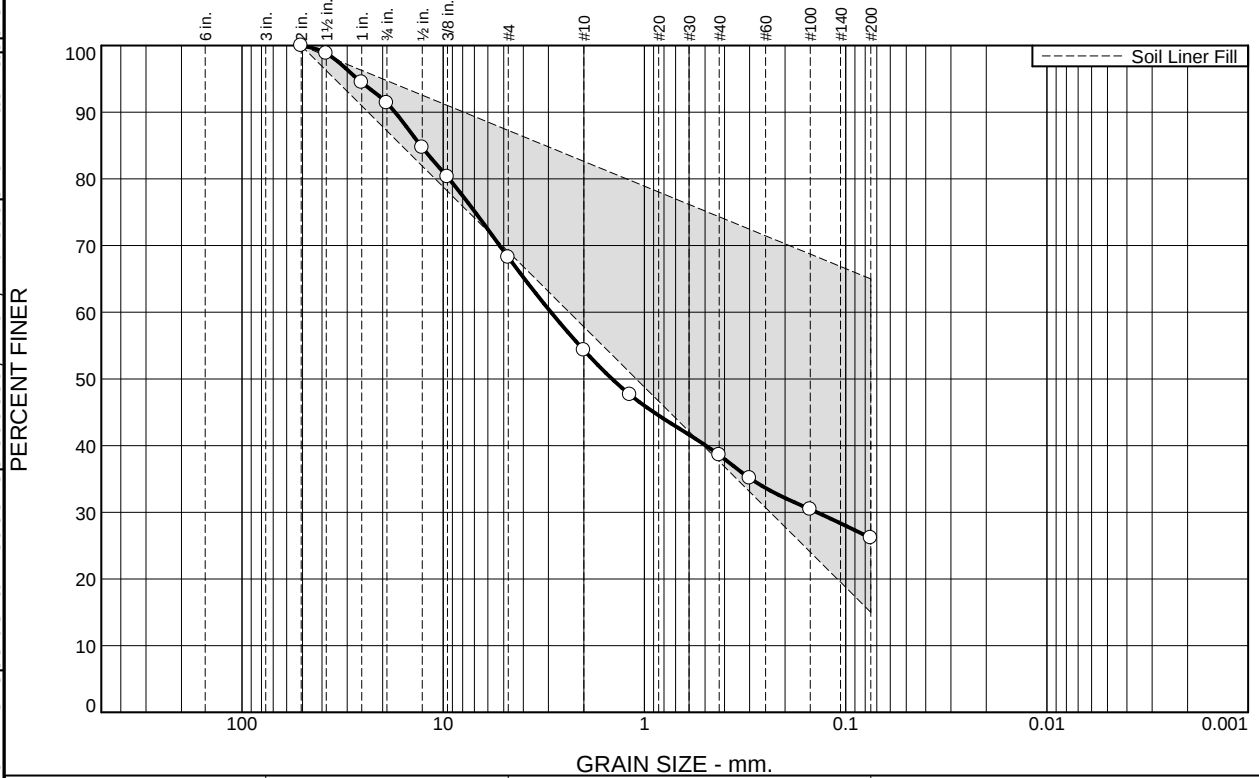
Figure SLF-33-C

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	8.6	23.2	13.9	15.7	12.4	26.2	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2	100.0	100.0	
1.5	98.8		
1	94.5		
.75	91.4		
0.5	84.7		
.375	80.3		
#4	68.2		
#10	54.3		
#16	47.6		
#40	38.6		
#50	35.1		
#100	30.4		
#200	26.2	15.0 - 65.0	

* Soil Liner Fill

Material Description

Brown clayey sand with gravel

Atterberg Limits

PL= 18 LL= 38 PI= 20

Coefficients

D₉₀= 17.3135 D₈₅= 12.9354 D₆₀= 2.9126
D₅₀= 1.4482 D₃₀= 0.1391 D₁₅=
D₁₀= C_u= C_c=

Classification

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

Remarks

Location: Upper Dump 1 Stockpile
Sample Number: SLF-34-C

Date: 04/04/2023

NewFields

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

Project No: 475.0106.056

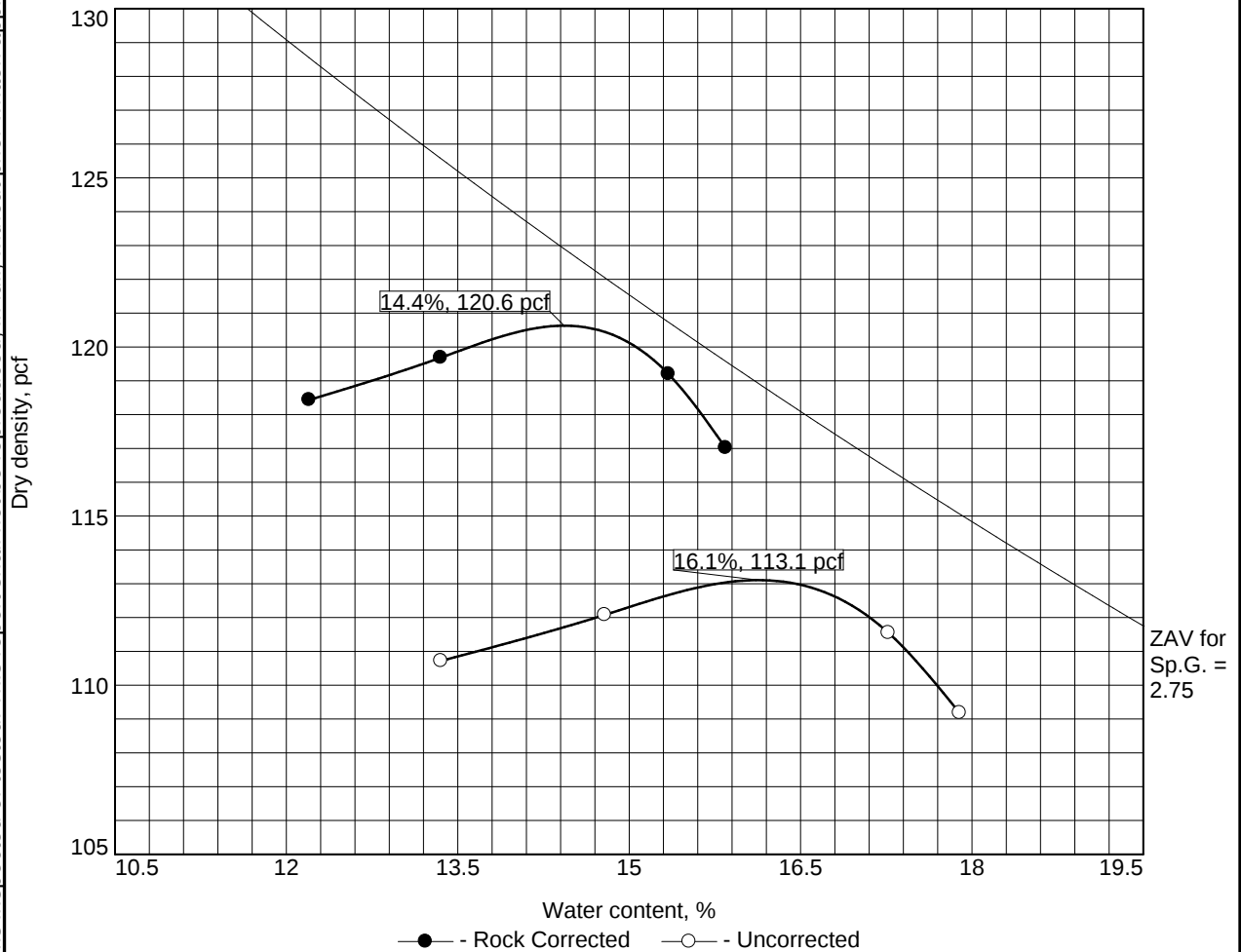
Figure SLF-34-C

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.

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	38	20	19.7	26.2

ROCK CORRECTED TEST RESULTS		UNCORRECTED	MATERIAL DESCRIPTION
Maximum dry density = 120.6 pcf		113.1 pcf	Brown clayey sand with gravel
Optimum moisture = 14.4 %		16.1 %	
Project No. 475.0106.056 Client: Newmont-Cripple Creek & Victor Goldmine			Remarks:
Project: VLF2 Phase 3			
Date: 04/04/23			
Location: Upper Dump 1 Stockpile Sample Number: SLF-34-C			
NewFields			Figure SLF-34-C

Tested By: DK Checked By: TW

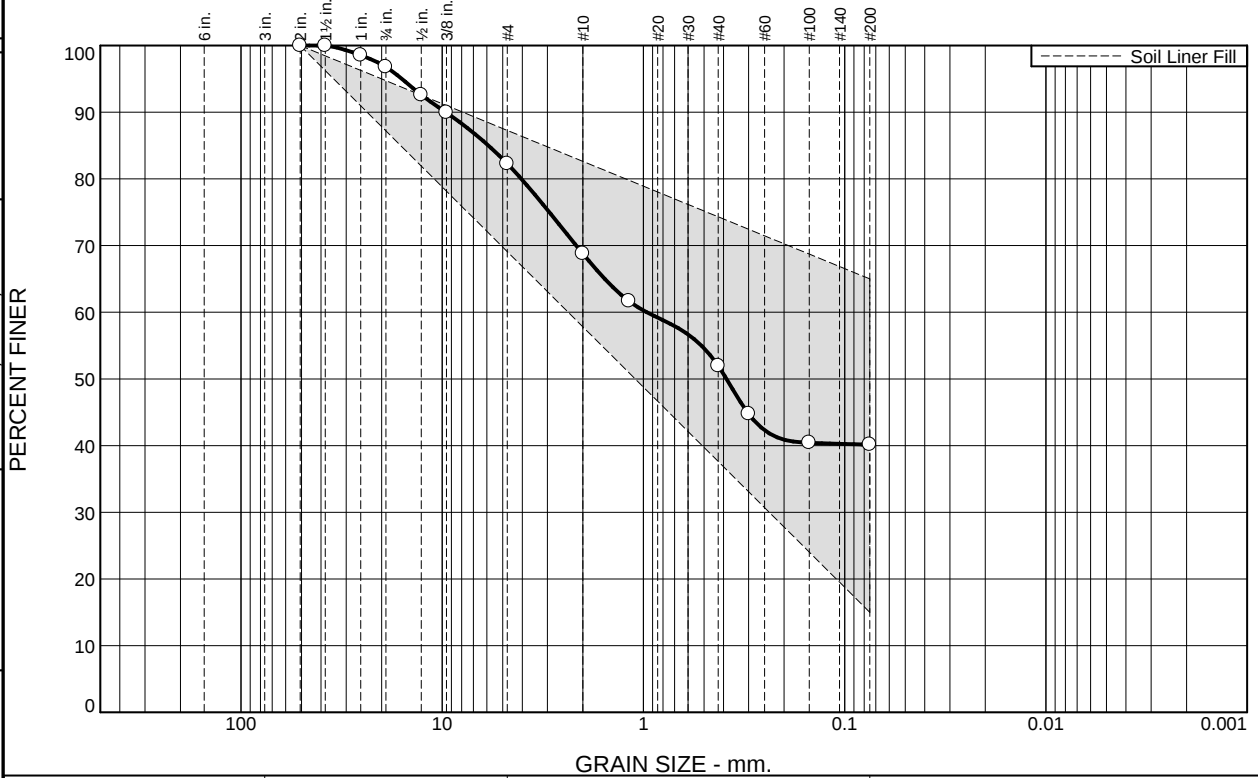
Flexible Wall Hydraulic Conductivity ASTM D5084

Client: Cripple Creek and Victor Gold Mines	Lab Sample No.: SLF-34-C
Project: VLF2 PH3	
Project No.: 475.0106.056	Location: Upper SLF Dump 1 Stockpile
Phase: A	Elevation/Depth: Stockpile
Requested By: TW	Tested By: TW
Test Started: 4/18/2023	Checked By: TW
Test Finished: 4/26/2023	Sample Description: Brown clayey sand with 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)	630.1		594.10
Dry Soil + Tare (g)	550.71		524.50
Tare (g)	0.00		119.50
Wt. of Water (g)	79.39		69.60
Dry Soil (g)	550.71		405.00
Moisture Content (%)	14.4		17.2
Sample Volume (ft ³)	0.01063	0.01059	
Dry Density (pcf)	114.3	114.4	
Wet Density (pcf)	130.7	133.8	
Saturation (%)	85.3	100.0	
Percent Compaction	94.7	94.9	
Height (in)	3.018	3.016	
Diameter (in)	2.783	2.781	
Area (in ²)	6.084	6.074	
Est. Moisture Content after Consolidation (%)		16.8%	
Est. Void Ratio after Consolidation		0.444	
Specific Gravity*	2.65		
*Specific gravity is assumed	Maximum Dry Density (pcf):		120.6
Maximum Dry Density:	Initial Remolded Dry Density (pcf):		114.3
ASTM D 698	Initial Percent Compaction:		95%
	Initial Void Ratio:		0.447
	Optimum Moisture Content(%):		14.4
	Initial Water Content (%):		14.4
	Confining Pressure (psi):		5.0
	Hydraulic Conductivity, k₂₀ (cm/s):		2.2E-07
	Gradient Range (h/L):		1.2 1.3

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	3.2	14.5	13.5	16.8	11.9	40.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2	100.0	100.0	
1.5	100.0		
1	98.5		
.75	96.8		
0.5	92.6		
.375	89.9		
#4	82.3		
#10	68.8		
#16	61.7		
#40	52.0		
#50	44.7		
#100	40.4		
#200	40.1	15.0 - 65.0	

* Soil Liner Fill

Material Description

Brown clayey sand with gravel

Atterberg Limits

PL= 17 LL= 36 PI= 19

Coefficients

D₉₀= 9.5980 D₈₅= 5.8922 D₆₀= 0.9611
D₅₀= 0.3862 D₃₀= D₁₅=
D₁₀= C_u= C_c=

Classification

USCS= SC AASHTO= A-6(3)

Remarks

Location: Upper Dump 1 Stockpile
Sample Number: SLF-35-C

Date: 04/10/2023



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

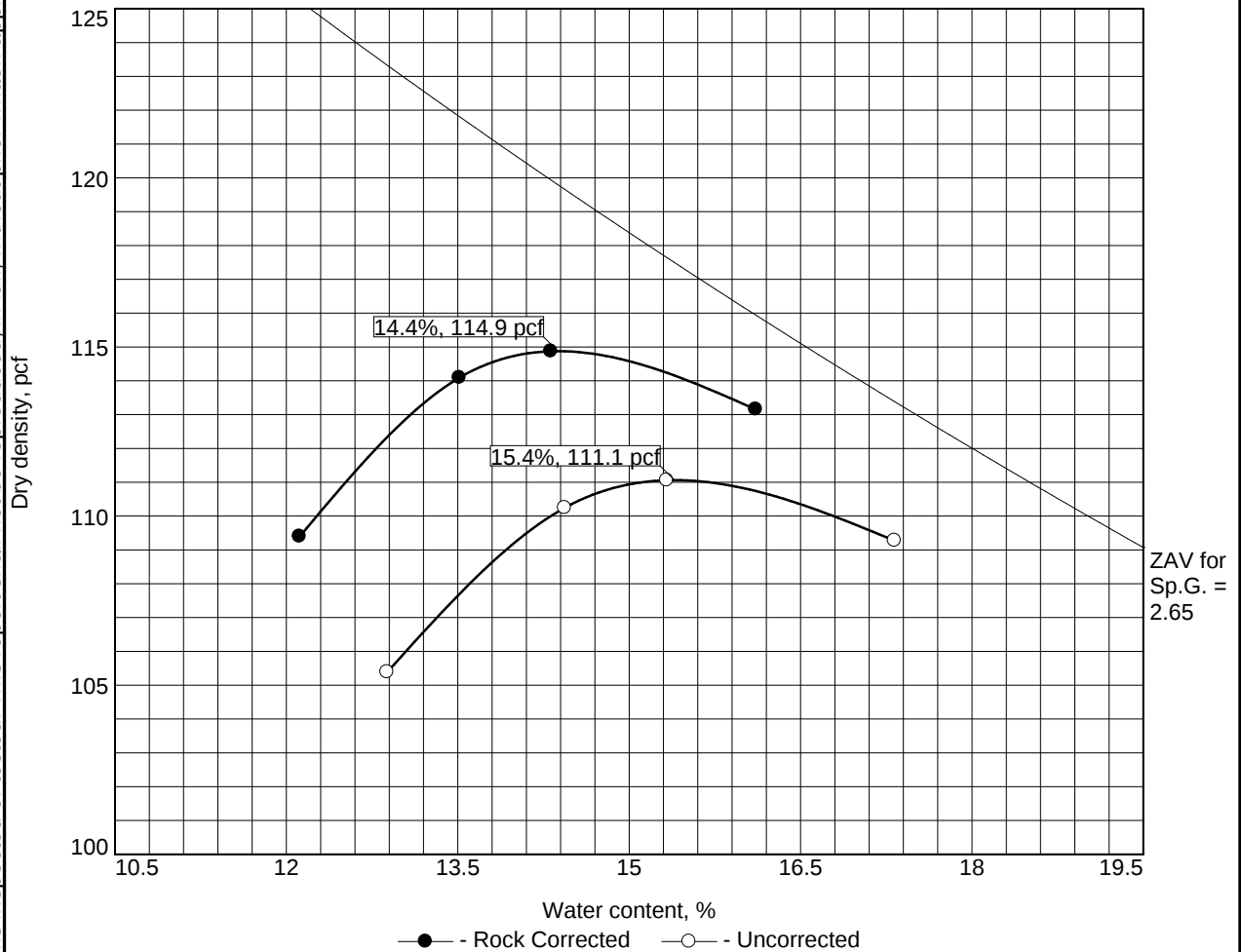
Project No: 475.0106.056

Figure SLF-35-C

Tested By: DK

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-6(3)		2.65	36	19	10.1	40.1

ROCK CORRECTED TEST RESULTS		UNCORRECTED	MATERIAL DESCRIPTION
Maximum dry density = 114.9 pcf		111.1 pcf	Brown Clayey Sand With Gravel
Optimum moisture = 14.4 %		15.4 %	

Project No. 475.0106.056 Client: Newmont-Cripple Creek & Victor Goldmine			Remarks:
Project: VLF2 Phase 3			
Date: 04/10/23			
Location: Upper Dump 1 Stockpile Sample Number: SLF-35-C			
 NewFields			

Figure SLF-35-C

Tested By: DK Checked By: TW

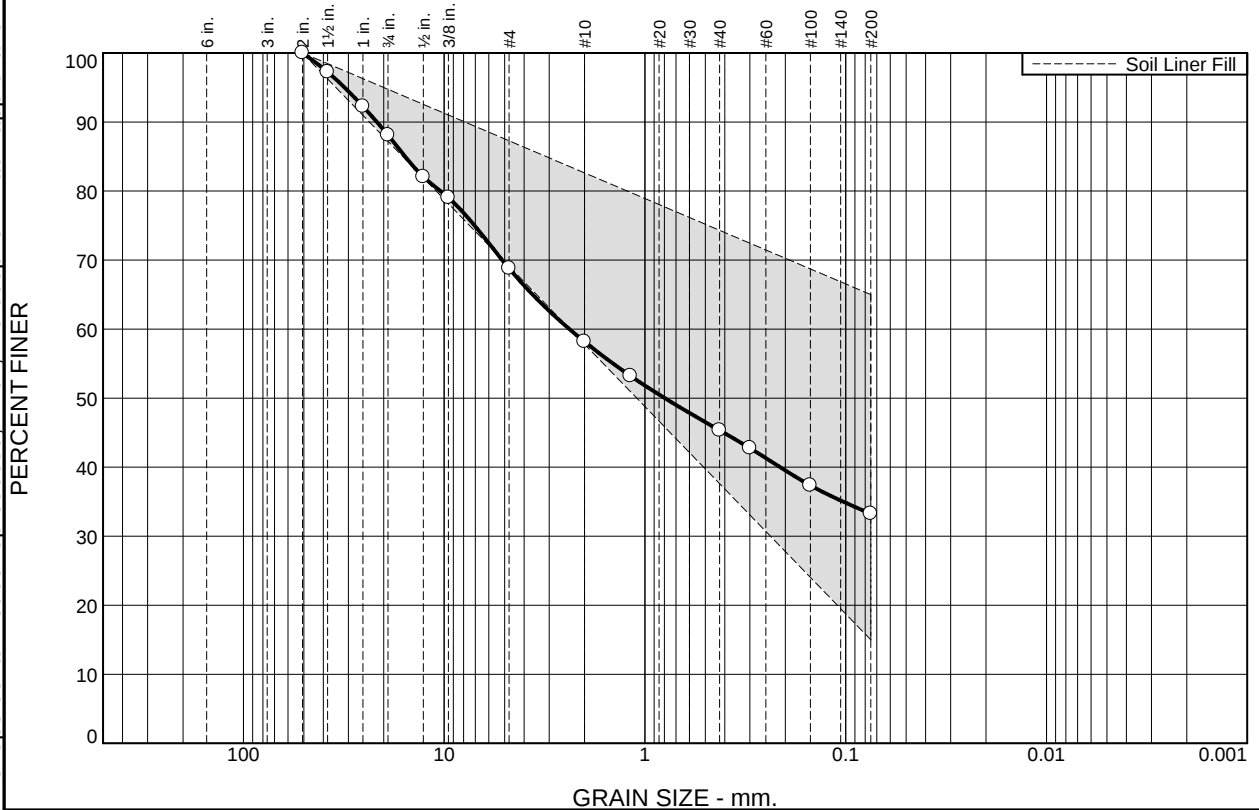
Flexible Wall Hydraulic Conductivity ASTM D5084

Client: Cripple Creek and Victor Gold Mines	Lab Sample No.: SLF-35-C
Project: VLF2 PH3	
Project No.: 475.0106.056	Location: Upper SLF Dump 1 Stockpile
Phase: A	Elevation/Depth: Stockpile
Requested By: TW	Tested By: TW
Test Started: 4/18/2023	Checked By: TW
Test Finished: 4/26/2023	Sample Description: Brown clayey sand with 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)	600.52		594.10
Dry Soil + Tare (g)	524.85		520.00
Tare (g)	0.00		119.50
Wt. of Water (g)	75.67		74.10
Dry Soil (g)	524.85		400.50
Moisture Content (%)	14.4		18.5
Sample Volume (ft ³)	0.01060	0.01059	
Dry Density (pcf)	109.2	109.1	
Wet Density (pcf)	124.9	130.4	
Saturation (%)	74.2	100.0	
Percent Compaction	95.0	95.0	
Height (in)	3.018	3.018	
Diameter (in)	2.780	2.781	
Area (in ²)	6.070	6.073	
Est. Moisture Content after Consolidation (%)		19.5%	
Est. Void Ratio after Consolidation		0.516	
Specific Gravity*	2.65		
*Specific gravity is assumed	Maximum Dry Density (pcf):		114.9
Maximum Dry Density:	Initial Remolded Dry Density (pcf):		109.2
ASTM D 698	Initial Percent Compaction:		95%
	Initial Void Ratio:		0.515
	Optimum Moisture Content(%):		14.4
	Initial Water Content (%):		14.4
	Confining Pressure (psi):		5.0
	Hydraulic Conductivity, k₂₀ (cm/s):		5.1E-07
	Gradient Range (h/L):		1.1 1.3

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	11.9	19.3	10.6	12.9	12.0	33.3	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2	100.0	100.0	
1.5	97.2		
1	92.3		
.75	88.1		
0.5	82.1		
.375	79.0		
#4	68.8		
#10	58.2		
#16	53.2		
#40	45.3		
#50	42.8		
#100	37.4		
#200	33.3	15.0 - 65.0	

* Soil Liner Fill

Material Description

Brown clayey sand with gravel

Atterberg Limits

PL= 17

LL= 42

PI= 25

Coefficients

D₉₀= 21.6211

D₈₅= 15.6587

D₆₀= 2.3773

D₅₀= 0.7962

D₃₀=

D₁₅=

D₁₀=

C_u=

C_c=

Classification

USCS= SC

AASHTO= A-2-7(3)

Remarks

Location: Upper Dump 1 Stockpile
Sample Number: SLF-36-C

Date: 04/12/2022



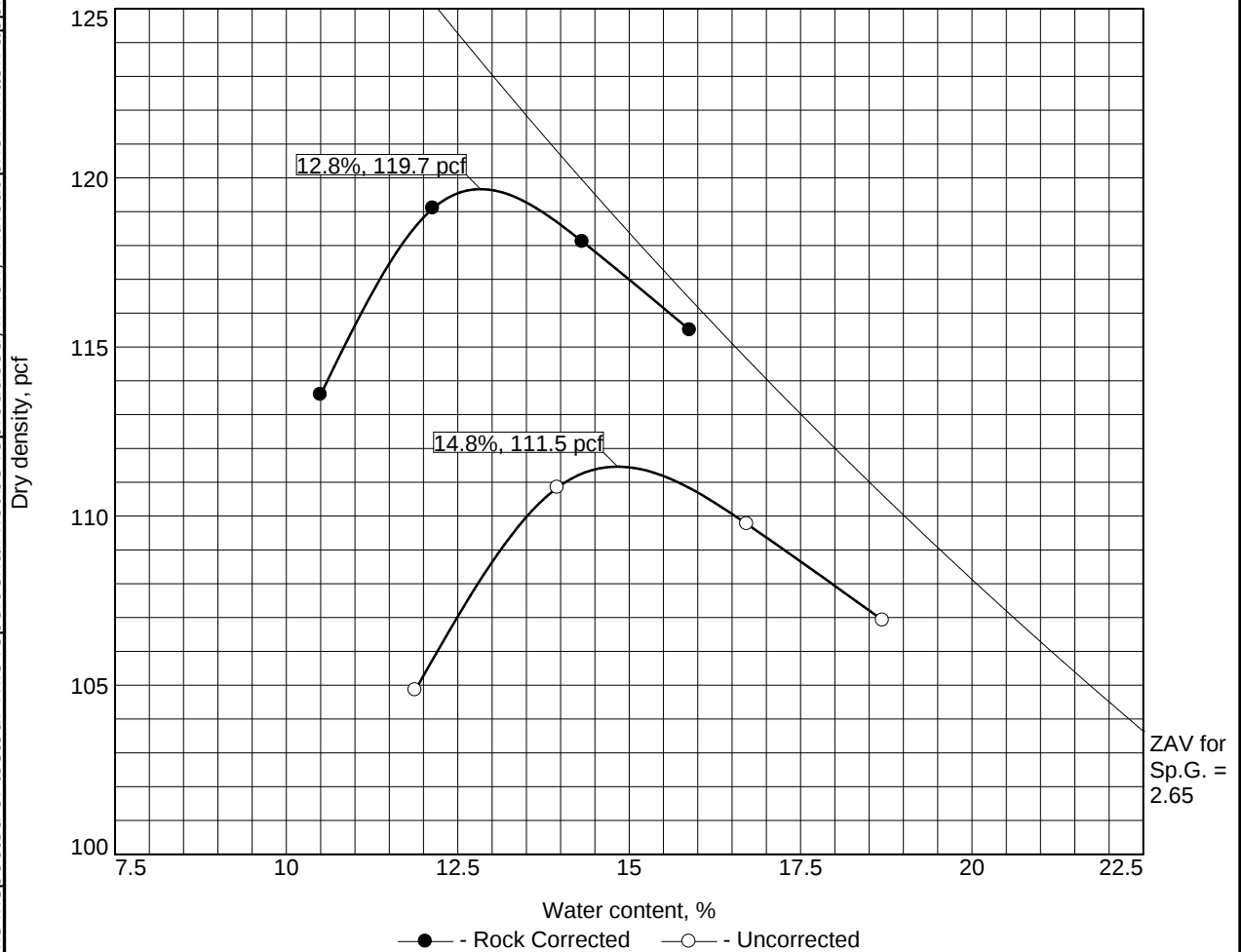
Client: Newmont-Cripple Creek & Victor Goldmine
Project: VLF2 Phase 3

Project No: 475.0106.056

Figure SLF-36-C

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(3)		2.65	42	25	21.0	33.3

ROCK CORRECTED TEST RESULTS		UNCORRECTED	MATERIAL DESCRIPTION
Maximum dry density = 119.7 pcf		111.5 pcf	Brown Clayey Sand With Gravel
Optimum moisture = 12.8 %		14.8 %	

Project No. 475.0106.056 Client: Newmont-Cripple Creek & Victor Goldmine			Remarks:
Project: VLF2 Phase 3			
Date: 04/12/23			
Location: Upper Dump 1 Stockpile Sample Number: SLF-36-C			
NewFields			

Figure SLF-36-C

Figure SLF-36-C

Tested By: DK Checked By: TW

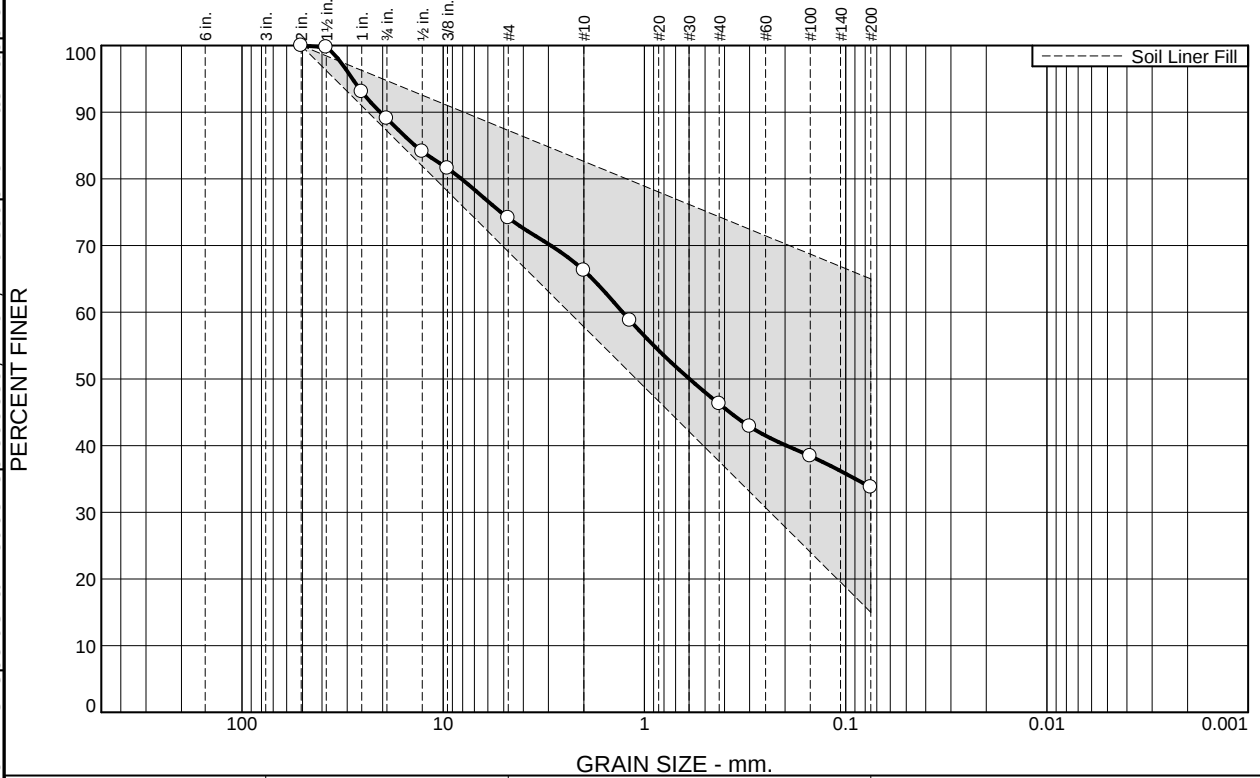
Flexible Wall Hydraulic Conductivity ASTM D5084

Client: Cripple Creek and Victor Gold Mines	Lab Sample No.: SLF-36-C
Project: VLF2 PH3	
Project No.: 475.0106.056	Location: Upper SLF Dump 1 Stockpile
Phase: A	Elevation/Depth: Stockpile
Requested By: TW	Tested By: TW
Test Started: 4/29/2023	Checked By: TW
Test Finished: 5/9/2023	Sample Description: Brown clayey sand with 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)	616.7		588.30
Dry Soil + Tare (g)	546.40		519.00
Tare (g)	0.00		119.50
Wt. of Water (g)	70.30		69.30
Dry Soil (g)	546.40		399.50
Moisture Content (%)	12.9		17.3
Sample Volume (ft ³)	0.01060	0.01055	
Dry Density (pcf)	113.7	113.9	
Wet Density (pcf)	128.3	133.5	
Saturation (%)	74.7	100.0	
Percent Compaction	95.0	95.2	
Height (in)	3.018	3.014	
Diameter (in)	2.780	2.777	
Area (in ²)	6.070	6.056	
Est. Moisture Content after Consolidation (%)		17.0%	
Est. Void Ratio after Consolidation		0.450	
Specific Gravity*	2.65		
*Specific gravity is assumed	Maximum Dry Density (pcf):		119.7
Maximum Dry Density:	Initial Remolded Dry Density (pcf):		113.7
ASTM D 698	Initial Percent Compaction:		95%
	Initial Void Ratio:		0.454
	Optimum Moisture Content(%):		12.8
	Initial Water Content (%):		12.9
	Confining Pressure (psi):		5.0
	Hydraulic Conductivity, k₂₀ (cm/s):		2.3E-07
	Gradient Range (h/L):		1.2 1.3

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	11.0	14.8	7.9	20.0	12.6	33.7	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2	100.0	100.0	
1.5	99.7		
1	93.1		
.75	89.0		
0.5	84.1		
.375	81.6		
#4	74.2		
#10	66.3		
#16	58.8		
#40	46.3		
#50	42.9		
#100	38.4		
#200	33.7	15.0 - 65.0	

* Soil Liner Fill

Material Description

Brown Clayey Sand With Gravel

Atterberg Limits

PL= 18 LL= 44 PI= 26

Coefficients

D₉₀= 20.5331 D₈₅= 13.7859 D₆₀= 1.2828
D₅₀= 0.5971 D₃₀= D₁₅=
D₁₀= C_u= C_c=

Classification

USCS= SC AASHTO= A-2-7(3)

Remarks

Location: Lower Dump 1 Stockpile (JHL)
Sample Number: SLF-37-C

Date: 4-27-23

NewFields

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

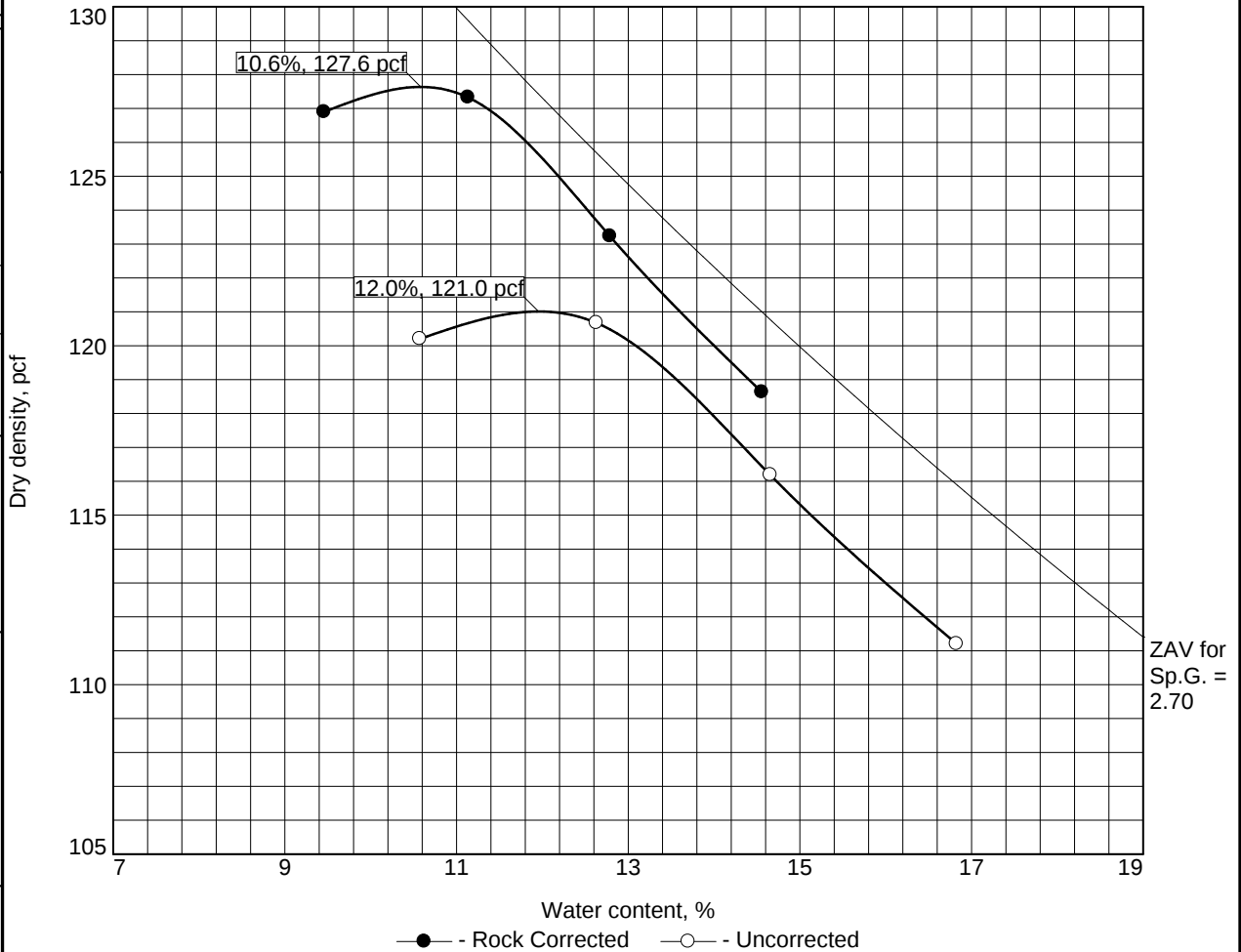
Project No: 475.0106.056

Figure SLF-37-C

Tested By: DK

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-SM	A-2-4(0)		2.65	24	6	18.4	33.7

ROCK CORRECTED TEST RESULTS	UNCORRECTED	MATERIAL DESCRIPTION
Maximum dry density = 127.6 pcf	121.0 pcf	Brown Clayey Sand With Gravel
Optimum moisture = 10.6 %	12.0 %	

Project No. 475.0106.056 Client: Newmont-Cripple Creek & Victor Goldmine	Remarks:
Project: VLF2 Phase 3	
Date: 04/27/23	
Location: Lower Dump 1 Stockpile (JHL) Sample Number: SLF-37-C	

NewFields

Figure SLF-37-C

Tested By: DK Checked By: TW

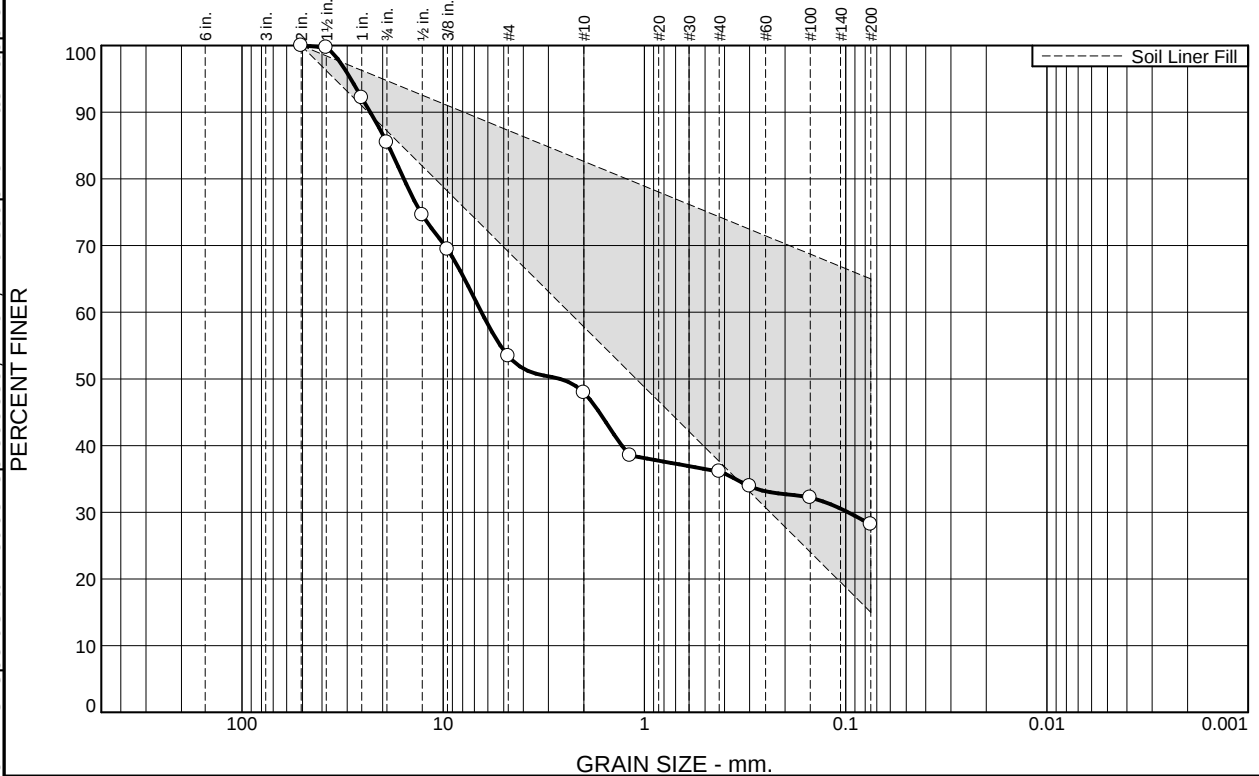
Flexible Wall Hydraulic Conductivity ASTM D5084

Client: Cripple Creek and Victor Gold Mines	Lab Sample No.: SLF-37-C
Project: VLF2 PH3	
Project No.: 475.0106.056	Location: Lower SLF Dump 1 Stockpile (JHL)
Phase: A	Elevation/Depth: Stockpile
Requested By: TW	Tested By: TW
Test Started: 4/29/2023	Checked By: TW
Test Finished: 5/9/2023	Sample Description: Brown clayey sand with 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)	644		600.80
Dry Soil + Tare (g)	583.46		543.90
Tare (g)	0.00		119.50
Wt. of Water (g)	60.54		56.90
Dry Soil (g)	583.46		424.40
Moisture Content (%)	10.4		13.4
Sample Volume (ft ³)	0.01063	0.01061	
Dry Density (pcf)	120.8	120.8	
Wet Density (pcf)	133.6	137.7	
Saturation (%)	76.1	100.0	
Percent Compaction	94.7	94.7	
Height (in)	3.018	3.018	
Diameter (in)	2.783	2.783	
Area (in ²)	6.084	6.082	
Est. Moisture Content after Consolidation (%)		13.9%	
Est. Void Ratio after Consolidation		0.369	
Specific Gravity*	2.65		
*Specific gravity is assumed	Maximum Dry Density (pcf):		127.6
Maximum Dry Density:	Initial Remolded Dry Density (pcf):		120.8
ASTM D 698	Initial Percent Compaction:		95%
	Initial Void Ratio:		0.369
	Optimum Moisture Content(%):		10.6
	Initial Water Content (%):		10.4
	Confining Pressure (psi):		5.0
	Hydraulic Conductivity, k₂₀ (cm/s):		6.3E-07
	Gradient Range (h/L):		1.0 1.3

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	14.5	32.1	5.5	11.8	7.9	28.2	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2	100.0	100.0	
1.5	99.7		
1	92.2		
.75	85.5		
0.5	74.6		
.375	69.4		
#4	53.4		
#10	47.9		
#16	38.5		
#40	36.1		
#50	33.9		
#100	32.2		
#200	28.2	15.0 - 65.0	

* Soil Liner Fill

Material Description

Red-Brown clayey gravel with sand

Atterberg Limits

PL= 17 LL= 36 PI= 9

Coefficients

D₉₀= 23.0583 D₈₅= 18.7208 D₆₀= 6.4544
D₅₀= 2.6234 D₃₀= 0.0973 D₁₅=
D₁₀= C_u= C_c=

Classification

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

Remarks

Location: Lower Dump 1 Stockpile (JHL)
Sample Number: SLF-38-C

Date: 5/5/2023

NewFields

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

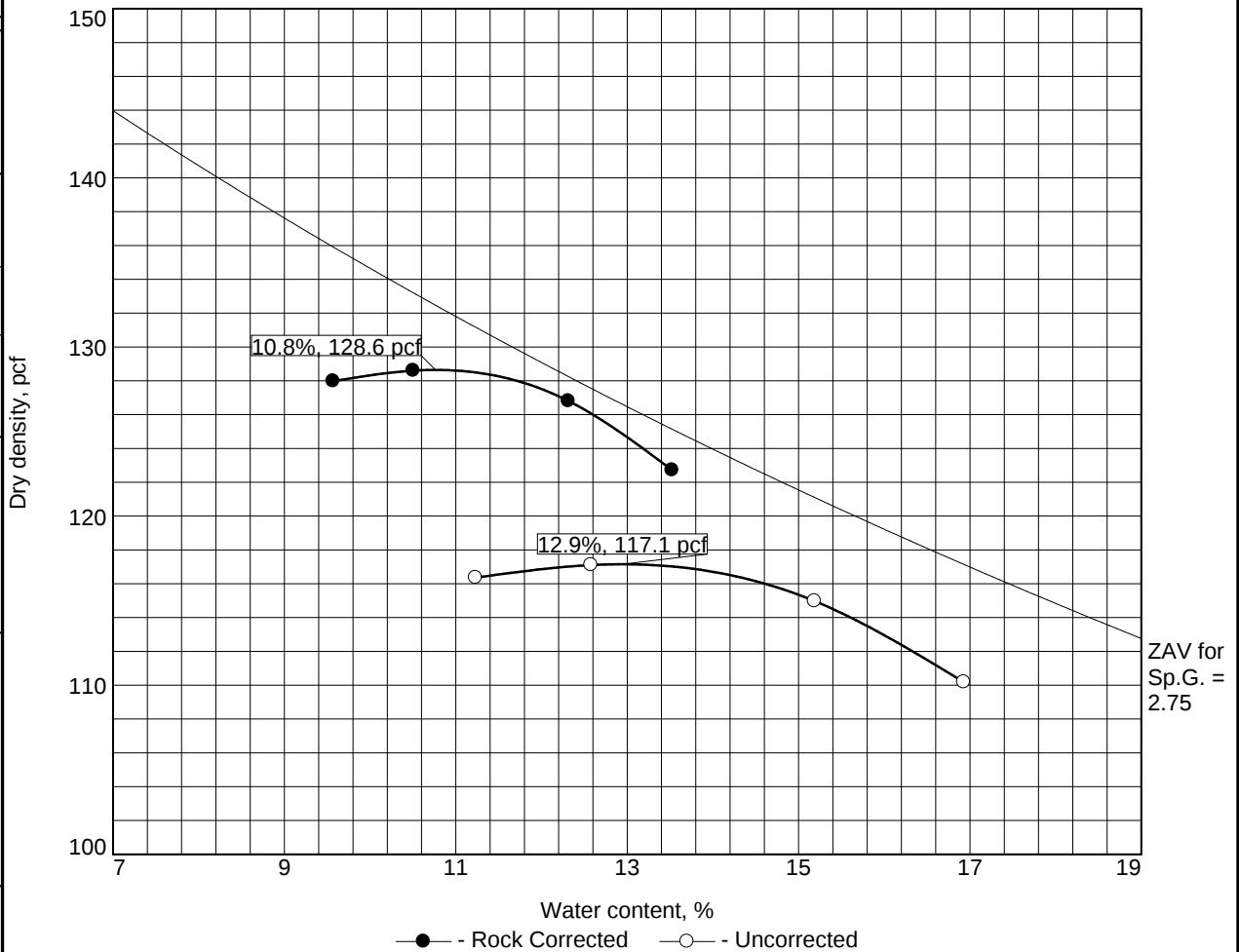
Project No: 475.0106.056

Figure SLF-38-C

Tested By: DK

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-2-4(0)		2.65	26	9	30.6	28.2

ROCK CORRECTED TEST RESULTS		UNCORRECTED	MATERIAL DESCRIPTION
Maximum dry density = 128.6 pcf		117.1 pcf	Red-Brown Clayey sand With Gravel
Optimum moisture = 10.8 %		12.9 %	

Project No. 475.0106.056 Client: Newmont-Cripple Creek & Victor Goldmine		Remarks:
Project: VLF2 Phase 3		
Date: 05/05/23		
Location: Lower Dump 1 Stockpile (JHL) Sample Number: SLF-38-C		
NewFields		Figure SLF-38-C

Tested By: DK Checked By: TW

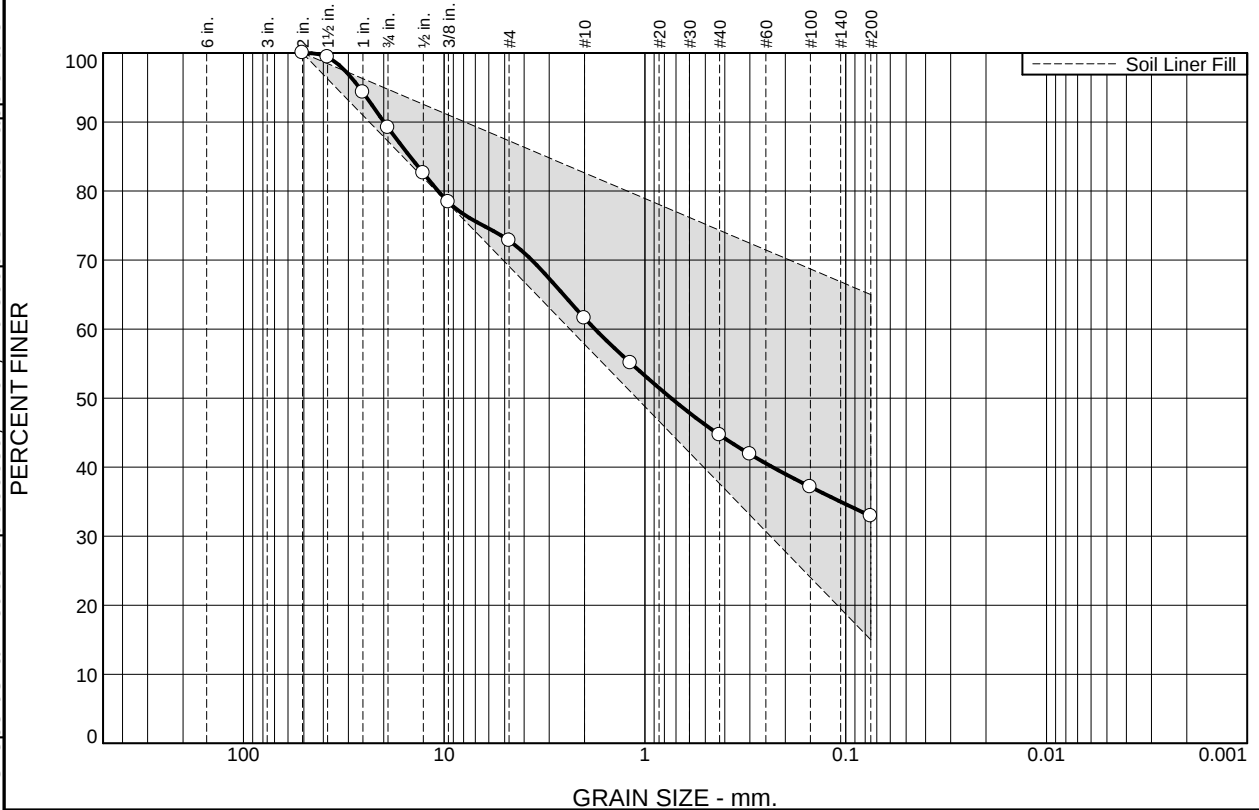
Flexible Wall Hydraulic Conductivity ASTM D5084

Client: Cripple Creek and Victor Gold Mines	Lab Sample No.: SLF-38-C
Project: VLF2 PH3	Field Sample No.: SLF-38-C
Project No.: 475.0106.056	Location: Lower SLF Dump 1 Stockpile (JHL)
Phase: A	Elevation/Depth: Stockpile
Requested By: TW	Tested By: TW
Test Started: 5/31/2023	Checked By: TW
Test Finished: 6/7/2023	Sample Description: Brown clayey sand with 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)	648.9		604.20
Dry Soil + Tare (g)	585.96		546.00
Tare (g)	0.00		119.50
Wt. of Water (g)	62.94		58.20
Dry Soil (g)	585.96		426.50
Moisture Content (%)	10.7		13.6
Sample Volume (ft ³)	0.01062	0.01053	
Dry Density (pcf)	121.3	122.5	
Wet Density (pcf)	138.0	138.7	
Saturation (%)	100.0%	100.0	
Percent Compaction	94.3	95.2	
Height (in)	3.008	2.998	
Diameter (in)	2.777	2.768	
Area (in ²)	6.057	6.016	
Est. Moisture Content after Consolidation (%)		13.2%	
Est. Void Ratio after Consolidation		0.351	
Specific Gravity*	2.65		
*Specific gravity is assumed	Maximum Dry Density (pcf):		128.6
Maximum Dry Density:	Initial Remolded Dry Density (pcf):		121.2
ASTM D 698	Initial Percent Compaction:		94%
	Initial Void Ratio:		0.364
	Optimum Moisture Content(%):		10.8
	Initial Water Content (%):		10.7
	Confining Pressure (psi):		20.0
	Hydraulic Conductivity, k₂₀ (cm/s):		8.6E-07
	Gradient Range (h/L):		0.8 1.3

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	10.8	16.4	11.2	16.9	11.8	32.9	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2	100.0	100.0	
1.5	99.4		
1	94.3		
.75	89.2		
0.5	82.6		
.375	78.4		
#4	72.8		
#10	61.6		
#16	55.1		
#40	44.7		
#50	41.9		
#100	37.1		
#200	32.9	15.0 - 65.0	

* Soil Liner Fill

Material Description

Brown clayey sand with gravel

Atterberg Limits

PL= 15

LL= 34

PI= 19

Coefficients

D₉₀= 19.9544

D₈₅= 14.7827

D₆₀= 1.7730

D₅₀= 0.7408

D₃₀=

D₁₅=

D₁₀=

C_u=

C_c=

Classification

USCS= SC

AASHTO= A-2-6(2)

Remarks

Location: Upper Dump 1 Stockpile
Sample Number: SLF-39-C

Date: 05/05/2023



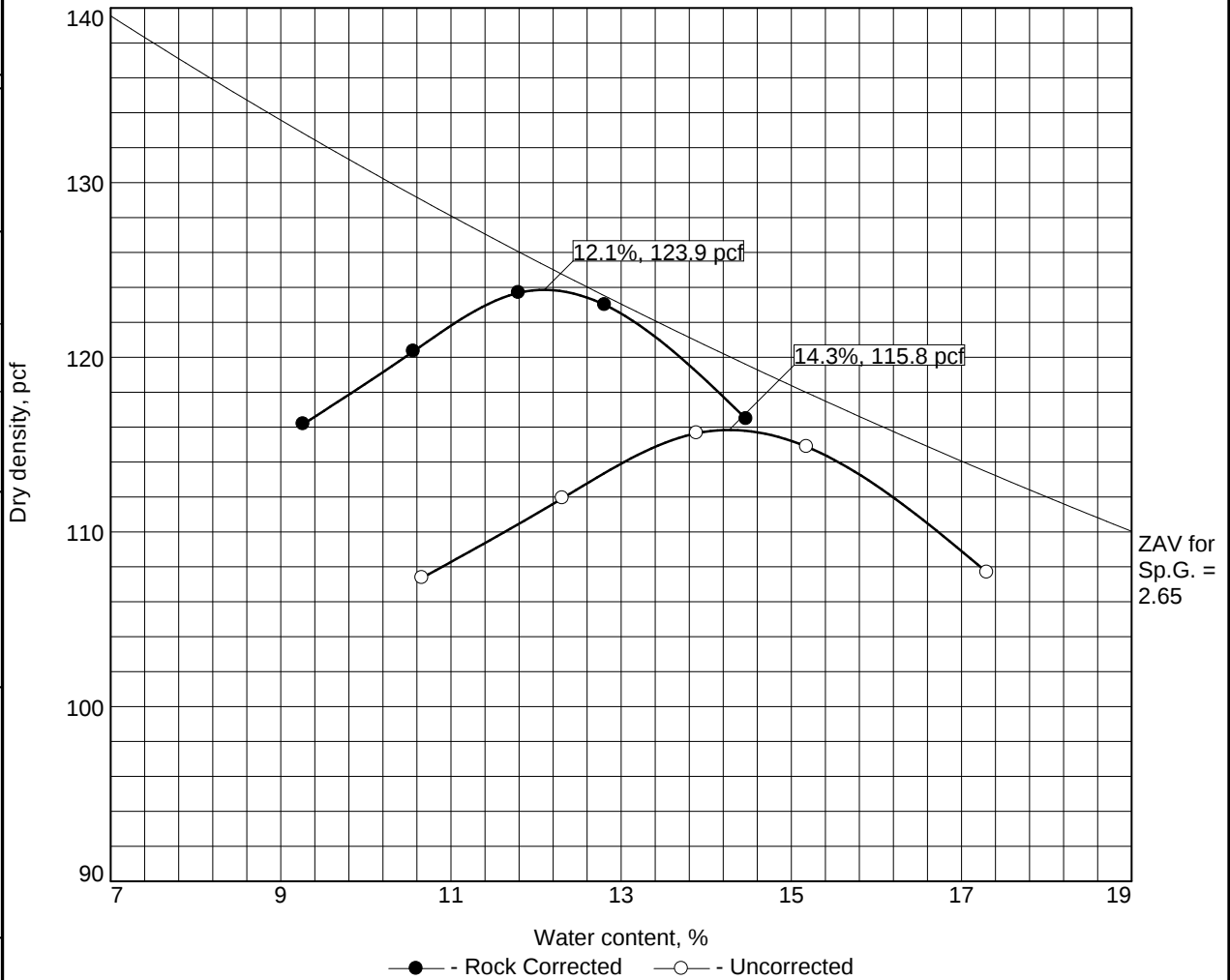
Client: Newmont-Cripple Creek & Victor Goldmine
Project: VLF2 Phase 3

Project No: 475.0106.056

Figure SLF-39-C

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	34	19	21.6	32.9
ROCK CORRECTED TEST RESULTS			UNCORRECTED		MATERIAL DESCRIPTION			
Maximum dry density = 123.9 pcf			115.8 pcf		Brown Clayey Sand with Gravel			
Optimum moisture = 12.1 %			14.3 %					
Project No. 475.0106.056 Client: Newmont-Cripple Creek & Victor Goldmine					Remarks:			
Project: VLF2 Phase 3								
Date:								
Location: Upper Dump 1 Stockpile Sample Number: SLF-39-C								
NewFields					Figure SLF-39-C			

Flexible Wall Hydraulic Conductivity ASTM D5084

Client: Cripple Creek and Victor Gold Mines	Lab Sample No.: SLF-39-C
Project: VLF2 PH3	
Project No.: 475.0106.056	Location: Upper SLF Dump 1 Stockpile
Phase: A	Elevation/Depth: Stockpile
Requested By: TW	Tested By: TW
Test Started: 6/12/2023	Checked By: TW
Test Finished: 6/23/2023	Sample Description: Brown clayey sand with 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)	634.61		588.40
Dry Soil + Tare (g)	566.07		526.00
Tare (g)	0.00		119.50
Wt. of Water (g)	68.54		62.40
Dry Soil (g)	566.07		406.50
Moisture Content (%)	12.1		15.4
Sample Volume (ft ³)	0.01058	0.01057	
Dry Density (pcf)	118.0	118.0	
Wet Density (pcf)	132.3	135.9	
Saturation (%)	79.9	100.0	
Percent Compaction	95.2	95.2	
Height (in)	3.018	3.019	
Diameter (in)	2.777	2.777	
Area (in ²)	6.055	6.058	
Est. Moisture Content after Consolidation (%)		15.2%	
Est. Void Ratio after Consolidation		0.403	
Specific Gravity*	2.65		
*Specific gravity is assumed	Maximum Dry Density (pcf):		123.9
Maximum Dry Density:	Initial Remolded Dry Density (pcf):		118.0
ASTM D 698	Initial Percent Compaction:		95%
	Initial Void Ratio:		0.401
	Optimum Moisture Content(%):		12.1
	Initial Water Content (%):		12.1
	Confining Pressure (psi):		5.0
	Hydraulic Conductivity, k₂₀ (cm/s):		1.6E-07
	Gradient Range (h/L):		1.1 1.3

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	15.3	17.2	11.9	10.8	21.6	23.2	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2	100.0	100.0	
1.5	96.8		
1	90.0		
.75	84.7		
0.5	78.5		
.375	74.8		
#4	67.5		
#10	55.6		
#16	51.2		
#40	44.8		
#50	33.8		
#100	27.2		
#200	23.2	15.0 - 65.0	

* Soil Liner Fill

Material Description

Brown clayey sand with gravel

Atterberg Limits

PL= 17 LL= 37 PI= 20

Coefficients

D₉₀= 25.3890 D₈₅= 19.3581 D₆₀= 2.7655
D₅₀= 0.9953 D₃₀= 0.2478 D₁₅=
D₁₀= C_u= C_c=

Classification

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

Remarks

Location: Upper Dump 1 Stockpile
Sample Number: SLF-40-C

Date: 5/8/23

NewFields

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

Project No: 475.0106.056

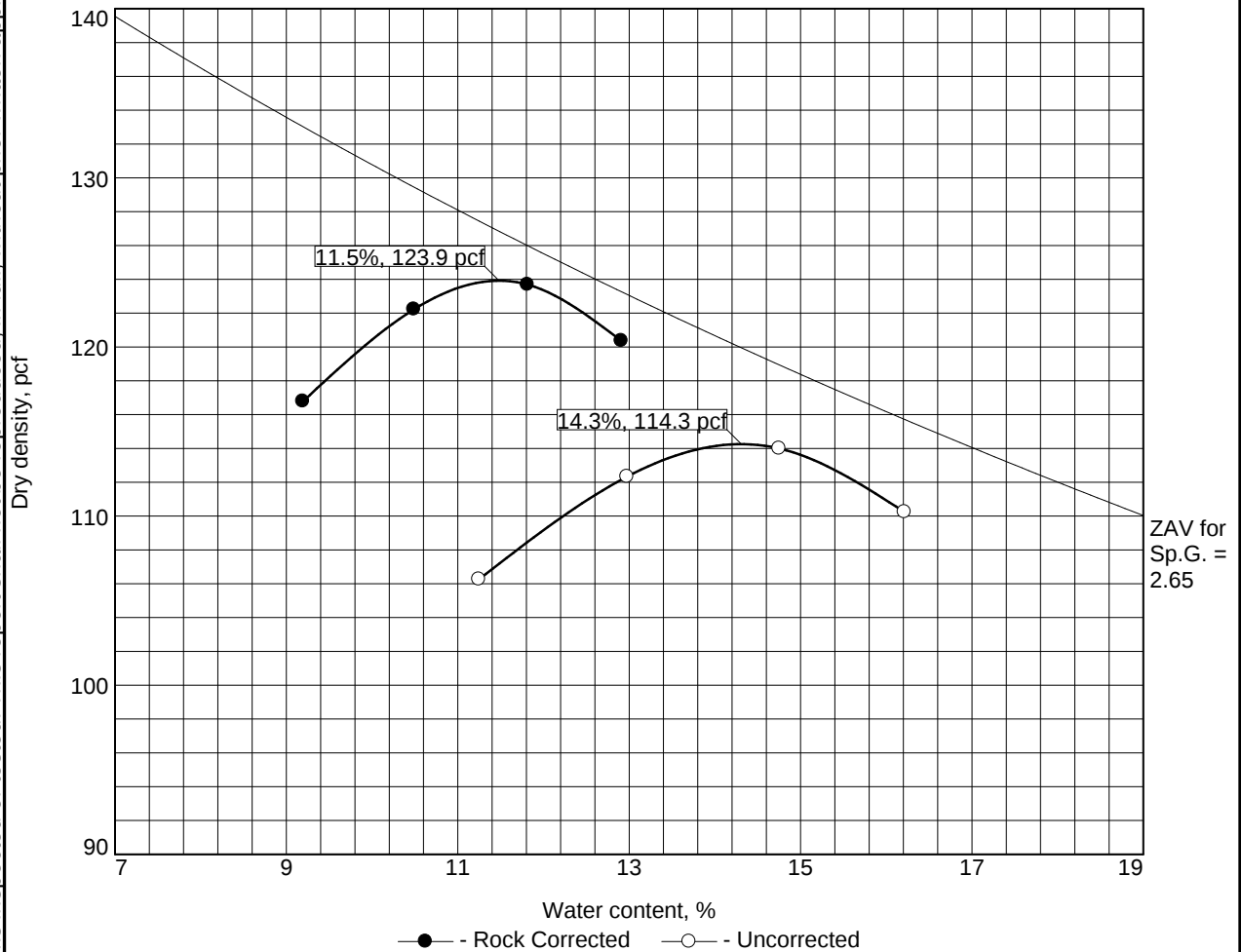
Figure SLF-40-C

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.

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	37	20	25.2	23.2

ROCK CORRECTED TEST RESULTS	UNCORRECTED	MATERIAL DESCRIPTION
Maximum dry density = 123.9 pcf	114.3 pcf	Brown Clayey Sand with Gravel
Optimum moisture = 11.5 %	14.3 %	

Project No. 475.0106.056 Client: Newmont-Cripple Creek & Victor Goldmine		Remarks:
Project: VLF2 Phase 3		
Date: 05/05/23		
Location: Upper Dump 1 Stockpile Sample Number: SLF-40-C		
NewFields		Figure SLF-40-C

Tested By: DK Checked By: TW

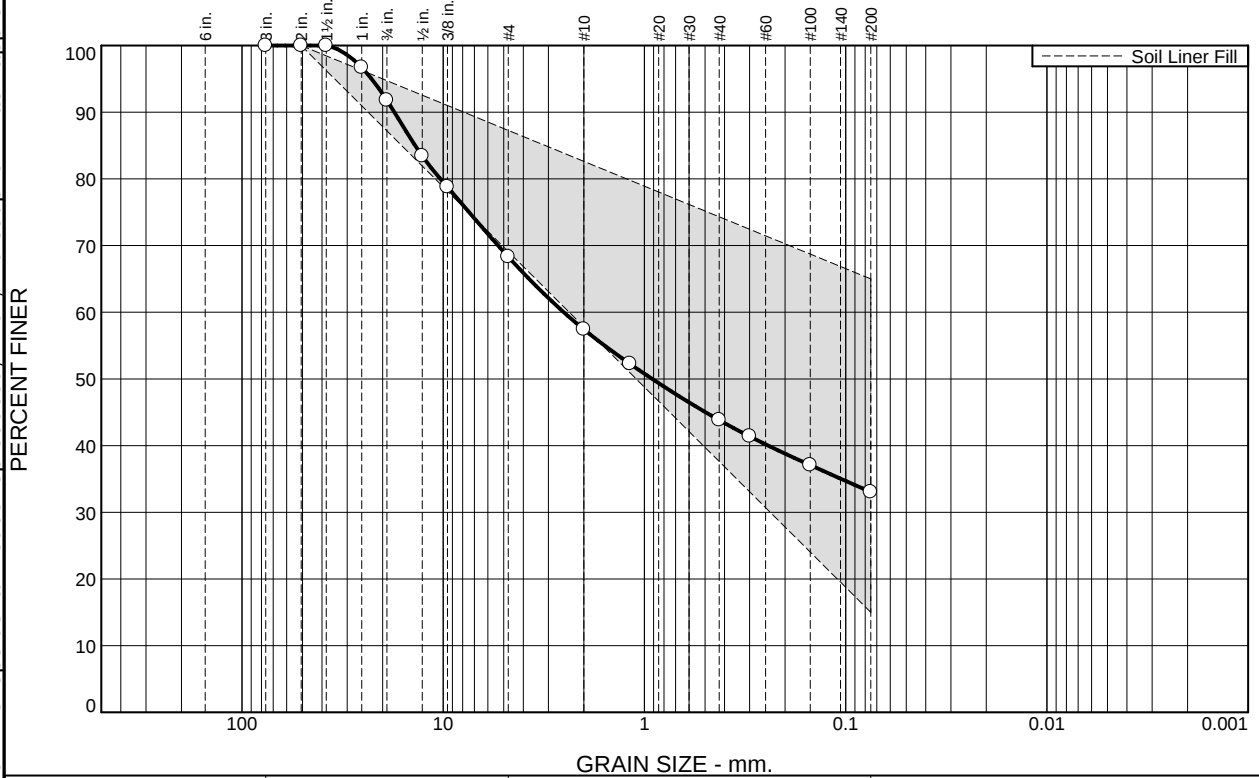
Flexible Wall Hydraulic Conductivity ASTM D5084

Client: Cripple Creek and Victor Gold Mines	Lab Sample No.: SLF-40-C
Project: VLF2 PH3	
Project No.: 475.0106.056	Location: Upper SLF Dump 1 Stockpile
Phase: A	Elevation/Depth: Stockpile
Requested By: TW	Tested By: TW
Test Started: 6/28/2023	Checked By: TW
Test Finished: 7/10/2023	Sample Description: Brown clayey sand with 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)	631.8		594.30
Dry Soil + Tare (g)	566.09		534.00
Tare (g)	0.00		119.50
Wt. of Water (g)	65.71		60.30
Dry Soil (g)	566.09		414.50
Moisture Content (%)	11.6		14.5
Sample Volume (ft ³)	0.01055	0.01052	
Dry Density (pcf)	118.4	118.5	
Wet Density (pcf)	132.0	136.3	
Saturation (%)	76.9	100.0	
Percent Compaction	95.6	95.6	
Height (in)	3.018	3.016	
Diameter (in)	2.773	2.772	
Area (in ²)	6.041	6.035	
Est. Moisture Content after Consolidation (%)		14.9%	
Est. Void Ratio after Consolidation		0.395	
Specific Gravity*	2.65		
*Specific gravity is assumed Maximum Dry Density: ASTM D 698	Maximum Dry Density (pcf):		123.9
	Initial Remolded Dry Density (pcf):		118.4
	Initial Percent Compaction:		96%
	Initial Void Ratio:		0.396
	Optimum Moisture Content(%):		11.5
	Initial Water Content (%):		11.6
	Confining Pressure (psi):		5.0
	Hydraulic Conductivity, k₂₀ (cm/s):		7.7E-07
	Gradient Range (h/L):		0.9 1.3

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	23.5	10.9	13.6	10.8	33.0	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0	100.0	
2	100.0		
1.5	100.0		
1	96.7		
.75	91.8		
0.5	83.4	15.0 - 65.0	
.375	78.8		
#4	68.3		
#10	57.4		
#16	52.3		
#40	43.8		
#50	41.4		
#100	37.1		
#200	33.0		

* Soil Liner Fill

Material Description

Brown clayey sand with gravel

Atterberg Limits

PL= 16 LL= 39 PI= 23

Coefficients

D₉₀= 17.4728 D₈₅= 13.7811 D₆₀= 2.5159
D₅₀= 0.9142 D₃₀= C_u=
D₁₀= C_c=

Classification

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

Remarks

Location: Lower Dump 1 Stockpile (JHL)
Sample Number: SLF-41-C

Date: 5/16/23



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

Project No: 475.0106.056

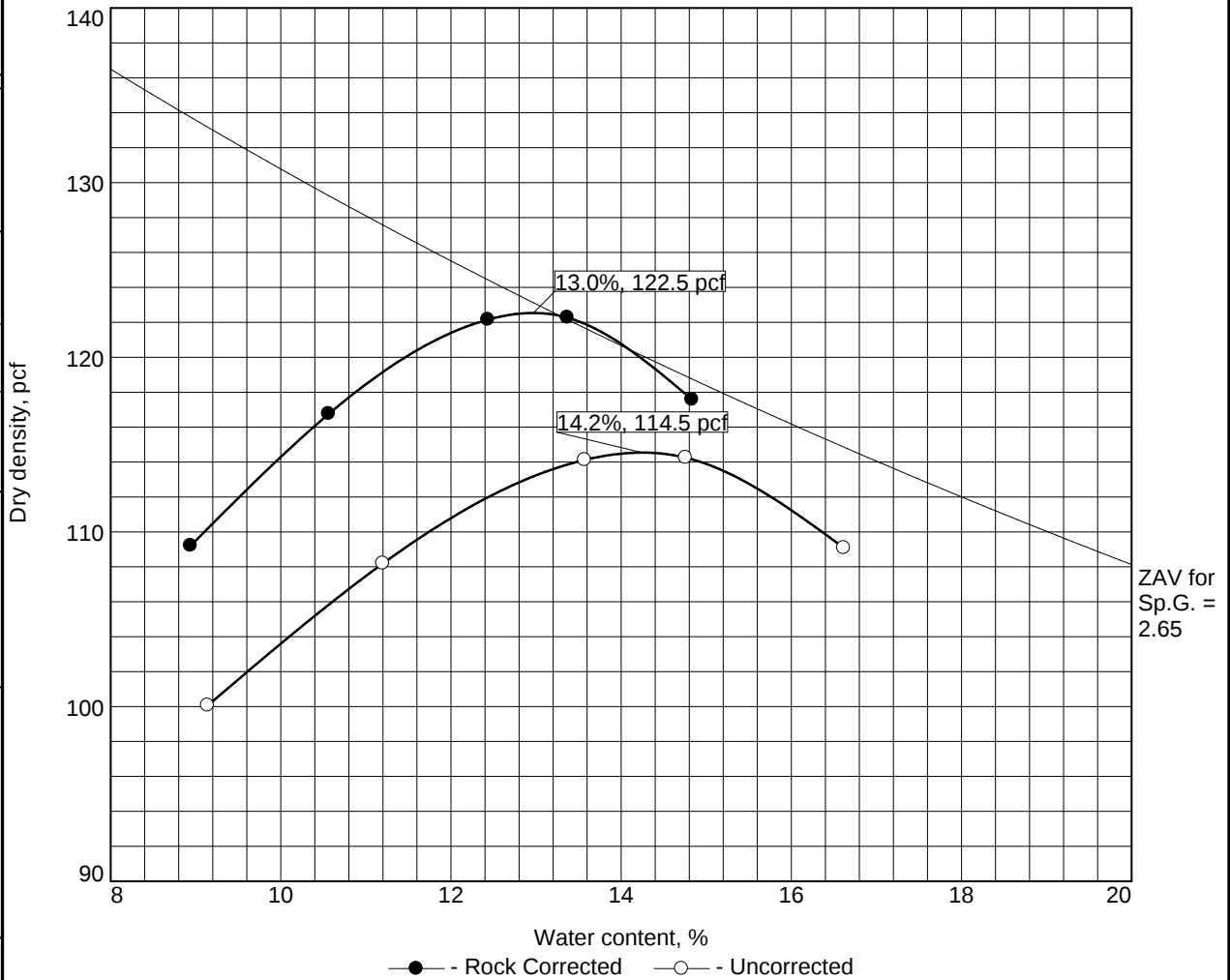
Figure SLF-41-C

Tested By: HW

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.

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	39	23	21.2	33.0
ROCK CORRECTED TEST RESULTS			UNCORRECTED		MATERIAL DESCRIPTION			
Maximum dry density = 122.5 pcf			114.5 pcf		Brown clayey sand with gravel			
Optimum moisture = 13.0 %			14.2 %					
Project No. 475.0106.056 Client: Newmont-Cripple Creek & Victor Goldmine					Remarks:			
Project: VLF2 Phase 3								
Date:								
Loc.: Lower Dump 1 Stockpile (JHL) Sample No.: SLF-41-C								
NewFields					Figure SLF-41-C			

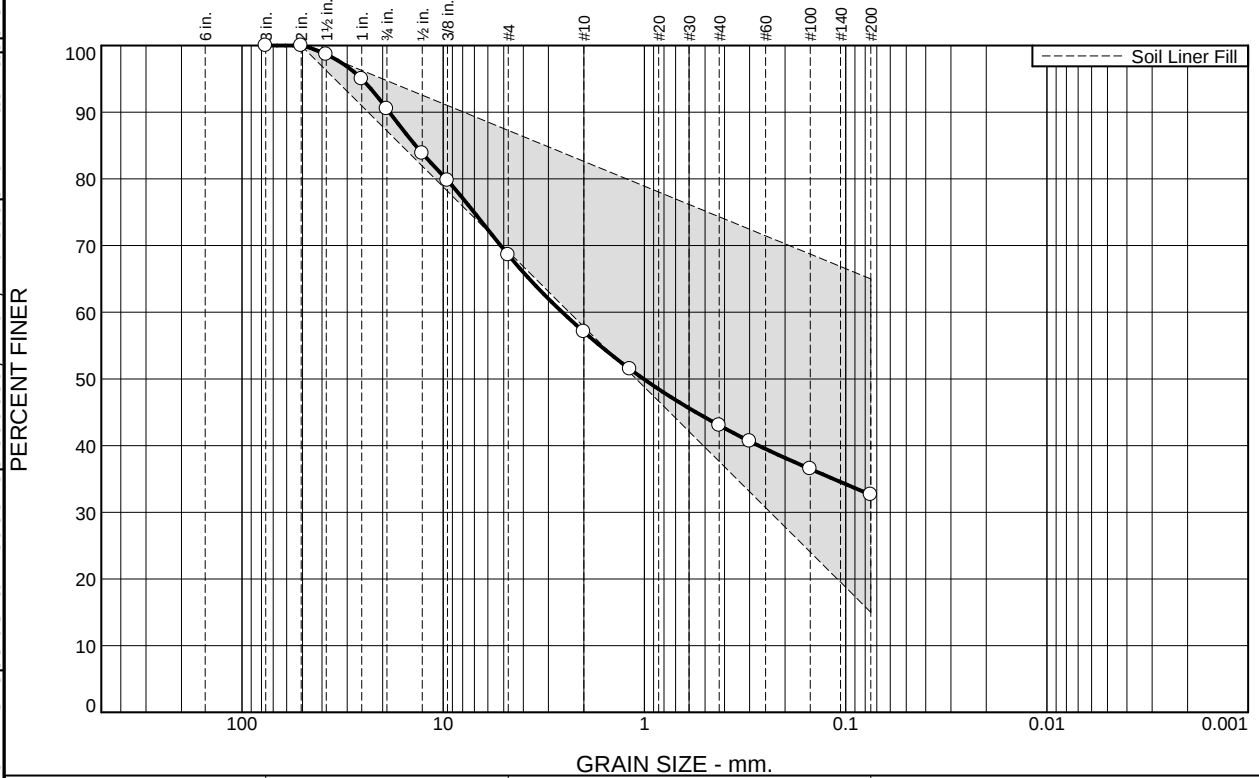
Flexible Wall Hydraulic Conductivity ASTM D5084

Client: Cripple Creek and Victor Gold Mines	Lab Sample No.: SLF-41-C
Project: VLF2 PH3	
Project No.: 475.0106.060	Location: Lower SLF Dump 1 Stockpile (JHL)
Phase: A	Elevation/Depth: Stockpile
Requested By: TW	Tested By: TW
Test Started: 6/28/2023	Checked By: TW
Test Finished: 7/10/2023	Sample Description: Brown clayey sand with 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)	632.4		578.90
Dry Soil + Tare (g)	559.67		517.00
Tare (g)	0.00		119.50
Wt. of Water (g)	72.73		61.90
Dry Soil (g)	559.67		397.50
Moisture Content (%)	13.0		15.6
Sample Volume (ft ³)	0.01058	0.01055	
Dry Density (pcf)	116.7	116.7	
Wet Density (pcf)	131.8	135.2	
Saturation (%)	82.5	100.0	
Percent Compaction	95.2	95.3	
Height (in)	3.018	3.017	
Diameter (in)	2.777	2.775	
Area (in ²)	6.055	6.050	
Est. Moisture Content after Consolidation (%)		15.7%	
Est. Void Ratio after Consolidation		0.416	
Specific Gravity*	2.65		
*Specific gravity is assumed Maximum Dry Density: ASTM D 698	Maximum Dry Density (pcf):		122.5
	Initial Remolded Dry Density (pcf):		116.7
	Initial Percent Compaction:		95%
	Initial Void Ratio:		0.417
	Optimum Moisture Content(%):		13.0
	Initial Water Content (%):		13.0
	Confining Pressure (psi):		5.0
	Hydraulic Conductivity, k₂₀ (cm/s):		5.7E-07
	Gradient Range (h/L):		1.0 1.3

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	9.5	21.9	11.5	14.1	10.4	32.6	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0	100.0	
2	100.0		
1.5	98.7		
1	95.0		
.75	90.5		
0.5	83.8	15.0 - 65.0	
.375	79.8		
#4	68.6		
#10	57.1		
#16	51.5		
#40	43.0		
#50	40.7		
#100	36.5		
#200	32.6		

* Soil Liner Fill

Material Description

Brown Clayey Sand with Gravel

Atterberg Limits

PL= 13 LL= 39 PI= 26

Coefficients

D₉₀= 18.5036 D₈₅= 13.7087 D₆₀= 2.5587
D₅₀= 1.0095 D₃₀= D₁₅=
D₁₀= C_u= C_c=

Classification

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

Remarks

Location: Upper Dump 1 Stockpile
Sample Number: SLF-42-C

Date: 5/16/23

NewFields

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

Project No: 475.0106.056

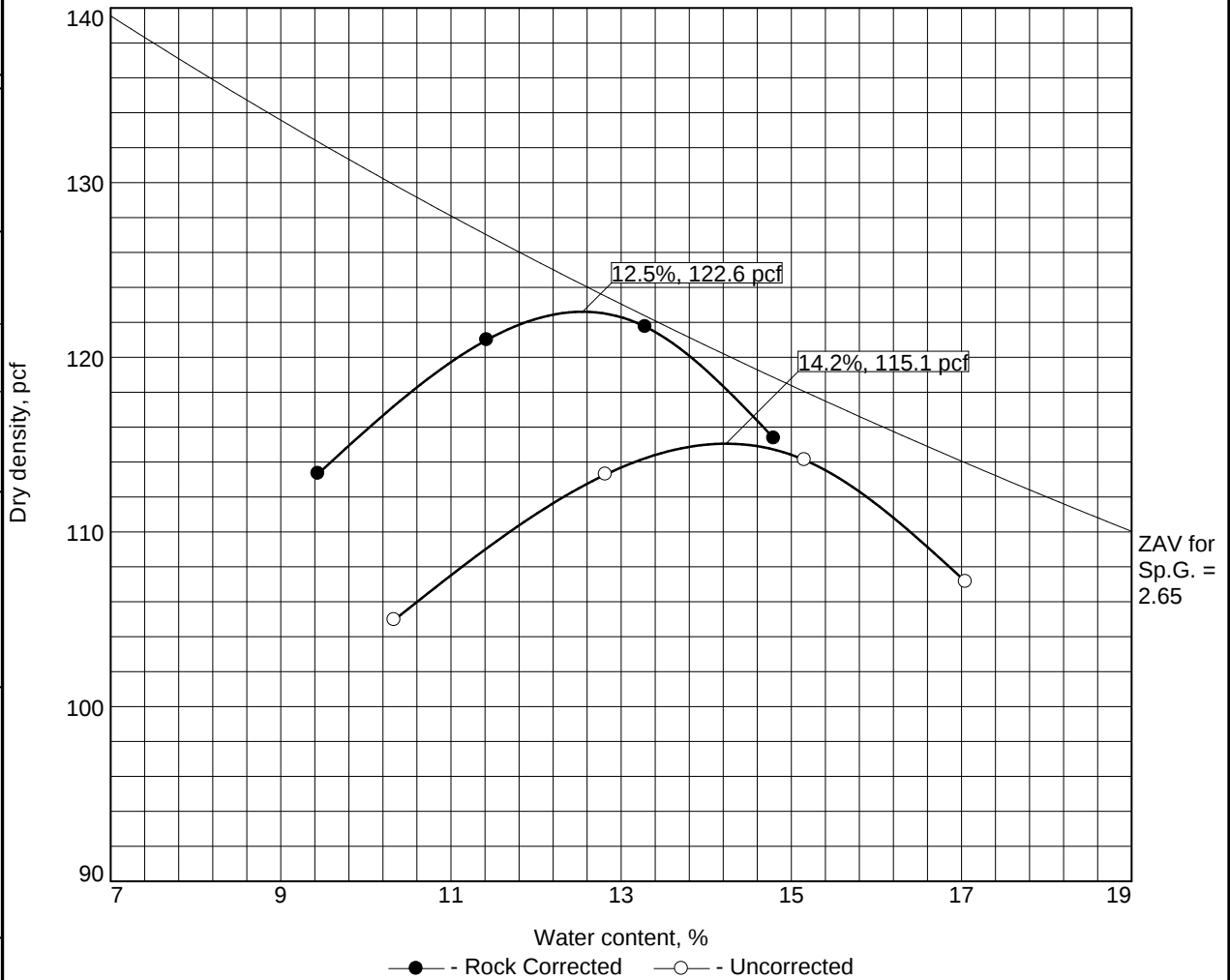
Figure SLF-42-C

Tested By: HW

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.

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)		2.65	39	26	20.2	32.6
ROCK CORRECTED TEST RESULTS			UNCORRECTED		MATERIAL DESCRIPTION			
Maximum dry density = 122.6 pcf			115.1 pcf		Brown Clayey Sand with Gravel			
Optimum moisture = 12.5 %			14.2 %					
Project No. 475.0106.056 Client: Newmont-Cripple Creek & Victor Goldmine					Remarks:			
Project: VLF2 Phase 3								
Date:								
Location: Upper Dump 1 Stockpile			Sample Number: SLF-42-C					
NewFields					Figure SLF-42-C			

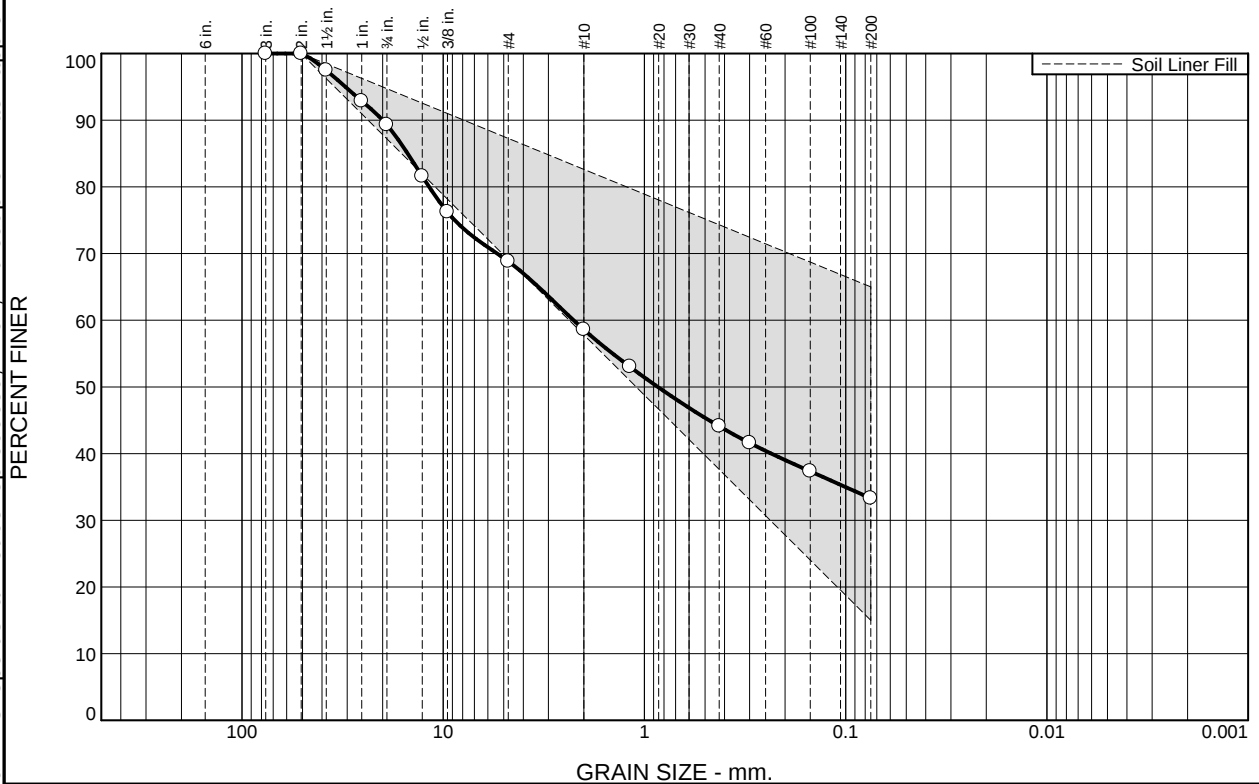
Flexible Wall Hydraulic Conductivity ASTM D5084

Client: Cripple Creek and Victor Gold Mines	Lab Sample No.: SLF-42-C
Project: VLF2 PH3	
Project No.: 475.0106.060	Location: Upper SLF Dump 1 Stockpile
Phase: A	Elevation/Depth: Stockpile
Requested By: TW	Tested By: TW
Test Started: 7/10/2023	Checked By: TW
Test Finished: 7/20/2023	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		
Burrete Area (cm ²)	0.877		
Test Specimen Data	Initial	During k Testing	Final
Wet Soil + Tare (g)	630.1		586.40
Dry Soil + Tare (g)	560.79		520.90
Tare (g)	0.00		119.50
Wt. of Water (g)	69.31		65.50
Dry Soil (g)	560.79		401.40
Moisture Content (%)	12.4		16.3
Sample Volume (ft ³)	0.01078	0.01079	
Dry Density (pcf)	114.6	114.4	
Wet Density (pcf)	128.9	133.6	
Saturation (%)	74.7	100.0	
Percent Compaction	93.4	93.3	
Height (in)	3.069	3.071	
Diameter (in)	2.780	2.782	
Area (in ²)	6.070	6.080	
Est. Moisture Content after Consolidation (%)		16.9%	
Est. Void Ratio after Consolidation		0.448	
Specific Gravity*	2.65		
*Specific gravity is assumed	Maximum Dry Density (pcf):		122.6
Maximum Dry Density:	Initial Remolded Dry Density (pcf):		114.6
ASTM D 698	Initial Percent Compaction:		93%
	Initial Void Ratio:		0.444
	Optimum Moisture Content(%):		12.5
	Initial Water Content (%):		12.4
	Confining Pressure (psi):		5.0
	Hydraulic Conductivity, k₂₀ (cm/s):		1.4E-07
	Gradient Range (h/L):		9.6 10.3

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	10.7	20.5	10.2	14.5	10.8	33.3	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0	100.0	
2	100.0		
1.5	97.5		
1	92.9		
.75	89.3		
0.5	81.6	15.0 - 65.0	
.375	76.2		
#4	68.8		
#10	58.6		
#16	53.0		
#40	44.1		
#50	41.6		
#100	37.3		
#200	33.3		

* Soil Liner Fill

Material Description

Brown Clayey Sand with Gravel

Atterberg Limits

PL= 14 LL= 34 PI= 20

Coefficients

D₉₀= 19.9696 D₈₅= 15.0064 D₆₀= 2.2476
D₅₀= 0.8576 D₃₀= C_u=
D₁₀= C_c=

Classification

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

Remarks

Location: Lower Dump 1 Stockpile (JHL)
Sample Number: SLF-43-C

Date: 5/17/23

NewFields

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

Project No: 475.0106.056

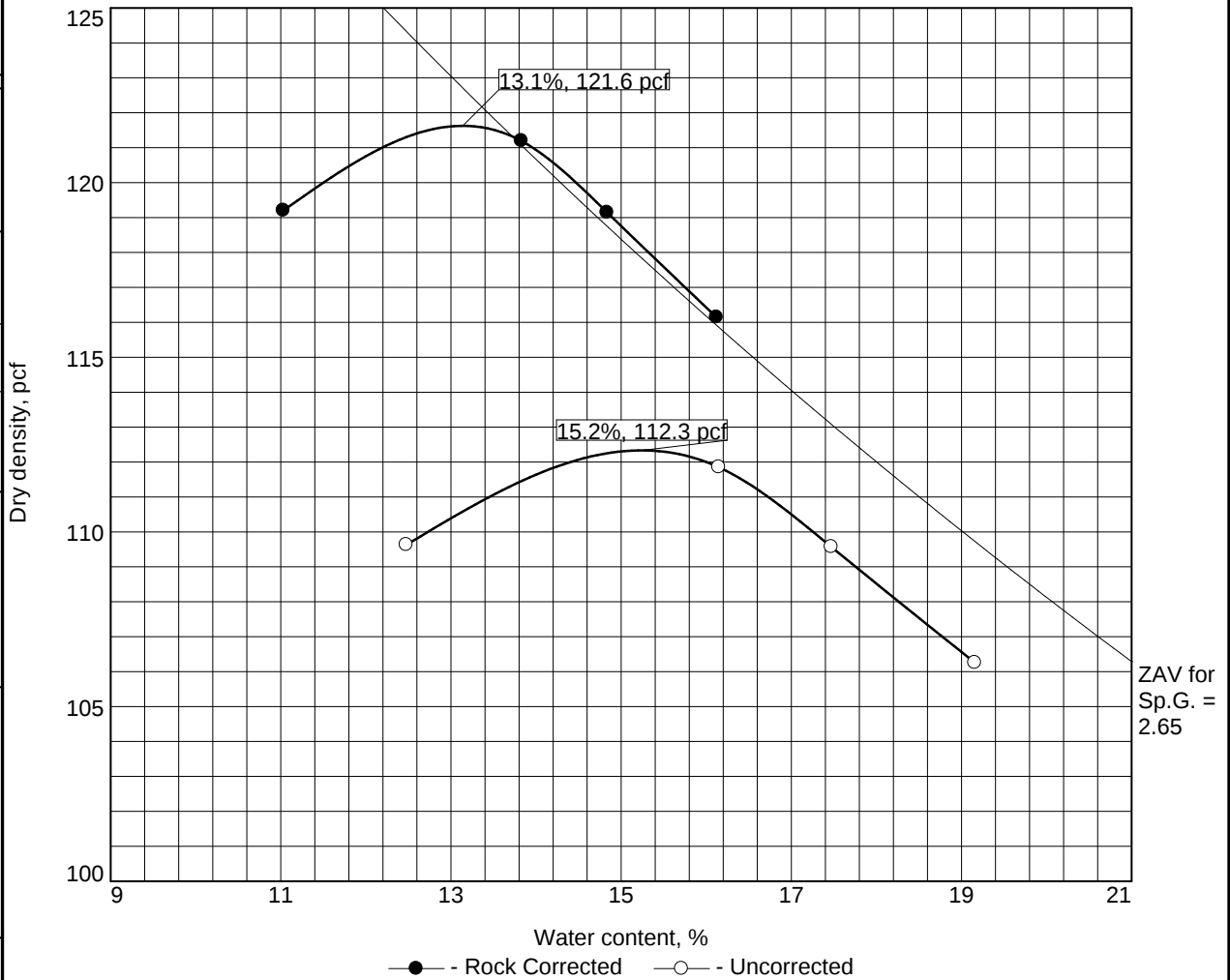
Figure SLF-43-C

Tested By: HW

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.

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	34	20	23.8	33.3
ROCK CORRECTED TEST RESULTS			UNCORRECTED		MATERIAL DESCRIPTION			
Maximum dry density = 121.6 pcf			112.3 pcf		Brown Clayey Sand with Gravel			
Optimum moisture = 13.1 %			15.2 %					
Project No. 475.0106.056 Client: Newmont-Cripple Creek & Victor Goldmine					Remarks:			
Project: VLF2 Phase 3								
Date:								
Loc.: Lower Dump 1 Stockpile (JHL)			Sample No.: SLF-43-C					
NewFields					Figure SLF-43-C			

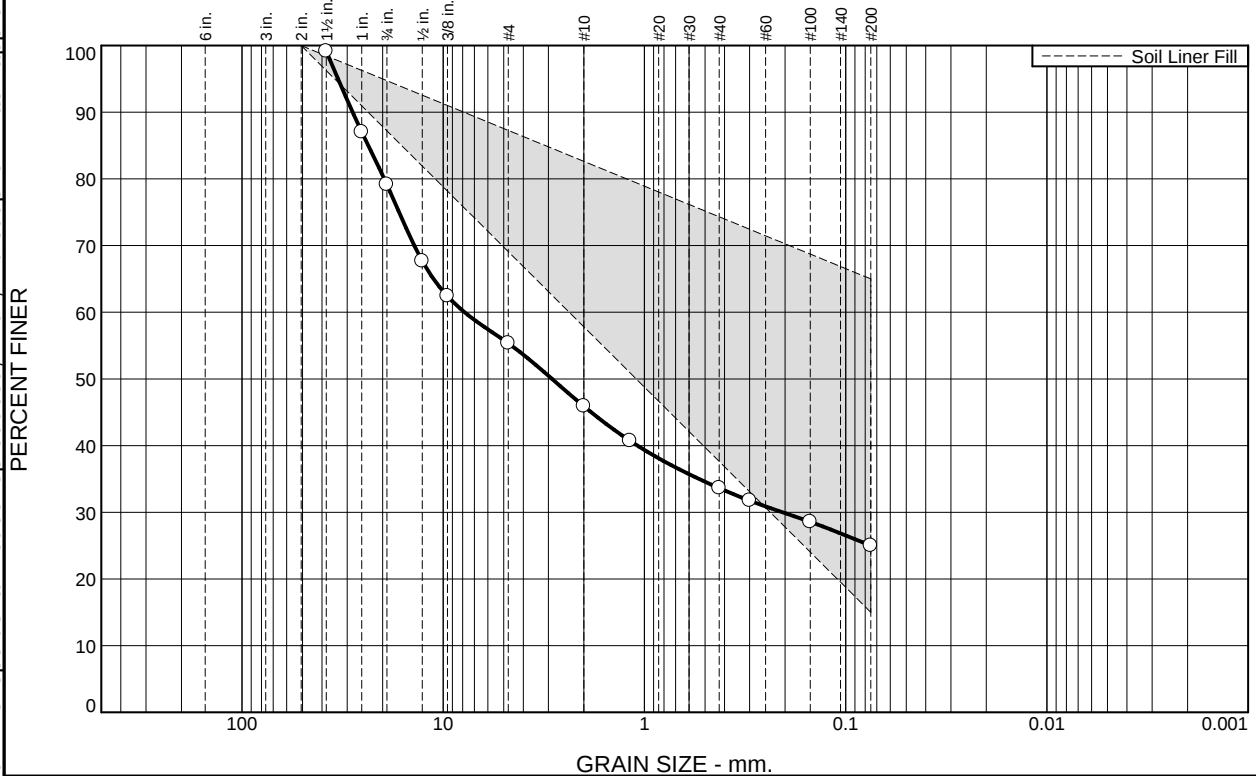
Flexible Wall Hydraulic Conductivity ASTM D5084

Client: Cripple Creek and Victor Gold Mines	Lab Sample No.: SLF-43-C
Project: VLF2 PH3	
Project No.: 475.0106.060	Location: Lower SLF Dump 1 Stockpile (JHL)
Phase: A	Elevation/Depth: Stockpile
Requested By: TW	Tested By: TW
Test Started: 7/10/2023	Checked By: TW
Test Finished: 7/20/2023	Sample Description: Red brown clayey sand with 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)	628		591.90
Dry Soil + Tare (g)	555.15		524.00
Tare (g)	0.00		119.50
Wt. of Water (g)	72.85		67.90
Dry Soil (g)	555.15		404.50
Moisture Content (%)	13.1		16.8
Sample Volume (ft ³)	0.01063	0.01062	
Dry Density (pcf)	115.2	115.2	
Wet Density (pcf)	130.3	134.1	
Saturation (%)	79.7	100.0	
Percent Compaction	94.7	94.7	
Height (in)	3.018	3.018	
Diameter (in)	2.783	2.784	
Area (in ²)	6.084	6.086	
Est. Moisture Content after Consolidation (%)		16.5%	
Est. Void Ratio after Consolidation		0.436	
Specific Gravity*	2.65		
*Specific gravity is assumed Maximum Dry Density: ASTM D 698	Maximum Dry Density (pcf):		121.6
	Initial Remolded Dry Density (pcf):		115.2
	Initial Percent Compaction:		95%
	Initial Void Ratio:		0.435
	Optimum Moisture Content(%):		13.1
	Initial Water Content (%):		13.1
	Confining Pressure (psi):		5.0
	Hydraulic Conductivity, k ₂₀ (cm/s):		9.2E-07
	Gradient Range (h/L):		0.9 1.3

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
		23.7	9.5	12.3	8.6	25.0	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1.5	99.1		
1	87.0		
.75	79.1		
.5	67.7		
.375	62.4		
#4	55.4		
#10	45.9		
#16	40.7		
#40	33.6		
#50	31.7		
#100	28.6		
#200	25.0	15.0 - 65.0	

* Soil Liner Fill

Material Description

Red-Brown Clayey Sand With Gravel

Atterberg Limits

PL= 15 LL= 28 PI= 13

Coefficients

D₉₀= 28.1780 D₈₅= 23.5832 D₆₀= 7.8359
D₅₀= 2.8780 D₃₀= 0.2060 D₁₅=
D₁₀= C_u= C_c=

Classification

USCS= GC AASHTO= A-2-6(0)

Remarks

Location: Lower Dump 1 Stockpile (JHL)
Sample Number: SLF-44-C

Date: 5-24-2023

NewFields

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

Project No: 475.0106.056

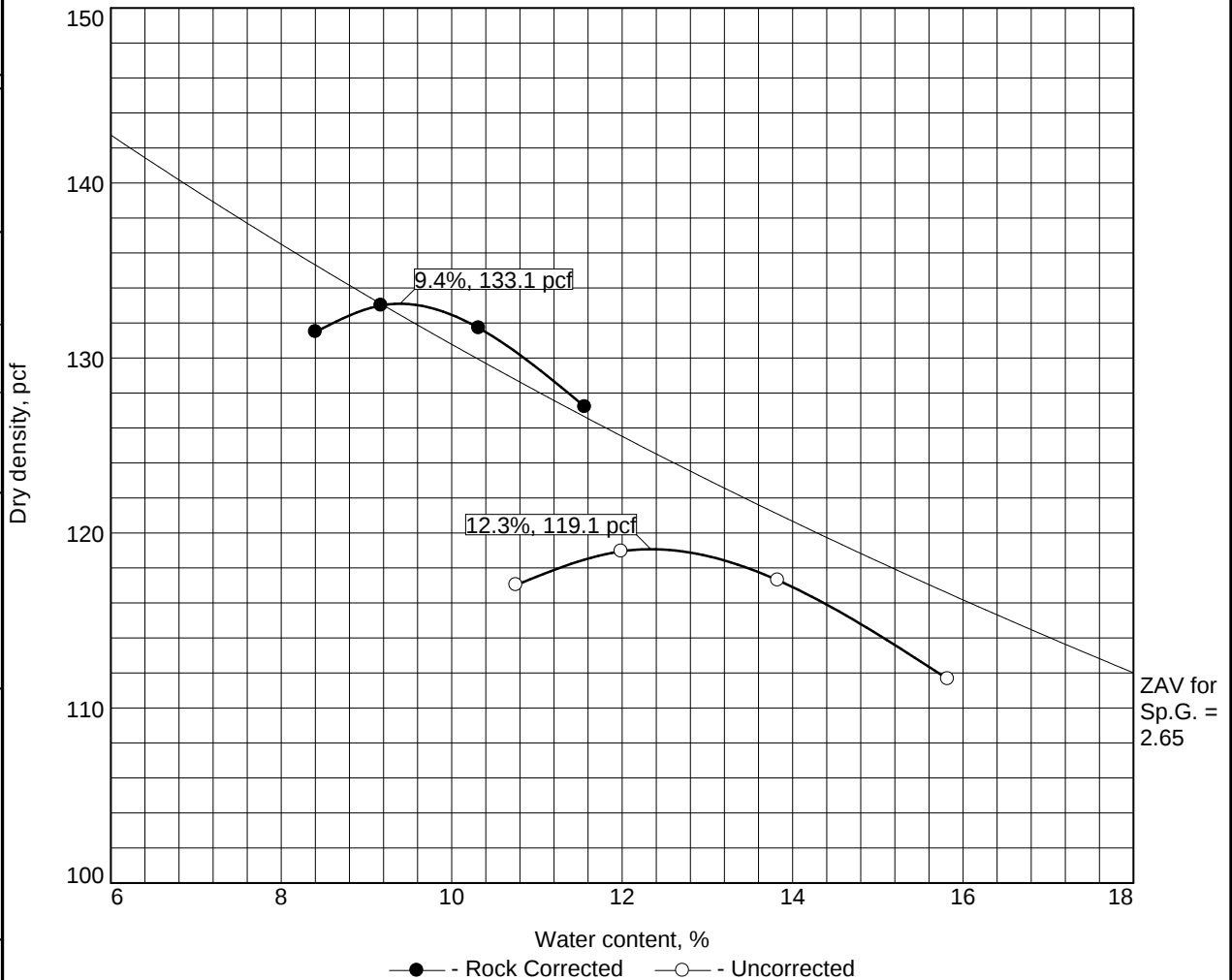
Figure SLF-44-C

Tested By: HW

Checked By: DK

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-2-6(0)		2.65	28	13	37.6	25.0
ROCK CORRECTED TEST RESULTS			UNCORRECTED		MATERIAL DESCRIPTION			
Maximum dry density = 133.1 pcf			119.1 pcf		Red-Brown Clayey Sand With Gravel			
Optimum moisture = 9.4 %			12.3 %					
Project No. 475.0106.056 Client: Newmont-Cripple Creek & Victor Goldmine					Remarks:			
Project: VLF2 Phase 3								
Date:								
Loc.: Lower Dump 1 Stockpile (JHL) Sample No.: SLF-44-C								
NewFields					Figure SLF-44-C			

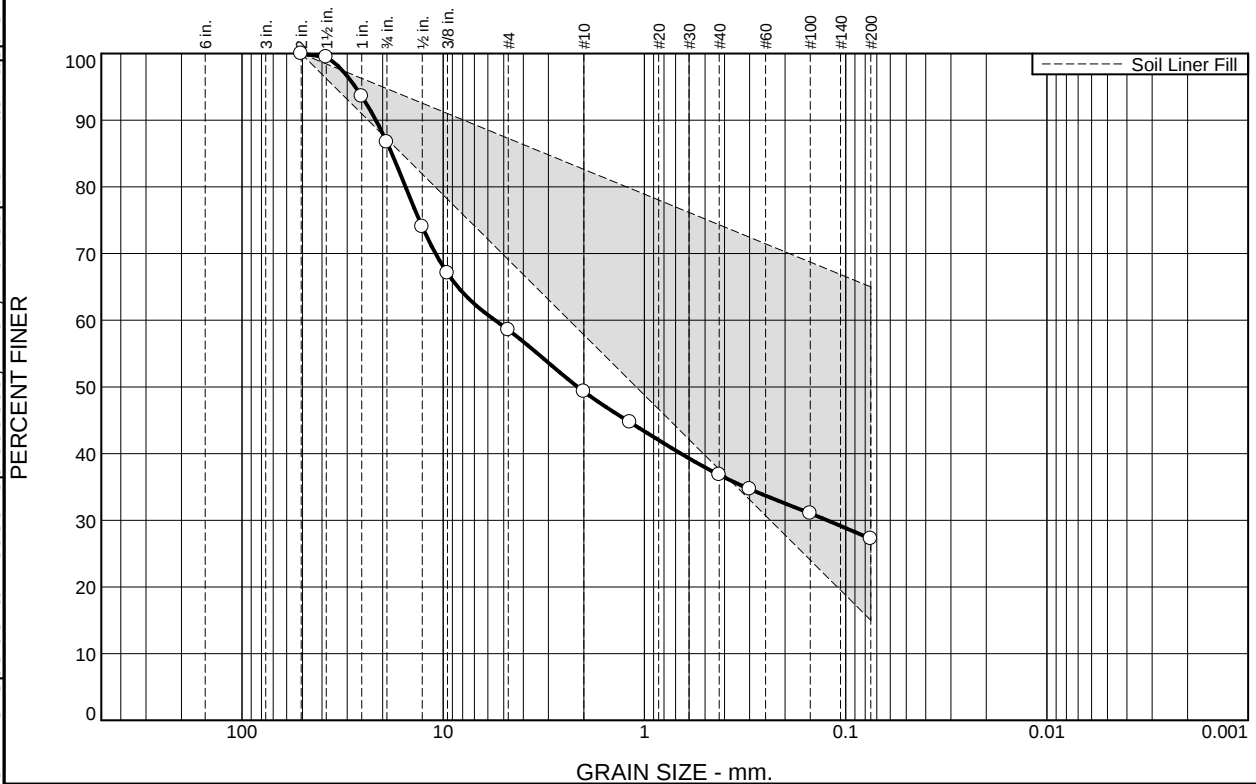
Flexible Wall Hydraulic Conductivity ASTM D5084

Client: Cripple Creek and Victor Gold Mines	Lab Sample No.: SLF-44-C
Project: VLF2 PH3	Field Sample No.: SLF-44-C
Project No.: 475.0106.060	Location: Lower SLF Dump 1 Stockpile (JHL)
Phase: A	Elevation/Depth: Stockpile
Requested By: TW	Tested By: TW
Test Started: 7/21/2023	Checked By: TW
Test Finished: 7/27/2023	Sample Description: Red brown clayey gravel with sand

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)	664.1		612.90
Dry Soil + Tare (g)	606.99		558.60
Tare (g)	0.00		119.50
Wt. of Water (g)	57.11		54.30
Dry Soil (g)	606.99		439.10
Moisture Content (%)	9.4		12.4
Sample Volume (ft ³)	0.01064	0.01060	
Dry Density (pcf)	125.6	126.1	
Wet Density (pcf)	140.6	141.0	
Saturation (%)	100.0%	100.0	
Percent Compaction	94.4	94.8	
Height (in)	3.014	3.004	
Diameter (in)	2.783	2.774	
Area (in ²)	6.083	6.042	
Est. Moisture Content after Consolidation (%)		11.8%	
Est. Void Ratio after Consolidation		0.312	
Specific Gravity*	2.65		
*Specific gravity is assumed	Maximum Dry Density (pcf):		133.1
Maximum Dry Density:	Initial Remolded Dry Density (pcf):		125.6
ASTM D 698	Initial Percent Compaction:		94%
	Initial Void Ratio:		0.316
	Optimum Moisture Content(%):		9.4
	Initial Water Content (%):		9.4
	Confining Pressure (psi):		20.0
	Hydraulic Conductivity, k₂₀ (cm/s):		3.4E-07
	Gradient Range (h/L):		0.5 1.3

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	13.3	28.1	9.3	12.5	9.6	27.2	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2	100.0	100.0	
1.5	99.4		
1	93.6		
.75	86.7		
.5	74.0		
.375	67.1		
#4	58.6		
#10	49.3		
#16	44.7		
#40	36.8		
#50	34.7		
#100	31.0		
#200	27.2	15.0 - 65.0	

* Soil Liner Fill

Material Description

Red-Brown Clayey Sand With Gravel

Atterberg Limits

PL= 14 LL= 29 PI= 15

Coefficients

D₉₀= 21.6057 D₈₅= 17.9859 D₆₀= 5.5205
D₅₀= 2.1455 D₃₀= 0.1236 D₁₅=
D₁₀= C_u= C_c=

Classification

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

Remarks

Location: Lower Dump 1 Stockpile (JHL)
Sample Number: SLF-45-C

Date: 5-24-2023

NewFields

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

Project No: 475.0106.056

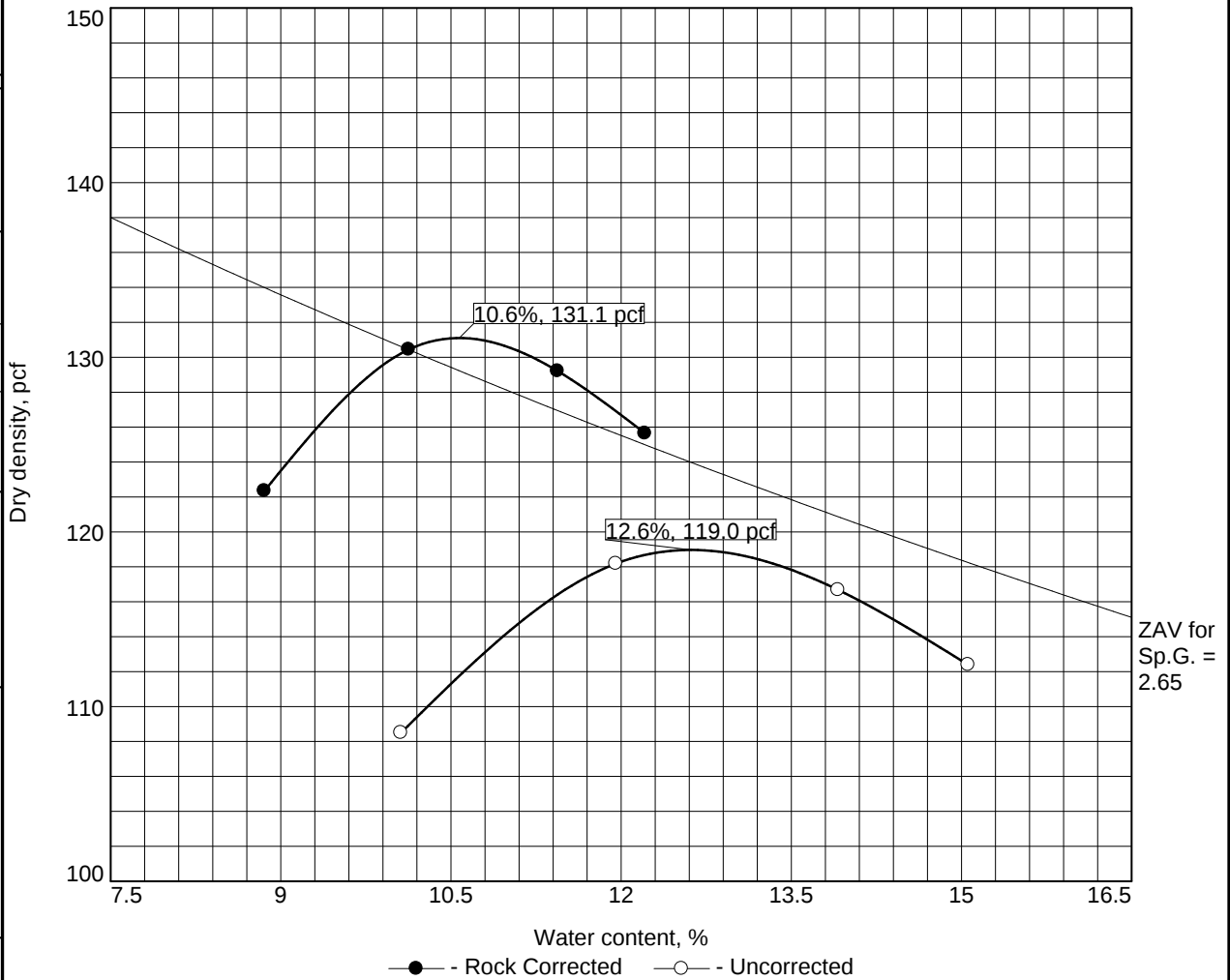
Figure SLF-45-C

Tested By: HW

Checked By: DK

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-2-6(1)		2.65	29	15	32.9	27.2
ROCK CORRECTED TEST RESULTS			UNCORRECTED		MATERIAL DESCRIPTION			
Maximum dry density = 131.1 pcf			119.0 pcf		Red-Brown Clayey Sand Wlth Gravel			
Optimum moisture = 10.6 %			12.6 %					
Project No. 475.0106.056 Client: Newmont-Cripple Creek & Victor Goldmine					Remarks:			
Project: VLF2 Phase 3								
Date:								
Loc.: Lower Dump 1 Stockpile (JHL) Sample No.: SLF-45-C								
NewFields					Figure SLF-45-C			

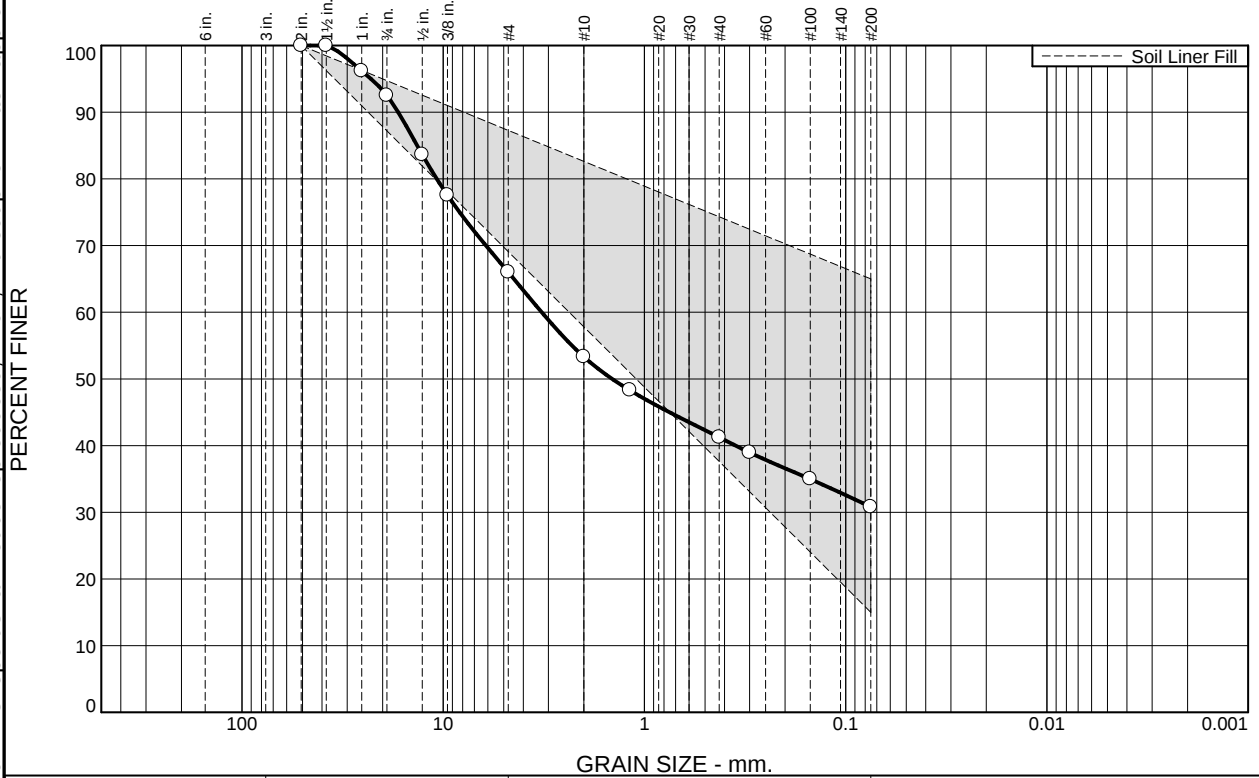
Flexible Wall Hydraulic Conductivity ASTM D5084

Client: Cripple Creek and Victor Gold Mines	Lab Sample No.: SLF-45-C
Project: VLF2 PH3	
Project No.: 475.0106.060	Location: Lower SLF Dump 1 Stockpile (JHL)
Phase: A	Elevation/Depth: Stockpile
Requested By: TW	Tested By: TW
Test Started: 7/21/2023	Checked By: TW
Test Finished: 7/27/2023	Sample Description: Red brown clayey gravel with sand

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)	661.8		604.80
Dry Soil + Tare (g)	598.27		550.90
Tare (g)	0.00		119.50
Wt. of Water (g)	63.53		53.90
Dry Soil (g)	598.27		431.40
Moisture Content (%)	10.6		12.5
Sample Volume (ft ³)	0.01065	0.01064	
Dry Density (pcf)	123.8	123.8	
Wet Density (pcf)	137.0	139.5	
Saturation (%)	83.8	100.0	
Percent Compaction	94.5	94.4	
Height (in)	3.018	3.018	
Diameter (in)	2.787	2.787	
Area (in ²)	6.099	6.100	
Est. Moisture Content after Consolidation (%)		12.7%	
Est. Void Ratio after Consolidation		0.336	
Specific Gravity*	2.65		
*Specific gravity is assumed Maximum Dry Density: ASTM D 698	Maximum Dry Density (pcf):	131.1	
	Initial Remolded Dry Density (pcf):	123.8	
	Initial Percent Compaction:	94%	
	Initial Void Ratio:	0.335	
	Optimum Moisture Content(%):	10.6	
	Initial Water Content (%):	10.6	
	Confining Pressure (psi):	5.0	
	Hydraulic Conductivity, k₂₀ (cm/s):	9.5E-07	
	Gradient Range (h/L):	0.8	1.3

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	7.5	26.5	12.7	12.1	10.4	30.8	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2	100.0	100.0	
1.5	100.0		
1	96.2		
.75	92.5		
0.5	83.6		
.375	77.6		
#4	66.0		
#10	53.3		
#16	48.3		
#40	41.2		
#50	39.0		
#100	35.0		
#200	30.8	15.0 - 65.0	

* Soil Liner Fill

Material Description

Brown Clayey Sand With Gravel

Atterberg Limits

PL= 12 LL= 27 PI= 15

Coefficients

D₉₀= 16.7196 D₈₅= 13.4676 D₆₀= 3.2399
D₅₀= 1.4460 D₃₀= C_u=
D₁₀= C_c=

Classification

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

Remarks

Location: Lower Dump 1 Stockpile (JHL)
Sample Number: SLF-46-C

Date: 5-25-23

NewFields

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

Project No: 475.0106.056

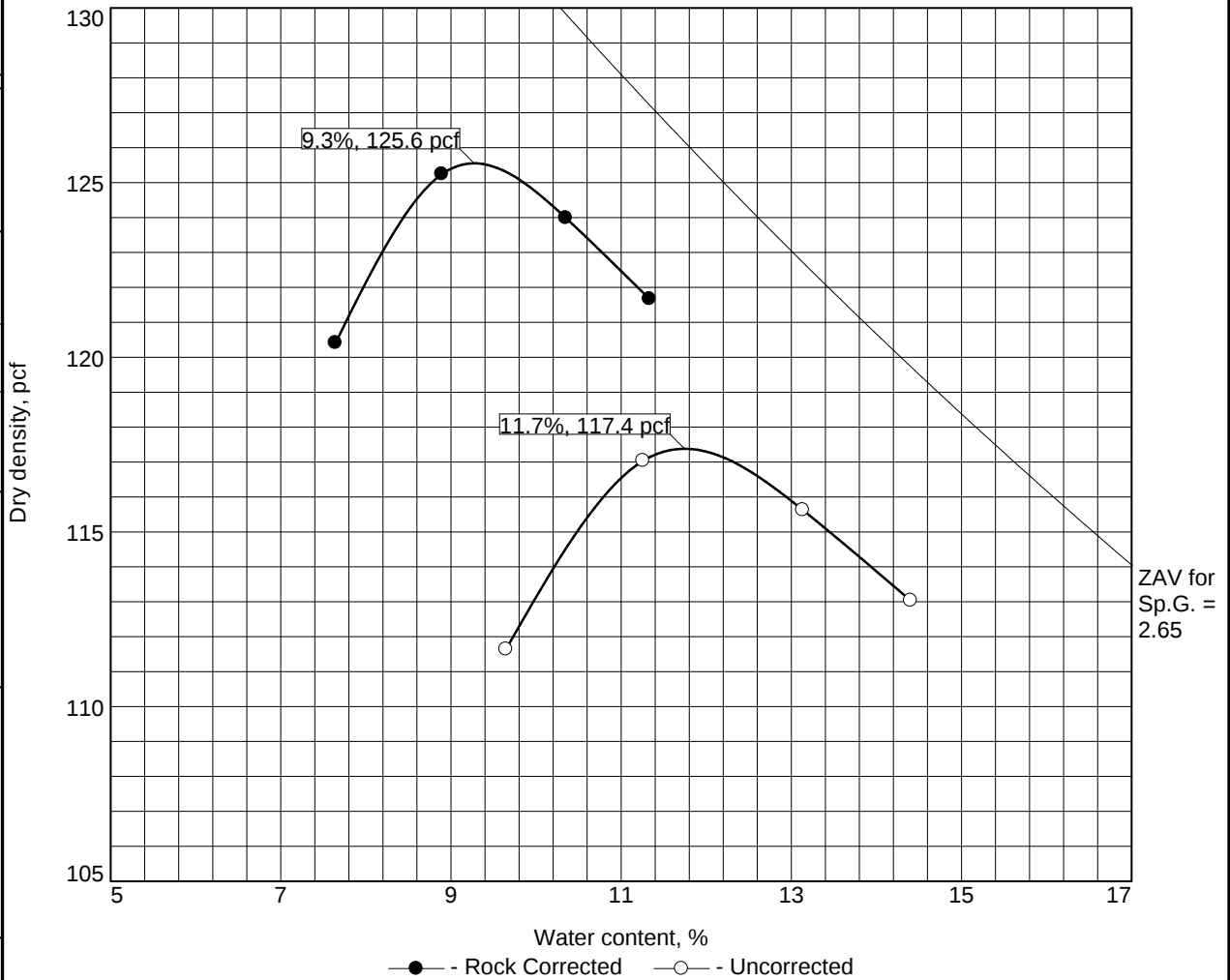
Figure SLF-46-C

Tested By: HW/KE/MW

Checked By: DK

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	27	15	22.4	30.8
ROCK CORRECTED TEST RESULTS			UNCORRECTED		MATERIAL DESCRIPTION			
Maximum dry density = 125.6 pcf			117.4 pcf		Brown Clayey Sand With Gravel			
Optimum moisture = 9.3 %			11.7 %					
Project No. 475.0106.056 Client: Newmont-Cripple Creek & Victor Goldmine					Remarks:			
Project: VLF2 Phase 3								
Date:								
Loc.: Lower Dump 1 Stockpile (JHL) Sample No.: SLF-46-C								
NewFields					Figure SLF-46-C			

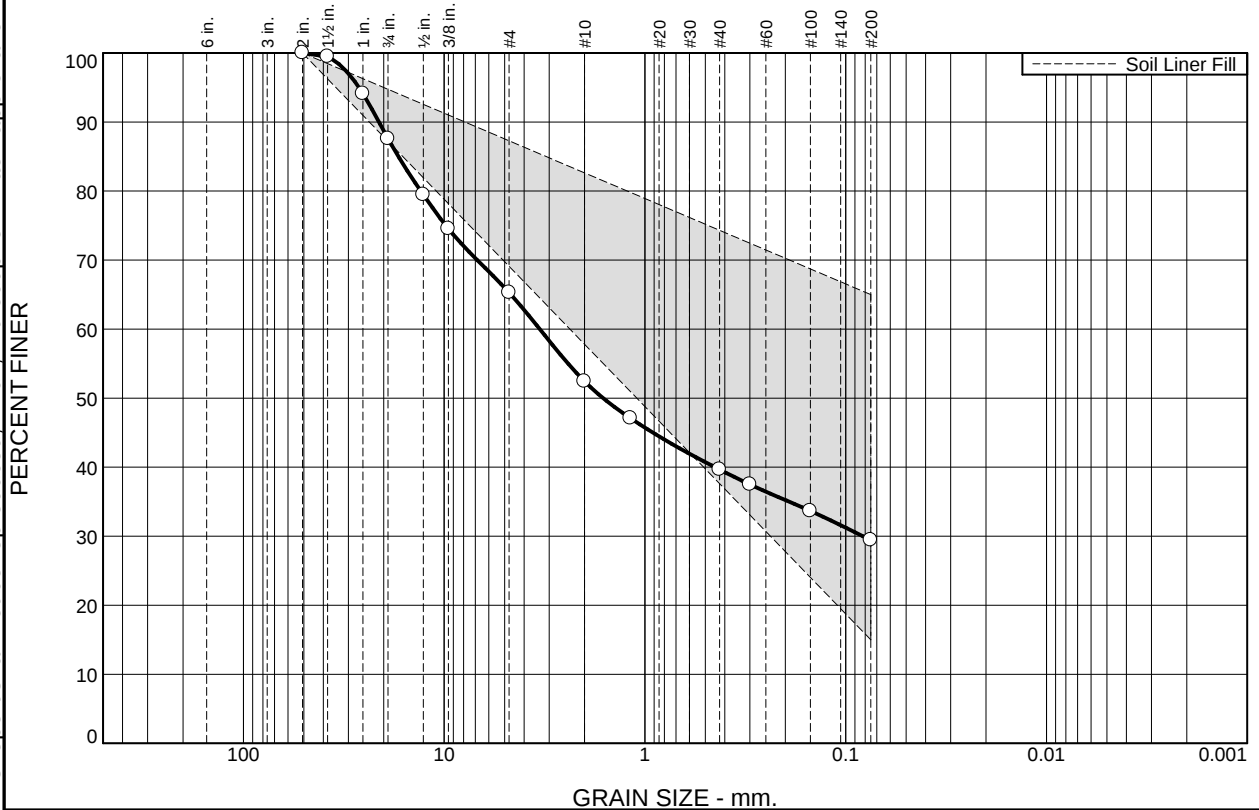
Flexible Wall Hydraulic Conductivity ASTM D5084

Client: Cripple Creek and Victor Gold Mines	Lab Sample No.: SLF-46-C
Project: VLF2 PH3	Field Sample No.: SLF-46-C
Project No.: 475.0106.060	Location: Upper SLF Dump 1 Stockpile (JHL)
Phase: A	Elevation/Depth: Stockpile
Requested By: TW	Tested By: TW
Test Started: 7/30/2023	Checked By: TW
Test Finished: 8/8/2023	Sample Description: Red brown clayey gravel with sand

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)	626.8		612.20
Dry Soil + Tare (g)	572.90		550.30
Tare (g)	0.00		119.50
Wt. of Water (g)	53.90		61.90
Dry Soil (g)	572.90		430.80
Moisture Content (%)	9.4		14.4
Sample Volume (ft ³)	0.01060	0.01054	
Dry Density (pcf)	119.1	119.8	
Wet Density (pcf)	136.6	137.0	
Saturation (%)	100.0%	100.0	
Percent Compaction	94.8	95.4	
Height (in)	3.011	3.001	
Diameter (in)	2.777	2.768	
Area (in ²)	6.057	6.017	
Est. Moisture Content after Consolidation (%)		14.4%	
Est. Void Ratio after Consolidation		0.381	
Specific Gravity*	2.65		
*Specific gravity is assumed	Maximum Dry Density (pcf):		125.6
Maximum Dry Density:	Initial Remolded Dry Density (pcf):		119.0
ASTM D 698	Initial Percent Compaction:		95%
	Initial Void Ratio:		0.390
	Optimum Moisture Content(%):		9.3
	Initial Water Content (%):		9.4
	Confining Pressure (psi):		20.0
	Hydraulic Conductivity, k₂₀ (cm/s):		6.7E-07
	Gradient Range (h/L):		0.8 1.3

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	12.4	22.3	12.9	12.7	10.3	29.4	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2	100.0	100.0	
1.5	99.5		
1	94.1		
.75	87.6		
0.5	79.5		
.375	74.5		
#4	65.3		
#10	52.4		
#16	47.1		
#40	39.7		
#50	37.5		
#100	33.7		
#200	29.4	15.0 - 65.0	

* Soil Liner Fill

Material Description

Brown CLayey Sand With Gravel

Atterberg Limits

PL= 14

LL= 29

PI= 15

Coefficients

D₉₀= 21.1317

D₈₅= 16.9066

D₆₀= 3.3427

D₅₀= 1.6152

D₃₀= 0.0821

D₁₅=

D₁₀=

C_u=

C_c=

Classification

USCS= SC

AASHTO= A-2-6(1)

Remarks

Location: Lower Dump 1 Stockpile (JHL)
Sample Number: SLF-47-C

Date: 5/30/2023



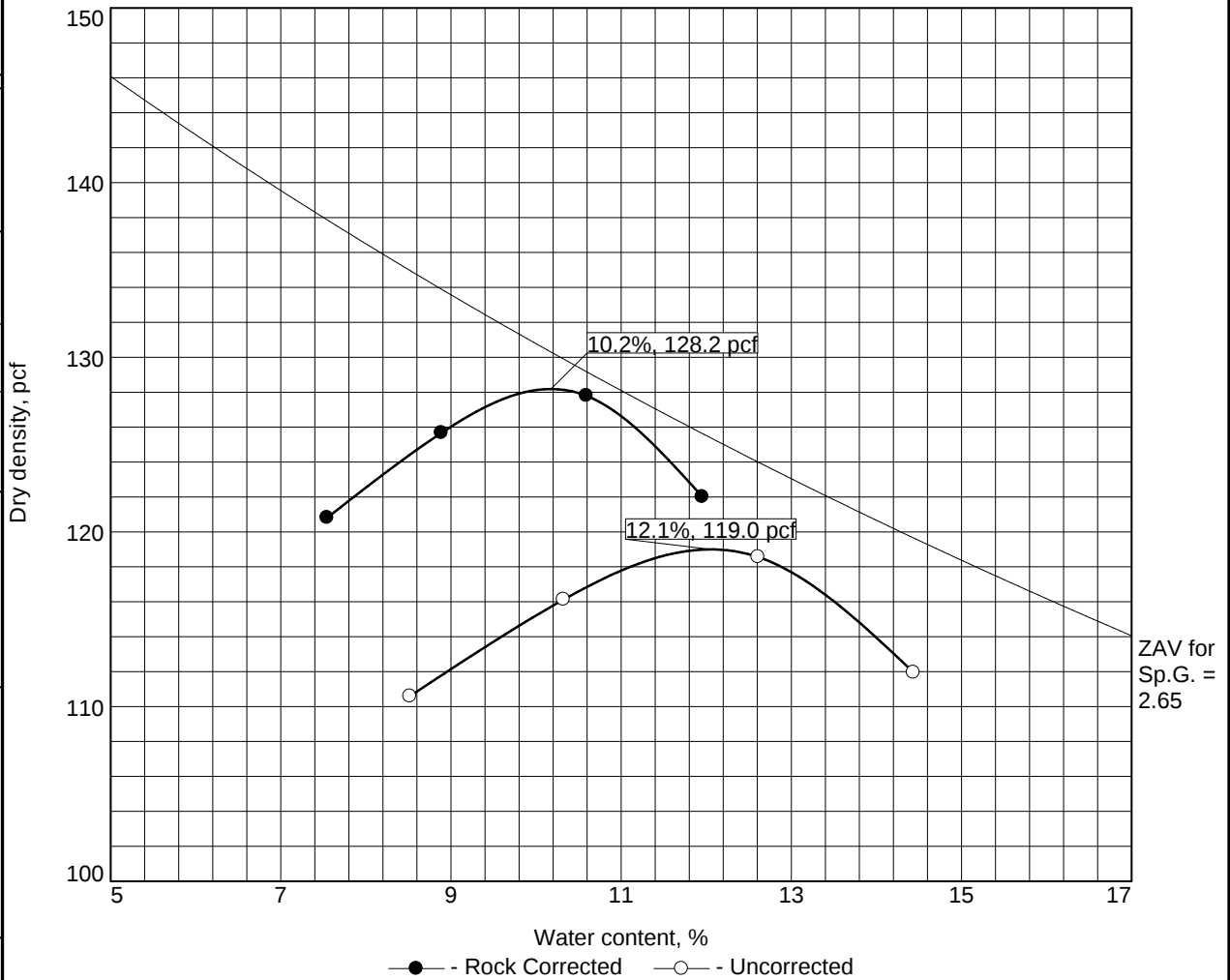
Client: Newmont-Cripple Creek & Victor Goldmine
Project: VLF2 Phase 3

Project No: 475.0106.056

Figure SLF-47-C

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	29	15	25.5	29.4
ROCK CORRECTED TEST RESULTS			UNCORRECTED		MATERIAL DESCRIPTION			
Maximum dry density = 128.2 pcf			119.0 pcf		Brown CLayey Sand With Gravel			
Optimum moisture = 10.2 %			12.1 %					
Project No. 475.0106.056 Client: Newmont-Cripple Creek & Victor Goldmine					Remarks:			
Project: VLF2 Phase 3								
Date:								
Loc.: Lower Dump 1 Stockpile (JHL) Sample No.: SLF-47-C								
NewFields					Figure SLF-47-C			

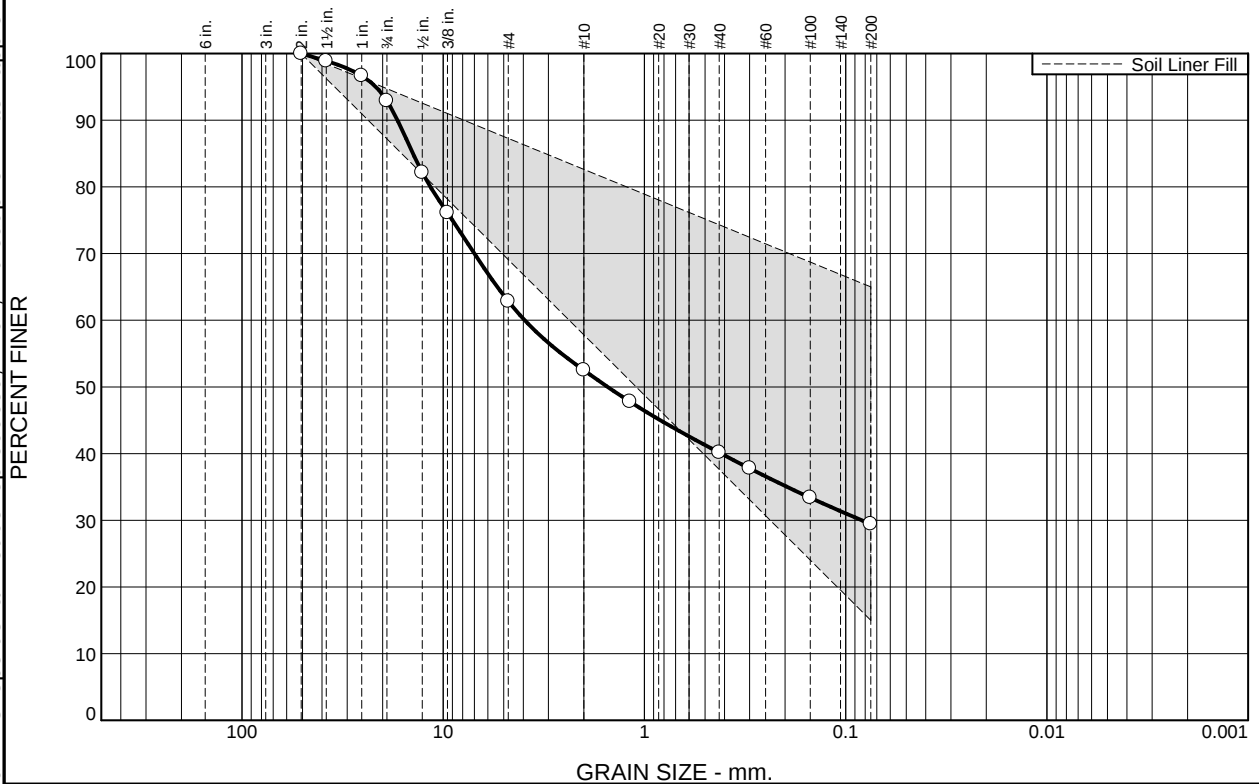
Flexible Wall Hydraulic Conductivity ASTM D5084

Client: Cripple Creek and Victor Gold Mines	Lab Sample No.: SLF-47-C
Project: VLF2 PH3	
Project No.: 475.0106.060	Location: Upper SLF Dump 1 Stockpile (JHL)
Phase: A	Elevation/Depth: Stockpile
Requested By: TW	Tested By: TW
Test Started: 8/14/2023	Checked By: TW
Test Finished: 8/20/2023	Sample Description: Red brown clayey gravel with sand

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)	645.3		604.90
Dry Soil + Tare (g)	585.93		546.50
Tare (g)	0.00		119.50
Wt. of Water (g)	59.37		58.40
Dry Soil (g)	585.93		427.00
Moisture Content (%)	10.1		13.7
Sample Volume (ft ³)	0.01063	0.01057	
Dry Density (pcf)	121.5	121.8	
Wet Density (pcf)	133.9	138.4	
Saturation (%)	74.8	100.0	
Percent Compaction	94.8	95.0	
Height (in)	3.018	3.014	
Diameter (in)	2.783	2.780	
Area (in ²)	6.084	6.068	
Est. Moisture Content after Consolidation (%)		13.4%	
Est. Void Ratio after Consolidation		0.356	
Specific Gravity*	2.65		
*Specific gravity is assumed Maximum Dry Density: ASTM D 698	Maximum Dry Density (pcf):		128.2
	Initial Remolded Dry Density (pcf):		121.5
	Initial Percent Compaction:		95%
	Initial Void Ratio:		0.361
	Optimum Moisture Content(%):		10.2
	Initial Water Content (%):		10.1
	Confining Pressure (psi):		5.0
	Hydraulic Conductivity, k ₂₀ (cm/s):		5.3E-07
	Gradient Range (h/L):		1.0 1.3

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	7.1	30.1	10.3	12.3	10.8	29.4	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2	100.0	100.0	
1.5	98.9		
1	96.6		
.75	92.9		
0.5	82.1		
.375	76.1		
#4	62.8		
#10	52.5		
#16	47.8		
#40	40.2		
#50	37.8		
#100	33.4		
#200	29.4	15.0 - 65.0	

* Soil Liner Fill

Material Description

Brown-Red clayey gravel with sand

Atterberg Limits

PL= 16 LL= 36 PI= 20

Coefficients

D₉₀= 16.8607 D₈₅= 14.1219 D₆₀= 3.9354
D₅₀= 1.5234 D₃₀= 0.0832 D₁₅=
D₁₀= C_u= C_c=

Classification

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

Remarks

Material discarded before Proctor

Location: N58,693.7 E35505.8
Sample Number: SLF-48-R

Depth: 10,055'

Date: 6/1/2023

NewFields

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

Project No: 475.0106.056

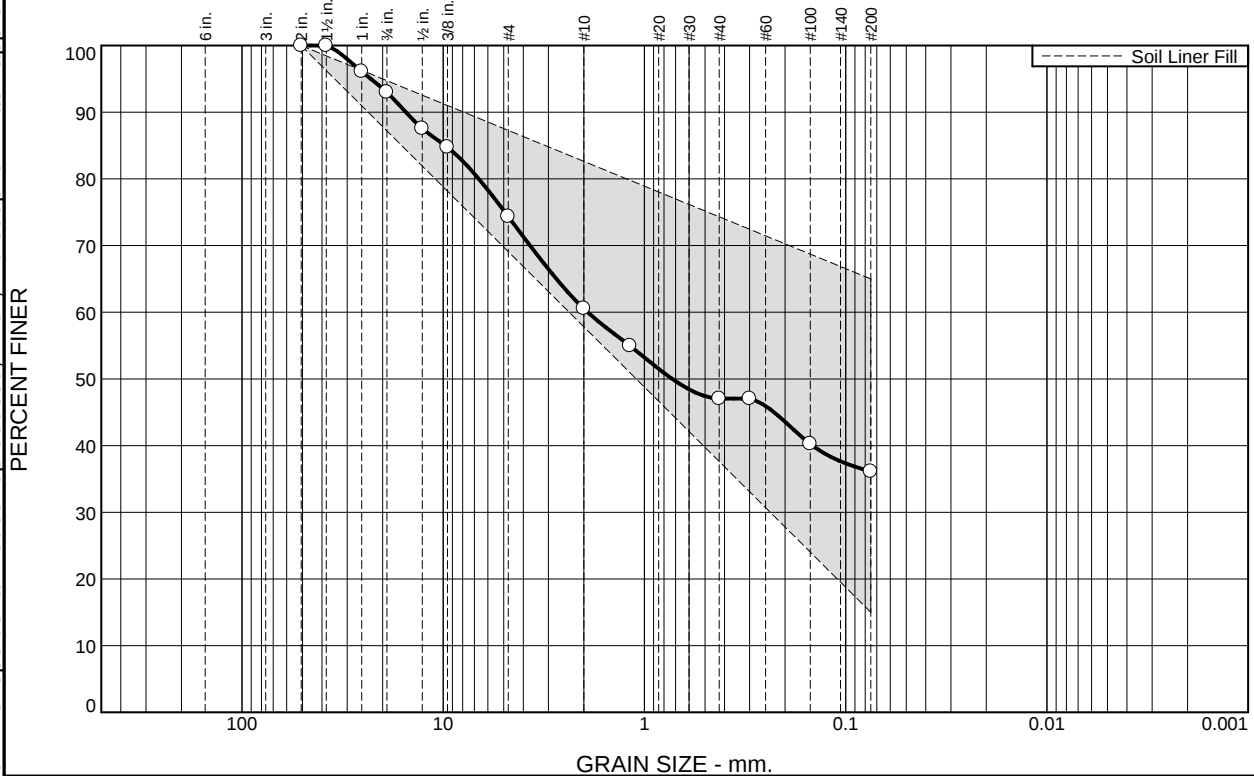
Figure SLF-48-R

Tested By: HW/KE/MW

Checked By: DK

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	18.7	13.8	13.5	10.9	36.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2	100.0	100.0	
1.5	100.0		
1	96.1		
.75	93.0		
0.5	87.6		
.375	84.7		
#4	74.3		
#10	60.5		
#16	55.0		
#40	47.0		
#50	47.0		
#100	40.3		
#200	36.1	15.0 - 65.0	

* Soil Liner Fill

Material Description

Brown-red clayey sand with gravel

Atterberg Limits

PL= 12 LL= 36 PI= 24

Coefficients

D₉₀= 15.3158 D₈₅= 9.7650 D₆₀= 1.9128
D₅₀= 0.7270 D₃₀= D₁₅=
D₁₀= C_u= C_c=

Classification

USCS= SC AASHTO= A-6(3)

Remarks

Location: N58,927.2 E36,260.9
Sample Number: SLF-49-R

Depth: 10,059'

Date: 6/8/2023



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

Project No: 475.0106.056

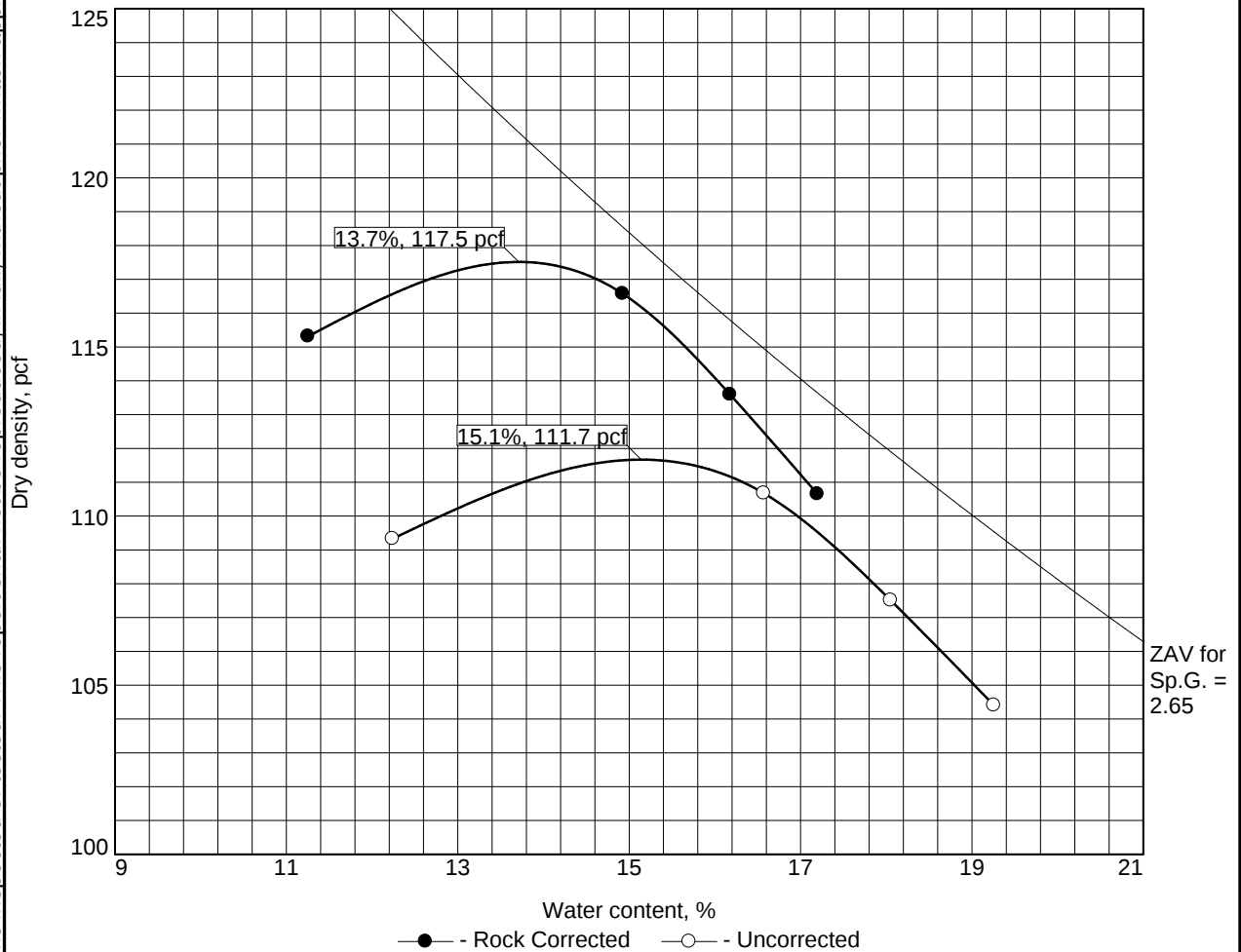
Figure SLF-49-R

Tested By: MW/KE

Checked By: DK

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						
10,059'	SC	A-6(3)		2.65	36	24	15.3	36.1

ROCK CORRECTED TEST RESULTS		UNCORRECTED	MATERIAL DESCRIPTION
Maximum dry density = 117.5 pcf		111.7 pcf	
Optimum moisture = 13.7 %		15.1 %	

Project No. 475.0106.056	Client: Newmont-Cripple Creek & Victor Goldmine	Remarks:
Project: VLF2 Phase 3		
	Date: 06/12/23	
Location: N58,927.2 E36,260.9	Sample Number: SLF-49-R	

NewFields	Figure SLF-49-R
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Tested By: DK Checked By: TW

Flexible Wall Hydraulic Conductivity ASTM D5084

Client: Cripple Creek and Victor Gold Mines	Lab Sample No.: SLF-49-R
Project: VLF2 PH3	
Project No.: 475.0106.060	Location: N 58,927 E 36,261
Phase: A	Elevation/Depth: FG
Requested By: TW	Tested By: TW
Test Started: 8/14/2023	Checked By: TW
Test Finished: 8/20/2023	Sample Description: Red brown clayey sand with 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		
Burette Area (cm ²)	0.877		
Test Specimen Data	Initial	During k Testing	Final
Wet Soil + Tare (g)	610.3		586.90
Dry Soil + Tare (g)	537.06		513.40
Tare (g)	0.00		119.50
Wt. of Water (g)	73.24		73.50
Dry Soil (g)	537.06		393.90
Moisture Content (%)	13.6		18.7
Sample Volume (ft ³)	0.01057	0.01057	
Dry Density (pcf)	111.9	111.9	
Wet Density (pcf)	127.3	132.0	
Saturation (%)	76.0	100.0	
Percent Compaction	95.2	95.2	
Height (in)	3.017	3.018	
Diameter (in)	2.777	2.778	
Area (in ²)	6.055	6.059	
Est. Moisture Content after Consolidation (%)		18.1%	
Est. Void Ratio after Consolidation		0.480	
Specific Gravity*	2.65		
*Specific gravity is assumed	Maximum Dry Density (pcf):		117.5
Maximum Dry Density:	Initial Remolded Dry Density (pcf):		111.9
ASTM D 698	Initial Percent Compaction:		95%
	Initial Void Ratio:		0.478
	Optimum Moisture Content(%):		13.7
	Initial Water Content (%):		13.6
	Confining Pressure (psi):		5.0
	Hydraulic Conductivity, k₂₀ (cm/s):		1.5E-07
	Gradient Range (h/L):		1.2 1.3



APPENDIX I.2.1 – 80-MIL GEOMEMBRANE FUSION TRIAL SEAM SUMMARY

Cripple Creek & Victor Gold Mining Company
Valley Leach Facility 2 Phase 3
Stage A.2 Record of Construction
Geomembrane Fusion Trial Seam Summary



Date	Sample Number	Time	Machine Number	Operator	Ambient Air Temp. (°F)	Machine Settings		Test Results							QA Monitor	Remarks ^{2,3}
						Temp. (°F)	Speed (ft/min)	Inside Peel (Min. = 100 ppi)		Outside Peel (Min. = 100 ppi)		Shear (Minimum = 120 ppi)		Pass/Fail		
								Strength (ppi)	Mode ¹	Strength (ppi)	Mode ¹	Strength (ppi)	Mode ¹			
6/15/2023	TF-1	10:05 AM	11	AG	68	800	13.0	137	BRK	130	BRK	148	BRK	P	KE	SS
								138	BRK	139	BRK					
6/15/2023	TF-2	10:07 AM	82	RT	68	800	13.0	138	BRK	138	BRK	148	BRK	P	KE	SS
								149	BRK	141	BRK					
6/15/2023	TF-3	10:08 AM	12	FC	68	800	13.0	133	BRK	131	BRK	139	BRK	P	KE	SS
								129	BRK	136	BRK					
6/15/2023	TF-4	10:06 AM	11	AG	68	800	12.0	141	BRK	148	BRK	148	BRK	P	KE	TT
								130	BRK	134	BRK					
6/15/2023	TF-5	10:07 AM	82	RT	68	800	13.0	124	BRK	134	BRK	140	BRK	P	KE	TT
								137	BRK	144	BRK					
6/15/2023	TF-6	10:08 AM	12	FC	68	800	12.0	136	BRK	137	BRK	144	BRK	P	KE	TT
								145	BRK	149	BRK					
6/15/2023	TF-7	2:51 PM	82	RT	52	800	13.0	120	BRK	126	BRK	133	BRK	P	KE	SS
								118	BRK	126	BRK					
6/15/2023	TF-8	2:54 PM	11	AG	52	800	12.0	126	BRK	131	BRK	151	BRK	P	KE	SS
								137	BRK	133	BRK					
6/15/2023	TF-9	2:53 PM	12	FC	52	800	12.0	136	BRK	142	BRK	141	BRK	P	KE	TT
								127	BRK	131	BRK					
6/15/2023	TF-10	2:54 PM	12	FC	52	800	12.0	129	BRK	152	BRK	147	BRK	P	KE	SS
								125	BRK	138	BRK					
6/15/2023	TF-11	2:57 PM	11	FC	52	800	12.0	132	BRK	133	BRK	154	BRK	P	KE	TT
								138	BRK	139	BRK					
6/16/2023	TF-12	7:04 AM	11	AG	52	800	9.0	158	BRK	144	BRK	151	BRK	P	HW	TT
								154	BRK	150	BRK					
6/16/2023	TF-13	10:50 AM	11	AG	52	801	13.0	132	BRK	119	BRK	150	BRK	P	HW	SS
								129	BRK	131	BRK					
6/16/2023	TF-14	10:40 AM	12	FC	52	802	11.0	117	BRK	123	BRK	140	BRK	P	HW	SS
								127	BRK	137	BRK					
6/16/2023	TF-15	11:00 AM	42	RT	52	803	13.0	124	BRK	117	BRK	145	BRK	P	HW	SS
								122	BRK	131	BRK					
6/16/2023	TF-16	10:44 AM	12	FC	52	804	10.0	122	BRK	124	BRK	148	BRK	P	HW	TT
								142	BRK	144	BRK					

¹See Figure 3 for Break Modes

²TT - Textured to Textured Weld

³SS - Smooth to Smooth Weld

Cripple Creek & Victor Gold Mining Company
Valley Leach Facility 2 Phase 3
Stage A.2 Record of Construction
Geomembrane Fusion Trial Seam Summary



Date	Sample Number	Time	Machine Number	Operator	Ambient Air Temp. (°F)	Machine Settings		Test Results							QA Monitor	Remarks ^{2,3}
						Temp. (°F)	Speed (ft/min)	Inside Peel (Min. = 100 ppi)		Outside Peel (Min. = 100 ppi)		Shear (Minimum = 120 ppi)		Pass/Fail		
								Strength (ppi)	Mode ¹	Strength (ppi)	Mode ¹	Strength (ppi)	Mode ¹			
6/16/2023	TF-17	11:02 AM	42	RT	52	805	13.0	130	BRK	132	BRK	144	BRK	P	HW	TT
								132	BRK	130	BRK					
6/16/2023	TF-18	12:35 PM	11	AG	57	800	11.0	142	BRK	148	BRK	144	BRK	P	HW	TT
								135	BRK	131	BRK					
6/20/2023	TF-19	7:48 AM	11	AG	52	801	7.0	148	BRK	127	BRK	141	BRK	P	HW	TT
								139	BRK	123	BRK					
6/20/2023	TF-20	12:08 PM	11	AG	61	802	12.0	111	BRK	110	BRK	126	BRK	P	HW	SS
								128	BRK	126	BRK					
6/20/2023	TF-21	12:12 PM	12	FC	61	803	11.5	134	BRK	134	BRK	147	BRK	P	HW	SS
								131	BRK	139	BRK					
6/20/2023	TF-22	12:15 PM	42	RT	61	804	13.0	135	BRK	133	BRK	150	BRK	P	HW	SS
								121	BRK	139	BRK					
6/20/2023	TF-23	12:09 PM	11	AG	61	805	12.0	141	BRK	123	BRK	150	BRK	P	HW	TT
								133	BRK	154	BRK					
6/20/2023	TF-24	12:15 PM	12	FC	61	806	10.5	141	BRK	148	BRK	139	BRK	P	HW	TT
								135	BRK	124	BRK					
6/20/2023	TF-25	12:30 PM	42	RT	61	807	13.0	134	BRK	131	BRK	141	BRK	P	HW	TT
								123	BRK	124	BRK					
6/20/2023	TF-26	12:42 PM	12	FC	61	808	12.0	131	BRK	129	BRK	147	BRK	P	HW	ST
								128	BRK	132	BRK					
6/21/2023	TF-27	6:13 AM	11	AG	48	800	8.0	169	BRK	152	BRK	173	BRK	P	HW	TT
								167	BRK	142	BRK					
6/21/2023	TF-28	10:50 AM	42	RT	62	850	13.0	142	BRK	134	BRK	137	BRK	P	HW	SS
								125	BRK	130	BRK					
6/21/2023	TF-29	10:50 AM	12	FC	62	800	13.0	134	BRK	130	BRK	139	BRK	P	HW	SS
								128	BRK	141	BRK					
6/21/2023	TF-30	10:38 AM	11	AG	62	800	13.0	134	BRK	132	BRK	134	BRK	P	HW	SS
								129	BRK	126	BRK					
6/21/2023	TF-31	10:38 AM	11	AG	62	800	12.0	133	BRK	135	BRK	138	BRK	P	HW	TT
								129	BRK	126	BRK					
6/21/2023	TF-32	10:50 AM	12	FC	62	800	11.0	122	BRK	138	BRK	134	BRK	P	HW	TT
								125	BRK	139	BRK					

¹See Figure 3 for Break Modes

²TT - Textured to Textured Weld

³SS - Smooth to Smooth Weld

Cripple Creek & Victor Gold Mining Company
Valley Leach Facility 2 Phase 3
Stage A.2 Record of Construction
Geomembrane Fusion Trial Seam Summary



Date	Sample Number	Time	Machine Number	Operator	Ambient Air Temp. (°F)	Machine Settings		Test Results						QA Monitor	Remarks ^{2,3}	
						Temp. (°F)	Speed (ft/min)	Inside Peel (Min. = 100 ppi)		Outside Peel (Min. = 100 ppi)		Shear (Minimum = 120 ppi)				Pass/Fail
								Strength (ppi)	Mode ¹	Strength (ppi)	Mode ¹	Strength (ppi)	Mode ¹			
6/21/2023	TF-33	10:51 AM	42	RT	62	850	13.0	138	BRK	131	BRK	130	BRK	P	HW	TT
								118	BRK	132	BRK					
6/22/2023	TF-34	6:18 AM	42	RT	45	850	12.0	153	BRK	144	BRK	175	BRK	P	HW	SS
								149	BRK	164	BRK					
6/22/2023	TF-35	6:23 AM	12	FC	45	800	10.0	162	BRK	131	BRK	177	BRK	P	HW	TT
								151	BRK	151	BRK					
6/22/2023	TF-36	6:15 AM	11	AG	45	800	12.0	142	BRK	132	BRK	144	BRK	P	HW	SS
								147	BRK	134	BRK					
6/22/2023	TF-37	6:20 AM	12	FC	45	800	10.5	130	BRK	147	BRK	165	BRK	P	HW	SS
								134	BRK	149	BRK					
6/22/2023	TF-38	6:19 AM	11	AG	45	800	11.0	139	BRK	137	BRK	170	BRK	P	HW	TT
								140	BRK	149	BRK					
6/22/2023	TF-39	6:18 AM	42	RT	45	850	12.0	130	BRK	150	BRK	164	BRK	P	HW	TT
								145	BRK	133	BRK					
6/22/2023	TF-40	12:47 PM	12	FC	62	800	12.5	112	BRK	118	BRK	123	BRK	P	HW	SS
								112	BRK	123	BRK					
6/22/2023	TF-41	12:58 PM	42	RT	62	850	12.0	120	BRK	112	BRK	131	BRK	P	HW	SS
								122	BRK	125	BRK					
6/22/2023	TF-42	12:44 PM	11	AG	62	800	13.0	130	BRK	120	BRK	128	BRK	P	HW	SS
								123	BRK	124	BRK					
6/22/2023	TF-43	12:43 PM	12	FC	62	800	11.5	132	BRK	130	BRK	138	BRK	P	HW	TT
								130	BRK	137	BRK					
6/22/2023	TF-44	12:47 PM	11	AG	62	800	12.0	122	BRK	115	BRK	129	BRK	P	HW	TT
								130	BRK	129	BRK					
6/22/2023	TF-45	12:59 PM	42	RT	62	850	12.0	123	BRK	120	BRK	126	BRK	P	HW	TT
								129	BRK	123	BRK					
6/23/2023	TF-46	6:17 AM	11	AG	46	800	12.0	137	BRK	137	BRK	180	BRK	P	HW	SS
								141	BRK	161	BRK					
6/23/2023	TF-47	6:15 AM	12	FC	46	800	10.0	161	BRK	158	BRK	177	BRK	P	HW	SS
								170	BRK	157	BRK					
6/23/2023	TF-48	6:10 AM	42	RT	46	850	12.0	166	BRK	159	BRK	180	BRK	P	HW	SS
								158	BRK	158	BRK					

¹See Figure 3 for Break Modes

²TT - Textured to Textured Weld

³SS - Smooth to Smooth Weld

Cripple Creek & Victor Gold Mining Company
Valley Leach Facility 2 Phase 3
Stage A.2 Record of Construction
Geomembrane Fusion Trial Seam Summary



Date	Sample Number	Time	Machine Number	Operator	Ambient Air Temp. (°F)	Machine Settings		Test Results							QA Monitor	Remarks ^{2,3}
						Temp. (°F)	Speed (ft/min)	Inside Peel (Min. = 100 ppi)		Outside Peel (Min. = 100 ppi)		Shear (Minimum = 120 ppi)		Pass/Fail		
								Strength (ppi)	Mode ¹	Strength (ppi)	Mode ¹	Strength (ppi)	Mode ¹			
6/23/2023	TF-49	6:17 AM	12	FC	46	800	12.0	162	BRK	161	BRK	173	BRK	P	HW	TT
								167	BRK	171	BRK					
6/23/2023	TF-50	6:20 AM	11	AG	46	800	11.0	165	BRK	185	BRK	195	BRK	P	HW	TT
								139	BRK	175	BRK					
6/23/2023	TF-51	7:55 AM	42	RT	46	850	12.0	169	BRK	174	BRK	176	BRK	P	HW	TT
								166	BRK	154	BRK					
6/27/2023	TF-52	6:00 AM	12	FC	51	800	9.0	148	BRK	143	BRK	160	BRK	P	HW	SS
								149	BRK	146	BRK					
6/27/2023	TF-53	6:04 AM	11	AG	51	800	11.0	152	BRK	173	BRK	140	BRK	P	HW	TT
								132	BRK	154	BRK					
6/27/2023	TF-54	6:06 AM	42	RT	51	850	10.0	153	BRK	135	BRK	171	BRK	P	HW	SS
								168	BRK	144	BRK					
6/27/2023	TF-55	5:58 AM	11	AG	51	800	12.0	143	BRK	142	BRK	160	BRK	P	HW	SS
								144	BRK	150	BRK					
6/27/2023	TF-56	5:46 AM	12	FC	51	800	8.5	158	BRK	149	BRK	169	BRK	P	HW	TT
								170	BRK	158	BRK					
6/26/2023	TF-57	8:08 AM	11	AG	56	800	12.0	140	BRK	127	BRK	151	BRK	P	KE	SS
								138	BRK	127	BRK					
6/26/2023	TF-58	8:05 AM	12	FC	56	800	11.0	134	BRK	131	BRK	149	BRK	P	KE	SS
								133	BRK	136	BRK					
6/26/2023	TF-59	8:00 AM	11	AG	56	800	12.0	156	BRK	143	BRK	161	BRK	P	KE	TT
								155	BRK	148	BRK					
6/26/2023	TF-60	8:07 AM	12	FC	55	800	11.0	140	BRK	138	BRK	163	BRK	P	KE	TT
								146	BRK	144	BRK					
6/27/2023	TF-61	12:20 PM	12	FC	69	800	15.0	133	BRK	127	BRK	140	BRK	P	HW	SS
								138	BRK	133	BRK					
6/27/2023	TF-62	12:13 PM	11	AG	69	800	13.0	136	BRK	128	BRK	129	BRK	P	HW	SS
								137	BRK	129	BRK					
6/27/2023	TF-63	12:25 PM	12	RT	69	850	13.0	134	BRK	127	BRK	133	BRK	P	HW	SS
								141	BRK	127	BRK					
6/27/2023	TF-64	12:23 PM	12	FC	69	800	16.0	136	BRK	132	BRK	137	BRK	P	HW	TT
								119	BRK	136	BRK					

¹See Figure 3 for Break Modes

²TT - Textured to Textured Weld

³SS - Smooth to Smooth Weld

Cripple Creek & Victor Gold Mining Company
Valley Leach Facility 2 Phase 3
Stage A.2 Record of Construction
Geomembrane Fusion Trial Seam Summary



Date	Sample Number	Time	Machine Number	Operator	Ambient Air Temp. (°F)	Machine Settings		Test Results							QA Monitor	Remarks ^{2,3}
						Temp. (°F)	Speed (ft/min)	Inside Peel (Min. = 100 ppi)		Outside Peel (Min. = 100 ppi)		Shear (Minimum = 120 ppi)		Pass/Fail		
								Strength (ppi)	Mode ¹	Strength (ppi)	Mode ¹	Strength (ppi)	Mode ¹			
6/27/2023	TF-65	12:18 PM	11	AG	69	800	12.0	140	BRK	141	BRK	158	BRK	P	HW	TT
								148	BRK	143	BRK					
6/28/2023	TF-66	6:15 AM	11	AG	47	800	7.0	151	BRK	141	BRK	181	BRK	P	HW	TT
								171	BRK	154	BRK					
6/28/2023	TF-67	6:11 AM	11	AG	47	800	8.0	148	BRK	152	BRK	179	BRK	P	HW	ST
								164	BRK	152	BRK					
6/28/2023	TF-68	6:08 AM	12	FC	47	800	8.0	157	BRK	160	BRK	171	BRK	P	HW	ST
								157	BRK	158	BRK					
6/28/2023	TF-69	6:13 AM	12	FC	47	800	7.5	158	BRK	141	BRK	159	BRK	P	HW	TT
								162	BRK	150	BRK					
6/28/2023	TF-70	12:20 PM	12	FC	60	800	11.5	135	BRK	138	BRK	140	BRK	P	HW	SS
								127	BRK	133	BRK					
6/28/2023	TF-71	12:25 PM	42	RT	60	800	13.0	134	BRK	141	BRK	129	BRK	P	HW	SS
								127	BRK	127	BRK					
6/28/2023	TF-72	12:13 PM	11	AG	60	800	13.0	136	BRK	137	BRK	133	BRK	P	HW	SS
								128	BRK	129	BRK					
6/28/2023	TF-73	12:18 PM	11	AG	60	800	12.0	140	BRK	148	BRK	158	BRK	P	HW	TT
								141	BRK	143	BRK					
6/28/2023	TF-74	12:23 PM	12	FC	60	800	10.0	136	BRK	119	BRK	137	BRK	P	HW	TT
								132	BRK	126	BRK					
6/29/2023	TF-75	12:30 PM	11	AG	64	800	11.0	120	BRK	131	BRK	136	BRK	P	BM	TT
								127	BRK	142	BRK					
6/29/2023	TF-76	5:40 AM	11	AG	51	800	8.0	148	SE1	148	SE1	168	BRK	P	BM	SS
								176	SE1	162	SE1					
6/29/2023	TF-77	5:45 AM	12	FC	51	800	10.0	153	SE1	162	SE1	173	BRK	P	BM	SS
								153	SE1	162	SE1					
6/29/2023	TF-78	5:48 AM	12	FC	51	800	9.5	159	SE1	160	SE1	180	BRK	P	BM	TT
								173	SE1	168	SE1					
6/29/2023	TF-79	5:48 AM	12	AG	51	800	8.0	168	SE1	157	SE1	186	BRK	P	BM	TT
								167	SE1	168	SE1					
6/29/2023	TF-80	5:45 AM	42	RT	51	850	10.0	146	SE1	150	SE1	177	BRK	P	BM	SS
								154	SE1	152	SE1					

¹See Figure 3 for Break Modes

²TT - Textured to Textured Weld

³SS - Smooth to Smooth Weld

Cripple Creek & Victor Gold Mining Company
Valley Leach Facility 2 Phase 3
Stage A.2 Record of Construction
Geomembrane Fusion Trial Seam Summary



Date	Sample Number	Time	Machine Number	Operator	Ambient Air Temp. (°F)	Machine Settings		Test Results						QA Monitor	Remarks ^{2,3}	
						Temp. (°F)	Speed (ft/min)	Inside Peel (Min. = 100 ppi)		Outside Peel (Min. = 100 ppi)		Shear (Minimum = 120 ppi)				Pass/Fail
								Strength (ppi)	Mode ¹	Strength (ppi)	Mode ¹	Strength (ppi)	Mode ¹			
6/29/2023	TF-81	12:30 PM	12	FC	64	800	11.0	126	SE1	137	SE1	136	BRK	P	BM	SS
								123	SE1	131	SE1					
6/29/2023	TF-82	12:30 PM	42	RT	64	850	11.0	130	SE1	125	SE1	137	BRK	P	BM	SS
								123	SE1	130	SE1					
6/29/2023	TF-83	12:30 PM	11	AG	64	800	12.0	113	SE1	127	SE1	127	BRK	P	BM	SS
								121	SE1	133	SE1					
6/30/2023	TF-84	5:55 AM	12	FC	45	800	9.5	153	SE1	147	SE1	173	BRK	P	BM	SS
								157	SE1	132	SE1					
6/30/2023	TF-85	5:55 AM	42	RT	45	850	9.0	168	SE1	166	SE1	174	BRK	P	BM	SS
								163	SE1	165	SE1					
6/30/2023	TF-86	6:03 AM	11	AG	45	800	8.0	162	SE1	163	SE1	173	BRK	P	BM	SS
								169	SE1	162	SE1					
6/30/2023	TF-87	5:57 AM	42	FC	45	800	9.0	136	SE1	144	SE1	175	BRK	P	BM	TT
								156	SE1	161	SE1					
6/30/2023	TF-88	5:57 AM	42	RT	45	850	9.0	168	SE1	172	SE1	183	BRK	P	BM	TT
								181	SE1	175	SE1					
7/7/2023	TF-89	6:04 AM	11	AG	47	800	8.0	153	SE1	135	SE1	175	BRK	P	BM	SS
								143	SE1	149	SE1					
7/7/2023	TF-90	6:01 AM	42	RT	47	850	8.0	151	BRK	158	BRK	187	BRK	P	HW	SS
								139	BRK	164	BRK					
7/7/2023	TF-91	5:56 AM	12	FC	47	800	9.5	157	BRK	148	BRK	176	BRK	P	HW	SS
								153	BRK	155	BRK					
7/7/2023	TF-92	6:00 AM	12	FC	47	800	9.0	158	BRK	148	BRK	172	BRK	P	HW	TT
								169	BRK	153	BRK					
7/7/2023	TF-93	6:05 AM	42	RT	47	850	8.0	178	BRK	170	BRK	203	BRK	P	HW	TT
								181	BRK	183	BRK					
7/7/2023	TF-94	12:48 PM	12	FC	67	800	13.0	144	BRK	116	BRK	147	BRK	P	HW	SS
								143	BRK	140	BRK					
7/7/2023	TF-95	12:40 PM	11	AG	67	800	13.0	135	BRK	137	BRK	147	BRK	P	HW	SS
								140	BRK	141	BRK					
7/7/2023	TF-96	12:46 PM	11	AG	67	800	12.0	143	BRK	132	BRK	139	BRK	P	HW	TT
								153	BRK	144	BRK					

¹See Figure 3 for Break Modes

²TT - Textured to Textured Weld

³SS - Smooth to Smooth Weld

Cripple Creek & Victor Gold Mining Company
Valley Leach Facility 2 Phase 3
Stage A.2 Record of Construction
Geomembrane Fusion Trial Seam Summary



Date	Sample Number	Time	Machine Number	Operator	Ambient Air Temp. (°F)	Machine Settings		Test Results							QA Monitor	Remarks ^{2,3}
						Temp. (°F)	Speed (ft/min)	Inside Peel (Min. = 100 ppi)		Outside Peel (Min. = 100 ppi)		Shear (Minimum = 120 ppi)		Pass/Fail		
								Strength (ppi)	Mode ¹	Strength (ppi)	Mode ¹	Strength (ppi)	Mode ¹			
7/7/2023	TF-97	12:49 PM	42	RT	67	850	10.0	143	BRK	137	BRK	153	BRK	P	HW	SS
								140	BRK	149	BRK					
7/7/2023	TF-98	12:45 PM	42	RT	67	850	10.0	144	BRK	135	BRK	145	BRK	P	HW	TT
								163	BRK	144	BRK					
7/7/2023	TF-99	12:50 PM	12	FC	67	800	12.0	153	BRK	156	BRK	162	BRK	P	HW	TT
								126	BRK	161	BRK					
7/11/2023	TF-100	11:00 AM	12	FC	70	800	12.0	137	BRK	133	BRK	138	BRK	P	HW	SS
								132	BRK	132	BRK					
7/11/2023	TF-101	11:00 AM	42	LZ	70	850	11.0	137	BRK	127	BRK	138	BRK	P	HW	SS
								137	BRK	134	BRK					
7/11/2023	TF-102	11:00 AM	11	AG	70	800	11.0	134	BRK	132	BRK	138	BRK	P	HW	SS
								130	BRK	129	BRK					
7/11/2023	TF-103	11:00 AM	11	AG	70	800	12.0	149	BRK	150	BRK	144	BRK	P	HW	SS
								151	BRK	143	BRK					
7/11/2023	TF-104	11:00 AM	12	FC	70	800	11.5	127	BRK	128	BRK	132	BRK	P	HW	SS
								119	BRK	138	BRK					
7/12/2023	TF-105	6:01 AM	12	FC	53	800	10.0	150	BRK	143	BRK	173	BRK	P	HW	SS
								150	BRK	160	BRK					
7/12/2023	TF-106	6:07 AM	12	FC	55	800	9.5	156	BRK	162	BRK	168	BRK	P	HW	TT
								162	BRK	156	BRK					
7/12/2023	TF-107	6:30 AM	11	AG	55	800	12.0	151	BRK	129	BRK	171	BRK	P	HW	SS
								157	BRK	139	BRK					
7/12/2023	TF-108	6:36 AM	11	AG	55	800	11.0	151	BRK	152	BRK	170	BRK	P	HW	TT
								159	BRK	147	BRK					
7/12/2023	TF-109	6:47 AM	42	LZ	55	850	9.5	136	BRK	141	BRK	167	BRK	P	HW	SS
								142	BRK	153	BRK					
7/12/2023	TF-110	6:47 AM	42	LZ	55	850	9.5	160	BRK	154	BRK	168	BRK	P	HW	TT
								157	BRK	157	BRK					
7/12/2023	TF-111	12:41 PM	12	FC	72	800	12.0	141	BRK	141	BRK	141	BRK	P	HW	SS
								143	BRK	137	BRK					
7/12/2023	TF-112	12:36 PM	11	AG	72	800	13.0	149	BRK	142	BRK	155	BRK	P	HW	SS
								150	BRK	138	BRK					

¹See Figure 3 for Break Modes

²TT - Textured to Textured Weld

³SS - Smooth to Smooth Weld

Cripple Creek & Victor Gold Mining Company
Valley Leach Facility 2 Phase 3
Stage A.2 Record of Construction
Geomembrane Fusion Trial Seam Summary



Date	Sample Number	Time	Machine Number	Operator	Ambient Air Temp. (°F)	Machine Settings		Test Results								QA Monitor	Remarks ^{2,3}
						Temp. (°F)	Speed (ft/min)	Inside Peel (Min. = 100 ppi)		Outside Peel (Min. = 100 ppi)		Shear (Minimum = 120 ppi)		Pass/Fail			
								Strength (ppi)	Mode ¹	Strength (ppi)	Mode ¹	Strength (ppi)	Mode ¹				
7/12/2023	TF-113	12:38 PM	11	AG	72	800	12.0	140	BRK	135	BRK	136	BRK	P	HW	TT	
								139	BRK	132	BRK						
7/12/2023	TF-114	12:44 PM	42	PO	72	850	10.0	129	BRK	119	BRK	128	BRK	P	HW	SS	
								130	BRK	122	BRK						
7/12/2023	TF-115	12:36 PM	42	PO	72	850	9.5	124	BRK	149	BRK	140	BRK	P	HW	TT	
								137	BRK	141	BRK						
7/13/2023	TF-116	5:54 AM	11	AG	55	800	11.0	141	BRK	145	BRK	176	BRK	P	HW	SS	
								158	BRK	158	BRK						
7/13/2023	TF-117	5:55 AM	11	AG	55	800	11.0	-	AD	-	-	-	-	F	HW	TT	
								-	-	-	-						
7/13/2023	TF-118	6:04 AM	12	FC	55	800	10.0	144	BRK	152	BRK	182	BRK	P	HW	SS	
								151	BRK	153	BRK						
7/13/2023	TF-119	6:07 AM	12	FC	55	800	9.0	163	BRK	170	BRK	182	BRK	P	HW	TT	
								158	BRK	178	BRK						
7/13/2023	TF-120	6:06 AM	42	PO	55	850	9.5	169	BRK	167	BRK	180	BRK	P	HW	SS	
								168	BRK	167	BRK						
7/13/2023	TF-121	6:04 AM	42	PO	55	850	9.0	143	BRK	170	BRK	184	BRK	P	HW	TT	
								134	BRK	164	BRK						
7/13/2023	TF-122	6:04 AM	11	AG	55	800	10.0	161	BRK	167	BRK	169	BRK	P	HW	TT	
								158	BRK	170	BRK						
7/13/2023	TF-123	12:40 PM	12	FC	70	800	10.5	145	BRK	145	BRK	150	BRK	P	HW	SS	
								128	BRK	138	BRK						
7/13/2023	TF-124	12:46 PM	12	FC	70	800	9.5	144	BRK	137	BRK	145	BRK	P	HW	TT	
								144	BRK	145	BRK						
7/13/2023	TF-125	12:38 PM	11	AG	73	800	13.0	157	BRK	151	BRK	160	BRK	P	HW	SS	
								152	BRK	151	BRK						
7/13/2023	TF-126	12:44 PM	11	AG	73	800	11.0	146	BRK	128	BRK	149	BRK	P	HW	TT	
								145	BRK	145	BRK						
7/13/2023	TF-127	12:55 PM	42	AG	73	850	10.0	149	BRK	129	BRK	149	BRK	P	HW	SS	
								152	BRK	145	BRK						
7/13/2023	TF-128	12:50 PM	42	AG	73	850	9.5	120	BRK	129	BRK	142	BRK	P	HW	TT	
								149	BRK	139	BRK						

¹See Figure 3 for Break Modes

²TT - Textured to Textured Weld

³SS - Smooth to Smooth Weld

Cripple Creek & Victor Gold Mining Company
Valley Leach Facility 2 Phase 3
Stage A.2 Record of Construction
Geomembrane Fusion Trial Seam Summary



Date	Sample Number	Time	Machine Number	Operator	Ambient Air Temp. (°F)	Machine Settings		Test Results							QA Monitor	Remarks ^{2,3}
						Temp. (°F)	Speed (ft/min)	Inside Peel (Min. = 100 ppi)		Outside Peel (Min. = 100 ppi)		Shear (Minimum = 120 ppi)		Pass/Fail		
								Strength (ppi)	Mode ¹	Strength (ppi)	Mode ¹	Strength (ppi)	Mode ¹			
7/18/2023	TF-129	6:30 AM	42	RT	50	800	9.0	147	BRK	136	BRK	154	BRK	P	HW	SS
								109	BRK	146	BRK					
7/18/2023	TF-130	6:28 AM	12	FC	50	800	9.5	141	BRK	143	BRK	155	BRK	P	HW	SS
								150	BRK	144	BRK					
7/18/2023	TF-131	6:24 AM	11	AG	50	800	10.0	152	BRK	157	BRK	160	BRK	P	HW	SS
								140	BRK	155	BRK					
7/18/2023	TF-132	6:29 AM	11	AG	50	800	9.0	148	BRK	157	BRK	152	BRK	P	HW	TT
								151	BRK	167	BRK					
7/18/2023	TF-133	1:00 PM	12	FC	77	800	10.5	123	BRK	121	BRK	128	BRK	P	HW	SS
								122	BRK	124	BRK					
7/18/2023	TF-134	1:05 PM	12	FC	77	800	10.0	137	BRK	147	BRK	150	BRK	P	HW	TT
								148	BRK	124	BRK					
7/18/2023	TF-135	1:00 PM	11	AG	77	800	13.0	115	BRK	122	BRK	127	BRK	P	HW	SS
								117	BRK	123	BRK					
7/18/2023	TF-136	1:05 PM	11	AG	77	800	12.0	121	BRK	128	BRK	132	BRK	P	HW	TT
								136	BRK	137	BRK					
7/18/2023	TF-137	12:46 PM	42	RT	77	800	11.0	114	BRK	124	BRK	128	BRK	P	HW	SS
								121	BRK	117	BRK					
7/19/2023	TF-138	5:50 AM	11	AG	53	800	10.0	136	BRK	152	BRK	154	BRK	P	HW	SS
								140	BRK	146	BRK					
7/19/2023	TF-139	5:50 AM	42	RT	53	800	8.0	153	BRK	145	BRK	173	BRK	P	HW	SS
								148	BRK	165	BRK					
7/19/2023	TF-140	5:45 AM	12	FC	53	800	8.5	144	BRK	151	BRK	168	BRK	P	HW	SS
								150	BRK	151	BRK					
7/19/2023	TF-141	5:46 AM	11	AG	53	800	9.0	150	BRK	167	BRK	164	BRK	P	HW	TT
								167	BRK	157	BRK					
7/19/2023	TF-142	5:50 AM	42	RT	53	800	8.0	151	BRK	159	BRK	166	BRK	P	HW	TT
								167	BRK	167	BRK					
7/19/2023	TF-143	5:47 AM	12	FC	53	800	8.0	164	BRK	162	BRK	174	BRK	P	HW	TT
								156	BRK	164	BRK					
7/19/2023	TF-144	12:30 PM	42	RT	69	800	11.0	138	BRK	144	BRK	145	BRK	P	HW	SS
								137	BRK	133	BRK					

¹See Figure 3 for Break Modes

²TT - Textured to Textured Weld

³SS - Smooth to Smooth Weld

Cripple Creek & Victor Gold Mining Company
Valley Leach Facility 2 Phase 3
Stage A.2 Record of Construction
Geomembrane Fusion Trial Seam Summary



Date	Sample Number	Time	Machine Number	Operator	Ambient Air Temp. (°F)	Machine Settings		Test Results						QA Monitor	Remarks ^{2,3}	
						Temp. (°F)	Speed (ft/min)	Inside Peel (Min. = 100 ppi)		Outside Peel (Min. = 100 ppi)		Shear (Minimum = 120 ppi)				Pass/Fail
								Strength (ppi)	Mode ¹	Strength (ppi)	Mode ¹	Strength (ppi)	Mode ¹			
7/19/2023	TF-145	12:30 PM	42	RT	69	800	11.0	153	BRK	141	BRK	142	BRK	P	HW	TT
								152	BRK	140	BRK					
7/19/2023	TF-146	12:35 PM	11	AG	69	800	13.0	138	BRK	142	BRK	138	BRK	P	HW	SS
								138	BRK	143	BRK					
7/19/2023	TF-147	12:41 PM	11	AG	69	800	12.0	140	BRK	135	BRK	135	BRK	P	HW	TT
								149	BRK	131	BRK					
7/19/2023	TF-148	12:50 PM	12	FC	69	800	10.0	131	BRK	131	BRK	141	BRK	P	HW	SS
								134	BRK	132	BRK					
7/19/2023	TF-149	12:50 PM	12	FC	69	800	9.0	137	BRK	128	BRK	135	BRK	P	HW	TT
								140	BRK	150	BRK					
7/20/2023	TF-150	5:40 AM	11	AG	50	800	9.0	142	BRK	142	BRK	169	BRK	P	MW	TT
								154	BRK	153	BRK					
7/20/2023	TF-151	5:41 AM	11	AG	50	800	8.0	148	BRK	163	BRK	181	BRK	P	MW	SS
								152	BRK	156	BRK					
7/20/2023	TF-152	7:15 AM	42	RT	55	800	8.0	143	BRK	138	BRK	144	BRK	P	KE	SS
								142	BRK	146	BRK					
7/20/2023	TF-153	7:16 AM	42	RT	55	800	8.0	143	BRK	139	BRK	139	BRK	P	KE	TT
								149	BRK	144	BRK					
7/25/2023	TF-154	11:10 AM	12	FC	72	800	12.0	123	BRK	114	BRK	131	BRK	P	HW	SS
								117	BRK	130	BRK					
7/25/2023	TF-155	11:11 AM	12	FC	72	800	12.0	132	BRK	121	BRK	130	BRK	P	HW	TT
								125	BRK	123	BRK					
7/25/2023	TF-156	11:13 AM	32	AG	72	800	12.0	123	BRK	124	BRK	132	BRK	P	HW	SS
								127	BRK	125	BRK					
7/25/2023	TF-157	11:14 AM	32	AG	72	800	12.0	124	BRK	126	BRK	131	BRK	P	HW	TT
								131	BRK	128	BRK					
7/25/2023	TF-158	12:30 PM	42	LZ	72	800	13.5	124	BRK	124	BRK	140	BRK	P	MW	SS
								113	BRK	123	BRK					
7/25/2023	TF-159	12:31 PM	42	LZ	72	800	13.5	128	BRK	127	BRK	135	BRK	P	MW	TT
								125	BRK	131	BRK					
7/25/2023	TF-160	1:48 PM	12	FC	75	800	11.0	107	BRK	113	BRK	124	BRK	P	HW	SS
								109	BRK	121	BRK					

¹See Figure 3 for Break Modes

²TT - Textured to Textured Weld

³SS - Smooth to Smooth Weld

Cripple Creek & Victor Gold Mining Company
Valley Leach Facility 2 Phase 3
Stage A.2 Record of Construction
Geomembrane Fusion Trial Seam Summary



Date	Sample Number	Time	Machine Number	Operator	Ambient Air Temp. (°F)	Machine Settings		Test Results							QA Monitor	Remarks ^{2,3}
						Temp. (°F)	Speed (ft/min)	Inside Peel (Min. = 100 ppi)		Outside Peel (Min. = 100 ppi)		Shear (Minimum = 120 ppi)		Pass/Fail		
								Strength (ppi)	Mode ¹	Strength (ppi)	Mode ¹	Strength (ppi)	Mode ¹			
7/25/2023	TF-161	3:30 PM	32	AG	75	800	11.0	135	BRK	127	BRK	125	BRK	P	HW	TT
								128	BRK	134	BRK					
7/26/2023	TF-162	6:58 AM	11	FC	57	800	11.0	125	BRK	138	BRK	171	BRK	P	HW	SS
								140	BRK	128	BRK					
7/26/2023	TF-163	7:00 AM	11	FC	57	800	10.5	157	BRK	141	BRK	171	BRK	P	HW	TT
								156	BRK	148	BRK					
7/26/2023	TF-164	7:00 AM	42	LA	57	800	11.0	140	BRK	134	BRK	165	BRK	P	HW	SS
								134	BRK	150	BRK					
7/26/2023	TF-165	7:12 AM	32	AG	57	800	12.0	139	BRK	141	BRK	162	BRK	P	HW	SS
								143	BRK	139	BRK					
7/26/2023	TF-166	7:17 AM	32	AG	57	800	11.0	133	BRK	144	BRK	148	BRK	P	HW	TT
								148	BRK	130	BRK					
7/26/2023	TF-167	12:20 PM	32	AG	737	800	12.0	143	BRK	156	BRK	144	BRK	P	HW	TT
								161	BRK	139	BRK					
7/26/2023	TF-168	12:24 PM	32	AG	73	800	13.0	137	BRK	133	BRK	140	BRK	P	HW	SS
								149	BRK	145	BRK					
7/26/2023	TF-169	12:40 PM	11	FC	73	800	12.0	99	AD	-	-	-	-	F	HW	SS
								135	-	-	-					
7/26/2023	TF-170	12:42 PM	11	FC	73	800	10.0	153	BRK	149	BRK	147	BRK	P	HW	TT
								140	BRK	125	BRK					
7/26/2023	TF-171	12:40 PM	42	LZ	73	800	12.5	137	BRK	132	BRK	143	BRK	P	HW	SS
								152	BRK	134	BRK					
7/26/2023	TF-172	12:40 PM	11	FC	73	800	12.0	118	BRK	140	BRK	136	BRK	P	HW	SS
								118	BRK	135	BRK					
7/27/2023	TF-173	6:21 AM	32	AG	58	800	12.0	150	SE1	145	SE1	176	BRK	P	BM	SS
								163	SE1	148	SE1					
7/27/2023	TF-174	6:30 AM	11	FC	58	800	11.0	134	SE1	147	SE1	179	BRK	P	BM	SS
								144	SE1	140	SE1					
7/27/2023	TF-175	6:46 AM	32	AG	58	800	12.0	165	SE1	161	SE1	184	BRK	P	BM	TT
								156	SE1	167	SE1					
7/27/2023	TF-176	6:31 AM	11	FC	58	800	10.5	153	SE1	149	SE1	175	BRK	P	BM	TT
								158	SE1	166	SE1					

¹See Figure 3 for Break Modes

²TT - Textured to Textured Weld

³SS - Smooth to Smooth Weld

Cripple Creek & Victor Gold Mining Company
Valley Leach Facility 2 Phase 3
Stage A.2 Record of Construction
Geomembrane Fusion Trial Seam Summary



Date	Sample Number	Time	Machine Number	Operator	Ambient Air Temp. (°F)	Machine Settings		Test Results						QA Monitor	Remarks ^{2,3}	
						Temp. (°F)	Speed (ft/min)	Inside Peel (Min. = 100 ppi)		Outside Peel (Min. = 100 ppi)		Shear (Minimum = 120 ppi)				Pass/Fail
								Strength (ppi)	Mode ¹	Strength (ppi)	Mode ¹	Strength (ppi)	Mode ¹			
7/27/2023	TF-177	7:01 AM	42	LZ	58	800	10.0	139	SE1	141	SE1	170	BRK	P	BM	SS
								137	SE1	143	SE1					
7/31/2023	TF-178	1:06 PM	32	AG	70	800	13.0	116	BRK	119	BRK	137	BRK	P	BM	SS
								116	BRK	141	BRK					
7/31/2023	TF-179	1:07 PM	32	AG	70	800	12.0	147	BRK	149	BRK	141	BRK	P	BM	TT
								139	BRK	141	BRK					
7/31/2023	TF-180	1:04 PM	11	FC	70	800	11.5	78	AD	-	-	-	-	F	BM	SS
								93	AD	-	-					
7/31/2023	TF-181	1:10 PM	42	RT	70	800	11.0	112	BRK	128	BRK	134	BRK	P	BM	SS
								125	BRK	118	BRK					
7/31/2023	TF-182	1:14 PM	11	FC	70	800	10.5	100	BRK	122	BRK	136	BRK	P	BM	SS
								102	BRK	116	BRK					
7/31/2023	TF-183	1:55 PM	42	RT	70	800	11.0	130	BRK	137	BRK	131	BRK	P	BM	TT
								129	BRK	129	BRK					
8/2/2023	TF-184	6:52 AM	32	AG	52	800	12.0	156	BRK	166	BRK	197	BRK	P	BM	SS
								136	BRK	174	BRK					
8/2/2023	TF-185	6:57 AM	42	RT	52	800	11.0	143	BRK	163	BRK	177	BRK	P	BM	SS
								152	BRK	166	BRK					
8/2/2023	TF-186	7:01 AM	11	FC	52	850	10.5	142	BRK	133	BRK	194	BRK	P	BM	SS
								158	BRK	157	BRK					
8/2/2023	TF-187	7:07 AM	32	AG	52	800	11.0	171	BRK	168	BRK	199	BRK	P	BM	TT
								171	BRK	169	BRK					
8/2/2023	TF-188	7:10 AM	42	RT	52	800	11.0	168	BRK	183	BRK	196	BRK	P	BM	TT
								168	BRK	178	BRK					
8/2/2023	TF-189	7:12 AM	11	FC	52	850	11.0	187	BRK	167	BRK	192	BRK	P	BM	TT
								178	BRK	164	BRK					
8/2/2023	TF-190	12:40 PM	32	AG	67	800	12.0	152	BRK	163	BRK	141	BRK	P	BM	TT
								153	BRK	160	BRK					
8/3/2023	TF-191	12:53 PM	32	RT	67	800	11.0	130	BRK	135	BRK	141	BRK	P	BM	SS
								127	BRK	138	BRK					
8/3/2023	TF-192	12:54 PM	32	RT	67	800	11.0	128	BRK	135	BRK	147	BRK	P	BM	TT
								132	BRK	140	BRK					

¹See Figure 3 for Break Modes

²TT - Textured to Textured Weld

³SS - Smooth to Smooth Weld

Cripple Creek & Victor Gold Mining Company
Valley Leach Facility 2 Phase 3
Stage A.2 Record of Construction
Geomembrane Fusion Trial Seam Summary



Date	Sample Number	Time	Machine Number	Operator	Ambient Air Temp. (°F)	Machine Settings		Test Results							QA Monitor	Remarks ^{2,3}
						Temp. (°F)	Speed (ft/min)	Inside Peel (Min. = 100 ppi)		Outside Peel (Min. = 100 ppi)		Shear (Minimum = 120 ppi)		Pass/Fail		
								Strength (ppi)	Mode ¹	Strength (ppi)	Mode ¹	Strength (ppi)	Mode ¹			
8/3/2023	TF-193	12:55 PM	11	FC	67	800	11.0	126	BRK	126	BRK	136	BRK	P	BM	SS
								122	BRK	137	BRK					
8/3/2023	TF-194	12:57 PM	11	FC	67	800	10.5	135	BRK	125	BRK	149	BRK	P	BM	TT
								141	BRK	135	BRK					
8/3/2023	TF-195	1:00 PM	22	AG	67	800	13.0	129	BRK	131	BRK	150	BRK	P	BM	SS
								131	BRK	127	BRK					
8/3/2023	TF-196	1:05 PM	22	AG	67	800	12.0	128	BRK	131	BRK	141	BRK	P	BM	TT
								132	BRK	139	BRK					
8/4/2023	TF-197	6:44 AM	183	FC	50	800	10.5	147	BRK	150	BRK	186	BRK	P	BM	SS
								131	BRK	149	BRK					
8/4/2023	TF-198	6:49 AM	11	FC	50	800	11.0	189	BRK	183	BRK	187	BRK	P	BM	TT
								184	BRK	170	BRK					
8/4/2023	TF-199	6:50 AM	32	RT	50	800	11.0	154	BRK	170	BRK	187	BRK	P	BM	SS
								178	BRK	163	BRK					
8/4/2023	TF-200	6:50 AM	22	AG	50	800	11.0	173	BRK	180	BRK	179	BRK	P	BM	TT
								164	BRK	170	BRK					
8/4/2023	TF-201	6:50 AM	32	RT	50	800	11.0	177	BRK	168	BRK	184	BRK	P	BM	TT
								161	BRK	174	BRK					
8/4/2023	TF-202	6:55 AM	22	AG	50	800	12.0	158	BRK	150	BRK	187	BRK	P	BM	SS
								162	BRK	156	BRK					
8/4/2023	TF-203	12:39 PM	11	FC	68	800	12.0	143	BRK	143	BRK	143	BRK	P	BM	SS
								142	BRK	133	BRK					
8/4/2023	TF-204	12:40 PM	22	AG	68	800	13.0	136	BRK	150	BRK	158	BRK	P	BM	SS
								146	BRK	147	BRK					
8/4/2023	TF-205	12:40 PM	32	RT	68	800	12.0	132	BRK	159	BRK	147	BRK	P	BM	TT
								144	BRK	132	BRK					
8/4/2023	TF-206	12:42 PM	11	FC	68	800	12.0	170	BRK	161	BRK	163	BRK	P	BM	TT
								155	BRK	153	BRK					
8/4/2023	TF-207	12:46 PM	22	AG	68	800	12.0	151	BRK	142	BRK	143	BRK	P	BM	TT
								152	BRK	132	BRK					
8/4/2023	TF-208	12:48 PM	32	RT	68	800	12.0	141	BRK	130	BRK	149	BRK	P	BM	SS
								136	BRK	133	BRK					

¹See Figure 3 for Break Modes

²TT - Textured to Textured Weld

³SS - Smooth to Smooth Weld

Cripple Creek & Victor Gold Mining Company
Valley Leach Facility 2 Phase 3
Stage A.2 Record of Construction
Geomembrane Fusion Trial Seam Summary



Date	Sample Number	Time	Machine Number	Operator	Ambient Air Temp. (°F)	Machine Settings		Test Results							QA Monitor	Remarks ^{2,3}
						Temp. (°F)	Speed (ft/min)	Inside Peel (Min. = 100 ppi)		Outside Peel (Min. = 100 ppi)		Shear (Minimum = 120 ppi)		Pass/Fail		
								Strength (ppi)	Mode ¹	Strength (ppi)	Mode ¹	Strength (ppi)	Mode ¹			
8/5/2023	TF-209	6:34 AM	32	RT	52	800	11.0	174	BRK	171	BRK	175	BRK	P	BM	TT
								166	BRK	149	BRK					
8/8/2023	TF-210	6:30 AM	22	AG	50	800	12.0	160	BRK	160	BRK	140	BRK	P	HW	SS
								167	BRK	166	BRK					
8/8/2023	TF-211	6:35 AM	32	RT	50	800	11.0	157	BRK	165	BRK	187	BRK	P	HW	SS
								157	BRK	161	BRK					
8/8/2023	TF-212	6:30 AM	11	FC	50	800	11.5	153	BRK	134	BRK	191	BRK	P	HW	SS
								154	BRK	141	BRK					
8/8/2023	TF-213	6:32 AM	11	FC	50	800	11.0	163	BRK	156	BRK	181	BRK	P	HW	TT
								169	BRK	163	BRK					
8/8/2023	TF-214	6:35 AM	32	RT	50	800	11.0	183	BRK	166	BRK	188	BRK	P	HW	TT
								151	BRK	164	BRK					
8/8/2023	TF-215	6:35 AM	22	AG	50	800	11.0	185	BRK	166	BRK	200	BRK	P	HW	TT
								171	BRK	179	BRK					
8/9/2023	TF-216	6:40 AM	32	RT	48	800	11.0	168	BRK	155	BRK	191	BRK	P	HW	SS
								157	BRK	168	BRK					
8/9/2023	TF-217	6:40 AM	32	RT	48	800	11.0	155	BRK	160	BRK	177	BRK	P	HW	TT
								162	BRK	174	BRK					
8/9/2023	TF-218	8:40 AM	11	FC	54	800	11.0	139	BRK	150	BRK	170	BRK	P	HW	SS
								140	BRK	135	BRK					
8/9/2023	TF-219	8:40 AM	22	AG	54	800	12.0	140	BRK	139	BRK	191	BRK	P	HW	SS
								151	BRK	166	BRK					
8/9/2023	TF-220	8:45 AM	22	AG	54	800	11.0	170	BRK	170	BRK	177	BRK	P	HW	TT
								163	BRK	167	BRK					
8/9/2023	TF-221	8:30 AM	11	FC	54	800	11.0	157	BRK	157	BRK	167	BRK	P	HW	TT
								143	BRK	156	BRK					
8/10/2023	TF-222	6:35 AM	22	AG	52	800	12.0	169	BRK	166	BRK	179	BRK	P	HW	SS
								158	BRK	155	BRK					
8/10/2023	TF-223	6:45 AM	32	RT	52	800	11.0	151	BRK	131	BRK	158	BRK	P	HW	SS
								153	BRK	157	BRK					
8/10/2023	TF-224	6:48 AM	11	FC	52	800	11.0	143	BRK	133	BRK	174	BRK	P	HW	SS
								149	BRK	135	BRK					

¹See Figure 3 for Break Modes

²TT - Textured to Textured Weld

³SS - Smooth to Smooth Weld

Cripple Creek & Victor Gold Mining Company
Valley Leach Facility 2 Phase 3
Stage A.2 Record of Construction
Geomembrane Fusion Trial Seam Summary



Date	Sample Number	Time	Machine Number	Operator	Ambient Air Temp. (°F)	Machine Settings		Test Results							QA Monitor	Remarks ^{2,3}
						Temp. (°F)	Speed (ft/min)	Inside Peel (Min. = 100 ppi)		Outside Peel (Min. = 100 ppi)		Shear (Minimum = 120 ppi)		Pass/Fail		
								Strength (ppi)	Mode ¹	Strength (ppi)	Mode ¹	Strength (ppi)	Mode ¹			
8/10/2023	TF-225	6:40 AM	22	AG	52	800	11.0	184	BRK	173	BRK	183	BRK	P	HW	TT
								169	BRK	176	BRK					
8/10/2023	TF-226	6:40 AM	32	RT	52	800	11.0	176	BRK	175	BRK	179	BRK	P	HW	TT
								172	BRK	153	BRK					
8/10/2023	TF-227	6:50 AM	11	FC	52	800	11.0	168	BRK	171	BRK	186	BRK	P	HW	TT
								162	BRK	169	BRK					
8/11/2023	TF-228	6:50 AM	42	FC	50	800	10.5	127	BRK	-	-	-	-	F	HW	SS
								86	AD	-	-					
8/11/2023	TF-229	6:55 AM	32	RT	50	800	11.0	150	BRK	129	BRK	181	BRK	P	HW	SS
								150	BRK	155	BRK					
8/11/2023	TF-230	6:55 AM	32	RT	50	800	11.0	169	BRK	154	BRK	170	BRK	P	HW	TT
								173	BRK	149	BRK					
8/11/2023	TF-231	6:45 AM	22	AG	50	800	12.0	150	BRK	149	BRK	182	BRK	P	HW	SS
								159	BRK	158	BRK					
8/11/2023	TF-232	6:50 AM	22	AG	50	800	11.0	171	BRK	170	BRK	171	BRK	P	HW	TT
								169	BRK	169	BRK					
8/11/2023	TF-233	6:56 AM	42	FC	50	800	10.5	153	BRK	150	BRK	170	BRK	P	HW	TT
								166	BRK	152	BRK					
8/11/2023	TF-234	6:50 AM	42	FC	50	800	12.0	137	BRK	141	BRK	167	BRK	P	HW	SS
								133	BRK	139	BRK					
8/14/2023	TF-235	8:03 AM	22	AG	46	800	11.0	177	BRK	162	BRK	180	BRK	P	CU	TT
								157	BRK	175	BRK					
8/15/2023	TF-236	6:57 AM	11	FC	49	830	12.0	127	BRK	148	BRK	177	BRK	P	HW	SS
								136	BRK	154	BRK					
8/15/2023	TF-237	6:57 AM	32	RT	49	800	11.0	147	BRK	148	BRK	177	BRK	P	HW	SS
								159	BRK	156	BRK					
8/15/2023	TF-238	6:57 AM	32	RT	49	800	11.0	178	BRK	179	BRK	179	BRK	P	HW	TT
								172	BRK	155	BRK					
8/15/2023	TF-239	6:55 AM	11	FC	49	830	12.0	167	BRK	174	BRK	180	BRK	P	HW	TT
								164	BRK	163	BRK					
8/15/2023	TF-240	7:22 AM	22	AG	49	800	11.0	152	BRK	153	BRK	176	BRK	P	HW	SS
								153	BRK	151	BRK					

¹See Figure 3 for Break Modes

²TT - Textured to Textured Weld

³SS - Smooth to Smooth Weld

Cripple Creek & Victor Gold Mining Company
Valley Leach Facility 2 Phase 3
Stage A.2 Record of Construction
Geomembrane Fusion Trial Seam Summary



Date	Sample Number	Time	Machine Number	Operator	Ambient Air Temp. (°F)	Machine Settings		Test Results						QA Monitor	Remarks ^{2,3}	
						Temp. (°F)	Speed (ft/min)	Inside Peel (Min. = 100 ppi)		Outside Peel (Min. = 100 ppi)		Shear (Minimum = 120 ppi)				Pass/Fail
								Strength (ppi)	Mode ¹	Strength (ppi)	Mode ¹	Strength (ppi)	Mode ¹			
8/15/2023	TF-241	7:17 AM	22	AG	49	800	11.0	170	BRK	172	BRK	172	BRK	P	HW	TT
								163	BRK	164	BRK					
8/15/2023	TF-242	12:30 PM	32	RT	72	800	12.0	129	BRK	123	BRK	141	BRK	P	HW	SS
								135	BRK	132	BRK					
8/15/2023	TF-243	12:28 PM	42	FC	72	800	12.5	141	BRK	140	BRK	147	BRK	P	HW	SS
								135	BRK	134	BRK					
8/15/2023	TF-244	12:30 PM	22	AG	72	800	13.0	138	BRK	134	BRK	137	BRK	P	HW	SS
								118	BRK	131	BRK					
8/15/2023	TF-245	7:40 AM	42	FC	54	800	12.0	145	BRK	154	BRK	190	BRK	P	HW	SS
								153	BRK	149	BRK					
8/15/2023	TF-246	12:35 PM	22	AG	72	800	12.0	143	BRK	144	BRK	150	BRK	P	HW	TT
								134	BRK	135	BRK					
8/15/2023	TF-247	12:30 PM	42	FC	72	800	12.5	135	BRK	127	BRK	138	BRK	P	HW	TT
								127	BRK	131	BRK					
8/15/2023	TF-248	12:30 PM	32	RT	72	800	12.0	145	BRK	152	BRK	151	BRK	P	HW	TT
								148	BRK	134	BRK					
8/16/2023	TF-249	7:00 AM	22	DS	53	800	11.0	147	BRK	156	BRK	173	BRK	P	HW	SS
								158	BRK	153	BRK					
8/16/2023	TF-250	6:55 AM	32	RT	53	800	11.0	157	BRK	147	BRK	177	BRK	P	HW	SS
								154	BRK	137	BRK					
8/16/2023	TF-251	6:50 AM	42	FC	53	800	12.0	145	BRK	145	BRK	179	BRK	P	HW	SS
								154	BRK	156	BRK					
8/16/2023	TF-252	7:01 AM	22	DS	53	800	11.0	157	BRK	171	BRK	175	BRK	P	HW	TT
								172	BRK	153	BRK					
8/16/2023	TF-253	6:55 AM	32	RT	53	800	11.0	162	BRK	169	BRK	168	BRK	P	HW	TT
								157	BRK	154	BRK					
8/16/2023	TF-254	6:55 AM	42	FC	53	800	12.0	164	BRK	152	BRK	170	BRK	P	HW	TT
								152	BRK	121	BRK					
8/16/2023	TF-255	12:41 PM	32	RT	72	800	12.0	146	BRK	153	BRK	143	BRK	P	HW	SS
								139	BRK	141	BRK					
8/16/2023	TF-256	12:40 PM	32	RT	72	800	12.0	140	BRK	132	BRK	148	BRK	P	HW	TT
								133	BRK	139	BRK					

¹See Figure 3 for Break Modes

²TT - Textured to Textured Weld

³SS - Smooth to Smooth Weld

Cripple Creek & Victor Gold Mining Company
Valley Leach Facility 2 Phase 3
Stage A.2 Record of Construction
Geomembrane Fusion Trial Seam Summary



Date	Sample Number	Time	Machine Number	Operator	Ambient Air Temp. (°F)	Machine Settings		Test Results							QA Monitor	Remarks ^{2,3}
						Temp. (°F)	Speed (ft/min)	Inside Peel (Min. = 100 ppi)		Outside Peel (Min. = 100 ppi)		Shear (Minimum = 120 ppi)		Pass/Fail		
								Strength (ppi)	Mode ¹	Strength (ppi)	Mode ¹	Strength (ppi)	Mode ¹			
8/17/2023	TF-257	6:55 AM	22	AG	55	800	12.0	158	BRK	165	BRK	179	BRK	P	HW	TT
								162	BRK	161	BRK					
8/21/2023	TF-258	8:06 AM	32	RT	58	800	11.0	159	BRK	140	BRK	181	BRK	P	HW	SS
								158	BRK	148	BRK					
8/21/2023	TF-259	8:05 AM	42	FC	58	800	11.0	138	BRK	140	BRK	147	BRK	P	HW	SS
								139	BRK	145	BRK					
8/21/2023	TF-260	8:08 AM	42	FC	58	800	11.0	156	BRK	160	BRK	175	BRK	P	HW	TT
								160	BRK	153	BRK					
8/21/2023	TF-261	8:06 AM	32	RT	58	800	11.0	145	BRK	152	BRK	180	BRK	P	HW	TT
								157	BRK	155	BRK					
8/21/2023	TF-262	8:18 AM	22	AG	58	800	9.0	156	BRK	137	BRK	167	BRK	P	HW	SS
								153	BRK	149	BRK					
8/21/2023	TF-263	8:20 AM	22	AG	58	800	8.0	158	BRK	158	BRK	182	BRK	P	HW	TT
								160	BRK	153	BRK					
8/22/2023	TF-264	6:41 AM	42	FC	54	800	11.5	149	BRK	145	BRK	176	BRK	P	CU	SS
								143	BRK	159	BRK					
8/22/2023	TF-265	6:43 AM	32	RT	54	800	11.0	164	BRK	180	BRK	183	BRK	P	CU	SS
								177	BRK	174	BRK					
8/22/2023	TF-266	6:50 AM	22	AG	54	800	12.0	161	BRK	147	BRK	169	BRK	P	CU	SS
								158	BRK	151	BRK					
8/22/2023	TF-267	6:55 AM	22	AG	54	800	11.0	176	BRK	167	BRK	189	BRK	P	CU	TT
								162	BRK	167	BRK					
8/22/2023	TF-268	6:40 AM	42	FC	54	800	11.5	156	BRK	158	BRK	183	BRK	P	CU	TT
								153	BRK	149	BRK					
8/22/2023	TF-269	6:50 AM	32	RT	54	800	11.0	172	BRK	170	BRK	181	BRK	P	CU	TT
								164	BRK	159	BRK					
8/22/2023	TF-270	12:39 PM	32	RT	70	800	13.0	139	BRK	136	BRK	141	BRK	P	CU	SS
								148	BRK	145	BRK					
8/22/2023	TF-271	12:40 PM	22	AG	70	800	13.0	120	BRK	121	BRK	131	BRK	P	CU	SS
								126	BRK	122	BRK					
8/22/2023	TF-272	12:45 PM	42	FC	70	800	12.5	136	BRK	142	BRK	150	BRK	P	CU	SS
								129	BRK	140	BRK					

¹See Figure 3 for Break Modes

²TT - Textured to Textured Weld

³SS - Smooth to Smooth Weld

Cripple Creek & Victor Gold Mining Company
Valley Leach Facility 2 Phase 3
Stage A.2 Record of Construction
Geomembrane Fusion Trial Seam Summary



Date	Sample Number	Time	Machine Number	Operator	Ambient Air Temp. (°F)	Machine Settings		Test Results							QA Monitor	Remarks ^{2,3}
						Temp. (°F)	Speed (ft/min)	Inside Peel (Min. = 100 ppi)		Outside Peel (Min. = 100 ppi)		Shear (Minimum = 120 ppi)		Pass/Fail		
								Strength (ppi)	Mode ¹	Strength (ppi)	Mode ¹	Strength (ppi)	Mode ¹			
8/22/2023	TF-273	12:39 PM	32	RT	70	800	13.0	141	BRK	129	BRK	143	BRK	P	CU	TT
								138	BRK	134	BRK					
8/22/2023	TF-274	12:41 PM	22	AG	70	800	12.0	145	BRK	139	BRK	140	BRK	P	CU	TT
								147	BRK	142	BRK					
8/22/2023	TF-275	12:46 PM	42	FC	70	800	12.5	139	BRK	141	BRK	155	BRK	P	CU	TT
								164	BRK	154	BRK					
8/23/2023	TF-276	7:05 AM	42	FC	54	800	11.0	134	BRK	148	BRK	159	BRK	P	CU	SS
								136	BRK	143	BRK					
8/23/2023	TF-277	7:00 AM	32	RT	54	800	11.0	145	BRK	157	BRK	175	BRK	P	CU	SS
								146	BRK	144	BRK					
8/23/2023	TF-278	7:00 AM	32	RT	54	800	11.0	165	BRK	183	BRK	194	BRK	P	CU	TT
								185	BRK	177	BRK					
8/23/2023	TF-279	7:09 AM	22	AG	54	800	12.0	147	BRK	162	BRK	171	BRK	P	CU	SS
								157	BRK	149	BRK					
8/23/2023	TF-280	7:12 AM	22	AG	54	800	11.0	179	BRK	185	BRK	182	BRK	P	CU	TT
								180	BRK	180	BRK					
8/23/2023	TF-281	7:35 AM	11	FC	54	800	11.0	168	BRK	152	BRK	173	BRK	P	CU	SS
								184	BRK	168	BRK					
8/23/2023	TF-282	7:35 AM	11	FC	54	800	10.5	136	BRK	142	BRK	167	BRK	P	CU	TT
								166	BRK	148	BRK					
8/24/2023	TF-283	6:40 AM	22	AG	52	800	12.0	165	BRK	165	BRK	170	BRK	P	HW	SS
								145	BRK	160	BRK					
8/24/2023	TF-284	6:44 AM	22	AG	52	800	11.0	148	BRK	149	BRK	177	BRK	P	HW	TT
								152	BRK	159	BRK					
8/24/2023	TF-285	7:43 AM	11	FC	54	800	12.0	139	BRK	142	BRK	157	BRK	P	HW	SS
								137	BRK	122	BRK					
8/24/2023	TF-286	7:37 AM	32	RT	54	800	11.0	134	BRK	146	BRK	165	BRK	P	HW	SS
								134	BRK	140	BRK					
8/24/2023	TF-287	7:43 AM	11	FC	54	800	11.5	168	BRK	149	BRK	166	BRK	P	HW	TT
								165	BRK	146	BRK					
8/24/2023	TF-288	7:37 AM	32	RT	54	800	11.0	164	BRK	146	BRK	162	BRK	P	HW	TT
								153	BRK	149	BRK					

¹See Figure 3 for Break Modes

²TT - Textured to Textured Weld

³SS - Smooth to Smooth Weld

Cripple Creek & Victor Gold Mining Company
Valley Leach Facility 2 Phase 3
Stage A.2 Record of Construction
Geomembrane Fusion Trial Seam Summary



Date	Sample Number	Time	Machine Number	Operator	Ambient Air Temp. (°F)	Machine Settings		Test Results							QA Monitor	Remarks ^{2,3}
						Temp. (°F)	Speed (ft/min)	Inside Peel (Min. = 100 ppi)		Outside Peel (Min. = 100 ppi)		Shear (Minimum = 120 ppi)		Pass/Fail		
								Strength (ppi)	Mode ¹	Strength (ppi)	Mode ¹	Strength (ppi)	Mode ¹			
8/24/2023	TF-289	12:50 PM	22	AG	70	800	13.0	114	BRK	126	BRK	141	BRK	P	HW	SS
								112	BRK	120	BRK					
8/24/2023	TF-290	12:53 PM	32	RT	70	800	13.0	123	BRK	132	BRK	137	BRK	P	HW	SS
								116	BRK	124	BRK					
8/24/2023	TF-291	12:53 PM	32	RT	70	800	13.0	134	BRK	138	BRK	140	BRK	P	HW	TT
								127	BRK	128	BRK					
8/25/2023	TF-292	6:44 AM	22	AG	54	800	11.0	142	SE1	161	SE1	166	BRK	P	BM	TT
								150	SE1	148	SE1					
8/30/2023	TF-293	9:30 AM	22	AG	63	800	12.0	132	BRK	147	BRK	139	BRK	P	HW	SS
								140	BRK	137	BRK					
8/30/2023	TF-294	9:30 AM	11	FC	63	800	11.5	131	BRK	129	BRK	145	BRK	P	HW	SS
								135	BRK	140	BRK					
8/30/2023	TF-295	9:31 AM	32	RT	63	800	11.0	133	BRK	141	BRK	148	BRK	P	HW	SS
								127	BRK	134	BRK					
8/30/2023	TF-296	9:33 AM	22	AG	63	800	11.0	140	BRK	155	BRK	159	BRK	P	HW	TT
								149	BRK	156	BRK					
8/30/2023	TF-297	9:35 AM	11	FC	63	800	11.5	125	BRK	134	BRK	156	BRK	P	HW	TT
								140	BRK	143	BRK					
8/30/2023	TF-298	9:42 AM	32	RT	63	800	11.0	122	BRK	131	BRK	150	BRK	P	HW	TT
								130	BRK	129	BRK					
8/30/2023	TF-299	12:45 PM	22	AG	70	800	13.0	118	BRK	132	BRK	145	BRK	P	HW	SS
								128	BRK	136	BRK					
8/30/2023	TF-300	12:41 PM	11	FC	70	800	11.0	136	BRK	106	BRK	145	BRK	P	HW	SS
								128	BRK	107	BRK					
8/30/2023	TF-301	12:45 PM	32	RT	70	800	13.0	120	BRK	139	BRK	139	BRK	P	HW	SS
								117	BRK	133	BRK					
8/30/2023	TF-302	12:43 PM	11	FC	70	800	12.5	128	BRK	143	BRK	153	BRK	P	HW	TT
								141	BRK	143	BRK					
8/30/2023	TF-303	12:45 PM	32	RT	70	800	13.0	149	BRK	157	BRK	155	BRK	P	HW	TT
								134	BRK	148	BRK					
8/30/2023	TF-304	12:50 PM	22	AG	70	800	12.0	162	BRK	165	BRK	160	BRK	P	HW	TT
								155	BRK	144	BRK					

¹See Figure 3 for Break Modes

²TT - Textured to Textured Weld

³SS - Smooth to Smooth Weld

Cripple Creek & Victor Gold Mining Company
Valley Leach Facility 2 Phase 3
Stage A.2 Record of Construction
Geomembrane Fusion Trial Seam Summary



Date	Sample Number	Time	Machine Number	Operator	Ambient Air Temp. (°F)	Machine Settings		Test Results							QA Monitor	Remarks ^{2,3}
						Temp. (°F)	Speed (ft/min)	Inside Peel (Min. = 100 ppi)		Outside Peel (Min. = 100 ppi)		Shear (Minimum = 120 ppi)		Pass/Fail		
								Strength (ppi)	Mode ¹	Strength (ppi)	Mode ¹	Strength (ppi)	Mode ¹			
8/31/2023	TF-305	6:45 AM	22	AG	54	800	12.0	153	BRK	156	BRK	175	BRK	P	HW	SS
								149	BRK	155	BRK					
8/31/2023	TF-306	6:40 AM	22	AG	54	800	11.0	163	BRK	157	BRK	172	BRK	P	HW	TT
								152	BRK	156	BRK					
8/31/2023	TF-307	8:00 AM	11	FC	60	800	11.5	134	BRK	140	BRK	164	BRK	P	HW	SS
								142	BRK	142	BRK					
8/31/2023	TF-308	7:58 AM	11	FC	60	800	11.5	140	BRK	158	BRK	165	BRK	P	HW	TT
								150	BRK	148	BRK					
8/31/2023	TF-309	7:50 AM	32	RT	60	800	11.0	165	BRK	185	BRK	191	BRK	P	HW	SS
								150	BRK	173	BRK					
8/31/2023	TF-310	7:50 AM	32	RT	60	800	11.0	180	BRK	141	BRK	146	BRK	P	HW	TT
								164	BRK	149	BRK					
8/31/2023	TF-311	12:59 PM	22	AG	68	800	13.0	130	BRK	140	BRK	150	BRK	P	HW	SS
								143	BRK	143	BRK					
8/31/2023	TF-312	12:59 PM	32	RT	68	800	13.0	141	BRK	135	BRK	147	BRK	P	HW	SS
								147	BRK	150	BRK					
8/31/2023	TF-313	12:57 PM	32	RT	68	800	13.0	138	BRK	141	BRK	148	BRK	P	HW	TT
								133	BRK	145	BRK					
9/1/2023	TF-314	7:12 AM	32	RT	56	800	10.0	150	BRK	144	BRK	166	BRK	P	BM	TT
								150	BRK	155	BRK					

¹See Figure 3 for Break Modes
²TT - Textured to Textured Weld
³SS - Smooth to Smooth Weld