FMS-HG18-13A


GOLDER
Project Number: 1895674
Project Title: Hydrogeological Investigations - Fifteen Mile Stream and Cochrane Hill
Client: Atlantic Gold Corporation
Borehole Number: FMS-HG18-13A
Core Run Number(s): 3-5
Depth (m): 5.86 to 8.38
Date (yy/mm/dd): 13/08/08
Core Condition: (Dry/Wet) WET
Prepared by: AKV / KL
Kodak grey scale
Scale in cm
FMS-HG18-13A
6.39
7.17
8.38

FMS-HG18-13A


1895678 - FMS+CH HYDROGEO. INVESTIGATIONS
FMS-HG18-10A
CR3-CR5
BOX 2
5.86-8.38m
GOLDER
Project Number: 1895674
Borehole Number: FMS-HG18-13A
Date (yy/mm/dd): 18/08/08
Project Title: Hydrogeological Investigations - Fifteen Mile Stream and Cochrane Hill
Core Run Number(s): 5-6
Core Condition: (Dry/Wet) WET
Client: Atlantic Gold Corporation
Depth (m): 8.38 to 10.89
Prepared by: AKV / KL
KODAK Color Control Patches
Kodak grey scale
Scale in cm
8.38m
9.28m
10.89 M

FMS-HG18-13A


GOLDER
Project Number: 1895674
Borehole Number: FMS-HG18-13A
Date (yy/mm/dd): 13/08/08
Project Title: Hydrogeological Investigations - Fifteen Mile Stream and Cochrane Hill
Core Run Number(s): 7
Core Condition: (Dry/Wet) WET
Client: Atlantic Gold Corporation
Depth (m): 10.87 to 12.43
Prepared by: AKV / KL
Kodak gray scale
Scale in cm
FMS-HG18-13A
12.43

FMS-HG18-13B


GOLDER
Project Number: 1895674
Borehole Number: FMS-HG18-13B
Date (yy/mm/dd): 13/08/09
Project Title: Hydrogeological Investigations - Fifteen Mile Stream and Cochrane Hill
Core Run Number(s): 1-4
Core Condition: (Dry/Wet) DRY
Client: Atlantic Gold Corporation
Depth (m): 2.59 to 5.62
Prepared by: AKV / KL
Kodak grey scale
Scale in cm
2.59m
3.08M
3.51M
5.62m

FMS-HG18-14A


GOLDER
Project Number: 1895674
Borehole Number: FMS-HG18-14A
Date (yy/mm/dd): 18/06/08
Project Title: Hydrogeological Investigations - Fifteen Mile Stream and Cochrane Hill
Core Run Number(s): 1 to 4
Core Condition: (Dry/Wet) wet
Client: Atlantic Gold Corporation
Depth (m): 2.74 to 5.34
Prepared by: CM/CDM
KODAK Color Control Patches
Kodak grey scale
Scale in cm
0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160
FMS-HG18-14A-BOX1
.35 HVN
> 5.34m

FMS-HG18-14A


GOLDER
Project Number: 1895674
Borehole Number: FMS-HG18-14A
Date (yy/mm/dd): 18/06/06
Project Title: Hydrogeological Investigations - Fifteen Mile Stream and Cochrane Hill
Core Run Number(s): 4 to 6
Core Condition: (Dry/Wet) Wet
Client: Atlantic Gold Corporation
Depth (m): 5.34 to 7.96
Prepared by: CM/CDM
KODAK Color Control Patches
Kodak grey scale
Scale in cm
0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160
5.34
6.31
7.81

FMS-HG18-14A


GOLDER
Project Number: 1895674
Borehole Number: FMS-HG18-14A
Date (yy/mm/dd): 18/06/06
Project Title: Hydrogeological Investigations Fifteen Mile Stream and Cochrane Hill
Core Run Number(s): 6 to 7
Core Condition: (Dry/Wet) Wet
Client: Atlantic Gold Corporation
Depth (m): 7.96 to 10.69
Prepared by: CM/CDM
KODAK Color Control Patches
Kodak grey scale
Scale in cm
0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160
FMS-HG18-14A
7.96m
10.69

FMS-HG18-14A


GOLDER
Project Number: 1895674
Borehole Number: FMS-HG18-14A
Date (yy/mm/dd): 18/06/08
Project Title: Hydrogeological Investigations - Fifteen Mile Stream and Cochrane Hill
Core Run Number(s): 7 to 9
Core Condition: (Dry/Wet) Wet
Client: Atlantic Gold Corporation
Depth (m): 10.69 to 13.35
Prepared by: CM/COM
KODAK Color Control Patches
Kodak grey scale
0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160
Scale in cm
10.69
12.31
13.35

FMS-HG18-14A


GOLDER
Project Number: 1895674
Borehole Number: FMS-HG18-14A
Date (yy/mm/dd): 18/06/08
Project Title: Hydrogeological Investigations - Fifteen Mile Stream and Cochrane Hill
Core Run Number(s): 9
Core Condition: (Dry/Wet) Wet
Client: Atlantic Gold Corporation
Depth (m): 13.35 to 13.81
Prepared by: CM/COM
Kodak grey scale
Scale in cm
13.81
13.81m EOH

FMS-HG18-14B


GOLDER
Project Number: 1895674
Borehole Number: FMS-HG18-14B
Date (yy/mm/dd): 18/06/10
Project Title: Hydrogeological Investigations - Fifteen Mile Stream and Cochrane Hill
Core Run Number(s): 1 to 5
Core Condition: (Dry/Wet) Wet
Client: Atlantic Gold Corporation
Depth (m): 2.50 to 5.13
Prepared by: CM/CDM
KODAK Color Control Patches
Kodak grey scale
Scale in cm
2.30M
FMS-HG18-14B
3.33m
3.70
4.83m
5.13m

FMS-HG18-14B


GOLDER
Project Number: 1895674
Borehole Number: FMS-HG18-14B
Date (yy/mm/dd): 18/06/10
Project Title: Hydrogeological Investigations - Fifteen Mile Stream and Cochrane Hill
Core Run Number(s): 5 to 6
Core Condition: (Dry/Wet) WET
Client: Atlantic Gold Corporation
Depth (m): 5.13 to 7.83
Prepared by: CM/COM
KODAK Color Control Patches
Kodak grey scale
Scale in cm
5.13m
6.33
7.83m
17.83m

FMS-HG18-15A


GOLDER
Project Number: 1895674
Borehole Number: FMS-HG18-15A
Date (yy/mm/dd): 18/06/12
Project Title: Hydrogeological Investigations - Fifteen Mile Stream and Cochrane Hill
Core Run Number(s): 1 to 4
Core Condition: (Dry/Wet) Wet
Client: Atlantic Gold Corporation
Depth (m): 2.35 to 4.92
Prepared by: CM/CDM
KODAK Color Control Patches
Kodak grey scale
Scale in cm
0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160
3.09
FMS-HG18-15A

FMS-HG18-15A


GOLDER
Project Number: 1895674
Borehole Number: FMS-HG18-15A
Date (yy/mm/dd): 18/06/12
Project Title: Hydrogeological Investigations - Fifteen Mile Stream and Cochrane Hill
Core Run Number(s): 4 to 5
Core Condition: (Dry/Wet) Wet
Client: Atlantic Gold Corporation
Depth (m): 4.92 to 7.75
Prepared by: CM/CDM
Kodak grey scale
Scale in cm
FMS-HG18-15A Box 2

FMS-HG18-15A


GOLDER
Project Number: 1895674
Borehole Number: FMS-HG18-15A
Date (yy/mm/dd): 18/06/12
Project Title: Hydrogeological Investigations - Fifteen Mile Stream and Cochrane Hill
Core Run Number(s): 5 to 7
Core Condition: (Dry/Wet) Wet
Client: Atlantic Gold Corporation
Depth (m): 7.75 to 10.45
Prepared by: CM/COM
KODAK Color Control Patches
Kodak grey scale
Scale in cm
0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160
FMS-HG18-15A
7.54
9.34
CO
.56
.26

FMS-HG18-15A


GOLDER
Project Number: 1895674
Borehole Number: FMS-HG18-15A
Date (yy/mm/dd): 18/06/12
Project Title: Hydrogeological Investigations - Fifteen Mile Stream and Cochrane Hill
Core Run Number(s): 7
Core Condition: (Dry/Wet) Wet
Client: Atlantic Gold Corporation
Depth (m): 10.45 to 10.83
Prepared by: CM/CDM
Kodak grey scale
Scale in cm
0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

FMS-HG18-15B


GOLDER
Project Number: 1895674
Borehole Number: FMS-HG18-15B
Date (yy/mm/dd): 18/06/13
Project Title: Hydrogeological Investigations - Fifteen Mile Stream and Cochrane Hill
Core Run Number(s): 1 to 2
Core Condition: (Dry/Wet) WET
Client: Atlantic Gold Corporation
Depth (m): 2.01 to 4.17
Prepared by: CM/CDM
Kodak grey scale
Scale in cm
4.17
14.13 m EOH

FMS-HG18-16A


GOLDER
Project Number: 1895674
Borehole Number: FMS-HG18-16A
Date (yy/mm/dd): 18/08/10
Project Title: Hydrogeological Investigations - Fifteen Mile Stream and Cochrane Hill
Core Run Number(s): 1-4
Core Condition: (Dry/Wet) WET
Client: Atlantic Gold Corporation
Depth (m): 2.06 to 5.20
Prepared by: AKV / KL
KODAK Color Control Patches
Kodak grey scale
Scale in cm

FMS-HG18-16A


GOLDER
Project Number: 1895674
Borehole Number: FMS-HG18-16A
Date (yy/mm/dd): 18/08/10
Project Title: Hydrogeological Investigations - Fifteen Mile Stream and Cochrane Hill
Core Run Number(s): 4-5
Core Condition: (Dry/Wet) Wet
Client: Atlantic Gold Corporation
Depth (m): 5.20 to 7.99
Prepared by: AKV / KL
Kodak grey scale
Scale in cm
6.52m
8.02m

FMS-HG18-16A


GOLDER
Project Number: 1895674
Borehole Number: FMS-HG18-16A
Date (yy/mm/dd): 18/08/10
Project Title: Hydrogeological Investigations - Fifteen Mile Stream and Cochrane Hill
Core Run Number(s): 6 - 7
Core Condition: (Dry/Wet) Wet
Client: Atlantic Gold Corporation
Depth (m): 7.99 to 11.02
Prepared by: AKV / KL
Kodak grey scale

FMS-HG18-16B


GOLDER
Project Number: 1895674
Borehole Number: FMS-HG18-16B
Date (yy/mm/dd): 18/08/11
Project Title: Hydrogeological Investigations Fifteen Mile Stream and Cochrane Hill
Core Run Number(s): 1 to 3
Core Condition: (Dry/Wet) Wet
Client: Atlantic Gold Corporation
Depth (m): 3.06 to 5.65
Prepared by: AKV/MA
Kodak grey scale
3.54m
4.84m
5.65m

APPENDIX C

Overburden Grain Size Distribution Results

Client	**Golder Associates (Golder Project No.1895674)**
Project	**Atlantic Gold Hydrogeological Investigation**
Borehole	**FMS-HG18-02X**
Depth	**0.70m**
Sample No.	**SS2**
Date Received	
Sample Description	
Comments :	

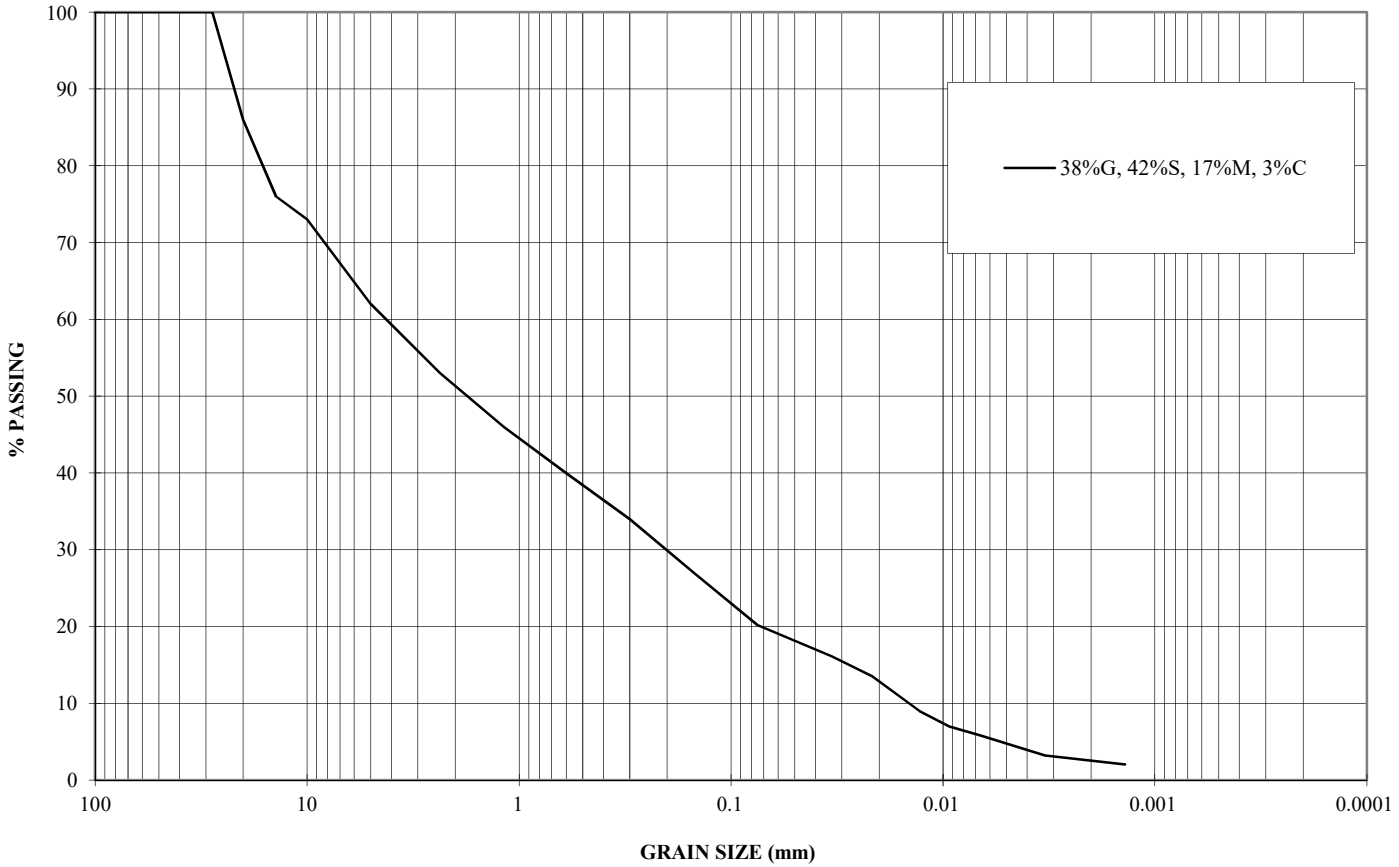
Moisture = 4.2%

Metric Sieve Analysis

	Sieve Size ASTM	Metric (mm)	% Passing
	4"	112	100
	3"	80	100
	2"	56	100
	1 1/2"	40	100
	1"	28	100
	3/4"	20	86
	1/2"	14	76
	3/8"	10	73
	No. 4	5	62
	No. 8	2.36	53
	No. 16	1.18	46
	No. 30	0.6	40
	No. 50	0.3	34
	No. 100	0.15	27
	No. 200	0.075	20.2
Hydrometer Analysis		0.0333	16.1
		0.0215	13.5
		0.0129	9.0
		0.0093	7.0
		0.0066	5.8
		0.0033	3.2
		0.0014	2.1

Client:	Golder Associates (Golder Project No.1895674)	Project:	Atlantic Gold Hydrogeological Investigation
Sample:	FMS-HG18-02X - SS2	Date Sample Rec'd.:	
Sample Taken By:	Client	Report Date:	27-Sep-18

GRAIN SIZE DISTRIBUTION



GRAVEL		SAND			SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE		

Client	**Golder Associates (Golder Project No.1895674)**
Project	**Atlantic Gold Hydrogeological Investigation**
Borehole	**FMS-HG18-03A**
Depth	**0.31**
Sample No.	**SS1**
Date Received	
Sample Description	
Comments :	

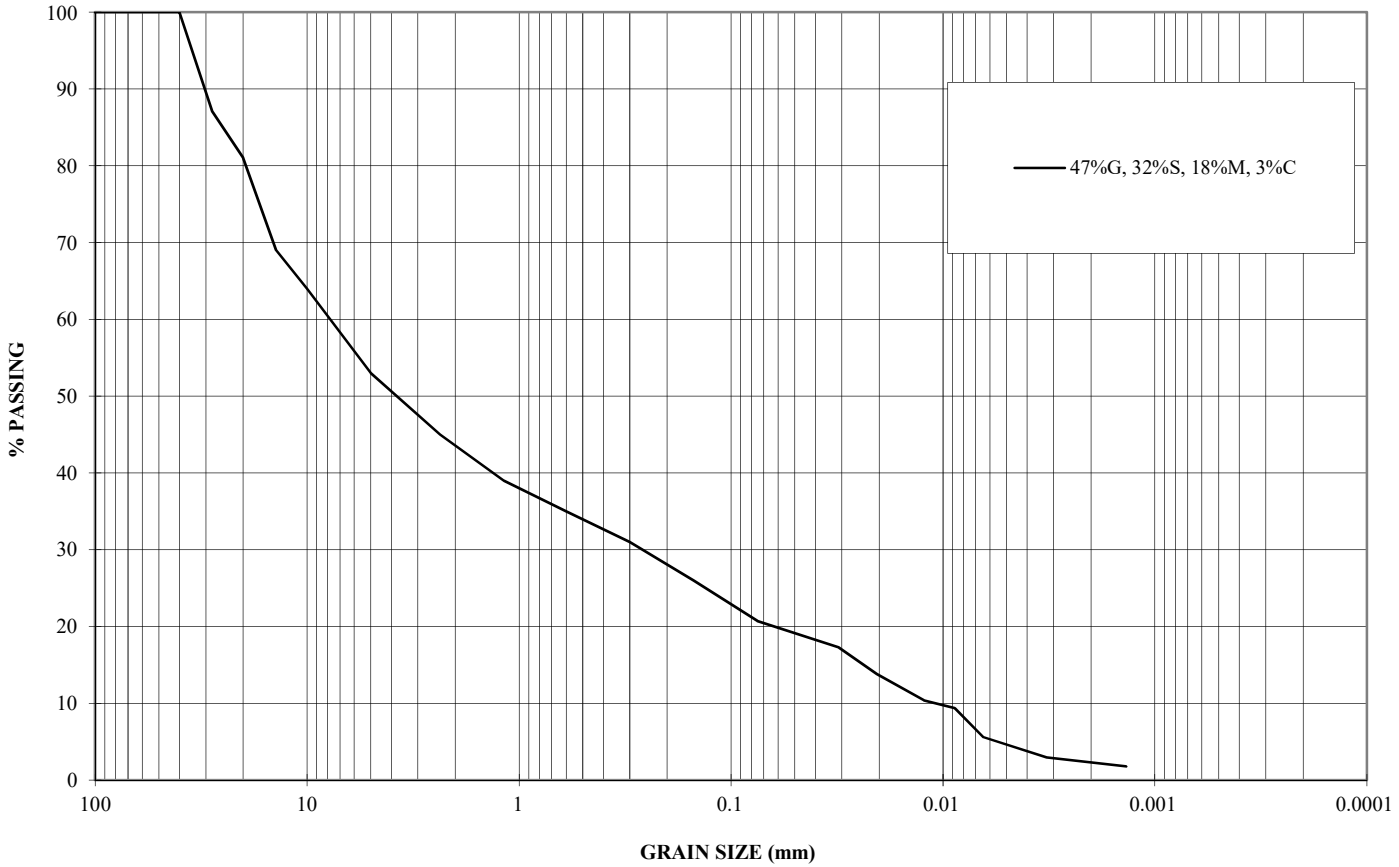
Moisture = 4.4%

Metric Sieve Analysis

	Sieve Size ASTM	Metric (mm)	% Passing
	4"	112	100
	3"	80	100
	2"	56	100
	1 1/2"	40	100
	1"	28	87
	3/4"	20	81
	1/2"	14	69
	3/8"	10	64
	No. 4	5	53
	No. 8	2.36	45
	No. 16	1.18	39
	No. 30	0.6	35
	No. 50	0.3	31
	No. 100	0.15	26
	No. 200	0.075	20.7
Hydrometer Analysis		0.0311	17.3
		0.0205	13.8
		0.0123	10.4
		0.0088	9.4
		0.0065	5.6
		0.0032	3.0
		0.0014	1.8

Client:	Golder Associates (Golder Project No.1895674)	Project:	Atlantic Gold Hydrogeological Investigation
Sample:	FMS-HG18-03A - SS1	Date Sample Rec'd.:	
Sample Taken By:	Client	Report Date:	27-Sep-18

GRAIN SIZE DISTRIBUTION



GRAVEL		SAND			SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE		

Client	**Golder Associates (Golder Project No.1895674)**
Project	**Atlantic Gold Hydrogeological Investigation**
Borehole	**FMS-HG18-03A**
Depth	**1.09m**
Sample No.	**SS3**
Date Received	
Sample Description	
Comments :	**Non-Plastic**

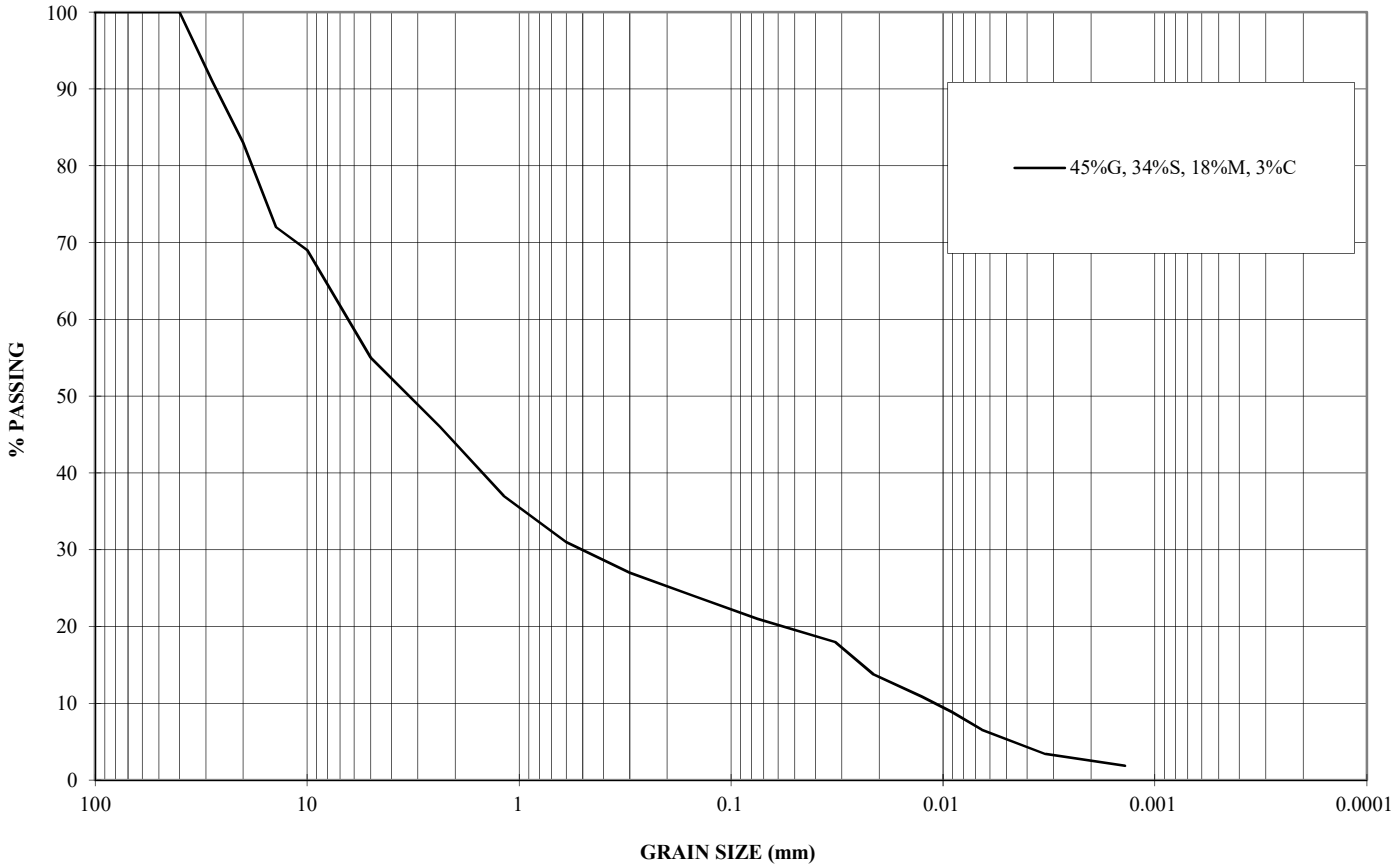
Moisture = 7.1%

Metric Sieve Analysis

Sieve Size ASTM	Metric (mm)	% Passing
4"	112	100
3"	80	100
2"	56	100
1 1/2"	40	100
1"	28	91
3/4"	20	83
1/2"	14	72
3/8"	10	69
No. 4	5	55
No. 8	2.36	46
No. 16	1.18	37
No. 30	0.6	31
No. 50	0.3	27
No. 100	0.15	24
No. 200	0.075	21.0
Hydrometer Analysis	0.0322	18.0
	0.0212	13.8
	0.0126	10.9
	0.0091	8.9
	0.0065	6.5
	0.0033	3.4
	0.0014	1.9

Client:	Golder Associates (Golder Project No.1895674)	Project:	Atlantic Gold Hydrogeological Investigation
Sample:	FMS-HG18-03A - SS3	Date Sample Rec'd.:	
Sample Taken By:	Client	Report Date:	27-Sep-18

GRAIN SIZE DISTRIBUTION



GRAVEL		SAND			SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE		

Client	**Golder Associates (Golder Project No.1895674)**
Project	**Atlantic Gold Hydrogeological Investigation**
Borehole	**FMS-HG18-03A**
Depth	**3.99m**
Sample No.	**SS7**
Date Received	
Sample Description	
Comments :	

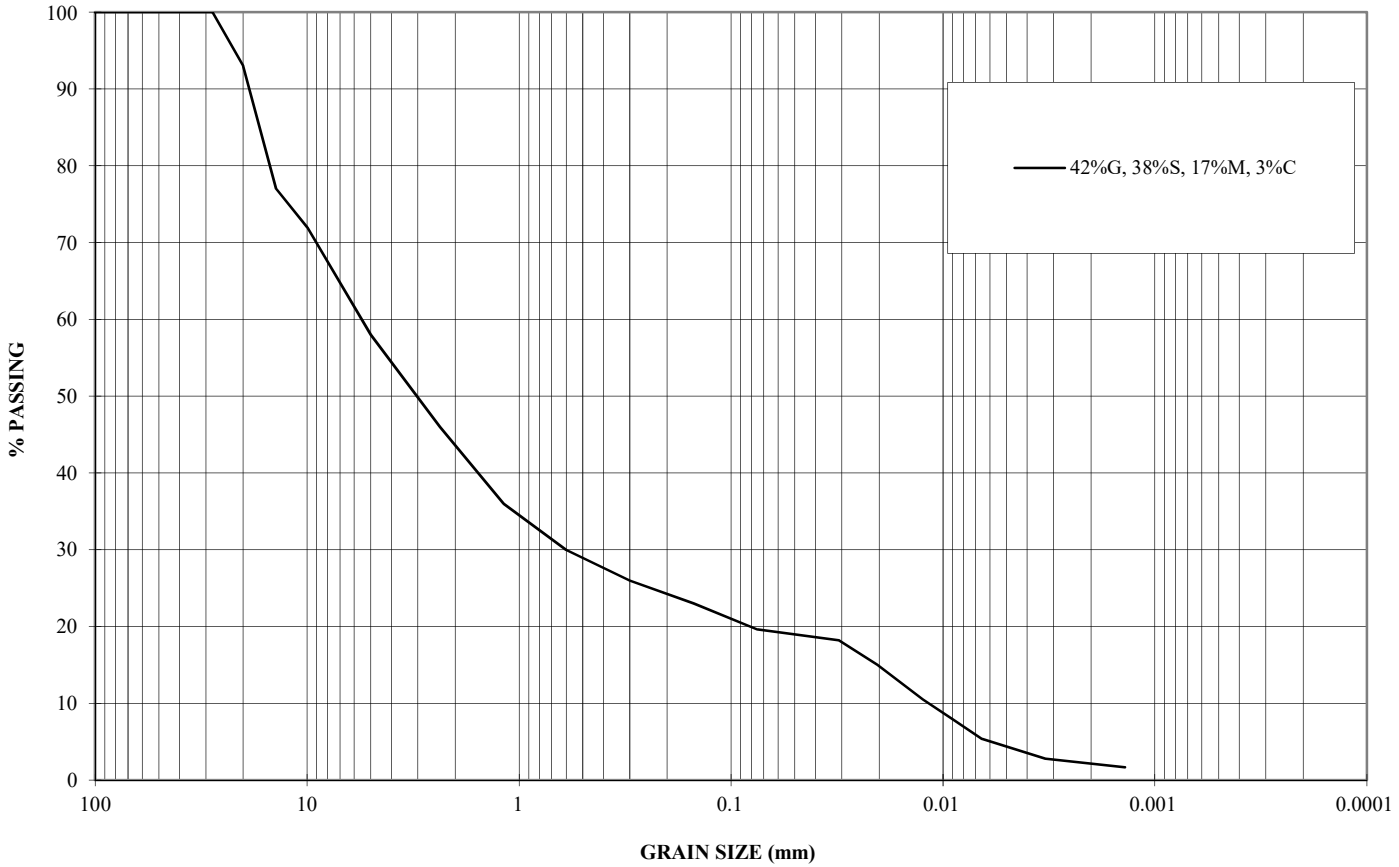
Moisture = 7.2%

Metric Sieve Analysis

	Sieve Size ASTM	Metric (mm)	% Passing
	4"	112	100
	3"	80	100
	2"	56	100
	1 1/2"	40	100
	1"	28	100
	3/4"	20	93
	1/2"	14	77
	3/8"	10	72
	No. 4	5	58
	No. 8	2.36	46
	No. 16	1.18	36
	No. 30	0.6	30
	No. 50	0.3	26
	No. 100	0.15	23
	No. 200	0.075	19.6
Hydrometer Analysis		0.0311	18.2
		0.0204	15.0
		0.0124	10.5
		0.0090	7.9
		0.0065	5.3
		0.0033	2.8
		0.0014	1.7

Client:	Golder Associates (Golder Project No.1895674)	Project:	Atlantic Gold Hydrogeological Investigation
Sample:	FMS-HG18-03A - SS7	Date Sample Rec'd.:	
Sample Taken By:	Client	Report Date:	27-Sep-18

GRAIN SIZE DISTRIBUTION



GRAVEL		SAND			SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE		

Client	**Golder Associates (Golder Project No.1895674)**
Project	**Atlantic Gold Hydrogeological Investigation**
Borehole	**FMS-HG18-03A**
Depth	**6.23m**
Sample No.	**SS8**
Date Received	
Sample Description	
Comments :	**Non-Plastic**

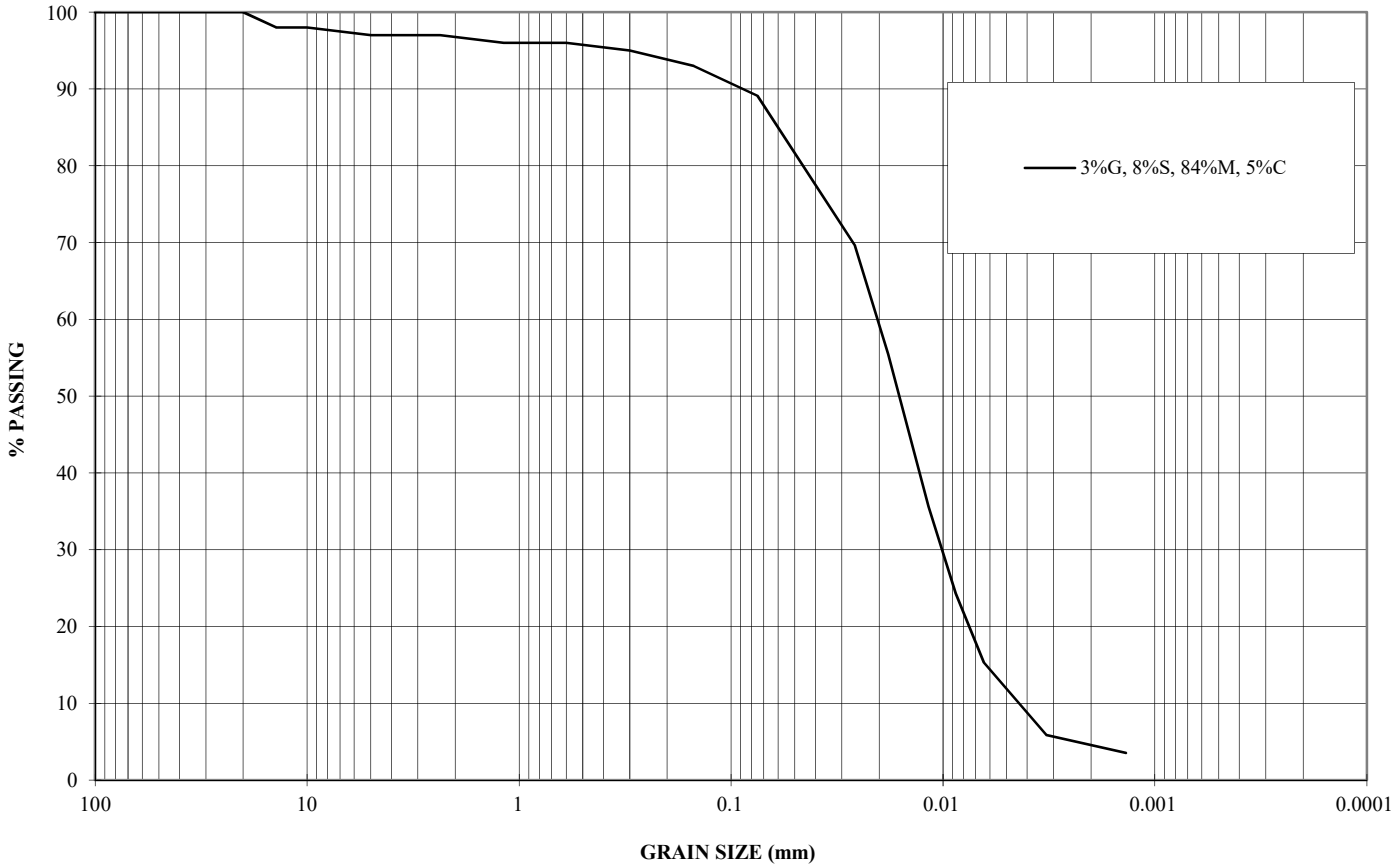
Moisture = 22.4%

Metric Sieve Analysis

Sieve Size ASTM	Metric (mm)	% Passing
4"	112	100
3"	80	100
2"	56	100
1 1/2"	40	100
1"	28	100
3/4"	20	100
1/2"	14	98
3/8"	10	98
No. 4	5	97
No. 8	2.36	97
No. 16	1.18	96
No. 30	0.6	96
No. 50	0.3	95
No. 100	0.15	93
No. 200	0.075	89.1
Hydrometer Analysis	0.0260	69.6
	0.0181	55.4
	0.0117	35.6
	0.0087	24.3
	0.0064	15.3
	0.0033	5.9
	0.0014	3.5

Client:	Golder Associates (Golder Project No.1895674)	Project:	Atlantic Gold Hydrogeological Investigation
Sample:	FMS-HG18-03A - SS8	Date Sample Rec'd.:	
Sample Taken By:	Client	Report Date:	27-Sep-18

GRAIN SIZE DISTRIBUTION



GRAVEL		SAND			SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE		

Client	**Golder Associates (Golder Project No.1895674)**
Project	**Atlantic Gold Hydrogeological Investigation**
Borehole	**FMS-HG18-04A**
Depth	**2.11m**
Sample No.	**SS3**
Date Received	
Sample Description	
Comments :	

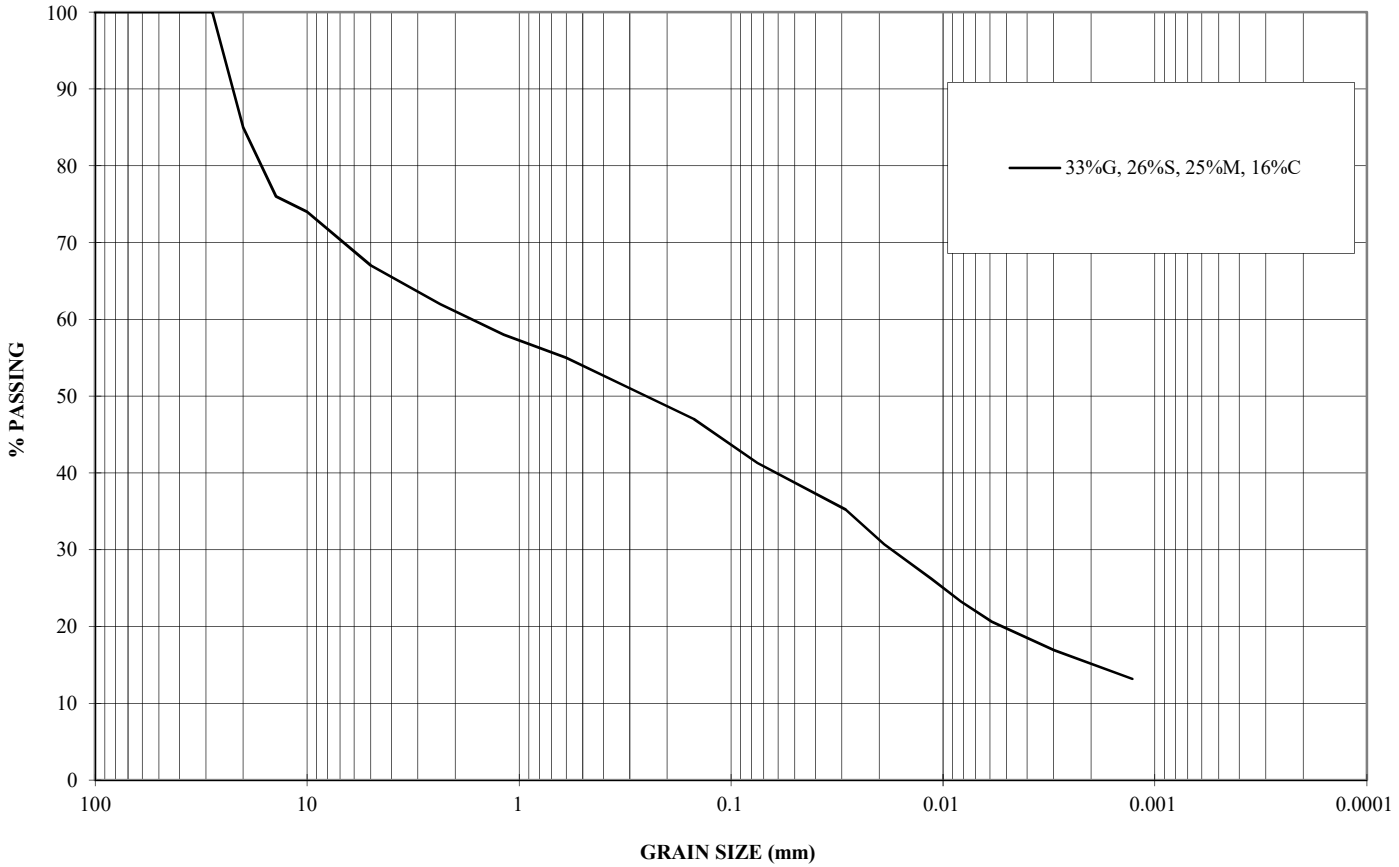
Moisture = 12.1%

Metric Sieve Analysis

	Sieve Size ASTM	Metric (mm)	% Passing
	4"	112	100
	3"	80	100
	2"	56	100
	1 1/2"	40	100
	1"	28	100
	3/4"	20	85
	1/2"	14	76
	3/8"	10	74
	No. 4	5	67
	No. 8	2.36	62
	No. 16	1.18	58
	No. 30	0.6	55
	No. 50	0.3	51
	No. 100	0.15	47
	No. 200	0.075	41.3
Hydrometer Analysis		0.0287	35.2
		0.0189	30.7
		0.0114	26.2
		0.0082	23.2
		0.0059	20.7
		0.0030	16.9
		0.0013	13.2

Client:	Golder Associates (Golder Project No.1895674)	Project:	Atlantic Gold Hydrogeological Investigation
Sample:	FMS-HG18-04A - SS3	Date Sample Rec'd.:	
Sample Taken By:	Client	Report Date:	27-Sep-18

GRAIN SIZE DISTRIBUTION



GRAVEL		SAND			SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE		

Client	**Golder Associates (Golder Project No.1895674)**
Project	**Atlantic Gold Hydrogeological Investigation**
Borehole	**FMS-HG18-04A**
Depth	**3.69m**
Sample No.	**SS5**
Date Received	
Sample Description	
Comments :	**Non-Plastic**

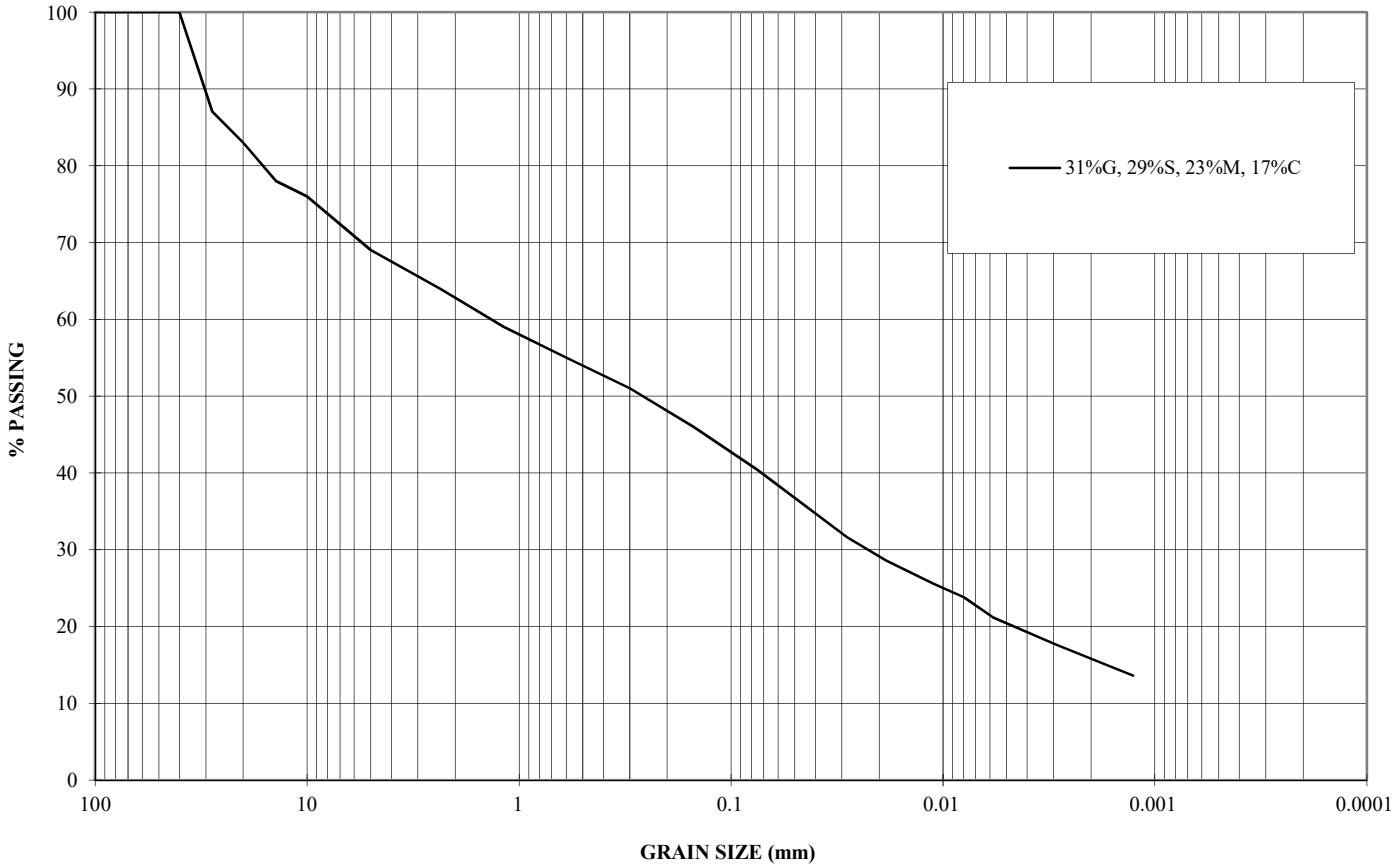
Moisture = 12.0%

Metric Sieve Analysis

	Sieve Size ASTM	Metric (mm)	% Passing
	4"	112	100
	3"	80	100
	2"	56	100
	1 1/2"	40	100
	1"	28	87
	3/4"	20	83
	1/2"	14	78
	3/8"	10	76
	No. 4	5	69
	No. 8	2.36	64
	No. 16	1.18	59
	No. 30	0.6	55
	No. 50	0.3	51
	No. 100	0.15	46
	No. 200	0.075	40.4
Hydrometer Analysis		0.0283	31.6
		0.0185	28.6
		0.0111	25.6
		0.0080	23.8
		0.0058	21.2
		0.0029	17.6
		0.0013	13.6

Client:	Golder Associates (Golder Project No.1895674)	Project:	Atlantic Gold Hydrogeological Investigation
Sample:	FMS-HG18-04A - SS5	Date Sample Rec'd.:	
Sample Taken By:	Client	Report Date:	27-Sep-18

GRAIN SIZE DISTRIBUTION



GRAVEL		SAND			SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE		

Client	**Golder Associates (Golder Project No.1895674)**
Project	**Atlantic Gold Hydrogeological Investigation**
Borehole	**FMS-HG18-05A**
Depth	**0.29m**
Sample No.	**SS1B**
Date Received	
Sample Description	
Comments :	

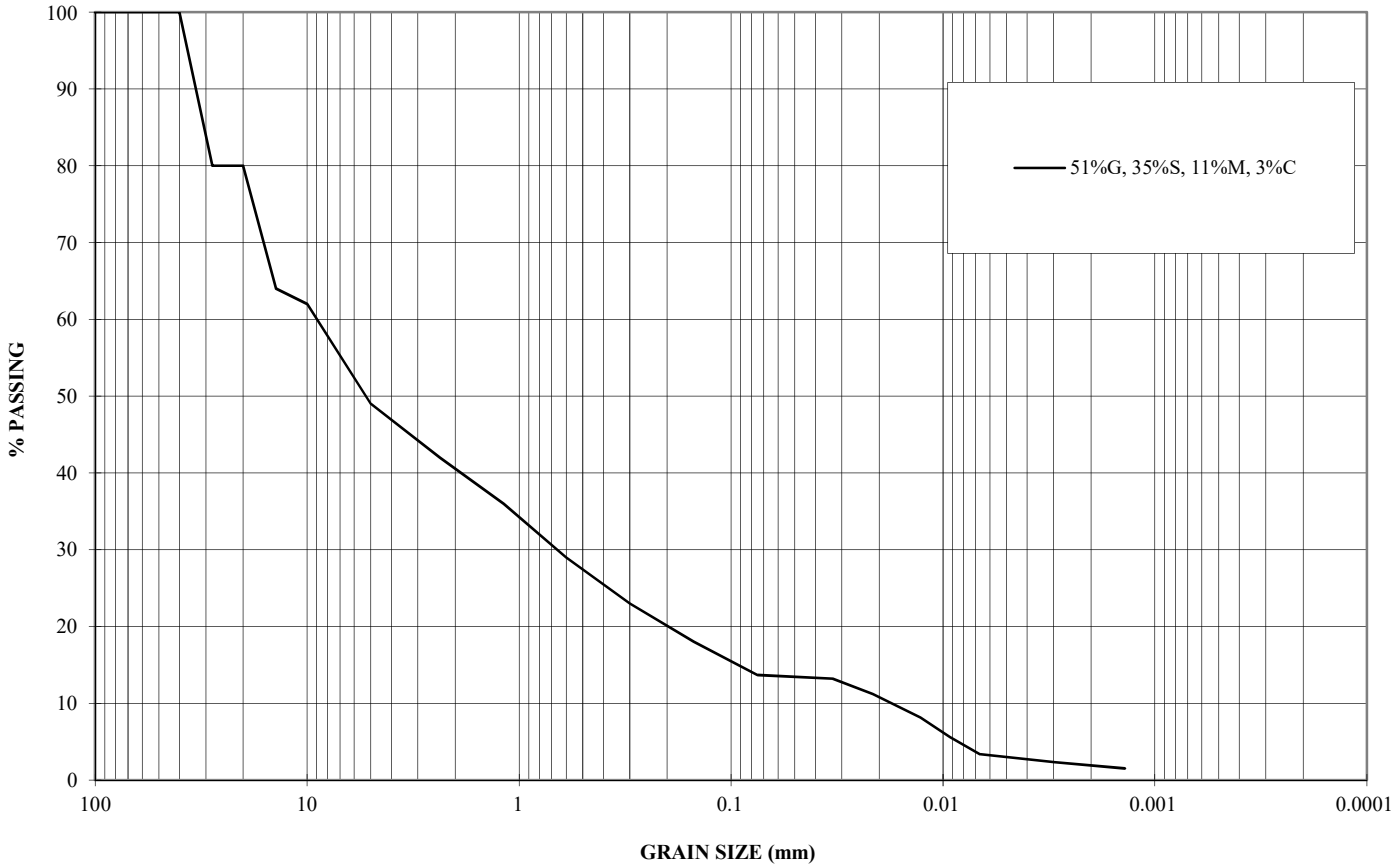
Moisture = 11.4%

Metric Sieve Analysis

	Sieve Size ASTM	Metric (mm)	% Passing
	4"	112	100
	3"	80	100
	2"	56	100
	1 1/2"	40	100
	1"	28	80
	3/4"	20	80
	1/2"	14	64
	3/8"	10	62
	No. 4	5	49
	No. 8	2.36	42
	No. 16	1.18	36
	No. 30	0.6	29
	No. 50	0.3	23
	No. 100	0.15	18
	No. 200	0.075	13.7
Hydrometer Analysis		0.0332	13.2
		0.0214	11.2
		0.0128	8.1
		0.0093	5.6
		0.0067	3.4
		0.0030	2.3
		0.0014	1.5

Client:	Golder Associates (Golder Project No.1895674)	Project:	Atlantic Gold Hydrogeological Investigation
Sample:	FMS-HG18-05A - SS1B	Date Sample Rec'd.:	
Sample Taken By:	Client	Report Date:	27-Sep-18

GRAIN SIZE DISTRIBUTION



GRAVEL		SAND			SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE		

Client	**Golder Associates (Golder Project No.1895674)**
Project	**Atlantic Gold Hydrogeological Investigation**
Borehole	**FMS-HG18-05A**
Depth	**1.84m**
Sample No.	**SS3**
Date Received	
Sample Description	
Comments :	

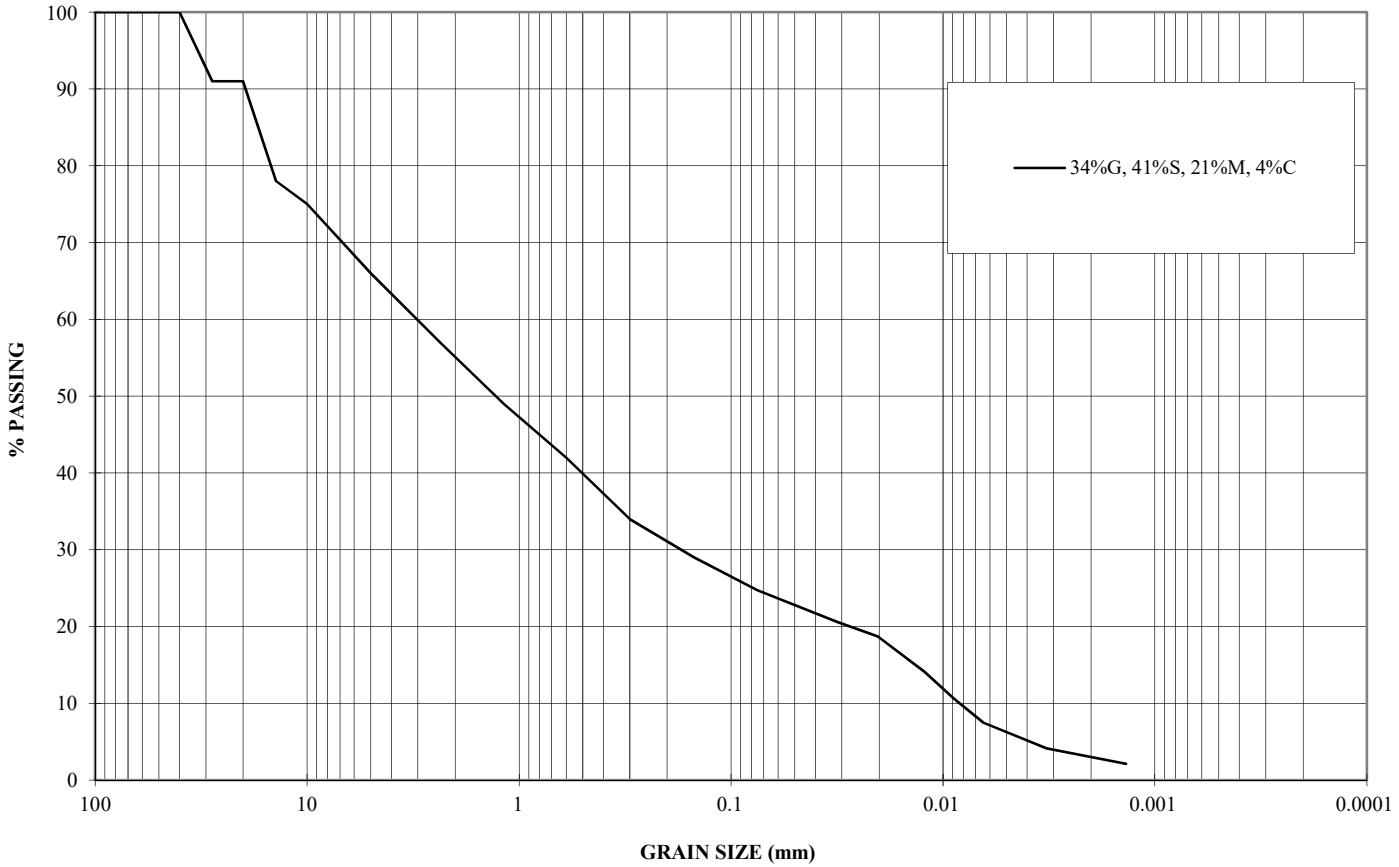
Moisture = 10.8%

Metric Sieve Analysis

Sieve Size ASTM	Metric (mm)	% Passing
4"	112	100
3"	80	100
2"	56	100
1 1/2"	40	100
1"	28	91
3/4"	20	91
1/2"	14	78
3/8"	10	75
No. 4	5	66
No. 8	2.36	57
No. 16	1.18	49
No. 30	0.6	42
No. 50	0.3	34
No. 100	0.15	29
No. 200	0.075	24.7
Hydrometer Analysis	0.0315	20.6
	0.0203	18.7
	0.0122	14.1
	0.0089	10.6
	0.0064	7.5
	0.0032	4.1
	0.0014	2.1

Client:	Golder Associates (Golder Project No.1895674)	Project:	Atlantic Gold Hydrogeological Investigation
Sample:	FMS-HG18-05A - SS3	Date Sample Rec'd.:	
Sample Taken By:	Client	Report Date:	27-Sep-18

GRAIN SIZE DISTRIBUTION



GRAVEL		SAND			SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE		

Client	**Golder Associates (Golder Project No.1895674)**
Project	**Atlantic Gold Hydrogeological Investigation**
Borehole	**FMS-HG18-05A**
Depth	**3.36m**
Sample No.	**SS5**
Date Received	
Sample Description	
Comments :	**Non-Plastic**

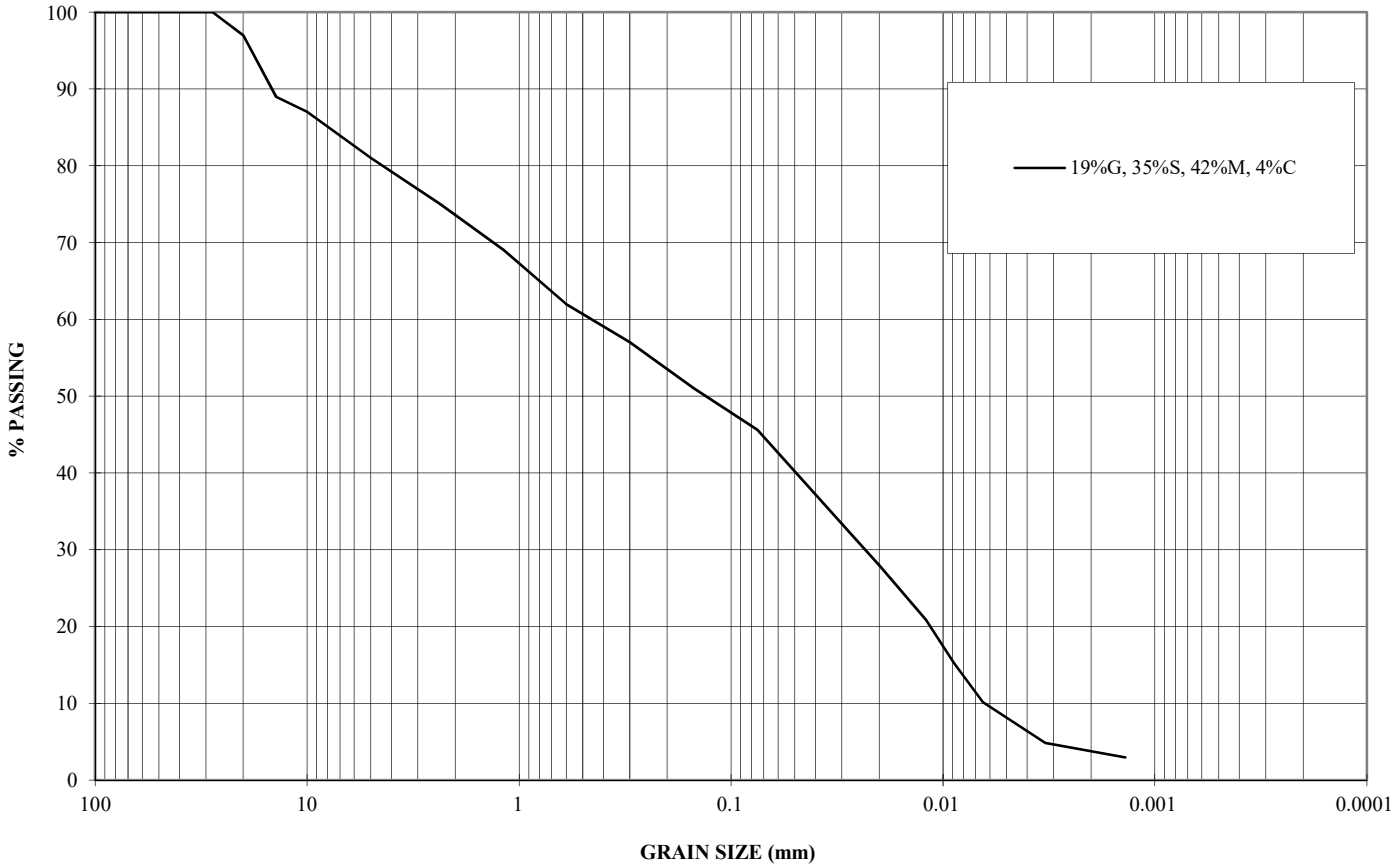
Moisture = 14.6%

Metric Sieve Analysis

Sieve Size ASTM	Metric (mm)	% Passing
4"	112	100
3"	80	100
2"	56	100
1 1/2"	40	100
1"	28	100
3/4"	20	97
1/2"	14	89
3/8"	10	87
No. 4	5	81
No. 8	2.36	75
No. 16	1.18	69
No. 30	0.6	62
No. 50	0.3	57
No. 100	0.15	51
No. 200	0.075	45.6
Hydrometer Analysis	0.0299	33.3
	0.0198	27.9
	0.0121	20.9
	0.0089	15.3
	0.0065	10.1
	0.0033	4.8
	0.0014	3.0

Client:	Golder Associates (Golder Project No.1895674)	Project:	Atlantic Gold Hydrogeological Investigation
Sample:	FMS-HG18-05A - SS5	Date Sample Rec'd.:	
Sample Taken By:	Client	Report Date:	27-Sep-18

GRAIN SIZE DISTRIBUTION



GRAVEL		SAND			SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE		

Client	**Golder Associates (Golder Project No.1895674)**
Project	**Atlantic Gold Hydrogeological Investigation**
Borehole	**FMS-HG18-06A**
Depth	**1.84m**
Sample No.	**SS3**
Date Received	
Sample Description	
Comments :	

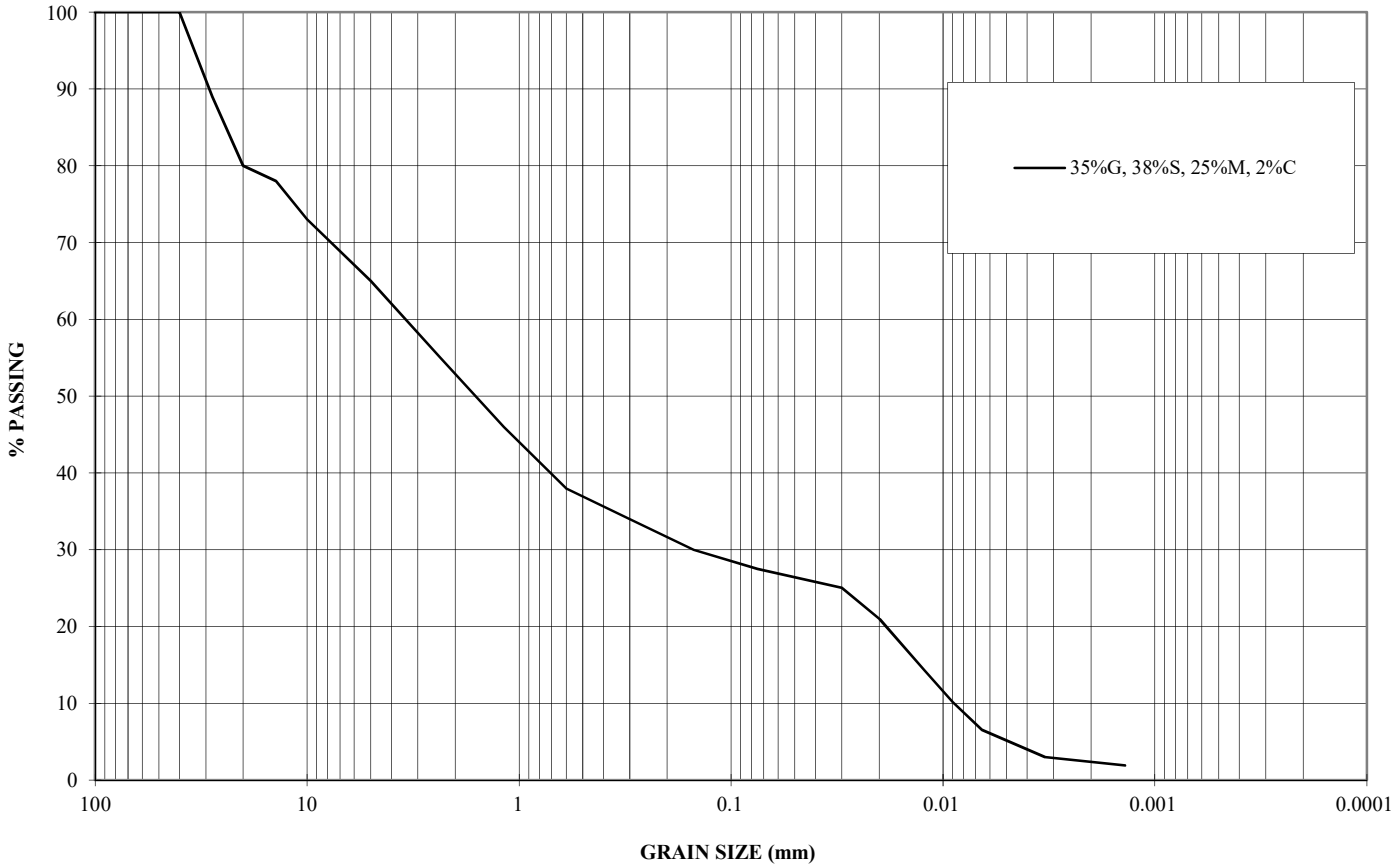
Moisture = 10.3%

Metric Sieve Analysis

	Sieve Size ASTM	Metric (mm)	% Passing
	4"	112	100
	3"	80	100
	2"	56	100
	1 1/2"	40	100
	1"	28	89
	3/4"	20	80
	1/2"	14	78
	3/8"	10	73
	No. 4	5	65
	No. 8	2.36	55
	No. 16	1.18	46
	No. 30	0.6	38
	No. 50	0.3	34
	No. 100	0.15	30
	No. 200	0.075	27.5
Hydrometer Analysis		0.0300	25.0
		0.0199	21.0
		0.0122	14.3
		0.0090	10.1
		0.0065	6.6
		0.0033	3.0
		0.0014	1.9

Client:	Golder Associates (Golder Project No.1895674)	Project:	Atlantic Gold Hydrogeological Investigation
Sample:	FMS-HG18-06A - SS3	Date Sample Rec'd.:	
Sample Taken By:	Client	Report Date:	27-Sep-18

GRAIN SIZE DISTRIBUTION



GRAVEL		SAND			SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE		

Client	**Golder Associates (Golder Project No.1895674)**
Project	**Atlantic Gold Hydrogeological Investigation**
Borehole	**FMS-HG18-07A**
Depth	**0.92m**
Sample No.	**SS2**
Date Received	
Sample Description	
Comments :	

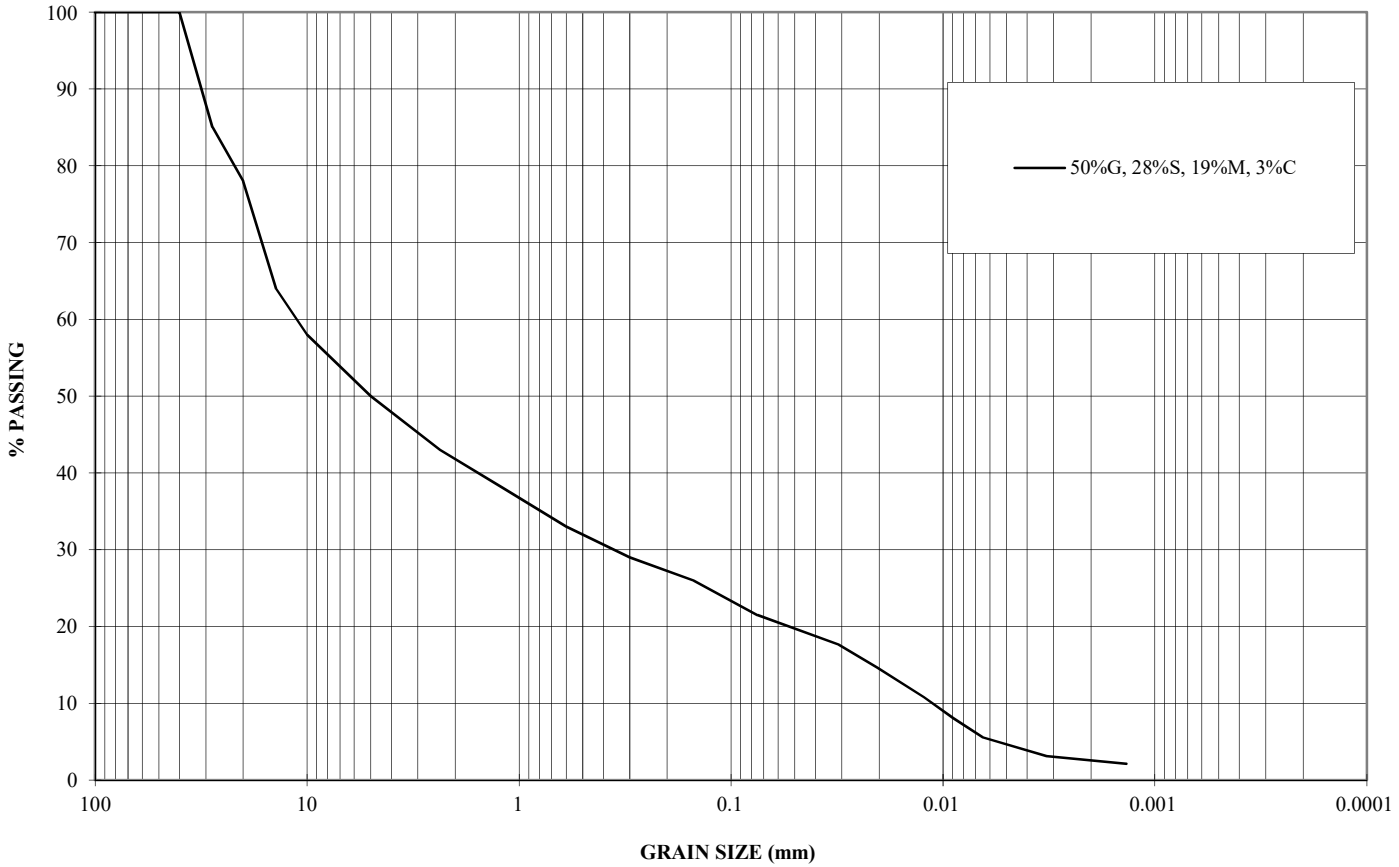
Moisture = 14.0%

Metric Sieve Analysis

	Sieve Size ASTM	Metric (mm)	% Passing
	4"	112	100
	3"	80	100
	2"	56	100
	1 1/2"	40	100
	1"	28	85
	3/4"	20	78
	1/2"	14	64
	3/8"	10	58
	No. 4	5	50
	No. 8	2.36	43
	No. 16	1.18	38
	No. 30	0.6	33
	No. 50	0.3	29
	No. 100	0.15	26
	No. 200	0.075	21.5
Hydrometer Analysis		0.0311	17.7
		0.0204	14.6
		0.0123	10.8
		0.0089	8.1
		0.0065	5.5
		0.0032	3.1
		0.0014	2.1

Client:	Golder Associates (Golder Project No.1895674)	Project:	Atlantic Gold Hydrogeological Investigation
Sample:	FMS-HG18-07A - SS2	Date Sample Rec'd.:	
Sample Taken By:	Client	Report Date:	27-Sep-18

GRAIN SIZE DISTRIBUTION



GRAVEL		SAND			SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE		

Client	**Golder Associates (Golder Project No.1895674)**
Project	**Atlantic Gold Hydrogeological Investigation**
Borehole	**FMS-HG18-07A**
Depth	**2.75m**
Sample No.	**SS4**
Date Received	
Sample Description	
Comments :	

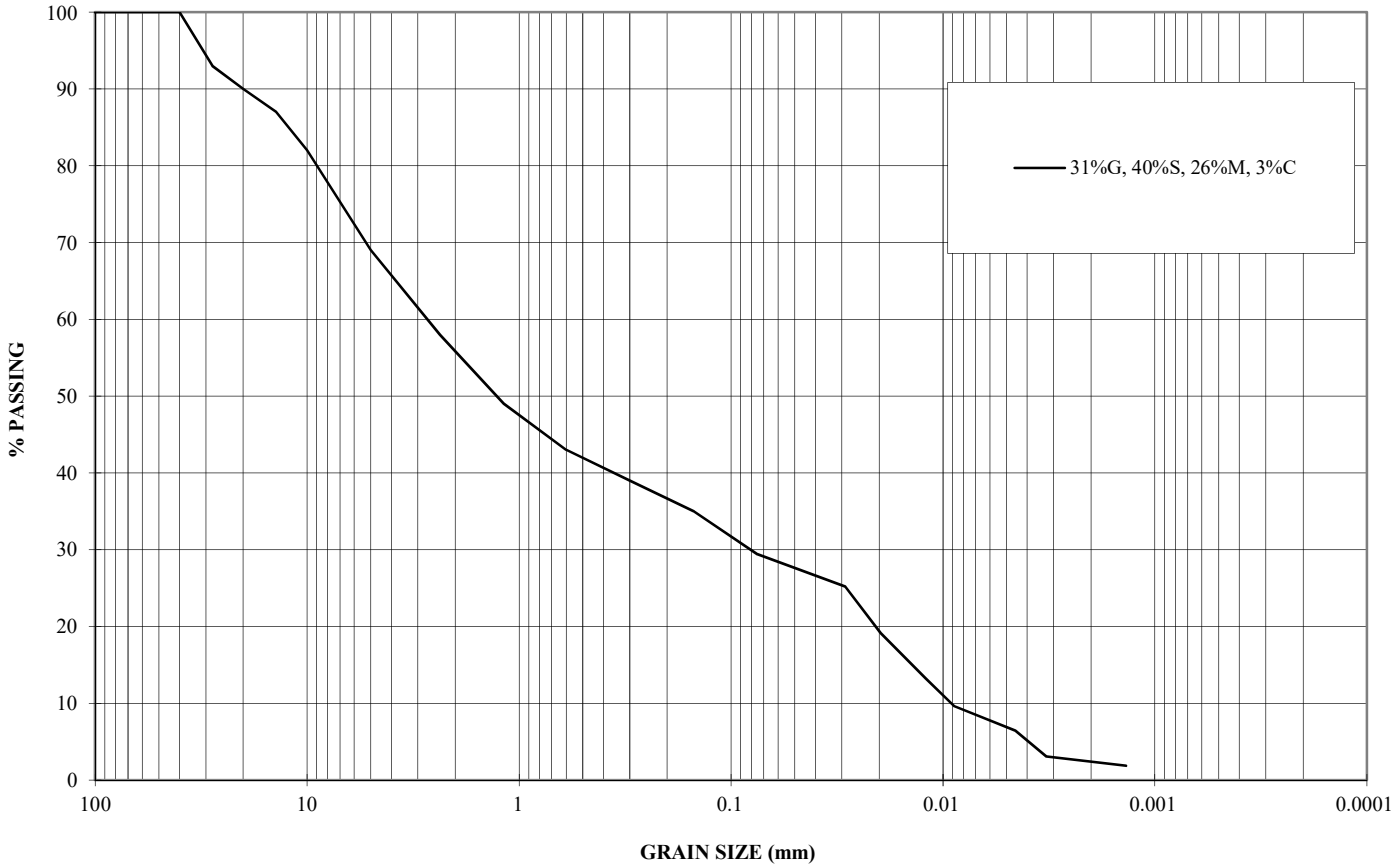
Moisture = 10.3%

Metric Sieve Analysis

	Sieve Size ASTM	Metric (mm)	% Passing
	4"	112	100
	3"	80	100
	2"	56	100
	1 1/2"	40	100
	1"	28	93
	3/4"	20	90
	1/2"	14	87
	3/8"	10	82
	No. 4	5	69
	No. 8	2.36	58
	No. 16	1.18	49
	No. 30	0.6	43
	No. 50	0.3	39
	No. 100	0.15	35
	No. 200	0.075	29.4
Hydrometer Analysis		0.0289	25.2
		0.0197	19.2
		0.0121	13.3
		0.0089	9.6
		0.0046	6.5
		0.0033	3.1
		0.0014	1.9

Client:	Golder Associates (Golder Project No.1895674)	Project:	Atlantic Gold Hydrogeological Investigation
Sample:	FMS-HG18-07A - SS4	Date Sample Rec'd.:	
Sample Taken By:	Client	Report Date:	27-Sep-18

GRAIN SIZE DISTRIBUTION



GRAVEL		SAND			SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE		

Client	**Golder Associates (Golder Project No.1895674)**
Project	**Atlantic Gold Hydrogeological Investigation**
Borehole	**FMS-HG18-08A**
Depth	**0.80m**
Sample No.	**SS2**
Date Received	
Sample Description	
Comments :	

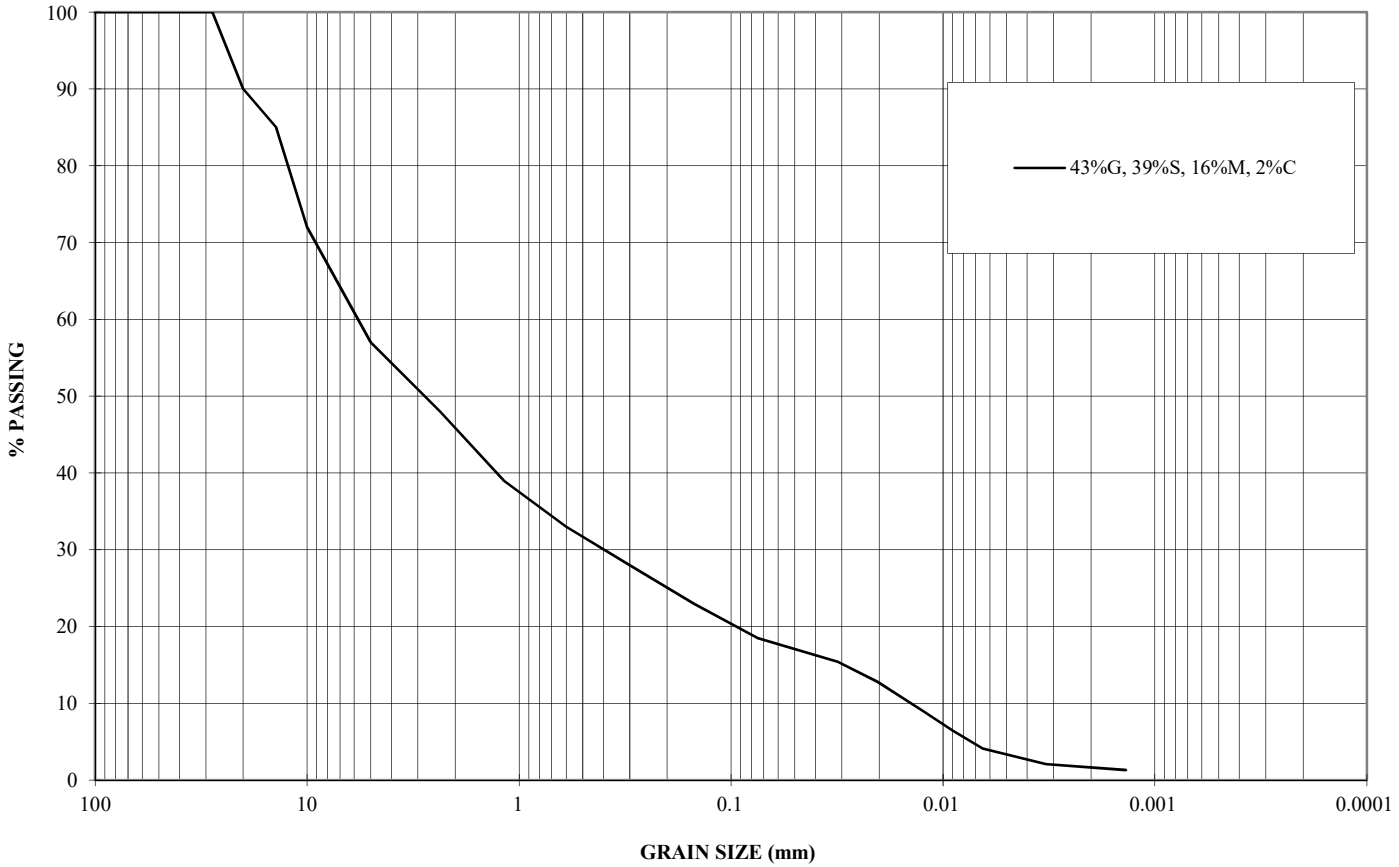
Moisture = 3.6%

Metric Sieve Analysis

	Sieve Size ASTM	Metric (mm)	% Passing
	4"	112	100
	3"	80	100
	2"	56	100
	1 1/2"	40	100
	1"	28	100
	3/4"	20	90
	1/2"	14	85
	3/8"	10	72
	No. 4	5	57
	No. 8	2.36	48
	No. 16	1.18	39
	No. 30	0.6	33
	No. 50	0.3	28
	No. 100	0.15	23
	No. 200	0.075	18.5
Hydrometer Analysis		0.0311	15.4
		0.0204	12.8
		0.0123	8.9
		0.0090	6.4
		0.0065	4.1
		0.0033	2.1
		0.0014	1.3

Client:	Golder Associates (Golder Project No.1895674)	Project:	Atlantic Gold Hydrogeological Investigation
Sample:	FMS-HG18-08A - SS2	Date Sample Rec'd.:	
Sample Taken By:	Client	Report Date:	27-Sep-18

GRAIN SIZE DISTRIBUTION



GRAVEL		SAND			SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE		

Client	**Golder Associates (Golder Project No.1895674)**
Project	**Atlantic Gold Hydrogeological Investigation**
Borehole	**FMS-HG18-09A**
Depth	**1.80m**
Sample No.	**SS3**
Date Received	
Sample Description	
Comments :	

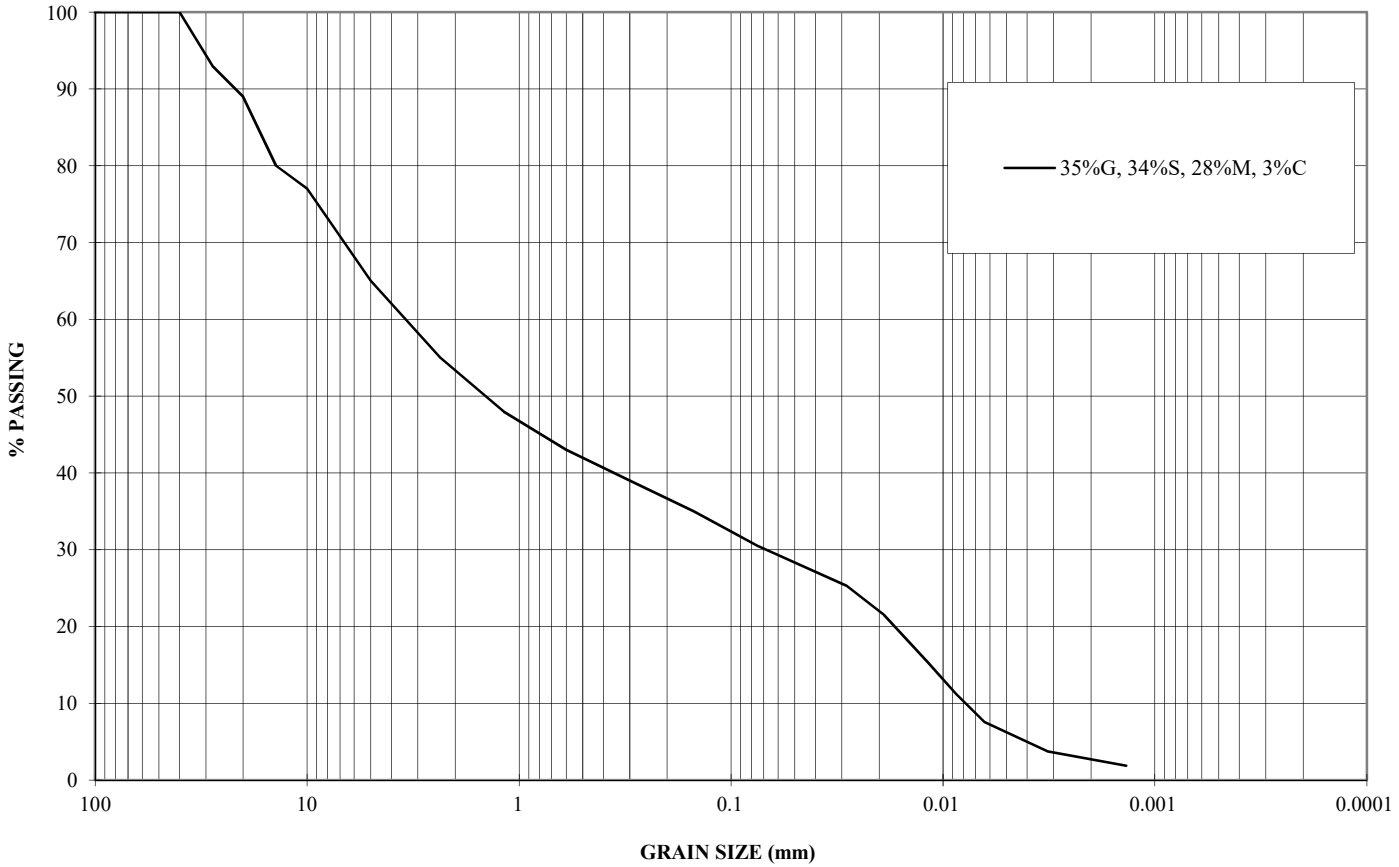
Moisture = 11.6%

Metric Sieve Analysis

	Sieve Size ASTM	Metric (mm)	% Passing
	4"	112	100
	3"	80	100
	2"	56	100
	1 1/2"	40	100
	1"	28	93
	3/4"	20	89
	1/2"	14	80
	3/8"	10	77
	No. 4	5	65
	No. 8	2.36	55
	No. 16	1.18	48
	No. 30	0.6	43
	No. 50	0.3	39
	No. 100	0.15	35
	No. 200	0.075	30.5
Hydrometer Analysis		0.0284	25.3
		0.0189	21.5
		0.0118	15.3
		0.0087	11.2
		0.0064	7.6
		0.0032	3.8
		0.0014	1.9

Client:	Golder Associates (Golder Project No.1895674)	Project:	Atlantic Gold Hydrogeological Investigation
Sample:	FMS-HG18-09A - SS3	Date Sample Rec'd.:	
Sample Taken By:	Client	Report Date:	27-Sep-18

GRAIN SIZE DISTRIBUTION



GRAVEL		SAND			SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE		

Client	**Golder Associates (Golder Project No.1895674)**
Project	**Atlantic Gold Hydrogeological Investigation**
Borehole	**FMS-HG18-09A**
Depth	**4.32m**
Sample No.	**SS5**
Date Received	
Sample Description	
Comments :	

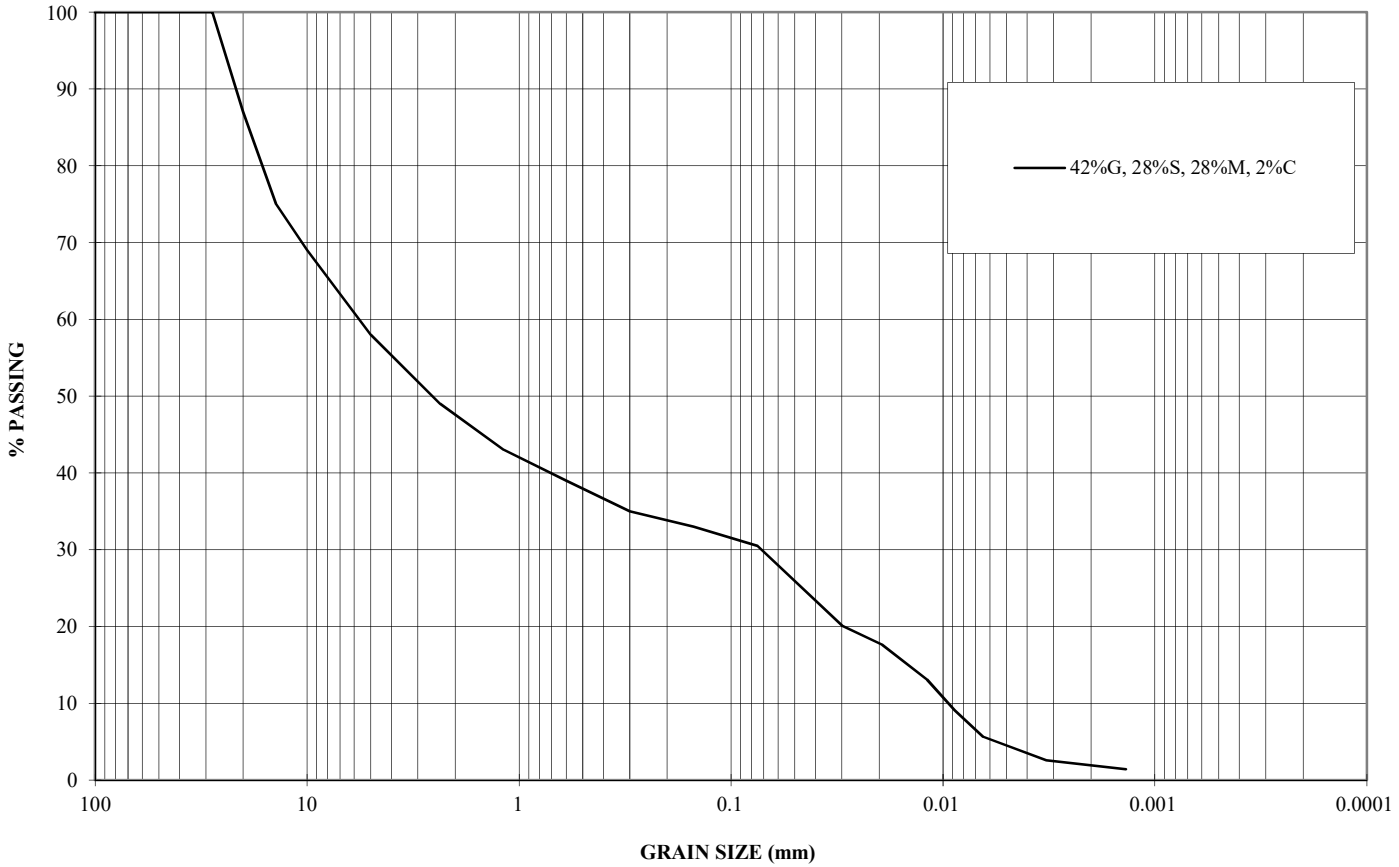
Moisture = 9.8%

Metric Sieve Analysis

	Sieve Size ASTM	Metric (mm)	% Passing
	4"	112	100
	3"	80	100
	2"	56	100
	1 1/2"	40	100
	1"	28	100
	3/4"	20	87
	1/2"	14	75
	3/8"	10	69
	No. 4	5	58
	No. 8	2.36	49
	No. 16	1.18	43
	No. 30	0.6	39
	No. 50	0.3	35
	No. 100	0.15	33
	No. 200	0.075	30.5
Hydrometer Analysis		0.0297	20.1
		0.0194	17.7
		0.0119	13.1
		0.0088	9.1
		0.0064	5.6
		0.0033	2.6
		0.0014	1.4

Client:	Golder Associates (Golder Project No.1895674)	Project:	Atlantic Gold Hydrogeological Investigation
Sample:	FMS-HG18-09A - SS5	Date Sample Rec'd.:	
Sample Taken By:	Client	Report Date:	27-Sep-18

GRAIN SIZE DISTRIBUTION



GRAVEL		SAND			SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE		

Client	**Golder Associates (Golder Project No.1895674)**
Project	**Atlantic Gold Hydrogeological Investigation**
Borehole	**FMS-HG18-10A**
Depth	**0.92m**
Sample No.	**SS2**
Date Received	
Sample Description	
Comments :	

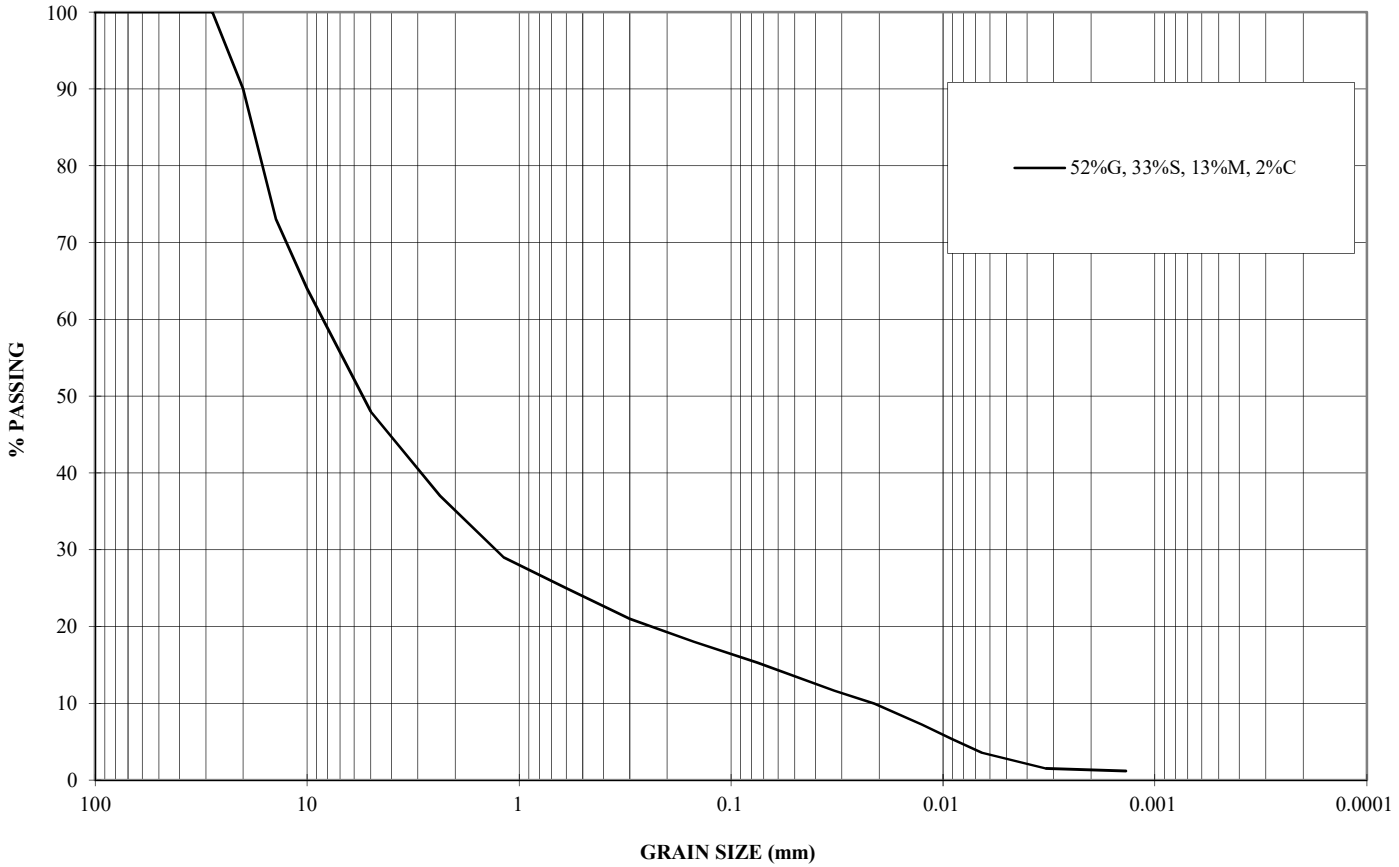
Moisture = 2.9%

Metric Sieve Analysis

	Sieve Size ASTM	Metric (mm)	% Passing
	4"	112	100
	3"	80	100
	2"	56	100
	1 1/2"	40	100
	1"	28	100
	3/4"	20	90
	1/2"	14	73
	3/8"	10	64
	No. 4	5	48
	No. 8	2.36	37
	No. 16	1.18	29
	No. 30	0.6	25
	No. 50	0.3	21
	No. 100	0.15	18
	No. 200	0.075	15.3
Hydrometer Analysis		0.0325	11.7
		0.0210	10.0
		0.0126	7.2
		0.0091	5.4
		0.0066	3.6
		0.0033	1.5
		0.0014	1.2

Client:	Golder Associates (Golder Project No.1895674)	Project:	Atlantic Gold Hydrogeological Investigation
Sample:	FMS-HG18-10A - SS2	Date Sample Rec'd.:	
Sample Taken By:	Client	Report Date:	27-Sep-18

GRAIN SIZE DISTRIBUTION



GRAVEL		SAND			SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE		

Client	**Golder Associates (Golder Project No.1895674)**
Project	**Atlantic Gold Hydrogeological Investigation**
Borehole	**FMS-HG18-13A**
Depth	**1.41m**
Sample No.	**SS3**
Date Received	
Sample Description	
Comments :	

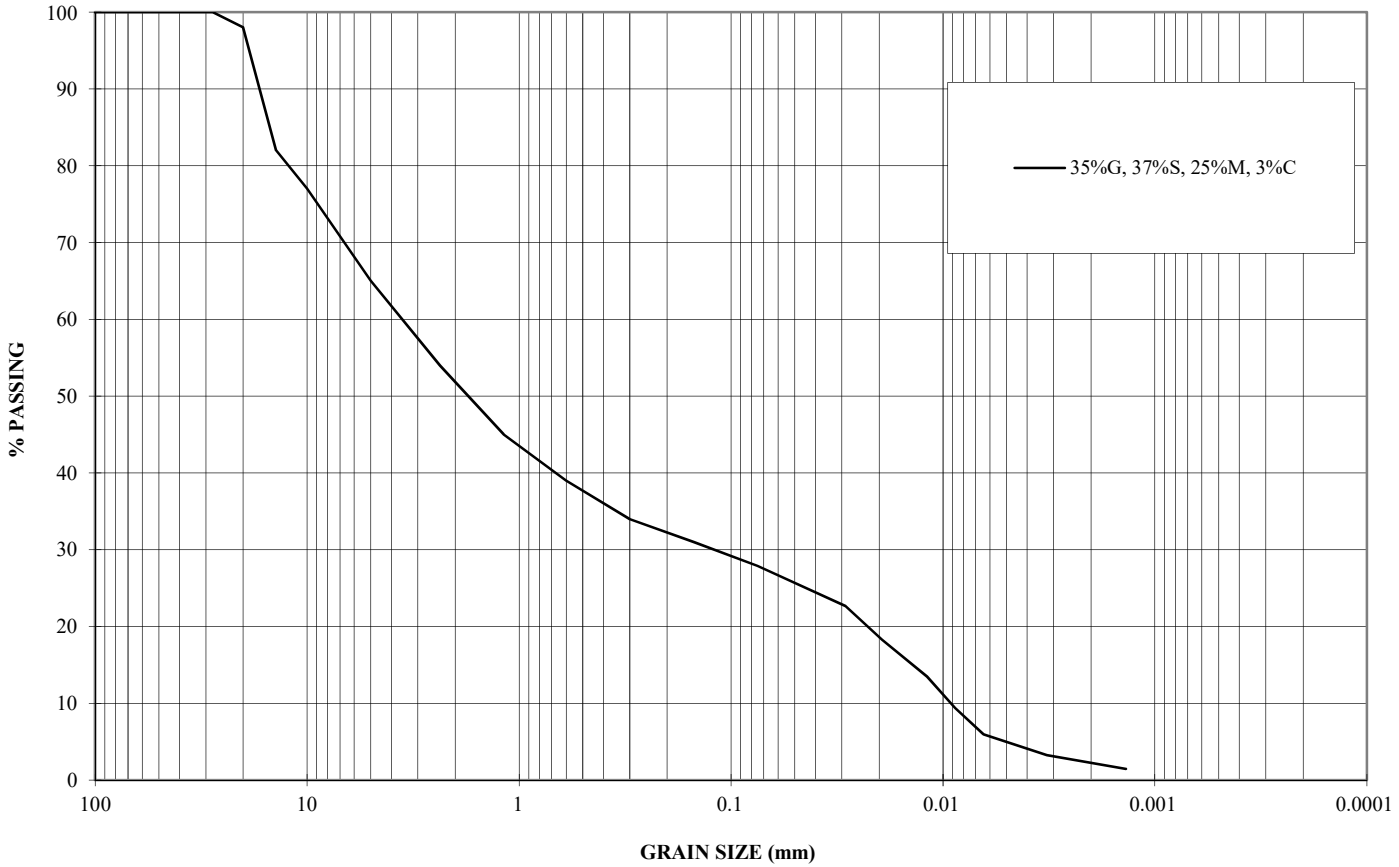
Moisture = 9.8%

Metric Sieve Analysis

	Sieve Size ASTM	Metric (mm)	% Passing
	4"	112	100
	3"	80	100
	2"	56	100
	1 1/2"	40	100
	1"	28	100
	3/4"	20	98
	1/2"	14	82
	3/8"	10	77
	No. 4	5	65
	No. 8	2.36	54
	No. 16	1.18	45
	No. 30	0.6	39
	No. 50	0.3	34
	No. 100	0.15	31
	No. 200	0.075	27.9
Hydrometer Analysis		0.0288	22.7
		0.0194	18.3
		0.0119	13.5
		0.0088	9.4
		0.0064	6.0
		0.0032	3.2
		0.0014	1.5

Client:	Golder Associates (Golder Project No.1895674)	Project:	Atlantic Gold Hydrogeological Investigation
Sample:	FMS-HG18-13A - SS3	Date Sample Rec'd.:	
Sample Taken By:	Client	Report Date:	27-Sep-18

GRAIN SIZE DISTRIBUTION



GRAVEL		SAND			SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE		

Client	**Golder Associates (Golder Project No.1895674)**
Project	**Atlantic Gold Hydrogeological Investigation**
Borehole	**FMS-HG18-14A**
Depth	**0.84m**
Sample No.	**SS2**
Date Received	
Sample Description	
Comments :	

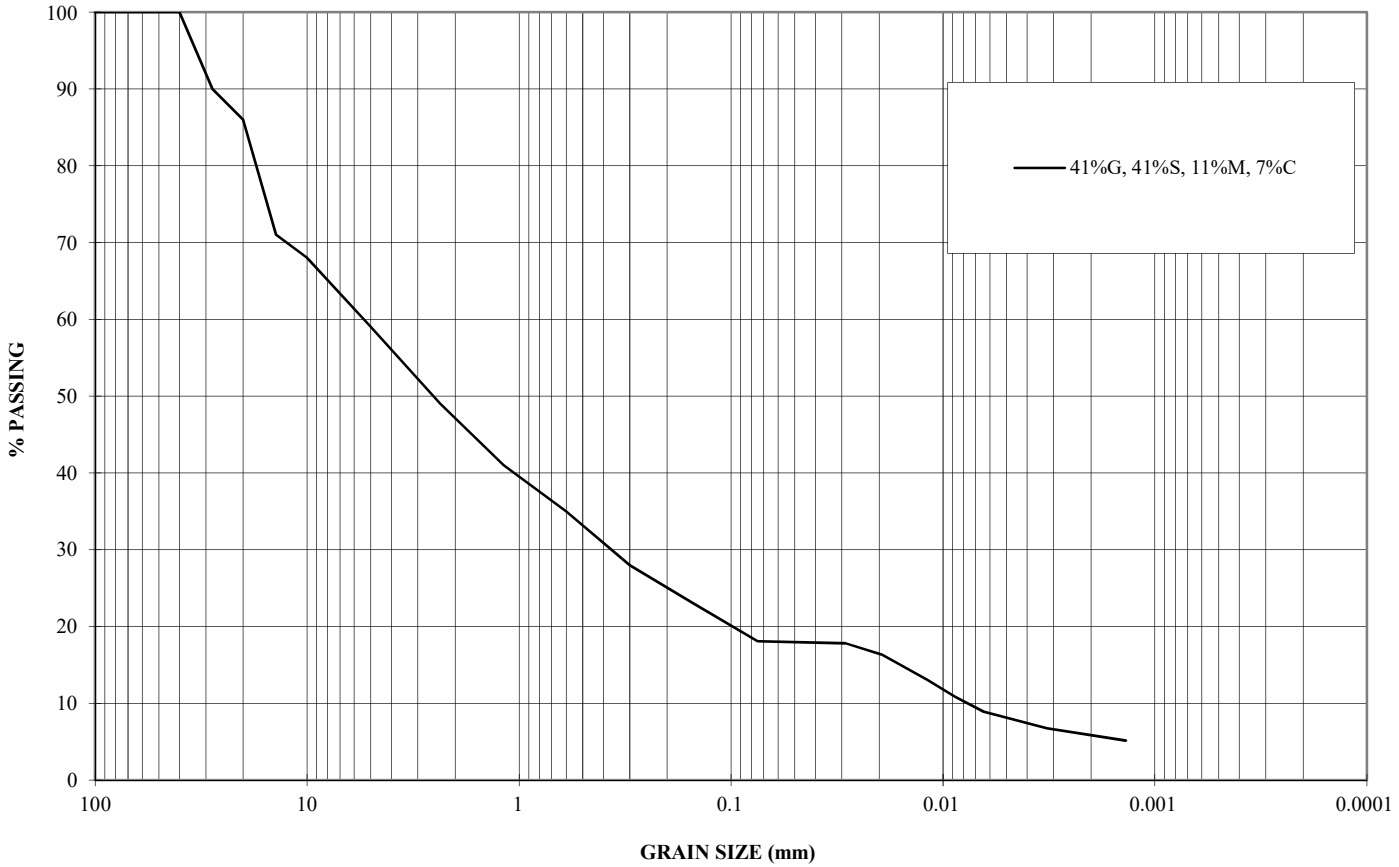
Moisture = 6.8%

Metric Sieve Analysis

Sieve Size ASTM	Metric (mm)	% Passing
4"	112	100
3"	80	100
2"	56	100
1 1/2"	40	100
1"	28	90
3/4"	20	86
1/2"	14	71
3/8"	10	68
No. 4	5	59
No. 8	2.36	49
No. 16	1.18	41
No. 30	0.6	35
No. 50	0.3	28
No. 100	0.15	23
No. 200	0.075	18.1
Hydrometer Analysis	0.0288	17.8
	0.0194	16.3
	0.0119	13.1
	0.0088	10.9
	0.0064	8.9
	0.0032	6.7
	0.0014	5.1

Client:	Golder Associates (Golder Project No.1895674)	Project:	Atlantic Gold Hydrogeological Investigation
Sample:	FMS-HG18-14A - SS2	Date Sample Rec'd.:	
Sample Taken By:	Client	Report Date:	28-Sep-18

GRAIN SIZE DISTRIBUTION



GRAVEL		SAND			SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE		

Client	**Golder Associates (Golder Project No.1895674)**
Project	**Atlantic Gold Hydrogeological Investigation**
Borehole	**FMS-HG18-14A**
Depth	**1.86m**
Sample No.	**SS3**
Date Received	
Sample Description	
Comments :	

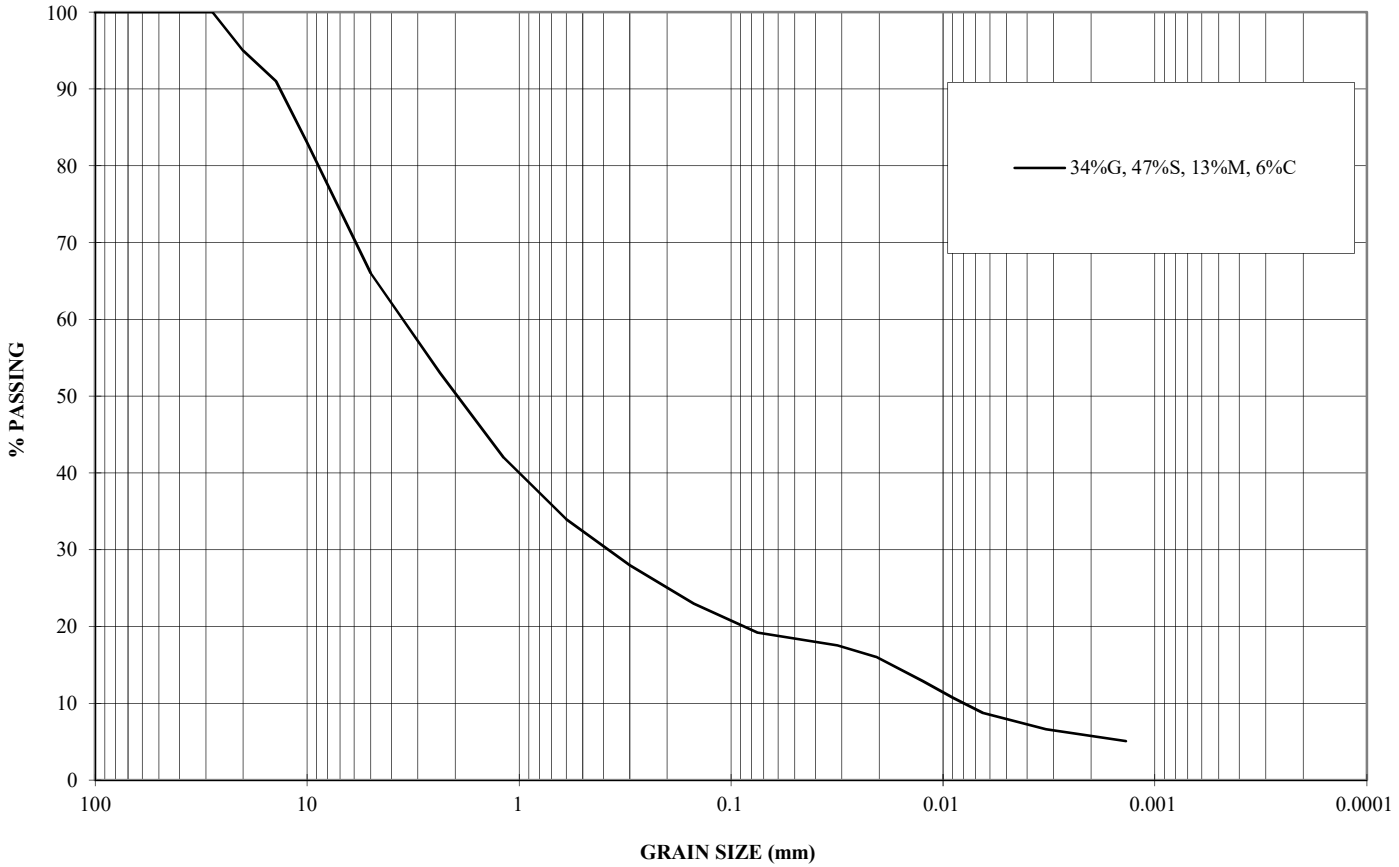
Moisture = 6.4%

Metric Sieve Analysis

	Sieve Size ASTM	Metric (mm)	% Passing
	4"	112	100
	3"	80	100
	2"	56	100
	1 1/2"	40	100
	1"	28	100
	3/4"	20	95
	1/2"	14	91
	3/8"	10	83
	No. 4	5	66
	No. 8	2.36	53
	No. 16	1.18	42
	No. 30	0.6	34
	No. 50	0.3	28
	No. 100	0.15	23
	No. 200	0.075	19.2
Hydrometer Analysis		0.0315	17.5
		0.0207	16.1
		0.0124	12.9
		0.0089	10.7
		0.0065	8.8
		0.0033	6.6
		0.0014	5.1

Client:	Golder Associates (Golder Project No.1895674)	Project:	Atlantic Gold Hydrogeological Investigation
Sample:	FMS-HG18-14A - SS3	Date Sample Rec'd.:	
Sample Taken By:	Client	Report Date:	28-Sep-18

GRAIN SIZE DISTRIBUTION



GRAVEL		SAND			SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE		

Client	**Golder Associates (Golder Project No.1895674)**
Project	**Atlantic Gold Hydrogeological Investigation**
Borehole	**FMS-HG18-16A**
Depth	**0.31m**
Sample No.	**SS1**
Date Received	
Sample Description	
Comments :	

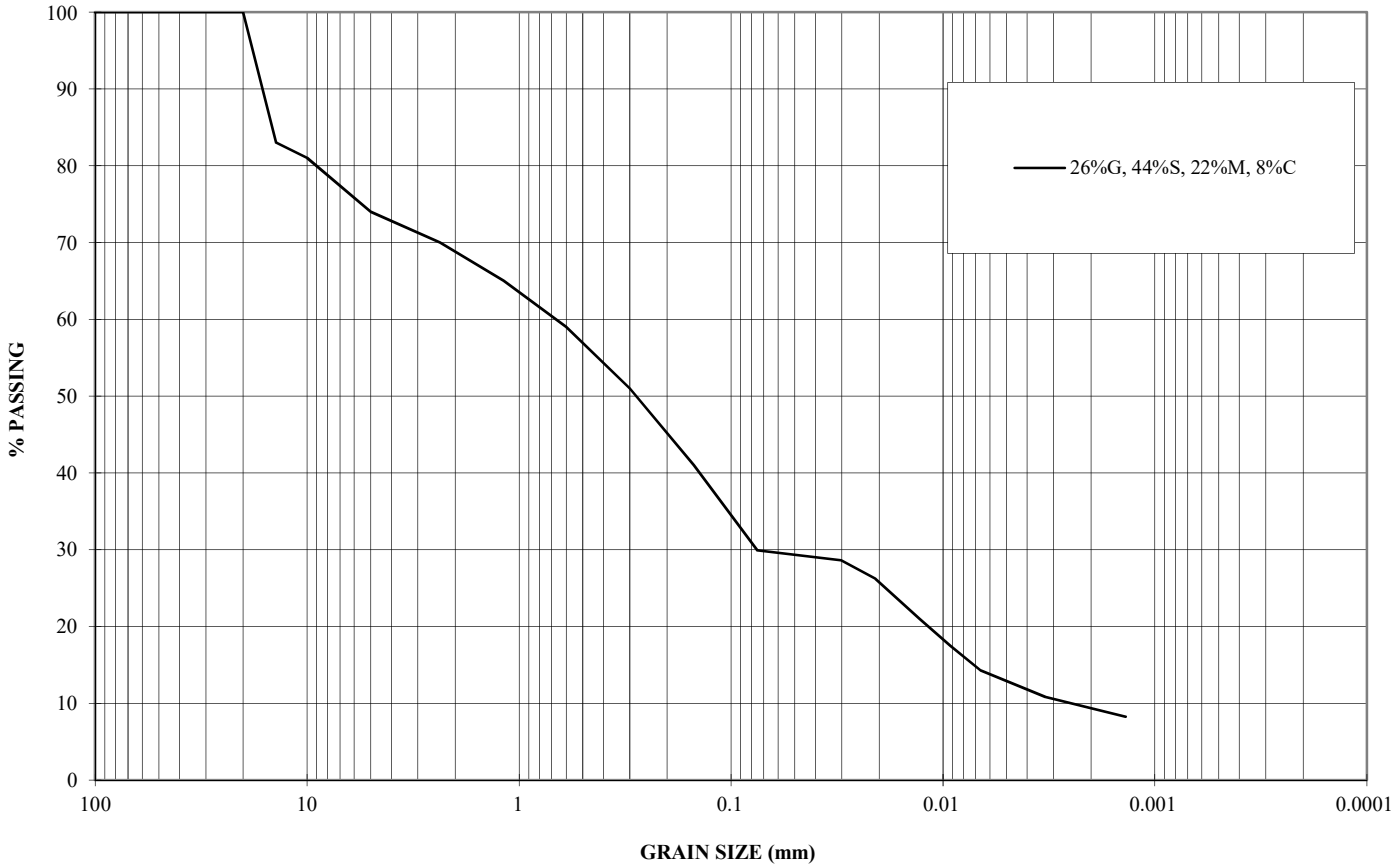
Moisture = 23.9%

Metric Sieve Analysis

Sieve Size ASTM	Metric (mm)	% Passing
4"	112	100
3"	80	100
2"	56	100
1 1/2"	40	100
1"	28	100
3/4"	20	100
1/2"	14	83
3/8"	10	81
No. 4	5	74
No. 8	2.36	70
No. 16	1.18	65
No. 30	0.6	59
No. 50	0.3	51
No. 100	0.15	41
No. 200	0.075	29.9
Hydrometer Analysis	0.0303	28.6
	0.0209	26.2
	0.0129	21.0
	0.0092	17.5
	0.0067	14.3
	0.0033	10.8
	0.0014	8.3

Client:	Golder Associates (Golder Project No.1895674)	Project:	Atlantic Gold Hydrogeological Investigation
Sample:	FMS-HG18-16A - SS1	Date Sample Rec'd.:	
Sample Taken By:	Client	Report Date:	28-Sep-18

GRAIN SIZE DISTRIBUTION



GRAVEL		SAND			SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE		

Client	**Golder Associates (Golder Project No.1895674)**
Project	**Atlantic Gold Hydrogeological Investigation**
Borehole	**FMS-HG18-16A**
Depth	**1.64m**
Sample No.	**SS3**
Date Received	
Sample Description	
Comments :	**Non-Plastic**

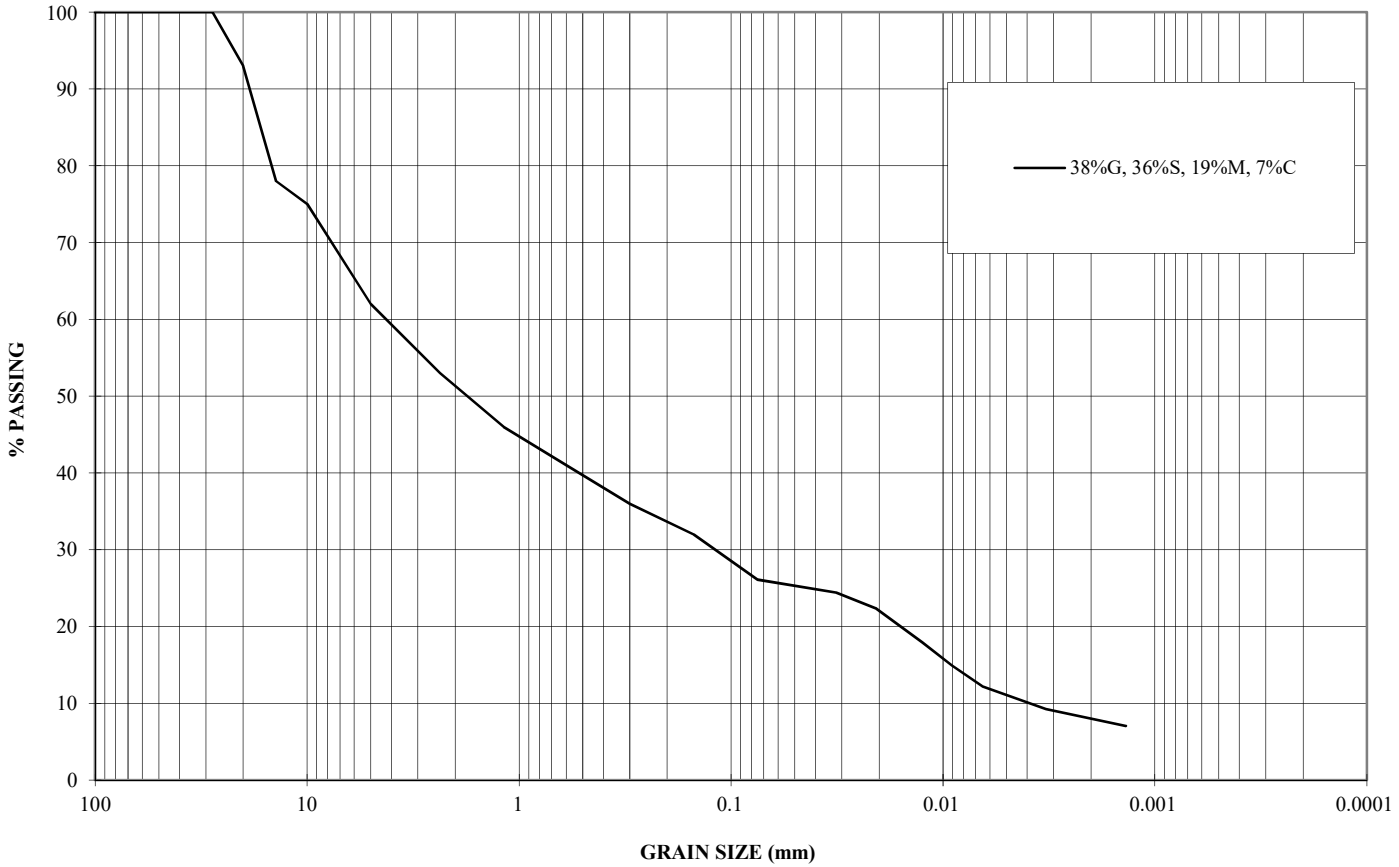
Moisture = 9.1%

Metric Sieve Analysis

	Sieve Size ASTM	Metric (mm)	% Passing
	4"	112	100
	3"	80	100
	2"	56	100
	1 1/2"	40	100
	1"	28	100
	3/4"	20	93
	1/2"	14	78
	3/8"	10	75
	No. 4	5	62
	No. 8	2.36	53
	No. 16	1.18	46
	No. 30	0.6	41
	No. 50	0.3	36
	No. 100	0.15	32
	No. 200	0.075	26.1
Hydrometer Analysis		0.0319	24.4
		0.0207	22.4
		0.0125	17.9
		0.0090	14.9
		0.0065	12.2
		0.0033	9.2
		0.0014	7.1

Client:	Golder Associates (Golder Project No.1895674)	Project:	Atlantic Gold Hydrogeological Investigation
Sample:	FMS-HG18-16A - SS3	Date Sample Rec'd.:	
Sample Taken By:	Client	Report Date:	28-Sep-18

GRAIN SIZE DISTRIBUTION



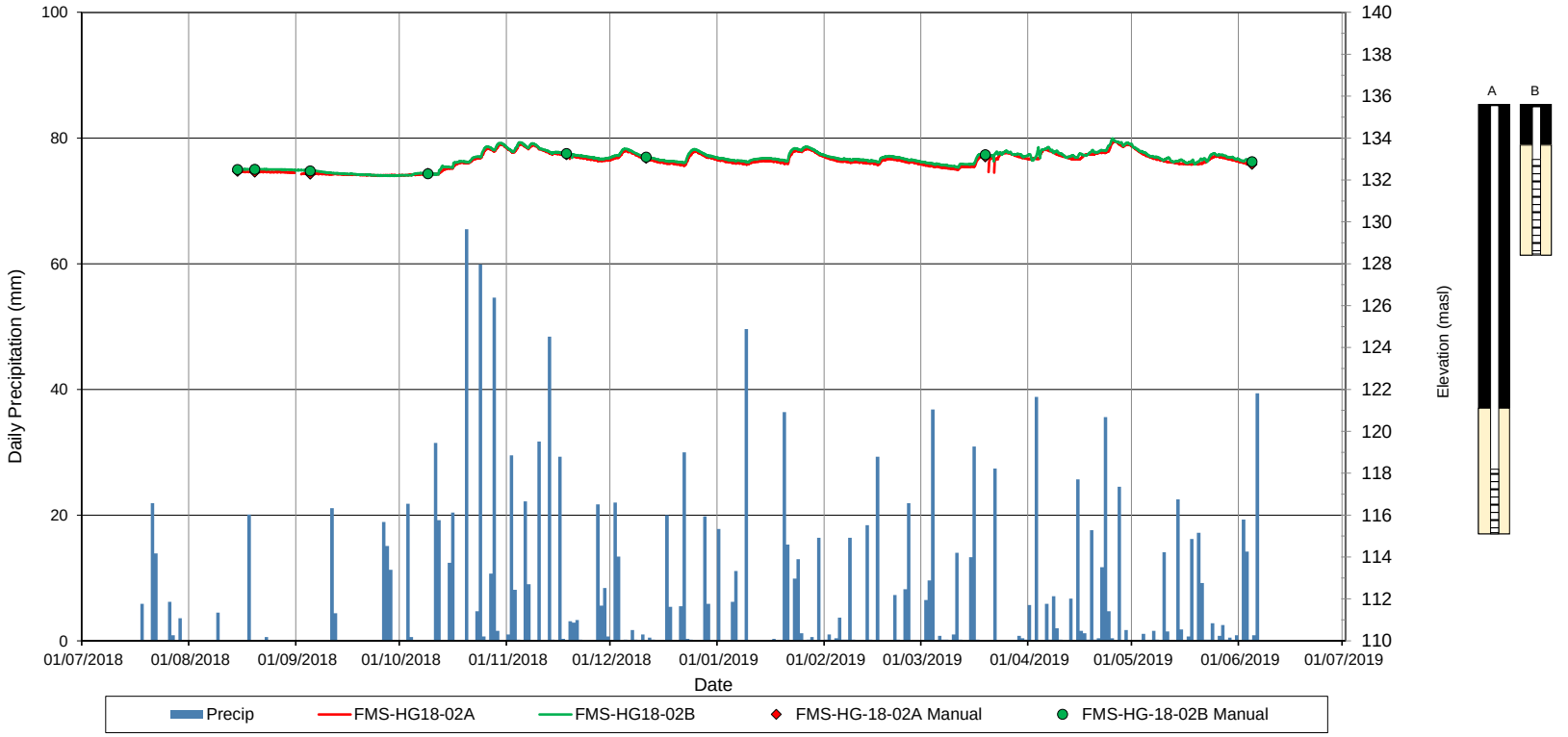
GRAVEL		SAND			SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE		

APPENDIX D

Groundwater Level Hydrographs

HYDROGRAPH OF MONITORING WELL NEST FMS-HG18-02A/B
GROUNDWATER ELEVATIONS

FIGURE 1



DATE: June 2019

PROJECT: 1895674

Note: Precipitation data from Malay Falls, NS Station, Approximately 18 km away

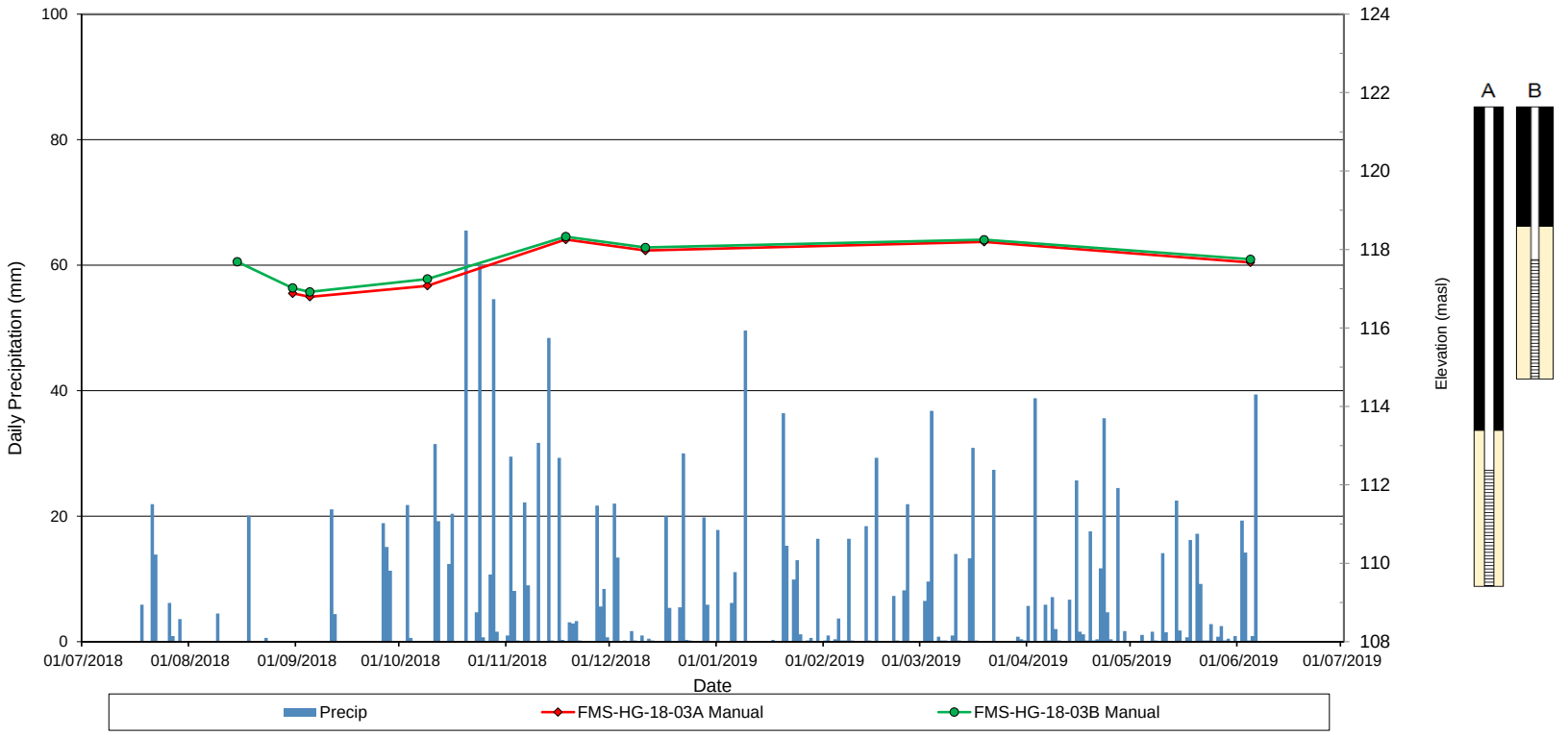
GOLDER

Prepared: CM

Checked: GM

HYDROGRAPH OF MONITORING WELL NEST FMS-HG18-03A/B
GROUNDWATER ELEVATIONS

FIGURE 2



DATE: June 2019

PROJECT: 1895674

Note: Precipitation data from Malay Falls, NS Station, Approximately 18 km away

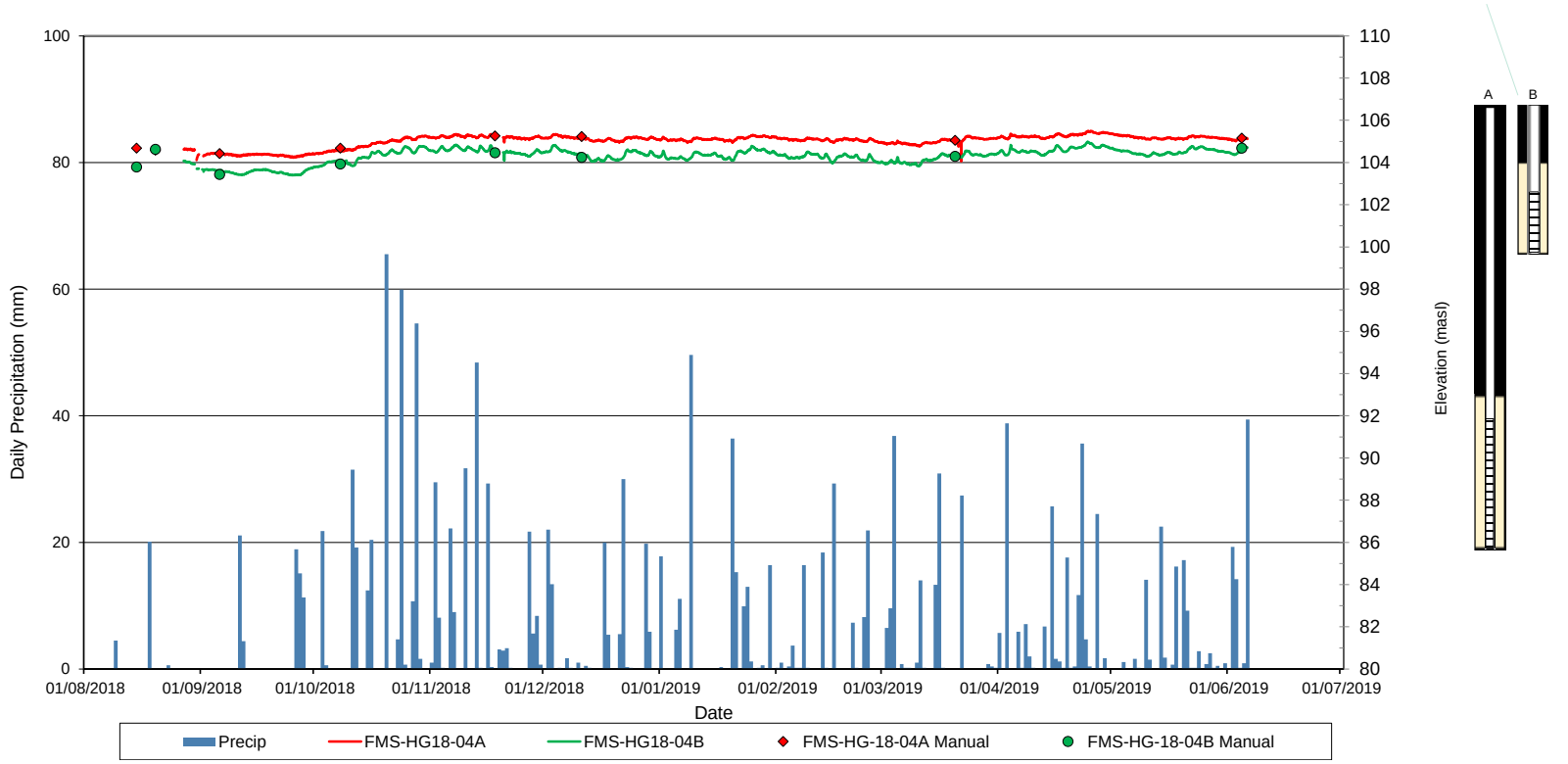
GOLDER

Prepared: CM

Checked: GM

HYDROGRAPH OF MONITORING WELL NEST FMS-HG18-04A/B
GROUNDWATER ELEVATIONS

FIGURE 3



DATE: June 2019

PROJECT: 1895674

Note: Precipitation data from Malay Falls, NS Station, Approximately 18 km away

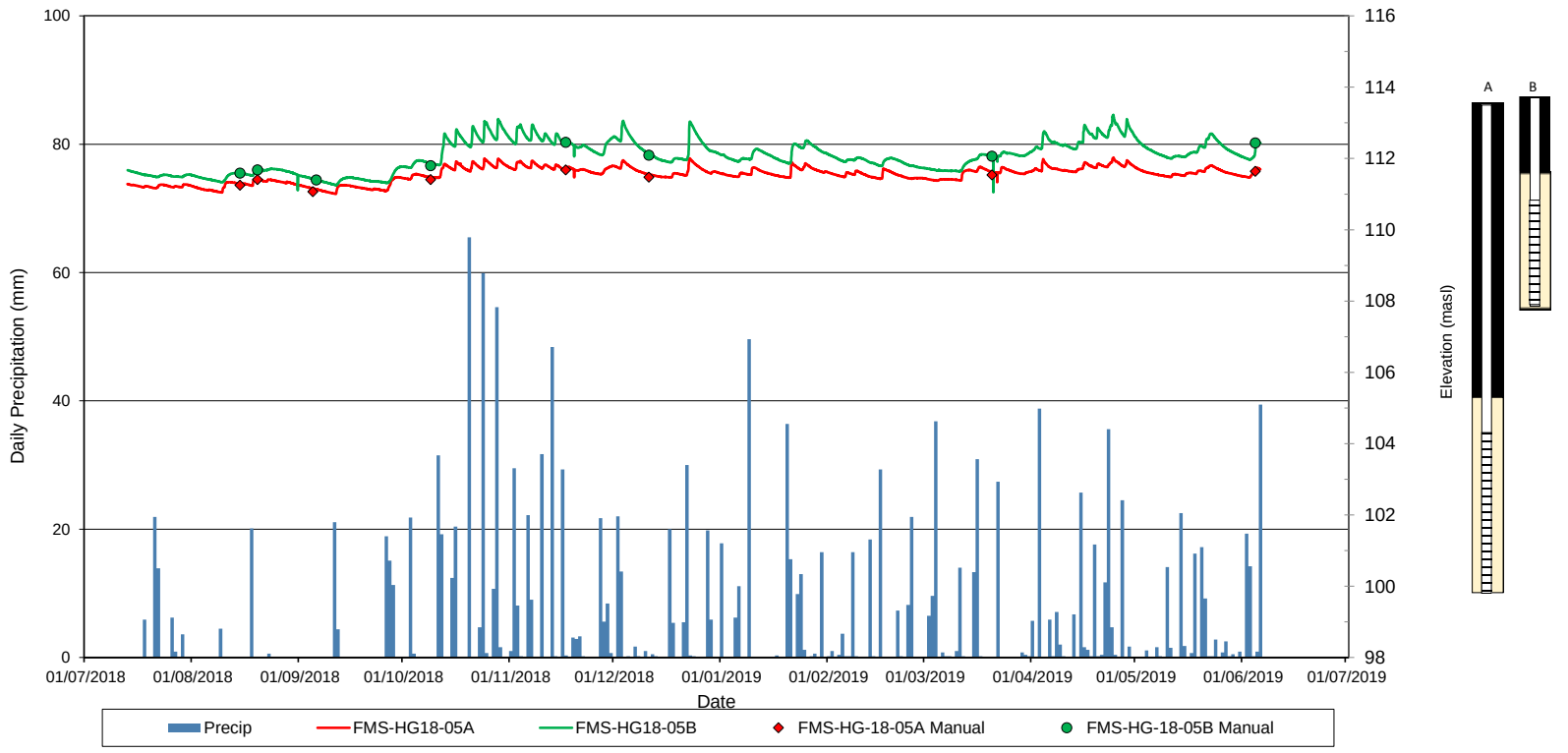
GOLDER

Prepared: CM

Checked: GM

HYDROGRAPH OF MONITORING WELL NEST FMS-HG18-05A/B
GROUNDWATER ELEVATIONS

FIGURE 4



DATE: June 2019

PROJECT: 1895674

Note: Precipitation data from Malay Falls, NS Station, Approximately 18 km away

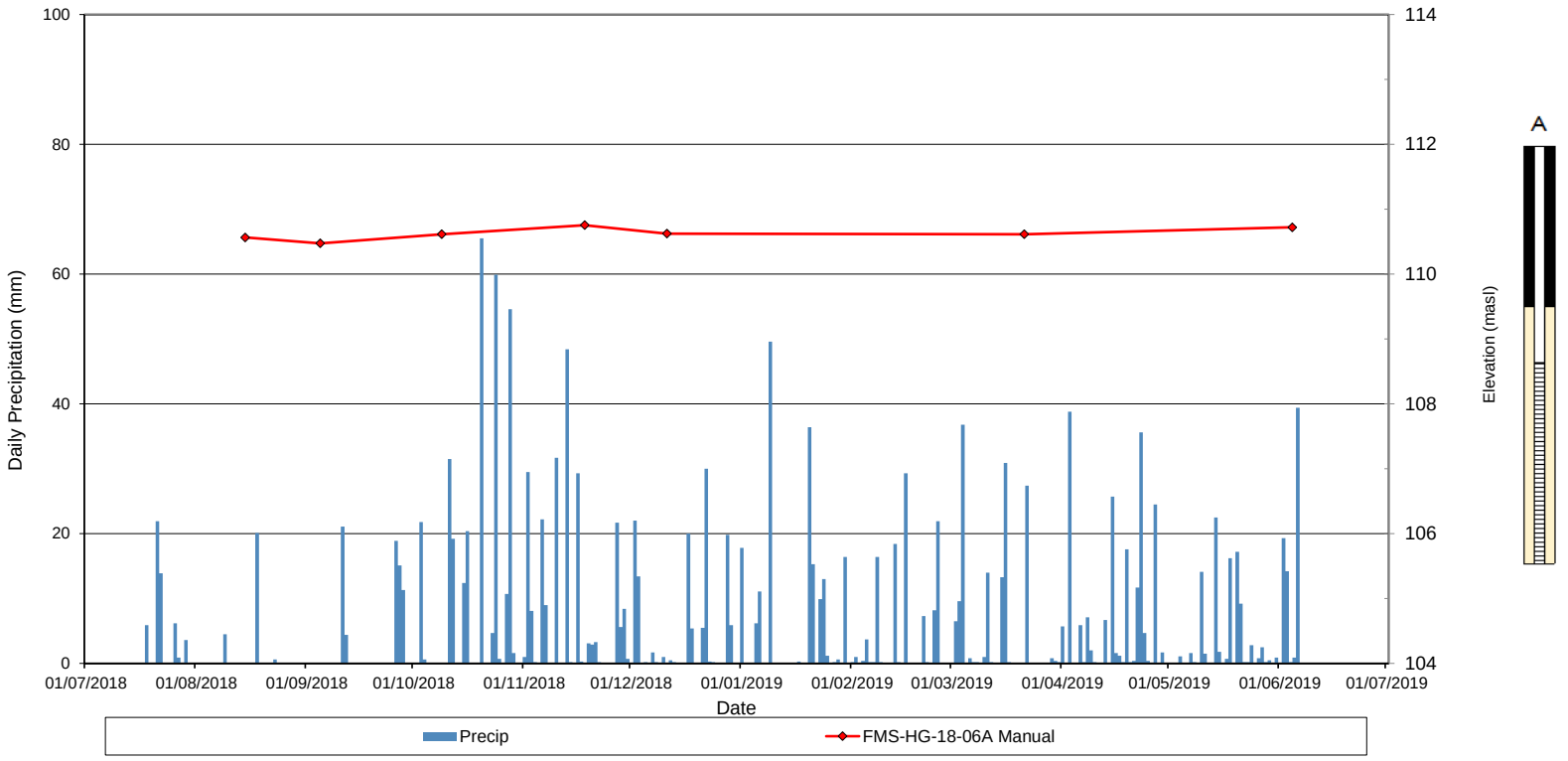
GOLDER

Prepared: CM

Checked: GM

HYDROGRAPH OF MONITORING WELL NEST FMS-HG18-06A
GROUNDWATER ELEVATIONS

FIGURE 5



DATE: June 2019

PROJECT: 1895674

Note: Precipitation data from Malay Falls, NS Station, Approximately 18 km away

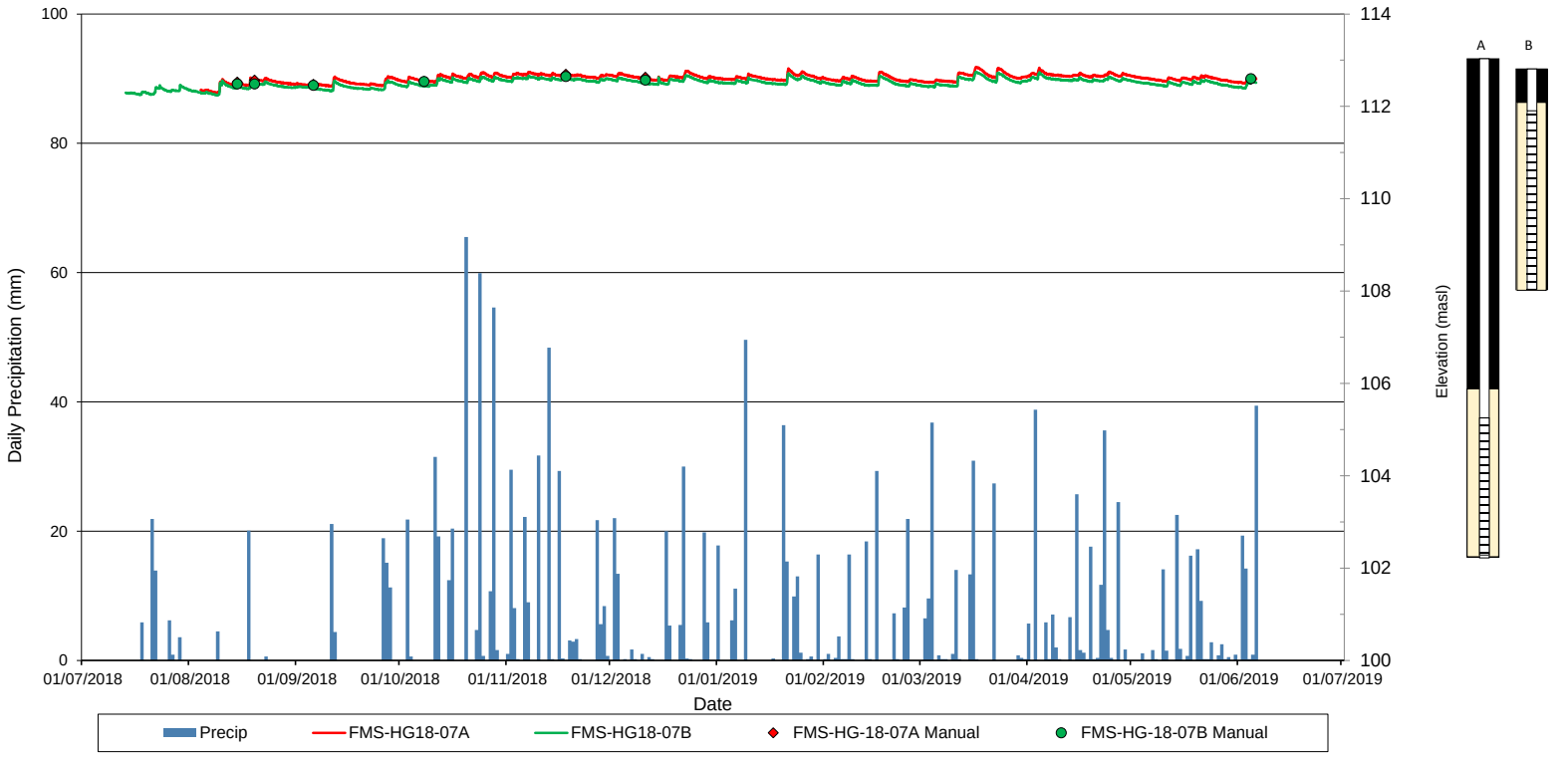
GOLDER

Prepared: CM

Checked: GM

HYDROGRAPH OF MONITORING WELL NEST FMS-HG18-07A/B
GROUNDWATER ELEVATIONS

FIGURE 6



DATE: June 2019

PROJECT: 1895674

Note: Precipitation data from Malay Falls, NS Station, Approximately 18 km away

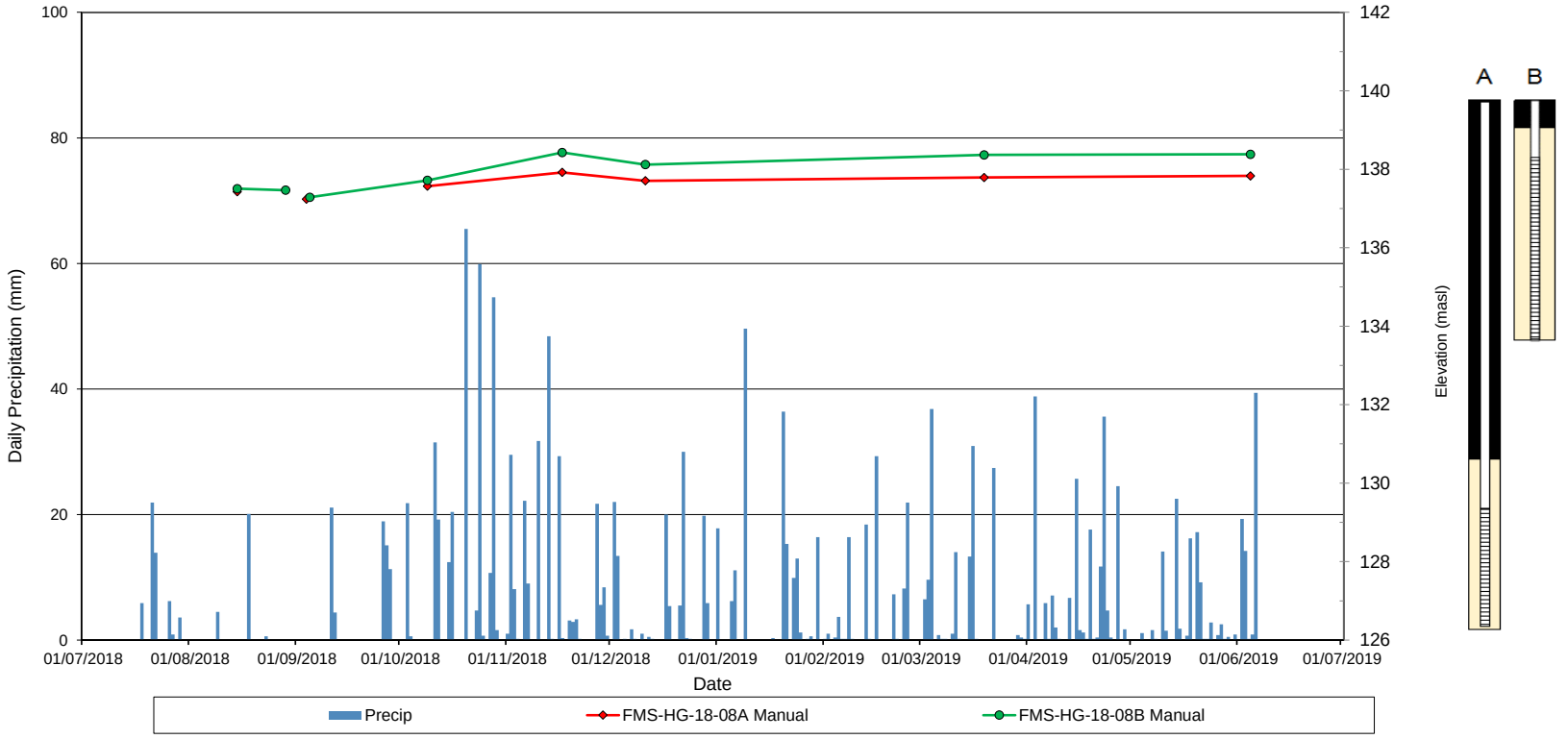
GOLDER

Prepared: CM

Checked: GM

HYDROGRAPH OF MONITORING WELL NEST FMS-HG18-08A/B
GROUNDWATER ELEVATIONS

FIGURE 7



DATE: June 2019

PROJECT: 1895674

Note: Precipitation data from Malay Falls, NS Station, Approximately 18 km away

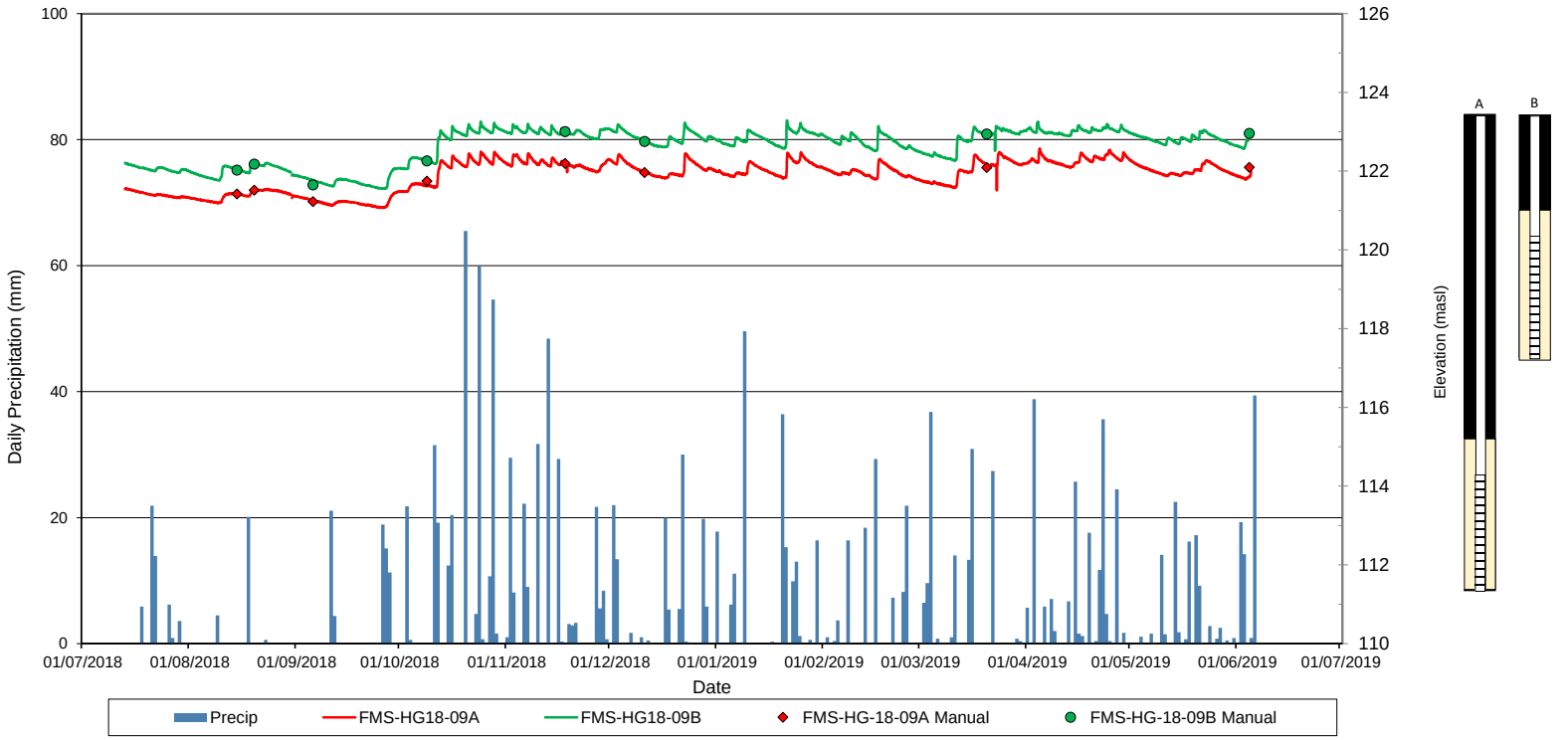
GOLDER

Prepared: CM

Checked: GM

HYDROGRAPH OF MONITORING WELL NEST FMS-HG18-09A/B
GROUNDWATER ELEVATIONS

FIGURE 8



DATE: June 2019

PROJECT: 1895674

Note: Precipitation data from Malay Falls, NS Station, Approximately 18 km away

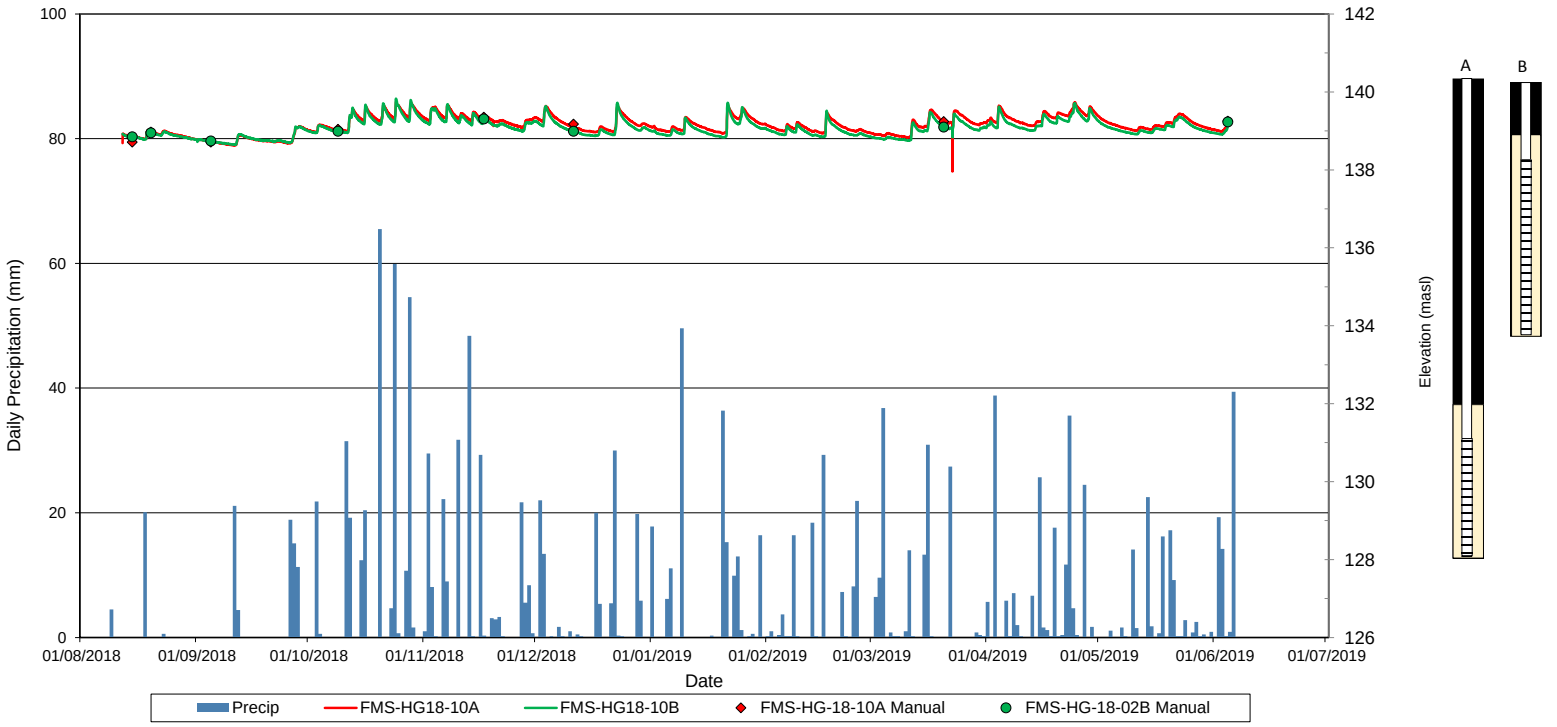
GOLDER

Prepared: CM

Checked: GM

HYDROGRAPH OF MONITORING WELL NEST FMS-HG18-10A/B
GROUNDWATER ELEVATIONS

FIGURE 9



DATE: June 2019

PROJECT: 1895674

Note: Precipitation data from Malay Falls, NS Station, Approximately 18 km away

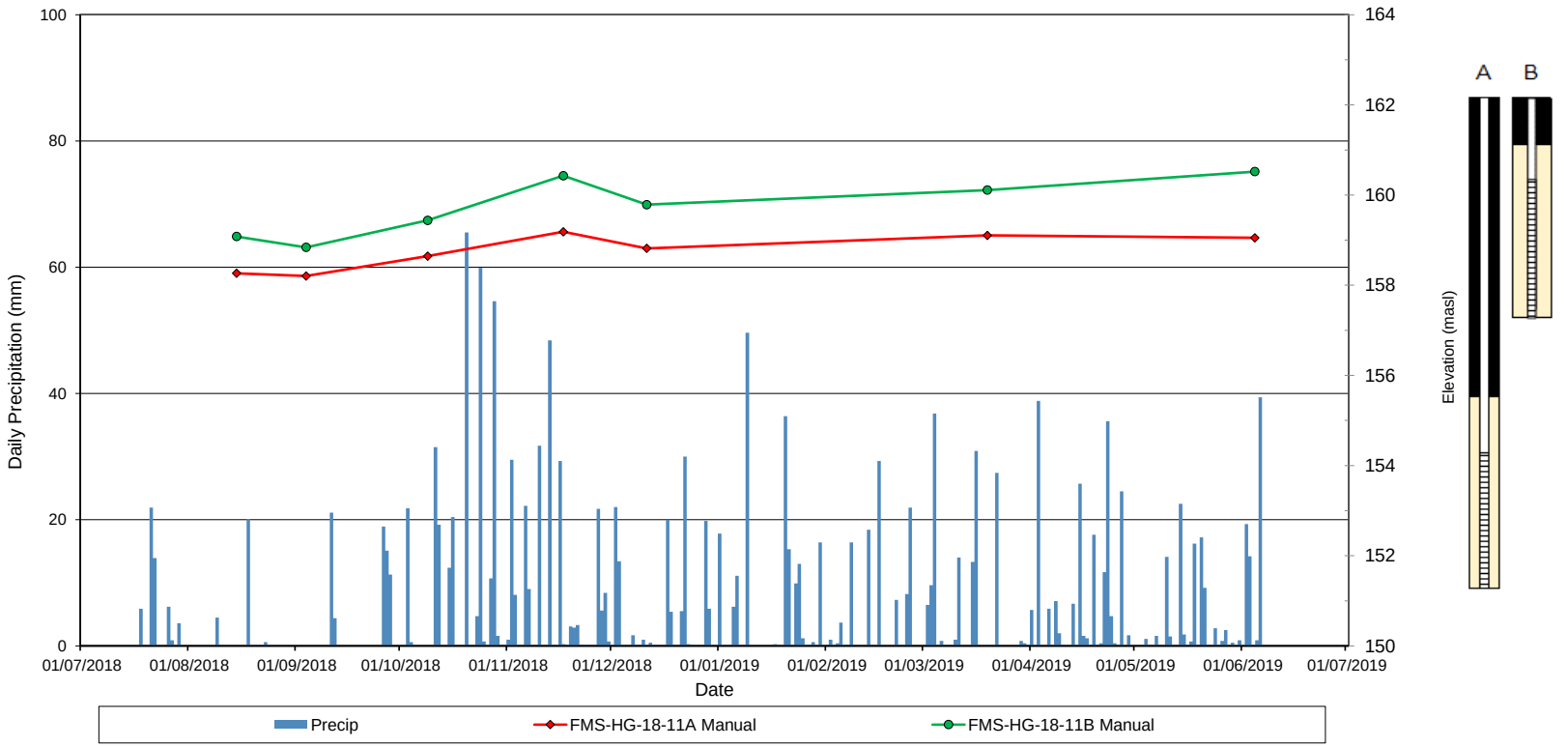
GOLDER

Prepared: CM

Checked: GM

HYDROGRAPH OF MONITORING WELL NEST FMS-HG18-11A/B
GROUNDWATER ELEVATIONS

FIGURE 10



DATE: June 2019

PROJECT: 1895674

Note: Precipitation data from Malay Falls, NS Station, Approximately 18 km away

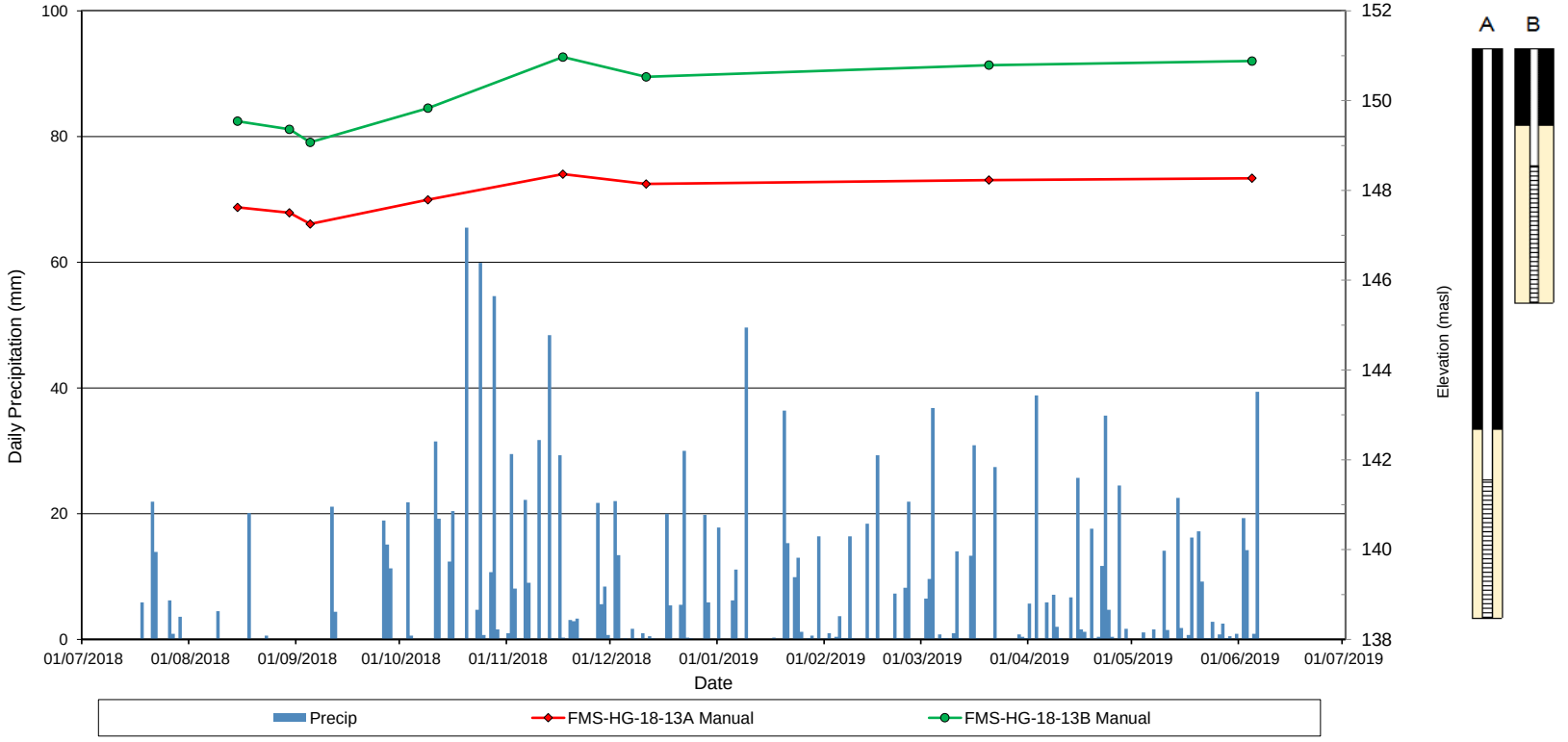
GOLDER

Prepared: CM

Checked: GM

HYDROGRAPH OF MONITORING WELL NEST FMS-HG18-13A/B
GROUNDWATER ELEVATIONS

FIGURE 11



DATE: June 2019

PROJECT: 1895674

Note: Precipitation data from Malay Falls, NS Station, Approximately 18 km away

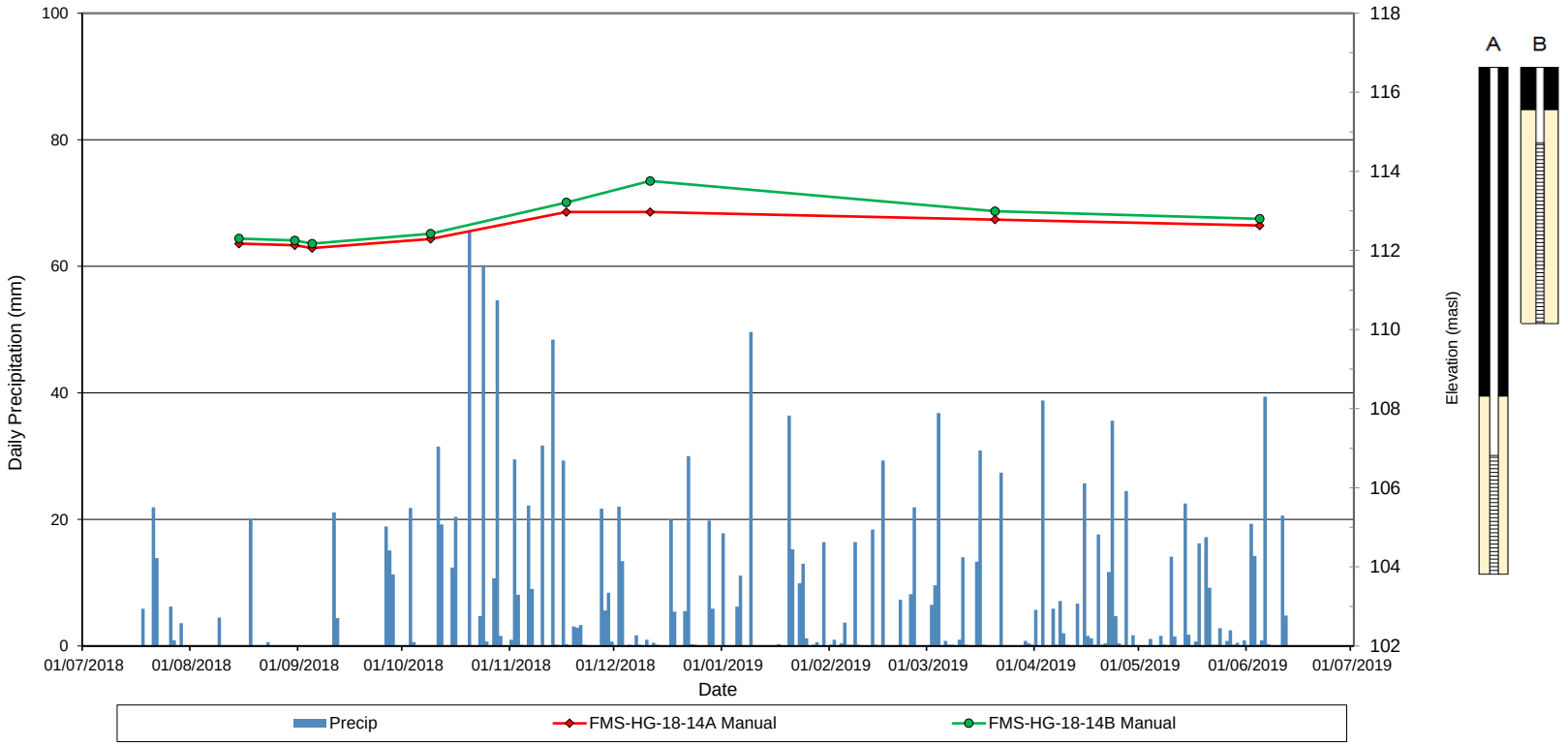
GOLDER

Prepared: CM

Checked: GM

HYDROGRAPH OF MONITORING WELL NEST FMS-HG18-14A/B
GROUNDWATER ELEVATIONS

FIGURE 12



DATE: June 2019

PROJECT: 1895674

Note: Precipitation data from Malay Falls, NS Station, Approximately 18 km away

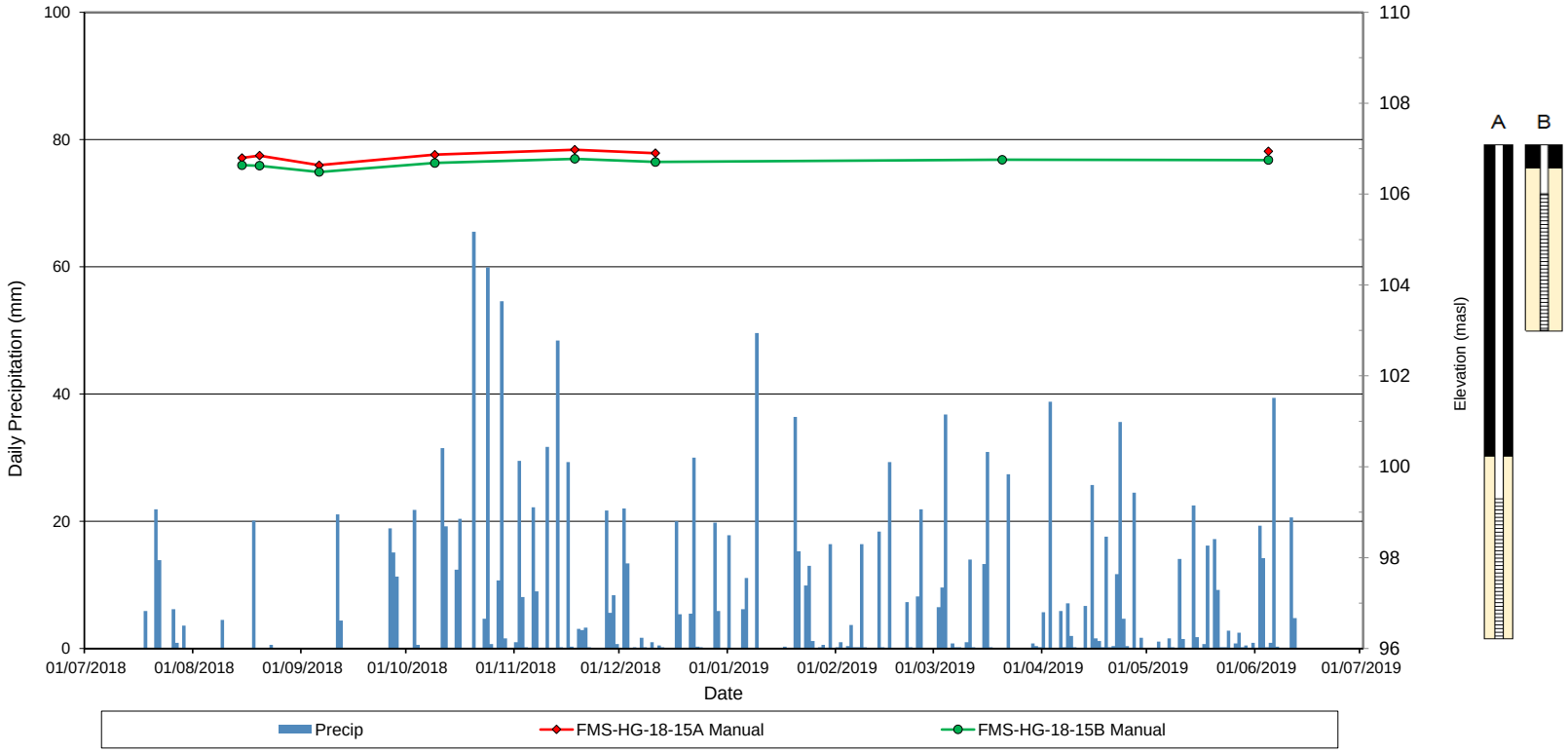
GOLDER

Prepared: CM

Checked: GM

HYDROGRAPH OF MONITORING WELL NEST FMS-HG18-15A/B
GROUNDWATER ELEVATIONS

FIGURE 13



DATE: June 2019

PROJECT: 1895674

Note: Precipitation data from Malay Falls, NS Station, Approximately 18 km away

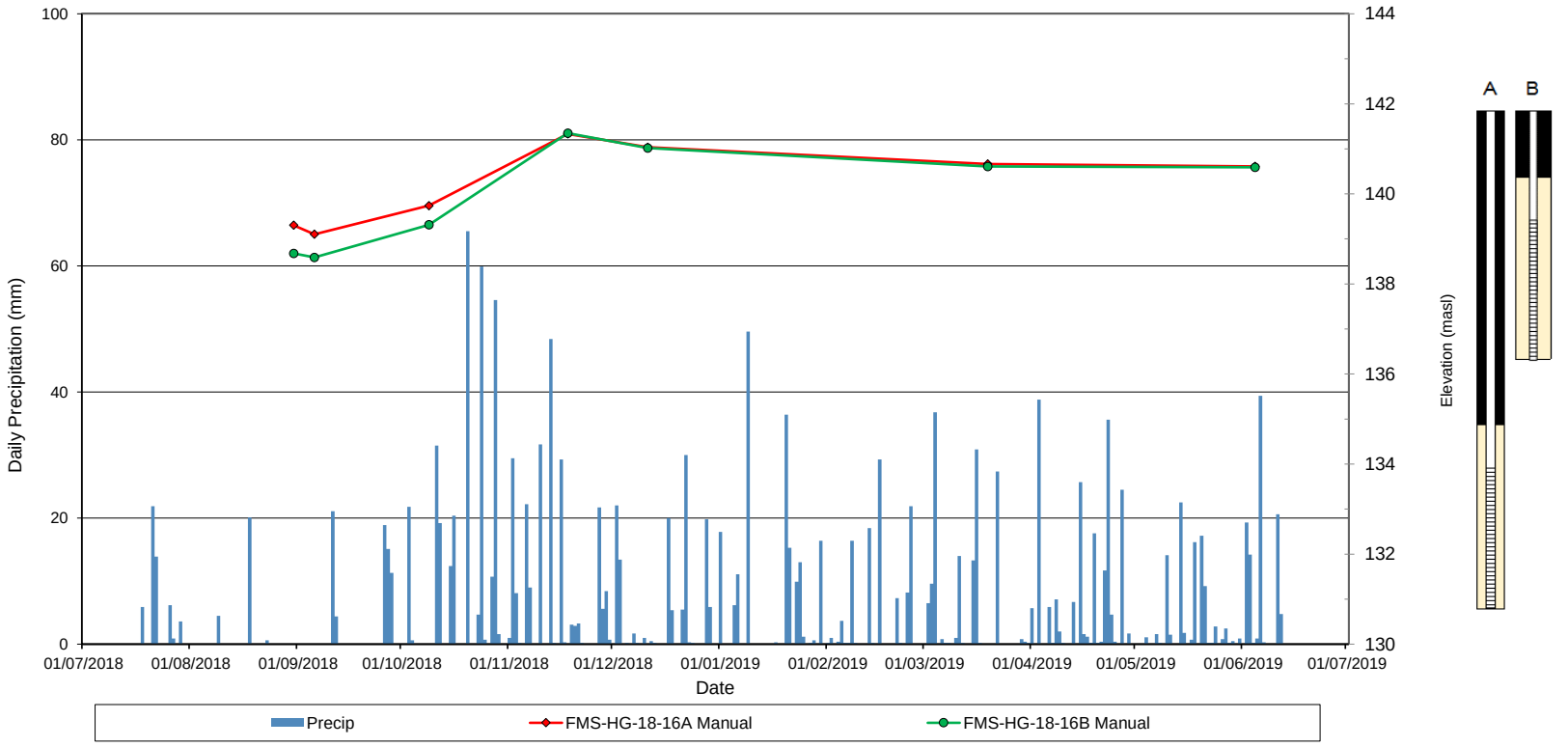
GOLDER

Prepared: CM

Checked: GM

HYDROGRAPH OF MONITORING WELL NEST FMS-HG18-16A/B
GROUNDWATER ELEVATIONS

FIGURE 14



DATE: June 2019

PROJECT: 1895674

Note: Precipitation data from Malay Falls, NS Station, Approximately 18 km away

GOLDER

Prepared: CM

Checked: GM

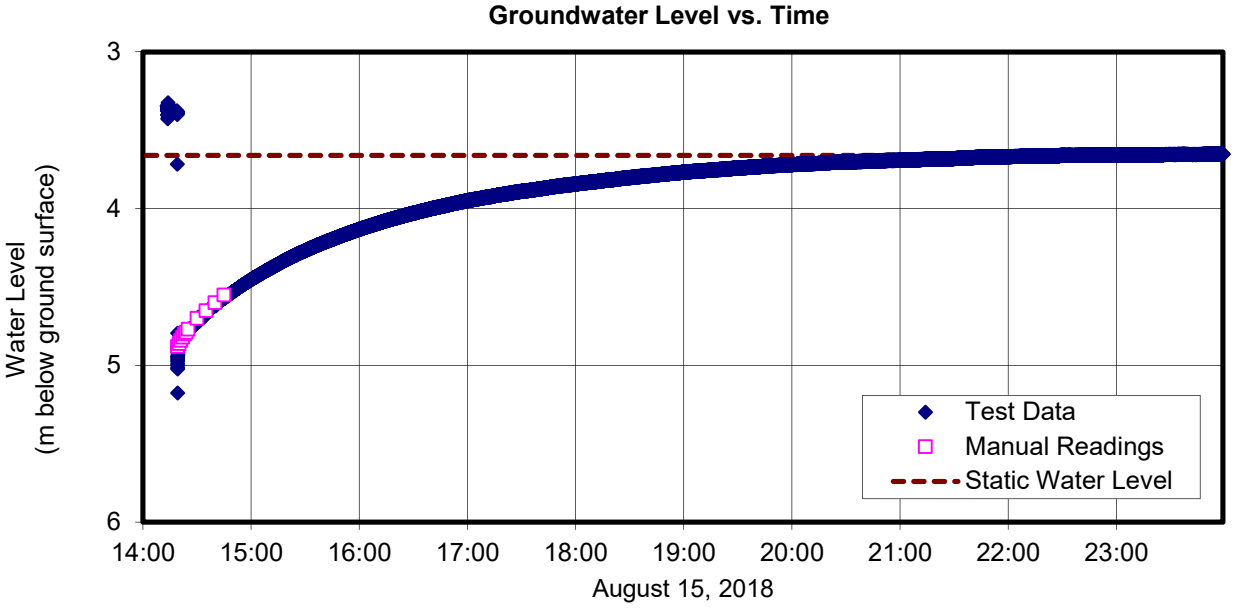
APPENDIX E

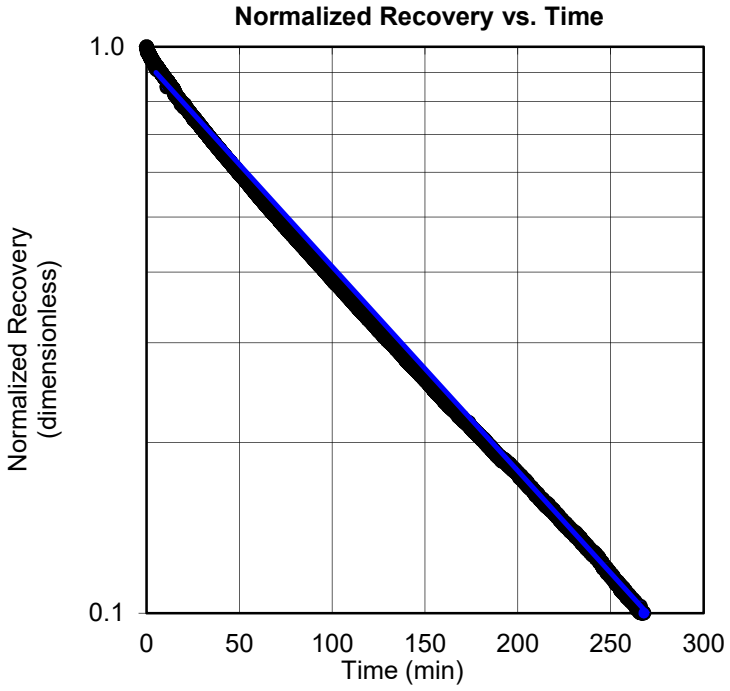
Single Well Response Test Analysis Sheets

In-Situ Hydraulic Conductivity Test Report

Borehole FMS-HG18-02A

FIGURE E1





Test Interval (below ground surface)

17.4 m to 20.4 m

Static Water Level (below ground surface)

3.66 m

Test Interval (L) = 3.05 m

Well Radius (r) = 0.0254 m

Hole Radius (R) = 0.048 m

Points Used for Match Line

h_1/H_0 = 0.90 t_1 = 5 min

h_2/H_0 = 0.27 t_2 = 150 min

Hvorslev Analysis

$$\text{Hydraulic Conductivity (K)} = \frac{-(r^2) \cdot \ln(L/R)}{2 \cdot L} \cdot \frac{\ln(h_2/H_0) - \ln(h_1/H_0)}{t_2 - t_1} = \textbf{6E-8 m/s}$$

DATE: November 2018

PROJECT: 1895674

GOLDER

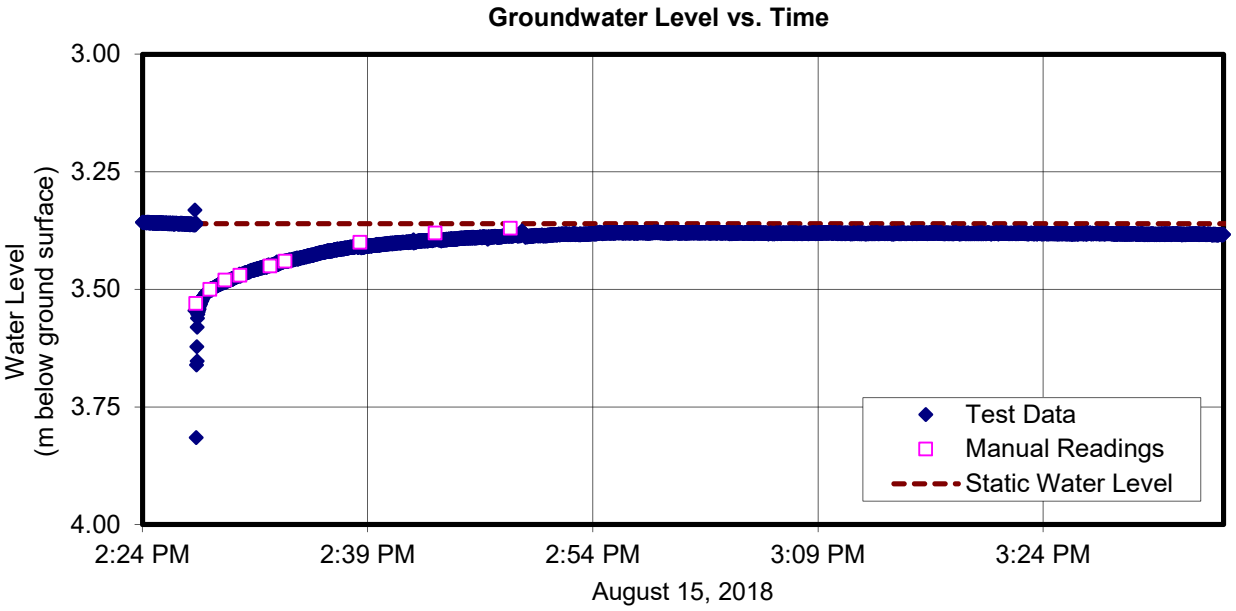
DESIGN: KL

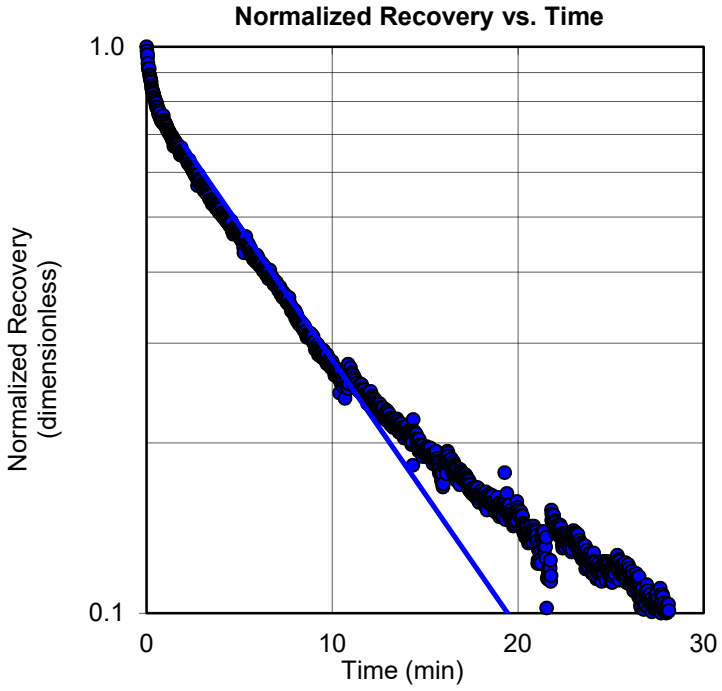
CHECK: MB

In-Situ Hydraulic Conductivity Test Report

Borehole FMS-HG18-02B

FIGURE E2





Test Interval (below ground surface)

3.4 m to 7.0 m

Static Water Level (below ground surface)

3.36 m

Test Interval (L) = 3.67 m

Eff. Well Radius (r) = 0.0338 m

Hole Radius (R) = 0.048 m

Points Used for Match Line

h_1/H_0 = 0.67 t_1 = 2 min

h_2/H_0 = 0.28 t_2 = 10 min

Hvorslev Analysis

$$\text{Hydraulic Conductivity (K)} = \frac{-(r^2) \cdot \ln(L/R)}{2 \cdot L} \cdot \frac{\ln(h_2/H_0) - \ln(h_1/H_0)}{t_2 - t_1} = \textbf{1E-6 m/s}$$

DATE: November 2018

PROJECT: 1895674

GOLDER

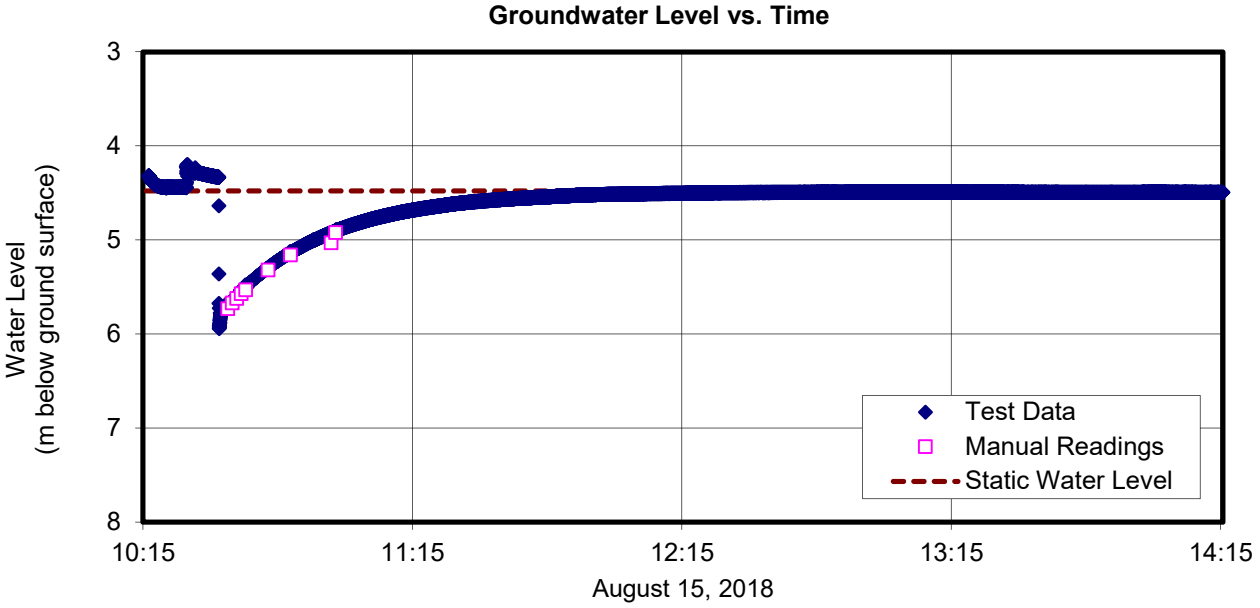
DESIGN: KL

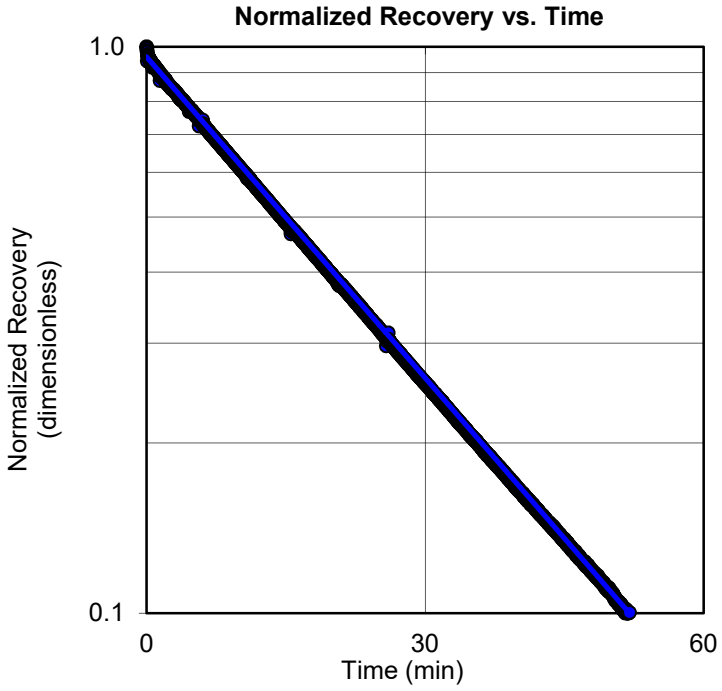
CHECK: MB

In-Situ Hydraulic Conductivity Test Report

Borehole FMS-HG18-03A

FIGURE E3





Test Interval (below ground surface)

8.9 m to 12.0 m

Static Water Level (below ground surface)

4.48 m

Test Interval (L) = 3.05 m

Well Radius (r) = 0.0254 m

Hole Radius (R) = 0.048 m

Points Used for Match Line

h_1/H_0 = 0.96 t_1 = 0 min

h_2/H_0 = 0.10 t_2 = 52 min

Hvorslev Analysis

$$\text{Hydraulic Conductivity (K)} = \frac{-(r^2) \cdot \ln(L/R)}{2 \cdot L} \cdot \frac{\ln(h_2/H_0) - \ln(h_1/H_0)}{t_2 - t_1} = \textbf{3E-7 m/s}$$

DATE: November 2018

PROJECT: 1895674

GOLDER

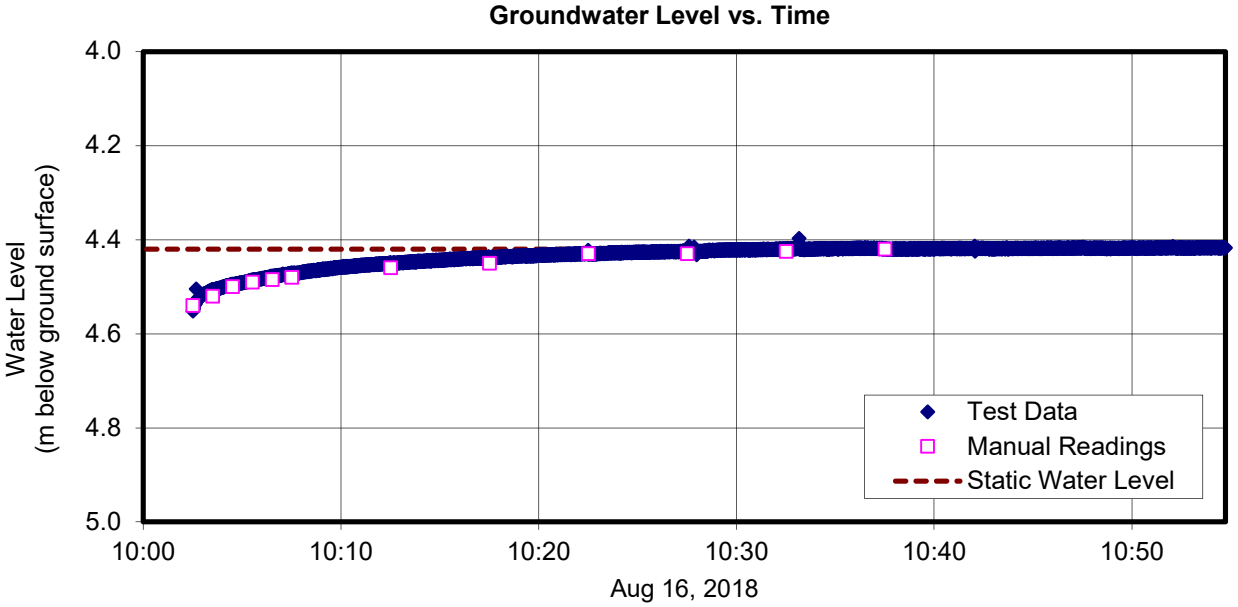
DESIGN: RA

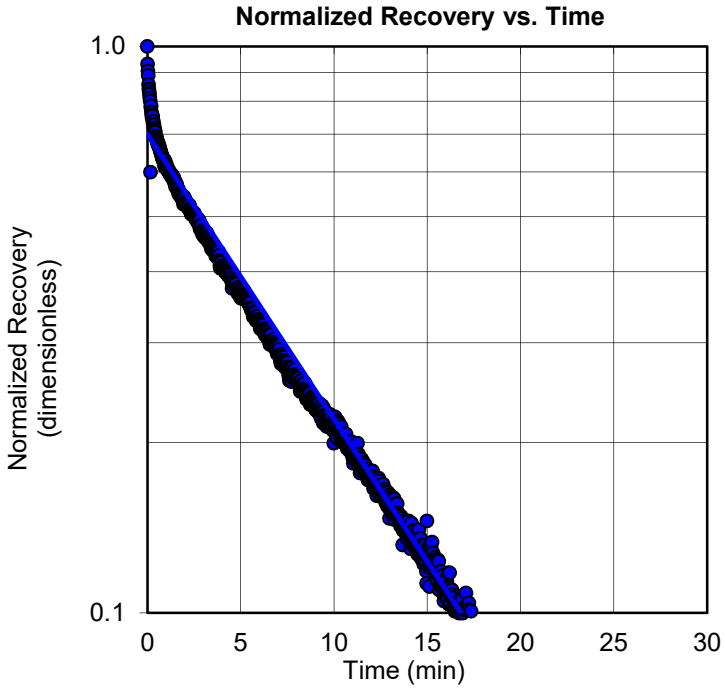
CHECK: MB

In-Situ Hydraulic Conductivity Test Report

Borehole FMS-HG18-03B

FIGURE E4





Test Interval (below ground surface)

4.4 m to 6.9 m

Static Water Level (below ground surface)

4.42 m

Test Interval (L) = 2.47 m

Eff. Well Radius (r) = 0.0336 m

Hole Radius (R) = 0.048 m

Points Used for Match Line

h_1/H_0 = 0.70 t_1 = 0 min

h_2/H_0 = 0.22 t_2 = 10 min

Hvorslev Analysis

$$\text{Hydraulic Conductivity (K)} = \frac{-(r^2) \cdot \ln(L/R)}{2 \cdot L} \cdot \frac{\ln(h_2/H_0) - \ln(h_1/H_0)}{t_2 - t_1} = \textbf{2E-6 m/s}$$

DATE: November 2018

PROJECT: 1895674

GOLDER

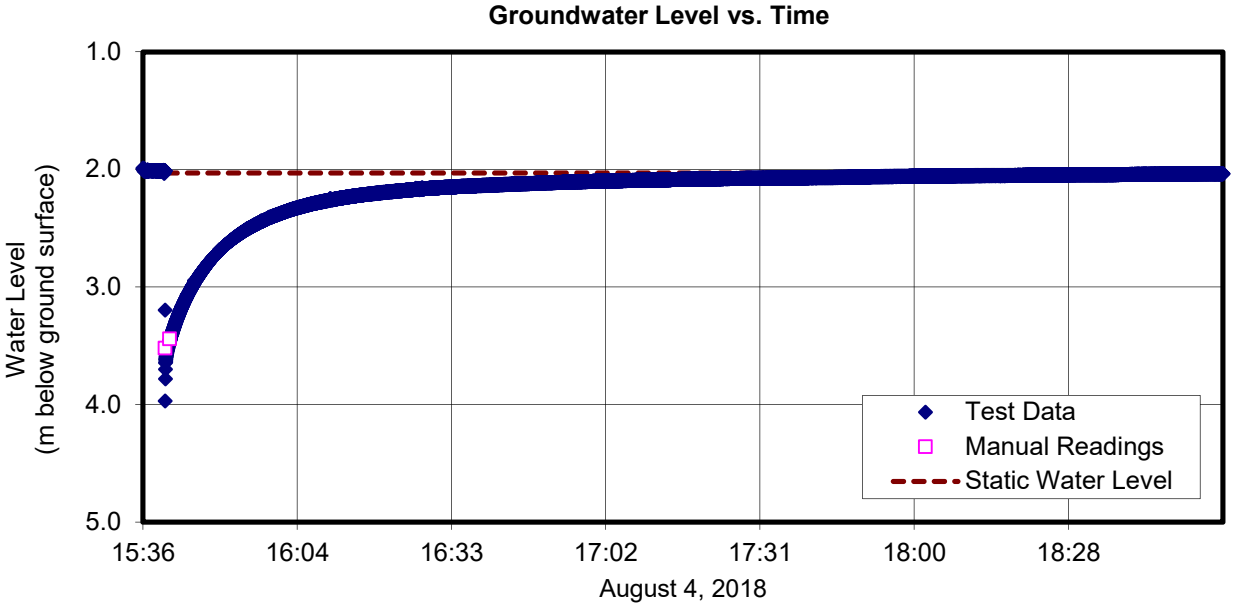
DESIGN: RA

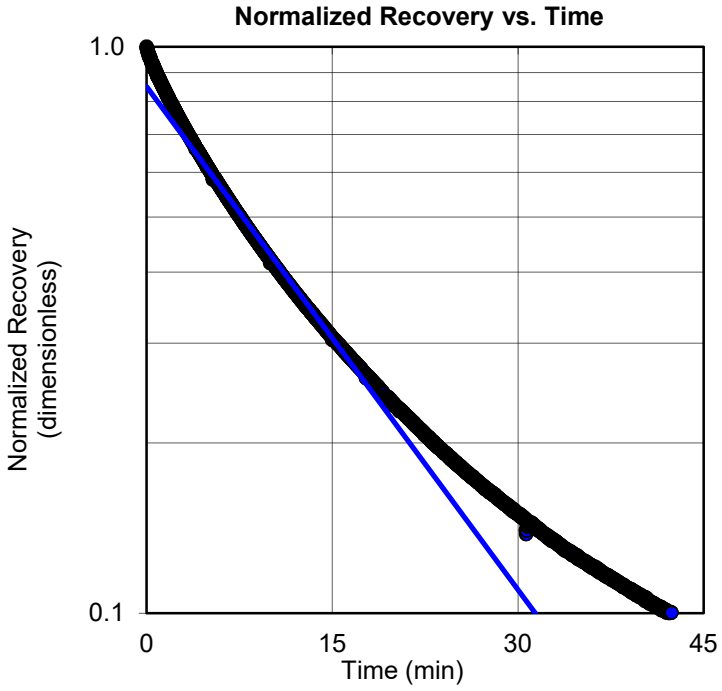
CHECK: MB

In-Situ Hydraulic Conductivity Test Report

Borehole FMS-HG18-04A

FIGURE E5





Test Interval (below ground surface)

14.9 m to 21.0 m

Static Water Level (below ground surface)

2.03 m

Test Interval (L) = 6.1 m

Well Radius (r) = 0.0254 m

Hole Radius (R) = 0.048 m

Points Used for Match Line

h_1/H_0 = 0.85 t_1 = 0 min

h_2/H_0 = 0.11 t_2 = 30 min

Hvorslev Analysis

$$\text{Hydraulic Conductivity (K)} = \frac{-(r^2) \cdot \ln(L/R)}{2 \cdot L} \cdot \frac{\ln(h_2/H_0) - \ln(h_1/H_0)}{t_2 - t_1} = \textbf{3E-7 m/s}$$

DATE: November 2018

PROJECT: 1895674

GOLDER

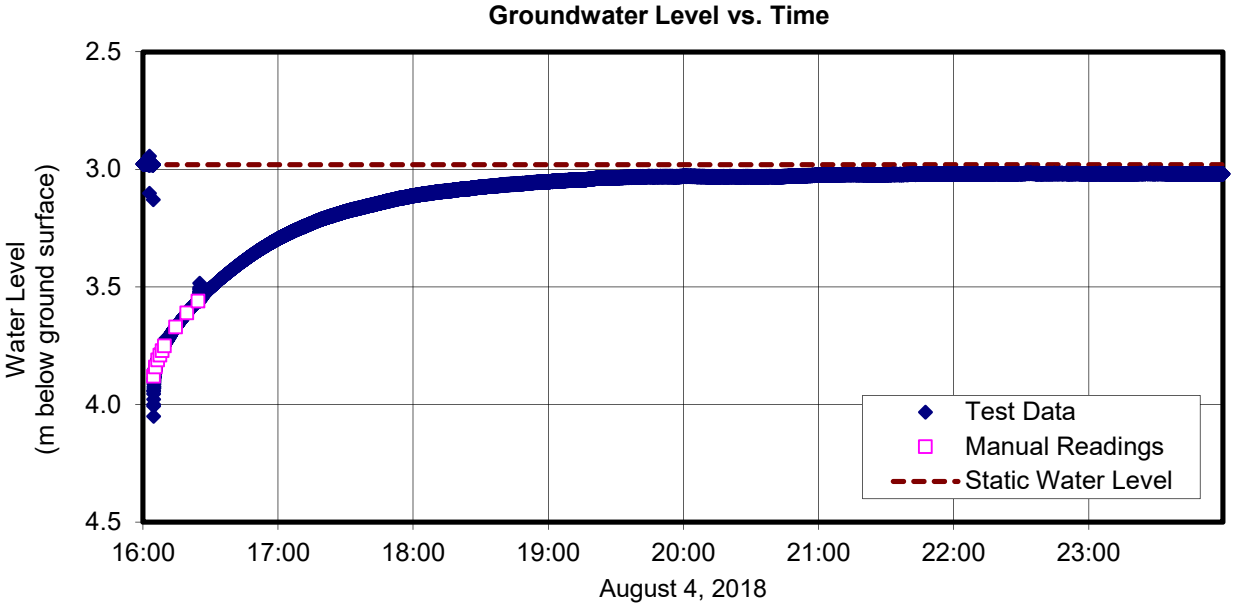
DESIGN: KL

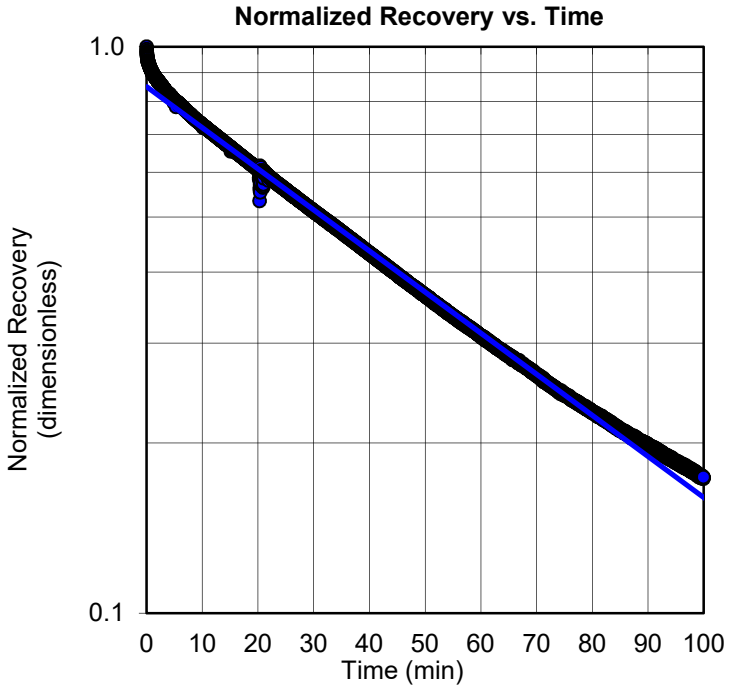
CHECK: MB

In-Situ Hydraulic Conductivity Test Report

Borehole FMS-HG18-04B

FIGURE E6





Test Interval (below ground surface)

4.1 m to 7.1 m

Static Water Level (below ground surface)

2.98 m

Test Interval (L) = 3.05 m

Well Radius (r) = 0.0254 m

Hole Radius (R) = 0.048 m

Points Used for Match Line

h_1/H_0 = 0.85 t_1 = 0 min

h_2/H_0 = 0.16 t_2 = 100 min

Hvorslev Analysis

$$\text{Hydraulic Conductivity (K)} = \frac{-(r^2) \cdot \ln(L/R)}{2 \cdot L} \cdot \frac{\ln(h_2/H_0) - \ln(h_1/H_0)}{t_2 - t_1} = \textbf{1E-7 m/s}$$

DATE: November 2018

PROJECT: 1895674

GOLDER

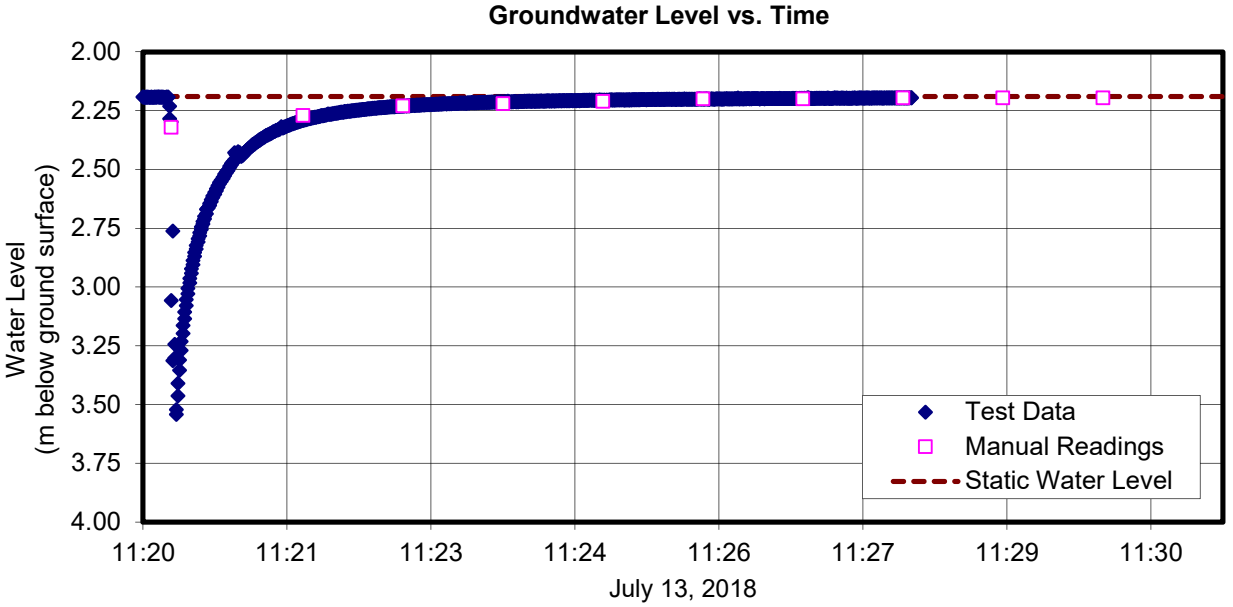
DESIGN: KL

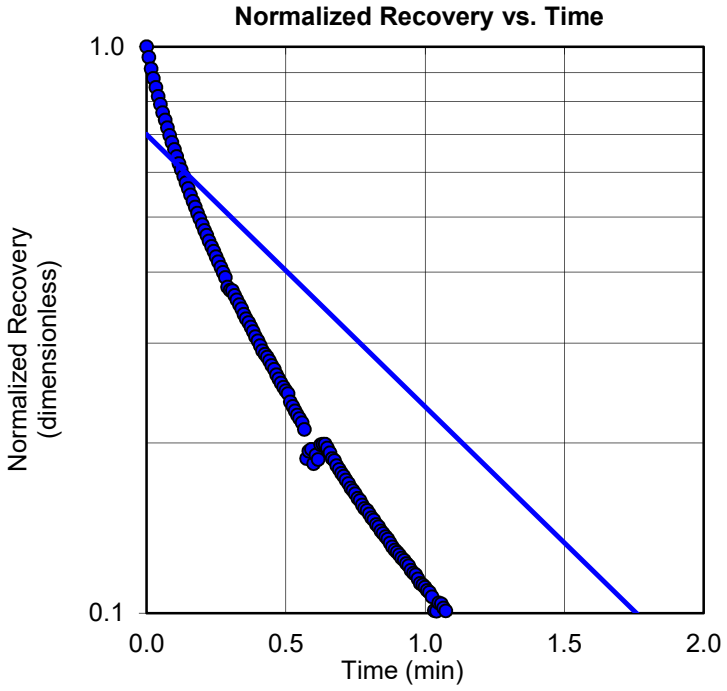
CHECK: MB

In-Situ Hydraulic Conductivity Test Report

Borehole FMS-HG18-05A

FIGURE E7





Test Interval (below ground surface)

9.2 m to 13.7 m

Static Water Level (below ground surface)

2.19 m

Test Interval (L) = 4.53 m

Well Radius (r) = 0.0254 m

Hole Radius (R) = 0.048 m

Points Used for Match Line

h_1/H_0 = 0.70 t_1 = 0 min

h_2/H_0 = 0.25 t_2 = 0.5 min

Hvorslev Analysis

$$\text{Hydraulic Conductivity (K)} = \frac{-(r^2) \cdot \ln(L/R)}{2 \cdot L} \cdot \frac{\ln(h_2/H_0) - \ln(h_1/H_0)}{t_2 - t_1} = \textbf{1E-5 m/s}$$

DATE: November 2018

PROJECT: 1895674

GOLDER

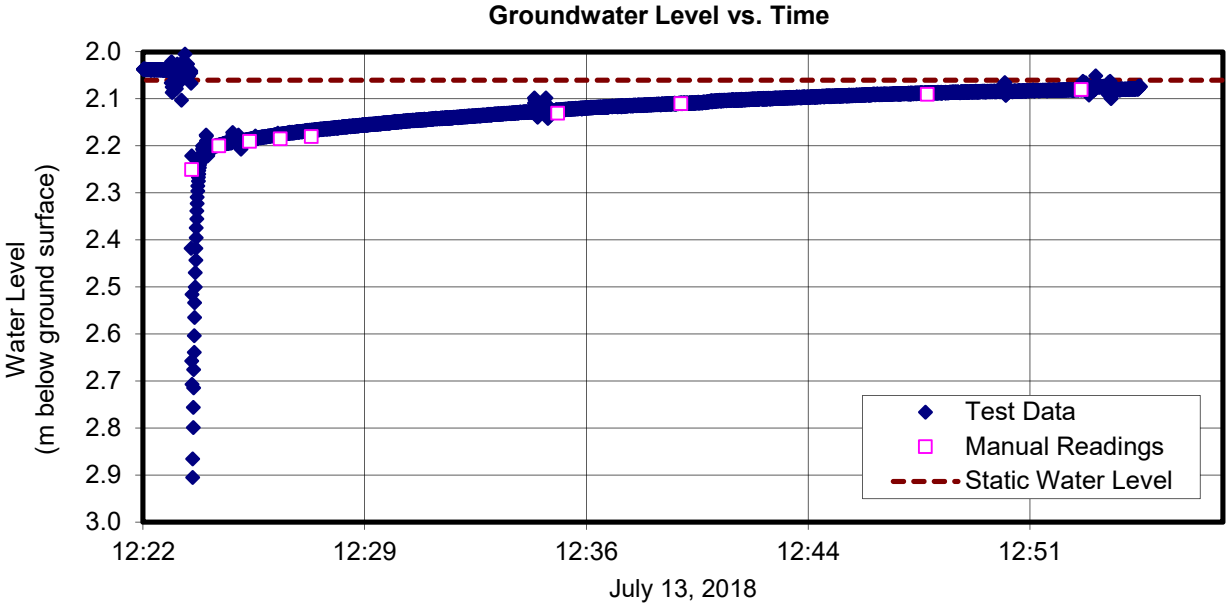
DESIGN: KL

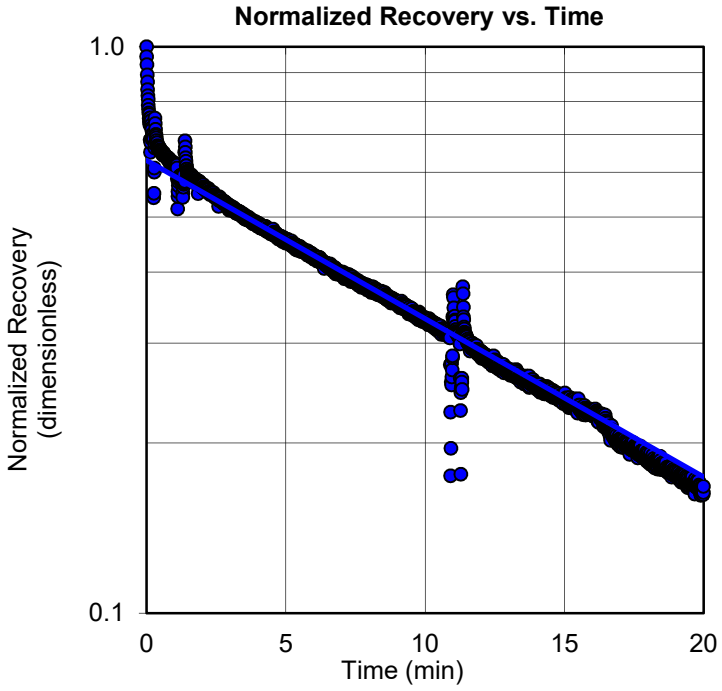
CHECK: MB

In-Situ Hydraulic Conductivity Test Report

Borehole FMS-HG18-05B

FIGURE E8





Test Interval (below ground surface)

2.8 m to 5.9 m

Static Water Level (below ground surface)

2.06 m

Test Interval (L) = 3.05 m

Well Radius (r) = 0.0254 m

Hole Radius (R) = 0.048 m

Points Used for Match Line

h_1/H_0 = 0.63 t_1 = 0 min

h_2/H_0 = 0.24 t_2 = 15 min

Hvorslev Analysis

$$\text{Hydraulic Conductivity (K)} = \frac{-(r^2) \cdot \ln(L/R)}{2 \cdot L} \cdot \frac{\ln(h_2/H_0) - \ln(h_1/H_0)}{t_2 - t_1} = \textbf{5E-7 m/s}$$

DATE: November 2018

PROJECT: 1895674

GOLDER

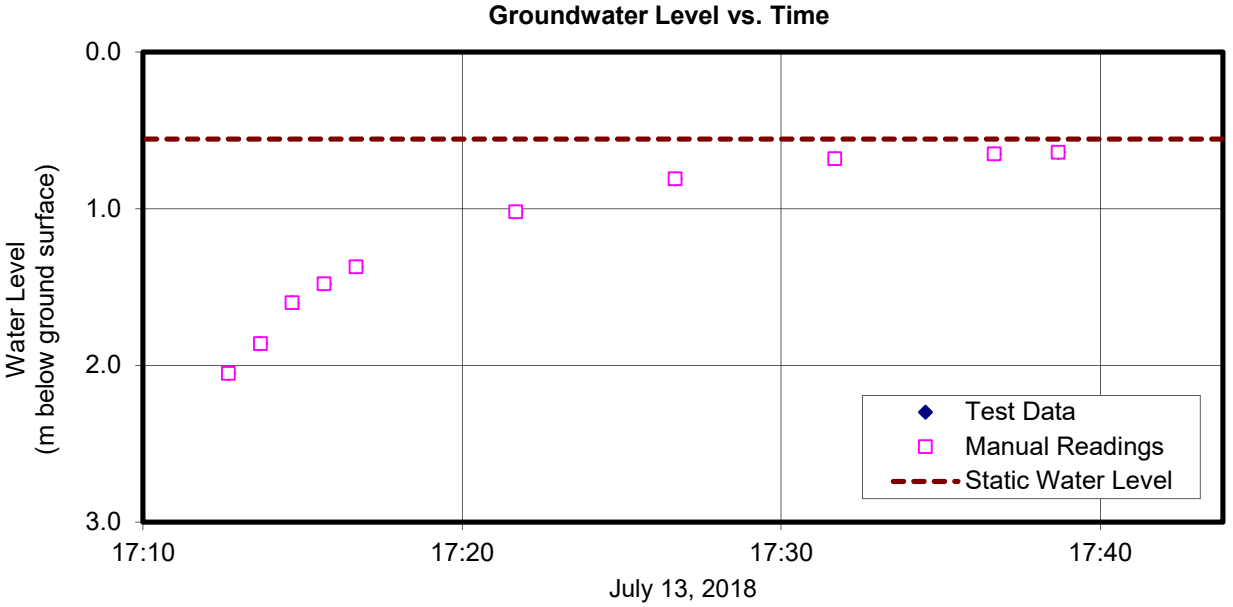
DESIGN: KL

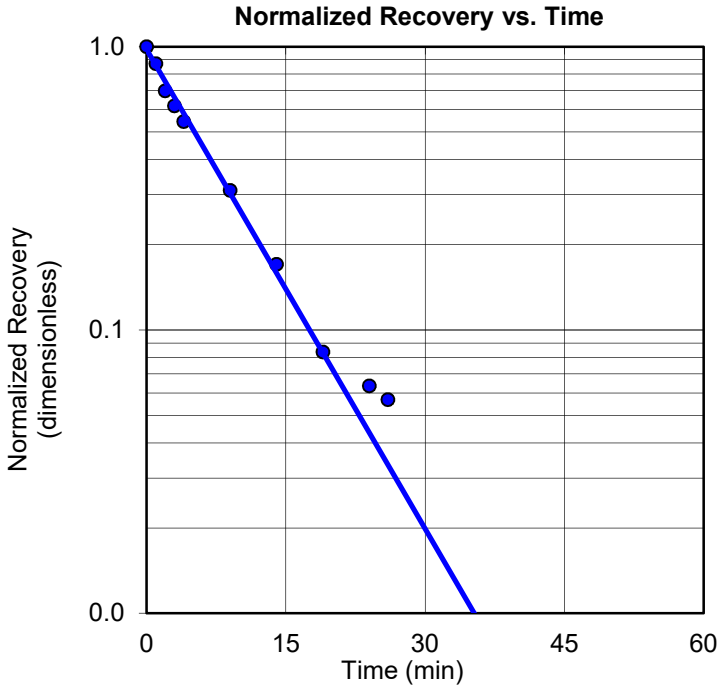
CHECK: MB

In-Situ Hydraulic Conductivity Test Report

Borehole FMS-HG18-07A

FIGURE E9





Test Interval (below ground surface)

7.7 m to 10.7 m

Static Water Level (below ground surface)

0.56 m

Test Interval (L) = 3.05 m

Well Radius (r) = 0.0254 m

Hole Radius (R) = 0.048 m

Points Used for Match Line

h_1/H_0 = 0.98 t_1 = 0 min

h_2/H_0 = 0.08 t_2 = 19 min

Hvorslev Analysis

$$\text{Hydraulic Conductivity (K)} = \frac{-(r^2) \cdot \ln(L/R)}{2 \cdot L} \cdot \frac{\ln(h_2/H_0) - \ln(h_1/H_0)}{t_2 - t_1} = \textbf{1E-6 m/s}$$

DATE: November 2018

PROJECT: 1895674

GOLDER

DESIGN: KL

CHECK: MB