

APPENDIX B

Sixtymile Trench Data

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For Flow Metals

Trench Overview

In the fall of 2020, three trenches were excavated on the Upper Glacier Creek historic placer target. The trenches were mapped and sampled by Harley Slade to better understand the structure, lithology and alteration of the rocks. The trenches were placed near small discrete placer deposits described by Mike McDougall.

LITHOLOGY

The trenches exposed two main rock types: an orange weathering quartz muscovite-sericite schist interpreted as the Klondike schist, and a dark brown weathering quartz-biotite-graphitic schist (Nasina biotite schist). Both units can be locally silicified and sericitized. The two lithologies are locally imbricated and juxtaposed by a set of shallow angle reverse faults.

VEINS

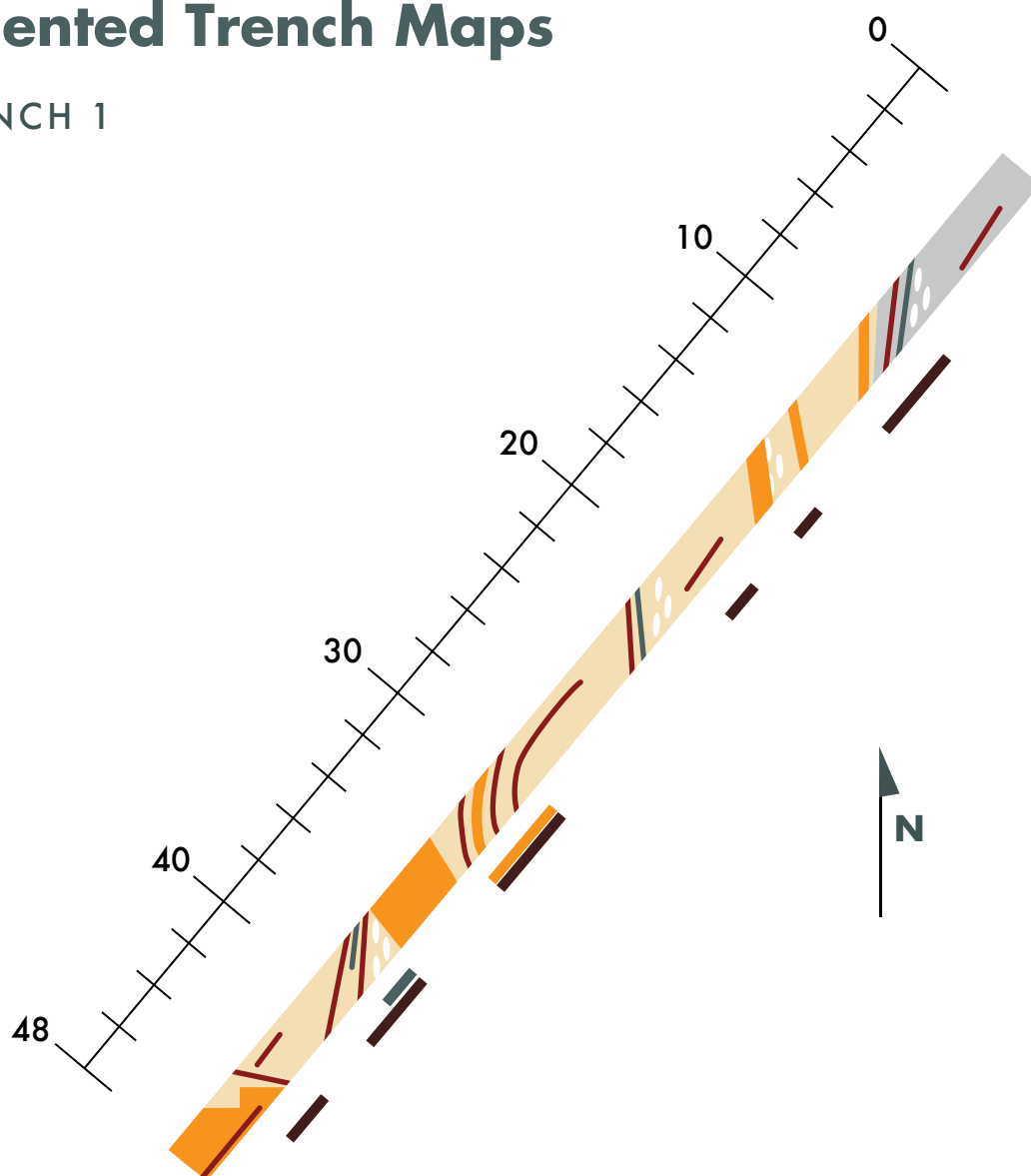
S2, D4 and D5 Veins were encountered in the trenches. D4 and S2 veins were not differentiated since they have the same strike and a system to differentiate the two styles had not been developed yet. They need to be differentiated with mineralogy where S2 veins are clear quartz and D4 are predominantly milky white quartz.

ALTERATION

Sericite, graphite and silica alteration is present in the rocks exposed at the trenches. Sericite alteration is a lightening of the rocks near some of the larger thrust faults. Graphite alteration is in the Nasina Biotite schist and in some of the fault gouge. Silicification is present in both units and is accompanied by S2/D4 quartz veining.

Oriented Trench Maps

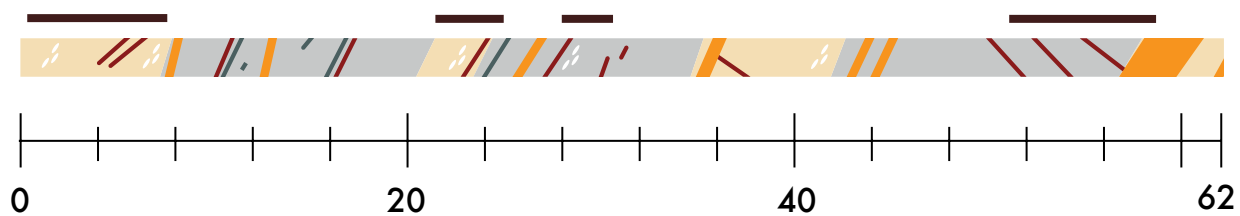
TRENCH 1



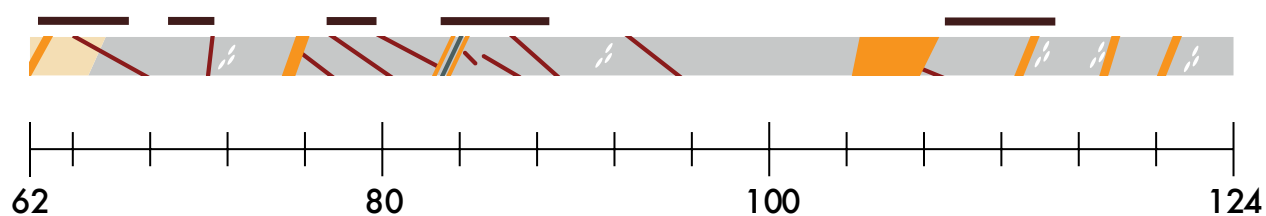
LEGEND

- | | | | |
|--|--|--|---|
| | Silicification | | Orange clay fault gouge |
| | Sericitization | | Orange weathering Klondike Schist |
| | Graphite gouge or alteration | | Foliation parallel quartz veins (D4/S2) |
| | Brown weathering Nasina Biotite Schist | | D5 Qtz/Apy veins |

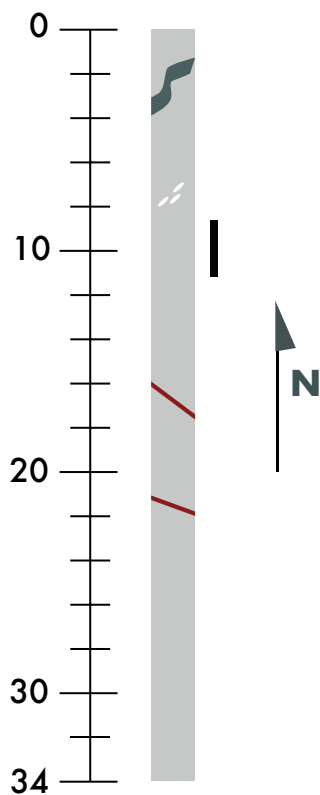
TRENCH 2A 0-62m



TRENCH 2B 62-124m



TRENCH 3



LEGEND

-  Silicification
-  Sericitization
-  Graphite gouge or alteration
-  Brown weathering
Nasina Biotite Schist
-  Orange clay fault gouge
-  Orange weathering Klondike
Schist
-  Foliation parallel quartz veins
(D4/S2)
-  D5 Qtz/Apy veins

Trench 1

0

Lithology: Nasina Biotite schist

Foliation: 360/18

Alteration: N/A

Veining: D5, 5cm, 040/90.

Total Au: 0

2

Lithology: Nasina Biotite schist

Foliation: 360/18

Alteration: N/A

Veining: N/A

Total Au: 0.01g/ton

2**4**

Lithology: Nasina Biotite schist

Foliation: 360/18

Alteration: N/A

Veining: D4/S2 Fo parallel qtz veining

Total Au: 0

4**6**

6



Lithology: Nasina Biotite schist

Foliation: 360/18

Alteration: Silicification

Fault: Thrust, graph+ ser, 360/32

Total Au: 0

8

8



Lithology: Klondike Schist

Foliation: 360/18

Alteration: Silicification

Veining: N/A

Total Au: 0

10

10



Lithology: Klondike Schist

Foliation: 360/32

Alteration: Silicification

Veining: N/A

Total Au: 0

12

12



Lithology: Klondike Schist

Foliation: 360/32

Alteration: N/A

Veining: D5 gossan vein, 040/90

Fault: Clay filled Thrust, 360/20

14

Total Au: 0

14

Lithology: Klondike Schist

Foliation: 020/35

Alteration: Silicification

Veining: 30 cm D4/S2 veins // foliation

Total Au: 0

16**16**

Lithology: Klondike Schist

Foliation: 360/20

Alteration: N/A

Veining: D5 vein 040/85

Total Au: 0.01g/ton

18**18**

Lithology: Klondike Schist

Foliation: 360/20

Alteration: Silicification

Veining: N/A

Total Au: 0

20**20**

Lithology: Klondike Schist

Foliation: 340/28

Alteration: N/A

Veining: N/A

Total Au: 0

22

22**No image**

Lithology: Klondike Schist

Foliation: 340/28

Alteration: N/A

Veining: D4/S2 veins // foliation

Total Au: 0

24**24**

Lithology: Klondike Schist

Foliation: 340/28

Alteration: N/A

Fault: Thrust fault, graphite 340/28

Total Au: 0

26**26**

Lithology: Klondike Schist

Foliation: 030/80

Alteration: N/A

Fault: Small dextral strike slip fault. 290/90

Total Au: 0

28**28**

Lithology: Klondike Schist

Foliation: 050/85

Alteration: N/A

Veining: N/A

Total Au: 0

30

30



Lithology: Klondike Schist

Foliation: 050/85

Alteration: Silicification

Veining:

Total Au: 0

32

32



Lithology: Klondike Schist

Foliation: 320/50

Alteration: Silicification

Veining: N/A

Total Au: 0

34

34



Lithology: Klondike Schist

Foliation: 320/50

Alteration: Silicification

Veining: N/A

Total Au: 0

36

36



Lithology: Thrust Fault Gouge

Foliation: 310/50

Alteration: N/A

Fault: Ser+Clay 310/50

Total Au: 0

38

38

Lithology: Thrust Fault Gouge

Foliation: 310/50

Alteration: N/A

Veining: N/A

Total Au: 0

40**40**

Lithology: Klondike Schist

Foliation: 320/50

Alteration: Silicification

Veining: N/A

Total Au: 0

42**42**

Lithology: Klondike Schist

Foliation: 100/65

Alteration: Silicification

Veining: D4/S2 vein // foliation

44

Total Au: 0

44

Lithology: Klondike Schist

Foliation: 100/65

Alteration: N/A

Veining: N/A

46

Total Au: 0

46



Lithology: Klondike Schist

Foliation: 210/85

Alteration: Silicification

Veining:

Total Au: 0

48



Lithology: Thrust Fault Gouge

Foliation: 140/65

Alteration: N/A

Veining:

Total Au: 0

48

50



Lithology: Thrust Fault Gouge

Foliation: 040/85

Alteration: N/A

Fault: Dextral SS fault~ 40cm displacement

Total Au: 0

50

52

End of Trench 1

Trench 2

0



Lithology: Klondike Schist

Foliation: 010/28

Alteration: Silicification

Veining: foliation parallel qtz veins

Total Au: 0

2



Lithology: Klondike Schist

Foliation: 010/28

Alteration: Silicification

Veining: D5 Qtz, APY veins 3cm wide 240/90

Total Au: 0.01

2

4



Lithology: Klondike Schist

Foliation: 010/28

Alteration: Silicification

Veining: D5 Qtz, APY veins 3cm wide 240/90

Total Au: 0.01

4

6



Lithology: Nasina Biotite schist

Foliation: 030/30

Alteration: Silicification

Veining: Foliation parallel qtz boudins

Fault: rusty thrust fault 020/25

Total Au: 0.01

6

8

8

Lithology: Nasina Biotite schist

Foliation: 030/30

Alteration: N/A

Veining: N/A

Total Au: 0.01

10**10**

Lithology: Nasina Biotite schist

Foliation: 020/25

Alteration: N/A

Fault: Rusty graphitic thrust fault: 020/25

Total Au: 0

12**12**

Lithology: Nasina Biotite schist

Foliation: 020/25

Alteration: N/A

Veining: N/A

Total Au: 0.01

14**14**

Lithology: Nasina Biotite schist

Foliation: 020/30

Alteration: N/A

Veining: N/A

Total Au: 0

16

16



Lithology: Nasina Biotite schist

Foliation: 020/30

Alteration: N/A

Veining: N/A

Total Au: 0.01

18

18



Lithology: Nasina Biotite schist

Foliation: 020/18

Alteration: N/A

Veining: N/A

Total Au: 0

20

20



Lithology: Klondike Schist

Foliation: 040/08

Alteration: Silicification

Fault: Graphitic reverse fault: 020/25

22

Total Au: 0.01

22



Lithology: Nasina Biotite schist

Foliation: 040/38

Alteration: Silicification

Veining: Foliation parallel qtz veins

24

Total Au: 0

24

Lithology: Nasina Biotite schist

Foliation: 025/23

Alteration: N/A

Veining: N/A

Total Au: 0

26**26**

Lithology: Nasina Biotite schist

Foliation: 025/23

Alteration: N/A

Veining: Foliation parallel quartz veins

Total Au: 0

28**28**

Lithology: Nasina Biotite schist

Foliation: 025/36

Alteration: Silicification

Veining: N/A

30**30**

Lithology: Nasina Biotite schist

Foliation: 025/36

Alteration: N/A

Veining: N/A

32

Total Au: 0

32

Lithology: Nasina Biotite schist

Foliation: 025/36

Alteration: N/A

Fault: orange reverse fault: 020/40

Total Au: 0

34**34**

Lithology: Thrust fault gouge

Foliation: 020/40

Alteration: N/A

Veining: N/A

36

Total Au: 0

36

Lithology: Klondike Schist

Foliation: 025/16

Alteration: N/A

Veining: N/A

38

Total Au: 0

38

Lithology: Klondike Schist

Foliation: 025/90

Alteration: N/A

Veining: N/A

40

Total Au: 0

40

Lithology: Klondike Schist

Foliation: 020/50

Alteration: N/A

Veining: N/A

Total Au: 0

42**42**

Lithology: Nasina Biotite schist

Foliation: 020/50

Alteration: N/A

Veining: N/A

Total Au:0

44**44**

Lithology: Nasina Biotite schist

Foliation: 022/18

Alteration: N/A

Veining: N/A

Total Au:0

46**46**

Lithology: Nasina Biotite schist

Foliation: 022/18

Alteration: N/A

Veining: N/A

Total Au: 0

48

48

Lithology: Nasina Biotite schist

Foliation: 022/18

Alteration: N/A

Veining: D5 qtz APY vein, 310/90, 5cm wide

Total Au: 0

50**50**

Lithology: Nasina Biotite schist

Foliation: 020/26

Alteration: Silicification

Veining: D5 qtz APY vein, 310/90, 5cm wide

Total Au: 0

52**52**

Lithology: Nasina Biotite schist

Foliation: 020/26

Alteration: Silicification

Veining: D5 qtz APY vein, 310/90, 5cm wide

Total Au: 0

54**54**

Lithology: Nasina Biotite schist

Foliation: 040/38

Alteration: Silicification

Veining: D5 qtz APY vein, 310/90, 5cm wide

Total Au: 0

56

56



Lithology: Thrust fault gouge

Foliation: 037/55

Alteration: N/A

Fault: 3m wide thrust fault: 037/55

Total Au: 0.02

58



Lithology: Thrust fault gouge

Foliation: 037/55

Alteration: N/A

Fault: 3m wide orange thrust fault: 037/55

Total Au: 0

58

60



Lithology: Klondike Schist

Foliation: 037/55

Alteration: Chlorite + Silicification

Veining: N/A

Total Au: 0

60

62



Lithology: Klondike Schist

Foliation: 225/35

Alteration: N/A

Fault: Orange reverse fault 240/66

Total Au: 0

62

64

64

Lithology: Klondike Schist

Foliation: 240/66

Alteration: Chlorite + Silicification

Veining: D5 qtz APY vein, 310/90, 4cm wide

Total Au: 0

66

Lithology: Nasina Biotite schist

Foliation: 210/54

Alteration: Chlorite + Silicification

Veining: N/A

Total Au: 0

66**68**

Lithology: Nasina Biotite schist

Foliation: 220/60

Alteration: N/A

Structures: 30 cm scale parasitic folds, west verging

Total Au: 0.01

68**70**

Lithology: Nasina Biotite schist

Foliation: 018/35

Alteration: Silicification

Veining: N/A

Total Au: 0

70**72**

72

Lithology: Nasina Biotite schist

Foliation: 20/32

Alteration: N/A

Veining: Foliation parallel boudinaged qtz

Total Au: 0

74**74**

Lithology: Thrust fault gouge

Foliation: 010/40

Alteration: N/A

Veining: D5 qtz APY vein, 112/75, 10cm wide

Total Au: 0

76**76**

Lithology: Klondike Schist

Foliation: 010/40

Alteration: N/A

Veining: D5 qtz APY vein, 112/75, 7cm wide

Total Au: 0.29

78**78**

Lithology: Nasina Biotite schist

Foliation: 025/32

Alteration: Silicification

Veining: D5 qtz APY vein, 112/75 4cm wide

Total Au: 0.038

80

80

Lithology: Nasina Biotite schist

Foliation: 025/32

Alteration: N/A

Veining: D5 qtz APY vein, 112/75 4cm wide

Total Au: 0.014

82**82**

Lithology: Nasina Biotite schist

Foliation: 025/32

Alteration: N/A

Fault: orange/ gray reverse fault 025/32 offset by D5 vien

Total Au: 0.048

84**84**

Lithology: Nasina Biotite schist

Foliation: 010/14

Alteration: Silicification

Veining: D5 qtz APY vein, 120/75 4cm wide

Total Au: 0.12

86**86**

Lithology: Nasina Biotite schist

Foliation: 010/14

Alteration: Silicification

Veining: N/A

88

Total Au: 0.019

88

Lithology: Nasina Biotite schist

Foliation: 010/14

Alteration: Silicification

Veining: D5 qtz APY vein, 120/75 4cm wide

Total Au: 0

90**90**

Lithology: Nasina Biotite schist

Foliation: 350/22

Alteration: N/A

Veining: Foliation parallel qtz veins

Total Au: 0

92**92**

Lithology: Nasina Biotite schist

Foliation: 350/22

Alteration: N/A

Veining: D5 qtz APY vein, 120/75 4cm wide

Total Au: 0

94**94**

Lithology: Nasina Biotite schist

Foliation: 012/42

Alteration: N/A

Veining: N/A

Total Au: 0

96

96



Lithology: Nasina Biotite schist

Foliation: 012/42

Alteration: N/A

Veining: N/A

Total Au: 0

98



Lithology: Nasina Biotite schist

Foliation: 032/18

Alteration: N/A

Veining: N/A

Total Au: 0

98

100



Lithology: Nasina Biotite schist

Foliation: 032/18

Alteration: N/A

Veining: N/A

Total Au: 0

100

102



Lithology: Nasina Biotite schist

Foliation: 022/30

Alteration: N/A

Fault: Orange reverse fault 020/30 4m wide

Total Au:

102

104

104

Lithology: Thrust fault gouge

Foliation: 020/30

Alteration: N/A

Fault: Orange reverse fault 020/30 4m wide

Total Au: 0.057

106**106**

Lithology: Thrust fault gouge

Foliation: 020/30

Alteration: N/A

Veining: D5 veins 112/75, APY +qtz, 10cm wide

Total Au: 0.043

108**108**

Lithology: Nasina Biotite schist

Foliation: 010/32

Alteration: Silicification

Veining: N/A

Total Au: 0

110**110**

Lithology: Nasina Biotite schist

Foliation: 012/18

Alteration: Silicification

Fault: Orange reverse fault 032/68

Total Au: 0

112

112



Lithology: Nasina Biotite schist

Foliation: 032/ 68

Alteration: Silicification

Fault: Orange reverse fault 032/29

Veining: Foliation parallel qtz veins

Total Au: 0

114

114



Lithology: Nasina Biotite schist

Foliation: 030/29

Alteration: N/A

Veining: Foliation parallel quartz vein

Total Au: 0

116

116



Lithology: Nasina Biotite schist

Foliation: 030/29

Alteration: N/A

Fault: Orange reverse fault with quartz 030/29

Total Au: 0

118

118



Lithology: Nasina Biotite schist

Foliation: 030/29

Alteration: N/A

Fault: Orange reverse fault 026/29

Total Au: 0

120

120



Lithology: Nasina Biotite schist

Foliation: 026/29

Alteration: N/A

Veining: Foliation parallel

Total Au:0

122

122



Lithology: Nasina Biotite schist

Foliation: 026/29

Alteration: N/A

Veining: N/A

124

Total Au: 0.044

End of Trench 2

Trench 3

0

Lithology: Nasina Biotite schist

Foliation: 034/50

Alteration: N/A

Fold: 1m chevron, axial plane: 045/35

Total Au: 0

2

Lithology: Nasina Biotite schist

Foliation: 234/54

Alteration: Graphite

Veining: N/A

Total Au: 0

2**4**

Lithology: Nasina Biotite schist

Foliation: 234/54

Alteration: N/A

Veining: N/A

Total Au: 0.01g/ton

4**6**

Lithology: Nasina Biotite schist

Foliation: 012/44

Alteration: N/A

Veining: D4/S2 foliation parallel qtz

Total Au: 0

6**8**

8

Lithology: Nasina Biotite schist

Foliation: 032/22

Alteration: Silicification

Veining: N/A

Total Au: 0.028

10**10**

Lithology: Nasina Biotite schist

Foliation: 032/22

Alteration: Silicification

Veining: N/A

Total Au: 0

12**12**

Lithology: Nasina Biotite schist

Foliation: 010/09

Alteration: N/A

Veining: N/A

Total Au: 0

14**14**

Lithology: Nasina Biotite schist

Foliation: 010/09

Alteration: N/A

Veining: N/A

Total Au: 0.01g/ton

16

16

Lithology: Nasina Biotite schist

Foliation: 010/09

Alteration: N/A

Veining: N/A

Total Au: 0

18

Lithology: Nasina Biotite schist

Foliation: 028/26

Alteration: N/A

Veining: D5 vein with qtz, 298/90

Total Au: 0.01g/ton

20

Lithology: Nasina Biotite schist

Foliation: 015/28

Alteration: N/A

Veining: D4 parasitic folds, 30cm, 228/40

Total Au: 0.038

22

Lithology: Nasina Biotite schist

Foliation: 015/28

Alteration: N/A

Veining: 4 cm wide D5 Qtz apy vein.

24

Total Au: 0.41

24

Lithology: Nasina Biotite schist

Foliation: 015/28

Alteration: N/A

Veining: N/A

Total Au: 0.028

26

Lithology: Nasina Biotite schist

Foliation: 350/32

Alteration: N/A

Veining: N/A

Total Au: 0.014

26**28**

Lithology: Nasina Biotite schist

Foliation: 350/32

Alteration: N/A

Veining: N/A

Total Au: 0.02

28**30**

Lithology: Nasina Biotite schist

Foliation: 350/32

Alteration: N/A

Veining: N/A

Total Au: 0.052

30**32**

End of Trench 3