

UNIT 15

Cond'd  
PIECE 1-6

330-U1376A-11R-1-A\_SHLF2891981\_20110131130717



DRILLING  
← DEBRIS

56-61  
vein network,  
u=2, 0.4mm  
branched  
61-83

vein, u=1, 0.2mm  
straight, branching  
reconciled, 81 →  
251

Fresh to  
slightly altered

23-25 fracture, u=1,  
straight, 62 → 015

VEIN w/ ALTERED  
OLIVINE AUREOLE

30.5-37 composite vein,  
w=2, 1.5mm, straight  
60 → 186  
58 → 226

46 fracture, u=1, straight  
88 → 182

46-52 vein, u=1, 0.7mm  
straight  
90-220



VESICLES  
0.5%

9mm max  
1mm MOD

HIGH SPHERICITY  
ROUNDED.

Calcite

87 vein, u=1, 0.2mm, irreg.

89-91 vein, u=1, 0.2mm,  
straight, 80 → 351

MASSIVE LAVA  
THICK LAVA FLOW.

ISCI 3

OLIVINES  
10%

FRESH COMPLETELY ALT.  
NEAR TO FRACTURES,  
9mm MAX  
4mm MOD.

to  
green  
clay

PYROXENE  
4%

FRESH  
6mm MAX  
3mm MOD.

HIGHLY OLIVINE-  
AUGITE-PHYRIC  
BASALT

MEDIUM GRAY  
FINE GRAINED  
0.2mm  
HIGHLY PHYRIC  
MASSIVE

black  
clay

UNIT 15  
Cont'd  
Piece 1

330-U1376A-11R-2-A\_SHLF2892011\_20110131131053



9-11 vein network,  $n=3$ ,  
straight - curved, max 0.2  
wide 0.1 mm, horizontal-  
sub-vertical

11-29 vein,  $n=1$ , 0.4 mm,  
straight, 28 → 256

32.5 vein,  $n=1$ , 0.3 mm,  
straight, 21 → 355

35-37 vein,  $n=1$ , 0.5 mm,  
straight, 30 → 342



44-61 vein,  $n=1$ , 0.1 mm  
straight, 26 → 242

55-57 vein,  $n=1$ , 0.3 mm, straight  
84 → 166

58-62 vein,  $n=1$ , 0.1 mm,  
straight, → 275

72-79 vein,  $n=1$ , 0.4 mm  
straight, stepped, 90 → 133

UNIT 15

Control

Piece 1a - k



1-21 vein,  $u=1$ , 0.2mm  
straight, 52 → 262

20-22 vein,  $u=1$ , 1mm,  
straight, 81 → 344

23-32 vein,  $u=2$ ,  
max. 0.2mm, mode. 0.4  
straight, 80 → 055

28-30 fracture,  $u=1$ ,  
straight, 90 → 158

55-59 vein,  $u=1$ , 2mm  
irregular, 79 → 334

57-60 vein,  $u=1$ , 1mm,  
irregular, 80 → 149



84.5-90 vein,  $u=1$ , 1.5mm  
straight, 88 → 049

UNIT 15  
Cont'd  
Piece 1a-4



6.5 fracture, u=1, straight  
88 → 186

2-14 vein, u=1, 3mm  
irregular, 80 → 119

7-20 vein, u=1, 2mm,  
irregular-straight, 79 →  
251

24-28 vein, u=1, 2mm,  
irregular, 30 → 150



60-74 fracture, u=1  
straight, 85 → 141

79-86 vein, u=1, 0.6mm,  
irregular, 90 → 242

83-87 vein, u=1, 0.2mm  
83 → 214 straight

88-91 vein, u=1, 0.1mm,  
81 → 158 straight

104-113 vein, u=1, 1mm,  
straight, 69 → 057

121-127 vein, u=1, 0.1mm  
straight, 70 → 30P

UNIT 15  
CONTD  
PIECE 1-6



17-22 vein,  $w=1$ , 4mm,  
straight, 81 → 242

↑ connected?  
↓

24-30 vein,  $w=1$ , 4mm  
straight, 81 → 134

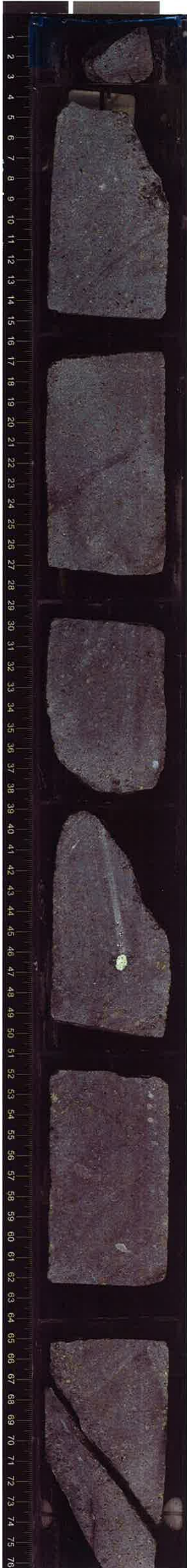
68-72 vein,  $w=1$ , 0.8mm  
straight, 56 → 113



88-103 vein,  $w=1$ , 1mm,  
straight, 80 → 258

106-109.5 vein,  $w=1$ , 0.4mm  
straight, 70 → 153

UNIT 15  
Cont'd  
Piece 1-13



79-87 vein, w/d, 2mm,  
irregular, 86 -> 066

97-99 vein, w/d, 0.2mm  
irregular, 71 -> 169

39-45 vein, w/d, 2mm,  
irregular, 90 -> 240

48-49 vein, w/d, 0.3mm  
straight, 60 -> 192

53.5-57 vein network  
w/d, 0.1mm, branched  
n=2, 55 -> 036

135-142 vein, w/d, 0.1mm  
straight, 88 -> 089

67-75 vein, w/d, 0.1mm  
straight, 85 -> 055

71-76 vein, w/d, 0.1  
straight, 82 -> 242

UNIT 15

CONTD.

la-4c 0-12R-5  
43cm

MASSIVE BASALT  
LAVA FLOW

0% PLAGIOCLASE

10% OLIVINE

EUMERAL FRESH  
SLIGHTLY ALTERED IN PLACES  
8mm/4mm

COMPLETELY ALTERED NEAR  
VEINS/FRACTURES, ALTERATION  
↓ WITHIN 10mm OF  
VEIN/FRACTURE

4% PYROXENE  
SUBHEDRAL, FRESH  
6mm/3mm

▷ HIGHLY OLIVINE -  
AUGITE PHYLIC BASALT

MEDIUM GRAY  
FINE-GRAINED, 0.2mm



VESICLES:

0.5%

HIGH, ROUNDED

1.5mm, 0.5mm

2-15 vein, u=1, 0.1mm  
straight, 83 → 288

10 fracture, u=1, straight

12 fracture, u=1, (90 → 179)  
straight, 90 → 168

36 vein, u=1, 0.1mm, straight  
non-oriented

31-44 vein, u=1, 0.2mm  
straight, 51 → 260

Sections 1-5.

Fresh to  
slightly altered.  
Olivine fresh  
except where  
adj to veins -  
partially altered  
to green by  
± calcite ± Fe oxide

62-65  
fracture, u=1, straight  
A → 154.



76-79 fracture, u=1, straight  
83 → 154

86 vein, u=1, 0.1mm,  
straight, 31 → 182

99-103 vein, u=1, 0.1mm,  
straight, 29 → 254

UNIT 15  
CONTD.  
PIECE 1a-2



27.5-31 vein, u=1, 1mm,  
straight, 54 → 212

36-38 vein network, u=2  
0.8mm, branched, 80 →  
350

u=1  
vein, u=1, 0.1mm,  
straight  
74 → 358

58-66 vein, u=1, 0.1mm  
straight, 86 → 312

57-60 fracture, u=1, straight  
45-035

64-785 vein, u=1, 0.1  
straight, 50 → 270



78-89 vein, u=1, 1mm,  
straight, 69 → 347

82-92 vein, u=1, straight,  
80 → 238

102-106 vein, u=1, 0.1mm  
straight, 60 → 140

MB10

127-132 vein, u=1, 0.1mm  
straight, 88 → 329



UNIT (15) CONTD  
PIECE 1-8



1-6 vein, n=1, 0.1mm  
straight, 88-134

19-21 vein, n=1, 0.1mm  
irregular

55.5 vein, n=1, 0.2mm  
straight, non-orient.



67-70 vein, n=1, 1mm,  
straight, 80-201

117-128 vein, n=1, 0.1mm  
irregular, 81-204

UNIT (15)  
CONTD.  
PIECE 1-7



1-4 vein webbed,  
u=4, 0.2mm,  
straight

15-18 vein, u=1, 0.1mm  
straight, 89 → 210

34-41 vein, u=1, 0.1mm  
straight, 80 → 240

51-55 vein, u=1, 0.2mm  
straight, 69 → 337



86-87 vein, u=1, 1mm,  
straight, 90 → 041

93-97 vein, u=1, 0.1mm  
straight, 89 → 222

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UNIT 15 CONTD  
PIECE 1a-1b



1-2 vein,  $w=1, 0.7mm,$   
straight -166  
2-3.5 vein,  $w=1, 1mm,$   
79 → 172

7-11 vein,  $w=1, 1mm$   
straight, 30 → 040  
"wave form"

15-17 vein,  $w=1, 0.5$   
curved, 60 → 342



22-28 vein,  $w=1, 0.1mm-$   
straight, 89 → 125

28-30 vein,  $w=1, 0.1mm$   
straight 64 → 112

37-42 vein,  $w=1, 1mm,$   
straight 90 → 122