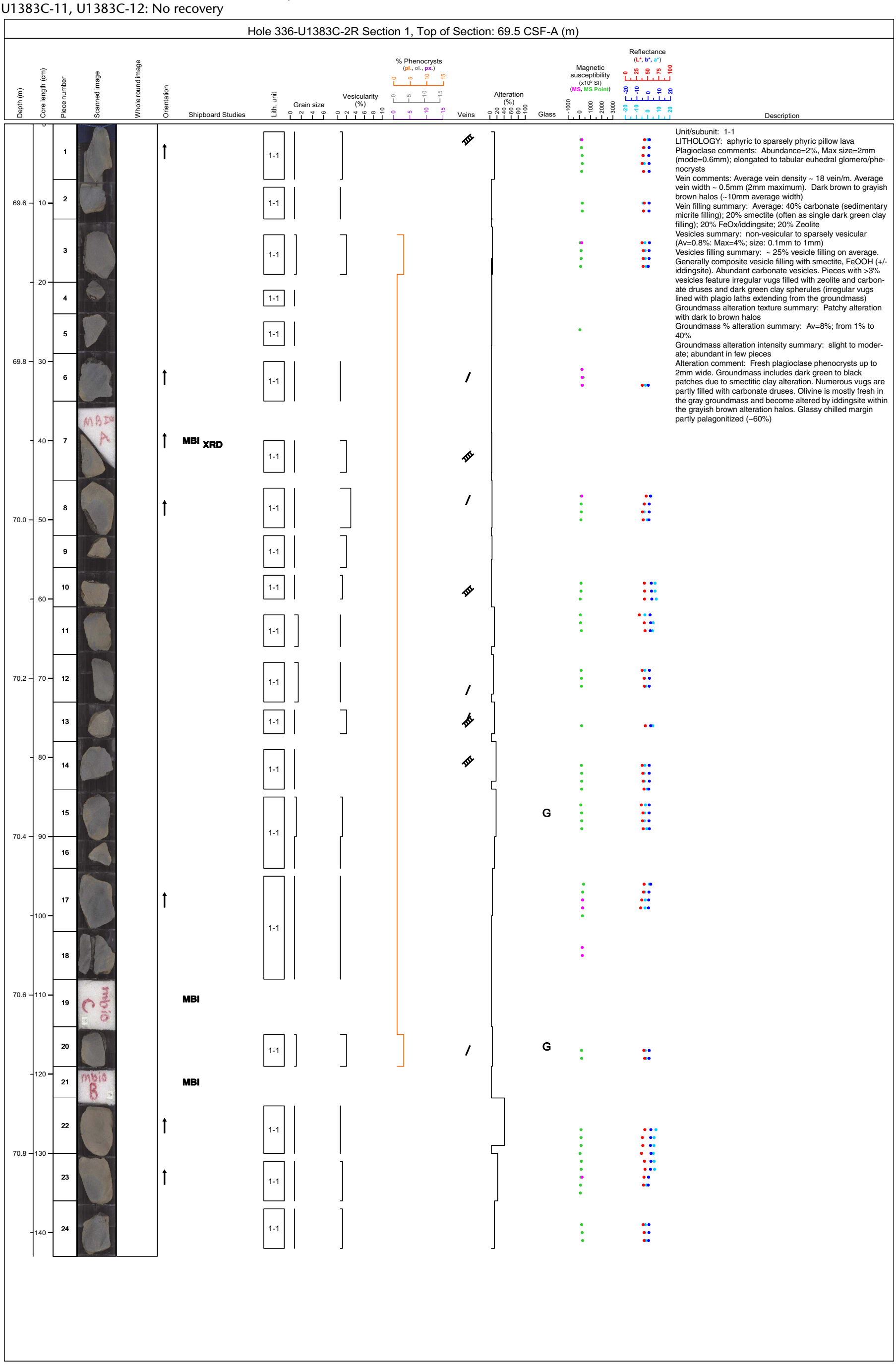
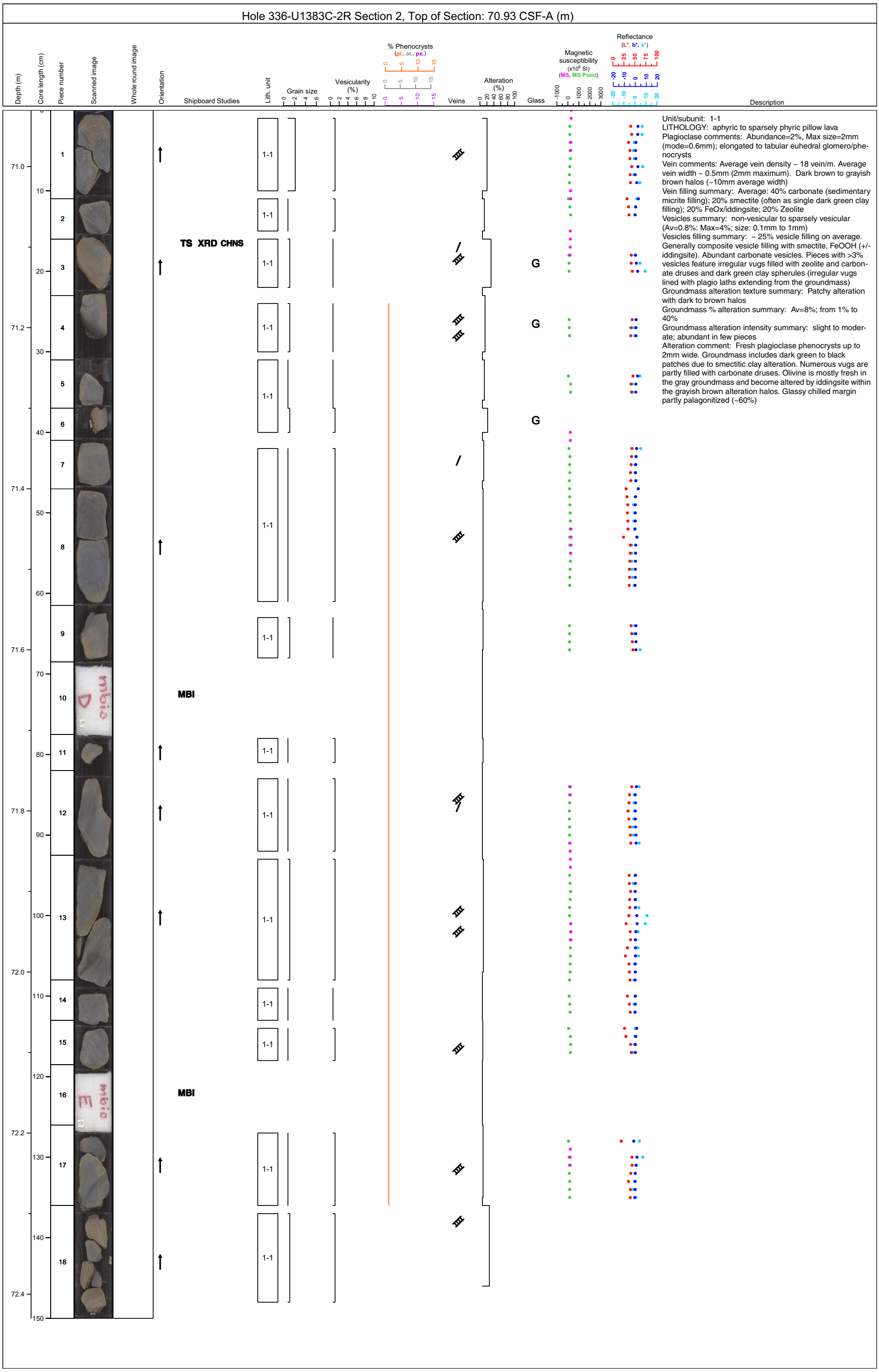
Core Photo

U1383A-11: No recovery
U1383B-11, U1383B-12, U1383B-13: No recovery
U1383C-11, U1383C-12: No recovery

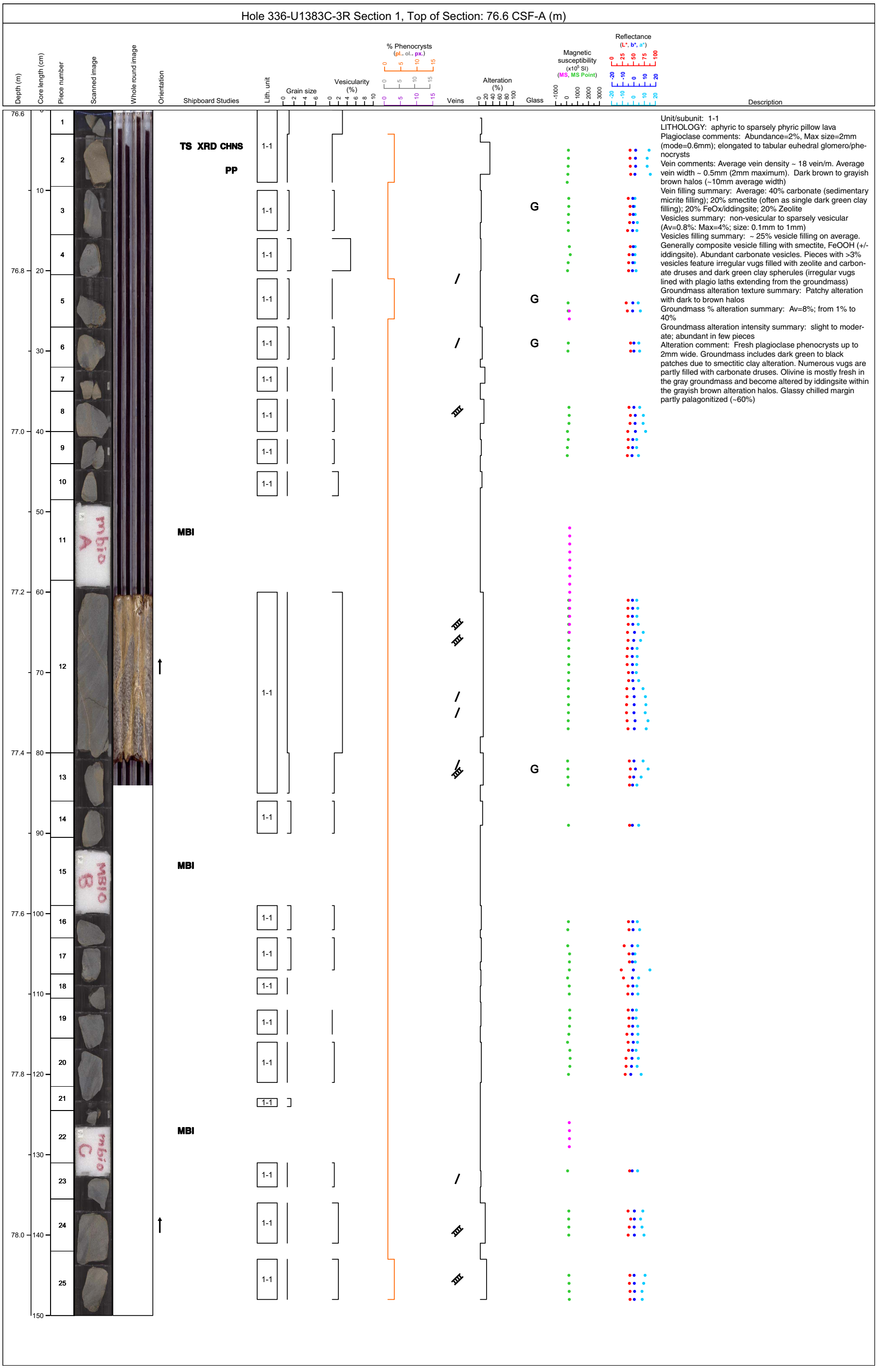


Unit/subunit: 1-1
LITHOLOGY: aphyric to sparsely phyric pillow lava
Plagioclase comments: Abundance=2%, Max size=2mm (mode=0.6mm); elongated to tabular euhedral glomero/phenocrysts
Vein comments: Average vein density ~ 18 vein/m. Average vein width ~ 0.5mm (2mm maximum). Dark brown to grayish brown halos (~10mm average width)
Vein filling summary: Average: 40% carbonate (sedimentary micrite filling); 20% smectite (often as single dark green clay filling); 20% FeOx/iddingsite; 20% Zeolite
Vesicles summary: non-vesicular to sparsely vesicular (Av=0.8%: Max=4%; size: 0.1mm to 1mm)
Vesicles filling summary: ~ 25% vesicle filling on average. Generally composite vesicle filling with smectite, FeOOH (+/- iddingsite). Abundant carbonate vesicles. Pieces with >3% vesicles feature irregular vugs filled with zeolite and carbonate druses and dark green clay spherules (irregular vugs lined with plagio laths extending from the groundmass)
Groundmass alteration texture summary: Patchy alteration with dark to brown halos
Groundmass % alteration summary: Av=8%; from 1% to 40%
Groundmass alteration intensity summary: slight to moderate; abundant in few pieces
Alteration comment: Fresh plagioclase phenocrysts up to 2mm wide. Groundmass includes dark green to black patches due to smectitic clay alteration. Numerous vugs are partly filled with carbonate druses. Olivine is mostly fresh in the gray groundmass and become altered by iddingsite within the grayish brown alteration halos. Glassy chilled margin partly palagonitized (~60%)

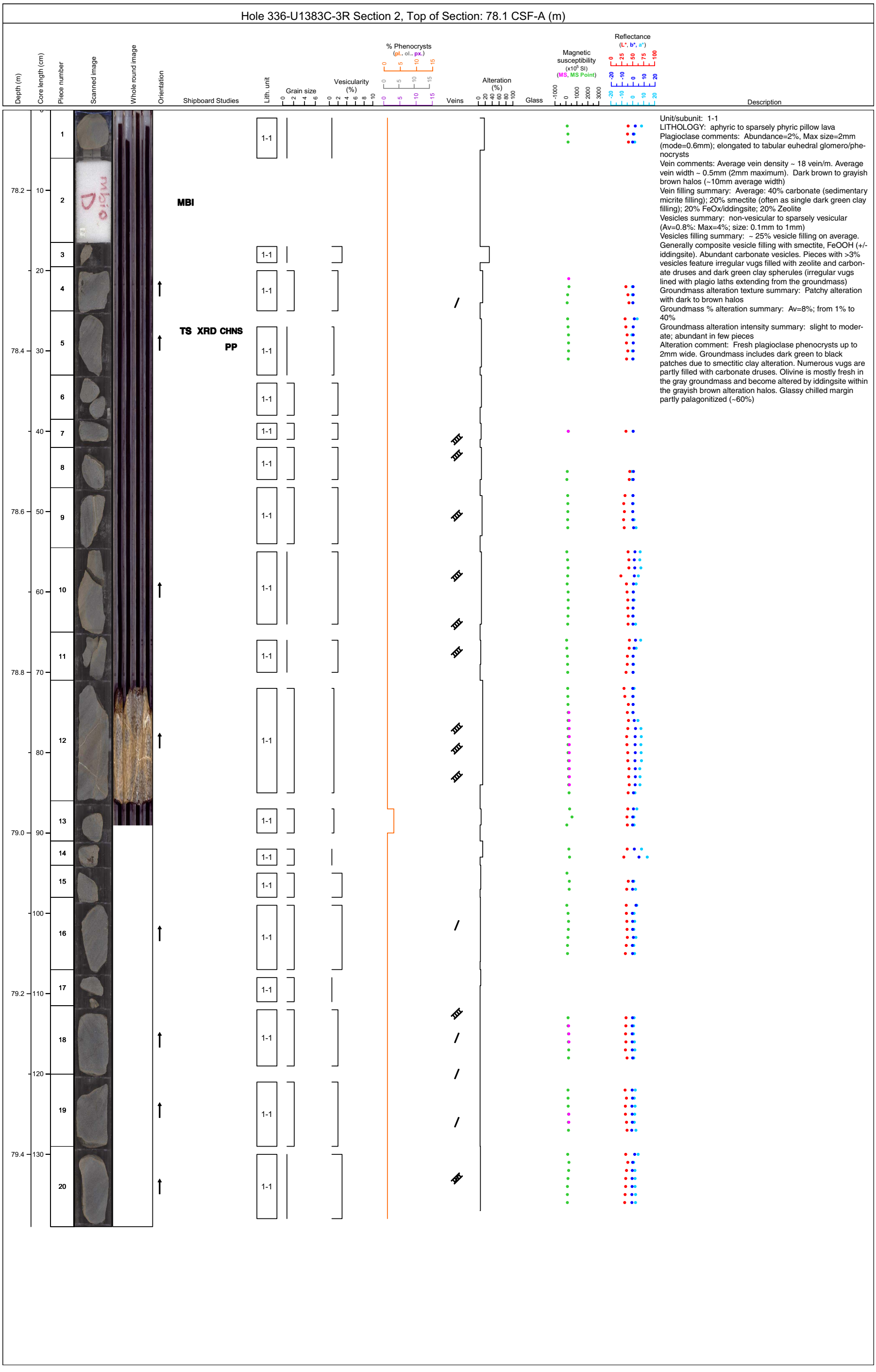
Core Photo


Hole 336-U1383C-2R Section 2, Top of Section: 70.93 CSF-A (m)
Depth (m)
Core length (cm)
Piece number
Scanned image
Whole round image
Orientation
Shipboard Studies
Lith. unit
Grain size
Vesicularity (%)
% Phenocrysts (pl., ol., px.)
Veins
Alteration (%)
Glass
Magnetic susceptibility (x10⁻⁵ SI) (MS, MS Point)
Reflectance (L*, b*, a*)
Description
TS XRD CHNS
MBI
MBI
Unit/subunit: 1-1
LITHOLOGY: aphyric to sparsely phyric pillow lava
Plagioclase comments: Abundance=2%, Max size=2mm (mode=0.6mm); elongated to tabular euhedral glomero/phenocrysts
Vein comments: Average vein density ~ 18 vein/m. Average vein width ~ 0.5mm (2mm maximum). Dark brown to grayish brown halos (~10mm average width)
Vein filling summary: Average: 40% carbonate (sedimentary micrite filling); 20% smectite (often as single dark green clay filling); 20% FeOx/iddingsite; 20% Zeolite
Vesicles summary: non-vesicular to sparsely vesicular (Av=0.8%: Max=4%; size: 0.1mm to 1mm)
Vesicles filling summary: ~ 25% vesicle filling on average. Generally composite vesicle filling with smectite, FeOOH (+/- iddingsite). Abundant carbonate vesicles. Pieces with >3% vesicles feature irregular vugs filled with zeolite and carbonate druses and dark green clay spherules (irregular vugs lined with plagio laths extending from the groundmass)
Groundmass alteration texture summary: Patchy alteration with dark to brown halos
Groundmass % alteration summary: Av=8%; from 1% to 40%
Groundmass alteration intensity summary: slight to moderate; abundant in few pieces
Alteration comment: Fresh plagioclase phenocrysts up to 2mm wide. Groundmass includes dark green to black patches due to smectitic clay alteration. Numerous vugs are partly filled with carbonate druses. Olivine is mostly fresh in the gray groundmass and become altered by iddingsite within the grayish brown alteration halos. Glassy chilled margin partly palagonitized (~60%)

Core Photo

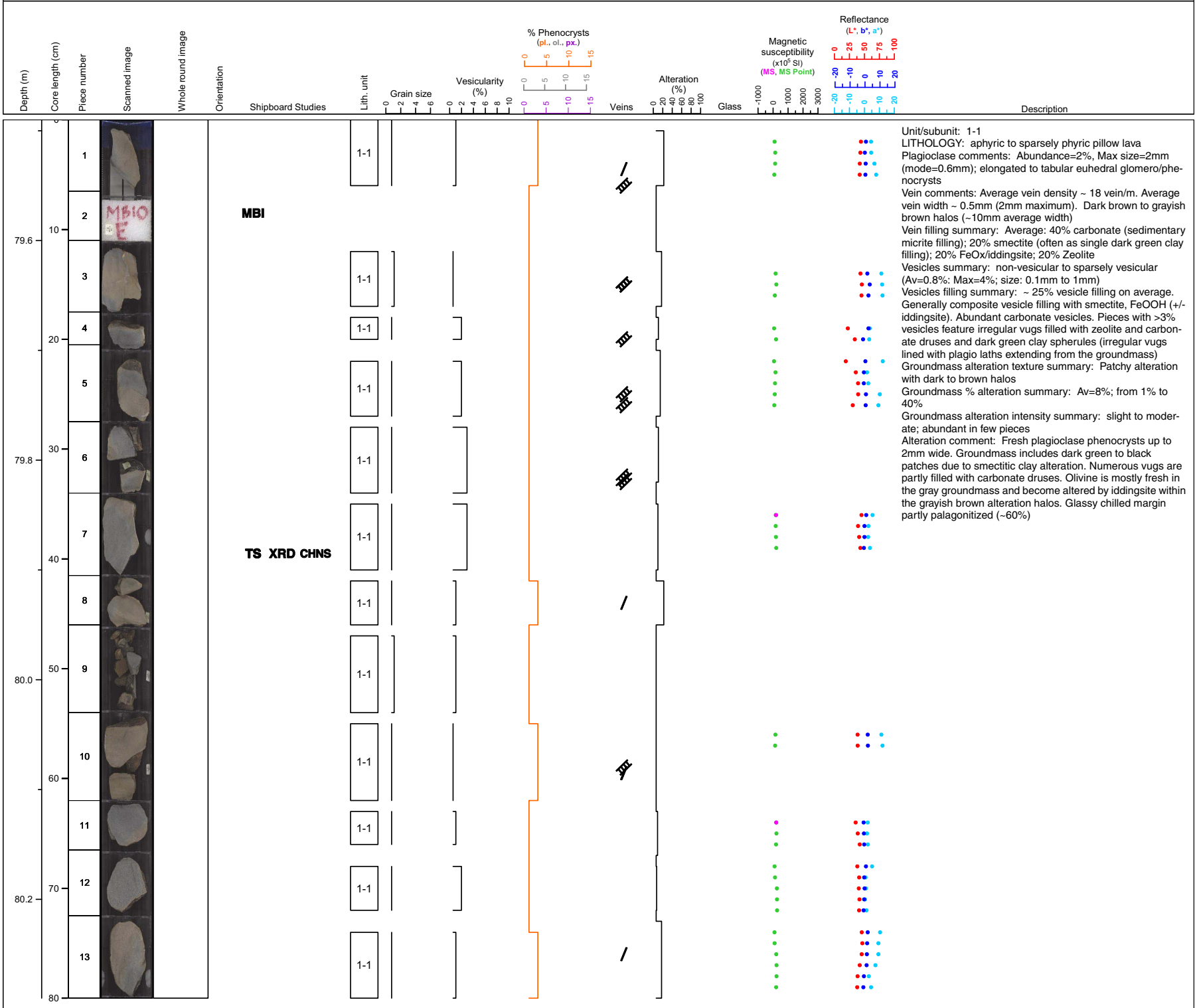

Hole 336-U1383C-3R Section 1, Top of Section: 76.6 CSF-A (m)
Depth (m)
Core length (cm)
Piece number
Scanned image
Whole round image
Orientation
Shipboard Studies
Lith. unit
Grain size
Vesicularity (%)
% Phenocrysts (pl., ol., px.)
Veins
Alteration (%)
Glass
Magnetic susceptibility (x10⁵ SI) (MS, MS Point)
Reflectance (L*, b*, a*)
Description
TS XRD CHNS
PP
MBI
MBI
MBI
Unit/subunit: 1-1
LITHOLOGY: aphyric to sparsely phyric pillow lava
Plagioclase comments: Abundance=2%, Max size=2mm (mode=0.6mm); elongated to tabular euhedral glomero/phenocrysts
Vein comments: Average vein density ~ 18 vein/m. Average vein width ~ 0.5mm (2mm maximum). Dark brown to grayish brown halos (~10mm average width)
Vein filling summary: Average: 40% carbonate (sedimentary micrite filling); 20% smectite (often as single dark green clay filling); 20% FeOx/iddingsite; 20% Zeolite
Vesicles summary: non-vesicular to sparsely vesicular (Av=0.8%: Max=4%; size: 0.1mm to 1mm)
Vesicles filling summary: ~ 25% vesicle filling on average. Generally composite vesicle filling with smectite, FeOOH (+/- iddingsite). Abundant carbonate vesicles. Pieces with >3% vesicles feature irregular vugs filled with zeolite and carbonate druses and dark green clay spherules (irregular vugs lined with plagio laths extending from the groundmass)
Groundmass alteration texture summary: Patchy alteration with dark to brown halos
Groundmass % alteration summary: Av=8%; from 1% to 40%
Groundmass alteration intensity summary: slight to moderate; abundant in few pieces
Alteration comment: Fresh plagioclase phenocrysts up to 2mm wide. Groundmass includes dark green to black patches due to smectitic clay alteration. Numerous vugs are partly filled with carbonate druses. Olivine is mostly fresh in the gray groundmass and become altered by iddingsite within the grayish brown alteration halos. Glassy chilled margin partly palagonitized (~60%)

Core Photo

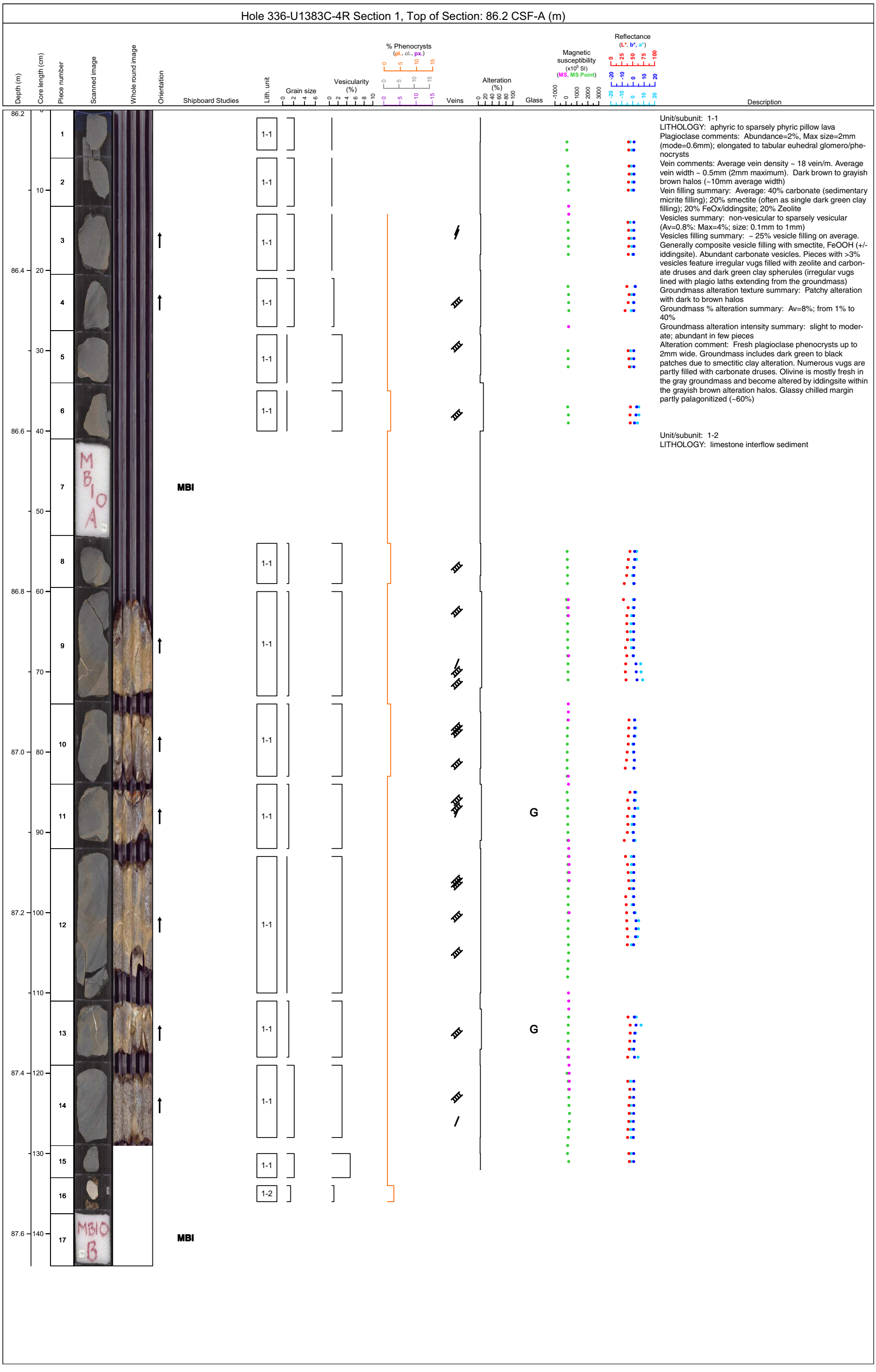

Hole 336-U1383C-3R Section 2, Top of Section: 78.1 CSF-A (m)
Depth (m)
Core length (cm)
Piece number
Scanned image
Whole round image
Orientation
Shipboard Studies
Lith. unit
Grain size
Vesicularity (%)
% Phenocrysts (pl., ol., px.)
Veins
Alteration (%)
Glass
Magnetic susceptibility (x10⁵ SI) (MS, MS Point)
Reflectance (L*, b*, a*)
Description
MBI
TS XRD CHNS
PP
Unit/subunit: 1-1
LITHOLOGY: aphyric to sparsely phyric pillow lava
Plagioclase comments: Abundance=2%, Max size=2mm (mode=0.6mm); elongated to tabular euhedral glomero/phenocrysts
Vein comments: Average vein density ~ 18 vein/m. Average vein width ~ 0.5mm (2mm maximum). Dark brown to grayish brown halos (~10mm average width)
Vein filling summary: Average: 40% carbonate (sedimentary micrite filling); 20% smectite (often as single dark green clay filling); 20% FeOx/iddingsite; 20% Zeolite
Vesicles summary: non-vesicular to sparsely vesicular (Av=0.8%: Max=4%; size: 0.1mm to 1mm)
Vesicles filling summary: ~ 25% vesicle filling on average. Generally composite vesicle filling with smectite, FeOOH (+/- iddingsite). Abundant carbonate vesicles. Pieces with >3% vesicles feature irregular vugs filled with zeolite and carbonate druses and dark green clay spherules (irregular vugs lined with plagio laths extending from the groundmass)
Groundmass alteration texture summary: Patchy alteration with dark to brown halos
Groundmass % alteration summary: Av=8%; from 1% to 40%
Groundmass alteration intensity summary: slight to moderate; abundant in few pieces
Alteration comment: Fresh plagioclase phenocrysts up to 2mm wide. Groundmass includes dark green to black patches due to smectitic clay alteration. Numerous vugs are partly filled with carbonate druses. Olivine is mostly fresh in the gray groundmass and become altered by iddingsite within the grayish brown alteration halos. Glassy chilled margin partly palagonitized (~60%)

Core Photo

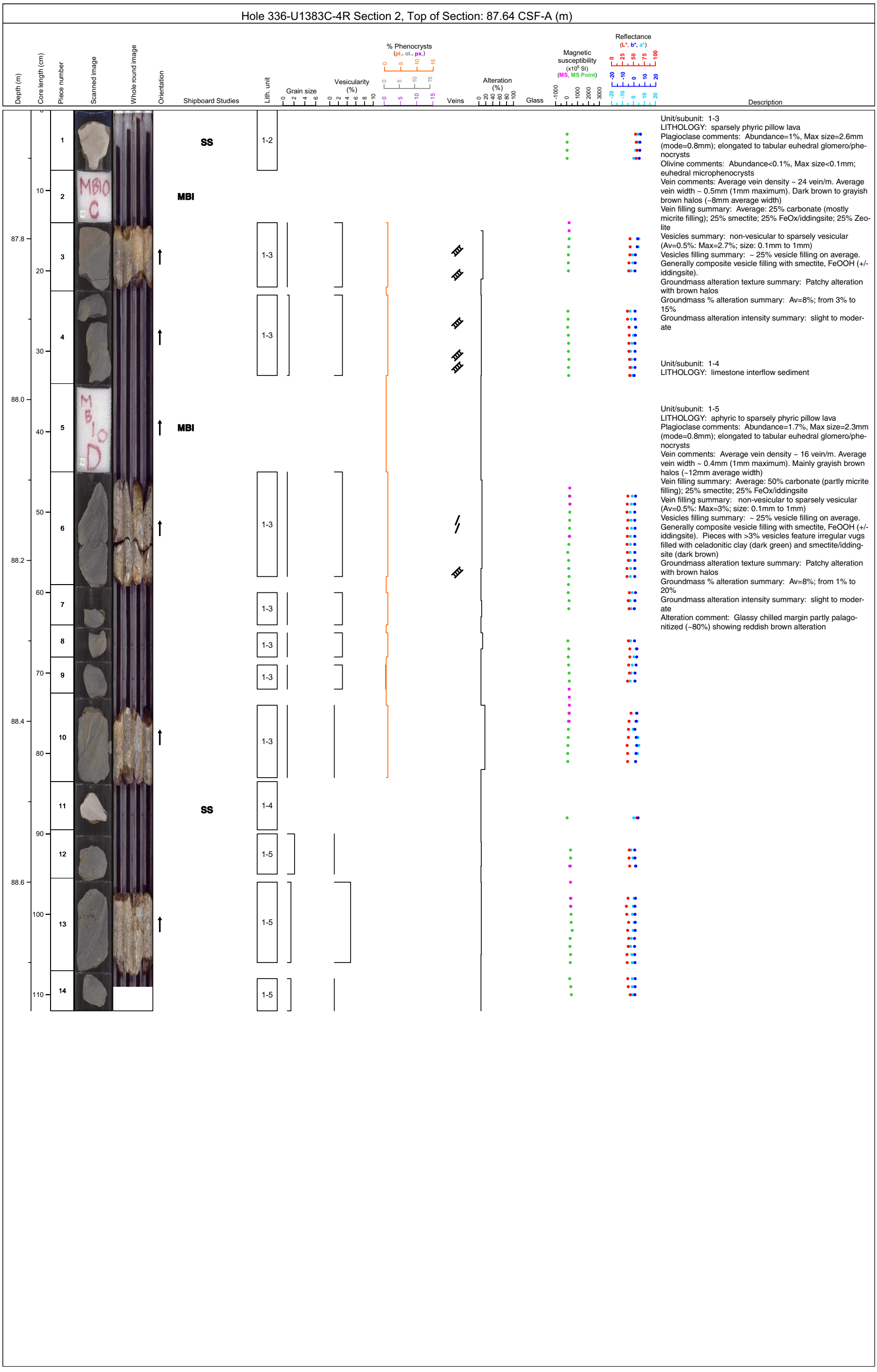
Hole 336-U1383C-3R Section 3, Top of Section: 79.49 CSF-A (m)



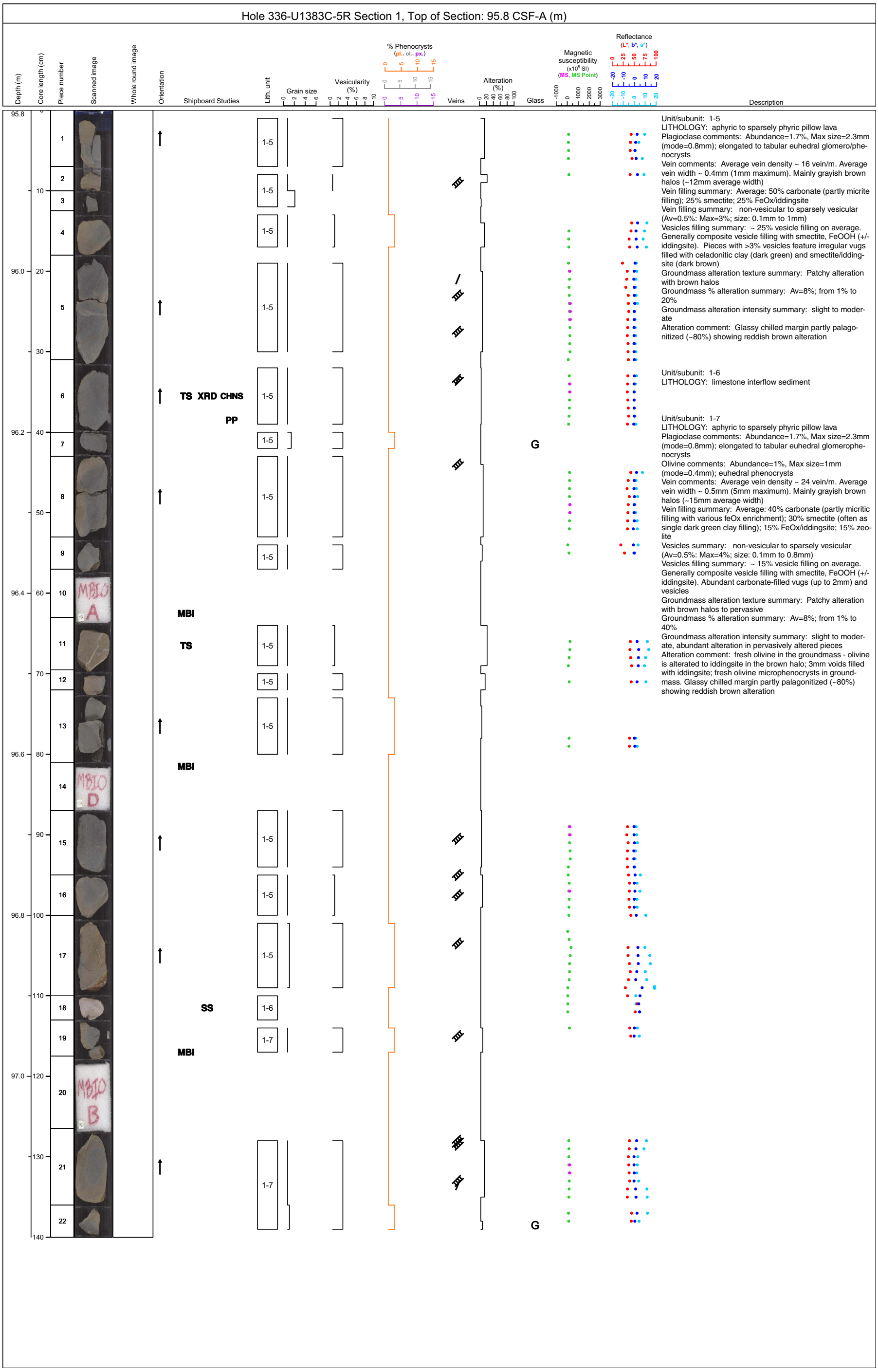
Core Photo


Hole 336-U1383C-4R Section 1, Top of Section: 86.2 CSF-A (m)
Depth (m)
Core length (cm)
Piece number
Scanned image
Whole round image
Orientation
Shipboard Studies
Lith. unit
Grain size
Vesicularity (%)
% Phenocrysts (pl., ol., px.)
Veins
Alteration (%)
Glass
Magnetic susceptibility (x10⁵ SI) (MS, MS Point)
Reflectance (L*, b*, a*)
Description
MBI
G
Unit/subunit: 1-1
LITHOLOGY: aphyric to sparsely phyric pillow lava
Plagioclase comments: Abundance=2%, Max size=2mm (mode=0.6mm); elongated to tabular euhedral glomero/phenocrysts
Vein comments: Average vein density ~ 18 vein/m. Average vein width ~ 0.5mm (2mm maximum). Dark brown to grayish brown halos (~10mm average width)
Vein filling summary: Average: 40% carbonate (sedimentary micrite filling); 20% smectite (often as single dark green clay filling); 20% FeOx/iddingsite; 20% Zeolite
Vesicles summary: non-vesicular to sparsely vesicular (Av=0.8%: Max=4%; size: 0.1mm to 1mm)
Vesicles filling summary: ~ 25% vesicle filling on average. Generally composite vesicle filling with smectite, FeOOH (+/- iddingsite). Abundant carbonate vesicles. Pieces with >3% vesicles feature irregular vugs filled with zeolite and carbonate druses and dark green clay spherules (irregular vugs lined with plagio laths extending from the groundmass)
Groundmass alteration texture summary: Patchy alteration with dark to brown halos
Groundmass % alteration summary: Av=8%; from 1% to 40%
Groundmass alteration intensity summary: slight to moderate; abundant in few pieces
Alteration comment: Fresh plagioclase phenocrysts up to 2mm wide. Groundmass includes dark green to black patches due to smectitic clay alteration. Numerous vugs are partly filled with carbonate druses. Olivine is mostly fresh in the gray groundmass and become altered by iddingsite within the grayish brown alteration halos. Glassy chilled margin partly palagonitized (~60%)
Unit/subunit: 1-2
LITHOLOGY: limestone interflow sediment

Core Photo

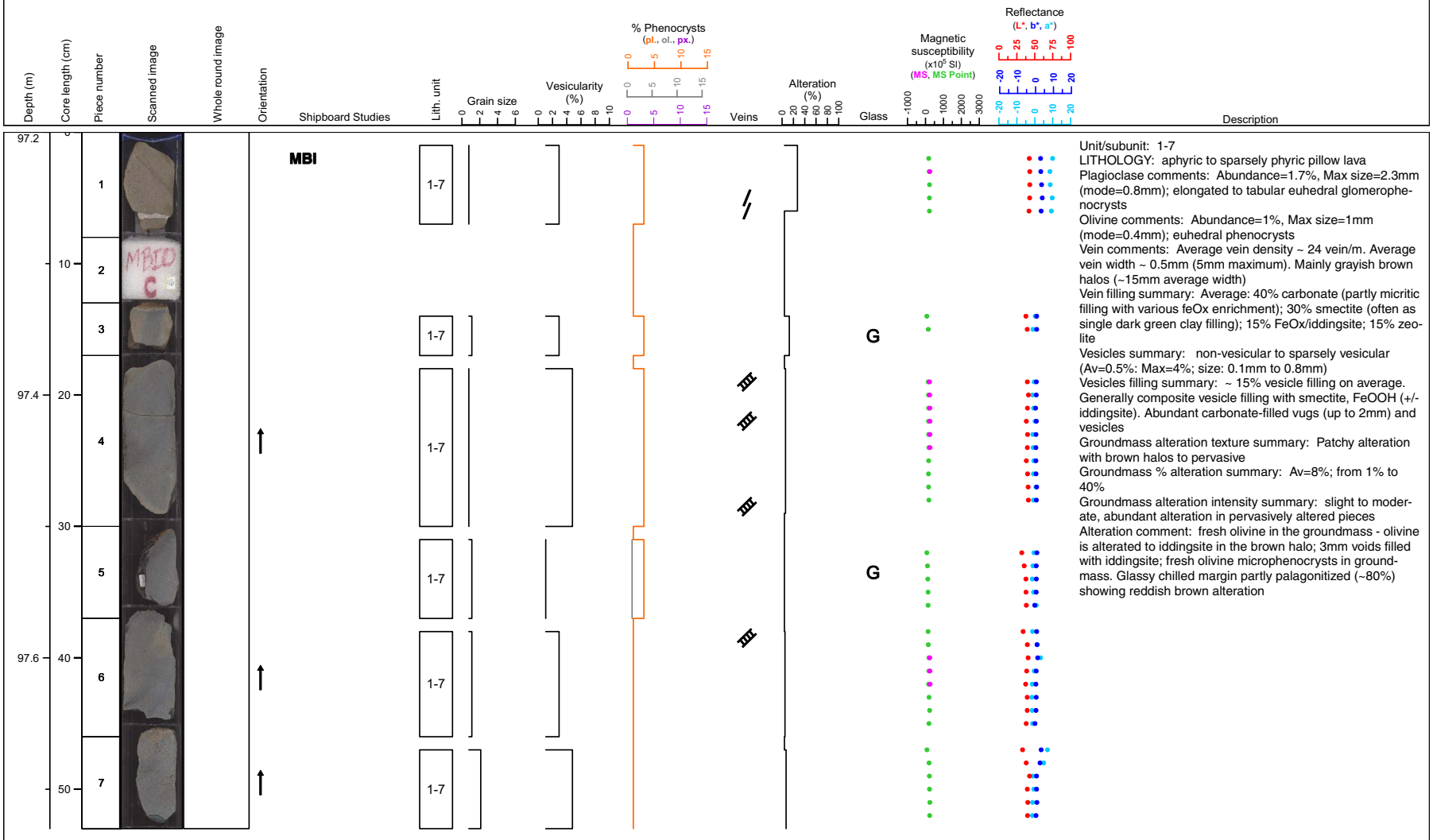

Hole 336-U1383C-4R Section 2, Top of Section: 87.64 CSF-A (m)
Depth (m)
Core length (cm)
Piece number
Scanned image
Whole round image
Orientation
Shipboard Studies
Lith. unit
Grain size
Vesicularity (%)
% Phenocrysts (pl., ol., px.)
Veins
Alteration (%)
Glass
Magnetic susceptibility (x10⁵ SI) (MS, MS Point)
Reflectance (L*, b*, a*)
Description
SS
MBI
SS
MBI
1-2
1-3
1-3
1-3
1-3
1-3
1-4
1-5
1-5
1-5
Unit/subunit: 1-3
LITHOLOGY: sparsely phyric pillow lava
Plagioclase comments: Abundance=1%, Max size=2.6mm (mode=0.8mm); elongated to tabular euhedral glomero/phenocrysts
Olivine comments: Abundance<0.1%, Max size<0.1mm; euhedral microphenocrysts
Vein comments: Average vein density ~ 24 vein/m. Average vein width ~ 0.5mm (1mm maximum). Dark brown to grayish brown halos (~8mm average width)
Vein filling summary: Average: 25% carbonate (mostly micrite filling); 25% smectite; 25% FeOx/iddingsite; 25% Zeolite
Vesicles summary: non-vesicular to sparsely vesicular (Av=0.5%: Max=2.7%; size: 0.1mm to 1mm)
Vesicles filling summary: ~ 25% vesicle filling on average. Generally composite vesicle filling with smectite, FeOOH (+/- iddingsite).
Groundmass alteration texture summary: Patchy alteration with brown halos
Groundmass % alteration summary: Av=8%; from 3% to 15%
Groundmass alteration intensity summary: slight to moderate
Unit/subunit: 1-4
LITHOLOGY: limestone interflow sediment
Unit/subunit: 1-5
LITHOLOGY: aphyric to sparsely phyric pillow lava
Plagioclase comments: Abundance=1.7%, Max size=2.3mm (mode=0.8mm); elongated to tabular euhedral glomero/phenocrysts
Vein comments: Average vein density ~ 16 vein/m. Average vein width ~ 0.4mm (1mm maximum). Mainly grayish brown halos (~12mm average width)
Vein filling summary: Average: 50% carbonate (partly micrite filling); 25% smectite; 25% FeOx/iddingsite
Vein filling summary: non-vesicular to sparsely vesicular (Av=0.5%: Max=3%; size: 0.1mm to 1mm)
Vesicles filling summary: ~ 25% vesicle filling on average. Generally composite vesicle filling with smectite, FeOOH (+/- iddingsite). Pieces with >3% vesicles feature irregular vugs filled with celadonitic clay (dark green) and smectite/iddingsite (dark brown)
Groundmass alteration texture summary: Patchy alteration with brown halos
Groundmass % alteration summary: Av=8%; from 1% to 20%
Groundmass alteration intensity summary: slight to moderate
Alteration comment: Glassy chilled margin partly palagonitized (~80%) showing reddish brown alteration

Core Photo

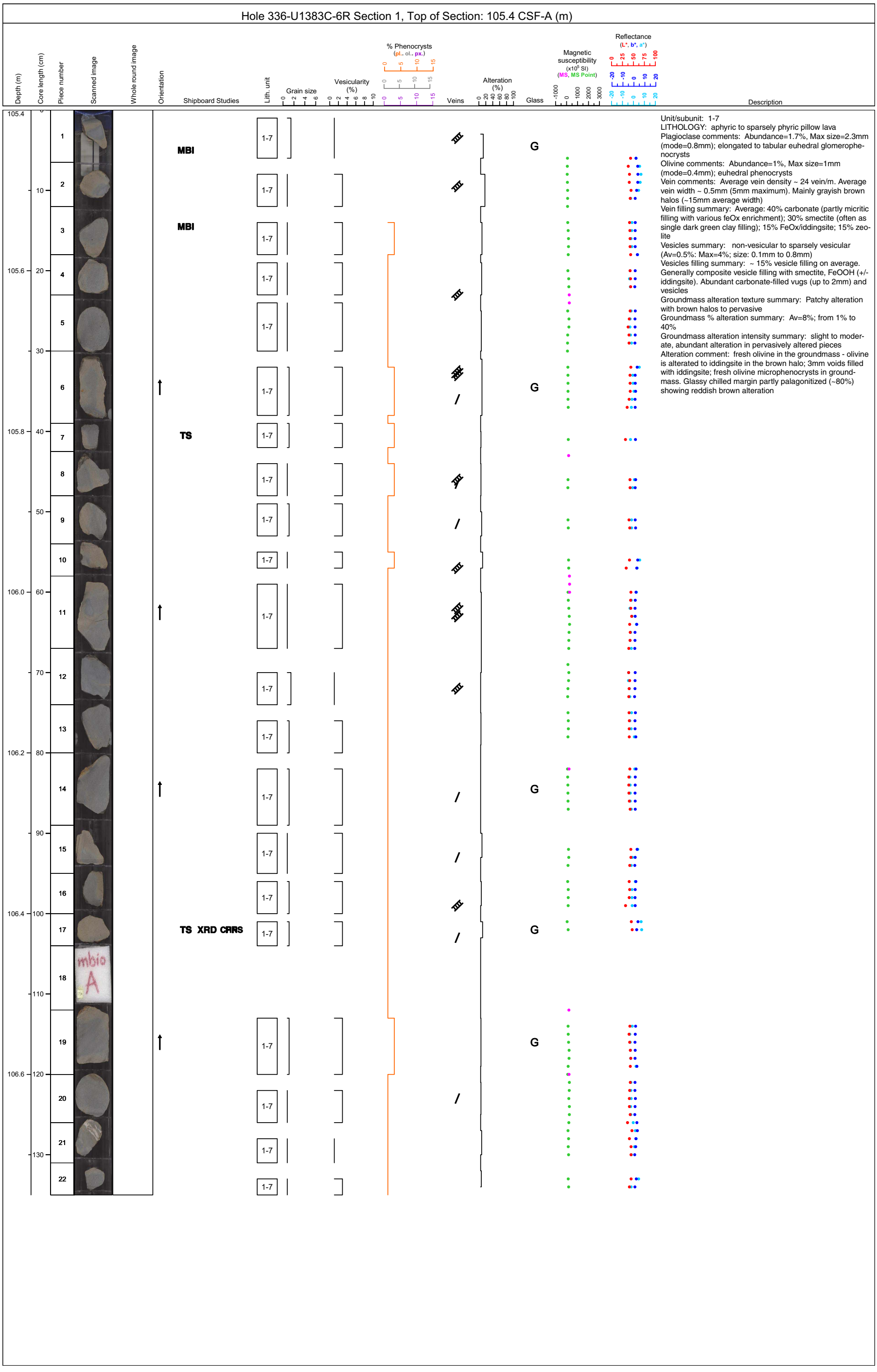

Hole 336-U1383C-5R Section 1, Top of Section: 95.8 CSF-A (m)
Depth (m)
Core length (cm)
Piece number
Scanned image
Whole round image
Orientation
Shipboard Studies
Lith. unit
Grain size
Vesicularity (%)
% Phenocrysts (pl., ol., px.)
Veins
Alteration (%)
Glass
Magnetic susceptibility (x10⁵ SI) (MS, MS Point)
Reflectance (L*, b*, a*)
Description
TS XRD CHNS
PP
MBI
TS
MBI
SS
MBI
G
G
Unit/subunit: 1-5
LITHOLOGY: aphyric to sparsely phyric pillow lava
Plagioclase comments: Abundance=1.7%, Max size=2.3mm (mode=0.8mm); elongated to tabular euhedral glomero/phenocrysts
Vein comments: Average vein density ~ 16 vein/m. Average vein width ~ 0.4mm (1mm maximum). Mainly grayish brown halos (~12mm average width)
Vein filling summary: Average: 50% carbonate (partly micrite filling); 25% smectite; 25% FeOx/iddingsite
Vein filling summary: non-vesicular to sparsely vesicular (Av=0.5%: Max=3%; size: 0.1mm to 1mm)
Vesicles filling summary: ~ 25% vesicle filling on average. Generally composite vesicle filling with smectite, FeOOH (+/- iddingsite). Pieces with >3% vesicles feature irregular vugs filled with celadonitic clay (dark green) and smectite/iddingsite (dark brown)
Groundmass alteration texture summary: Patchy alteration with brown halos
Groundmass % alteration summary: Av=8%; from 1% to 20%
Groundmass alteration intensity summary: slight to moderate
Alteration comment: Glassy chilled margin partly palagonitized (~80%) showing reddish brown alteration
Unit/subunit: 1-6
LITHOLOGY: limestone interflow sediment
Unit/subunit: 1-7
LITHOLOGY: aphyric to sparsely phyric pillow lava
Plagioclase comments: Abundance=1.7%, Max size=2.3mm (mode=0.8mm); elongated to tabular euhedral glomerophenocrysts
Olivine comments: Abundance=1%, Max size=1mm (mode=0.4mm); euhedral phenocrysts
Vein comments: Average vein density ~ 24 vein/m. Average vein width ~ 0.5mm (5mm maximum). Mainly grayish brown halos (~15mm average width)
Vein filling summary: Average: 40% carbonate (partly micritic filling with various feOx enrichment); 30% smectite (often as single dark green clay filling); 15% FeOx/iddingsite; 15% zeolite
Vesicles summary: non-vesicular to sparsely vesicular (Av=0.5%: Max=4%; size: 0.1mm to 0.8mm)
Vesicles filling summary: ~ 15% vesicle filling on average. Generally composite vesicle filling with smectite, FeOOH (+/- iddingsite). Abundant carbonate-filled vugs (up to 2mm) and vesicles
Groundmass alteration texture summary: Patchy alteration with brown halos to pervasive
Groundmass % alteration summary: Av=8%; from 1% to 40%
Groundmass alteration intensity summary: slight to moderate, abundant alteration in pervasively altered pieces
Alteration comment: fresh olivine in the groundmass - olivine is alterated to iddingsite in the brown halo; 3mm voids filled with iddingsite; fresh olivine microphenocrysts in groundmass. Glassy chilled margin partly palagonitized (~80%) showing reddish brown alteration

Core Photo

Hole 336-U1383C-5R Section 2, Top of Section: 97.2 CSF-A (m)

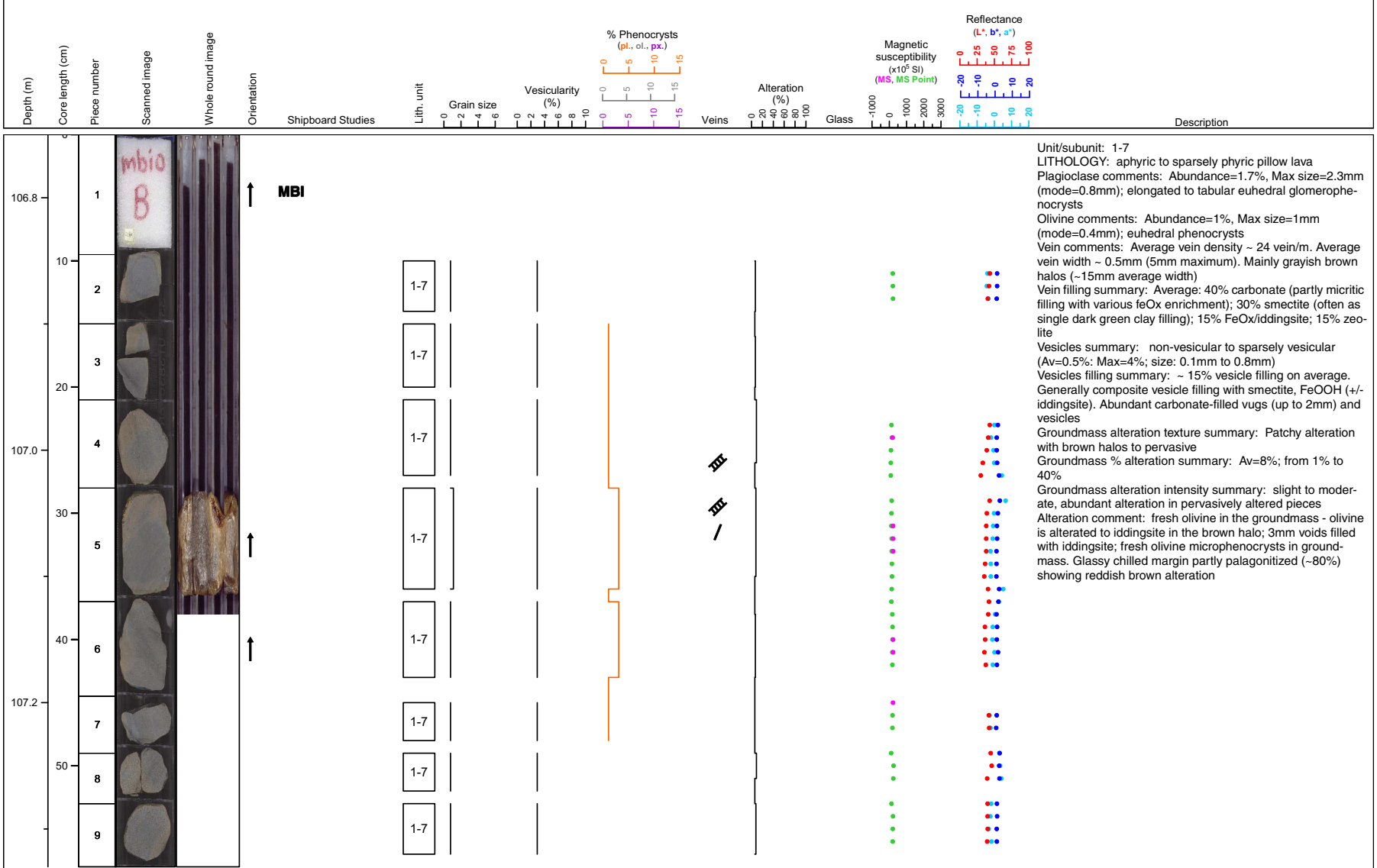


Core Photo


Hole 336-U1383C-6R Section 1, Top of Section: 105.4 CSF-A (m)
Depth (m)
Core length (cm)
Piece number
Scanned image
Whole round image
Orientation
Shipboard Studies
Lith. unit
Grain size
Vesicularity (%)
% Phenocrysts (pl., ol., px.)
Veins
Alteration (%)
Glass
Magnetic susceptibility (x10⁵ SI) (MS, MS Point)
Reflectance (L*, b*, a*)
Description
MBI
TS
TS XRD CRRS
1-7
G
mbio
A
Unit/subunit: 1-7
LITHOLOGY: aphyric to sparsely phyric pillow lava
Plagioclase comments: Abundance=1.7%, Max size=2.3mm (mode=0.8mm); elongated to tabular euhedral glomerophenocrysts
Olivine comments: Abundance=1%, Max size=1mm (mode=0.4mm); euhedral phenocrysts
Vein comments: Average vein density ~ 24 vein/m. Average vein width ~ 0.5mm (5mm maximum). Mainly grayish brown halos (~15mm average width)
Vein filling summary: Average: 40% carbonate (partly micritic filling with various feOx enrichment); 30% smectite (often as single dark green clay filling); 15% FeOx/iddingsite; 15% zeolite
Vesicles summary: non-vesicular to sparsely vesicular (Av=0.5%: Max=4%; size: 0.1mm to 0.8mm)
Vesicles filling summary: ~ 15% vesicle filling on average. Generally composite vesicle filling with smectite, FeOOH (+/- iddingsite). Abundant carbonate-filled vugs (up to 2mm) and vesicles
Groundmass alteration texture summary: Patchy alteration with brown halos to pervasive
Groundmass % alteration summary: Av=8%; from 1% to 40%
Groundmass alteration intensity summary: slight to moderate, abundant alteration in pervasively altered pieces
Alteration comment: fresh olivine in the groundmass - olivine is alterated to iddingsite in the brown halo; 3mm voids filled with iddingsite; fresh olivine microphenocrysts in groundmass. Glassy chilled margin partly palagonitized (~80%) showing reddish brown alteration

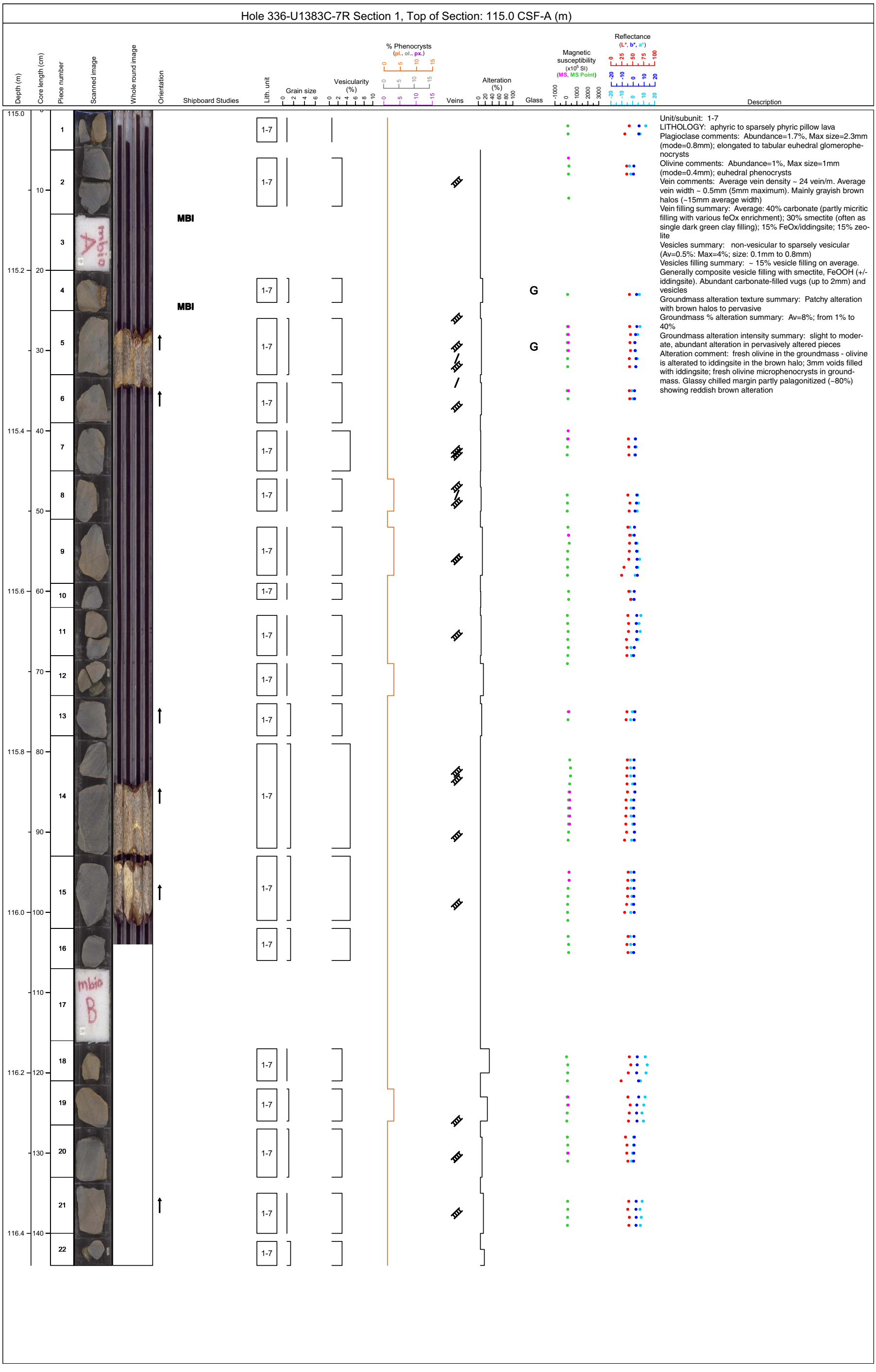
Core Photo

Hole 336-U1383C-6R Section 2, Top of Section: 106.75 CSF-A (m)

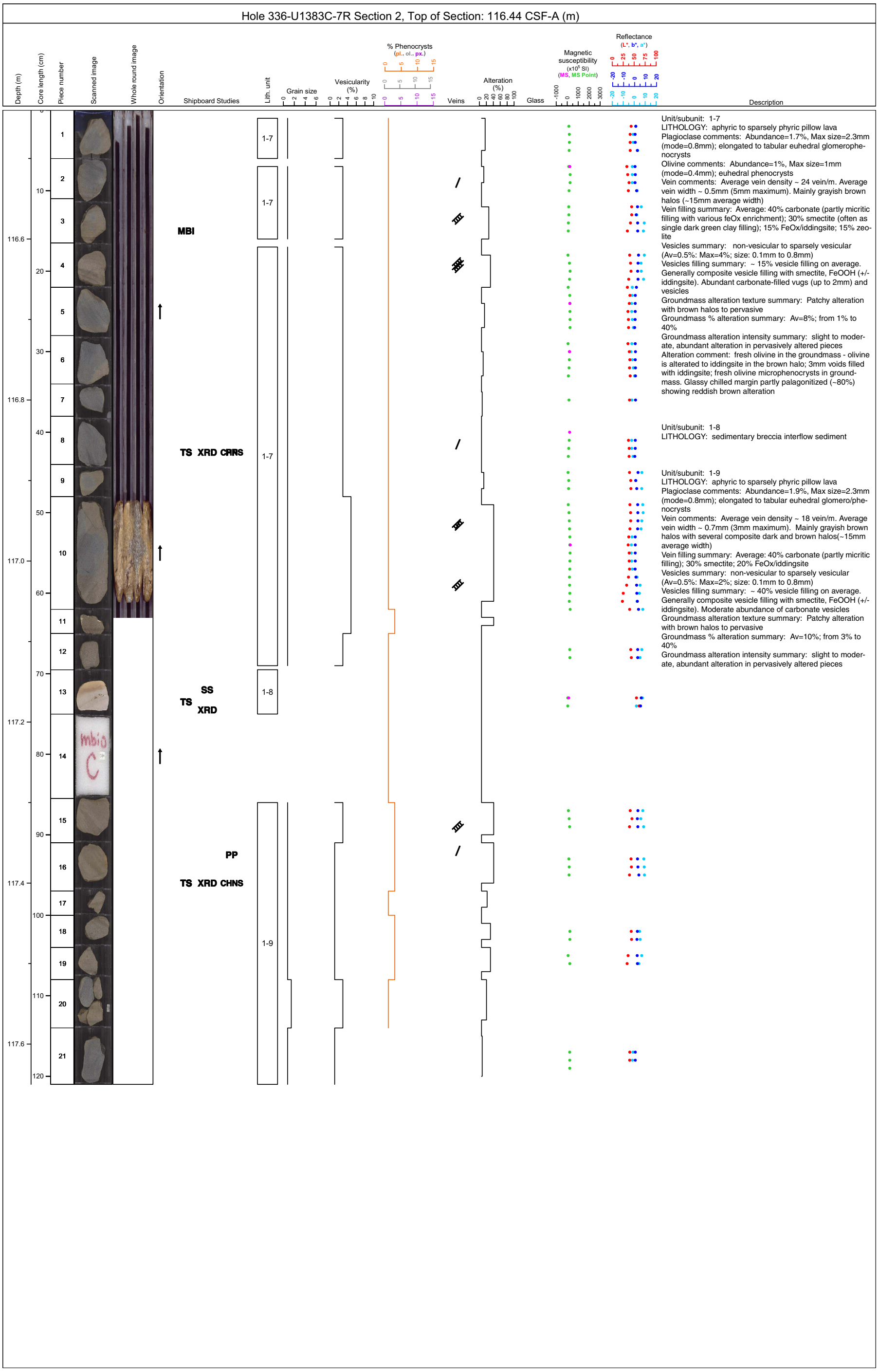


Unit/subunit: 1-7
LITHOLOGY: aphyric to sparsely phyric pillow lava
Plagioclase comments: Abundance=1.7%, Max size=2.3mm (mode=0.8mm); elongated to tabular euhedral glomerophenocrysts
Olivine comments: Abundance=1%, Max size=1mm (mode=0.4mm); euhedral phenocrysts
Vein comments: Average vein density ~ 24 vein/m. Average vein width ~ 0.5mm (5mm maximum). Mainly grayish brown halos (~15mm average width)
Vein filling summary: Average: 40% carbonate (partly micritic filling with various feOx enrichment); 30% smectite (often as single dark green clay filling); 15% FeOx/iddingsite; 15% zeolite
Vesicles summary: non-vesicular to sparsely vesicular (Av=0.5%: Max=4%; size: 0.1mm to 0.8mm)
Vesicles filling summary: ~ 15% vesicle filling on average. Generally composite vesicle filling with smectite, FeOOH (+/- iddingsite). Abundant carbonate-filled vugs (up to 2mm) and vesicles
Groundmass alteration texture summary: Patchy alteration with brown halos to pervasive
Groundmass % alteration summary: Av=8%; from 1% to 40%
Groundmass alteration intensity summary: slight to moderate, abundant alteration in pervasively altered pieces
Alteration comment: fresh olivine in the groundmass - olivine is alterated to iddingsite in the brown halo; 3mm voids filled with iddingsite; fresh olivine microphenocrysts in groundmass. Glassy chilled margin partly palagonitized (~80%) showing reddish brown alteration

Core Photo

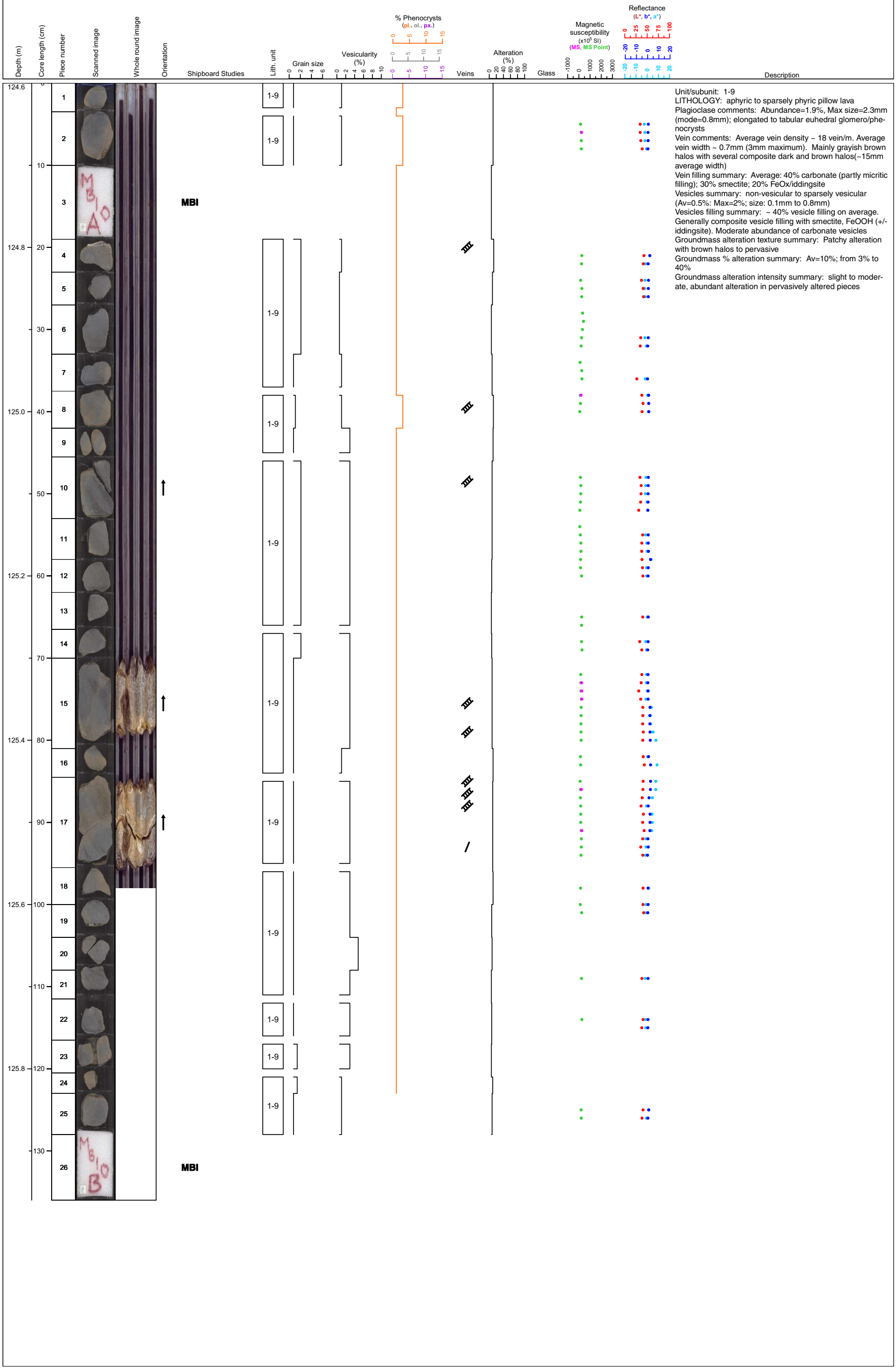

Hole 336-U1383C-7R Section 1, Top of Section: 115.0 CSF-A (m)
Depth (m)
Core length (cm)
Piece number
Scanned image
Whole round image
Orientation
Shipboard Studies
Lith. unit
Grain size
Vesicularity (%)
% Phenocrysts (pl., ol., px.)
Veins
Alteration (%)
Glass
Magnetic susceptibility (x10⁵ SI) (MS, MS Point)
Reflectance (L*, b*, a*)
Description
MBI
MBI
G
G
Unit/subunit: 1-7
LITHOLOGY: aphyric to sparsely phyric pillow lava
Plagioclase comments: Abundance=1.7%, Max size=2.3mm (mode=0.8mm); elongated to tabular euhedral glomerophenocrysts
Olivine comments: Abundance=1%, Max size=1mm (mode=0.4mm); euhedral phenocrysts
Vein comments: Average vein density ~ 24 vein/m. Average vein width ~ 0.5mm (5mm maximum). Mainly grayish brown halos (~15mm average width)
Vein filling summary: Average: 40% carbonate (partly micritic filling with various feOx enrichment); 30% smectite (often as single dark green clay filling); 15% FeOx/iddingsite; 15% zeolite
Vesicles summary: non-vesicular to sparsely vesicular (Av=0.5%: Max=4%; size: 0.1mm to 0.8mm)
Vesicles filling summary: ~ 15% vesicle filling on average. Generally composite vesicle filling with smectite, FeOOH (+/- iddingsite). Abundant carbonate-filled vugs (up to 2mm) and vesicles
Groundmass alteration texture summary: Patchy alteration with brown halos to pervasive
Groundmass % alteration summary: Av=8%; from 1% to 40%
Groundmass alteration intensity summary: slight to moderate, abundant alteration in pervasively altered pieces
Alteration comment: fresh olivine in the groundmass - olivine is alterated to iddingsite in the brown halo; 3mm voids filled with iddingsite; fresh olivine microphenocrysts in groundmass. Glassy chilled margin partly palagonitized (~80%) showing reddish brown alteration

Core Photo

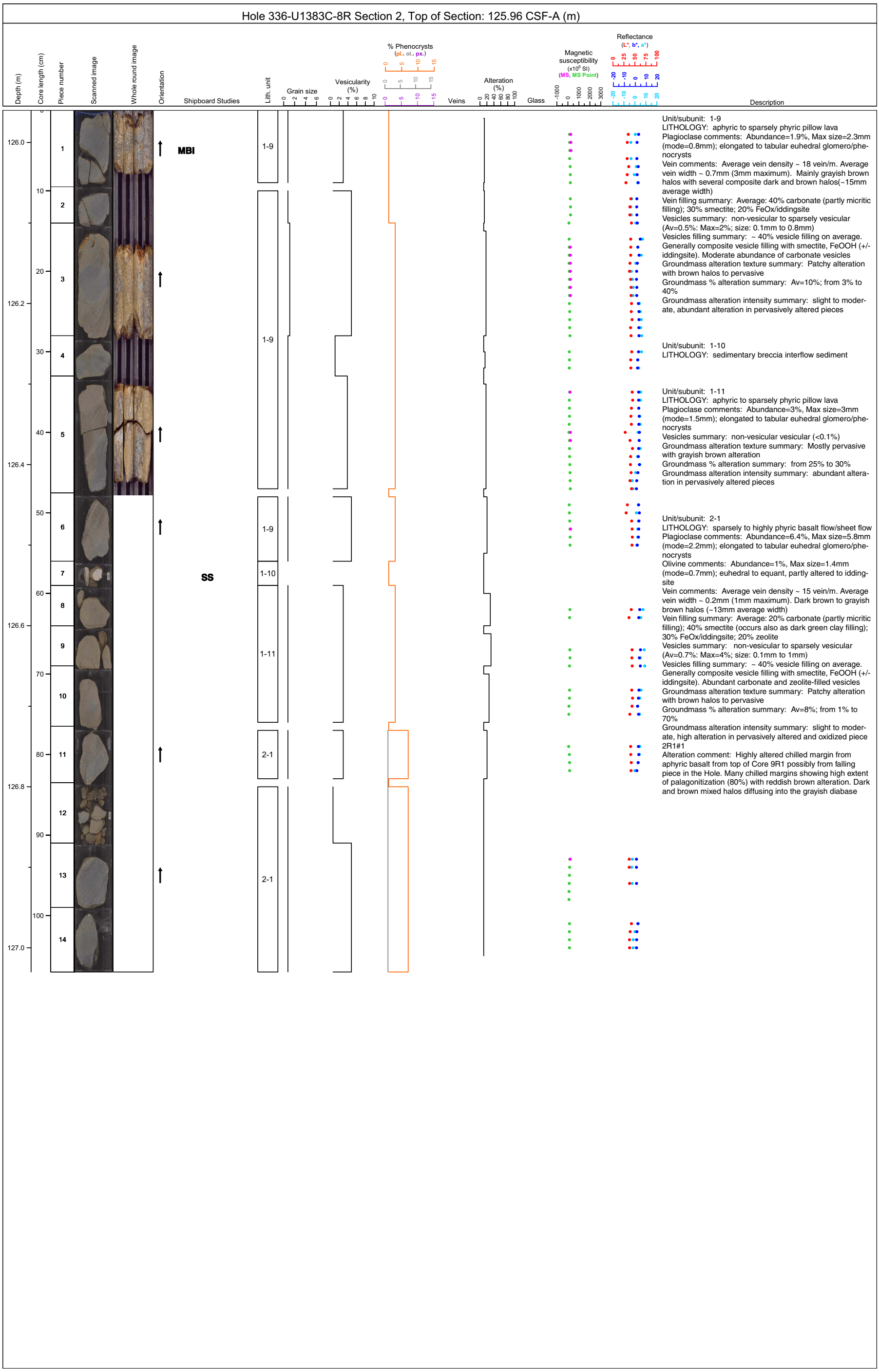

Hole 336-U1383C-7R Section 2, Top of Section: 116.44 CSF-A (m)
Depth (m)
Core length (cm)
Piece number
Scanned image
Whole round image
Orientation
Shipboard Studies
Lith. unit
Grain size
Vesicularity (%)
% Phenocrysts (pl., ol., px.)
Veins
Alteration (%)
Glass
Magnetic susceptibility (x10⁵ SI) (MS, MS Point)
Reflectance (L*, b*, a*)
Description
MBI
TS XRD CRRS
SS
TS
XRD
PP
TS XRD CHNS
1-7
1-8
1-9
116.6
116.8
117.0
117.2
117.4
117.6
Unit/subunit: 1-7
LITHOLOGY: aphyric to sparsely phyric pillow lava
Plagioclase comments: Abundance=1.7%, Max size=2.3mm (mode=0.8mm); elongated to tabular euhedral glomerophenocrysts
Olivine comments: Abundance=1%, Max size=1mm (mode=0.4mm); euhedral phenocrysts
Vein comments: Average vein density ~ 24 vein/m. Average vein width ~ 0.5mm (5mm maximum). Mainly grayish brown halos (~15mm average width)
Vein filling summary: Average: 40% carbonate (partly micritic filling with various feOx enrichment); 30% smectite (often as single dark green clay filling); 15% FeOx/iddingsite; 15% zeolite
Vesicles summary: non-vesicular to sparsely vesicular (Av=0.5%: Max=4%; size: 0.1mm to 0.8mm)
Vesicles filling summary: ~ 15% vesicle filling on average. Generally composite vesicle filling with smectite, FeOOH (+/- iddingsite). Abundant carbonate-filled vugs (up to 2mm) and vesicles
Groundmass alteration texture summary: Patchy alteration with brown halos to pervasive
Groundmass % alteration summary: Av=8%; from 1% to 40%
Groundmass alteration intensity summary: slight to moderate, abundant alteration in pervasively altered pieces
Alteration comment: fresh olivine in the groundmass - olivine is alterated to iddingsite in the brown halo; 3mm voids filled with iddingsite; fresh olivine microphenocrysts in groundmass. Glassy chilled margin partly palagonitized (~80%) showing reddish brown alteration
Unit/subunit: 1-8
LITHOLOGY: sedimentary breccia interflow sediment
Unit/subunit: 1-9
LITHOLOGY: aphyric to sparsely phyric pillow lava
Plagioclase comments: Abundance=1.9%, Max size=2.3mm (mode=0.8mm); elongated to tabular euhedral glomero/phenocrysts
Vein comments: Average vein density ~ 18 vein/m. Average vein width ~ 0.7mm (3mm maximum). Mainly grayish brown halos with several composite dark and brown halos(~15mm average width)
Vein filling summary: Average: 40% carbonate (partly micritic filling); 30% smectite; 20% FeOx/iddingsite
Vesicles summary: non-vesicular to sparsely vesicular (Av=0.5%: Max=2%; size: 0.1mm to 0.8mm)
Vesicles filling summary: ~ 40% vesicle filling on average. Generally composite vesicle filling with smectite, FeOOH (+/- iddingsite). Moderate abundance of carbonate vesicles
Groundmass alteration texture summary: Patchy alteration with brown halos to pervasive
Groundmass % alteration summary: Av=10%; from 3% to 40%
Groundmass alteration intensity summary: slight to moderate, abundant alteration in pervasively altered pieces

Core Photo

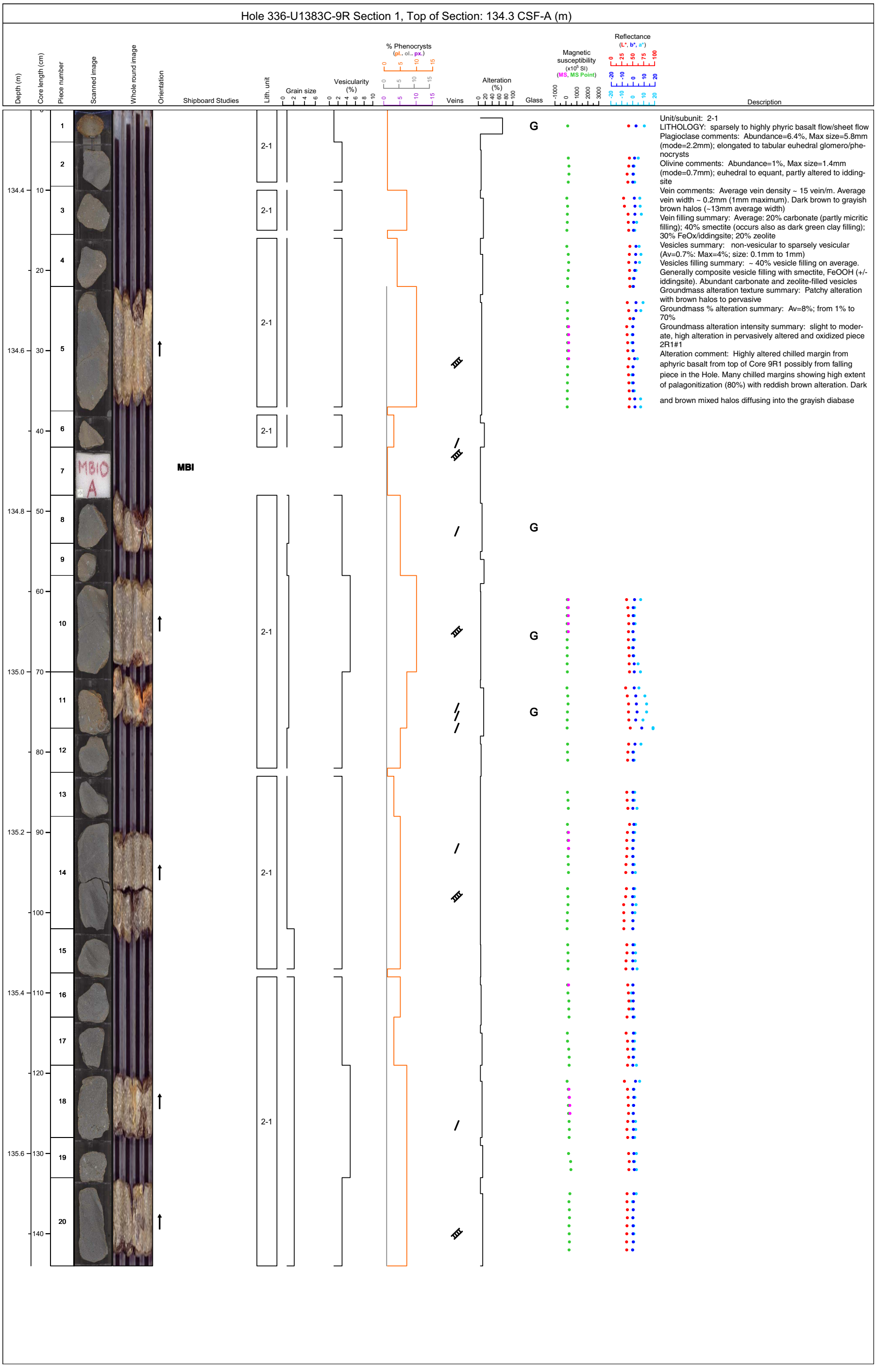
Hole 336-U1383C-8R Section 1, Top of Section: 124.6 CSF-A (m)



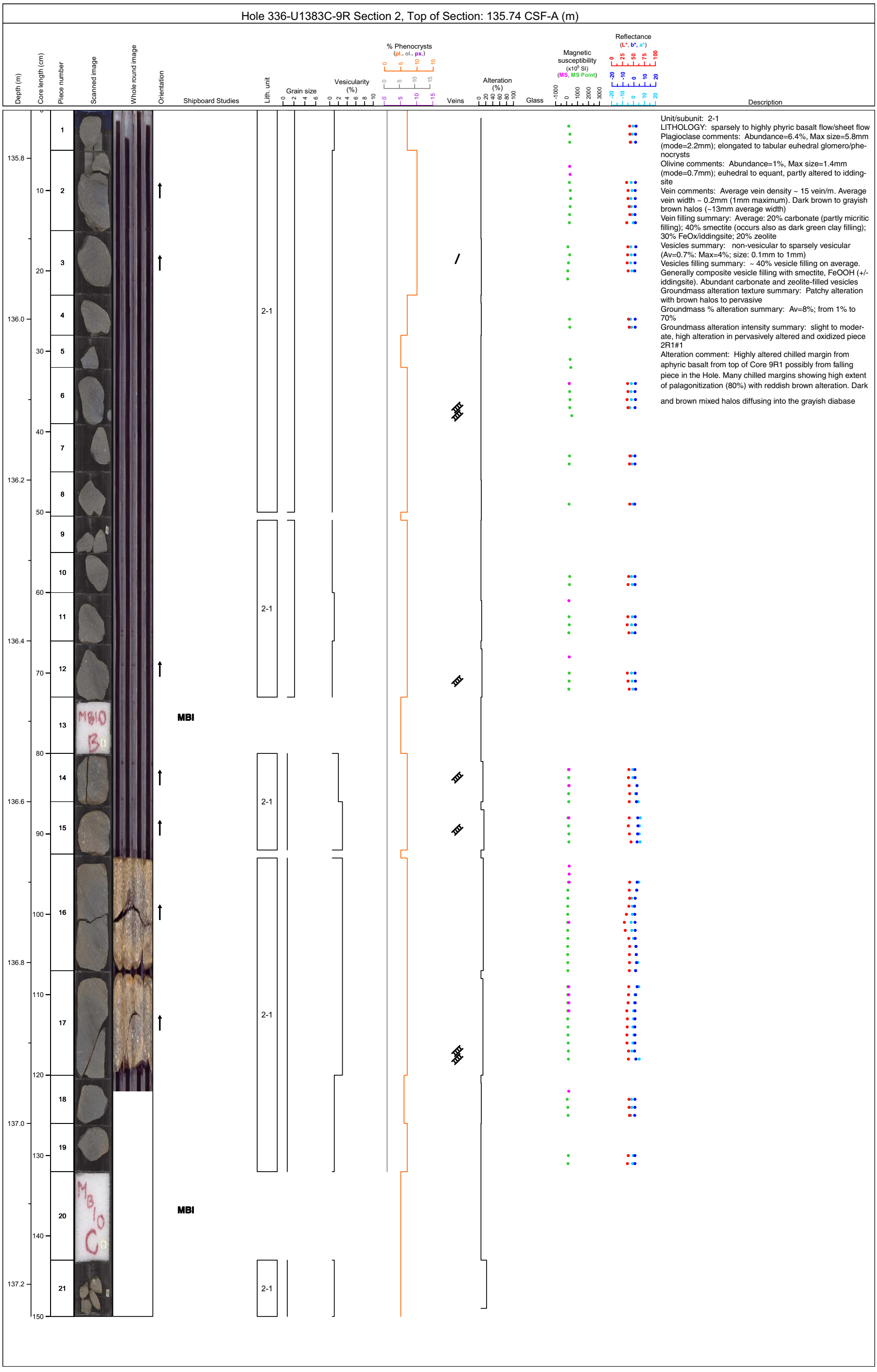
Core Photo


Hole 336-U1383C-8R Section 2, Top of Section: 125.96 CSF-A (m)
Depth (m)
Core length (cm)
Piece number
Scanned image
Whole round image
Orientation
Shipboard Studies
Lith. unit
Grain size
Vesicularity (%)
% Phenocrysts (pl., ol., px.)
Veins
Alteration (%)
Glass
Magnetic susceptibility (x10⁵ SI) (MS, MS Point)
Reflectance (L*, b*, a*)
Description
126.0
126.2
126.4
126.6
126.8
127.0
MBI
SS
1-9
1-10
1-11
2-1
Unit/subunit: 1-9
LITHOLOGY: aphyric to sparsely phyric pillow lava
Plagioclase comments: Abundance=1.9%, Max size=2.3mm (mode=0.8mm); elongated to tabular euhedral glomero/phenocrysts
Vein comments: Average vein density ~ 18 vein/m. Average vein width ~ 0.7mm (3mm maximum). Mainly grayish brown halos with several composite dark and brown halos(~15mm average width)
Vein filling summary: Average: 40% carbonate (partly micritic filling); 30% smectite; 20% FeOx/iddingsite
Vesicles summary: non-vesicular to sparsely vesicular (Av=0.5%: Max=2%; size: 0.1mm to 0.8mm)
Vesicles filling summary: ~ 40% vesicle filling on average. Generally composite vesicle filling with smectite, FeOOH (+/- iddingsite). Moderate abundance of carbonate vesicles
Groundmass alteration texture summary: Patchy alteration with brown halos to pervasive
Groundmass % alteration summary: Av=10%; from 3% to 40%
Groundmass alteration intensity summary: slight to moderate, abundant alteration in pervasively altered pieces
Unit/subunit: 1-10
LITHOLOGY: sedimentary breccia interflow sediment
Unit/subunit: 1-11
LITHOLOGY: aphyric to sparsely phyric pillow lava
Plagioclase comments: Abundance=3%, Max size=3mm (mode=1.5mm); elongated to tabular euhedral glomero/phenocrysts
Vesicles summary: non-vesicular vesicular (<0.1%)
Groundmass alteration texture summary: Mostly pervasive with grayish brown alteration
Groundmass % alteration summary: from 25% to 30%
Groundmass alteration intensity summary: abundant alteration in pervasively altered pieces
Unit/subunit: 2-1
LITHOLOGY: sparsely to highly phyric basalt flow/sheet flow
Plagioclase comments: Abundance=6.4%, Max size=5.8mm (mode=2.2mm); elongated to tabular euhedral glomero/phenocrysts
Olivine comments: Abundance=1%, Max size=1.4mm (mode=0.7mm); euhedral to equant, partly altered to iddingsite
Vein comments: Average vein density ~ 15 vein/m. Average vein width ~ 0.2mm (1mm maximum). Dark brown to grayish brown halos (~13mm average width)
Vein filling summary: Average: 20% carbonate (partly micritic filling); 40% smectite (occurs also as dark green clay filling); 30% FeOx/iddingsite; 20% zeolite
Vesicles summary: non-vesicular to sparsely vesicular (Av=0.7%: Max=4%; size: 0.1mm to 1mm)
Vesicles filling summary: ~ 40% vesicle filling on average. Generally composite vesicle filling with smectite, FeOOH (+/- iddingsite). Abundant carbonate and zeolite-filled vesicles
Groundmass alteration texture summary: Patchy alteration with brown halos to pervasive
Groundmass % alteration summary: Av=8%; from 1% to 70%
Groundmass alteration intensity summary: slight to moderate, high alteration in pervasively altered and oxidized piece 2R1#1
Alteration comment: Highly altered chilled margin from aphyric basalt from top of Core 9R1 possibly from falling piece in the Hole. Many chilled margins showing high extent of palagonitization (80%) with reddish brown alteration. Dark and brown mixed halos diffusing into the grayish diabase

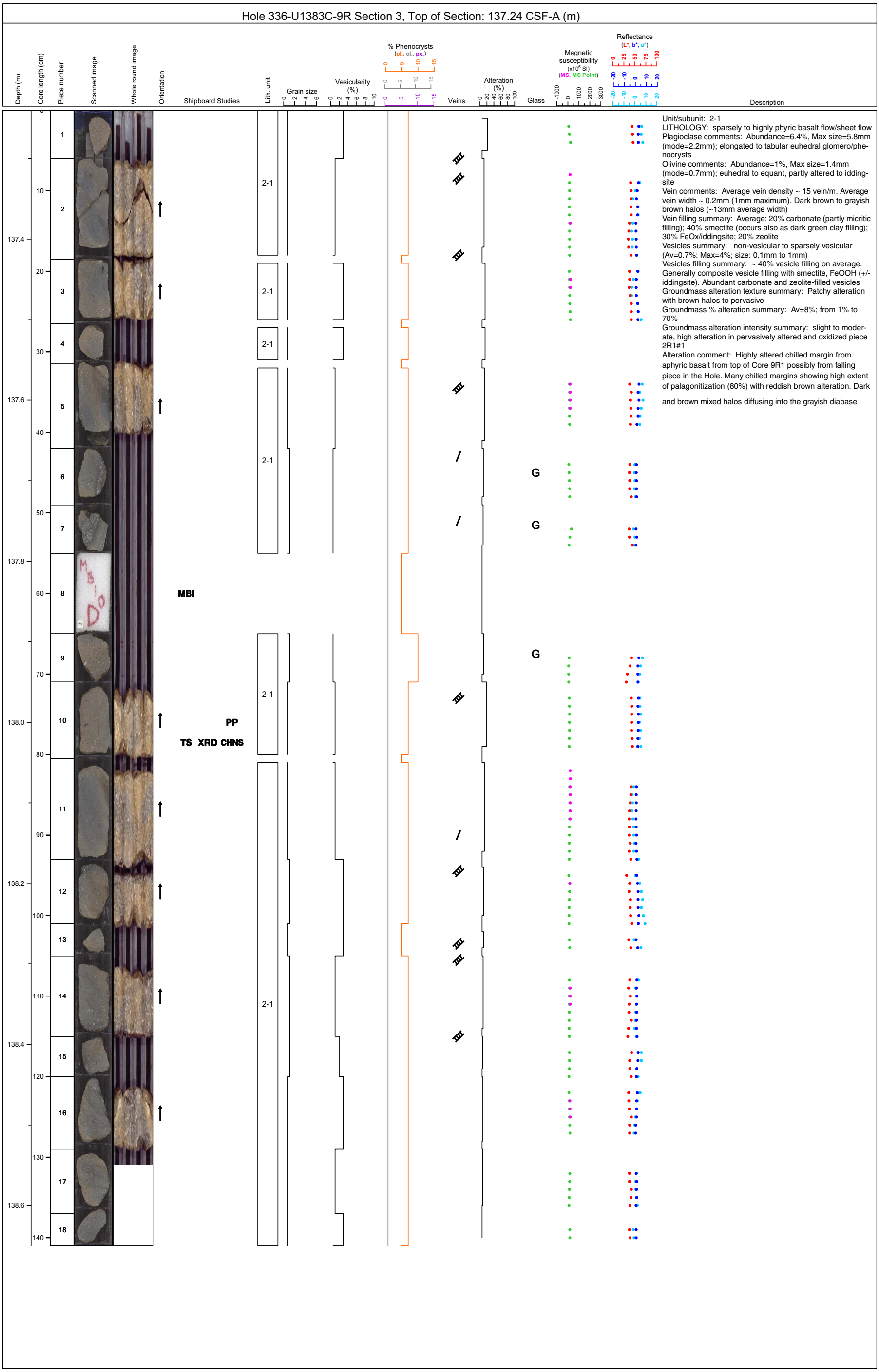
Core Photo


Hole 336-U1383C-9R Section 1, Top of Section: 134.3 CSF-A (m)
Depth (m)
Core length (cm)
Piece number
Scanned image
Whole round image
Orientation
Shipboard Studies
Lith. unit
Grain size
Vesicularity (%)
% Phenocrysts (pl., ol., px.)
Veins
Alteration (%)
Glass
Magnetic susceptibility (x10⁵ SI) (MS, MS Point)
Reflectance (L*, b*, a*)
Description
MBIO A
MBI
2-1
G
Unit/subunit: 2-1
LITHOLOGY: sparsely to highly phyric basalt flow/sheet flow
Plagioclase comments: Abundance=6.4%, Max size=5.8mm (mode=2.2mm); elongated to tabular euhedral glomero/phenocrysts
Olivine comments: Abundance=1%, Max size=1.4mm (mode=0.7mm); euhedral to equant, partly altered to iddingsite
Vein comments: Average vein density ~ 15 vein/m. Average vein width ~ 0.2mm (1mm maximum). Dark brown to grayish brown halos (~13mm average width)
Vein filling summary: Average: 20% carbonate (partly micritic filling); 40% smectite (occurs also as dark green clay filling); 30% FeOx/iddingsite; 20% zeolite
Vesicles summary: non-vesicular to sparsely vesicular (Av=0.7%: Max=4%; size: 0.1mm to 1mm)
Vesicles filling summary: ~ 40% vesicle filling on average. Generally composite vesicle filling with smectite, FeOOH (+/- iddingsite). Abundant carbonate and zeolite-filled vesicles
Groundmass alteration texture summary: Patchy alteration with brown halos to pervasive
Groundmass % alteration summary: Av=8%; from 1% to 70%
Groundmass alteration intensity summary: slight to moderate, high alteration in pervasively altered and oxidized piece 2R1#1
Alteration comment: Highly altered chilled margin from aphyric basalt from top of Core 9R1 possibly from falling piece in the Hole. Many chilled margins showing high extent of palagonitization (80%) with reddish brown alteration. Dark and brown mixed halos diffusing into the grayish diabase

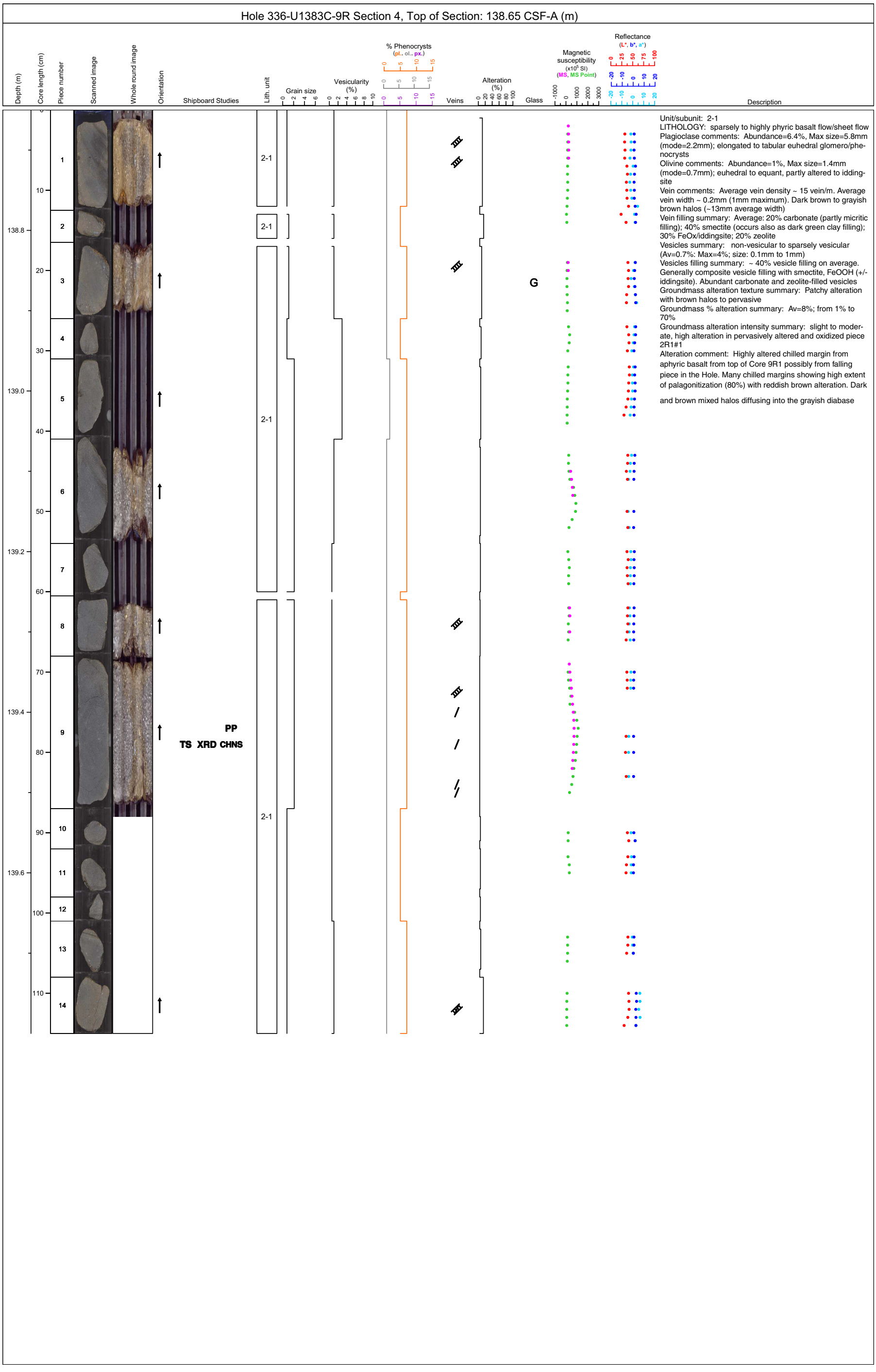
Core Photo


Hole 336-U1383C-9R Section 2, Top of Section: 135.74 CSF-A (m)
Depth (m)
Core length (cm)
Piece number
Scanned image
Whole round image
Orientation
Shipboard Studies
Lith. unit
Grain size
Vesicularity (%)
% Phenocrysts (pl., ol., px.)
Veins
Alteration (%)
Glass
Magnetic susceptibility (x10⁵ SI) (MS, MS Point)
Reflectance (L*, b*, a*)
Description
135.8
136.0
136.2
136.4
136.6
136.8
137.0
137.2
MBI
2-1
Unit/subunit: 2-1
LITHOLOGY: sparsely to highly phyric basalt flow/sheet flow
Plagioclase comments: Abundance=6.4%, Max size=5.8mm (mode=2.2mm); elongated to tabular euhedral glomero/phenocrysts
Olivine comments: Abundance=1%, Max size=1.4mm (mode=0.7mm); euhedral to equant, partly altered to iddingsite
Vein comments: Average vein density ~ 15 vein/m. Average vein width ~ 0.2mm (1mm maximum). Dark brown to grayish brown halos (~13mm average width)
Vein filling summary: Average: 20% carbonate (partly micritic filling); 40% smectite (occurs also as dark green clay filling); 30% FeOx/iddingsite; 20% zeolite
Vesicles summary: non-vesicular to sparsely vesicular (Av=0.7%: Max=4%; size: 0.1mm to 1mm)
Vesicles filling summary: ~ 40% vesicle filling on average. Generally composite vesicle filling with smectite, FeOOH (+/- iddingsite). Abundant carbonate and zeolite-filled vesicles
Groundmass alteration texture summary: Patchy alteration with brown halos to pervasive
Groundmass % alteration summary: Av=8%; from 1% to 70%
Groundmass alteration intensity summary: slight to moderate, high alteration in pervasively altered and oxidized piece 2R1#1
Alteration comment: Highly altered chilled margin from aphyric basalt from top of Core 9R1 possibly from falling piece in the Hole. Many chilled margins showing high extent of palagonitization (80%) with reddish brown alteration. Dark
and brown mixed halos diffusing into the grayish diabase

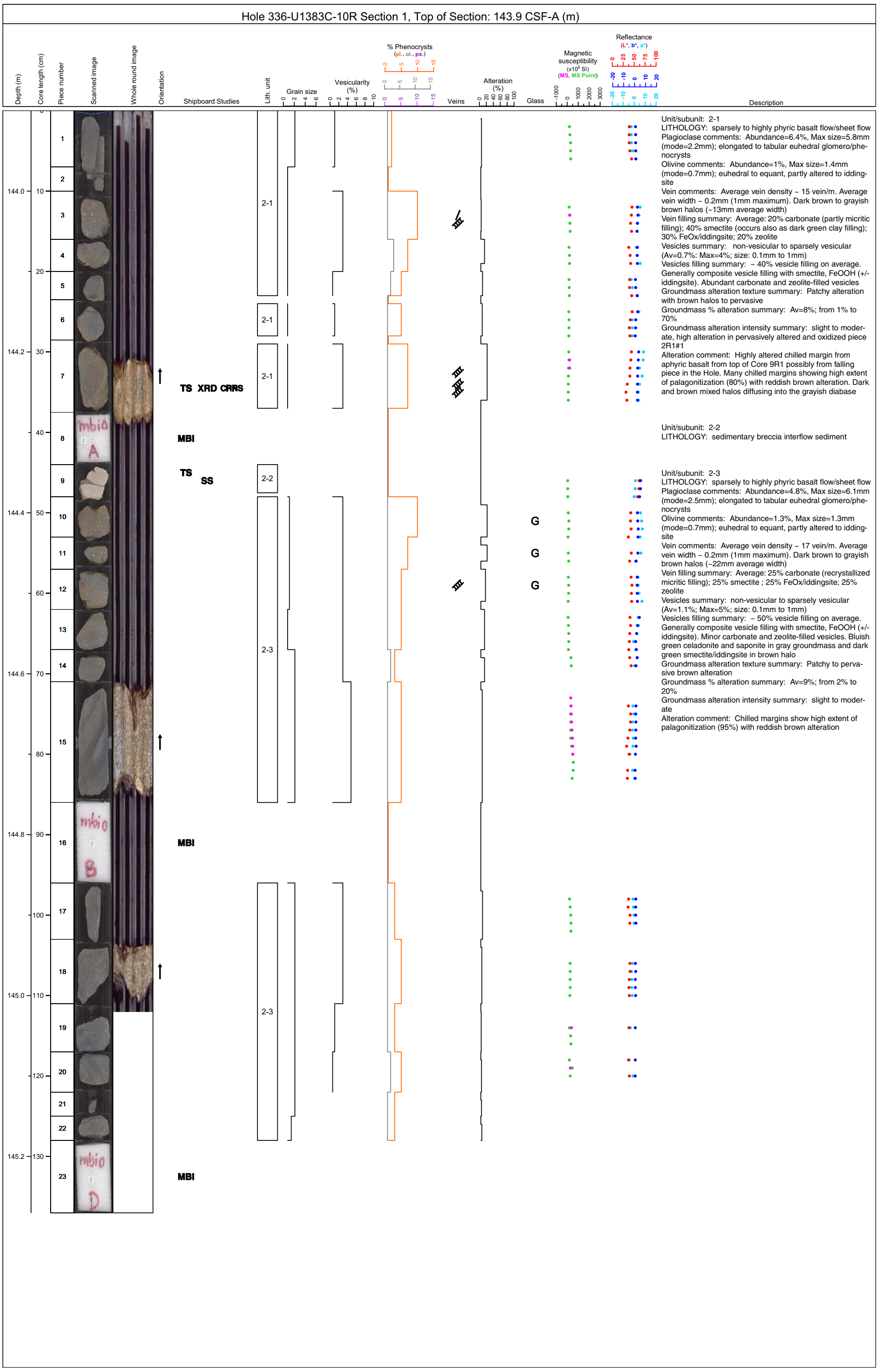
Core Photo


Hole 336-U1383C-9R Section 3, Top of Section: 137.24 CSF-A (m)
Depth (m)
Core length (cm)
Piece number
Scanned image
Whole round image
Orientation
Shipboard Studies
Lith. unit
Grain size
Vesicularity (%)
% Phenocrysts (pl., ol., px.)
Veins
Alteration (%)
Glass
Magnetic susceptibility (x10⁵ SI) (MS, MS Point)
Reflectance (L*, b*, a*)
Description
MBI
PP
TS XRD CHNS
Unit/subunit: 2-1
LITHOLOGY: sparsely to highly phyric basalt flow/sheet flow
Plagioclase comments: Abundance=6.4%, Max size=5.8mm (mode=2.2mm); elongated to tabular euhedral glomero/phenocrysts
Olivine comments: Abundance=1%, Max size=1.4mm (mode=0.7mm); euhedral to equant, partly altered to iddingsite
Vein comments: Average vein density ~ 15 vein/m. Average vein width ~ 0.2mm (1mm maximum). Dark brown to grayish brown halos (~13mm average width)
Vein filling summary: Average: 20% carbonate (partly micritic filling); 40% smectite (occurs also as dark green clay filling); 30% FeOx/iddingsite; 20% zeolite
Vesicles summary: non-vesicular to sparsely vesicular (Av=0.7%: Max=4%; size: 0.1mm to 1mm)
Vesicles filling summary: ~ 40% vesicle filling on average. Generally composite vesicle filling with smectite, FeOOH (+/- iddingsite). Abundant carbonate and zeolite-filled vesicles
Groundmass alteration texture summary: Patchy alteration with brown halos to pervasive
Groundmass % alteration summary: Av=8%; from 1% to 70%
Groundmass alteration intensity summary: slight to moderate, high alteration in pervasively altered and oxidized piece 2R1#1
Alteration comment: Highly altered chilled margin from aphyric basalt from top of Core 9R1 possibly from falling piece in the Hole. Many chilled margins showing high extent of palagonitization (80%) with reddish brown alteration. Dark
and brown mixed halos diffusing into the grayish diabase

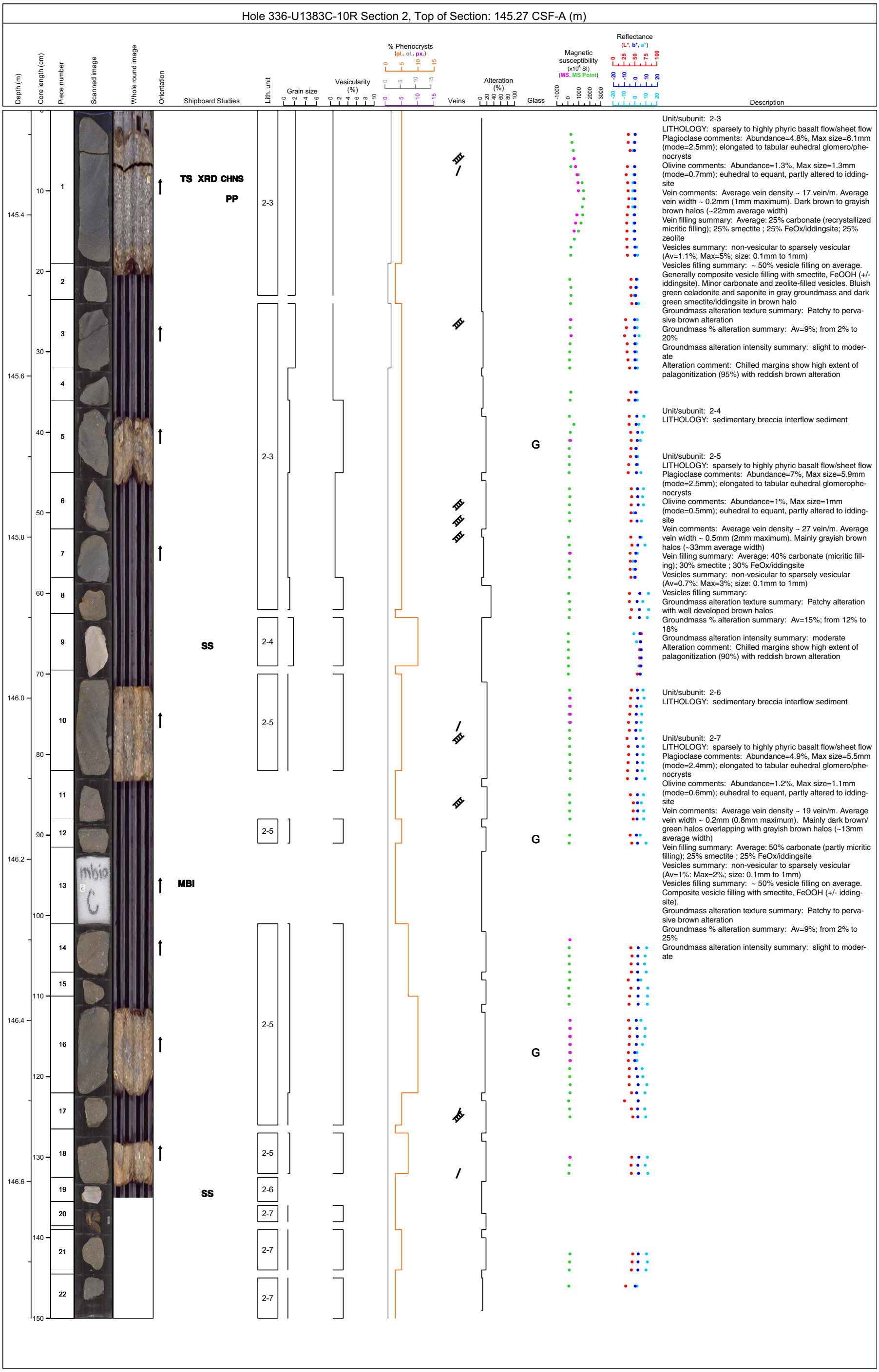
Core Photo


Hole 336-U1383C-9R Section 4, Top of Section: 138.65 CSF-A (m)
Depth (m)
Core length (cm)
Piece number
Scanned image
Whole round image
Orientation
Shipboard Studies
Lith. unit
Grain size
Vesicularity (%)
% Phenocrysts (pl., ol., px.)
Veins
Alteration (%)
Glass
Magnetic susceptibility (x10⁵ SI) (MS, MS Point)
Reflectance (L*, b*, a*)
Description
138.8
139.0
139.2
139.4
139.6
2-1
G
PP
TS XRD CHNS
Unit/subunit: 2-1
LITHOLOGY: sparsely to highly phyric basalt flow/sheet flow
Plagioclase comments: Abundance=6.4%, Max size=5.8mm (mode=2.2mm); elongated to tabular euhedral glomero/phenocrysts
Olivine comments: Abundance=1%, Max size=1.4mm (mode=0.7mm); euhedral to equant, partly altered to iddingsite
Vein comments: Average vein density ~ 15 vein/m. Average vein width ~ 0.2mm (1mm maximum). Dark brown to grayish brown halos (~13mm average width)
Vein filling summary: Average: 20% carbonate (partly micritic filling); 40% smectite (occurs also as dark green clay filling); 30% FeOx/iddingsite; 20% zeolite
Vesicles summary: non-vesicular to sparsely vesicular (Av=0.7%: Max=4%; size: 0.1mm to 1mm)
Vesicles filling summary: ~ 40% vesicle filling on average. Generally composite vesicle filling with smectite, FeOOH (+/- iddingsite). Abundant carbonate and zeolite-filled vesicles
Groundmass alteration texture summary: Patchy alteration with brown halos to pervasive
Groundmass % alteration summary: Av=8%; from 1% to 70%
Groundmass alteration intensity summary: slight to moderate, high alteration in pervasively altered and oxidized piece 2R1#1
Alteration comment: Highly altered chilled margin from aphyric basalt from top of Core 9R1 possibly from falling piece in the Hole. Many chilled margins showing high extent of palagonitization (80%) with reddish brown alteration. Dark
and brown mixed halos diffusing into the grayish diabase

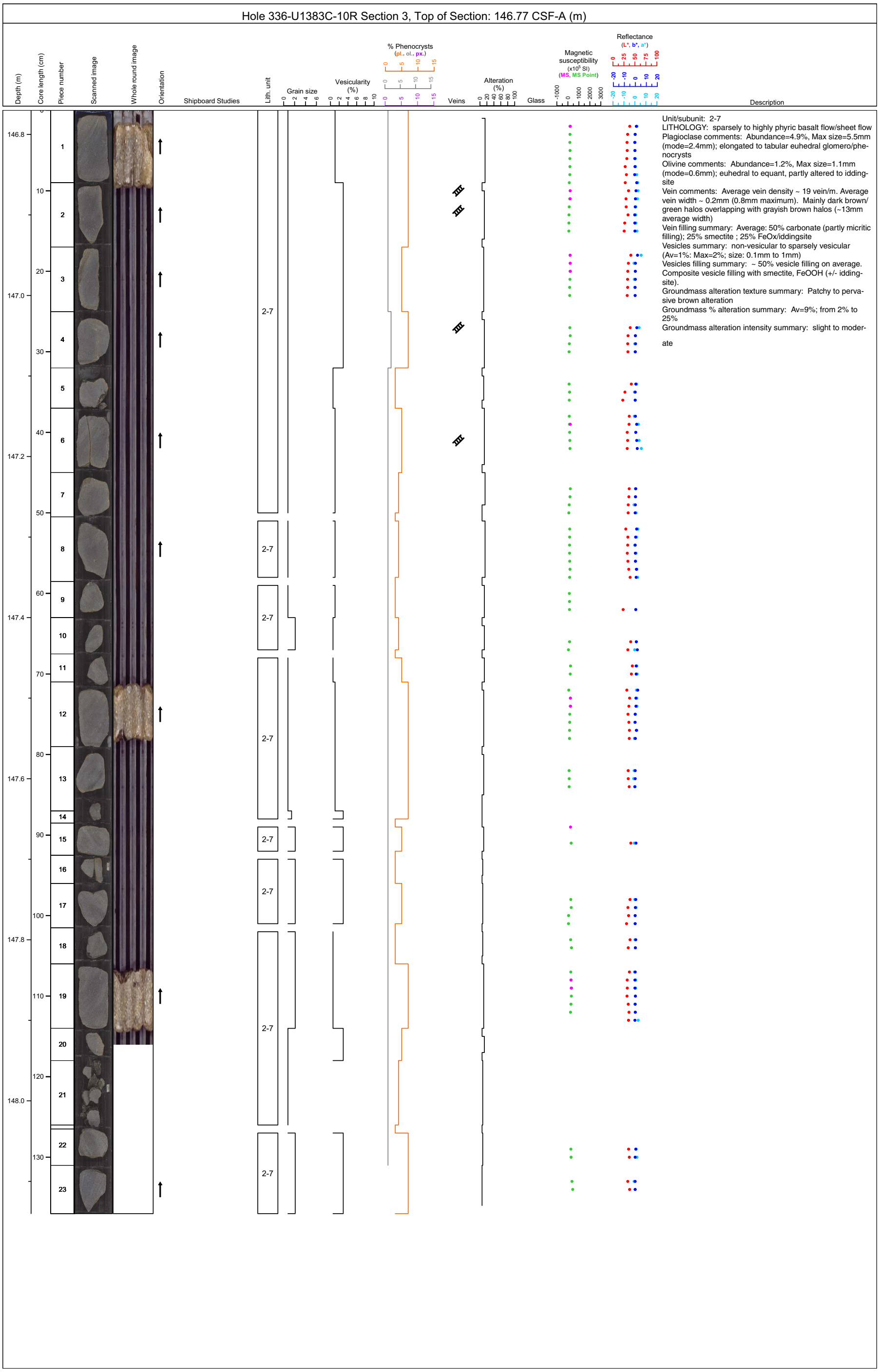
Core Photo


Hole 336-U1383C-10R Section 1, Top of Section: 143.9 CSF-A (m)
Depth (m)
Core length (cm)
Piece number
Scanned image
Whole round image
Orientation
Shipboard Studies
Lith. unit
Grain size
Vesicularity (%)
% Phenocrysts (pl., ol., px.)
Veins
Alteration (%)
Glass
Magnetic susceptibility (x10⁵ SI) (MS, MS Point)
Reflectance (L*, b*, a*)
Description
144.0
144.2
144.4
144.6
144.8
145.0
145.2
TS XRD CRRS
MBI
TS SS
2-1
2-2
2-3
G
Unit/subunit: 2-1
LITHOLOGY: sparsely to highly phyric basalt flow/sheet flow
Plagioclase comments: Abundance=6.4%, Max size=5.8mm (mode=2.2mm); elongated to tabular euhedral glomero/phenocrysts
Olivine comments: Abundance=1%, Max size=1.4mm (mode=0.7mm); euhedral to equant, partly altered to iddingsite
Vein comments: Average vein density ~ 15 vein/m. Average vein width ~ 0.2mm (1mm maximum). Dark brown to grayish brown halos (~13mm average width)
Vein filling summary: Average: 20% carbonate (partly micritic filling); 40% smectite (occurs also as dark green clay filling); 30% FeOx/iddingsite; 20% zeolite
Vesicles summary: non-vesicular to sparsely vesicular (Av=0.7%: Max=4%; size: 0.1mm to 1mm)
Vesicles filling summary: ~ 40% vesicle filling on average. Generally composite vesicle filling with smectite, FeOOH (+/- iddingsite). Abundant carbonate and zeolite-filled vesicles
Groundmass alteration texture summary: Patchy alteration with brown halos to pervasive
Groundmass % alteration summary: Av=8%; from 1% to 70%
Groundmass alteration intensity summary: slight to moderate, high alteration in pervasively altered and oxidized piece 2R1#1
Alteration comment: Highly altered chilled margin from aphyric basalt from top of Core 9R1 possibly from falling piece in the Hole. Many chilled margins showing high extent of palagonitization (80%) with reddish brown alteration. Dark and brown mixed halos diffusing into the grayish diabase
Unit/subunit: 2-2
LITHOLOGY: sedimentary breccia interflow sediment
Unit/subunit: 2-3
LITHOLOGY: sparsely to highly phyric basalt flow/sheet flow
Plagioclase comments: Abundance=4.8%, Max size=6.1mm (mode=2.5mm); elongated to tabular euhedral glomero/phenocrysts
Olivine comments: Abundance=1.3%, Max size=1.3mm (mode=0.7mm); euhedral to equant, partly altered to iddingsite
Vein comments: Average vein density ~ 17 vein/m. Average vein width ~ 0.2mm (1mm maximum). Dark brown to grayish brown halos (~22mm average width)
Vein filling summary: Average: 25% carbonate (recrystallized micritic filling); 25% smectite ; 25% FeOx/iddingsite; 25% zeolite
Vesicles summary: non-vesicular to sparsely vesicular (Av=1.1%; Max=5%; size: 0.1mm to 1mm)
Vesicles filling summary: ~ 50% vesicle filling on average. Generally composite vesicle filling with smectite, FeOOH (+/- iddingsite). Minor carbonate and zeolite-filled vesicles. Bluish green celadonite and saponite in gray groundmass and dark green smectite/iddingsite in brown halo
Groundmass alteration texture summary: Patchy to pervasive brown alteration
Groundmass % alteration summary: Av=9%; from 2% to 20%
Groundmass alteration intensity summary: slight to moderate
Alteration comment: Chilled margins show high extent of palagonitization (95%) with reddish brown alteration

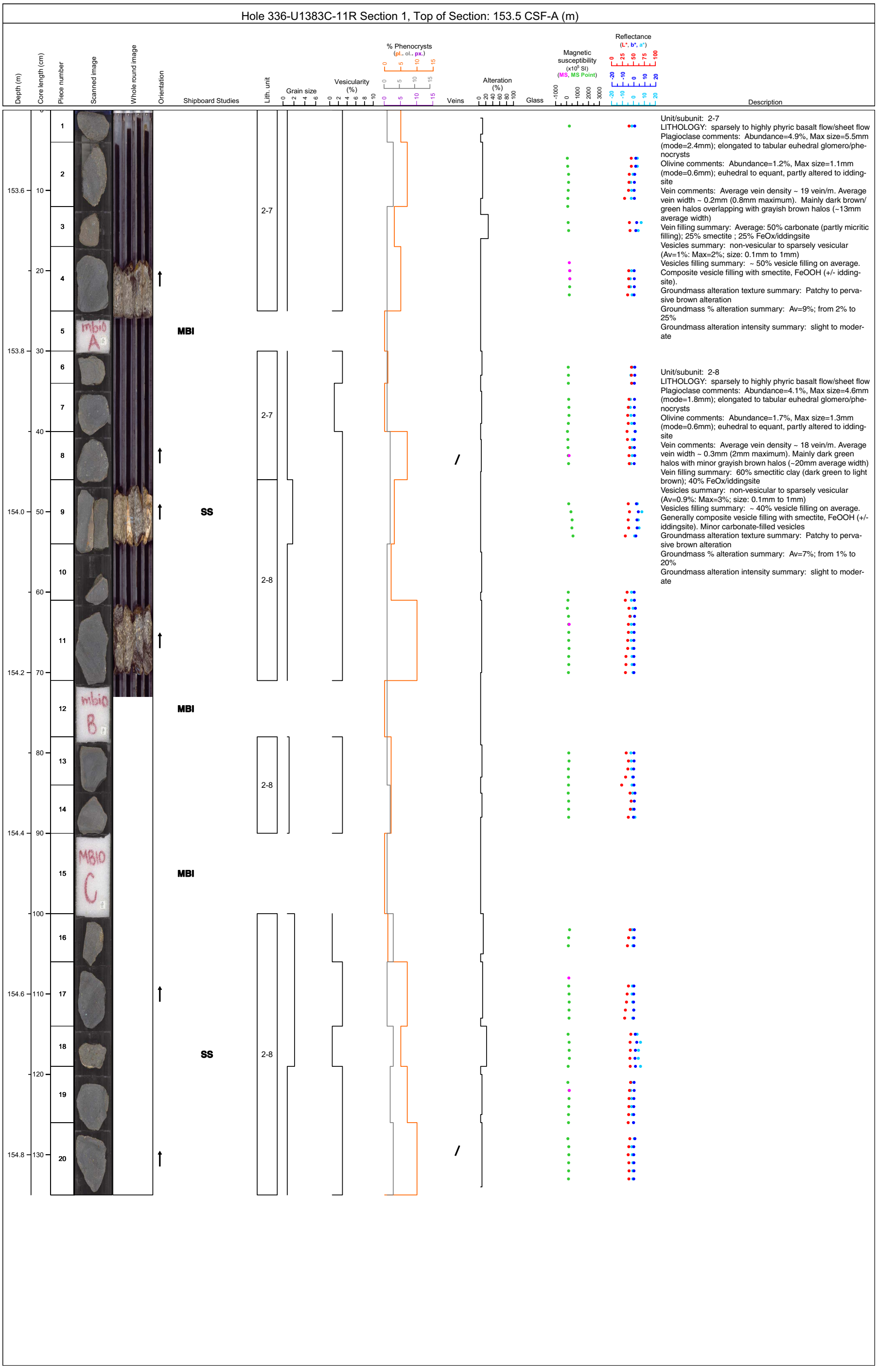
Core Photo


Hole 336-U1383C-10R Section 2, Top of Section: 145.27 CSF-A (m)
Depth (m)
Core length (cm)
Piece number
Scanned image
Whole round image
Orientation
Shipboard Studies
Lith. unit
Grain size
Vesicularity (%)
% Phenocrysts (pl., ol., px.)
Veins
Alteration (%)
Glass
Magnetic susceptibility (x10⁵ SI) (MS, MS Point)
Reflectance (L*, b*, a*)
Description
TS XRD CHNS
PP
SS
MBI
SS
2-3
2-4
2-5
2-5
2-5
2-6
2-7
2-7
2-7
G
G
G
Unit/subunit: 2-3
LITHOLOGY: sparsely to highly phyric basalt flow/sheet flow
Plagioclase comments: Abundance=4.8%, Max size=6.1mm (mode=2.5mm); elongated to tabular euhedral glomero/phenocrysts
Olivine comments: Abundance=1.3%, Max size=1.3mm (mode=0.7mm); euhedral to equant, partly altered to iddingsite
Vein comments: Average vein density ~ 17 vein/m. Average vein width ~ 0.2mm (1mm maximum). Dark brown to grayish brown halos (~22mm average width)
Vein filling summary: Average: 25% carbonate (recrystallized micritic filling); 25% smectite ; 25% FeOx/iddingsite; 25% zeolite
Vesicles summary: non-vesicular to sparsely vesicular (Av=1.1%; Max=5%; size: 0.1mm to 1mm)
Vesicles filling summary: ~ 50% vesicle filling on average. Generally composite vesicle filling with smectite, FeOOH (+/- iddingsite). Minor carbonate and zeolite-filled vesicles. Bluish green celadonite and saponite in gray groundmass and dark green smectite/iddingsite in brown halo
Groundmass alteration texture summary: Patchy to pervasive brown alteration
Groundmass % alteration summary: Av=9%; from 2% to 20%
Groundmass alteration intensity summary: slight to moderate
Alteration comment: Chilled margins show high extent of palagonitization (95%) with reddish brown alteration
Unit/subunit: 2-4
LITHOLOGY: sedimentary breccia interflow sediment
Unit/subunit: 2-5
LITHOLOGY: sparsely to highly phyric basalt flow/sheet flow
Plagioclase comments: Abundance=7%, Max size=5.9mm (mode=2.5mm); elongated to tabular euhedral glomerophenocrysts
Olivine comments: Abundance=1%, Max size=1mm (mode=0.5mm); euhedral to equant, partly altered to iddingsite
Vein comments: Average vein density ~ 27 vein/m. Average vein width ~ 0.5mm (2mm maximum). Mainly grayish brown halos (~33mm average width)
Vein filling summary: Average: 40% carbonate (micritic filling); 30% smectite ; 30% FeOx/iddingsite
Vesicles summary: non-vesicular to sparsely vesicular (Av=0.7%: Max=3%; size: 0.1mm to 1mm)
Vesicles filling summary:
Groundmass alteration texture summary: Patchy alteration with well developed brown halos
Groundmass % alteration summary: Av=15%; from 12% to 18%
Groundmass alteration intensity summary: moderate
Alteration comment: Chilled margins show high extent of palagonitization (90%) with reddish brown alteration
Unit/subunit: 2-6
LITHOLOGY: sedimentary breccia interflow sediment
Unit/subunit: 2-7
LITHOLOGY: sparsely to highly phyric basalt flow/sheet flow
Plagioclase comments: Abundance=4.9%, Max size=5.5mm (mode=2.4mm); elongated to tabular euhedral glomero/phenocrysts
Olivine comments: Abundance=1.2%, Max size=1.1mm (mode=0.6mm); euhedral to equant, partly altered to iddingsite
Vein comments: Average vein density ~ 19 vein/m. Average vein width ~ 0.2mm (0.8mm maximum). Mainly dark brown/green halos overlapping with grayish brown halos (~13mm average width)
Vein filling summary: Average: 50% carbonate (partly micritic filling); 25% smectite ; 25% FeOx/iddingsite
Vesicles summary: non-vesicular to sparsely vesicular (Av=1%: Max=2%; size: 0.1mm to 1mm)
Vesicles filling summary: ~ 50% vesicle filling on average. Composite vesicle filling with smectite, FeOOH (+/- iddingsite).
Groundmass alteration texture summary: Patchy to pervasive brown alteration
Groundmass % alteration summary: Av=9%; from 2% to 25%
Groundmass alteration intensity summary: slight to moderate

Core Photo

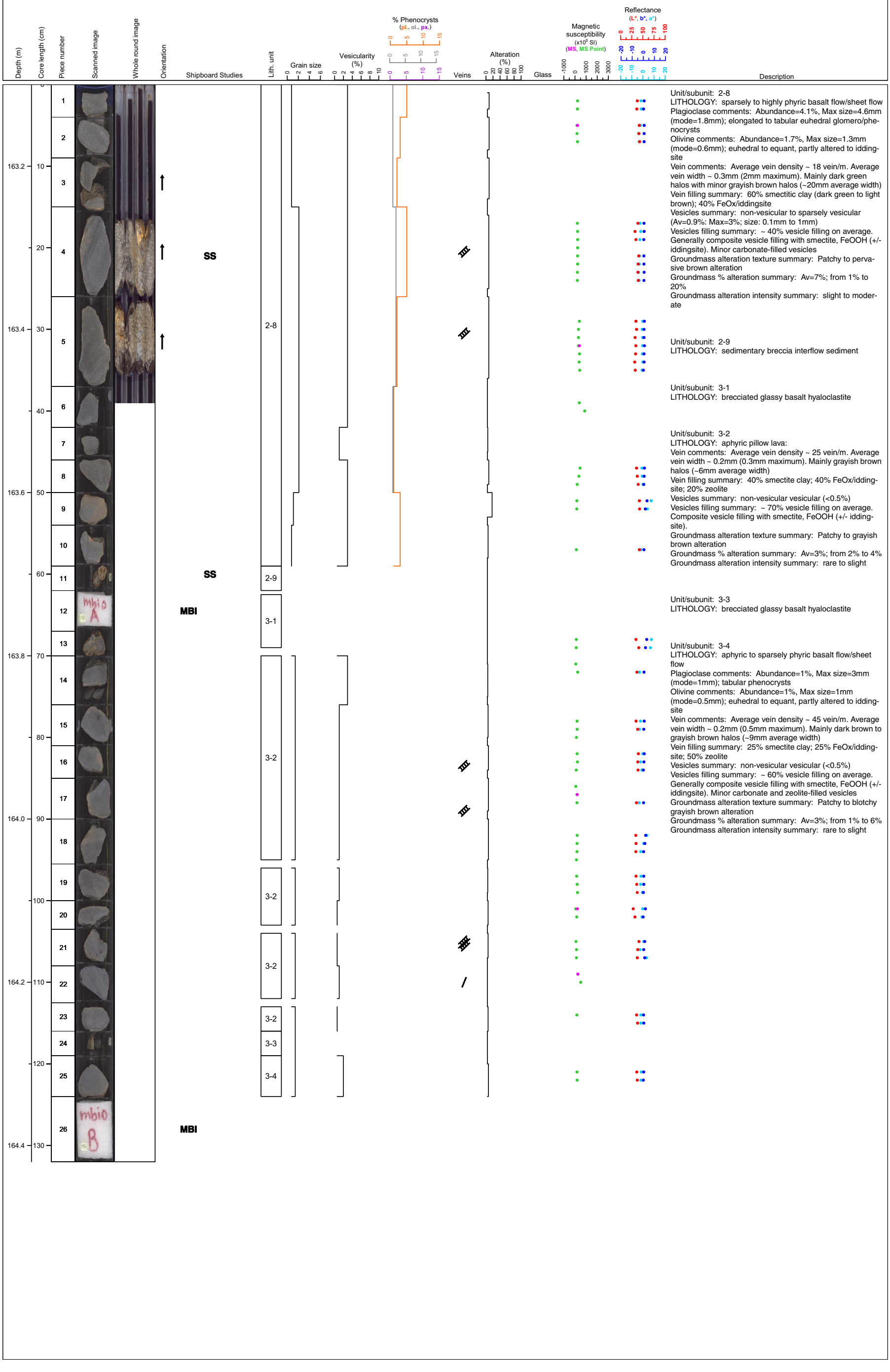

Hole 336-U1383C-10R Section 3, Top of Section: 146.77 CSF-A (m)
Depth (m)
Core length (cm)
Piece number
Scanned image
Whole round image
Orientation
Shipboard Studies
Lith. unit
Grain size
Vesicularity (%)
% Phenocrysts (pl., ol., px.)
Veins
Alteration (%)
Glass
Magnetic susceptibility (x10⁵ SI) (MS, MS Point)
Reflectance (L*, b*, a*)
Description
146.8
147.0
147.2
147.4
147.6
147.8
148.0
2-7
Unit/subunit: 2-7
LITHOLOGY: sparsely to highly phyric basalt flow/sheet flow
Plagioclase comments: Abundance=4.9%, Max size=5.5mm (mode=2.4mm); elongated to tabular euhedral glomero/phenocrysts
Olivine comments: Abundance=1.2%, Max size=1.1mm (mode=0.6mm); euhedral to equant, partly altered to iddingsite
Vein comments: Average vein density ~ 19 vein/m. Average vein width ~ 0.2mm (0.8mm maximum). Mainly dark brown/green halos overlapping with grayish brown halos (~13mm average width)
Vein filling summary: Average: 50% carbonate (partly micritic filling); 25% smectite ; 25% FeOx/iddingsite
Vesicles summary: non-vesicular to sparsely vesicular (Av=1%: Max=2%; size: 0.1mm to 1mm)
Vesicles filling summary: ~ 50% vesicle filling on average. Composite vesicle filling with smectite, FeOOH (+/- iddingsite).
Groundmass alteration texture summary: Patchy to pervasive brown alteration
Groundmass % alteration summary: Av=9%; from 2% to 25%
Groundmass alteration intensity summary: slight to moderate

Core Photo

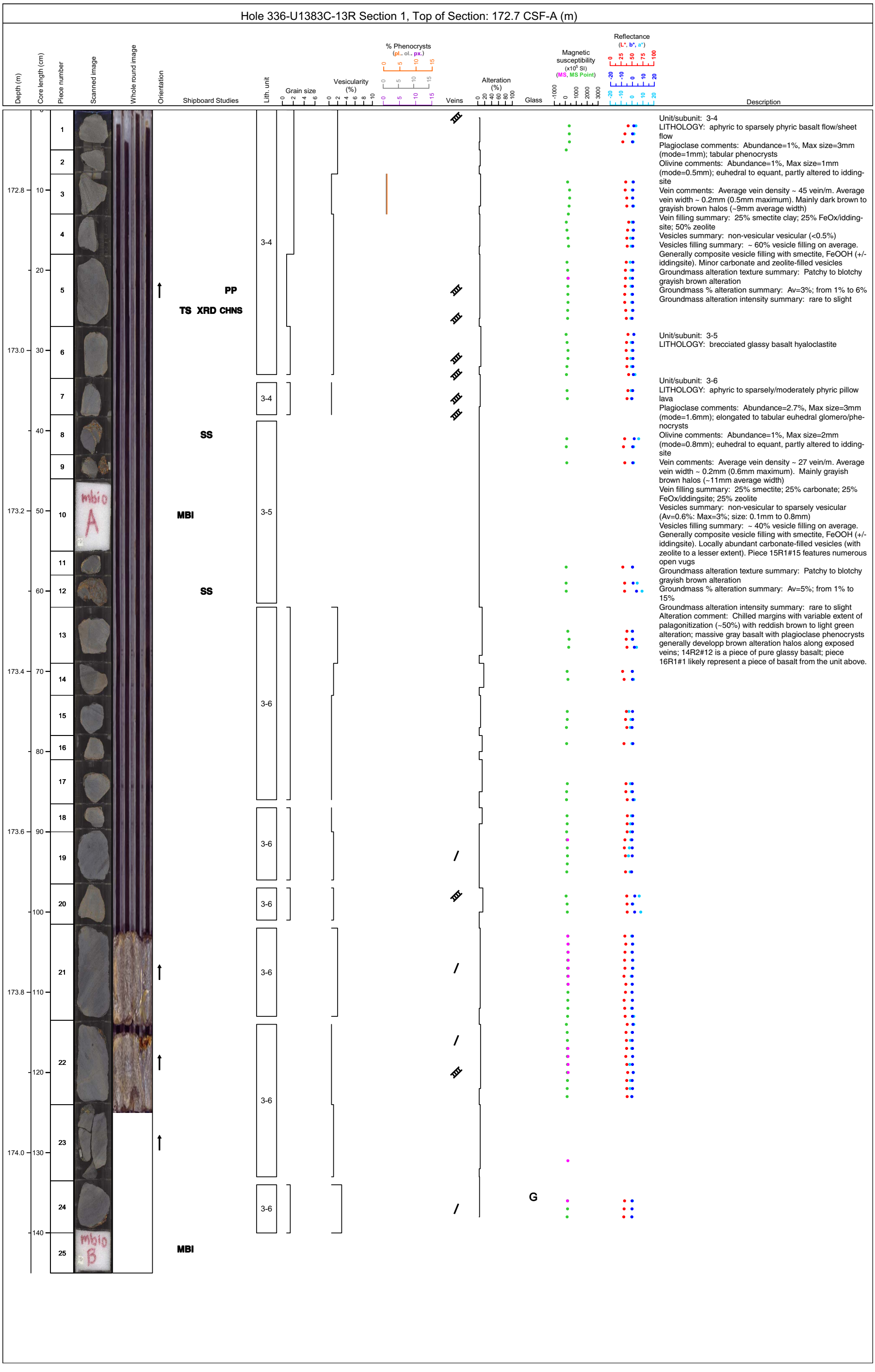

Hole 336-U1383C-11R Section 1, Top of Section: 153.5 CSF-A (m)
Depth (m)
Core length (cm)
Piece number
Scanned image
Whole round image
Orientation
Shipboard Studies
Lith. unit
Grain size
Vesicularity (%)
% Phenocrysts (pl., ol., px.)
Veins
Alteration (%)
Glass
Magnetic susceptibility (x10⁵ SI) (MS, MS Point)
Reflectance (L*, b*, a*)
Description
153.6
153.8
154.0
154.2
154.4
154.6
154.8
MBI
SS
2-7
2-8
Unit/subunit: 2-7
LITHOLOGY: sparsely to highly phyric basalt flow/sheet flow
Plagioclase comments: Abundance=4.9%, Max size=5.5mm (mode=2.4mm); elongated to tabular euhedral glomero/phenocrysts
Olivine comments: Abundance=1.2%, Max size=1.1mm (mode=0.6mm); euhedral to equant, partly altered to iddingsite
Vein comments: Average vein density ~ 19 vein/m. Average vein width ~ 0.2mm (0.8mm maximum). Mainly dark brown/green halos overlapping with grayish brown halos (~13mm average width)
Vein filling summary: Average: 50% carbonate (partly micritic filling); 25% smectite ; 25% FeOx/iddingsite
Vesicles summary: non-vesicular to sparsely vesicular (Av=1%: Max=2%; size: 0.1mm to 1mm)
Vesicles filling summary: ~ 50% vesicle filling on average. Composite vesicle filling with smectite, FeOOH (+/- iddingsite).
Groundmass alteration texture summary: Patchy to pervasive brown alteration
Groundmass % alteration summary: Av=9%; from 2% to 25%
Groundmass alteration intensity summary: slight to moderate
Unit/subunit: 2-8
LITHOLOGY: sparsely to highly phyric basalt flow/sheet flow
Plagioclase comments: Abundance=4.1%, Max size=4.6mm (mode=1.8mm); elongated to tabular euhedral glomero/phenocrysts
Olivine comments: Abundance=1.7%, Max size=1.3mm (mode=0.6mm); euhedral to equant, partly altered to iddingsite
Vein comments: Average vein density ~ 18 vein/m. Average vein width ~ 0.3mm (2mm maximum). Mainly dark green halos with minor grayish brown halos (~20mm average width)
Vein filling summary: 60% smectitic clay (dark green to light brown); 40% FeOx/iddingsite
Vesicles summary: non-vesicular to sparsely vesicular (Av=0.9%: Max=3%; size: 0.1mm to 1mm)
Vesicles filling summary: ~ 40% vesicle filling on average. Generally composite vesicle filling with smectite, FeOOH (+/- iddingsite). Minor carbonate-filled vesicles
Groundmass alteration texture summary: Patchy to pervasive brown alteration
Groundmass % alteration summary: Av=7%; from 1% to 20%
Groundmass alteration intensity summary: slight to moderate

Core Photo

Hole 336-U1383C-12R Section 1, Top of Section: 163.1 CSF-A (m)

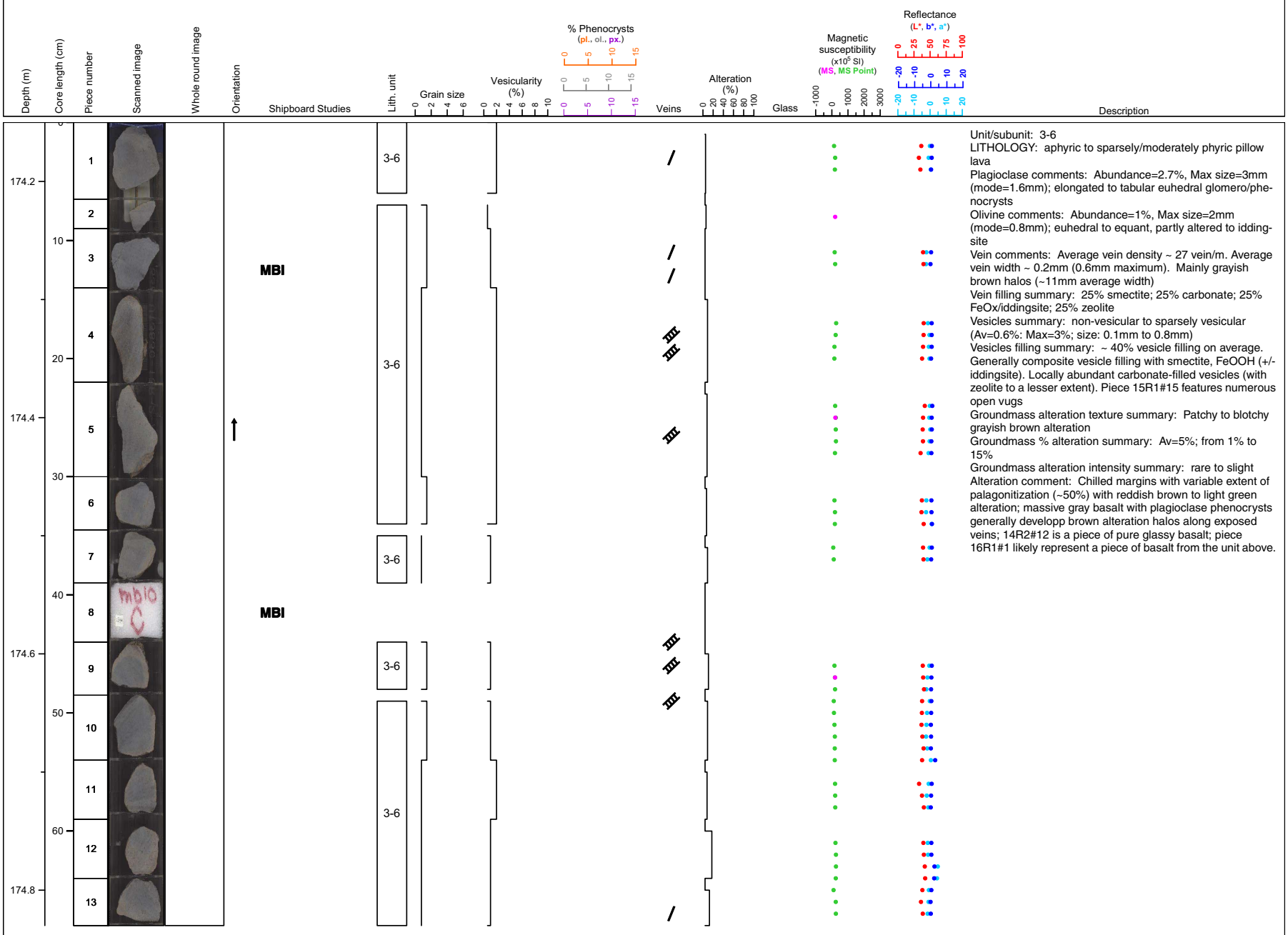


Core Photo


Hole 336-U1383C-13R Section 1, Top of Section: 172.7 CSF-A (m)
Depth (m)
Core length (cm)
Piece number
Scanned image
Whole round image
Orientation
Shipboard Studies
Lith. unit
Grain size
Vesicularity (%)
% Phenocrysts (pl., ol., px.)
Veins
Alteration (%)
Glass
Magnetic susceptibility (x10⁻⁵ SI) (MS, MS Point)
Reflectance (L*, b*, a*)
Description
PP
TS XRD CHNS
SS
MBI
3-4
3-5
3-6
G
Unit/subunit: 3-4
LITHOLOGY: aphyric to sparsely phyric basalt flow/sheet flow
Plagioclase comments: Abundance=1%, Max size=3mm (mode=1mm); tabular phenocrysts
Olivine comments: Abundance=1%, Max size=1mm (mode=0.5mm); euhedral to equant, partly altered to idding-site
Vein comments: Average vein density ~ 45 vein/m. Average vein width ~ 0.2mm (0.5mm maximum). Mainly dark brown to grayish brown halos (~9mm average width)
Vein filling summary: 25% smectite clay; 25% FeOx/idding-site; 50% zeolite
Vesicles summary: non-vesicular vesicular (<0.5%)
Vesicles filling summary: ~ 60% vesicle filling on average. Generally composite vesicle filling with smectite, FeOOH (+/- iddingsite). Minor carbonate and zeolite-filled vesicles
Groundmass alteration texture summary: Patchy to blotchy grayish brown alteration
Groundmass % alteration summary: Av=3%; from 1% to 6%
Groundmass alteration intensity summary: rare to slight
Unit/subunit: 3-5
LITHOLOGY: brecciated glassy basalt hyaloclastite
Unit/subunit: 3-6
LITHOLOGY: aphyric to sparsely/moderately phyric pillow lava
Plagioclase comments: Abundance=2.7%, Max size=3mm (mode=1.6mm); elongated to tabular euhedral glomero/phe-nocrysts
Olivine comments: Abundance=1%, Max size=2mm (mode=0.8mm); euhedral to equant, partly altered to idding-site
Vein comments: Average vein density ~ 27 vein/m. Average vein width ~ 0.2mm (0.6mm maximum). Mainly grayish brown halos (~11mm average width)
Vein filling summary: 25% smectite; 25% carbonate; 25% FeOx/iddingsite; 25% zeolite
Vesicles summary: non-vesicular to sparsely vesicular (Av=0.6%: Max=3%; size: 0.1mm to 0.8mm)
Vesicles filling summary: ~ 40% vesicle filling on average. Generally composite vesicle filling with smectite, FeOOH (+/- iddingsite). Locally abundant carbonate-filled vesicles (with zeolite to a lesser extent). Piece 15R1#15 features numerous open vugs
Groundmass alteration texture summary: Patchy to blotchy grayish brown alteration
Groundmass % alteration summary: Av=5%; from 1% to 15%
Groundmass alteration intensity summary: rare to slight
Alteration comment: Chilled margins with variable extent of palagonitization (~50%) with reddish brown to light green alteration; massive gray basalt with plagioclase phenocrysts generally developp brown alteration halos along exposed veins; 14R2#12 is a piece of pure glassy basalt; piece 16R1#1 likely represent a piece of basalt from the unit above.

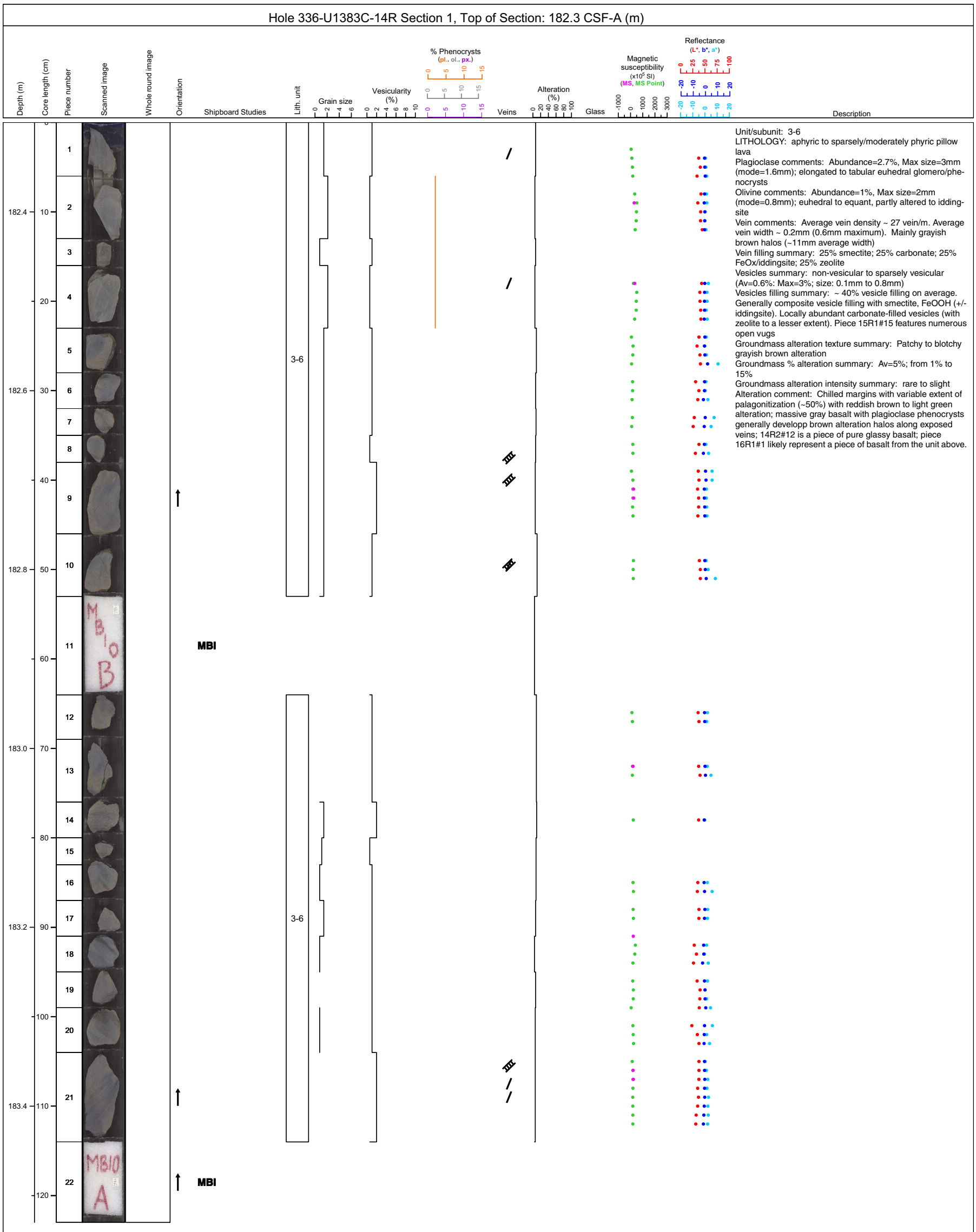
Core Photo

Hole 336-U1383C-13R Section 2, Top of Section: 174.15 CSF-A (m)



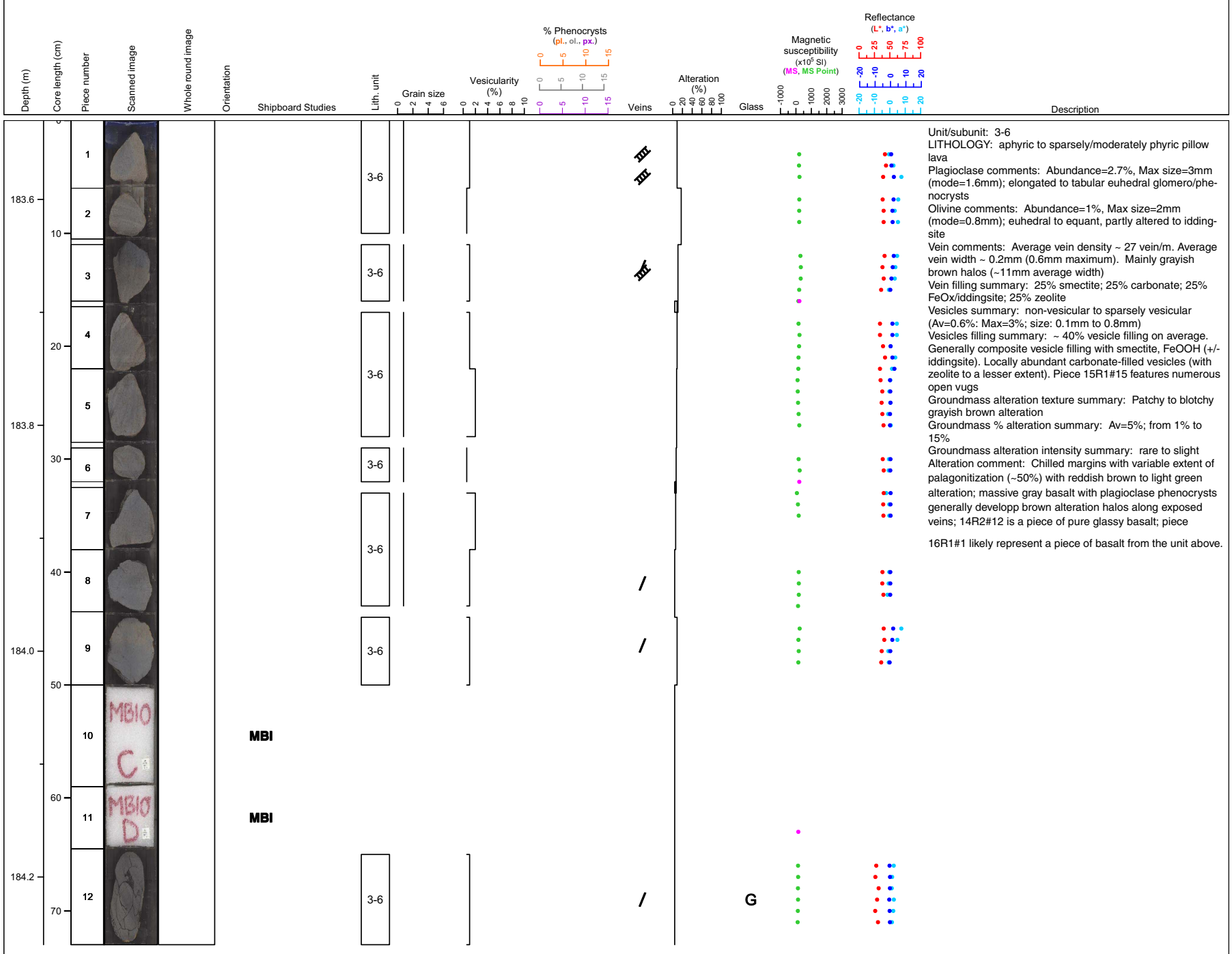
Unit/subunit: 3-6
LITHOLOGY: aphyric to sparsely/moderately phyric pillow lava
Plagioclase comments: Abundance=2.7%, Max size=3mm (mode=1.6mm); elongated to tabular euhedral glomero/phenocrysts
Olivine comments: Abundance=1%, Max size=2mm (mode=0.8mm); euhedral to equant, partly altered to iddingsite
Vein comments: Average vein density ~ 27 vein/m. Average vein width ~ 0.2mm (0.6mm maximum). Mainly grayish brown halos (~11mm average width)
Vein filling summary: 25% smectite; 25% carbonate; 25% FeOx/iddingsite; 25% zeolite
Vesicles summary: non-vesicular to sparsely vesicular (Av=0.6%: Max=3%; size: 0.1mm to 0.8mm)
Vesicles filling summary: ~ 40% vesicle filling on average. Generally composite vesicle filling with smectite, FeOOH (+/- iddingsite). Locally abundant carbonate-filled vesicles (with zeolite to a lesser extent). Piece 15R1#15 features numerous open vugs
Groundmass alteration texture summary: Patchy to blotchy grayish brown alteration
Groundmass % alteration summary: Av=5%; from 1% to 15%
Groundmass alteration intensity summary: rare to slight
Alteration comment: Chilled margins with variable extent of palagonitization (~50%) with reddish brown to light green alteration; massive gray basalt with plagioclase phenocrysts generally developp brown alteration halos along exposed veins; 14R2#12 is a piece of pure glassy basalt; piece 16R1#1 likely represent a piece of basalt from the unit above.

Core Photo


Hole 336-U1383C-14R Section 1, Top of Section: 182.3 CSF-A (m)
Depth (m)
Core length (cm)
Piece number
Scanned image
Whole round image
Orientation
Shipboard Studies
Lith. unit
Grain size
Vesicularity (%)
% Phenocrysts (pl., ol., px.)
Veins
Alteration (%)
Glass
Magnetic susceptibility (x10⁵ SI) (MS, MS Point)
Reflectance (L*, b*, a*)
Description
182.4
182.6
182.8
183.0
183.2
183.4
3-6
MBI
Unit/subunit: 3-6
LITHOLOGY: aphyric to sparsely/moderately phyric pillow lava
Plagioclase comments: Abundance=2.7%, Max size=3mm (mode=1.6mm); elongated to tabular euhedral glomero/phenocrysts
Olivine comments: Abundance=1%, Max size=2mm (mode=0.8mm); euhedral to equant, partly altered to iddingsite
Vein comments: Average vein density ~ 27 vein/m. Average vein width ~ 0.2mm (0.6mm maximum). Mainly grayish brown halos (~11mm average width)
Vein filling summary: 25% smectite; 25% carbonate; 25% FeOx/iddingsite; 25% zeolite
Vesicles summary: non-vesicular to sparsely vesicular (Av=0.6%: Max=3%; size: 0.1mm to 0.8mm)
Vesicles filling summary: ~ 40% vesicle filling on average. Generally composite vesicle filling with smectite, FeOOH (+/- iddingsite). Locally abundant carbonate-filled vesicles (with zeolite to a lesser extent). Piece 15R1#15 features numerous open vugs
Groundmass alteration texture summary: Patchy to blotchy grayish brown alteration
Groundmass % alteration summary: Av=5%; from 1% to 15%
Groundmass alteration intensity summary: rare to slight
Alteration comment: Chilled margins with variable extent of palagonitization (~50%) with reddish brown to light green alteration; massive gray basalt with plagioclase phenocrysts generally developp brown alteration halos along exposed veins; 14R2#12 is a piece of pure glassy basalt; piece 16R1#1 likely represent a piece of basalt from the unit above.

Core Photo

Hole 336-U1383C-14R Section 2, Top of Section: 183.53 CSF-A (m)

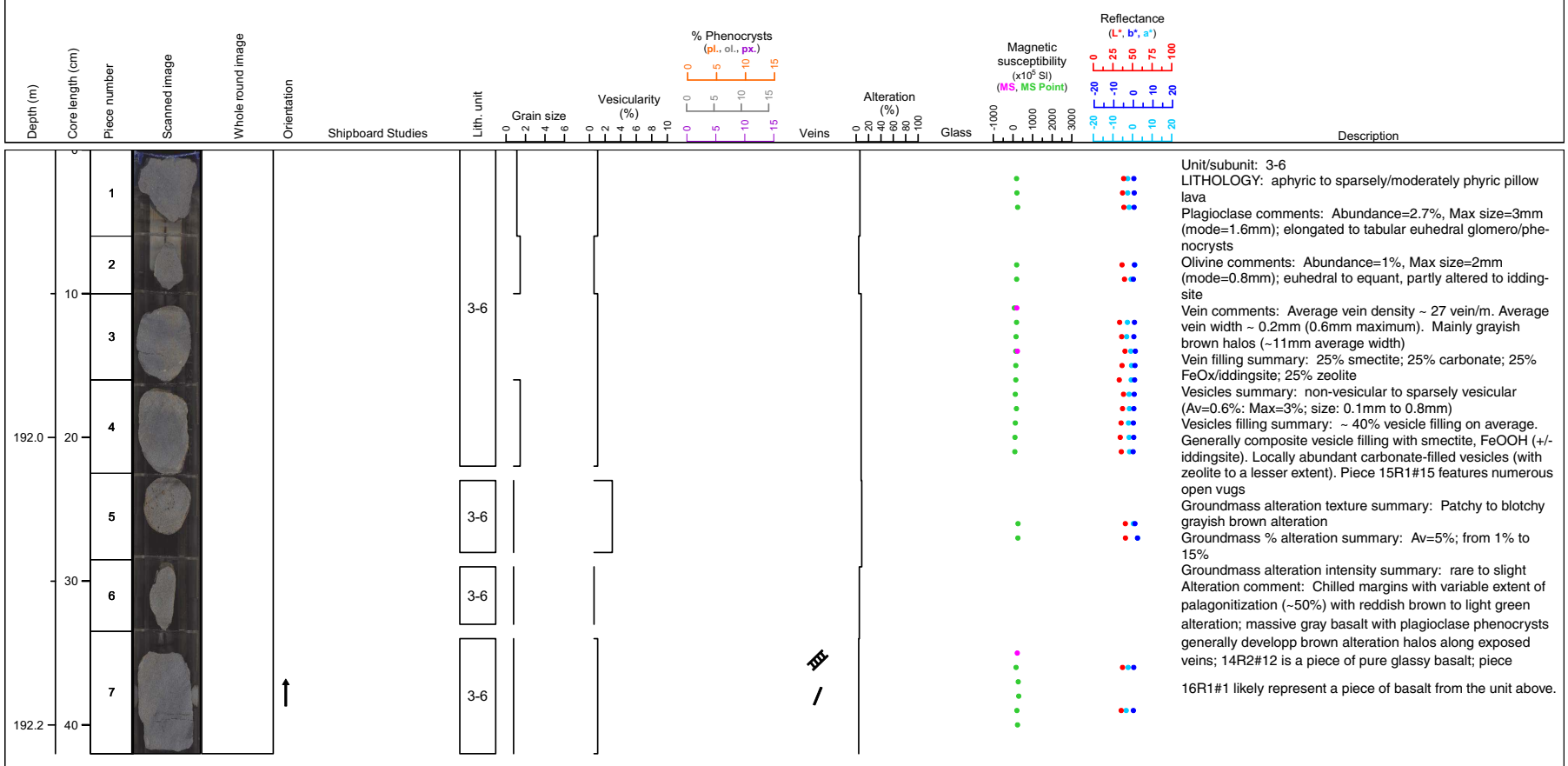


Unit/subunit: 3-6
LITHOLOGY: aphyric to sparsely/moderately phyric pillow lava
Plagioclase comments: Abundance=2.7%, Max size=3mm (mode=1.6mm); elongated to tabular euhedral glomero/phenocrysts
Olivine comments: Abundance=1%, Max size=2mm (mode=0.8mm); euhedral to equant, partly altered to iddingsite
Vein comments: Average vein density ~ 27 vein/m. Average vein width ~ 0.2mm (0.6mm maximum). Mainly grayish brown halos (~11mm average width)
Vein filling summary: 25% smectite; 25% carbonate; 25% FeOx/iddingsite; 25% zeolite
Vesicles summary: non-vesicular to sparsely vesicular (Av=0.6%: Max=3%; size: 0.1mm to 0.8mm)
Vesicles filling summary: ~ 40% vesicle filling on average. Generally composite vesicle filling with smectite, FeOOH (+/- iddingsite). Locally abundant carbonate-filled vesicles (with zeolite to a lesser extent). Piece 15R1#15 features numerous open vugs
Groundmass alteration texture summary: Patchy to blotchy grayish brown alteration
Groundmass % alteration summary: Av=5%; from 1% to 15%
Groundmass alteration intensity summary: rare to slight
Alteration comment: Chilled margins with variable extent of palagonitization (~50%) with reddish brown to light green alteration; massive gray basalt with plagioclase phenocrysts generally developp brown alteration halos along exposed veins; 14R2#12 is a piece of pure glassy basalt; piece

16R1#1 likely represent a piece of basalt from the unit above.

Core Photo

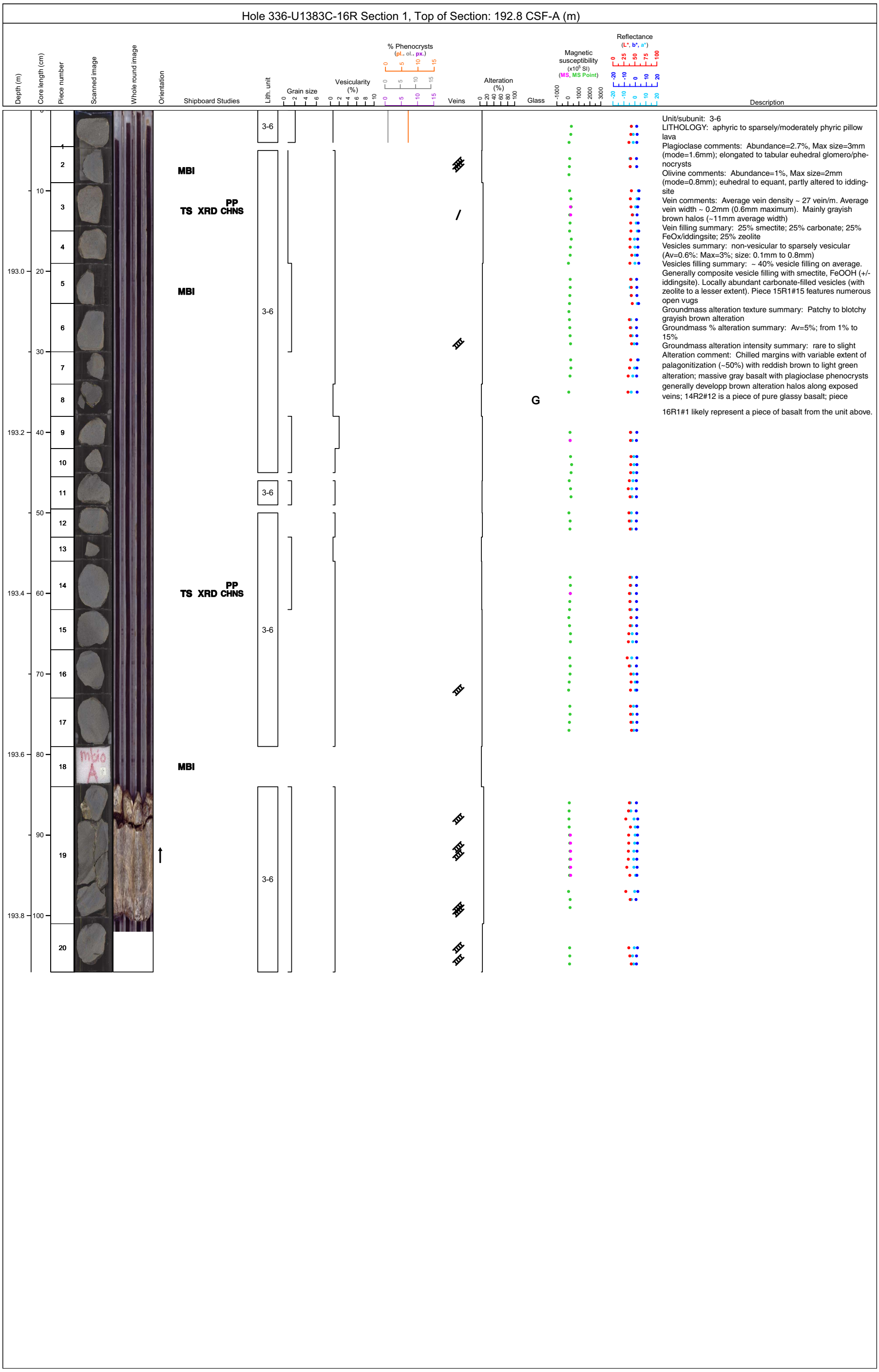
Hole 336-U1383C-15R Section 1, Top of Section: 191.8 CSF-A (m)



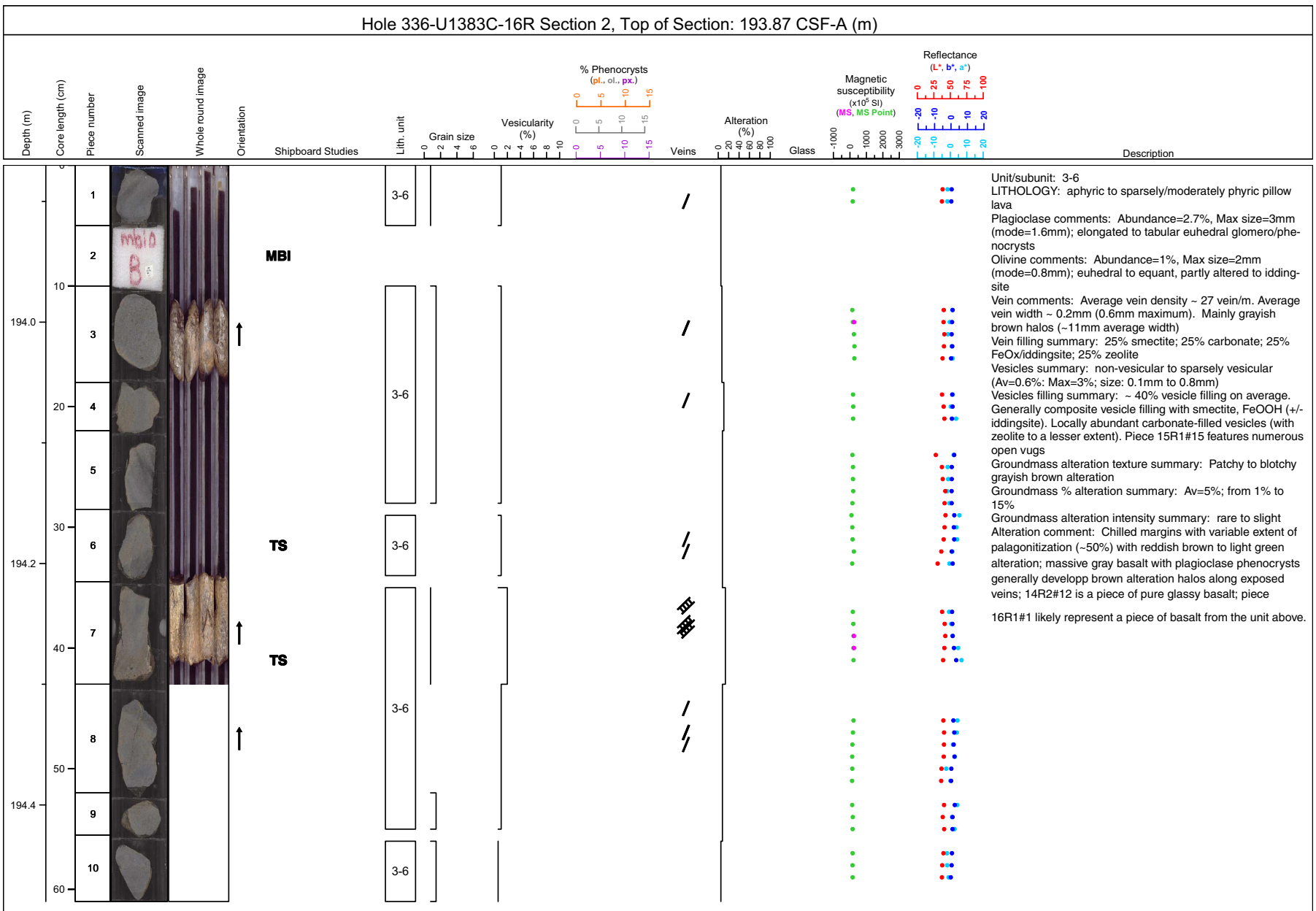
Unit/subunit: 3-6
LITHOLOGY: aphyric to sparsely/moderately phyric pillow lava
Plagioclase comments: Abundance=2.7%, Max size=3mm (mode=1.6mm); elongated to tabular euhedral glomero/phenocrysts
Olivine comments: Abundance=1%, Max size=2mm (mode=0.8mm); euhedral to equant, partly altered to iddingsite
Vein comments: Average vein density ~ 27 vein/m. Average vein width ~ 0.2mm (0.6mm maximum). Mainly grayish brown halos (~11mm average width)
Vein filling summary: 25% smectite; 25% carbonate; 25% FeOx/iddingsite; 25% zeolite
Vesicles summary: non-vesicular to sparsely vesicular (Av=0.6%: Max=3%; size: 0.1mm to 0.8mm)
Vesicles filling summary: ~ 40% vesicle filling on average. Generally composite vesicle filling with smectite, FeOOH (+/- iddingsite). Locally abundant carbonate-filled vesicles (with zeolite to a lesser extent). Piece 15R1#15 features numerous open vugs
Groundmass alteration texture summary: Patchy to blotchy grayish brown alteration
Groundmass % alteration summary: Av=5%; from 1% to 15%
Groundmass alteration intensity summary: rare to slight
Alteration comment: Chilled margins with variable extent of palagonitization (~50%) with reddish brown to light green alteration; massive gray basalt with plagioclase phenocrysts generally developp brown alteration halos along exposed veins; 14R2#12 is a piece of pure glassy basalt; piece

16R1#1 likely represent a piece of basalt from the unit above.

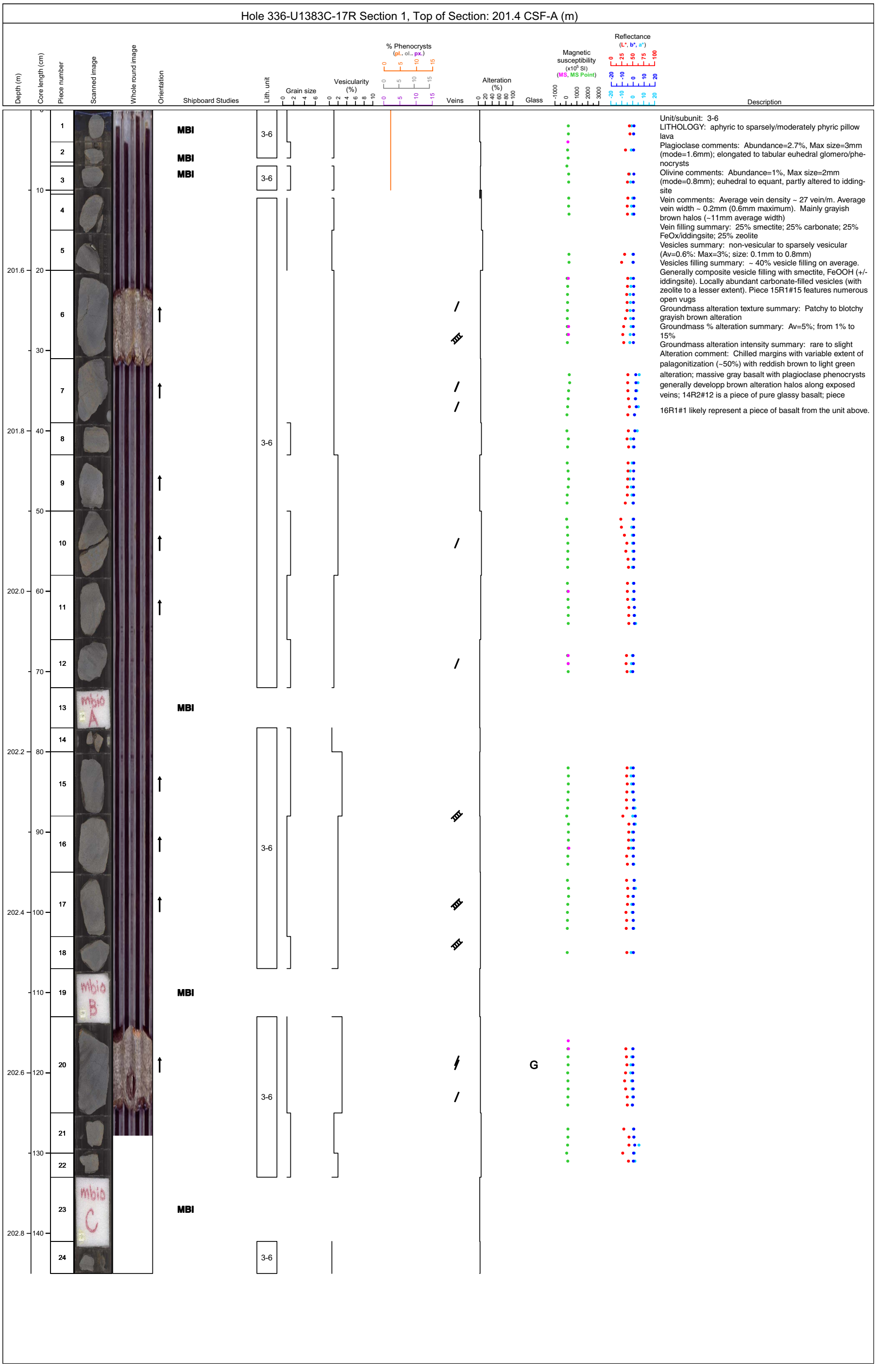
Core Photo


Hole 336-U1383C-16R Section 1, Top of Section: 192.8 CSF-A (m)
Depth (m)
Core length (cm)
Piece number
Scanned image
Whole round image
Orientation
Shipboard Studies
Lith. unit
Grain size
Vesicularity (%)
% Phenocrysts (pl., ol., px.)
Veins
Alteration (%)
Glass
Magnetic susceptibility (x10⁵ SI) (MS, MS Point)
Reflectance (L*, b*, a*)
Description
MBI
TS XRD PP CHNS
3-6
G
Unit/subunit: 3-6
LITHOLOGY: aphyric to sparsely/moderately phyric pillow lava
Plagioclase comments: Abundance=2.7%, Max size=3mm (mode=1.6mm); elongated to tabular euhedral glomero/phenocrysts
Olivine comments: Abundance=1%, Max size=2mm (mode=0.8mm); euhedral to equant, partly altered to iddingsite
Vein comments: Average vein density ~ 27 vein/m. Average vein width ~ 0.2mm (0.6mm maximum). Mainly grayish brown halos (~11mm average width)
Vein filling summary: 25% smectite; 25% carbonate; 25% FeOx/iddingsite; 25% zeolite
Vesicles summary: non-vesicular to sparsely vesicular (Av=0.6%: Max=3%; size: 0.1mm to 0.8mm)
Vesicles filling summary: ~ 40% vesicle filling on average. Generally composite vesicle filling with smectite, FeOOH (+/- iddingsite). Locally abundant carbonate-filled vesicles (with zeolite to a lesser extent). Piece 15R1#15 features numerous open vugs
Groundmass alteration texture summary: Patchy to blotchy grayish brown alteration
Groundmass % alteration summary: Av=5%; from 1% to 15%
Groundmass alteration intensity summary: rare to slight
Alteration comment: Chilled margins with variable extent of palagonitization (~50%) with reddish brown to light green alteration; massive gray basalt with plagioclase phenocrysts generally developp brown alteration halos along exposed veins; 14R2#12 is a piece of pure glassy basalt; piece
16R1#1 likely represent a piece of basalt from the unit above.

Core Photo

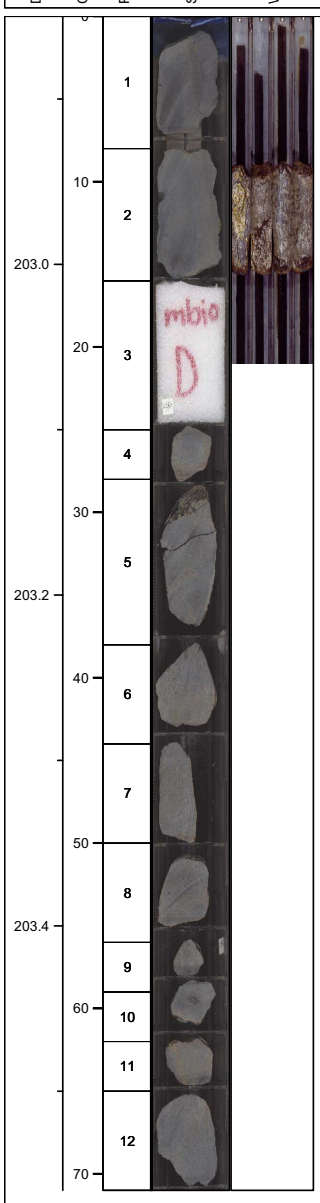

Hole 336-U1383C-16R Section 2, Top of Section: 193.87 CSF-A (m)
Depth (m)
Core length (cm)
Piece number
Scanned image
Whole round image
Orientation
Shipboard Studies
Lith. unit
Grain size
Vesicularity (%)
% Phenocrysts (pl., ol., px.)
Veins
Alteration (%)
Glass
Magnetic susceptibility (x10⁵ SI) (MS, MS Point)
Reflectance (L*, b*, a*)
Description
194.0
194.2
194.4
MBI
TS
TS
3-6
Unit/subunit: 3-6
LITHOLOGY: aphyric to sparsely/moderately phyric pillow lava
Plagioclase comments: Abundance=2.7%, Max size=3mm (mode=1.6mm); elongated to tabular euhedral glomero/phenocrysts
Olivine comments: Abundance=1%, Max size=2mm (mode=0.8mm); euhedral to equant, partly altered to iddingsite
Vein comments: Average vein density ~ 27 vein/m. Average vein width ~ 0.2mm (0.6mm maximum). Mainly grayish brown halos (~11mm average width)
Vein filling summary: 25% smectite; 25% carbonate; 25% FeOx/iddingsite; 25% zeolite
Vesicles summary: non-vesicular to sparsely vesicular (Av=0.6%: Max=3%; size: 0.1mm to 0.8mm)
Vesicles filling summary: ~ 40% vesicle filling on average. Generally composite vesicle filling with smectite, FeOOH (+/- iddingsite). Locally abundant carbonate-filled vesicles (with zeolite to a lesser extent). Piece 15R1#15 features numerous open vugs
Groundmass alteration texture summary: Patchy to blotchy grayish brown alteration
Groundmass % alteration summary: Av=5%; from 1% to 15%
Groundmass alteration intensity summary: rare to slight
Alteration comment: Chilled margins with variable extent of palagonitization (~50%) with reddish brown to light green alteration; massive gray basalt with plagioclase phenocrysts generally developp brown alteration halos along exposed veins; 14R2#12 is a piece of pure glassy basalt; piece
16R1#1 likely represent a piece of basalt from the unit above.

Core Photo


Hole 336-U1383C-17R Section 1, Top of Section: 201.4 CSF-A (m)
Depth (m)
Core length (cm)
Piece number
Scanned image
Whole round image
Orientation
Shipboard Studies
Lith. unit
Grain size
Vesicularity (%)
% Phenocrysts (pl., ol., px.)
Veins
Alteration (%)
Glass
Magnetic susceptibility (x10⁵ SI) (MS, MS Point)
Reflectance (L*, b*, a*)
Description
MBI
3-6
G
Unit/subunit: 3-6
LITHOLOGY: aphyric to sparsely/moderately phyric pillow lava
Plagioclase comments: Abundance=2.7%, Max size=3mm (mode=1.6mm); elongated to tabular euhedral glomero/phenocrysts
Olivine comments: Abundance=1%, Max size=2mm (mode=0.8mm); euhedral to equant, partly altered to iddingsite
Vein comments: Average vein density ~ 27 vein/m. Average vein width ~ 0.2mm (0.6mm maximum). Mainly grayish brown halos (~11mm average width)
Vein filling summary: 25% smectite; 25% carbonate; 25% FeOx/iddingsite; 25% zeolite
Vesicles summary: non-vesicular to sparsely vesicular (Av=0.6%: Max=3%; size: 0.1mm to 0.8mm)
Vesicles filling summary: ~ 40% vesicle filling on average. Generally composite vesicle filling with smectite, FeOOH (+/- iddingsite). Locally abundant carbonate-filled vesicles (with zeolite to a lesser extent). Piece 15R1#15 features numerous open vugs
Groundmass alteration texture summary: Patchy to blotchy grayish brown alteration
Groundmass % alteration summary: Av=5%; from 1% to 15%
Groundmass alteration intensity summary: rare to slight
Alteration comment: Chilled margins with variable extent of palagonitization (~50%) with reddish brown to light green alteration; massive gray basalt with plagioclase phenocrysts generally developp brown alteration halos along exposed veins; 14R2#12 is a piece of pure glassy basalt; piece
16R1#1 likely represent a piece of basalt from the unit above.

Core Photo

Hole 336-U1383C-17R Section 2, Top of Section: 202.85 CSF-A (m)

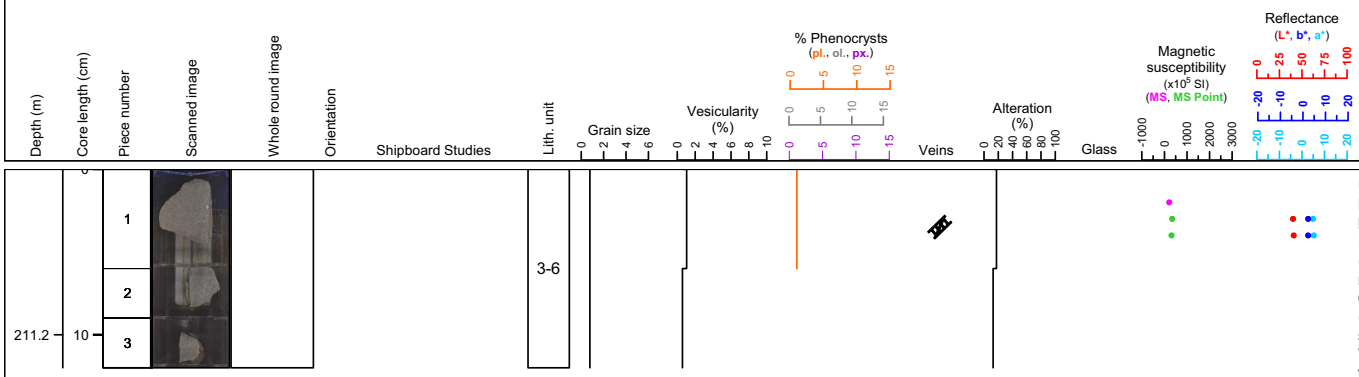


Unit/subunit: 3-6
LITHOLOGY: aphyric to sparsely/moderately phyric pillow lava
Plagioclase comments: Abundance=2.7%, Max size=3mm (mode=1.6mm); elongated to tabular euhedral glomero/phenocrysts
Olivine comments: Abundance=1%, Max size=2mm (mode=0.8mm); euhedral to equant, partly altered to iddingsite
Vein comments: Average vein density ~ 27 vein/m. Average vein width ~ 0.2mm (0.6mm maximum). Mainly grayish brown halos (~11mm average width)
Vein filling summary: 25% smectite; 25% carbonate; 25% FeOx/iddingsite; 25% zeolite
Vesicles summary: non-vesicular to sparsely vesicular (Av=0.6%: Max=3%; size: 0.1mm to 0.8mm)
Vesicles filling summary: ~ 40% vesicle filling on average. Generally composite vesicle filling with smectite, FeOOH (+/- iddingsite). Locally abundant carbonate-filled vesicles (with zeolite to a lesser extent). Piece 15R1#15 features numerous open vugs
Groundmass alteration texture summary: Patchy to blotchy grayish brown alteration
Groundmass % alteration summary: Av=5%; from 1% to 15%
Groundmass alteration intensity summary: rare to slight
Alteration comment: Chilled margins with variable extent of palagonitization (~50%) with reddish brown to light green alteration; massive gray basalt with plagioclase phenocrysts generally developp brown alteration halos along exposed veins; 14R2#12 is a piece of pure glassy basalt; piece

16R1#1 likely represent a piece of basalt from the unit above.

Core Photo

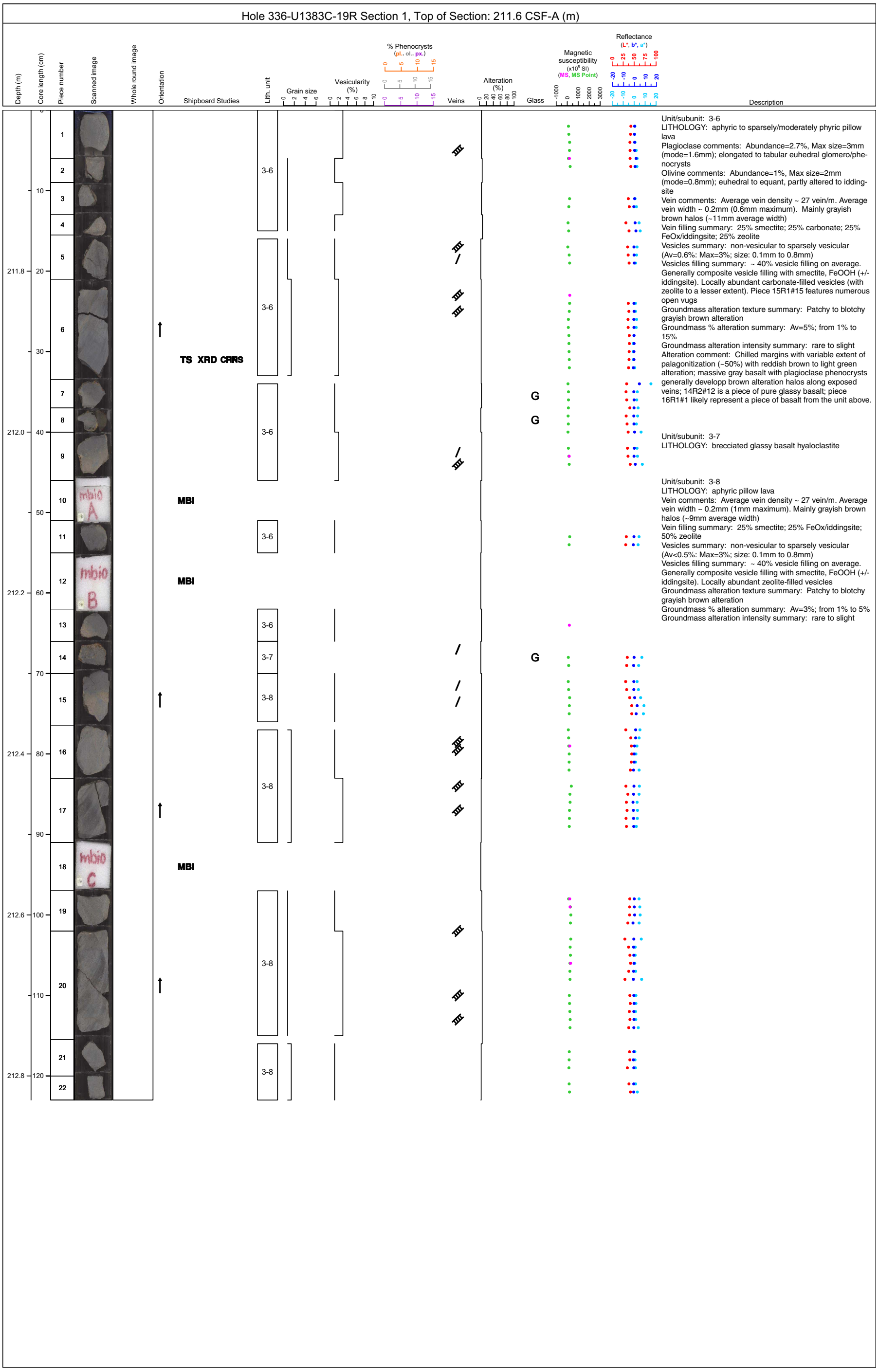
Hole 336-U1383C-18R Section 1, Top of Section: 211.1 CSF-A (m)



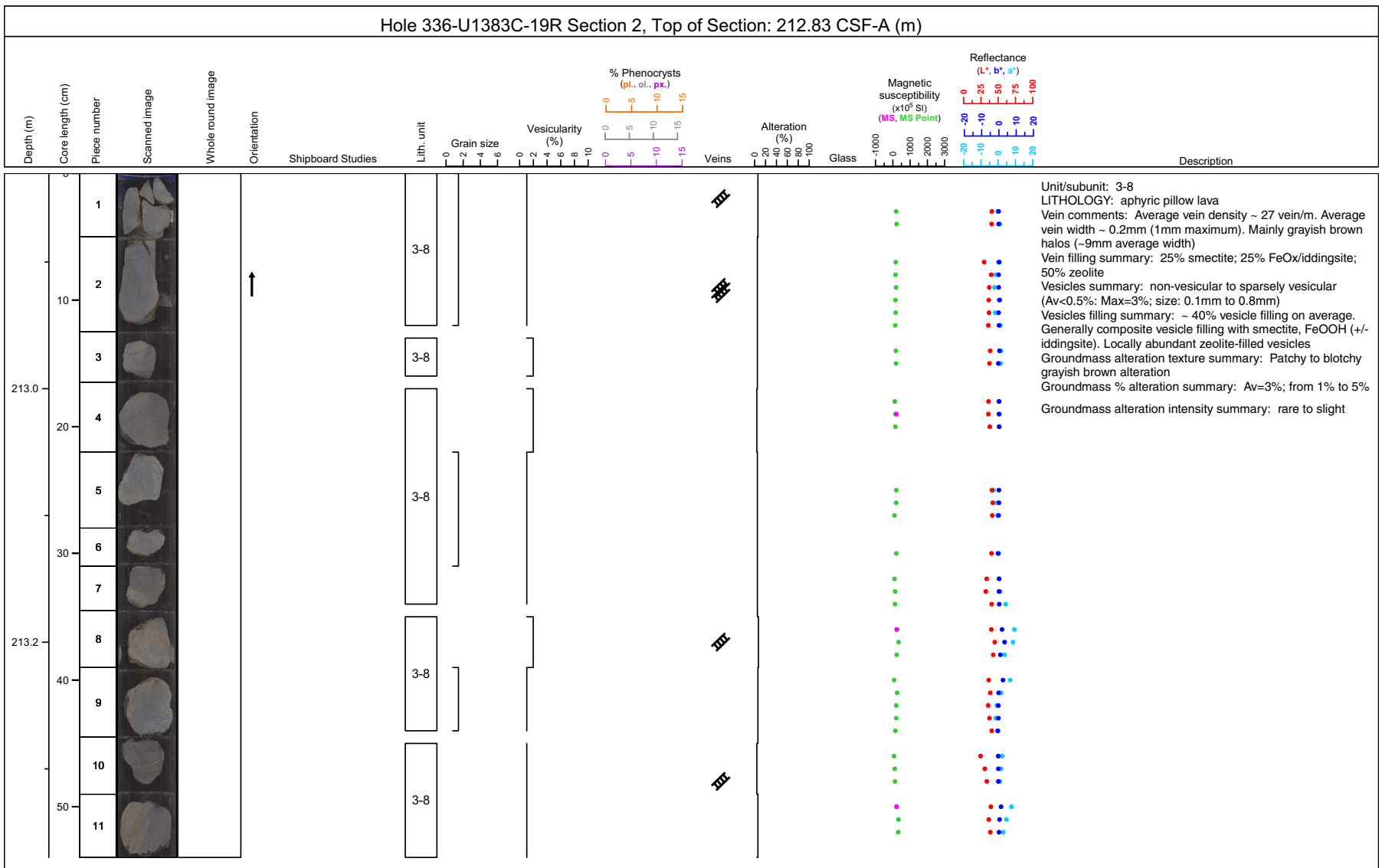
Unit/subunit: 3-6
LITHOLOGY: aphyric to sparsely/moderately phyric pillow lava
Plagioclase comments: Abundance=2.7%, Max size=3mm (mode=1.6mm); elongated to tabular euhedral glomero/phenocrysts
Olivine comments: Abundance=1%, Max size=2mm (mode=0.8mm); euhedral to equant, partly altered to iddingsite
Vein comments: Average vein density ~ 27 vein/m. Average vein width ~ 0.2mm (0.6mm maximum). Mainly grayish brown halos (~11mm average width)
Vein filling summary: 25% smectite; 25% carbonate; 25% FeOx/iddingsite; 25% zeolite
Vesicles summary: non-vesicular to sparsely vesicular (Av=0.6%: Max=3%; size: 0.1mm to 0.8mm)
Vesicles filling summary: ~ 40% vesicle filling on average. Generally composite vesicle filling with smectite, FeOOH (+/- iddingsite). Locally abundant carbonate-filled vesicles (with zeolite to a lesser extent). Piece 15R1#15 features numerous open vugs
Groundmass alteration texture summary: Patchy to blotchy grayish brown alteration
Groundmass % alteration summary: Av=5%; from 1% to 15%
Groundmass alteration intensity summary: rare to slight
Alteration comment: Chilled margins with variable extent of palagonitization (~50%) with reddish brown to light green alteration; massive gray basalt with plagioclase phenocrysts generally developp brown alteration halos along exposed veins; 14R2#12 is a piece of pure glassy basalt; piece

16R1#1 likely represent a piece of basalt from the unit above.

Core Photo


Hole 336-U1383C-19R Section 1, Top of Section: 211.6 CSF-A (m)
Depth (m)
Core length (cm)
Piece number
Scanned image
Whole round image
Orientation
Shipboard Studies
Lith. unit
Grain size
Vesicularity (%)
% Phenocrysts (pl., ol., px.)
Veins
Alteration (%)
Glass
Magnetic susceptibility (x10⁻⁵ SI) (MS, MS Point)
Reflectance (L*, b*, a*)
Description
TS XRD CRRS
MBI
Unit/subunit: 3-6
LITHOLOGY: aphyric to sparsely/moderately phyric pillow lava
Plagioclase comments: Abundance=2.7%, Max size=3mm (mode=1.6mm); elongated to tabular euhedral glomero/phenocrysts
Olivine comments: Abundance=1%, Max size=2mm (mode=0.8mm); euhedral to equant, partly altered to iddingsite
Vein comments: Average vein density ~ 27 vein/m. Average vein width ~ 0.2mm (0.6mm maximum). Mainly grayish brown halos (~11mm average width)
Vein filling summary: 25% smectite; 25% carbonate; 25% FeOx/iddingsite; 25% zeolite
Vesicles summary: non-vesicular to sparsely vesicular (Av=0.6%: Max=3%; size: 0.1mm to 0.8mm)
Vesicles filling summary: ~ 40% vesicle filling on average. Generally composite vesicle filling with smectite, FeOOH (+/- iddingsite). Locally abundant carbonate-filled vesicles (with zeolite to a lesser extent). Piece 15R1#15 features numerous open vugs
Groundmass alteration texture summary: Patchy to blotchy grayish brown alteration
Groundmass % alteration summary: Av=5%; from 1% to 15%
Groundmass alteration intensity summary: rare to slight
Alteration comment: Chilled margins with variable extent of palagonitization (~50%) with reddish brown to light green alteration; massive gray basalt with plagioclase phenocrysts generally developp brown alteration halos along exposed veins; 14R2#12 is a piece of pure glassy basalt; piece 16R1#1 likely represent a piece of basalt from the unit above.
Unit/subunit: 3-7
LITHOLOGY: brecciated glassy basalt hyaloclastite
Unit/subunit: 3-8
LITHOLOGY: aphyric pillow lava
Vein comments: Average vein density ~ 27 vein/m. Average vein width ~ 0.2mm (1mm maximum). Mainly grayish brown halos (~9mm average width)
Vein filling summary: 25% smectite; 25% FeOx/iddingsite; 50% zeolite
Vesicles summary: non-vesicular to sparsely vesicular (Av<0.5%: Max=3%; size: 0.1mm to 0.8mm)
Vesicles filling summary: ~ 40% vesicle filling on average. Generally composite vesicle filling with smectite, FeOOH (+/- iddingsite). Locally abundant zeolite-filled vesicles
Groundmass alteration texture summary: Patchy to blotchy grayish brown alteration
Groundmass % alteration summary: Av=3%; from 1% to 5%
Groundmass alteration intensity summary: rare to slight

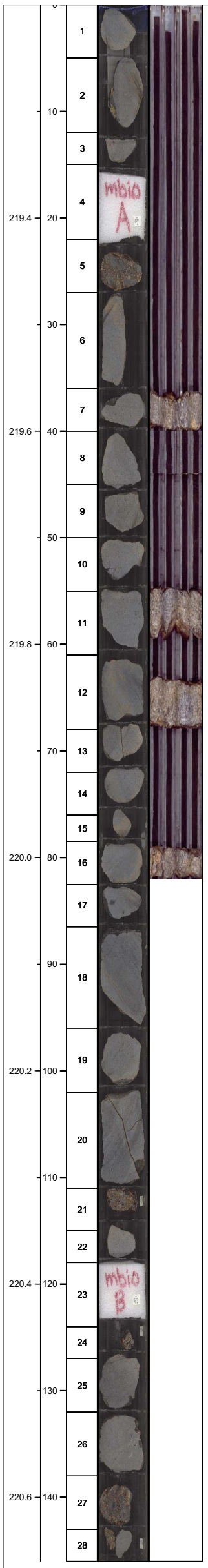
Core Photo


Hole 336-U1383C-19R Section 2, Top of Section: 212.83 CSF-A (m)
Depth (m)
Core length (cm)
Piece number
Scanned image
Whole round image
Orientation
Shipboard Studies
Lith. unit
Grain size
Vesicularity (%)
% Phenocrysts (pl., ol., px.)
Veins
Alteration (%)
Glass
Magnetic susceptibility (x10⁵ SI) (MS, MS Point)
Reflectance (L*, b*, a*)
Description
213.0
213.2
3-8
Unit/subunit: 3-8
LITHOLOGY: aphyric pillow lava
Vein comments: Average vein density ~ 27 vein/m. Average vein width ~ 0.2mm (1mm maximum). Mainly grayish brown halos (~9mm average width)
Vein filling summary: 25% smectite; 25% FeOx/iddingsite; 50% zeolite
Vesicles summary: non-vesicular to sparsely vesicular (Av<0.5%: Max=3%; size: 0.1mm to 0.8mm)
Vesicles filling summary: ~ 40% vesicle filling on average. Generally composite vesicle filling with smectite, FeOOH (+/- iddingsite). Locally abundant zeolite-filled vesicles
Groundmass alteration texture summary: Patchy to blotchy grayish brown alteration
Groundmass % alteration summary: Av=3%; from 1% to 5%
Groundmass alteration intensity summary: rare to slight

Core Photo

Hole 336-U1383C-20R Section 1, Top of Section: 219.2 CSF-A (m)

Depth (m) | Core length (cm) | Piece number | Scanned image | Whole round image | Orientation | Shipboard Studies | Lith. unit | Grain size | Vesicularity (%) | % Phenocrysts (pl., ol., px.) | Veins | Alteration (%) | Glass | Magnetic susceptibility (x10^{5} SI) (MS, MS Point) | Reflectance (L*, b*, a*) | Description



MBI
TS XRD CRRS
MBI
TS

3-8
3-9
3-10
3-11
3-12
3-13
3-14
3-15

Unit/subunit: 3-8
LITHOLOGY: aphyric pillow lava
Vein comments: Average vein density ~ 27 vein/m. Average vein width ~ 0.2mm (1mm maximum). Mainly grayish brown halos (~9mm average width)
Vein filling summary: 25% smectite; 25% FeOx/iddingsite; 50% zeolite
Vesicles summary: non-vesicular to sparsely vesicular (Av<0.5%: Max=3%; size: 0.1mm to 0.8mm)
Vesicles filling summary: ~ 40% vesicle filling on average. Generally composite vesicle filling with smectite, FeOOH (+/- iddingsite). Locally abundant zeolite-filled vesicles
Groundmass alteration texture summary: Patchy to blotchy grayish brown alteration
Groundmass % alteration summary: Av=3%; from 1% to 5%
Groundmass alteration intensity summary: rare to slight

Unit/subunit: 3-9
LITHOLOGY: brecciated glassy basalt hyaloclastite

Unit/subunit: 3-10
LITHOLOGY: aphyric pillow lava
Vein comments: Average vein density ~ 25 vein/m. Average vein width ~ 0.15mm (0.2mm maximum). Mainly grayish brown halos (~4mm average width)
Vein filling summary: 33% smectite; 33% FeOx/iddingsite; 33% zeolite
Vesicles summary: non-vesicular (<0.5%)
Groundmass alteration texture summary: Patchy to blotchy grayish brown alteration
Groundmass % alteration summary: Av=3%; from 1% to 5%
Groundmass alteration intensity summary: rare to slight

Unit/subunit: 3-11
LITHOLOGY: brecciated glassy basalt hyaloclastite

Unit/subunit: 3-12
LITHOLOGY: aphyric pillow lava
Vesicles summary: non-vesicular (<0.5%)
Groundmass alteration texture summary: blotchy grayish brown alteration
Groundmass % alteration summary: Av=3%; from 2% to 5%
Groundmass alteration intensity summary: rare to slight
Alteration comment: Chilled margins with variable extent of palagonitization (~80%) with reddish brown to light green alteration and zeolite as glass clast cement;

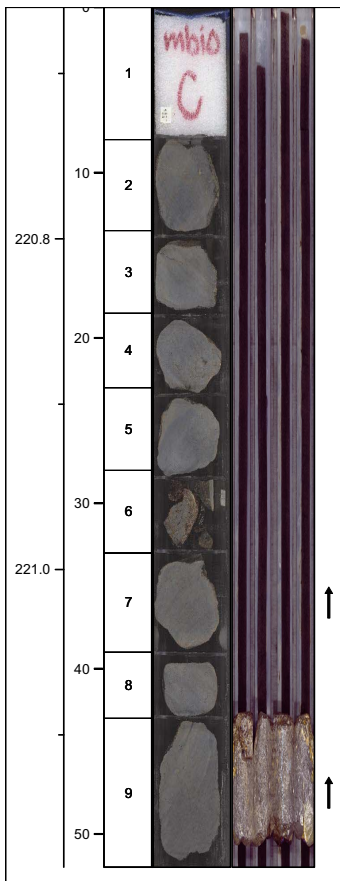
Unit/subunit: 3-13
LITHOLOGY: brecciated glassy basalt

Unit/subunit: 3-14
LITHOLOGY: aphyric pillow lava
Vesicles summary: Mainly non-vesicular (<0.5%) except with vugs up to 2.8mm
Groundmass alteration texture summary: blotchy grayish brown alteration
Groundmass % alteration summary: Av=3%; from 2% to 5%
Groundmass alteration intensity summary: rare to slight
Alteration comment: Chilled margins with variable extent of palagonitization (~80%) with reddish brown to light green alteration and zeolite as glass clast cement;

Unit/subunit: 3-15
LITHOLOGY: brecciated glassy basalt hyaloclastite

Core Photo

Hole 336-U1383C-20R Section 2, Top of Section: 220.66 CSF-A (m)



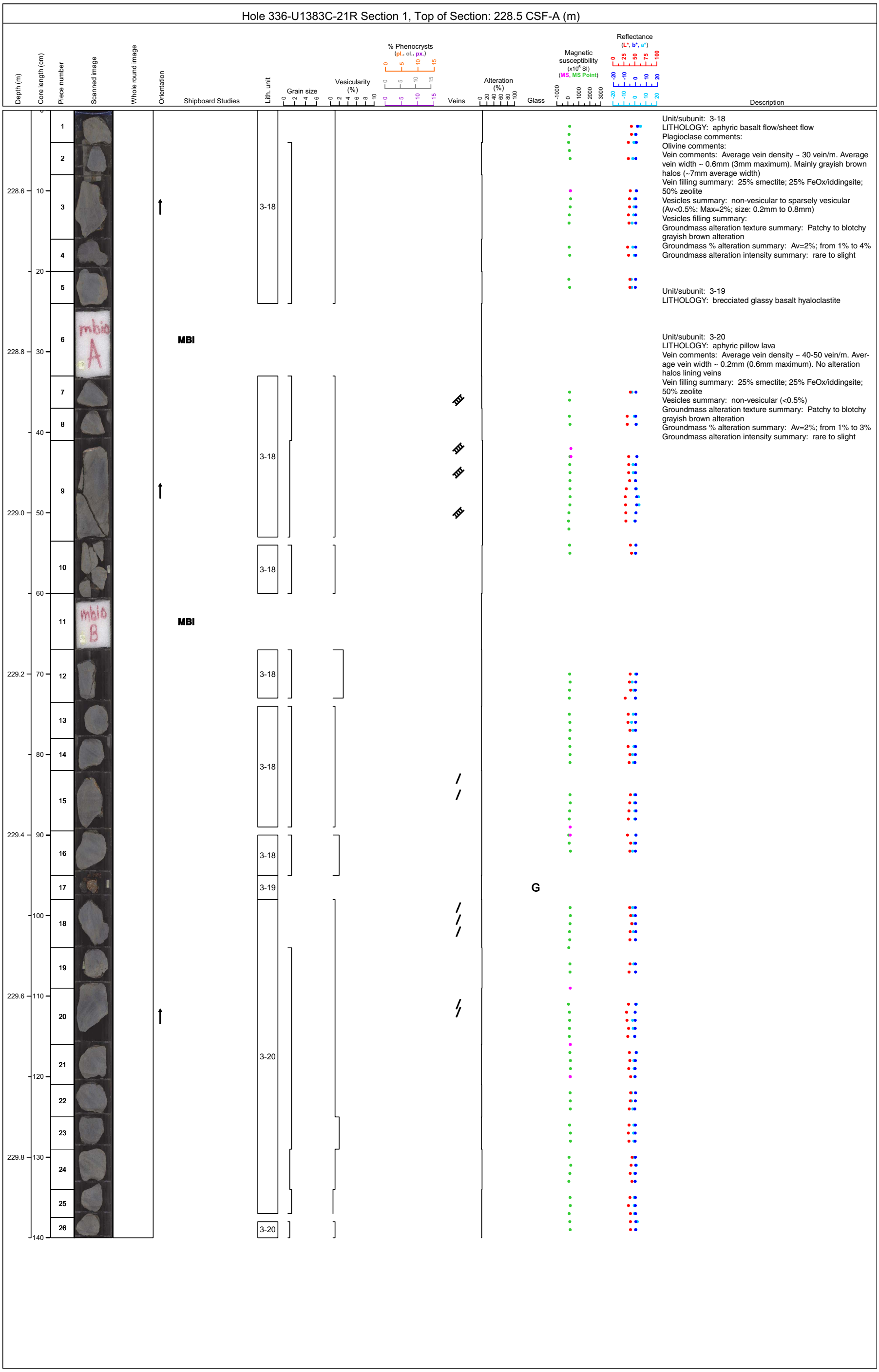
Unit/subunit: 3-15
LITHOLOGY: brecciated glassy basalt hyaloclastite

Unit/subunit: 3-16
LITHOLOGY: aphyric pillow lava
Vein comments: Average vein density ~ 45 vein/m. Average vein width ~ 0.2mm (0.5mm maximum). No alteration halos lining veins
Vein filling summary: 15% smectite; 35% carbonate; 15% FeOx/iddingsite; 35% zeolite
Vesicles summary: non-vesicular (<0.5%)
Vesicles filling summary:
Groundmass alteration texture summary: patchy grayish brown alteration
Groundmass % alteration summary: Av=3%
Groundmass alteration intensity summary: slight
Alteration comment: Chilled margins with variable extent of palagonitization (~60%) with reddish brown to light green alteration and zeolite as glass clast cement;

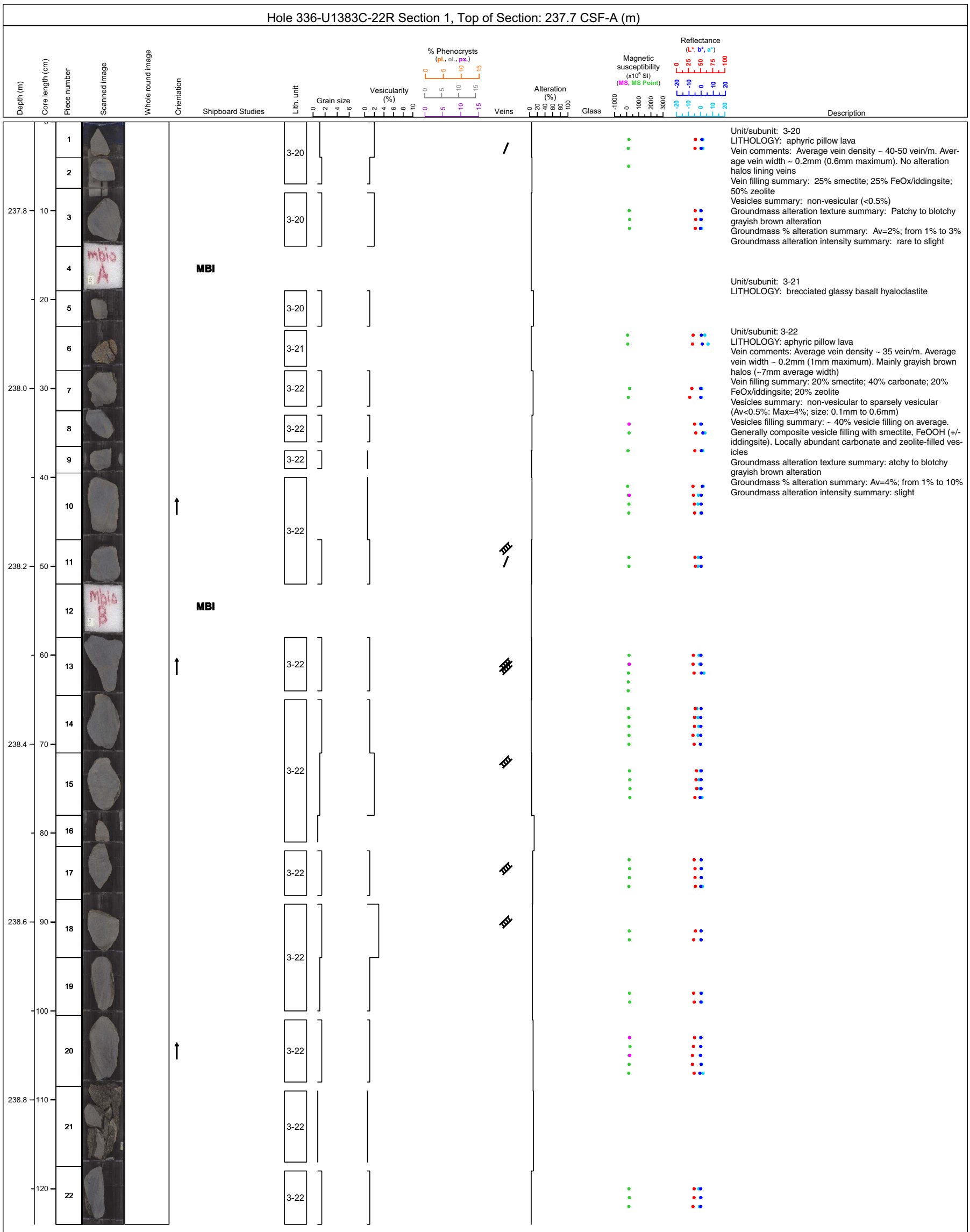
Unit/subunit: 3-17
LITHOLOGY: brecciated glassy basalt hyaloclastite

Unit/subunit: 3-18
LITHOLOGY: aphyric basalt flow/sheet flow
Plagioclase comments:
Olivine comments:
Vein comments: Average vein density ~ 30 vein/m. Average vein width ~ 0.6mm (3mm maximum). Mainly grayish brown halos (~7mm average width)
Vein filling summary: 25% smectite; 25% FeOx/iddingsite; 50% zeolite
Vesicles summary: non-vesicular to sparsely vesicular (Av<0.5%: Max=2%; size: 0.2mm to 0.8mm)
Vesicles filling summary:
Groundmass alteration texture summary: Patchy to blotchy grayish brown alteration
Groundmass % alteration summary: Av=2%; from 1% to 4%
Groundmass alteration intensity summary: rare to slight

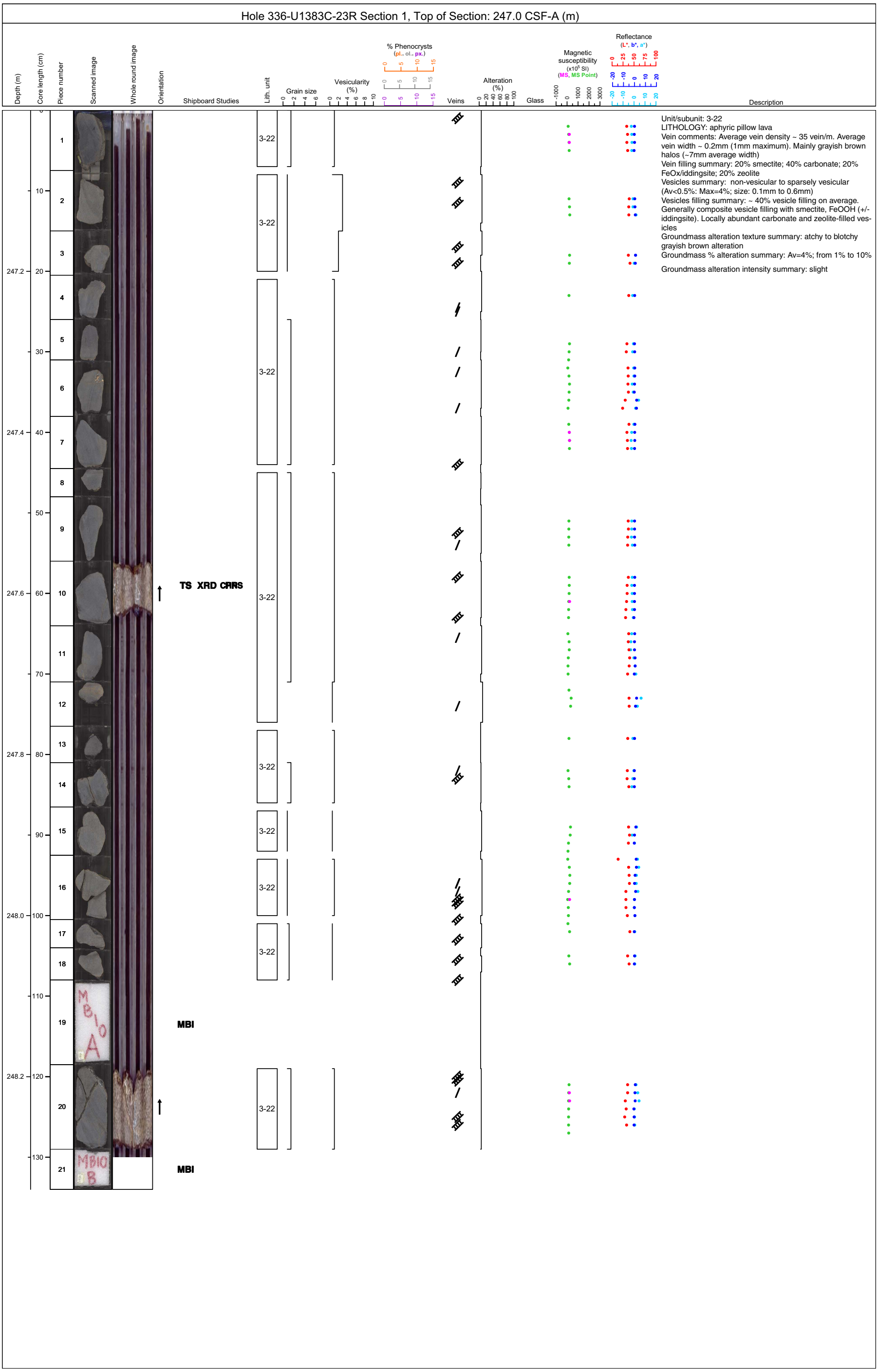
Core Photo


Hole 336-U1383C-21R Section 1, Top of Section: 228.5 CSF-A (m)
Depth (m)
Core length (cm)
Piece number
Scanned image
Whole round image
Orientation
Shipboard Studies
Lith. unit
Grain size
Vesicularity (%)
% Phenocrysts (pl., ol., px.)
Veins
Alteration (%)
Glass
Magnetic susceptibility (x10⁻⁵ SI) (MS, MS Point)
Reflectance (L*, b*, a*)
Description
228.6
228.8
229.0
229.2
229.4
229.6
229.8
3-18
3-19
3-20
MBI
G
Unit/subunit: 3-18
LITHOLOGY: aphyric basalt flow/sheet flow
Plagioclase comments:
Olivine comments:
Vein comments: Average vein density ~ 30 vein/m. Average vein width ~ 0.6mm (3mm maximum). Mainly grayish brown halos (~7mm average width)
Vein filling summary: 25% smectite; 25% FeOx/iddingsite; 50% zeolite
Vesicles summary: non-vesicular to sparsely vesicular (Av<0.5%: Max=2%; size: 0.2mm to 0.8mm)
Vesicles filling summary:
Groundmass alteration texture summary: Patchy to blotchy grayish brown alteration
Groundmass % alteration summary: Av=2%; from 1% to 4%
Groundmass alteration intensity summary: rare to slight
Unit/subunit: 3-19
LITHOLOGY: brecciated glassy basalt hyaloclastite
Unit/subunit: 3-20
LITHOLOGY: aphyric pillow lava
Vein comments: Average vein density ~ 40-50 vein/m. Average vein width ~ 0.2mm (0.6mm maximum). No alteration halos lining veins
Vein filling summary: 25% smectite; 25% FeOx/iddingsite; 50% zeolite
Vesicles summary: non-vesicular (<0.5%)
Groundmass alteration texture summary: Patchy to blotchy grayish brown alteration
Groundmass % alteration summary: Av=2%; from 1% to 3%
Groundmass alteration intensity summary: rare to slight

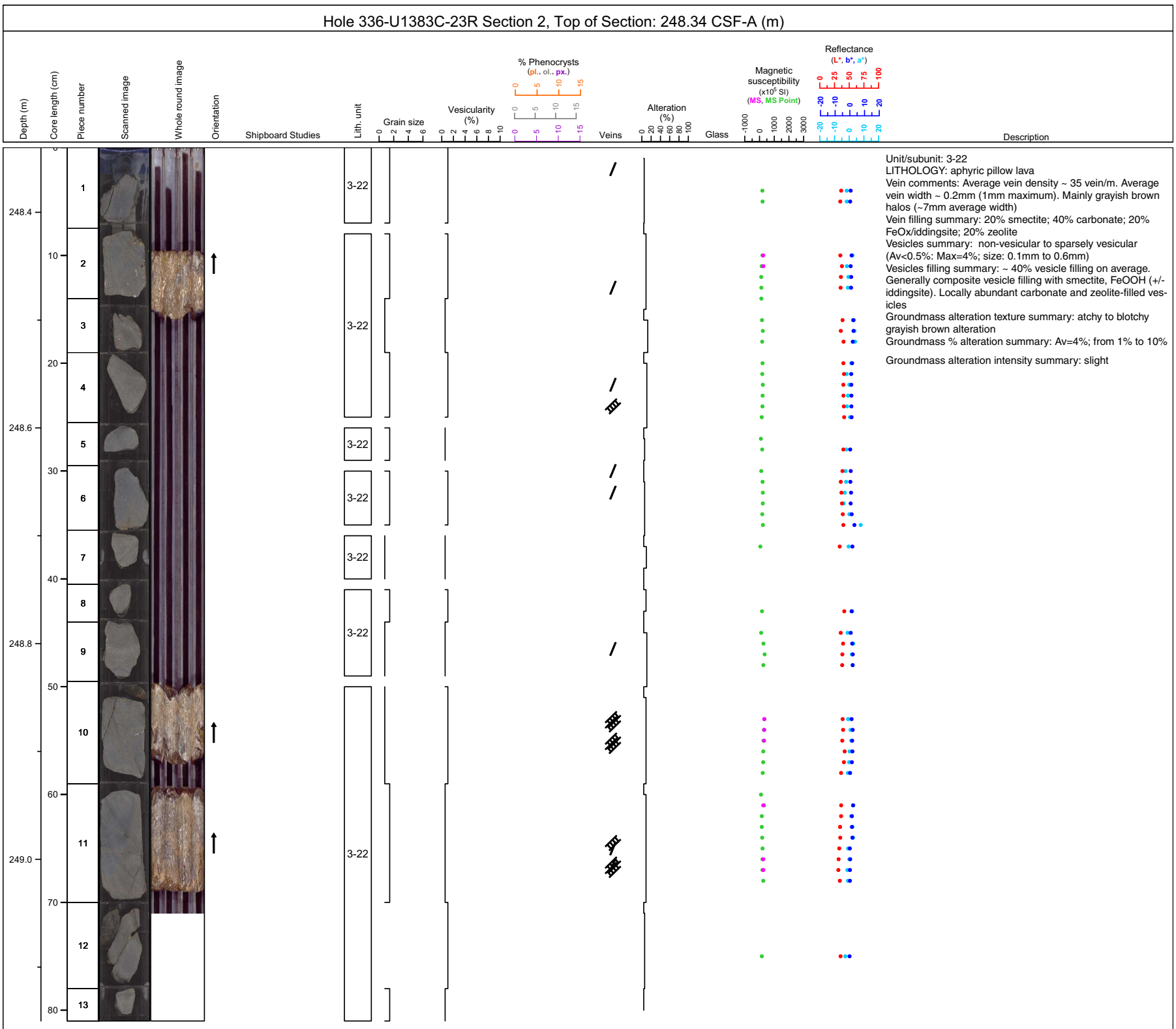
Core Photo


Hole 336-U1383C-22R Section 1, Top of Section: 237.7 CSF-A (m)
Depth (m)
Core length (cm)
Piece number
Scanned image
Whole round image
Orientation
Shipboard Studies
Lith. unit
Grain size
Vesicularity (%)
% Phenocrysts (pl., ol., px.)
Veins
Alteration (%)
Glass
Magnetic susceptibility (x10⁵ SI) (MS, MS Point)
Reflectance (L*, b*, a*)
Description
MBI
MBI
MBI
3-20
3-21
3-22
Unit/subunit: 3-20
LITHOLOGY: aphyric pillow lava
Vein comments: Average vein density ~ 40-50 vein/m. Average vein width ~ 0.2mm (0.6mm maximum). No alteration halos lining veins
Vein filling summary: 25% smectite; 25% FeOx/iddingsite; 50% zeolite
Vesicles summary: non-vesicular (<0.5%)
Groundmass alteration texture summary: Patchy to blotchy grayish brown alteration
Groundmass % alteration summary: Av=2%; from 1% to 3%
Groundmass alteration intensity summary: rare to slight
Unit/subunit: 3-21
LITHOLOGY: brecciated glassy basalt hyaloclastite
Unit/subunit: 3-22
LITHOLOGY: aphyric pillow lava
Vein comments: Average vein density ~ 35 vein/m. Average vein width ~ 0.2mm (1mm maximum). Mainly grayish brown halos (~7mm average width)
Vein filling summary: 20% smectite; 40% carbonate; 20% FeOx/iddingsite; 20% zeolite
Vesicles summary: non-vesicular to sparsely vesicular (Av<0.5%: Max=4%; size: 0.1mm to 0.6mm)
Vesicles filling summary: ~ 40% vesicle filling on average. Generally composite vesicle filling with smectite, FeOOH (+/- iddingsite). Locally abundant carbonate and zeolite-filled vesicles
Groundmass alteration texture summary: atchy to blotchy grayish brown alteration
Groundmass % alteration summary: Av=4%; from 1% to 10%
Groundmass alteration intensity summary: slight

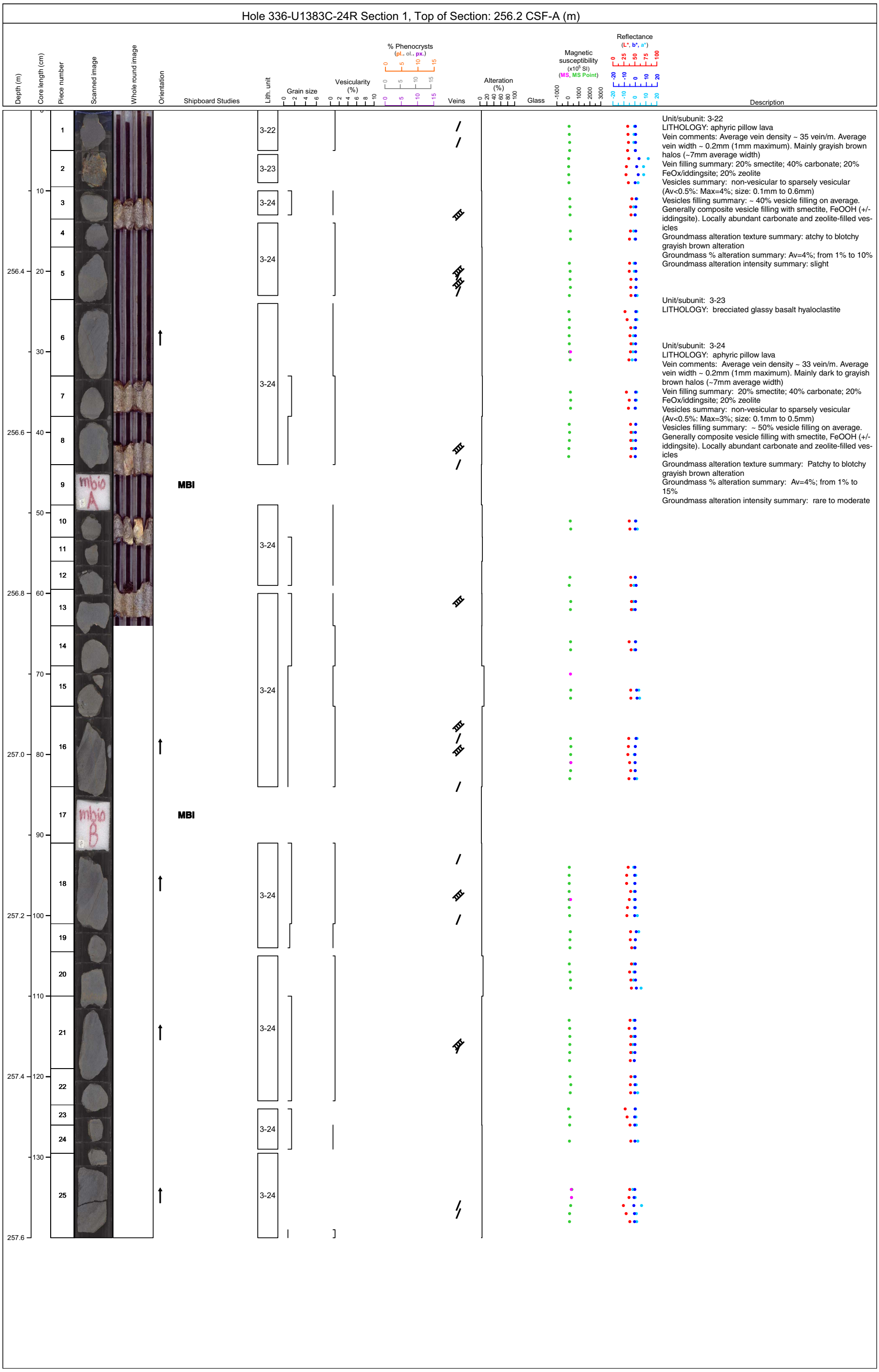
Core Photo


Hole 336-U1383C-23R Section 1, Top of Section: 247.0 CSF-A (m)
Depth (m)
Core length (cm)
Piece number
Scanned image
Whole round image
Orientation
Shipboard Studies
Lith. unit
Grain size
Vesicularity (%)
% Phenocrysts (pl., ol., px.)
Veins
Alteration (%)
Glass
Magnetic susceptibility (x10⁵ SI) (MS, MS Point)
Reflectance (L*, b*, a*)
Description
TS XRD CRRS
MBI
MBI
Unit/subunit: 3-22
LITHOLOGY: aphyric pillow lava
Vein comments: Average vein density ~ 35 vein/m. Average vein width ~ 0.2mm (1mm maximum). Mainly grayish brown halos (~7mm average width)
Vein filling summary: 20% smectite; 40% carbonate; 20% FeOx/iddingsite; 20% zeolite
Vesicles summary: non-vesicular to sparsely vesicular (Av<0.5%: Max=4%; size: 0.1mm to 0.6mm)
Vesicles filling summary: ~ 40% vesicle filling on average. Generally composite vesicle filling with smectite, FeOOH (+/- iddingsite). Locally abundant carbonate and zeolite-filled vesicles
Groundmass alteration texture summary: atchy to blotchy grayish brown alteration
Groundmass % alteration summary: Av=4%; from 1% to 10%
Groundmass alteration intensity summary: slight

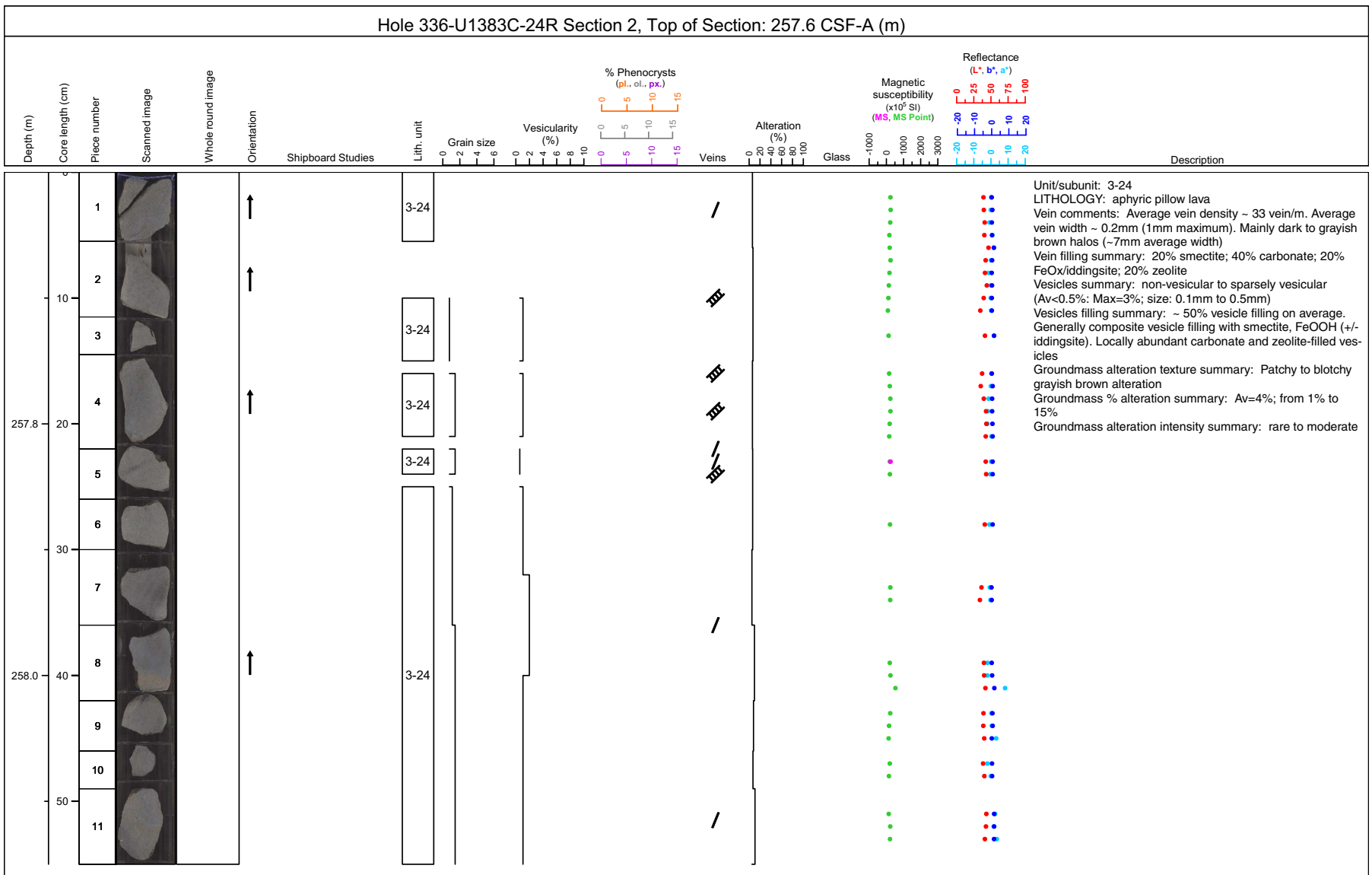
Core Photo


Hole 336-U1383C-23R Section 2, Top of Section: 248.34 CSF-A (m)
Depth (m)
Core length (cm)
Piece number
Scanned image
Whole round image
Orientation
Shipboard Studies
Lith. unit
Grain size
Vesicularity (%)
% Phenocrysts (pl., ol., px.)
Veins
Alteration (%)
Glass
Magnetic susceptibility (x10⁵ SI) (MS, MS Point)
Reflectance (L*, b*, a*)
Description
248.4
248.6
248.8
249.0
3-22
Unit/subunit: 3-22
LITHOLOGY: aphyric pillow lava
Vein comments: Average vein density ~ 35 vein/m. Average vein width ~ 0.2mm (1mm maximum). Mainly grayish brown halos (~7mm average width)
Vein filling summary: 20% smectite; 40% carbonate; 20% FeOx/iddingsite; 20% zeolite
Vesicles summary: non-vesicular to sparsely vesicular (Av<0.5%: Max=4%; size: 0.1mm to 0.6mm)
Vesicles filling summary: ~ 40% vesicle filling on average. Generally composite vesicle filling with smectite, FeOOH (+/- iddingsite). Locally abundant carbonate and zeolite-filled vesicles
Groundmass alteration texture summary: atchy to blotchy grayish brown alteration
Groundmass % alteration summary: Av=4%; from 1% to 10%
Groundmass alteration intensity summary: slight

Core Photo

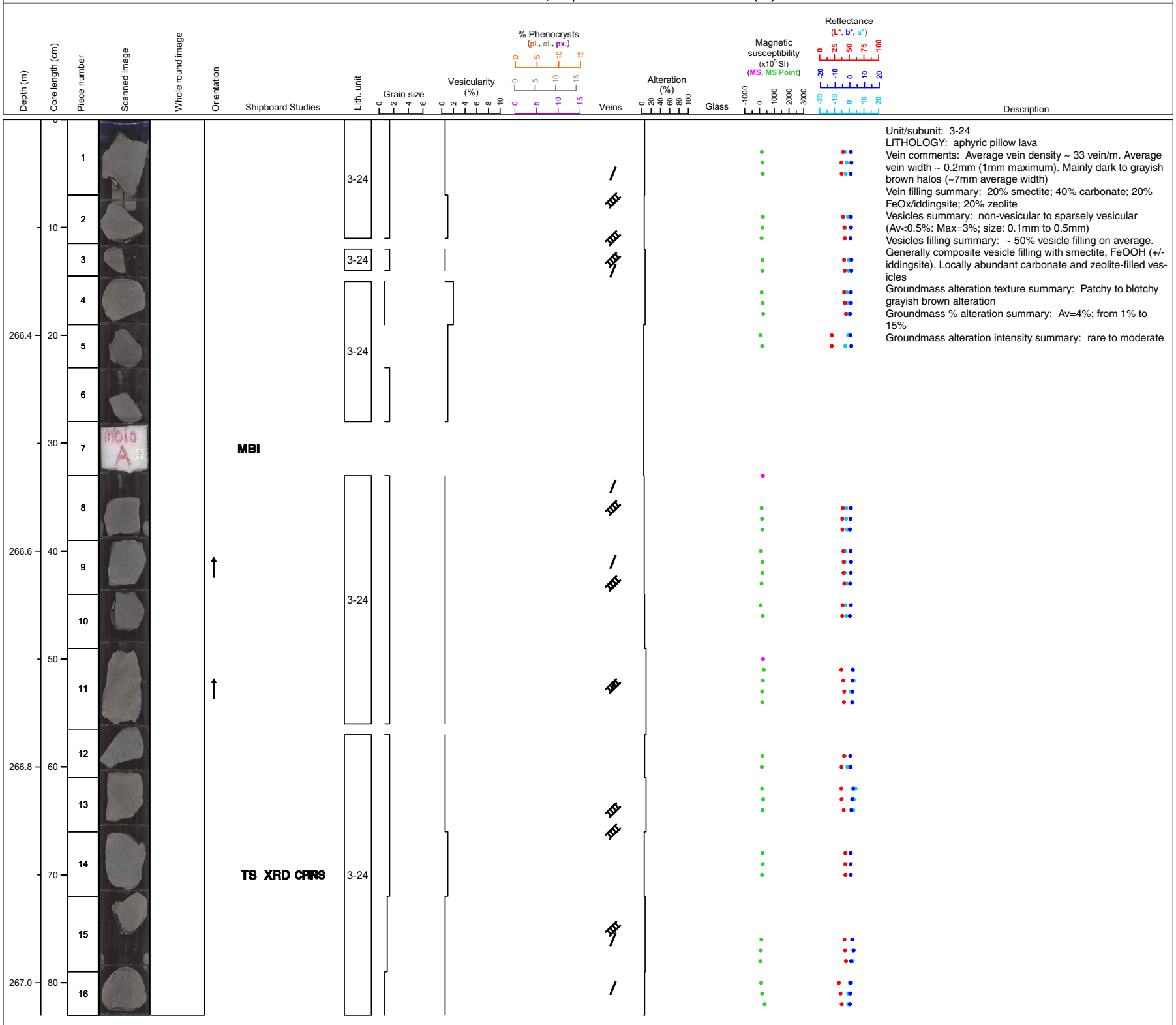

Hole 336-U1383C-24R Section 1, Top of Section: 256.2 CSF-A (m)
Depth (m)
Core length (cm)
Piece number
Scanned image
Whole round image
Orientation
Shipboard Studies
Lith. unit
Grain size
Vesicularity (%)
% Phenocrysts (pl., ol., px.)
Veins
Alteration (%)
Glass
Magnetic susceptibility (x10⁵ SI) (MS, MS Point)
Reflectance (L*, b*, a*)
Description
MBI
MBI
Unit/subunit: 3-22
LITHOLOGY: aphyric pillow lava
Vein comments: Average vein density ~ 35 vein/m. Average vein width ~ 0.2mm (1mm maximum). Mainly grayish brown halos (~7mm average width)
Vein filling summary: 20% smectite; 40% carbonate; 20% FeOx/iddingsite; 20% zeolite
Vesicles summary: non-vesicular to sparsely vesicular (Av<0.5%: Max=4%; size: 0.1mm to 0.6mm)
Vesicles filling summary: ~ 40% vesicle filling on average. Generally composite vesicle filling with smectite, FeOOH (+/- iddingsite). Locally abundant carbonate and zeolite-filled vesicles
Groundmass alteration texture summary: atchy to blotchy grayish brown alteration
Groundmass % alteration summary: Av=4%; from 1% to 10%
Groundmass alteration intensity summary: slight
Unit/subunit: 3-23
LITHOLOGY: brecciated glassy basalt hyaloclastite
Unit/subunit: 3-24
LITHOLOGY: aphyric pillow lava
Vein comments: Average vein density ~ 33 vein/m. Average vein width ~ 0.2mm (1mm maximum). Mainly dark to grayish brown halos (~7mm average width)
Vein filling summary: 20% smectite; 40% carbonate; 20% FeOx/iddingsite; 20% zeolite
Vesicles summary: non-vesicular to sparsely vesicular (Av<0.5%: Max=3%; size: 0.1mm to 0.5mm)
Vesicles filling summary: ~ 50% vesicle filling on average. Generally composite vesicle filling with smectite, FeOOH (+/- iddingsite). Locally abundant carbonate and zeolite-filled vesicles
Groundmass alteration texture summary: Patchy to blotchy grayish brown alteration
Groundmass % alteration summary: Av=4%; from 1% to 15%
Groundmass alteration intensity summary: rare to moderate

Core Photo


Hole 336-U1383C-24R Section 2, Top of Section: 257.6 CSF-A (m)
Depth (m)
Core length (cm)
Piece number
Scanned image
Whole round image
Orientation
Shipboard Studies
Lith. unit
Grain size
Vesicularity (%)
% Phenocrysts (pl., ol., px.)
Veins
Alteration (%)
Glass
Magnetic susceptibility (x10⁵ SI) (MS, MS Point)
Reflectance (L*, b*, a*)
Description
257.8
258.0
3-24
Unit/subunit: 3-24
LITHOLOGY: aphyric pillow lava
Vein comments: Average vein density ~ 33 vein/m. Average vein width ~ 0.2mm (1mm maximum). Mainly dark to grayish brown halos (~7mm average width)
Vein filling summary: 20% smectite; 40% carbonate; 20% FeOx/iddingsite; 20% zeolite
Vesicles summary: non-vesicular to sparsely vesicular (Av<0.5%: Max=3%; size: 0.1mm to 0.5mm)
Vesicles filling summary: ~ 50% vesicle filling on average. Generally composite vesicle filling with smectite, FeOOH (+/- iddingsite). Locally abundant carbonate and zeolite-filled vesicles
Groundmass alteration texture summary: Patchy to blotchy grayish brown alteration
Groundmass % alteration summary: Av=4%; from 1% to 15%
Groundmass alteration intensity summary: rare to moderate

Core Photo

Hole 336-U1383C-25R Section 1, Top of Section: 266.2 CSF-A (m)



Unit/subunit: 3-24
LITHOLOGY: aphyric pillow lava
Vein comments: Average vein density ~ 33 vein/m. Average vein width ~ 0.2mm (1mm maximum). Mainly dark to grayish brown halos (~7mm average width)
Vein filling summary: 20% smectite; 40% carbonate; 20% FeOx/iddingsite; 20% zeolite
Vesicles summary: non-vesicular to sparsely vesicular (Av<0.5%: Max=3%; size: 0.1mm to 0.5mm)
Vesicles filling summary: ~ 50% vesicle filling on average. Generally composite vesicle filling with smectite, FeOOH (+/- iddingsite). Locally abundant carbonate and zeolite-filled vesicles
Groundmass alteration texture summary: Patchy to blotchy grayish brown alteration
Groundmass % alteration summary: Av=4%; from 1% to 15%
Groundmass alteration intensity summary: rare to moderate

Core Photo

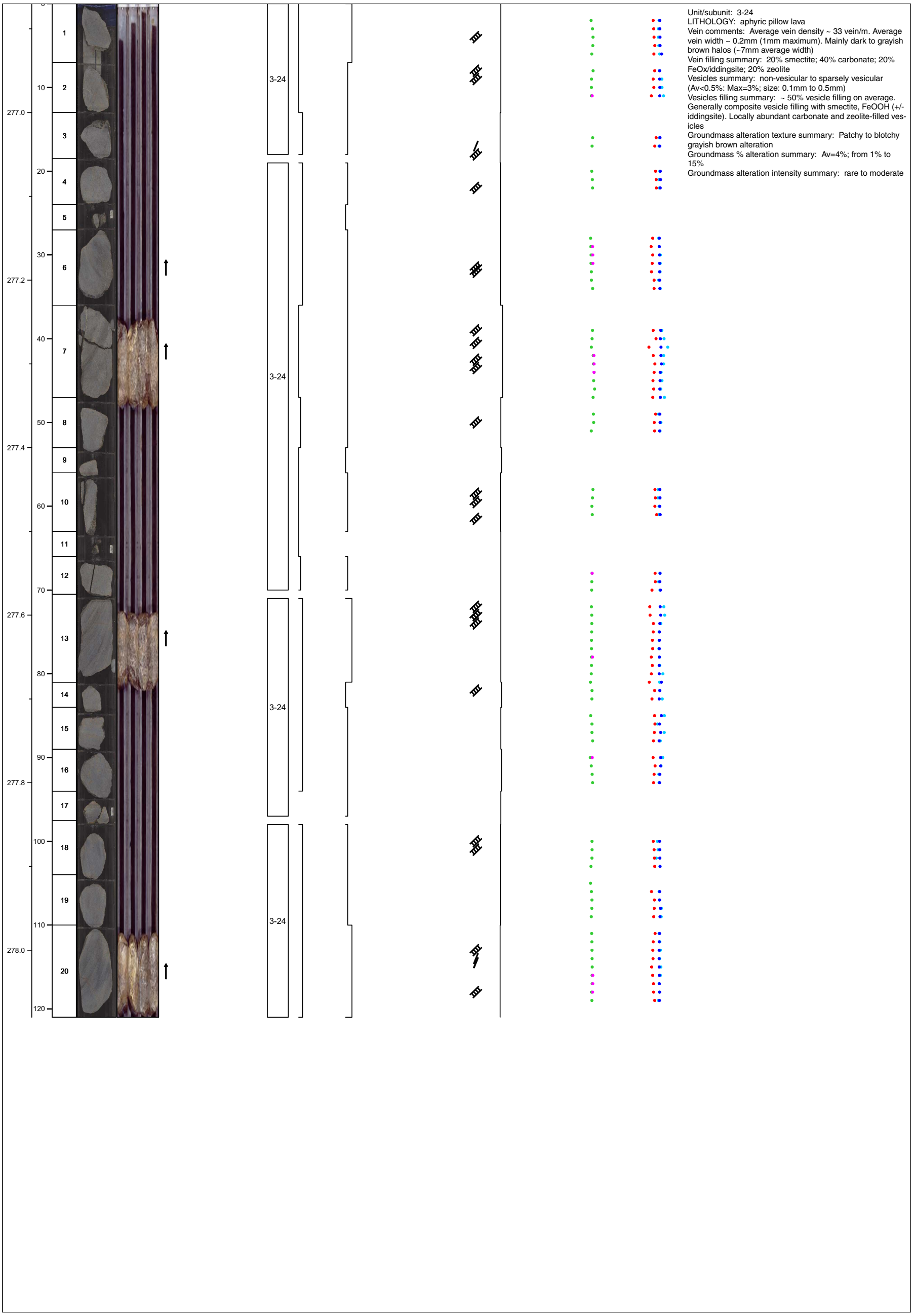
Hole 336-U1383C-26R Section 1, Top of Section: 275.4 CSF-A (m)

Depth (m) | Core length (cm) | Piece number | Scanned image | Whole round image | Orientation | Shipboard Studies | Lith. unit | Grain size | Vesicularity (%) | % Phenocrysts (pl., ol., px.) | Veins | Alteration (%) | Glass | Magnetic susceptibility (x10^{5} SI) (MS, MS Point) | Reflectance (L*, b*, a*) | Description

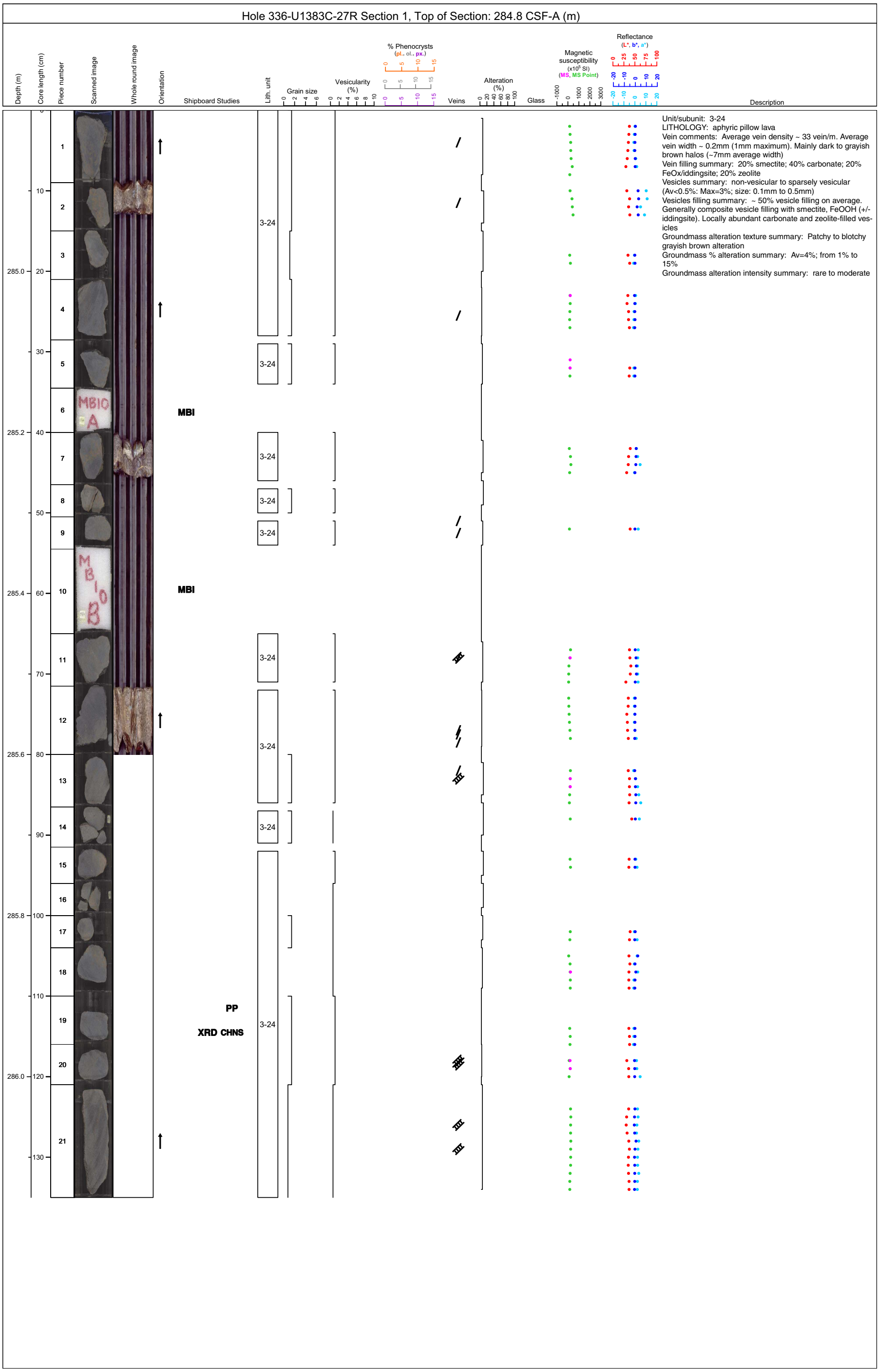
Unit/subunit: 3-24
LITHOLOGY: aphyric pillow lava
Vein comments: Average vein density ~ 33 vein/m. Average vein width ~ 0.2mm (1mm maximum). Mainly dark to grayish brown halos (~7mm average width)
Vein filling summary: 20% smectite; 40% carbonate; 20% FeOx/iddingsite; 20% zeolite
Vesicles summary: non-vesicular to sparsely vesicular (Av<0.5%: Max=3%; size: 0.1mm to 0.5mm)
Vesicles filling summary: ~ 50% vesicle filling on average. Generally composite vesicle filling with smectite, FeOOH (+/- iddingsite). Locally abundant carbonate and zeolite-filled vesicles
Groundmass alteration texture summary: Patchy to blotchy grayish brown alteration
Groundmass % alteration summary: Av=4%; from 1% to 15%
Groundmass alteration intensity summary: rare to moderate

Core Photo

Hole 336-U1383C-26R Section 2, Top of Section: 276.87 CSF-A (m)

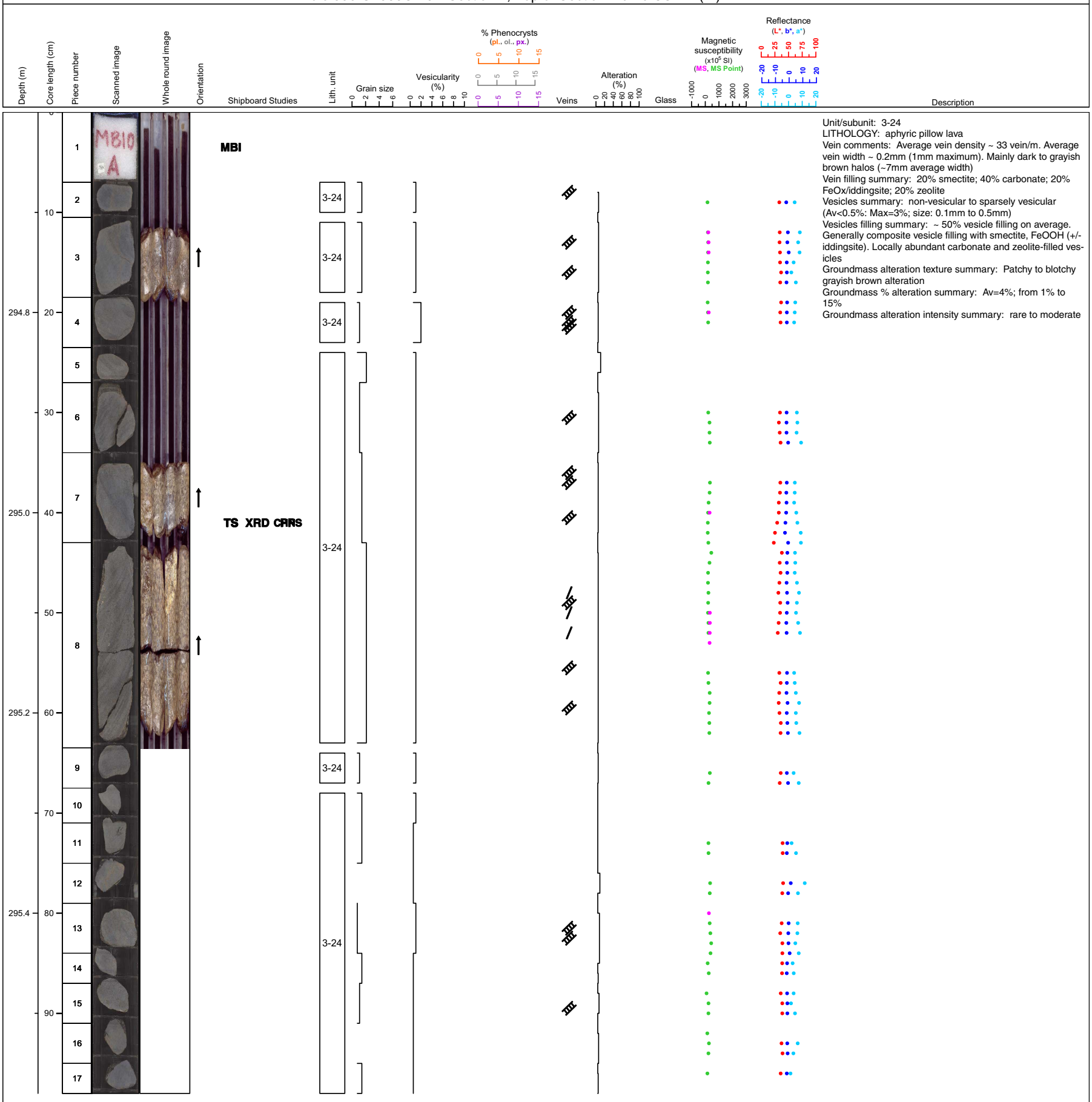


Core Photo


Hole 336-U1383C-27R Section 1, Top of Section: 284.8 CSF-A (m)
Depth (m)
Core length (cm)
Piece number
Scanned image
Whole round image
Orientation
Shipboard Studies
Lith. unit
Grain size
Vesicularity (%)
% Phenocrysts (pl., ol., px.)
Veins
Alteration (%)
Glass
Magnetic susceptibility (x10⁻⁵ SI) (MS, MS Point)
Reflectance (L*, b*, a*)
Description
MBIO A
MBIO B
MBI
PP
XRD CHNS
3-24
Unit/subunit: 3-24
LITHOLOGY: aphyric pillow lava
Vein comments: Average vein density ~ 33 vein/m. Average vein width ~ 0.2mm (1mm maximum). Mainly dark to grayish brown halos (~7mm average width)
Vein filling summary: 20% smectite; 40% carbonate; 20% FeOx/iddingsite; 20% zeolite
Vesicles summary: non-vesicular to sparsely vesicular (Av<0.5%: Max=3%; size: 0.1mm to 0.5mm)
Vesicles filling summary: ~ 50% vesicle filling on average. Generally composite vesicle filling with smectite, FeOOH (+/- iddingsite). Locally abundant carbonate and zeolite-filled vesicles
Groundmass alteration texture summary: Patchy to blotchy grayish brown alteration
Groundmass % alteration summary: Av=4%; from 1% to 15%
Groundmass alteration intensity summary: rare to moderate

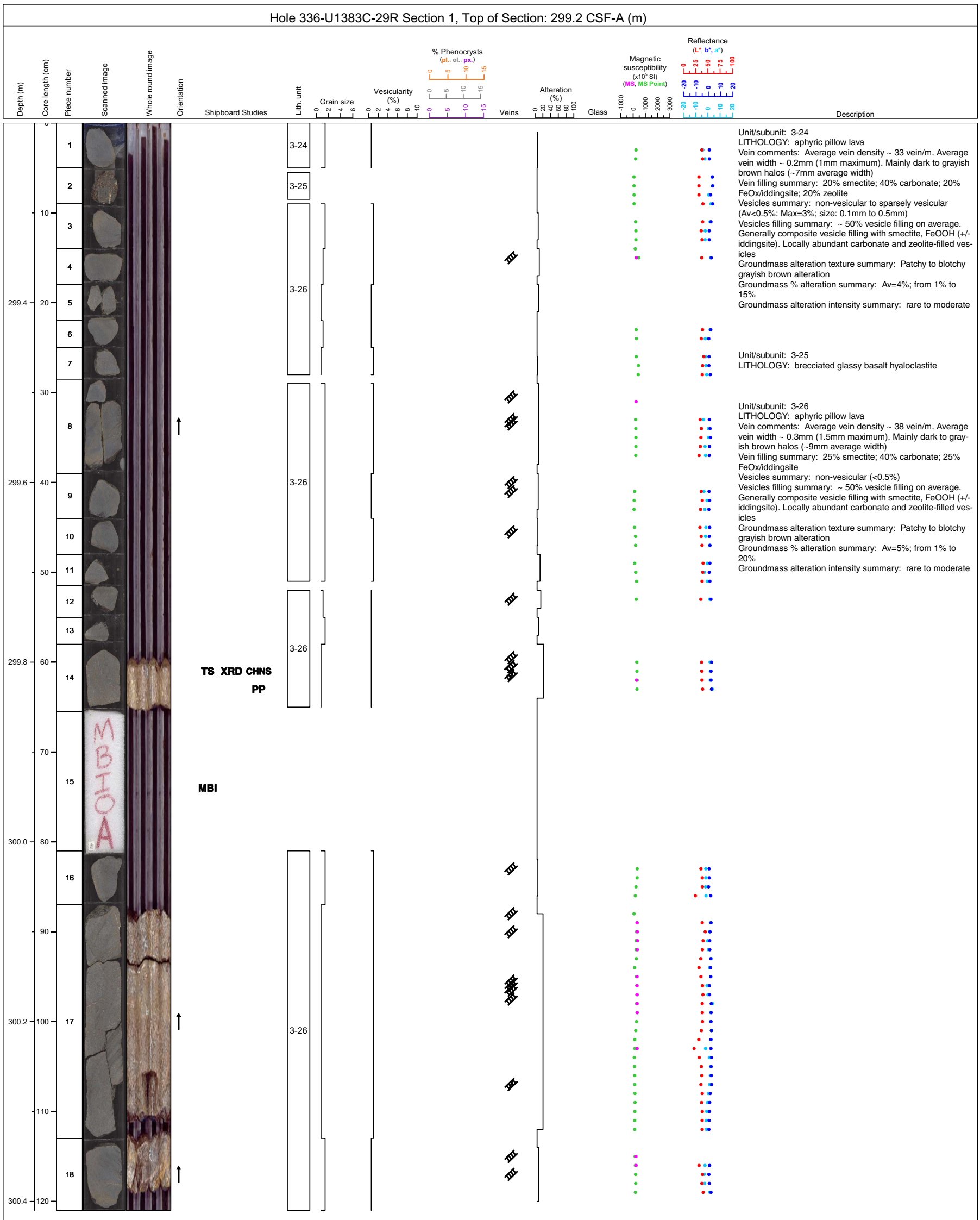
Core Photo

Hole 336-U1383C-28R Section 1, Top of Section: 294.6 CSF-A (m)



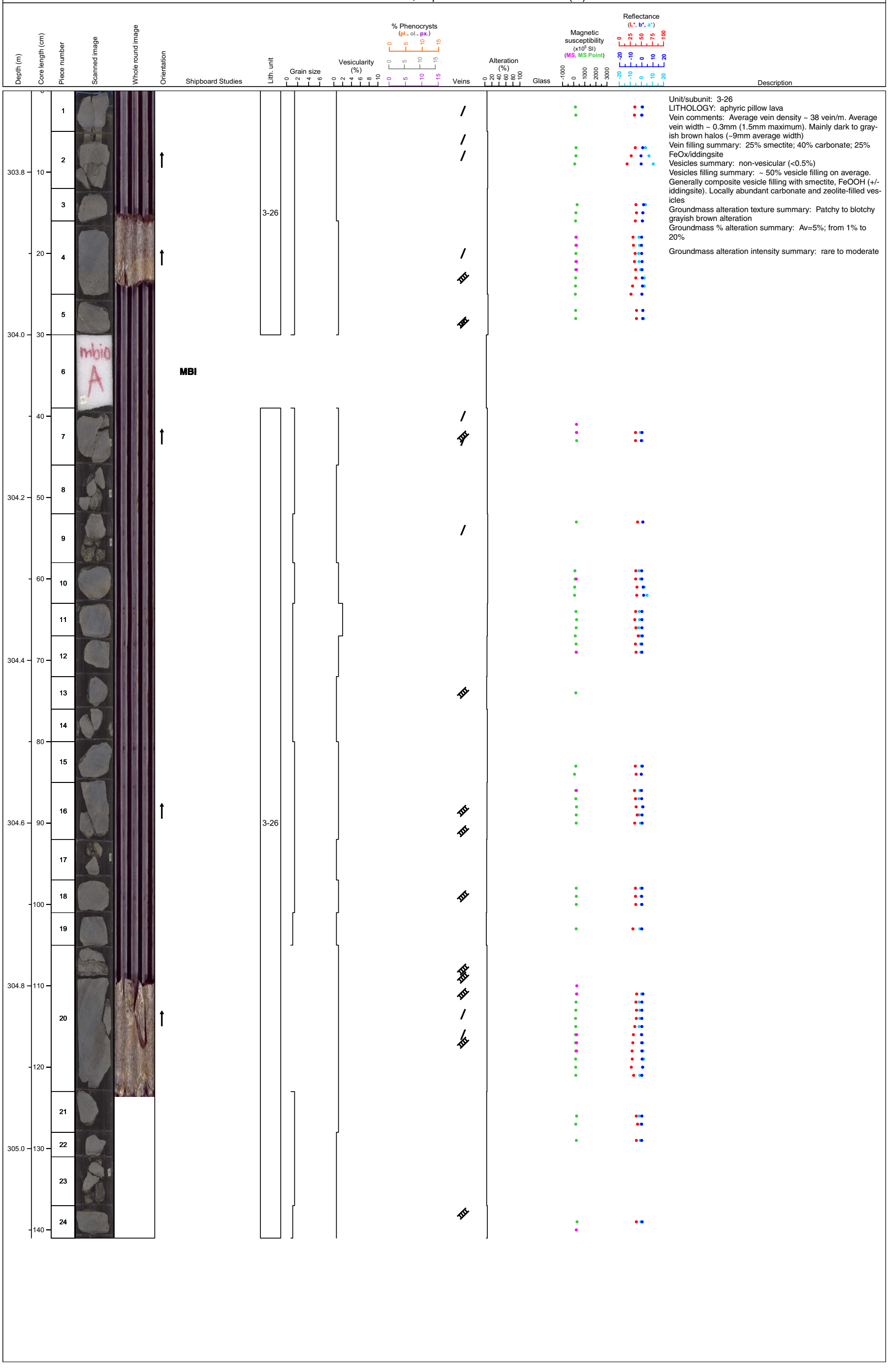
Unit/subunit: 3-24
LITHOLOGY: aphyric pillow lava
Vein comments: Average vein density ~ 33 vein/m. Average vein width ~ 0.2mm (1mm maximum). Mainly dark to grayish brown halos (~7mm average width)
Vein filling summary: 20% smectite; 40% carbonate; 20% FeOx/iddingsite; 20% zeolite
Vesicles summary: non-vesicular to sparsely vesicular (Av<0.5%: Max=3%; size: 0.1mm to 0.5mm)
Vesicles filling summary: ~ 50% vesicle filling on average. Generally composite vesicle filling with smectite, FeOOH (+/- iddingsite). Locally abundant carbonate and zeolite-filled vesicles
Groundmass alteration texture summary: Patchy to blotchy grayish brown alteration
Groundmass % alteration summary: Av=4%; from 1% to 15%
Groundmass alteration intensity summary: rare to moderate

Core Photo


Hole 336-U1383C-29R Section 1, Top of Section: 299.2 CSF-A (m)
Depth (m)
Core length (cm)
Piece number
Scanned image
Whole round image
Orientation
Shipboard Studies
Lith. unit
Grain size
Vesicularity (%)
% Phenocrysts (pl., ol., px.)
Veins
Alteration (%)
Glass
Magnetic susceptibility (x10⁻⁵ SI) (MS, MS Point)
Reflectance (L*, b*, a*)
Description
TS XRD CHNS
PP
MBI
Unit/subunit: 3-24
LITHOLOGY: aphyric pillow lava
Vein comments: Average vein density ~ 33 vein/m. Average vein width ~ 0.2mm (1mm maximum). Mainly dark to grayish brown halos (~7mm average width)
Vein filling summary: 20% smectite; 40% carbonate; 20% FeOx/iddingsite; 20% zeolite
Vesicles summary: non-vesicular to sparsely vesicular (Av<0.5%: Max=3%; size: 0.1mm to 0.5mm)
Vesicles filling summary: ~ 50% vesicle filling on average. Generally composite vesicle filling with smectite, FeOOH (+/- iddingsite). Locally abundant carbonate and zeolite-filled vesicles
Groundmass alteration texture summary: Patchy to blotchy grayish brown alteration
Groundmass % alteration summary: Av=4%; from 1% to 15%
Groundmass alteration intensity summary: rare to moderate
Unit/subunit: 3-25
LITHOLOGY: brecciated glassy basalt hyaloclastite
Unit/subunit: 3-26
LITHOLOGY: aphyric pillow lava
Vein comments: Average vein density ~ 38 vein/m. Average vein width ~ 0.3mm (1.5mm maximum). Mainly dark to grayish brown halos (~9mm average width)
Vein filling summary: 25% smectite; 40% carbonate; 25% FeOx/iddingsite
Vesicles summary: non-vesicular (<0.5%)
Vesicles filling summary: ~ 50% vesicle filling on average. Generally composite vesicle filling with smectite, FeOOH (+/- iddingsite). Locally abundant carbonate and zeolite-filled vesicles
Groundmass alteration texture summary: Patchy to blotchy grayish brown alteration
Groundmass % alteration summary: Av=5%; from 1% to 20%
Groundmass alteration intensity summary: rare to moderate

Core Photo

Hole 336-U1383C-30R Section 1, Top of Section: 303.7 CSF-A (m)

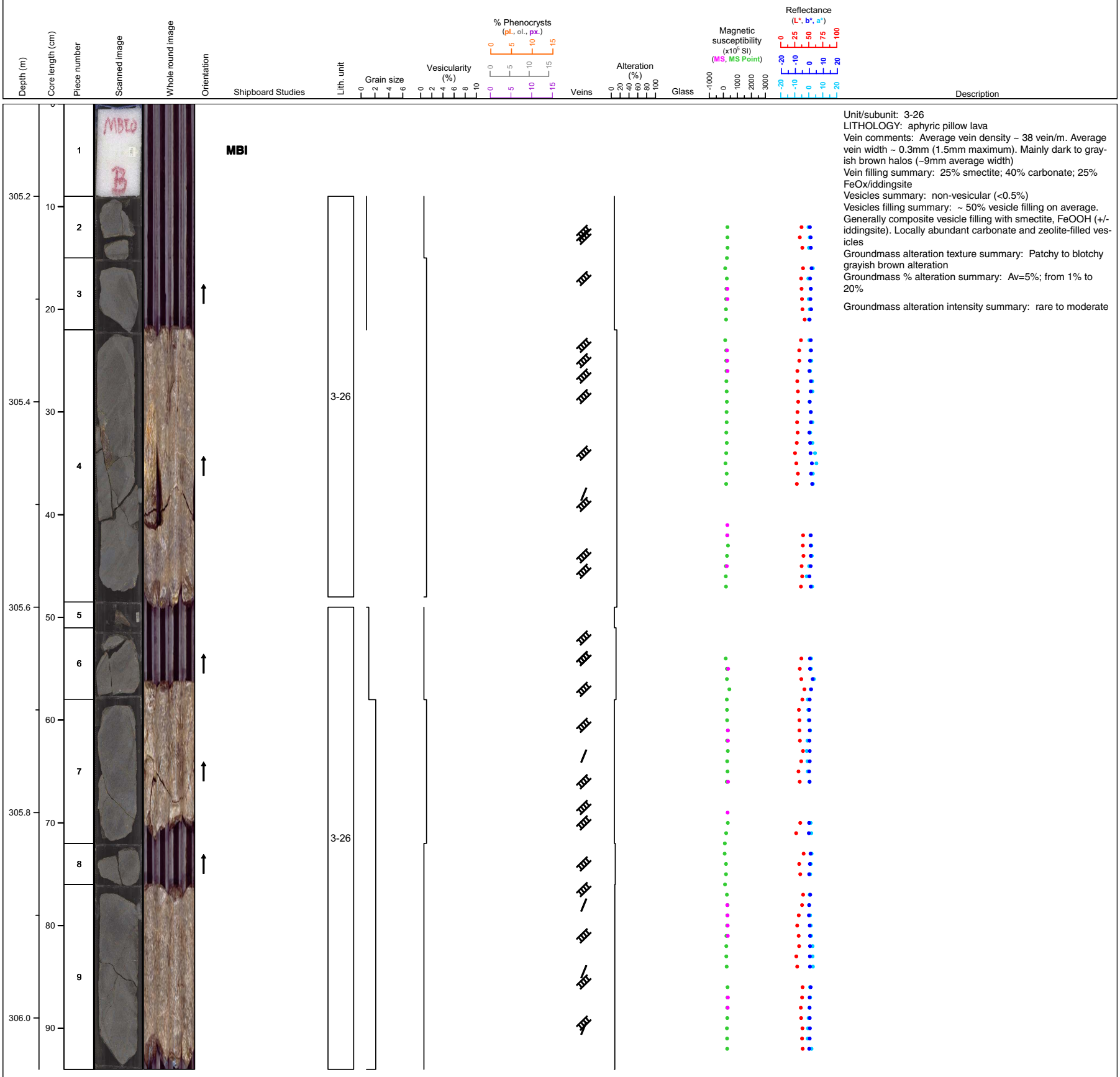


Unit/subunit: 3-26
LITHOLOGY: aphyric pillow lava
Vein comments: Average vein density ~ 38 vein/m. Average vein width ~ 0.3mm (1.5mm maximum). Mainly dark to grayish brown halos (~9mm average width)
Vein filling summary: 25% smectite; 40% carbonate; 25% FeOx/iddingsite
Vesicles summary: non-vesicular (<0.5%)
Vesicles filling summary: ~ 50% vesicle filling on average. Generally composite vesicle filling with smectite, FeOOH (+/- iddingsite). Locally abundant carbonate and zeolite-filled vesicles
Groundmass alteration texture summary: Patchy to blotchy grayish brown alteration
Groundmass % alteration summary: Av=5%; from 1% to 20%

Groundmass alteration intensity summary: rare to moderate

Core Photo

Hole 336-U1383C-30R Section 2, Top of Section: 305.11 CSF-A (m)

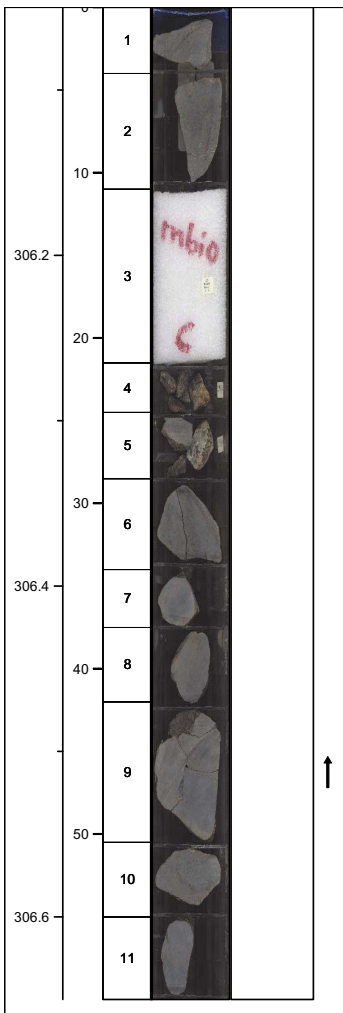


Unit/subunit: 3-26
LITHOLOGY: aphyric pillow lava
Vein comments: Average vein density ~ 38 vein/m. Average vein width ~ 0.3mm (1.5mm maximum). Mainly dark to grayish brown halos (~9mm average width)
Vein filling summary: 25% smectite; 40% carbonate; 25% FeOx/iddingsite
Vesicles summary: non-vesicular (<0.5%)
Vesicles filling summary: ~ 50% vesicle filling on average. Generally composite vesicle filling with smectite, FeOOH (+/- iddingsite). Locally abundant carbonate and zeolite-filled vesicles
Groundmass alteration texture summary: Patchy to blotchy grayish brown alteration
Groundmass % alteration summary: Av=5%; from 1% to 20%

Groundmass alteration intensity summary: rare to moderate

Core Photo

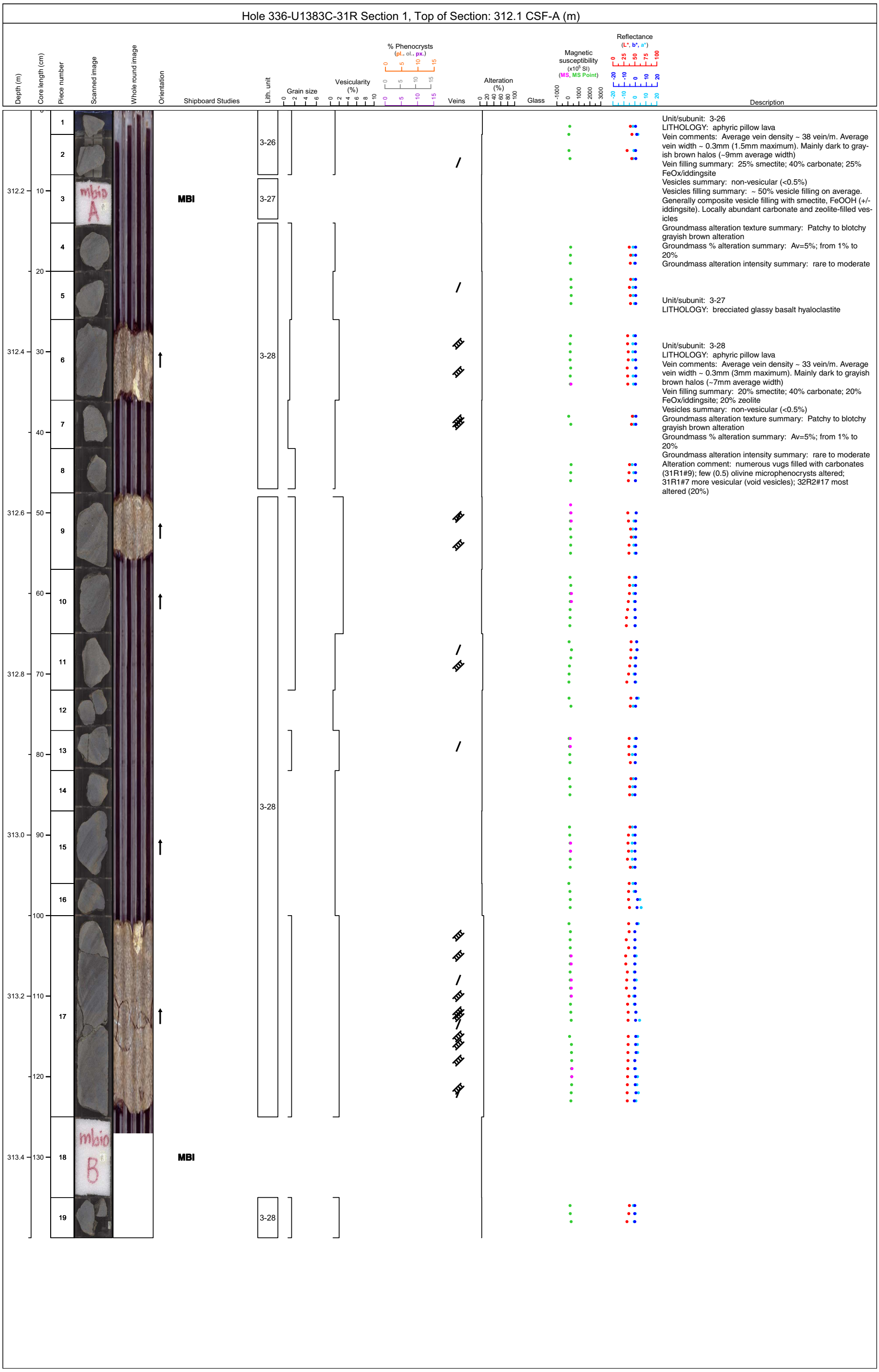
Hole 336-U1383C-30R Section 3, Top of Section: 306.05 CSF-A (m)



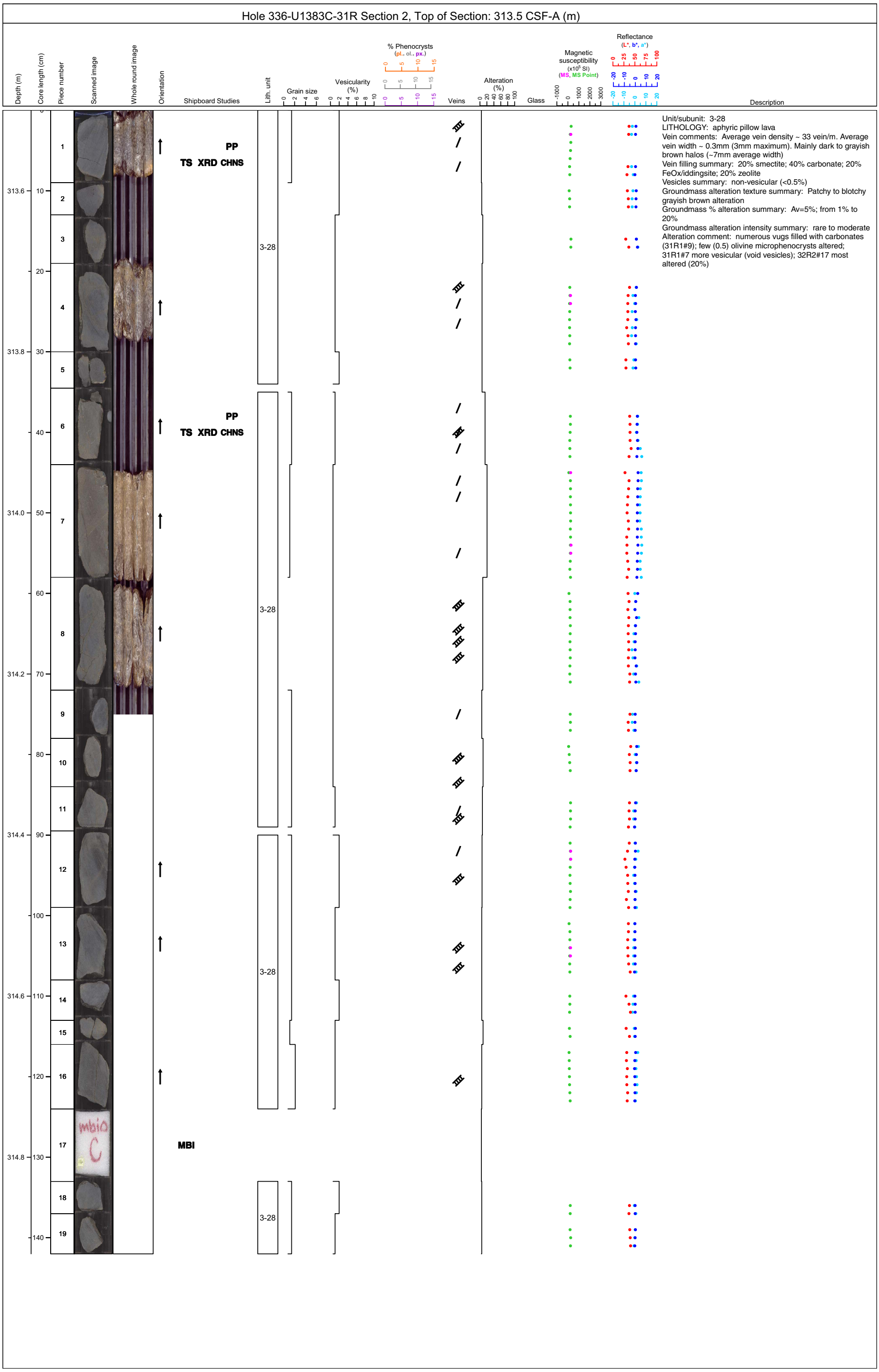
Unit/subunit: 3-26
LITHOLOGY: aphyric pillow lava
Vein comments: Average vein density ~ 38 vein/m. Average vein width ~ 0.3mm (1.5mm maximum). Mainly dark to grayish brown halos (~9mm average width)
Vein filling summary: 25% smectite; 40% carbonate; 25% FeOx/iddingsite
Vesicles summary: non-vesicular (<0.5%)
Vesicles filling summary: ~ 50% vesicle filling on average. Generally composite vesicle filling with smectite, FeOOH (+/- iddingsite). Locally abundant carbonate and zeolite-filled vesicles
Groundmass alteration texture summary: Patchy to blotchy grayish brown alteration
Groundmass % alteration summary: Av=5%; from 1% to 20%

Groundmass alteration intensity summary: rare to moderate

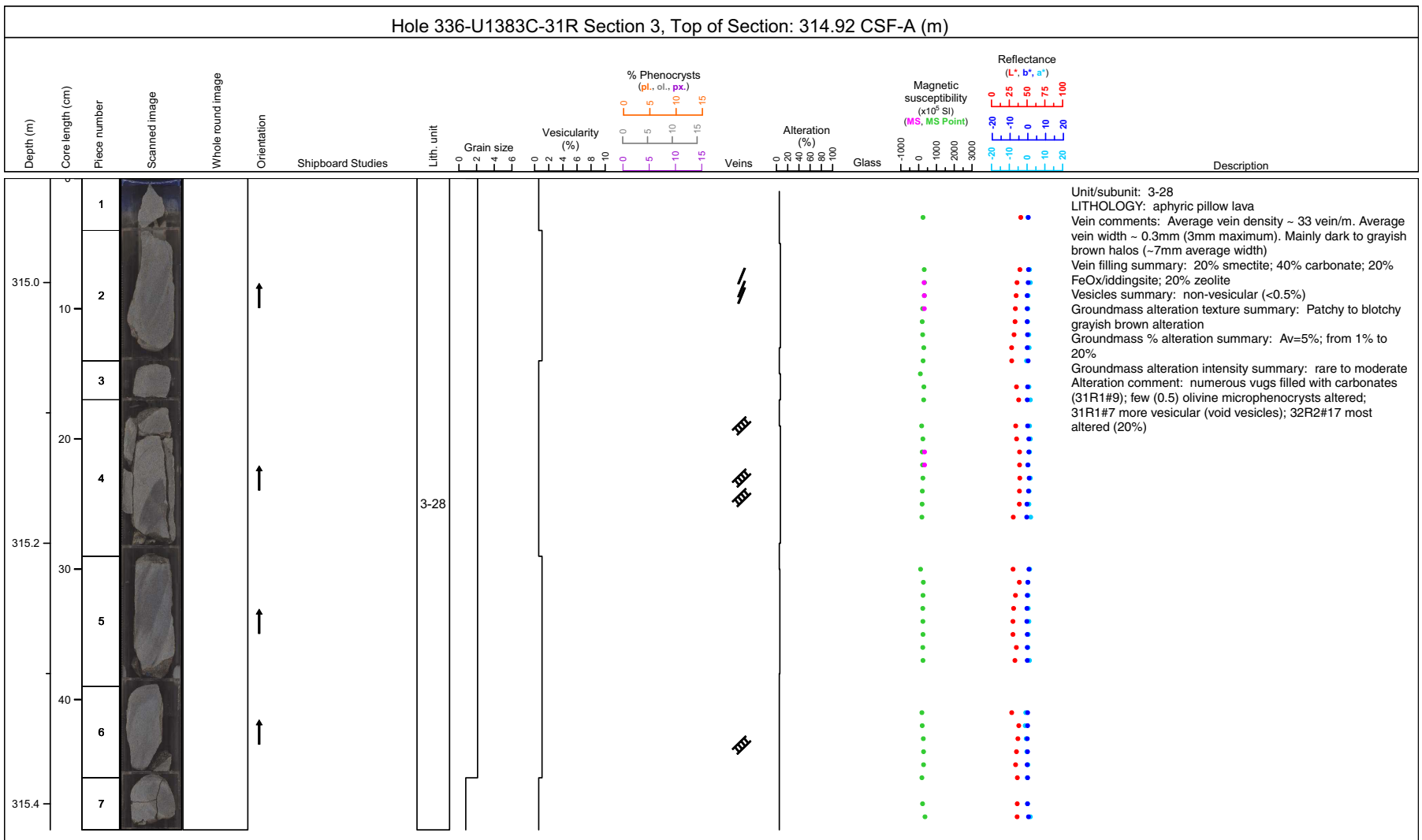
Core Photo


Hole 336-U1383C-31R Section 1, Top of Section: 312.1 CSF-A (m)
Depth (m)
Core length (cm)
Piece number
Scanned image
Whole round image
Orientation
Shipboard Studies
Lith. unit
Grain size
Vesicularity (%)
% Phenocrysts (pl., ol., px.)
Veins
Alteration (%)
Glass
Magnetic susceptibility (x10⁻⁵ SI) (MS, MS Point)
Reflectance (L*, b*, a*)
Description
MBI
3-26
3-27
3-28
312.2
312.4
312.6
312.8
313.0
313.2
313.4
Unit/subunit: 3-26
LITHOLOGY: aphyric pillow lava
Vein comments: Average vein density ~ 38 vein/m. Average vein width ~ 0.3mm (1.5mm maximum). Mainly dark to grayish brown halos (~9mm average width)
Vein filling summary: 25% smectite; 40% carbonate; 25% FeOx/iddingsite
Vesicles summary: non-vesicular (<0.5%)
Vesicles filling summary: ~ 50% vesicle filling on average. Generally composite vesicle filling with smectite, FeOOH (+/- iddingsite). Locally abundant carbonate and zeolite-filled vesicles
Groundmass alteration texture summary: Patchy to blotchy grayish brown alteration
Groundmass % alteration summary: Av=5%; from 1% to 20%
Groundmass alteration intensity summary: rare to moderate
Unit/subunit: 3-27
LITHOLOGY: brecciated glassy basalt hyaloclastite
Unit/subunit: 3-28
LITHOLOGY: aphyric pillow lava
Vein comments: Average vein density ~ 33 vein/m. Average vein width ~ 0.3mm (3mm maximum). Mainly dark to grayish brown halos (~7mm average width)
Vein filling summary: 20% smectite; 40% carbonate; 20% FeOx/iddingsite; 20% zeolite
Vesicles summary: non-vesicular (<0.5%)
Groundmass alteration texture summary: Patchy to blotchy grayish brown alteration
Groundmass % alteration summary: Av=5%; from 1% to 20%
Groundmass alteration intensity summary: rare to moderate
Alteration comment: numerous vugs filled with carbonates (31R1#9); few (0.5) olivine microphenocrysts altered; 31R1#7 more vesicular (void vesicles); 32R2#17 most altered (20%)

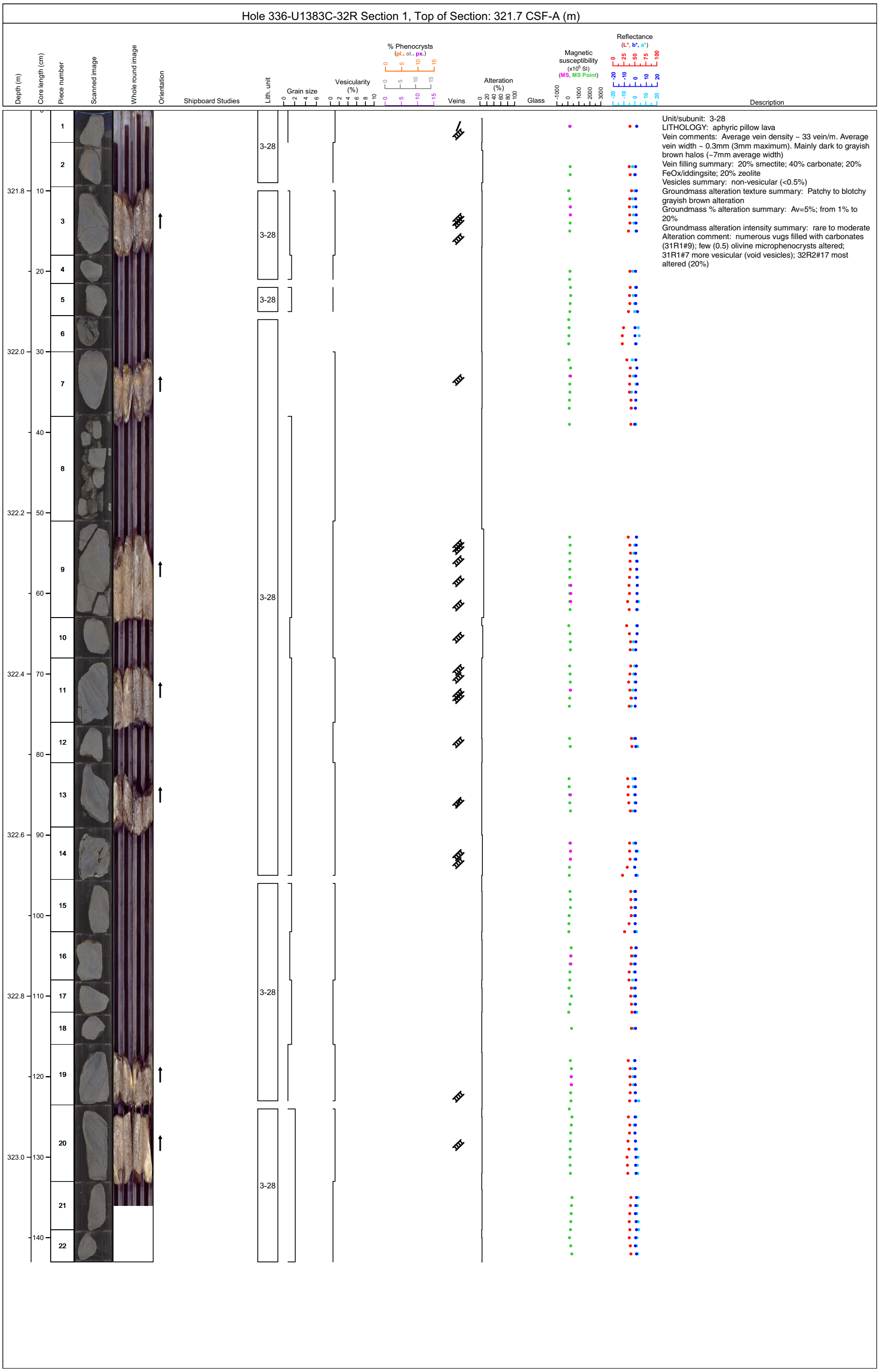
Core Photo


Hole 336-U1383C-31R Section 2, Top of Section: 313.5 CSF-A (m)
Depth (m)
Core length (cm)
Piece number
Scanned image
Whole round image
Orientation
Shipboard Studies
Lith. unit
Grain size
Vesicularity (%)
% Phenocrysts (pl., ol., px.)
Veins
Alteration (%)
Glass
Magnetic susceptibility (x10⁻⁵ SI) (MS, MS Point)
Reflectance (L*, b*, a*)
Description
PP
TS XRD CHNS
MBI
3-28
313.6
313.8
314.0
314.2
314.4
314.6
314.8
Unit/subunit: 3-28
LITHOLOGY: aphyric pillow lava
Vein comments: Average vein density ~ 33 vein/m. Average vein width ~ 0.3mm (3mm maximum). Mainly dark to grayish brown halos (~7mm average width)
Vein filling summary: 20% smectite; 40% carbonate; 20% FeOx/iddingsite; 20% zeolite
Vesicles summary: non-vesicular (<0.5%)
Groundmass alteration texture summary: Patchy to blotchy grayish brown alteration
Groundmass % alteration summary: Av=5%; from 1% to 20%
Groundmass alteration intensity summary: rare to moderate
Alteration comment: numerous vugs filled with carbonates (31R1#9); few (0.5) olivine microphenocrysts altered; 31R1#7 more vesicular (void vesicles); 32R2#17 most altered (20%)

Core Photo

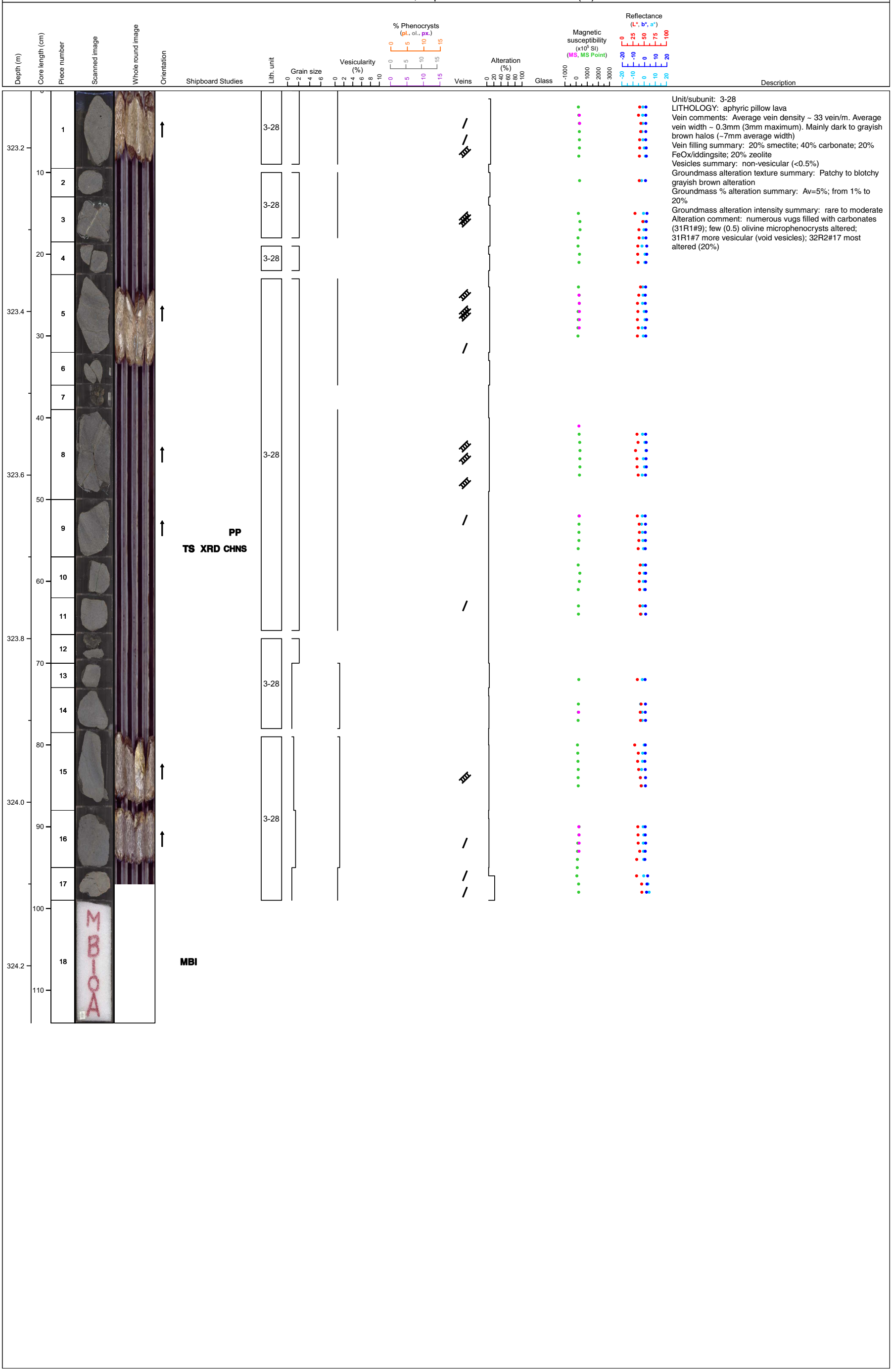

Hole 336-U1383C-31R Section 3, Top of Section: 314.92 CSF-A (m)
Depth (m)
Core length (cm)
Piece number
Scanned image
Whole round image
Orientation
Shipboard Studies
Lith. unit
Grain size
Vesicularity (%)
% Phenocrysts (pl., ol., px.)
Veins
Alteration (%)
Glass
Magnetic susceptibility (x10⁵ SI) (MS, MS Point)
Reflectance (L*, b*, a*)
Description
315.0
315.2
315.4
3-28
Unit/subunit: 3-28
LITHOLOGY: aphyric pillow lava
Vein comments: Average vein density ~ 33 vein/m. Average vein width ~ 0.3mm (3mm maximum). Mainly dark to grayish brown halos (~7mm average width)
Vein filling summary: 20% smectite; 40% carbonate; 20% FeOx/iddingsite; 20% zeolite
Vesicles summary: non-vesicular (<0.5%)
Groundmass alteration texture summary: Patchy to blotchy grayish brown alteration
Groundmass % alteration summary: Av=5%; from 1% to 20%
Groundmass alteration intensity summary: rare to moderate
Alteration comment: numerous vugs filled with carbonates (31R1#9); few (0.5) olivine microphenocrysts altered; 31R1#7 more vesicular (void vesicles); 32R2#17 most altered (20%)

Core Photo


Hole 336-U1383C-32R Section 1, Top of Section: 321.7 CSF-A (m)
Depth (m)
Core length (cm)
Piece number
Scanned image
Whole round image
Orientation
Shipboard Studies
Lith. unit
Grain size
Vesicularity (%)
% Phenocrysts (pl., ol., px.)
Veins
Alteration (%)
Glass
Magnetic susceptibility (x10⁵ SI) (MS, MS Point)
Reflectance (L*, b*, a*)
Description
Unit/subunit: 3-28
LITHOLOGY: aphyric pillow lava
Vein comments: Average vein density ~ 33 vein/m. Average vein width ~ 0.3mm (3mm maximum). Mainly dark to grayish brown halos (~7mm average width)
Vein filling summary: 20% smectite; 40% carbonate; 20% FeOx/iddingsite; 20% zeolite
Vesicles summary: non-vesicular (<0.5%)
Groundmass alteration texture summary: Patchy to blotchy grayish brown alteration
Groundmass % alteration summary: Av=5%; from 1% to 20%
Groundmass alteration intensity summary: rare to moderate
Alteration comment: numerous vugs filled with carbonates (31R1#9); few (0.5) olivine microphenocrysts altered; 31R1#7 more vesicular (void vesicles); 32R2#17 most altered (20%)

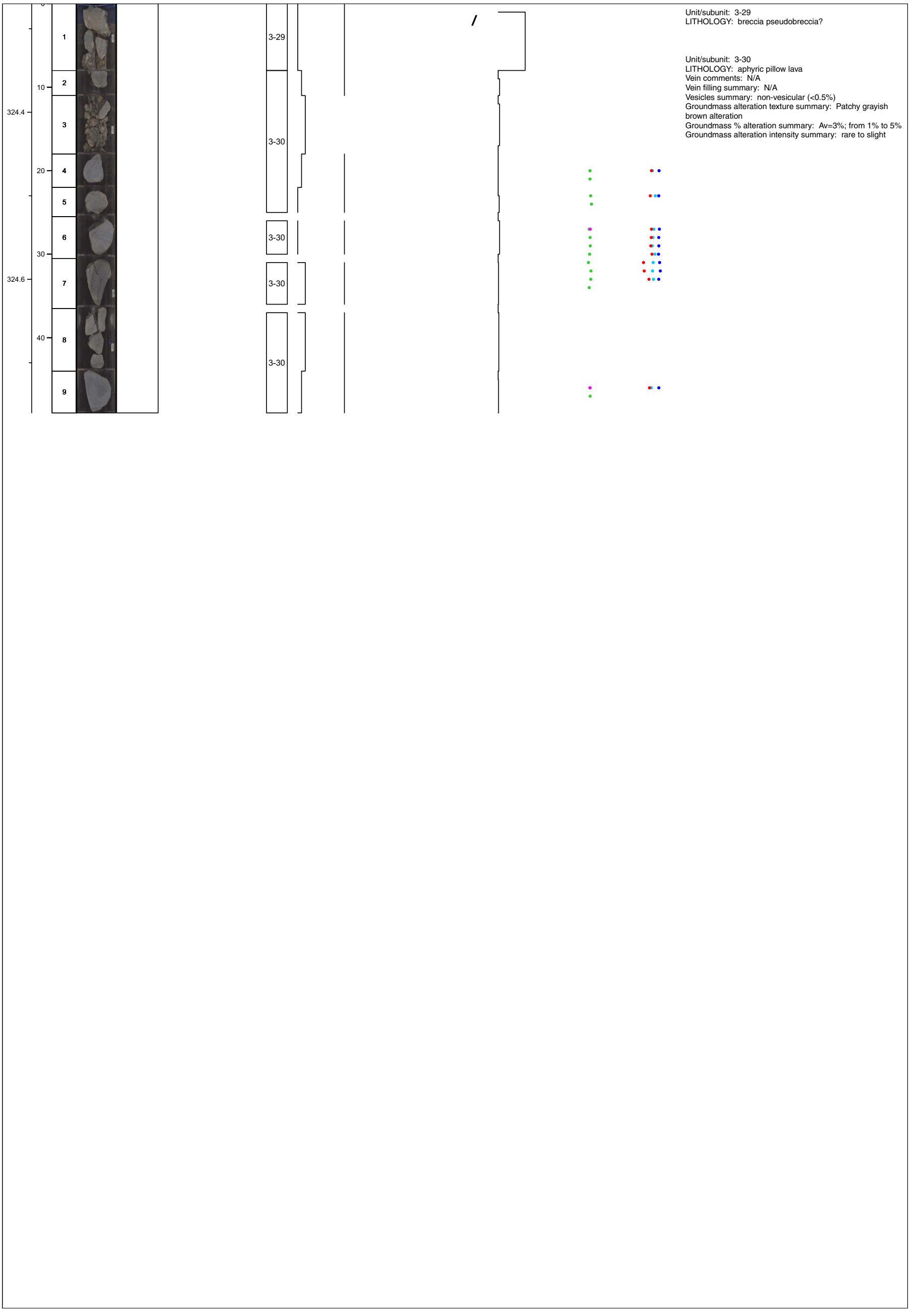
Core Photo

Hole 336-U1383C-32R Section 2, Top of Section: 323.13 CSF-A (m)



Core Photo

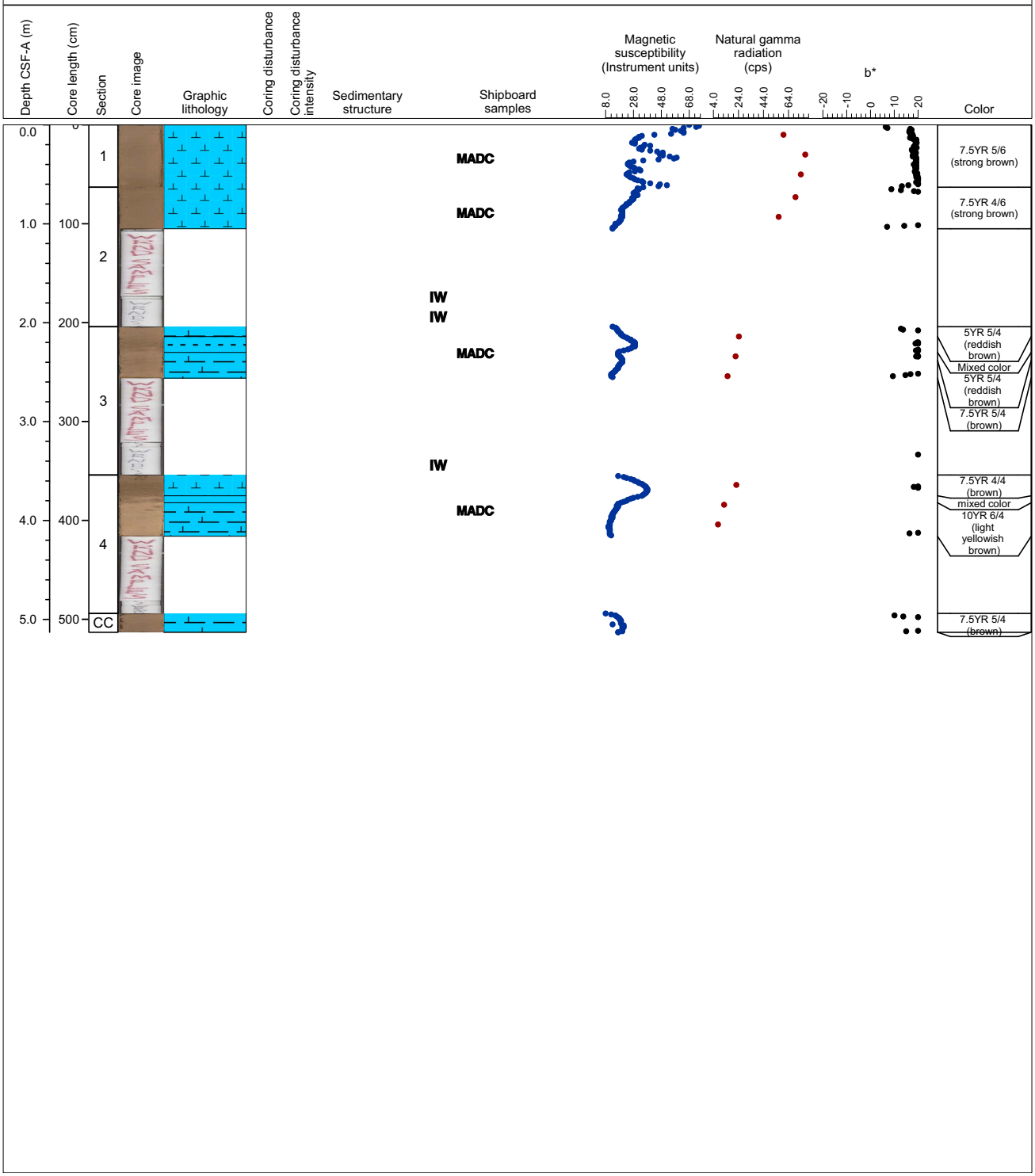
Hole 336-U1383C-32R Section 3, Top of Section: 324.27 CSF-A (m)



Core Photo

Hole 336-U1383D Core 1H, Interval 0.0-5.13 m (CSF-A)

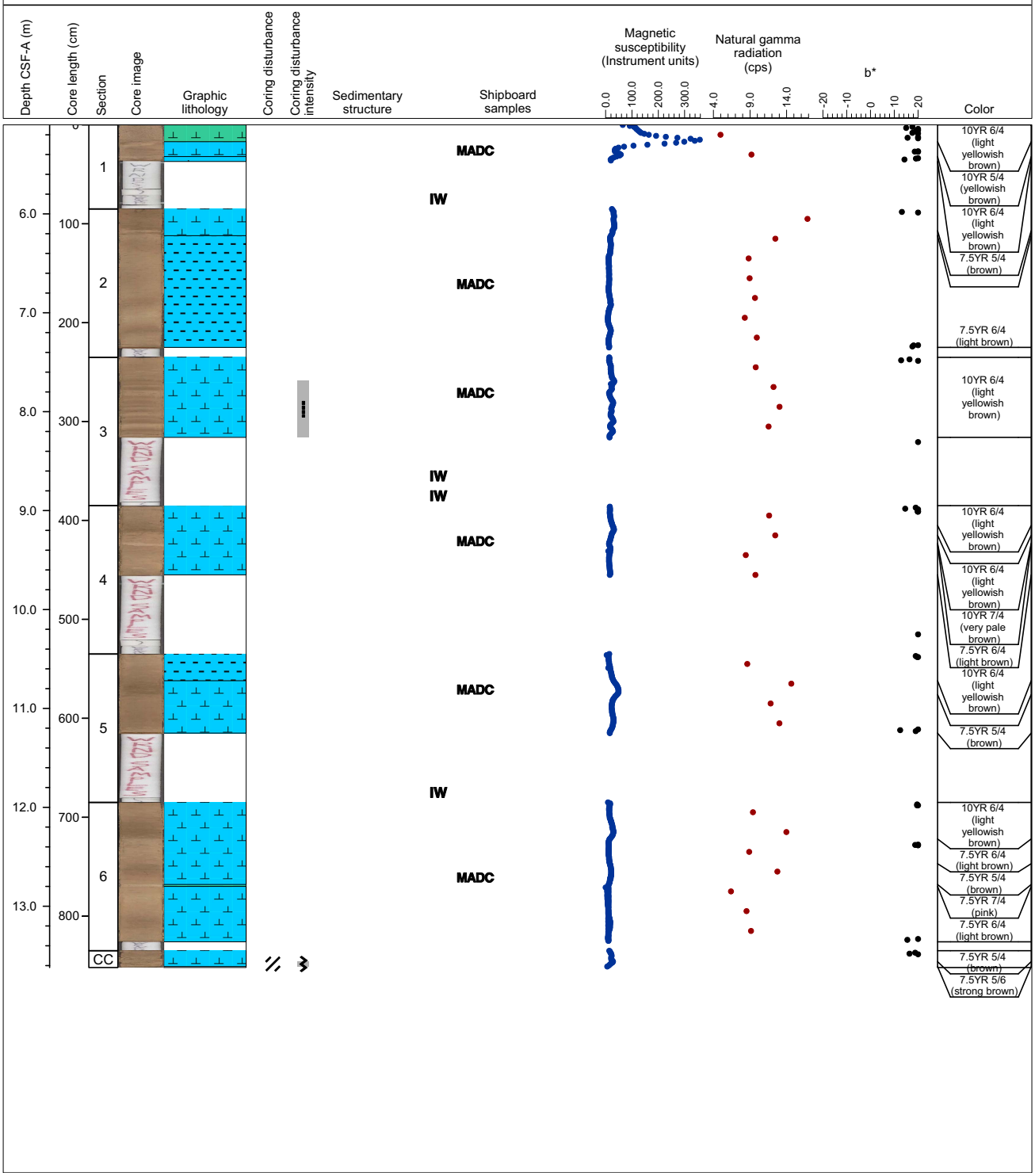
Strong brown to reddish brown to light yellowish brown foraminifer nannofossil ooze with variable proportions of foraminifers and nannofossils



Core Photo

Hole 336-U1383D Core 2H, Interval 5.1-13.62 m (CSF-A)

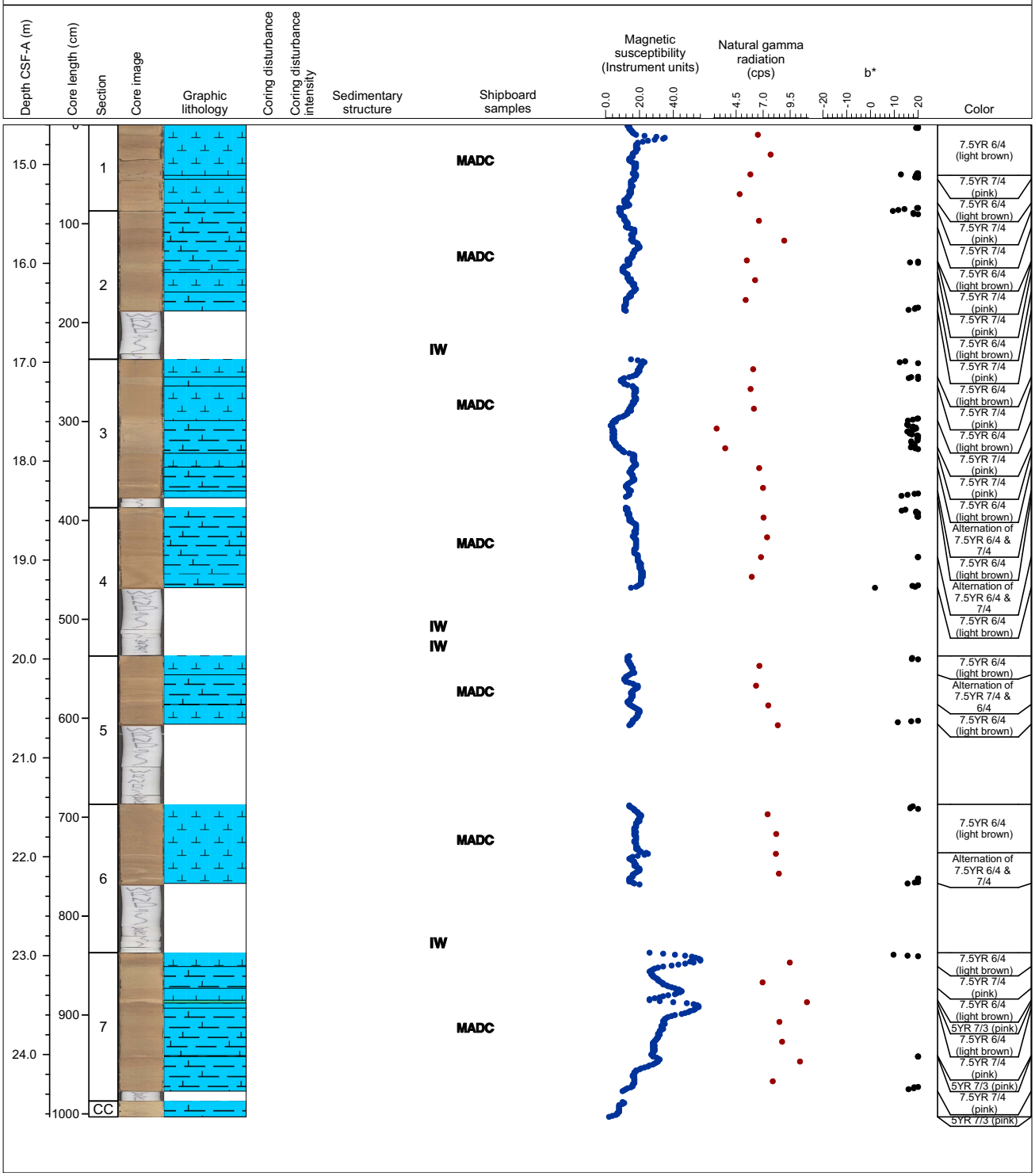
Light yellowish to light brown foraminifer nannofossil ooze with variable proportions of foraminifers and nannofossils, containing very rare sandy volcanic clasts, showing some rare drilling disturbance



Core Photo

Hole 336-U1383D Core 3H, Interval 14.6-24.63 m (CSF-A)

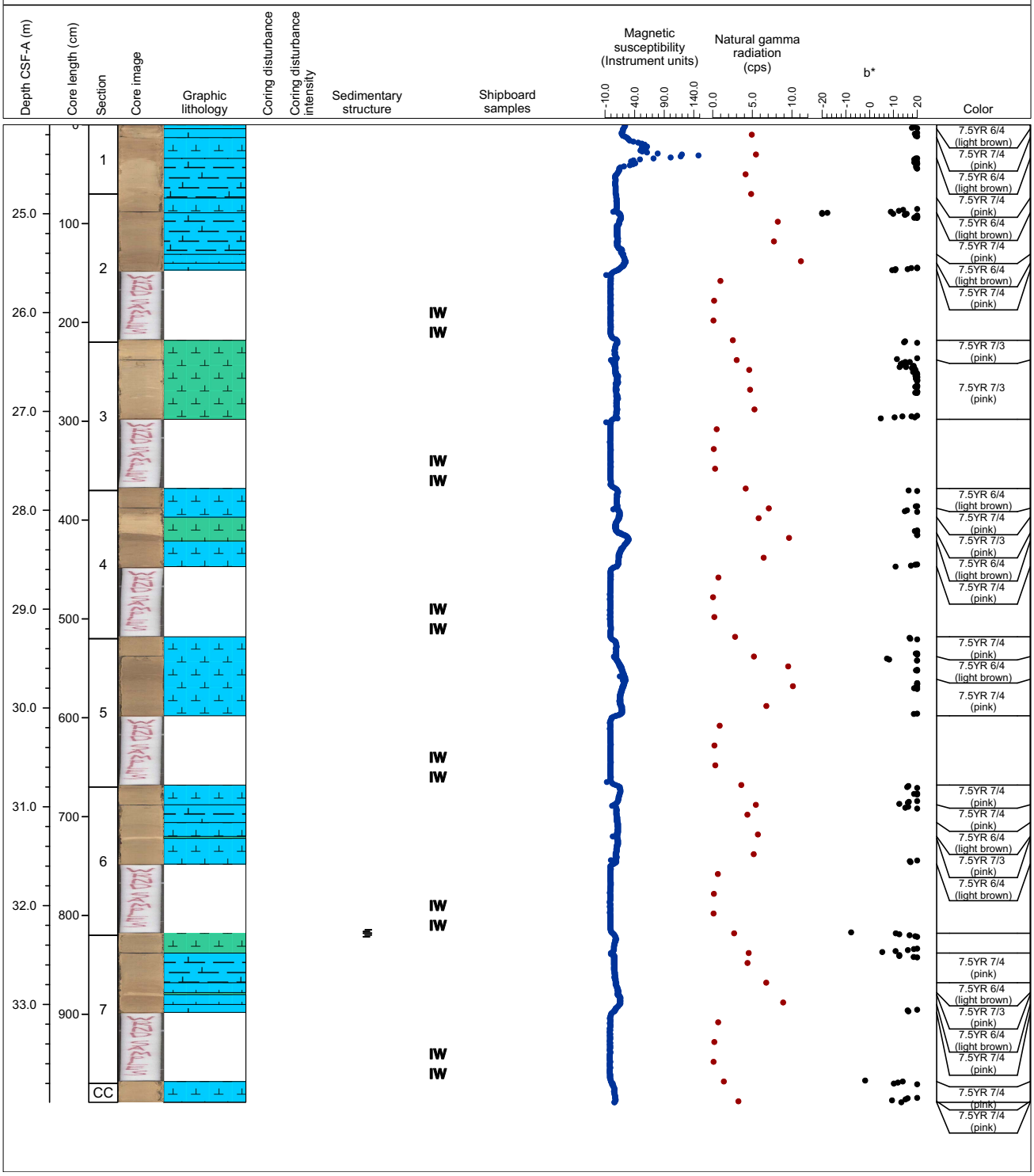
Pink to light brown foraminifer nannofossil ooze with variable proportions of foraminifers and nannofossils, with very rare drilling disturbance



Core Photo

Hole 336-U1383D Core 4H, Interval 24.1-33.99 m (CSF-A)

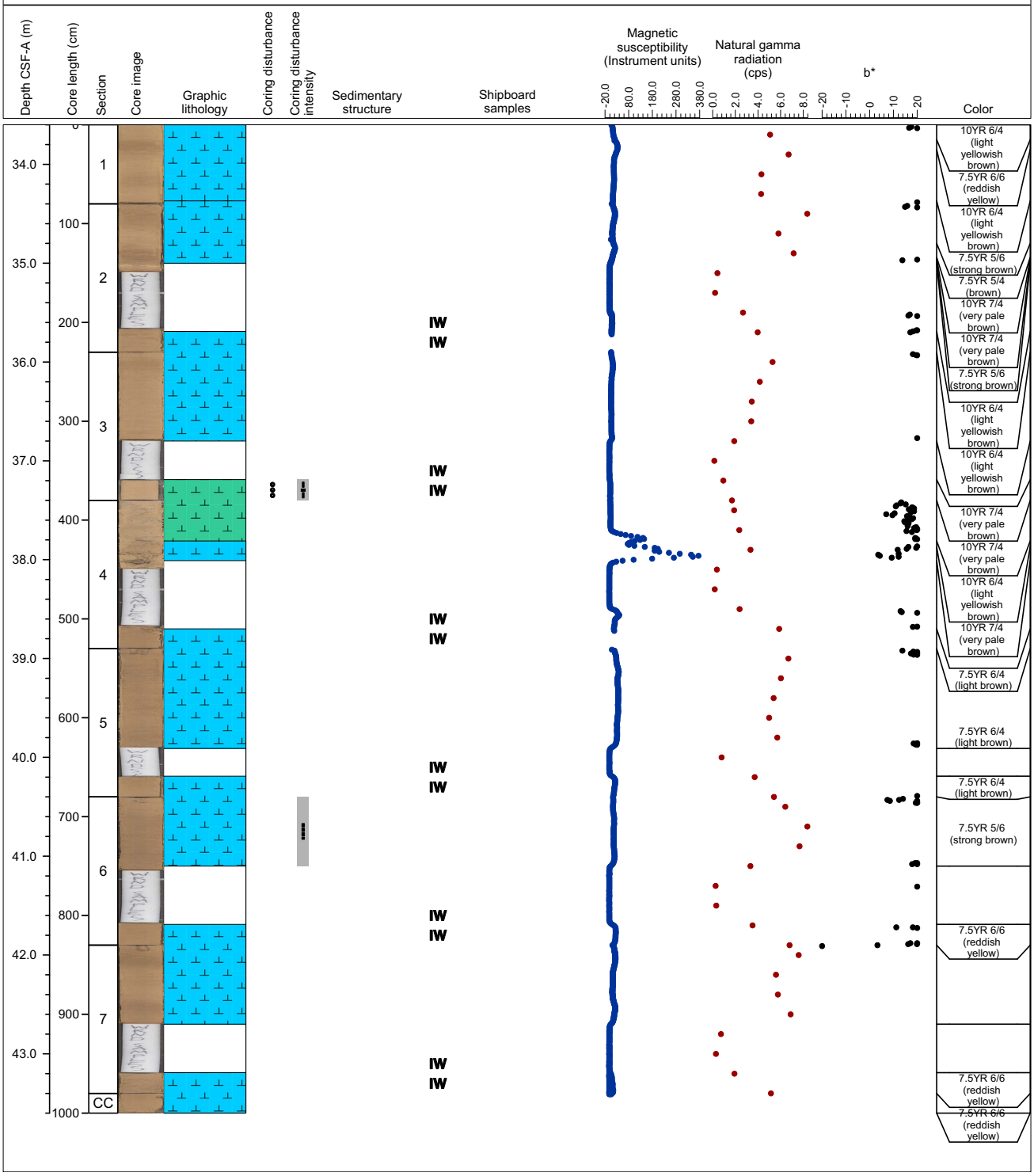
Pink to light brown foraminifer nannofossil ooze with variable proportions of foraminifers and nannofossils, some black grains underline laminae, containing very rare black clasts



Core Photo

Hole 336-U1383D Core 5H, Interval 33.6-43.6 m (CSF-A)

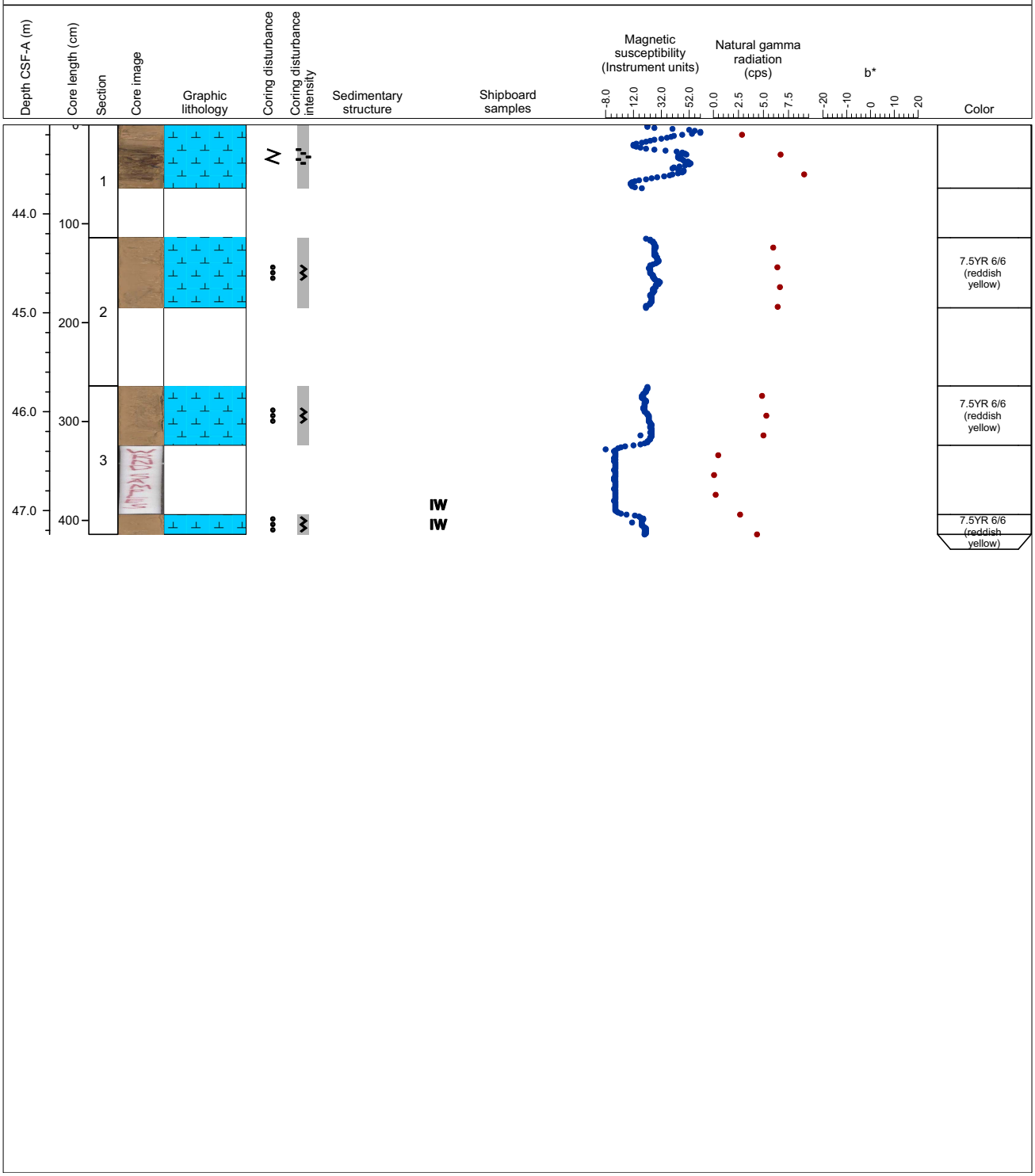
Strong brown to reddish yellow to light yellowish brown foraminifer nannofossil ooze with variable proportions of foraminifers and nannofossils, containing some sandy to pebbly black clasts, very rare weak drilling disturbance



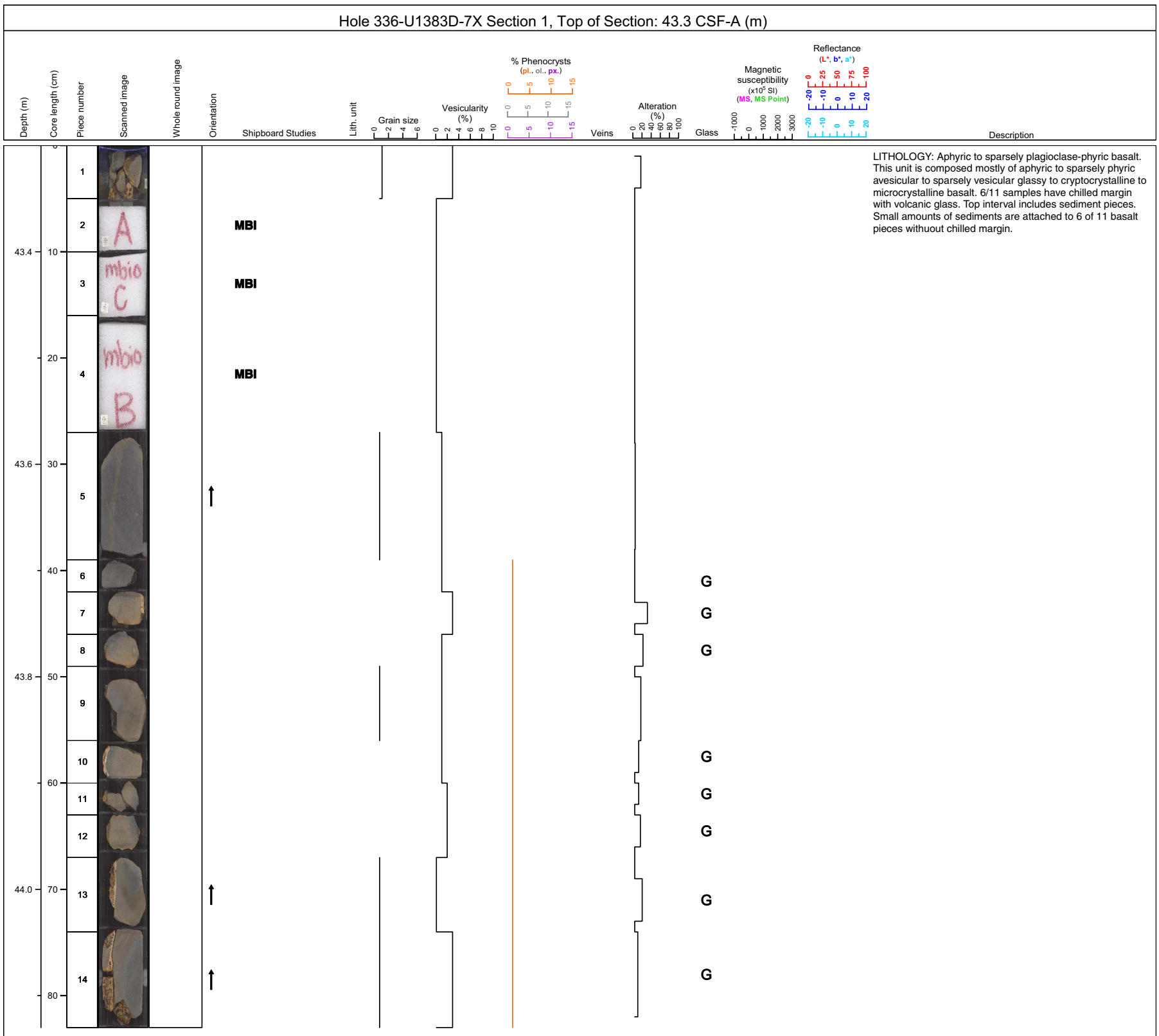
Core Photo

Hole 336-U1383D Core 6H, Interval 43.1-47.24 m (CSF-A)

Highly drilling disturbed core made of foraminifer bearing nannofossil rich ooze, some pebbly black clasts



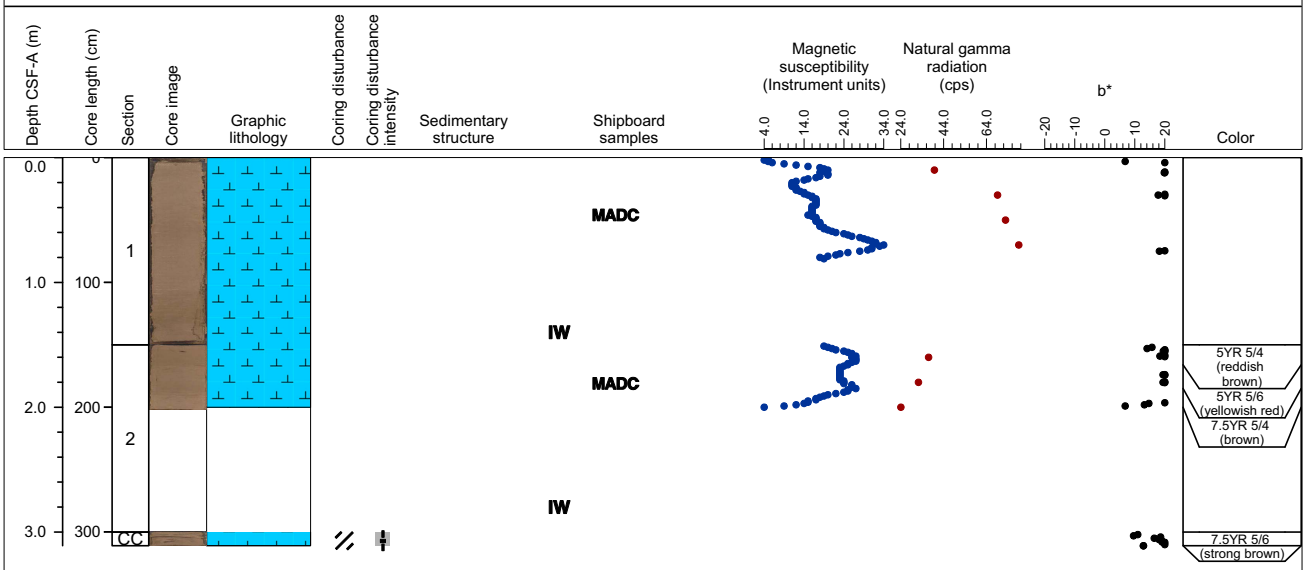
Core Photo


Hole 336-U1383D-7X Section 1, Top of Section: 43.3 CSF-A (m)
Depth (m)
Core length (cm)
Piece number
Scanned image
Whole round image
Orientation
Shipboard Studies
Lith. unit
Grain size
Vesicularity (%)
% Phenocrysts (pl., ol., px.)
Veins
Alteration (%)
Glass
Magnetic susceptibility (x10⁵ SI) (MS, MS Point)
Reflectance (L*, b*, a*)
Description
LITHOLOGY: Aphyric to sparsely plagioclase-phyric basalt. This unit is composed mostly of aphyric to sparsely phyric avesicular to sparsely vesicular glassy to cryptocrystalline to microcrystalline basalt. 6/11 samples have chilled margin with volcanic glass. Top interval includes sediment pieces. Small amounts of sediments are attached to 6 of 11 basalt pieces withuout chilled margin.
MBI
G
43.4
43.6
43.8
44.0

Core Photo

Hole 336-U1383E Core 1H, Interval 0.0-3.11 m (CSF-A)

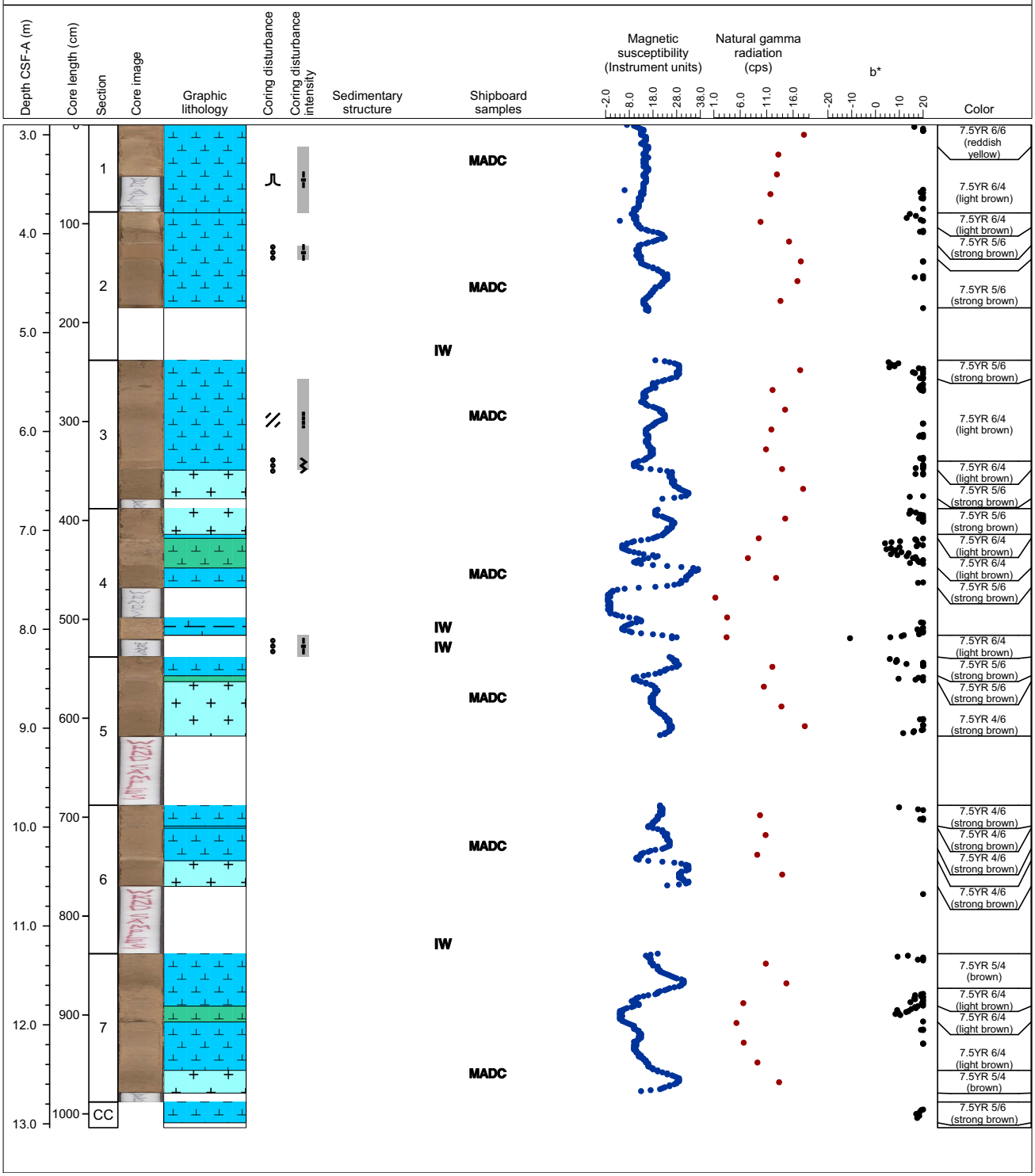
Strong brown to brown to reddish brown to yellowish red foraminifer bearing nannofossil rich ooze with weak coring disturbance



Core Photo

Hole 336-U1383E Core 2H, Interval 2.9-13.04 m (CSF-A)

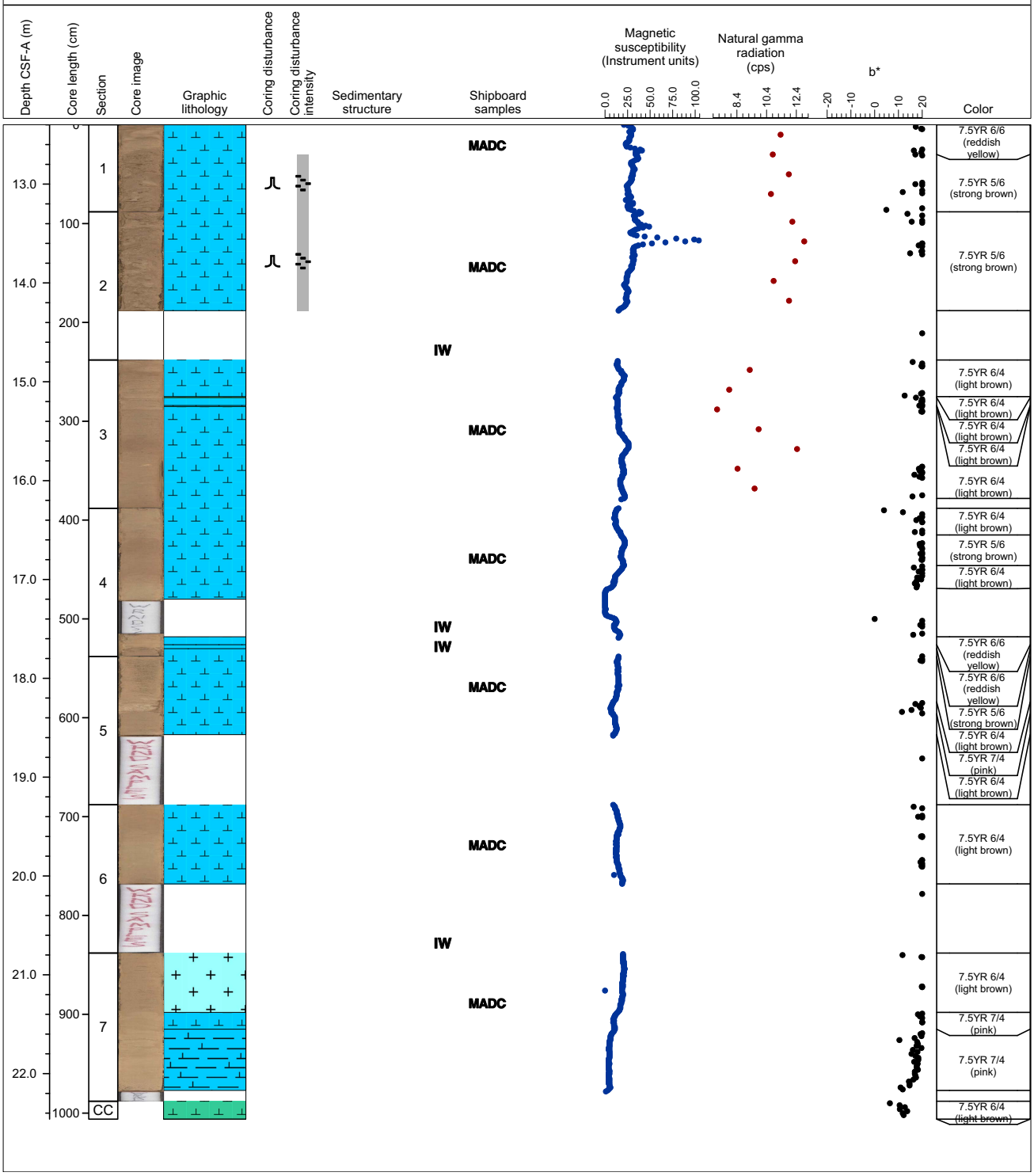
Strong brown to light brown moderately coring disturbed foraminifer nannofossil ooze with variable proportions of foraminifers and nannofossils, containing some layers with angular sandy well sorted black clasts, showing some upward fining sequences



Core Photo

Hole 336-U1383E Core 3H, Interval 12.4-22.46 m (CSF-A)

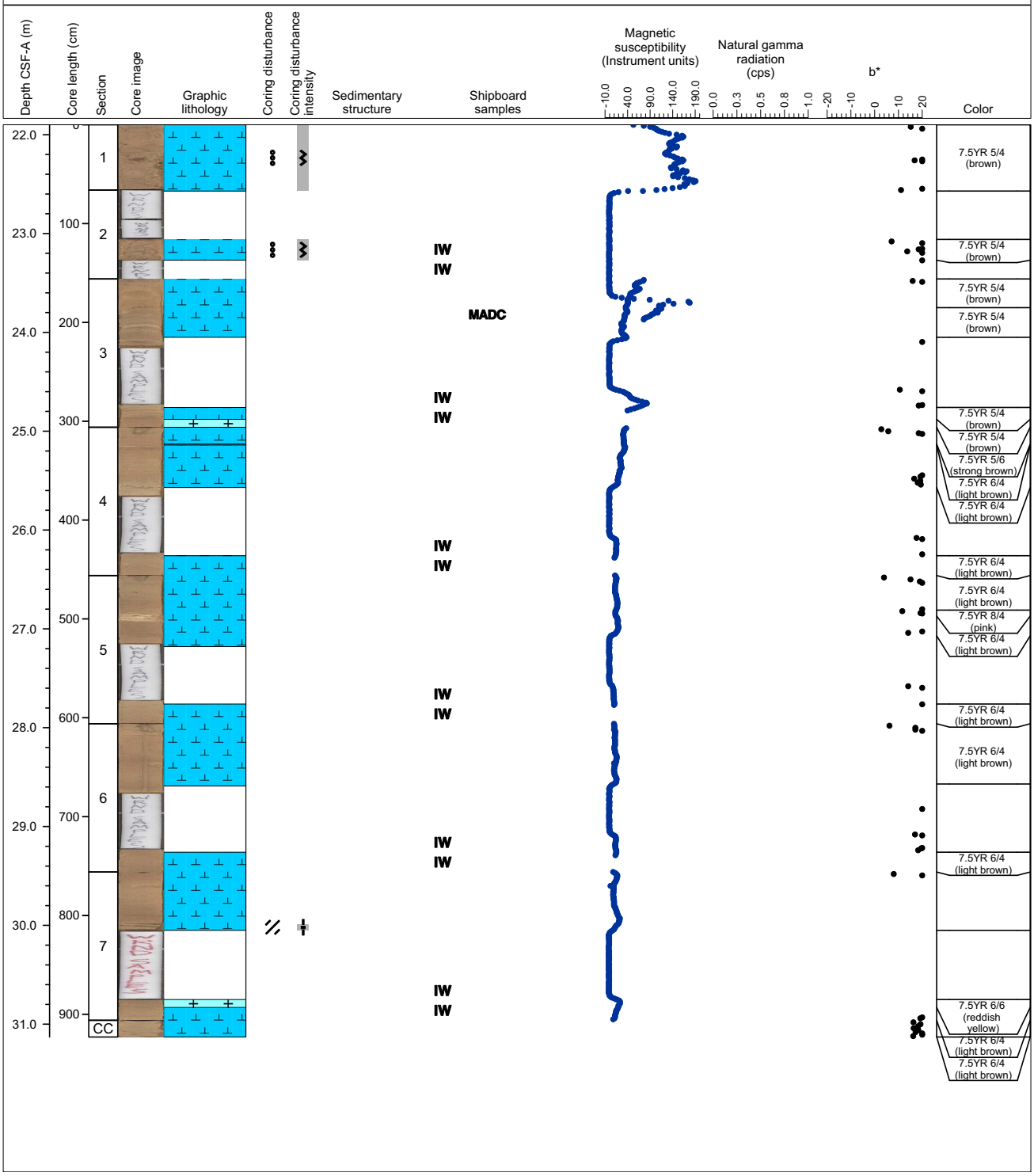
Strong brown to light brown to reddish yellow to pink moderately affected by coring disturbance foraminifer nannofossil ooze with variable proportions of foraminifers and nannofossils and showing some upward fining sequences



Core Photo

Hole 336-U1383E Core 4H, Interval 21.9-31.13 m (CSF-A)

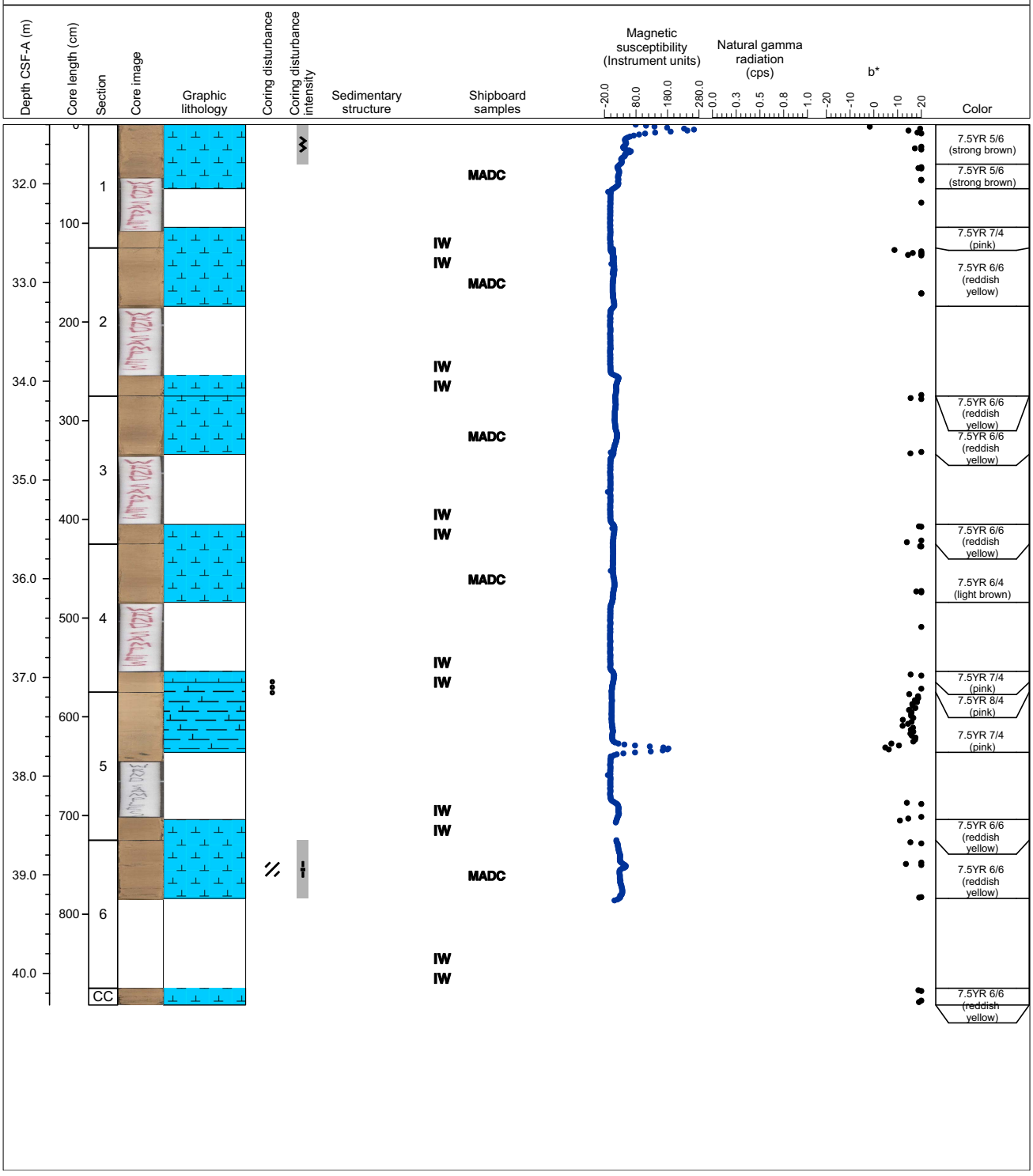
Brown to light brown weakly affected by coring disturbance (soupy and arched boundaries) foraminifer nannofossil ooze with variable proportions of foraminifers and nannofossils



Core Photo

Hole 336-U1383E Core 5H, Interval 31.4-40.32 m (CSF-A)

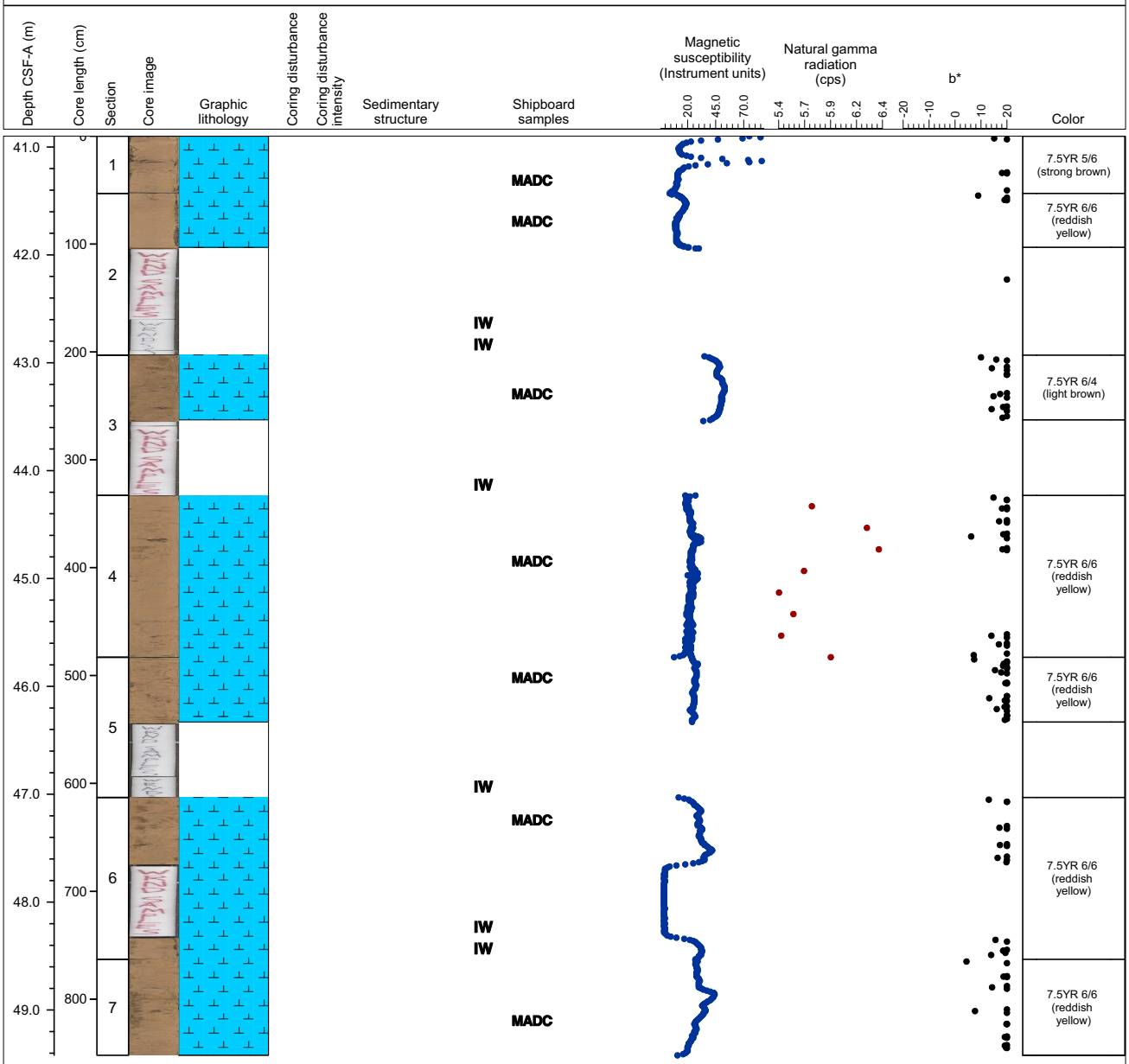
Reddish yellow to pink moderately affected by drilling disturbance foraminifer bearing nannofossil rich ooze and nannofossil bearing foraminifer rich ooze with some layers containing pebbly angular clasts



Core Photo

Hole 336-U1383E Core 6H, Interval 40.9-49.42 m (CSF-A)

Mostly reddish yellow foraminifer bearing nannofossil rich ooze with some layers containing pebbly black clasts, dark inclusions and a clast of nannofossil limestone



U1383E-7X-CC: No description

Sample	Top [cm]	Bottom [cm]	Top Depth [m]	Bottom Depth [m]	Sample domain where smear slide taken	Gravel texture [%]	Sand texture [%]	Silt texture [%]	Clay texture [%]	Glass [%]	Palagonite [%]	Other mineral grains [%]	Calcareous nannofossils [%]	Benthic foraminifers [%]	Planktonic foraminifers [%]	Radiolarians [%]	Dinoflagellate, acritarch, prasinophyte [%]	Other microfossils [%]	Microfossil comment	Amorphous lump,siliceous [%]	Amorphous lump, calcareous [%]	Smear slide comment	Prefix	Principal lithology	Lithology complete name	Ship File Links	Shore File Links
336-U1383C-4R-2-W 1/7-SS13	0	6	87.650	87.710	inter-basalt	0	0	10	90	5	2	5	3							x	60		nannofossil	limestone	nannofossil limestone		
336-U1383C-4R-2-W 85/89-SS14	0	4	88.490	88.530	inter-basalt	0	0	10	90	10	10	5	5							x	45		nannofossil	limestone	nannofossil limestone		
336-U1383C-5R-1-W 110/113-SS15	0	3	96.900	96.930	inter-basalt	0	0	10	90	10	10	5	5							x	40		nannofossil	limestone	nannofossil limestone		
336-U1383C-7R-2-W 70/74-SS16	0	4	117.140	117.180	inter-basalt	0	0	10	90	15	5	2	2							x	50		nannofossil	limestone	nannofossil limestone		
336-U1383C-8R-2-W 57/59-SS17	0	2	126.530	126.550	inter-basalt	0	0	10	90	10	3	10	2							x	45		nannofossil	limestone	nannofossil limestone		
336-U1383C-10R-1-W 44/48-SS18	0	4	144.340	144.380	inter-basalt	0	0	10	90	5	5	3	2							x	70		nannofossil	limestone	nannofossil limestone		
336-U1383C-10R-2-W 134/135-SS20	0	1	146.610	146.620	inter-basalt	0	0	10	90	10	5	5	10							x	50		nannofossil	limestone	nannofossil limestone		
336-U1383C-10R-2-W 64/69-SS19	0	5	145.910	145.960	inter-basalt	0	0	10	90	2	1	2	5							x	80		nannofossil	limestone	nannofossil limestone		
336-U1383C-11R-1-W 115/120-SS22	0	5	154.650	154.700	cling to basalt	0	0	10	90	20	15	8	5							40	x		volcaniclastic	sediment	volcaniclastic sediment		
336-U1383C-11R-1-W 46/54-SS21	0	8	153.960	154.040	basalt intruded	0	0	10	90	5	3	2	10							x	40		nannofossil	limestone	nannofossil limestone		
336-U1383C-12R-1-W 16/26-SS23	0	10	163.260	163.360	cling to basalt	0	0	10	90	25	10	10	x							50	x		volcaniclastic	sediment	volcaniclastic sediment		
336-U1383C-12R-1-W 59/61-SS24	0	2	163.690	163.710	inter-basalt	0	0	10	90	10	5	10	20							30	5		nannofossil	limestone	nannofossil limestone		
336-U1383C-13R-1-W 38/43-SS25	0	5	173.080	173.130	inter-basalt	30	10	20	40	20	60	5	5							x	x		polymictic	breccia	polymictic breccia		
336-U1383C-13R-1-W 58/62-SS26	0	4	173.280	173.320	inter-basalt	30	10	20	40	20	70	7	1							x	x		polymictic	breccia	polymictic breccia		

Sample	Top [cm]	Bottom [cm]	Top Depth [m]	Bottom Depth [m]	Sample domain where smear slide taken	Gravel texture [%]	Sand texture [%]	Silt texture [%]	Clay texture [%]	Glass [%]	Palagonite [%]	Other mineral grains [%]	Calcareous nannofossils [%]	Benthic foraminifers [%]	Planktonic foraminifers [%]	Radiolarians [%]	Dinoflagellate, acritarch, prasinophyte [%]	Other microfossils [%]	Microfossil comment	Amorphous lump,siliceous [%]	Amorphous lump, calcareous [%]	Smear slide comment	Prefix	Principal lithology	Lithology complete name	Ship File Links	Shore File Links
336-U1383D-1H-1-W 0/2-SS27	0	2	0.000	0.020																			nannofossil rich	ooze	nannofossil rich ooze		
336-U1383D-2H-4-W 0/2-SS28	0	2	8.950	8.970																			nannofossil rich	ooze	nannofossil rich ooze		
336-U1383D-3H-6-W 0/2-SS29	0	2	21.470	21.490																			nannofossil rich	ooze	nannofossil rich ooze		
336-U1383D-4H-6-W 0/2-SS30	0	2	30.980	31.000																			nannofossil rich	ooze	nannofossil rich ooze		

Sample	Top [cm]	Bottom [cm]	Top Depth [m]	Bottom Depth [m]	Sample domain where smear slide taken	Gravel texture [%]	Sand texture [%]	Silt texture [%]	Clay texture [%]	Glass [%]	Palagonite [%]	Other mineral grains [%]	Calcareous nannofossils [%]	Benthic foraminifers [%]	Planktonic foraminifers [%]	Radiolarians [%]	Dinoflagellate, acritarch, prasinophyte [%]	Other microfossils [%]	Microfossil comment	Amorphous lump,siliceous [%]	Amorphous lump, calcareous [%]	Smear slide comment	Prefix	Principal lithology	Lithology complete name	Ship File Links	Shore File Links
336-U1383E-1H-2-W 0/2-SS31	0	2	1.500	1.520			0	10	90														nannofossil rich	ooze	nannofossil rich ooze		
336-U1383E-2H-4-IWB-IWSC-SS32	0	2	8.280	8.300																			nannofossil rich	muddy gravel	nannofossil rich muddy gravel		
336-U1383E-2H-6-W 0/2-SS33	0	2	9.980	10.000																			nannofossil rich	ooze	nannofossil rich ooze		
336-U1383E-3H-7-W 0/2-SS34	0	2	20.780	20.800																			nannofossil rich	ooze	nannofossil rich ooze		
336-U1383E-4H-7-W 0/2-SS35	0	2	29.460	29.480																			nannofossil rich	ooze	nannofossil rich ooze		
336-U1383E-6H-4-W 0/2-SS36	0	2	44.230	44.250																			nannofossil rich	ooze	nannofossil rich ooze		
336-U1383E-6H-7-W 0/2-SS37	0	2	48.530	48.550																			nannofossil rich	ooze	nannofossil rich ooze		

Thin section: 336-U1383C-2R-2-W 15/18-TSB#28-TS#28
Piece number: 10, 11
Depth CSF-A (m): 71.080 - 71.110
Rock name: sparsely plag-Ol phyric basalt, avesicular
Grain size: glassy to microcrystalline
Texture: hyalophytic

			Size					
Primary mineralogy	**Percent present**	**Percent original**	**min**	**max**	**mode**	**Shape**	**Replacing/ filling**	**Comments**
Phenocrysts								
Olivine	1	1	0.06	0.3	0.1	large crystals partly resorbed		
Plagioclase	2	2	0.8	tabular, euhedral	some interpenetrating clusters			
Clinopyroxene					1		skeletal	
Groundmass/matrix								
Olivine	35	30		0.5			sheef and swallow-taitec microphenocrysts	acicular, skeletal
Plagioclase	25	25		0.02				in between plabio needles
Clinopyroxene	<1	<1		<0.01				
Mesostasis	19	30						
Sulfide								
Glassy margin	2	5					the 2 present (and 5 originally) are glassy margin	

		Size				
Secondary mineralogy	**Percent**	**min**	**max**	**mode**	**Replacing/ filling**	**Comments**
Zeolite	1				vein	low birefringence, acicular
Palagonite	14				glassy rind and glass in mesostasis	palagonite, estimated in reflected light

Vesicles	**Present**	**Original**	**min**	**max**	**mode**	**Shape**	**Comments**
V1							

Total Alteration:	15
Structure:	Upper 5% was glass now 60% palagonitized, next 20% has cryptocristalline, rest has microcristaline mesostasis.
Comments:	

Thin section: 336-U1383C-3R-1-W 3/6-TSB#30-TS#30
Piece number: 2
Depth CSF-A (m): 76.630 - 76.660
Rock name: avesicular sparsely plagioclase phyric basalt
Grain size: micrcrystalline
Texture: hyalophitic

			Size					
Primary mineralogy	**Percent present**	**Percent original**	**min**	**max**	**mode**	**Shape**	**Replacing/ filling**	**Comments**
Phenocrysts								
Olivine	tr	tr		0.06		euhedral		
Plagioclase	2	2	0.3	1	0.6	tabular		
Clinopyroxene								
Groundmass/matrix								
Olivine	1	4	0.01	0.05		equant		
Plagioclase	34	35	0.01	0.2		acicular, skeletal		swallow-tailed
Clinopyroxene	20	20		0.1		plumose		
Mesostasis	4	34						alteration intensity estimated in reflected light

		Size				
Secondary mineralogy	**Percent**	**min**	**max**	**mode**	**Replacing/ filling**	**Comments**
Brown clay	37				olivine, mesostasis	
FeOOH	2				olivine	
Zeolite	tr.				filling vesicle	

Vesicles	**Present**	**Original**	**min**	**max**	**mode**	**Shape**	**Comments**
V1							
Total Alteration:	39						
Structure:							
Comments:							

Thin section: 336-U1383C-3R-2-W 26/29-TSB#31-TS#31
Piece number: 5
Depth CSF-A (m): 78.360 - 78.390
Rock name: sparsely plagioclase olivine phyric basalt
Grain size: microcrystalline
Texture: porphyritic

			Size					
Primary mineralogy	**Percent present**	**Percent original**	**min**	**max**	**mode**	**Shape**	**Replacing/ filling**	**Comments**
Phenocrysts								
Olivine	tr	1	0.1	0.5	0.2	euhedral		in cluster with plagioclase
Plagioclase	2	2	0.2	2	1	tabular		
Clinopyroxene								
Groundmass/matrix								
Olivine	1	6	0.01	0.08				
Plagioclase	44	45	0.01	0.2				
Clinopyroxene	25	25		0.15				
Fe-Ti oxide	1	1		0.04				
Sulfide								
Mesostasis	16	20						

		Size				
Secondary mineralogy	**Percent**	**min**	**max**	**mode**	**Replacing/ filling**	**Comments**
Green clay					olivine, glassy mesostasis, filling	
Brown clay	9				vesicles	
FeOOH	1				olivine	

Vesicles	**Present**	**Original**	**min**	**max**	**mode**	**Shape**	**Comments**
V1							

Total Alteration:	10
Structure:	avesicular
Comments:	

Thin section: 336-U1383C-3R-3-W 38/41-TSB#29-TS#29
Piece number: 7
Depth CSF-A (m): 79.870 - 79.900
Rock name: Sparsely plag-Ol phyric basalt
Grain size: microcrystalline to fine grained
Texture: hyalophytic to fine grained

			Size					
Primary mineralogy	**Percent present**	**Percent original**	**min**	**max**	**mode**	**Shape**	**Replacing/ filling**	**Comments**
Phenocrysts								
Olivine	0.3	0.5	0.05	0.1	0.06	sometime sieve-textured		
Plagioclase	2	2	0.03	1	0.05	tabular		
Clinopyroxene			1	0.01	0.03	equant		
Groundmass/matrix								
Olivine		35	35	0.01	0.1	acicular, swallow-		
Plagioclase	20	20	0.01	0.08	0.03			
Clinopyroxene	tr	tr		<0.01				in groundmass
Fe-Ti oxide								
Sulfide								
Mesostasis	30	35						cryptocrystalline

		Size				
Secondary mineralogy	**Percent**	**min**	**max**	**mode**	**Replacing/ filling**	**Comments**
Green clay						
Brown clay	7.2				mesostasis,olivine	
Carbonate	1					
Zeolite	1				mostly micritic vein	very low birefringence

Vesicles	**Present**	**Original**	**min**	**max**	**mode**	**Shape**	**Comments**
V1							

Total Alteration:	7.2
Structure:	A 0.5 thick zeolite vein with patches of prismatic carbonate was reopened and filled with micritic limstone with sub-mm basalt clasts. Vein makes up 2% of rock
Comments:	

Thin section: 336-U1383C-5R-1-W 34/37-TSB#32-TS#32
Piece number: 6
Depth CSF-A (m): 96.140 - 96.170
Rock name: Sparsely plag-Ol phyric basalt
Grain size: cryptocristalline to microcristalline
Texture: hyalophytic to trachytic

			Size					
Primary mineralogy	**Percent present**	**Percent original**	**min**	**max**	**mode**	**Shape**	**Replacing/ filling**	**Comments**
Phenocrysts								
Olivine								
Plagioclase								
Clinopyroxene								
Groundmass/matrix								
Olivine	4	5	0.005	0.05	0.01	equant to elongate		
Plagioclase	40	40	0.05	2	0.2	skeletal to elongated		
Clinopyroxene	15	15				plumose skeletal		
Fe-Ti oxide	1	1	0.002	0.008	0.004	anhedral, equant		
Sulfide	tr	tr		0.006		blebs		
Mesostasis	38	41					cryptocrystalline	

		Size				
Secondary mineralogy	**Percent**	**min**	**max**	**mode**	**Replacing/ filling**	**Comments**
Brown clay	4				olivine, mesostasis	olivine alteration is patchy

Vesicles	**Present**	**Original**	**min**	**max**	**mode**	**Shape**	**Comments**
V1							

Total Alteration:	4
Structure:	massive, avesicular, plagioclase phenocrysts ~2%, olivine phenocrysts ~ 0.5%
Comments:	

Thin section: 336-U1383C-5R-1-W 64/69-TSB#33-TS#33
Piece number: 11
Depth CSF-A (m): 96.440 - 96.490
Rock name: Sparsely plag-Ol phyric basalt
Grain size: microcrystalline
Texture: hyalophytic to trachytic

			Size					
Primary mineralogy	**Percent present**	**Percent original**	**min**	**max**	**mode**	**Shape**	**Replacing/ filling**	**Comments**
Phenocrysts								
Olivine	1	1						as glomerocrysts
Plagioclase	3	3						
Clinopyroxene								
Groundmass/matrix								
Olivine	6	7	0.01	0.2	0.06	equant elongated	clay	
Plagioclase	43	43	0.01	2	0.2	tabular phenocrysts, acicular in ground mass		
Clinopyroxene	15	15	0.01	0.08	0.04	skeletal, anhedral		
Fe-Ti oxide	1	1	0.002	0.01		equant anhedral		
Sulfide	tr	tr				blebs		
Mesostasis	25	34						

		Size				
Secondary mineralogy	**Percent**	**min**	**max**	**mode**	**Replacing/ filling**	**Comments**
Green clay						
Brown clay	9.5				after olivine and mesostasis, in vein	
Zeolite	0.5				in vein	

Vesicles	**Present**	**Original**	**min**	**max**	**mode**	**Shape**	**Comments**
V1							

Total Alteration:	10
Structure:	10% of thin section is branched vein (<0.5 thick) of micritic limstone, which is recrystallised in patches, 1% of thin section is clay zeolite vein, 3% plag phenocrysts, 1% olivine phenocrysts, often as glomerocrysts
Comments:	

Thin section: 336-U1383C-6R-1-W 100/104-TSB#34-TS#34
Piece number: 17
Depth CSF-A (m): 106.400 - 106.440
Rock name: sparsely plagioclase-olivine phyric avesicular basalt (chilled margin)
Grain size: glassy to microcrystalline
Texture: hyalophitic to aphanitic to intersertal

			Size					
Primary mineralogy	**Percent present**	**Percent original**	**min**	**max**	**mode**	**Shape**	**Replacing/ filling**	**Comments**
Phenocrysts								
Olivine	0.5	1	0.04	0.25	0.15	euhedral to tabular,		partly altered to yellowish green/brownish clay in some phenocrysts. glomerocrysts with/without olivine are common
Plagioclase	2	2	0.04	1.5	0.25	bladed		
Clinopyroxene								
Groundmass/matrix								
Olivine								
Plagioclase	40	45	0.02	0.4	0.15	skeletal, acicular		accicular plagioclase sheaves in the different side of glassy rim.
Clinopyroxene	15	30		0.2		anhedral, plumos		interstitial between acicular plagioclase, partly altered to brownish clay
Fe-Ti oxide	1	1		0.02		equant elongate		concentrated in mesostasis, but also present in interstitial between acicular plagioclase
Sulfide	tr.	tr.		0.03		equant, subhedral		
Mesostasis	18	20						

		Size				
Secondary mineralogy	**Percent**	**min**	**max**	**mode**	**Replacing/ filling**	**Comments**
Green clay	4				vesicle, olivine, plagioclase	replacing minerals and lining vesicles
Brown clay	18				olivine, clinopyroxene, plagioclase, and mesostasis	

Vesicles	**Present**	**Original**	**min**	**max**	**mode**	**Shape**	**Comments**
V1	tr.	tr.		0.2		irregular	

Glass:	8	10	partly altered to brownish yellow clay
Total Alteration:	22.5		

Structure:

Comments: from glassy rim to interior, three zones are recognized: (1) glass matrix where tiny acicular plagioclase, skeletal plagioclase laths, tabular plagioclase phenocrysts, and olivine microphenocrysts form interior of dark spherulite, (2) crowded and less spherical zone with few acicular plagioclase, (3) acicular plagioclase sheaves with plumose-like clinopyroxene and cryptocrystalline mesostasis in interstitial between highly skeletal plagioclase laths.

Thin section: 336-U1383C-7R-2-W 41/44-TSB#36-TS#36
Piece number: 8
Depth CSF-A (m): 116.850 - 116.880
Rock name: sparsely plagioclase-olivine phyric sparcely vesicular basalt
Grain size: micro to cryptocrystalline
Texture: intersertal

			Size					
Primary mineralogy	**Percent present**	**Percent original**	**min**	**max**	**mode**	**Shape**	**Replacing/ filling**	**Comments**
Phenocrysts								
Olivine	1	1	0.04	0.5	0.1	euhedral, equant		partly altered to yellowish green/brownish clay in some phenocrysts. several skeletal phynocrysts with inclusions of groundmass.
Plagioclase	2	2	0.2	0.8	0.5	tabular		
Clinopyroxene								
Groundmass/matrix								
Olivine								
Plagioclase	43	44	0.05	0.5	0.2	skeletal, acicular		
Clinopyroxene	32	35		0.2		euhedral, plumos		interstitial between acicular plagioclase
Fe-Ti oxide	2	2	0.005	0.025	0.01	equant, elongate		interstitial between plagioclase lath with clinopyroxene
Sulfide	tr.	tr.	0.004	0.03	0.006	equant, subhedral		
Mesostasis	14	15						microcrystalline mesostasis interstitial between plagioclase laths

		Size				
Secondary mineralogy	**Percent**	**min**	**max**	**mode**	**Replacing/ filling**	**Comments**
Green clay	2				olivine, vesicle, and groundmass clinopyroxene, plagioclase, and mesostasis	
Brown clay	2				olivine, vesicle, and groundmass clinopyroxene, plagioclase, and mesostasis	
FeOOH	1				vesicle, olivine	

Vesicles	**Present**	**Original**	**min**	**max**	**mode**	**Shape**	**Comments**
V1	1	1	0.1	0.6	0.2	spherical, irregular	lined with clay and FeOOH. One spherical vesicle sliced laterally through a meniscus.

Total Alteration:	5
Structure:	
Comments:	abundance of secondary minerals generally increases toward brownish alteration halo.

Thin section: 336-U1383C-7R-2-W 95/97-TSB#38-TS#38
Piece number: 16
Depth CSF-A (m): 117.390 - 117.410
Rock name: moderately plagioclase-olivine phyric sparsely vesicular basalt
Grain size: micro to cryptocrystalline
Texture: intersertal

			Size					
Primary mineralogy	**Percent present**	**Percent original**	**min**	**max**	**mode**	**Shape**	**Replacing/ filling**	**Comments**
Phenocrysts								
Olivine	1	3	0.08	0.8	0.2	euhedral		altered to iddingsite
Plagioclase	5	5	0.2	1.6	0.5	tabular		glomerocrysts with olivine
Clinopyroxene								
Groundmass/matrix								
Olivine								
Plagioclase	36	40	0.03	0.5	0.1	skeletal laths, needles		acicular sheaves surrounding plagioclase and a few sworls
Clinopyroxene	5	30	0.02	0.2	0.05	anhedral, plumose		interstitial between plagioclase, plumose pattern, mostly altered to brownish clay
Fe-Ti oxide	1	1		0.002		equant, elongate		very small crystals presented in interstitial between plagioclase needles
Sulfide	tr.	tr.		0.002		equant, elongate		very rare. Inclusion in plagioclase and olivine?
Mesostasis	16	20						cryptocrystalline mesostasis interstices between plagioclase sheaves

		Size				
Secondary mineralogy	**Percent**	**min**	**max**	**mode**	**Replacing/ filling**	**Comments**
Brown clay	35				olivine phenocrysts and crynopyroxene, plagioclase, and mesostasis in groundmass vesicle	replacing minerals and lining vesicles
Zeolite	0.5					filling some vesicles with brown clay

Vesicles	**Present**	**Original**	**min**	**max**	**mode**	**Shape**	**Comments**
V1	0.5	1	0.01	0.35	0.1	spherical	

Total Alteration: 35.5

Structure:

Comments: groundmass of the sample is mainly composed of highly skeletal plagioclase laths, acicular plagioclase sheaves and sworls, plumos-like clinopyroxene, and cryptocrystalline mesostasis.

Thin section: 336-U1383C-9R-3-W 77/80-TSB#39-TS#39
Piece number: 10
Depth CSF-A (m): 138.010 - 138.040
Rock name: moderately plagioclase-olivine phyric sparsely vesicular basalt
Grain size: microcrystalline
Texture: intersertal

			Size					
Primary mineralogy	**Percent present**	**Percent original**	**min**	**max**	**mode**	**Shape**	**Replacing/ filling**	**Comments**
Phenocrysts								
Olivine	1	3	0.06	0.5	0.1	euhedral, equant		partly to completely altered to iddingsite glomerocrysts with olivine are observed. Most of the phenocrysts have generally smooth crystal margin, although dendritic margin is partly observed. Several phenocrysts are highly skeletal, having many inclusions of groundmass and/or glass.
Plagioclase	7	7	0.1	2	0.3	tabular		
Clinopyroxene								
Groundmass/matrix								
Olivine								
Plagioclase	34	38	0.04	0.5	0.2	skeletal laths, needles		acicular sheaves surrounding olivine and plagioclase microphenocrysts
Clinopyroxene	29	39	0.02	0.2	0.05	anhedral, plumose		interstitial between plagioclase, plumose pattern
Fe-Ti oxide	2	2	0.002	0.01	0.003	equant, elongate		interstitial between plagioclase lath with clinopyroxene
Sulfide	tr.	tr.	0.002	0.03	0.003	equant to anhedral		trace but significant amounts. Interstices between plagiocase
Mesostasis	8	10						microcrystalline mesostasis interstices between plagioclase laths

		Size				
Secondary mineralogy	**Percent**	**min**	**max**	**mode**	**Replacing/ filling**	**Comments**
Green clay	3				vesicle, vein, olivine	
Brown clay	15				olivine phenocrysts and crynopyroxene, plagioclase, and mesostasis in groundmass	
Zeolite	tr.				vesicle, vein	partly filling vein and some vesicles

Vesicles	**Present**	**Original**	**min**	**max**	**mode**	**Shape**	**Comments**
V1	0.5	1	0.1	0.3	0.2	spherical	

Total Alteration: 18

Structure:

Comments:

Thin section: 336-U1383C-9R-4-W 78/80-TSB#40-TS#40
Piece number: 9
Depth CSF-A (m): 139.430 - 139.450
Rock name: highly plagioclase-olivine phyric sparsely vesicular basalt
Grain size: microcrystalline
Texture: intersertal

			Size					
Primary mineralogy	**Percent present**	**Percent original**	**min**	**max**	**mode**	**Shape**	**Replacing/ filling**	**Comments**
Phenocrysts								
Olivine	3	3	0.02	0.2	0.05	euhedral, equant		some of them make glomerocryst with relatively small (<0.5 mm)tabular plagioclase phenocrysts
Plagioclase	15	15	0.05	2	0.3	tabular		most of the phenocrysts have "staircase" dendritic crystal margin. Some of them have skeletal inclusions of groundmass. Spherulitic glass inclusions are also obsereved in several phenocrysts.
Clinopyroxene	15	15	0.05	2	0.3	tabular		most of the phenocrysts have "staircase" dendritic crystal margin. Some of them have skeletal inclusions of groundmass. Spherulitic glass inclusions are also observed in several phenocrysts.
Groundmass/matrix								
Olivine								
Plagioclase	43	43	0.05	0.3	0.15	skeletal laths		relatively large skeletal lath
Clinopyroxene	32	32	0.02	0.1	0.05	anhedral, partly plumose		interstitial between laths
Fe-Ti oxide	3	3	0.002	0.02	0.005	equant, elongate		interstitial between plagioclase lath with clinopyroxene
Sulfide	tr.	tr.	0.005	0.02	0.01	equant to anhedral		trace but significant amounts. Most of them are equant to anhedral grains in interstices between plagioclase laths, but two of them are anhedral grains in inclusions of skeletal plagioclase phenocrysts.
Mesostasis								

		Size				
Secondary mineralogy	**Percent**	**min**	**max**	**mode**	**Replacing/ filling**	**Comments**
Green clay	1				vesicle	
Brown clay						
FeOOH						

Vesicles	**Present**	**Original**	**min**	**max**	**mode**	**Shape**	**Comments**
V1	0	1	0.02	0.05	0.04	spherical	

Total Alteration: 1
Structure:
Comments:

Thin section: 336-U1383C-10R-1-W 33/36-TSB#41-TS#41
Piece number: 7
Depth CSF-A (m): 144.230 - 144.260
Rock name: plagioclase olivine phyric basalt
Grain size: microcrystalline
Texture: porphyritic

			Size					
Primary mineralogy	**Percent present**	**Percent original**	**min**	**max**	**mode**	**Shape**	**Replacing/ filling**	**Comments**
Phenocrysts								
Olivine	1	1	0.1	1	0.3	equant,euhedral		glomerocrysts, partly resorbed
Plagioclase	10	10	0.5	3	1.5	tabular to rounded		
Clinopyroxene								
Groundmass/matrix								
Olivine	3	4	0.01	0.1	0.05	equant		
Plagioclase	44	44	0.01	0.5	0.1	needls		
Clinopyroxene	30	30		0.7		plumose, anhedral		
Fe-Ti oxide	1	1				equant		
Mesostasis	8	10						

		Size					
Secondary mineralogy	**Percent**	**min**	**max**	**mode**		**Replacing/ filling**	**Comments**
Green clay						olivine, mesostasis	
Brown clay	3 to 15?						
Zeolite	tr.						filling vesicle

Vesicles	**Present**	**Original**	**min**	**max**	**mode**	**Shape**	**Comments**
V1							

Total Alteration:	3
Structure:	
Comments:	

Thin section: 336-U1383C-10R-2-W 7/10-TSB#43-TS#43
Piece number: 1
Depth CSF-A (m): 145.340 - 145.370
Rock name: avesicular, plagioclase-olivine phyric basalt
Grain size: fine grained
Texture: porphyritic, intersertal groundmass

			Size					
Primary mineralogy	**Percent present**	**Percent original**	**min**	**max**	**mode**	**Shape**	**Replacing/ filling**	**Comments**
Phenocrysts								
Olivine	1	1	0.4	1	0.6	euhedral		
Plagioclase	10	10	1	6	3	tabular, rounded		
Clinopyroxene								
Groundmass/matrix								
Olivine	4	6	0.01	1	0.5	euhedral, equant		
Plagioclase	45	45	0.01	1	0.5	tabular to aciclar		
Clinopyroxene	36	36	0.01	0.6	0.3	acicular to plumose		
Fe-Ti oxide	2	2	0.06			anhedral		
Sulfide	tr	tr		0.01		blebs		
Apatite	tr	tr				acicular		

		Size				
Secondary mineralogy	**Percent**	**min**	**max**	**mode**	**Replacing/ filling**	**Comments**
Brown clay	2				replacing olivines, filling vesicles (rare)	

Vesicles	**Present**	**Original**	**min**	**max**	**mode**	**Shape**	**Comments**
V1							

Total Alteration:	2
Structure:	
Comments:	

Thin section: 336-U1383C-13R-1-W 24/26-TSB#44-TS#44
Piece number: 5
Depth CSF-A (m): 172.940 - 172.960
Rock name: aphyric sparsely vesicular basalt
Grain size: microcrystalline
Texture: intersertal

			Size					
Primary mineralogy	**Percent present**	**Percent original**	**min**	**max**	**mode**	**Shape**	**Replacing/ filling**	**Comments**
Phenocrysts								
Olivine								
Plagioclase								
Clinopyroxene								
Groundmass/matrix								
Olivine	1.5	3	0.05	0.4	0.16	equant to elongate, skeletal		partly altered to clay minerals. some crystals show highly elongate "hopper-like" morphology.
Plagioclase	41	43	0.04	2.4	0.5	skeletal, acicular		sheaf-like structure and swallow-tail/belt buckle structures are common.
Clinopyroxene	33	35				anhedral, partly plumose		interstitial between acicular plagioclase, intergrown with plagioclase laths
Fe-Ti oxide	2	2	0.004	0.02	0.01	equant elongate		mesostasis and interstitial between plagioclase
Sulfide	tr.	tr.		0.01		equant, subhedral		very rare. Interstitial between plagioclase laths
Mesostasis	14	15						microcrystalline mesostasis, interstitial between plagioclase laths

		Size				
Secondary mineralogy	**Percent**	**min**	**max**	**mode**	**Replacing/ filling**	**Comments**
Green clay	5				vesicle, olivine, clinopyroxene, plagioclase, mesostasis	
Brown clay	3				vein, olivine, clinopyroxene, plagioclase, mesostasis	
FeOOH	0.5				vesicle, olivine	

Vesicles	**Present**	**Original**	**min**	**max**	**mode**	**Shape**		**Comments**
V1	tr.	2	0.12	0.4	0.2	spherical	filled with clay mineral	

Total Alteration:	8.5
Structure:	
Comments:	this TS-sample is not chilled margin sample, but common occurrence of sheaf-like textured highly skeletal/acicular plagioclase and highly skeletal/elongate hopper-like olivine suggests significantly rapid cooling of the sample.

Thin section: 336-U1383C-16R-1-W 11/14-TSB#45-TS#45
Piece number: 3
Depth CSF-A (m): 192.910 - 192.940
Rock name: aphyric sparsely vesicular basalt
Grain size: microcrystalline
Texture: intersertal

			Size					
Primary mineralogy	**Percent present**	**Percent original**	**min**	**max**	**mode**	**Shape**	**Replacing/ filling**	**Comments**
Phenocrysts								
Olivine								
Plagioclase								
Clinopyroxene								
Groundmass/matrix								
Olivine	1	3	0.05	0.4	0.1	equant		partly to completely altered to clay
Plagioclase	45	45	0.08	1	0.4	skeletal lath		
Clinopyroxene	38	40				anhedral		intergrown with plagioclase laths
Fe-Ti oxide	2	2	0.004	0.03	0.01	equant elongate		interstitial between plagioclase laths
Sulfide	tr.	tr.		0.02		equant		Interstitial between plagioclase laths
Mesostasis	4	5						microcrystalline mesostasis, interstitial between plagioclase laths

		Size				
Secondary mineralogy	**Percent**	**min**	**max**	**mode**	**Replacing/ filling**	**Comments**
Green clay	2				vesicle, olivine, clinopyroxene, mesostasis	
Brown clay	3				vesicle, olivine, clinopyroxene, mesostasis	
FeOOH	1				vesicle, olivine	

Vesicles	**Present**	**Original**	**min**	**max**	**mode**	**Shape**		**Comments**
V1	4	5	0.2	1	0.5	spherical, elongate	lined with clay	

Total Alteration:	6
Structure:	
Comments:	

Thin section: 336-U1383C-16R-1-W 59/61-TSB#46-TS#46
Piece number: 14
Depth CSF-A (m): 193.390 - 193.410
Rock name: aphyric basalt with blotchy alteration
Grain size: crypto to microcristalline
Texture: hyalophitic

			Size					
Primary mineralogy	**Percent present**	**Percent original**	**min**	**max**	**mode**	**Shape**	**Replacing/ filling**	**Comments**
Phenocrysts								
Olivine	1	2	0.04	0.8		skeletal, euhedral microphenocrysts		
Groundmass/matrix								
Olivine	1	1	0.04	0.2		subhedral in groudmass		
Plagioclase	35	35	0.01	0.5		needles		
Clinopyroxene	15	15	0.01	0.08		anhedral in groundmass between plagio		
Fe-Ti oxide	tr	tr		<0.001		equant		
Mesostasis	40	43						

		Size				
Secondary mineralogy	**Percent**	**min**	**max**	**mode**	**Replacing/ filling**	**Comments**
Brown clay	4				olivine, mesostatsis	

Vesicles	**Present**	**Original**	**min**	**max**	**mode**	**Shape**	**Comments**
V1							

Total Alteration:	4
Structure:	
Comments:	

Thin section: 336-U1383C-16R-2-W 30/33-TSB#47-TS#47
Piece number: 6
Depth CSF-A (m): 194.170 - 194.200
Rock name: sparsely vesicular aphyric basalt
Grain size: crypto to microcrystalline
Texture: aphanitic

			Size					
Primary mineralogy	**Percent present**	**Percent original**	**min**	**max**	**mode**	**Shape**	**Replacing/ filling**	**Comments**
Phenocrysts								
Olivine	1	1		0.5		euhedral, resorbed		
Plagioclase								
Clinopyroxene								
Groundmass/matrix								
Olivine	9	10		<0.05		quench-growth		
Plagioclase	10	10		<0.05		acicular, skeletal		in sheafs, in varioles
Clinopyroxene								
Fe-Ti oxide								
Mesostasis	78	79						

		Size				
Secondary mineralogy	**Percent**	**min**	**max**	**mode**	**Replacing/ filling**	**Comments**
Brown clay	2				mesostasis and olivine along cracks	
Zeolite	1				in veins and vesicles	

Vesicles	**Present**	**Original**	**min**	**max**	**mode**	**Shape**	**Comments**
V1							

Total Alteration:	3
Structure:	upper 10%of thin section is glassy cryptocristalline. Variolitic zone with plag spherules in buff-colored cryptocrystalline mesostasis. Density of spherules increases near bottom of section
Comments:	

Thin section: 336-U1383C-16R-2-W 39/43-TSB#48-TS#48
Piece number: 7
Depth CSF-A (m): 194.260 - 194.300
Rock name: aphyric sparsely vesicular basalt
Grain size: microcrystalline
Texture: intersertal

			Size					
Primary mineralogy	**Percent present**	**Percent original**	**min**	**max**	**mode**	**Shape**	**Replacing/ filling**	**Comments**
Phenocrysts								
Olivine								
Plagioclase								
Clinopyroxene								
Groundmass/matrix								
Olivine	tr.	3	0.04	0.4	0.08	equant		partly to completely altered to clay
Plagioclase	43	45	0.04	1.6	0.5	skeletal lath, acicular		sheaf-like structure of acicular plagioclase is observed in fine-grained part
Clinopyroxene	25	40				anhedral, partly plumos		interstitial between acicular plagioclase, intergrown with plagioclase laths
Fe-Ti oxide	2	2		0.002		equant elongate		very small, interstitial between plagioclase laths
Mesostasis	4	5						microcrystalline mesostasis, interstitial between plagioclase laths

		Size				
Secondary mineralogy	**Percent**	**min**	**max**	**mode**	**Replacing/ filling**	**Comments**
Green clay					olivine, clinopyroxene, mesostasis	
Brown clay	21					
Zeolite	2				vesicle, vein	

Vesicles	**Present**	**Original**	**min**	**max**	**mode**	**Shape**	**Comments**
V1	3	5	0.15	0.5	0.3	spherical, irregular	mostly filled with zeolite

Total Alteration: 23

Structure:

Comments: This TS is divided into two domains: (1) mainly composed of acicular plagioclase sheafs intergrown with plumose-like clinopyroxene, suggesting rapid cooling, and (2) of highly skeletal plagioclase laths intergrown with relatively coaser-grained clinopyroxene crystals, suggeting slower cooling rate compared to the domain (1).

Thin section: 336-U1383C-19R-1-W 30/32-TSB#49-TS#49
Piece number: 6
Depth CSF-A (m): 211.900 - 211.920
Rock name: aphyric basalt with blotchy alteration
Grain size: cryptocrystalline
Texture: hyalophitic

			Size					
Primary mineralogy	**Percent present**	**Percent original**	**min**	**max**	**mode**	**Shape**	**Replacing/ filling**	**Comments**
Phenocrysts								
Olivine								
Plagioclase								
Clinopyroxene								
Groundmass/matrix								
Olivine	1	2	0.04	0.4		skeletal, euhedral		
Plagioclase	40	40	0.01	0.5		needles		
Clinopyroxene	5	5				anhedral, partly plumos	between plagioclase	
Fe-Ti oxide	1	1				equant		
Sulfide	51	51						
Glass		1						

		Size				
Secondary mineralogy	**Percent**	**min**	**max**	**mode**	**Replacing/ filling**	**Comments**
Brown clay	2				glass, olivine, mesostasis	

Vesicles	**Present**	**Original**	**min**	**max**	**mode**	**Shape**	**Comments**
V1							

Total Alteration:	2
Structure:	
Comments:	

Thin section: 336-U1383C-20R-1-W 47/50-TSB#50-TS#50
Piece number: 9
Depth CSF-A (m): 219.670 - 219.700
Rock name: hyaloclastite
Grain size:
Texture:

Primary mineralogy	Percent present	Percent original	Size min	Size max	Size mode	Shape	Replacing/ filling	Comments
Phenocrysts								
Void space	0	60						
Olivine								
Plagioclase								
Clinopyroxene								
Groundmass/matrix								
Olivine	tr.	tr		0.02		euhedral to elongate acicular, skeletal		surrounded by feathery quenchy crystals
Plagioclase	tr	tr	0.02					tailed
Clinopyroxene								
Fe-Ti oxide								
Sulfide								
Mesostasis								
Glass	40	40						

Secondary mineralogy	Percent	Size min	Size max	Size mode	Replacing/ filling	Comments
FeOOH	1					
Zeolite	3					
Palagonite	50					
Chalcedony	6					

Vesicles	Present	Original	min	max	mode	Shape	Comments
V1							

Total Alteration:	60
Structure:	piece is hyaloclastite with clasts of pristine glass surrounded by banded palagonite, wich is places surroudded by layers of radial chalcedony and acicular lou birefringence zeolite. The calcedony is intergrown with Fe-oxyhydroxide in places. Glass is spasly vesicular, most vesicules are unfilled
Comments:	

Thin section: 336-U1383C-20R-1-W 143/146-TSB#51-TS#51
Piece number: 28
Depth CSF-A (m): 220.630 - 220.660
Rock name: aphyric sparsely vesicular basalt
Grain size: microcrystalline
Texture: intersertal

			Size					
Primary mineralogy	**Percent present**	**Percent original**	**min**	**max**	**mode**	**Shape**	**Replacing/ filling**	**Comments**
Phenocrysts								
Olivine								
Plagioclase								
Clinopyroxene								
Groundmass/matrix								
Olivine	tr.	7	0.05	0.4	0.1	equant to elongate, skeletal		highly skeletal and elongate. Some elongate crystals have swallow-tail arms
Plagioclase	12	15	0.03	0.5	0.1	acicular		sheaf-like structure, some exhibit radial grows
Clinopyroxene	10	15	-	-	-	anhedral		intergrown with plagioclase, in part plumose
Fe-Ti oxide	1	1		0.006		equant elongate		disseminated in mesostasis and interstitial between plagioclase needles
Sulfide								
Mesostasis	52	60						crypto-to microcrystalline mesostasis

		Size				
Secondary mineralogy	**Percent**	**min**	**max**	**mode**	**Replacing/ filling**	**Comments**
Green clay	8				clinopyroxene, mesostasis, vesicle, vein	
Brown clay	15				olivine, clinopyroxene, mesostasis, vein	
FeOOH	1				vesicle, vein, mesostasis	
Pyrite	tr.				core of square-shaped goethite	pyrite occure as core of square-shaped goethite presented in altered groundmass and veins, implying the goethite is pseudomorph after pyrite
Zeolite	1				vesicle, vein	

Vesicles	**Present**	**Original**	**min**	**max**	**mode**	**Shape**	**Comments**
V1	tr.	2	0.08	0.25	0.15	spherical	partly filled/lined with clay and zeolite

Total Alteration:	25
Structure:	
Comments:	

Thin section: 336-U1383C-23R-1-W 57/61-TSB#52-TS#52
Piece number: 10
Depth CSF-A (m): 247.570 - 247.610
Rock name: aphyric sparsely vesicular basalt
Grain size: microcrystalline
Texture: intersertal

			Size					
Primary mineralogy	**Percent present**	**Percent original**	**min**	**max**	**mode**	**Shape**	**Replacing/ filling**	**Comments**
Phenocrysts								
Olivine								
Plagioclase								
Clinopyroxene								
Groundmass/matrix								
Olivine	5	7	0.04	0.2	0.1	granular, elongate		several granulara olivine crystals are microphenocrysts (up to 0.2 mm). Groundmass olivine crystals show skeletal quench crystal textures
Plagioclase	22	25	0.05	0.4	0.2	acicular		sheaf-like needles often show radial growth
Clinopyroxene	22	30	-	-	-	anhedral, plumose		intergrown with acicular plagioclase sheaves
Fe-Ti oxide	2	2	0.002	0.01	0.005	equant elongate		interstitial etween plagioclase and/or olivine crystals
SULF	tr.	tr.		0.01		subhedral to anhedral		very rare, interstitial between plagioclase needles
Mesostasis	32.5	34						crypto-to microcrystalline mesostasis

		Size				
Secondary mineralogy	**Percent**	**min**	**max**	**mode**	**Replacing/ filling**	**Comments**
Green clay	5				olivine, clinopyroxene, plagioclase, mesostasis, vesicle	
Brown clay	10				olivine, clinopyroxene, plagioclase, mesostasis, vesicle	
FeOOH	1				vesicle, mesostasis	

Vesicles	**Present**	**Original**	**min**	**max**	**mode**	**Shape**	**Comments**
V1	0.5	2	0.04	0.6	0.2	spherical, irregular	spherical vesicles are filled with clay but no fillings are observed in irregular-shaped vugs

Total Alteration:	16
Structure:	
Comments:	

Thin section: 336-U1383C-25R-1-W 68/72-TSB#53-TS#53
Piece number: 14
Depth CSF-A (m): 266.880 - 266.920
Rock name: aphyric basalt with blotchy alteration
Grain size: microcrystalline
Texture: aphanitic to hyalophytic

			Size					
Primary mineralogy	**Percent present**	**Percent original**	**min**	**max**	**mode**	**Shape**	**Replacing/ filling**	**Comments**
Phenocrysts								
Olivine	1	2		0.08		euhedral		microphenocrysts
Plagioclase								
Clinopyroxene								
Groundmass/matrix								
Olivine	1	8				elongated, skeletal		in mesostasis
Plagioclase	15	15				acicular		sheaf-like
Clinopyroxene	10	10				anhedrale, plumose		in between plag needles
Fe-Ti oxide	1	1						
Mesostasis	60	64						

		Size				
Secondary mineralogy	**Percent**	**min**	**max**	**mode**	**Replacing/ filling**	**Comments**
Brown clay	12				olivine, mesostasis	
Zeolite	tr.				filling vesicles	

Vesicles	**Present**	**Original**	**min**	**max**	**mode**	**Shape**	**Comments**
V1							

Total Alteration:	12
Structure:	aphanitic to hyalophytic
Comments:	

Thin section: 336-U1383C-28R-1-W 40/42-TSB#54-TS#54
Piece number: 7
Depth CSF-A (m): 295.000 - 295.020
Rock name: aphyric basalt
Grain size: microcrystalline
Texture: intersertal

			Size					
Primary mineralogy	**Percent present**	**Percent original**	**min**	**max**	**mode**	**Shape**	**Replacing/ filling**	**Comments**
Phenocrysts								
Olivine								
Plagioclase								
Clinopyroxene								
Groundmass/matrix								
Olivine	2	3	0.04	0.08		skeletal, anhedral		
Plagioclase	50	50	0.01	1		acicular		
Clinopyroxene	6	6	0.01	0.6		anhedral		
Fe-Ti oxide	1.5	1.5		<0.001		equant		
Mesostasis	32	35						

		Size				
Secondary mineralogy	**Percent**	**min**	**max**	**mode**	**Replacing/ filling**	**Comments**
Green clay	3				mesostasis	
Brown clay FeOOH	1				olivine	

Vesicles	**Present**	**Original**	**min**	**max**	**mode**	**Shape**	**Comments**
V1							

Total Alteration:	4
Structure:	
Comments:	

Thin section: 336-U1383C-29R-1-W 60/62-TSB#55-TS#55
Piece number: 14
Depth CSF-A (m): 299.800 - 299.820
Rock name: aphyric sparsely vesicular basalt
Grain size: microcrystalline
Texture: intersertal

			Size					
Primary mineralogy	**Percent present**	**Percent original**	**min**	**max**	**mode**	**Shape**	**Replacing/ filling**	**Comments**
Phenocrysts								
Olivine								
Plagioclase								
Clinopyroxene								
Groundmass/matrix								
Olivine	tr.	5	0.08	0.4	0.15	skeletal elongate		hopper to linked parallel-grouth forms
Plagioclase	33	35	0.03	1.2	0.5	skeletal tabular, acicular		swallow-tail and belt-buckle forms are common, intergrown with clinopyroxene
Clinopyroxene	25	30	-	-	-	anhedral, partly plumose		intergrown with plagioclase, plumose plagioclase-clinopyroxene intergrowth in microcrystalline mesostasis, prismatic crystals in interstices between tabular plagioclase laths in coaser grained well-crystallize domain
Fe-Ti oxide	2	2	0.002	0.02	0.005	equant elongate		interstitial between plagioclase
SULF								
Mesostasis	23	25						microcrystalline mesostasis

		Size				
Secondary mineralogy	**Percent**	**min**	**max**	**mode**	**Replacing/ filling**	**Comments**
Green clay	5				vesicle, clinopyroxene olivine, mesostasis	
Brown clay	8					
FeOOH	1				vesicle	
Pyrite	tr.					pyrite mainly occurs as equant euhedral crystal in vein, vesicle, and groundmass with yellowish green clay mineral. Most of them are altered to FeOOH, showing pseudomorphic replacement.
Carbonate	1					

Vesicles	**Present**	**Original**	**min**	**max**	**mode**	**Shape**	**Comments**
V1	2	3	0.08	0.4	0.2	spherical, irregular	spherical vesicles are only lined with yellowish green clay, but irregular-shaped vugs are filled with yellowish green and blownish clays and/or FeOOH and calcite.

Total Alteration:	15
Structure:	
Comments:	

Thin section: 336-U1383C-31R-2-W 5/8-TSB#56-TS#56
Piece number: 1
Depth CSF-A (m): 313.550 - 313.580
Rock name: aphyric sparsely vesicular basalt
Grain size: microcrystalline
Texture: intersertal

			Size					
Primary mineralogy	**Percent present**	**Percent original**	**min**	**max**	**mode**	**Shape**	**Replacing/ filling**	**Comments**
Phenocrysts								
Olivine								
Plagioclase								
Clinopyroxene								
Groundmass/matrix								
Olivine	4	5	0.05	0.2	0.1	skeletal elongate		olivine crystals show a variety of quench crystal morphology form skeletal hopper to lantern-shape to linked-parallel growth forms.
Plagioclase	40	40	0.05	0.5	0.2	acicular, skeletal		sheaf-like structure. Radiating acicular plagioclase bundles emanating from olivine nuclei.
Clinopyroxene	33	35	-	-	-	anhedral, plumose		plumose plagioclase-clinopyroxene intergrowth
Fe-Ti oxide	2	2		0.01		equant elongate		concentrated in mesostasis, although also present in interstices between plagioclase
SULF								
Mesostasis	14	15						microcrystalline mesostasis

		Size				
Secondary mineralogy	**Percent**	**min**	**max**	**mode**	**Replacing/ filling**	**Comments**
Green clay	2.5					vesicle, clinopyroxene, mesostasis
Brown clay	3					olivine, vesicle, clinopyroxene, mesostasis
FeOOH	1					pseudomorph
Pyrite	tr.					very rare. presented as core of square-shaped goethite grains, suggestive of pseudomorphic replacement after pyrite

Vesicles	**Present**	**Original**	**min**	**max**	**mode**	**Shape**	**Comments**
V1	tr.	3	0.04	0.25	0.12	spherical	completely filled with clay minerals

Total Alteration:	7
Structure:	
Comments:	

Thin section: 336-U1383C-31R-2-W 39/41-TSB#57-TS#57
Piece number: 6
Depth CSF-A (m): 313.890 - 313.910
Rock name: aphyric sparsely vesicular basalt
Grain size: crypto to microcrystalline
Texture: intersertal

			Size					
Primary mineralogy	**Percent present**	**Percent original**	**min**	**max**	**mode**	**Shape**	**Replacing/ filling**	**Comments**
Phenocrysts								
Olivine								
Plagioclase								
Clinopyroxene								
Groundmass/matrix								
Olivine	tr.	6	0.05	1	0.2	skeletal elongate		This thin section includes olivine crystals exhibiting a variety of quench crystal morphology including skeletal hopper and lantern-shaped, crystals.
Plagioclase	34	35	0.03	0.2	0.1	acicular		sheaves and swarls intergrown with clinopyroxene
Clinopyroxene	30	35	-	-	-	anhedral, plumose equant		plumose plagioclase-clinopyroxene intergrowth
Fe-Ti oxide	1	1		0.01		elongate		presented in mesostasis and interstices between plagioclase
SULF								
Mesostasis	13	23						crypto-to microcrystalline mesostasis

		Size				
Secondary mineralogy	**Percent**	**min**	**max**	**mode**	**Replacing/ filling**	**Comments**
Green clay	8				vesicle, clinopyroxene, plagioclase, mesostasis	
Brown clay	8				olivine, mesostasis, vesicle	
FeOOH	1				mesostasis, vein	
Zeolite	3				vein, vesicle	filling vesicles with clay minerals and filling veins with carbonate
Carbonate	2				vein	filling veins with zeolite

Vesicles	**Present**	**Original**	**min**	**max**	**mode**	**Shape**	**Comments**
V1	tr.	3	0.04	0.2	0.12	spherical	filled with clay minerals and/or zeolite. In addition to vesicle, there are many

Total Alteration:	22
Structure:	
Comments:	No chilled margin, but presence of linked-chain olivine and acicular plagioclase swirls in cryptocrystalline groundmass strongly suggest very near to chilled margin, possively transition zone from variolitic zone to microcrystalline interior portion.

Thin section: 336-U1383C-32R-2-W 55/57-TSB#58-TS#58
Piece number: 9
Depth CSF-A (m): 323.680 - 323.700
Rock name: aphyric basalt
Grain size: fine grained
Texture: intersertal

Primary mineralogy	Percent present	Percent original	Size min	Size max	Size mode	Shape	Replacing/ filling	Comments
Phenocrysts								
Olivine								
Plagioclase								
Clinopyroxene								
Groundmass/matrix								
Olivine	6	10	0.01	0.2	0.06	equant		
Plagioclase	45	45	0.01	2	0.5	stubby		
Clinopyroxene	40	40	0.01	0.8	0.3	sheaf-like		
Fe-Ti oxide	2	2	0.01	0.1	0.05	anhedral		
SULF	tr	tr		<0.01		blebs		
Mesostasis	1	3					between plagioclase laths	

Secondary mineralogy	Percent	Size min	Size max	Size mode	Replacing/ filling	Comments
Green clay						
Brown clay	6				olivine, mesostasis, filling vesicles ans vugs	
FeOOH						

Vesicles	Present	Original	min	max	mode	Shape	Comments
V1							

Total Alteration:	6
Structure:	<1% vesicles filled with reddish-brown clay
Comments:	