Hole U1350A Core 1W, Interval 0-0.19 m (core depth below seafloor)

Major: Dark reddish brown (2.5YR 3/3), reddish brown (2.5 YR 4/4) and black (N 2.5) chert.

Faint banding visible in the dark reddish brown piece. Reddish brown piece has small, circular porcellanite blotches within the matrix and a 1 mm thick coating of chalk on one side. Black piece has one very thin patch of porcellanite coating.

	(cm)					GRA	bulk	Ma	ignetic	Re (L	flectance ', b* - raw; b* - filtered)	Age				c	/ Fossil	Struc ≿		
Depth (m)	Core length (cm) Section	Core image		Graphic lithology	(GF		(g/cm ³) RA - filtered)		ignetic eptibility Point - raw; Point - filtered) 22 0 1	E 50		 Grain si	ze	Shipboard sample	Bioturbation intensity	lchnofossil / Fossil	Sedimentary structure	Lithologic accessories	Drilling disturbance
<u>م</u> د ٥		Ŭ		lithology		<u></u>		1.1.	1.1.1.	<u>" []</u> 70	ليسليساس	NC8a-b			FAL BAL	<u>.</u> 	<u>0</u> :	st ö	a Li	ăë ∦
U13	50A-	2R N	io re	COV	'ERY	,														



Hole U1350A Core 3R, Interval 114.2-114.31 m (core depth below seafloor)

Major: Black (N 2.5) chert.

Gray (N 5) streaks and blotches of porcellanite are common. Concentrations of circular fossil "ghosts" are associated with these patches, which probably represent recrystallized radiolarians.

Depth (m)	Core length (cm)	Section	Core image	Graphic lithology	GRA bulk density (g/cm³) (GRA - raw; GRA - filtered) بم	Magnetic Susceptibility (MS, MS Point - raw;) MS, MS Point - filtered 0 0 0 0 0 0 0	Reflectance (L ⁺ , b ⁺ - filtered) (L ⁺ , b ⁺ - filt	Nannofossil & zone a	Grainsize ୦୮୦୯୩ ୧୦୦୦	Shipboard sample	Bioturbation intensity	Ichnofossil / Fossil	Sedimentary structure	Lithologic accessories	Drilling disturbance
	10	1					24 S. P			PAL		1		Py	



Hole U1350A Core 4R, Interval 123.8-124.065 m (core depth below seafloor)

Major: Black (N 2.5) chert.

Gray (N 5) porcellanite patches and streaks are common on all pieces. Radiolarian fossil "ghosts" can be seen in places. 1 mm thick chalk coating on uppermost piece (0-5 cm). Minor chalky coatings present on other pieces.

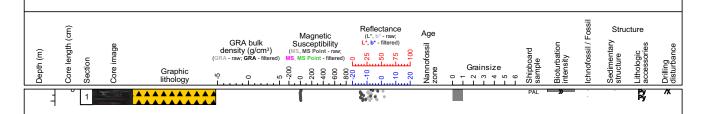
Depth (m) Core lenath (cm)	Section	Core image	Graphic lithology		Magnetic Susceptibility (MS, MS Point - raw;) MS, MS Point - filtered)	Reflectance (L*, b* - raw; L*, b* - filtered) 000000000000000000000000000000000000	Nannofossil d zone	Grain size ວ ⊢ ດ ຕ ຈ ທ	- 6 Shipboard sample	Bioturbation intensity	Ichnofossil / Fossil	Sedimentary structure _E t	Lithologic accessories	Drilling disturbance
124 -	1			*	\$		NC4		PAL			1		×



Hole U1350A Core 5R, Interval 133.4-133.66 m (core depth below seafloor)

Major: Black (N 2.5) chert.

1mm-thick chalk coating on uppermost piece (0-14 cm). This piece also shows pervasive mottling, probably relict bioturbation structures, picked out by gray patches of porcellanite and pyrite-replaced burrows. Radiolarians appear moderately well preserved and diverse (?) in several pieces.





Hole U1350A Core 6R, Interval 143-143.22 m (core depth below seafloor)

Major: Black (N 2.5) chert.

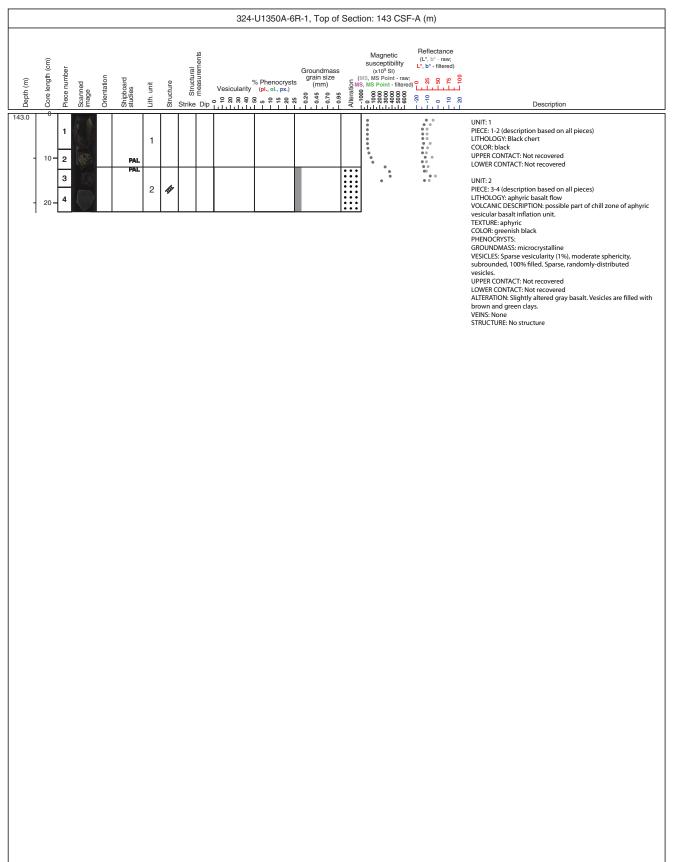
Minor: Dark gray (N 4) basalt.

Chert has less radiolarian fossils and fewer bioturbation structures than in higher cores. Thin coatings of light brownish gray (10 YR 7/2,) sit/fine sand are adhered to the chert in places.

Basalt is very fine grained and with only minor vesiculation.

Depth (m)	Core length (cm) Section	Core image	Graphic lithology	Magnetic Susceptibility (MS, MS Point - raw; MS, MS Point - filtered) 00 00 02 0 02 0 02 0 03 0 04 0	հատիսակուսի	Nannofossil a zone	Grainsize ○ 〒 ○ ☞ 3 ☞ ☞	Shipboard sample	Bioturbation intensity	Ichnofossil / Fossil	Sedimentary structure	Lithologic accessories	Drilling disturbance
-	1	Ener		¢	ФУ.			PAL				÷	

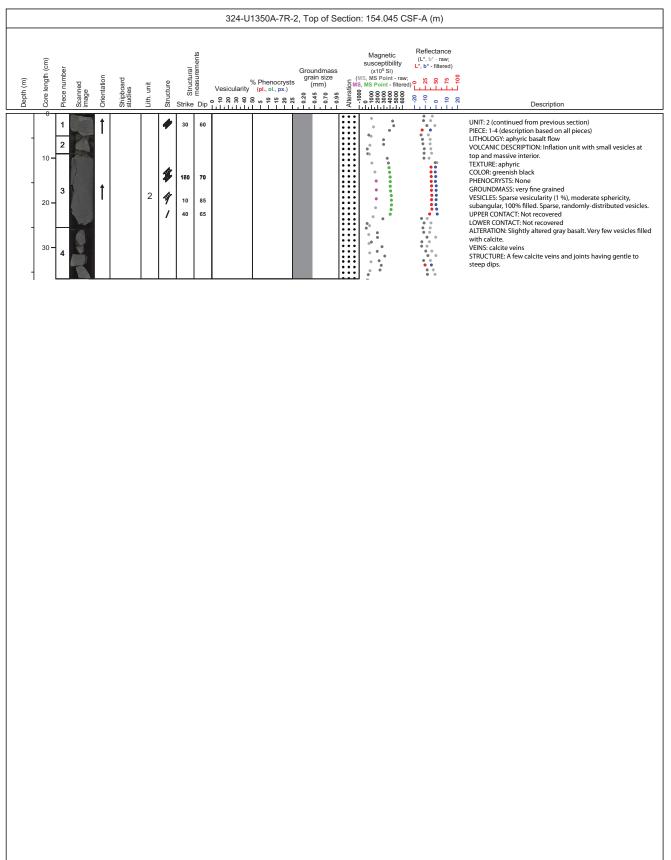






(iii) State State Magnetic Reflectance (iii) Susceptibility (iii) Susceptibility (iii) Susceptibility (iiii) Harding Groundmass (mm) Susceptibility Susceptibility (iiii) Harding Susceptibility Susceptibility Susceptibility (iiii) Harding Susceptibility Harding (iiii) Harding Susceptibility Harding (iiii) Harding Harding Harding (iiii) Harding	
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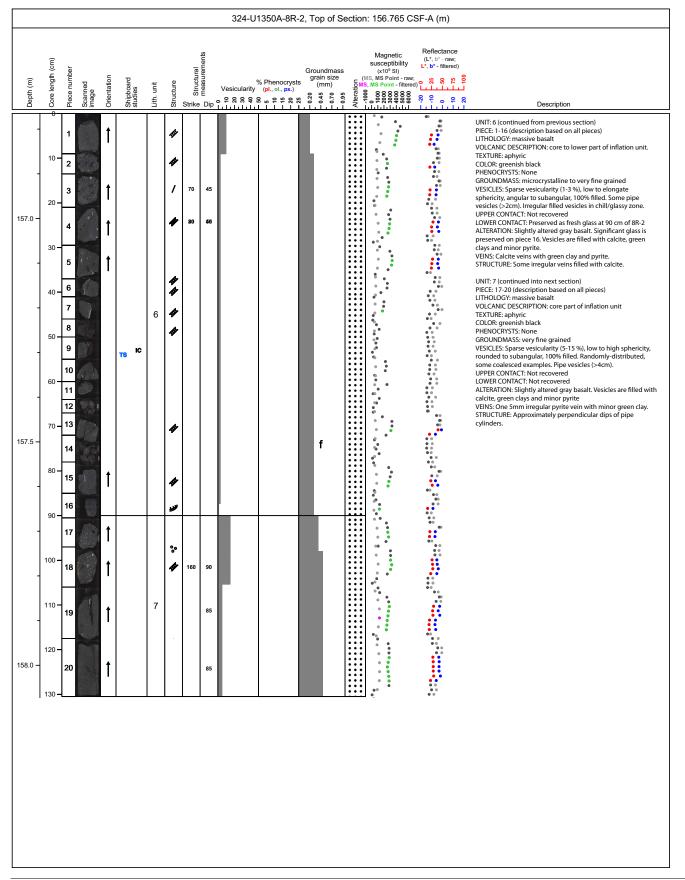




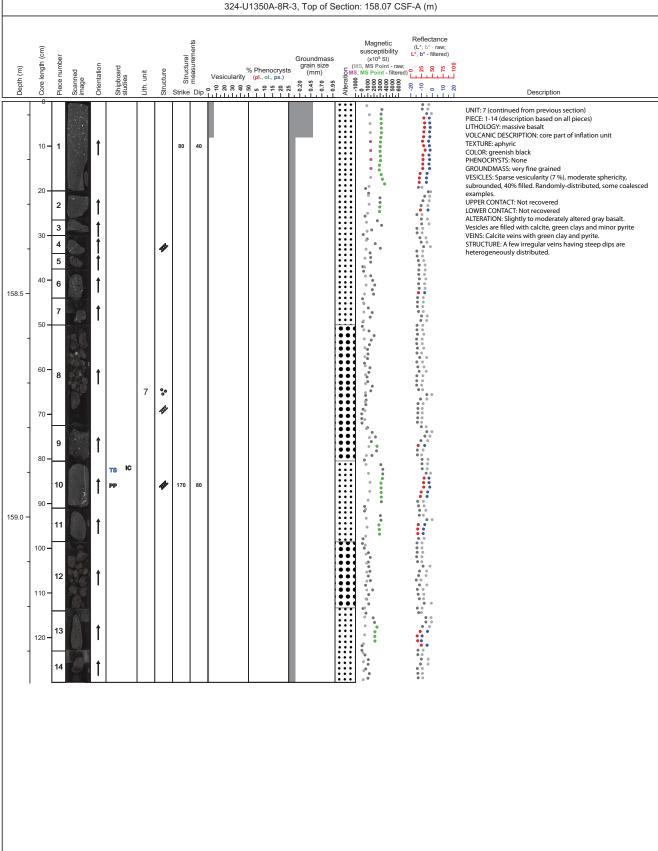


										324-L	J1350A-8F	R-1, Top of S	Sectio	on: 155.3 CSI	F-A (m)	
Depth (m)	Core length (cm)	Piece number	Scanned image	Orientation	Shipboard studies	Lith. unit	Structure	Structural	di di	Vesicularity କେର୍ଚ୍ଚର ଜେନ୍ଟ୍ର	생 Phenocrysts (pl., ol., px.) 3	()	Alteration	Magnetic susceptibility (x10 ⁶ SI) MS, MS Point - raw; 5, MS Point - filtered 000 80 80 80 7 0 4 20 80 7 0 5 8	Reflectance (L*, b* - raw; L*, b* - filtered)	Description
	0		in a		PAL										* *	UNIT: 3 (continued from previous section)
- 155.5 —	10 - 20 -	1		•	рр	3		165 165 160 20	65 85 40 40 0					0.0 0.0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		PIECE: 1 (description based on piece 1) LITHOLOGY: black chert COLOR: brownish black UNIT: 4 PIECE: 2-6 (description based on all pieces) LITHOLOGY: aphyric basalt flow VOLCANIC DESCRIPTION: core to lower part of inflation unit (lower margin is preserved as traces of fresh glasses). TEXTURE: aphyric COLOR: greenish black PHENOCRYSTS: None GROUNDMASS: microcrystalline
-	30 - 40 -	4	XXX	1	T8 IC			10 120 30 5 10	20 79 30 50 60							VESICLES: Sparse vesicularity (1-5 %), high sphericity, rounded, 100% filled. Sparse, randomly-distributed vesicles. UPPER CONTACT: Not recovered LOWER CONTACT: Preserved as fresh glass at 95 cm of 8R-1 ALTERATION: Slightly altered gray basalt. Vesicles are filled with calcite, green clays and minor pyrite. The glassy lower part of the unit has traces of fresh glass. VEINS: A network of calcite veins with pyrite. Pyrite veins are cut by the calcite veins. STRUCTURE: Calcite veins having steep dips are heteroge- neously distributed. Sometimes calcite veins with pyrite. Two
- - 156.0 —	50 - 60 - 70 -	5		1	TS XRD	4		25 150 180 10 155 5 155 155 1\$5	30 50 40 75 70 20 65 85							veins are massive structure and others are polycrystalline. UNIT: 5 PIECE: 7-14 (description based on all pieces) LITHOLOGY: pieces of glassy basalt and sandstone VOLCANIC DESCRIPTION: boundary part between flow units. TEXTURE: aphyric COLOR: greenish black PHENOCRYSTS: None GROUNDIMASS: cryptocrystalline VESICLES: Sparse vesicularity (7 %), moderate sphericity,
-	80 - 90 -	6		1	XRD			160 120 1950 0	30 60 30 20							subrounded, 100% filled. Sparse, randomly-distributed vesicles. UPPER CONTACT: Not recovered LOWER CONTACT: Not recovered ALTERATION: Slightly to moderately altered gray basalt pieces. Significant glass is preserved on piece 13. Vesicles are filled with calcite, green clays and minor pyrite. VEINS: N/A STRUCTURE: No structure. UNIT: 6 (continued into next section) PIECE: 15 (piece 15)
- - 156.5 –	100 - 110 -	7 8 9 10		1		5	2424								•••	LITHOLOGY: massive basalt VOLCANIC DESCRIPTION: core part of inflation unit. TEXTURE: aphyric COLOR: greenish black PHENOCRYSTS: None GROUNDMASS: microcrystalline GROUNDMASS: microcrystalline VESICLES: Sparse, randomly-distributed vesicles. UPPER CONTACT: Not recovered LOWER CONTACT: Not recovered LOWER CONTACT: Preserved as fresh glass at 90 cm of 8R-2 ALTERATION: Slightly altered gray basalt. Vesicles are filled with calcite, green clays and minor pyrite. VEINS: N/A STRUCTURE: No structure.
-	120 - 130 - 140 -	11 12 13 14 15			TS 88	6	154									
				L	<u> </u>	<u> </u>		<u> </u>	<u> </u>					•* •	••	





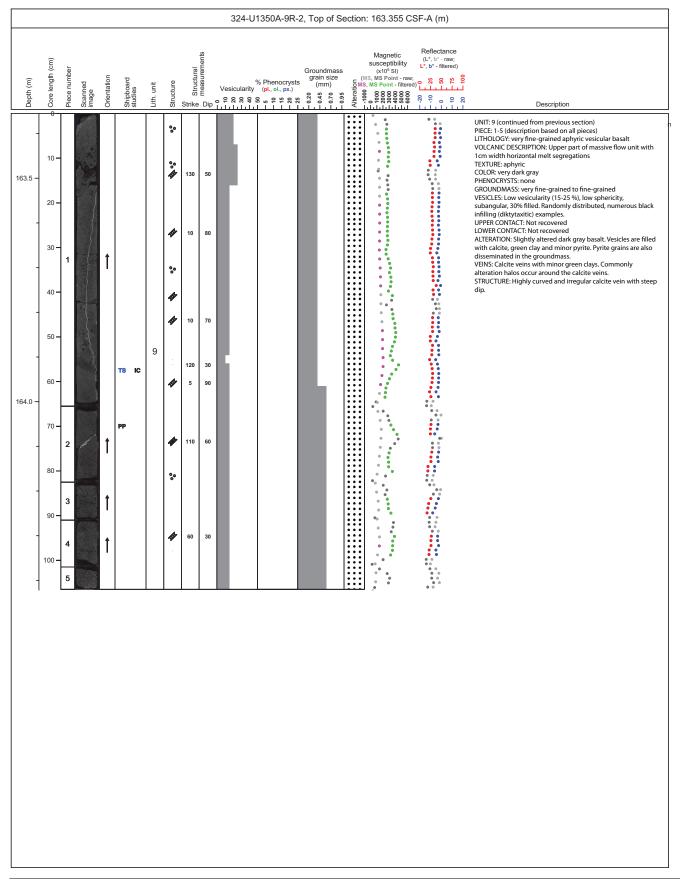




Site U1350 core descriptions

										324-L	J1350A-9F	R-1, Top of	Sectio	n: 162.3 CSF	⁼ -A (m)	
Depth (m)	Core length (cm)	Piece number	Scanned image	Orientation	Shipboard studies	Lith. unit	Structure	Structural	dig measurements	Vesicularity	2 2 2 2 2 X	()	()	Magnetic susceptibility (x10 ⁵ SI) S, MS Point - raw; MS Point - filtered)	Reflectance (L*, b*- raw; L*, b*- filtered) 00 00 00 00 00 00 00 00 00 00 00 00 00	Description
	0 10 -	1				7 8	봐					a	***			UNIT: 7 (continued from previous section) PIECE: 1 (description based on a piece) LITHOLOGY: cryptocrystalline plagioclase phyric basalt VOLCANIC DESCRIPTION: glassy chilled zone (fresh glass preserved), Allochtonous material from up-hole level? Not in situ?
162.5 -	20 -	3		1	PAL		°°°									TEXTURE: sparsely phyric COLOR: very dark gray PHENOCRYSTS: plagioclase GROUNDMASS: cryptocrystalline VESICLES: Sparse vesicularity (2 %), high sphericity, subrounded, 40% filled. Large vesicles at the base of chilled
-	30 -						11	20 50	70 40	L					**	zone. UPPER CONTACT: Not recovered LOWER CONTACT: Not recovered ALTERATION: Slightly altered basalt VEINS: none STRUCTURE: No structure.
-	40 - 50 -	- 5		1											······································	UNIT: 8 PIECE: 2 (description based on a piece) LITHOLOGY: black chert VOLCANIC DESCRIPTION: Allochtonous material from up-hole level? Not in situ? UPPER CONTACT: Not recovered LOWER CONTACT: Not recovered ALTERATION: none VEINS: none
-	60 -	6		t		9	*	110	40							STRUCTURE: No structure. UNIT: 9 (continued into next section) PIECE: 3-9 (description based on all pieces) LITHOLOGY: very fine-grained aphyric vesicular basalt VOLCANIC DESCRIPTION: Upper part of massive flow unit TEXTURE: aphyric
163.0 -	70 - 80 -	7		t			*	158	78				· · · · · · · · · · · · · · · · · · ·			COLOR: very dark gray PHENOCRYSTS: none GROUNDMASS: very fine-grained VESICLES: Low vesicularity (20 %), high and low sphericity, subrounded, 70% filled. Randomly distributed, numerous black infilling (diktytaxitic) examples. UPPER CONTACT: Not recovered
_	90 -	8		•			•	0	70							LOWER CONTACT: Not recovered ALTERATION: Slightly altered dark gray basalt. Vesicles are filled with calcite, green clay and minor pyrite. Pyrite grains are also disseminated in the groundmass. VEINS: Calcite veins with minor green clays. Commonly alteration halos occur around the calcite veins. STRUCTURE: Irregular veins having steep dips, connecting amygdules, and party anastomosing.
-	100 -	9												•	0 0 0 0 0 0 0 0	

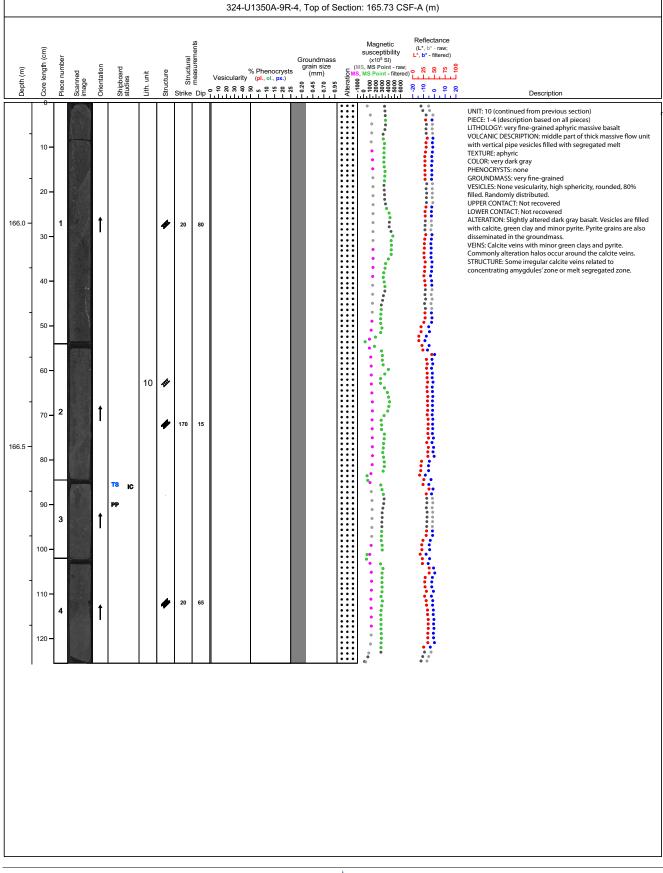






										324-U	1350A-9R	-3, Top of S	ectio	n: 164.42 CS	SF-A (m)	
Depth (m)	Core length (cm)	Piece number	Scanned image	Orientation	Shipboard studies	Lith. unit	Structure	Structural Strike	did	9 Vesicularity 5 은 ၃ 용 육 윤		()		Magnetic susceptibility (x10 ⁵ SI) MS, MS Point - filterer S, MS Point - filterer S, SS SS SS SS SS SS SS SS SS SS SS SS SS SS	Reflectance $(L^*, b^* - raw;$ $L^*, b^* - filtered)$ 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 -	Description
164.5 -	- 0- 10 -						*	50	30 60							UNIT: 9 (continued from previous section) PIECE: 1-4 (description based on all pieces) LITHOLOGY: very fine-grained aphyric vesicular basalt VOLCANIC DESCRIPTION: Lower part of massive flow unit with 1cm width horizontal melt segregations TEXTURE: aphyric COLOR: very dark gray PHENOCRYSTS: none
-	20 -	-						40	50						• • • • • • • • • • • • • • • • • • •	GROUNDMASS: very fine-grained. VESICLES: Low vesicularity (15-25 %), low sphericity, subangular, 30% filled. Randomly distributed, numerous black infilling (dikytaxitic) examples. UPPER CONTACT: Not recovered LOWER CONTACT: Not recovered ALTERATION: Slightly altered dark gray basalt. Vesicles are filled
-	30 - 40 -	1		Î												with calcite, green clay and minor pyrite. Pyrite grains are also disseminated in the groundmass. VEINS: Calcite veins with minor green clays. Commonly alteration halos occur around the calcite veins. STRUCTURE: Some irregular calcite veins related to concentrating amygdules' zone.
-	50 -		E T			9	*	20 170	60 30						••• •• ••	UNIT: 10 (continued into next section) PIECE: 5-6 (description based on all pieces) LITHOLOGY: very fine-grained aphyric massive basalt VOLCANIC DESCRIPTION: upper part of massive flow unit with 1cm patches of melt segregations TEXTURE: aphyric COLOR: very dark gray
165.0 -	60 -						*									PHENOCRYSTS: none GROUNDMASS: very fine-grained VESICLES: None vesicularity (1-2 %), moderate sphericity, subrounded, 30% filled. Randomly distributed. UPPER CONTACT: Not recovered LOWER CONTACT: Not recovered ALTERATION: Slightly altered dark gray basalt. Vesicles are filled
-	70 - 80 -	2	A	t			194	165	50							with calcite, green clay and minor pyrite. Pyrite grains are also disseminated in the groundmass. VEINS: Calcite veins with minor green clays and pyrite. Commonly alteration halos occur around the calcite veins. STRUCTURE: No structure.
-	90 -	3					15L									
-	100 -	╞														
165.5 —	110-	5	S. COLOR			10	15L									
	120 -	6														
	130-	1				1	1	1							• •	







Site U1350 core descriptions

Core Photo 324-U1350A-9R-5, Top of Section: 166.985 CSF-A (m) Reflectance Magnetic (L*, b* - raw; L*, b* - filtered) (MS, MS Point - raw; MS, MS Point - ritered) Core length (cm) Structural measureme Groundmass fece number grain size (mm) 75 10 Drientation % Phenocrysts (pl., ol., px.) 22 Depth (m) Shipboard studies Structure Alteration Lith. unit Vesicularity MS Point - 1000 00000 00 9 9 9 نىت nage 1000 Strike Dip 9 8 8 6 9 8 8 8 9 9 8 8 8 9 9 8 8 9 9 8 8 9 9 8 8 9 9 8 8 9 9 9 8 8 9 0.45 0.70 0.95 8 9 • Description 167.0 UNIT: 10 (continued from previous section) PIECE: 1-3 (description based on all pieces) LITHOLOGY: very fine-grained aphyric massive basalt VOLCANIC DESCRIPTION: middle part of thick massive flow unit ŝ 0 65 VOLCANIC DESCRIPTION: middle part of thick massive flow uni TEXTURE: aphyric COLOR: very dark gray PHENOCRYSTS: none GROUNDMASS: very fine-grained VESICLES: None vesicularity, high sphericity, rounded, 80% filled. Randomly distributed. Long (50cm) vertical pipe vesicle filled wit segregated melt of 3% vesiculation. UPPER CONTACT: Not recovered . 10 ٠ . 0 • 20 • 1 1 4 LOWER CONTACT: Not recovered ALTERATION: Slightly altered dark gray basalt. Vesicles are filled 65 10 with calcite, green clay and minor pyrite. Pyrite grains are also disseminated in the groundmass. VEINS: Calcite veins with minor green clays and pyrite. 30 Commonly alteration halos occur around the calcite veins STRUCTURE: Some irregular calcite vein with halo in upper part. Melt segregations showing steep dips (approximately perpendicular) on core face in lower part. 40 •, 50 167.5 -60 10 1 2 70 80 • 90 4 • • ******************************** • 100 168.0 -

3

110

120

130

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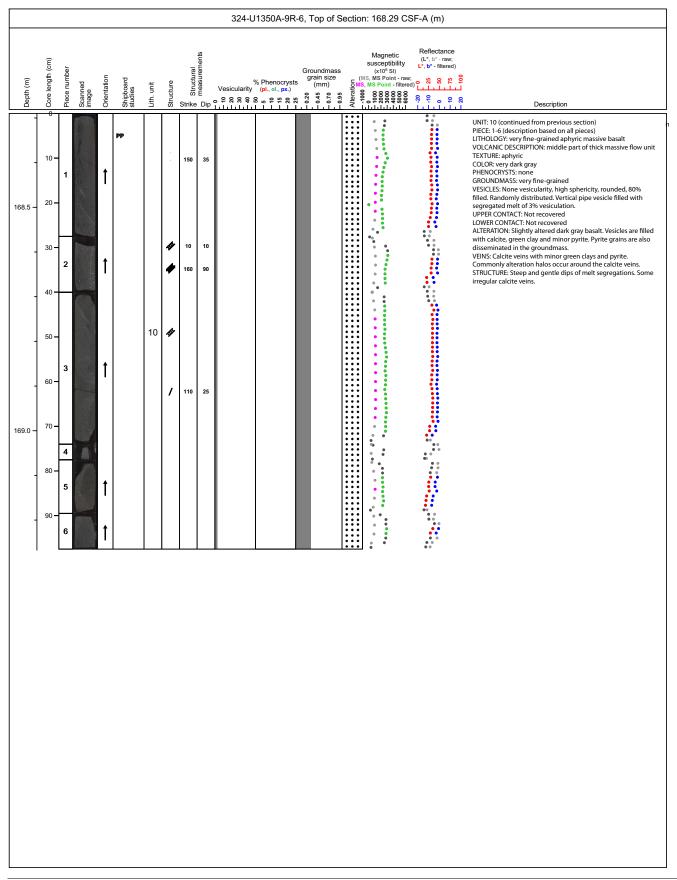


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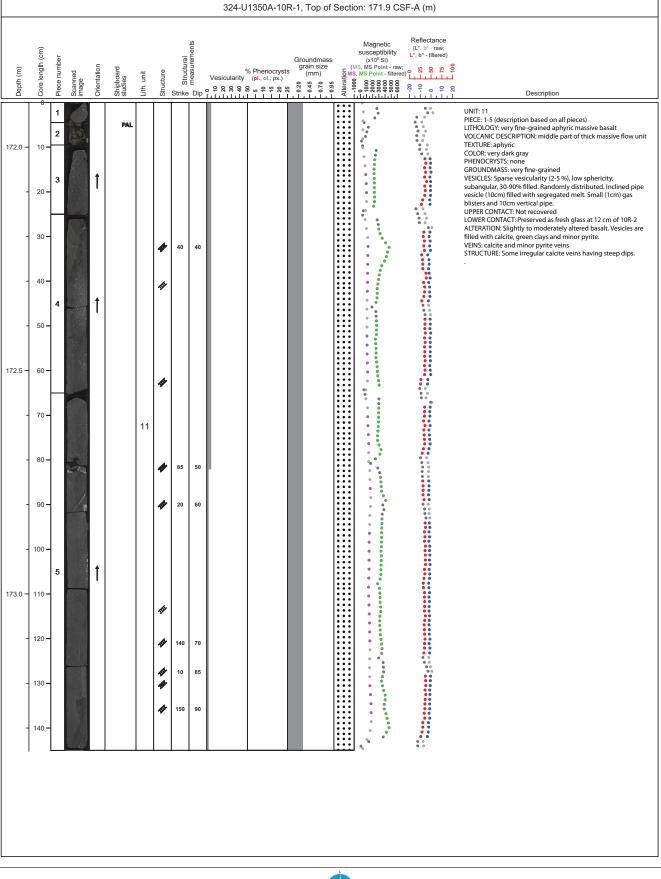
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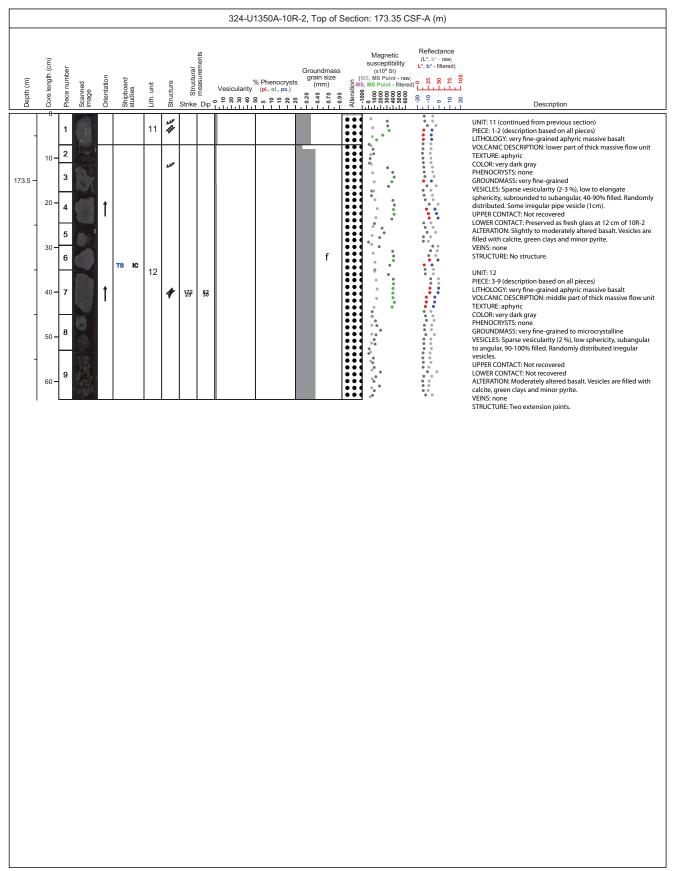
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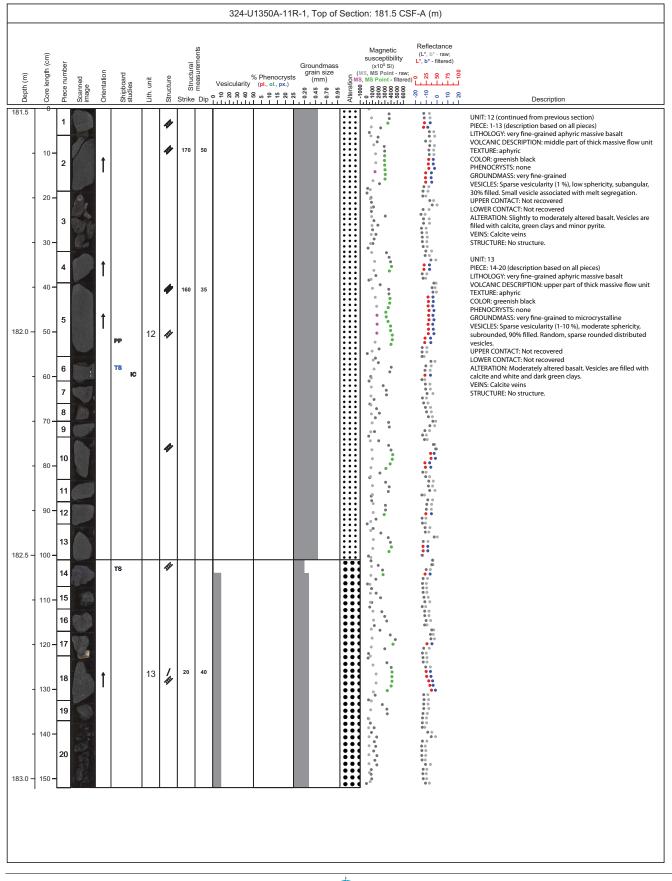




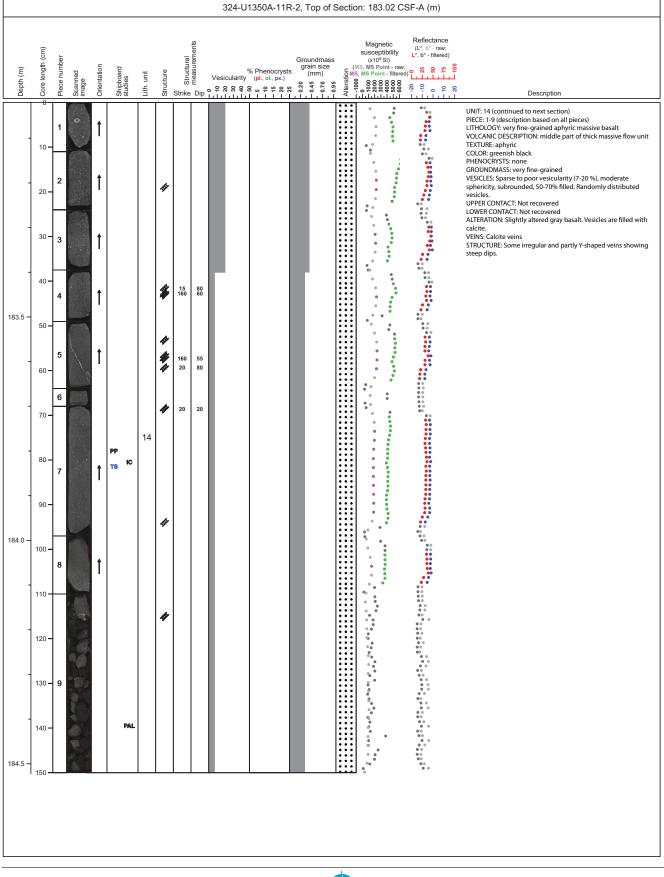




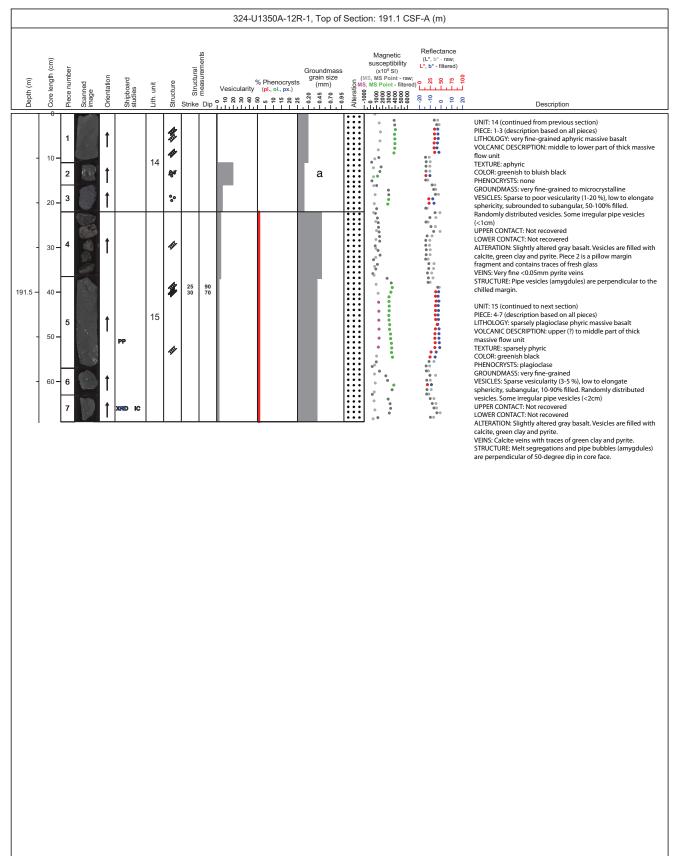








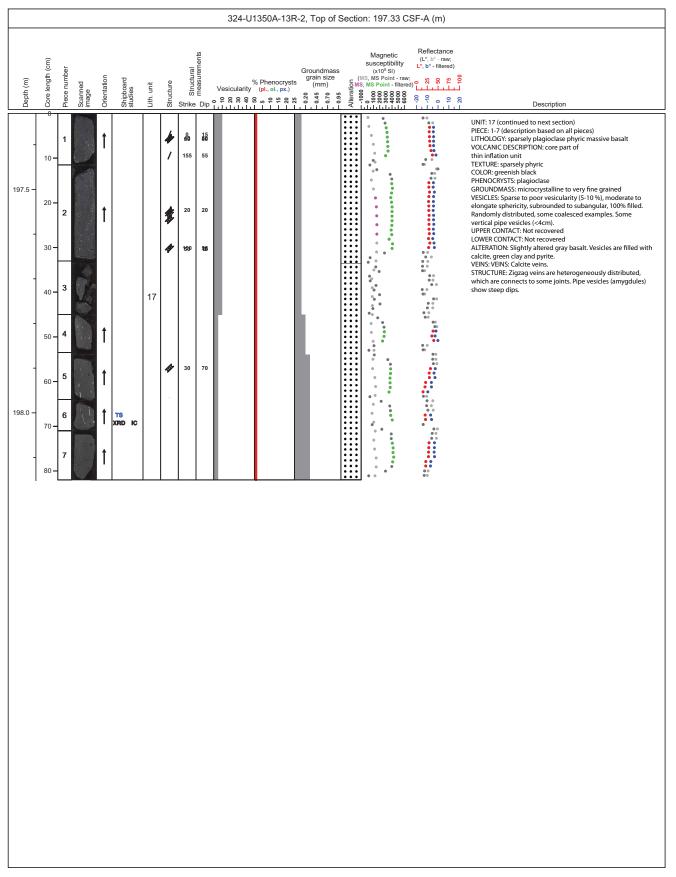




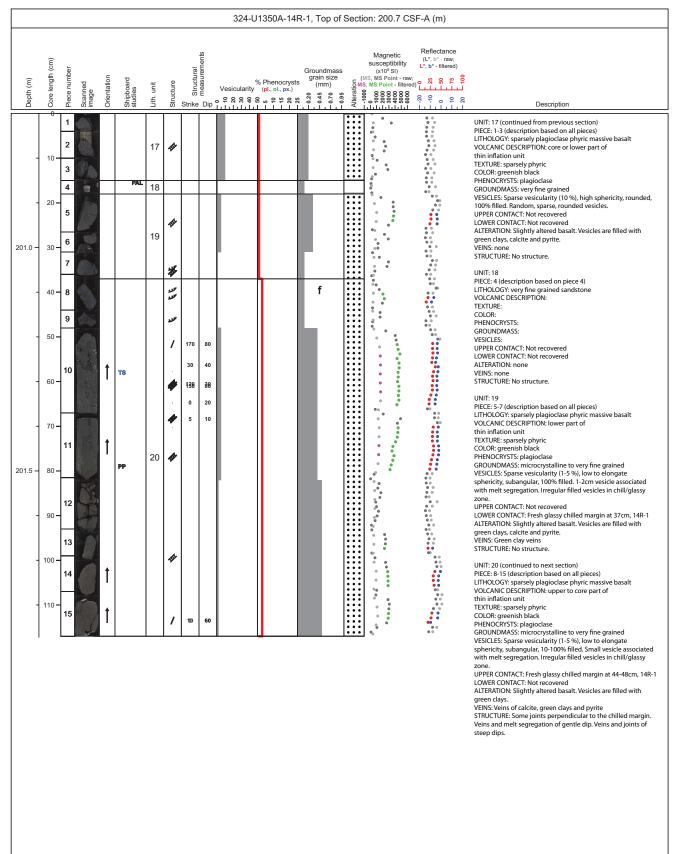


										324-U	1350A-13F	R-1, Top of	Sect	ion: 195.9 CS	SF-A (m)	
Depth (m)	Core length (cm)	Piece number	Scanned image	Orientation	Shipboard studies	Lith. unit	Structure	Structural Strice		Vesicularity	6 Phenocrysts (pl., ol., px.) 3 며 은 또 없 없	0 10 0 K		Magnetic susceptibility (x10 ⁵ SI) (MS, MS Point - filterer 80 00 00 00 00 00 - 00 00 00 00 00 - 00	Reflectance (L*, b* - raw; L*, b* - filtered) 00 01 02 02 01 00 01 00 00 00 00 00 00 00 00 00 00	Description
196.0 -	0- 10-	1				15	1954 1944					m				UNIT: 15 (continued from previous section) PIECE: 1-2 (description based on all pieces) LITHOLOGY: sparsely plagioclase phyric massive basalt VOLCANIC DESCRIPTON: middle or lower part of flow unit TEXTURE: sparsely phyric COLOR: greenish black PHENOCRYSTS: plagioclase
-	20 -	3	1.	1			4	140	55							GROUNDMASS: microcrystalline VESICLES: Sparse to poor vesicularity (7 %), low sphericity, subrounded, 90% filled. Randomly distributed, some coalesced examples. UPPER CONTACT: Not recovered LOWER CONTACT: Not recovered ALTERATION: Slightly altered gray basalt. Vesicles are filled with calcite, green clay and pyrite.
-	30 - 40 -							69	60						8 • • • • • • • • • • • • • • • • • • •	VEINS: N/A STRUCTURE: No structure. UNIT: 16 PIECE: 3-12 (description based on all pieces) LITHOLOGY: sparsely plagioclase phyric massive basalt VOLCANIC DESCRIPTION: core part of thin inflation unit
-	50 -	4	•	1	99 २१ प्रिंग्रेट		-	50	40							TEXTURE: sparsely phyric COLOR: greenish black PHENOCRYSTS: plagioclase GROUNDMASS: very fine-grained VESICLES: Sparse vesicularity (S-10 %), high to low sphericity, rounded to subangular, 50-100% filled. Randomly distributed small vesicles with some irregular pipe vesicles (<3cm). Small vesicle associated with melt segregation.
196.5 -	60 - 70 -	5										ŀ				UPPER CONTACT: Not recovered LOWER CONTACT: Not recovered ALTERATIONS lightly altered gray basalt. Vesicles are filled with calcite, green clay and pyrite. Piece 10 is a pillow margin fragment and contains traces of fresh glass. VEINS: Calcite veins with traces of green clay and pyrite. STRUCTURE: Pipe vesicles (amygdules) show several directions of dip in core face. Some irregular veins.
-	80 -	6				16	TE									or dip in core race, some irregular vens.
-	90 - 100 -															
197.0 -	110-	8		1			the test	60 10 170	30 80 80						••• ••	
	120 - 130 -	9										f				
	140 -	11 12		1			HI.									

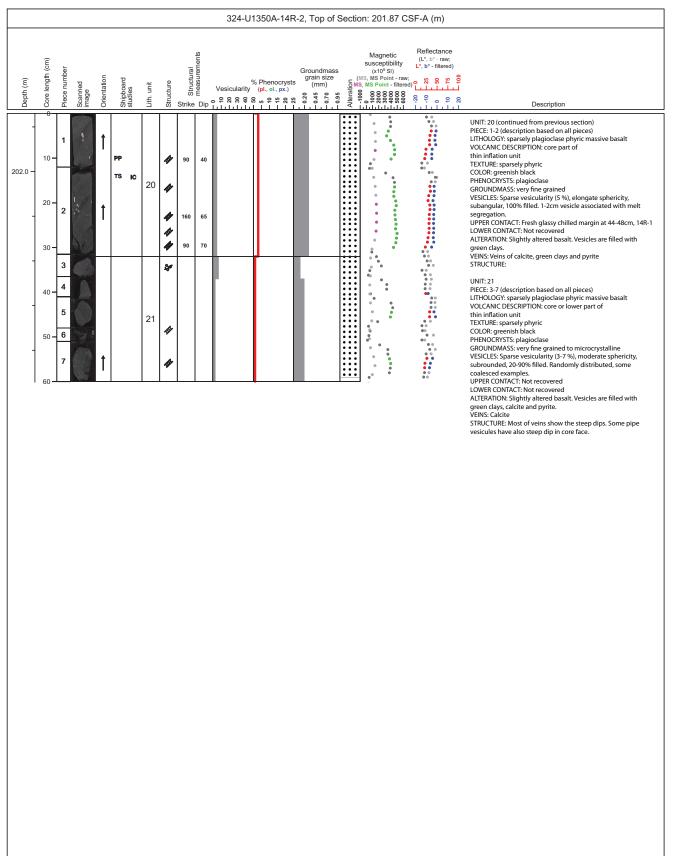








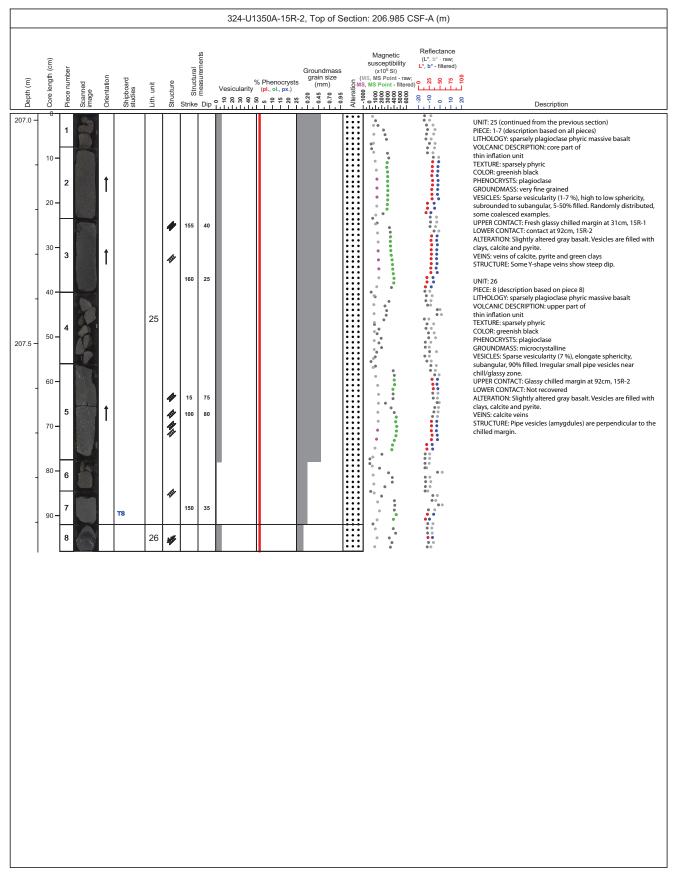




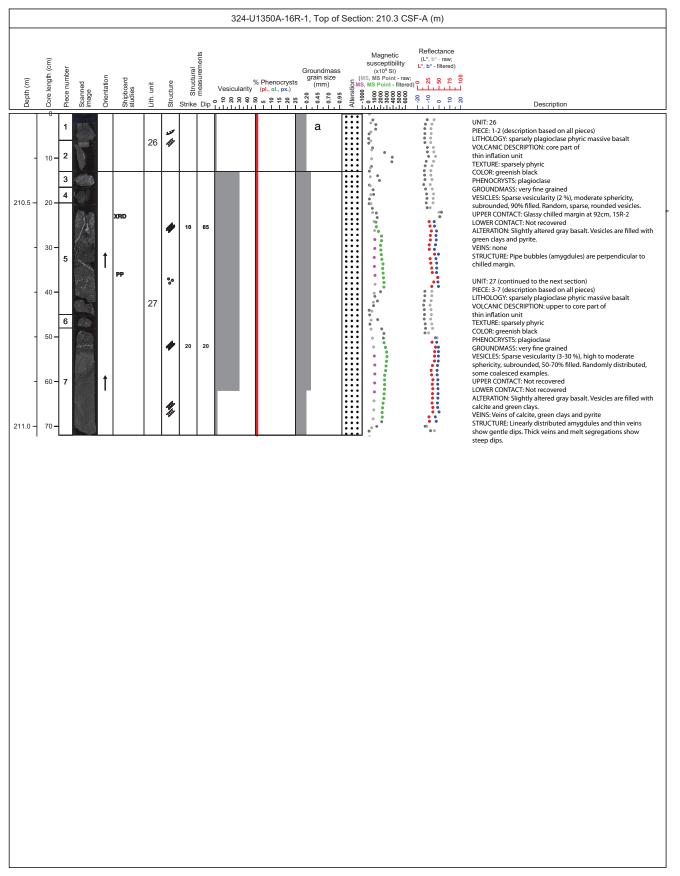


										324-U	1350A-15F	R-1, Top of	Sect	ion: 205.5 CS	SF-A (m)	
Depth (m)	Core length (cm)	Piece number	Scanned image	Orientation	Shipboard studies	Lith. unit	Structure	Structural	dig measurements	Vesicularity	% Phenocrysts (pl., ol., px.) 중 6 은 단 입 원	()		Magnetic susceptibility (x10 ⁵ SI) MS, MS Point - raw; S, MS Point - filtered S, S, S	Reflectance (L*, b* - raw; 20 0 0 21 - 100 0 21 - 100 0 20 0	Description
205.5	0	1				22										UNIT: 22 PIECE: 1-2 (description based on all pieces) LITHOLOGY: inter flows breccia VOLCANIC DESCRIPTION: TEXTURE: sparsely phyric
	- 10.	3			PAL TS	23							•••			COLOR: sparsey pnyric COLOR: greenish black PHENOCRYSTS: plagioclase GROUNDMASS: very fine grained VESICLES: Sparse vesicularity (5 %), high sphericity, subrounded, 90% filled. Randomly distributed, some coalesced
	- 20.	4	8			24	1954 2.200									examples. UPPER CONTACT: Not recovered LOWER CONTACT: Not recovered ALTERATION: Moderately altered gray basalt. Vesicles are filled with clays, calcite and pyrite.
	- 30 -	6	P		TS		2220					m	••			VEINS: none STRUCTURE: No structure. UNIT: 23 PIECE: 3 (description based on piece 3) LITHOLOGY: sandstone interbed
206.0 -	50.	8					111								•••	VOLCANIC DESCRIPTION: TEXTURE: sparsely phyric COLOR: light gray PHENOCRYSTS: GROUNDMASS: VESICLES:
	- 60.	9		•			111	155	75							VESICLES: UPPER CONTACT: Not recovered LOWER CONTACT: Not recovered ALTERATION: none VEINS: none STRUCTURE: No structure.
	- 70-		F. 0.	1			•	165	15						• • • • • • • • • • • • • • • • • • •	UNIT: 24 PIECE: 4-5 (description based on all pieces) LITHOLOGY: sparsely plagioclase phyric massive basalt VOLCANIC DESCRIPTION: core part of thin inflation unit
	- 80 -	10						20 140	70 70 70							TEXTURE: sparsely phyric COLOR: greenish black PHENOCRYSTS: plagioclase GROUNDMASS: very fine grained VESICLES: Sparse vesicularity (10 %), moderate sphericity, subrounded, 80% filled. Randomly distributed, some coalesced
	- 90 -	11		•		25	*	5	70							examples. UPPER CONTACT: Not recovered LOWER CONTACT: Not recovered ALTERATION: Moderately altered gray basalt. Vesicles are filled with clays, calcite and pyrite.
206.5 -	- 100 -						*	110	90 40							VEINS: none STRUCTURE: Some joints. UNIT: 25 (continued to the next section) PIECE: 6-13 (description based on all pieces) LITHOLOGY: sparsely plagioclase phyric massive basalt
	- 110-	╞	ñ							Γ.		I.			••	VOLCANIC DESCRIPTION: upper to core part of thin inflation unit TEXTURE: sparsely phyric COLOR: greenish black PHENOCRYSTS: plagioclase GROUNDMASS: very fine grained to microcrystalline
	- 120 -	12		t	XRD IC TS		,	190	45							VESICLES: Sparse vesicularity (1-15 %), high to low sphericity, rounded to subangular, 5-100% hilled. Mandom, sparse, irregular vesicles. Some irregular pipe vesicles (>4cm), UPPER CONTACT: resh glassy chilled margin at 3 cm, 15R-1 LOWER CONTACT: contact at 92cm, 15R-2
	- 130 -				PP		T									ALTERATION: Slightly altered gray basalt. Vesicles are filled with clays, calcite and pyrite. VEINS: veins of calcite, pyrite and green clays STRUCTURE: Most of veins and one joint show steep dip.
	- 140 -	13	Ň	t												
				<u> </u>		<u> </u>		<u> </u>] •	• •	











											324-U1350A	A-16R-	-2, Top of S	Sectio	n: 211.02 CS	SF-A (m)	
Depth (m)		Core length (cm)	Piece number	Scanned image	Orientation	Shipboard	Lith. unit	Structure	Strik	di measurements	% Phen Vesicularity (pl., oi 등 은 은 용 용 용 요 유	., px.)	Groundmass grain size (mm) Sf 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5	Alteration S	Magnetic susceptibility (x10 ⁵ SI) IS, MS Point - filtered 88888888 0 + 2 & 8 & 8 0 + 2 & 8 & 8 0 + 1 + 1 + 1 + 1 + 1	Reflectance (L*, b* - raw; L*, b* - filtered) 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0	Description
211.5	- 1 - 2 - 3 - 4 - 5 - 6 - 7 - 7 - 8	$3 \\ 0 \\ 10 \\ - \\ 20 \\ - \\ 30 \\ - \\ 50 \\ - \\ 50 \\ - \\ 50 \\ - \\ 30 \\ - \\ 00 \\ - \\ - \\ 00 \\ - \\ - \\ 00 \\ - \\ -$	1			TS	27		 140 10 50 40 159 100 110 88 20 70 100 	45 70 50 30 45							UNIT: 27 (continued from the previous section) PIECE: 1 (description based on piece 1) LITHOLOSY: sparsely plagicalase phyric massive basalt VOLCANC DESCRPTION: core part of thin inflation unit TEXTURE: sparsely opinical COLOR: greenish black PHENOCRYST: plagicalase GROUNDMASS: very fine grained VESICLES: Sparse vesicularity (1-3 %), high sphericity, subrounded, 70-100% filled. Random, sparse, rounded vesicles. UPER CONTACT: Not recovered LOWER CONTACT: Not recovered ALTERATION: Sighty altered gray basalt. Vesicles are filled with calcite and green class. VENS: veins of calcite, green class and pyrite STRUCTURE: Some calcite veins are heterogeneously distributed.

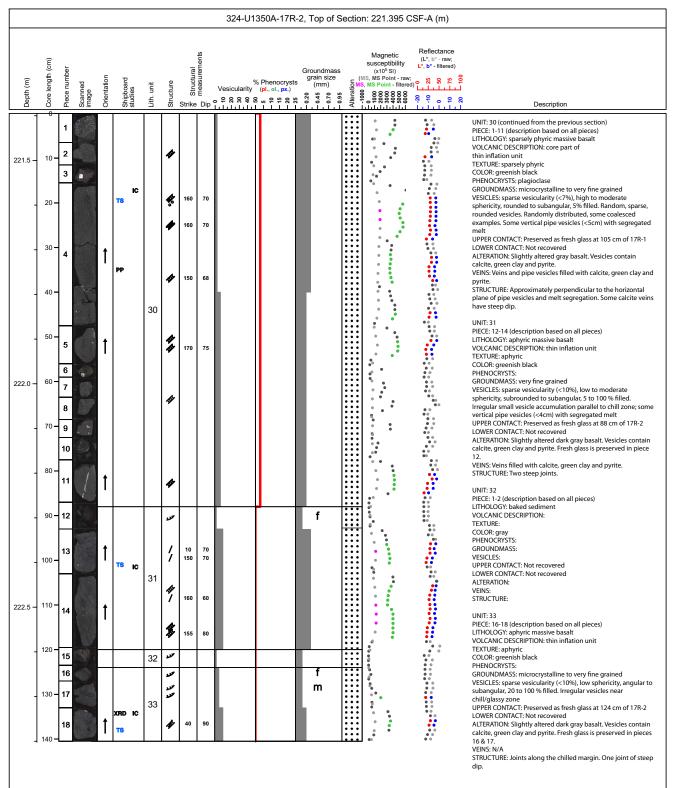


										324-U1	1350A-16	R-3,	Top of	Sectio	on: 211.96 C	SF-A (m)	
Depth (m)	Core length (cm)	Piece number	Scanned image	Orientation	Shipboard studies	Lith. unit	Structure	Structural Strike	di di	Vesicularity 우 윉 양 당 물	% Phenocrys (pl., ol., px.) දී යුද ද ද	ts (roundmas grain size (mm)		Magnetic susceptibility (x10 ⁵ SI) MS, MS Point - filterec 000 8888888 - 0 2888888 - 0 2888888	Reflectance (L*, b* - raw; 2 0 10 10 100 10 10 100 10 10 100 10 10 100 10 10 10 10 10 10 10 10 10 10 10 10 10 1	Description
212.0 -	0- 10- 20-						**	20 5 399	20 10 78						· · · · · · · · · · · · · · · · · · ·		UNIT: 27 (continued from the previous section) PIECE: 1-2 (description based on all pieces) LITHOLOGY: sparsely plagioclase phyric massive basalt VOLCANIC DESCRIPTION: core part of thin inflation unit TEXTURE: sparsely phyric COLOR: greenish black PHENOCRYSTS: plagioclase GROUNDMASS: very fine grained VESICLES: Sparse vesicularity (1 %), high sphericity, subrounded, 100% filled. Random, sparse, rounded vesicles.
-	30 -			•	XRD TS			40 20	80 80								UPPER CONTACT: Not recovered LOWER CONTACT: Not recovered ALTERATION: Slightly altered gray basalt. Vesicles are filled with calcite and green clays. VEINS: Veins of calcite, green clays and pyrite STRUCTURE: Composite veins and irregular calcite veins are heterogeneously distributed.
- 212.5 –	40 - 50 -	1		Î		27		95 90 150	15 20 40								UNIT: 28 (continued to the next section) PIECE: 3-5 (description based on all pieces) LITHOLOGY: aphyric massive basalt VOLCANIC DESCRIPTION: core part of thin inflation unit TEXTURE: sparsely phyric COLOR: greenish black PHENOCRYSTS: plagioclase GROUNDMASS: very fine grained VESICLES: Sparse to poor vesicularity (2-25 %), high to low
-	60 - 70 -	-	1-1-Y-A		TS		4	10 1110 10	10 0 20 10								VESICLES: Sparse to poor Vesicularity (2-25 %), high to tow sphericity, subrounded to subangular, 50-90% filled. Random, sparse, rounded vesicles. Randomly distributed, some coalesced examples. UPPER CONTACT: Not recovered LOWER CONTACT: Not recovered ALTERATION: ALTERATION: Slightly altered gray basalt. Vesicles are filled with calcite and pyrite. VEINS: none STRUCTURE: No structure.
-	80 –	2	A O				*	10 90	60 30						· · · · · · · · · · · · · · · · · · ·		STRUCTURE: No structure.
- 213.0 –	90 - 100 -	3					<u>II</u>									00 00 00 00 00 00 00 00 00 00	
-	110 - 120 -	6				28	***								· · · · · · · · · · · · · · · · · · ·		
			Red B													• • • • •	



											324-U	1350A-17	R-1	I, Top of	Secti	on: 219.9 CS	SF-A (m)	
Depth (m)	Core length (cm)	core rengin (cm)	Piece number	Scanned image	Orientation	Shipboard studies	Lith. unit	Structure	Strike	di measurements	esicularity	생 Phenocrysta (pl., ol., px.) 8	s	Groundmass grain size (mm)		Magnetic susceptibility (x10 ⁵ SI) MS, MS Point - raw; S, MS Point - filterer	Reflecta (L*, b* - L*, b* - fil 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0	raw; tered) 52 4 4	Description
E 4 4 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	- 1 ¹ - 2 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10 - 11 ¹ - 12 - 13		unru sold 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 7 18 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	Baned of the second	Orientation	TS IC	28 29 30			60 60	esicularity	% Phenonysti (pl.oi, px.) 3 → 9 + 1 2 → 9 + 1 2 → 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1	s	- (mm)		MS, MS Point - Imer			 Description UNIT: 28 (continued from the previous section). PIECE: 1-4 (description based on all pieces). UTHOLOGY: sparsely phyric massive basalt VOLCANIC DESCRIPTION: core part of thin inflation unit TEXTURE: sparsely phyric. GOULOMACSS: very fine grained UESICLES: Sparse vesicularity (10 %), low sphericity, subangular, 5% filed. Annohmy distributed, some coalesced examples. UPER CONTACT: Not recovered LUWER CONTACT: Not recovered UNIT: 29 PIECE: 5-17 (description based on all pieces). LTENTION: Sightly altered gray basalt. Vesicles contain calcite, green clay and pyrite. VESIC: 2000 (Gescription based on all pieces). LTENTION: Sightly altered gray basalt. Vesicles contain calcite, green clay and pyrite. VESIC: 2000 (Gescription based on all pieces). LTENTION: Sightly altered gray basalt. Vesicles contain calcite, green clay and pyrite. VESIC: 2000 (Gescription based on all pieces). LTENTION: Sightly altered gray basalt. Vesicles contain calcite, green clay and pyrite. VESIC: 2000 (Gescription) based on all pieces). LTENTION: Sightly altered gray basalt. Vesicles contain calcite, green clay and pyrite. VESIC: 2000 vesicularity (15 %), lob to bask basalt. Vesicles contain calcite, green clay and pyrite. VESIC: 2000 VIACT: Not recovered UTERTION: Sightly altered gray basalt. Vesicles contain calcite, green clay and pyrite. Pieces 5, 8, 13, 15, 16, 16, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10





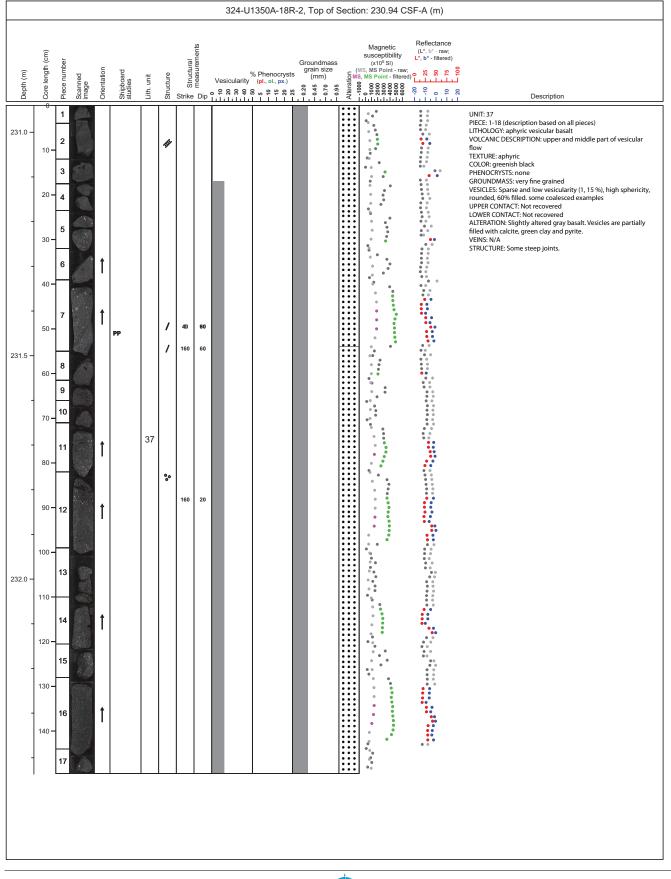


										324-U1350A	-17R	-3, Top of	Secti	ion: 222.8 CS	8F-A (m)	
Depth (m)	Core length (cm)	Piece number	Scanned image	Orientation	Shipboard studies	Lith. unit	Structure	Structural Structural	di measurements	% Pheno Vesicularity (pl., ol., 승 은 은 용 용 용 요 은 원	px.)	Groundmass grain size (mm) Sf 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5		Magnetic susceptibility (x10 ⁵ SI) MS, MS Point - raw; S, MS Point - filterec 00 0000000000000000000000000000000000	Reflectance (L*, b* - raw; L*, b* - filtered) (0 \$2 \$2 \$2 \$2 (0 \$2 \$2 \$2 \$2 (0 \$2 \$2 \$2 \$2 \$2 (0 \$2 \$2 \$2 \$2 \$2 \$2 \$2 \$2 \$2 \$2 \$2 \$2 \$2	Description
-	0- 10-	1		Î		33	1994 1994 1994	175	85							UNIT: 33 PIECE: 1-2 (description based on all pieces) LITHOLOGY: aphyric massive basalt VOLCANLC DESCRIPTION: thin inflation unit TEXTURE: aphyric COLOR: greenish black PHENOCRYSTS: GROUNDMASS: microcrystalline to very fine grained UCCUC (Construction) (2001) to the provide
223.0 -	20 - 30 -	- 3		t			144 141 141		0			f				VESICLES: sparse vesicularity (<10%), low sphericity, angular to subangular, 20 to 100 % filled. Irregular vesicles near chill/glassy zone UPPER CONTACT: Preserved as fresh glass at 124 cm of 17R-2 LOWER CONTACT: Not recovered ALTERATION: Slightly altered gray basalt. Vesicles contain calcite, green clay and pyrite. VEINS: STRUCTURE: One joint of steep and curved dip.
-	40 - 50 -	5		t			/	25 50	50						UNIT: 34 (continued from the previous section) PIECE: 3-13 (description based on all pieces) LITHOLOGY: sparsely phyric massive basalt VOLCANIC DESCRIPTION: core part of thin inflation unit TEXTURE: sparsely phyric COLOR: greenish black PHENOCRYSTS: plagioclase GROUNDMASS: microcrystalline to very fine grained VESICLES: sparse vesicularity (<7%), low, moderate and	
- 223.5 –	60 - 70 -	6		t			T	40	20							elongate sphericity, subrounded to subangular, 50-100% filled. Irregular small vesicles in chill/glassy zone; randomly distributed coalesced examples and vertical pipe vesicles (>5cm) with segregated melt. UPPER CONTACT: Preserved as fresh glass at 18 cm of 17R-3 LOWER CONTACT: Nor trecovered ALTERATION: Slightly altered dark gray basalt. Vesicles contain calcite, green clay and pyrite. Fresh glass is preserved in piece 3. VEINS: N/A
-	80 - 90 -	7		t	PP XRD IC	34						L				STRUCTURE: Approximately horizontal chilled margin. A few joints of steep dips.
-	100 -	9		† †			1	10	80			L				
- 224.0 –	110- 120-	11		t								L		•		
-	130 -	12					<u>1</u>									

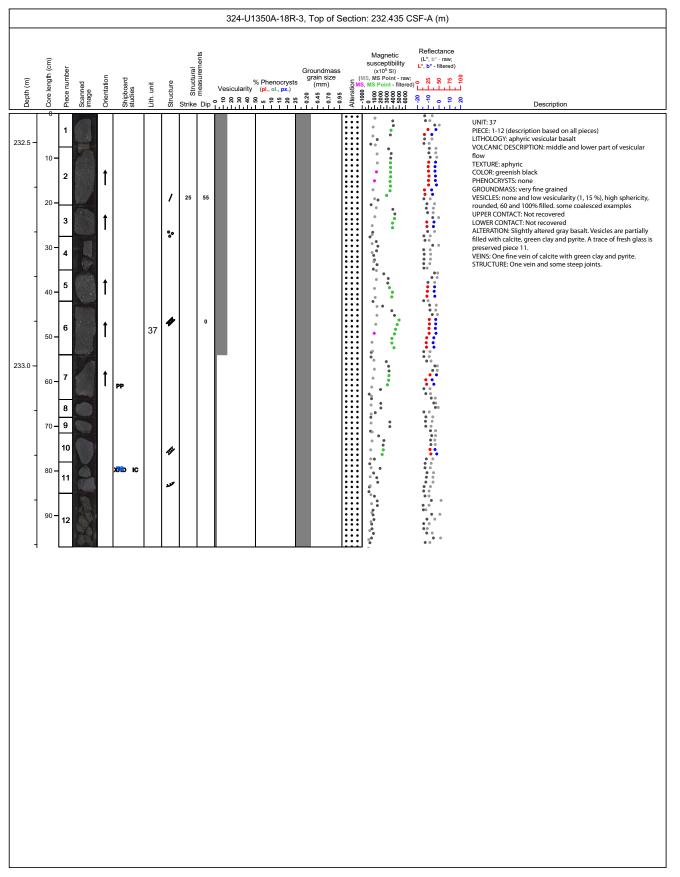


										324-U	1350A-18F	R-1	, Top of	Secti	on: 229.5 CS	SF-A (m)	
Depth (m)	Core length (cm)	Piece number	Scanned image	Orientation	Shipboard studies	Lith. unit	Structure	Structural	di di	Vesicularity	생 Phenocrysts (pl., ol., px.) 3 & 은 은 은 왕 왕	s (roundmass grain size (mm)		Magnetic susceptibility (x10 ⁵ SI) MS, MS Point - filterec 00 00 0000000000000000000000000000000	Reflectance (L [*] , b [*] - raw; L [*] , b [*] - filtered) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Description
229.5	 10 _	1	NO.			34	000 1001										UNIT: 34 PIECE: 1-2 (description based on all pieces) LITHOLOGY: aphyric massive and vesicular basalt VOLCANIC DESCRIPTION: fragments of flow interior TEXTURE: aphyric
-	20 -	3	Real Provide P			35											COLOR: greenish black PHENOCRYSTS: none GROUNDMASS: fine grained to microcrystalline VESICLES: Sparse and low vesicularity (3, 15 %), low sphericity, subangular and subrounded, 5 and 100% filled. Many coalesced examples
-	30 –	4	A BUSS				TH						f				UPPER CONTACT: Not recovered LOWER CONTACT: Not recovered ALTERATION: Slightly altered gray basalt. Vesicles are partially filled with calcite, green clay and pyrite. VEINS: N/A STRUCTURE: No structure.
-	40 -	5					442 1997						m				UNIT: 35 PIECE: 3 (description based on one piece) LITHOLOGY: sandstone VOLCANIC DESCRIPTION: sediment interbed UPPER CONTACT: Not recovered LOWER CONTACT: Not recovered ALTERATION: VEINS:
230.0 –	50 -	7		1			- FFF										STRUCTURE: UNIT: 36 PIECE: 4-15 (description based on all pieces) LITHOLOGY: aphyric massive basalt
-	60 - 70 -	8		Î													VOLCANIC DESCRIPTION: entire unit of massive flow TEXTURE: aphyric COLOR: greenish black PHENOCRYSTS: none GROUNDMASS: fine grained to microcrystalline VESICLES: Sparse and low vesicularity (3, 15 %), low sphericity, cubaseutica and cubravied of 5 and 100% filed long pino.
_	80 -	10		1		36	B										subangular and subrounded, 5 and 100% filled. Long pipe vesicles (10cm) vertical to flow (filled with segregation melt) UPPER CONTACT: fresh glassy chilled one with contact of baked sandstone LOWER CONTACT: fresh glassy chilled margin ALTERATION: Slightly altered gray basalt. Vesicles are partially filled with calcite, green clay and pyrite. A trace of fresh glass is preserved in 1 of the 5 fragments of piece 4 and in piece 15. VEINS: Very fine veins of calcite with green clay and pyrite. Pipe vesicles filled with segregated melt and calcite with pyrite. STRUCTURE: Pipe vesicles and melt segregations show the
230.5 –	90 - 100 -	11	Ì	1	рр			168	85								steep dips of 70 to 90 degree.
-	110 -	12		1	TS IC		•	20	75								
-	120 -	13		1													
-	130 -	14		1			/	10	85								
	140 -	15		1			*	10 135 20	75 85 10							00 00 0 0 0 0 0 0 0 0 0	









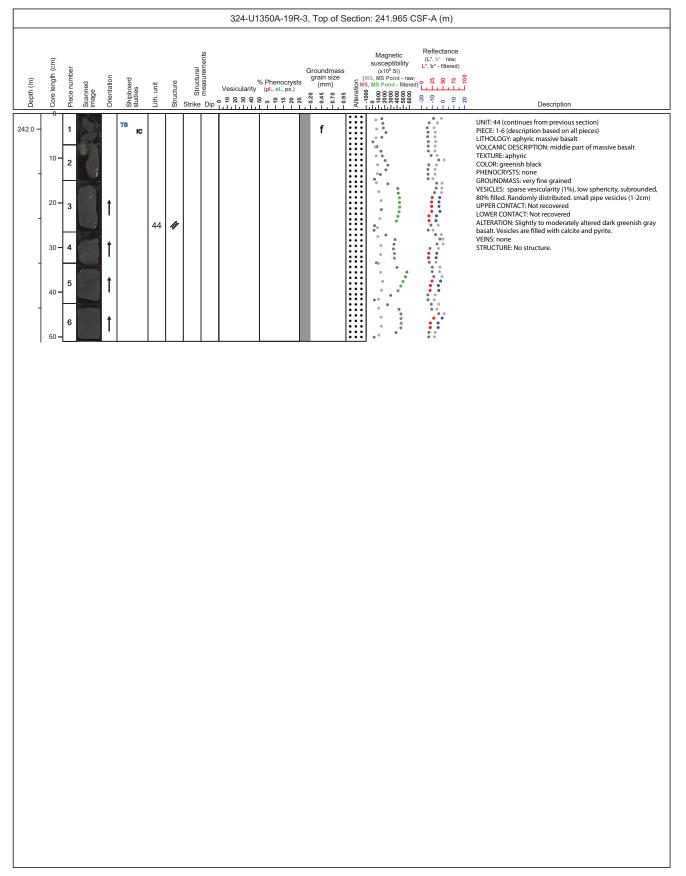


										324-U1350)A-19F	R-1, Top of	Sect	ion: 239.1 CS	8F-A (m)	
Depth (m)	Core length (cm)	Piece number	Scanned image	Orientation	Shipboard studies	Lith. unit	Structure	Structural Strike	did	% Phe Vesicularity (pl., 5 은 은 은 은 운 요 요 요 	nocrysts ol., px.) 같 또 원 원	()	5	Magnetic susceptibility (x10 ⁵ SI) (MS, MS Point - filtered 80 50 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Reflectance $(L^*, b^* - raw;$ $L^*, b^* - filtered)$ 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0	Description
<u>8</u> 239.5 - 240.0 - 240.0 -	8 0 10 - 20 - 30 - 40 - 50 - 60 - 70 - 80 - 90 - 100 - 110 - 120 - 130 - 140 -				ALD IC	338 39 40		Strike	Dip 6 70 40 15 75 38 66 0 80 80 80 80 80 80 65 70 40							Description UNIT: 38 PIECE: 1-2 (description based on all pieces) LITHOLOCY: aphyric massive basalt VOLCANIC DESCRIPTION: Middle part of massive basalt TEXTURE: aphyric (0.1 % plagioclase phenocrysts) COLOR: greenish black PHENOCRYSTS: plagioclase GROUNDMASS: very fine greined UPPER CONTACT: Not recovered LOWER CONTACT: Not recovered LOWER CONTACT: Not recovered LOWER CONTACT: Not recovered UNIT: 39 PIECE: 24 (description based on all pieces) LITHOLOCY: aphyric massive basalt VOLCANIC DESCRIPTION: Middle part of massive basalt TEXTURE: aphyric COLOR: greenish black PHENOCRYSTS: none GROUNDMASS: microcrystalline VESICLES: None vesicularity, low sphericity, subangular, 100% filled. Irregular and randomly distributed vesicles, some coalesced examples UPPER CONTACT: Not recovered LOWER CONTACT: Not recovered COLOR: greenish black PHENOCRYSTS: none GROUNDMASS: very fine grained VESICLES: None vesicularity, high sphericity, rounded, 50% filled. Sparse, isolated round vesicles. UPPER CONTACT: Not recovered LOWER CONTACT: N
240.5 -	140 -	6												1 1 1	• 0 • 0 • 0	

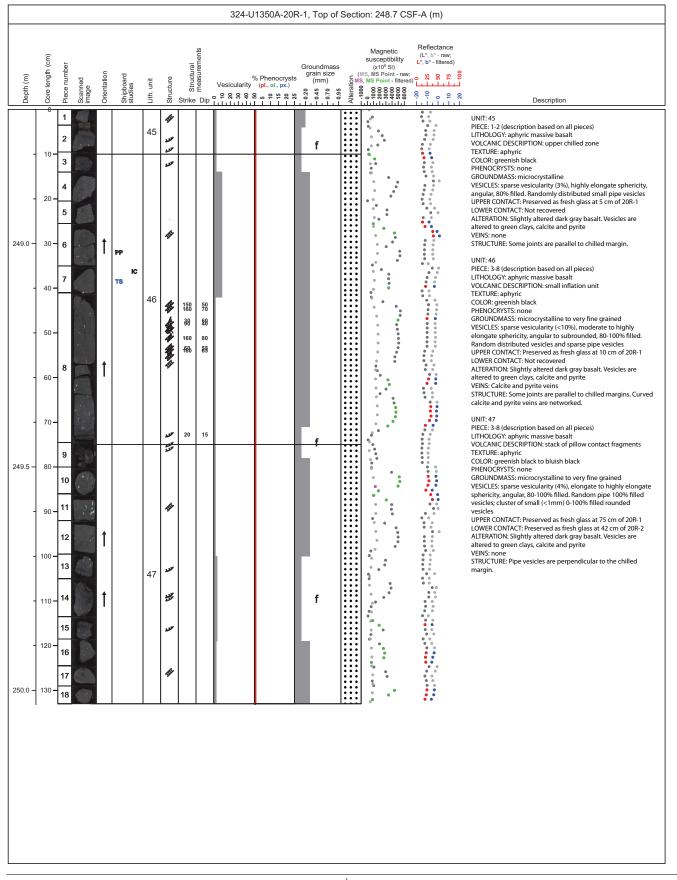


									324-U	1350A-19F	R-2, Top of S	Section	on: 240.53 C	SF-A (m)	
Depth (m)	Core length (cm)	Piece number	Scanned image	Orientation	Shipboard studies	Lith. unit	Structure	structural measurements	Vesicularity		0 10 0 10	, Mgu	Magnetic susceptibility (x10 ⁶ SI) MS, MS Point - filtered S, MS Point - filtered S, S S S S S S S S S S S S S S S S S S	Reflectance $(L^*, b^* - raw;$ $L^*, b^* - filtered)$ 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0	Description
-	0 10-	1 2 3		t		41	444 444 444				f		· · · · · · · · · · · · · · · · · · ·		UNIT: 41 PIECE: 1-3 (description based on all pieces) LITHOLOGY: aphyric massive basalt VOLCANIC DESCRIPTION: chilled zone of small inflation unit with baked sediment TEXTURE: aphyric COLOR: greenish black PHENOCRYSTS: none
-	20 - 30 -	3 4 5		1							ŀ				GROUNDMASS: microcrystalline VESICLES: sparse vesicularity (3%), low sphericity, subangular, 100% filled. Radial distribution of large vesicles to chilled margin UPPER CONTACT: Not recovered LOWER CONTACT: Not recovered ALTERATION: Slightly altered dark greenish gray basalt. Vesicles are filled with dark and light green clays and pyrite. VEINS: none
- 241.0 -	40 - 50 -	6 7				42	B								STRUCTURE: Some joints are perpendicular to the chilled margin. UNIT: 43 PIECE: 4-9 (description based on all pieces) LITHOLOGY: aphyric massive basalt VOLCANIC DESCRIPTION: Middle part of massive basalt TEXTURE: aphyric COLOR: greenish black
-	60 -	8 9 10	Ň								f				PHENOCRYSTS: none GROUNDMASS: very fine grained VESICLES: : sparse vesicularity (3%), low sphericity, subangular, 80% filled. Some hollow pipe vesicles (2cm) UPPER CONTACT: Not recovered LOWER CONTACT: Not recovered ALTERATION: Moderately (about 15%) altered dark greenish gray basalt. Vesicles are filled with green clays and pyrite. VEINS: none STRUCTURE: No structure.
-	70 - 80 -	11		1			Y.								UNIT: 43 PIECE: 10-14 (description based on all pieces) LITHOLOGY: aphyric massive basalt VOLCANIC DESCRIPTION: chilled zone of small inflation unit with baked sediment TEXTURE: aphyric COLOR: greenish black PIENOCRYSTS: none
- 241.5 -	90 - 100 -	12		1		43	- 44								CROUNDMASS: microcrystalline GROUNDMASS: microcrystalline VESICLES: sparse vesicularity (5%), elongate sphericity, subrounded, 100% filled. Radial distribution of large vesicles to chilled margin UPPER CONTACT: Not recovered LOWER CONTACT: Not recovered ALTERATION: Slightly altered dark greenish gray basalt. Vesicles are filled with dark and light green clays, calcite and pyrite. VEINS: none
-	110-	14 15					*** %		-		ŀ				STRUCTURE: Some joints are perpendicular to the chilled margin. UNIT: 44 PIECE: 15-20 (description based on all pieces) LITHOLOGY: aphyric massive basalt VOLCANIC DESCRIPTION: upper part of massive basalt TEXTURE: aphyric
-	120 - 130 -	16 17 18	X HO			44	194								COLOR: greenish black PHENOCRYSTS: none GROUNDMASS: very fine grained VESICLES: low vesicularity (10%), high sphericity, rounded, 80% fillet, andomly distributed, some coalesced examples UPPER CONTACT: Not recovered LOWER CONTACT: Not recovered ALTERATION: Slightly to moderately altered dark greenish gray
-	140 -	19 20													basalt. Vesicles are filled with calcite and pyrite. VEINS: none STRUCTURE: No structure.

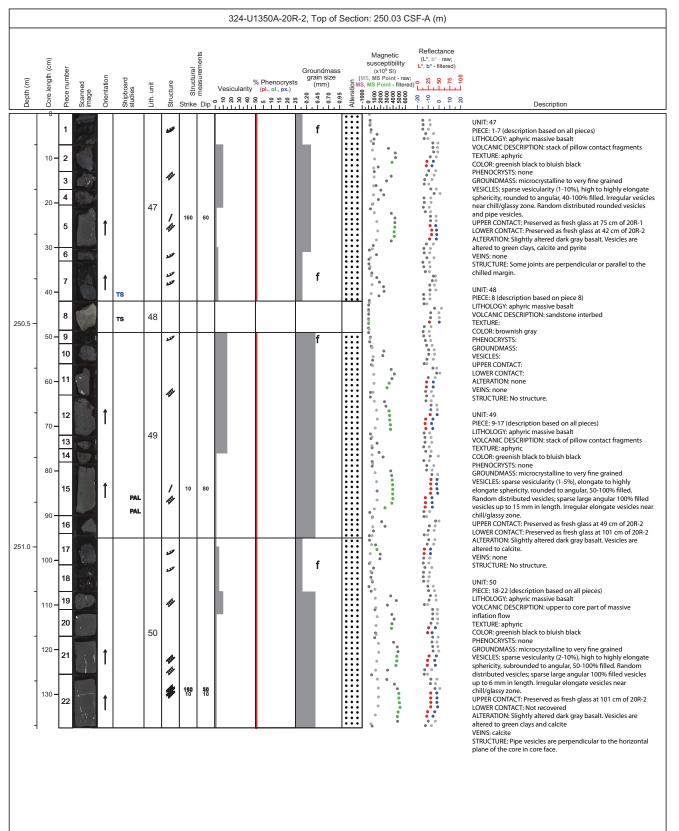




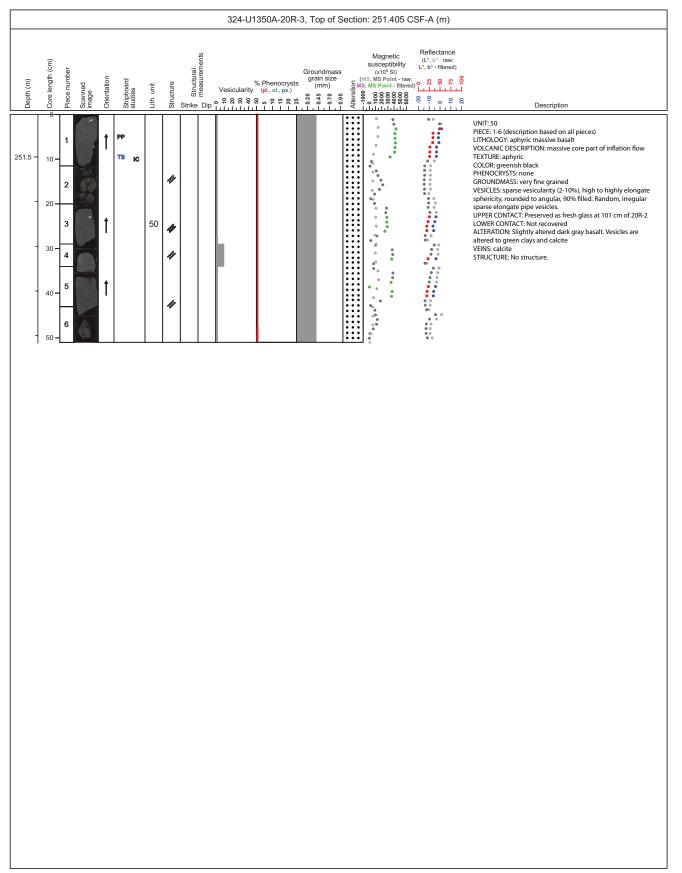












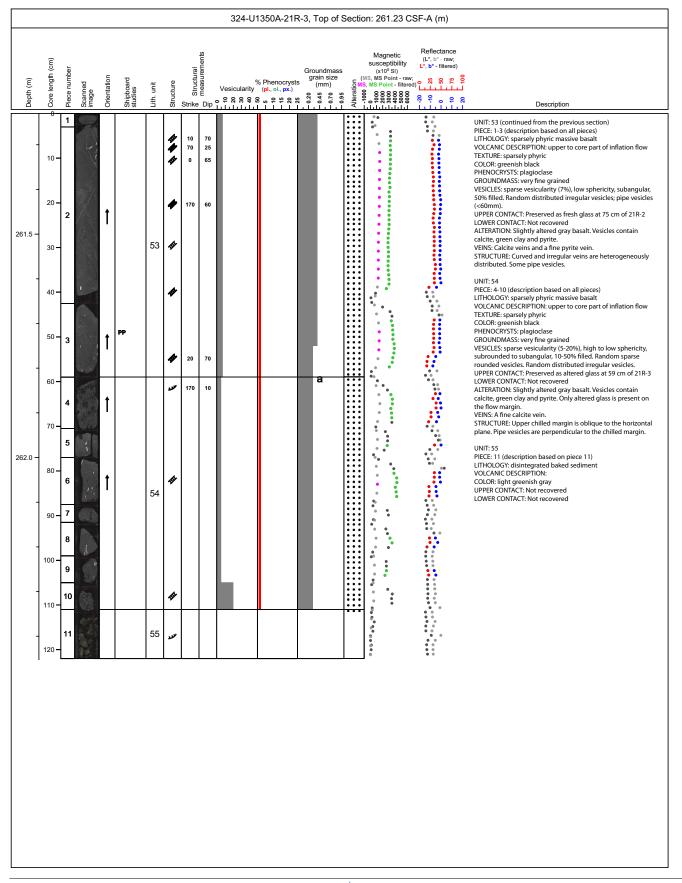


											324-U	1350A-211	R-1,	Top of	Sect	ion: 258.3 CS	SF-A (m)	
Depth (m)		Core length (cm)	Piece number	Scanned image	Orientation	Shipboard studies	Lith. unit	Structure	Structural Structural	di di	Vesicularity	% Phenocrysts (pl., ol., px.) දියදෙදෙදෙද	gr s	oundmass rain size (mm)	, M	Magnetic susceptibility (x10 ⁵ SI) MS, MS Point - raw; S, MS Point - filtered 00 0000000000000000000000000000000000	Reflectance (L*, b* - raw; L*, b* - filtered) (b (b) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c	Description
258.5	5 -	0 10 - 20 -	1		t t		51		20 40 20 165	40 40 70 40								UNIT: 51 PIECE: 1-8 (description based on all pieces) LITHOLOGY: aphyric massive basalt VOLCANIC DESCRIPTION: massive core part of inflation flow TEXTURE: aphyric COLOR: greenish black PHENOCRYSTS: none GROUNDMASS: microcrystalline to very fine grained VESICLES: sparse vesicularity (1-20%), low to elongate sphericity, rounded to subangular, 10-50% filled. Random distributed irregular vesicles. Zone of small vesicles and pipe vesicles close to low margin; other part is non-vesicular. UPPER CONTACT: Not recovered LOWER CONTACT: Preserved as altered glass at 68 cm of 218-21 ALTERATION: Slightly altered gray basalt. Vesicles contain calcite, green clay and pyrite. Only altered glass is present on the flow margin.
	-	40 50 -	3 4 5 6 7 8		Ť	PP	51	The second	65	75				a				STRUCTURE: Banding of bubbles are oblique to the horizontal plane. Two veins are connecting amygdules. UNIT: 52 (continued to the next section) PIECE: 9-22 (description based on all pieces) LITHOLOGY: aphyric massive basalt VOLCANIC DESCRIPTION: massive core part of inflation flow TEXTURE: aphyric COLOR: greenish black PHENOCGYSTS: none GROUNDMASS: microcrystalline to very fine grained VESICLES: sparse vesicularity (3%), high to moderate sphericity, subrounded to angular, 10-100% filled. Irregular pipe vesicles. randomly distributed, some coalesced examples. UPPER CONTACT: Not recovered LOWER CONTACT: Not recovered ALTERATION: Slightly altered gray basalt. Vesicles contain calcite, green clay and pyrite.
259.0			9 10 11 12 13 14		Î			194 J	10	45								VEINS: Ñ/A STRUCTURE: Some pipe vesicles. No structure.
259.5	- 1 - 1	20 -	15 16 17 18 19 20 21 22		t t		52	ŢŢ.										
		-													4			

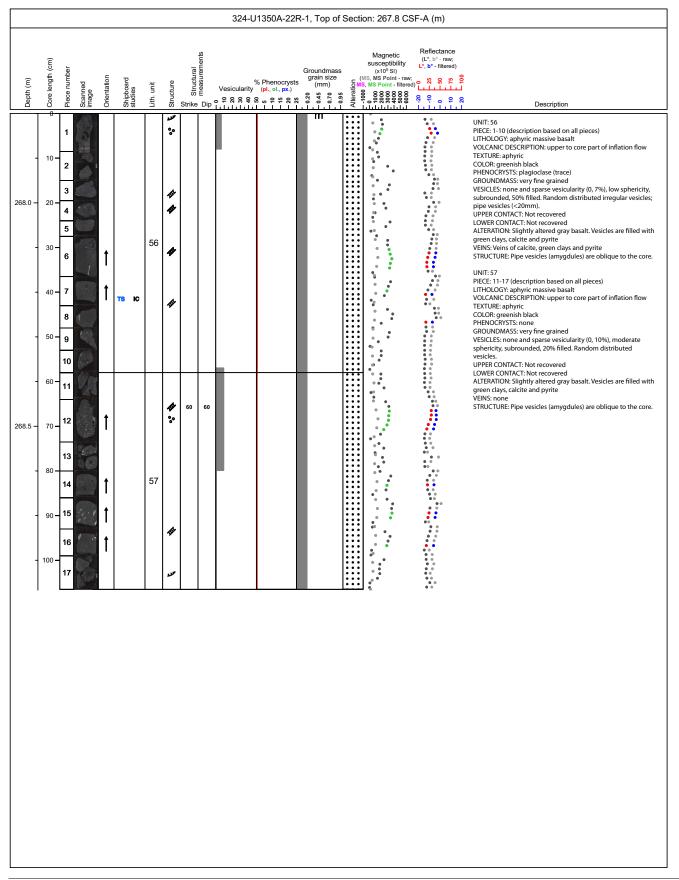


										324-U1	1350A-21F	R-2, Top of	Sect	ion: 259.8 CS	SF-A (m)	
Depth (m)	Core length (cm)	Piece number	Scanned image	Orientation	Shipboard studies	Lith. unit	Structure	Structural Structural	dig measurements	% Vesicularity 5 은 옧 응 욱 옶	o Phenocrysts (pl., ol., px.) 야 은 약 원 원 원	(11111)		Magnetic susceptibility (x10 ⁵ SI) MS, MS Point - filterer 80 SS 80 SS - 0 C SS 84 SS - 0 C SS 84 SS - 0 C SS 85 SS - 0 C SS	Reflectance (L*, b* - raw; L*, b* - filtered) 0,	Description
-	— 0 10 –	1		t			1	5	75 85							UNIT: 52 (continued to the next section) PIECE: 1-8 (description based on all pieces) LITHOLOGY: sparsely phyric massive basalt VOLCANIC DESCRIPTION: massive core part of inflation flow TEXTURE: sparsely phyric COLOR: greenish black PHENOCRYSTS: plagioclase GROUNDMASS: very fine grained
260.0 -	20 - 30 -	2		t			1914 1914 2200	5	70			L				VESICLES: sparse vesicularity (2-5%), moderate to highly elongate sphericity, rounded to angular, 10-100% filled. Random distributed irregular vesicles; rare pipe vesicles. UPPER CONTACT: Not recovered ALTERATION: Slightly altered gray basalt. Vesicles contain calcite; green clay and pyrite. VEINS: Calcite veins and a fine pyrite vein. STRUCTURE: Pipe vesicles are mostly perpendicular to
-	40 -	4 5 6				52	T									horizontal plane (70-90 degree). UNIT: 53 (continued to the next section) PIECE: 9-17 (description based on all pieces) LITHOLOGY: sparsely phyritic massive basalt VOLCANIC DESCRIPTION: upper to core part of inflation flow TEXTURE: sparsely phyrit COLOR: greenish black
-	50 - 60 -	7		t				10	70							PHENOCRYSTS: plagioclase GROUNDMASS: microcrystalline to very fine grained VESICLES: sparse vesicularity (3-5%), moderate to high sphericity, rounded to subrounded, 10-40% filled. Random sparse rounded vesicles. I regular pipe vesicles. UPPER CONTACT: Preserved as fresh glass at 75 cm of 21R-2 LOWER CONTACT: Not recovered ALTERATIONS lightly altered gray basalt. Vesicles contain
260.5 –	70 -	8			РР		115					L				calcite, green clay and pyrite. Fresh glass is present on the flow margin, piece 9. VEINS: A calcite vein. STRUCTURE: One pipe vesicle is perpendicular to the horizontal plane. But other two pipes are parallel to the horizontal plane.
-	80 - 90 -	10		Î								Ľ				
-	100 -	12 13 14		t		52	•	15	85			L				
- 261.0 -	110 - 120 -	15			TS IC	53	T					L				
-	130 -	16		↑ ↑			/	0 160	90 50			ŀ				
	140 -	1													•••	











										324-U13	350A-22R-	2, Top of	Sectio	n: 268.865 C	SF-A (m)	
Depth (m)	Core length (cm)	Piece number	Scanned image	Orientation	Shipboard studies	Lith. unit	Structure	Structural		생 Vesicularity 5 은 왕 왕 왕 않		()	5 (Magnetic susceptibility (x10 ⁵ SI) MS, MS Point - filterec 80 50 6 8 8 8 8 8 8 9 50 6 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	Reflectance (L*, b* - raw; L*, b* - filtered) 0, 0; 0; 0 0; 0; 0; 0; 0; 0; 0; 0; 0; 0; 0; 0; 0; 0	Description
269.0 -	10 - 20 -					50		130 140 140 140 140 140 170 15	60 70 70 10 80 30 70 40 90			m			•••	UNIT: 58 PIECE: 1 (description based on one piece) LITHOLOGY: sparsely phyric massive basalt VOLCANIC DESCRIPTION: complete section of a flow unit TEXTURE: sparsely phyric COLOR: greenish black PHENOCRYSTS: plagioclase GROUNDMASS: microcrystalline VESICLES: none and sparse vesicularity (0, 10%), moderate sphericity, subrounded, 100% filled. elongate vesicles radial distributed to chilled margin. LOPPER CONTACT: recovered as fresh chilled glass LOWER CONTACT: recovered as fresh chilled glass
-	30 - 40 - 50 -					58		80 20 30 85 0 170 30 20	60 36 85 69 60 85 69 65							ALTERATION: Slightly altered gray basalt. Vesicles are filled with green clays, calcite and pryite VEINS: Veins of calcite and green clays. STRUCTURE: Calcite veins have steep dips. UNIT: 59 PIECE: 1 (description based on one piece) LITHOLOGY: sparsely phyric massive basalt VOLCANIC DESCRIPTION: complete section of a flow unit TEXTURE: sparsely phyric COLOR: greenish black PHENOCRYSTS: plagioclase GROUNDMASS: microcrystalline VESICLES: none and sparse vesicularity (0, 4%), moderate
- 269.5	60 - 70 -	1		1	TS			170 169 170	60 ජීවි 55							sphericity, subrounded, 100% filled. elongate vesicles radial distributed to chilled margin. UPPER CONTACT: recovered as fresh chilled glass LOWER CONTACT: recovered as fresh chilled glass ALTERATION: Slightly altered gray basalt. Vesicles are filled with green clays, calcite and pyrite VEINS: Veins of calcite, green clays and minor pyrite. STRUCTURE: Calcite veins have gentle dips. UNIT: 60 PIECE: 2 (description based on all pieces) LITHOLOGY: aphyric massive basalt
-	80 - 90 -		XXX			59		120 120 170 160 20 30 90	355 40 20 55 15 50 60							UNICOUC PERSITE Interstee basis VOLCANIC DESCRIPTION: fragments of fresh glass from chilled zone TEXTURE: sparsely phyric COLOR: greenish black PHENOCRYSTS: none GROUNDMASS: microcrystalline VESICLES: sparse vesicularity (2%), elongate sphericity, subrounded, 20% filled. elongate vesicles radial distributed to chilled margin. UPPER CONTACT: Not recovered LOWER CONTACT: Not recovered
- 270.0 –	100 - 110 -				pp			158 30 0 0 110 150 160 30	50 20 10 15 70 30 28							ALTERATION: Slightly altered gray basalt. Vesicles are filled with green clays. VEINS: none STRUCTURE: No structure.
-	120 - 130 -	2				60	1493 1494 1494 1494 1494 1494 1494 1494	150	90 20			m				

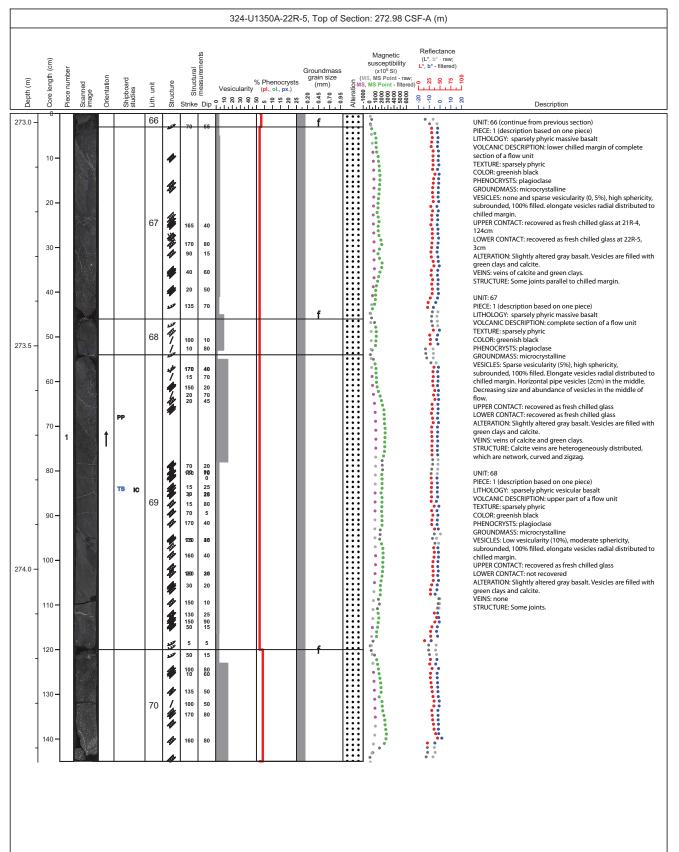


										324-U1	350A-22R-	-3, Top of	Sectio	n: 270.175 C	SF-A (m)	
Depth (m)	Core length (cm)	Piece number	Scanned image	Orientation	Shipboard studies	Lith. unit	Structure	Structural Strike		% Vesicularity 5 은 원 왕 왕 왕		()	5 M	Magnetic susceptibility (x10 ⁵ SI) MS, MS Point - filterec 80 50 80 80 80 80 50 90 80 80 50 90 80 80 50 90 80 50 80 50 50 80 50 50 50 50 50 50 50 50 50 50 50 50 50	Reflectance (L*, b* - raw; L*, b* - filtered) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Description
-	10 -						* ****	200 170 160 15 100 35	25 80 78 40 10 60			f				UNIT: 61 PIECE: 1 (description based on one piece) LITHOLOGY: sparsely phyric massive basalt VOLCANIC DESCRIPTION: complete section of a flow unit TEXTURE: sparsely phyric COLOR: greenish black PHENOCRYSTS: plagioclase GROUNDMASS: microcrystalline VESICLES: none and sparse vescularity (0, 5%), moderate
- 270.5 –	20 - 30 -		1				*	60 50 30 168	50 40 50 60							sphericity, subrounded, 100% filled. elongate vesicles radial distributed to chilled margin. UPPER CONTACT: recovered as fresh chilled glass LOWER CONTACT: recovered as fresh chilled glass ALTERATION: Slightly altered gray basalt. Vesicles are filled with green clays and calcite. VEINS: veins of calcite and green clays. STRUCTURE: Calcite veins are heterogeneously distributed. Some of them have the cross-fiber structures.
-	40 - 50 -		Y			61		160 10 160 190	45 50 80 0 3 8							UNIT: 62 PIECE: 1 (description based on one piece) LITHOLOGY: sparsely phyric massive basalt VOLCANIC DESCRIPTION: complete section of a flow unit TEXTURE: sparsely phyric COLOR: greenish black PHENOCRYSTS: plagioclase GROUNDMASS: microcrystalline
-	60 -		net set					0 40 0 75 20 \$! 20	50 55 40 20 50 50 50 50 50 50 50 50 50 50 50 50 50							VESICLES: none and sparse vesicularity (0, 3%), moderate sphericity, subrounded, 100% filled.elongate vesicles radial distributed to chilled margin. UPPER CONTACT: recovered as fresh chilled glass LOWER CONTACT: recovered as fresh chilled glass ALTERATION: Slightly altered gray basalt. Vesicles are filled with green clays and calcite. VEINS: veins of calcite and green clays.
-	70 - 80 -	3		1			1 1 1 1	100 160 150 100	88 50 70 30			f				STRUCTURE: Calcite veins are heterogeneously distributed. Some of them have the cross-fiber structures.
271.0 -	90 —							110 20 0 150 10	30 55 60 65 55							
-	100 - 110 -		DAL)			62		150 120 178 110	65 25 80 65					•••		
-	120 -		I de		PP TS IC		LEI LEI LEI	110 55 20 10	65 0 30 70 70					· · · · · · · · · · · · · · · · · · ·		
271.5 -	130 -		in the second				100 A	150 50 15	70 55 15	1		f				

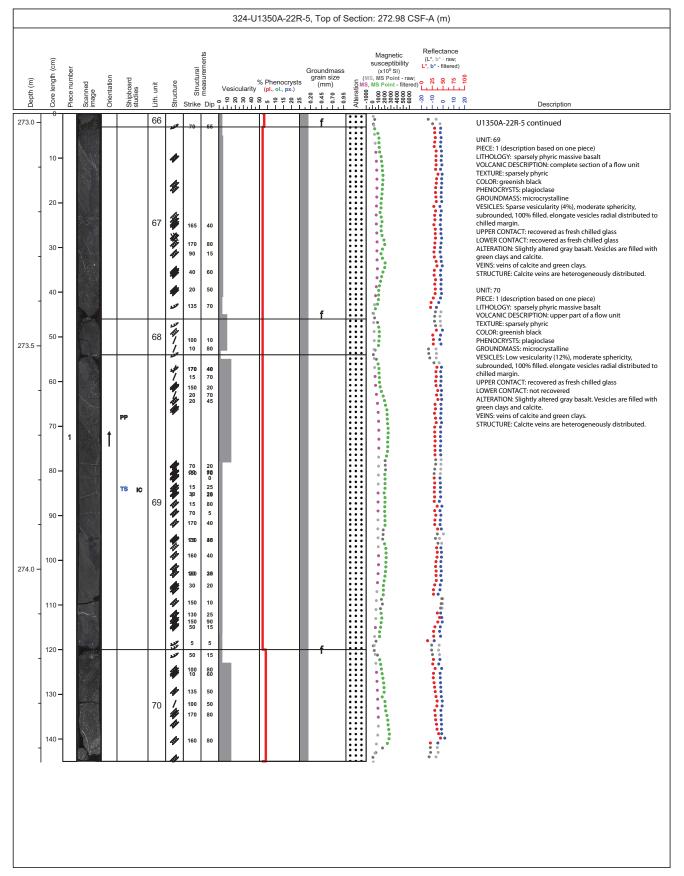


										324-U1350A	-22R	-4, Top of S	ectio	n: 271.565 C	SF-A (m)	
Depth (m)	Core length (cm)	Piece number	Scanned image	Orientation	Shipboard studies	Lith. unit	Structure	ayiztS Structural	did	% Phen Vesicularity (pl., ol 도우 있 응 육 등 요	. px.)	()		Magnetic susceptibility (x10 ⁵ SI) MS, MS Point - raw; 5, MS Point - filtered	Reflectance (L [*] , b [*] - raw; L [*] , b [*] - filtered) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Description
-	0-						THE REAL	20 20 130	25 60 80			f		0 0 0 0 0 0 0 0 0 0	• •	UNIT: 63 PIECE: 1 (description based on one piece) LITHOLOGY: sparsely phyric massive basalt VOLCANIC DESCRIPTION: complete section of a flow unit TEXTURE: sparsely phyric
-	10 -	1		+			¶₽		0							COLOR: greenish black PHENOCRYSTS: plagioclase GROUNDMASS: microcrystalline VESICLES: none and sparse vesicularity (0, 3%), high sphericity,
-	20 -			I		63		138 40	80 60							subrounded, 100% filled. elongate vesicles radial distributed to chilled margin. UPPER CONTACT: recovered as fresh chilled glass LOWER CONTACT: recovered as fresh chilled glass
-	30 -							75 150	85 80				••••			ALTERATION: Slightly altered gray basalt, Vesicles are filled with green clays and calcite. VEINS: veins of calcite and green clays. STRUCTURE: Calcite veins have steep dips.
	40 -						**	1770 160	50 6 0			f				UNIT: 64 PIECE: 2 (description based on one piece) LITHOLOGY: sparsely phyric massive basalt VOLCANIC DESCRIPTION: complete section of a flow unit, chilled fracture within a flow
2.0 -	50 -		1				*	10 10 160	85 25							Colline inacture within a now TEXTURE: sparsely phyric COLOR: greenish black PHENOCRYSTS: plagioclase GROUNDMASS: microcrystalline
-	60 -	2		Ī		64	A Set	30 0 15	50 30 40							VESICLES: none and sparse vesicularity (0, 3%), high sphericity, subrounded, 100% filled. elongate vesicles radial distributed to chilled margin. UPPER CONTACT: recovered as fresh chilled glass LOWER CONTACT: recovered as fresh chilled glass
-	00 -						2200	10	35			m			• •	ALTERATION: Slightly altered gray basalt. Vesicles are filled with green clays and calcite. VEINS: veins of calcite and green clays. STRUCTURE: Calcite veins are heterogeneously distributed.
_	70 -		N.					178	60 50			m				UNIT: 65 PIECE: 3 (description based on one piece)
	80 –		X					200 160 160 170 155	35 28 80 80 38				••••			LITHOLOGY: sparsely phyric massive basalt VOLCANIC DESCRIPTION: complete section of a flow unit TEXTURE: sparsely phyric COLOR: greenish black PHENOCRYSTS: plagioclase COLUNDER plagioclase
	90 –							20 30 6	30 10 90							GROUNDMASS: microcrystalline VESICLES: none and sparse vesicularity (0, 3%), high sphericity, subrounded, 100% filled. elongate vesicles radial distributed to chilled margin. UPPER CONTACT: recovered as fresh chilled glass
2.5 -	100 -					65		110 1,569	40 20							LOWER CONTACT: recovered as fresh chilled glass ALTERATION: Slightly altered gray basalt. Vesicles are filled with green clays and calcite. VEINS: veins of calcite and green clays. STRUCTURE: Calcite veins are heterogeneously distributed.
-		3		t				140 11500	55 66							UNIT: 66 PIECE: 3 (description based on one piece)
	110 -							0	50 65							LITHOLOGY: sparsely phyric massive basalt VOLCANIC DESCRIPTION: complete section of a flow unit TEXTURE: sparsely phyric COLOR: areenish black
	120 -							20	20						•	PHENOCRYSTS: plagioclase GROUNDMASS: microcrystalline VESICLES: none and sparse vesicularity (0, 5%), high sphericity,
-							LUN TEL	55 145	40 65			m				subrounded, 100% filled. elongate vesicles radial distributed to chilled margin. UPPER CONTACT: recovered as fresh chilled glass at 21R-4, 124cm
-	130 -					66	*							•		LOWER CONTACT: recovered as fresh chilled glass at 22R-5, 3cm ALTERATION: Slightly altered gray basalt. Vesicles are filled with green clays and calcite.
	140 -						1	15 30	50 70						•••	VEINS: veins of calcite and green clays. STRUCTURE: Calcite veins and joints are heterogeneously distributed.

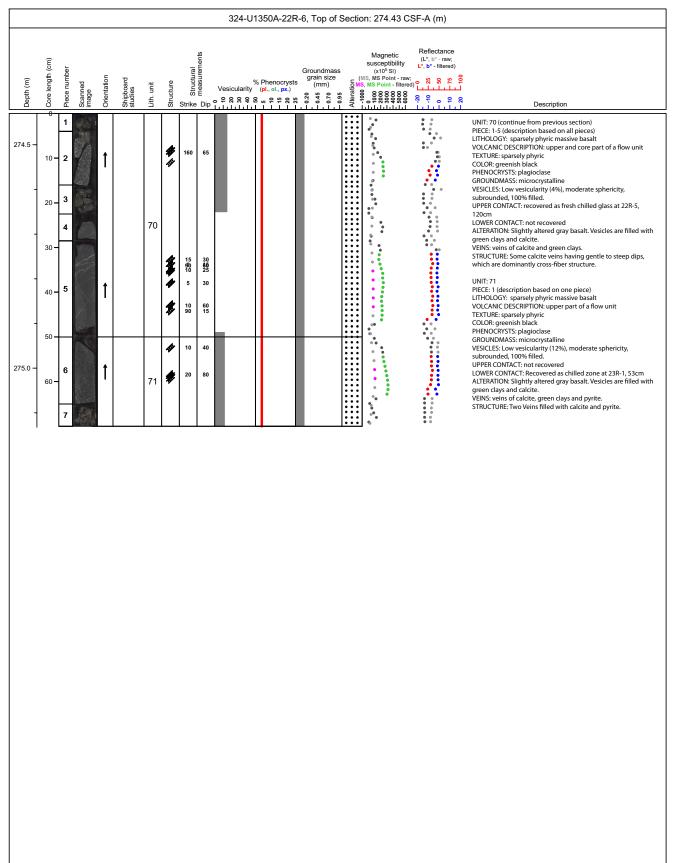




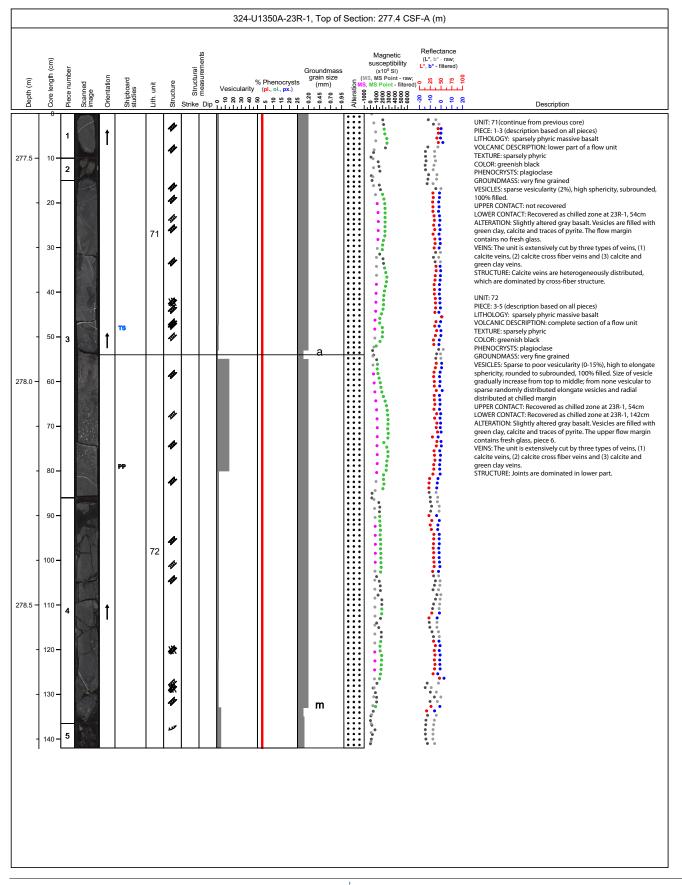




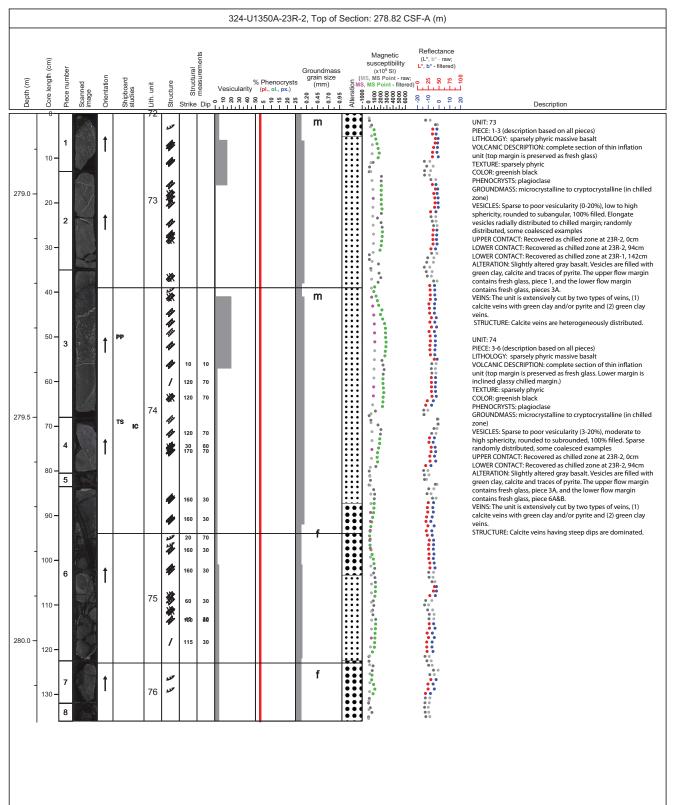




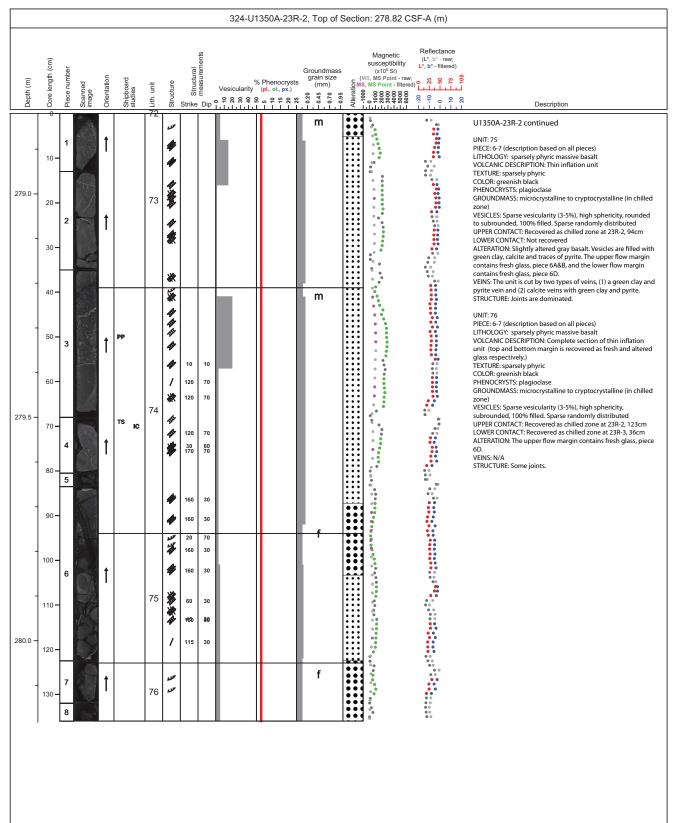








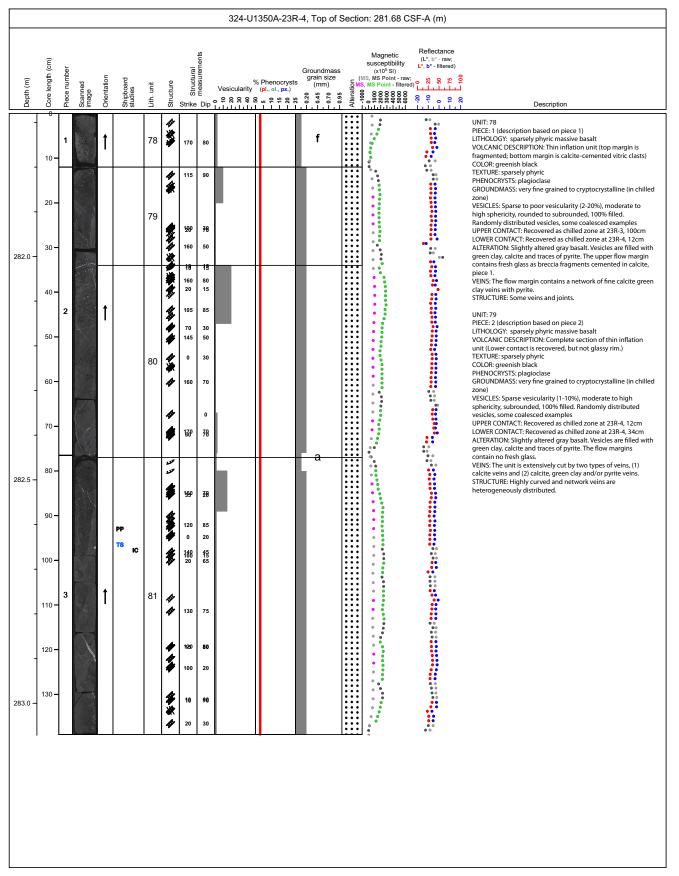




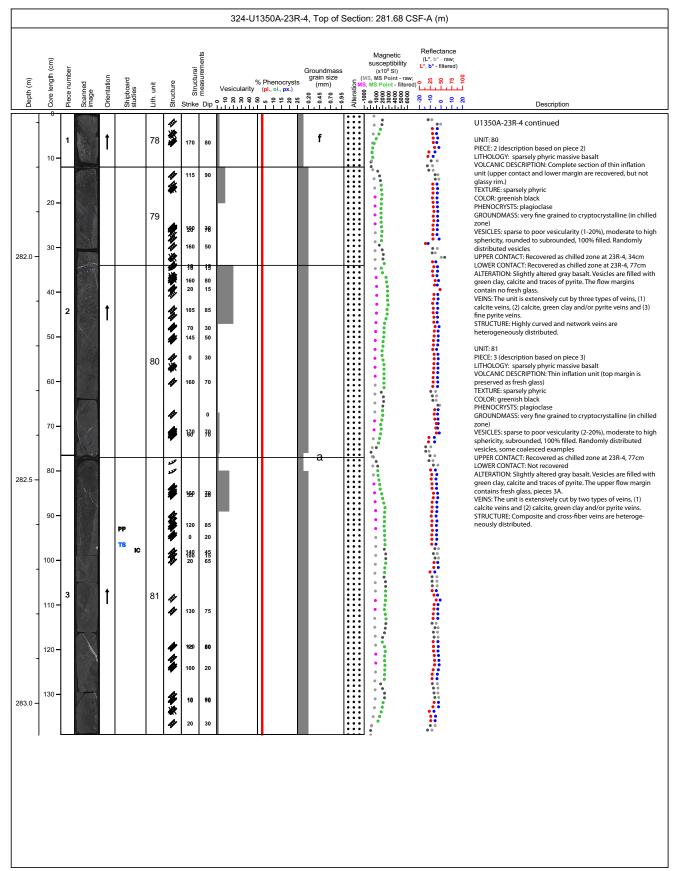


Depth (m)	Core length (cm)	Piece number	Scanned image	Orientation	Shipboard studies	Lith. unit	Structure	Structural Structural		% Phenocrys Vesicularity (pl. ol., px.) ♀ ♀ ♀ ♀ ♀ ♀ ♀ ♀ ♀	Groundmas grain size ts (mm)	5	Magnetic susceptibility (x10 ⁵ SI) MS, MS Point - raw; S, MS Point - filtere	Reflectance (L*, b* - raw; L*, b* - filtered)	Description
	0 10- 20-	1		1		76	*	40	70						UNIT: 76 PIECE: 1-2 (description based on all pieces) LITHOLOGY: sparsely phyric massive basalt VOLCANIC DESCRIPTION: Complete section of thin inflation unit (top and bottom margin is recovered as fresh and altered glass respectively.) TEXTURE: sparsely phyric COLOR: greenish black PHENOCRYSTS: plagioclase GROUNDMASS: microcrystalline to cryptocrystalline (in chilled zone) VESICLES: Sparse vesicularity (3-5%), high sphericity, subrounded, 100% filled. Sparse randomly distributed
280.5 -	30 -	2	F	1	XRD		1	18	6 0						UPPER CONTACT: Recovered as chilled zone at 23R-2, 123cm LOWER CONTACT: Recovered as chilled zone at 23R-3, 36cm ALTERATION: Slightly altered gray basalt. Vesicles are filled with green clay, calcite and traces of pyrite. The flow margin contains no fresh glass. VEINS: The unit is extensively cut by three types of veins, (1)
-	40 -	3		1				175 150 15	30 60 50		m				large (1cm) calcite and green clay veins, (2) networks of calcite and green clay veins and (3) networks of green clay veins. STRUCTURE: Calcite veins having steep dips are dominantly distributed. UNIT: 77 PIECE: 3-7 (description based on all pieces)
-	50 - 60 -		5				*	100	30						TIECC: 57 (description based on an pieces) LITHOLOGY: sparsely phyric massive basalt VOLCANIC DESCRIPTION: Thin inflation unit (fragmented bottom margin) TEXTURE: sparsely phyric COLOR: greenish black PHENOCRYSTS: plagioclase
-	70 -	4		1		77									GROUNDMASS: microcrystalline to cryptocrystalline (in chilled zone) VESICLES: Sparse vesicularity (2-5%), moderate to high sphericity, rounded to subrounded, 100% filled. Radially distribution elongate vesicles in chilled margin to sparse randomly distributed UPPER CONTACT: Recovered as chilled zone at 23R-3, 36cm
281.0 -	80 –							20	60.						LOWER CONTACT: Recovered as chilled zone at 23R-3, 100cm ALTERATION: Slightly altered gray basalt. Vesicles are filled with green clay, calcite and traces of pyrite. The upper flow margin contains fresh glass with some sediment, piece 3, and the lower flow margin contains fresh glass, pieces 4C, 5, 6 & 7A. VEINS: The unit is extensively cut by three types of veins, (1) calcite veins with green clay and/or pyrite, (2) a calcite vein and
_	90 -	5					 				f				(2) a green (day and pyrite vein. (3) a green (day and pyrite vein. STRUCTURE: Highly curved and network veins are heterogeneously distributed. UNIT: 78 PIECE: 7-9 (description based on all pieces)
-	100 - 110 -	7					2.25° 2.25°				Ĺ				LITHOLOGY: sparsely phyric massive basalt VOLCANIC DESCRIPTION: Thin inflation unit (top margin is fragmented; bottom margin is calcite-cemented vitric clasts) COLOR: greenish black PHENOCRYSTS: plagioclase GROUNDMASS: very fine grained to cryptocrystalline (in chilled
-	120 -	8		1			THE REAL	170	75						zone) VESICLES: Sparse to poor vesicularity (2-20%), moderate to high sphericity, rounded to subrounded, 100% filled. Randomly distributed vesicles, some coalesced examples UPPER CONTACT: Recovered as chilled zone at 23R-3, 100cm LOWER CONTACT: Recovered as chilled zone at 23R-4, 12cm ALTERATION: Slightly altered gray basalt. Vesicles are filled with
281.5 -	130 -					78	***	170 0	4 0 20						green clay, calcite and traces of pyrite. The upper flow margin contains fresh glass, pieces 4C, 5, 6 & 7A. VEINS: The unit is extensively cut by three types of veins, (1) calcite veins with green clay and/or pyrite, (2) a calcite vein and (3) pyrite veins. STRUCTURE: Calcite veins of gentle dips are heterogeneously distributed.
-	140 -	9					*	170 20 30	50 40 30						distributed.
	150 -				<u> </u>			I		I I			g 0° *	00 00	

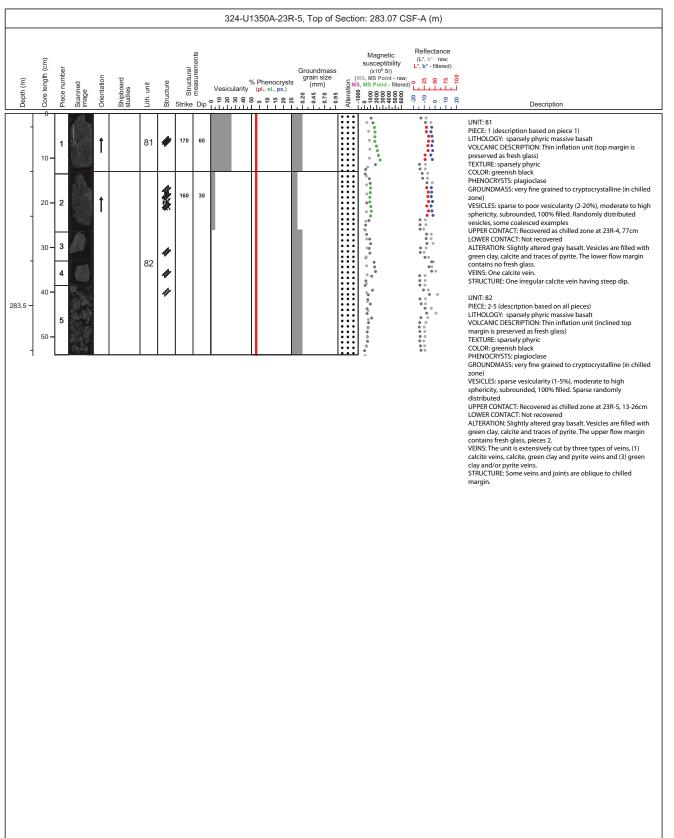








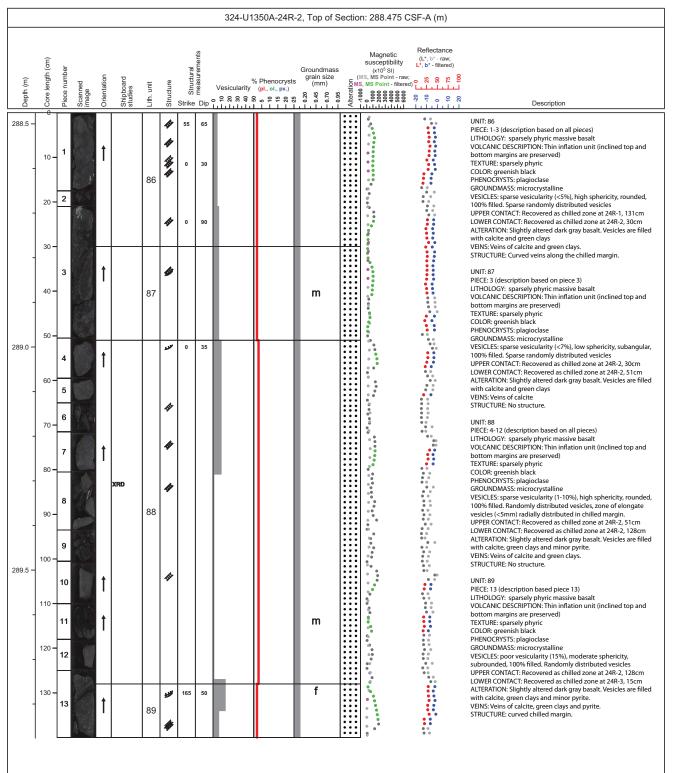






										324-L	J1350A-24	R-1, Top o	f Sect	tion: 287 CSI	F-A (m)	
Depth (m)	Core length (cm)	Piece number	Scanned image	Orientation	Shipboard studies	Lith. unit	Structure	Structural Strike	dig dig	생 Vesicularity 5 은 R 유 유 L L L L L L L L	6 Phenocrysts (pl., ol., px.) 6 여 약 양 양 양	Groundmass grain size (mm)		Magnetic susceptibility (x10 ⁵ SI) MS, MS Point - raw; 3, MS Point - filterec 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0	Reflectance (L*, b* - raw; L*, b* - filtered) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Description
-	10 - 20 - 30 -	1				83		20 0 160 155 20 160 75 75	20 55 10 60 15 75 20 20			m				UNIT: 83 PIECE: 1-2 (description based on all pieces) LITHOLOGY: sparsely phyric massive basalt VOLCANIC DESCRIPTION: Thin inflation unit (bottom margin is preserved) TEXTURE: sparsely phyric COLOR: greenish black PHENOCRYSTS: plagioclase GROUNDMASS: microcrystalline VESICLES: sparse vesicularity (5-7%), high to elongate sphericity, rounded to subangular, 100% filled. Randomly distributed vesicles. Radially distribution of elongate vesicles to chilled margin. UPPER CONTACT: Not recovered LOWER CONTACT: Not recovered LOWER CONTACT: Not recovered LOWER CONTACT: Rocovered as chilled zone at 24R-1, 35cm ALTERATION: Slightly altered dark gray basalt. Vesicles are filled with calcite and green clays VEINS: Veins of calcite, green clays and minor pyrite STRUCTURE: Highly curved and planer veins are heteroge- neously distributed. Curved veins are thicker than planer vein.
- 187.5 –	40 - 50 - 60 -	2	A. A	t		84		120 25 30 20 20 0 75 20	70 55 50 25 65 50 30 60							UNIT: 84 PIECE: 2-3 (description based on all pieces) LITHOLOGY: sparsely phyric massive basalt VOLCANIC DESCRIPTION: Thin inflation unit (inclined top and bottom margins are preserved) TEXTURE: sparsely phyric COLOR: greenish black PHENOCRYSTS: plagioclase GROUNDMASS: microcrystalline VESICLES: sparse to poor vesicularity (5-15%), elongate to high sphericity, subangular to rounded, 100% filled. Elongate vesicles radially distributed in chilled margin. randomly distributed small vesicles UPPER CONTACT: Recovered as chilled zone at 24R-1, 35cm LOWER CONTACT: Recovered as chilled zone at 24R-1, 89cm
-	70 - 80 - 90 -	. 3						160 150 125	75 45 70					ာ စ ေ ေ ေ ေ ေ ေ ေ ေ ေ ေ ေ ေ		ALTERATION: Slightly altered dark gray basalt. Vesicles are filled with calcite and green clays VEINS: Veins of Calcite, green clays and minor pyrite STRUCTURE: Highly curved and planer veins are heteroge- neously distributed. Curved veins are thicker than planer vein. UNIT: 85 PIECE: 3-4 (description based on all pieces) LITHOLOGY: sparsely phyric massive basalt VOLCANIC DESCRIPTION: Thin inflation unit (inclined top and bottom margins are preserved) TEXTURE: sparsely phyric COLOR: greenish black PHENOCRYSTS: plagioclase
288.0 -	100 - 110 -				PP	85	44 14 14 14	15 170 90	25 20 60							GROUNDMASS: microcrystalline VESICLES: sparse to poor vesicularity (5-15%), high sphericity, rounded, 100% filled. Randomly distributed small vesicles UPPER CONTACT: Recovered as chilled zone at 24R-1, 89cm LOWER CONTACT: Recovered as chilled zone at 24R-1, 131cm ALTERATION: Slightly altered dark gray basalt. Vesicles are filled with calcite and green clays VEINS: Veins of calcite and green clays. STRUCTURE: Highly curved and planer veins are heteroge- neously distributed. UNIT: 86
-	120 - 130 -	4	C X Y	1	TS K	;	* ** !	150	30 45			m				PIECE: 4 (description based on piece 4) LITHOLOGY: sparsely phyric massive basalt VOLCANIC DESCRIPTION: Thin inflation unit (inclined top and bottom margins are preserved) TEXTURE: sparsely phyric COLOR: greenish black PHENOCRYSTS: plagioclase GROUNDMASS: microcrystalline VESICLES: sparse vesicularity (<7%), low to high sphericity, rounded to subangular, 100% filled. Randomly distributed
-	140 —		ton a			86	T									small vesicles UPPER CONTACT: Recovered as chilled zone at 24R-1, 131 cm LOWER CONTACT: Recovered as chilled zone at 24R-2, 30cm ALTERATION: Slightly altered dark gray basalt. Vesicles are filled with calcite and green clays VEINS: Veins of calcite and green clays. STRUCTURE: Pipe vesicles are distributed to be perpendicular to chilled margin.



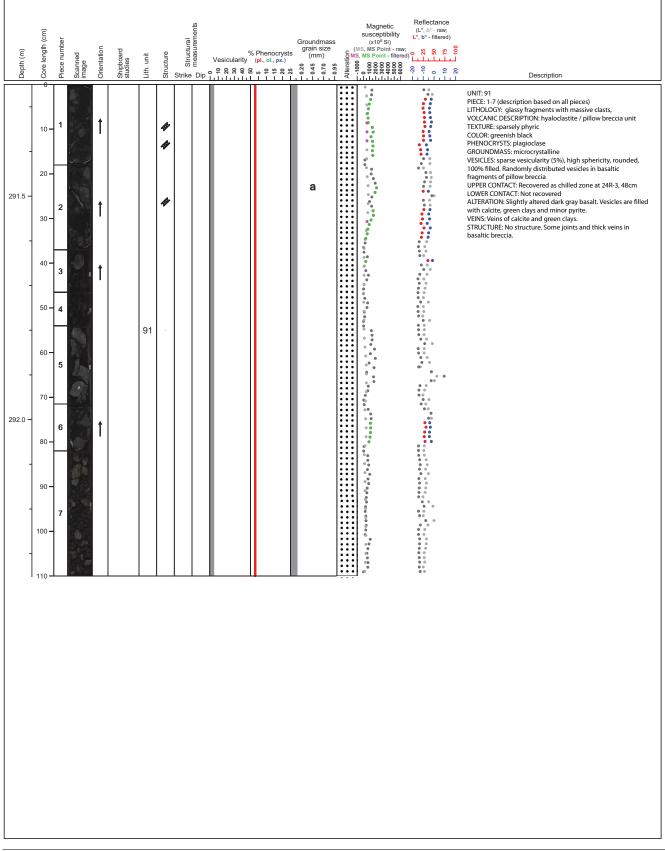




										324-U13	350A-24R-	3, Top of S	ectio	n: 289.875 C	SF-A (m)	
Depth (m)	Core length (cm)	Piece number	Scanned image	Orientation	Shipboard studies	Lith. unit	Structure	Structural Structural		% Vesicularity 5 은 옧 응 육 윦		0 0 0 0	Alteration	Magnetic susceptibility (x10 ⁵ SI) MS, MS Point - raw; 5, MS Point - filterec 8 8 8 8 8 8 8 0 0 0 0 0 0 0 0 0 0 0 0 0	Reflectance (L*, b* - raw; L*, b* - filtered) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Description
- 290.0 -	0 10 -	1	X	1		89	 	50 30 25 130	70 50 30 65			m			**	UNIT: 89 PIECE: 1 (description based piece 1) LITHOLOGY: sparsely phyric massive basalt VOLCANIC DESCRIPTION: Thin inflation unit (inclined top and bottom margins are preserved) TEXTURE: sparsely phyric COLOR: greenish black PHENOCRYSTS: plagioclase
-	20 - 30 -	2		1	PP	90		165 1505 150 160 25	20 86 25 70 15							GROUNDMASS: microcrystalline VESICLES: poor vesicularity (15%), moderate sphericity, subrounded, 100% filled. Randomly distributed vesicles; few elongate vesicles (<4mm) radially distributed in chilled margin UPPER CONTACT: Recovered as chilled zone at 24R-2, 128cm LOWER CONTACT: Recovered as chilled zone at 24R-3, 15cm ALTERATION: Slightly altered dark gray basalt. Vesicles are filled with calcite, green clays and minor pyrite.
_	40 - 50 -			•	TS IC		1 1 227	170	45 45						•••	STRUCTURE: Curved joints and vein are distributed. UNIT: 90 PIECE: 4 (description based piece 4) LITHOLOGY: sparsely phyric massive basalt VOLCANIC DESCRIPTION: Thin inflation unit (inclined top and bottom margins are preserved) TEXTURE: sparsely phyric COLOR: greenish black
- 290.5 —	60 -	3		1												PHENOCRYSTS: plagioclase GROUNDMASS: microcrystalline VESICLES: sparse vesicularity (5%), moderate sphericity, subrounded, 100% filled. Vesicles concentrated in mid part of inflation unit, few elongate vesicles (<5mm) radially distributed in chilled margin UPPER CONTACT: Recovered as chilled zone at 24R-3, 15cm LOWER CONTACT: Recovered as chilled zone at 24R-3, 48cm ALTERATION: Slightly altered dark gray basalt. Vesicles are filled with calicite and green clays.
-	70 - 80 -	4		1												VUILS: Veins of calcite and green clays. STRUCTURE: Some curved and planer veins are heteroge- neously distributed. UNIT: 91 PIECE: 3-9 (description based on all pieces) LITHOLOGY: glassy fragments with massive clasts, VOLCANIC DESCRIPTION: hyaloclastite / pillow breccia unit TEXTURE: sparsely phyric
_	90 - 100 -	6		1		91										COLOR: greenish black PHENOCRYSTS: plagioclase GROUNDMASS: microcrystalline VESICLES: sparse vesicularity (5%), high sphericity, rounded, 100% filled. Randomly distributed vesicles in basaltic fragments of pillow breccia UPPER CONTACT: Recovered as chilled zone at 24R-3, 48cm LOWER CONTACT: Not recovered ALTERATION: Bighty altered dark gray basalt. Vesicles are filled
- 291.0 -	110 —	7		1											•••	with calcite, green clays and minor pyrite. VEINS: Veins of calcite and green clays. STRUCTURE: No structure. Some joints in basaltic breccia.
-	120 - 130 -	8		† †										99 99 99 99 99 99 99 99 99 99 99 99 99		







324-U1350A-24R-4, Top of Section: 291.25 CSF-A (m)



										324-U1	350A-25F	R-1, Top of	Secti	on: 296.7 CS	SF-A (m)	
Depth (m)	Core length (cm)	Piece number	Scanned image	Orientation	Shipboard studies	Lith. unit	Structure	Structural	did measurements	% Vesicularity 5 은 없 용 용 융	Phenocrysts (pl., ol., px.) ය ද ද බ හැ	Groundmass grain size (mm) 0 54 0 0 0 1 1 1 1 1	(1	Magnetic susceptibility (x10 ⁵ SI) MS, MS Point - filterec S, MS Point - filterec SS SS SS SS SS SS SS SS SS SS SS SS SS SS	Reflectance (L ⁺ , b ⁺ -raw; L ⁺ , b ⁺ -filtered) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Description
-	10-	1				o de la c	2 TH				1					UNIT: 91 (continue from previous core) PIECE: 1 (description based on a piece) LITHOLOGY: sparsely phyric massive basalt VOLCANIC DESCRIPTION: fragment of massive flow interior TEXTURE: sparsely phyric COLOR: black PIENOCRYSTS: plagioclase
	20 -	3		1	PP TS IC		THE P	170 20	50 65			a		• • • • • • • • •		GROUNDMASS: microcrystalline VESICLES: sparse vesicularity (2%), high sphericity, rounded, 100% filled. Randomly distributed vesicles UPPER CONTACT: Recovered as chilled zone at 24R-3, 48cm LOWER CONTACT: Not recovered ALTERATION: Slightly to moderately altered gray basalt. Vesicles are filled with green clay, calcite and pyrite. VEINS: I/VA
297.0 -	30 - 40 -	5		1		92	*	40	ရာ 90							STRUCTURE: No structure. UNIT: 92 PIECE: 2-5 (description based on all pieces) LITHOLOGY: moderately phyric massive basalt VOLCANIC DESCRIPTION: entire pillow lava unit with baked sediment on the top TEXTURE: moderately phyric
-	- 50 -	6					1 1 1	170	10			а				COLOR: greenish black PHENOCRYSTS: plagioclase GROUNDMASS: microcrystalline VESICLES: sparse vesicularity (5%), low sphericity, subrounded, 100% filled. large radiated vesicles UPPER CONTACT: Recovered as chilled zone LOWER CONTACT: Recovered as chilled zone
-	60 - 70 -			t		93										ALTERATION: Slightly to moderately altered gray basalt. Vesicles are filled with green clay, calcite and pyrite. Traces of fresh glass are preserved in both the upper and lower contact, pieces 2, 3 & 6, but most glass is altered to clay. VEINS: Large green clay & nontronite vein networks. STRUCTURE: Disordered crack in auto-brecciated pillow-basalt filled with fine-breccias and clay. One calcite irregular vein.
297.5 -	80 -															UNIT: 93 PIECE: 7 (description based on a piece) LITHOLOGY: moderately phyric massive basalt VOLCANIC DESCRIPTION: entire pillow lava unit TEXTURE: moderately phyric COLOR: greenish black PHENOCRYSTS: plagioclase GROUNDMASS: microcrystalline
	90 -	8		1			14 14 14 14					a				VESICLES: sparse vesicularity (3%), highly elongated sphericity, angular, 100% filled. elongated directions of vesicles are vertical to flow UPPER CONTACT: Recovered as chilled zone LOWER CONTACT: Recovered as chilled zone ALTERATION: Slightly to moderately altered gray basalt. Vesicles are filled with green clay, calcite and pyrite. Traces of fresh glass are preserved in both the upper and lower contact,
-	110-	-				94		95 155 170	45 5 30							piece 6, but most glass is altered to clay. VEINS: Joints containing green clay are found on the pillow margins. STRUCTURE: No structure, only some joints to be parallel to chilled margin. UNIT: 94
-	120 -			Î			*	10 40	45 30			a				PIECE: 8-9 (description based on all pieces) LITHOLOGY: moderately phyric massive basalt VOLCANIC DESCRIPTION: entire pillow lava unit TEXTURE: moderately phyric COLOR: greenish black PHENOCRYSTS: plagioclase GROUNDMASS: microcrystalline VESICLES: sparse vesicularity (3%), highly elongated sphericity,
298.0 -	130 - 140 -	10		1	TS	95	T	5 35 20	5 80 50							VESICLES: sparse vesicularity (1%), highly elongated sphericity, angular, 100% filed. elongated directions of vesicles are vertical to flow UPPER CONTACT: Recovered as chilled zone LOWER CONTACT: Recovered as chilled zone ALTERATION: Slightly to moderately altered gray basalt. Vesicles are filed with green clay, calcite and printe. Traces of fresh glass are preserved in both the upper and lower contact, pieces 7 a & 8B, but most glass is altered to clay.
-	150-	11												0 00 00	• • • •• •• ••	VEINS: Irregular veins of calcite and green clay. VEINS: Irregular veins of calcite and green clay. STRUCTURE: Some irregular and curved veins of calcite. UNIT: 95 PIECE: 10-11 (description based on and lipeces) PIECE: 1 (description based on one piece) LITHOLOGY: laminated volcaniclastic sandstone and limestone UPPER CONTACT: Not recovered LOWER CONTACT: Not recovered CIDUCT UPER Miscofuktic sandstone

LOWER CONTACT: Not recovered STRUCTURE: Microfaults in sediment.



										324-U1	1350A-25R	R-2, Top	of Secti	ion: 298.2 CS	SF-A (m)	
Depth (m)	Core length (cm)	Piece number	Scanned image	Orientation	Shipboard studies	Lith. unit	Structure	Structural Structural	did	% Vesicularity 도우 중 중 육 융	e Phenocrysts (pl., ol., px.) دو در کار کار	()		Magnetic susceptibility (x10 ⁵ SI) MS, MS Point - raw S, MS Point - filtere	Reflectance $(L^*, b^* - raw;$ $L^*, b^* - filtered)$ $(L^*, b^* - filtered)$ $(L^*, b^* - filtered)$ $(L^*, b^* - filtered)$ $(L^*, b^* - filtered)$	Description
-	0-10-				PAL	96	9 **	30	20			a				UNIT: 96 PIECE: 1 (description based on a piece) LITHOLOGY: moderately phyric massive basalt VOLCANIC DESCRIPTION: entire pillow lava unit with baked sediment on the bottom TEXTURE: moderately phyric COLOR: greenish black PHENOCRYSTS: plagioclase GROUNDMASS: microcrystalline VESICLES: sparse vesicularity (2%), high sphericity, rounded,
- 298.5 –	20 - 30 -	1		1		97										100% filled. Randomly distributed vesicles UPPER CONTACT: Recovered as chilled zone LOWER CONTACT: Recovered as chilled zone with sediment contact ALTERATION: Slightly to moderately altered gray basalt. Vesicles are filled with green clay, calcite and pyrite. Traces of fresh glass are preserved in both the upper and lower contact, pieces 1 &&B, but most glass is altered to clay. VEINS: Irregular veins of calcite and green clay parallel to the pillow margin.
-	40 -				88	98	*	150 150 155	60 30 60		_			•		STRUCTURE: Highly curved thick vein. UNIT: 97 PIECE: 1 (description based on a piece) LITHOLOGY: moderately phyric massive basalt
	50 - 60 -	2		1		99	2.424 2.424 4 4 4	20 0	15 50			a				VOLCANIC DESCRIPTION: entire pillow lava unit with baked sediment on the top and bottom TEXTURE: moderately phyric COLOR: greenish black PHENOCRYSTS: plagioclase GROUNDMASS: microcrystalline VESICLES: sparse vesicularity (5%), low sphericity, subrounded,
- 299.0	70 - 80 -		State of			100	11	15	75							10% filled, irregular coalesced vesicles accumulate in flow top and bottom UPPER CONTACT: Recovered as chilled zone with sediment contact LOWER CONTACT: Recovered as chilled zone with sediment contact ALTERATION: Slightly to moderately altered gray basalt. Vesicles are filed with green clay, calcite and pyrite. Traces of fresh glass are preserved in both the upper and lower contact, pieces 1 C, but most glass is altered to clay. VEINS: N/A STRUCTURE: No structure, only joints to be parallel to chilled
-	90 - 100 -	3	A LINE A.	1			**					a				margin. UNIT: 98 PIECE: 1 (description based on a piece) LITHOLOGY. limestone UPPER CONTACT: Not recovered LOWER CONTACT: Not recovered VEINS: Calcite veins STRUCTURE: Some calcite veins having steep dips.
-	110 - 120 -				TS IC PP	101	*					l				
299.5 –	130 —					102						a				
	140 -	4		1		102		20	50			а				
							·							J		



										324-U1	350A-25F	R-2, Top of	Section	on: 298.2 CS	8F-A (m)	
Depth (m)	, Core length (cm)	Piece number	Scanned image	Orientation	Shipboard studies	Lith. unit	Structure	Structural	dig dig	% Vesicularity 5 은 응 응 육 융		() 	- (N	Magnetic susceptibility (x10 ⁵ SI) IS, MS Point - filterec 8888888 o e R & 888 o e R & 888		Description
-	- 0- 10-				PAL	96	ي پير بر	30	20			а				U1350A-25R-2 continued UNIT: 99 PIECE: 2 (description based on a piece) LITHOLOGY: moderately phyric massive basalt VOLCANIC DESCRIPTION: entire pillow lava unit with baked sediment on the bottom TEXTURE: moderately phyric COLOR: greenish black
- 298.5 –	20 - 30 -	1		1		97										PHENOCRYSTS: plagioclase GROUNDMASS: microcrystalline VESICLES: sparse vesicularity (7%), moderate sphericity, subrounded, 100% filled. size of vesicles increase from margin to center UPPER CONTACT: Recovered as chilled zone LOWER CONTACT: Recovered as chilled zone ALTERATION: Slightly to moderately altered gray basalt. Vesicles are filled with green clay, calcite and pyrite. Traces of fresh glass are preserved in both the upper and lower contact,
-	40 -		S		88	98	*	150 150 155	60 30 60							pieces 1 C, but most glass is altered to clay. VEINS: N/A STRUCTURE: No structure, only joints to be parallel to chilled margin.
-	50 -	2		1		99	242 14	20	15			а				UNIT: 100 PIECE: 3 (description based on a piece) LITHOLOGY: moderately phyric massive basalt VOLCANIC DESCRIPTION: entire pillow lava unit TEXTURE: moderately phyric
-	- 60 -		11.15				4	0	50							COLOR: greenish black PHENOCRYSTS: plagioclase GROUNDMASS: microcrystalline VESICLES: sparse vesicularity (7%), moderate sphericity, subrounded, 100% filled. irregular coalesced vesicles accumulate in flow top and bottom, 2cm gas blisters in the
- 299.0	70 - 80 -		STRON .			100	194 194	15	75							middle UPPER CONTACT: Recovered as chilled zone LOWER CONTACT: Recovered as chilled zone ALTERATION: Slightly to moderately altered gray basalt. Vesicles are filled with green clay, calcite and pyrite. Traces of fresh glass are preserved in both the upper and lower contact, pieces 3 A&B, but most glass is altered to clay. VEINS: Veins of calcite and green clay.
-	90 - 100 -	3	Service and the	1			*									UNIT: 101 STRUCTURE: Thick (>0.2cm) veins having steep dips. UNIT: 101 PIECE: 3 (description based on a piece) LITHOLOGY: moderately phyric massive basalt VOLCANIC DESCRIPTION: entire pillow lava unit TEXTURE: moderately phyric COLOR: greenish black PHENOCRYSTS: plagioclase GROUNDMASS: microcrystalline
-	110-				TS		^ر د *					a	• • • •		- ii	VESICLES: sparse vesicularity (5%), moderate sphericity, subrounded, 100% filled. Irregular coalesced vesicles accumulate in flow top and bottom, 2cm gas blisters in the middle UPPER CONTACT: Recovered as chilled zone LOWER CONTACT: Recovered as chilled zone ALTERATION: Slightly to moderately altered gray basalt. Vesicles are filled with green clay, calcite and pyrite. Traces of
-	120 -	-			IC PP	101										fresh glass are preserved in both the upper and lower contact, pieces 3 B&C, but most glass is altered to clay. VEINS: Large green clay & nontronite vein networks. STRUCTURE: Partly curved and irregular veins filled with fine-breccias and clay.
299.5 -	130 -											a	•••			
-	140-	4		1		102 103		20	50			а				



Site U1350 core descriptions

Depth (m)	Core length (cm)	Piece number	Scanned image	Orientation	Shipboard studies	Lith. unit	Structure	Structural Structural	did	Vesicularity (pl		ار ا	Magnetic susceptibility (x10 ⁵ SI) MS, MS Point - filterec 8, MS Point - filterec 8, 88 900 800 0000000000000000000000000000	Reflectance (L ⁺ , b ⁺ - raw; L ⁺ , b ⁺ - filtered) (0, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2,	Description
	10-				PAL	96	% **	30	20		a		•		U1350A-25R-2 continued UNIT: 102 PIECE: 3 (description based on a piece) LITHOLOGY: limestone UPPER CONTACT: Not recovered LOWER CONTACT: Not recovered VEINS: Calcite veins
- 298.5 –	20 - 30 -	1		1		97									STRUCTURE: Some curved and zigzag calcite veins. UNIT: 103 PIECE: 3 (description based on a piece) LITHOLOGY: moderately phyric massive basalt VOLCANIC DESCRIPTION: entire unit of small pillow lava TEXTURE: moderately phyric COLOR: greenish black PHENOCRYSTS: plagioclase GROUNDMASS: microcrystalline VESICLES: sparse vesicularity (6%), moderate sphericity,
-	40 -	2		1	88	98	*	150 150 155	60 30 60			•••	•••••		subrounded, 100% filled. size of vesicles increase from margin to center UPPER CONTACT: Recovered as chilled zone LOWER CONTACT: Recovered as chilled zone ALTERATION: Slightly to moderately altered gray basalt. Vesicles are filled with green clay, calcite and pyrite. Traces of fresh glass are preserved in both the upper and lower contact,
-	50 - 60 -		1. 1. 1. 5			99	249 249 249	20 0	15 50		a				piece 4, but most glass is altered to clay. VEINS: Large green clay & nontronite vein networks. STRUCTURE: Networked and highly curved clay veins. UNIT: 94 PIECE: 8-9 (description based on all pieces) LITHOLGGY: moderately phyric massive basalt VOLCANIC DESCRIPTION: entire pillow lava unit
- 299.0	70 - 80 -		1. TONTON			100	11 1	15	75			· · · · · · · · · · · · · · · · · · ·			TEXTURE: moderately phyric COLOR: greenish black PHENOCRYSTS: plagiocdas GROUNDMASS: microcrystalline VESICLES: sparse vesicularity (3%), highly elongated sphericity, angular, 100% filled. elongated directions of vesicles are vertical to flow UPPER CONTACT: Recovered as chilled zone LOWER CONTACT: Recovered as chilled zone
-	90 –	3	A LOND TO A	1			*								ALTERATION: VEINS: STRUCTURE: UNIT: 95 PIECE: 10-11 (description based on all pieces) PIECE: 3 (description based on one piece) LITHOLOGY: Jaminated volcaniclastic sandstone and limestone UPPER CONTACT: Not recovered
-	100 - 110 -				TS		¥				a				LOWER CONTACT: Not recovered
- 299.5 –	120 - 130 -				IC PP	101									
-	140 -	4		1		102 103		20	50		 a		co c		

324-U1350A-25R-2, Top of Section: 298.2 CSF-A (m)

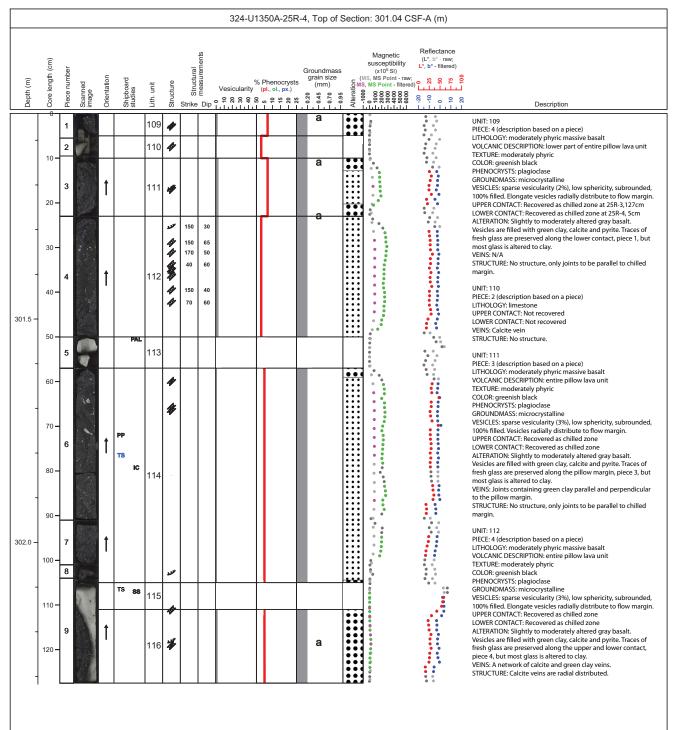


										324-U135	50A-25R	2-3, Top	of Se	ectio	n: 299.69 CS	SF-A (m)			
Depth (m)	, Core length (cm)	Piece number	Scanned image	Orientation	Shipboard studies	Lith. unit	Structure	Structural Structural		% Pi Vesicularity (pi کو کی کی کی کی ایلیا ایلی ایل		()	ze	Alteration — -1000 <mark>S</mark>	Magnetic susceptibility (x10 ⁵ SI) IS, MS Point - raw; MS Point - filtered SS SS SS SS SS SS SS SS SS SS SS SS SS SS	Reflectance (L*, b*- raw; L*, b*- filtered) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Description		
-	-0-					104	1 20-								•	•••	UNIT: 104 PIECE: 1 (description based on a piece)		
	10						/	150 160	20 70			а					LITHOLOGY: limestone UPPER CONTACT: Not recovered LOWER CONTACT: Not recovered		
-	10 - 20 -	1		t			*										UNIT: 105 PIECE: 1-2 (description based on all pieces) LITHOLOGY: moderately phyric massive basalt VOLCANIC DESCRIPTION: entire pillow lava unit with baked sediment on the top TEXTURE: moderately phyric COLOR: greenish black		
300.0 –	30 -					105	19	160	20							PHENOCRYSTS: plagioclase GROUNDMASS: microcrystalline VESICLES: sparse vesicularity (5%), elongate sphericity, subangular, 100% filled. elongate coalesced vesicles accumulate in flow top and bottom, 1cm gas blisters in the middle. UBPEP CONTACT: Becoursed as childed tops with codimont			
-	40 -																green clay, calcite and pyrite. Traces of fresh glass are		
-	50 -	2					***					_				•••	VEINS: Fine network of green clay veins. STRUCTURE: Network of veins in upper part.		
-	60 -	3	and and an	1		106						а					UNIT: 106 PIECE: 3 (description based on a piece) LITHOLOGY: moderately phyric massive basalt VOLCANIC DESCRIPTION: side edge of pillow lava TEXTURE: moderately phyric COLOR: greenish black		
-	70 -		21	9 1												• • •			PHENOCRYSTS: plagioclase GROUNDMASS: microcrystalline VESICLES: sparse vesicularity (2%), elongate sphericity, subrounded, 100% filled. Elongate vesicles radially distribute to flow margin. UPPER CONTACT: Recovered as chilled zone with sediment
300.5 -	80 -						228										contact LOWER CONTACT: Recovered as chilled zone ALTERATION: Slightly altered gray basalt. Vesicles are filled with green clay, calcite and pyrite. Traces of fresh glass are		
-	90 –	4		• †		107		130	30 70								preserved along the margin of the pillow, pieces 3 A&B, but most glass is altered to clay. VEINS: IV.A STRUCTURE: No structure, only joints to be parallel to chilled margin.		
-	100 -		and a la				1	150 10	50 5						•				
-	110 -		- Alt				.€₽ ₩	150 160	60 30			a							
-	120 —	5	A	t	98	108	*				•	a			1				
301.0 -	130 —		THE PARTY			109	<u>1</u>												

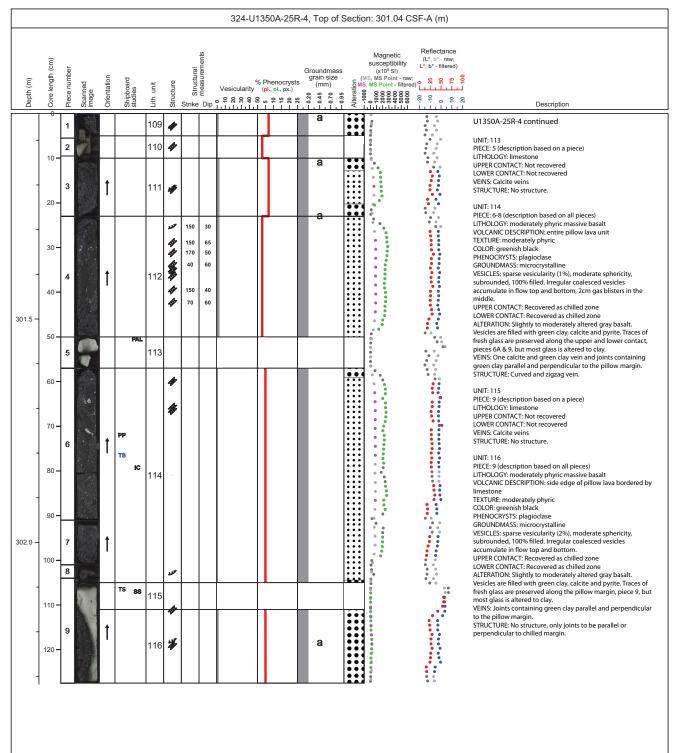


										324-U1350A-25	iR-3, Top o	Secti	on: 299.69 CS	SF-A (m)	
Depth (m)	Core length (cm)	Piece number	Scanned image	Orientation	Shipboard studies	Lith. unit	Structure	Structural Structural		% Phenocry Vesicularity (pl., ol., px.) 등 은 영 영 영 영 요 은 또 영	0 10 0	۲.	Magnetic susceptibility (x10 ⁵ SI) (MS, MS Point - filtered 8 000000000000000000000000000000000000	Reflectance $(L^*, b^* - raw;$ $L^*, b^* - filtered)$ $(L^*, b^* - filtered)$ $(L^*, b^* - filtered)$ $(L^*, b^* - filtered)$	Description
-	0-					104	10th								U1350A-25R-3 continued
-	10 - 20 -	1	in the second	t			**	150 160	20 70		a				UNIT: 107 PIECE: 4 (description based on a piece) LITHOLOGY: highly phyric massive basalt VOLCANIC DESCRIPTION: entire pillow lava unit TEXTURE: highly phyric COLOR: greenish black PHENOCRYSTS: plagioclase GROUNDWASS: microcrystalline VESICLES: sparse vesicularity (2%), low sphericity, subrounded, 100% filled. Elongate vesicles radially distribute to flow margin. UPPER CONTACT: Recovered as chilled zone
300.0 –	30 - 40 -		a francisco			105	T	160	20						LOWER CONTACT: Recovered as chilled zone ALTERATION: Slightly altered gray basalt. Vesicles are filled with green clay, calcite and pyrite. Traces of fresh glass are preserved along the margin of the pillow, pieces 4 A&C, but most glass is altered to clay. VEINS: ALTERATION: Slightly altered gray basalt. Vesicles are filled with green clay, calcite and pyrite. Traces of fresh glass are preserved along the margin of the pillow, pieces 4 A&C, but
-	40 – 50 –	2					328 328								most glass is altered to clay. VEINS: Vein networks of calcite and green clay. STRUCTURE: Some thick calcite veins having steep dips. Veins are connecting amygdules. UNIT: 108 PIECE: 4 (description based on a piece)
-	60 -	3	and a share a start	t		106	2200				а				LITHOLOGY: limestone UPPER CONTACT: Not recovered LOWER CONTACT: Not recovered VEINS: Calcite veins STRUCTURE: Irregular and curved veins. UNIT: 109 PIECE: 4 (description based on a piece) LITHOLOGY: moderately phyric massive basalt
300.5 -	70 - 80 -						247								VOLCANIC DESCRIPTION: upper part of entire pillow lava unit TEXTURE: moderately phyric COLOR: greenish black PHENOCRYSTS: plagioclase GROUNDMASS: microcrystalline VESICLES: sparse vesicularity (2%), low sphericity, subrounded, 100% filled. Elongate vesicles radially distribute to flow margin. UPPER CONTACT: Recovered as chilled zone at 25R-3,127cm
-	90 - 100 -	4	first -	t		107		30 130 150 10	30 70 50 5						LOWER CONTACT: Recovered as chilled zone at 25R-4, 5cm ALTERATION: Highly brecciated flow margin in a calcite cement with traces of fresh glass preserved, piece 5, but most glass is altered to clay. VEINS: N/A STRUCTURE: Highly brecciated.
-	110 -		1.20		PAL		11 **	150 160	60 30		а				
-	120 -	5		t	88	108	*				a				
301.0 -	130 -		and the			109	11							• •	









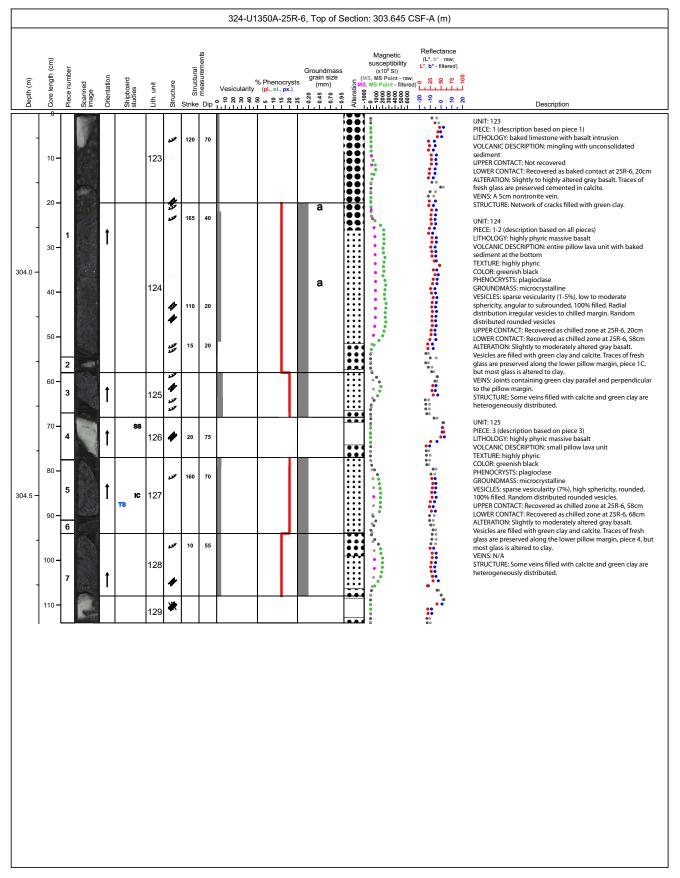


										324-U1350A	-25R-	5, Top of S	ectio	n: 302.315 C	SF-A (m)	
Depth (m)	Core length (cm)	Piece number	Scanned image	Orientation	Shipboard studies	Lith. unit	Structure	Structural Structural	di di	% Phen Vesicularity (pl., ol - 은 있 없 유 등 요 	., px .)	Groundmass grain size (mm) 27 0 6	, Mu	Magnetic susceptibility (x10 ⁵ SI) MS, MS Point - filtered S, MS Point - filtered S, S, S S S S S S S S S S S S S S S S S	Reflectance $(L^*, b^* - raw;$ $L^*, b^* - filtered)$ 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 100	Description
-	0 10 -	1		t		117	× - *	15 20	30 20			а				UNIT: 117 PIECE: 1 (description based on piece 1) LITHOLOGY: moderately phyric massive basalt VOLCANIC DESCRIPTION: entire pillow lava unit TEXTURE: highly phyric COLOR: greenish black PHENOCRYSTS: plagioclase GROUNDMASS: microcrystalline
302.5 –	20 -		N.	1			27 18 18	0 20	- 20 80			a				VESICLES: sparse vesicularity (2%), moderate sphericity, subrounded, 100% filled. Irregular coalesced vesicles accumulate in flow top and bottom. UPPER CONTACT: Recovered as chilled zone at 25R-5, 0cm LOWER CONTACT: Recovered as chilled zone at 25R-5, 22cm ALTERATION: Slightly to moderately altered gray basalt. Vesicles are filled with green clay and calcite. Traces of fresh
-	30 - 40 -	2				118	19 19					a				Vesicies are lined with green cay and calcite. Indees of fresh glass are preserved along the upper and lower contacts, pieces 1 A&B, but most glass is altered to clay. VEINS: Large 1 cm vein networks of nontronite and green clay STRUCTURE: Brecciated cracks filled with green clay. UNIT: 118
-	40 -	3		t			19 19 19	170	80			a				PIECE: 1-3 (description based on all pieces) LITHOLOGY: moderately phyric massive basalt VOLCANIC DESCRIPTION: entire pillow lava unit TEXTURE: moderately phyric COLOR: greenish black PHENOCRYSTS: plagioclase
-	60 -		3	1	PP	119		175	40							GROUNDMASS: microcrystalline VESICLES: sparse vesicularity (1-3%), low to moderate sphericity, subangular, 100% filled. random distributed irregular vesicles. UPPER CONTACT: Recovered as chilled zone at 25R-5, 20cm LOWER CONTACT: Recovered as chilled zone at 25R-5, 49cm ALTERATION: Slightly to moderately altered gray basalt.
303.0 –	70 -						THE REAL					a				Vesicles are filled with green clay and calcite. Traces of fresh glass are preserved along the upper and lower contacts, pieces 1 B and 2A, but most glass is altered to clay. VEINS: Large 1 cm calcite vein bisects the pillow. STRUCTURE: Calcite vein having steep dip. UNIT: 119
-	80 -	4	N. P.	t		120	, , ,	60 75	50 55							PIECE: 3 (description based on piece 3) LITHOLOGY: highly phyric massive basalt VOLCANIC DESCRIPTION: entire pillow lava unit TEXTURE: highly phyric COLOR: greenish black PHENOCRYSTS: plagioclase
_	90 - 100 -			•			1	90 45	5 40							GROUNDMASS: microcrystalline VESICLES: sparse vesicularity (1-5%), low to moderate sphericity, subrounded to subangular, 100% filled. Random distributed irregular vesicles in chilled zone and core part. UPPER CONTACT: Recovered as chilled zone at 25R-5, 48cm LOWER CONTACT: Recovered as chilled zone at 25R-5, 69cm ALTERATION: Slightly to moderately altered gray basalt.
-	110 -	5		1		121	, EE					a				ALLEKATION: Signity to moderately aftered gray basait. Vesicles are filled with green clay and calcite. Traces of fresh glass are preserved along the pillow margin, piece 2B, but most glass is altered to clay. VEINS: A vein of calcite and green clay. STRUCTURE: A vein of calcite and green clay.
303.5 –	120 -	6		1		122	*	60	50							
-	130 –		: t													

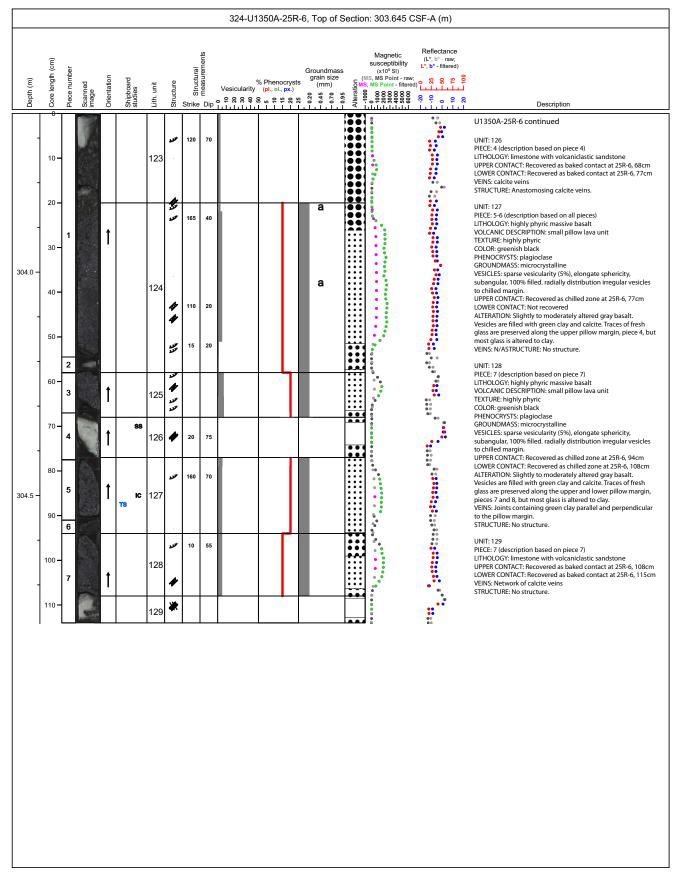


										324-U1350A-25F	R-5, Top of	Sectio	n: 302.315 C	SF-A (m)	
Depth (m)	Core length (cm)	Piece number	Scanned image	Orientation	Shipboard studies	Lith. unit	Structure	Structural Structural		% Phenocrys Vesicularity (pl., el., px.) - 은 은 응 응 응 등 ~ 은 약 등	0 0 0		Magnetic susceptibility (x10 ⁵ SI) IS, MS Point - filtered 88888888 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Reflectance (L*, b* - raw; L*, b* - filtered) 00 00 00 00 00 00 00 00 00 00 00 00 00	Description
	0						117 117	15	30		a		÷.		U1350A-25R-5 continued
- 302.5 –	10 - 20 -	1		1		117	/ 🕷	20	20 20		a				UNIT: 120 PIECE: 4 (description based on piece 4) LITHOLOGY: highly phyric massive basalt VOLCANIC DESCRIPTION: entire pillow lava unit TEXTURE: highly phyric COLOR: greenish black PIENOCRYSTS: plagioclase GROUNDMASS: microcrystalline UFSICIES: space vesciulativ (3.2%) low to moderate
-	30 —	2				118	14 151 151	20	80						VESICLES: sparse vesicularity (3-7%), low to moderate sphericity, subrounded to subangular, 100% filled. Random distributed irregular vesicles in chilled zone and core part. UPPER CONTACT: Recovered as chilled zone at 25R-5, 69cm LOWER CONTACT: Recovered as chilled zone at 25R-5, 102cm LOWER CONTACT: Recovered as chilled zone at 25R-5, 69cm ALTERATION: Slightly to moderately altered gray basalt. Vesicles are filled with green clay and calicite. Traces of fresh
-	40 —						194 194 194	170	80		a				glass are preserved along the upper pillow margin, piece 2B, but most glass is altered to clay. VEINS: IV/A STRUCTURE: Brecciated cracks filled with green clay. One vein and two joints. UNIT: 121
	50 -	3		1			10°								PIECE: 4-6 (description based on all pieces) LITHOLOGY: highly phyric massive basalt VOLCANIC DESCRIPTION: entire pillow lava unit TEXTURE: highly phyric
-	60 -				PP	119		175	40						COLOR: greenish black PHENOCRYSTS: plagioclase GROUNDMASS: microcrystalline VESICLES: sparse vesicularity (3%), moderate sphericity, subrounded, 100% filled. Random distributed irregular vesicles in chilled zone. UPPER CONTACT: Recovered as chilled zone at 25R-5, 102cm
303.0 -	70 -						Ť				a				LOWER CONTACT: Recovered as chilled zone at 25R-5, 114cm ALTERATION: Slightly to moderately altered gray basalt. Vesicles are filled with green clay and calcite. Traces of fresh
-	80 —						1	60	50						glass are preserved along the pillow margin, piece 5, but most glass is altered to clay. VEINS: I/V.A STRUCTURE: No structure. UNIT: 122
-	90 —	4	1.2.2	1		120	-	75 90	55						VIII. 122 PIECE: 6 (description based on piece 6) LITHOLOGY: highly phyric massive basalt VOLCANIC DESCRIPTION: entire pillow lava unit TEXTURE: highly phyric COLOR: greenish black
-	100 -						,	45	40						PHENOCRYSTS: plagioclase GROUNDMASS: microcrystalline VESICLES: sparse vesicularity (3-10%), moderate to elongate sphericity, subrounded, 100% filled. Random distributed
-	110 -	5		1		121	EE.				а				irregular vesicles in chilled zone and core part. UPPER CONTACT: Recovered as chilled zone at 25R-5, 114cm LOWER CONTACT: Recovered as chilled zone at 25R-5, 133cm ALTERATION: Slightly to moderately altered gray basalt. Vesicles are filled with green clay and calcite. Glass is altered to clay.
303.5 -	120 —	120 - 6		1		122	¥ (60	50						VEINS: Large 1cm vein networks of nontronite and green clay STRUCTURE: Brecciated cracks filled with green clay.
	130 -												j.		

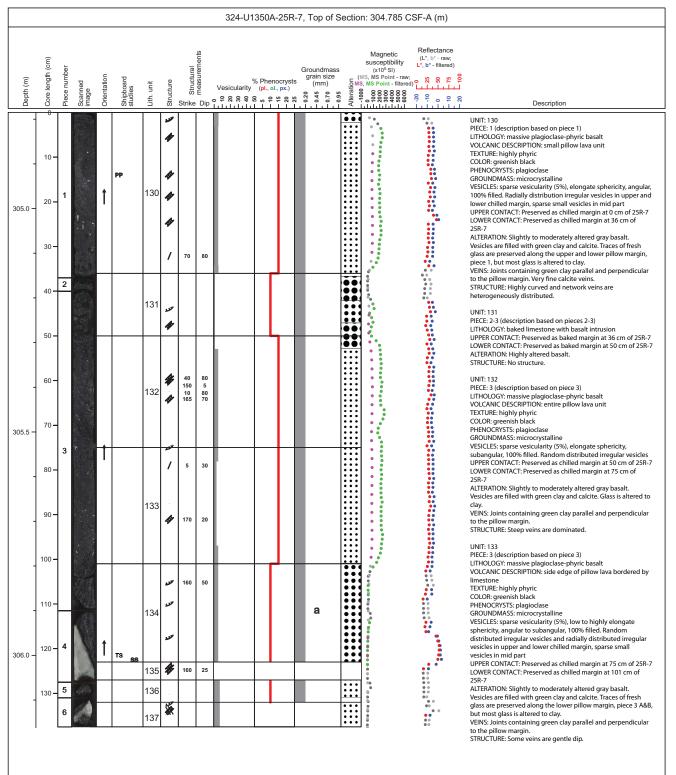




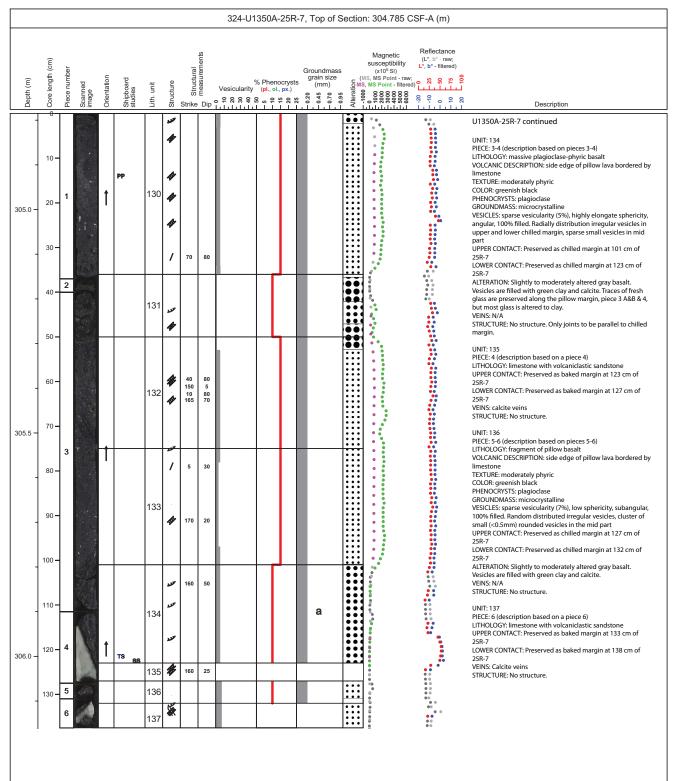




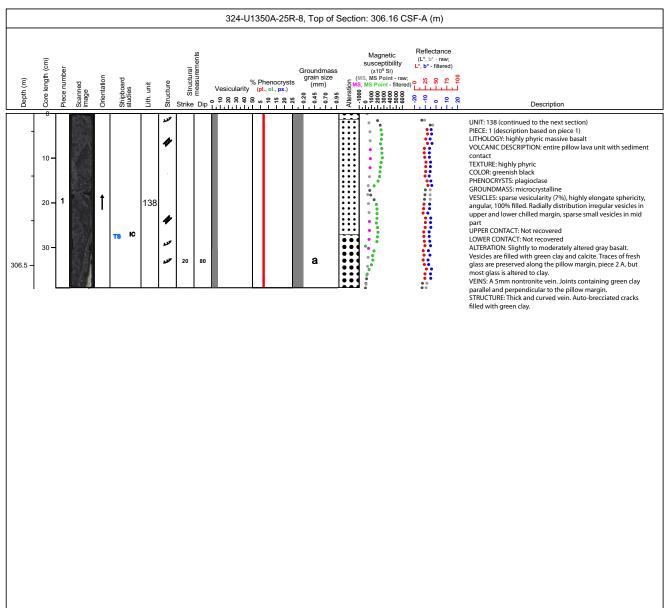














										324-U138	50A-26F	R-1, Top of	Sectio	n: 306.2 CSI	F-A (m)	
Depth (m)	, Core length (cm)	Piece number	Scanned image	Orientation	Shipboard studies	Lith. unit	Structure	Structural Structural	dig measurements	% Ph Vesicularity (pl. ୦୦ କ୍ ର୍ର୍ଚ୍ଚ କ୍ରେଜ୍ର ୦୦୦୦୦୦୦୦୦୦୦୦୦୦୦୦୦୦୦୦୦୦୦୦୦୦୦୦୦୦୦୦୦୦୦୦	enocrysts , ol., px.) 은 또 원 없	()	Alteration — -1000 <mark>S</mark> ∭	Magnetic susceptibility (x10 ⁵ SI) S, MS Point - raw; MS Point - filtered) 8 8 8 8 8 8 9 8 8 8 8 8 9 8 8 8 8 8 9 8 8 8 8	Reflectance (L*, b*- raw; L*, b*- filtered) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Description
	0-	1				138	T					m		• • • •		UNIT: 138 (continued from previous section) PIECE: 1-2 (description based all pieces) LITHOLOGY: moderately phyric massive basalt VOLCANIC DESCRIPTION: entire pillow lava unit
-	10-	3		1		139 140										TEXTURE: moderate phyric COLOR: greenish black PHENOCRYSTS: plagiocdase GROUNDMASS: microcrystalline VESICLES: sparse vesicularity (5%), elongate sphericity, subangular, 100% filled. Randomly distributed irregular
- 306.5 –	20 - 30 -							0	40			m				vesicles UPPER CONTACT: Not recovered LOWER CONTACT: Recovered as chilled zone at 26R-1, 9cm ALTERATION: Moderately altered dark gray basalt. Vesicles are filled with green clays and calcite. VEINS: none STRUCTURE: Massive structure.
-	40 -	5		1	TS	141	111	o	70							UNIT: 139 PIECE: 3 (description based on piece 3) LITHOLOGY: limestone UPPER CONTACT: Recovered as baked contact at 26R-1, 9cm LOWER CONTACT: Not recovered ALTERATION: none VEINS: none
-	50 - 60 -						1) 1)					m			0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	STRUCTURE: Chilled margin contact with limestone. UNIT: 140 PIECE: 4 (description based on piece 4) LITHOLOGY: moderately phyric massive basalt VOLCANIC DESCRIPTION: side margin of inflation unit TEXTURE: moderate phyric COLOR: greenish black
-	70 -	6	A.	1	Х ПР IC	142	101 111	o	46							PHENOCRYSTS: plagioclase GROUNDMASS: incrocrystalline VESICLES: sparse vesicularity (10%), elongate sphericity, subrounded, 100% filled. Radially distributed irregular vesicles in upper chilled margin UPPER CONTACT: Not recovered LOWER CONTACT: Recovered as chilled zone at 26R-1, 22cm ALTERATION: Moderately altered dark gray basalt. Vesicles are
307.0 -	80 -	7			PP		<u></u> 200	0	26			a				filled with green clays. VEINS: Veins of green clays STRUCTURE: Uncompleted pillow structure with radial vesicles. UNIT: 141
-	90 - 100 -	8		1		143	11									PIECE: 5 (description based on piece 5) LITHOLOGY: highly phyric massive basalt VOLCANIC DESCRIPTION: side margin of inflation unit TEXTURE: highly phyric COLOR: greenish black PHENOCRYSTS: plagioclase GROUNDMASS: microcrystalline
-	110-	9		1			1414	0	88			а				VESICLES: sparse vesicularity (5%), low sphericity, subrounded, 100% filled. Radially distributed irregular vesicles in upper chilled margin UPPER CONTACT: Recovered as chilled zone at 26R-1, 22cm LOWER CONTACT: Recovered as chilled zone at 26R-1, 50cm ALTERATION: Moderately altered dark gray basalt. Vesicles are
-	120 -	10	a the s	1			- FFE					а				filled with green clays. VEINS: Veins of green clays and calcite. STRUCTURE: Uncompleted pillow structure with radial vesicles.
307.5 –				1		144	2426	0	88					0 • 0 • 0 • 0 • 0 • 0		
-	140 -	11	1990 -											10 00 00 00 00 00 00 00 00 00 00 00 00 0		



		Orientation	Shipboard studies	138 [139]	1 1 1 1 1	Strice	did measurements	%Ph Vesicularity (pi a ♀ ℵ ጽ ♀ ֍ ∞ uuuuuuuuuuuuuuuuuuuuuuuuuuuuuuuuuuu	nenocrysts ., ol., px.) 우 약 응 왕	()	Alteration	Magnetic susceptibility (x10 ⁵ SI) S, MS Point - raw; MS Point - filtered 88888888 0 + 8 & 8 & 8 0 + 8 & 8 & 8 0 + 8 & 8 & 8 0 + 8 & 8 & 8 & 8 0 + 1 + 1 + 1 + 1 + 1	Reflectance (L*, b* - raw; L*, b* - filtered) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Description U1350A-26R-1 continued
2 3 4 - - 5		1		139						m			•••	U1350A-26B-1 continued
) - 3 - 4)		1		139								a di seconda di second	• •	51550A-2011 FCORTINED
5	5													UNIT: 142 PIECE: 5-6 (description based on pieces 5-6) LITHOLOGY: highly phyric massive basalt VOLCANIC DESCRIPTION: side margin of inflation unit TEXTURE: highly phyric COLOR: greenish black PHENOCRYSTS: plagioclase GROUNDMASS: microcrystalline VSICLES: sparse vesicularity (5%), low to elongate sphericity,
		+		141		0	40			m				subrounded, 100% filled. Randomly distributed irregular vesicles UPPER CONTACT: Not recovered LOWER CONTACT: Recovered as chilled zone at 26R-1, 83cm ALTERATION: Moderately altered dark gray basalt. Vesicles are filled with green clays and calcite. Pyrite is present close to the margin. VEINS: Veins of green clays and calcite.
		-	TS		24 14 14	0	70			m				STRUCTURE: Uncompleted pillow structure with radial vesicles. UNIT: 143 PIECE: 7-9 (description based on pieces 7-9) LITHOLOGY: moderately phyric massive basalt VOLCANIC DESCRIPTION: vide marsgin of inflation unit TEXTURE: moderately phyric COLOR: greenish black PIENDCRYSTS: plaqioclase
- 6		t		142	B H									Prencound St Singlocabe GROUNDMASS: microcrystalline VESICLES: sparse vesicularity (3%), low to elongate sphericity, angular to subangular, 100% filled. Randomly distributed irregular vesicles UPPER CONTACT: Recovered as chilled zone at 26R-1, 83cm LOWER CONTACT: Recovered as chilled zone at 26R-1, 111cm ALTERATION: Moderately altered dark gray basalt. Vesicles are filled with green clays.
>- >-		1	Х <mark>Р</mark> ЭР IC PP		1	0	46			a				VEINS: none STRUCTURE: Uncompleted pillow structure with radial vesicles. UNIT: 144 (continued to next section) PIECE: 10-11 (description based on pieces 10-11) LITHOLOGY: moderately phyric massive basalt VOLCANIC DESCRIPTION: side margin of inflation unit TEXTURE: moderately phyric
-		t		143	130 FBL	0	26						• 0 • 0 • 0 • 0 • 0 • 0 • 0 • 0 • 0 • 0	COLOR: greenish black PHENOCRYSTS: plagioclase GROUNDMASS: microcrystalline VESICLES: sparse vesicularity (3%), moderate to elongate sphericity, subrounded, 100% filled. Randomly distributed irregular vesicles UPPER CONTACT: Recovered as chilled zone at 26R-1, 111cm LOWER CONTACT: Recovered as chilled zone at 26R-2, 10cm
9 9		1			EE.	0	88			а				ALTERATION: Moderately altered dark gray basalt. Vesicles are filled with green clays. VEINS: none STRUCTURE: Uncompleted pillow structure with radial vesicles.
) - 10	0	1			1914	0	88			а				
) -) - 11	1			144	184									
) -) -) -		6 7 7 8 9 9		7 ×mm 8 ↑ 9 ↑ 10 ↑	6	6 142 142 142 144 144 144 144 144 144 144	6 ↑ 142 № 0 7 7 10 № 143 № 0 8 ↑ 143 № 0 9 ↑ 144 № 0 144 № 0	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{bmatrix} 6 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\$	$\begin{bmatrix} 6 \\ 1 \\ 142 \\ 142 \\ 142 \\ 143 \\ 143 \\ 143 \\ 143 \\ 143 \\ 143 \\ 16 \\ 16 \\ 16 \\ 16 \\ 16 \\ 16 \\ 16 \\ 1$	$\begin{bmatrix} 6 \\ 1 \\ 142 \\ 142 \\ 142 \\ 143 \\ 143 \\ 143 \\ 143 \\ 143 \\ 143 \\ 16 \\ 16 \\ 16 \\ 16 \\ 16 \\ 16 \\ 16 \\ 1$



