ATV 177

SAMPLE DESCRIPTION

Cruise ID LC96-14

Sample No. ATV 177-1R

Latitude 44° 12.7799' N

Date & Time 22 Aug 96, 1540Z

Longitude 129° 38.4531' W

Water Depth 11209 feet

Location

~~Core Length~~ Sample size 10 cm x 11 cm x 8 cm

Sample Description Pillow fragment with glassy rind, iron oxide staining on outside surface.

Subsamples

Remarks Sample given to Dave Christie (OSU).

Described by: IH

Subsamples by:

SAMPLE DESCRIPTION

Cruise ID LC 96-14 Sample No. ATV 177 - 9R

Latitude 44° 12.6988 4' N Date & Time Aug 23, 1996 @ 0214

Longitude 129° 38.4453' W Water Depth 11237 feet

Location Mound Area

~~Core Length~~ Sample size 12 x 10 x 5 cm

Sample Description Fresh part is gray sulfide & sulfate w/ outer rim on one end of yellowish (pale) sulfate - cemented clastic debris -

- exterior of rock is a yellowish white granular & crystalline surface, appears cemented in some areas. angular fragments, dark brown-orange staining on outside surface
- interior rock is light gray with cemented angular fragments, contains light colored (white-yellow) veins. Metallic minerals (sulfides) present in little veins, some silver flecs visible, not well compacted

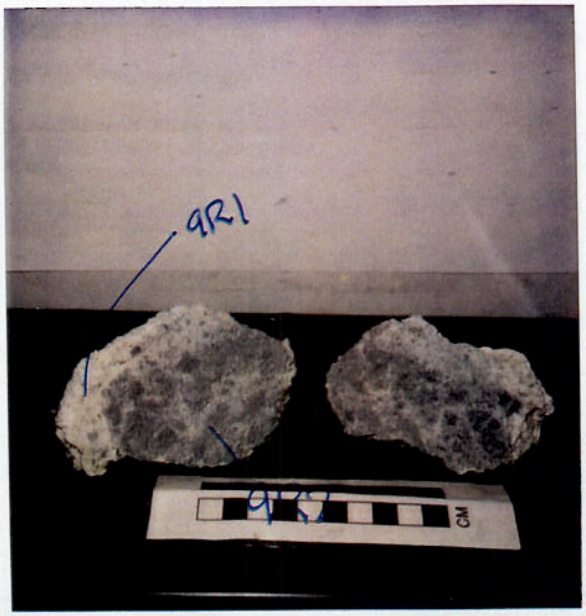
Subsamples 9R1 - XRD, CHEM Outside yellow white rind → 0-15 mm

9R2 - XRD, CHEM Rock interior - light gray 50 mm diameter

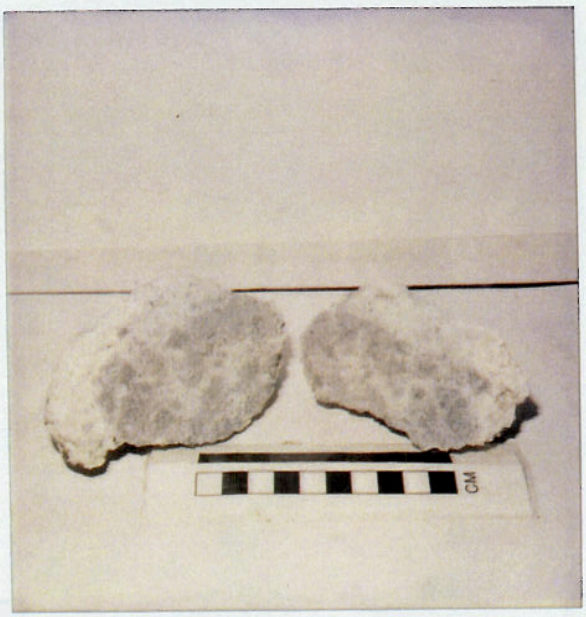
X-section

Remarks XRD, slide photos, rock rinsed before chemistry (after XRD) PTS, FITS

Described by: JH Subsamples by: MK



ATV 177-9R



ATV 177 - 9R

SAMPLE DESCRIPTION

Cruise ID LC 96-14

Sample No. ATV 177 - 14R

Latitude 44° 12.9038' N

Date & Time Aug. 23, 1996 @ 0437

Longitude 129° 38.4336' W

Water Depth 11 214 feet

Location

Sample Size ~~Core Length~~ Piece A slab 20 x 21 x 5 cm - upper surface scrapped - more equan
Piece B slab 30 x 11 x 5 cm - elongate slab

Sample Description 2 pieces - One surface of one piece scrapped for microbiology - Inside of both samples where they were joined full of Fe-oxide - repl. worms - oxidized sulfides on hydroth. altered basalt - Some large sulfide grains

(14RA) Piece A - Interior - red oxidized material Exterior - black oxidized mat
(14RB) Piece B - Interior - red oxidized Exterior - black oxidized
Broken Pieces

* Polaroids

Subsamples

Remarks See the following pages for subsamples & descriptions, Rocks rinsed before chemistry, PTS, FITS.

Described by: Hein

Subsamples by: MG

SAMPLE DESCRIPTION

Cruise ID LC96-14

Sample No. ATV 177 - 14RA

Latitude 44° 12.9038' N

Date & Time 23 Aug 96, 0437 Z

Longitude 129° 38.4336' W

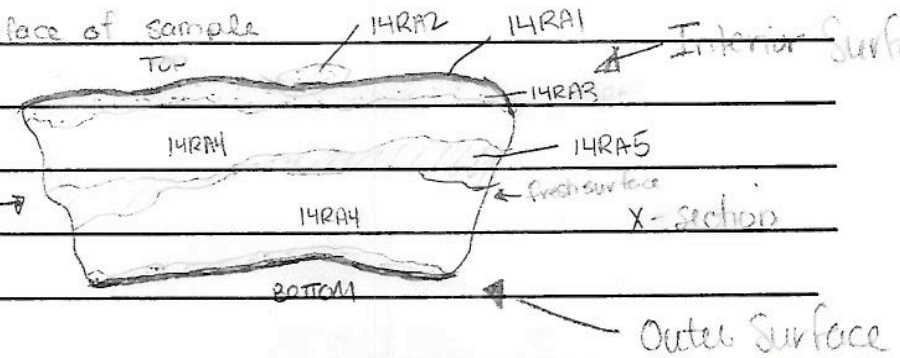
Water Depth 11214 feet

Location

~~Core Length~~ Sample size 20 x 21 x 5 cm

Sample Description

Top (~~Interior~~ surface) is burnt orange and granular (fine-grained) bacteria scraped from this part. black/brown spotty staining (granular) on orange surface (more spotting on bottom of sample), foamy granular yellow-white layer (1-10mm thickness varies) below orange surface, substrate rock is granular & crystalline gray with white altered veins, small metallic flecs visible in substrate rock. Bottom surface of sample has more black/brown staining than top.



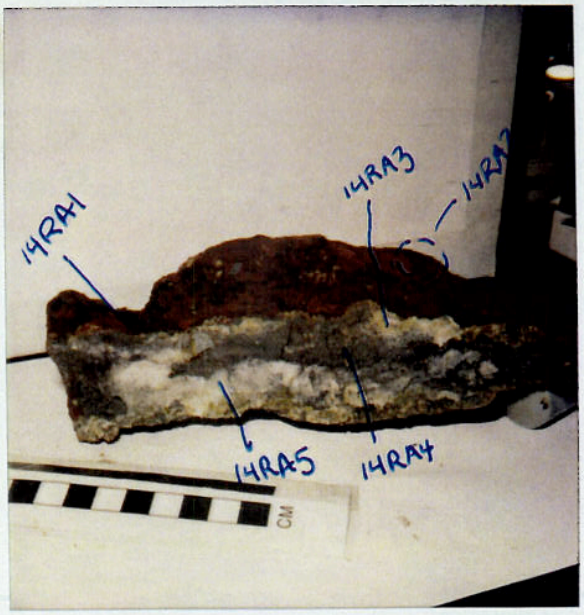
Subsamples

14RA1 XRD, CHEM	(0-1 mm) outside orange coating
14RA2 XRD	(surficial) black/brown staining
14RA3 XRD, CHEM	Granular white-yellow layer (1 to 10 mm)
14RA4 XRD, CHEM	Substrate Rock Crystalline (10-40 mm)
14RA5 XRD, CHEM	White altered veins w/in

Remarks XRD, 35 mm photos, PTS, FITS

Described by: MG

Subsamples by: MG



ATV177-14RA

SAMPLE DESCRIPTION

Cruise ID LC 96-14 Sample No. ATV 177-14RB

Latitude 44° 12.9038' N Date & Time 23 Aug 96, 0437 z

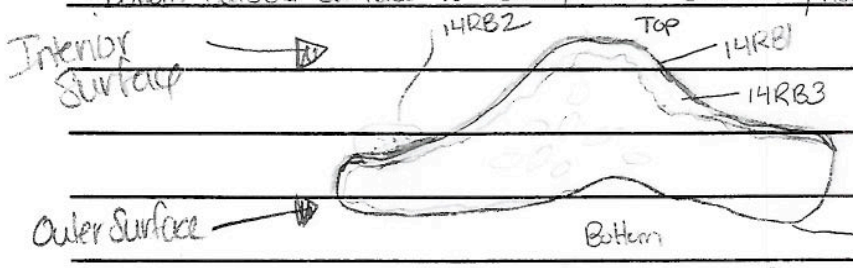
Longitude 129° 38.4336' W Water Depth 11214 ft.

Location

~~Core Length~~ Sample size 30 x 11 x 5cm

Sample Description Elongated sample

- Top surface is burnt orange and granular, bacteria scraped from this area. brown/black staining spots (~up to 5-6 cm diameter) on orange surface, below orange is a granular (foamy looking) yellow-ish white layer (1-6mm), substrate rock is porous and granular & crystalline (grains up to 3mm) dark gray with lighter colored angular (crystalline) grains
- Bottom outside surface is black/brown stained, not all layers which occur on top are present on entire bottom surface

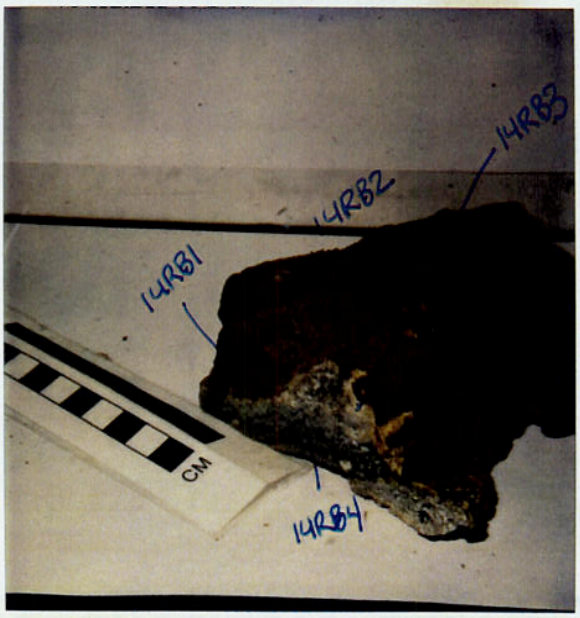


- substrate rock contains metallic (gold) sulfides (or pyrite).

Subsamples		
14RB1 XRD	~~Out~~ In side Orange Coating	0-1 mm
14RB2 XRD	Dark brown/black staining on (surficial) Orange Coating	
14RB3 XRD	Granular-yellowish white layer	1-6mm
14RB4 XRD, CHEM	Substrate Rock crystalline	6-20 mm

Remarks XRD 35 mm photos, FITS, DTS

Described by: MG Subsamples by: MG



ATV 177-14RB