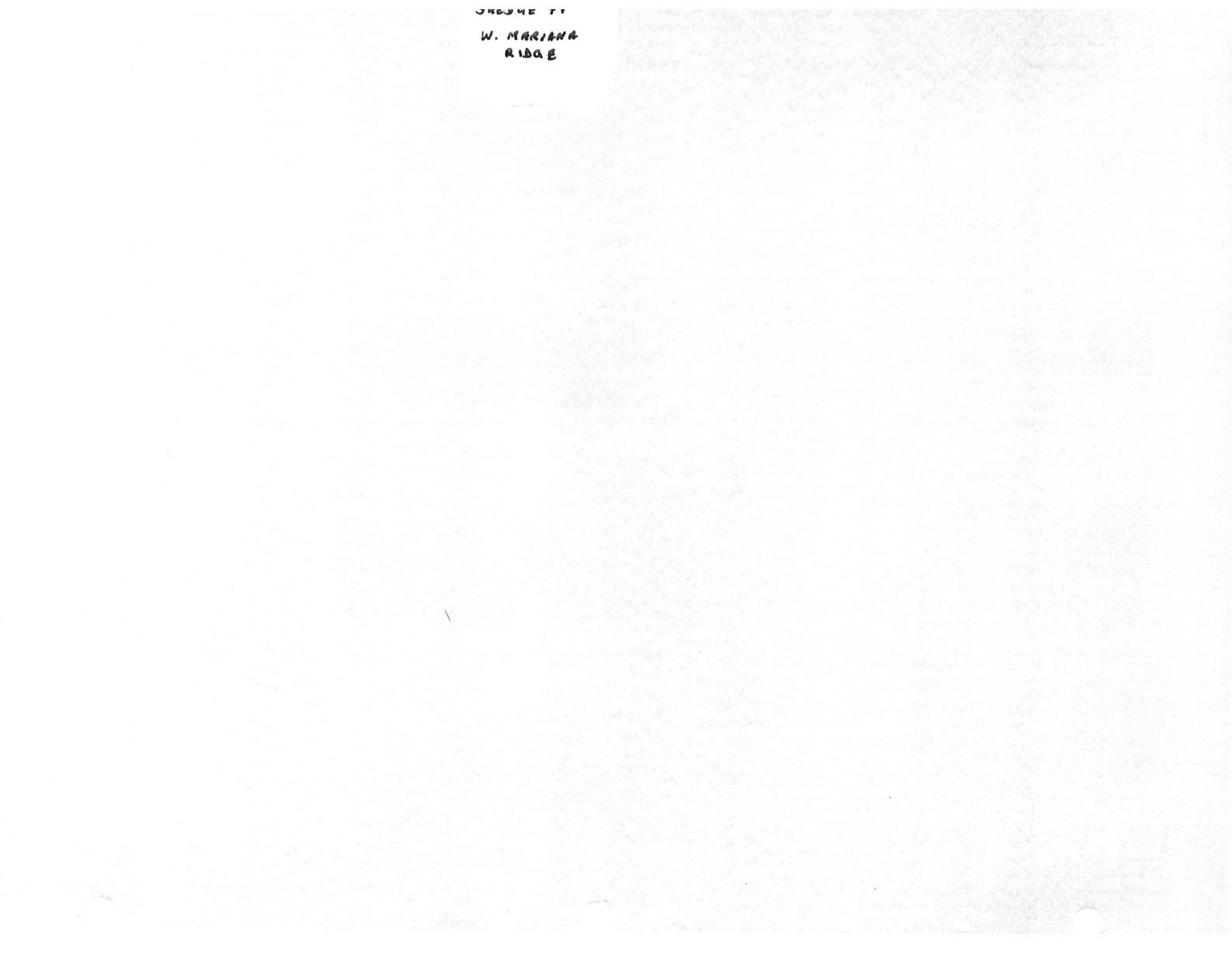

W. MARIANA
RIDGE

SAMPLE ID	Mn CHEM	Pt & Au	REE	Si Chem	P.Sect.	35mm Pho	Archive	Paleo	XRD			
D'71-1	✓	✓	✓									
D'71-2	Jayers	✓	✓						✓			
D71-3								✓				
D 71-4	✓											
D'71-5												

Sample Description

Cruise I.D: ~~[illegible]~~ Sample I.D: Sta: D [illegible] Location: [illegible]

Size: [illegible] Weight: [illegible]

Mn crust thickness:

Total: min: max: ave:

Inner crust: min: max: ave:

Outer crust: min: max: ave:

Surface texture:

Internal structure:

layered: V
laminated:
massive:
porous:
dendritic:
other:

Mineralogy (XRD):

Associated alteration, phosphorite, or hydrothermal deposits:

Substratum:

Rock type: [illegible]

Description:

[illegible]

Mineralogy (XRD):

Analyses and subsamples:

analysis:	analyst:
[illegible]	[illegible]
XRD [illegible]	
[illegible]	
[illegible] D71-1	
[illegible] D71-1	
[illegible] D71-1	
XRD	
D71-1 also sent to [illegible]	

Sample Description

Cruise I.D: ~~EW-83-MW~~ Mariana 2

Sample I.D: Sta: D71-2

Location: W. Mariana Ridge

Size: 2x3cm Weight: 0.76 kg (dry wt)

Depth (bottom) 6 - 7 km

Mn crust thickness:

Total: min: 2.5cm max: 4.9cm ave: ~3.5cm

Inner crust: min: .5cm max: 2cm ave: .75 cm

Outer crust: min: 2.5cm max: 3cm ave: 3 cm

Surface texture: Low relief

Internal structure:

layered: √
laminated:
massive:
porous: √
dendritic:
other:

clay

Mineralogy (XRD):

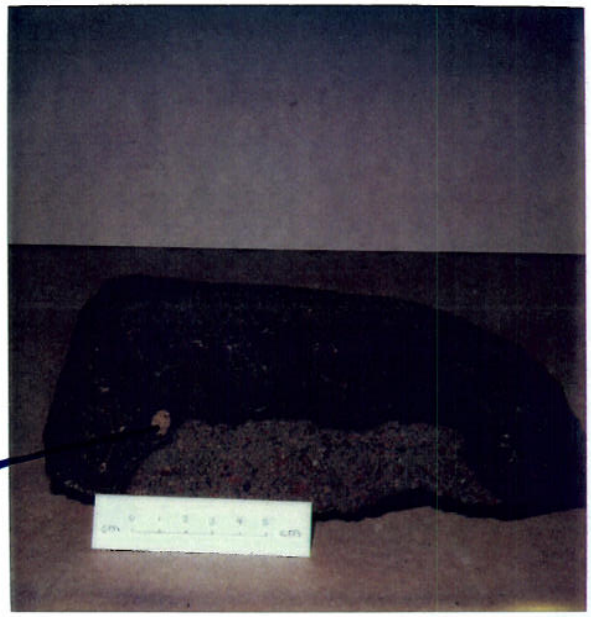
Associated alteration, phosphorite, or hydrothermal deposits:

Substratum:

Rock type: Volcanic Sandstone or mudstone

Description: Sand sized lava fragments, altered

Mineralogy (XRD):



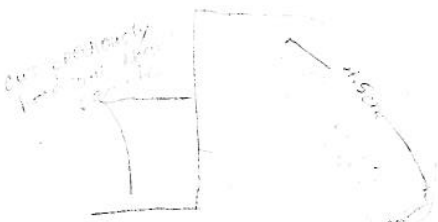
D71-2

Mariana TT192

Analyses and subsamples:

analysis:	analyst:
Chemistry (all samples of crust to bedrock	J. Morgenson
XRD (all samples of crust to bedrock D71-2 E)	
Chemistry XRD	
D71-2-A just XRD-description	M. Morrison 10-12-87
D71-2-B-I outer most Fe/Mn crust	
D71-2-B-II outer crust from Top	
D71-2-C-I outer stratified crust 1-2.5 cm	
D71-2-C-II inner transitional/Top 2-3 cm	
D71-2-D-I inner massive layer/base 2.5-3.5 cm	
D71-2-D-II inner massive layer Top 3.5-4.5 cm	
Small piece of I and rock	
Description	

OVER



SAMPLE DESCRIPTION

Id: TT192 Size: [illegible] Location: [illegible]

Sample Id: D71-3 Weight: 1 Kg Depth: 1660 M

Mn Crust Description

Surface Texture: [illegible]

Mn Crust Thickness:

Min: [illegible] Max: [illegible] Ave: [illegible]

Layers (Outer to Inner):

	Min	Max	Ave	Texture
1.				
2.				
3.				
4.				
5.				
6.				

C nts and XRD Mineralogy:

[illegible]

Substrate Description

Rock Type: Volcaniclastic Breccia

Description:

Some [illegible]

Dm black clasts [illegible]

Rim

Mn stained [illegible]

TT192 D71-3

Mariana Islands

ANALYSES

Archived

Described By: JSM Subsampled By:

Sample Description

Cruise I.D: ~~L5-83-MW~~ Sample I.D: Sta: D 7-4 Location:

Size: Weight:

Mn crust thickness:

Total: min: max: ave:

Inner crust: min: max: ave:

Outer crust: min: max: ave:

Surface texture:

Internal structure:

layered:
laminated:
massive:
porous:
dendritic:
other:

Mineralogy (XRD):

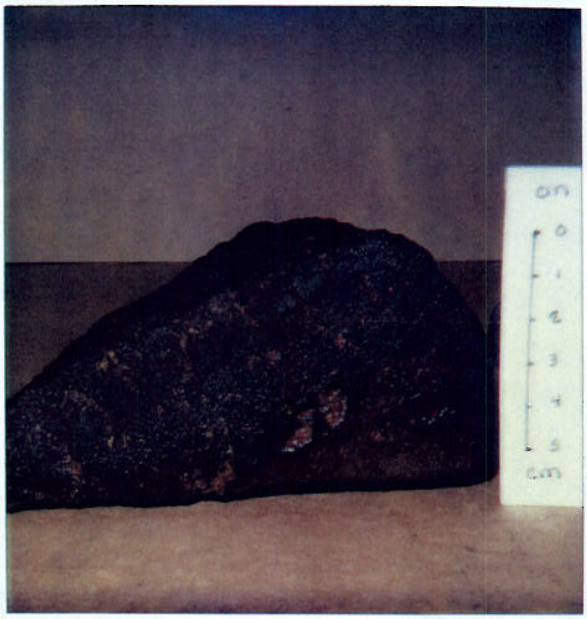
Associated alteration, phosphorite, or hydrothermal deposits:

Substratum:

Rock type:

Description:

Mineralogy (XRD):



071-4 Mariana Is
T T 192

Analyses and subsamples:

analysis:	analyst:

SAMPLE DESCRIPTION

Id: FT192 Size: _____ Location: W. Mariana [illegible]

Sample Id: D71-5 Weight: _____ Depth: 1600 m

Mn Crust Description

Surface Texture: [illegible]

Mn Crust Thickness:

Min: 20mm Max: 40mm Ave: 36

Layers (Outer to Inner):

	Min	Max	Ave	Texture
1.				
2.				
3.				
4.				
5.				
6.				

D71-5

Mariana Islands

Comments and XRD Mineralogy:

Mn Sp. Discs of crust fragments

Crust-age Sediment and Manganese

ANALYSES

Substrate Description

Rock Type: Manganese [illegible]

Description:

Mn crust Substrate interface at these [illegible]

Described By: JM Subsampled By: