

MEMORANDUM

CHECK
INFORMATION _____
FOR ACTION _____
PERMIT _____
OTHER _____

TO: Nancy Musgrove

FROM: Laurence Ashley *LA*

SUBJECT: CLAMS FROM GRAYS HARBOR COUNTY OCEAN BEACHES

DATE: August 6, 1979

State of
Washington
Department
of Ecology

Seven clam samples from various ocean beach locations in Grays Harbor County were delivered May 31, 1979 to the laboratory. The request for analysis was for the content of six heavy metals in the clams.

The clam samples (both body parts and liquid portions) were digested in a dilute HNO_3/HCl solution as received.

The body parts were portions of the "neck" and "foot" of each clam. The liquid portion was the liquid poured from the container of each sample. The digestion solutions were filtered to volumetric flasks. The solutions were analyzed on a Perkin-Elmer Model 403 Atomic Absorption Spectrophotometer.

LA:kw

cc: Steve Robb

John Bernhardt



REDMOND LABORATORY

Copies To:

Steve Robb

N. Musgrove

DATA SUMMARY

(Metals)

Collected By N. Musgrove

Date Collected 5/29/79

Source Ocean Beaches
Grays Harbor County

Log Number:

Station:	7B	7L																
Cu TOTAL	0.5	0.5	µg/gr															
Cu (Soluble)																		
Zn TOTAL	15.	21.	µg/gr															
Zn (Soluble)																		
Fe																		
Fe (Soluble)																		
Ni TOTAL	<0.1	<0.1	µg/gr															
Ni (Soluble)																		
Cr TOTAL	<0.1	<0.1	µg/gr															
Cr (Soluble)																		
Cd TOTAL	<0.1	<0.1	µg/gr															
Cd (Soluble)																		
Pb TOTAL	0.3	<0.1	µg/gr															
Pb (Soluble)																		
Hg																		
As																		
Values in µg/gr of materials as received																		
L = Liquid portion																		
B = Body part																		

Note: ~~All results are in µg/L unless otherwise specified.~~ Metal concentrations not specified are "Acid Soluble". "<" is "Less Than" and ">" is "Greater Than".

Summary By J. Ashley Date 8/3/79



REIMOND LABORATORY

Copies To:

Steve Robb

N. Musgrove

DATA SUMMARY

(Metals)

Collected By N. Musgrove

Date Collected 5/29/79

Source Ocean Beaches
Grays Harbor County

Log Number:

Station:	1B	1L	2B	2L	3B	3L	4B	4L	5B	5L	6B	6L
Cu TOTAL	1.6	<0.1	1.8	0.7	1.7	0.6	0.8	0.5	0.4	0.4	0.9	0.5
Cu TOTAL (Soluble)												119 gr
Zn TOTAL	15.	3.0	15.	6.2	17.	7.6	10.	8.0	15.	18.	25.	21.
Zn TOTAL (Soluble)												115 gr
Fe												
Fe (Soluble)												
Ni TOTAL	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ni (Soluble)												119 gr
Cr TOTAL	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cr (Soluble)												119 gr
Cd TOTAL	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cd (Soluble)	119 gr											119 gr
Pb TOTAL	0.2	<0.1	0.4	<0.1	0.3	<0.1	0.6	<0.1	0.2	0.3	0.3	0.2
Pb (Soluble)	119 gr											119 gr
Hg												
As												
Values in 119/gr of material as received.												
See tags	{		L = Liquid portion									
			B = Body part									

Note: ~~Method used in EPA 821 (20/1) unless otherwise specified.~~ Metal concentrations not specified are "Acid Soluble". "<" is "Less Than" and ">" is "Greater Than".

Summary By J. Ashley Date 8/3/79