UNIVERSITY OF WASHINGTON
APPLIED FISHERIES LABORATORY
SEATTLE, WASHINGTON

411106

Locality ELMER Date 12 FEB 58

Personnel BINGHAM, HEID Weather

Water conditions

Radiation level(s)

Operations:

ARRIVED 1830 GOOD WEATHER, SMOOTH TRIP.
WAGGE HUTT (MEC) & 1 BOX BILLINGS (P.I) ON THE SAME FLIGHT.
7-1 HOW DOES THE MEETING, GREETING, BILLING, &C.
ASSIGNED TO BLS 109. Rm 1
MET CMDR STEINMEYER (JTF REPRESENTATIVE) AT KLAB.
HE WILL WATCH FOR OUR CREW'S ARRIVAL & GIVE ANY NEEDED
ASSISTANCE. TALKED OVER LIFT SUPPORT FOR RONGELAP WITH HUTT
& STEINMEYER — THERE WILL BE A MINIMUM OF THREE FLIGHTS & POSSIBLY
FIVE DURING THE STAY AT RONG.

UNIVERSITY OF WASHINGTON
APPLIED FISHERIES LABORATORY
SEATTLE, WASHINGTON

Locality ELMER Date 13 FEB 58

Personnel KB EH Weather

Water conditions

Radiation level(s)

Operations:

CHECKED IN. SAW RAY EMENS (AEC). CHYNOOP IS BEE MAKING ARRANGEMENTS FOR WEATHER STATIONS. LSM SCHEDULED TO LEAVE HERE FOR ARRIVAL AT RONGELAP 24 FEB TO DELIVER GENERATOR TO THE PLUMAS COUNTY WHICH IS SCHEDULED TO ARRIVE RONGELAP SAME DATE. OUR GEAR WILL GO ON THE LSM. IT WILL BE DECIDED LATER WHETHER KB & EH WILL FLY TO BIKINI & GO TO RONGELAP VIA LSM OR FLY TO KWAJ & MEET THE LST. DETAILED MAPS OF RONGELAP IS & ENIAETCK IS WERE READY & WAITING - NONE AVAILABLE FOR KABELLE IS. REQUESTED VEHICLE FROM CAPT THOMAS (71,J-3); DOES. 4C NOT ON HIS LIST BUT HE SCROUNGED A JEEP FOR IS ON A TEMPORARY BASIS. SAYS HE WILL BE ABLE TO FURNISH VEHICLE TO GROUP ARRIVING ± 1 APR. SHIPPED "BOX #1" & 4 PROBES VIA AIR FREIGHT EXPRESS TO EGL - JACK LIVINGSTONE HANDLED (MAY HAVE TO GO FROM TRAVIS TO SEATTLE VIA MOTOR TRANSPORT). STARTED PACKING RONGELAP SUPPLIES & EQUIPMENT.

UNIVERSITY OF WASHINGTON
APPLIED FISHERIES LABORATORY
SEATTLE, WASHINGTON

RFP FOR QW

Locality ELMER Date 16 Feb 58, Sun.

Personnel K B + CH Weather

Water conditions

Radiation level(s)

Operations:

Walked over seaward reef behind lab - no great changes since last June. There has been an influx of small cowries directly behind the lab + just a few feet from shore at low tide. The polychaete colonies are, if anything, more prevalent than they were in June. In some places they form single colonies of 10-15 ft.^{2} Searched the quarry area for coral growth - found none. Found thousands of Notarchus (sea slugs) just south of the assembly area. They were being washed up on the beach.

Many visitors at the lab.

"Chief" of Paint Shop told us of the sea slugs.

UNIVERSITY OF WASHINGTON
APPLIED FISHERIES LABORATORY
SEATTLE, WASHINGTON

Locality ELMER Date 17 FEB 58, Mon

Personnel KB & EH Weather

Water conditions

Radiation level(s)

Operations:

Completed packing gear for Rongelap. KB prepared fish samples for X-ray spectroscopy.

UNIVERSITY OF WASHINGTON
APPLIED FISHERIES LABORATORY
SEATTLE, WASHINGTON

Locality Elmer Date 18 Feb 58, Tues

Personnel KB + EH Weather

Water conditions

Radiation level(s)

Operations:

Bill Tammany (Rad-Safe) checked us out on compressor. Tested all values, gauges & connections - everything in top shape. T-frame returned - painted ready to go. 3 made plankton tows - deep entrance (2 hauls 1 at bouy 6, 1 at bouy 4) + off Clyde. Using only #20 net, hauled 30 minutes about 1 mile off Clyde 1345-1415 hrs, then 15 min. 1440-1455 beside (south) D.E. Channel Buoy #6, and 15 min 1510-1525 beside buoy #4 farther east, almost outside of pass; maintained position in a 2-knot current. Preserved Clyde & #4 buoy tows in alcohol & #6 tow which was apparently identical + #4, in formalin. Good quantities, but no large organisms susceptible to isolation for analysis by species.

5

UNIVERSITY OF WASHINGTON

APPLIED FISHERIES LABORATORY

SEATTLE, WASHINGTON

Locality ELMER Date 14 FEB 56 Wed.

Personnel KB JP Stt Weather

Water conditions

Radiation level(s)

Operations:

STUDIED CORALS IN REFERENCE COLLECTION. Collected 500 CUCUMBERS ON REF between ELMER & FRED. STARTED EXPT TO DETERMINE HOW MUCH SAND PASSED THROUGH H. edu GUT IN HER PERIOD.

(Maj. Monaco)

FLIGHT TO KWAJ LAID ON THROUGH J-3 A FOR SUNDAY 23 FEB. REQUESTED AERIAL PHOTOS OF KABELLE, RONGELAP & AENFATCK THROUGH J-3.

MANY VISITORS TO LAB & MANY QUERIES OF HELP FOR FISHING. ONE MR. WIESS IN CHARGE OF ~~FROM~~ NAVY BOAT POOL HAS DONE COMMERCIAL FISHING - HE WILL LOOK UP FGL & REP IN APR.

Requested that all reapers be in operation by 1 Apr.

UNIVERSITY OF WASHINGTON
APPLIED FISHERIES LABORATORY
SEATTLE, WASHINGTON

Locality ELMER Date 20 Feb. 58 Th:

Personnel KB & ~~EA~~ Weather

Water conditions

Radiation level(s)

Operations:

GEAR FOR RONGELAP PUT ABOARD "ALOTO."
CLEANED ESTERLINE-ANGUS RECORDER - NOW OPERATING OK.
IN THE FUTURE, WHEN THE RECORDER IS TO BE LEFT IDLE FOR
SEVERAL MONTHS, IT WOULD BE BEST TO EMPTY INK RESERVOIR &
PEN. BORROWED COUNTING TUBE FROM BILL TAMMANY FOR
RATE-METER - OPERATING OK.
Took muscle and liver samples from a 2-foot black tip shark that Ed caught yesterday in a few minutes' fishing with rod & reel from shore. Of two caught & put in tank, one this one died, other seemed ok.

UNIVERSITY OF WASHINGTON
APPLIED FISHERIES LABORATORY
SEATTLE, WASHINGTON

Locality ELMER Date 21 Feb. 58 Fri.

Personnel KB & ~~EGK~~ Weather

Water conditions

Radiation level(s)

Operations:

LAID ON FLT TO JANET FOR 22 ARR. 0755. WENT AQUALUNGING W/ HENRY SCHLACKS. HE HAS A LIST OF NEEDED AQUALUNG PARTS & WILL SEND TO RFP. NEED ALL NEW HARNESSES.

On reef south of ferry got 6 Holothuria atra; opposite coral pile got 1 Actinopyga mauritiana & 3 small A. agassizi(?) Dried 2 H. atra & " " after cleaning, by hanging on clothes line by fine wire. Asked sample of H. atra gut for counting & ~~Dr~~ X-ray fluoroscopy.

Continued study of coral collection and cucumbers.

UNIVERSITY OF WASHINGTON
APPLIED FISHERIES LABORATORY
SEATTLE, WASHINGTON

Locality 22 APR 50 Date 22 ~~APR~~ Feb 50 Sat.

Personnel KB + BH Weather

Water conditions

Radiation level(s)

Operations:

6 OT WORK LAST NIGHT - HAVE TO CATCH PLANE TO KWAJ TODAY 1200.

Arr. Kwajalein 1730.

Weather good with only traces of rain during entire stay at Eniwetok,

UNIVERSITY OF WASHINGTON
APPLIED FISHERIES LABORATORY
SEATTLE, WASHINGTON

Locality Elmer Fred — Date Tues April 22 '58
Personnel Weeks Palumbo Lowmen — Weather Windy Showers
Water conditions Rough
Radiation level(s) —

Operations:

Arrived Eniwetok 0730 on flight 569 Palumbo's + Lowmen's hold baggage lost between Hickam and PPG. Gave necessary info. to [redacted] sergeant at PPG terminal. Arrived Perry by water taxi; had breakfast (Dave).

In P.M. went to see Col. Lucke. Had a nice visit. Transportation not immediately available for our crew since Col. Lucke had not received a request for such. Captain Thames, transportation officer, trying to find a vehicle so we should be on wheels in a week or so.

Evidently funds are not available for canvas awnings but Col. Lucke and Ernie are trying to scrounge materials, at least, for this job. Same situation applies to the Silverstein. Perhaps AI should be contacted to help out with this problem.

Rongelap gear stacked in middle of floor at lab. Started unpacking to obtain necessary gear for Rehabath.

Only two plankton buckets found so far. Hope we find the other two since we'll need them on both the plankton nets and the mid water trawl.

By passed Kwajalein on trip in to the PPG. No baggage inspection upon arrival. Things are really streamlined now so that facilities and services are easily obtained - including plane transportation around the Atoll.

of 2 by FSS DW

UNIVERSITY OF WASHINGTON
APPLIED FISHERIES LABORATORY
SEATTLE, WASHINGTON

KB

Locality Elmer Fred Date ~~Wed.~~ April 23 '58

Personnel Weeks Palumbo Lowman Weather Windy-Showers

Water conditions Rough

Radiation level(s) ---

Operations:

Cleaned out laboratory shelves, deep freeze, and refrigerator. Defrosted the refrigerator.

The twenty cubic foot deep freeze on the front porch is inoperable and the freezer department says it is beyond repair. Appears that it would cost more to fix it than replace it. Checked w/ Ernie about getting it moved out of the way. AEC is working on the required steps to survey it.

Called Bud Shores about the plankton bucket Kelley took for repairs. Bud said the bucket had been returned to EMBL. Couldn't find it so we went to the machine shop and found it there.

Unpacked Rongelap gear and removed equipment and supplies needed for trip. Using all of the pressure sensitive tape. Using the wide mouth bottles. Washed up all of the dirty polyethylene bottles packed in the Rongelap gear. Will use the washed bottles for bio samples.

Checked out the Marsh-Welton plankton gear - mostly in good shape. Rearranged and packed for the Rehoboth. Have 6 used ~~#~~ ½ meter plankton nets in good shape. Four have the bucket rings. Will use the used gear in high contamination areas. Have 7 new ½ M. plankton nets. Have 3 bucket rings and 3 ½ M hoops. The meter block and nylon rope is in operating condition. Will have to make new bridles with the Pacor Tiller cable and the Nicol press. Have plenty of swivel snaps, eyelets, shackels and bridle rings. Looks like we're in business. 6 Nansen bottles in working order for the Silverstein trip.

UNIVERSITY OF WASHINGTON
APPLIED FISHERIES LABORATORY
SEATTLE, WASHINGTON

Locality ..... Date April 23 continued

Personnel ..... Weather .....

..... Water conditions .....

Radiation level(s) .....

Operations:

Ernie is working on the zooming problem so it will probably be solved one way or another by the time the ship gets here.

F. G. L.

P.S. Unpacked counting equipment from Marsh and started checking. Fixed one scaling circuit in one of the scalers. Gate for rate meters not operable - probably won't try to use it. Haven't checked the Allison tubes yet - Hope the argon filling hasn't perfused out thru the mica window.

UNIVERSITY OF WASHINGTON
APPLIED FISHERIES LABORATORY
SEATTLE, WASHINGTON

Locality ..... Date April 23 continued

Personnel ..... Weather .....

..... Water conditions .....

....

Radiation level(s) .....

Operations:

Talked to Bill Temmeny and Gordon Jacks at Red Sefe. Were offered any electronics facilities at their outfit that we could use. Gordon has some underwater monitoring problems that we may be able to assist on, It's good when assistance can work both ways.

Picked up a classified document at 71 addressed to Doc. It will be of great assistance in our work at the PPG.

Bill Temmeny visited the lab and checked us out on the air compresser. It is certainly a nice piece of equipment.

After lunch visited C. Bernier at the new Holmes and Narver Photo Lab. They have the nicest installation I've seen. George promised to make a large print of the tern for Doc.

Called MATS terminal at Eniwetok and found that nothing had been done regarding our baggage. Hopped on L-20 to the terminal and supplied another set of information to the people there. Got a flight back to Perry as soon as we finished.

Here must be lot of the NRDL people here but so far no one is using the lab. They have a 30 foot trailer parked to the north of our building.

Visited Ernie in the evening and was asked about our transportation. Nothing available.

We are staying at one of the new large Barracks. These are really the ritz. Much nicer than the old barracks. We all have a four man room to ourselves with single level bunks.

NIVERSITY OF WASHINGTON
APPLIED FISHERIES LABORATORY
SEATTLE, WASHINGTON

Locality Perry Is. Date Thurs April 24 '58

Personnel Weather Windy

Water conditions Rough

Radiation level(s)

Operations:

Received following TWIX.
USAEC, WASH. D.C.
TO F.G. Lowman
From A.W. Seymour

Collect Pre Hardtack open ocean water samples of one gallon each at six widely separated locations. Ship to Dr. John Harley, HASL, NYO, 90 Columbus Ave. N.Y. 23, N.Y. End. Ref. - BMES; AHS AEC -938.

Will contact Col. Locke this afternoon re. a ship to take the samples. Will take pre-survey plankton samples at same time w/ the one meter nets. See no parmeular problem except time.

Three lion fish, one stone fish, a puffer, and several butterflies are in the large aquarium here had many visiting firemen wanting to see the fish.

Packed more gear for the Rehoboth joint. Col. Locke's office called this AM and requested a meeting concerning the Silverstein trip. We dont know much about it but will try to help in any way possible.

Last Saturday we visited the Rehoboth at Pearl. On the way into Pearl they had decided to clean the bilges. One of the fellows forgot to close the seacocks and the ship just about sank at the dock. The engine room was pretty well flooded before the error was discovered.

PM. Just checked in w/ Col. Locke and Cmdr. Wendell re. the HASL samples. Four of the samples in the south half of

NIVERSITY OF WASHINGTON
APPLIED FISHERIES LABORATORY
SEATTLE, WASHINGTON

Locality ..... Date April 24 cont.

Personnel ..... Weather .....

..... Water conditions .....

Radiation level(s) .....

Operations:

Eniwetok Atoll in the open sea will be taken tomorrow by four ships. We will have to wait until later to get the other two samples.

Saw Gordon Dunning at lunch today. Said he had been down to visit us at the lab but we weren't home. He plans to visit us in a few days.

Commander Starrett 7.3 came by this afternoon and checked on the requirements for the Silverstein. He had made out a letter to the Captain of the Silverstein based on a letter to DBM for the Wilson survey. Except for minor details the letter was OK. The revised copy will be sent to the Silverstein w/ additional copies to AF and Seattle.

We would like to know where the Rongelap numbering system for samples left off so that we can start numbering our samples.

At 5:00 PM Rick Don went for a session with the Aqualung.

Knocked off at 6:00.

RB
DW

UNIVERSITY OF WASHINGTON
APPLIED FISHERIES LABORATORY
SEATTLE, WASHINGTON

Locality Perry Island Date Friday April 25 '58
Personnel Weeks, Palumbo, Lowman Weather Fair
Water conditions Medium Rough
Radiation level(s)
Operations:

Checked out two nuclear scalers w/ anton tubes. Two out of three Antons marked good hed plateaus Here two more tubes in cans unopened. Hope these will last out the operation.

Had another housecleaning session. Lab looks pretty good now.

Some of the NRDL boys that are going to be using the lab showed up today. Seem to be a real nice bunch of guys.

Cleaned out aquafung tanks. Had small amount of oil

UNIVERSITY OF WASHINGTON
APPLIED PHYSICS LABORATORY
SEATTLE, WASHINGTON

Locality Perry Date Saturday April 26

Personnel Weather Fair

Water conditions Medium Rough

Radiation level(s)

Operations:

Picked up three cans of water collected in open sea off Clyde-David, Leroy and Glenn. 5 gallons in each sample. Will send NYO one gallon each.

Prepared two more cans and delivered to Cmdr. Brown for more samples to be taken off Kwajalein and Engebi today. They are sending a cruiser out to do the job.

Picked up 2 tons of steel shielding bricks from Wiley Williams for use at the lab. Scrubbed, dried, and stacked the steel.

Checked on lost baggage. Still no word Ed Wayne Hiatt at AEC is going to put some pressure on to see if they can find it.

Late this afternoon the remaining three cans of water arrived at the Lab. Will rebottle and ship to NYO.

Ran backgrounds on Antons = 16-18 c/m. Prepare more material for use aboard the Rehoboth.

Baggage was found today at the Pass and Badge Office. Evidently was sent on over to Perry Island as cargo. Next time we'll bring suit cases.

Went swimming for an hour late in the afternoon. Lowman got sunburned.

STEAK TONITE!

NIVERSITY OF WASHINGTON
APPLIED FISHERIES LABORATORY
SEATTLE, WASHINGTON

Locality Perry Island Date Sunday April 27 '58

Personnel Weather Fair

Water conditions Medium Rough

Radiation level(s)

Operations:

Ran backgrounds on Anrons and checked w/ 1 gm KCl. Bkgnd on both counters 17 c/m, KCl counts were 217 c/m on #1 and 216 c/m on #2. Good check.

Unpacked lost baggage and got the paper work straightened out.

Hordes of visiting firemen today.

RF

UNIVERSITY OF WASHINGTON
APPLIED FISHERIES LABORATORY
SEATTLE, WASHINGTON

Locality Perry Island Date Monday April 28'58

Personnel Weather Fair

Water conditions Medium Rough

Radiation level(s) Higher locally (not here)

Operations:

Checked in with Ernie and Col. Lucke about the awning problem. We are in somewhat of an embarassing position. Both Col. Lucke and Ernie remarked about our not having a field operating fund. Probably should get some kind of an understanding with AF before the Silverstein operation or we'll be crawling into the woodwork again.

Tom we are supposed to have a meeting with Col. Lucke and J-3 operations concerning the awning. Col Lucke is planning to have a navy repair ship do the job on navy funds. Ernie is ready to assign EMBL funds to the job if it can't be worked out some other way. Hope we don't get caught in any crossfire.

Checked out outboard motor. Plugs were fouled but everything OK now.

The 400 gallon tank is ok but rusty. The iron nuts and bolts will have to be replaced.

Went to Jenet at 3:00 PM. Stayed overnite to collect rocks, soil, and plants.

DJS
KB

UNIVERSITY OF WASHINGTON
APPLIED FISHERIES LABORATORY
SEATTLE, WASHINGTON

Locality Perry Island Date Tuesday April 29 '58

Personnel Weather Fair

Water conditions Medium Rough

Radiation level(s)

Operations:

Arrived back at Perry at about 9:30 AM. Went to lab and packed more gear for the Rehoboth. Checked on awning problem. Navy repair ship Hooper Island to do steel work and J-6 will here H&N do canvas work. Took nuts and bolts off the big tank to get replacements. Cleaned up the lab and processed the Janet plants. Had a short meeting in afternoon with the oceanography group.

UNIVERSITY OF WASHINGTON
APPLIED FISHERIES LABORATORY
SEATTLE, WASHINGTON

JJS
KB
p 120

Locality Parry Island Date Wednesday April 30'58

Personnel Weather Fair

Water conditions Medium Rough

Radiation level(s)

Operations:

Had a meeting with most of the Navy people concerned with the Wahoo shot. Lasted about two hours. All phases were discussed and planned including the recovery of blast and pressure guages from the target array, pre shot oceanographic work, re-entry of ships into the target area, and the post-shot radiological work-us. Everything appears to dovetail remarkably well and it looks as if a complete set of data might be gotten.

Gathered up supplies - got a two ½ ton truck for the job. Got bolts & nuts for the tank, camp cots, two red devil fans with snakes and a 50 gallon pump.

Arranged to have our things picked up by J-4 in afternoon. Went to lab and got all boxes onto the front porch for pick up. A fork lift loaded all boxes and the tank onto a trailer along with 450 pounds of lead shot in bags that was loaned to us by army signal corps boys. Duckworth's spectrometer doesn't have a shield so he will build one w/ lead shot in a box. The spectrometer is going to be at our disposal for our hot samples. These people are really nice to work with.

Got some of our personal things ready to board ship.

NIVERSITY OF WASHINGTON
APPLIED FISHERIES LABORATORY
SEATTLE, WASHINGTON

PROJ

Locality Perry & Rehoboth Date Thursday May 1 '58

Personnel Weeks, Palumbo, Lowman Weather Rain and more Rain

Water conditions Medium Rough

Radiation level(s)

Operations:

Took gear out to ship and started installations. Didn't have marine male plugs so couldn't check out the electronic gear. Installed counting gear in lower lab, chemistry lab in upper lab. Started putting midwater trawl net and plankton nets together. Returned to Perry Island at 4:30 PM.

RF

UNIVERSITY OF WASHINGTON
APPLIED FISHERIES LABORATORY
SEATTLE, WASHINGTON

Locality Parry & Rehoberth Date Friday, May 2 '58

Personnel Weeks, Palumbo, Lowman Weather Fair

Water conditions Medium Rough

Radiation level(s) ~

Operations:

Went to ship at 0930. Finished rigging midwater trawl with bridle Rigged new bridles for plankton nets. Are going to use a twenty five pound weight on the ½ meter nets. Fixed chem lab with plywood base and installed framework pumps etc for chemistry work.

RP

UNIV.

UNIVERSITY OF WASHINGTON
APPLIED FISHERIES LABORATORY
SEATTLE, WASHINGTON

Locality Parry - Rehoboth Date Saturday May 3'58

Personnel Lowman, Weeks, Palumbo Weather Fair

Water conditions Smooth - Medium

Radiation level(s) #1 18.2 c/m #2 16.7 c/m

Operations:

Took water taxi to USS Rehoboth for pre-survey. Boarded at 9:30 AM and after being squared away for berthing we got ready for sea and work. Continued with setting up chemlab and securing sampling equipment. Ship went out of lagoon through the wide channel. US Hydrographic group spent most of day setting out current dregues, taking BTs and trying to get Nansen bottles out. Wind difficulty delayed the cast such that our operations were delayed also. Late afternoon at 5 pm we ran our first midwater T and T test. The deep sea anchor wind on the fantail was used for this operation. The wire cable was run by us along the boat deck to the 15 ton crane and fastened to the bridle. The crew for this operation numbers a score or more. The boom was maintained at 90° angle to the starboard side and the cable was let out to 100 fathoms. A BT cast was taken with a BT and registered to 100 ft. Net hauled in at 5:35 PM and sample included one small scad* and a piece of cardboard and scraps of unknown origin - no fish or plankton. The first operation was fast and ragged and the cable went under the ship's port side. Steering to starboard corrected this and turning (taking) off the starboard screw eased the entanglement.

UNIV

24

UNIVERSITY OF WASHINGTON
APPLIED FISHERIES LABORATORY
SEATTLE, WASHINGTON

Locality _____ Date 5/4/58 (P.2)

Personnel _____ Weather _____

_____ Water conditions _____

Radiation level(s) _____

Operations:

Type of Haul
T - Midwater Trawl
P - Plankton

Samples prepared for counting -

T-1 Sta # 15 (Depth 580 ft)

Total water volume filtered = 565 ml (saved)

Plankton plate = 5 ml

P.W = 2.360 gms

T-2 Station # 25 600 ft depth

Total vol plankton = 15 ml

water = 310 ml (saved)

Plate made - 2 coarse filters No. 1 Whatman

Total gamma { 1 MF (0.45μ) Plankton entire

P-1 Sta # 7

Plankton Vol - 18 ml ; Total H₂O - 105 ml

Plates made - 1 plankton

Total gamma - MF (0.45μ) plankton entire

P-2 Sta # 12 Plankton Vol. = 50 ml . Water = 140 ml

Plates made - 1 plankton

Total gamma - MF (0.45μ) Plankton portion

T-3 (end 2315) 580 ft depth Total plankton - 60 ml

17 fish (saved) } saved
1 eel larva
lots of shrimp }

plate made - 1 plankton

Total gamma - plankton

MF + Hand not saved

UNIVERSITY OF WASHINGTON
APPLIED FISHERIES LABORATORY
SEATTLE, WASHINGTON

Locality Rehoboth - West of Ent. Anll Date Sunday May 4'58

Personnel Lowman, Weeks, Palumbo Weather Fair

Water conditions Medium Rough

Radiation level(s) ~~#2) 16.1c/m~~ #2) 16.1c/m + 225-252 c/m total

Operations:

~~Re~~ Prepared second trawl net in case of failure of first. Made first trawl haul in water at 11.44 AM. 350 fathoms cable out at 11:30. Started retrieving at 12:00 AM (noon). 12:16 net out of water 50cc H20 of plankton (fix - start Time 1105 #1 18.4 N 162-04.3 E)

track of tow

Time 1213 #2 11:20.6 N 162-02.3E) (Station 15)

55 feet deep (60° at 350) (82° surface) 50cc plankton used on plate.

thermocline at 400 ft. ~~(322 ft)~~

2nd Trawl haul in water at 1252 350 fathoms out at 1305 (Station 25)

~~1335 started~~ 1416 started to haul in. 14:30 net out of water.

59° at 600' thermocline at 300'

82° at surface towed at 5 knots

One fish and 15 cc plankton. 1307 net in water 11-22.3 N 162-02.7 E

Plankton #1 Station 7 ½ meter net

net in water 3.40 PM

cable out (1500') 3:55 PM 10 minute haul

out of water 4:15 PM

surface temp 84°

322' 84° (thermocline)

>900' (temp at 900' 51°)

18 cc of plankton

1318	11-23.0 N 162-02.0 E
1330	11-25.9 N 162-01.4 E
1340	11-27.8 N 162-01.8 E
	11-25.5 N 162-02.2 E
R/00	11-24.1 N 162-02.6 E
1416	11-28.8 N 162-01.8 E
1439	11-25.4 N 162 00.2 E

Plankton #2 Station #12 ½M net May 4

1945 - in water 680' deep 58°F

1952 700' wire out 300' thermocline

2115 - started retrieve Surface 81.8°

2120 out of water

3rd Midwater trawl in water 22:05; 350 fathoms cable out 22:23; started in 23:00; surface 23:20. Surface temp 81.6, went to 575' at 62°, thermocline 300-400 feet.

2

UNIVERSITY OF WASHINGTON
APPLIED FISHERIES LABORATORY
SEATTLE, WASHINGTON

Locality USS Rehoboth - ocean Date 5 May 1958 MONDAY

Personnel LEWMAN, WEEKS, PALUMBO Weather FAIR

Water conditions swells

Radiation level(s) #1 - 21c/m ; #2 - 15.6c/m ; Total gamma - 256 c/m

Operations:

P-3; station (6-7) Some error due to drifting
In water at 1423 stopped 1427 w/700' wire out BT
showed depth as 645' T°F: Surface 82.3
Thermocline at 300 ft. 645' - 59.4°
started in at 1515 out at 1518
Total Plankton 23 cc ; H2o filtered - 104 ml
Plates made & 2 totals taken
(Hydro Pers)

Water Samples - from Nansen casts made by USN Hydrographic station H-6 to H-7 made two casts - during office plankton tow (P-3) - [About same stored in PE bottles]

	Hydro Bottle No	depth (To be determined later)
↓	167	
	17	
1st	166	
Cast	151	
shallow	168	
	165	
	14	
	156	
	32	
	20	
	28	
	401	
2nd cast	26	
	18	
deeper	155	
	16	
	25	
	164	
	157	

UNIVERSITY OF WASHINGTON
APPLIED FISHERIES LABORATORY
SEATTLE, WASHINGTON

Locality ..... Date 5 May 1958 (P.2)

Personnel ..... Weather .....

..... Water conditions .....

Radiation level(s) .....

Operations: Sta # H-18

P-4 700' wire. BT did not work
in at 1950 ; out at 1957 ; in at 2032 to 2035
Pvolumac 10 ml H_2O vol 70 ml
Tried 2 MF 5 9/16" filters in tandem, one above the other. This did not work since botton filter could not drag the water through. So the MF's were separated and drawn separately.
Plates made - 1 plankton (copper Sml)
total gamma 1. 3μ MF ; 1. 0.45μ MF

The mid water trawl was not used because the Hydro personnel had trouble with the Nansan casts earlier and did not finish until late morning. We had scheduled the haul for 7:30 pm because our only mile haul was much better than our day time hauls.

Much time has been spent checking the spectrometer for efficiency and stability. The instrument is very stable and reliable and the efficiency is lower than at the Seattle lab by almost 50%. but is getting better as the new tubes warm to their task - FGL is happy about the whole thing. We can get some idea as to the early fission products present. We ran a spectrum of one plankton sample collected today & found a small peak at position 2 (Ce^{144}-Pr^{144} maybe).

2

UNIVERSITY OF WASHINGTON
APPLIED FISHERIES LABORATORY
SEATTLE, WASHINGTON

Locality ..... Date 5 May 1958 (P.3)

Personnel ..... Weather .....

..... Water conditions .....

Radiation level(s) .....

Operations:

A 16" dolphin was caught by Photographer Randolph while trolling at good speed. Samples of muscle and liver were taken and total gamma counts showed no significant activity. Bulk samples were dried and stored —

Procedure for Samples collected

Plankton

1. Take total volume
2. Remove Sea for B-plate and Count dry weigh at EMBL + record + package
3. Filter Aliquot thru coarse screen or filter paper and Total gamma wet. Dry + save (weigh for comp
4. Remainder, if any, for storage in 50% alcohol —
5. Filter Through MF paper for micro plankton Total gamma wet paper — store rest for Beta —
6. Take vol of water. store or do Na_2CO_3 ppt + count 2-10ml ppt B + γ for hot stuff — Count MF Paper of original sample also + store remainder not used for ppt See UWFL 46 for details

(also for Nansen Samples)

Fish Liver / Muscle } B-plates Total β dry + store remainder

Smallfish — Total fish - gamma + or Beta

.·. Art may have some ideas re homogenizing -

2c

UNIVERSITY OF WASHINGTON
APPLIED FISHERIES LABORATORY
SEATTLE, WASHINGTON

Locality Rehobeth Date 6 May 58

Personnel Lowman Weather Sclr

Water conditions medium rough

Cactus 0615

Radiation level(s) Diogas flag pulled up at 13:15 - 200 mr/hr - this is airborne pollution & has not touched water - am saving flag for future

Operations: Obs. 0

plankton filtered thru fine bresscloth & 45μ millipore filter. 1 1/4 cc placed for 3 counts - 100 hrs to count. Took a 2 mg. for decay curve. Decaying with T - 1.03 rate. Rest of plankton saved for 3 counts. Too hot. Subdivided. Very distinct X peaks found.

P-7 May 6, 1958 in water, 19:56 700' cable out. 20:33 started taking in, 20:36 out of water, 30 cc plankton. Surface temp. 51.3°; 660 foot depth w/ wire 58°; thermocline 260'. 1/4 cc of plankton too hot for 3 counts. Subdivided. Decays with T - 1.03. Large plankton, .45μ plankton, and water sample saved. One 1½" lantern fish in plankton. Ran X spectra on all fractions.

Finished at 1:30 AM May 7.

UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION BIOLOGY
SEATTLE, WASHINGTON

EMBL-

Locality AGS-50 - Parry * Date 6 May 1958

Personnel Welander - Wiecks * Weather Fair

Palumbo + - Lowman Water conditions NORMAL !

Duckworth - Severance

Radiation level(s)

Operations:

* Transferred From Rehoboth To YTB at 1230 in fairly rough water. Remained aboard the Tag until 1400 and then transferred To ARS Remained on it and Taken To Lagoon for Transfer to LCM and Parry Island. Just made messhall in time To close the door at 1920. Welander seen for first Time bent over a sizeable dish of veal cutlets et al.. FGL stayed aboard.

Welander arrived Monday, May 5th at 1000, checked thru security, billeting, etc., etc. Finally landed in Barracks 460, room 5 - reserved for U of W. Worked on 1957 Fish - Enumeration report in afternoons at the Lab.