

DATA DOCUMENTATION FORM

10/8/76

DOF-A:2:01

NOAA FORM 24-13 (4-72)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEANOGRAPHIC DATA CENTER
RECORDS SECTION
ROCKVILLE, MARYLAND 20852

FORM APPROVED
O.M.B. No. 41-R2651

TR0440

This form should accompany all data submissions to NODC. Section A, Originator Identification, must be completed when the data are submitted. It is highly desirable for NODC to also receive the remaining pertinent information at that time. This may be most easily accomplished by attaching reports, publications, or manuscripts which are readily available describing data collection, analysis, and format specifics. Readable, handwritten submissions are acceptable in all cases. All data shipments should be sent to the above address.

F032

A. ORIGINATOR IDENTIFICATION.

THIS SECTION MUST BE COMPLETED BY DONOR FOR ALL DATA TRANSMITTALS

1. NAME AND ADDRESS OF INSTITUTION, LABORATORY, OR ACTIVITY WITH WHICH SUBMITTED DATA ARE ASSOCIATED <i>Dr. H. Feder Institute of Marine Science University of Alaska Fbx AK 99701</i>			
2. EXPEDITION, PROJECT, OR PROGRAM DURING WHICH DATA WERE COLLECTED <i>OCS / NOAA / BLM Benthic Organisms OCSEAP</i>		3. CRUISE NUMBER(S) USED BY ORIGINATOR TO IDENTIFY DATA IN THIS SHIPMENT <i>Discoverer 812 File ID - 000812</i>	
4. PLATFORM NAME(S) <i>Discoverer</i>	5. PLATFORM TYPE(S) (E.G., SHIP, BUOY, ETC.) <i>Ship</i>	6. PLATFORM AND OPERATOR NATIONALITY(IES) <i>USA USA</i>	7. DATES FROM: MO, DAY, YR TO: MO, DAY, YR <i>10/8/75 10/16/75</i>
8. ARE DATA PROPRIETARY? <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES IF YES, WHEN CAN THEY BE RELEASED FOR GENERAL USE? YEAR _____ MONTH _____		11. PLEASE DARKEN ALL MARSDEN SQUARES IN WHICH ANY DATA CONTAINED IN YOUR SUBMISSION WERE COLLECTED. GENERAL AREA	
9. ARE DATA DECLARED NATIONAL PROGRAM (DNP)? (I.E., SHOULD THEY BE INCLUDED IN WORLD DATA CENTERS HOLDINGS FOR INTERNATIONAL EXCHANGE?) <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES <input type="checkbox"/> PART (SPECIFY BELOW)			
10. PERSON TO WHOM INQUIRIES CONCERNING DATA SHOULD BE ADDRESSED WITH TELEPHONE NUMBER (AND ADDRESS IF OTHER THAN IN ITEM-1) <i>Dr. H. Feder P.O. Hadley ims / U.A.</i>			

B. SCIENTIFIC CONTENT

NAME OF DATA FIELD	REPORTING UNITS OR CODE	METHODS OF OBSERVATION AND INSTRUMENTS USED (SPECIFY TYPE AND MODEL)	ANALYTICAL METHODS (INCLUDING MODIFICATIONS) AND LABORATORY PROCEDURES	DATA PROCESSING TECHNIQUES WITH FILTERING AND AVERAGING
<p><i>Benthic Organisms</i></p>	<p><i>Species lists Taxon Code dry wt. in grams</i></p>	<p><i>See procedures & quality control enclosed</i></p>		

C. DATA FORMAT

COMPLETE THIS SECTION FOR PUNCHED CARDS OR TAPE, MAGNETIC TAPE, OR DISC SUBMISSIONS.

**1. LIST RECORD TYPES CONTAINED IN THE TRANSMITTAL OF YOUR FILE
GIVE METHOD OF IDENTIFYING EACH RECORD TYPE**

<p style="font-size: 1.2em; margin: 0;">Record Type</p> <p style="margin: 5px 0 0 20px;">I</p> <p style="margin: 5px 0 0 20px;">II</p> <p style="margin: 5px 0 0 20px;">III</p> <p style="margin: 5px 0 0 20px;">IV</p>	<p style="margin: 0 0 0 20px;">Header</p> <p style="margin: 5px 0 0 20px;">Station location</p> <p style="margin: 5px 0 0 20px;">Station sampling info</p> <p style="margin: 5px 0 0 20px;">Data</p>
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2. GIVE BRIEF DESCRIPTION OF FILE ORGANIZATION

Batched by Record Type

1

2

3

5

3. ATTRIBUTES AS EXPRESSED IN

<input type="checkbox"/> PL-1	<input type="checkbox"/> ALGOL	<input type="checkbox"/> COBOL
<input checked="" type="checkbox"/> FORTRAN	<input type="checkbox"/> _____	<input type="checkbox"/> LANGUAGE

4. RESPONSIBLE COMPUTER SPECIALIST:

NAME AND PHONE NUMBER Cydney Hansen, (907) 479-7836

ADDRESS Institute of Marine Science, University of Alaska, Fairbanks, AK
99701

COMPLETE THIS SECTION IF DATA ARE ON MAGNETIC TAPE

<p>5. RECORDING MODE</p> <p><input type="checkbox"/> BCD <input type="checkbox"/> BINARY</p> <p><input type="checkbox"/> ASCII <input checked="" type="checkbox"/> EBCDIC</p> <p><input type="checkbox"/> _____</p>	<p>9. LENGTH OF INTER-RECORD GAP (IF KNOWN) <input type="checkbox"/> 3/4 INCH <input checked="" type="checkbox"/> .5 INCH</p>
<p>6. NUMBER OF TRACKS (CHANNELS)</p> <p><input type="checkbox"/> SEVEN</p> <p><input checked="" type="checkbox"/> NINE</p> <p><input type="checkbox"/> _____</p>	<p>10. END OF FILE MARK</p> <p><input type="checkbox"/> OCTAL 17</p> <p><input checked="" type="checkbox"/> OCTAL 23</p>
<p>7. PARITY</p> <p><input checked="" type="checkbox"/> ODD</p> <p><input type="checkbox"/> EVEN</p>	<div style="border: 1px dashed black; padding: 5px;"> <p>281 032 812 DE IONS</p> <p>Discoverer 812</p> <p>Kodiak area stations</p> <p>10/8+10/16/76 H.M. Feder</p> <p>9Trk, 800BPI, EBCDIC, No Label,</p> <p style="text-align: right;">Odd Parity</p> </div>
<p>8. DENSITY</p> <p><input type="checkbox"/> 200 BPI <input type="checkbox"/> 1600 BPI</p> <p><input type="checkbox"/> 556 BPI</p> <p><input checked="" type="checkbox"/> 800 BPI</p> <p><input type="checkbox"/> _____</p>	<p style="text-align: center; font-size: 1.2em;">346 BLOCKS</p> <p>12. PHYSICAL BLOCK LENGTH IN BYTES</p> <p style="text-align: center;">80 BYTES/BLOCK 98 BYTES/BLOCK</p> <p>13. LENGTH OF BYTES IN BITS</p> <p style="text-align: center;">8 BITS/BYTE</p>

RECORD FORMAT DESCRIPTION

RECORD NAME _____

14. FIELD NAME	15. POSITION FROM - 1 MEASURED IN <small>(e.g., bits, bytes)</small>	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
				<i>As per ammended File type '032'</i> <i>accepted 3/31/76</i>	

PROCEDURES AND QUALITY CONTROL

FOR

THE DISTRIBUTION, ABUNDANCE, DIVERSITY, AND PRODUCTIVITY
OF BENTHIC ORGANISMS IN THE GULF OF ALASKA

as used by

Howard M. Feder, Principle Investigator

Contract Number 03-5-022-56

Task Order 20, R. U. #281

BENTHIC ORGANISMS

Field Operations

Grab Sampling

A van Veen grab, with 70 lbs. of extra lead weights is used. The grab sampled an area of 0.1m^2 . At each station five or more replicates are taken, unless weather conditions, sediment type, or ship's schedule preclude adequate sampling. Certain designated stations are sampled with 10 replicates for statistical purposes. This sampling technique is dependent upon bottom type, coarse gravel bottoms cannot be properly sampled.

Each grab is separately emptied into a large wash tub. The sediment is then measured to the nearest 500 ml. using three gallon pails; calibrated and marked in liters with a graduate cylinder and water.

The sediment is emptied into a screening box, 1.0 mm screen. The pails and tub are washed with sea water and the washing emptied into the screening box. The sediment is then washed through the screens using pressurized sea water, less than or equal to 40 psi. Each grab is washed separately in a single screening box.

Once the majority of sediment has been screened out, the larger organisms are gently removed with forceps and retained in a plastic bag. All rocks

are checked for epifauna, if present, the rocks are retained in a separate plastic bag. Any remaining sediment is then screened and remaining organisms are spooned into plastic bags. Sufficient bags are used for each grab to insure that samples are not crushed. A paper label is placed in each bag with the following information: location, station number, sample number, date, collector, Lat., Long., time, depth, gear, and volume.

Samples are covered with hexamine buffered 10% formalin, excess air squeezed out and sealed. Bags for each station are then placed in a larger plastic bag which is sealed and labeled with station number, sample number, date, etc., on outside.

Station bags are placed in numbered plastic buckets for shipment to sorting center, buckets are labeled with the station numbers of the contained samples.

BENTHIC SAMPLE PROCESSING

Laboratory Operations

I. Samples Received

- A. Samples are submitted with a Work Description form and a Sample Inventory form.
- B. Samples are spot checked for preservation and are checked against the Sample Inventory form.
- C. Samples are stored until work begins.

II. Initial Sorting of Samples

- A. Samples are processed in order of priority as indicated on Work Description.
- B. Samples are treated with ammonia to remove most of the formalin.
- C. Sample is rinsed on a 1 mm screen to remove residual formalin and fine sediments.
- D. Sample is spread on a white tray.
- E. Organisms are removed from the sample with forceps and accumulated in disposable petri dishes. The organisms are preliminarily sorted to phenon (look alike) at this stage.
- F. Data form with all information from label is filled out.

III. Identification of Organisms

- A. Organisms are sorted to phenon using a low power stereoscopic microscope.
- B. Organisms are identified and counted by taxon. This information is recorded on the data form prepared in step II. F.
- C. Organisms are drained and blotted for 1 min. on a paper towel and a wet weight is determined for each taxa. This data is recorded on the data form.
- D. Sample is recombined and placed in fresh preservative (40% formalin buffered with hexamine).
- E. Samples are placed in a sealed bag and archived.
- F. The data forms, when complete, are submitted for keypunching.
- G. The Sample Inventory form is then completed and filed.

IV. Voucher preparation

- A. When a new taxon for the study has been identified from a sample a representative is placed in the voucher collection.
- B. The identification of this specimen is confirmed by the individual in the Sorting Center who specializes in the group. If necessary the specimen is sent out to a recognized expert in the area.
- C. This specimen is reviewed by all individuals working on the project.
- D. This set of vouchers will be deposited in the University of Alaska Museum when the study is complete.

S - 444

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WEATHERPROOF

WORK DESCRIPTION

(Note both a work description and a sample inventory must be submitted on all work requests.)

NAME OF PERSON SUBMITTING REQUEST _____

ACCOUNT NUMBER _____ WORK ORDER REQUESTED YES NO WORK ORDER # _____

TYPE OF SAMPLE _____ GEAR USED FOR SAMPLING _____

SAMPLE PURPOSE (Qualitative population estimates, Quantitative population estimates, growth study) _____

LEVEL OF IDENTIFICATION REQUIRED(Phylum, class, species, best possible, etc.) _____

TYPE OF ANALYSIS (Count, wet weight, dry weight, ash free dry weight, etc.) _____

TECHNIQUES(Utermole, type of split, sub-sample size, staining etc.) _____

PRIORITY /Deadlines (Order of sample analysis, date for completion) _____

SPECIAL INSTRUCTIONS (Sample for oil analysis, do not use ~~tar~~ bottomed pan, sample for heavy metal analysis use only distilled water, etc.) _____

DISPOSITION OF SAMPLES WHEN WORK COMPLETED (Dump, save for other analysis, etc.) _____

ADDITIONAL INSTRUCTIONS _____

COMPLETE THIS SECTION FOR PUNCHED CARDS OR TAPE, MAGNETIC TAPE, OR DISC SUBMISSIONS.

1. LIST RECORD TYPES CONTAINED IN THE TRANSMITTAL OF YOUR FILE
GIVE METHOD OF IDENTIFYING EACH RECORD TYPE

File 032

Four record types differentiated by a "Record Type Identifier" field in byte 10 of every record.

RECORD TYPE	DATA TYPE
1	Header (Text) Record (Optional)
2	Station (Sample) Header Record
3	Segment Detail Record
5	Species Record

2. GIVE BRIEF DESCRIPTION OF FILE ORGANIZATION

[Empty box for file organization description]

3. ATTRIBUTES AS EXPRESSED IN PL-1 ALGOL COBOL
 FORTRAN _____ LANGUAGE

4. RESPONSIBLE COMPUTER SPECIALIST:

NAME AND PHONE NUMBER _____
ADDRESS _____

COMPLETE THIS SECTION IF DATA ARE ON MAGNETIC TAPE

<p>5. RECORDING MODE</p> <p><input type="checkbox"/> BCD <input type="checkbox"/> BINARY</p> <p><input type="checkbox"/> ASCII <input checked="" type="checkbox"/> EBCDIC</p> <p><input type="checkbox"/> _____</p>	<p>9. LENGTH OF INTER-RECORD GAP (IF KNOWN) <input type="checkbox"/> 3/4 INCH</p> <p><input type="checkbox"/> _____</p>
<p>6. NUMBER OF TRACKS (CHANNELS)</p> <p><input type="checkbox"/> SEVEN</p> <p><input checked="" type="checkbox"/> NINE</p> <p><input type="checkbox"/> _____</p>	<p>10. END OF FILE MARK</p> <p><input type="checkbox"/> OCTAL 17</p> <p><input type="checkbox"/> _____</p>
<p>7. PARITY</p> <p><input checked="" type="checkbox"/> ODD</p> <p><input type="checkbox"/> EVEN</p>	<p>11. PASTE-ON-PAPER LABEL DESCRIPTION (INCLUDE ORIGINATOR NAME AND SOME LAY SPECIFICATIONS OF DATA TYPE, VOLUME NUMBER)</p> <p>_____</p>
<p>8. DENSITY</p> <p><input type="checkbox"/> 200 BPI <input type="checkbox"/> 1600 BPI</p> <p><input type="checkbox"/> 556 BPI</p> <p><input checked="" type="checkbox"/> 800 BPI</p> <p><input type="checkbox"/> _____</p>	<p>12. PHYSICAL BLOCK LENGTH IN BYTES</p> <p>_____</p> <p>13. LENGTH OF BYTES IN BITS</p> <p>_____</p>

RECORD FORMAT DESCRIPTION

RECORD NAME HEADER (TEXT) RECORD (OPTIONAL)

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN <small>(e.g., bits, bytes)</small>	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	Bytes	A3	Always '032'
Cruise Number	4	6	Bytes	A6	
Record Type	10	1	Bytes	I1	Always '1'
Ship Name	11	6	Bytes	A6	
Text	17	62	Bytes	62A1	
Sequence Number	79	2	Bytes	I2	Incremented by one for each text record.
Blank	81	6	Bytes	6X	

99

Station 4

Steel 6

BENTHIC ORGANISMS
RECORD FORMAT DESCRIPTION

RECORD NAME STATION (SAMPLE) HEADER RECORD

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	Bytes	A3	Always '032'
Cruise Number	4	6	Bytes	A6	
Record Type	10	1	Bytes	A1	Always '2'
Station Number	11	5	Bytes	I5	
Start Depth	16	4	Bytes	I4	To whole meters
Start Date (GMT)					
Year	20	2	Bytes	I2	00 to 99
Month	22	2	Bytes	I2	01 to 12
Day	24	2	Bytes	I2	01 to 31
Start Time (GMT)					
Hour	26	3	Bytes	I3	To tenths (000 to 239)
Start Latitude					
Degrees	29	2	Bytes	I2	00 to 80
Minutes	31	2	Bytes	I2	00 to 59
Seconds	33	2	Bytes	I2	00 to 59
Hemisphere	35	1		A1	'N' or 'S'
Start Longitude					
Degrees	36	3	Bytes	I3	000 to 180
Minutes	39	2	Bytes	I2	00 to 59
Seconds	41	2	Bytes	I2	00 to 59
Hemisphere	43	1	Bytes	A1	'E' or 'W'
End Depth	44	4	Bytes	I4	To whole meters

RECORD FORMAT DESCRIPTION

RECORD NAME STATION (SAMPLE) HEADER RECORD, CONTINUED

FIELD NAME	15. POSITION FROM -1 MEASURED IN <small>(e.g., bits, bytes)</small>	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
End Date (GMT)					
Year	48	2	Bytes	I2	00 to 99
Month	50	2	Bytes	I2	01 to 12
Day	52	2	Bytes	I2	01 to 31
End Time (GMT)					
Hours	54	3	Bytes	I3	To tenths (000 to 239)
End Latitude					
Degrees	57	2	Bytes	I2	00 to 90
Minutes	59	2	Bytes	I2	00 to 59
Seconds	61	2	Bytes	I2	00 to 59
Hemisphere	63	1	Bytes	A1	'N' or 'S'
End Longitude					
Degrees	64	3	Bytes	I3	000 to 180
Minutes	67	2	Bytes	I2	00 to 59
Seconds	69	2	Bytes	I2	00 to 59
Hemisphere	71	1	Bytes	A1	'E' or 'W'
Distance Offshore	72	3	Bytes	I3	Distance to nearest shoreline in whole kilometers.
Tow Direction	75	3	Bytes	I3	Direction from true North in whole degrees.
Blank	78	9	Bytes	9X	

RECORD FORMAT DESCRIPTION

SEGMENT DETAIL RECORD

RECORD NAME

14. FIELD NAME	15. POSITION FROM - 1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	Bytes	I3	Always '032'
Cruise Number	4	6	Bytes	I6	
Record Type	10	1	Bytes	I1	Always '3'
Station Number	11	5	Bytes	I5	
Sample Segment					
Start Depth	16	2	Bytes	I2	Start depth of segment within sample in cm.
End Depth	18	2	Bytes	I2	End depth of segment within sample in cm.
Penetration Depth	20	3	Bytes	I3	Core penetration in mm.
Area Sampled	23	7	Bytes	I7	Meters squared to thousandths
Bottom Salinity	30	5	Bytes	I5	Parts per thousand to thousandths
Bottom Temperature	35	4	Bytes	I4	Degrees Celsius to hundredths
Bottom Oxygen	39	3	Bytes	I3	Milliliters per liter to tenths
Sediment Organic Carbon	42	4	Bytes	I4	Percent by weight to hundredths
Sediment Total Carbon	46	4	Bytes	I4	Percent by weight to hundredths
Sand	50	3	Bytes	I3	Percent by volume to tenths
Silt	53	3	Bytes	I3	Percent by volume to tenths
Clay	56	3	Bytes	I3	Percent by volume to tenths
Minimum Sieve Size	59	4	Bytes	I4	Millimeters to hundredths
Wire Length	63	4	Bytes	I4	Length of wire out in whole meters.
Wire Angle	67	2	Bytes	I2	In whole degrees from verticals

RECORD FORMAT DESCRIPTION

RECORD NAME SEGMENT DETAIL RECORD, CONTINUED

14. FIELD NAME	15. POSITION FROM - 1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
Average Phi Size	69	3	Bytes	I3	To tenths
Equipment Code	72	3	Bytes	A3	'BMT' = Beam Trawl 'OTB' = Otter Trawl 'SMG' = Smith-MacIntyre Grab 'DSC' = Deep Sea Camera 'MCB' = Multiple Core 'QCB' = 1/4 Meter Sq. Box Core 'GMB' = 1/10 Meter Sq. Box Core 'VVG' = Van Veen Grab Originator's Number
Sample Number	75	4	Bytes	I4	Originator's Number
Segment Sequence	79	2	Bytes	I2	Sequential number indicating an individual segment of a sample. These numbers should be consecutive (01,02,03,etc.)
Sample Volume	81	4	Bytes	I4	Liters to tenths
Number of Grabs	85	2	Bytes	I2	Total number making up sample volume

3/31/76

BENTHIC ORGANISMS
RECORD FORMAT DESCRIPTION

RECORD NAME SPECIES RECORD

FIELD NAME	15. POSITION FROM-1, MEASURED IN Bytes (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	Bytes	A3	Always '032'
Cruise Number	4	6	Bytes	A6	
Record Type	10	1	Bytes	I1	Always '5'
Station Number	11	5	Bytes	I5	
Species Code	16	10	Bytes	5A2	
Sub Species Code	26	2	Bytes	A2	
Number of Individuals	28	5	Bytes	I5	
Species Total Weight	33	10	Bytes	I10	Grams to thousandths
Blank	43	36	Bytes	36X	
Segment Sequence Number	79	2	Bytes	I2	Corresponding to the sample segment sequence number in which the species is found.
Blank	81	6	Bytes	6X	(e.g. when record type 3 has a segment sequence no. of 06, all record type 5 records associated will have segment sequence no. of 06.)
					<p>The first N records (optional) of each file may be Type 1 records sequenced in ascending order 01 through N. Each sampling station within the file will begin with a single Type 2 record. Each segment within a sample will have one Type 3 record with a unique, ascending sequence number (01 through the total number of delineated segments). Each species detected in a segment will have a unique Type 5 record and will be tied to the segment with a corresponding segment sequence number.</p>

Benthic Organisms

Header (Text)

FILE TYPE	CRUISE NUMBER	RECORD TYPE	VESSEL NAME	TEXT	BLANK
(032)					

Station (Sample)

FILE TYPE	CRUISE NUMBER	RECORD TYPE	STATION NUMBER	START DEPTH (M)	START DATE (GMT)			START TIME (GMT)			START LATITUDE			START LONGITUDE			END DEPTH (M)	END DATE			END TIME (GMT)			END LATITUDE			END LONGITUDE			DISTANCE OFF-SHORE (KM)	TOW DIRECTION (DEG.)	BLANK
					YR.	MO.	DY.	HR.	%	DEG.	MIN.	SEC.	N OF S	DEG.	MIN.	SEC.		E OF W	YR.	MO.	DY.	HR.	%	DEG.	MIN.	SEC.	N OF S	DEG.	MIN.			
(032)																																

Segment Detail

FILE TYPE	CRUISE NUMBER	RECORD TYPE	STATION NUMBER	SAMPLE SEGMENT (CM)		CORE PENETRATION DEPTH (MM)	AREA SAMPLED (M ² TO THOUSANDTHS)	BOTTOM SALINITY (‰ TO THOUSANDTHS)	BOTTOM TEMPERATURE (°C TO HUNDREDTHS)	BOTTOM OXYGEN CONC. (ML/L TO TENTHS)	SEDIMENT CARBON		PERCENT SAND (TO TENTHS)	PERCENT SILT (TO TENTHS)	PERCENT CLAY (TO TENTHS)	MINIMUM SIEVE SIZE (MM. TO HUNDREDTHS)	WIRE LENGTH OUT (M)	WIRE ANGLE (DEG.)	AVG. PHI SIZE (TO TENTHS)	EQUIPMENT CODE	SAMPLE NUMBER	SEGMENT NO.	VOLUME OF SAMPLE (LITERS TO %)	NO. OF GRASS IN SAMPLE (VOL. LITER)
				START DEPTH	END DEPTH						ORGANIC	TOTAL												
(032)																								

Species

FILE TYPE	CRUISE NUMBER	RECORD TYPE	STATION NUMBER	SPECIES CODE	SUBSPECIES	NUMBER OF INDIVIDUALS	SPECIES TOTAL WEIGHT (GRAMS TO THOUSANDTHS)	BLANK	SEGMENT NO.	BLANK
(032)										

D. INSTRUMENT CALIBRATION

This calibration information will be utilized by NOAA's National Oceanographic Instrumentation Center in their efforts to develop calibration standards for voluntary acceptance by the oceanographic community. Identify the instruments used by your organization to obtain the scientific content of the DDF (i.e., STD, temperature and pressure sensors, salinometers, oxygen meters, velocimeters, etc.) and furnish the calibration data requested by completing and/or checking ("✓") the appropriate spaces. Add the interval time (i.e., 3 months, 6 months, 9 months, etc.) if the fixed interval calibration cycle is checked.

INSTRUMENT TYPE (MFR., MODEL NO.)	DATE OF LAST CALIBRATION	INSTRUMENT WAS CALIBRATED BY		CHECK ONE: INSTRUMENT IS CALIBRATED					INSTRUMENT IS NOT CALI- BRATED (✓)
		YOUR ORGANIZATION (✓)	OTHER ORGANIZATION (GIVE NAME)	AT FIXED INTERVALS (✓)	BEFORE OR AFTER USE (✓)	BEFORE AND AFTER USE (✓)	ONLY AFTER REPAIR (✓)	ONLY WHEN NEW (✓)	
N/A									

DDF A: 2: 01

DATA SET FILE NAME

ACQUISITION/TRACE

7601793 / 0440

Step	Completion Date/Init.	Operator	Tape or Disk	# of Files	BLKSIZE	LRECL	# RECORDS
ORIGINATOR TAPE #	12/1/81	J.E.B.	017459	1	86	86	346
QUAD/SCAN TAPE #	12/1/81	J.E.B.	W000171	1	86	86	346
ASSIGNED FOR PROCESS.							
DDF EVALUATION	12/8/81	MR					
QUALITY REVIEW	12/8/81	MR					
PRELIMINARY DATA SORT							
LIBRARY MULECHK	12/8/81	MR	D15773 * F032. TR0440				
FIRST USER TAPE #							
WORK DISK FILE	12/8/81	MR	D15773 * F032. TR0440				
FINAL USER TAPE #							
FINAL MULECHK	12/8/81	MR	D15773 * F032. TR0440				
EDITED DISK FILE							
DATA SET "FINALIZED"							

DATE:

TO:

FROM:

SUBJECT: Error Correction in Processing of Data Set - Accession # 7601793

- 1) File Type: 032
- 2) Project Ident.: OCSEAP
- 3) Track Nos.: 0440

I. Error Corrections as reported to Principal Investigator:

Error

Correction Completed (Check)

II. Additional error corrections:

Error

Correction Completed (Check)

1. Job code change (5001030101 to 5001040101)

M. Lewis

TAPE OR DISK ASSIGNMENT SHEET

(MRL) 11/6/78

(Rev. 11/80)

ION/TRACK NO.: 7601993 / 0440

TYPE OF TAPE	TAPE NUMBER	LABEL	LRECL	BLKSIZE	RECFM	REMARKS	# RECORDS
ORIGINATOR	017459	NL	86	86	FB		346
DUPLICATE	W00017	NL	86	86	FB		346
REFORMATTED							
FIRST							
FINAL USER							
DISK FILE	DSN					REMARKS	# RECORDS
WORK DISK FILE	DIS 773* F032. TR0440						346
EDITED DISK FILE							

76-01793

TR0440

F032

Taxonomic codes

Tax code 5001030101 - was not found. Can not find code in code book. (Corrected 12/11/81)

Pen this animal wt - below range - looks ok.

M Lewis

07 Dec. 1981

let the below range of animal wts
go through
had

PRIVATE MESSAGE TO YOU

KEYWORDS:

MESSAGE 2588, TAX CODE ANSWER

TO SID HALMINSKI
FROM MARILYN ALLEN
SUBJ: YOUR MESSAGE #2588 - TAX CODE

RECEIVED YOUR MESSAGE AND HAVE LOCATED THE PROBLEM. HERE GOES.....

BEFORE THE 1981 (3RD VERSION) NODC TAX CODE FILE WAS RELEASED, WE RECEIVED A REVISION TO THE 1978 VASCULAR PLANT SECTION. DUE TO THAT REVISED SECTION, WE CREATED ANOTHER MASTER FILE WHICH WE REFERED TO AS THE 1981 NODC CODE. THEREFORE, ALL DATA SETS WHICH HAD PLANT CODES 32-34 IN THE 1978 CODE WERE CONVERTED TO THE NEW "1981" CODE. ALL THIS DID WAS TO UPDATE THE VASCULAR PLANT SECTION. AFTER THE 1981 3RD VERSION WAS RELEASED, MARY HOLLINGER INFORMED US THAT NUMEROUS CODE BESIDES THE VASCULAR PLANTS WERE NOW DIFFERENT. IN FACT, THE 1978 CODE FILE AND THE 1981 CODE FILE WERE VERY VERY DIFFERENT. WHICH MEANS THAT ALL DATA WHICH WAS SUBMITTED IN THE 1978 OR "1981-PLANT" CODE MAY NOT (PROBABLY WILL NOT) EQUAL THE 1981 3RD VERSION. THE CONCLUSION DRAWN BETWEEN MARY, MIKE, AND I WAS THAT THIS WOULD MAKE FOR SOME REAL PROBLEMS. ESPECIALLY SINCE NAMES MAY HAVE CHANGED FOR A NUMBER, ECT.

WELL, AS YOU WILL HAVE GUESSED, THIS IS ONE OF THOSE PROBLEMS. THE CODE NUMBER 5001030101 = PEISIDICE ASPERA AND IS A VALID CODE IN THE MAY 1978 NODC TAX CODE BOOK. IT IS ALSO A VALID CODE IN THE 1981 VERSION 3 NODC TAX CODE BOOK ----- ALTHOUGH HERE IT HAS NUMBER OF 5001040101 = PEISIDICE ASPERA. BOTH OF THESE NUMBERS WITH THE SAME NAME HAVE ALASKA CODE NUMBERS OF 4801020101.

THE FEDER DATA SET YOU MENTIONED IN YOUR MESSAGE AND THE ONE WE FINAL PROCESSED, WAS RECEIVED BY US IN THE ALASKA CODE. WE CHECKED THE TAX CODES AND FOUND THAT THERE WERE VASCULAR PLANT CODES, SO THEY WERE CONVERTED TO THE "1981-PLANT" CODE INSTEAD OF JUST THE 1978 CODE WHICH WOULD OTHERWISE HAVE BEEN DONE. REMEMBERING THAT THE ONLY DIFFERENCE IN THE 1978 CODE AND THE "1981-PLANT" CODE ARE THE NUMBERS FROM 32-34, MEANS THAT ALL OTHER NUMBERS ARE IN THE 1978 NODC TAX CODE. SO ESSENTIALLY, ANY DATA SETS CONVERTED FROM ALASKA CODE TO NODC CODE BEFORE NOVEMBER 1981 WERE 1978 CODE UNLESS THERE WERE VASCULAR PLANT CODES. THESE WOULD BE THE IN THE "1981-PLANT" CODE OR 1978 CODE WITH THE 1981 VASCULAR PLANT SECTION. ONCE WE RECEIVED THE 1981 3RD VERSION, WE REVISED OUR MASTER FILES SO THAT WE ARE ABLE TO CORRECTLY AND EFFECIENTLY CONVERT ALL TAX CODES WHETHER ALASKA OR 1978 TO THE NODC 1981 CODE. THIS WAS IN OPERATION AS OF NOVEMBER, 1981.

WHEN WE HAD RECEIVED THE VASCULAR PLANT UPDATE, WE WERE UNAWARE OF ANY FURTHER UPDATES TO THE TAX CODE FILE. AT THAT TIME, WHICH WAS MONTHS AHEAD OF THE 1981 3RD VERSION, THOSE WERE ASSUMED TO BE THE REVISIONS TO THE TAX CODE FILE. WITH THE RELEASE OF THE 1981 3RD VERSION AND THE TALK WITH MARY, THAT WAS NO LONGER TRUE.

HOPEFULLY, THIS LONG-WINDED EXPLANATION WILL ANSWER YOU SHORT QUESTION.]
YOU HAVE ANY MORE QUESTIONS ON THIS FEEL FREE TO ASK.

CC MARY HOLLINGER

DATA DOCUMENTATION FORM

10/8/76

NOAA FORM 24-13
(4-72)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEANOGRAPHIC DATA CENTER
RECORDS SECTION
ROCKVILLE, MARYLAND 20852

PV231
TR0440

FORM APPROVED
O.M.B. No. 41-R265

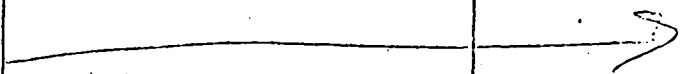
This form should accompany all data submissions to NODC. Section A, Originator Identification, must be completed when the data are submitted. It is highly desirable for NODC to also receive the remaining pertinent information at that time. This may be most easily accomplished by attaching reports, publications, or manuscripts which are readily available describing data collection, analysis, and format specifics. Readable, handwritten submissions are acceptable in all cases. All data shipments should be sent to the above address.

A. ORIGINATOR IDENTIFICATION

THIS SECTION MUST BE COMPLETED BY DONOR FOR ALL DATA TRANSMITTALS

1. NAME AND ADDRESS OF INSTITUTION, LABORATORY, OR ACTIVITY WITH WHICH SUBMITTED DATA ARE ASSOCIATED			
<p>Dr. H. Feder Institute of Marine Science University of Alaska Box AK 92701</p>			
2. EXPEDITION, PROJECT, OR PROGRAM DURING WHICH DATA WERE COLLECTED		3. CRUISE NUMBER(S) USED BY ORIGINATOR TO IDENTIFY DATA IN THIS SHIPMENT	
<p>OCS / NOAA / BLM Benthic Organisms</p>		<p>Discoverer 812</p>	
4. PLATFORM NAME(S)	5. PLATFORM TYPE(S) (E.G., SHIP, BUOY, ETC.)	6. PLATFORM AND OPERATOR NATIONALITY(IES)	7. DATES
<p>Discoverer</p>	<p>Ship</p>	PLATFORM	OPERATOR
		<p>USA</p>	<p>USA</p>
		FROM: MO/PAY/YR	TO: MO/DAY
		<p>10/8/75</p>	<p>10/16/75</p>
8. ARE DATA PROPRIETARY?		11. PLEASE DARKEN ALL MARSDEN SQUARES IN WHICH ANY DATA CONTAINED IN YOUR SUBMISSION WERE COLLECTED.	
<input type="checkbox"/> NO <input type="checkbox"/> YES IF YES, WHEN CAN THEY BE RELEASED FOR GENERAL USE? YEAR _____ MONTH _____		<p>GENERAL AREA</p>	
9. ARE DATA DECLARED NATIONAL PROGRAM (DNP)? (I.E., SHOULD THEY BE INCLUDED IN WORLD DATA CENTERS HOLDINGS FOR INTERNATIONAL EXCHANGE?)			
<input type="checkbox"/> NO <input type="checkbox"/> YES <input type="checkbox"/> PART (SPECIFY BELOW)			
10. PERSON TO WHOM INQUIRIES CONCERNING DATA SHOULD BE ADDRESSED WITH TELEPHONE NUMBER (AND ADDRESS IF OTHER THAN IN ITEM-1)			
<p>Dr. H. Feder 95 Hooding ims / U.A.</p>			

B. SCIENTIFIC CONTENT

NAME OF DATA FIELD	REPORTING UNITS OR CODE	METHODS OF OBSERVATION AND INSTRUMENTS USED (SPECIFY TYPE AND MODEL)	ANALYTICAL METHODS (INCLUDING MODIFICATIONS) AND LABORATORY PROCEDURES	DATA PROCESSING TECHNIQUES WITH FILTERING AND AVERAGING
<p><i>Benthic Organisms</i></p>	<p><i>Species lists Taxon Code dry wt. in grams</i></p>	<p><i>See procedures & quality control enclosed</i></p>		

C. DATA FORMAT

COMPLETE THIS SECTION FOR PUNCHED CARDS OR TAPE, MAGNETIC TAPE, OR DISC SUBMISSIONS.

**1. LIST RECORD TYPES CONTAINED IN THE TRANSMITTAL OF YOUR FILE
GIVE METHOD OF IDENTIFYING EACH RECORD TYPE**

<i>Record Type I</i>	<i>Header</i>
<i>II</i>	<i>Station location</i>
<i>III</i>	<i>Station sampling info</i>
<i>IV</i>	<i>Data</i>

2. GIVE BRIEF DESCRIPTION OF FILE ORGANIZATION

Batched by Record Type

1
2
3
5

3. ATTRIBUTES AS EXPRESSED IN

<input type="checkbox"/> PL-1	<input type="checkbox"/> ALGOL	<input type="checkbox"/> COBOL
<input checked="" type="checkbox"/> FORTRAN	<input type="checkbox"/> _____	<input type="checkbox"/> LANGUAGE

4. RESPONSIBLE COMPUTER SPECIALIST:

NAME AND PHONE NUMBER Cydney Hansen, (907) 479-7836
 ADDRESS Institute of Marine Science, University of Alaska, Fairbanks, AK
99701

COMPLETE THIS SECTION IF DATA ARE ON MAGNETIC TAPE

<p>5. RECORDING MODE</p> <p><input type="checkbox"/> BCD <input type="checkbox"/> BINARY</p> <p><input type="checkbox"/> ASCII <input checked="" type="checkbox"/> EBCDIC</p> <p><input type="checkbox"/> _____</p>	<p>9. LENGTH OF INTER-RECORD GAP (IF KNOWN) <input type="checkbox"/> 3/4 INCH <input checked="" type="checkbox"/> .5 INCH</p>
<p>6. NUMBER OF TRACKS (CHANNELS)</p> <p><input type="checkbox"/> SEVEN</p> <p><input checked="" type="checkbox"/> NINE</p> <p><input type="checkbox"/> _____</p>	<p>10. END OF FILE MARK</p> <p><input type="checkbox"/> OCTAL 17</p> <p><input checked="" type="checkbox"/> OCTAL 23</p>
<p>7. PARITY</p> <p><input checked="" type="checkbox"/> ODD</p> <p><input type="checkbox"/> EVEN</p>	<p>11.</p> <p>281 032 812 DE Discoverer 812 ONS Kodiak area stations 10/8-10/16/76 H.M. Feder 9Trk, 800BPI, EBCDIC, No Label, Odd Parity</p>
<p>8. DENSITY</p> <p><input type="checkbox"/> 200 DPI <input type="checkbox"/> 1600 BPI</p> <p><input type="checkbox"/> 556 DPI</p> <p><input checked="" type="checkbox"/> 800 DPI</p> <p><input type="checkbox"/> _____</p>	<p>12. PHYSICAL BLOCK LENGTH IN BYTES</p> <p>86 BYTES/BLOCK</p>
	<p>13. LENGTH OF BYTES IN BITS</p> <p>8 BITS/BYTE</p>

RECORD FORMAT DESCRIPTION

RECORD NAME _____

14. FIELD NAME	15. POSITION FROM - 1 MEASURED IN <small>(e.g., bits, bytes)</small>	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
				<p><i>File type '032'</i></p> <p><i>accepted 3/31/76</i></p>	

D. INSTRUMENT CALIBRATION

This calibration information will be utilized by NOAA's National Oceanographic Instrumentation Center in their efforts to develop calibration standards for voluntary acceptance by the oceanographic community. Identify the instruments used by your organization to obtain the scientific content of the DDF (i.e., STD, temperature and pressure sensors, salinometers, oxygen meters, velocimeters, etc.) and furnish the calibration data requested by completing and/or checking ("✓") the appropriate spaces. Add the interval time (i.e., 3 months, 6 months, 9 months, etc.) if the fixed interval calibration cycle is checked.

INSTRUMENT TYPE (MFR., MODEL NO.)	DATE OF LAST CALIBRATION	INSTRUMENT WAS CALIBRATED BY		CHECK ONE: INSTRUMENT IS CALIBRATED					INSTRUMENT IS NOT CALI- BRATED (✓)
		YOUR ORGANIZATION (✓)	OTHER ORGANIZATION (GIVE NAME)	AT FIXED INTERVALS (✓)	BEFORE OR AFTER USE (✓)	BEFORE AND AFTER USE (✓)	ONLY AFTER REPAIR (✓)	ONLY WHEN NEW (✓)	
N/A									

PROCEDURES AND QUALITY CONTROL

FOR

THE DISTRIBUTION, ABUNDANCE, DIVERSITY, AND PRODUCTIVITY
OF BENTHIC ORGANISMS IN THE GULF OF ALASKA

as used by

Howard M. Feder, Principle Investigator
Contract Number 03-5-022-56
Task Order 20, R. U. #281

BENTHIC ORGANISMS

Field Operations

Grab Sampling

A van Veen grab, with 70 lbs. of extra lead weights is used. The grab sampled an area of 0.1m^2 . At each station five or more replicates are taken, unless weather conditions, sediment type, or ship's schedule preclude adequate sampling. Certain designated stations are sampled with 10 replicates for statistical purposes. This sampling technique is dependent upon bottom type, coarse gravel bottoms cannot be properly sampled.

Each grab is separately emptied into a large wash tub. The sediment is then measured to the nearest 500 ml. using three gallon pails; calibrated and marked in liters with a graduate cylinder and water.

The sediment is emptied into a screening box, 1.0 mm screen. The pails and tub are washed with sea water and the washing emptied into the screening box. The sediment is then washed through the screens using pressurized sea water, less than or equal to 40 psi. Each grab is washed separately in a single screening box.

Once the majority of sediment has been screened out, the larger organisms are gently removed with forceps and retained in a plastic bag. All rocks

are checked for epifauna, if present, the rocks are retained in a separate plastic bag. Any remaining sediment is then screened and remaining organisms are spooned into plastic bags. Sufficient bags are used for each grab to insure that samples are not crushed. A paper label is placed in each bag with the following information: location, station number, sample number, date, collector, Lat., Long., time, depth, gear, and volume.

Samples are covered with hexamine buffered 10% formalin, excess air squeezed out and sealed. Bags for each station are then placed in a larger plastic bag which is sealed and labeled with station number, sample number, date, etc., on outside.

Station bags are placed in numbered plastic buckets for shipment to sorting center, buckets are labeled with the station numbers of the contained samples.

BENTHIC SAMPLE PROCESSING

Laboratory Operations

I. Samples Received

- A. Samples are submitted with a Work Description form and a Sample Inventory form.
- B. Samples are spot checked for preservation and are checked against the Sample Inventory form.
- C. Samples are stored until work begins.

II. Initial Sorting of Samples

- A. Samples are processed in order of priority as indicated on Work Description.
- B. Samples are treated with ammonia to remove most of the formalin.
- C. Sample is rinsed on a 1 mm screen to remove residual formalin and fine sediments.
- D. Sample is spread on a white tray.
- E. Organisms are removed from the sample with forceps and accumulated in disposable petri dishes. The organisms are preliminarily sorted to phenon (look alike) at this stage.
- F. Data form with all information from label is filled out.

III. Identification of Organisms

- A. Organisms are sorted to phenon using a low power stereoscopic microscope.
- B. Organisms are identified and counted by taxon. This information is recorded on the data form prepared in step II. F.
- C. Organisms are drained and blotted for 1 min. on a paper towel and a wet weight is determined for each taxa. This data is recorded on the data form.
- D. Sample is recombined and placed in fresh preservative (40% formalin buffered with hexamine).
- E. Samples are placed in a sealed bag and archived.
- F. The data forms, when complete, are submitted for keypunching.
- G. The Sample Inventory form is then completed and filed.

IV. Voucher preparation

- A. When a new taxon for the study has been identified from a sample a representative is placed in the voucher collection.
- B. The identification of this specimen is confirmed by the individual in the Sorting Center who specializes in the group. If necessary the specimen is sent out to a recognized expert in the area.
- C. This specimen is reviewed by all individuals working on the project.
- D. This set of vouchers will be deposited in the University of Alaska Museum when the study is complete.

S-444

GRAVEL
SAND
MUD

SOUPY
SOFT
COMPACT

SHELL
WOOD

OXIDIZED
REDUCED

COLOR

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SAND
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10-10-60

WORK DESCRIPTION

(Note both a work description and a sample inventory must be submitted on all work requests.)

NAME OF PERSON SUBMITTING REQUEST _____

ACCOUNT NUMBER _____ WORK ORDER REQUESTED YES NO WORK ORDER # _____

TYPE OF SAMPLE _____ GEAR USED FOR SAMPLING _____

SAMPLE PURPOSE (Qualitative population estimates, Quantitative population estimates, growth study) _____

LEVEL OF IDENTIFICATION REQUIRED(Phylum, class, species, best possible, etc.) _____

TYPE OF ANALYSIS (Count, wet weight, dry weight, ash free dry weight, etc.) _____

TECHNIQUES(Utermole, type of split, sub-sample size, staining etc.) _____

PRIORITY /Deadlines (Order of sample analysis, date for completion) _____

SPECIAL INSTRUCTIONS (Sample for oil analysis, do not use tar bottomed pan, sample for heavy metal analysis use only distilled water, etc.) _____

DISPOSITION OF SAMPLES WHEN WORK COMPLETED (Dump, save for other analysis, etc.) _____

ADDITIONAL INSTRUCTIONS _____

Password:

accNo	fileA	refNo	proj	inst	ship	startDate	cruise	catId
7601793	F132	TR0440	0081	31I7	31DS	1975/10/13	812	301207

(1 row affected)

Password:

accNo	fileA	refNo	ship	staCnt	recCnt	startDate	endDate
7601793	F132	TR0440	31DS	3	347	75/10/13	75/10/14

(1 row affected)

Password:

accNo	fleA	refNo	proj	inst	ship	startDate	cruise	catId
7617993	F022	TT3028	0073	3547	35CI	1974/07/25	NULL	302336
7617993	C022	359136	0073	3547	35CI	1974/07/25	TT3028	302337

(2 rows affected)

Password:

accNo	fileA	refNo	ship	staCnt	recCnt	startDate	endDate
7617993	F022	TT3028	35CI	55	5202	74/07/25	74/08/10
7617993	C022	359136	35CI	55	100	74/07/25	74/08/10

(2 rows affected)