ACCESSION NUMBER 7100509

DATA DOCUMENTATION FORM

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

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.

A01349

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

DR. ROBERT H. PARKER
DEPT. OF BIOLOGY
TEXAS CHRISTIAN UNIVERSITY
FORT WORTH, TEXAS 76129

2. EXPEDITION, PROJECT, OR PROGRAM DURING WHICH DATA WERE COLLECTED

ECOLOGICAL STUDY OF HADLEY HARBOR, MASS.

3. CRUISE NUMBER(S) USED BY ORIGINATOR TO IDENTIFY DATA IN THIS SHIPMENT

?

4. PLATFORM NAME(S)	5. PLATFORM TYPE(S) *(E.G., SHIP, BUOY, ETC.)*	6. PLATFORM AND OPERATOR NATIONALITY(IES)		7. DATES	
		PLATFORM	OPERATOR	FROM: MO/DAY/YR	TO: MO/DAY/YR
?	?	?	?	?	?

8. ARE DATA PROPRIETARY?

☐ NO ☐ YES

IF YES, WHEN CAN THEY BE RELEASED FOR GENERAL USE? YEAR____ MONTH____

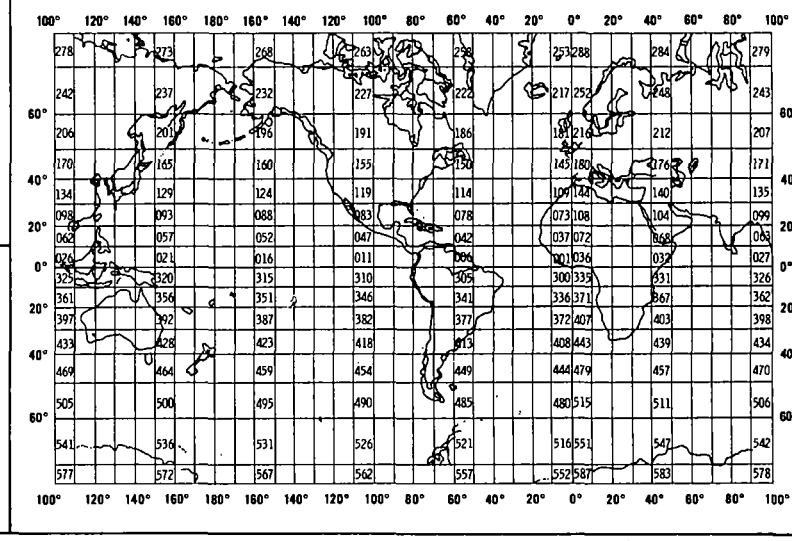
9. ARE DATA DECLARED NATIONAL PROGRAM (DNP)?
(I.E., SHOULD THEY BE INCLUDED IN WORLD DATA CENTERS HOLDINGS FOR INTERNATIONAL EXCHANGE?)

☐ NO ☐ YES ☐ PART *(SPECIFY BELOW)*

10. PERSON TO WHOM INQUIRIES CONCERNING DATA SHOULD BE ADDRESSED WITH TELEPHONE NUMBER *(AND ADDRESS IF OTHER THAN IN ITEM-1)*

11. PLEASE DARKEN ALL MARSDEN SQUARES IN WHICH ANY DATA CONTAINED IN YOUR SUBMISSION WERE COLLECTED.

GENERAL AREA



B. SCIENTIFIC CONTENT

Include enough information concerning manner of observation, instrumentation, analysis, and data reduction routines to make them understandable to future users. Furnish the minimum documentation considered relevant to each data type. Documentation will be retained as a permanent part of the data and will be available to future users. Equivalent information already available may be substituted for this section of the form (i.e., publications, reports, and manuscripts describing observational and analytical methods). If you do not provide equivalent information by attachment, please complete the scientific content section in a manner similar to the one shown in the following example.

EXAMPLE (HYPOTHETICAL INFORMATION)

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
Salinity	‰	Nansen bottles	Inductive salinometer (Hytech model S 510)	N/A (Not applicable)
		STD Bissett-Berman Model 9006	N/A	Values averaged over 5-meter intervals
Water color	Forel scale	Visual comparison with Forel bottles	N/A	N/A
Sediment size	ϕ units and percent by weight	Ewing corer	Standard sieves. Carbonate fraction removed by acid treatment	Same as "Sedimentary Rock Manual," Folk '65

(SPACE IS PROVIDED ON THE FOLLOWING TWO PAGES FOR THIS INFORMATION)

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

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

C. DATA FORMAT

This information is requested only for data transmitted on punched cards or magnetic tape. Have one of your data processing specialists furnish answers either on the form or by attaching equivalent readily available documentation. Identify the nature and meaning of all entries and explain any codes used.

1. List the record types contained in your file transmittal (e.g., tape label record, master, detail, standard depth, etc.).

2. Describe briefly how your file is organized.

3-13. Self-explanatory.

14. Enter the field name as appropriate (e.g., header information, temperature, depth, salinity.

15. Enter starting position of the field.

16. Enter field length in number columns and unit of measurement (e.g., bit, byte, character, word) in unit column.

17. Enter attributes as expressed in the programming language specified in item 3 (e.g., "F 4.1," "BINARY FIXED (5.1)").

18. Describe field. If sort field, enter "SORT 1" for first, "SORT 2" for second, etc. If field is repeated, state number of times it is repeated.

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

2. GIVE BRIEF DESCRIPTION OF FILE ORGANIZATION

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

4. RESPONSIBLE COMPUTER SPECIALIST:
NAME AND PHONE NUMBER MIKE HENRY
ADDRESS TCU, FT. WORTH, TEXAS 76129

COMPLETE THIS SECTION IF DATA ARE ON MAGNETIC TAPE

5. RECORDING MODE ☒ BCD ☐ BINARY ☐ ASCII ☐ EBCDIC ☐ _____

6. NUMBER OF TRACKS (CHANNELS) ☒ SEVEN ☐ NINE ☐ _____

7. PARITY ☐ ODD ☐ EVEN

8. DENSITY ☐ 200 BPI ☐ 1600 BPI ☐ 556 BPI ☒ 800 BPI ☐ _____

9. LENGTH OF INTER-RECORD GAP (IF KNOWN) ☐ 3/4 INCH ☐ _____

10. END OF FILE MARK ☐ OCTAL 17 ☐ _____

11. PASTE-ON-PAPER LABEL DESCRIPTION *(INCLUDE ORIGINATOR NAME AND SOME LAY SPECIFICATIONS OF DATA TYPE, VOLUME NUMBER)*

12. PHYSICAL BLOCK LENGTH IN BYTES

13. LENGTH OF BYTES IN BITS

RECORD FORMAT DESCRIPTION

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		

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RECORD FORMAT DESCRIPTION

RECORD NAME _____

14. FIELD NAME	15. POSITION FROM - 1 MEASURED IN _____ (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
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RECORD FORMAT DESCRIPTION

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		

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RECORD FORMAT DESCRIPTION

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		

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 CALIBRATED
		YOUR ORGANIZATION (√)	OTHER ORGANIZATION (GIVE NAME)	AT FIXED INTERVALS (√)	BEFORE OR AFTER USE (√)	BEFORE AND AFTER USE (√)	ONLY AFTER REPAIR (√)	ONLY WHEN NEW (√)	(√)

USCOMM-DC 44289-P72

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0101 ✓	"	"
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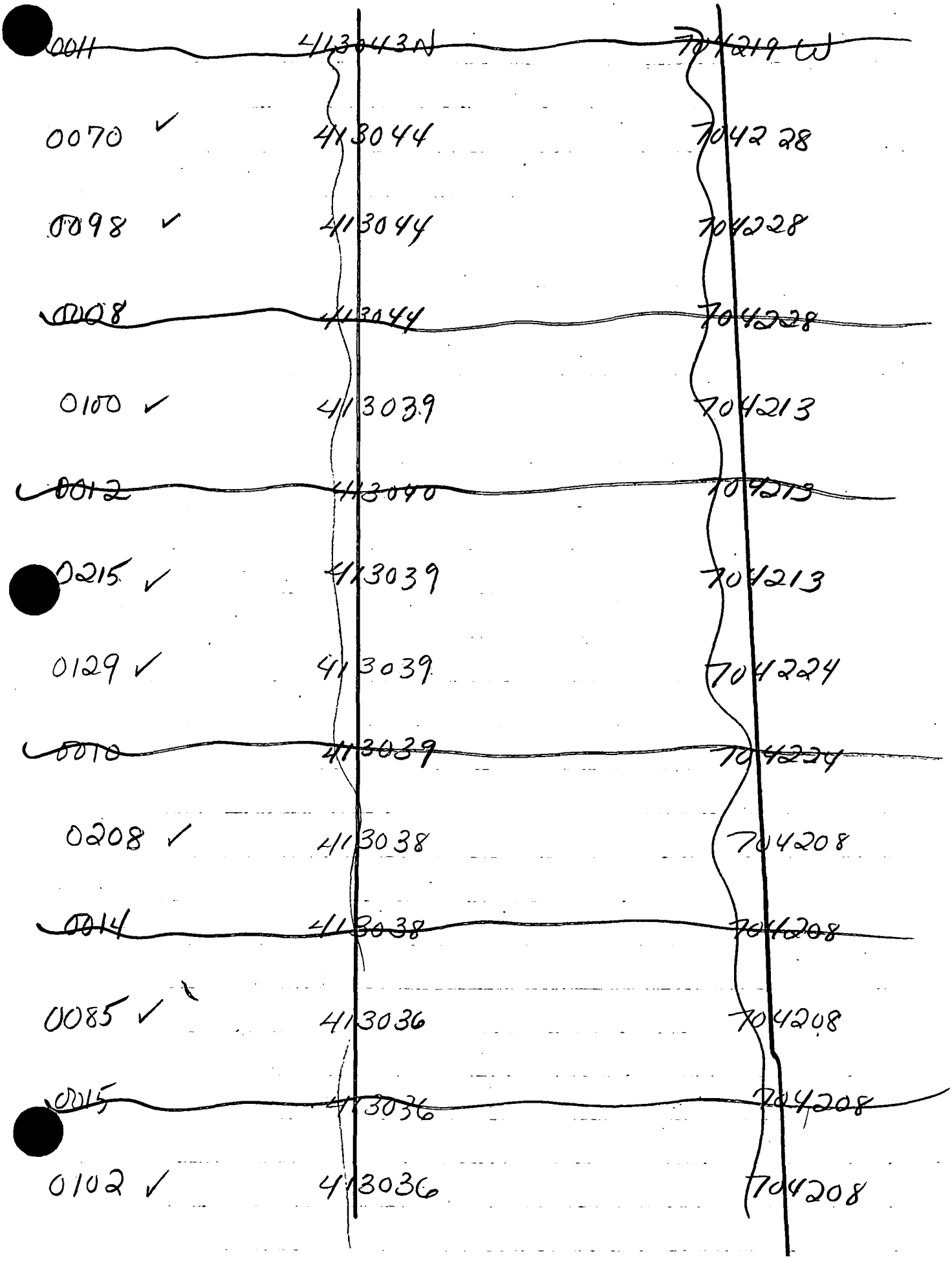
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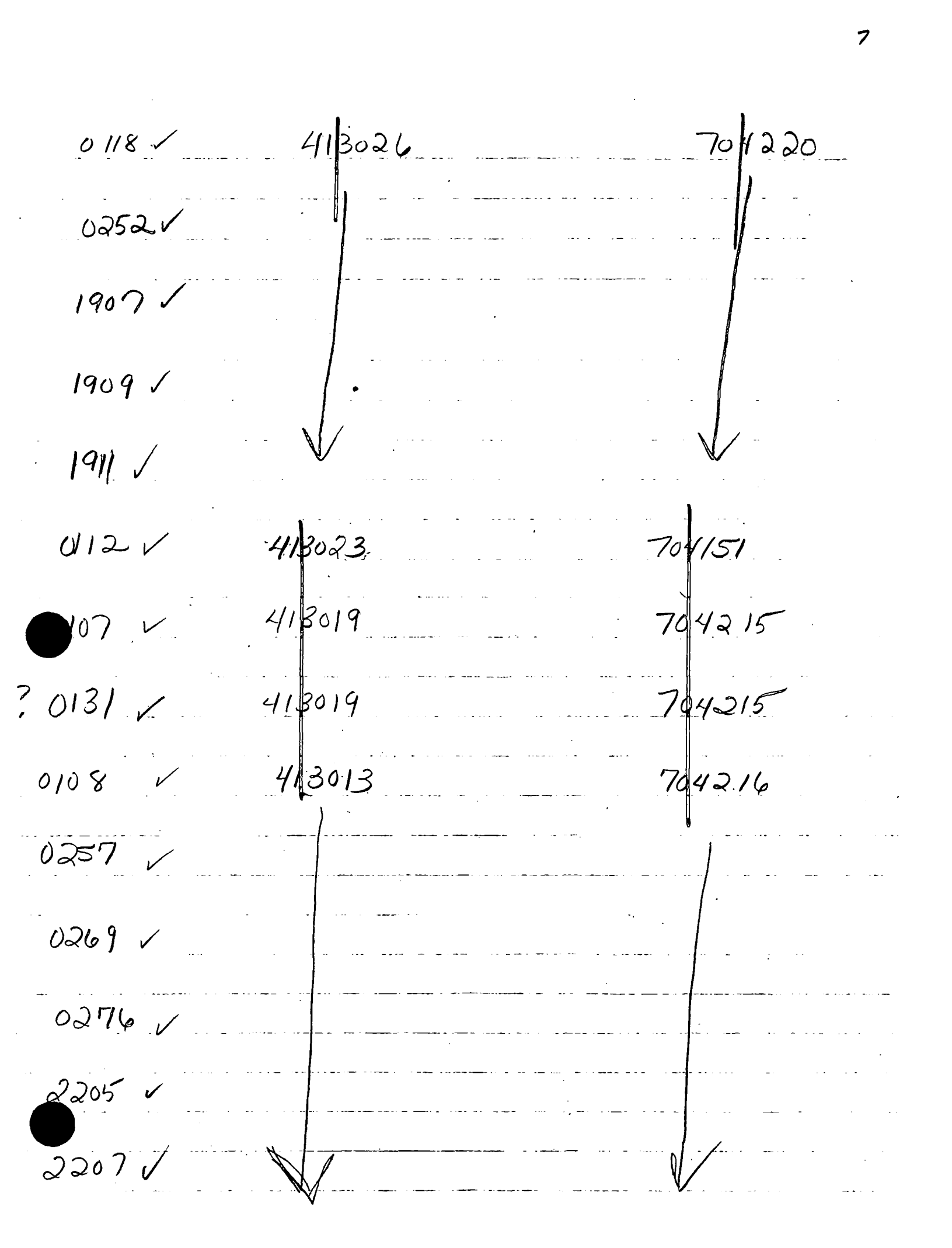
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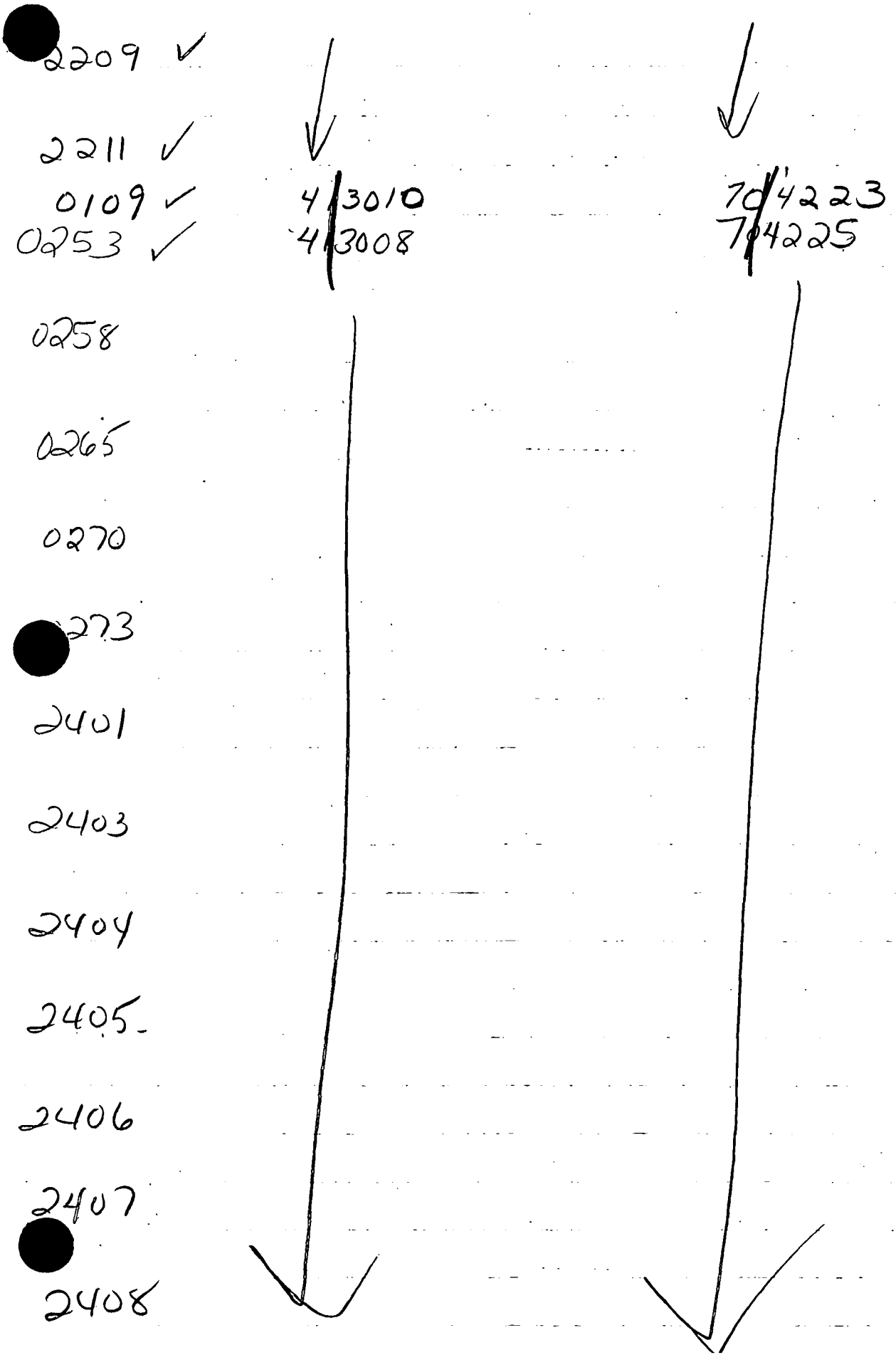
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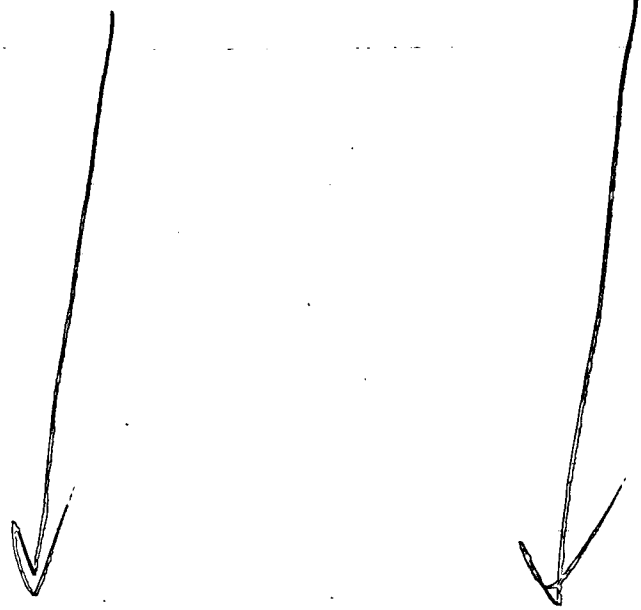


SYSTEMATICS ECOLOGY PROGRAM--ECOLOGY DIVISION

STATION CARD

ITEM	COLUMNS FROM	COLUMNS THRU	NO. COL.	DATA				
STATION NUMBER	1	5	5					
LOCATION CODE	6	8	3					
PHYSICAL STATION NUMBER	9	10	2					
MONTH	11	12	2					
DAY	13	14	2					
YEAR	15	16	2					
TIME	17	20	4					
SALINITY SURFACE	21	24	4					
BOTTOM	25	28	4					
TEMPERATURE AIR	29	32	4					
SURFACE	33	36	4					
BOTTOM	37	40	4					
OXYGEN SURFACE	41	44	4					
BOTTOM	45	48	4					
pH SURFACE	49	52	4					
BOTTOM	53	56	4					
Eh SURFACE	57	60	4					
BOTTOM	61	64	4					
DEPTH	65	66	2					
CURRENT	67	68	2					
BIO-MASS	69	73	5					
BIO. SAMPLING GEAR	74	75	2					
SEDIMENT	76	77	2					
ILLUMINATION	78	79	2					
	80							

TAPE FORMAT

File 1 - Species a rranged in phylogenetic order with all data relating to each species for all stations (arranged in chronological order) at which each species was collected.

File 2 - Physical-chemical and sediment data in chronological order, station data only.

File 3 - All physical, sediment and species data (numbers in each size fraction, total population, sex data) arrangedfor all stations in chronological order, with listing of all species and their data which were taken at each station.

File 4 - Name cards for all species and taxa (Phylum, Class, Order, Family, Genus and Species) arranged phylogenetically. Each species name card has describer and date of description.

NOTES

1. All records are 134 blocked 10. The last 20 characters of every record may be discarded, i.e., positions 115-134. To shift data from tape to printer, write each record as one (1) line.
2. There are two (2) end of file marks between File 2 and File 3 instead of one (1).
3. Print-out samples of each file is attached.
4. All data taped at 556 bits per inch, although your tapes are labled for 800 BPI.
5. All Data recorded on one tape (with lable). Other tape empty.

NODC Rec No 777

Code for Biological Sampling Gear

1. Van Veen Grab 1/25 m^2
2. Detritus Dredge (Okklmann Design)
3. Phleger Corer
4. Metal quadrat
5. 10 foot otter trawl
6. Petersen Grab
7. Hand (diving)
8. Minidredge
9. Suction Dredge
10. Clark-Bumpus Plankton Net
11. 1/2 meter net
12. Smith-McIntyre Grab
12. Shell dredge
14. Hand scrapers and dip net
15. Tangle Dredge
16. MBL Tráángular Shell dredge
17. Niino's Shell Dredge
18. Kumada's Shell Dredge
19. Kamiya's Dredge
20. Oyster tongs
50. Van Veen Grab , 1/50 m^2

1003 Hope Sampler for Nematodes

3001 Buzas Foram sampler

Sediment Type Code

1. Sand
2. Silty sand
3. Sandy silt
4. Silt
5. Clayey silt
6. Silty clay
7. Clay
8. Sandy clay
9. Clayey sand
10. Sand-silt-clay
11. Shelly sand
12. Sandy shell
13. Shelly silty sand
14. Shelly, sand-silt clay
15. Gravel
16. Sandy gravel
17. Muddy gravel
18. Gravelly sand
19. Gravelly mud
20. Shelly gravel
21. Boulders
22. Rock

Most sediment types based on Shepard's (1954) nomenclature.

from: See Back page

[redacted]lance will be by invitation. Facilities for the [redacted]-day meeting have been provided by Central Power and Light Company of Corpus Christi. ■

TCU's ROUNDUP ON RESEARCH

Special Reports in this edition of GULF REVIEW focus on two GURC member institutions and their facilities.

Being located almost three hundred miles from the Gulf of Mexico hasn't slowed down far-sighted marine scientists at Fort Worth's Texas Christian University. They are exchanging the traditional cowboy boots of the "Where-the-West-Begins" city for deck shoes and are turning from the saddle to the rolling deck of the research vessel. Though their current research is on a long-distance basis, Dallas-Fort Worth scientists and civic leaders envision future access to the Gulf by developing a Texas-size Trinity River canal, capable of accommodating large ocean-going vessels, to connect north Texas with the Gulf, some 300 miles away.

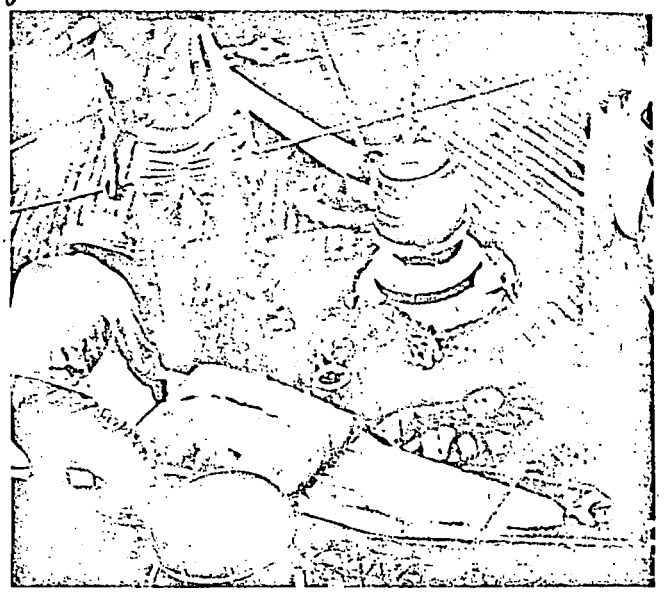
TCU scientists are wasting no time, however, and, though there is no complete marine science program at the landlocked University, many of its faculty members are conducting productive research in oceanography and related fields.

[redacted] Robert H. Parker is completing a study of the [redacted]gy of a half square mile body of water near [redacted]ds Hole. Data collected weekly over a two-year period is being analyzed with the aid of the TCU Computer Center and computers at nearby Graduate Research Center of the Southwest. A computer program has been developed to correlate five variables for each of 350 species of fauna with 18 physical variables. Physical measurements were taken *in situ*, with instruments operating while dropped down into the water rather than bringing samples up into foreign environment. Biological analysis was made of fauna screened down to 250 microns.

Dr. Parker's study will concern the total amount of kinetic and radiant energy produced in the area, with attempts to develop ecologic principles in microcosm which can be applied to studies of the total ocean.

Undegraduate courses in marine ecology and invertebrate zoology include trips to the Gulf using Bureau of Commercial Fisheries' vessels and facilities of other GURC members.

Dr. Neil Hulings is concerned with zoogeography and the taxonomy of marine ostracods. Following his presentation at the Second International Oceanographic Congress in Moscow last year, he participated in the NSF-sponsored Southeastern Pacific Biological Oceanographic Program cruise along the [redacted]sts of Peru and Chili. Dr. Hulings is attempting [redacted]ply both carapace and appendage morphology [redacted]ifications to ostracods at the species level.



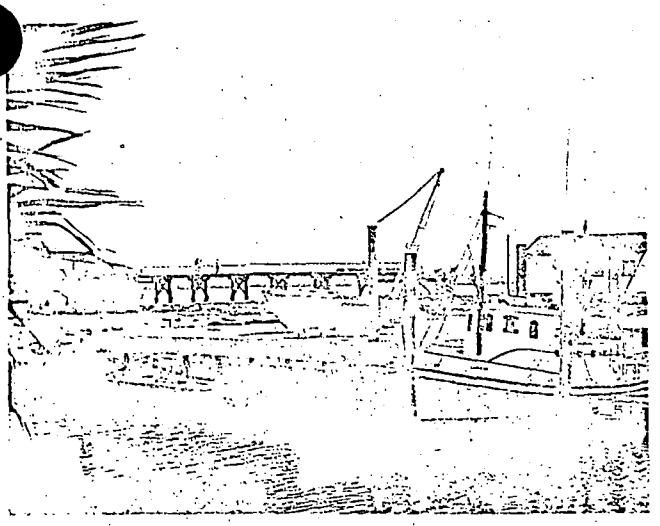
Scientists aboard the ANTON BRUUN prepare to open a Menzes net used to secure samples from depths of 10,000 feet off the coast of Chili. TCU's Dr. Neil Hulings participated in the NSF-sponsored cruise.

A study of benthic fauna of the Heald-Sabine Banks area of the northwestern Gulf is underway by Dr. Willis G. Hewatt, with the long-term goal of improving the basis for interpreting paleo environments of late Tertiary sedimentation. Samples come from a 1,000 square mile portion of the Gulf from the shoreline outward up to 40 miles.

In addition to marine biology studies, research by TCU geologists is related to the oceans. Dr. Arthur Ehlmann is studying Puerto Rican river sediments, soil and marine samples. They are being analyzed by X-ray diffraction techniques to aid in evaluating factors controlling the origin and distribution of sediments.

Research by Edward Heuer and Dr. Jack Walper concerning the tectonics of Central Guatemala-Northern Honduras has marine implications. The faults in that portion of Central America may extend eastward, and their horizontal movement may have separated one land mass into two islands, one now occupied by Cuba and the other by Haiti and the Dominican Republic.

Until now, however, the emphasis in the science departments has not been in the marine sciences. TCU, with a student enrollment of 7,300, offers doctoral programs in physics, chemistry, mathematics and psychology and these areas have seen the largest growth in advanced studies. There is increasing interest in marine studies at TCU, but because of limited resources, the University's expansion into the marine sciences will depend much on cooperative efforts with other agencies and institutions and on facilities that can be shared with others. ■



At the University of Texas Institute of Marine Science facility, boats are used for studies on the Gulf Continental Shelf and the great variety of brackish to hypersaline lagoons, bays and estuaries along the Gulf Coast. In the background are the pier and pier lab over the Aransas Pass and the Gulf of Mexico.

U OF TEXAS' INSTITUTE OF MARINE SCIENCE

The University of Texas has broad scientific capabilities in the area of research related to the Gulf of Mexico, and the hub of this diversity is the Institute of Marine Science.

Located on the Gulf of Mexico, 200 miles from the main University campus at Austin, the Institute is directed by Dr. Donald E. Wohlschlag, professor of zoology. Operating as part of the University's graduate school, the Institute's six permanent staff members are: Dr. Wohlschlag, ecology of fishes and dynamics and energetics of fish populations; Dr. Chase Van Baaleen, marine microbiology, algal physiology, especially isolation, nutrition, growth and biochemistry of blue-green algae; Dr. Patrick L. Parker, marine chemistry and geochemistry; Dr. William E. Behrens, sedimentation, sedimentary petrography; Dr. B. J. Copeland, estuarine ecology and environmental stresses; and Dr. Colin Nicol, bioluminescence.

Current enrollment at the Institute stands at thirteen students working toward advanced degrees. Research conducted by students and staff members at the Institute during the past five years has resulted in the publication of more than 100 papers in scientific journals in the fields of marine geology, ecology, marine chemistry, ichthyology, marine botany and microbiology. Edited by Dr. Copeland, *Publications of the Institute of Marine Science* appears annually and includes much significant research related to the Gulf of Mexico.

Founded in 1941, the Institute is located in the village of Port Aransas on Mustang Island, a 20-mile long barrier island bounded on the north by Aransas Pass inlet and on the south by Padre Island. The Aransas Pass inlet is a major waterway serving as an entrance from the Gulf to the bay areas in the vicinity of Corpus Christi.

Headquarters for the institute is a modern new masonry building with a library, laboratories and classrooms. Special facilities include three walk-in controlled temperature rooms, concrete ponds for experimental studies of marine environments, an autoclave room, and a radioactive storage and handling room. A dock laboratory over the water is equipped with running sea water. Boats include the 44-foot LORENE and the 44-foot cruiser VAGABOND.

Of prime importance to the Institute is its favorable location near a wide variety of environments that are readily available for field research activities. There are turtle grass flats, mud-bottom bays, oyster reefs, continental shelf environments, rock jetties, open beaches, oil drilling platforms, and bird rookeries. An excess of evaporation over rainfall and drainage exists in the estuaries to the south of Port Aransas, but a reverse relationship is true of the estuaries farther north. Consequently, there is a salinity gradient from a hypersaline condition of 40-100 parts per thousand in Laguna Madre to the south to ordinary brackish conditions in the north. Peculiar environments, where gypsum deposits, oolite, and restricted faunas occur, are available for comparative studies. Also of great interest are comparative studies on biological and geochemical processes in the shallow estuaries where waters vary from continuous hot summer temperatures to brief near-freezing temperatures during occasional "northers." However, the prevailing sub-tropical coastal climate (annual mean temperature 71 degrees) is rather more equable than farther inland.

The vast University encompasses nine campuses in seven Texas cities. At the University's main campus in Austin, where total enrollment soared to well over 27,000—with 4,307 at the graduate level—for the Fall Semester 1966-67, related fields of work in Geology and Engineering Science attract students from all over the world.

GULF REGIONAL PANEL FOR IBP

A Gulf Coast Regional Panel of the International Biological Program met last month in Biloxi, Mississippi. Called by Committee Chairman Dr. Donald Wohlschlag, Institute of Marine Science, University of Texas, the workshop meeting was attended by approximately 25 scientists, representing universities, state agencies, and laboratories of the Gulf coast states, many of which were from GURC institutions. The workshop meeting was directed toward the identification of research interests and activities that can be brought together for a regional plan to advance biological research along the Gulf coastal area.

Heading a group on ecosystem analysis was Dr. B. J. Copeland, Institute of Marine Science, University of Texas. A working group on distribution and abundance of organisms was led by Fred H. Berry, Bureau of Commercial Fisheries, Tropical Atlantic Biological Laboratory, Miami. A third group discussed planned modification of the environment and was directed by Dr. Winston Menzel, Florida State University.

As part of the IBP Productivity of Marine Communities, the Gulf Coast Regional Panel is charged with working up general programs that are directed along international lines and toward comparative studies. Since much of the change in marine environment has been man-made, it is most obvious in the estuaries and near-shore coastal waters, where the Committee's work will be concentrated.

"There is considerable interest among the various groups who attended the meeting for working together and creating an overall research program," Dr. Wohlschlag reported. "We have tentatively planned a Regional Panel meeting to be held at the time of the American Institute of Biological Science meeting in August at Texas A&M."

Set up as a special program of the International Council of Scientific Unions, the IBP is formulating a world-wide five-year program which begins this year. The IBP is concerned with "the biological basis of productivity and human welfare." ◻

NEWS NOTES

▻Robert B. Abel, Executive Secretary of the Interagency Committee on Oceanography since 1960, will head the National Science Foundation's program to implement the National Sea Grant College and Program Act.

▻More than 230 fish farmers from Tennessee, Connecticut, Florida, Louisiana, Arkansas and Texas attended the first Texas Commercial Fish Farming Conference, which dealt with freshwater fish production, held February 1-2 at Texas A&M.

▻Dr. John L. Buckley has been named director for the newly-formed Office of Ecology in the Department of the Interior. He will also serve as the Department's environmental quality adviser.

▻The recently completed *Galveston Bay Work Plan* prepared by staff members of The University of Texas, Texas A&M University and Texas Technological College which calls for a three-year $2.4 million program to produce a comprehensive Study for Galveston Bay, was praised by Texas Governor John Connally. "I regard this report as extremely well done," the Governor announced at a press conference last month.

▻The American Institute of Mining, Metallurgical and Petroleum Engineers, Inc. 96th Annual Meeting, to be held in Los Angeles, February 19-23, will include two sessions on Ocean Engineering on Wednesday, February 22. ◻

GULF REVIEW is published by Gulf Universities Research Corporation, 227 System Building, College Station, Texas 77843. Subscriptions are available upon written request. Address all inquiries to the Executive Director.

GURC is a non-profit educational and research organization whose membership consists of Florida State University, Graduate Research Center of the Southwest, Gulf South Research Institute, Louisiana State University, Rice University, Southern Methodist University, Southwest Research Institute, Texas A&M University, Texas Christian University, Texas Technological College, Tulane University, University of Alabama, University of Florida, University of Houston, University of Miami, University of Texas.

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NATIONAL OCEANOGRAPHIC DATA CENTER
Washington, D. C. 20390

Code 2410-SFB/emm

27 JUN 1967

AIRMAIL

Professor Robert Parker
Department of Biology
Texas Christian University
Fort Worth, Texas 76129

Dear Professor Parker:

In accordance with my telephone conversation with you on 14 June, I am sending you two blank magnetic tapes under separate cover by registered mail; you can transfer onto these tapes your edited data on the study of the ecology of the Elizabeth Island channels. A printout and explanation of the program should be included when you ship the loaded tapes back to us. It would also be desirable to have a chart or index map of the sample location and identification. Part of the data from the tapes will be transferred to appropriate automated systems of NODC now in operation, and the remainder of the data to other systems as they are developed.

The receipt of the data tape will be announced in our NEWSLETTER. Normally, any material deposited at NODC is entirely available to the oceanographic community. Unless notified to the contrary, we assume you will have no reservations concerning the release of the entire taped data.

As promised, I include copies of NODC forms that may be of use in the future recording of your data from the Texas coastal areas. Also included are some forms being developed for the Gulf of Mexico Estuarine Inventory. Your suggestion of shipping your future data to us on our forms periodically, possibly monthly, is the ideal way to proceed, and we would greatly appreciate this systematic approach.

I include also an inventory of processed physical chemical data in our automated archives as you indicated this type of data could be

useful to you. Other unprocessed data are available but not inventoried. When you actually need the data (January 1968) please let us know, and every effort will be made to provide you on an exchange basis with the required information and data. Possibly by that time the use of the NODC Nearshore Data form and the forms for the Gulf of Mexico Estuarine Inventory will have generated a larger quantity of data and information than are presently available or identifiable.

Comments on these forms will be appreciated. A copy of your data form would be valuable for reference and will be useful to persons who are undertaking the study of the nearshore estuarine ecology.

We look forward to receiving your taped data. Please let us know when we may be of assistance.

Sincerely yours,

SUZANNE F. BERSHAD
Geological Oceanographer

Enclosures

Enclosure (SC)

TEXAS CHRISTIAN UNIVERSITY
Fort Worth, Texas 76129
Department of Biology

7 August 1967

Dr. Suzanne F. Bershad
National Oceanographic Data Center
Washington, D. C. 20390

Code 2410-SFB/emm

Dear Suzanne:

Please forgive me for the delay in getting all of this data back to you. It has taken me, my assistant and programmer all summer to order the data, correct it and to devise the programs to store it on tape to make it more useful to you. The last pieces of data were taped last night. Most of the delay was in correcting errors in species data and bringing the scientific names up to date.

I hope you will forgive me for not sending a complete print-out of the data on the tape. I am charged only for listing, paper and programmer, and I am now out of computer funds. I am enclosing the first pages of each File, which I will annotate for you. I have also given you a sheet with the contents of each file and some notes. A station map with all station numbers is also enclosed, along with a xerox copy of the chart with the locality block numbers used to code locality on the station data cards. Finally, I have given you the code numbers and meaning for sampling gear and sediment type as used on the station data cards.

As you will see, we had to tape all data at 556 BPI rather than 800 BPI. I hope you can get this off O.K. We only needed one tape since the data was blocked, 134 blocked 10. We are returning the empty tape as well.

The book upon which these data are based is finished and will be submitted to the editor sometime this month. I have noted in the book that all data are stored at NODC and also on tape here at TCU and can be obtained from either institution. I have no objection to your releasing the data, although I would like to know who requests it during the next year, since I still hope to use sections of it in two other papers in preparation.

We will be starting to work down on the south Texas coast next month on a limited budget, and probably will not be starting our systematic sampling until January. We will attempt to get data to you periodically and entered on to your forms. I still have not had a chance to go over your forms and make an appraisal of them. When I do, I will certainly inform you of any suggestions that I might have.

Thank you very much for all of your help, and I hope that I have not inconvenienced you too much with the delay. If you have any questions on the data I have sent, please call or write me.

Sincerely yours,

Bob

Robert H. Parker
Associate Professor

DO NOT DETACH BASIC DOCUMENTS OR ENCLOSURES
NOTIFY RECORDS SECTION WHEN CHANGING ACTION CODE

ROUTING SHEET - RECORD MATERIAL
NDW - NAVOCEANO - 5211/1 (Rev. 12-65)

H. O. FILE NO.

ORIGINATOR: Code 2410 - Burchard.

H. O. ROUTE SHEET NUMBER

SERIAL NUMBER | DATE: 9/18/67 | ENCLOSURES | RECEIPT DATE

SUBJECT: Data from Texas Christian University, Mr. R. H. Parker.

ACTION DUE IN RECORDS

ROUTE TO CODE	PUR-POSE	DATE IN	DATE OUT	INITIALS	REMARKS (Show initials, extension and code)
2200			9/18	JJC	Mr Chakalis Please give us 4 part printout
2220			10/2	MRP	
2410					return to: Elaine Suzy
					Bob - A special 1401 program will have to be written to reformat this tape (#777) from 134 char. to 120 char per logical record by dropping the last 14 char. of each logical record (these char. can be discarded as per Parker's note). Can John W. program this? The O/P tape should also be blocked 10 making a <u>physical</u> record size of 1200 characters which can then be printed by the 1401 General Tape-to-Print program. Both tapes, the original and the reformatted tape, should be saved and returned to 2410 as the <u>source</u> for this data. JJC
2410	SFB			2410	Printout Received 10/2/67 - 6 copies please

ANSWERED BY (Serial number & date) | A INTERNAL ACTION | A-R REPLY REQUIRED | I INFORMATION | S SIGNATURE

Copy sent to [illegible] - [illegible] - 38-14
+ [illegible] O.U. [illegible] 11/3/67 [illegible]

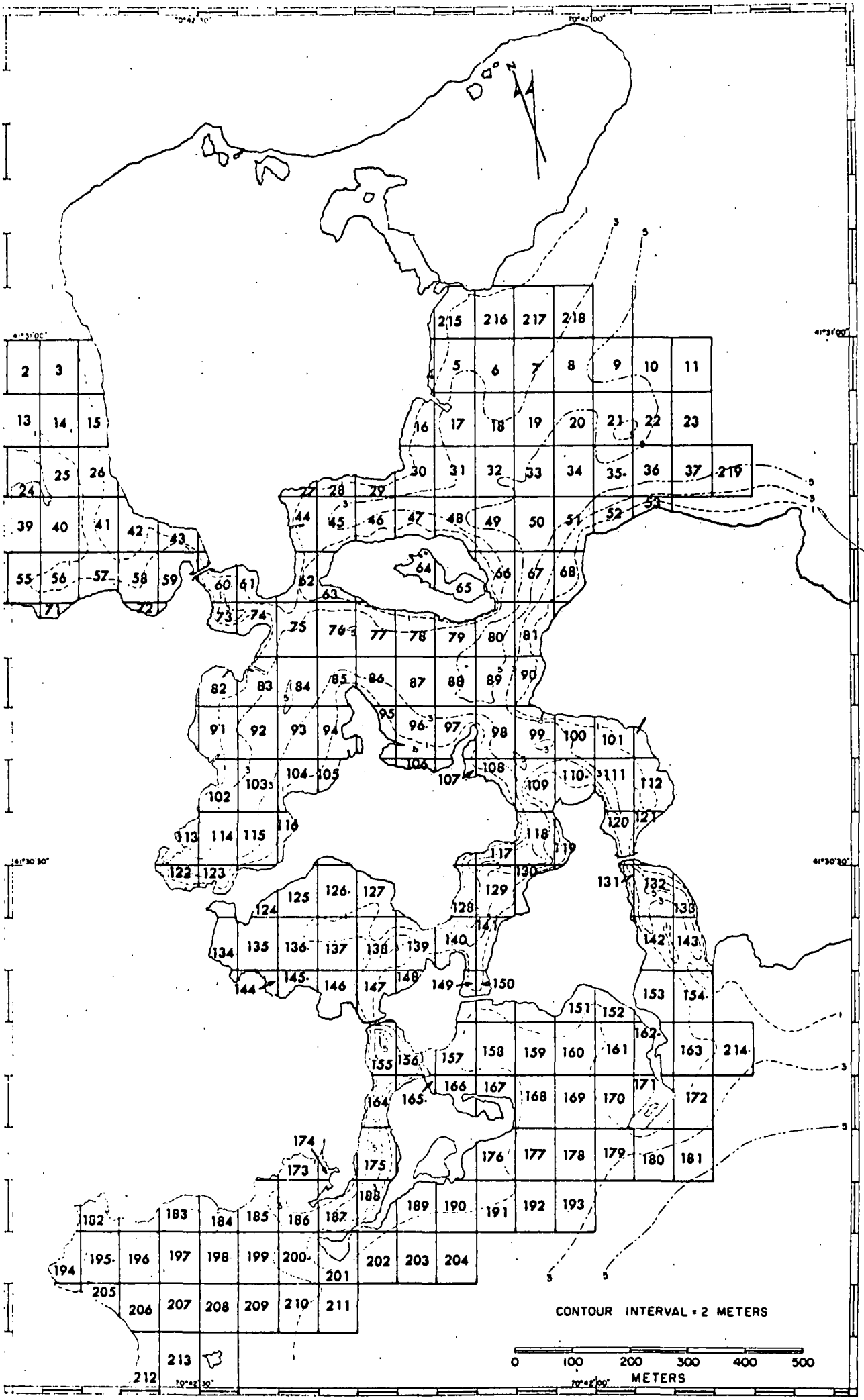

Figure 2

1-4 | 20- 26 | 30- 37 | 80

STATION	LAT ↓		LONG ↓		↓ 1
0096 ✓	413100	N	0704205	W	
0249 ✓	413100		704205		
~~0001~~	~~413100~~		704205		
0278 ✓	413059		704204		
1012 ✓	413059		704204		
0095 ✓	413052		704157		
~~0002~~	~~413052~~		704157		
0117 ✓	413053		704204		
~~0003~~	~~413053~~		~~704204~~		
0120 ✓	413052		704211		
~~0004~~	~~413052~~		~~704211~~		
0121 ✓	413049		704221		
~~0005~~	~~413049~~		~~704221~~		

8/5/68

GEOLOGY CATALOGUE SHEET

NODC Acq. # 091467

Note - Major class for filing is underlined; data in other classes is checked

Brief Title of Document:

Class -

I Sediments
- ✓a) Types
- b) Analyses
- c) (Photographs)

II Topography
- a) Discrete soundings
- b) Continuous soundings
- c) Profiles
- d) Contoured Bathymetry
- e) Geomorphology
- f) (Photographs)

III (A) Seismic Reflection
- a) Continuous
- b) Explosive
- c) Echosounders with penetration
- d) Contoured (isopachous analyses)

III (B) Seismic Refraction

IV Gravity

V Magnetics

VI Heat Flow

VII Photography
- a) Bottom photography, midwater, aerial

VIII Geochemistry

IX Paleontology

X Ecology

✓ XI Processes
- a) Measurements of static and dynamic forces, currents, suspended sediments, waves, erosion.

XIII Biology

✓ XIII Physical Oceanography

XIV Meteorology

XV Bibliography

XVI Miscellaneous

NODC Acq. #_____

Major Class. for Filing
BIOLOGY

GEOLOGY CATALOGUE CITATION SHEET

Brief Title: Biological, physical, and bottom sediment data from Hadley Harbor off Woods Hole.

Description: This batch of data, in the form of machine listing, contains ecological data such species and species counts, bottom type, water temperature, salinity, currents, and etc. Was sent to the NODC by Dr. Robert Parker of TCU [Texas Christian U.] in 1967. Station locations are depicted on map; however, the actual coordinates may be picked off by semi automatic plotter or by visual mechanical means. This batch is predominantly of biological data; sedimentary and physical data constitute a very minor portion of the entire data listing. The machine listing was a printout from a magnetic tape file stored in TCU. The tape format and other note are filed with this listing for reference.

I, Ding, have not studied this listing in details. Since it's primarily a biological listing, perhaps the data specialist for Biology should look into this listing and the accompanied tape format more closely.

FORMAT OF MATERIAL
CHECK LIST

1. Tape
   a) Paper
   b) Magnetic

2. Cards
   a) Data cards - EAM
   b) Data cards - Keyhole punch
   c) Aperature Cards

3. Published documents

4. Manuscript text

5. Coded sheets

6. Coded tabulations

7. Manuscript tabulations

8. Charts (full scale)

✓ 9. Index charts

10. Microfilm (35mm, 16mm, misc reduct & sizes)

11. Microfiche

12. Analog records

13. Unformatted data records

14. Log books

15. Bibliography cards

✓ 16. Machine listing + accompanied notes.

(1)

col 20-26 (26 always has 'N')

col 30-37 (37 always has "W")

col. 36 always has '1'

STATION NUMBER		
0155	41° 31' 02" N	070° 42' 10" W
0075	41° 31' 00" N	070° 42' 03" W
0246	41° 30' 59" N	070° 42' 09" W
0053	41° 30' 59" N	070° 42' 00" W
0163	41° 30' 57" N	070° 41' 55" W
0082	41° 30' 57" N	070° 42' 00" W
0221	41° 30' 57" N	070° 42' 04" W
0137	41° 30' 57" N	070° 42' 10" W
0259	41° 30' 57" N	070° 42' 07" W
0012	41° 30' 56" N	070° 42' 06" W
0176	41° 30' 56" N	070° 42' 05" W
0052	41° 30' 56" N	070° 41' 59" W
0107	41° 30' 55" N	070° 41' 58" W
0184	41° 30' 55" N	070° 41' 58" W
0008	41° 30' 54" N	070° 42' 01" W
0201	41° 30' 55" N	070° 42' 12" W

STATION NUMBER		
0188	41° 30' 57" N	070° 42' 39" W
0147	41° 30' 54" N	070° 42' 40" W
0223	41° 30' 53" N	070° 42' 39" W
0175	41° 30' 52" N	070° 41' 50" W
0051	41° 30' 52" N	070° 41' 59" W
0254	41° 30' 53" N	070° 42' 00" W
0074	41° 30' 53" N	070° 42' 06" W
0240	41° 30' 51" N	070° 42' 07" W
0112	41° 30' 52" N	070° 42' 09" W
0233	41° 30' 51" N	070° 42' 17" W
0237	41° 30' 50" N	070° 42' 42" W
0076	41° 30' 49" N	070° 42' 39" W
0136	41° 30' 50" N	070° 42' 33" W
0119	41° 30' 48" N	070° 42' 30" W
0168	41° 30' 51" N	070° 42' 22" W
0138	41° 30' 50" N	070° 42' 19" W

STATION NUMBER		
0041	41° 30' 49" N	070° 42' 19" W
0196	41° 30' 49" N	070° 42' 19" W
0124	41° 30' 50" N	070° 42' 16" W
0042	41° 30' 51" N	070° 42' 12" W
0274	41° 30' 50" N	070° 42' 12" W
0151	41° 30' 50" N	070° 42' 10" W
0019	41° 30' 49" N	070° 42' 08" W
0018	41° 30' 49" N	070° 42' 06" W
0017	41° 30' 49" N	070° 42' 03" W
0016	41° 30' 49" N	070° 42' 02" W
0005	41° 30' 50" N	070° 42' 01" W
0209	41° 30' 50" N	070° 42' 02" W
0091	41° 30' 48" N	070° 42' 05" W
0177	41° 30' 46" N	070° 42' 43" W
0169	41° 30' 47" N	070° 42' 36" W
0197	41° 30' 47" N	070° 42' 34" W

STATION NUMBER		
0139	41° 30' 43" N	070° 42' 12" W
0006	41° 30' 42" N	070° 42' 12" W
0234	41° 30' 42" N	070° 42' 14" W
0187	41° 30' 43" N	070° 42' 10" W
0061	41° 30' 42" N	070° 42' 08" W
0043	41° 30' 44" N	070° 42' 07" W
0225	41° 30' 42" N	070° 42' 07" W
0178	41° 30' 39" N	070° 42' 28" W
0113*	41° 30' 40" N	070° 42' 26" W
0073	41° 30' 40" N	070° 42' 22" W
0174	41° 30' 39" N	070° 42' 20" W
0083	41° 30' 41" N	070° 42' 17" W
0284	41° 30' 40" N	070° 42' 16" W
0160	41° 30' 41" N	070° 42' 15" W
0004	41° 30' 41" N	070° 42' 14" W
0045	41° 30' 42" N	070° 42' 13" W

STATION NUMBER		
0062	41° 30' 41" N	070° 42' 12" W
0044	41° 30' 41" N	070° 42' 08" W
0156	41° 30' 41" N	070° 42' 06" W
1123	41° 30' 39" N	070° 42' 11" W
2123	41° 30' 39" N	070° 42' 11" W
0082	41° 30' 38" N	070° 42' 27" W
0159	41° 30' 36" N	070° 42' 26" W
0202	41° 30' 38" N	070° 42' 24" W
0[redacted]7	41° 30' 36" N	070° 42' 22" W
0183	41° 30' 37" N	070° 42' 15" W
0013	41° 30' 38" N	070° 42' 13" W
0143	41° 30' 37" N	070° 42' 12" W
281	41° 30' 38" N	070° 42' 07" W
0046	41° 30' 37" N	070° 42' 06" W
0[redacted]7	41° 30' 38" N	070° 42' 06" W
0020	41° 30' 37" N	070° 42' 05" W

0140	41° 30' 36" N	070° 42' 05" W
0169	41° 30' 38" N	070° 42' 02" W
0021	41° 30' 36" N	070° 42' 02" W
0235	41° 30' 36" N	070° 42' 01" W
0092	41° 30' 35" N	070° 41' 59" W
0191	41° 30' 36" N	070° 41' 57" W
0141	41° 30' 35" N	070° 41' 56" W
0247	41° 30' 34" N	070° 41' 57" W
0050	41° 30' 34" N	070° 41' 58" W
0022	41° 30' 35" N	070° 41' 58" W
0031	41° 30' 34" N	070° 41' 59" W
0135	41° 30' 34" N	070° 42' 02" W
0166	41° 30' 34" N	070° 42' 06" W
0207	41° 30' 34" N	070° 42' 29" W
0006	41° 30' 35" N	070° 42' 26" W
0090	41° 30' 33" N	070° 42' 26" W

0224 41° 30' 32" N 070° 42' 27" W

0142 41° 30' 31" N 070° 42' 29" W

0035 41° 30' 30" N 070° 42' 27" W

0243 41° 30' 32" N 070° 42' 26" W

0168 41° 30' 30" N 070° 42' 25" W

0125 41° 30' 31" N 070° 42' 06" W

0086 41° 30' 32" N 070° 42' 05" W

0239 41° 30' 32" N 070° 42' 04" W

0117 41° 30' 31" N 070° 42' 05" W

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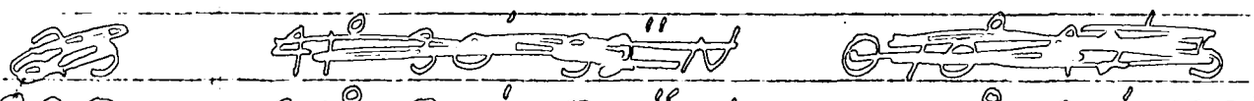
0038 41° 30' 30" N 070° 42' 05" W

0251 41° 30' 29" N 070° 42' 05" W



0023 41° 30' 32" N 070° 41' 58" W

0161 41° 30' 32" N 070° 41' 57" W

0029 41° 30' 32" N 070° 41' 58" W

STATION NUMBER			
0185	41°	30' 29" N	070° 42' 31" W
0241	41°	30' 29" N	070° 42' 28" W
0162	41°	30' 27" N	070° 42' 24" W
0078	41°	30' 28" N	070° 42' 20" W
0189	41°	30' 27" N	070° 42' 17" W
0263	41°	30' 29" N	070° 42' 10" W
0220	41°	30' 29" N	070° 42' 08" W
0087	41°	30' 28" N	070° 42' 09" W
0115	41°	30' 28" N	070° 42' 06" W
0048	41°	30' 27" N	070° 42' 09" W
~~0113~~ 0227?	41°	30' 29" N	070° → 41' → 56" W
0186	41°	30' 28" N	070° 41' 54" W
0071	41°	30' 28" N	070° 41' 55" W
0212	41°	30' 25" N	070° 42' 27" W
0100	41°	30' 26" N	070° 42' 22" W
2130	41°	30' 26" N	070° 42' 22" W

0264	41° 30' 25" N	070° 42' 19" W
0236	41° 30' 24" N	070° 42' 18" W
0066	41° 30' 25" N	070° 42' 18" W
0203	41° 30' 26" N	070° 42' 17" W
0025	41° 30' 24" N	070° 42' 16" W
0275	41° 30' 24" N	070° 42' 15" W
0149	41° 30' 24" N	070° 42' 14" W
0049	41° 30' 26" N	070° 42' 14" W
0206	41° 30' 26" N	070° 42' 12" W
0039	41° 30' 26" N	070° 42' 12" W
0226	41° 30' 25" N	070° 42' 12" W
0285	41° 30' 26" N	070° 42' 10" W
0008	41° 30' 26" N	070° 42' 11" W
0152	41° 30' 26" N	070° 42' 11" W
004	41° 30' 25" N	070° 42' 09" W
0126	41° 30' 24" N	070° 42' 09" W

0146	41° 30' 26" N	070° 41' 56" W
0248	41° 30' 26" N	070° 41' 54" W
0081	41° 30' 24" N	070° 41' 54" W
0205	41° 30' 24" N	070° 41' 53" W
0088	41° 30' 25" N	070° 41' 53" W
0068	41° 30' 22" N	070° 41' 52" W
0180	41° 30' 22" N	070° 41' 55" W
0181	41° 30' 22" N	070° 42' 01" W
0184	41° 30' 19" N	070° 41' 50" W
0283	41° 30' 18" N	070° 41' 58" W
0133	41° 30' 20" N	070° 42' 02" W
0218	41° 30' 19" N	070° 42' 05" W
0171	41° 30' 18" N	070° 42' 10" W
0206	41° 30' 21" N	070° 42' 09" W
0109	41° 30' 23" N	070° 42' 20" W
0127	41° 30' 22" N	070° 42' 17" W

0150 41° 30' 20" N 070° 42' 16" W

0040 41° 30' 20" N 070° 42' 17" W

0010 41° 30' 20" N 070° 42' 16" W

0195 41° 30' 18" N 070° 42' 14" W

0232 41° 30' 17" N 070° 42' 16" W

0079 41° 30' 16" N 070° 42' 17" W

0280 41° 30' 15" N 070° 42' 09" W

0172 41° 30' 17" N 070° 42' 02" W

0154 41° 30' 15" N 070° 41' 58" W

0230 41° 30' 14" N 070° 41' 54" W

0111 41° 30' 11" N 070° 41' 44" W

0200 41° 30' 11" N 070° 42' 02" W

0216 41° 30' 14" N 070° 42' 17" W

0014 41° 30' 13" N 070° 42' 17" W

0058 41° 30' 13" N 070° 42' 16" W

0011 41° 30' 13" N 070° 42' 16" W

0182	41°	30' 08" N	070° 42' 16" W
0128 (0128)	41°	30' 10" N	070° 42' 17" W
0199	41°	30' 10" N	070° 42' 18" W
0132	41°	30' 12" N	070° 42' 22" W
0213	41°	30' 11" N	070° 42' 23" W
0064	41°	30' 10" N	070° 42' 22" W
0067	41°	30' 10" N	070° 42' 25" W
0204	41°	30' 07" N	070° 42' 24" W
1994	41°	30' 06" N	070° 42' 21" W
2094	41°	30' 06" N	070° 42' 21" W
0231	41°	30' 09" N	070° 42' 28" W
0080	41°	30' 09" N	070° 42' 31" W
0242	41°	30' 07" N	070° 42' 30" W
0190	41°	30' 08" N	070° 42' 28" W
0[redacted]5	41°	30' 07" N	070° 42' 26" W

0165 41° 30' 47"N 070° 42' 34"W

0167 41° 30' 46"N 070° 42' 29"W

0160 41° 30' 45"N 070° 42' 28"W

0148 41° 30' 47"N 070° 42' 27"W

0164 41° 30' 47"N 070° 42' 22"W

0173 41° 30' 46"N 070° 42' 07"W

0084 41° 30' 47"N 070° 42' 03"W

0210 41° 30' 44"N 070° 42' 27"W

[redacted] 41° 30' 44"N 070° 42' 25"W

0165 41° 30' 43"N 070° 42' 24"W

0059 41° 30' 44"N 070° 42' 21"W

0229 41° 30' 45"N 070° 42' 21"W

0238 41° 30' 42"N 070° 42' 20"W

0030 41° 30' 44"N 070° 42' 18"W

[redacted]14 41° 30' 43"N 070° 42' 18"W

0262 41° 30' 44"N 070° 42' 17"W

0170 41° 30' 06" N 070° 42' 27" W

953 41° 30' 07" N 070° 42' 37" W

0219 41° 30' 06" N 070° 42' 39" W

1093 41° 30' 55" N 070° 42' 09" W

2093 41 30' 55" N 070° 42' 09" W