

DDF

A: 5:03

TR 3103

VCM 498

Rec'd

ACCESSION NUMBER

78-0477

DATA DOCUMENTATION FORM

HYDRCB.010.BLM06B'

NOAA FORM 24-13 (4-72)

U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL OCEANOGRAPHIC DATA CENTER RECORDS SECTION ROCKVILLE, MARYLAND 20882

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

TR3103 F010

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

Virginia Institute of Marine Science Gloucester Point, Virginia 23062

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

BLM 06B

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

BLM06B

VCM 498

HYDROCARBON 010

4. PLATFORM NAME(S)

R/V H.J.W. FAY

5. PLATFORM TYPE(S) (E.G., SHIP, BUOY, ETC.)

Ship

6. PLATFORM AND OPERATOR NATIONALITY(IES)

H.J.W. FAY

VIMS

7. DATES

FROM: 02/04/77

TO: 03/13/77

8. ARE DATA PROPRIETARY?

NO  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

11b

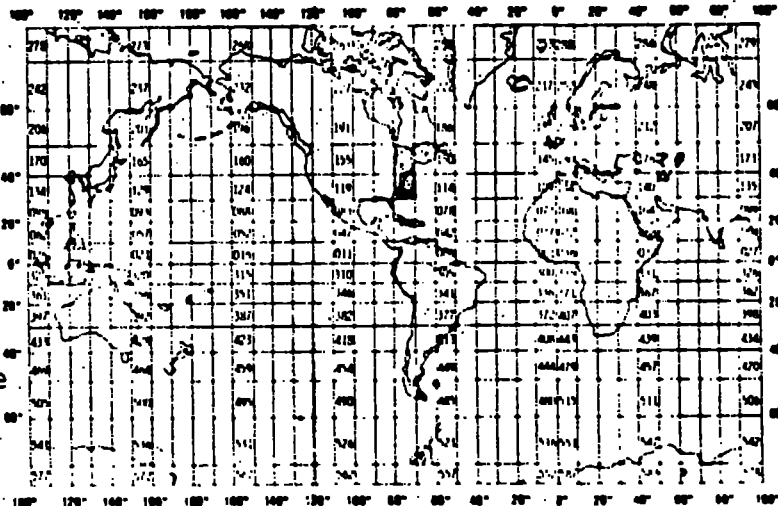
9. ARE DATA DECLARED NATIONAL PROGRAM (DNP)?

(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)

Dr. Gerald L. Engel Virginia Inst. of Marine Science Gloucester Point, Va. 23062 804-642-2111



B. SCIENTIFIC CONTENT

NAME OF DATA FIELD	REPORTING UNIT & 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
Latitude & Long.	Degrees, mins., seconds	Loran "C" SIMRAD Model LC101		Program used to convert from LORAN C coordiant to lat. & long.
Latitude	in CR S			
Longitudinal Hemisphere	E or W			
Station time	min to nearest tenth of an hour	Wrist watch checked daily with WWV		
Water depth	to nearest tenth of a meter	Hydroproducts PDR		
Water sample depth	to nearest meter	CID Bell Brown PK III		
Surface water temperature	°C to nearest tenth	Mercury in glass stem thermometer		
Barometric pressure	millibars, hundredths to tenths	Barograph-Castella of London		
Dry-bulb air temperature	°C to nearest tenth	Aspirated Psychrometer Bendix Model 566		
Wet-bulb air temperature	°C to nearest tenth	Aspirated Psychrometer Bendix Model 566		
Wind direction	tens of degrees WMO code 0877	Ship's compass		
Wind speed	knots	Anemometer Taylor Windscope Model 3105		
Wave direction	tens of degrees WMO code 0877	Ship's compass - Visual observation		
Wave height	1/2 meters WMO code 1555	Visual observation		
Swell direction	tens of degrees WMO code 0877	Ship's compass - visual observation		
Swell height	1/2 meters WMO code 1555	visual observation		
Weather	WMO code 4677	visual observation		
Cloud type	WMO codes 0513, 0515, 0509	visual observation		
Cloud cover	WMO code 2700	visual observation		
Visibility	WMO code 0585	visual observation		
Wave period	seconds	Wrist watch - visual observation		

Use. S. time

### 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
Swell period	seconds	Wrist watch - visual observation		

### C. DATA FORMAT

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

1. GIVE METHOD OF IDENTIFYING EACH RECORD TYPE

1. File Header "1" in position 10
2. Sample Header 1 "2" in position 10
3. Terminator for Sample Header 1 Position 1-10 identical to last sample header, "998" in positions 11-13
4. Sample Header 2 "3" in position 10
5. Terminator for Positions 1-10 identical to the last sample header Sample Header 2 "998" in positions 11-13.
6. Data Record "4" in position 10
7. Terminator of data for Positions 1-10 identical to last data record, Each sample "99" - position 11-13
8. File Terminator Positions 1-10 identical to last data record, "998" in positions 11-13.

2. GIVE BRIEF DESCRIPTION OF FILE ORGANIZATION

First record is File Header. Following this are Sample Header records 1 and 2, each followed by a Terminator record. Following this are Data Records for that sample followed by Terminator record. Sample Headers, terminators, data records, terminator sequence is repeated until final terminator record.

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"/> _____ | LANGUAGE                       |

4. RESPONSIBLE COMPUTER SPECIALIST: Gerald L. Engel  
 NAME AND PHONE NUMBER \_\_\_\_\_  
 ADDRESS Gloucester Point, Virginia

COMPLETE THIS SECTION IF DATA ARE ON MAGNETIC TAPE

<p>5. RECORDING MODE</p> <table style="width: 100%; border: none;"> <tr> <td><input type="checkbox"/> BCD</td> <td><input type="checkbox"/> BINARY</td> </tr> <tr> <td><input type="checkbox"/> ASCII</td> <td><input checked="" type="checkbox"/> EBCDIC</td> </tr> <tr> <td><input type="checkbox"/> _____</td> <td></td> </tr> </table>	<input type="checkbox"/> BCD	<input type="checkbox"/> BINARY	<input type="checkbox"/> ASCII	<input checked="" type="checkbox"/> EBCDIC	<input type="checkbox"/> _____		<p>9. LENGTH OF INTER-RECORD GAP (IF KNOWN) <input type="checkbox"/> 3/4 INCH  <input checked="" type="checkbox"/> 0.6 inch</p>		
<input type="checkbox"/> BCD	<input type="checkbox"/> BINARY								
<input type="checkbox"/> ASCII	<input checked="" type="checkbox"/> EBCDIC								
<input type="checkbox"/> _____									
<p>6. NUMBER OF TRACKS (CHANNELS)</p> <table style="width: 100%; border: none;"> <tr> <td><input type="checkbox"/> SEVEN</td> </tr> <tr> <td><input checked="" type="checkbox"/> NINE</td> </tr> <tr> <td><input type="checkbox"/> _____</td> </tr> </table>	<input type="checkbox"/> SEVEN	<input checked="" type="checkbox"/> NINE	<input type="checkbox"/> _____	<p>10. END OF FILE MARK</p> <table style="width: 100%; border: none;"> <tr> <td><input type="checkbox"/> OCTAL 17</td> </tr> <tr> <td><input type="checkbox"/> _____</td> </tr> </table>	<input type="checkbox"/> OCTAL 17	<input type="checkbox"/> _____			
<input type="checkbox"/> SEVEN									
<input checked="" type="checkbox"/> NINE									
<input type="checkbox"/> _____									
<input type="checkbox"/> OCTAL 17									
<input type="checkbox"/> _____									
<p>7. PARITY</p> <table style="width: 100%; border: none;"> <tr> <td><input checked="" type="checkbox"/> ODD</td> </tr> <tr> <td><input type="checkbox"/> EVEN</td> </tr> </table>	<input checked="" type="checkbox"/> ODD	<input type="checkbox"/> EVEN	<p>11. PASTE-ON-PAPER LABEL DESCRIPTION (INCLUDE ORIGINATOR NAME AND SOME LAY SPECIFICATIONS OF DATA TYPE, VOLUME NUMBER)</p> <p>VCM <del>498</del> 498          Va. Inst. of Marine Sc.          Hydrocarbon (010)          BLM <del>06B</del> 06B          File label = '<del>HYDRAB. DIO. BLM 06B</del>'          'HYDRAB. DIO. BLM 06B'</p>						
<input checked="" type="checkbox"/> ODD									
<input type="checkbox"/> EVEN									
<p>8. DENSITY</p> <table style="width: 100%; border: none;"> <tr> <td><input type="checkbox"/> 200 BPI</td> <td><input checked="" type="checkbox"/> 1600 BPI</td> </tr> <tr> <td><input type="checkbox"/> 556 BPI</td> <td></td> </tr> <tr> <td><input type="checkbox"/> 800 BPI</td> <td></td> </tr> <tr> <td><input type="checkbox"/> _____</td> <td></td> </tr> </table>	<input type="checkbox"/> 200 BPI	<input checked="" type="checkbox"/> 1600 BPI	<input type="checkbox"/> 556 BPI		<input type="checkbox"/> 800 BPI		<input type="checkbox"/> _____		<p>12. PHYSICAL BLOCK LENGTH IN BYTES</p> <p>113</p>
<input type="checkbox"/> 200 BPI	<input checked="" type="checkbox"/> 1600 BPI								
<input type="checkbox"/> 556 BPI									
<input type="checkbox"/> 800 BPI									
<input type="checkbox"/> _____									
<p>13. LENGTH OF BYTES IN BITS</p> <p style="text-align: center;">8</p>									

## RECORD FORMAT DESCRIPTION

RECORD NAME: **FILE HEADER**

4. FIELD NAME	15. POSITION FROM - 1 MEASURED IN BYTES <small>(e.g., bits, bytes)</small>	16. LENGTH		17. ATTRIBUTES  (FORTRAN)	18. USE AND MEANING
		NUMBER	UNITS		
File type	1	3	Chars	A3	"010" file type
File date	4	6	Bytes	3I2	Year, month, day of file generation
Record type	10	1	Chars	A1	"1" (File header record)
Vessel	11	11	Chars	11A1	Vessel name (left-justified)
Cruise	22	6	Chars	6A1	Originator's cruise identify (left-justified)
Cruise dates	28	17	Bytes	5 (I2,A1) I2	xx/xx/xx-xx/xx/xx Beginning year, month, day-ending year, month, day
Senior scientist	45	19	Chars	19A1	(left-justified)
Investigator	64	16	Chars	16A1	Investigators & Institution
Blank	80	34	Bytes	34X	Responsible for data. Blank

### RECORD FORMAT DESCRIPTION

RECORD NAME Sample Header 1

FIELD NAME	15. POSITION FROM - 1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES (FORTRAN)	18. USE AND MEANING
		NUMBER	UNITS		
File type	1	3	Chars	A3	"010" File-type
File date	4	6	Bytes	3I2	Year, month, day of file generation
Record type	10	1	Char	A1	"2" (first sample header record)
Sequence	11	3	Chars	A3	Sequence of this record type within sample
Lab sample no.	14	5	Chars	5A1	Sample identifier (first 2 chars are station I.D.)
Latitude	19	6	Bytes	3I2	Latitude (degrees, minutes, seconds)
Lathem	25	1	Char	A1	Hemisphere (-N or S)
Longitude	26	7	Bytes	I3,2I2	Longitude (degrees, minutes, seconds)
Lonhem	33	1	Char	A1	Hemisphere (-E or W)
Time	34	3	Bytes	F3.1*	Station time (GMT to nearest tenth of an hour)
Date	37	8	Bytes	2(I2,A1)I2	Sample date in form xx/xx/xx (year, month, day)
Depth	45	5	Bytes	F5.1*	Water Depth (to nearest tenth of a meter)
Navigation	50	2	Bytes	I2	Navigation: 01=Loran (mixed or unspecified) 02=Radar and/or fixes 03=Raydist without complications 04=Raydist with errors, drifting, etc. 05=Satellite 06=Omega 07=Loran A only 08=Loran C only
Sample code	52	1	Byte	I1	Sample type code: 1=Sediment 2=Benthic 3=Zooplankton 4=Dissolved 5=Particulate 6= Surface film
Replicate	53	2	Chars	A2	Replicate number (sediment only)
Znumb	55	4	Bytes	I4	Zooplankton collection number
Species	59	10	Chars	10A1	Species code (VIMS code)
Pris/Phy	69	5	Bytes	E5.2*	Pristane/phytane ratio (E notation: 9 <sup>^</sup> 99+9)
Phy/C <sub>18</sub>	74	5	Bytes	E5.2*	Phytane/C <sub>18</sub> ratio (E notation: 9 <sup>^</sup> 99+9)
Pris/C <sub>17</sub>	79	5	Bytes	E5.2*	Pristane/C <sub>17</sub> ratio (E notation: 9 <sup>^</sup> 99+9)
Total extract	84	6	Bytes	E6.3*	Total extract weight** (E notation: 9 <sup>^</sup> 999+9)
Total alpha	90	6	Bytes	E6.3*	Total Aliphatic weight ** (E notation 9 <sup>^</sup> 999+9)

\*Decimal place is implied; "period" is not present

\*\*Units are defined by sample type code 1, 2 & 3 in µgm/gm; 4 & 5 in µgm/liter; 6 in µgm/m<sup>2</sup>

RECORD FORMAT DESCRIPTION

RECORD NAME Sample Header 1 continued

FIELD NAME	15. POSITION FROM -1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES  (FORTRAN)	18. USE AND MEANING
		NUMBER	UNITS		
Total aromatic	96	6	Bytes	E6.3*	Total aromatic weight** (E notation 9^999+9)
GC aliph	102	6	Bytes	E6.3*	Total GC aliphatic** (E notation 9^999+9)
GC arom	108	6	Bytes	E6.3*	Total GC aromatic** (E notation 9^999+9)

\*Decimal place is implied; "period" is not present

\*\*Units are defined by sample type code: 1, 2 & 3 in µgm/gm  
4 & 5 in µgm/liter  
6 in µgm/m<sup>2</sup>

## RECORD FORMAT DESCRIPTION

RECORD NAME \_\_\_\_\_

FIELD NAME	15. POSITION FROM -1 MEASURED IN BYTES <small>(e.g., bits, bytes)</small>	16. LENGTH		17. ATTRIBUTES  (FORTRAN)	18. USE AND MEANING
		NUMBER	UNITS		
<b>Record Type "2" Terminators</b>					
Ident	1	10	Bytes	A3,3I2,A1	Same as Sample Header Record
Sequence	11	3	Chars	A3	"998" (constant)
Blank	14	100	Bytes	100X	Blank
<b>Sample Header Record 2</b>					
File type	1	3	Chars	A3	"010" (constant)
File Date	4	6	Bytes	3I2	Year,month,day of file generation
Record Type	10	1	Char	A1	"3" (second sample header record
Sequence	11	3	Bytes	I3	Sequence of this record type within sample
Sample	14	5	Chars	5A1	Sample number identifier
Barometer	19	3	Bytes	F3.1*	Pressure in millibars
Dry Bulb	22	4	Bytes	F4.1*	Air temperature; degrees Celsius
Wet Bulb	26	4	Bytes	F4.1*	Air temperature; degrees Celsius
Wind Direction	30	2	Bytes	I2	WMO code 0877; tens of degrees
Wind Speed	32	2	Bytes	I2	Knots
Wave Direction	34	2	Bytes	I2	WMO code 0877; tens of degrees
Wave Height	36	1	Byte	I1	WMO code 1555
Swell Direction	37	2	Bytes	I2	WMO code 0877; tens of degrees
Swell Height	39	1	Byte	I1	WMO code 1555
Weather	40	2	Bytes	I2	WMO code 4677
Cloud type	42	3	Bytes	I3	WMO codes 0513,0515,0509
Cloud Cover	45	1	Bytes	I1	WMO code 2700; percent of cloud cover
Visibility	46	1	Byte	I1	WMO code 4300
Blank	47	1	Byte	1x	Blank
Turbidity	48	1	Byte	I1	Turbidity measurement technique (see attached codes)
Wave Period	49	2	Bytes	I2	Seconds
Swell Period	51	2	Bytes	I2	Seconds
Sea SFC Temp	53	3	Bytes	F3.1*	Sea surface temperature degrees celsius
Blank	56	58	Bytes	58X	Blank

\*Decimal place is IMPLIED; "period" is not present





## RECORD FORMAT DESCRIPTION

RECORD NAME \_\_\_\_\_

FIELD NAME	15. POSITION FROM - 1 MEASURED IN <small>(e.g., bits, bytes)</small>	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
<u>Data Record Terminator</u>					
Ident	1	10	Bytes	A3,3I2,A1	Same as Data Record
Sequence	11	3	Chars	A3	"998" (constant)
Blank	14	100	Bytes	100X	Blank
<u>File Terminator</u>					
Ident	1	10	Bytes	A3,3I2,A1	Same as Data Record
Sequence	11	3	Chars	A3	"999" (constant)
Blank	14	100	Bytes	100X	Blank
					*Decimal place is IMPLIED; "period" is not present.

## NAVIGATION:

- 01 = Loran (mixed or unspecified)
- 02 = Radar and/or fixes
- 03 = Raydist without complications
- 04 = Raydist with errors, drifting, etc.
- 05 = Satellite
- 06 = Omega
- 07 = Loran A only
- 08 = Loran C only

## TURBIDITY MEASUREMENT TECHNIQUE

- 1 = Turbidometer; in JTU
- 2 = Transmissometer; in percent of light transmission over a 10 cm. path
- 3 = Fluorometer; suspended solids calibration
- 4 = Nephelometer

### 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 (✓)	
Neil Brown Inst. CTD MK III	July, 1976	✓			✓				
Beckman Minds D. O. Sensor	July, 1976	✓			✓				
Beckman Inductive Salinometer RS 7B	Dec. 1975	✓		* ✓ Annually					

ERROR CORRECTION DOCUMENTATION FORM

DATE:

TO: OC12

FROM: OC13

SUBJECT: Error Correction in Processing of Data Set - Accession # 7800477

- 1) File Type: F010
- 2) Project Ident.: VIMS-DCS
- 3) Track Nos.: TR3103

I. Error Corrections as reported to Principal Investigator:

Error

Correction Completed (Check)

II. Additional error corrections:

Error

Correction Completed (Check)

III. Processor Name: \_\_\_\_\_

TAPE ASSIGNMENT SHEET

ACCESSION NO.: 7800477

TRACK NO(s): TR 3103

Type of Tape	Tape Number	Label	LRECL	BLKSIZE	RECFM	Remarks
Originator	VCM498	SL	113	113	9-t 1600 BPI EBCDIC	
Duplicate	W10122	SL	113	4520	9-t 1600 BPI ASCII	
Reformatted						
First User						
Final User						

## DATA SET ROUTE SHEET

ACCESSION/TRACK # 7800477/TR3103

Step	Completion Date/Init.		Tape # or DSN	# of Files	BLKSIZE	LRECL	# RECORDS
ORIGINATOR TAPE	2/24/83	<del>JBR</del>	VCM498	3	113	113	
QUADI/SCAN TAPE	2/24/83	<del>JBR</del>	W10122	3	4520	113	
ASSIGNED FOR PROCESS.							
DDF EVALUATION							
QUALITY REVIEW							
PRELIMINARY DATA SORT							
PRELIMINARY MULCHEK							
FIRST USER TAPE							
WORK DISK FILE							
FINAL USER TAPE							
FINAL MULCHEK							
EDITED DISK FILE							
DATA SET "FINALIZED"							

DDF A: 5:03

5/3/78

VLM 447

ACCESSION NUMBER

78-0477

NO  
ADDITIONAL  
THIS IS

DATA DOCUMENTATION FORM

HYDRAB. OIO. BLMOSW

NOAA FORM 24-73 (4-72)

U.S. DEPARTMENT OF COMMERCE  
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION  
NATIONAL OCEANOGRAPHIC DATA CENTER  
RECORDS SECTION  
ROCKVILLE, MARYLAND 20882

FORM APPROVED  
O.M.B. No. 41-R2631

TR3104-TR3105  
FOIO

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.

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1. NAME AND ADDRESS OF INSTITUTION, LABORATORY, OR ACTIVITY WITH WHICH SUBMITTED DATA ARE ASSOCIATED

Virginia Institute of Marine Science  
Gloucester Point, Virginia 23062

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

BLM

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

BLMOSW

4. PLATFORM NAME(S)

H.J.W. Fay/  
Virginian Sea

5. PLATFORM TYPE(S)  
(E.G., SHIP, BUOY, ETC.)

Ship

6. PLATFORM AND OPERATOR NATIONALITY(IES)

PLATFORM	OPERATOR	7. DATES	
		FROM: MO, DAY, YR	TO: MO, DAY, YR
H.J.W. Fay/ Virginian Sea	Tracor	11/19/76	11/29/76
	Marine/	11/04/76	11/07/76
	VIMS	11/17/76	11/26/76

8. ARE DATA PROPRIETARY?

NO  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 (ONP)?

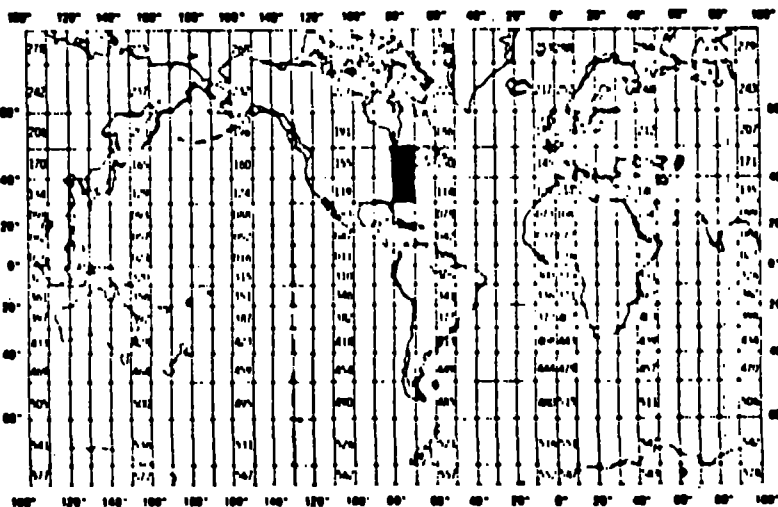
(I.E., SHOULD THEY BE INCLUDED IN WORLD DATA CENTERS HOLDINGS FOR INTERNATIONAL EXCHANGE?)

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)

Dr. Gerald L. Engel  
Va. Institute of Marine Science  
Gloucester Pt., Va. 23062

804-642-2111





## 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
Latitude & Long.	Degrees, mins., seconds	Loran C SIMRAD Model LC 101		Program used to convert from Loran C coordinates to Latitude & Longitude
Latitudinal hemis.	N or S			
Longitudinal Hemisphere	E or W			
Station time	GMT to nearest tenth of an hr.	Wrist Watch checked daily with WWV		
Water depth	to nearest tenth of a meter	EDO Model 55A Recorder EDO Model 444 Tranceiver EDO Model 415 Transducer		
Water sample depth	to nearest meter	CTD Neil Brown MK III		
Surface water temperature	°C to nearest tenth	Mercury in glass stem thermometer		
Barometric pressure	Millibars, tens to tenths	Danforth Aneroid Barometer Model 310		
Dry-bulb air temperature	°C to nearest tenth	Aspirated Psychrometer Bendix Model 566		
Wet-bulb air temperature	°C to nearest tenth	Aspirated Psychrometer Bendix Model 566		
Wind direction	Tens of degrees WMO Code 0877	Ship's Anemometer Bendix Model 120/135		
Wind Speed	Knots	Ship's Anemometer Bendix Model 120/135		
Wave direction	Tens of degrees WMO Code 0877	Ship's compass		
Wave height	1/2 meters WMO Code 1555	Visual estimate		
Swell direction	Tens of degrees WMO Code 0877	Ship's compass		
Swell height	1/2 meters WMO Code 1555	Visual estimate		
Weather	WMO Code 4677	Visual estimate		
Cloud type	WMO Codes 0513, 0515, 0509	Visual estimate		

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
Cloud cover	WMO Code 2700	Visual observation		
Visibility	WMO Code 4300	Visual observation		
Wave period	Seconds	Wrist watch - visual observation		
Swell period	Seconds	Wrist watch - visual observation		
Salinity	Parts per thousand to 0.01%	Niskin bottles on rosette	Guildline Auto sac Model 8400	N/A
Dissolved oxygen	Milligrams per liter	Niskin bottles on rosette	Azide modification to Winkler Titration	N/A
Water temperature	°C to 0.1	XBT	N/A	Depth and temp at local max, min, inflection points

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

1. File Header "1" in position 10
2. Sample Header 1 "2" in position 10
3. Terminator for Sample Header 1 Positions 1-10 identical to last sample header, "998" in positions 11-13
4. Sample Header 2 "3" in position 10
5. Terminator for Sample Header 2 Positions 1-10 identical to the last sample header "998" in positions 11-13.
6. Data Record "4" in position 10
7. Terminator for data for each sample Positions 1-10 identical to last data record, "998" - position 11-13
8. File Terminator Positions 1-10 identical to last data record, "999" in Positions 11-13

2. GIVE BRIEF DESCRIPTION OF FILE ORGANIZATION

First record is File Header. Following this are Sample Header records 1 & 2, each followed by a Terminator record. Following this are Data Records for that sample followed by Terminator record. Sample headers, terminators, data records, terminator sequence is repeated until final terminator record.

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

4. RESPONSIBLE COMPUTER SPECIALIST:

NAME AND PHONE NUMBER Gerald L. Engel  
ADDRESS Gloucester Point, Virginia

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"/> 0.6 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 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 LABEL SPECIFICATIONS OF DATA TYPE, VOLUME NUMBER)</p> <p>VCM497 Virginia Institute of Marine Science Hydrocarbon File Label = 'HYDRCB.010.BLM05W'</p>
<p>8. DENSITY</p> <p><input type="checkbox"/> 200 BPI <input checked="" type="checkbox"/> 1600 BPI</p> <p><input type="checkbox"/> 556 BPI</p> <p><input type="checkbox"/> 800 BPI</p> <p><input type="checkbox"/> _____</p>	<p>12. PHYSICAL BLOCK LENGTH IN BYTES 113</p> <p>13. LENGTH OF BYTES IN BITS 8</p>

RECORD FORMAT DESCRIPTION

RECORD NAME FILE HEADER

14. FIELD NAME	15. POSITION FROM - 1 MEASURED IN BYTES <small>(e.g. bits, bytes)</small>	16. LENGTH		17. ATTRIBUTES  (FORTRAN)	18. USE AND MEANING
		NUMBER	UNITS		
File type	1	3	Chars	A3	"010" file type
File date	4	6	Bytes	3I2	Year, month, day of file generation
Record type	10	1	Chars	A1	"1" (File header record)
Vessel	11	11	Chars	11A1	Vessel name (left-justified)
Cruise	22	6	Chars	6A1	Originator's cruise identify (left-justified)
Cruise dates	28	17	Bytes	5 (I2,A1) I2	xx/xx/xx-xx/xx/xx Beginning year, month, day-ending year, month, day (left-justified)
Senior scientist Investigator	45	19	Chars	19A1	Investigators & Institution Responsible for data.
	64	16	Chars	16A1	
Blank	80	34	Bytes	34X	Blank

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN (No. Min. bytes)	16. LENGTH		17. ATTRIBUTES (FORTRAN)	18. USE AND MEANING
		NUMBER	UNITS		
File type	1	3	Chars	A3	"010" File-type
File date	4	6	Bytes	3I2	Year, month, day of file generation
Record type	10	1	Char	A1	"2" (first sample header record)
Sequence	11	3	Chars	A3	Sequence of this record type within sample
Lab. sample no.	14	5	Chars	5A1	Sample identifier (first 2 chars are station I.D.)
Latitude	19	6	Bytes	3I2	Latitude (degrees, minutes, seconds)
Lathem	25	1	Char	A1	Hemisphere (-N or S)
Longitude	26	7	Bytes	I3, 2I2	Longitude (degrees, minutes, seconds)
Lonhem	33	1	Char	A1	Hemisphere (-E or W)
Time	34	3	Bytes	F3.1*	Station time (GMT to nearest tenth of an hour)
Date	37	8	Bytes	2(I2,A1)I2	Sample date in form xx/xx/xx (year, month, day)
Depth	45	5	Bytes	F5.1*	Water depth (to nearest tenth of a meter)
Navigation	50	2	Bytes	I2	Navigation: 01=Loran (mixed or unspecified) 02=Radar and/or fixes 03=Raydist without complications 04=Raydist with errors, drifting, etc. 05=Satellite 06=Omega 07=Loran A only 08=Loran C only
Sample code	52	1	Byte	I1	Sample type code: 1=Sediment 7=Neuston 2=Benthic 8=Dissolved Oxygen 3=Zooplankton bottom 4=Dissolved oxygen surface 5=Particulate, <sup>surface</sup> 6=Surface film 9=Particulate, <sup>bottom</sup>
Replicate	53	2	Chars	A2	Replicate number (sediment only)
Znumb	55	4	Bytes	I4	Zooplankton collection number
Species	59	10	Chars	10A1	Species code (NOCD code)
Pris/Phy	69	5	Bytes	E5.2*	Pristane/phytane ratio (E notation 9,99+9)
Phy/C18	74	5	Bytes	E5.2*	Phytane/C18 ratio (E notation 9,99+9)
Pris/C17	79	5	Bytes	E5.2*	Pristane/C17 ratio (E notation 9,99+9)
Total extract	84	6	Bytes	E6.3*	Total extract weight** (E notation 9,999+9)
CPI	90	6	Bytes	E6.3*	(E notation 9 999+9) (C23+C25+C27+C29)/ (C24+C26+C28+C30)

\*Decimal place is implied; "period" is not present

\*\*Units are defined by sample type code 1, 2, 3, & 7 in µgm/gm; 4, 5, & 8 in µgm/liter; 6 in µgm/m<sup>2</sup>

RECORD FORMAT DESCRIPTION

RECORD NAME

Sample Header 1 (continued)

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN <small>(e.g., bits, bytes)</small>	16. LENGTH		17. ATTRIBUTES (FORTRAN)	18. USE AND MEANING
		NUMBER	UNITS		
Blank	96	6	Bytes	6X	Blank
GC aliph	102	6	Bytes	E6.3*	Total GC aliphatic** (E notation 9 <sup>999</sup> +9)
GC arom	108	6	Bytes	E6.3*	Total GC aromatic** (E notation 9 <sup>999</sup> +9)

\*Decimal place is implied; "period" is not present

\*\*Units are defined by sample type code: 1, 2, 3 & 7 in ugm/gm  
4, 5 & 8 in ugm/liter  
6 in ugm/m<sup>2</sup>

## RECORD FORMAT DESCRIPTION

RECORD NAME \_\_\_\_\_

FIELD NAME	15. POSITION FROM - 1 MEASURED IN BYTES <small>(e.g., bits, bytes)</small>	16. LENGTH		17. ATTRIBUTES  (FORTRAN)	18. USE AND MEANING
		NUMBER	UNITS		
<b>Record Type "2" Terminators</b>					
Ident	1	10	Bytes	A3,3I2,A1	Same as Sample Header Record
Sequence	11	3	Chars	A3	"998" (constant)
Blank	14	100	Bytes	100X	Blank
<b>Sample Header Record 2</b>					
File type	1	3	Chars	A3	"C13" (constant)
File Date	4	6	Bytes	3I2	Year, month, day of file generation
Record Type	10	1	Char	A1	"3" (second sample header record)
Sequence	11	3	Bytes	I3	Sequence of this record type within sample
Sample	14	5	Chars	5A1	Sample number identifier
Barometer	19	3	Bytes	F3.1*	Pressure in millibars
Dry Bulb	22	4	Bytes	F4.1*	Air temperature; degrees Celsius
Wet Bulb	26	4	Bytes	F4.1*	Air temperature; degrees Celsius
Wind Direction	30	2	Bytes	I2	WMO code 0877; tens of degrees
Wind Speed	32	2	Bytes	I2	Knots
Wave Direction	34	2	Bytes	I2	WMO code 0877; tens of degrees
Wave Height	36	1	Byte	I1	WMO code 1555
Swell Direction	37	2	Bytes	I2	WMO code 0877; tens of degrees
Swell Height	39	1	Byte	I1	WMO code 1555
Weather	40	2	Bytes	I2	WMO code 4677
Cloud type	42	3	Bytes	I3	WMO codes 0513, 0515, 0509
Cloud Cover	45	1	Bytes	I1	WMO code 2700; percent of cloud cover
Visibility	46	1	Byte	I1	WMO code 4300
Blank	47	1	Byte	1x	Blank
Turbidity	48	1	Byte	I1	Turbidity measurement technique (see attached codes)
Wave Period	49	2	Bytes	I2	Seconds
Swell Period	51	2	Bytes	I2	Seconds
Sea SFC Temp	53	3	Bytes	F3.1*	Sea surface temperature degrees celsius
Blank	56	58	Bytes	58X	Blank

\*Decimal place is IMPLIED; "period" is not present

RECORD FORMAT DESCRIPTION

RECORD NAME

14. FIELD NAME	15. POSITION FROM - 1 MEASURED IN (No. of bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
Record Type "3"	Terminator				
Ident	1	10	Bytes	A3,3I2,A1	Same as Sample Header Record 2
Sequence	11	3	Chars	A3	"998" (constant)
Blank	14	100	Bytes	100X	Blank
Data Record					
File type	1	3	Chars	A3	"010" (constant)
File date	4	6	Bytes	3I2	year, month, day of file generation
Record type	10	1	Char	A1	"4" (data record)
Sequence	11	3	Bytes	I3	Sequence of this record type within sample
Sample	14	5	Chars	5A1	Sample identifier (14-15 station code)
No.	19	2	Bytes	I2	Number of concentrations in this record (up to 10)
Extract	21	1	Char	A1	Extract Code H=Aliphatic B=Aromatic
Retention	22	4	Bytes	I4	Retention index**
Concentration	26	5	Bytes	E5.2*	Concentration (E notation 9 <sup>99</sup> 9)
Retention	31	4	Bytes	I4	Retention index**
Concentration	35	5	Bytes	E5.2*	Concentration
Retention	40	4	Bytes	I4	Retention index**
Concentration	44	5	Bytes	E5.2*	Concentration
Retention	49	4	Bytes	I4	Retention index**
Concentration	53	5	Bytes	E5.2*	Concentration
Retention	58	4	Bytes	I4	Retention index**
Concentration	62	5	Bytes	E5.2*	Concentration
Retention	67	4	Bytes	I4	Retention index**
Concentration	71	5	Bytes	E5.2*	Concentration
Retention	76	4	Bytes	I4	Retention index**
Concentration	80	5	Bytes	E5.2*	Concentration
Retention	85	4	Bytes	I4	Retention index**
Concentration	89	5	Bytes	E5.2*	Concentration
Retention	94	4	Bytes	I4	Retention index**
Concentration	98	5	Bytes	E5.2*	Concentration
Retention	103	4	Bytes	I4	Retention index**
Concentration	107	5	Bytes	E5.2*	Concentration
Blank	112	2	Bytes	2X	Blank

\*Decimal place is IMPLIED; "period" is not present.

\*\*Analytical Chemistry, Vol. 36, No. 8, July, 1964, pp 31A-41A.



## RECORD FORMAT DESCRIPTION

RECORD NAME \_\_\_\_\_

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN _____ (e.g., diff. bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
<u>Data Record Terminator</u>					
Ident	1	10	Bytes	A3,3I2,A1	Same as Data Record
Sequence	11	3	Chars	A3	"998" (constant)
Blank	14	100	Bytes	100X	Blank
<u>File Terminator</u>					
Ident	1	10	Bytes	A3,3I2,A1	Same as Data Record
Sequence	11	3	Chars	A3	"999" (constant)
Blank	14	100	Bytes	100X	Blank
*Decimal place is IMPLIED; "period" is not present.					

#### NAVIGATION:

- 01 = Loran (mixed or unspecified)
- 02 = Radar and/or fixes
- 03 = Raydist without complications
- 04 = Raydist with errors, drifting, etc.
- 05 = Satellite
- 06 = Omega
- 07 = Loran A only
- 08 = Loran C only

#### TURBIDITY MEASUREMENT TECHNIQUE

- 1 = Turbidometer; in JTU
- 2 = Transmissometer; in percent of light transmission over a 10 cm. path
- 3 = Fluorometer; suspended solids calibration
- 4 = Nephelometer

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.

BLM05B, BLM05W

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 (✓)	
Neil Brown Inst. CTD MK III	Oct., 1976	✓			✓				
Beckman Minds D.O. Sensor	Oct., 1976	✓			✓				
Guildline Autosac MOD8400	Oct., 1976	✓			✓				

ERROR CORRECTION DOCUMENTATION FORM

DATE:

TO: OC12

FROM: OC13

SUBJECT: Error Correction in Processing of Data Set - Accession # 7800477

- 1) File Type: FO10
- 2) Project Ident.: VIMS-DCS
- 3) Track Nos.: TR3104-5

I. Error Corrections as reported to Principal Investigator:

Error

Correction Completed (Check)

II. Additional error corrections:

Error

Correction Completed (Check)

III. Processor Name: \_\_\_\_\_

DATA SET ROUTE SHEET

ACCESSION/TRACK # 7800477 / TR3104-5

Step	Completion Date/Init.		Tape # or DSN	# of Files	BLKSIZE	LRECL	# RECORDS
	ORIGINATOR TAPE	2/28/83	<del>8/10/82</del>	VCN497	3	113	113
QUADI/SCAN TAPE	2/28/83	<del>8/10/82</del>	W10579	3	4520	113	
ASSIGNED FOR PROCESS.							
DDF EVALUATION							
QUALITY REVIEW							
PRELIMINARY DATA SORT							
PRELIMINARY MULCHEK							
FIRST USER TAPE							
WORK DISK FILE							
FINAL USER TAPE							
FINAL MULCHEK							
EDITED DISK FILE							
DATA SET "FINALIZED"							

TAPE ASSIGNMENT SHEET

ACCESSION NO.: 7800477

TRACK NO(s): TR3104-5

Type of Tape	Tape Number	Label	LRECL	BLKSIZE	RECFM	Remarks
Originator	VCMA97	NL	113	113	9-t 1600 BPI EBCDIC	
Duplicate	W10579	SL	113	4520	9-t 1600 BPI ASCII	
Reformatted						
First User						
Final User						

Password:

accNo	fleA	refNo	proj	inst	ship	startDate	cruise	catId
7800477	F144	TR3103	0084	3128	31FY	1977/02/04	BLM06B	307230
7800477	F144	TR3104	0084	3128	32VS	1976/11/04	BLM05W	307231
7800477	F144	TR3105	0084	3128	31FY	1976/11/04	BLM05W	307232

(3 rows affected)

Password:

accNo	fleA	refNo	ship	staCnt	recCnt	startDate	endDate
7800477	F144	TR3103	31FY	61	0	77/02/04	77/03/13
7800477	F144	TR3104	32VS	8	0	76/11/04	76/11/29
7800477	F144	TR3105	31FY	7	0	76/11/04	76/11/29

(3 rows affected)