

DDF-18:3:15



UNITED STATES DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
ENVIRONMENTAL DATA SERVICE  
Washington, D.C. 20235  
National Oceanographic Data Center

Date :  
To : D781  
From : D752 *WRH*  
Subject : Error Correction in Processing of  
Data Set - Accession # 78-0591

- 1) File Type: 021
- 2) Project Ident.: Puget Sound/PSERP
- 3) Track Nos.: TR 3282-3

I. Error corrections as reported to Principal Investigator:

*none*

II. Additional error corrections:

- ① Observations having only record types (1) and (2) were deleted on war tape.
- ② observations with duplicate station numbers were changed.

III. Processor name: J. B. Ridlon



DATA DOCUMENTATION FORM

TR3282

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.

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  Pacific Marine Environmental Laboratory 3711 15th Ave. N.E. Seattle, WA 98105			
2. EXPEDITION, PROJECT, OR PROGRAM DURING WHICH DATA WERE COLLECTED  MESA Puget Sound Project (PSERP)		3. CRUISE NUMBER(S) USED BY ORIGINATOR TO IDENTIFY DATA IN THIS SHIPMENT  771116	
4. PLATFORM NAME(S)  SNOW GOOSE	5. PLATFORM TYPE(S) (E.G., SHIP, BUOY, ETC.)  SHIP	6. PLATFORM AND OPERATOR NATIONALITY(IES)	7. DATES
		PLATFORM OPERATOR	FROM: MO/DAY/YR TO: MO/DAY/YR
		US	US
			3/10/77 3/16/77
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.  Puget Sound 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)  Ed Baker PMEL/ERL/NOAA 442-4800 (Commercial) 399-4800 (FTS)			

**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
Nephels	kHz to hundreds	See attached sheet	N/A	N/A
Total Suspended matter (TSM)	µg/l (micrograms per liter)	See attached sheet	Samples on 0.4 µm Nuclepore filters weighed on a Cahn 4700 automatic electrobalance	N/A

## Sampling Methods

Water samples were collected in 5-liter Scott-Richards bottles and filtered under vacuum through preweighed 0.4  $\mu\text{m}$  Nuclepore filters. The filters were removed from the filtration apparatus, placed into individually marked petri dishes, dried in a desiccator for 24 hours, and stored frozen for return to the laboratory.

The vertical distribution of suspended matter was determined with a continuously recording integrating nephelometer. The instrument was interfaced with a Plessey CTD system, using the sound velocity channel (14-16 kHz), to obtain real time measurements of forward light scattering.

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

Record Type 1 - 1 in Col 10  
Record Type 2 - 2 in Col 10  
Record Type 5 - 5 in Col 10

2. GIVE BRIEF DESCRIPTION OF FILE ORGANIZATION

File is composed of data from 1 cruise  
Record Type 1 is a cruise and station description header card;  
record type 2 is a station number and cast identifier card; record type 5 is  
a data listing card  
*Cards converted to tape at NODC with tape characteristics  
as outlined under blocks #5-#13 below.*

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

4. RESPONSIBLE COMPUTER SPECIALIST:

NAME AND PHONE NUMBER Dr. Edward Baker 206-442-4800  
ADDRESS PMEL, Hanger 32, 7600 SAnd Point Way N.E., Seattle WA 98115

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 checked="" 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 checked="" 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><i>Vol = Ser = 09538 (orig.)</i></p> <p><i>Vol = Ser = 06737 (o/c)</i></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</p> <p><i>4800</i></p> <p>13. LENGTH OF BYTES IN BITS</p> <p><i>8</i></p>

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

USER TAPE

78-0591

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 D 752-NOAA/EDIS/NODC-2026347505  
ADDRESS WASHINGTON, DC 20235

COMPLETE THIS SECTION IF DATA ARE ON MAGNETIC TAPE

<p>5. RECORDING MODE</p> <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 type="checkbox"/> _____</p>
<p>6. NUMBER OF TRACKS (CHANNELS)</p> <input type="checkbox"/> SEVEN <input checked="" type="checkbox"/> NINE <input type="checkbox"/> _____	<p>10. END OF FILE MARK <input type="checkbox"/> OCTAL 17  <input type="checkbox"/> _____</p>
<p>7. PARITY</p> <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>00505 (1,5L)</p> <p>DSN=TR3282</p>
<p>8. DENSITY</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>12. PHYSICAL BLOCK LENGTH IN BYTES</p> <p>13. LENGTH OF BYTES IN BITS</p>

RECORD FORMAT DESCRIPTION

RECORD NAME Trace Metals (Station/Sample Header)

14. 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 '021'
File Identifier	4	6	Bytes	A6	'YYMMDD' = date of file creation or unique cruise number
Record Type	10	1	Bytes	A1	Always '1'
Sequence Number	11	3	Bytes	I3	Ascending order for sorting
Station Number	14	5	Bytes	A5	
Latitude,					
Degrees	19	2	Bytes	I2	
Minutes	21	2	Bytes	I2	
Seconds	23	2	Bytes	I2	
Hemisphere	25	1	Bytes	A1	'N' or 'S'
Longitude,					
Degrees	26	3	Bytes	I3	
Minutes	29	2	Bytes	I2	
Seconds	31	2	Bytes	I2	
Hemisphere	33	1	Bytes	A1	'E' or 'W'
Sample Collection					
Date-Time					
Year	34	2	Bytes	I2	00 to 99 G.M.T.
Month	36	2	Bytes	I2	01 to 12 "
Day	38	2	Bytes	I2	01 to 31 "
Hour	40	2	Bytes	I2	00 to 23 "
Minutes	42	2	Bytes	I2	00 to 59 "
Depth to Bottom	44	5	Bytes	I5	Whole meters
Sphere Code	49	1	Bytes	A1	
Blank	50	31	Bytes	31X	

**RECORD FORMAT DESCRIPTION**

RECORD NAME Trace Metals (Text)

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN Bytes <small>(e.g., bits, bytes)</small>	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	Bytes	A3	Always '021'
File Identifier	4	6	Bytes	A6	'YYMMDD' = date of file creation or unique cruise number
Record Type	10	1	Bytes	A1	Always '2'
Sequence Number	11	3	Bytes	I3	Ascending order for sorting
Station Number	14	5	Bytes	A5	
Text	19	62	Bytes	62A1	Any descriptive alpha-numeric information



**RECORD FORMAT DESCRIPTION**

RECORD NAME Trace Metals (Data III)

14. 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 '021'
File Identifier	4	6	Bytes	A6	'YYMMDD' = date of file creation or unique cruise number
Record Type	10	1	Bytes	A1	Always '5'
Sequence Number	11	3	Bytes	I3	Ascending order for sorting
Station Number	14	5	Bytes	A5	
Sample Depth	19	4	Bytes	I4	Whole meters
Replicate Number	23	1	Bytes	I1	
Lab Sample Number	24	4	Bytes	I4	
Nephels	28	5	Bytes	I5	kHz in hundredths
Total Suspended Matter (TSM)	33	6	Bytes	I6	Micrograms per liter

### 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  (✓)	
PMEL Analog Nephelometer	See Attached Sheet								

## Instrument Calibration

The analog nephelometer is calibrated empirically in the field with units of relative scattering intensity. Quantitative calibration is done in the laboratory by correlating light scattering values with TSM values (in  $\mu\text{g}/\ell$ ).

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.

A. ORIGINATOR IDENTIFICATION

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1. NAME AND ADDRESS OF INSTITUTION, LABORATORY, OR ACTIVITY WITH WHICH SUBMITTED DATA ARE ASSOCIATED					
Pacific Marine Environmental Laboratory 3711 15th Ave. N.E. Seattle, WA 98105					
2. EXPEDITION, PROJECT, OR PROGRAM DURING WHICH DATA WERE COLLECTED		3. CRUISE NUMBER(S) USED BY ORIGINATOR TO IDENTIFY DATA IN THIS SHIPMENT			
MESA Puget Sound Project (PSERP)		770808			
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
SNOW GOOSE	SHIP	US	US	8/8/77	8/14/77
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.  Puget Sound 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) Ed Baker PMEL/ERL/NOAA 442-4800 (Commercial) 399-4800 (FTS)					

**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
Nephels	kHz to hundreds	See attached sheet	N/A	N/A
Total Suspended matter (TSM)	μg/l (micrograms per liter)	See attached sheet	Samples on 0.4 μm Nuclepore filters weighed on a Cahn 4700 automatic electrobalance	N/A

## Sampling Methods

Water samples were collected in 5-liter Scott-Richards bottles and filtered under vacuum through preweighed 0.4  $\mu\text{m}$  Nuclepore filters. The filters were removed from the filtration apparatus, placed into individually marked petri dishes, dried in a desiccator for 24 hours, and stored frozen for return to the laboratory.

The vertical distribution of suspended matter was determined with a continuously recording integrating nephelometer. The instrument was interfaced with a Plessey CTD system, using the sound velocity channel (14-16 kHz), to obtain real time measurements of forward light scattering.

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

Record Type 1 - 1 in Col 10  
Record Type 2 - 2 in Col 10  
Record Type 5 - 5 in Col 10

2. GIVE BRIEF DESCRIPTION OF FILE ORGANIZATION

File is composed of data from 1 cruise  
Record Type 1 is a cruise and station description header card;  
record type 2 is a station number and cast identifier card; record type 5 is a data listing card  
*Cards converted to tape at NODC with tape characteristics as outlined under blocks #5 - #13 below*

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

4. RESPONSIBLE COMPUTER SPECIALIST:

NAME AND PHONE NUMBER Dr. Edward Baker 206-442-4800  
ADDRESS PMEL, Hanger 32, 7600 SAnd Point Way N.E., Seattle WA 98115

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 checked="" 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 checked="" 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><i>Vol = Ser = 09538 (orig.)</i></p> <p><i>Vol = Ser = 06737 (o/c)</i></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</p> <p><i>4800</i></p> <p>13. LENGTH OF BYTES IN BITS</p> <p><i>8</i></p>

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

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

USER TAPE

78-0591

2. GIVE BRIEF DESCRIPTION OF FILE ORGANIZATION

[Empty box for file organization description]

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

4. RESPONSIBLE COMPUTER SPECIALIST:

NAME AND PHONE NUMBER

ADDRESS

D 752-NOAA/EDIS/NODC-202-6347505  
WASHINGTON, DC 20235

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>000505 (1,54)</p> <p>DSN = TR 3282</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</p> <p>13. LENGTH OF BYTES IN BITS</p>



RECORD FORMAT DESCRIPTION

RECORD NAME Trace Metals (Station/Sample Header)

14. 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 '021'
File Identifier	4	6	Bytes	A6	'YYMMDD' = date of file creation or unique cruise number
Record Type	10	1	Bytes	A1	Always '1'
Sequence Number	11	3	Bytes	I3	Ascending order for sorting
Station Number	14	5	Bytes	A5	
Latitude,					
Degrees	19	2	Bytes	I2	
Minutes	21	2	Bytes	I2	
Seconds	23	2	Bytes	I2	
Hemisphere	25	1	Bytes	A1	'N' or 'S'
Longitude,					
Degrees	26	3	Bytes	I3	
Minutes	29	2	Bytes	I2	
Seconds	31	2	Bytes	I2	
Hemisphere	33	1	Bytes	A1	'E' or 'W'
Sample Collection					
Date-Time					
Year	34	2	Bytes	I2	00 to 99 G.M.T.
Month	36	2	Bytes	I2	01 to 12 "
Day	38	2	Bytes	I2	01 to 31 "
Hour	40	2	Bytes	I2	00 to 23 "
Minutes	42	2	Bytes	I2	00 to 59 "
Depth to Bottom	44	5	Bytes	I5	Whole meters
Sphere Code	49	1	Bytes	A1	
Blank	50	31	Bytes	31X	

**RECORD FORMAT DESCRIPTION**

RECORD NAME Trace Metals (Text)

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN bytes <small>(e.g., bits, bytes)</small>	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	Bytes	A3	Always '021'
File Identifier	4	6	Bytes	A6	'YYMMDD' = date of file creation or unique cruise number
Record Type	10	1	Bytes	A1	Always '2'
Sequence Number	11	3	Bytes	I3	Ascending order for sorting
Station Number	14	5	Bytes	A5	
Text	19	62	Bytes	62A1	Any descriptive alpha-numeric information

**RECORD FORMAT DESCRIPTION**

RECORD NAME Trace Metals (Data III)

14. FIELD NAME	15. POSITION FROM - 1 MEASURED IN <u>Bytes</u> <small>(e.g., bits, bytes)</small>	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	Bytes	A3	Always '021'
File Identifier	4	6	Bytes	A6	'YYMMDD' = date of file creation or unique cruise number
Record Type	10	1	Bytes	A1	Always '5'
Sequence Number	11	3	Bytes	I3	Ascending order for sorting
Station Number	14	5	Bytes	A5	
Sample Depth	19	4	Bytes	I4	Whole meters
Replicate Number	23	1	Bytes	I1	
Lab Sample Number	24	4	Bytes	I4	
Nephels	28	5	Bytes	I5	kHz in hundredths
Total Suspended Matter (TSM)	33	6	Bytes	I6	Micrograms per liter

### 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 (✓)	
PMEL Analog Nephelometer	See Attached Sheet								

## Instrument Calibration

The analog nephelometer is calibrated empirically in the field with units of relative scattering intensity. Quantitative calibration is done in the laboratory by correlating light scattering values with TSM values (in  $\mu\text{g}/\ell$ ).



**U.S. DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration**

ENVIRONMENTAL RESEARCH LABORATORIES

Pacific Marine Environmental Laboratory

NOAA Building Number 32

7600 Sand Point Way N.E.

Seattle, WA 98115

Date: July 25, 1978

To: Sid Stillwaugh, EDIS

From: Edward T. Baker *Judith B. Nevins for  
Edward T. Baker*

Subject: Transmittal of Cruise Data

Enclosed are data documentation forms and I.B.M. cards containing data (File Type 021) for MESA Puget Sound Project (PSERP), Snow Goose cruises 3/10/77 - 3/16/77 and 8/8/77 - 8/14/77. The File I.D.'s are, respectively, 771116 and 770808.

Any questions concerning the documentation forms should be directed to Judy Nevins.

Enclosures





**UNITED STATES DEPARTMENT OF COMMERCE**  
**National Oceanic and Atmospheric Administration**  
ENVIRONMENTAL DATA SERVICE  
National Oceanographic Data Center Liaison Office  
Pacific Marine Environmental Laboratory  
NOAA Bldg. 264 (tower)  
7600 Sand Point Way N.E.  
Seattle, Wa. 98115

Date : July 26, 1978  
To : Dr. James B. Ridlon, MESA Data Coordinator  
From : *Sid Stillwaugh*  
: Sid Stillwaugh, Seattle I.O.  
Subject : MESA Data Submission

Enclosed, (cert. 523045), find punch cards and associated documentation for:

- 1) E.T. Baker/PMEL - File Type 021, field period 3/10/77 to 3/16/77, File I.D. 771116.
- 2) E.T. Baker/PMEL - File Type 021, field period 8/8/77 to 8/11/77, File I.D. 770808.

enclosures



Password:

accNo	fleA	refNo	proj	inst	ship	startDate	cruise	catId
7800591	F144	TR3282	0082	313F	32GS	1977/03/11	771116	307614
7800591	F144	TR3283	0082	313F	32GS	1977/08/08	770808	307615

(2 rows affected)



Password:

accNo	fleA	refNo	ship	staCnt	recCnt	startDate	endDate
7800591	F144	TR3282	32GS	26	309	77/03/11	77/03/16
7800591	F144	TR3283	32GS	37	408	77/08/08	77/08/14

(2 rows affected)