

Filetype: 59

ACCESSION
NUMBER

78-0341

DDF-B:1:08

DATA DOCUMENTATION FORM

TR3026

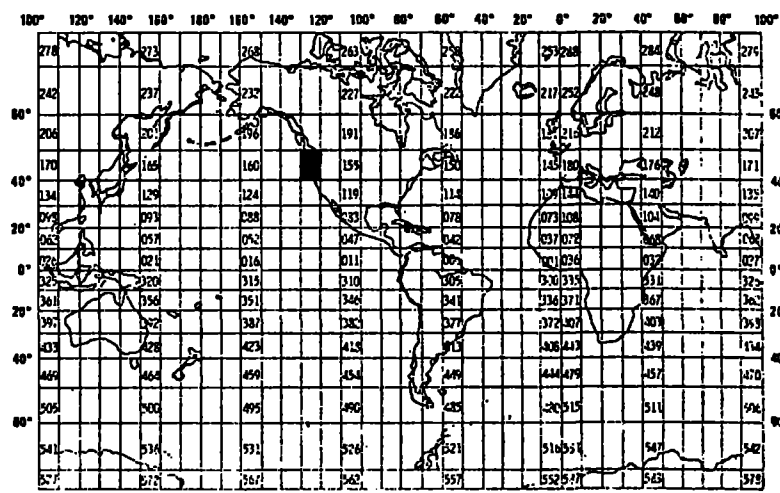
NOAA FORM 24-13
(4-72)U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEANOGRAPHIC DATA CENTER
RECORDS SECTION
ROCKVILLE, MARYLAND 20852FORM APPROVED
O.M.B. No. 41-R2651

F059

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			
Dr. D.W.S. Westlake Department of Microbiology University of Alberta Edmonton, Alberta T6G 2E9 (Contract No. 03-7-022-35136)			
2. EXPEDITION, PROJECT, OR PROGRAM DURING WHICH DATA WERE COLLECTED		3. CRUISE NUMBER(S) USED BY ORIGINATOR TO IDENTIFY DATA IN THIS SHIPMENT	
Third Sampling Trip Puget Sound, Washington, Waters and beaches (MESA).		TRIP03	
4. PLATFORM NAME(S)	5. PLATFORM TYPE(S) (E.G., SHIP, BUOY, ETC.)	6. PLATFORM AND OPERATOR NATIONALITY(IES)	7. DATES
NA	NA	PLATFORM OPERATOR	FROM: MO/DAY/YR TO: MO/DAY/YR
		NA NA	09/16/77 09/21/77
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.	
9. ARE DATA DECLARED NATIONAL PROGRAM (DNP)? (I.E., SHOULD THEY BE INCLUDED IN WORLD DATA CENTERS HOLDINGS FOR INTERNA- TIONAL EXCHANGE?) <input type="checkbox"/> NO <input type="checkbox"/> YES <input type="checkbox"/> PART (SPECIFY BELOW)		GENERAL AREA	
10. PERSON TO WHOM INQUIRIES CONCERNING DATA SHOULD BE ADDRESSED WITH TELE- PHONE NUMBER (AND ADDRESS IF OTHER THAN IN ITEM-1)			
Dr. Westlake 406-432-3277			

ACCESSION
NUMBER

78.0341

DATA DOCUMENTATION FORM

T19 3027

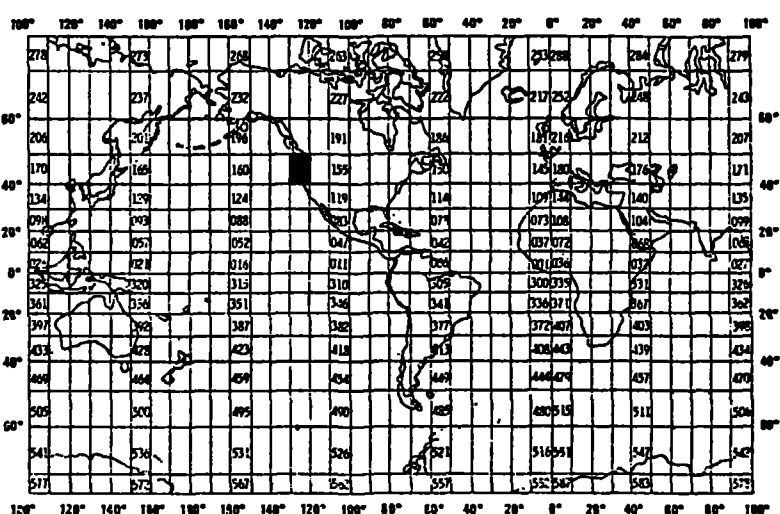
NOAA FORM 24-13
(4-72)U.S. DEPARTMENT OF COMMERCE
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2. EXPEDITION, PROJECT, OR PROGRAM DURING WHICH DATA WERE COLLECTED Fourth Sampling Trip Puget Sound, Washington. Waters and beaches (MESA).		3. CRUISE NUMBER(S) USED BY ORIGINATOR TO IDENTIFY DATA IN THIS SHIPMENT TRIP04	
4. PLATFORM NAME(S) NA	5. PLATFORM TYPE(S) (E.G., SHIP, BUOY, ETC.) NA	6. PLATFORM AND OPERATOR NATIONALITY(IES) NA	7. DATES FROM: MO/DAY/YR TO: MO/DAY/YR 11/21/77 11/22/77
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. GENERAL AREA 	
9. ARE DATA DECLARED NATIONAL PROGRAM (DNP)? (I.E., SHOULD THEY BE INCLUDED IN WORLD DATA CENTERS HOLDINGS FOR INTERNATIONAL EXCHANGE?) <input type="checkbox"/> NO <input type="checkbox"/> YES <input type="checkbox"/> PART (SPECIFY BELOW)			
10. PERSON TO WHOM INQUIRIES CONCERNING DATA SHOULD BE ADDRESSED WITH TELEPHONE NUMBER (AND ADDRESS IF OTHER THAN IN ITEM-1) Dr. Westlake 406-432-3277			

ACCESSION
NUMBER

78.0341

TR3028

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

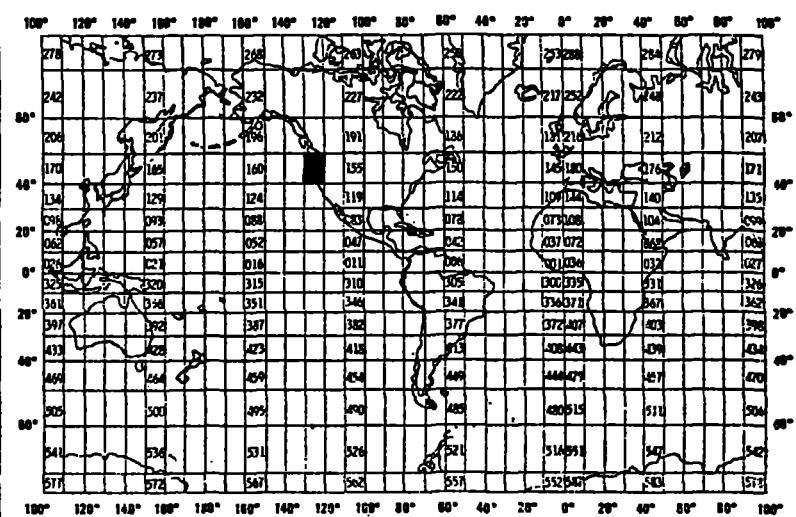
FORM APPROVED
O.M.B. No. 41-R2651

F059

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 Dr. D.W.S. Westlake Department of Microbiology University of Alberta Edmonton, Alberta T6G 2E9 (Contract No. 03-7-022-35136)			
2. EXPEDITION, PROJECT, OR PROGRAM DURING WHICH DATA WERE COLLECTED Fifth Sampling Trip Puget Sound, Washington. Waters and beaches (MESA).		3. CRUISE NUMBER(S) USED BY ORIGINATOR TO IDENTIFY DATA IN THIS SHIPMENT TRIP05	
4. PLATFORM NAME(S) NA	5. PLATFORM TYPE(S) (E.G., SHIP, BUOY, ETC.) NA	6. PLATFORM AND OPERATOR NATIONALITY(IES) NA	7. DATES FROM: MO/DAY/YR TO: MO/DAY/YR 01/08/78 01/11/78
8. ARE DATA PROPRIETARY? <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES IF YES, WHEN CAN THEY BE RELEASED FOR GENERAL USE? YEAR MONTH		11. PLEASE DARKEN ALL MARSDEN SQUARES IN WHICH ANY DATA CONTAINED IN YOUR SUBMISSION WERE COLLECTED. GENERAL AREA	
9. ARE DATA DECLARED NATIONAL PROGRAM (DNP)? (I.E., SHOULD THEY BE INCLUDED IN WORLD DATA CENTERS HOLDINGS FOR INTERNATIONAL EXCHANGE?) <input 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) Dr. Westlake 406-432-3277			

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								
salinity	parts per thousand	Yellow Springs SCT meter #33	not applicable	no processing								
water temperature	°C	Yellow Spring SCT meter #33	not applicable	no processing								
acidity	pH (NBS)	Radiometer pH meter #29	not applicable	no processing								
dissolved oxygen	parts per million	Yellow Springs Oxygen meter #57	not applicable	no processing								
bacterial count	number/ml or number/g (dry weight)	not applicable	standard plate count procedure medium: (per litre distilled water) NaCl, 23.4g; KCl, 0.75g; MgSO ₄ ·7H ₂ O, 7.0g; Peptone, 1g; Yeast extract, 1g; Agar 20g. Temperature of incubation is given in Data Record I. The time of incubation depends on the temperature and is summarized below: <table><tr><td>Temperature(°C)</td><td>Time (Days)</td></tr><tr><td>8</td><td>21 or 28</td></tr><tr><td>14</td><td>21</td></tr><tr><td>20 or 30</td><td>7</td></tr></table>	Temperature(°C)	Time (Days)	8	21 or 28	14	21	20 or 30	7	mean and standard deviation
Temperature(°C)	Time (Days)											
8	21 or 28											
14	21											
20 or 30	7											
H ₂ S from SO ₄ ⁼	0=absence 1=present	Deposition of FeS on Iron nail in medium	Modified Butlin's medium (Fedorak, M.Sc. Thesis, University of Alberta). Incubation temperature: 22°C Incubation time: 21 days	none								
H ₂ S from SO ₃ ⁼ and/or SO ₄ ⁼	0=absence 1=present	Deposition of FeS on Iron nail in medium	Modified Butlin's medium plus Na ₂ SO ₃ . Incubation temperature: 22°C Incubation time: 21 days	none								

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
Degradation of Prudhoe Bay oil	see Code D	Varian aerograph gas chromatograph model 1740. 20 ft. x 1/8" stainless steel column, 3% SE30 Ultraphase on chromosorb W(AW-DMCS) 80/100 mesh. Carrier gas N ₂ at 15 ml/min. Program 50°C for 2 min, 50° to 300° C at 10°/min, held at 300° for 20 min.	Crude oil plus 200 ml sea water without and with 59 mg PO ₄ ⁼ and 0.6g NH ₄ NO ₃ added. Crude oil plus 10g sand in 200 ml of solution containing (per litre), NaCl, 23.4g; KCl, 0.75g; MgSO ₄ ·7H ₂ O, 7.0g (without or with PO ₄ ⁼ and NH ₄ NO ₃ added as above). Amount of oil temperature and time of incubation are given in data records. Pentane extract injected on GLC column.	visual; loss of n-alkane peaks
Kjeldahl-N	µg/ml or µg/g (dry weight)	not applicable	Methods of Soil Analysis Part 2 Chemicals and Microbiological Properties. American Society of Agronomy (1965).	
Available-P	µg/ml or µg/g (dry weight)	not applicable		
Taxonomy	NODC Taxonomy Code	Isolates were picked on the basis of colonial morphology on the plates used to determine the bacterial count.	Gram stain; microscopic morphology; oxidase and catalase activity; glucose and lactose utilization (aerobically and anaerobically); motility, by wet mount; spore test by heating.	none
Suspended solids	mg/l	not applicable	Standard Methods for the Examination of Water and Wastewater. 14th Ed. American Public Health Assoc. (1976).	means of replicates

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
Mineralization rate with radio- active substrate	mg selected compound/unit (ml or g)/day	Isocap 300 or Mark I Scin- tillation Counter - Both Nuclear Chicago	Replicate stoppered flasks contain 25 ml of sample (water column undiluted or 1:5 dilutions of sediment) were incubated (plus or minus N and P) with shaking at 22°C in the presence of ¹⁴ C-1-labelled n-alkane (octadecane or hexadecane) and Prudhoe Bay oil. At appropriate times a culture in one of these flasks was acidified to stop bacterial action and to release CO ₂ ; CO ₂ trapping agent was added and the agent counted in toluene-based scintilla- tion fluid. (POPOP/PP0). Corrected using channels ratio method. Blanks are identical to test flasks, but are acidified before incubation.	dpm from ¹⁴ CO ₄ trapped was plotted against incubation time. The slope of this plot was calculated and the initial rate determined taking into account sample dilutions and specific activity of the labelled compound (diluted by cold substrate in crude oil)

4-20-78

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

059

Eleven distinct record: File Header (1); Station Header (2);
Text Record (3); Data Record I (4); Data Record II (5); Data Record III (6);
Data Record IV (7); Data Record V (8); Data Record VI (9); Data Record VII (A);
and Data Record VIII (B); differentiated by byte 10.

GIVE BRIEF DESCRIPTION OF FILE ORGANIZATION

File sorted by station number and sequence number to obtain proper
sequence.

(Cards from PI converted to tape at NODC with tape characteristics
as outlined under blocks #5 → #3 below)

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

4. RESPONSIBLE COMPUTER SPECIALIST:

NAME AND PHONE NUMBER Phil Fedorak

ADDRESS Dept. of Microbiology, University of Alberta, Edmonton, Alberta

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 <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>Vol = Ser = 09252 (orig.)</p> <p>Vol = Ser = 08321 (o/c)</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>4800</p> <p>13. LENGTH OF BYTES IN BITS</p> <p>8</p>

RECORD FORMAT DESCRIPTION

RECORD NAME File Header - Microbiological Degradation Format

12-16-77

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 '059'
File Identifier	4	6	Bytes	A6	Unique cruise number or date (YYMMDD)
Record Type	10	1	Bytes	I1	Always '1'
Sampling Interval	11	17	Bytes	I2,5(A1,I2)	xx/xx/xx - xx/xx/xx Beginning yr/mo/day; Ending yr./mo./day
Investigator/ Institution	28	53	Bytes	53A1	Left justified text

RECORD FORMAT DESCRIPTION

RECORD NAME Station Header - Microbiological Degradation Format

12-16-77

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 '059'
File Identifier	4	6	Bytes	A6	Unique cruise number or date (YYMMDD)
Record Type	10	1	Bytes	I1	Always '2'
Station Number	11	5	Bytes	A5	File 100 station code may be used.
Sample Site Number	16	3	Bytes	A3	Originator's sample designator
Date, (GMT)					
Year	19	2	Bytes	I2	00-99
Month	21	2	Bytes	I2	01-12
Day	23	2	Bytes	I2	01-31
Time, (GMT)					
Hours	25	2	Bytes	I2	00-23
Minutes	27	2	Bytes	I2	00-59
Latitude,					
Degrees	29	2	Bytes	I2	
Minutes	31	2	Bytes	I2	
Seconds	33	2	Bytes	I2	
Hemisphere	35	1	Bytes	A1	'N' or 'S'
Longitude,					
Degrees	36	3	Bytes	I3	
Minutes	39	2	Bytes	I2	
Seconds	41	2	Bytes	I2	
Hemisphere	43	1	Bytes	A1	'E' or 'W'
Weather	44	1	Bytes	A1	WMO Code 4501
Wave Height	45	1	Bytes	A1	WMO Code 1555
Water Temperature	46	3	Bytes	I3	Degrees C. to tenths
Salinity	49	3	Bytes	I3	Parts/thousand to tenths
pH	52	3	Bytes	I3	pH units to tenths
pH Scale	55	1	Bytes	I1	1 NBS 2 Sorenson 3 Hansson
Dissolved Oxygen	56	3	Bytes	I3	
Habitat Code	59	3	Bytes	3A1	Use file 100 Habitat Code

RECORD FORMAT DESCRIPTION

RECORD NAME Station Header - Microbiological Degradation Format (continued)

4-11-78

14. FIELD NAME	15. POSITION FROM - 1 MEASURED IN Bytes (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
Beach Sample Temperature	62	3	Bytes	I3	Degrees C. to tenths
Water Depth	65	5	Bytes	I5	Meters to tenths
Blank	70	8	Bytes	8x	
Sequence Number	78	3	Bytes	I3	Ascending numeric to order records within station

RECORD FORMAT DESCRIPTION

RECORD NAME Text Record - Microbiological Degradation Format

12-16-77

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 '059'
File Identifier	4	6	Bytes	A6	Unique cruise number or date (YYMMDD)
Record Type	10	1	Bytes	I1	Always '3'
Station Number	11	5	Bytes	A5	File 100 station code may be used
Sample Site Number	16	3	Bytes	A3	Originator's sample designator
Text	19	59	Bytes	59A1	Descriptive information
Sequence Number	78	3	Bytes	I3	Ascending numeric to order records within station

RECORD FORMAT DESCRIPTION

RECORD NAME Data Record I - Microbiological Degradation Format

6-9-78

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 '059'
File Identifier	4	6	Bytes	A6	Unique cruise number or date (YYMMDD)
Record Type	10	1	Bytes	I1	Always '4'
Station Number	11	5	Bytes	A5	File 100 station code may be used
Sample Site Number	16	3	Bytes	A3	Originator's sample designator
Sample Type Code	19	1	Bytes	A1	
Treatment Code	20	1	Bytes	A1	Use file 059 Treatment Code
Temperature of Incubation	21	3	Bytes	I3	Degrees C. to tenths
Time of Incubation	24	3	Bytes	I3	Days to tenths
Bacterial Density	27	3	Bytes	I3	Whole number (Per unit, byte 77)
Standard Deviation (For Plate Count)	30	3	Bytes	I3	To tenths
Dilution Counted	33	2	Bytes	I2	Always a minus sign in byte 33
Units	35	1	Bytes	A1	G = gram ⁻¹ (dry weight), M = Ml ⁻¹ , L=liter ⁻¹ , K=kilogram ⁻¹ , H=hectogram ⁻¹
Plate Count #1	36	3	Bytes	I3	Whole numbers
Plate Count #2	39	3	Bytes	I3	Whole numbers
Plate Count #3	42	3	Bytes	I3	Whole numbers
Plate Count # 4	45	3	Bytes	I3	Whole numbers
Plate Count # 5	48	3	Bytes	I3	Whole numbers
H ₂ S from SO ₄ =	51	1	Bytes	A1	{ 0 - absent 1 - present 9 - sample not done
H ₂ S From SO ₄ = and/or SO ₃ =	52	1	Bytes	A1	
Eldahl - N	53	4	Bytes	I4	
					µg/unit (byte 35)

RECORD FORMAT DESCRIPTION

RECORD NAME Data Record I - Microbiological Degradation Format (continued)

6-9-78

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN Bytes (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
Total - P	57	4	Bytes	I4	µg/unit (byte 35)
Total Organic -C	61	4	Bytes	I4	µg/unit (byte 35)
Suspended Solids	65	5	Bytes	A5	mg/l (three significant figures, sign for exponent, exponent - e.g. 123+2 = 12300)
Available - P	70	4	Bytes	I4	µg/unit (byte 35)
Blank	74	3	Bytes	3x	
Unit for Average Bacterial Density (Bytes 27-29)	77	1	Bytes	A1	G = Gram ⁻¹ (dry weight), M = Ml ⁻¹
Sequence Number	78	3	Bytes	I3	Ascending numeric to order records within station

RECORD FORMAT DESCRIPTION

RECORD NAME Data Record II - Microbiological Degradation Format

12-16-77

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 '059'
File Identifier	4	6	Bytes	A6	Unique cruise number or date (YYMMDD)
Record Type	10	1	Bytes	I1	Always '5'
Station Number	11	5	Bytes	A5	File 100 station code may be used
Sample Site Number	16	3	Bytes	A3	Originator's sample designator
Sample Type Code	19	1	Bytes	A1	
Treatment Code	20	1	Bytes	A1	Use File 059 Treatment Code
Temperature of Incubation	21	3	Bytes	I3	Degrees C. to tenths
Time of Incuba- tion	24	3	Bytes	I3	Days to tenths
Initial Oil Concentration	27	5	Bytes	I5	mg/l to tenths
Degradation Code	32	1	Bytes	A1	Use File 059 Degradation Code
Mineralization determined gravimetrically	33	4	Bytes	I4	Percent weight loss to tenths (float sign if negative)
Rate	37	5	Bytes	I5	mg/week to hundredths
Blank	42	36	Bytes	36x	
Sequence Number	78	3	Bytes	I3	Ascending number to order records within station

RECORD FORMAT DESCRIPTION

RECORD NAME Data Record III - Microbiological Degradation Format

12-16-77

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 '059'
File Identifier	4	6	Bytes	A6	Unique cruise number or date (YYMMDD)
Record Type	10	1	Bytes	I1	Always '6'
Station Number	11	5	Bytes	A5	File 100 station code may be used
Sample Site Number	16	3	Bytes	A3	Originator's sample designator
Sample Type Code	19	1	Bytes	A1	
Treatment Code	20	1	Bytes	A1	Use File 059 Treatment Code
Taxonomic Code	21	10	Bytes	5A2	NODC Taxonomic Code
Number of Colonial types in this group	31	2	Bytes	I2	Whole numbers
Percent of Average Density	33	2	Bytes	I2	Whole numbers
Taxonomic Code	35	10	Bytes	5A2	NODC Taxonomic Code
Number of Colonial types in this group	45	2	Bytes	I2	Whole numbers
Percent of Average Density	47	2	Bytes	I2	Whole numbers
Taxonomic Code	49	10	Bytes	5A2	NODC Taxonomic Code
Number of Colonial types in this group	59	2	Bytes	I2	Whole numbers
Percent of Average Density	61	2	Bytes	I2	Whole numbers
Taxonomic Code	63	10	Bytes	5A2	NODC Taxonomic Code

RECORD FORMAT DESCRIPTION

RECORD NAME Data Record III - Microbiological Degradation Format (continued) 12-16-77

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN <u>Bytes</u> (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
Number of Colonial types in this group	73	2	Bytes	I2	Whole numbers
Percent of Average Density	75	2	Bytes	I2	Whole numbers
Blank	77	1	Bytes	1x	
Sequence Number	78	3	Bytes	I3	Ascending number to order records within station

RECORD FORMAT DESCRIPTION

RECORD NAME Data Record IV - Microbiological Degradation Format

12-16-77

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 '059'
File Identifier	4	6	Bytes	A6	Unique cruise number or date (YYMMDD)
Record Type	10	1	Bytes	I1	Always '7'
Station Number	11	5	Bytes	A5	File 100 station code may be used
Sample Site Number	16	3	Bytes	A3	Originator's sample designator
Sample Type Code	19	1	Bytes	A1	
Treatment Code	20	1	Bytes	A1	Use File 059 Treatment Code
Number of Colonial types which could not be classified	21	2	Bytes	I2	Whole numbers
Percent of Average Density	23	2	Bytes	I2	Whole numbers
Number of Colonial types which did not survive first transfer	25	2	Bytes	I2	Whole numbers
Percent of Average Density	27	2	Bytes	I2	Whole numbers
Blank	29	49	Bytes	49x	
Sequence Number	78	3	Bytes	I3	Ascending numeric to order records within station

RECORD FORMAT DESCRIPTION

4-19-78

RECORD NAME Data Record V - Microbiological Degradation Format

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	I3	Always '059'
File Identifier	4	6	Bytes	A6	Unique cruise number or date (YYMMDD)
Record Type	10	1	Bytes	I1	Always '8'
Station Number	11	5	Bytes	A5	File 100 station code may be used
Sample Site Number	16	3	Bytes	A3	Originator's sample designator
Sample Type Code	19	1	Bytes	A1	
Treatment Code	20	1	Bytes	A1	Use file 059 Treatment Code
Sample Depth	21	5	Bytes	I5	Meters to tenths
Sample Temperature	26	3	Bytes	I3	Degrees C to tenths
pH	29	4	Bytes	I4	pH units to hundredths
Eh	33	4	Bytes	I4	Millivolts
% Moisture	37	3	Bytes	I3	Percent to tenths; Sediment samples only
ATP Concentration	40	6	Bytes	I6	Nanograms to tenths (per liter for water sample; per gram dry weight for sediment sample)
Glycolic Acid	46	4	Bytes	I4	Micrograms to tenths (per liter for water sample; per gram dry weight for sediment sample)
Urea	50	5	Bytes	I5	Micrograms to hundredths (per liter for water sample; per gram dry weight for sediment sample)
Core Length	55	3	Bytes	I3	Centimeters to tenth (if sediment core taken)
Dry Weight Sediment per ml Undiluted Sea Water	58	6	Bytes	I6	Grams to ten thousandths
Blank	64	14	Bytes	14x	
Sequence Number	78	3	Bytes	I3	Ascending numeric within station number

RECORD FORMAT DESCRIPTION

RECORD NAME Data Record VI - Microbiological Degradation Format

4-17-78

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN Bytes (C.A., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	Bytes	I3	Always '059'
File Identifier	4	6	Bytes	A6	Unique cruise number or date (YYMMDD)
Record Type	10	1	Bytes	I1	Always '9'
Station Number	11	5	Bytes	A5	File 100 station code may be used
Sample Site Number	16	3	Bytes	A3	Originator's sample designator
Sample Type Code	19	1	Bytes	A1	
Treatment Code	20	1	Bytes	A1	Use file 059 treatment code
Sample Depth	21	5	Bytes	I5	Meters to tenths
Log of Direct Counts per ml Undiluted	26	8	Bytes	I8	To millionths
° Cocci	34	3	Bytes	I3	Percent to tenths
° Short Rods	37	3	Bytes	I3	Percent to tenths
° Long Rods	40	3	Bytes	I3	Percent to tenths
° Spirals	43	3	Bytes	I3	Percent to tenths
° Coccobacillary	46	3	Bytes	I3	Percent to tenths
° Filaments	49	3	Bytes	I3	Percent to tenths
° Others	52	3	Bytes	I3	Percent to tenths
Blank	55	23	Bytes	23x	
Sequence Number	78	3	Bytes	I3	Ascending numeric within station number

CORD NAME Data Record VII - Microbiological Degradation Format

FIELD NAME	15. POSITION FROM - 1 MEASURED IN <u>Bytes</u> (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	Bytes	I3	Always '059'
File Identifier	4	6	Bytes	A6	Unique cruise number or date (YYMMDD)
Record Type	10	1	Bytes	A1	Always 'A'
Station Number	11	5	Bytes	A5	File 100 station code may be used
Sample Site Number	16	3	Bytes	A3	Originator's sample designator
Sample Type Code	19	1	Bytes	A1	
Treatment Code	20	1	Bytes	A1	Use file 059 treatment code
Sample Depth	21	5	Bytes	I5	Meter to tenths
Medium Code	26	2	Bytes	I2	Use file 059 medium code
Incubation Type	28	1	Bytes	I1	0 = anaerobic, 1 = aerobic
Time of Incubation	29	2	Bytes	I2	Whole days
Temperature of Incubation	31	2	Bytes	I2	Degrees Celsius
Average Log of Colony Forming Units per ml Undiluted	33	6	Bytes	I6	To ten thousandths
Average Log of Pigmented Colonies per ml Undiluted	39	6	Bytes	I6	To ten thousandths
Average Log of Non-pigmented Colonies per ml Undiluted	45	6	Bytes	I6	To ten thousandths
Average Log of Fungi per ml Undiluted	51	6	Bytes	I6	To ten thousandths

RECORD FORMAT DESCRIPTION

4-17-78

CORD NAME Data Record VII - Microbiological Degradation Format (Con't)

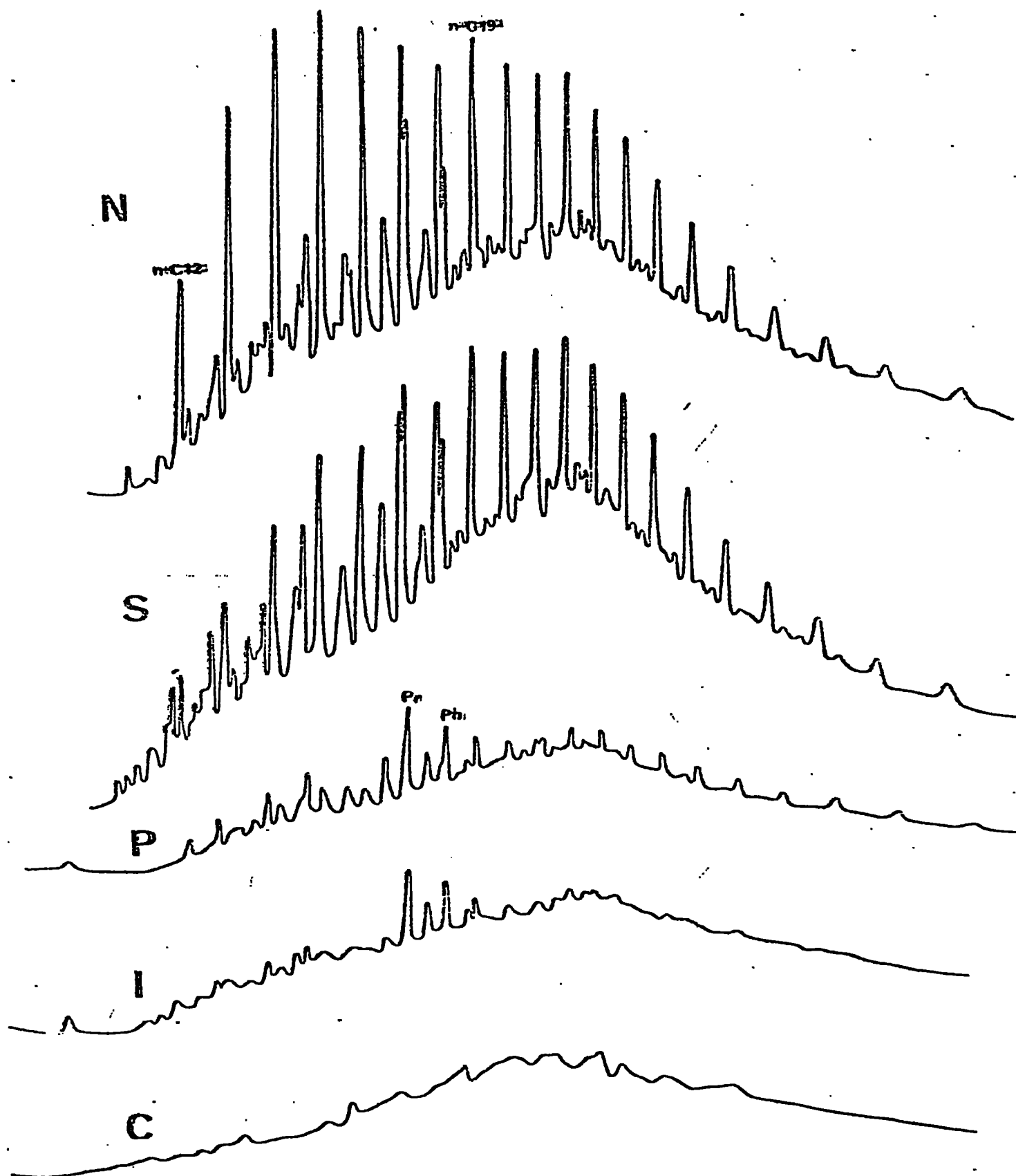
FIELD NAME	15. POSITION FROM -1 MEASURED IN Bytes (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
Average Log of Actinomycete- like per ml Undiluted	57	6	Bytes	I6	To ten thousandths
Number of Repli- cates in Average	63	2	Bytes	I2	Whole number
Blank	65	13	Bytes	13x	
Sequence Number	78	3	Bytes	I3	Ascending numeric within station number

RECORD FORMAT DESCRIPTION

CORD NAME Data Record VIII - Microbiological Degradation Format

4-18-78

FIELD NAME	15. POSITION FROM - 1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	Bytes	I3	Always '059'
File Identifier	4	6	Bytes	A6	Unique cruise number or date (YYMMDD)
Record Type	10	1	Bytes	A1	Always 'B'
Station Number	11	5	Bytes	A5	File 100 station code may be used.
Sample Site Number	16	3	Bytes	A3	Originator's sample designator
Sample Type Code	19	1	Bytes	A1	
Treatment Code	20	1	Bytes	A1	Use file 059 treatment code
Sample Depth	21	5	Bytes	I5	Meters to tenths
Type of Kinetics	26	1	Bytes	I1	0 = Saturation, 1 = First Order
Medium	27	2	Bytes	I2	Use file 059 medium code
Medium Concentration	29	5	Bytes	I5	Nanomoles to thousandths
Incubation Time	34	5	Bytes	I5	Hours to thousandths (t)
t/f	39	6	Bytes	I6	Hours to thousandths (incubation time in hours/fraction of medium utilized)
Turnover Time	45	6	Bytes	I6	Hours to hundredths
$k_T + s_N$	51	6	Bytes	I6	Nanomoles to hundredths (trans- port constant plus natural medium concentration)
V_{max}	57	6	Bytes	I6	Nanomoles/hour to hundredths (maximum medium consumption rate)
s_N	63	6	Bytes	I6	Nanomoles to hundredths (in situ natural medium (substrate) concentration)
V_d	69	6	Bytes	I6	Nanomoles/hour to hundredths (uptake rate)
Blanks	75	3	Bytes	3x	
Sequence Number	78	3	Bytes	I3	Ascending numeric within Station



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 (✓)	
Radiometer pH meter #29	-				✓				
Dissolved Oxygen meter (Yellow Springs #59)	Sept. 23, 1977					✓			
Salinity-temperature meter (Yellow Spring SCT#33)	Sept. 29, 1977					✓			

TRIP03

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 (✓)	
Radiometer pH meter #29	-				✓				
Dissolved Oxygen meter (Yellow Springs #57)	Nov. 24, 1977					✓			
Salinity-temperature meter (Yellow Springs SCT #33)	Nov. 26, 1977					✓			

TRIP 04

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 (✓)	
Radiometer pH meter #29	-				✓				
Dissolved Oxygen meter (Yellow Springs #57)	Jan. 13, 1978					✓			
Salinity-temperature meter (Yellow Springs SCT meter #33)	Jan. 16, 1978					✓			
Isocap 300 Nuclear Chicago			Nuclear Chicago					✓	
Mark I Nuclear Chicago		✓			✓				

TRIP 05

Taxonomic		Nitrogen Supplement (to 100)		#3	Count	Plate
Code		Phosphorus Supplement (to 100)		#4	Count	Plate
Code		Incubation Temp. w/Radioactive Substrate (°C to 10)		#5	Count	Plate
Taxonomic		Mineralization Rate w/Radioactive Substrate (to 1000) Unit		H ₂ S from SO ₄ ^F		
Code		Radioactive Substrate		H ₂ S from SO ₄ and SO ₃		
Taxonomic		Radioactive Substrate		Kjeldahl - N		
Code		Radioactive Substrate		(ug/unit - byte 35)		
Taxonomic		Radioactive Substrate		Total - P		
Code		Radioactive Substrate		(ug/unit - byte 35)		
Taxonomic		Radioactive Substrate		Total Organic - C		
Code		Radioactive Substrate		(ug/unit - byte 35)		
Taxonomic		Radioactive Substrate		Suspended Solids		
Code		Radioactive Substrate		(mg/l, three signif. figs., sign, expon)		
Taxonomic		Radioactive Substrate		Available - P		
Code		Radioactive Substrate		(ug/unit - byte 35)		
Taxonomic		Radioactive Substrate		Blank		
Code		Radioactive Substrate		Units: G or M		
Taxonomic		Radioactive Substrate		Sequence Number		
Code		Radioactive Substrate		Sequence Number		
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RECORD FORMAT DESCRIPTION

RECORD NAME

78-0341

F(059)

14. FIELD NAME	15. POSITION FROM - 1 MEASURED IN _____ (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
TR 3026-28		(9)		STATION 01012 (TR3028) WAS REPEATED - SECOND 01012 WAS CHANGED TO 01013	



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

78-0341

Date : May 4, 1978
To : Dr. James B. Bidlon, MESA Data Coordinator
From : *Sid Stillwaugh* Sid Stillwaugh, Seattle L.O.
Subject : MESA Data Submission

Puget Sound/TSERP

Enclosed, (cert. 523035) find punch cards (3 sets), and appropriate documentation for:

- 1) Westlake, FT 059, field period 9/16/77 to 9/21/77, cruise *TR3026* no. TRIPO3.
- 2) Westlake, FT 059, field period 11/21/77 to 11/22/77, cruise *TR3027* no. TRIPO4.
- 3) Westlake, FT 059, field period 1/8/78 to 1/11/78, cruise *TR3028* no. TRIPO5.

Also enclosed are the requested ROSCOP's for :

- 1) Westlake - field period 5-6 July 77, TRIPO2.
- 2) Macleod/Snyder - field period 12-30 Oct. 77.

Also find additional ROSCOP's for Holbrook (field per. 11-15 Apr. 78), Nyblade (field per. 6 Jan. to 7 Feb. 78), and (3) additional Westlake ROSCOP's for TRIPO3, TRIPO4, and TRIPO5. Miller/Simenstad ROSCOP for field per. 13-21 Oct. 77 to follow.

#09252 (orig.)



RECEIVED 08 MAY 1978



Filetype

059

13

SDF1 001073

SDF2 020079

ANSI 020647

TR 2033, 2034, 3026-3028, 3880, 3881, 4115, 4325,
4512-4515

4278

Accession No: 78-034/
ID: Puget Sound/PSERP

Microbiological Degradation Format

1-18-78

File Header

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80																																																																																																																																																																																																								
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053 Identifier										Number										Year										Month										Day										Hours										Minutes										Degrees										Minutes										Seconds										Hemi/Nor S										Degrees										Minutes										Seconds										Hemi/East W										Weather Code										Wave Height Code										Water Temperature (Degrees C to 16)										Salinity (Parts/Thousand to 16)										PH (pH)										PH Sensor Code										Dissolved Oxygen (ppm to 16)										Habitat Code										Beach Sample Temperature (Degrees C to 16)										Water Depth										Blank										Sequence Number																			

Text Record

6-9-78

AF FORM 1530 FEB 74 PREVIOUS EDITION WILL BE USED.

PUNCH CARD TRANSCRIPT

4-20-78

AF FORM 1530 FEB 74 PREVIOUS EDITION WILL BE USED.

PUNCH CARD TRANSCRIPT

☆ U.S. Government Printing Office: 1979-597-452

4-20-78

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
File	File	Record Type A	Station	Sample Site	Sample Type Code	Sample Treatment Code	Sample	Medium Code	Incubation Type Code	Time of Incubation (days)	Temperature of Incubation (°C)	Average Log of Colony Forming Units per ml. Undiluted (to 10,000)	Average Log of Pigmented Colonies per ml. Undiluted (to 10,000)	Average Log of Non-pigmented Colonies per ml. Undiluted (to 10,000)	Average Log of Fungal Actinomycete-like per ml. Undiluted (to 10,000)	Number of Replicates	Average	Blank	Sequence Number																																																												
Type	Identifier	Number	Number	Number	Number	Number	Depth (m. to %)	Medium Code	Incubation Type Code	Time of Incubation (days)	Temperature of Incubation (°C)	Units per ml. Undiluted (to 10,000)	Colonies per ml. Undiluted (to 10,000)	Colonies per ml. Undiluted (to 10,000)	per ml. Undiluted (to 10,000)	Number of Replicates	Average	Blank	Sequence Number																																																												
059	Identifier	Number	Number	Number	Number	Number	Depth (m. to %)	Medium Code	Incubation Type Code	Time of Incubation (days)	Temperature of Incubation (°C)	Units per ml. Undiluted (to 10,000)	Colonies per ml. Undiluted (to 10,000)	Colonies per ml. Undiluted (to 10,000)	per ml. Undiluted (to 10,000)	Number of Replicates	Average	Blank	Sequence Number																																																												
File	File	Record Type B	Station	Sample Site	Sample Type Code	Sample Treatment Code	Sample	Type of Kinetics Code	Medium Code	Medium Concentration (nanomoles to 100)	Incubation Time (hours to 100)	Turnover Time / fraction of medium (hours to 100)	Turnover Time (hours to 100)	K ₁ + S ₁ (transport constant plus initial medium concentration) (nanomoles to 100)	V _{max} (maximum medium consumption rate) (nanomoles / hour to 100)	K ₁ (in situ natural medium concentration) (nanomoles to 100)	V _{max} (uptake rate) (nanomoles / hour to 100)	Blank	Sequence Number																																																												
Type	Identifier	Number	Number	Number	Number	Number	Depth (m. to %)	Type of Kinetics Code	Medium Code	Medium Concentration (nanomoles to 100)	Incubation Time (hours to 100)	Turnover Time / fraction of medium (hours to 100)	Turnover Time (hours to 100)	K ₁ + S ₁ (transport constant plus initial medium concentration) (nanomoles to 100)	V _{max} (maximum medium consumption rate) (nanomoles / hour to 100)	K ₁ (in situ natural medium concentration) (nanomoles to 100)	V _{max} (uptake rate) (nanomoles / hour to 100)	Blank	Sequence Number																																																												
059	Identifier	Number	Number	Number	Number	Number	Depth (m. to %)	Type of Kinetics Code	Medium Code	Medium Concentration (nanomoles to 100)	Incubation Time (hours to 100)	Turnover Time / fraction of medium (hours to 100)	Turnover Time (hours to 100)	K ₁ + S ₁ (transport constant plus initial medium concentration) (nanomoles to 100)	V _{max} (maximum medium consumption rate) (nanomoles / hour to 100)	K ₁ (in situ natural medium concentration) (nanomoles to 100)	V _{max} (uptake rate) (nanomoles / hour to 100)	Blank	Sequence Number																																																												

Password:

accNo	fleA	refNo	proj	inst	ship	startDate	cruise	catId
7800341	F059	TR3026	0082	1822	18FX	1977/09/16	TRIP03	306950
7800341	F059	TR3027	0082	1822	18FX	1977/11/21	TRIP04	306951
7800341	F059	TR3028	0082	1822	18FX	1978/01/08	TRIP05	306952

(3 rows affected)

Password:

accNo	fleA	refNo	ship	staCnt	recCnt	startDate	endDate
-----	-----	-----	-----	-----	-----	-----	-----
7800341	F059	TR3026	18FX	20	333	77/09/16	77/09/21
7800341	F059	TR3027	18FX	2	119	77/11/21	77/11/22
7800341	F059	TR3028	18FX	15	153	78/01/08	78/01/09

(3 rows affected)