DATA DOCUMENTATION FORM

NOAA FORM 24-13

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

W 300

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								
A.C.BROAD									
DEPT. OF BIOLOGY									
WESTERN WASHINGTON STATE COLLEGE									
BELLINGHAM, WA 98275									
2. EXPEDITION, PROJECT, O	R PROGRAM DURING	WHICH		BER(S) USED E	Y ORIGINATOR	TO IDENTIFY			
DATA WERE GOLLEGIED				13 3/11 1112141					
OCSEAP - F	LU 356		FILE ID N	110P34					
			FILE TY		0				
4. PLATFORM NAME(S)	5. PLATFORM TYPI (E.G., SHIP, BUO		6. PLATFORM A NATIONALIT		7. DA	res			
ĺ			PLATFORM	OPERATOR	FROM: MODAY,YE	TO: MO/DAY/YR			
Discoveren	ON FOOT				0//				
RP4D176B Leg. I.			บร	US	8/5/75	9/7/75			
						, ,			
8. ARE DATA PROPRIETARY					UARES IN WHICE				
NO TES		CONT	KINED IN 100K	SOBMISSION III	ERE COLLECT	· · · · · · · · · · · · · · · · · · ·			
				CENEDAL AD		ì			
IF YES, WHEN CAN TH FOR GENERAL USE?				GENERAL AR	EA				
9. ARE DATA DECLARED NAT	FIONAL	100- 150- 140- 180- 180- 180- 140- 150- 100- 80- 50- 40- 50- 8- 50- 40- 50- 40- 50- 100-							
(I.E., SHOULD THEY BE IN	CLUDED IN WORLD								
DATA CENTERS HOLDINGS TIONAL EXCHANGE?)	FOR INTERNA-	22	237 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		1 6 20 25	14 July 1			
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	!	" <u> </u>		15 15		100 100			
	<u> </u>	20.							
10. PERSON TO WHOM INQUIRED DATA SHOULD BE ADDRES				15x 515	Z				
PHONE NUMBER (AND ADD	20 20				323 73° 1323 73°				
THAN IN ITEM-1)	中国			/ <del></del>	39 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				
DEPTIOF GEOLOGY	GREGG PETRIE			5 183	11.00	257 270			
WESTERN WASHINGTO	ιNo	10, 22	500	- S	44 313	511 506 60*			
STATE COLEGE		Pi	bw.	E3   Jan	516;350				
BELLINGHAM, WA 9	0225	25.4	1572 1872 1873 1873 1873 1873 1873 1873 1873 1873	· 122° 130° 60° 60°		10. 60. 10. 100.			
(206)	676-8339	100. 150. 143. 190. 180. 170. 140. 153. 130. 19. 60. 47. 50. 0. 50. 40. 60. 88. 188.							

USCOMM-DC 44289-P72

1. LIST RECORD TYPES CONTAINED IN THE TRANSMITTAL OF YOUR FILE GIVE METHOD OF IDENTIFYING EACH RECORD TYPE										
Seven distinct record types; (1) Fi	le Header, (2) Station Header, (3) Site									
Header, (4) Composite Data, (5) Indi	vidual Sample Data, (6) Profile Data,									
and (7) Comment Records, differenti	ated by byte 10									
2. GIVE BRIEF DESCRIPTION OF FILE ORGANIZATION										
After the file header, records are grouped together by station number (in increasing order) with a station header record (type=2) being the first of a set of related records. (i.e., each record type 2 is followed by corresponding record types 3, 4, 6, and 7). No record type 5 format is used.										
Note: Any unused fields are filled with	spaces.									
3. ATTRIBUTES AS EXPRESSED IN PL-1 X FORTRAN	ALGOL COBOL									
FORTRAN	LANGUAGE									
4. RESPONSIBLE COMPUTER SPECIALIST:										
NAME AND PHONE NUMBER Gregg Petri										
Address Dept. Georgy, W.W.S.C.,	Bellingham, WA 98225									
COMPLETE THIS SECTION IF DATA ARE ON MAGNE										
5. RECORDING MODE BCD BINARY	9. LENGTH OF INTER- RECORD GAP (IF KNOWN) 3/4 INCH									
ASCII X EBCDIC	X IBM Standard									
	10. END OF FILE MARK									
6. NUMBER OF TRACKS SEVEN	[X] IBM Standard									
X NINE	11. PASTE-ON-PAPER LABEL DESCRIPTION (INCLUDE ORIGINATOR NAME AND SOME LAY SPECIFICATIONS OF DATA TYPE, VOLUME NUMBER)									
·	Originator: A.C. Broad, Dept. Biology									
7. PARITY	W.W.S.C., Bellingham, WA									
X EVEN	98225 Data Type: remarks, hydrographic, pro-									
8. DENSITY 200 BPI 1600 BPI	file, environment, biological Volume No: 000939(no label on tape									
556 BPI	12. PHYSICAL BLOCK LENGTH IN BYTES									
[X] 800 BPI	1200									
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14. FIELD NAME	15. POSITION FROM - 1 MEASURED		GTH	17. ATTRIBUTES	18. USE AND MEANING
	IN Bytes (o.g., bits, bytes)	NUMBER	UNITS		
File Type	1	3	Bytes	A3	Always '030'
File Identifier	4	6	Bytes	A6	File creation date (YYMMDD) or unique cruise number
Record Type	10	1 .	Bytes	11	Always '1'
Vessel Name	11	11	Bytes	A11	
Cruise Number	22	6	Bytes	A6	;
Start Date,					
Year	28	2 .	Bytes	12	00 to 99
Month	30	2	Bytes	12	01 to 12
Day	32	2	Bytes	12	01 to 31
End Date,					
Year	34	2	Bytes	12	00 το 99
Month	36	2	Bytes	12	01 to 12
Day	38	2	Bytes	12	01 to 31
Senior Scientist	40	19	Bytes	A19	Left justified
Investigator and or Institution	59	62	Bytes	۸62	Left justified `
ı					:
		)			
				:	:
;					
		i			,

# RECORD NAME <u>Intertidal Data (Station Header)</u>

14. FIELD NAME	15. POSITION FROM - 1		GTH	17. ATTRIBLE ES	18. USE AND MEANING
	MEASURED IN Bytes (c.d., bits, bytes)	NUMBER	UNITS	•	
File Type	1	3	Bytes	A3	Always '030'
File Identifier	4	6	  Bytes	A6	File creation date (YYMMDD) or unique cruise number
Record Type	10	1	Bytes	Il	Always '2'
Station Number	11	5	Bytes	A5	Right justified
Sequence Number	16	4	Bytes	14	Ascending order for sorting
Latitude,			ŀ		
Degrees	20	2	Bytes	12	
Minutes	22	4	Bytes	14	To hundredths
Hemisphere	26	1	Bytes	Al	'N' or 'S'
Longitude					
   Degrees	27	3	Bytes	13	
Minutes	30	4	Bytes	14	To hundredths
Hemisphere	34	1	Bytes	Al	'E' or 'W'
Year	35	2	Bytes	12	00 to 99
Month	37	2	Bytes	12	01 to 12 G.M.T.
Day	39	2	Bytes	12	01 to 31
Start Time					
Hours	41	2	Bytes	12	00-23 G.M.T.
Minutes	43	2	Bytes	12	00-59
Elapsed Time,					- - -
Hours	45	2	Bytes	12	
Minutes	47	2	Bytes	12	
Time Zone	49	3	Bytes	A3	-12 to +12
Surface Salinity	52	5	Bytes	15	Parts per thousand to thousandths
Surface Temper- ature	57	5	Bytes	15	Deg. C. to hundredths

RECORD NAME Intertidal Data (Station Header Continued)

14.	FIELD NAME	IS. HOSETION FROM - 1 MEASUPED	16. TEN	ĠŤĤ	in Attrice (ES	16. USE AND MEANING
		(N. Bytes (A. J., Litt., Lyten)	NUMBER	UNITS		
Ai	r Temperature	62	4	Bytes	14	Deg. C. to tenths
SE	CCHI Disc Depth	66	3	Bytes	13	Meters to tenths
We	ather Code	69	2	Bytes	A2	WMO Code 4677
Cl	oud Type Code	71	1	Bytes	Al	WMO Code 0500
Cl	oud Amount Code	72	1	Bytes	Al	WMO Code 2700
Wi	nd Speed	73	. 2	Bytes	12	Whole knots
Wi	nd Direction	75	3	Bytes	13	Whole degrees
Se	a State Code	78	1	Bytes	Al	WMO Code 3700
	eaker Height Code	79	1	Bytes	Al	WMO Code 3700
Ex	posure Directio	n 80	3	Bytes	13	Whole degrees
1	bstrata Type Codes					Any combination of up to three Substrata Type Codes. Code from right to left (most
	Primary	83	1	Dytes	A1	predominant on the right).
	Secondary	84	1	Bytes	A1	
	Tertiary	85	1	Bytes	Al	,
	rometric Pressure	86	4	Bytes	14	Millibars to tenths
На	bitat Codes					
	Geomorphic	90	1	Bytes	A1	Use Habitat Code
	Composition	91	1	Bytes	Al	Use File Type '030' Composition Code
	Cover	92	1	Bytes	Al	Use File Type '030' Cover Code
	Slope	93	1	Bytes	Al	Use File Type '030' Slope Code
B1	ank	94	27	Bytes	27X	
				,		
					<u> </u>	

14. FIELD NAME	FROM • 1 MEASURED		<b>СТН</b>	17. ATTRÚ LÉ	IS. USE AND MEANING
	(c.2., bils, bytes)	NUMBER	צדזאט		
File Type	ı	3	Bytes	A3	Always '030'
File Identifier	jł	6	Bytes	A6	File creation date (YYMMDD) or unique cruise number
Record Type	10	1	Bytes	Il	Always '3'
Station Number	11	5	Bytes	A5	Right justified
Sequence Number	16	4	Bytes	14	Ascending order for sorting
Catalog Number	20	8	Bytes	A8	Originator's internal number
Photograph Numbe	r 28	10	Bytes	AlO	Originator's internal number
Gear Type Code	38	1	Bytes	Al	Use File 030 Gear Type Code
Transect Number	39	2	Bytes	A2	
Transect Directi	on 41	3	Bytes	13	Whole Degrees
Meter Number	71,74	14	Bytes	A4	
Zone/Arrow/ No. of Sample	48	3	Bytes	A3	
Quadrat Size	51	5	Bytes	15	Square meters to thousandths
Elevation	56	4	Bytes	14	Meters to hundredths
Substrata Type Codes	60	3	Bytes	3Al	Any combination of up to three Substrata Type Codes. Code from right to left (most predominant to right).
Surface Topo- graphy Codes	63	3	Bytes	3Al	Any combination of up to three File 030 Surface Topography Codes Code from right to left (most predominant to right).
					·

#### RECORD NAME Intertidal Data (Site Header, Continued)

14. FIELD NAME	15. POSITION FROM - 1 MEASURED			17. ATTRI JTES	18. USE AND MEANING
	(c.g., bits, bytes)	NUMBER	UNITS		
Collection Time	66	2	Bytes	12	G,M,T.
	68	2		12	1
Minutes			Bytes		G.M.T.
Sieve Size	70	4	Bytes	14	Millimeters to hundredths
Dilution Volume	74	3	Bytes	13	*Decimal Equivalents (.XXX)
Quadrat Slope	77	2	Bytes	12	Whole degrees
Direction of Quadrat Slope	79	3	Bytes	13	Whole degrees
Grab Number	82	2	Bytes	12	Sequential order of multiple digs
Sediment	84	7	Bytes	17	Liters to thousandths
Grain Size	91	2	Bytes	<b>I2</b>	<pre>p number (-LOG<sub>2</sub> MM.) with a range from -8 to +12. Minus p must be explicitly reported with a minus sign in byte 91, plus p should not incorporate '+' sign.</pre>
Patch Grid Size	93	5	Bytes	15	Square meters To Thousands Thousands
Medium Frame Multiple	98	2	Bytes	12	Number of Grids Occupied by
Large Frame Multiple	100	2	Bytes	12	all Species within
Total Work Area	102	5	Bytes	15	Square: meters
Depth	107	5	Bytes	15	Meters to tenths
Distance of Net Tow	112	3	Bytes	13	Meters to tenths
Blank	115	6	Bytes	6x	

\*The dilution volume is that portion of a sample which is analyzed after the sample has been diluted, as a means of statistically estimating the composition of the sample without having to examine the entire sample. Therefore, the dilution volume will be recorded in decimal equivalents. Example: a sample that is diluted so as to equal 16 times its original volume, with one sixteenth being the part studied, will have its dilution volume recorded as .063.

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## RECORD FORMAT DESCRIPTION

RECORD NAME Intertidal Data (Composite Data)

14. FIELD NAME	15. POSITION FROM - 1 MEASURED	16. LEN	<b>G</b> ТН	17. ATTRIN . TES	18. USE AND MEANING
	MEASURED IN BYTES	NUMBER	UNITS		
File Type	1	3	Bytes	Λ3	Always '030'
File Identifier	4	6	Bytes	A6	File creation date (YYMMDD) or unique cruise number
Record Type	10	1	Bytes	11	Always '4'
Station Number	11	5	Bytes	A5	Right justified
Sequence Number	16	4	Bytes	14	Ascending order for sorting
Taxonomic Code	20	10	Bytes	5A2	
Sub Species Code	30	2	Bytes	A2	
Sex Code	32	1	Bytes	Al	
Condition Codes	33	3	Bytes	3A1	Use File Type '030' Condition Code. Any combination of up to three Condition Codes. Code from right to left.
Coverage	36	3	Bytes	13	The number of species too small to be counted, or too well attached to the substrate to be removed, will be estimated by the percentage of the quadrat which they cover.  Range is greater than 0% and less than or equal to 100%.
Count	39	5	Bytes	15	Total number of individuals
Wet Weight	44	7	Bytes	17	Grams to thousandths
Dry Weight	51	7	Bytes	17	Grams to thousandths
Minimum Length	58	6	Bytes	16	Millimeters to hundredths
Maximum Length	64	6	Bytes	16	Millimeters to hundredths
Displacement Volume	70	5	Bytes	15	Milliliters to tenths
Mean Length	75	6	Bytes	16	Millimeters to hundredths
Minimum Width	81	6	Bytes	16	Millimeters to hundredths
Maximum Width	87	6	Bytes	16	Millimeters to hundredths
Mean Width	93	6	Bytes	16	Millimeters to hundredths

14. FIELD NAME	15. POSITION FROM - 1 MEASURED	ļ	GТН	17. ATTRIBUTES	18. USE AND MEANING
	(e.g., bits, bytes)	NUMBER	UNITS		
Minimum Age	99	2	Bytes	12	Wnole years
Maximum Age	101	2	Bytes	12	Whole years
Mean Age	103	2	Bytes	12	Whole years
Small Frame	105	3	Bytes	13	Number of grids occupied by
Medium Frame	108	3	Bytes	13	species within
Large Frame	111	. 2	Bytes	12	
Dilution Volume	113	3	Bytes	13	*Decimal equivalents (.XXX)
Plant Height	116	2	Bytes	12	Whole centimeters
Blank	118	3	Bytes	3X	
•					
					h is analyzed after the sample
	1	1		1	ting the composition of the Therefore, the dilution volume

\*The dilution volume is that portion of a sample which is analyzed after the sample has been diluted, as a means of statistically estimating the composition of the sample without having to examine the entire sample. Therefore, the dilution volume will be recorded in decimal equivalents. Example: a sample that is diluted so as to equal 16 times its original volume, with one sixteenth being the part studied, will have its dilution volume recorded as .063.

## RECORD NAME <u>Intertidal Data (Individual Sample Data)</u>

14. FIELD NAME	FROM - 1 MEASURED			17. ATTRIBUTES	18. USE AND MEANING	
	(e.g., bits, bytes)	NUMBER	UNITS			
	_					
File Type	1	3	Bytes	A3	Always '030'	
File Identifier	4	6	Bytes	A6	File creation date (YYMMDD) or unique cruise number	
Record Type	10	1	Bytes	. Il	Always '5'	
Station Number	11	5	Bytes	A5	Right justified	
Sequence Number	16	4	Bytes	14	Ascending order for sorting	
Taxonomic Code	20	10	Bytes	5A2		
Subspecies Code	30	2	Bytes	A2		
Sex Code	32	1	Bytes	A1		
Condition Codes	33	3	Bytes	3A1	Use File Type '030' Condition Codes, most predominant to left.	
Age	36	2	Bytes	12	Whole years	
Wet Weight	38	7	Bytes	17	Grams to thousandths	
Dry Weight	45	7	Bytes	17	Grams to thousandths	
Length	52	6	Bytes	16	Millimeters to hundreds	
Width	58	6	Bytes	16	Millimeters to hundreds	
Displacement Volume	64	5	Bytes	15	Milliliters to tenths	
Blank	69	52	Bytes	52X		

RECORD NAME Intertidal Data (Profile Data)

14. FIELD NAME	15. POSITION FROM - 1 MEASURED	16. LEN	GТH	17. ATTRIBUTES	18. USE AND MEANING
	INBYTES (c.f., bits, bytes)	NUMBER	UNITS		
File Type	1	3	Bytes	A3	Always '030'
File Identifier	4	6	Bytes	A6	File creation date (YYMMDD) or unique cruise number
Record Type	10	1	Bytes	11	Always '6'
Station Number	11	5	Bytes	A5	Right justified
Sequence Number	16	4	Bytes	14	Ascending order for sorting
Oxygen	20	3	Bytes	13	Milliliters per liter
рН	23	2	Bytes	12	To Tenths
pH Scale	25	1	Bytes	A1	1 = NBS pH scale 2 = Sorensen pH scale 3 = Hansson pH scale
Salinity	26	3	Bytes	13	Parts per thousand to tenths
Interstitial Salinity	29	3	Bytes	13	Parts per thousand to tenths
Permafrost Depth	32	2	Bytes	12	Meters to tenths
Water Temperature	34	3	Bytes	13	Degrees Celsius to tenths
Secchi Disk Depth	37	4	Bytes	14	Meters to hundredths (centimeters
Grain Size in Phi Unit Levels					
Greater than -8	41	3	Bytes	13	
-8 to -6	44	3	Bytes	13	
-6 to -4	47	3	Bytes	13	
-4 to -2	50	3	Bytes	13	
-2 to -1	53	3	Bytes	13	Percent by weight to
-1 to 0	56	3	Bytes	13	tenths
0 to 1	59	3	Bytes	13	
1 to 2	62	3	Bytes	13	
2 to 3	65	3	Bytes	13	

RECORD NAME Intertidal Data (Profile Data) Continued

14. FIELD NAME	15. POSITION FROM - 1 MEASURED			17. ATTRIBUTES	18. USE AND MEANING		
	IN Rutes	NUMBER	UNITS				
3 to 4	68	3	Bytes	13	Percent by weight to		
Less than 4	71	3	Bytes	13	tenths		
Blank	74	47	Bytes	47X			
		}					
					•		

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RECORD NAME Intertidal Data (Comment)

14. FIELD NAME	15. POSITION FROM-1 MEASURED IN Bytes	16. LENGTH		17. ATTRINUTES	18. USE AND MEANING		
	(e.g., 5its, bytes)	NUMBER	UNITS				
File Type	1	3	Bytes	A3	Always '030'		
File Identifier	4	6	Bytes	A6	File creation date (YYMMDD) or unique cruise number		
Record Type	10	1	Bytes	11	Always '7'		
Station Number	11	5	Bytes	A5	Right justified		
Sequence Number	16	4	Bytes	14	Ascending order for sorting		
Comments	20	101	Bytes	A101	Any alphanumeric comment data		
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Password:

accNo fleA refNo proj inst ship startDate cruise catId
7700086 F030 TR0528 0081 311W 32P8 1975/08/05 NULL 302625

(1 row affected)

### Password:

accNo	fleA	refNo	ship	${\tt staCnt}$	recCnt	startDate	endDate
7700086	F030	TR0528	32P8	15	1298	75/08/05	75/09/07

(1 row affected)