

H 5775

507







SOUNDING WIRE.				FMS.	DREDGING CABLE.		
<i>A.</i> M. Down.	Up.	<i>A.</i> M.	M. Down.		Up.	M.	
<i>7</i>	<i>5700</i>	<i>7</i>	<i>5800</i>	0			
<i>7</i>	<i>5730</i>	<i>7</i>	<i>5730</i>	100			
				200			
				300			
				400			
				500			
				600			
				700			
				800			
				900			
				1000			
				1100			
				1200			
				1300			
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				1500			
				1600			
				1700			
				1800			
				1900			
				2000			
				2100			
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				2600			
				2700			
				2800			
				2900			
				3000			
				3100			
				3200			
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				3700			
				3800			
				3900			
				4000			
				4100			
				4200			
				4300			
				4400			
				4500			
				4600			
				4700			
				4800			
				4900			



SOUNDING WIRE.				FMS.	DREDGING CABLE.		
A.M. DOWN.	UP.	A.M.	M. DOWN.		UP.	M.	
8 18 10	8 20 50			0			
8 18 50	8 19 30			100			
8 19 00	8 19 00		130	200			
				300			
				400			
				500			
				600			
				700			
				800			
				900			
				1000			
				1100			
				1200			
				1300			
				1400			
				1500			
				1600			
				1700			
				1800			
				1900			
				2000			
				2100			
				2200			
				2300			
				2400			
				2500			
				2600			
				2700			
				2800			
				2900			
				3000			
				3100			
				3200			
				3300			
				3400			
				3500			
				3600			
				3700			
				3800			
				3900			
				4000			
				4100			
				4200			
				4300			
				4400			
				4500			
				4600			
				4700			
				4800			
				4900			



Dredge } No. *H 5778* Date, *July 9*, 19 *15*  
Hydrog. }

Sdg. Mch. *Electric* Reel *Elk.* Shot } *30* lbs.  
Lead }

Turns ----- Cor'n ----- Depth  *96* fms.

Sdg. Cup *Armstrong (soft scoop)* Amt. Bot'm Sample

Character of Bottom *hard*

Thermom. { Make ----- Cor'n { Instr. -----  
                  { No. -----                    { Stem. -----

Bottom Reading ----- Cor'd Temp. -----

Temp. Surf. { *54°* Time *8:48* } Air { *64*  
                  { ----- Time ----- } { -----

Density: Surf. ----- fms. -----

Wind: Direction *West* Force *2*

Baromet. *30.08* Amt. of Clouds *7* State of Sea *2*

Weather *bc*

Direction and Force of Current { Surface -----  
  { Bottom -----

Tide -----

General Locality *Off mouth Columbia River*

Position *North Head bears N 86 1/2° E (true) distant 15.8 miles*

Chart used: No. *6100* Ed'n *5*

Drift: Direction ----- Distance -----

Depth of Haul -----

Apparatus and Rig used -----

Time towing ----- h. ----- m.

Remarks: *E 87 fms. Meter wheel 176 = 96 fms*

Deck Officer *Mr. Shepley* Recorder *W. B. Barber*

SOUNDING WIRE.				FMS.	DREDGING CABLE.			
A. M. Down.		Up. A. M.			M. Down.		Up. M.	
8 43	30	8 45	15	0				
8 44	10	8 44	10	87 100				
				200				
				300				
				400				
				500				
				600				
				700				
				800				
				900				
				1000				
				1100				
				1200				
				1300				
				1400				
				1500				
				1600				
				1700				
				1800				
				1900				
				2000				
				2100				
				2200				
				2300				
				2400				
				2500				
				2600				
				2700				
				2800				
				2900				
				3000				
				3100				
				3200				
				3300				
				3400				
				3500				
				3600				
				3700				
				3800				
				3900				
				4000				
				4100				
				4200				
				4300				
				4400				
				4500				
				4600				
				4700				
				4800				
				4900				



SOUNDING WIRE.

FMS.

DREDGING CABLE.

A. M. Down. | Up. | A. M.

M. Down. | Up. | M.

8 53 10 8 54 30  
 8 53 40 8 53 40

0  
 100  
 200  
 300  
 400  
 500  
 600  
 700  
 800  
 900  
 1000  
 1100  
 1200  
 1300  
 1400  
 1500  
 1600  
 1700  
 1800  
 1900  
 2000  
 2100  
 2200  
 2300  
 2400  
 2500  
 2600  
 2700  
 2800  
 2900  
 3000  
 3100  
 3200  
 3300  
 3400  
 3500  
 3600  
 3700  
 3800  
 3900  
 4000  
 4100  
 4200  
 4300  
 4400  
 4500  
 4600  
 4700  
 4800  
 4900

Dredge } No. 578  
Hydrog. } Date. / / , 19

Sdg. Mch. Reel Shot/Lead lbs.

Turns Cor'n Depth 74 fms.

Sdg. Cup Amt. Bot'm Sample

Character of Bottom (1) 2/2

Thermom. { Make Cor'n { Instr. No. Stem.

Bottom Reading Cor'd Temp.

Temp. Surf. { 55° Time 9:06 } .1ir { 66° Time

Density: Surf. fms.

Wind: Direction West Force 2-3

Baromet. 30.09 Amt. of Clouds 7 State of Sea

Weather b.c

Direction and Force of Current { Surface Bottom

Tide

General Locality

Position North Head bears S88°E (true) distant 17.2 miles

Chart used: No. 6100 Ed'n

Drift: Direction Distance

Depth of Haul

Apparatus and Rig used

Remarks: 1/1 Time towing h. m.

Deck Officer Recorder

SOUNDING WIRE.

DREDGING CABLE.

FMS.

M. Down. | Up. | M.

M. Down. | Up. | M.

M. Down.	Up.	M.	FMS.
2	40	9	0
9	03	12	67
			100
			200
			300
			400
			500
			600
			700
			800
			900
			1000
			1100
			1200
			1300
			1400
			1500
			1600
			1700
			1800
			1900
			2000
			2100
			2200
			2300
			2400
			2500
			2600
			2700
			2800
			2900
			3000
			3100
			3200
			3300
			3400
			3500
			3600
			3700
			3800
			3900
			4000
			4100
			4200
			4300
			4400
			4500
			4600
			4700
			4800
			4900

Dredge } No. H 5781 Date, July 1, 1911  
Hydrog. }

Sdg. Mch. \_\_\_\_\_ Reel \_\_\_\_\_ Shot } 50 lbs.  
Lead }

Turns \_\_\_\_\_ Cor'n \_\_\_\_\_ Depth 70 fms.

Sdg. Cup \_\_\_\_\_ Amt. Bot'm Sample \_\_\_\_\_

Character of Bottom \_\_\_\_\_ fine sand

Thermom. { Make \_\_\_\_\_ Cor'n { Instr. \_\_\_\_\_  
No. \_\_\_\_\_ Stem. \_\_\_\_\_

Bottom Reading \_\_\_\_\_ Cor'd Temp. \_\_\_\_\_

Temp. Surf. { Time 4:55 } Air { 61  
Time \_\_\_\_\_ } \_\_\_\_\_

Density: Surf. \_\_\_\_\_ fms. \_\_\_\_\_

Wind: Direction SE Force \_\_\_\_\_

Baromet. 29.90 Amt. of Clouds \_\_\_\_\_ State of Sea \_\_\_\_\_

Weather b.c.

Direction and Force of Current { Surface \_\_\_\_\_  
Bottom \_\_\_\_\_

Tide \_\_\_\_\_

General Locality \_\_\_\_\_

Position North Head bears S85°E (true) distant  
18.1 miles

Chart used: No. 6100 Ed'n 17.8

Drift: Direction \_\_\_\_\_ Distance \_\_\_\_\_

Depth of Haul \_\_\_\_\_

Apparatus and Rig used \_\_\_\_\_

Time towing \_\_\_\_\_ h. \_\_\_\_\_ m.

Remarks: ( )





Dredge } No. H5-782 Date, \_\_\_\_\_, 19\_\_\_\_  
Hydrog. }  
Sdg. Mch. Electric Reel 1 Shot/Lead 20 lbs.

Turns \_\_\_\_\_ Cor'n \_\_\_\_\_ Depth 76 1/2 fms.  
Sdg. Cup \_\_\_\_\_ Amt. Bot'm Sample \_\_\_\_\_  
Character of Bottom Yel. loam sand; green mud

Thermom. { Make \_\_\_\_\_ Cor'n { Instr. \_\_\_\_\_  
              { No. \_\_\_\_\_                 { Stem. \_\_\_\_\_

Bottom Reading \_\_\_\_\_ Cor'd Temp. \_\_\_\_\_

Temp. Surf. { \_\_\_\_\_ Time \_\_\_\_\_ } Air { \_\_\_\_\_  
                  { \_\_\_\_\_ Time \_\_\_\_\_ }

Density: Surf. \_\_\_\_\_ fms. \_\_\_\_\_

Wind: Direction W. by N. Force 2-3

Baromet. 30.00 Amt. of Clouds 7 State of Sea 9

Weather \_\_\_\_\_

Direction and Force of Current { Surface \_\_\_\_\_  
  { Bottom \_\_\_\_\_

Tide \_\_\_\_\_

General Locality \_\_\_\_\_

Position North Head bears S82 1/2° E (true) distant  
18.8 miles

Chart used: No. 6100 Ed'n \_\_\_\_\_

Drift: Direction \_\_\_\_\_ Distance \_\_\_\_\_

Depth of Haul \_\_\_\_\_

Apparatus and Rig used \_\_\_\_\_

Time towing \_\_\_\_\_ h. \_\_\_\_\_ m.  
Remarks: 1/2 \_\_\_\_\_

Deck Officer \_\_\_\_\_ Recorder J. D. F.

## SOUNDING WIRE.

M. Down.	Up.	M.
20		

FMS.

## DREDGING CABLE.

M. Down.	Up.	M.

0
100
200
300
400
500
600
700
800
900
1000
1100
1200
1300
1400
1500
1600
1700
1800
1900
2000
2100
2200
2300
2400
2500
2600
2700
2800
2900
3000
3100
3200
3300
3400
3500
3600
3700
3800
3900
4000
4100
4200
4300
4400
4500
4600
4700
4800
4900

Dredge } No. \_\_\_\_\_ Date, \_\_\_\_\_, 19\_\_\_\_  
Hydrog. }  
Sdg. Mch. \_\_\_\_\_ Reel \_\_\_\_\_ Shot/Lead \_\_\_\_\_ lbs.  
Turns \_\_\_\_\_ Cor'n \_\_\_\_\_ Depth 77 1/2 fms.  
Sdg. Cup Pennick (after) Amt. Bot'm Sample \_\_\_\_\_  
Character of Bottom Sand

Thermom. { Make \_\_\_\_\_ Cor'n { Instr. \_\_\_\_\_  
              { No. \_\_\_\_\_                 { Stem \_\_\_\_\_  
Bottom Reading \_\_\_\_\_ Cor'd Temp. \_\_\_\_\_

Temp. Surf. { \_\_\_\_\_ } Air { \_\_\_\_\_ }  
                  { Time \_\_\_\_\_ }  
                  { Time \_\_\_\_\_ }  
Density: Surf. \_\_\_\_\_ fms. \_\_\_\_\_

Wind: Direction \_\_\_\_\_ Force \_\_\_\_\_

Baromet. \_\_\_\_\_ Amt. of Clouds 7 State of Sea \_\_\_\_\_

Weather \_\_\_\_\_

Direction and Force of Current { Surface \_\_\_\_\_  
  { Bottom \_\_\_\_\_

Tide \_\_\_\_\_

General Locality Off Cape Cod, Massachusetts

Position North Head bears S 80 1/2° E (true) distant 19.6 miles  
Chart used: No. 6100 Ed'n \_\_\_\_\_

Drift: Direction \_\_\_\_\_ Distance \_\_\_\_\_

Depth of Haul \_\_\_\_\_

Apparatus and Rig used \_\_\_\_\_

Remarks: \_\_\_\_\_  
Time towing \_\_\_\_\_ h. \_\_\_\_\_ m.

Deck Officer Shapley Recorder \_\_\_\_\_  
11-1023

## SOUNDING WIRE.

FMS.

## DREDGING CABLE.

A M. DOWN. | Up. | A. M.

--- M. DOWN. | Up. | --- M.

A M. DOWN.	Up.	A. M.	FMS.
193.2	40	9 34 05	0
			100
			200
			300
			400
			500
			600
			700
			800
			900
			1000
			1100
			1200
			1300
			1400
			1500
			1600
			1700
			1800
			1900
			2000
			2100
			2200
			2300
			2400
			2500
			2600
			2700
			2800
			2900
			3000
			3100
			3200
			3300
			3400
			3500
			3600
			3700
			3800
			3900
			4000
			4100
			4200
			4300
			4400
			4500
			4600
			4700
			4800
			4900

70'

Dredge } No. \_\_\_\_\_ Date, \_\_\_\_\_, 19\_\_\_\_  
Hydrog. }

Sdg. Mch. \_\_\_\_\_ Reel \_\_\_\_\_ Shot } lbs.  
Lead }

Turns \_\_\_\_\_ Cor'n \_\_\_\_\_ Depth \_\_\_\_\_ fms.

Sdg. Cup \_\_\_\_\_ Amt. Bot'm Sample \_\_\_\_\_

Character of Bottom \_\_\_\_\_ (Change black sand)

Thermom. { Make \_\_\_\_\_ Cor'n { Instr. \_\_\_\_\_  
              { No. \_\_\_\_\_                 { Stem. \_\_\_\_\_

Bottom Reading \_\_\_\_\_ Cor'd Temp. \_\_\_\_\_

Temp. Surf. { \_\_\_\_\_ Time \_\_\_\_\_ }  
                  { \_\_\_\_\_ Time \_\_\_\_\_ }                 { Air } \_\_\_\_\_

Density: Surf. \_\_\_\_\_ fms. \_\_\_\_\_

Wind: Direction \_\_\_\_\_ West Force \_\_\_\_\_ 2

Baromet. \_\_\_\_\_ 20.10 Amt. of Clouds \_\_\_\_\_ State of Sea \_\_\_\_\_ 9

Weather \_\_\_\_\_

Direction and Force of Current { Surface \_\_\_\_\_  
  { Bottom \_\_\_\_\_

Tide \_\_\_\_\_

General Locality \_\_\_\_\_

Position North Head bears  $S 79^{\circ} E$  (true) distant \_\_\_\_\_  
20.5 miles

Chart used: No. 6100 Ed'n \_\_\_\_\_ 2

Drift: Direction \_\_\_\_\_ Distance \_\_\_\_\_

Depth of Haul \_\_\_\_\_

Apparatus and Rig used \_\_\_\_\_

Time towing \_\_\_\_\_ h. \_\_\_\_\_ m.

Remarks \_\_\_\_\_

Deck Officer \_\_\_\_\_ Recorder \_\_\_\_\_

SOUNDING WIRE.

M. Down. | Up. | M.

FMS.

DREDGING CABLE.

M. Down. | Up. | M.

- 0
- 100
- 200
- 300
- 400
- 500
- 600
- 700
- 800
- 900
- 1000
- 1100
- 1200
- 1300
- 1400
- 1500
- 1600
- 1700
- 1800
- 1900
- 2000
- 2100
- 2200
- 2300
- 2400
- 2500
- 2600
- 2700
- 2800
- 2900
- 3000
- 3100
- 3200
- 3300
- 3400
- 3500
- 3600
- 3700
- 3800
- 3900
- 4000
- 4100
- 4200
- 4300
- 4400
- 4500
- 4600
- 4700
- 4800
- 4900

81-30  
74-30



## SOUNDING WIRE.

M. Down. Up. M.

FMS.

## DREDGING CABLE.

M. Down. Up. M.

0

100

200

300

400

500

600

700

800

900

1000

1100

1200

1300

1400

1500

1600

1700

1800

1900

2000

2100

2200

2300

2400

2500

2600

2700

2800

2900

3000

3100

3200

3300

3400

3500

3600

3700

3800

3900

4000

4100

4200

4300

4400

4500

4600

4700

4800

4900





SOUNDING WIRE.		FMS.	DREDGING CABLE.	
M. Down.	Up. M.		M. Down.	Up. M.
100253	100113	0		
20220	10054	100		
11330	100730	200		
		300		
		400		
		500		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		
		2500		
		2600		
		2700		
		2800		
		2900		
		3000		
		3100		
		3200		
		3300		
		3400		
		3500		
		3600		
		3700		
		3800		
		3900		
		4000		
		4100		
		4200		
		4300		
		4400		
		4500		
		4600		
		4700		
		4800		
		4900		

*Lucifer*  
Hydrog. } No. 1 Date, 1 1, 19  
Sdg. Mch. \_\_\_\_\_ Reel \_\_\_\_\_ Shot/Lead \_\_\_\_\_ lbs.  
Turns \_\_\_\_\_ Cor'n \_\_\_\_\_ Depth 88 1/2 fms.  
Sdg. Cup A Amt. Bot'm Sample \_\_\_\_\_  
Character of Bottom black sand

Thermom. { Make \_\_\_\_\_ Cor'n { Instr. \_\_\_\_\_  
              { No. \_\_\_\_\_                 { Stem. \_\_\_\_\_

Bottom Reading \_\_\_\_\_ Cor'd Temp. \_\_\_\_\_

Temp. Surf. { 55° Time 10:24 }  
                  { \_\_\_\_\_ Time \_\_\_\_\_ } . Air { \_\_\_\_\_ }

Density: Surf. \_\_\_\_\_ fms. \_\_\_\_\_

Wind: Direction \_\_\_\_\_ Force \_\_\_\_\_

Baromet. \_\_\_\_\_ Amt. of Clouds 6 State of Sea 2

Weather \_\_\_\_\_

Direction and Force of Current { Surface \_\_\_\_\_  
  { Bottom \_\_\_\_\_

Tide \_\_\_\_\_

General Locality \_\_\_\_\_

Position North Head bears S 72° E (true) distant 20.8 miles

Chart used: No. 6100 Ed'n \_\_\_\_\_

Drift: Direction \_\_\_\_\_ Distance \_\_\_\_\_

Depth of Haul \_\_\_\_\_

Apparatus and Rig used \_\_\_\_\_

Remarks: \_\_\_\_\_  
Time towing \_\_\_\_\_ h. \_\_\_\_\_ m.

Deck Officer Mr. [Signature] Recorder \_\_\_\_\_

## SOUNDING WIRE.

M. DOWN. | Up. | M.

11 / 21  
20

FMS.

0  
100  
200  
300  
400  
500  
600  
700  
800  
900  
1000  
1100  
1200  
1300  
1400  
1500  
1600  
1700  
1800  
1900  
2000  
2100  
2200  
2300  
2400  
2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000  
4100  
4200  
4300  
4400  
4500  
4600  
4700  
4800  
4900

## DREDGING CABLE.

M. DOWN. | Up. | M.



SOUNDING WIRE.

A. M. Down.	Up.	A. M.
1027 1/2	1030	
1027 1/2	1030	

FMS.

DREDGING CABLE.

M. Down.	Up.	M.

- 0
- 100
- 200
- 300
- 400
- 500
- 600
- 700
- 800
- 900
- 1000
- 1100
- 1200
- 1300
- 1400
- 1500
- 1600
- 1700
- 1800
- 1900
- 2000
- 2100
- 2200
- 2300
- 2400
- 2500
- 2600
- 2700
- 2800
- 2900
- 3000
- 3100
- 3200
- 3300
- 3400
- 3500
- 3600
- 3700
- 3800
- 3900
- 4000
- 4100
- 4200
- 4300
- 4400
- 4500
- 4600
- 4700
- 4800
- 4900



SOUNDING WIRE.

DREDGING CABLE.

SOUNDING WIRE.		FMS.	DREDGING CABLE.		
A. M. Down.	Up. A. M.		M. Down.	Up.	M.
		0			
		100			
		200			
		300			
		400			
		500			
		600			
		700			
		800			
		900			
		1000			
		1100			
		1200			
		1300			
		1400			
		1500			
		1600			
		1700			
		1800			
		1900			
		2000			
		2100			
		2200			
		2300			
		2400			
		2500			
		2600			
		2700			
		2800			
		2900			
		3000			
		3100			
		3200			
		3300			
		3400			
		3500			
		3600			
		3700			
		3800			
		3900			
		4000			
		4100			
		4200			
		4300			
		4400			
		4500			
		4600			
		4700			
		4800			
		4900			





SOUNDING WIRE.

A M. Down. | Up. | A. M.

FMS.

DREDGING CABLE.

M. Down. | Up. | M.

11 2 3 3  
11 3 0 0

57 100

- 0
- 100
- 200
- 300
- 400
- 500
- 600
- 700
- 800
- 900
- 1000
- 1100
- 1200
- 1300
- 1400
- 1500
- 1600
- 1700
- 1800
- 1900
- 2000
- 2100
- 2200
- 2300
- 2400
- 2500
- 2600
- 2700
- 2800
- 2900
- 3000
- 3100
- 3200
- 3300
- 3400
- 3500
- 3600
- 3700
- 3800
- 3900
- 4000
- 4100
- 4200
- 4300
- 4400
- 4500
- 4600
- 4700
- 4800
- 4900



SOUNDING WIRE.

DREDGING CABLE.

FMS.

M. Down. | Up. | M.

M. Down. | Up. | M.

*11 22 27 31 35 39 43 47 51 55 59 63 67 71 75 79 83 87 91 95 99 103 107 111 115 119 123 127 131 135 139 143 147 151 155 159 163 167 171 175 179 183 187 191 195 199 203 207 211 215 219 223 227 231 235 239 243 247 251 255 259 263 267 271 275 279 283 287 291 295 299 303 307 311 315 319 323 327 331 335 339 343 347 351 355 359 363 367 371 375 379 383 387 391 395 399 403 407 411 415 419 423 427 431 435 439 443 447 451 455 459 463 467 471 475 479 483 487 491 495 499*

- 0
- 100
- 200
- 300
- 400
- 500
- 600
- 700
- 800
- 900
- 1000
- 1100
- 1200
- 1300
- 1400
- 1500
- 1600
- 1700
- 1800
- 1900
- 2000
- 2100
- 2200
- 2300
- 2400
- 2500
- 2600
- 2700
- 2800
- 2900
- 3000
- 3100
- 3200
- 3300
- 3400
- 3500
- 3600
- 3700
- 3800
- 3900
- 4000
- 4100
- 4200
- 4300
- 4400
- 4500
- 4600
- 4700
- 4800
- 4900



SOUNDING WIRE.

FMS.

DREDGING CABLE.

SOUNDING WIRE.		FMS.	DREDGING CABLE.		
M. Down.	Up.		M.	Up.	M.
		0			
		100			
12-30	12-31	200			
12-31		300			
		400			
		500			
		600			
		700			
		800			
		900			
		1000			
		1100			
		1200			
		1800			
		1400			
		1500			
		1600			
		1700			
		1800			
		1900			
		2000			
		2100			
		2200			
		2300			
		2400			
		2500			
		2600			
		2700			
		2800			
		2900			
		3000			
		3100			
		3200			
		3300			
		3400			
		3500			
		3600			
		3700			
		3800			
		3900			
		4000			
		4100			
		4200			
		4300			
		4400			
		4500			
		4600			
		4700			
		4800			
		4900			









SOUNDING WIRE.		FMS.	DREDGING CABLE.		
M. Down.	Up.		M.	Up.	M.
12453		0			
12454		100			
12454		200			
12454		300			
		400			
		500			
		600			
		700			
		800			
		900			
		1000			
		1100			
		1200			
		1300			
		1400			
		1500			
		1600			
		1700			
		1800			
		1900			
		2000			
		2100			
		2200			
		2300			
		2400			
		2500			
		2600			
		2700			
		2800			
		2900			
		3000			
		3100			
		3200			
		3300			
		3400			
		3500			
		3600			
		3700			
		3800			
		3900			
		4000			
		4100			
		4200			
		4300			
		4400			
		4500			
		4600			
		4700			
		4800			
		4900			



SOUNDING WIRE.			FMS.	DREDGING CABLE.		
M. Down.	Up.	M.		M. Down.	Up.	M.
1	16	30	0			
1	17	05	100			
			200			
			300			
			400			
			500			
			600			
			700			
			800			
			900			
			1000			
			1100			
			1200			
			1300			
			1400			
			1500			
			1600			
			1700			
			1800			
			1900			
			2000			
			2100			
			2200			
			2300			
			2400			
			2500			
			2600			
			2700			
			2800			
			2900			
			3000			
			3100			
			3200			
			3300			
			3400			
			3500			
			3600			
			3700			
			3800			
			3900			
			4000			
			4100			
			4200			
			4300			
			4400			
			4500			
			4600			
			4700			
			4800			
			4900			

Dredge } No. 177 Date, \_\_\_\_\_, 19\_\_\_\_  
Hydrog. }  
Sdg. Mch. \_\_\_\_\_ Reel \_\_\_\_\_ Shot/Lead \_\_\_\_\_ lbs.  
Turns \_\_\_\_\_ Cor'n \_\_\_\_\_ Depth 111 fms.  
Sdg. Cup \_\_\_\_\_ Amt. Bot'm Sample \_\_\_\_\_  
Character of Bottom \_\_\_\_\_

Thermom. { Make \_\_\_\_\_ Cor'n { Instr. \_\_\_\_\_  
              { No. \_\_\_\_\_                 { Stem. \_\_\_\_\_

Bottom Reading \_\_\_\_\_ Cor'd Temp. \_\_\_\_\_

Temp. Surf. { 56° Time 1:49 } Air {  
                  {                 Time                 }                 {

Density: Surf. \_\_\_\_\_ fms. \_\_\_\_\_

Wind: Direction \_\_\_\_\_ Force \_\_\_\_\_

Baromet. 30.09 Amt. of Clouds \_\_\_\_\_ State of Sea \_\_\_\_\_

Weather \_\_\_\_\_

Direction and Force of Current { Surface \_\_\_\_\_  
  { Bottom \_\_\_\_\_

Tide \_\_\_\_\_

General Locality \_\_\_\_\_

Position North Head bears N 85° E (true) distant 17.8 miles  
Chart used: No. 6100 Ed'n \_\_\_\_\_

Drift: Direction \_\_\_\_\_ Distance \_\_\_\_\_

Depth of Haul \_\_\_\_\_

Apparatus and Rig used \_\_\_\_\_

Time towing \_\_\_\_\_ h. \_\_\_\_\_ m.  
Remarks E. 10/11 \_\_\_\_\_

Deck Officer \_\_\_\_\_ Recorder \_\_\_\_\_

SOUNDING WIRE.

FMS.

DREDGING CABLE.

SOUNDING WIRE.		FMS.	DREDGING CABLE.		
M. Down.	Up.		M.	Up.	M.
		0			
1 39		100			
1 39		200			
		300			
		400			
		500			
		600			
		700			
		800			
		900			
		1000			
		1100			
		1200			
		1300			
		1400			
		1500			
		1600			
		1700			
		1800			
		1900			
		2000			
		2100			
		2200			
		2300			
		2400			
		2500			
		2600			
		2700			
		2800			
		2900			
		3000			
		3100			
		3200			
		3300			
		3400			
		3500			
		3600			
		3700			
		3800			
		3900			
		4000			
		4100			
		4200			
		4300			
		4400			
		4500			
		4600			
		4700			
		4800			
		4900			



## SOUNDING WIRE.

M. Down. | Up. | M.

FMS.

## DREDGING CABLE.

--- M. Down. | Up. | --- M.

0  
 / 100  
 200  
 300  
 400  
 500  
 600  
 700  
 800  
 900  
 1000  
 1100  
 1200  
 1300  
 1400  
 1500  
 1600  
 1700  
 1800  
 1900  
 2000  
 2100  
 2200  
 2300  
 2400  
 2500  
 2600  
 2700  
 2800  
 2900  
 3000  
 3100  
 3200  
 3300  
 3400  
 3500  
 3600  
 3700  
 3800  
 3900  
 4000  
 4100  
 4200  
 4300  
 4400  
 4500  
 4600  
 4700  
 4800  
 4900



Dredge } No. \_\_\_\_\_ Date, May 9, 1910  
Hydrog. }  
Sdg. Mch. \_\_\_\_\_ Reel 611 Shot } lbs.  
Lead }  
Turns \_\_\_\_\_ Cor'n \_\_\_\_\_ Depth 81 1/2 fms.

Sdg. Cup \_\_\_\_\_ Amt. Bot'm Sample \_\_\_\_\_  
Character of Bottom fine (s) (l)

Thermom. { Make \_\_\_\_\_ Cor'n { Instr. \_\_\_\_\_  
              { No. \_\_\_\_\_                 { Stem. \_\_\_\_\_

Bottom Reading \_\_\_\_\_ Cor'd Temp. \_\_\_\_\_

Temp. Surf. { \_\_\_\_\_ Time \_\_\_\_\_ } Air { \_\_\_\_\_  
                  { \_\_\_\_\_ Time \_\_\_\_\_ }

Density: Surf. \_\_\_\_\_ fms. \_\_\_\_\_

Wind: Direction Light Force \_\_\_\_\_

Baromet. 30.11 Amt. of Clouds 5 State of Sea L

Weather \_\_\_\_\_

Direction and Force of Current { Surface \_\_\_\_\_  
  { Bottom \_\_\_\_\_

Tide \_\_\_\_\_

General Locality \_\_\_\_\_

Position North Head bears <sup>87 1/2</sup> N 88° E (true) distant 19.6 miles

Chart used: No. 6100 Ed'n \_\_\_\_\_

Drift: Direction \_\_\_\_\_ Distance \_\_\_\_\_

Depth of Haul \_\_\_\_\_

Apparatus and Rig used \_\_\_\_\_

Time towing \_\_\_\_\_ h. \_\_\_\_\_ m.

Remarks: \_\_\_\_\_

Deck Officer \_\_\_\_\_ Recorder \_\_\_\_\_

## SOUNDING WIRE.

FMS.

## DREDGING CABLE.

M. Down. | Up. | M.

M. Down. | Up. | M.

0

100

200

300

400

500

600

700

800

900

1000

1100

1200

1300

1400

1500

1600

1700

1800

1900

2000

2100

2200

2300

2400

2500

2600

2700

2800

2900

3000

3100

3200

3300

3400

3500

3600

3700

3800

3900

4000

4100

4200

4300

4400

4500

4600

4700

4800

4900

Trawl Hydrog. No. 15 Date, , 191-

Sdg. Mch. *Curtis* Reel *6* Shot Lead 30 lbs.

Turns Cor'n Depth 77' 2 fms.

Sdg. Cup *Clemens* Amt. Bot'm Sample

Character of Bottom *fine M. S.*

Thermom. { Make Cor'n { Instr. No. Stem.

Bottom Reading Cor'd Temp.

Temp. Surf. { 56° Time 2:15 } Air { 66° Time

Density: Surf. fms.

Wind: Direction *S. W.* Force 3

Baromet. 30.11 Amt. of Clouds 4 State of Sea *S*

Weather *bcy*

Direction and Force of Current { Surface Bottom

Tide

General Locality *North Head*

Position *North Head bears N 87° E (true) distant 20.2 miles*

Chart used: No. 6100 Ed'n

Drift: Direction Distance

Depth of Haul

Apparatus and Rig used

Time towing h. m.

Remarks: *E. by N. 192 77/2*

Deck Officer *W. L. ...* Recorder *...*

## SOUNDING WIRE.

FMS.

## DREDGING CABLE.

M. Down. | Up. | M.

M. Down. | Up. | M.

2	13	00	2	14	20
2	13	20	2	13	20

0
100
200
300
400
500
600
700
800
900
1000
1100
1200
1300
1400
1500
1600
1700
1800
1900
2000
2100
2200
2300
2400
2500
2600
2700
2800
2900
3000
3100
3200
3300
3400
3500
3600
3700
3800
3900
4000
4100
4200
4300
4400
4500
4600
4700
4800
4900



SOUNDING WIRE.			FMS.	DREDGING CABLE.		
P. M. Down.	Up.	P. M.		M. Down.	Up.	M.
2	23	30	2	23	30	0
2	23	25	2	23	25	100
						200
						300
						400
						500
						600
						700
						800
						900
						1000
						1100
						1200
						1300
						1400
						1500
						1600
						1700
						1800
						1900
						2000
						2100
						2200
						2300
						2400
						2500
						2600
						2700
						2800
						2900
						3000
						3100
						3200
						3300
						3400
						3500
						3600
						3700
						3800
						3900
						4000
						4100
						4200
						4300
						4400
						4500
						4600
						4700
						4800
						4900



SOUNDING WIRE.						FMS.	DREDGING CABLE.		
M. Down.		Up.	P. M.				M. Down.	Up.	M.
2	33	05	2	34	35	0			
2	33	30	2	33	30	100			
						200			
						300			
						400			
						500			
						600			
						700			
						800			
						900			
						1000			
						1100			
						1200			
						1800			
						1400			
						1500			
						1600			
						1700			
						1800			
						1900			
						2000			
						2100			
						2200			
						2300			
						2400			
						2500			
						2600			
						2700			
						2800			
						2900			
						3000			
						3100			
						3200			
						3300			
						3400			
						3500			
						3600			
						3700			
						3800			
						3900			
						4000			
						4100			
						4200			
						4300			
						4400			
						4500			
						4600			
						4700			
						4800			
						4900			



Hydrog. No. 3-502 Date, \_\_\_\_\_, 1915

Sdg. Mch. Lucas Reel Shot/Lead 30 lbs.

Turns \_\_\_\_\_ Cor'n \_\_\_\_\_ Depth 204 1/2 fms.

Sdg. Cup Osney Int. Bot'm Sample

Character of Bottom \_\_\_\_\_

Thermom. { Make \_\_\_\_\_ Cor'n { Instr. \_\_\_\_\_ No. \_\_\_\_\_ Stem. \_\_\_\_\_

Bottom Reading \_\_\_\_\_ Cor'd Temp. \_\_\_\_\_

Temp. Surf. { 56° Time 2:50 P } Air { 66° Time \_\_\_\_\_

Density: Surf. \_\_\_\_\_ fms. \_\_\_\_\_

Wind: Direction N Force 3

Baromet. 30.11 Amt. of Clouds 5 State of Sea \_\_\_\_\_

Weather bcy

Direction and Force of Current { Surface \_\_\_\_\_ Bottom \_\_\_\_\_

Tide \_\_\_\_\_

General Locality \_\_\_\_\_

Position North Head bears N 86 1/2° E (true) distant 23.5 mile

Chart used: No. 6100 Ed'n \_\_\_\_\_

Drift: Direction \_\_\_\_\_ Distance \_\_\_\_\_

Depth of Haul \_\_\_\_\_

Apparatus and Rig used \_\_\_\_\_

Remarks: 2. 171 fms; 1. 274 - 2. 171

Deck Officer \_\_\_\_\_ Recorder \_\_\_\_\_

SOUNDING WIRE.			FMS.	DREDGING CABLE.		
M. Down.	Up.	M.		M. Down.	Up.	M.
2	43	50	2	47	45	0
2	44	30	2	46	30	100
2	45	10	2	45	15	<del>191</del> 200
						300
						400
						500
						600
						700
						800
						900
						1000
						1100
						1200
						1300
						1400
						1500
						1600
						1700
						1800
						1900
						2000
						2100
						2200
						2300
						2400
						2500
						2600
						2700
						2800
						2900
						3000
						3100
						3200
						3300
						3400
						3500
						3600
						3700
						3800
						3900
						4000
						4100
						4200
						4300
						4400
						4500
						4600
						4700
						4800
						4900



SOUNDING WIRE.			FMS.	DREDGING CABLE.		
✓ M. Down.	Up.	✓ M.		M. Down.	Up.	M.
3	12 40	3 14	20			
3	13 10	3 13	13			
			74			
			100			
			200			
			300			
			400			
			500			
			600			
			700			
			800			
			900			
			1000			
			1100			
			1200			
			1300			
			1400			
			1500			
			1600			
			1700			
			1800			
			1900			
			2000			
			2100			
			2200			
			2300			
			2400			
			2500			
			2600			
			2700			
			2800			
			2900			
			3000			
			3100			
			3200			
			3300			
			3400			
			3500			
			3600			
			3700			
			3800			
			3900			
			4000			
			4100			
			4200			
			4300			
			4400			
			4500			
			4600			
			4700			
			4800			
			4900			



SOUNDING WIRE.			FMS.	DREDGING CABLE.		
M. Down.	Up.	M.		M. Down.	Up.	M.
3 38	40	3 40	15			0
3 39	10	3 39	15			75 100
						200
						300
						400
						500
						600
						700
						800
						900
						1000
						1100
						1200
						1300
						1400
						1500
						1600
						1700
						1800
						1900
						2000
						2100
						2200
						2300
						2400
						2500
						2600
						2700
						2800
						2900
						3000
						3100
						3200
						3300
						3400
						3500
						3600
						3700
						3800
						3900
						4000
						4100
						4200
						4300
						4400
						4500
						4600
						4700
						4800
						4900

X

Hydrog. No. 5505 Date, Aug 1911

Sdg. Mch. Reel Shot/Lead 30 lbs.

Turns Cor'n Depth 292 fms.

Sdg. Cup Amt. Bot'm Sample

Character of Bottom No. 1

Thermom. { Make No. Cor'n { Instr. Stem.

Bottom Reading Cor'd Temp.

Temp. Surf. { Time Air {

Density: Surf. fms.

Wind: Direction 11 Force

Baromet. 30.09 Amt. of Clouds 4 State of Sea

Weather

Direction and Force of Current { Surface Bottom

Tide

General Locality

Position North Head bears S 66 1/2 E (true) distant

Chart used: No. 6100 Ed'n 22.7 miles 6

Drift: Direction Distance

Depth of Haul

Apparatus and Rig used

Time towing h. m.

Remarks:

SOUNDING WIRE.			FMS.	DREDGING CABLE.		
M. Down.	Up.	M.		M. Down.	Up.	M.
4			0			
4			100			
4			200			
4			300			
			400			
			500			
			600			
			700			
			800			
			900			
			1000			
			1100			
			1200			
			1300			
			1400			
			1500			
			1600			
			1700			
			1800			
			1900			
			2000			
			2100			
			2200			
			2300			
			2400			
			2500			
			2600			
			2700			
			2800			
			2900			
			3000			
			3100			
			3200			
			3300			
			3400			
			3500			
			3600			
			3700			
			3800			
			3900			
			4000			
			4100			
			4200			
			4300			
			4400			
			4500			
			4600			
			4700			
			4800			
			4900			



Dredge } No. 117 Date, \_\_\_\_\_, 19\_\_\_\_  
 Hydrog. }  
 Sdg. Mch. \_\_\_\_\_ Reel \_\_\_\_\_ Shot } 30 lbs.  
 Lead }  
 Turns \_\_\_\_\_ Cor'n \_\_\_\_\_ Depth \_\_\_\_\_ fms.  
 Sdg. Cup \_\_\_\_\_ Amt. Bot'm Sample \_\_\_\_\_  
 Character of Bottom \_\_\_\_\_

Thermom. { Make \_\_\_\_\_ Cor'n { Instr. \_\_\_\_\_  
 No. \_\_\_\_\_ Stem. \_\_\_\_\_

Bottom Reading \_\_\_\_\_ Cor'd Temp. \_\_\_\_\_

Temp. Surf. { 56° Time \_\_\_\_\_ }  
 Time \_\_\_\_\_ } Air { \_\_\_\_\_

Density: Surf. \_\_\_\_\_ fms. \_\_\_\_\_

Wind: Direction SW Force \_\_\_\_\_

Baromet. 30.07 Amt. of Clouds 4 State of Sea S

Weather \_\_\_\_\_

Direction and Force of Current { Surface \_\_\_\_\_  
 Bottom \_\_\_\_\_

Tide \_\_\_\_\_

General Locality \_\_\_\_\_

Position North Head bears S53 1/2° E (true) distant  
25.8 miles

Chart used: No. 6100 Ed'n \_\_\_\_\_

Drift: Direction \_\_\_\_\_ Distance \_\_\_\_\_

Depth of Haul \_\_\_\_\_

Apparatus and Rig used \_\_\_\_\_

Time towing: \_\_\_\_\_ h. \_\_\_\_\_ m.  
 Remarks: \_\_\_\_\_

Deck Officer Mr. Glick Recorder \_\_\_\_\_

## SOUNDING WIRE.

FMS.

## DREDGING CABLE.

M. Down. Up. M.

M. Down. Up. M.

0

100

200

300

400

500

600

700

800

900

1000

1100

1200

1300

1400

1500

1600

1700

1800

1900

2000

2100

2200

2300

2400

2500

2600

2700

2800

2900

3000

3100

3200

3300

3400

3500

3600

3700

3800

3900

4000

4100

4200

4300

4400

4500

4600

4700

4800

4900

①  
Dredge } No. 5807 Date, July 30, 1915  
Hydrog. }  
Sdg. Mch. Elect Reel H Shot/Lead 35 lbs.  
Turns \_\_\_\_\_ Cor'n \_\_\_\_\_ Depth 46 fms.

Sdg. Cup \_\_\_\_\_ Amt. Bot'm Sample \_\_\_\_\_  
Character of Bottom 20 G

Thermom. { Make \_\_\_\_\_ Cor'n { Instr. \_\_\_\_\_  
                  { No. \_\_\_\_\_                    { Stem. \_\_\_\_\_

Bottom Reading \_\_\_\_\_ Cor'd Temp. \_\_\_\_\_  
Temp. Surf. { 52° Time 8:25 AM } Air { 62°  
                  { \_\_\_\_\_ Time \_\_\_\_\_ } \_\_\_\_\_

Density: Surf. \_\_\_\_\_ fms. \_\_\_\_\_

Wind: Direction NW Force 3

Baromet. 30.12 Amt. of Clouds 8 State of Sea C

Weather bz

Direction and Force of Current { Surface \_\_\_\_\_  
  { Bottom \_\_\_\_\_

Tide \_\_\_\_\_

General Locality Off Grays Harbor, Wash.

Position Grays Harbor Light bears S67°E (true) distant 17 miles  
Chart used: No. 6400 Ed'n \_\_\_\_\_

Drift: Direction \_\_\_\_\_ Distance \_\_\_\_\_

Depth of Haul \_\_\_\_\_

Apparatus and Rig used \_\_\_\_\_

Time towing: \_\_\_\_\_ h. \_\_\_\_\_ m.

Remarks: \_\_\_\_\_

Deck Officer Mr. Shepley Recorder J. A. [Signature]  
11-1023





## SOUNDING WIRE.

M. Down.			Up.	M.		
8	41	ω	8	42	ω	
8	41	30	8	42	ω	

FMS.

## DREDGING CABLE.

M. Down. Up. M.

0  
100  
200  
300  
400  
500  
600  
700  
800  
900  
1000  
1100  
1200  
1300  
1400  
1500  
1600  
1700  
1800  
1900  
2000  
2100  
2200  
2300  
2400  
2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000  
4100  
4200  
4300  
4400  
4500  
4600  
4700  
4800  
4900

3

Hydrog. No. 5809 Date, , 19

Sdg. Mch. Reel Shot/Lead lbs.

Turns Cor'n Depth 33 fms.

Sdg. Cup Amt. Bot'm Sample

Character of Bottom 0 fine (black) sand

Thermom. { Make No. Cor'n { Instr. Stem.

Bottom Reading Cor'd Temp.

Temp. Surf. { 52 Time 9:00 AM } Air {

Density: Surf. fms.

Wind: Direction N-W Force 3-4

Baromet. 30.12 Amt. of Clouds 8 State of Sea C

Weather bc.

Direction and Force of Current { Surface Bottom

Tide

General Locality Off Grays Harbor

Position Grays Harbor light bears S 67 1/2 E (true) distant 21.3 miles

Chart used: No. 6400 Ed'n

Drift: Direction Distance

Depth of Haul

Apparatus and Rig used

Time towing h. m.

Remarks:

Deck Officer Recorder

## SOUNDING WIRE.

M. Down. | Up. | M.

FMS.

## DREDGING CABLE.

M. Down. | Up. | M.

0  
100  
200  
300  
400  
500  
600  
700  
800  
900  
1000  
1100  
1200  
1300  
1400  
1500  
1600  
1700  
1800  
1900  
2000  
2100  
2200  
2300  
2400  
2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000  
4100  
4200  
4300  
4400  
4500  
4600  
4700  
4800  
4900





SOUNDING WIRE.			FMS.	DREDGING CABLE.							
M. Down.	Up.	M.		M. Down.	Up.	M.					
9	16	28	9	17	40						
9	16	45	9	17	00	65					
						0					
						100					
						200					
						300					
						400					
						500					
						600					
						700					
						800					
						900					
						1000					
						1100					
						1200					
						1300					
						1400					
						1500					
						1600					
						1700					
						1800					
						1900					
						2000					
						2100					
						2200					
						2300					
						2400					
						2500					
						2600					
						2700					
						2800					
						2900					
						3000					
						3100					
						3200					
						3300					
						3400					
						3500					
						3600					
						3700					
						3800					
						3900					
						4000					
						4100					
						4200					
						4300					
						4400					
						4500					
						4600					
						4700					
						4800					
						4900					



## SOUNDING WIRE.

A	M. DOWN.	UP.	M.
9	3		
9			

FMS.

## DREDGING CABLE.

M. DOWN.	UP.	M.

0  
100  
200  
300  
400  
500  
600  
700  
800  
900  
1000  
1100  
1200  
1300  
1400  
1500  
1600  
1700  
1800  
1900  
2000  
2100  
2200  
2300  
2400  
2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000  
4100  
4200  
4300  
4400  
4500  
4600  
4700  
4800  
4900



SOUNDING WIRE.			FMS.	DREDGING CABLE.		
M. Down.	Up.	M.		M. Down.	Up.	M.
9 15 21 20	9 15 22 20		0			
12 42 1	9 15 21 50	68	100			
			200			
			300			
			400			
			500			
			600			
			700			
			800			
			900			
			1000			
			1100			
			1200			
			1300			
			1400			
			1500			
			1600			
			1700			
			1800			
			1900			
			2000			
			2100			
			2200			
			2300			
			2400			
			2500			
			2600			
			2700			
			2800			
			2900			
			3000			
			3100			
			3200			
			3300			
			3400			
			3500			
			3600			
			3700			
			3800			
			3900			
			4000			
			4100			
			4200			
			4300			
			4400			
			4500			
			4600			
			4700			
			4800			
			4900			



SOUNDING WIRE.

FMS.

DREDGING CABLE.

M. Down. Up. M.

M. Down. Up. M.

10 10 08  
10 10 51

- 0
- 100
- 200
- 300
- 400
- 500
- 600
- 700
- 800
- 900
- 1000
- 1100
- 1200
- 1300
- 1400
- 1500
- 1600
- 1700
- 1800
- 1900
- 2000
- 2100
- 2200
- 2300
- 2400
- 2500
- 2600
- 2700
- 2800
- 2900
- 3000
- 3100
- 3200
- 3300
- 3400
- 3500
- 3600
- 3700
- 3800
- 3900
- 4000
- 4100
- 4200
- 4300
- 4400
- 4500
- 4600
- 4700
- 4800
- 4900



Trawl } No. 5812 Date, \_\_\_\_\_, 19\_\_\_\_  
 Hydrog. }  
 Sdg. Mch. \_\_\_\_\_ Reel \_\_\_\_\_ Shot/Lead \_\_\_\_\_ lbs.  
 Turns \_\_\_\_\_ Cor'n \_\_\_\_\_ Depth \_\_\_\_\_ fms.  
 Sdg. Cup \_\_\_\_\_ Amt. Bot'm Sample \_\_\_\_\_  
 Character of Bottom \_\_\_\_\_  
 Thermom. { Make \_\_\_\_\_ Cor'n { Instr. \_\_\_\_\_  
 { No. \_\_\_\_\_ { Stem. \_\_\_\_\_  
 Bottom Reading \_\_\_\_\_ Cor'd Temp. \_\_\_\_\_  
 Temp. Surf. { 52 Time 10:31 } Air { 61  
 { \_\_\_\_\_ Time \_\_\_\_\_ } { \_\_\_\_\_  
 Density: Surf. \_\_\_\_\_ fms. \_\_\_\_\_  
 Wind: Direction 1V-1V Force \_\_\_\_\_  
 Baromet. 30.13 Amt. of Clouds 10 State of Sea \_\_\_\_\_  
 Weather \_\_\_\_\_  
 Direction and Force of Current { Surface \_\_\_\_\_  
 { Bottom \_\_\_\_\_  
 Tide \_\_\_\_\_

General Locality *Off Washington Coast*  
 Position *Gray Harbor light bears 56.8° E (true) distant 31.5 miles*  
 Chart used: No. 6400 Ed'n \_\_\_\_\_  
 Drift: Direction \_\_\_\_\_ Distance \_\_\_\_\_  
 Depth of Haul \_\_\_\_\_  
 Apparatus and Rig used \_\_\_\_\_

Time towing \_\_\_\_\_ h. \_\_\_\_\_ m.  
 Remarks: \_\_\_\_\_

Deck Officer *H. W. [unclear]* Recorder *[unclear]*

SOUNDING WIRE.		FMS.	DREDGING CABLE.			
M. Down.	Up.		A. M.	M. Down.	Up.	M.
10	28	19				
		0				
		100				
		200				
		300				
		400				
		500				
		600				
		700				
		800				
		900				
		1000				
		1100				
		1200				
		1300				
		1400				
		1500				
		1600				
		1700				
		1800				
		1900				
		2000				
		2100				
		2200				
		2300				
		2400				
		2500				
		2600				
		2700				
		2800				
		2900				
		3000				
		3100				
		3200				
		3300				
		3400				
		3500				
		3600				
		3700				
		3800				
		3900				
		4000				
		4100				
		4200				
		4300				
		4400				
		4500				
		4600				
		4700				
		4800				
		4900				

Dredge } No. 578 Date, \_\_\_\_\_, 19\_\_  
Hydrog. }  
Sdg. Mch. *Whitcomb* Reel *1047* Shot } lbs.  
Lead }  
Turns \_\_\_\_\_ Cor'n \_\_\_\_\_ Depth *84* fms.  
Sdg. Cup \_\_\_\_\_ Amt. Bot'm Sample \_\_\_\_\_  
Character of Bottom *(1) 7 sand*

Thermom. { Make \_\_\_\_\_ Cor'n { Instr. \_\_\_\_\_  
              { No. \_\_\_\_\_                 { Stem. \_\_\_\_\_

Bottom Reading \_\_\_\_\_ Cor'd Temp. \_\_\_\_\_

Temp. Surf. { \_\_\_\_\_ Time \_\_\_\_\_ } Air { \_\_\_\_\_  
                  { \_\_\_\_\_ Time \_\_\_\_\_ }

Density: Surf. \_\_\_\_\_ fms. \_\_\_\_\_

Wind: Direction *N-W* Force *4*

Baromet. *30.12* Amt. of Clouds *8* State of Sea *M*

Weather *W, S*

Direction and Force of Current { Surface \_\_\_\_\_  
  { Bottom \_\_\_\_\_

Tide \_\_\_\_\_

General Locality *Off Washington Coast*

Position *Grays Harbor Light bears S 68° E (true)*  
*distant 33.5 miles*

Chart used: No. *6400* Ed'n \_\_\_\_\_

Drift: Direction \_\_\_\_\_ Distance \_\_\_\_\_

Depth of Haul \_\_\_\_\_

Apparatus and Rig used \_\_\_\_\_

Time towing \_\_\_\_\_ h. \_\_\_\_\_ m.

Remarks: \_\_\_\_\_

Deck Officer *W. A. ...* Recorder *...*

SOUNDING WIRE.			FMS.	DREDGING CABLE.		
M. Down.	Up.	M.		M. Down.	Up.	M.
			0			
			100			
			200			
			300			
			400			
			500			
			600			
			700			
			800			
			900			
			1000			
			1100			
			1200			
			1300			
			1400			
			1500			
			1600			
			1700			
			1800			
			1900			
			2000			
			2100			
			2200			
			2300			
			2400			
			2500			
			2600			
			2700			
			2800			
			2900			
			3000			
			3100			
			3200			
			3300			
			3400			
			3500			
			3600			
			3700			
			3800			
			3900			
			4000			
			4100			
			4200			
			4300			
			4400			
			4500			
			4600			
			4700			
			4800			
			4900			



SOUNDING WIRE.

DREDGING CABLE.

FMS.

SOUNDING WIRE.		FMS.	DREDGING CABLE.		
M. Down.	Up.		A.	M.	M.
11 07 00	11 09 20	0			
11 07 28	11 09 45	100			
		200			
		300			
		400			
		500			
		600			
		700			
		800			
		900			
		1000			
		1100			
		1200			
		1300			
		1400			
		1500			
		1600			
		1700			
		1800			
		1900			
		2000			
		2100			
		2200			
		2300			
		2400			
		2500			
		2600			
		2700			
		2800			
		2900			
		3000			
		3100			
		3200			
		3300			
		3400			
		3500			
		3600			
		3700			
		3800			
		3900			
		4000			
		4100			
		4200			
		4300			
		4400			
		4500			
		4600			
		4700			
		4800			
		4900			

Dredge } No. 5817 Date, 1, 19 ..

Sdg. Mch. Lucas Reel / Shot / Lead lbs.

Turns ----- Cor'n ----- Depth 4 fms.

Sdg. Cup ----- Amt. Bot'm Sample ..

Character of Bottom I fine black silt

Thermom. { Make ----- Cor'n { Instr. ----- No. ----- Stem. -----

Bottom Reading ----- Cor'd Temp. ..

Temp. Surf. { Time 11:22 } Air { Time -----

Density: Surf. ----- fms. -----

Wind: Direction ----- Force -----

Baromet. ----- Amt. of Clouds ----- State of Sea -----

Weather -----

Direction and Force of Current { Surface ----- Bottom -----

Tide -----

General Locality Off Washington Coast

Position Gray's Harbor Light bears S 68 1/2° E (true) distant 3.6 miles

Chart used: No. 6400 Ed'n -----

Drift: Direction ----- Distance -----

Depth of Haul -----

Apparatus and Rig used -----

Time towing ----- h. ----- m.

Remarks:

Deck Officer W. S. ... Recorder ...

## SOUNDING WIRE.

FMS.

## DREDGING CABLE.

A M. Down. Up. A. M.

--- M. Down. Up. --- M.

A M. Down.	Up.	A. M.	FMS.
			0
11		2 1/2	92 100
			200
			300
			400
			500
			600
			700
			800
			900
			1000
			1100
			1200
			1300
			1400
			1500
			1600
			1700
			1800
			1900
			2000
			2100
			2200
			2300
			2400
			2500
			2600
			2700
			2800
			2900
			3000
			3100
			3200
			3300
			3400
			3500
			3600
			3700
			3800
			3900
			4000
			4100
			4200
			4300
			4400
			4500
			4600
			4700
			4800
			4900



Dredge } No. \_\_\_\_\_ Date, Jan 20, 19 10  
Hydrog. }

Sdg. Mch. \_\_\_\_\_ Reel W. H. C. Shot }  
Leads } \_\_\_\_\_ lbs.

Turns \_\_\_\_\_ Cor'n \_\_\_\_\_ Depth 104 fms.

Sdg. Cup \_\_\_\_\_ Amt. Bot'm Sample \_\_\_\_\_

Character of Bottom fine black sand

Thermom. { Make \_\_\_\_\_ Cor'n { Instr. \_\_\_\_\_  
              { No. \_\_\_\_\_                 { Stem. \_\_\_\_\_

Bottom Reading \_\_\_\_\_ Cor'd Temp. \_\_\_\_\_

Temp. Surf. { \_\_\_\_\_ Time \_\_\_\_\_ }  
                  { \_\_\_\_\_ Time \_\_\_\_\_ }     { Air } \_\_\_\_\_

Density: Surf. \_\_\_\_\_ fms. \_\_\_\_\_

Wind: Direction \_\_\_\_\_ Force \_\_\_\_\_

Baromet. \_\_\_\_\_ Amt. of Clouds \_\_\_\_\_ State of Sea \_\_\_\_\_

Weather \_\_\_\_\_

Direction and Force of Current { Surface \_\_\_\_\_  
  { Bottom \_\_\_\_\_

Tide \_\_\_\_\_

General Locality Off Washington Coast

Position Gray's Harbor Light bears 56 1/2° E (True)  
  distant 37.6 miles

Chart used: No. 6400 Ed'n 2

Drift: Direction \_\_\_\_\_ Distance \_\_\_\_\_

Depth of Haul \_\_\_\_\_

Apparatus and Rig used \_\_\_\_\_

Time towing \_\_\_\_\_ h. \_\_\_\_\_ m.

Remarks: \_\_\_\_\_

Deck Officer \_\_\_\_\_ Recorder \_\_\_\_\_

SOUNDING WIRE.

DREDGING CABLE.

FMS.

M. Down. Up. M.

M. Down. Up. M.

11 30 10 11 32 50  
 11 31 10 11 31 30

0  
 100  
 200  
 300  
 400  
 500  
 600  
 700  
 800  
 900  
 1000  
 1100  
 1200  
 1300  
 1400  
 1500  
 1600  
 1700  
 1800  
 1900  
 2000  
 2100  
 2200  
 2300  
 2400  
 2500  
 2600  
 2700  
 2800  
 2900  
 3000  
 3100  
 3200  
 3300  
 3400  
 3500  
 3600  
 3700  
 3800  
 3900  
 4000  
 4100  
 4200  
 4300  
 4400  
 4500  
 4600  
 4700  
 4800  
 4900

Dredge } No. 5819 Date, \_\_\_\_\_, 19

Sdg. Mch. \_\_\_\_\_ Reel \_\_\_\_\_ Shot / Lead \_\_\_\_\_ lbs.

Turns \_\_\_\_\_ Cor'n \_\_\_\_\_ Depth 194 fms.

Sdg. Cup \_\_\_\_\_ Amt. Bot'm Sample \_\_\_\_\_

Character of Bottom \_\_\_\_\_

Thermom. { Make V Instr. \_\_\_\_\_  
                  { No. \_\_\_\_\_ Cor'n { Stem. \_\_\_\_\_

Bottom Reading \_\_\_\_\_ Cor'd Temp. \_\_\_\_\_

Temp. Surf. { 52 Time 11:50 } Air { \_\_\_\_\_  
                  { \_\_\_\_\_ Time \_\_\_\_\_ } \_\_\_\_\_

Density: Surf. \_\_\_\_\_ fms. \_\_\_\_\_

Wind: Direction V-VV Force 3

Baromet. 30.12 Amt. of Clouds 8 State of Sea \_\_\_\_\_

Weather \_\_\_\_\_

Direction and Force of Current { Surface \_\_\_\_\_  
  { Bottom \_\_\_\_\_

Tide \_\_\_\_\_

General Locality Off Washington Coast

Position Gray Harbor Light bears S 68 1/2° E (true)

Chart used: No. 6400 Ed'n \_\_\_\_\_ distant 38.6 miles

Drift: Direction \_\_\_\_\_ Distance \_\_\_\_\_

Depth of Haul \_\_\_\_\_

Apparatus and Rig used \_\_\_\_\_

Time towing \_\_\_\_\_ h. \_\_\_\_\_ m.

Remarks:

Deck Officer \_\_\_\_\_ Recorder \_\_\_\_\_

SOUNDING WIRE.

M. Down. Up. M.

11 | 43 | 40

FMS.

DREDGING CABLE.

M. Down. Up. M.

- 0
- 100
- 200
- 300
- 400
- 500
- 600
- 700
- 800
- 900
- 1000
- 1100
- 1200
- 1300
- 1400
- 1500
- 1600
- 1700
- 1800
- 1900
- 2000
- 2100
- 2200
- 2300
- 2400
- 2500
- 2600
- 2700
- 2800
- 2900
- 3000
- 3100
- 3200
- 3300
- 3400
- 3500
- 3600
- 3700
- 3800
- 3900
- 4000
- 4100
- 4200
- 4300
- 4400
- 4500
- 4600
- 4700
- 4800
- 4900

Dredge } No. \_\_\_\_\_ Date, \_\_\_\_\_, 19

Sdg. Mch. \_\_\_\_\_ Reel \_\_\_\_\_ Shot } 35 lbs.  
Lead }

Turns \_\_\_\_\_ Cor'n \_\_\_\_\_ Depth \_\_\_\_\_ fms.

Sdg. Cup \_\_\_\_\_ Amt. Bot'm Sample \_\_\_\_\_

Character of Bottom \_\_\_\_\_

Thermom. { Make \_\_\_\_\_ Cor'n { Instr. \_\_\_\_\_  
              { No. \_\_\_\_\_                 { Stem. \_\_\_\_\_

Bottom Reading \_\_\_\_\_ Cor'd Temp. \_\_\_\_\_

Temp. Surf. { \_\_\_\_\_ Time / 12:17 } Air { \_\_\_\_\_  
                  { \_\_\_\_\_ Time \_\_\_\_\_ }         { \_\_\_\_\_

Density: Surf. \_\_\_\_\_ fms. \_\_\_\_\_

Wind: Direction N-W Force 3

Baromet. 30.11 Amt. of Clouds 5 State of Sea M

Weather \_\_\_\_\_

Direction and Force of Current { Surface \_\_\_\_\_  
  { Bottom \_\_\_\_\_

Tide \_\_\_\_\_

General Locality Off Washington Coast

Position Grays Harbor Light bears S 67 1/2° E (true) distant 3.5 miles

Chart used: No. 6400 Ed'n \_\_\_\_\_

Drift: Direction \_\_\_\_\_ Distance \_\_\_\_\_

Depth of Haul \_\_\_\_\_

Apparatus and Rig used \_\_\_\_\_

Time towing \_\_\_\_\_ h. \_\_\_\_\_ m.

Remarks:

## SOUNDING WIRE.

FMS.

## DREDGING CABLE.

P.M. Down. | Up. | M.

M. Down. | Up. | M.

	0		
	100		
	200		
	300		
	400		
	500		
	600		
	700		
	800		
	900		
	1000		
	1100		
	1200		
	1300		
	1400		
	1500		
	1600		
	1700		
	1800		
	1900		
	2000		
	2100		
	2200		
	2300		
	2400		
	2500		
	2600		
	2700		
	2800		
	2900		
	3000		
	3100		
	3200		
	3300		
	3400		
	3500		
	3600		
	3700		
	3800		
	3900		
	4000		
	4100		
	4200		
	4300		
	4400		
	4500		
	4600		
	4700		
	4800		
	4900		



SOUNDING WIRE.			FMS.	DREDGING CABLE.		
M. Down.	Up.	M.		M. Down.	Up.	M.
12	33	00	12	35	30	
12	34	00	12	34	05	
				<del>62</del>	<del>400</del>	
			200			
			300			
			400			
			500			
			600			
			700			
			800			
			900			
			1000			
			1100			
			1200			
			1300			
			1400			
			1500			
			1600			
			1700			
			1800			
			1900			
			2000			
			2100			
			2200			
			2300			
			2400			
			2500			
			2600			
			2700			
			2800			
			2900			
			3000			
			3100			
			3200			
			3300			
			3400			
			3500			
			3600			
			3700			
			3800			
			3900			
			4000			
			4100			
			4200			
			4300			
			4400			
			4500			
			4600			
			4700			
			4800			
			4900			





SOUNDING WIRE.			FMS.	DREDGING CABLE.		
M. Down.	Up.	M.		M. Down.	Up.	M.
12 52 55	12 55 20		0			
12 54 00	12 54 05		100			
			200			
			300			
			400			
			500			
			600			
			700			
			800			
			900			
			1000			
			1100			
			1200			
			1300			
			1400			
			1500			
			1600			
			1700			
			1800			
			1900			
			2000			
			2100			
			2200			
			2300			
			2400			
			2500			
			2600			
			2700			
			2800			
			2900			
			3000			
			3100			
			3200			
			3300			
			3400			
			3500			
			3600			
			3700			
			3800			
			3900			
			4000			
			4100			
			4200			
			4300			
			4400			
			4500			
			4600			
			4700			
			4800			
			4900			



SOUNDING WIRE.						FMS.	DREDGING CABLE.		
P. M. Down.		Up.	P. M.				M. Down.	Up.	M.
1	12	30	1	14	20	0			
1	12	55	1	13	00	68			
						100			
						200			
						300			
						400			
						500			
						600			
						700			
						800			
						900			
						1000			
						1100			
						1200			
						1300			
						1400			
						1500			
						1600			
						1700			
						1800			
						1900			
						2000			
						2100			
						2200			
						2300			
						2400			
						2500			
						2600			
						2700			
						2800			
						2900			
						3000			
						3100			
						3200			
						3300			
						3400			
						3500			
						3600			
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						4000			
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