

No. 5673-5699
No. 4938-4950
No. 1.

Lower California

Cruise,

1911.



Original Record of Lieut. B.G. Barthelow, U.S.
Navy, navigating officer, Lower California
Cruise, 1911. - U.S.S. "Albatross"

2	1911	NORTH.	WEST						
STATION #	DATE	LATITUDE	LONGITUDE	CHART	DEPTH	BOTTOM	DIST	COURS	
25673	MAR 1	31-26-00	117-42-00	H.O. 1006	1090	Blk Sgm	0.2	NE	
No. 4939	" 2	29-10-20	118-15-45	" 1681	300				
" 9	" 2	8-50	17-50	" "	290	hard			
" 40	" 2	9-30	23-00	" "	110				
" 1	" 2	9-00	20	" "	30	crushed			
" ✓	" 2	8-40	24-10	" "	37	" "			
" 3	" 2	8-00	30	" "	31	" "			
" 4	" 2	6-50	25-00	" "	18	gy s. sh			
" 5	" 2	20	24-30	" "	42	bl s.			
" 6	" 2	4-50	24-00	" "	25 to	"			
"	" 4			" "	12	"			
" 7	" 4	00-30	24-30	" "	89	hard			
" 8	" 4	28-59-30	25-50	" "	240		in 60 water 60		
" 9	" 4	29-01-15	23-50	" "	220	fragg. S.			
" 10	" 4	29-01-15	22-50	" "	138	" "			
25674	" 8	31-28-45	117-09-50	" 1149	590	" "	2.4	N 49 W	
" 5	" 15	27-07-08	116-33-10	" 1310	284	gnl. fine S	0.7	250 W	
4932	" 17	25-31-15	113-29-20	" 1493	645	" "	0.2?	N 72 W	
25676	" 17	23-45	16-00	" "	735	" "	0.2	N 72 W	
4933	" 21	24-35-20	111-59-25	" 1636	13 1/2	S. Break	0.6	N 81 W	
25677	" 22	23-47-45	23-00	" 1664	325	dg. m. S.	0.25	N 68 W	
" 80	" "	40-30	12-45	" "	389	" "	0.2?	N 68 W	
" 81	" "	33-15	02-10	" "	405	" "	0.2?	N 68 W	
" 2	" 24	22-48-20	109-52-40	" 1666	491	D	0.6	078 W	
" 3	Apr 00	46-45	50-15	" 1664	630	crs Sgm	1.5	026 W	
" 4	" 21	23-25-20	112-00-30	" "	1760	"	?	N 72 W (60)	
" 5	" 22	25-42-45	113-38-20	" 1493	645	bl S. (S)	?	N 78 "	
" 6	" "	26-14-00	114-00-00	" "	930	gn m. S. sh	?	" "	
" 7	" 23	27-39-15	115-16-00	" 1310	480	gn m. "	1.5	072 W (60)	
" 8	" "	38-45	17-40	" "	525	" "	2.0	082 W "	
" 9	" 24	29-23-00	116-14-00	" 1193	879	gn m. fine S	?	N 82 W "	
" 90	" "	29-29-00	18-00	" "	1101	gn m. S. sh	?	052 W "	
" 1	" 25	31-08-20	118-29-30	" 1006	868	gn m. "	?	082 W "	
" 2	" "	23-45	31-30	" "	1076	gy "	?	082 W "	
" 3	" 26	33-15-30	120-04-30	CS 5002	451	No sample	?	N 86 W "	
" 4	" "	33-24-36	12-30	" "	640	gn m.	?	063 W "	
" 5	" "	33-00	17-30	" "	534	gn d. S.	?	085 W "	
" 6	" 27	35-18-30	121-28-00	" "	460	No sample	?	N 63 W "	
" 7	" 28	35	39-00	" "	485	gn m. S.	?	N 72 W "	

BEARINGS TRUE.

REMARKS.

3782 ft Cone 92-18-30 } N 42° E 116-46 Black Rock N 89 W near North Pt. Dist 1.5	4900 ft Cone 31-36-30 } N 92° E 116-14-30	Near Boundary bet Mex & U.S. Guadalupe Id. north pt appears to extend about 1 mile too far eastward from tangent bearing of east coast and patent log run on north side of island
" " N 12 E	Block House 078 W	
Elephant Rk 023 W	Cone north side of Id 071 E	
" " 018 W	" " " " N 75 E	Reference made to position of North Pt as given on the chart to 29-10-1881 & 118-17-30 W
" " 01 W	" " " " N 65 E	
" " 040 E	" " " " N 60 E	
Tangent with Pt	Pt at Steamer Pt 011 E	
" " N 17 E	" " " " 07 E	← From this pos groups of seals on beach midway between pts at Elephant Rock and Steamer pts at
Rock at Steamer Pt 021 E	Elephant Rk N 6 E	Rock at Steamer Pt and N tan inner Id in line,
" " " N 11 E	Inner Id N tan 023 E	
" " " N 2 W	" " " " 022 E	" " " " Elephant Rock in line
Steamer Pt N 4 W	" " " " 021 E	" " " " " " " "
" " N 26 W	" " " " 021 E	
3780 Cone N 02 E	Bluff Pt (1410) N 78 E	
San Pablo Pt N 33 E	Mauson Pt N 87 E	Lower Cal. Mex. Between Ballenas and Santa Maria Bays.
Entrada Pt 053 W	Redondo Pt 015 W	Magdalena Bay
Cabo Talao N 61 W	Cape San Lucas N 11 W	off San Lucas Bay, Lower Cal. Mex.
" " N 13 W	Cabeza Ballena North	" " " " " " " "
" " " " " " " "	" " " " " " " "	South of Magdalena Bay.
" " " " " " " "	" " " " " " " "	off Lower California south of Abrejos Pt
" " " " " " " "	" " " " " " " "	" " " " " " " "
" " " " " " " "	" " " " " " " "	" " " " " " " "
" " " " " " " "	" " " " " " " "	" " " " " " " "
" " " " " " " "	" " " " " " " "	" " " " " " " "
" " " " " " " "	" " " " " " " "	" " " " " " " "
" " " " " " " "	" " " " " " " "	" " " " " " " "
" " " " " " " "	" " " " " " " "	" " " " " " " "
" " " " " " " "	" " " " " " " "	" " " " " " " "
" " " " " " " "	" " " " " " " "	" " " " " " " "
" " " " " " " "	" " " " " " " "	" " " " " " " "
" " " " " " " "	" " " " " " " "	" " " " " " " "
" " " " " " " "	" " " " " " " "	" " " " " " " "
" " " " " " " "	" " " " " " " "	" " " " " " " "
" " " " " " " "	" " " " " " " "	" " " " " " " "
" " " " " " " "	" " " " " " " "	" " " " " " " "
" " " " " " " "	" " " " " " " "	" " " " " " " "
" " " " " " " "	" " " " " " " "	" " " " " " " "

4

STATION	DATE	LATITUDE N	LONGITUDE W	CHART	DEPTH	BOTTOM	DIST	COURSE
D5698	Apr 27, 1911	36-50-00	121-49-00	68, 5002	475	NO SAND	?	N 72 W
9	" " "	36-00-30	122-00-00	" "	679	G M M	?	286 W

BEARINGS TRUE

REMARKS

Pt San NG W Junipero Mt N 47 E
 " " St N 12 E

off Pt San Cal.
 " " " "

First dredging
number for Lower Cali-
fornia Cruise is D. 5673;
next hydrographic is
N. 4938.

(Bureau's letter of
Feb'y. 17, 1911.)

||

bk	black
bl	blue
br	brown
brk	broken
C	Clay
Choc	Chocolate
Co	Coral
Corln	Coralline
crs	coarse
dk	dark
fne	fine
For	Formainifera
Frag	Fragments
G	Gravel
Glob	Globigerinae
gn	green
gy	gray
hrd	hard
Inf	Infusorial
Lav	Lava
lge	large
lt	light
M	Mud
Mang	Manganese
Nod	Nodules
Oz	Ooze
P	Pebbles
Part	Particles
Pter	Pteropods
R	Rock
rad	radiolarian
Rky	Rocky
rd	red
S	Sand
Sh	Shells
sml	small
Sp	Specks
St	Stones
stky	sticky
vol	volcanic
wh	white
yl	yellow

Dredge } No. D 5673 Date, March 1st, 1911
Hydrog. }

Sdg. Mch. Lucas Reel — Shot } 35 lbs.
Leads }

Turns — Cor'n — Depth 1090 fms.

Sdg. Cup Sigsbee Amt. Bot'm Sample 3 oz

Character of Bottom bl. gy. m.

Thermom. { Make m. 2. Cor'n { Instr. —
No. 104914 Stem. —

Bottom Reading Fines to Caprine Cor'd Temp. —

Temp. Surf. { 56° Time 6 a.m. } Air { 56°
58° Time 9 a.m. } 58°

Density: Surf. — fms. —

Wind: Direction SE Force 2

Baromet. 30.18-30.23 Amt. of Clouds 4 State of Sea S

Weather bc.

Direction and Force of Current { Surface —
Bottom —

Tide —

General Locality Near Boundary bet. Mexico & U.S.

3782' zone - 32° 18' 30" N, 116° 46' W - zone N 42 E;

Position 31° 26' 00" N - 117° 42' 00" W.

Chart used: No. H.O. 1006 Ed'n 1887

Drift: Direction N. E. Distance 0.2

Depth of Haul Bottom

Apparatus and Rig used 12 Agassiz 3 glass floats, 1 tail weight, 1 mud bag, 2 wing wts. (20 lb. sq.)

Time towing — h. 28 m.

Remarks: One bottle for canal anal.

Bot: Temp. reading 13.8° C. 56.9° F
Salinometer 25.

Surf: Temp. reading 15° C. 59.0° F
Salinometer 24.2

Deck Officer H. T. Johnson Recorder H. W. Fisher

Mr. Tolson Atukil 11-1023

SOUNDING WIRE.						FMS.	DREDGING CABLE.					
A. M. Down.			Up. A. M.				A. M. Down.			Up. A. M.		
6	11	30	6	42	00	0	6	56	05	10	30	00
	12	25		39	45	100	7	00	45		25	00
	13	15		38	40	200		05	00		21	00
	14	10		37	25	300		09	50		17	00
	15	10		34	30	400		14	25		12	45
	16	10		33	10	500		19	50		08	50
	17	10		32	00	600		22	35		05	00
	18	15		30	40	700		25	10	10	00	00
	19	20		29	25	800		28	30		55	00
	20	30		28	00	900		31	50		49	45
	21	40		26	15	1000		35	15		44	20
6	23	00	6	24	20	1090	1100	38	45		38	30
						1200		42	20		32	30
						1300		45	20		28	40
						1400		48	45		25	00
						1500		52	10		21	30
H. H. Thermometer failed to change						1600		55	25		17	10
						1700		57	00		13	10
H. Stopped 2 minutes to repair exhaust						1800	8	02	50		09	05
						1900		06	20		05	15
						2000	8	09	30	9	00	30
						2100		20	30		56	40
						2200		23	50		47	20
						2300	8	36	30	8	40	30
						2400						
						2500						
4900' wire - 31° 36' 30" N						2600						
116° 14' 30" W - 3 wire						2700						
N 82° E.						2800	Held wire at 2000 fms					
						2900	till 8:17:00, then paid					
						3000	out to 2200 fms. At					
						3100	8:34:00, paid out to					
						3200	2240 fms.					
						3300						
						3400						
						3500						
						3600						
						3700						
						3800						
						3900						
						4000						
						4100						
						4200						
						4300						
						4400						
						4500						
						4600						
						4700						
						4800						
						4900						

3

Trawl Hydrog. No. 4928 Date, Mar. 2, 1911

Sdg. Mch. Trawl Reel Shot/Lead lbs.

Turns Cor'n Depth 300 fms.

Sdg. Cup Lead Amt. Bot'm Sample did not reach bottom

Character of Bottom

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

Bottom Reading Cor'd Temp.

Temp. Surf. { 59° Time 7:00 a.m. } Air { 58° 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 Blount Rock N. 89 W. near North Pt. Dist. 1.5 mi.

Position 29° 10' 20" N. 118° 15' 45" W.

Chart used: No. N.O. 1681 Ed'n Oct. 1897

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				
		6 55 00		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				

Hydrog. } No. 4939 Date, Mar. 2, 1911

Sdg. Mch. Fair-Blish Reel Shot/Lead lbs.

Turns Cor'n Depth 290 fms.

Sdg. Cup Amt. Bot'm Sample

Character of Bottom Hard

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

Bottom Reading Cor'd Temp.

Temp. Surf. { 59° Time 8:00 a. } Air { 61° 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 Near North Pt., N. 12° E. Block House S. 78° W.

Position 29° 08' 50" N. 118° 17' 50" W.

Chart used: No. H.O. 1681 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			

7 55 00 290

Hydrog. } No. 4940 Date, Mar. 2, 1911

Sdg. Mch. In. Blight Reel Shot Lead lbs.

Turns Cor'n Depth 110 fms.

Sdg. Cup Amt. Bot'm Sample

Character of Bottom ?

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

Bottom Reading Cor'd Temp.

Temp. Surf. { 59 Time 9:00 } Air { 63°

Density: Surf. fms.

Wind: Direction Force

Baromet. Amt. of Clouds State of Sea

Weather

Direction and Force of Current { Surface Bottom

Tide

General Locality Elephant Rock, S. 53° W

Some north side of island, S. 71° E.

Position 29° 09' 30" N, 118° 23' 00" W.

Chart used: No. H. O. 1621 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			
	9	10	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			

Hydrog. } No. 4941 Date, Mar. 2, 1911

Sdg. Mch. Trawl-Blast Reel Shot/Lead lbs.

Turns Cor'n Depth 30 fms.

Sdg. Cup Amt. Bot'm Sample

Character of Bottom cor. bl. s.

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

Bottom Reading Cor'd Temp.

Temp. Surf. { 59° Time 9:00 } Air { 63° 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 Elephant Rock, S. 18° W.

Come north side of island N. 75° E.

Position 39° 09' 20" N. 118° 43' 20" W.

Chart used: No. H. O. 1681 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				
				30 100				
				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. 4942 Date, Mar. 2, 1911
Hydrog. }

Sdg. Mch. Juv. Blisk Reel Shot/Lead lbs.

Turns Cor'n Depth 27 fms.

Sdg. Cup Amt. Bot'm Sample

Character of Bottom res bl. S.

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

Bottom Reading Cor'd Temp.

Temp. Surf. { 59° Time 10:00 } Air { 64° 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 Elephant Rock, A. 1° W.

Coast north side of island N. 65° E.

Position 29° 08' 40" N. 118° 24' 10" W.

Chart used: No. H.C. 1681 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			
9	50	00	27 100			
			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. 4943 Date, May - 2, 1911
Hydrog. }

Sdg. Mch. Tm. Blak Reel Shot Lead lbs.

Turns Cor'n Depth 21 fms.

Sdg. Cup Amt. Bot'm Sample

Character of Bottom cor bl s.

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

Bottom Reading Cor'd Temp.

Temp. Surf. { 59° Time 10:00 } Air { 64° 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 Elephant Rock, S. 40° E

Cove north side of island, N. 60° E.

Position 29° 08' 00" N, 118° 24' 30" W.

Chart used: No. H. O. 1681 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			
10	05	00	3/100			
			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			

~~Depth~~ } No. 4944 Date, Mar 2, 1911

Sdg. Mch. Tur Block Reel Shot/Lead lbs.

Turns Cor'n Depth 58 fms.

Sdg. Cup Amt. Bot'm Sample

Character of Bottom gy S. Sh

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

Bottom Reading Cor'd Temp.

Temp. Surf. { 59 Time 10:00 } Air { 64 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 Elephant Rock, N. 64° E. Rock at Steamer Pt. S. 11° E.

Position 29° 06' 50" N. 118° 25' 00" W.

Chart used: No. H. O. 1681 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			
10	2500		58 100			
			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			

~~Hydrog.~~ } No. 4945 Date, Mar. 2, 1911

Sdg. Mch. Tini Blish Reel Shot/Lead lbs.

Turns Cor'n Depth 42 fms.

Sdg. Cup Amt. Bot'm Sample

Character of Bottom bl. crs. S.

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

Bottom Reading Cor'd Temp.

Temp. Surf. { 60° Time 11:00 } Air { 66° 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 Elephant Rock, N. 17° E. Rocks at Steamer Pt. S. 7° E.

Position 29° 06" 20" N. 118° 24' 30" W.

Chart used: No. H. O. 1681 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			
11	00	00	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			

Hydrog. No. 4946 Date, May 2, 1917

Sdg. Men. Hand lead line Reel Shot Lead lbs.

Turns Cor'n Depth 25 1/4 fms.

Sdg. Cup Amt. Bot'm Sample

Character of Bottom bl. m. s.

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

Bottom Reading Cor'd Temp.

Temp. Surf. { 60-61 Time 11:50-2:00 } Air { 66-63 Time

Density: Surf. fms.

Wind: Direction Force

Baromet. Amt. of Clouds State of Sea

Weather

Direction and Force of Current { Surface Bottom

Tide pk at Steamer Pt. S 21 E Etc. RR N 6 E - RR at Steamer Pt and at tang under 2d in line.

General Locality Midway between points of Elephant Rock and Steamer Pts.

Position 29° 04' 50" N. 118° 24' 00" W.

Chart used: No. N. O. 1681 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

11:30 1/2 hr

25-1/2 ~~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. 4947 Date, Jan 4, 1911
Hydrog. }

Sdg. Mch. T.V. Reel Shot/Lead lbs.

Turns Cor'n Depth 89 fms.

Sdg. Cup Amt. Bot'm Sample

Character of Bottom Mud.

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

Bottom Reading Cor'd Temp.

Temp. Surf. { 60° Time 4:08 } Air { 60°

Density: Surf. fms.

Wind: Direction Force

Baromet. Amt. of Clouds State of Sea

Weather

Direction and Force of Current { Surface Bottom

Tide S 2 3 E

General Locality ~~Rock at Steamers Pt~~ Mt. St. Ignace Id.

~~S 2 1 E, 11 11 1 1 1 E~~

Position 29-00-30 N - 118-24-30 W

Chart used: No. HO 1681 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.	
4	08	-	4 15	0				
				89 400				
				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. 4948 Date, June 4, 1911, 19

Hydrog. }
Sdg. Mch. TN Reel Shot Lead lbs.

Turns Cor'n Depth 200 fms.

Sdg. Cup Amt. Bot'm Sample

Character of Bottom

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

Bottom Reading Cor'd Temp.

Temp. Surf. { 60° Time 4:07 } Air { 60° Time

Density: Surf. fms.

Wind: Direction Force

Baromet. Amt. of Clouds State of Sea

Weather

Direction and Force of Current { Surface Bottom

Tide (N 2 W.)

General Locality Rocks at Steamer Hk. Elephant Rk. in line ~~T 111~~ Inner Is. 27. low. S 22 E

Position 28-57-30 N - 118-25-50 W

Chart used: No. 70 1681 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			
4 12			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			

Bridge } No. 4949 Date, 4 Mar. 11, 19

Hydrog. }
Sdg. Mch. T/V Reel Shot/Lead lbs.

Turns Cor'n Depth 226 fms.

Sdg. Cup Amt. Bot'm Sample

Character of Bottom fine gy S

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

Bottom Reading Cor'd Temp.

Temp. Surf. { 60° Time 4:20p } Air { 60° 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 Steamer Pt, Eleph. Pt in line

N 4 W - Inner Id at tan S 21 E

Position 29-01-15 N - 118-23-00 W

Chart used: No. 310 1681 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				
420 -				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				

Bredge } No. 4950 Date, Jan 4, 11, 19

Hydrog. }
Sdg. Mch. TN Reel Shot/Lead lbs.

Turns Cor'n Depth 138 fms.

Sdg. Cup Amt. Bot'm Sample

Character of Bottom fine gy S

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

Bottom Reading Cor'd Temp.

Temp. Surf. { 60° Time 4:45 } Air { 60° 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 Steamer ATN 26W - Inner Id at tan S 71 E

Position 29-01-15 N - 118-22-50 W

Chart used: No. 1681 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			
4. 43 -			138-200			
			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			

Also made a Hydro (No. 4951)

Dredge } No. 3674 Date, March 8, 1911
Hydrog. }

Sdg. Mch. Lucas Reel Lucas Shot/Leads 35 lbs.

Turns 540 Cor'n 750 Depth 590 fms.

Sdg. Cup Sigbee Amt. Bot'm Sample about 2 oz.

Character of Bottom gn. M, fine S, Glob.

Thermom. { Make W.G. Cor'n { Instr.
 { No. 104914 { Stem.

Bottom Reading 39.6° Cor'd Temp. 39.4

Temp. Surf. { 58° Time 6:00 am } Air { 60°
 { 59° Time 8:00 am } { 61°

Density: Surf. _____ fms.

Wind: Direction E.S.E. Force 1

Baromet. 30.21 Amt. of Clouds 9 State of Sea 2

Weather bc

Direction and Force of Current { Surface _____
 { Bottom _____

Tide _____

General Locality 3782' Cove N. 22° E.

Bluff Peak (1450) N. 78° E.

Position 31° 28' 45" N. 117° 09' 50" W.

Chart used: No. N. 9, 1149 Ed'n _____

Drift: Direction N. 49° W. Distance 2.4

Depth of Haul bottom

Apparatus and Rig used 12' Agassiz, 3 glass floats, 1 mud bag, tail weight, 2 side weights

Time towing h. 24 1/2 m.

Remarks: In sounding register read -50 on arrival of the at mark.
Water bottle failed to work.

Bot. No specimen.

Surf: Temp. reading 15.3
Salinometer 24.3

Also made a Hydro. Sta. (No. 4951)

Deck Officer Mr. Stanley Recorder Mr. DeLong
Mr. Johnson Mr. Fisher

SOUNDING WIRE.				FMS.	DREDGING CABLE.					
A. M. DOWN.		UP. A. M.			A. M. DOWN.		UP. A. M.			
6	04	16	6 20 55	0	6	32	00	8	37	30
	05	35	19 50	100		36	40		34	20
	06	35	18 25	200		39	55		31	25
	07	34	17 00	300		45	36		28	30
	08	45	15 25	400		49	40		25	30
	09	55	12 40	500		54	25		22	30
6	10	30	6 11 35 540	600		59	20		19	15
				700	7	03	45		16	10
				800		07	25		13	00
				900		11	00		09	30
				1000	7	14	25		06	10
			Stopped 5 min.	1100	7	21	20			
			" 3 "	1200						
			" 16 1/2 "	1300	7	26	00	8	03	00
				1400		47	10		59	30
				1500	7	49	50	7	55	40
				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. 5675 Date, March 15, 1911

Sdg. Mch. Lucas Reel 2 Shot 35 lbs.

Turns 284 Cor'n - Depth 284 fms.

Sdg. Cup Sieve Amt. Bot'm Sample 1 oz

Character of Bottom gn M for S

Thermom. { Make N.3. Cor'n { Instr. No. 104914 Stem.

Bottom Reading 44.8° Cor'd Temp. 44.6

Temp. Surf. { 64° Time 2:00 pm } Air { 67° 63° Time 3:00 pm } 67°

Density: Surf. fms.

Wind: Direction N.3W Force 2

Baromet. 29.9 Amt. of Clouds 2 State of Sea S

Weather bc

Direction and Force of Current { Surface Bottom

Tide

General Locality Lower Cal., Mexico.

San Pablo Pt. N 33 E - Asuncion Pt. N 87 E

Position 27° 07' 08" N - 114° 33' 10" W

Chart used: No. H.O. 1310 Ed'n.

Drift: Direction S 50 W Distance 0.7 m.

Depth of Haul Bottom.

Apparatus and Rig used 12' Agassiz trawl; 3 glass floats; 2 wing-uts.; tail ut.; mudlog.

Time towing - h. 20 m.

Remarks: Water bottle used in sdg.

Deck Officer Mr. Johnson Recorder A. R. Kil-

SOUNDING WIRE.			FMS.	DREDGING CABLE.				
P. M. Down.	Up.	P. M.		P. M. Down.	Up.	P. M.		
2	08 10	2	16 55	0	2	25 40	3	28 30
	09 20		15 25	100		24 30		25 30
	10 25		14 10	200		32 15		22 30
2	11 20	2	12 40	284 300		37 15		19 30
				400		41 00		16 30
				500		46 00		13 30
				600		2 50 .00	3	10 10
				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				

also make a Hydro. (No. 4952)

Dredge } No. 5-676 Date, March 17, 1911
Hydrog. }

Sdg. Mch. Lucas Reel Lucas Shot ~~Lead~~ 35 lbs.

Turns 647 Cor'n - 2 Depth 645 fms.

Sdg. Cup Sigbee Amt. Bot'm Sample 2 oz.

Character of Bottom gy. m. fine S., glob.

Thermom. { Make N.G. Cor'n { Instr. No. 104914 Stem.

Bottom Reading 39.2° Cor'd Temp. 39.0

Temp. Surf. { 66° Time 8:00 } Air { 65°
65° Time 9:00 } 70°

Density: Surf. fms.

Wind: Direction N Force 1

Baromet. 29.96 Amt. of Clouds 1 State of Sea 2

Weather bc

Direction and Force of Current { Surface Bottom

Tide

General Locality

Position 25° 31' 15" N 113° 29' 30" W

Chart used: No. H.O. 1493 Ed'n

Drift: Direction N.W. x W Distance 0.2 P

Depth of Haul bottom

Apparatus and Rig used 12' Agassiz, 2 diving weights, 1 tail weight, 145 lbs. hooker, 5 glass floats, 1 mud bag.

Time towing h. 20 m.

Remarks:

Bot. Temp. 16.6° Sp. Gr. 24.6
Surf. " 18.3° " 23.8
6.94

Deck Officer Mr. Stanley Recorder C.E. DeLong

SOUNDING WIRE.				FMS.	DREDGING CABLE.								
9. M. Down.		Up. 9. M.			9. M. Down.		Up. 9. M.						
8	09	50	8	26	10	0	8	34	30	9	58	30	
	11	00		25	05	100		37	45		55	30	
	12	00		24	10	200		40	40		52	10	
	13	00		23	10	300		44	05		49	10	
	14	00		22	10	400		47	10		46	00	
	15	00		20	50	500		49	50		42	50	
	16	05		19	15	600		52	40		39	20	
8	16	40	8	18	05	645	700	55	50		56	20	
						800		58	35		33	00	
						900		01	45		30	00	
						1000		9	06	10	9	26	15
						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							

Also made a Hydro. (No. 4953)

Dredge Hydrog. No. 5677 Date, Mch. 17th, 1911

Sdg. Mch. Lucas Reel Shot Level 35 lbs.

Turns 737 Cor'n 2 Depth 735 fms.

Sdg. Cup Ripbee Amt. Bot'm Sample 3oz

Character of Bottom fm. fine S. Clot

Thermom. { Make N.S. No. 104914 Cor'n { Instr. Stem.

Bottom Reading 38.8 Cor'd Temp. 38.6

Temp. Surf. { 66 Time 1.00 Air { 70 66 Time 2.00 Air { 70

Density: Surf. fms.

Wind: Direction N.W. Force 3

Baromet. 29.88 Amt. of Clouds 3 State of Sea S

Weather fog

Direction and Force of Current { Surface Bottom

Tide

General Locality

Position 25° 23' 45" N 113° 16' 00" W.

Chart used: No. H.O. 1493 Ed'n

Drift: Direction W. N. W. Distance 0.2

Depth of Haul Bottom

Apparatus and Rig used 12' Agassiz; 1 Trawl weight; 2 wing weights; 3 glass floats; 12' found sinker; 1 sand bag.

Time towing h. 20 m.

Remarks: No. #1+3 Towed return for 50 minutes during dredging operations.

Bot. Temp. 18.6; Sp. Gr. 28.2

Surf. " 19.1 " 23.2

Deck Officer Mr. Johnson Recorder H.W. Fisher.

SOUNDING WIRE.			FMS.	DREDGING CABLE.									
P. M. Down.	Up.	P. M.		P. M. Down.	Up.	P. M.							
1	5	30	1	21	20	0	1	33	00	2	57	20	
	6	25		20	25	100		36	45		54	15	
	7	20		19	40	200		40	15		51	00	
	8	15		18	50	300		44	00		47	50	
	9	10		18	00	400		47	20		44	40	
	10	10		17	00	500		50	10		41	30	
	11	10		16	00	600		53	10		38	20	
	12	15		14	40	700		56	00		35	00	
1	12	40	1	13	45	735	800	59	10		32	00	
						900		2	03	00	27	50	
						950	1000	2	05	00	2	25	00
						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. 5678 Date, Mar 21, 1911
Hydrog }

Sdg. Mch. Hand Lead Reel Shot 14 lbs.
Lead

Turns - Cor'n - Depth 13 1/2 fms.

Sdg. Cup Amt. Bot'm Sample

Character of Bottom S. fine brk sh. (dredge, m. b.)

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

Bottom Reading - Cor'd Temp. -

Temp. Surf. { 66° Time 10 a } Air { 71°
Time - } -

Density: Surf. - fms. -

Wind: Direction NW Force 2

Baromet. 30.01 Amt. of Clouds 8 State of Sea S

Weather Fog.

Direction and Force of Current { Surface -
Bottom -

Tide -

General Locality Magdalena Bay

Sail Rock, Entrada Pt. S. 53° W. Redondo Pt. S 15° W.

Position 24° 35' 20" N 111° 59' 35" W.

Chart used: No. 46 1636 Ed'n -

Drift: Direction N. 81° W. Distance 0.6

Depth of Haul Bottom

Apparatus and Rig used 17' Agassiz, 2 wing wts. 1 tail wt, 3 glass floats, mud bag.

Time towing - h. 20 m.

Remarks: -

Deck Officer Mr. Stanley Recorder J. M. ...

SOUNDING WIRE.			FMS.	DREDGING CABLE.					
M. Down.	Up.	M.		M. Down.			Up.	M.	
			0	10	00	50	10	25	30
			50	10	03	00	10	25	20
			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						

9.58 E.M.

Dredge } No. 5679 Date, Mar 22, 1911
Hydrog. }

Sdg. Mch. Lucas Reel Lucas Shot } 35 lbs.
Lead }

Turns 225 Cor'n — Depth 325 fms.

Sdg. Cup Sigbee Amt. Bot'm Sample about 3 oz.

Character of Bottom dk. gm. For

Thermom. { Make N.Y. Cor'n { Instr. _____
 { No. 104914 { Stem. _____

Bottom Reading 44.5° Cor'd Temp. 44.1

Temp. Surf. { 67° Time 7:21 } Air { 65°
 { 67° Time 7:38 } { 65°

Density: Surf. _____ fms. _____

Wind: Direction N.N.W. Force 3

Baromet. 30.04 Amt. of Clouds 10 State of Sea 2

Weather 0.

Direction and Force of Current { Surface _____
 { Bottom _____

Tide _____

General Locality _____

Position 33° 47' 45" N; 111° 23' 00" W.

Chart used: No. 401664 Ed'n _____

Drift: Direction N. 68° W. Distance 0.2

Depth of Haul bottom.

Apparatus and Rig used 12' Agassiz, 2 glass floats, 12 lb. sinker, 2 wing weights, 1 tail weight, 1 flat mud bag, 2 1/2 lb. mud bag

Time towing h. 15 m.

Remarks: Bottom water specimen lost in Lob. through oversight

Deck Officer M. Stanley Recorder C. O. Long

SOUNDING WIRE.			FMS.	DREDGING CABLE.		
A. M. Down.	Up.	A. M.		A. M. Down.	Up.	R. M.
6 37 35	6 45 15		0	6 55 15	7 57 30	
38 45	44 20		100	7 00 10	54 30	
39 35	43 15		200	08 40	51 20	
40 30	42 15		300	07 30	47 55	
6 40 50	6 41 50	325	400	12 15	44 20	
			500	16 35	40 20	
			600	7 20 40	7 36 40	
			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. 5680 Date, Mch. 22nd, 1911
Hydrog. }

Sdg. Mch. Lucas Reel Lucas Shot } 35 lbs.
Leads }

Turns 389 Cor'n _____ Depth 389 fms.

Sdg. Cup Rigbee Amt. Bot'm Sample 2 oz.

Character of Bottom dly gm + For

Thermom. { Make n 3 Cor'n { Instr. _____
 { No. 104914 { Stem. _____

Bottom Reading 43.8° Cor'd Temp. 43.6

Temp. Surf. { 69° Time 10:09 Air { 68°
 { 68° Time 11:29 { 71

Density: Surf. _____ fms. _____

Wind: Direction n.n.w. Force 3

Baromet. 30.04 Amt. of Clouds 10 State of Sea S

Weather 08

Direction and Force of Current { Surface _____
 { Bottom _____

Tide _____

General Locality _____

Position 23° 40' 30" N. 111° 12' 45" W

Chart used: No. A.O. 1664 Ed'n _____

Drift: Direction N. 68° W Distance 0.2

Depth of Haul _____

Apparatus and Rig used 12 Agassiz: 2 wing
weights, 1 Tail weight 53 glass
floats, 160 lb sinker: 1 round mullbag.

Time towing h. 2 1/2 m.

Remarks: Bottom water specimen
lost in lab

Bot. Temp. 15° C. Sp. Gr. 26.6
Surf. " 20° " " 23.6

Deck Officer Mr. Johnson Recorder Huxford

SOUNDING WIRE.				FMS.	DREDGING CABLE.			
A. M. Down.	Up.	A. M.	A. M. Down.		Up.	A. M.		
10 05	30	10 14	00	0	10 43	10 11	57	40
06	20	13	00	100	47	00	48	50
07	10	12	20	200	50	30	45	30
08	05	11	35	300	54	00	42	00
10 08	55	10 10	35	389	400	57	20	38 20
				500	11 01	00	34	40
				600	11 05	10	30	45
				650	11 23	30	11 29	00
				800				
				900				
				1000				
				1100				
				1200				
				1300				
				1400				
				1500				
				1600	# Towed 10 minutes			
				1700	at 600 fms.			
				1800				
				1900				
				2000	Water accumulator			
				2100	registered 3 ⁰⁰ fms			
				2200	in hauling in.			
				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. 5681 Date, Mar 22, 1911
Hydrog. }

Sdg. Mch. Lucas Reel L Shot Load 35 lbs.

Turns 405 Cor'n - Depth 405 fms.

Sdg. Cup Sigsbee Amt. Bot'm Sample none in s.dg. cup

Character of Bottom (fine mud) dk gn TT Fr

Thermom. { Make T.C. Cor'n { Instr. No. 104914 Stem.

Bottom Reading 43.5° Cor'd Temp. 43.3°

Temp. Surf. { 68° Time 2 pm } Air { 70°
68° Time 3 pm } 70°

Density: Surf. fms.

Wind: Direction WNW Force 3

Baromet. 29.98 Amt. of Clouds 10 State of Sea S

Weather overcast.

Direction and Force of Current { Surface Bottom

Tide

General Locality

Position 23° 33' 15" N. 111° 02' 10" W

Chart used: No. N.O. 1664 Ed'n

Drift: Direction N. 68° W. Distance 0.2

Depth of Haul Bottom.

Apparatus and Rig used 12' Agassiz trawl, 2 wing wts. 1 tailwt.; 3 floats, mudbag, North star

Time towing - h. 20 m.

Remarks: Water bottle used in s.dg., but failed its purpose.

Deck Officer Mr. Robinson Recorder J. M. Hill

SOUNDING WIRE.			FMS.	DREDGING CABLE.		
Ⓟ M. Down.	Up.	Ⓟ M.		Ⓟ M. Down.	Up.	Ⓟ M.
2 04 40	2 13 15		0	2 22 40	3	26 00
05 35	12 05		100	26 30		22 40
06 30	11 20		200	29 40		19 50
07 20	10 30		300	32 40		17 05
08 15	09 40		400	36 15		13 50
2 08 18	2 09 20		405 500	40 30		10 30
			600	43 45		06 50
			650 700	2 45 30	3	04 15
			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. 5682 Date, March 24, 1911

Sdg. Mch. Lucas Reel Lucas Shot/Lead 20 lbs.

Turns 491 Cor'n --- Depth 491 fms.

Sdg. Cup Ligsbee Amt. Bot'm Sample Trace

Character of Bottom S.

Thermom. { Make N.Z. Cor'n { Instr. No. 104914 Stem.

Bottom Reading 41' Cor'd Temp. 40.8°

Temp. Surf. { 69° Time 8:00 am Air { 69°

Density: Surf. Water bottle defective

Wind: Direction West Force 5

Baromet. 29.96 Amt. of Clouds 2 State of Sea m.

Weather C.S.

Direction and Force of Current { Surface Bottom

Tide

General Locality off San Lucas Lower Bay

Cabo Jalisco N. W. Cape San Lucas N. W.

Position Lat 22° 46' 20" Long 109° 52' 40"

Chart used: No. H.O. 1666 Ed'n

Drift: Direction S 18 W. Distance .6

Depth of Haul Bottom

Apparatus and Rig used 12' Agassiz, 1 mud bag

3 glass floats, 2 string weights, 1 Paul

weight

Time towing h. 20 m.

Remarks: Accumulator registered

3 fms in towing.

Deck Officer Mrs. Robarge Recorder C.E. Long

Stanley H. S. Rider

SOUNDING WIRE.			FMS.	DREDGING CABLE.		
A. M. Down.	Up.	A. M.		A. M. Down.	Up.	A. M.
7 27 05	7 36 50		0	7 48 50	9 05 00	
28 10	35 45		100	53 05	9 01 40	
28 45	35 00		200	56 30	58 25	
29 50	34 20		300	59 50	55 00	
30 40	32 40		400	8 03 15	51 30	
7 31 35	7 32 05	491	500	06 45	48 20	
			600	10 30	44 50	
			700	14 15	41 30	
			800	8 17 40	8 37 40	
			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. 5683 Date, April 20, 1911
Hydrog. }

Sdg. Mch. Lucas Reel L Shot Load 35 lbs.

Turns 360 Cor'n - Depth 630 fms.

Sdg. Cup Sigbee Amt. Bot'm Sample 2 g.

Character of Bottom cov. S. gn. T. G.

Thermom. { Make T 3 Cor'n { Instr. No. 104914 Stem.

Bottom Reading 39.3 Cor'd Temp. 39.1

Temp. Surf. { 73° Time 1:00 P } Air { 70
73° Time 2:00 P } 69

Density: Surf. fms.

Wind: Direction West Force 3

Baromet. 29.88 Amt. of Clouds 2 State of Sea S

Weather bc

Direction and Force of Current { Surface Bottom

Tide

General Locality Of San Lucas Bay, Lower Cal.

Cabo Falso N 53 W. Cabeza Belame North.

Position 22-46-45 N - 109-50-15 W.

Chart used; No. 70 1664 Ed'n

Drift: Direction S 26 W Distance 1.5 m.

Depth of Haul Bottom

Apparatus and Rig used 12 ft Agassiz, 2 glass floats, 3 rts., 160 lbs sinker.

Time towing h. 15 m.

Remarks: Water bottle used in sounding.

Bottom temp. 75

Sp. gr. 71

Remarks =

Surf. temp 23.5

Sp. gr. 73.2

Deck Officer Mr. Johnson Recorder J. Wittil

SOUNDING WIRE.				FMS.	DREDGING CABLE.			
P. M. Down.	Up.	P. M.			P. M. Down.	Up.	P. M.	
12 41 20	12 56 20			0	1 04 15	2 48 50		
42 15	55 40			100	08 00	45 30		
43 15	57 30			200	12 00	42 20		
44 15	53 10			300	14 15	39 00		
45 10	51 50			400	18 15	35 50		
46 10	50 30			500	21 25	32 15		
47 10	49 00			600	24 25	28 30		
12 47 30	12 48 30		630	700	27 00	24 30		
				800	29 45	20 00		
				900	33 45	14 45		
				1000	37 15	09 35		
				1100	39 25	2 04 45		
				1200	1 44 10	1 59 15		
				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 Bridle Stop
 carried away.
 runner twisted.



Dredge } No. 5-184 Date, Apr 21, 1911
Hydrog. }
Sdg. Mch. Lucas Reel Lucas Shot 35 lbs.
Turns 1760 Cor'n _____ Depth 1760 fms.
Sdg. Cup Bigbee Amt. Bot'm Sample _____
Character of Bottom _____

Thermom. { Make T.G. Cor'n { Instr. _____
 { No. 104914 { Stem. _____

Bottom Reading \times _____ Cor'd Temp. _____

Temp. Surf. { 67° Time 6 a.m. } Air { 64°
 { 67° Time 9 " } { 66°

Density: Surf. _____ fms. _____

Wind: Direction N.W. Force 3

Baromet. 29.98 Amt. of Clouds 1 State of Sea 2

Weather bc

Direction and Force of Current { Surface _____
 { Bottom _____

Tide _____

General Locality South of Magdalena Bay

Position 23° 23' 30" N, 112° 00' 30" W

Chart used: No. 40. 1664 Ed'n _____

Drift: Direction N.W. x W. Distance ?

Depth of Haul Bottom.

Apparatus and Rig used 12' Agassiz, & glass floats
3 weights, 250# silver

Time towing h. 30 m.

Remarks:

250 lb. wt. plain ahead of hndle.
residue of 140 lb.

\times Sounding wire carried away just
above stow line. Lost water bottle
sand cup + ther.

Glass floats carried away.

Recommendation regarding new glass

Deck Officer Mr. Stanley Recorder C. H. Taylor

Mr. Johnson H. W. Fisher

SOUNDING WIRE.				FMS.	DREDGING CABLE.								
A. M. Down.		Up.	P. M.		A. M. Down.		Up.	P. M.					
6	06	00	6	49	50	0	7	00	40	11	26	00	
	06	45		49	00	100		04	15		33	00	
	07	50		48	00	200		07	30		20	00	
	08	50		47	00	300		11	00		17	10	
	09	50		45	50	400		14	30		14	10	
	10	45		44	40	500		18	10		11	00	
	11	45		43	30	600		22	00		08	00	
	12	45		42	20	700		25	00		05	00	
	13	50		41	20	800		28	00	11	02	00	
	14	50		39	55	900		31	25		58	50	
	15	55		38	35	1000		34	45		55	30	
	17	00		37	15	1100		37	05		51	20	
	18	15		25	50	1200		40	10		47	00	
	19	20		34	25	1300		43	30		42	40	
	20	40		32	50	1400		46	45		38	00	
	21	50		31	10	1500		49	55		33	00	
	23	10		29	15	1600		52	45		27	45	
	24	20		27	30	1700		55	30		22	30	
6	25	10	6	26	10	1760	800	59	40		17	10	
						1900		8	03	50	11	20	
						2000			08	00		05	00
						2100			12	00	10	00	20
						2200			16	00		56	20
						2300			20	30		52	00
						2400			24	00		47	30
						2500			28	10		42	00
						2600			33	20		37	00
						2700			36	30		33	30
						2800			40	15		28	25
						2900			44	20		24	15
						3000			49	20		19	50
						3100	300	8	49	00	9	19	00
						3200							
						3300							
						3400							
						3500							
						3600							
						3700							
						3800							
						3900							
						4000							
						4100							
						4200							
						4300							
						4400							
						4500							
						4600							
						4700							
						4800							
						4900							

Dredge } No. 5285 Date, Aug. 22, 19 11
Hydrog. }

Sdg. Mch. Lucas Reel L Shot/Lead 35 lbs.

Turns 645 Cor'n - Depth 645 fms.

Sdg. Cup Sigsbee Amt. Bot'm Sample

Character of Bottom brs co

Thermom. { Make N. 3. Cor'n { Instr.
 { No. 108018 { Stem.

Bottom Reading 24° (?) Cor'd Temp.

Temp. Surf. { 61° Time 8 a } Air { 60°
 { 61° Time 9 a } { 61°

Density: Surf. _____ fms.

Wind: Direction NW Force 3

Baromet. 30.03 Amt. of Clouds 4 State of Sea S

Weather bc

Direction and Force of Current { Surface _____
 { Bottom _____

Tide _____

General Locality Off Lower Cal., S of Abrego Pt.

Position 25-42-45 N, 113° 38-30 W

Chart used: No. 740 1493 Ed'n Oct. 1908

Drift: Direction N by S Distance ?

Depth of Haul Bottom

Apparatus and Rig used 12' Agassiz, 160 lbs. sinter, 3 wts.

Time towing _____ h. 30 m.

Remarks: Water bottle used in sdg. but failed to work. Thermo. 108018 defective

Deck Officer Mr. Robinson Recorder J. T. Mill

SOUNDING WIRE.

FMS.

DREDGING CABLE.

SOUNDING WIRE.			DREDGING CABLE.			
A. M. DOWN.	UP.	A. M.	FMS.	A. M. DOWN.	UP.	A. M.
8 07 45	8 25 30	30	0	8 35 00	10 26 00	00
08 45	23 50	50	100	39 10	20 10	10
09 40	22 30	30	200	43 10	20 30	30
10 40	21 00	00	300	47 30	17 30	30
11 40	19 30	30	400	51 30	14 25	25
12 40	18 00	00	500	55 20	11 20	20
13 40	16 10	10	600	58 30	08 00	00
8 14 10	8 15 15	15	645 700	9 01 30	04 30	30
			800	04 30	10 01 05	05
			900	08 20	07 30	30
			1000	11 15	05 50	50
			1100	13 50	05 45	45
			1200	9 15 50	9 46 00	00
			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. 5686 Date, April 22, 1911
Hydrog. }

Sdg. Mch. Lucas Reel Lucas Shot } 35 lbs.
Lead }

Turns 930 Cor'n — Depth 930 fms.

Sdg. Cup Ligebe Amt. Bot'm Sample

Character of Bottom gn. M.; Glob.

Thermom. { Make N. 3. Cor'n { Instr.
 { No. 105018 { Stem.

Bottom Reading 37° Cor'd Temp. 37° 3

Temp. Surf. { 61° Time 3 p.m. } Air { 60°
 { 61° Time 4 " } { 61°

Density: Surf. _____ fms. _____

Wind: Direction S.W. Force 4

Baromet. 29.96 Amt. of Clouds 0 State of Sea C.

Weather b.

Direction and Force of Current { Surface
 { Bottom

Tide _____

General Locality Off Lower California, S.W. of
Abrejos Pt.

Position 36° 14' 00" N. 114° 00' 00" W

Chart used: No. H.C. 1493 Ed'n _____

Drift: Direction W. x S. Distance ?

Depth of Haul Bottom

Apparatus and Rig used 12' Agassiz, 2 wing weights,
1 tail weight, 2 glass floats, 1 sinker
160 lbs.

Time towing _____ h. 20 m.

Remarks: Register read -5 on arrival
of Lidge cup at surface.
5 Water specimens from bottle thrown
out by mistake

Deck Officer Mr Stanley Recorder C. E. Reding.

Mr Johnson H. W. Sizer

SOUNDING WIRE.			FMS.	DREDGING CABLE.		
P. M. Down.	Up.	P. M.		P. M. Down.	Up.	P. M.
3 07 30	3 33 45		0	3 42 20	5 22 30	
08 25	32 15		100	45 50	19 35	
09 15	31 00		200	48 55	16 50	
10 00	29 35		300	52 00	14 20	
10 55	28 10		400	55 25	11 40	
11 45	26 40		500	58 50	08 50	
12 40	25 00		600	4 01 55	05 50	
13 40	22 55		700	04 45	5 02 40	
14 40	20 30		800	07 30	39 10	
15 45	18 05		900	10 10	55 25	
3 16 05	3 17 20	950	1000	12 45	51 30	
			1100	15 30	47 05	
			1200	18 30	42 35	
			1300	4 20 00	4 40 00	
			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. 5687 Date, 23 April, 1911
Hydrog. }
Sdg. Mch. Lucas Reel Shot/Lead 35 lbs.
Turns 480 Cor'n - Depth 480 fms.
Sdg. Cup Sigbee Amt. Bot'm Sample 1 oz.
Character of Bottom gn M Gls

Thermom. { Make N.Z. Cor'n { Instr.
 { No. 108018 { Stem.

Bottom Reading 41° Cor'd Temp. 46.1

Temp. Surf. { 60° Time 1:30 } Air { 61°
 { 60° Time 2:00 } { 62°

Density: Surf. _____ fms.

Wind: Direction NW Force 3

Baromet. 30.04 Amt. of Clouds 3 State of Sea S

Weather fog

Direction and Force of Current { Surface _____
 { Bottom _____

Tide _____

General Locality Off Lower Cal., S of Cerro Is.
W tan. Natwid Id N70E - Braker Pt. Lower Cal

Position 27-39-N 115-16-00-W

Chart used: No. 701310 Ed'n _____

Drift: Direction S 70° W (true) Distance 1.5

Depth of Haul Bottom

Apparatus and Rig used 12' Agassiz, 160-lb sinker,
3 wing wts, 1 tail wt., 2 glass floats.

Time towing h. 30 m.

Remarks: Water bottle used in Sdg.

Bottom - Temp 14.9
 Sp. gr. 24.8

Surf. - Temp. 15.7
 Sp. gr. 24.0

Deck Officer J. H. Rohrer Recorder J. H. Wil -

SOUNDING WIRE.					FMS.	DREDGING CABLE.							
P. M. Down.		Up.	P. M.			P. M. Down.		Up.	P. M.				
12	37	00	12	50	00	0	12	58	30	2	23	20	
	38	00		49	25	100	1	02	15		20	05	
	38	50		49	05	200		05	30		16	55	
	39	50		45	40	300		08	35		15	40	
	41	00		44	10	400		11	40		10	30	
12	41	45	12	43	00	480	500	15	25		07	30	
						600		17	50		04	20	
						700		1	22	30	2	00	20
						750	800	1	29	00	1	59	10
						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. 5688 Date, 23 Sept, 1911
Hydrog. }
Sdg. Mch. Lucas Reel L Shot 35 lbs.
Leads }
Turns 57 Cor'n - Depth 57 fms.
Sdg. Cup Sigsbee Amt. Bot'm Sample 1 oz.
Character of Bottom gn M. G. S.

Thermom. { Make N.B. Cor'n { Instr. }
{ No. 108018 { Stem. }

Bottom Reading 39.8° Cor'd Temp. 39.9

Temp. Surf. { 60° Time 24. } Air { 62° }
{ 60° Time 37. } { 61° }

Density: Surf. fms.

Wind: Direction NW Force 3

Baromet. 30.03 Amt. of Clouds 9 State of Sea S

Weather bc

Direction and Force of Current { Surface }
{ Bottom }

Tide

General Locality Off Lower Cal., South of Coronado Id.
W. from Natividad Id. N 15° E - 18 miles Pt. Lower C
Position 27-38-45 N - 115-17-40 W.

Chart used: No. #01310 Ed'n

Drift: Direction S 85° W (true) Distance 2 m

Depth of Haul Bottom

Apparatus and Rig used 12' Agassiz 160-lb. Sinter,
2 wing wts., 1 tail wt., 2 glass floats.

Time towing h. 30 m.

Remarks: Water bottle used in Sdg.

Bottom - Temp. 12.0
Sp. Gr. 25.3

Surf. - Temp. 15.5
Sp. Gr. 24.1

Deck Officer Mr. Robinson Recorder F. T. W. H. -
Mr. Stanley. C. K. Redoung
11-1023

SOUNDING WIRE.			FMS.	DREDGING CABLE.		
△. M. DOWN.	UP.	△. M.		△. M. DOWN.	UP.	△. M.
2 30 30	2	43 55	0	2 50 00	4	22 40
31 20		42 45	100	54 00		19 15
32 05		40 55	200	57 00		16 10
33 00		39 30	300	3 00 00		13 00
33 50		38 05	400	02 50		9 35
34 40		36 35	500	05 50		06 10
2 35 00	2	36 10	500	09 00	4	02 45
			700	12 50		59 10
			800	3 16 30		55 30
			900	3 22 00	3	52 00
			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			

ATN 72 E

Dredge } No. 5689 Date, April 20th, 1911
Hydrog. }

Sdg. Mch. Lucas Reel Lucas Shot Lead 35 lbs.

Turns 879 Cor'n = Depth 879 fms.

Sdg. Cup Sieve Amt. Bot'm Sample 2 1/2 oz.

Character of Bottom gy. m. fr. S Glob

Thermom. { Make n.g. Cor'n { Instr. No. 108018 Stem.

Bottom Reading didn't register Cor'd Temp.

Temp. Surf. { 58° Time 6:00 } Air { 58°
58° Time 8 am } 58°

Density: Surf. fms.

Wind: Direction N.W. Force 3

Baromet. 30:00 Amt. of Clouds 10 State of Sea S

Weather ow

Direction and Force of Current { Surface Bottom

Tide

General Locality Off Lower Cal., E of Guadalupe

Hat Mountain N 57 E - St Vincent Pt N 47 E

Position 29° 23' 00" N, 116° 14' 00" W

Chart used: No. 1193 Ed'n

Drift: Direction N. 27° W. Distance ?

Depth of Haul Bottom

Apparatus and Rig used 1 1/2 Agassiz 2 wing weights 1 tail weight 1 ball sinker 2 glass floats.

Time towing h. 30 m.

Remarks: Thermometer # 108018 failed to register

Water specimens.

Bot. - Sp. Gr. 26.2

Temp. 11.5

Surf. - Sp. Gr. 24.1

Temp. 14.2

Deck Officer Mr. Johnson Recorder Mr. Exchange

H. W. Frida 11-1023

SOUNDING WIRE.			FMS.	DREDGING CABLE.		
A. M. Down.	Up.	A. M.		A. M. Down.	Up.	A. M.
6 11 30	6 37 15		0	6 48 00	8 49 00	
12 20	34 50		100	51 20	46 10	
13 20	33 20		200	54 40	43 10	
14 10	31 45		300	58 00	40 30	
15 05	30 10		400	7 01 30	37 20	
16 00	28 30		500	04 40	34 30	
17 00	26 40		600	07 40	31 20	
18 00	24 50		700	10 35	27 50	
19 00	22 50		800	13 45	24 30	
6 20 00	6 21 10	879	900	16 45	21 00	
			1000	19 35	17 40	
			1100	22 20	13 40	
			1200	25 30	10 00	
			1300	28 25	06 40	
			1400	31 35		
		141	1500	31 55	8 02 00	
			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. 5690 Date, Apr 24, 1911
Hydrog. }

Sdg. Mch. Lucas Reel L Shot/Leads 25 lbs.

Turns 1101 Cor'n - Depth 1101 fms.

Sdg. Cup Sigsbee Amt. Bot'm Sample 2 1/3

Character of Bottom gn M Glob

Thermom. { Make T.C. Cor'n { Instr. No. 98244 Stem.

Bottom Reading 38.0 Cor'd Temp. 38.1

Temp. Surf. { 58.0 Time 10 a } Air { 60.0
56.0 Time 12 m. } 60.0

Density: Surf. fms.

Wind: Direction NW Force 3

Baromet. 30.02 Amt. of Clouds 10 State of Sea 8

Weather overcast.

Direction and Force of Current { Surface Bottom

Tide

General Locality of Inner Cat. E of Guadalupe Is.

Position 29° 29' 00" N, 116° 18' 00" W.

Chart used: No. N.C. 1142 Ed'n

Drift: Direction S. 82° W. Distance ?

Depth of Haul Bottom

Apparatus and Rig used 12' Agassiz; 160-lb Sinkers, 3 vrb., 2 floats.

Time towing h. 18 m.

Remarks: Water Bottle used in Sdg.

Bottom - Temp 11.6 Sp. Gr. 27.8

Surf. - Temp. 14.5 Sp. Gr. 23.9

Deck Officer Mr. Rohony Recorder F. T. Hill

Mr. Stanley. C. E. Kellogg. 11-1025

SOUNDING WIRE.				FMS.	DREDGING CABLE.					
M. Down.		Up.	P. M.		M. Down.		Up.	P. M.		
10	07	20		0	10	44	15	12	56	30
	08	15	34	100		48	15		53	05
	09	05	33	200		51	20		49	45
	10	00	31	300		54	45		46	10
	10	50	30	400		58	00		42	55
	11	45	29	500	11	00	50		39	00
	12	45	27	600		03	40		35	10
	13	45	26	700		06	30		31	10
	14	50	24	800		09	15		26	45
	15	55	23	900		12	00		22	00
	16	55	21	1000		14	40		16	55
10	18	00	10 20 00	1100	11	17	30		12	30
				1200		20	30		08	25
				1300		23	30		04	40
				1400		26	50	12	00	30
				1500		30	15		56	30
				1600	11	33	15	11	51	30
				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. 5691 Date, April 25th, 1911
Hydrog. }
Sdg. Mch. Lucas Reel 2 Shot/Leads 35 lbs.
Turns 868 Cor'n - Depth 868 fms.
Sdg. Cup Sigbee Amt. Bot'm Sample
Character of Bottom gy. m.

Thermom. { Make n. 3 Cor'n { Instr. No. 98244 Stem.
Bottom Reading 37.1 Cor'd Temp. 37.2
Temp. Surf. { 57.0 Time 6:20 A } Air { 57.0
59 Time 8:00 " } 58

Density: Surf. fms.
Wind: Direction WNW Force 2-3
Baromet. 29.99 Amt. of Clouds 10 State of Sea JT
Weather overcast

Direction and Force of Current { Surface Bottom

Tide

General Locality Off Lower California, S.W. of San Diego

Position 31° 08' 30" N, 118° 29' 30" W

Chart used: No. 1006 Ed'n

Drift: Direction S 82° W. Distance ?

Depth of Haul Bottom

Apparatus and Rig used 12' Agassiz; 2 wing
weights; 1 ball weight; 2 fobs
floats; 160 lb sinker

Time towing h. 20 m.

Remarks:

Bot - Temp. 11.8
Sp. gr. 26.2 (?)
Surf. Temp. 14.6
Sp. gr. 24.0

Deck Officer Mr. Stanley Recorder H. W. Fisher
11-1023

SOUNDING WIRE.			FMS.	DREDGING CABLE.		
A. M. DOWN.	UP.	A. M.		A. M. DOWN.	UP.	A. M.
6 06 00	6 32 45		0	6 41 00	8 44 45	
07 00	29 00		100	45 00	41 45	
08 00	27 45		200	48 25	38 50	
09 30	26 25		300	51 50	35 50	
10 40	25 00		400	55 20	32 35	
11 50	23 30		500	59 10	29 15	
13 00	22 00		600	7 02 35	25 40	
14 20	20 30		700	05 50	21 55	
6 15 40	19 00		800	08 20	18 00	
6 16 40	6 17 40	868	900	11 20	14 30	
			1000	14 30	10 00	
			1100	17 30	06 35	
			1200	21 00	8 01 20	
			1300	24 10	56 50	
			1400	27 25	52 30	
			1450	7 29 30	7 49 30	
			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. 5692 Date, Sept. 25, 1911
Hydrog. }

Sdg. Mch. L. lens Reel L. Shot } 35 lbs.
Lead }

Turns 1076 Cor'n - Depth 1076 fms.

Sdg. Cup Synbee Amt. Bot'm Sample 1076

Character of Bottom gy. M.

Thermom. { Make N.B. Cor'n { Instr. _____
No. 98244 Stem. _____

Bottom Reading 37° Cor'd Temp. 37.1

Temp. Surf. { 57° Time 11:21 a } Air { 58°
60° Time 1:00 } 61°

Density: Surf. _____ fms. _____

Wind: Direction Ok. N. W. Force 2

Baromet. 29.99 Amt. of Clouds 10 to 9 State of Sea 2

Weather 0 and bc.

Direction and Force of Current { Surface _____
Bottom _____

Tide _____

General Locality Lat. 31° 23' 45" N. Long. 118° 31' 50" W.
Off Lower Cal., S. of San Diego.

Chart used: No. H.O. 1006 Ed'n _____

Drift: Direction S. 82° W. (~~W.~~) Distance ?

Depth of Haul bottom

Apparatus and Rig used 12' Agassiz, 160-lb Stk.,
3 vts., 2 flts.

Time towing h. 20 m. _____

Remarks: Water bottle used in sdg.

Bottom - Temp. 12.2
Sp. Gr. 25.8

Surf. - Temp. 15.0
Sp. Gr. 23.6

Deck Officer Mr. Stanley. Recorder A. Tuttle -

Mr. Johnson. C. E. DeLong.

SOUNDING WIRE.				FMS.	DREDGING CABLE.			
A. M. DOWN.	UP.	A. M.			A. M. DOWN.	UP.	P. M.	
11 20 45	11	50 40		0	12 12 00	2	16 45	
21 45		49 05		100	15 25		13 30	
22 40		47 35		200	18 50		10 10	
23 40		46 00		300	21 45		06 50	
24 35		44 35		400	25 10	2	03 25	
25 35		42 45		500	29 10		59 55	
26 30		41 00		600	33 00		56 45	
27 30		39 15		700	36 20		53 35	
28 30		37 30		800	39 20		50 20	
29 40		35 50		900	43 55		47 00	
30 40		34 00		1000	48 40		43 15	
11 31 30	11	32 40	10	1100	49 00		39 25	
				1200	51 55		35 25	
				1300	56 00		31 35	
				1400	59 25		27 30	
				1500	1 03 15	1	23 00	
				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				

Began letting cable out at 11:57:30, let out to 175 fath. & hove in until out was at surface at 12:12, then began letting out cable again.

Dredge } No. 5693 Date, April 26th, 1911
Hydrog. }

Sdg. Mch. Lucas Reel L Shot 35 lbs.

Turns 451 Cor'n - Depth 451 fms.

Sdg. Cup Sigsbee Amt. Bot'm Sample none

Character of Bottom no sample

Thermom. { Make N.B. Cor'n { Instr. No. 98244 Stem.

Bottom Reading ? Cor'd Temp.

Temp. Surf. { 56 Time 6:00 } Air { 54 }
{ 54 Time 7:00 } { 53 }

Density: Surf. fms.

Wind: Direction Variable Force 1-2

Baromet. 29.89 Amt. of Clouds 10 State of Sea S

Weather sd

Direction and Force of Current { Surface Bottom

Tide

General Locality West of San Nicolas Island, Cal.

Position 33° 13' 30" N. 120° 04' 30" W

Chart used: No. 605002 Ed'n

Drift: Direction N. 86° W. Distance ?

Depth of Haul Bottom

Apparatus and Rig used 1 1/2' Agassiz 2 wing
weights: 1 lead weight: 2 glass
floats: 160 lb snibber

Time towing h. 30 m.

Remarks: Trawl line carried away
with all instruments. Trawl
became slack and kinked.

Deck Officer Mr. Stanley Recorder W. Greider

SOUNDING WIRE.			FMS.	DREDGING CABLE.		
A. M. Down.	Up.	A. M.		A. M. Down.	Up.	A. M.
6 06 20	6 20 00		0	6 27 00	7 52 20	
07 25	17 30		100	30 55	49 20	
08 15	16 10		200	34 35	46 20	
09 15	15 05		300	38 15	43 15	
10 10	14 00		400	42 05	40 15	
6 10 50	6 13 10	45	500	45 50	37 10	
			600	49 10	33 50	
			700	53 20	30 30	
			800	6 57 10	7 27 10	
			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			

No. 721

Dredge } No. 5694 Date, Sept. 26, 1911
Hydrog. }
Sdg. Mch. Lucas Reel L Shot 35 lbs.
Leads }
Turns 640 Cor'n - Depth 640 fms.
Sdg. Cup Sigbee Amt. Bot'm Sample 1 kg.
Character of Bottom gn. M.

Thermom. { Make T.S. Cor'n { Instr. _____
 { No. 108154 { Stem. _____

Bottom Reading Thermo failed to Cor'd Temp. _____

Temp. Surf. { 57° Time 9:10 a. } Air { 60°
 { 57° Time 10:00 a. } { 56°

Density: Surf. _____ fms. _____

Wind: Direction Variable Force 1

Baromet. 29.91 Amt. of Clouds 9 State of Sea 5

Weather Dep.

Direction and Force of Current { Surface _____
 { Bottom _____

Tide _____

General Locality N.W. of San Nicolas Id., Cal.

Position 33° 34' 36" N. 120° 12' 30" W.

Chart used: No. 5002 Ed'n _____

Drift: Direction S. 63° W. Distance ?

Depth of Haul Bottom.

Apparatus and Rig used 12' Agassiz; 120-lb. Sinkers,
Rings, 2 floats.

Time towing h. 30 m.

Remarks: Water bottle used in Sdg.
Bottom - Temp. 14.0
 Sp. Gr. 25.0
Surf. - Temp. 14.0
 Sp. Gr. 23.9

Deck Officer Mr. Johnson Recorder J. T. Hill

SOUNDING WIRE.

FMS.

DREDGING CABLE.

A. M. Down. Up. P. M.

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

SOUNDING WIRE.		FMS.		DREDGING CABLE.	
A. M. Down.	Up. P. M.	FMS.		P. M. Down.	Up. P. M.
9 08 40	9 27 00	0		9 34 30	11 27 40
09 40	25 35	100		38 00	24 20
10 45	23 10	200		42 50	21 50
12 00	22 40	300		45 30	18 45
13 10	21 10	400		49 00	15 50
14 25	19 40	500		53 25	12 50
15 45	18 05	600		57 40	09 50
9 16 15	9 17 25	640 700		10 01 00	06 45
		800		04 10	03 40
		900		07 30	11 00 30
		1000		12 00	57 10
		1100		16 10	53 40
		1200		10 20 00	10 49 50
		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			

One trawl stop
carried away.

Dredge } No. 5695 Date, April 26, 1911
Hydrog. }

Sdg. Mch. Lucas Reel Lucas Shot Lead 36 lbs.

Turns 534 Cor'n _____ Depth 534 fms.

Sdg. Cup Sigbee Amt. Bot'm Sample very little.

Character of Bottom gn. s. glob.

Thermom. { Make T.G. Cor'n { Instr. _____
{ No. 108154 { Stem. _____

Bottom Reading 39° Cor'd Temp. 38.9

Temp. Surf. { 57° Time 1:00 } Air { 58°
{ 56° Time 2:00 } { 57°

Density: Surf. _____ fms. _____

Wind: Direction N.W. Force 3

Baromet. 29.90 Amt. of Clouds 9 to 7 State of Sea S.

Weather bc

Direction and Force of Current { Surface _____
{ Bottom _____

Tide _____

General Locality N.W. of San Nicolas Id., Cal.

Position 33° 33' 00" N. 120° 17' 30" W.

Chart used: No. S.D. 5002 Ed'n _____

Drift: Direction S 85° W. Distance ?

Depth of Haul bottom.

Apparatus and Rig used 12' Agassiz, 160 lb. sinker, 3 weights, 2 glass floats

Time towing h. 30 m.

Remarks: In sounding register - 10 when cups reached surface.

Bottom: Temp 11

S.p. Gr. 25.3

Surface: Temp 13

S.p. Gr. 24.2

Deck Officer Mr. Robinson Recorder C.E. Red Long

SOUNDING WIRE.			FMS.	DREDGING CABLE.		
P. M. DOWN.	UP.	P. M.		P. M. DOWN.	UP.	P. M.
1 07 50	1 22 10		0	1 30 00	3 21 50	
08 50	20 55		100	33 40	18 55	
09 45	19 40		200	37 00	16 10	
10 40	18 25		300	40 30	13 15	
11 35	17 05		400	44 00	10 30	
12 35	15 20		500	47 30	07 25	
1 13 00	1 14 35	534000	600	50 30	04 25	
			700	53 50	3 01 20	
			800	x 1 57 20	5 5 10	
			900	2 03 10	5 4 50	
			1000	07 30	5 1 45	
			1100	10 40	4 8 30	
			1200	2 14 20	2 4 30	
			1300			
			1400			
			1500			
			1600			
			1700	x Stopped 2 1/2 min.		
			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. 5696 Date, April 27, 1911
Hydrog. }
Sdg. Mch. Lucas Reel S Shot/Lead 35 lbs.
Turns 440 Cor'n Depth 440 fms.
Sdg. Cup Sieve Amt. Bot'm Sample no sample
Character of Bottom no sample

Thermom. { Make W.G. Cor'n { Instr.
 { No. 108154 { Stem.

Bottom Reading 40 Cor'd Temp. 39.9

Temp. Surf. { 54.0 Time 6:00 A } Air { 50°
 { 54.0 Time 7:00 A } { 52°

Density: Surf. fms.

Wind: Direction N.W. Force 4

Baromet. 30.04 Amt. of Clouds 4 State of Sea m.

Weather bc

Direction and Force of Current { Surface
 { Bottom

Tide

General Locality Coast of Pt. Buchan, Cal.
Pine Mt. 71.420 E.

Position 35° 18' 30" N, 121° 28' 00" W.

Chart used: No. 6-J. 5002 Ed'n

Drift: Direction 71.63° W. Distance

Depth of Haul Bottom

Apparatus and Rig used 12' Agassiz 2 wing
sprights: 1 tail weight; 2 glass
floats; 160-lb sinker.

Time towing h. 13 1/2 m.

Remarks: shot did not detach

Bottom - Temp. 10.5
 Sp. Gr. 25.1

Surf. - Temp. 12.2
 Sp. Gr. 23.7

Deck Officer Mr Johnson Recorder W. S. Fisher

SOUNDING WIRE.			FMS.	DREDGING CABLE.		
A. M. Down.	Up.	A. M.		A. M. Down.	Up.	A. M.
6	15 30	6 31 40	0	6	41 20	7 44 40
	16 50	29 25	100		45 20	40 10
	18 00	27 30	200		48 40	37 20
	19 20	25 40	300		52 00	34 10
	21 00	23 40	400		55 20	30 55
6	21 45	6 22 45 440	500		58 55	27 40
			600	7	03 20	24 20
			700	7	07 00	7 20 30
			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. 5697 Date, Apr 27, 1911
Hydrog. }
Sdg. Mch. Lucas Reel 2 Shot Lead 35 lbs.
Turns 485 Cor'n - Depth 485 fms.
Sdg. Cup Sigsbee Amt. Bot'm Sample

Character of Bottom gn M S
Thermom. { Make N3 Cor'n { Instr. No. 108157 Stem. Bottom Reading 39.9° Cor'd Temp. 39.8
Temp. Surf. { 52° Time 10 a } Air { 55°
53° Time 11 a } 56°

Density: Surf. fms.
Wind: Direction NW Force 4-3
Baromet. 30.18 Amt. of Clouds 5 State of Sea M.
Weather fog

Direction and Force of Current { Surface Bottom
Tide

General Locality West of Piedras Blanca, Col.
Silver Peak 71.40° E., Pine Mt. 71.75° E.
Position 35° 35' 00" N. 121° 59' 00" W.

Chart used: No. Ed. 5002 Ed'n
Drift: Direction N. 72° W. Distance ?
Depth of Haul Bottom
Apparatus and Rig used 12' Agassiz; 160-lb. Sinker, 3 wts., 2 floats.

Time towing h. 31 m.
Remarks: Water bottle used in Sdg
Bottom - Temp. 11.8
Sp. Gr. 75.3
Surf. - Temp. 14.5
Sp. Gr. 74.0

Deck Officer Mr. Tolson Recorder J. T. Kirk
11-1023

SOUNDING WIRE.				FMS.	DREDGING CABLE.								
A. M. DOWN.		UP.	A. M.		A. M. DOWN.		UP.	A. M.					
10	01	40	10	14	00	0	10	20	00	11	42	00	
	02	00		12	40	100		24	00		39	00	
	04	00		11	30	200		27	00		36	00	
	04	55		10	15	300		30	10		33	00	
	05	55		09	00	400		33	30		30	00	
10	06	40	10	07	40	485	500	37	15		27	00	
						600		42	00		24	00	
						700		45	30		21	00	
						750	800	10	47	30	11	18	40
						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. 5698 Date, April 27, 1911
Hydrog. }
Sdg. Mch. Lucas Reel Lucas Shot/Load 85 lbs.
Turns 475 Cor'n _____ Depth 475 fms.
Sdg. Cup Sigbee Amt. Bot'm Sample None
Character of Bottom No sample.

Thermom. { Make T.3. Cor'n { Instr. _____
 { No. 10515-4 { Stem. _____

Bottom Reading 42° Cor'd Temp. 39.9

Temp. Surf. { 53° Time 2:00 } Air { 53°
 { 53° Time 3:30 } { 63°

Density: Surf. _____ fms. _____

Wind: Direction P.O.V. Force 3-4

Baromet. 30.10 Amt. of Clouds 1 State of Sea 2

Weather bc

Direction and Force of Current { Surface _____
 { Bottom _____

Tide _____

General Locality Off Point Sur, Cal.

Pt. Sur. 71° 60' W., Juncos Mt., 71° 49' 06"

Position 35° 50' 00" N. 121° 49' 30" W.

Chart used: No. 6503 Ed'n _____

Drift: Direction 71.75° W. Distance ?

Depth of Haul bottom

Apparatus and Rig used 12' Agassiz, 160 lb sinker,
3 weights, 2 glass floats.

Time towing h. 20 m.

Remarks: Register at -20 on arrival of
shot at surface. Shot failed to release.

Bottom: Sp. Gr. 25.0

Temp. 11.9

Surface: Sp. Gr. 24.0

Temp. 12.0

Deck Officer Wm. Stanley Recorder C.E. DeLong

SOUNDING WIRE.			FMS.	DREDGING CABLE.				
P. M. Down.	Up.	P. M.		P. M. Down.	Up.	P. M.		
2	02 20		20 15	0	2	28 15	3	48 20
	03 30		17 55	100		31 35		44 20
	04 30		16 05	200		34 35		41 35
	05 25		14 10	300		37 55		38 45
	06 25		12 15	400		41 10		36 00
2	07 20	2	08 30	475 500		44 30		33 00
				600		47 40		30 00
				700		50 35		27 00
				800		53 50		23 10
				900	2	59 20	3	19 10
				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. 5699 Date, April 27th, 1911
Hydrog. }
Sdg. Mch. Lucas Reel S Shot/Lead 35 lbs.
Turns 659 Cor'n — Depth 659 fms.
Sdg. Cup Sigbee Amt. Bot'm Sample
Character of Bottom gy M

Thermom. { Make Wz Cor'n { Instr. _____
 { No. 10813-4 { Stem. _____

Bottom Reading 38° Cor'd Temp. 37.9

Temp. Surf. { 52° Time 6:15 P } Air { 51°
 { 52° Time 7:36 P } { 52°

Density: Surf. _____ fms. _____

Wind: Direction NNW Force 4

Baromet. 30.10 Amt. of Clouds 5 State of Sea II

Weather bc

Direction and Force of Current { Surface _____
 { Bottom _____

Tide _____

General Locality Off Point Bar, Cal.
Pt. Sur. Lt. N. 12° E.

Position 36° 00' 30" N. 127° 00' 00" W.

Chart used: No. C.D. 5003 Ed'n _____

Drift: Direction S. 86° W. Distance ?

Depth of Haul Bottom

Apparatus and Rig used 15' Agassiz; 160-lb. sinker;
3 wts., 2 floats.

Time towing h. 30 m.

Remarks:
Bot - Sp. Gr. 24.9
Temp. 13.9
Surf. - Sp. Gr. 24.2
Temp. 12.0

Deck Officer Mr Johnson Recorder H.W. Sider
Mr Robarge Fruit

SOUNDING WIRE.			FMS.	DREDGING CABLE.		
P. M. Down.	Up.	P. M.		P. M. Down.	Up.	P. M.
6 07 00	6 24 10		0	6 51 30	8 11 00	
08 10	22 50		100	55 10	07 00	
09 00	21 30		200	38 30	01 10	
09 50	20 10		300	41 50	8 01 50	
10 45	18 55		400	45 10	59 00	
11 50	17 30		500	48 20	55 00	
13 00	16 00		600	51 40	51 40	
6 14 00	6 15 00	6 59	700	55 20	48 20	
			800	58 30	44 40	
			900	7 02 35	40 40	
			1000	7 06 20	7 36 20	
			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 } 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 _____ } 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 _____

Position _____

Chart used: No. _____ 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				

Dredge } No. _____ 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. { _____ Time _____ } 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 _____

Position _____

Chart used: No. _____ 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			

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 _____

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

Bottom Reading _____ Cor'd Temp. _____

Temp. Surf. { _____ Time _____ } 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 _____

Position _____

Chart used: No. _____ 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				

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 _____

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

Bottom Reading _____ Cor'd Temp. _____

Temp. Surf. { _____ Time _____ } 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 _____

Position _____

Chart used: No. _____ 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				

Dredge } No. _____ 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. { _____ Time _____ } Air { _____
 { _____ Time _____ } { _____

Density: Surf. _____ fms. _____

Wind: Direction _____ Force _____

Baromet. _____ Amt. of
Clouds _____ State of
Sea _____

Weather _____

Direction and Force { Surface _____
of Current. { Bottom _____

Tide _____

General Locality _____

Position _____

Chart used: No. _____ 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				

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 _____

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

Bottom Reading _____ Cor'd Temp. _____

Temp. Surf. { _____ Time _____ } 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 _____

Position _____

Chart used: No. _____ 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			

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 _____

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

Bottom Reading _____ Cor'd Temp. _____

Temp. Surf. { _____ Time _____ } 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 _____

Position _____

Chart used: No. _____ 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				

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 _____

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

Bottom Reading _____ Cor'd Temp. _____

Temp. Surf. { _____ Time _____ } 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 _____

Position _____

Chart used: No. _____ 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				

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 _____

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

Bottom Reading _____ Cor'd Temp. _____

Temp. Surf. { _____ Time _____ } 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 _____

Position _____

Chart used: No. _____ 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				

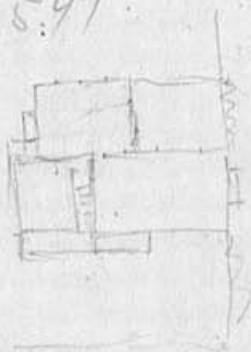
1936
 70.00 375
 2.72
 5.00

 77.72
 777

 85.49

11-18-40
 10-47-34

 21



3 64.55
 2 45.30

 29.25

