

# WIRE DRAG 6739

U.S. COAST & GEODETIC SURVEY  
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AUG 19 1942

Acc. No. \_\_\_\_\_

**6739**  
**WIRE DRAG**

|  |                        |
|--|------------------------|
| Form 504<br>Rev. Dec. 1933   |                        |
| DEPARTMENT OF COMMERCE<br>U.S. COAST AND GEODETIC SURVEY<br>R. S. PATTON, DIRECTOR |                        |
| DESCRIPTIVE REPORT   |                        |
| <del>Topographic</del><br><del>Hydrographic</del>                                  | Sheet No. <b>H6739</b> |
| <b>WIRE DRAG</b>   |                        |
| State <u>California</u>  |                        |
| LOCALITY   |                        |
| <u>Salton Sea</u>  |                        |
| Project <u>CS -282</u>   |                        |
| <u>1942</u>  |                        |
| CHIEF OF PARTY   |                        |
| <u>Max. G. Ricketts</u>  |                        |

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

WIRE DRAG  
HYDROGRAPHIC TITLE SHEET

REG. NO. H6739 WIRE DRAG

The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No. W

REGISTER NO. **H6739 WIRE DRAG**

State CALIFORNIA

General locality SALTON SEA

Locality SANDY BEACH

Scale 1:20,000 Date of survey JUNE & JULY, 19 42

Vessel (2) Twenty-six Foot Navy Power Whaleboats, (1) Sixteen Foot Skiff

Chief of Party Max G. Ricketts

Surveyed by Max G. Ricketts and Harry D. Reed, Jr.

Protracted by \_\_\_\_\_

Soundings penciled by \_\_\_\_\_

Soundings in fathoms feet

Plane of reference Water Level Salton Sea ~~###~~ -241.5 Sea Level  
See descriptive report.

Subdivision of wire dragged areas by \_\_\_\_\_

Inked by \_\_\_\_\_

Verified by G. B. LITTLEPAGE

Instructions dated March 20, May 9 and June 27, 1942, 19

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

(//)

D E S C R I P T I V E   R E P O R T

to accompany

SALTON SEA, CALIFORNIA

H6739 WIRE DRAG

WIRE-DRAG SHEET

PROJECT CS - 282.

INSTRUCTIONS:- Director's instructions for project CS-282, dated March 20, 1942 and his telegrams of May 9th and June 27, 1942. These instructions were supplemented by the requests of Public Works Officer's of Eleventh Naval District and Naval Air Station, San Diego. In addition to the above were requests of District Coast Guard Officer relative to placing marker buoys.

CONTROL:- Triangulation stations OBSIDIAN, 1934; KANE, 1939 and SODA, 1939 were occupied and control extended to the vicinity of Sandy Beach by third order methods. Three third order stations were established at this time and cuts were taken to all hydrographic signals. For use on the boatsheet these cuts were plotted graphically. An additional triangulation station was later established alongside the runway to obtain the position of the mid-centerline pin and the azimuth of the runway as requested by the Navy. This station was established on a three point fix. A few additional signals and recoverable points were located by sextant cuts and fixes.

SURVEY METHODS:- Standard wire-drag practice has been followed using a 3600 foot drag, 1/8" ground wire, 35 pound weights on intermediate buoys and 70 pound weights on end buoys. The drag was towed by two 26 foot Navy power whaleboats furnished by the Naval Air Station, a 16 foot skiff and outboard motor was used as a tender. The Navy had furnished a 16 foot punt but this boat was not satisfactory. Our buoys would not support the 70 pound weights so spherical Navy Plane Mooring Buoys were used as end buoys and were found very satisfactory except that there was no hoisting gear available. The small area of hydrography along the west side of the area was completed using the regular hand-lead methods. One of the whaleboats was used on this work.

DANGERS:- Dangers as listed below were located in the area:-

(1) A  $1\frac{1}{2}$  inch pipe in 18 feet of water; the top of this pipe was submerged  $3\frac{1}{2}$  feet. This obstacle was located about 0.4 mile off the grading for the ramp; Latitude 33 - 11.80 and Longitude 115 - 49.65. The wire-drag party removed this obstacle.

(2) A group of posts in 7 to 12 feet of water; the top of posts being submerged  $2\frac{1}{2}$  to 3 feet, four were sighted with probably more in the immediate vicinity. These posts were located about 0.1 mile northeast of the small boat pier; Latitude 33 - 11.24 and Longitude 115 - 49.67. A seaplane mooring buoy was left in this position to mark these dangers for future removal.

BUOYAGE:- Five marker buoys were placed as requested by the District Coast Guard Officer, these mark the corners and center of the original 16 square mile area.

(3)

H6739  
WIRE DRAG

SALTON SEA, SANDY BEACH  
CALIFORNIA  
WATER LEVEL DATA

| Date 1942 | Staff Reading | Water Level | Remarks           |
|-----------|---------------|-------------|-------------------|
| June 9    | 3.9           | -241.47     |                   |
| June 10   | 3.9           | -241.47     |                   |
| June 11   | 3.9           | -241.47     |                   |
| June 12   | 3.9           | -241.47     |                   |
| June 16   | 3.9           | -241.47     |                   |
| June 17   | 3.9           | -241.47     |                   |
| June 18   | 3.9           | -241.47     |                   |
| June 19   | 3.9           | -241.47     |                   |
| June 23   | 3.9           | -241.47     |                   |
| June 24   | 3.9           | -241.47     |                   |
| June 25   | 3.9           | -241.47     |                   |
| June 26   | 3.85          | -241.52     |                   |
| July 1    | 3.8           | -241.57     |                   |
| July 2    | 3.8           | -241.57     |                   |
| July 3    | 3.8           | -241.57     |                   |
| July 6    | 3.8           | -241.57     |                   |
| July 7    | 3.8           | -241.57     |                   |
| July 8    | 3.8           | -241.57     |                   |
| July 9    | 3.7           | -241.67     | Taken at 07:00 AM |
| July 9    | 3.8           | -241.57     | Taken at 12:30 PM |

The Bench Mark to which this staff is tied is the General Land Office Section Corner Mark of Sections 20, 21 and 29, 28; R 11 E, & T 11 S. This corner has an elevation of -219.75 feet established by Bureau of Reclamation for topographic control. This bench mark is being used for all construction at Sandy Beach Air Station.

The Bureau of Reclamation Office at Coachella, California takes readings on water level of Salton Sea once each month, these being tied to the first order net. After establishing the staff at Sandy Beach a comparison was made with their June reading and found to agree. This was considered necessary at the time as at that date we had been unable to determine where the elevation used in the construction had originally been determined.

(4)

H-6739 W.D.

This survey conforms with the instructions for the project with modifications and changes as contained in Lieut. M. G. Ricketts' letter of June 20, 1942.

The Eleventh Naval District stated that an effective depth of 10 feet from the present water level would be satisfactory and requested an extension of the area to be covered to include that between the western limits of the original area and the 10-ft. curve along the beach. This constitutes an additional area of 3-1/2 to 4 square miles and was accomplished as requested.

Two days of hydrography were done in the southwestern section of the wire drag work. The area sounded shows numerous 8- and 9-ft. lumps and Naval Authorities were advised that it would be covered as close to the bottom as practicable. This was accomplished with an effective depth of 8 feet except in the extreme southwest part of the work where there is a small area in which submerged posts were found.

The boat sheet and records have been carefully examined and all pertinent information is clearly indicated thereon. A smooth sheet and formal review are considered unnecessary.

G. B. Littlepage, Sept. 17, 1942

Approved:  
G. B. Littlepage

(5)

SALTON SEA  
STATISTICS

H6739 WIRE DRAG

WIRE-DRAG

| Date              | Letter | Volume | Drag Length<br>Ft. | Positions | Statute Miles | Soundings |
|-------------------|--------|--------|--------------------|-----------|---------------|-----------|
| 1942<br>June 10   | A      | 1      | 3600               | 68        | 3.7           | 0         |
| June 11           | B      | 1      | 3600               | 85(6)     | 4.5           | 6         |
| June 16           | C      | 1      | 3600               | 66(7)     | 4.0           | 7         |
| June 17           | D      | 1      | 3600               | 77        | 4.5           | 0         |
| June 18           | E      | 1      | 3600               | 128       | 6.8           | 0         |
| June 19           | F      | 2      | 3600               | 82        | 4.5           | 0         |
| June 24           | G      | 2      | 3600               | 98        | 5.1           | 0         |
| July 1            | H      | 2      | 3500               | 59        | 3.1           | 0         |
| July 2            | J      | 2      | 3600               | 81        | 4.7           | 0         |
| July 3            | K      | 2      | 3600               | 58        | 2.3           | 0         |
| July 6            | L      | 2&3    | 3600               | 81        | 4.8           | 0         |
| July 7            | M      | 3      | 3600               | 106(8)    | 4.5           | 8         |
| July 8            | N      | 3      | 3600               | 12(7)     | 1.3           | 7         |
| July 9            | P      | 3      | 2800               | 7(7)      | 0.8           | 7         |
| AREA 25.8 sq sta. |        | TOTALS |                    | 1043      | 54.6          | 35        |

STATISTICS HYDROGRAPHY

| Date               | Letter | Volume | Positions | Statute Miles | Soundings |      |
|--------------------|--------|--------|-----------|---------------|-----------|------|
| 1942               |        |        |           |               |           |      |
| June 9             | a      | 1      | 85        | 16.0          | 436       |      |
| June 12            | b      | 1      | 141       | 26.7          | 792       |      |
| June 23            | c      | 1      | 53        | 11.2          | 267       |      |
| June 25            |        | 1      | 35        | ----          | 34        |      |
| June 26            | d      | 1      | 6         | 0.6           | 25        |      |
| June 30            |        | 1      | 4         | ----          | ----      |      |
| July 9             | e      | 1      | 17        | 2.5           | 64        |      |
| AREA 5.1 sq. stat. |        | TOTALS |           | 341           | 57.0      | 1618 |

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DEPARTMENT OF COMMERCE  
U.S. COAST AND GEODETIC SURVEY  
Form 684

WYE

From Lead Corner. To Staff on Pier

FORWARD RUNNING

Date 6-3-42 Instrument # 75 Rod # 418

| POINT                                 | BACKSIGHT<br>Meters or feet | FORESIGHT<br>Meters or feet | DIFFERENCE<br>H.T. | REMARKS<br>Elev.     |
|---------------------------------------|-----------------------------|-----------------------------|--------------------|----------------------|
| Land Cor.<br>20/21 R.I.E<br>7/28 7115 | 3.52                        |                             |                    | - 219.75             |
| T.P. #1                               | 2.55                        | 5.98                        | 223.27             | 217.29               |
| T.P. #2                               | 5.02                        | 5.42                        | 219.84             | 214.42               |
| T.P. #3                               | 3.44                        | 11.19                       | 211.69             | 208.25               |
| T.P. #4                               | 4.33                        | 4.12                        | 211.90             | 207.57               |
| T.P. #5                               | 2.97                        | 3.66                        | 211.21             | 208.24               |
| T.P. #6                               | 3.72                        | 5.73                        | 209.20             | 205.48               |
| T.P. #7                               | 3.51                        | 8.53                        | 204.18             | 200.67               |
| Staff on Pier<br>6 ft. MK.            |                             | 4.06                        |                    | 200.12               |
|                                       |                             |                             |                    | 219.75               |
|                                       |                             |                             |                    | 200.12               |
|                                       |                             |                             |                    | 17.63 Diff in Elev   |
|                                       |                             |                             |                    | 219.75               |
|                                       |                             |                             |                    | 17.63                |
|                                       |                             |                             |                    | 202.12 Elev of Staff |

6

LEVELING

From Staff on Pier To Lead Corner

BACKWARD RUNNING

Date 6-3-42 Instrument # 75 Rod # 418

| POINT                                 | BACKSIGHT<br>Meters or feet | FORESIGHT<br>Meters or feet | DIFFERENCE<br>H.T. | REMARKS<br>Elev. |
|---------------------------------------|-----------------------------|-----------------------------|--------------------|------------------|
| Staff on Pier<br>6 ft. MK.            | 4.17                        |                             |                    | 200.12           |
| T.P. #1                               | 8.18                        | 3.63                        | 204.29             | 200.62           |
| T.P. #2                               | 5.72                        | 3.27                        | 208.84             | 205.57           |
| T.P. #3                               | 7.56                        | 7.04                        | 211.29             | 204.25           |
| T.P. #4                               | 5.28                        | 3.65                        | 213.44             | 208.16           |
| T.P. #5                               | 5.52                        | 0.21                        | 218.79             | 213.23           |
| T.P. #6                               | 8.42                        | 3.58                        | 223.63             | 215.21           |
| Land Cor.<br>20/21 R.I.E<br>7/28 7115 |                             | 3.90                        |                    | - 219.73         |
|                                       |                             |                             |                    | H.D.R.           |
|                                       |                             |                             |                    | Rod, U.M.C.      |

442

Surveys Section (Chart Division)

HYDROGRAPHIC SURVEY NO. **H6739** WIRE DRAG

Records accompanying survey:

Boat sheets *two*.; sounding vols. *(2)*.; wire drag vols. *(6)*.;  
 bomb vols. ....; graphic recorder rolls ....;  
 special reports, etc. ....  
 .....

The following statistics will be submitted with the cartographer's report on the sheet:

|   |                        |
|---|------------------------|
| Number of positions on sheet                            | 341 Hydro<br>1043 W.D. |
| Number of positions checked                             | 12 Hydro<br>45 W.D.    |
| Number of positions revised                             | 1                      |
| Number of soundings recorded                            | 1618 Hydro<br>35 W.D.  |
| Number of soundings revised<br>(refers to depth only)   | 3                      |
| Number of soundings erroneously<br>spaced               | 0                      |
| Number of signals erroneously<br>plotted or transferred | —                      |
| Topographic details                                     | Time —                 |
| Junctions   | Time —                 |
| Verification of soundings from<br>graphic record        | Time —                 |

Verification by *S. B. Littlepage*... Total time *31 hrs* Date *9/4/42*

Review by *S. B. Littlepage*... Time *5 hrs* Date *9/18/42*



Remarks

Decisions

|    | Remarks                          | Decisions |
|----|----------------------------------|-----------|
| 1  | U.S.G.S. Salton Sea and Vicinity |           |
| 2  |                                  |           |
| 3  |                                  |           |
| 4  |                                  |           |
| 5  |                                  |           |
| 6  |                                  |           |
| 7  |                                  |           |
| 8  |                                  |           |
| 9  |                                  |           |
| 10 |                                  |           |
| 11 |                                  |           |
| 12 |                                  |           |
| 13 |                                  |           |
| 14 |                                  |           |
| 15 |                                  |           |
| 16 |                                  |           |
| 17 |                                  |           |
| 18 |                                  |           |
| 19 |                                  |           |
| 20 |                                  |           |
| 21 |                                  |           |
| 22 |                                  |           |
| 23 |                                  |           |
| 24 |                                  |           |
| 25 |                                  |           |
| 26 |                                  |           |
| 27 |                                  |           |

GEOGRAPHIC NAMES

Survey No. **H6739**

**WIRE DRAG**

Name on Survey

A,

B,

C,

D

E

F

G

H

K

On Chart  
No.

On previous survey  
No.

On U. S. Quadrangle  
Maps

From local  
information

On local Maps

P. O. Guide or Map

Rand McNally Atlas

U. S. Light List

| Name on Survey     | A, | B, | C, | D | E | F | G | H | K  |
|--------------------|----|----|----|---|---|---|---|---|----|
| <u>Salton Sea</u>  |    |    |    |   |   |   |   |   | 1  |
| <u>Sandy Beach</u> |    |    |    |   |   |   |   |   | 2  |
|                    |    |    |    |   |   |   |   |   | 3  |
|                    |    |    |    |   |   |   |   |   | 4  |
|                    |    |    |    |   |   |   |   |   | 5  |
|                    |    |    |    |   |   |   |   |   | 6  |
|                    |    |    |    |   |   |   |   |   | 7  |
|                    |    |    |    |   |   |   |   |   | 8  |
|                    |    |    |    |   |   |   |   |   | 9  |
|                    |    |    |    |   |   |   |   |   | 10 |
|                    |    |    |    |   |   |   |   |   | 11 |
|                    |    |    |    |   |   |   |   |   | 12 |
|                    |    |    |    |   |   |   |   |   | 13 |
|                    |    |    |    |   |   |   |   |   | 14 |
|                    |    |    |    |   |   |   |   |   | 15 |
|                    |    |    |    |   |   |   |   |   | 16 |
|                    |    |    |    |   |   |   |   |   | 17 |
|                    |    |    |    |   |   |   |   |   | 18 |
|                    |    |    |    |   |   |   |   |   | 19 |
|                    |    |    |    |   |   |   |   |   | 20 |
|                    |    |    |    |   |   |   |   |   | 21 |
|                    |    |    |    |   |   |   |   |   | 22 |
|                    |    |    |    |   |   |   |   |   | 23 |
|                    |    |    |    |   |   |   |   |   | 24 |
|                    |    |    |    |   |   |   |   |   | 25 |
|                    |    |    |    |   |   |   |   |   | 26 |
|                    |    |    |    |   |   |   |   |   | 27 |

Names underlined in red approved  
by L. Heck on 10/26/42

# MEMORANDUM IMMEDIATE ATTENTION

SURVEY  
DESCRIPTIVE REPORT  
~~PHOTOSTATION~~

No. H **H6739**  
~~NOOT~~ **WIRE DRAG**

received **August 19, 1942**  
registered **August 28, 1942**  
verified  
reviewed  
approved

This is forwarded in order that your attention may be directed to the matters as indicated below. Please initial in column 3 as an acknowledgement that your attention has been thus directed. The complete original records are available if desired. If you cannot give this your immediate attention, please initial, note, and forward to the next section marked, calling for the records at your convenience.

| ROUTE |  | Initial | Attention called to |
|-------|--|---------|---------------------|
| 20    |  |         |                     |
| 22    |  |         |                     |
| 24    |  |         |                     |
| 25    |  |         |                     |
| 26    |  |         |                     |
| 30    |  |         |                     |
| 40    |  |         |                     |
| 62    |  |         |                     |
| 63    |  |         |                     |
| 82    |  |         |                     |
| 83    |  |         |                     |
| 88    |  |         |                     |
| 90    |  |         |                     |
|       |  |         |                     |
|       |  |         |                     |

RETURN TO

|    |            |
|----|------------|
| 82 | R. W. Knox |
|----|------------|

*RWK*

WIRE-DRAG GROUNDINGS:-

Several groundings of 8 and 9 feet in the southwest corner of the area were later cleared at 8 feet effective. The bottom in this area is overlaid with mud and in several cases the drag set at 12 feet grounded and pulled off.

A grounding of 8 feet on a group of stubs near the beach and the northeast corner of the inshore area was cleared at 7 feet effective. *Not definitely cleared*  
 $\phi 33^{\circ}-13'.2$   $\times 115^{\circ}50'.3'$

These groundings are not considered dangerous to plane landing operations.

COMPARISONS WITH PREVIOUS SURVEYS:-

No previous surveys of area.

GENERAL INFORMATION:-

Weather conditions in this area are very unfavorable for small boat work the majority of the time. Moderate to fresh southwest and west breezes prevailed in the afternoon usually leaving a heavy dust cloud and haze for the following morning. The sea makes up quickly into a short sharp chop dangerous to small boats. Although local information was that prevailing winds were southeast at this time of year, westerly winds prevailed nearly the entire period of work. During a period of forest and brush fires in the coast mountains smoke settled heavily in the valley and about the sea. Heat waves are very bad during the afternoon, visibility was generally poor in the area during the entire period. The present small boat pier offers no protection from easterly winds and only slight protection from the north-northwest.

Attention is called to the change of water level on July 9th. The previous afternoon a fresh westerly breeze and dust storm came up about three and blew well into the evening. The water was apparently piled toward the east shore by this wind, not returning to its customary level until noon of the 9th.

Respectfully submitted,

*Max G. Ricketts*  
 Max G. Ricketts,  
 Lieut., C. & G. Survey

T 11 S

1 July

JUNE

Covered in July

S 2 T 11 S T 12 S

115 50

I M P E R I A

indefinite

V A L L E Y

U.S.G.S. Map  
Salton Sea

H6739

33-03-41  
115-49-22

