	NOAA Form 76-35A
National	U.S. Department of Commerce Oceanic and Atmospheric Administration National Ocean Survey
1	DESCRIPTIVE REPORT
Type of Survey:	Field Examination
Registry Number:	F00618
	LOCALITY
State:	Alaska
General Locality:	Kodiak Island
Sub-locality:	Womens Bay
	2012
	CHIEF OF PARTY CDR James M. Crocker, NOAA
	LIBRARY & ARCHIVES
Date:	

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F00618

OAA FORM 77-28U.S. DEPARTMENT OF COMMERCE11-72)NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION		REGISTRY NUMBER:		
HYDROGRAPHIC TITLE SHEET		F00618		
INSTRUCTIONS: The Hydrog	INSTRUCTIONS: The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.			
State:	Alaska			
General Locality:	Kodiak Island			
Sub-Locality:	Womens Bay			
Scale:	5000			
Dates of Survey:	07/03/2012 to 07/03/2012			
Instructions Dated:	10/29/2012			
Project Number:	OPR-P136-FA-12			
Field Unit:	NOAA Ship Fairweather			
Chief of Party:	CDR James M. Crocker, NOAA			
Soundings by:	Multibeam Echo Sounder			
Imagery by:	Side Scan Sonar			
Verification by:	Pacific Hydrographic Branch			
Soundings Acquired in:	meters at Mean Lower Low Water			
H-Cell Compilation Units:	meters at Mean Lower Low Water			

Remarks:

The purpose of this survey is to provide reconnaissance data. All separates are filed with the hydrographic data. Revisions and end notes in red were generated during office processing. The processing branch concurs with all information and recommendations in the DR unless otherwise noted. Page numbering may be interrupted or non sequential. All pertinent records for this survey, including the Descriptive Report, are archived at the National Geophysical Data Center (NGDC) and can be retrieved via http://www.ngdc.noaa.gov/.

Survey F00618 does not meet specifications, as such data are not suitable for charting.

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Descriptive Report to Accompany Survey F00618

Project: OPR-P136-FA-12 Locality: Kodiak Island Sublocality: Womens Bay Scale: 1:5000 July 2012 - July 2012 NOAA Ship Fairweather

Chief of Party: CDR James M. Crocker, NOAA

A. Area Surveyed

On July 3, 2012 the NOAA Ship Fairweather Launch 2805 conducted a survey requested by Mark Blakeslee of Aqualife Engineering in Kodiak, AK to determine possible locations of lost (ghost) crab pots in the locality of Kodiak, AK with a sublocality of Womens Bay, AK. To accomplish this task, a 2 SNM polygon was used. Project Instructions provided by HSD OPS were received after the survey was complete. The field unit did not receive information from OPS in regards to ATONs, AWOIS, Bottom Samples, and Junctions.

A.1 Survey Limits

Data was acquired within the following survey limits:

Northeast Limit	Southwest Limit
57.7276972222 N	57.7129055556 N
152.490961111 W	152.550580556 W

Table 1: Survey Limits

Survey Limits were acquired in accordance with the requirements in the Project Instructions and the HSSD.

A.2 Survey Purpose

Side scan survey to support ghost crab pot removal.

A.3 Survey Quality

The entire survey is adequate to supersede previous data.

MB data was not required for this project. However, partial multibeam data was acquired while collecting side scan data. All data acquired is adequate to supersede previous data.

A.4 Survey Coverage



Figure 1: F00618 Survey Outline

Survey Coverage was in accordance with the requirements in the Project Instructions and the HSSD.

A.5 Survey Statistics

The following table lists the mainscheme and crossline acquisition mileage for this survey:

	HULL ID	S220 Launch 2805	Total
	SBES Mainscheme	0	0
	MBES Mainscheme	17.27	17.27
	Lidar Mainscheme	0	0
	SSS Mainscheme	18.11	18.11
LNM	SBES/MBES Combo Mainscheme	0	0
	SBES/SSS Combo Mainscheme	0	0
	MBES/SSS Combo Mainscheme	0	0
	SBES/MBES Combo Crosslines	0	0
	Lidar Crosslines	0	0
Numb Sampl	er of Bottom es		0
Numb	er of DPs		0
Numb Invest	er of Items Items igated by Dive Ops		0
Total 1	Number of SNM		1.32

 Table 2: Hydrographic Survey Statistics

The following table lists the specific dates of data acquisition for this survey:

Survey Dates

07/03/2012

Table 3: Dates of Hydrography

A.6 Shoreline

No shoreline verification was required for this project.

A.7 Bottom Samples

Bottom samples were not acquired in accordance with the HSSD. As referenced in the introduction, project instructions were not received until after the completion of the survey. The hydrographer recommends retaining bottom samples as charted.

B. Data Acquisition and Processing

B.1 Equipment and Vessels

Refer to the Data Acquisition and Processing Report (DAPR) for a complete description of data acquisition and processing systems, survey vessels, quality control procedures and data processing methods. Additional information to supplement sounding and survey data, and any deviations from the DAPR are discussed in the following sections.

B.1.1 Vessels

The following vessels were used for data acquisition during this survey:

	S220	
Hull ID	Launch	
	2805	
LOA	8.64 meters	
Draft	1.1 meters	
Table A. V	lossols Usod	

 Table 4: Vessels Used

B.1.2 Equipment

Manufacturer	Model	Туре
RESON	7125	MBES
RESON	SVP71	Sound Speed System
APPLANIX	POS/MV V4	Positioning System
Klein	K5000	SSS
SEABIRD	19+	Sound Speed System

The following major systems were used for data acquisition during this survey:

Table 5: Major Systems Used

Data was acquired using a Reson 7125 multibeam echo sounder, and a Klein 5000 series towed sidescan sonar. The Reson 7125 is a dual frequency (200kHz and 400kHz) multibeam system with a 140 degree swath. The swath is made up of 512 discrete equidistant beams with along-track and across-track beam widths of 1° and 0.54° respectively. It has a specified depth range of 50 meters. The Klein 5000 series is a 500kHz towed array. It has 4 range scales: 50, 75, 100, and 150m. The high resolution 75m range scale was used.

B.2 Quality Control

B.2.1 Crosslines

Crosslines were not collected per the HSSD.

B.2.2 Uncertainty

The following survey specific parameters were used for this survey:

Measured	Zoning
0.01meters	0.076meters

 Table 6: Survey Specific Tide TPU Values

Hull ID	Measured - CTD	Measured - MVP	Surface
S220 Launch 2805	4meters/second		0.5meters/second

Table 7: Survey Specific Sound Speed TPU Values

B.2.3 Junctions

There are no contemporary surveys that junction with this survey.

B.2.4 Sonar QC Checks

Sonar system quality control checks were conducted as detailed in the quality control section of the DAPR.

B.2.5 Equipment Effectiveness

B.2.5.1None Exist

There were no conditions or deficiencies that affected equipment operational effectiveness.

B.2.6 Factors Affecting Soundings

B.2.6.1 None Exist

There were no other factors that affected corrections to soundings.

B.2.7 Sound Speed Methods

Sound Speed Cast Frequency: Two casts were taken during the survey period approximately 3 hours apart.

B.2.8 Coverage Equipment and Methods

All Equipment and survey methods were used as detailed in the DAPR.

B.2.9 IHO Uncertainty

It was found that 100% of nodes in the 1m and 2m finalized grid meet or exceed IHO Order 1 specifications for all depths of survey F00618, see Standards and Compliance Review in Appendix V. To assess vertical accuracy standards, a child layer titled "IHO1" was created for each of the 1-meter, and 2-meter finalized surfaces using the equation as stated in section C.2.1 of the DAPR.



Figure 2: F00618 IHOness

B.2.10 Density

Density requirements for F00618 were achieved with at least 95% of finalized surface nodes containing five or more soundings, see Standards Compliance Review in Appendix V.



Figure 3: F00618 Density

B.3 Echo Sounding Corrections

B.3.1 Corrections to Echo Soundings

All data reduction procedures conform to those detailed in the DAPR.

B.3.2 Calibrations

All sounding systems were calibrated as detailed in the DAPR.

B.4 Backscatter

Backscatter was logged in 7k files and submitted directly to NGDC to be archived.

B.5 Data Processing

B.5.1 Software Updates

There were no software configuration changes after the DAPR was submitted.

The following Feature Object Catalog was used: NOAA Extended Attribute Files V5_2

B.5.2 Surfaces

Surface Name	Surface Type	Resolution	Depth Range	Surface Parameter	Purpose
F00618_1m	CUBE	1 meters	0 meters - 0 meters	NOAA_1m	MBES TracklineSBES Set Line Spacing
F00618_2m	CUBE	2 meters	0 meters - 0 meters	NOAA_2m	MBES TracklineSBES Set Line Spacing
F00618_1m_Final_0to20	CUBE	1 meters	0 meters - 20 meters	NOAA_1m	MBES TracklineSBES Set Line Spacing
F00618_2m_Final_18to40	CUBE	2 meters	18 meters - 40 meters	NOAA_2m	MBES TracklineSBES Set Line Spacing
F00618_Combined_2m	CUBE	2 meters	0 fathoms - 40 meters	NOAA_2m	MBES TracklineSBES Set Line Spacing
F00618_1m_Mosaic	SSS Mosaic	1 meters	0 meters - 0 meters	N/A	100% SSS

The following CARIS surfaces were submitted to the Processing Branch:

Table 8: CARIS Surfaces

All field sheet extents were adjusted using the Base 16 Calculator tool to ensure coincident nodes among all bathymetric surfaces regardless of the field sheet in which they are contained given the standard surface resolutions of one and two meters. The NOAA CUBE parameters mandated in HSSD were used for the creation of all CUBE BASE surfaces in Survey F00618. The surfaces have been reviewed where noisy data, or 'fliers' are incorporated into the gridded solution causing the surface to be shoaler or deeper than the true seafloor. Where these spurious soundings cause the gridded surface to be shoaler or deeper than the reliably measured seabed by greater than the maximum allowable TVU at that depth, the noisy data have been rejected and the surface recomputed.

B.5.3 Data Logs

Data acquisition and processing notes are included in the acquisition and processing logs, and additional processing such as final tide and sound velocity application is noted in the F00618 Data Log spreadsheet. All data logs are submitted digitally in the Separates I folder.

B.5.4 Critical Soundings

Designation of soundings followed procedures as outlined in section 5.2.1.2 of the HSSD.

C. Vertical and Horizontal Control

There is no HVCR submitted with this survey.

C.1 Vertical Control

The vertical datum for this project is Mean Lower Low Water.

Standard Vertical Control Methods Used:

Discrete Zoning

The following National Water Level Observation Network (NWLON) stations served as datum control for this survey:

Station Name	Station ID
Kodiak, AK	9457292

Table 9: NWLON Tide Stations

File Name	Status
9457292.tid	Final Approved

Table 10: Water Level Files (.tid)

File Name	Status
F00618CORF.zdf	Final

 Table 11: Tide Correctors (.zdf or .tc)

A request for final approved tides was sent to N/OPS1 on 07/13/2012. The final tide note was received on 11/02/2012.

Final zoning and water level files were received for survey F00618.

C.2 Horizontal Control

The horizontal datum for this project is North American Datum of 1983 (NAD83).

Differential correctors from the U.S. Coast Guard beacon at Kodiak, AK (313kHz) were used during realtime acquisition when not otherwise noted in the acquisition logs, and were the sole method of positioning of detached positions (DP) and bottom samples as there is currently no functionality for applying Smoothed Best Estimate of Trajectory (SBET) files to these types of data.

The following DGPS Stations were used for horizontal control:

DGPS Stations	
Kodiak, AK-313kHz (100 BPS)	

Table 12: USCG DGPS Stations

D. Results and Recommendations

D.1 Chart Comparison

D.1.1 Raster Charts

The following are the largest scale raster charts, which cover the survey area:

Chart	Scale	Edition	Edition Date	LNM Date	NM Date
16596	1:10000	12	07/2012	08/28/2012	09/08/2012
16595	1:20000	15	11/2004	08/21/2012	09/01/2012

Table 13: Largest Scale Raster Charts

<u>16596</u>

The largest scale NOS charts covering the project area were downloaded on the ship and used. Soundings from survey F00618 generally agreed within one to three feet with charted depths on chart 16596, with the exception of the one wreck that has been submitted as a DTON.

<u>16595</u>

There were no soundings shoaler than one fathom as compared to charted depths on chart 16595, with the exception of the one wreck that has been submitted as a DTON.

D.1.2 AWOIS Items

No AWOIS items exist for this survey.

D.1.3 Charted Features

No charted features exist for this survey.

D.1.4 Uncharted Features

An uncharted wreck was discovered during this survey in the NW corner of Womens Bay and was submitted as a DTON.

Several small contacts were found during the survey that may be crab pots. See attached 'Possible Locations of Crab Pots' Report.

D.1.5 Dangers to Navigation

The follwing DTON reports were submitted to the processing branch:

DTON Report Name	Date Submitted
DTON Kodiak AK Report 03 July 2012	2012-07-09

Table 14: DTON Reports

One danger to navigation was found within the limits of F00618, and was reported to the Marine Chart Division on August 8th, 2012. Danger to Navigation Reports are included in Appendix I of this report.

D.1.6 Shoal and Hazardous Features

No shoals or potentially hazardous features exist for this survey.

D.1.7 Channels

No channels exist for this survey. There are no designated anchorages, precautionary areas, safety fairways, traffic separation schemes, pilot boarding areas, or channel and range lines within the survey limits.

Both charts do have designated anchorages and chart 16596 has several Seaplane Runway Areas.

D.2 Additional Results

D.2.1 Shoreline

Shoreline was not assigned in the Hydrographic Survey Project Instructions or Statement of Work.

D.2.2 Prior Surveys

The project instructions mentioned prior surveys would be provided. However, prior surveys were not provided by HSD Operations Branch.

D.2.3 Aids to Navigation

ATONS exist as floating buoys. Not positioned but observed to be on station meeting the intended purpose as charted.

D.2.4 Overhead Features

Overhead features do not exist for this survey.

D.2.5 Submarine Features

Submarine features do not exist for this survey.

Even though there is no evidence in the data, Chart 16596 has a Caution Note regarding possible Submarine Pipelines and Cables.

D.2.6 Ferry Routes and Terminals

No ferry routes or terminals exist for this survey.

D.2.7 Platforms

No platforms exist for this survey.

D.2.8 Significant Features

The purpose of survey F00618 was to identify crab pots for removal. Project information and a detailed feature report were given to Mark Blakeslee of Aqualife Engineering in Kodiak, AK on 7 July, 2012. See Feature Report in Appendix II and Womens Bay Crab pot Possible Locations Report in Public Relations & Constituents Products.

D.2 Construction and Dredging

There is no present or planned construction or dredging within the survey limits.

E. Approval Sheet

As Chief of Party, Field operations for this hydrographic survey were conducted under my direct supervision, with frequent personal checks of progress and adequacy. I have reviewed the attached survey data and reports.

All field sheets, this Descriptive Report, and all accompanying records and data are approved. All records are forwarded for final review and processing to the Processing Branch.

The survey data meets or exceeds requirements as set forth in the NOS Hydrographic Surveys and Specifications Deliverables Manual, Field Procedures Manual, Standing and Letter Instructions, and all HSD Technical Directives. These data are adequate to supersede charted data in their common areas. This survey is complete and no additional work is required with the exception of deficiencies noted in the Descriptive Report.

Report Name	Report Date Sent
HSRR Memo	2012-05-01
Data Acquisition and Processing Report	2012-12-07
Coast Pilot Report	2012-12-07

Approver Name	Approver Title	Approval Date	Signature
CDR James M. Crocker, NOAA	Chief of Party	12/05/2012	James M Crocker cn=James M Crocker, o=NOAA Ship Fairwesther, ou, email=james.m.crocker@noaa.gov, c=U5 2012.12.05 22:21:03 -08'00'
HAST Clinton R. Marcus	Sheet Manager	12/05/2012	Digitally signed by Clinton Marcus Date: 2012.12.06 07:10:10-08'00'
CST Tami M. Beduhn	Chief Survey Technician	12/05/2012	Tami Beduhn '00'08- 21:32:07 2012.12.05
LT Caryn M. Zacharias	Field Operations Officer	12/05/2012	Caryn M. Machania Caryn M. Zacharias 2012.12.05 18:45:56 -08'00'

F. Table of Acronyms

Acronym	Definition
AFF	Assigned Features File
AHB	Atlantic Hydrographic Branch
AST	Assistant Survey Technician
ATON	Aid to Navigation
AWOIS	Automated Wreck and Obstruction Information System
BAG	Bathymetric Attributed Grid
BASE	Bathymetry Associated with Statistical Error
СО	Commanding Officer
CO-OPS	Center for Operational Products and Services
CORS	Continually Operating Reference Staiton
CTD	Conductivity Temperature Depth
CEF	Chart Evaluation File
CSF	Composite Source File
CST	Chief Survey Technician
CUBE	Combined Uncertainty and Bathymetry Estimator
DAPR	Data Acquisition and Processing Report
DGPS	Differential Global Positioning System
DP	Detached Position
DR	Descriptive Report
DTON	Danger to Navigation
ENC	Electronic Navigational Chart
ERS	Ellipsoidal Referenced Survey
ERZT	Ellipsoidally Referenced Zoned Tides
FOO	Field Operations Officer
FPM	Field Procedures Manual
GAMS	GPS Azimuth Measurement Subsystem
GC	Geographic Cell
GPS	Global Positioning System
HIPS	Hydrographic Information Processing System
HSD	Hydrographic Surveys Division
HSSDM	Hydrographic Survey Specifications and Deliverables Manual

Acronym	Definition
HSTP	Hydrographic Systems Technology Programs
HSX	Hypack Hysweep File Format
HTD	Hydrographic Surveys Technical Directive
HVCR	Horizontal and Vertical Control Report
HVF	HIPS Vessel File
IHO	International Hydrographic Organization
IMU	Inertial Motion Unit
ITRF	International Terrestrial Reference Frame
LNM	Local Notice to Mariners
LNM	Linear Nautical Miles
MCD	Marine Chart Division
MHW	Mean High Water
MLLW	Mean Lower Low Water
NAD 83	North American Datum of 1983
NAIP	National Agriculture and Imagery Program
NALL	Navigable Area Limit Line
NM	Notice to Mariners
NMEA	National Marine Electronics Association
NOAA	National Oceanic and Atmospheric Administration
NOS	National Ocean Service
NRT	Navigation Response Team
NSD	Navigation Services Division
OCS	Office of Coast Survey
OMAO	Office of Marine and Aviation Operations (NOAA)
OPS	Operations Branch
MBES	Multibeam Echosounder
NWLON	National Water Level Observation Network
PDBS	Phase Differencing Bathymetric Sonar
РНВ	Pacific Hydrographic Branch
POS/MV	Position and Orientation System for Marine Vessels
РРК	Post Processed Kinematic
PPP	Precise Point Positioning
PPS	Pulse per second

Acronym	Definition
PRF	Project Reference File
PS	Physical Scientist
PST	Physical Science Technician
RNC	Raster Navigational Chart
RTK	Real Time Kinematic
SBES	Singlebeam Echosounder
SBET	Smooth Best Estimate and Trajectory
SNM	Square Nautical Miles
SSS	Side Scan Sonar
ST	Survey Technician
SVP	Sound Velocity Profiler
TCARI	Tidal Constituent And Residual Interpolation
TPU	Total Porpagated Error
TPU	Topside Processing Unit
USACE	United States Army Corps of Engineers
USCG	United Stated Coast Guard
UTM	Universal Transverse Mercator
XO	Exectutive Officer
ZDA	Global Positiong System timing message
ZDF	Zone Definition File

F00618 Feature Report

Registry Number:	F00618
State:	Alaska
Locality:	Kodiak Island
Sub-locality:	Womens Bay
Project Number:	OPR-P136-FA-12
Survey Date:	July 3, 2012

Charts Affected

Number	Edition	Date	Scale (RNC)	RNC Correction(s)*
16596	12th	07/01/2002	1:10,000 (16596_1)	USCG LNM: 11/2/2010 (11/22/2011) CHS NTM: None (9/30/2011) NGA NTM: None (12/3/2011)
16595	15th	11/01/2004	1:20,000 (16595_1)	USCG LNM: 10/25/2011 (11/22/2011) CHS NTM: None (9/30/2011) NGA NTM: 2/24/2007 (12/3/2011)
16594	13th	04/04/1998	1:78,900 (16594_1)	[L]NTM: ?
16593	11th	02/01/2003	1:80,000 (16593_1)	[L]NTM: ?
16580	14th	01/01/2008	1:350,000 (16580_1)	[L]NTM: ?
16013	30th	07/01/2006	1:969,761 (16013_1)	[L]NTM: ?
531	24th	07/01/2007	1:2,100,000 (531_1)	[L]NTM: ?
500	8th	06/01/2003	1:3,500,000 (500_1)	[L]NTM: ?
530	32nd	06/01/2007	1:4,860,700 (530_1)	[L]NTM: ?
50	6th	06/01/2003	1:10,000,000 (50_1)	[L]NTM: ?

* Correction(s) - source: last correction applied (last correction reviewed--"cleared date")

Features

Feature	Survey	Survey	Survey
Туре	Depth	Latitude	Longitude
Wreck	7.62 m	57° 43' 05.2" N	152° 32' 55.8" W

1 - Dangers to Navigation

1.1) 88/2

DANGER TO NAVIGATION

Survey Summary

Survey Position:	57° 43' 05.2" N, 152° 32' 55.8" W
Least Depth:	7.62 m (= 24.99 ft = 4.165 fm = 4 fm 0.99 ft)
TPU (±1.96 თ) :	THU (TPEh) ±0.990 m ; TVU (TPEv) ±0.290 m
Timestamp:	2012-185.21:42:55.848 (07/03/2012)
Survey Line:	f00618 / fa_2805_400khz_7125_512bms_2012 / 2012-185 / 2012m_1852142
Profile/Beam:	88/2
Charts Affected:	16596_1, 16595_1, 16594_1, 16593_1, 16580_1, 16013_1, 531_1, 500_1, 530_1, 50_1

Remarks:

Uncharted dangerous wreck located during 100% sidescan survey operations in Womens Bay. Reson 7125 400khz Multibeam bathymetry data determined a least depth of 24.9 feet with preliminary observed tides in charted 54 feet.

Hydrographer Recommendations

Chart dangerous wreck based on the depth, position and S-57 attribution specified in this report.

Cartographically-Rounded Depth (Affected Charts):

25ft (16596_1) 4fm (16595_1, 16594_1, 16593_1, 16580_1, 16013_1, 530_1) 4fm 1ft (531_1) 7.6m (500_1, 50_1)

S-57 Data

Geo object 1: Wreck (WRECKS)

Attributes: VALSOU - 7.617 m



Figure 1.1.1



Figure 1.1.2



Figure 1.1.3

Possible Locations of Crabpots

Registry Number:	F00618
State:	Alaska
Locality:	Kodiak Island
Sub-locality:	Womens Bay
Project Number:	OPR-P136-FA-12
Survey Date:	July 03, 2012

Charts Affected

Number	Edition	Date	Scale (RNC)	RNC Correction(s)*
				USCG LNM: 11/2/2010 (11/22/2011) CHS NTM: None (9/30/2011)
16596	12th	07/01/2002	1:10,000 (16596_1)	NGA NTM: None (12/3/2011)
16595	15th	11/01/2004	1:20,000 (16595_1)	[L]NTM: ?
16594	13th	04/04/1998	1:78,900 (16594_1)	[L]NTM: ?
16593	11th	02/01/2003	1:80,000 (16593_1)	[L]NTM: ?
16580	14th	01/01/2008	1:350,000 (16580_1)	[L]NTM: ?
16013	30th	07/01/2006	1:969,761 (16013_1)	[L]NTM: ?
531	24th	07/01/2007	1:2,100,000 (531_1)	[L]NTM: ?
500	8th	06/01/2003	1:3,500,000 (500_1)	[L]NTM: ?
530	32nd	06/01/2007	1:4,860,700 (530_1)	[L]NTM: ?
50	6th	06/01/2003	1:10,000,000 (50_1)	[L]NTM: ?

* Correction(s) - source: last correction applied (last correction reviewed--"cleared date")

Name	Feature Type	Survey Depth	Survey Latitude	Survey Longitude
1	Shoal	11.29 m	57° 42' 04.4" N	152° 31' 53.0" W
23	Shoal	24.72 m	57° 42' 41.4" N	152° 30' 29.9" W
2	Shoal	27.34 m	57° 42' 47.6" N	152° 30' 27.9" W
3	SSS	[None]	57° 42' 09.6" N	152° 31' 51.7" W
4	SSS	[None]	57° 42' 16.4" N	152° 31' 41.6" W
5	SSS	[None]	57° 42' 19.6" N	152° 31' 33.0" W

Features

6	SSS	[None]	57° 42' 21.3" N	152° 31' 31.0" W
7	SSS	[None]	57° 42' 30.0" N	152° 31' 09.0" W
8	SSS	[None]	57° 42' 31.4" N	152° 31' 19.2" W
9	SSS	[None]	57° 42' 34.0" N	152° 31' 07.8" W
10	SSS	[None]	57° 42' 38.5" N	152° 32' 44.4" W
11	SSS	[None]	57° 42' 41.1" N	152° 30' 41.8" W
12	SSS	[None]	57° 42' 41.3" N	152° 31' 36.3" W
13	SSS	[None]	57° 42' 41.9" N	152° 30' 50.7" W
14	SSS	[None]	57° 42' 42.0" N	152° 31' 24.1" W
15	SSS	[None]	57° 42' 44.5" N	152° 31' 04.3" W
24	SSS	[None]	57° 42' 46.4" N	152° 30' 30.9" W
16	SSS	[None]	57° 42' 49.4" N	152° 30' 22.3" W
17	SSS	[None]	57° 42' 54.9" N	152° 30' 11.6" W
18	SSS	[None]	57° 43' 07.2" N	152° 32' 22.2" W
19	SSS	[None]	57° 43' 08.5" N	152° 32' 16.6" W
20	SSS	[None]	57° 43' 15.2" N	152° 32' 14.4" W
21	SSS	[None]	57° 43' 15.7" N	152° 32' 36.7" W
22	SSS	[None]	57° 43' 29.6" N	152° 31' 55.4" W
L				

1 - Features from Bathymetry

1.1) Profile/Beam 14/343 / 2012m_1852056

Survey Summary

Survey Position:	57° 42' 04.4" N, 152° 31' 53.0" W
Least Depth:	11.29 m (= 37.03 ft = 6.172 fm = 6 fm 1.03 ft)
TPU (±1.96σ):	THU (TPEh) ±0.985 m ; TVU (TPEv) ±0.302 m
Timestamp:	2012-185.20:56:25.057 (07/03/2012)
Survey Line:	d00171 / fa_2805_400khz_7125_512bms_2012 / 2012-185 / 2012m_1852056
Profile/Beam:	14/343
Charts Affected:	16596_1, 16595_1, 16594_1, 16593_1, 16580_1, 16013_1, 531_1, 500_1, 530_1, 50_1
Remarks:	

[None]

Hydrographer Recommendations

Figure 1.1.1

1.2) Profile/Beam 2867/184 / 2012m_1852056

Survey Summary

Survey Position:	57° 42' 41.4" N, 152° 30' 29.9" W
Least Depth:	24.72 m (= 81.09 ft = 13.514 fm = 13 fm 3.09 ft)
TPU (±1.96σ):	THU (TPEh) ±0.992 m ; TVU (TPEv) ±0.309 m
Timestamp:	2012-185.21:05:15.321 (07/03/2012)
Survey Line:	$d00171\ /\ fa_2805_400 khz_7125_512 bms_2012\ /\ 2012185\ /\ 2012m_1852056$
Profile/Beam:	2867/184

Charts Affected: 16596_1, 16595_1, 16594_1, 16593_1, 16580_1, 16013_1, 531_1, 500_1, 530_1, 50_1

Remarks:

Possible crabpot

Hydrographer Recommendations



Figure 1.2.1

1.3) Profile/Beam 1843/143 / 2012m_1851637

Survey Summary

Survey Position:	57° 42' 47.6" N, 152° 30' 27.9" W
Least Depth:	27.34 m (= 89.71 ft = 14.951 fm = 14 fm 5.71 ft)
TPU (±1.96σ):	THU (TPEh) ±1.001 m ; TVU (TPEv) ±0.315 m
Timestamp:	2012-185.16:42:58.111 (07/03/2012)
Survey Line:	d00171 / fa_2805_400khz_7125_512bms_2012 / 2012-185 / 2012m_1851637

Profile/Beam: 1843/143

Charts Affected: 16596_1, 16595_1, 16594_1, 16593_1, 16580_1, 16013_1, 531_1, 500_1, 530_1, 50_1

Remarks:

[None]

Hydrographer Recommendations



Figure 1.3.1



Figure 1.3.2

2 - Features from Imagery

2.1) Contact/Point 0001/1 / sonar_data120703165700

Survey Summary

Survey Position:	57° 42' 09.6" N, 152° 31' 51.7" W
Least Depth:	[None]
TPU (±1.965):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2012-187.09:08:48 (07/05/2012)
Survey Line:	d00171 / fa_2805_k5k_sss_tow_2012 / 2012-185 / sonar_data120703165700
Contact/Point:	0001/1
Charts Affected:	16596_1, 16595_1, 16594_1, 16593_1, 16580_1, 16013_1, 531_1, 500_1, 530_1, 50_1

Remarks:

possible crabpot

Hydrographer Recommendations





Figure 2.1.1

2.2) Contact/Point 0001/1 / sonar_data120703165100

Survey Summary

Survey Position:	57° 42' 16.4" N, 152° 31' 41.6" W
Least Depth:	[None]
TPU (±1.96σ):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2012-187.09:24:31 (07/05/2012)
Survey Line:	d00171 / fa_2805_k5k_sss_tow_2012 / 2012-185 / sonar_data120703165100
Contact/Point:	0001/1
Charts Affected:	16596_1, 16595_1, 16594_1, 16593_1, 16580_1, 16013_1, 531_1, 500_1, 530_1, 50_1
Remarks:	

possible crabpot

Hydrographer Recommendations



Figure 2.2.1

2.3) Contact/Point 0002/1 / sonar_data120703165000

Survey Summary

Survey Position:	57° 42' 19.6" N, 152° 31' 33.0" W
Least Depth:	[None]
TPU (±1.96σ):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2012-187.09:07:45 (07/05/2012)
Survey Line:	d00171 / fa_2805_k5k_sss_tow_2012 / 2012-185 / sonar_data120703165000
Contact/Point:	0002/1
Charts Affected:	16596_1, 16595_1, 16594_1, 16593_1, 16580_1, 16013_1, 531_1, 500_1, 530_1, 50_1

Remarks:

possible crabpot

Hydrographer Recommendations



Figure 2.3.1

2.4) Contact/Point 0001/1 / sonar_data120703165000

Survey Summary

Survey Position:	57° 42' 21.3" N, 152° 31' 31.0" W
Least Depth:	[None]
TPU (±1.96σ):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2012-187.09:06:29 (07/05/2012)
Survey Line:	d00171 / fa_2805_k5k_sss_tow_2012 / 2012-185 / sonar_data120703165000
Contact/Point:	0001/1
Charts Affected:	16596_1, 16595_1, 16594_1, 16593_1, 16580_1, 16013_1, 531_1, 500_1, 530_1, 50_1
Remarks:	

possible crabpot

Hydrographer Recommendations



Figure 2.4.1

2.5) Contact/Point 0001/1 / sonar_data120703164700

Survey Summary

Survey Position:	57° 42' 30.0" N, 152° 31' 09.0" W
Least Depth:	[None]
TPU (±1.96σ):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2012-187.07:39:37 (07/05/2012)
Survey Line:	$d00171\ /\ fa_{2805}\ k5k_sss_tow_2012\ /\ 2012-185\ /\ sonar_data120703164700$
Contact/Point:	0001/1
Charts Affected:	16596_1, 16595_1, 16594_1, 16593_1, 16580_1, 16013_1, 531_1, 500_1, 530_1, 50_1

Remarks:

possible crabpot

Hydrographer Recommendations



Figure 2.5.1

2.6) Contact/Point 0001/1 / sonar_data120703172000

Survey Summary

Survey Position:	57° 42' 31.4" N, 152° 31' 19.2" W
Least Depth:	[None]
TPU (±1.96σ):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2012-187.07:54:38 (07/05/2012)
Survey Line:	d00171 / fa_2805_k5k_sss_tow_2012 / 2012-185 / sonar_data120703172000
Contact/Point:	0001/1
Charts Affected:	16596_1, 16595_1, 16594_1, 16593_1, 16580_1, 16013_1, 531_1, 500_1, 530_1, 50_1

Remarks:

probably not a crab pot

Hydrographer Recommendations



Figure 2.6.1

2.7) Contact/Point 0001/1 / sonar_data120703171900

Survey Summary

Survey Position:	57° 42' 34.0" N, 152° 31' 07.8" W
Least Depth:	[None]
TPU (±1.96σ):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2012-187.07:47:26 (07/05/2012)
Survey Line:	d00171 / fa_2805_k5k_sss_tow_2012 / 2012-185 / sonar_data120703171900
Contact/Point:	0001/1
Charts Affected:	16596_1, 16595_1, 16594_1, 16593_1, 16580_1, 16013_1, 531_1, 500_1, 530_1, 50_1
Remarks:	

possible crabpot

Hydrographer Recommendations



Figure 2.7.1

2.8) Contact/Point 0001/1 / sonar_data120703203700

Survey Summary

Survey Position:	57° 42' 38.5" N, 152° 32' 44.4" W
Least Depth:	[None]
TPU (±1.96σ):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2012-187.08:47:28 (07/05/2012)
Survey Line:	d00171 / fa_2805_k5k_sss_tow_2012 / 2012-185 / sonar_data120703203700
Contact/Point:	0001/1
Charts Affected:	16596_1, 16595_1, 16594_1, 16593_1, 16580_1, 16013_1, 531_1, 500_1, 530_1, 50_1
Remarks:	

possible crabpot

Hydrographer Recommendations



Figure 2.8.1

2.9) Contact/Point 0001/1 / sonar_data120703170500

Survey Summary

Survey Position:	57° 42' 41.1" N, 152° 30' 41.8" W
Least Depth:	[None]
TPU (±1.96σ):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2012-187.07:51:51 (07/05/2012)
Survey Line:	$d00171\ /\ fa_{2805}\ k5k_sss_tow_2012\ /\ 2012\ -185\ /\ sonar_data120703170500$
Contact/Point:	0001/1

Charts Affected: 16596_1, 16595_1, 16594_1, 16593_1, 16580_1, 16013_1, 531_1, 500_1, 530_1, 50_1

Remarks:

possible crabpot

Hydrographer Recommendations



Figure 2.9.1

2.10) Contact/Point 0001/1 / sonar_data120703175700

Survey Summary

Survey Position:	57° 42' 41.3" N, 152° 31' 36.3" W
Least Depth:	[None]
TPU (±1.96σ):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2012-187.08:28:08 (07/05/2012)
Survey Line:	d00171 / fa_2805_k5k_sss_tow_2012 / 2012-185 / sonar_data120703175700
Contact/Point:	0001/1
Charts Affected:	16596_1, 16595_1, 16594_1, 16593_1, 16580_1, 16013_1, 531_1, 500_1, 530_1, 50_1

Remarks:

Possible crabpot

Hydrographer Recommendations



Figure 2.10.1

2.11) Contact/Point 0001/1 / sonar_data120703171700

Survey Summary

Survey Position:	57° 42' 41.9" N, 152° 30' 50.7" W
Least Depth:	[None]
TPU (±1.96σ):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2012-187.09:10:13 (07/05/2012)
Survey Line:	$d00171\ /\ fa_{2805}k5k_{sss}tow_{2012}\ /\ 2012185\ /\ sonar_data120703171700$
Contact/Point:	0001/1

Charts Affected: 16596_1, 16595_1, 16594_1, 16593_1, 16580_1, 16013_1, 531_1, 500_1, 530_1, 50_1

Remarks:

possible crabpots

Hydrographer Recommendations



Figure 2.11.1

2.12) Contact/Point 0001/1 / sonar_data120703175800

Survey Summary

Survey Position:	57° 42' 42.0" N, 152° 31' 24.1" W
Least Depth:	[None]
TPU (±1.96σ):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2012-187.09:24:44 (07/05/2012)
Survey Line:	d00171 / fa_2805_k5k_sss_tow_2012 / 2012-185 / sonar_data120703175800
Contact/Point:	0001/1
Charts Affected:	16596_1, 16595_1, 16594_1, 16593_1, 16580_1, 16013_1, 531_1, 500_1, 530_1, 50_1

Remarks:

Possible crabpot

Hydrographer Recommendations



Figure 2.12.1

2.13) Contact/Point 0001/1 / sonar_data120703173400

Survey Summary

Survey Position:	57° 42' 44.5" N, 152° 31' 04.3" W
Least Depth:	[None]
TPU (±1.96σ):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2012-187.09:12:22 (07/05/2012)
Survey Line:	d00171 / fa_2805_k5k_sss_tow_2012 / 2012-185 / sonar_data120703173400
Contact/Point:	0001/1

Charts Affected: 16596_1, 16595_1, 16594_1, 16593_1, 16580_1, 16013_1, 531_1, 500_1, 530_1, 50_1

Remarks:

probably not a crab pot.

Hydrographer Recommendations



Figure 2.13.1

2.14) Contact/Point 0001/1 / sonar_data120703164200

Survey Summary

Survey Position:	57° 42' 46.4" N, 152° 30' 30.9" W
Least Depth:	[None]
TPU (±1.96σ):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2012-188.05:38:31 (07/06/2012)
Survey Line:	d00171 / fa_2805_k5k_sss_tow_2012 / 2012-185 / sonar_data120703164200
Contact/Point:	0001/1
Charts Affected:	16596_1, 16595_1, 16594_1, 16593_1, 16580_1, 16013_1, 531_1, 500_1, 530_1, 50_1

Remarks:

possible crabpot

Hydrographer Recommendations



Figure 2.14.1

2.15) Contact/Point 0001/1 / sonar_data120703170800

Survey Summary

Survey Position:	57° 42' 49.4" N, 152° 30' 22.3" W
Least Depth:	[None]
TPU (±1.96σ):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2012-187.07:49:47 (07/05/2012)
Survey Line:	d00171 / fa_2805_k5k_sss_tow_2012 / 2012-185 / sonar_data120703170800
Contact/Point:	0001/1
Charts Affected:	16596_1, 16595_1, 16594_1, 16593_1, 16580_1, 16013_1, 531_1, 500_1, 530_1, 50_1

Remarks:

high probability this is a crabpot

Hydrographer Recommendations



Figure 2.15.1

2.16) Contact/Point 0001/1 / sonar_data120703164000

Survey Summary

Survey Position:	57° 42' 54.9" N, 152° 30' 11.6" W
Least Depth:	[None]
TPU (±1.96σ):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2012-187.07:46:49 (07/05/2012)
Survey Line:	d00171 / fa_2805_k5k_sss_tow_2012 / 2012-185 / sonar_data120703164000
Contact/Point:	0001/1
Charts Affected:	16596_1, 16595_1, 16594_1, 16593_1, 16580_1, 16013_1, 531_1, 500_1, 530_1, 50_1
Remarks:	

possible crabpot

Hydrographer Recommendations



Figure 2.16.1

2.17) Contact/Point 0001/1 / sonar_data120703195100

Survey Summary

Survey Position:	57° 43' 07.2" N, 152° 32' 22.2" W
Least Depth:	[None]
TPU (±1.96σ):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2012-187.08:56:57 (07/05/2012)
Survey Line:	d00171 / fa_2805_k5k_sss_tow_2012 / 2012-185 / sonar_data120703195100
Contact/Point:	0001/1
Charts Affected:	16596_1, 16595_1, 16594_1, 16593_1, 16580_1, 16013_1, 531_1, 500_1, 530_1, 50_1
Remarks:	

Possible crabpot

Hydrographer Recommendations



Figure 2.17.1

2.18) Contact/Point 0001/1 / sonar_data120703194300

Survey Summary

Survey Position:	57° 43' 08.5" N, 152° 32' 16.6" W
Least Depth:	[None]
TPU (±1.96σ):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2012-187.08:25:11 (07/05/2012)
Survey Line:	d00171 / fa_2805_k5k_sss_tow_2012 / 2012-185 / sonar_data120703194300
Contact/Point:	0001/1
Charts Affected:	16596_1, 16595_1, 16594_1, 16593_1, 16580_1, 16013_1, 531_1, 500_1, 530_1, 50_1

Remarks:

probably not a crab pot

Hydrographer Recommendations



Figure 2.18.1

2.19) Contact/Point 0001/1 / sonar_data120703195200

Survey Summary

Survey Position:	57° 43' 15.2" N, 152° 32' 14.4" W
Least Depth:	[None]
TPU (±1.96σ):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2012-187.08:27:16 (07/05/2012)
Survey Line:	d00171 / fa_2805_k5k_sss_tow_2012 / 2012-185 / sonar_data120703195200
Contact/Point:	0001/1

Charts Affected: 16596_1, 16595_1, 16594_1, 16593_1, 16580_1, 16013_1, 531_1, 500_1, 530_1, 50_1

Remarks:

possible crabpot

Hydrographer Recommendations



Figure 2.19.1

2.20) Contact/Point 0001/1 / sonar_data120703201300

Survey Summary

Survey Position:	57° 43' 15.7" N, 152° 32' 36.7" W
Least Depth:	[None]
TPU (±1.96σ):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2012-187.08:41:04 (07/05/2012)
Survey Line:	$d00171\ /\ fa_{2805}\ k5k_sss_tow_2012\ /\ 2012-185\ /\ sonar_data120703201300$
Contact/Point:	0001/1
Charts Affected:	16596_1, 16595_1, 16594_1, 16593_1, 16580_1, 16013_1, 531_1, 500_1, 530_1, 50_1

Remarks:

Possible crabpot

Hydrographer Recommendations



Figure 2.20.1

2.21) Contact/Point 0001/1 / sonar_data120703201700

Survey Summary

Survey Position:	57° 43' 29.6" N, 152° 31' 55.4" W
Least Depth:	[None]
TPU (±1.96σ):	THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp:	2012-187.08:58:49 (07/05/2012)
Survey Line:	d00171 / fa_2805_k5k_sss_tow_2012 / 2012-185 / sonar_data120703201700
Contact/Point:	0001/1
Charts Affected:	16596_1, 16595_1, 16594_1, 16593_1, 16580_1, 16013_1, 531_1, 500_1, 530_1, 50_1

Remarks:

possible crabpot

Hydrographer Recommendations



Figure 2.21.1

APPROVAL PAGE

F00618

Data did not meet current specifications as determined by the OCS survey acceptance review process. F00618 is a reconnaissance survey, data density did not meet object detection specifications. With the exception of the DTON located at 57-43-05.2N, 152-32-55.8W, the survey will not be applied to NOAA charting products.

The following products will be sent to NGDC for archive:

- F00618_DR.pdf
- Processed survey data and records
- F00618_GeoImage.pdf

The survey evaluation and verification has been conducted according to current OCS specifications and procedures.

Approved:_____

Peter Holmberg Cartographic Team Lead, Pacific Hydrographic Branch

The survey has not been approved for chart updates. The data will be archived at NGDC so that it can be made available for other uses.

Approved:_____

CDR David Zezula, NOAA Chief, Pacific Hydrographic Branch