12BIM03 - 12BIM04

BJ NANCY KYLE JULIE

OVERCAST, BREEZY out of N
T-STORMS BUILDING to S+W 12:30CDT

INSTALL BENCHMARK "BERM"
ON NORTH END of CHANDELEUR
ISLANDS

RODS INSTALLED ~~THI THI~~ I

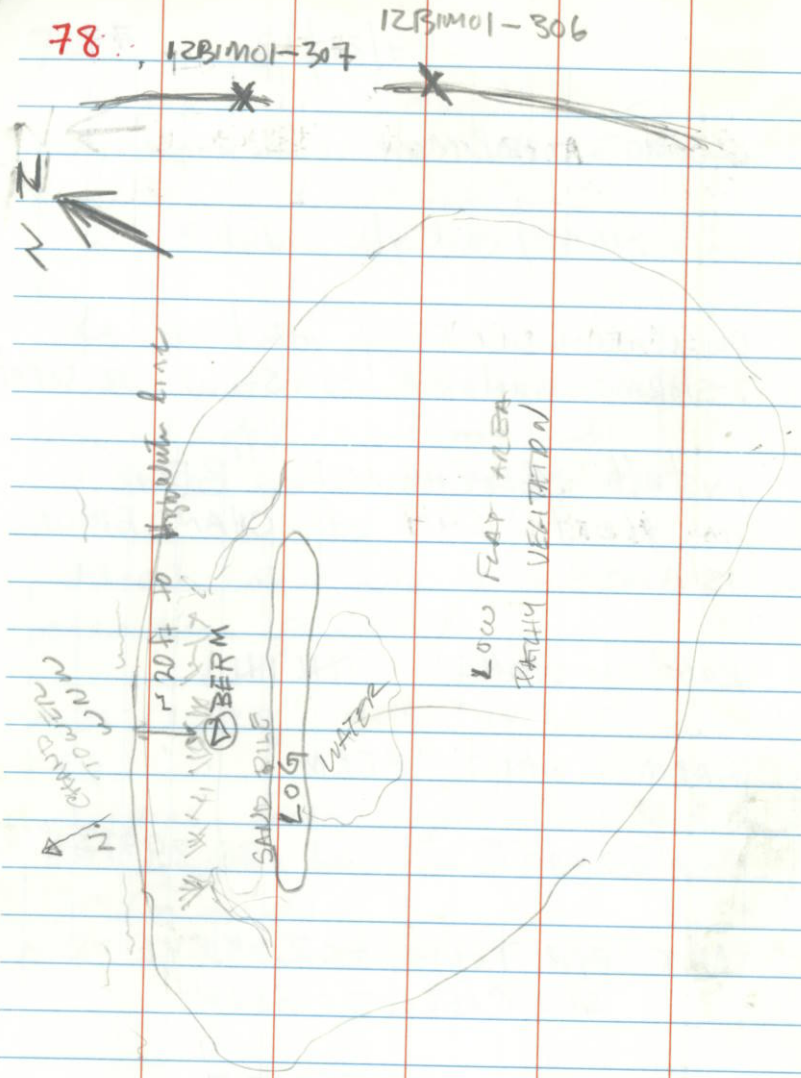
GARMIN WAYPT "BERM"

N30.00792° W 088.84777°

ANT P/N 70145-02 REVE
S/N CR62005-38004

PROFlx 500 PN 802077
S/N 201038003

~~27 45 48.5818 N = 21.37M~~
~~82 38 15.9115 W RTK BASE?~~



Boat ACCESS pt "BERM B"
N 30 0.4290 W 88 51.2133

SEABIRD DIVE

START 13:37

ON BOAT 13:47

07/23/12

SWAP BASE TMRK

stop 23:58:00 utc

start 30 sec int (night)
00:03:00 No Ext Battery

07/24/12

SWAP BASE TMRK

stop 12:10:40 utc

start 1 SEC INT 12:15:30

SWAP BASE TMRK

RECEIVER NOT RECORDING

START 30 SEC INT 00:31:15 SESSA

Ext BATTERY NO CHARGE
RESTART SESS B INT only

7/25/12

SWAP BASE TMRK

stop UTC 12:53:45

start 1 SEC REC INT
12:58:00

TWIN VEE - SWAP TMRK night
BASE.

7/26/12

TWIN VEE SALINITY 154216
@ SOUTHERN VI

CAT BOAT 1540 @ SVI

* NEED TMRK REC/ANT INFO

SWAP TMRK

stop 13:09:50

REC P/N 800889 REV D
S/N ZE12005260 34

ANT MODEL 701945-02 REV E
S/N CR6200548008

start REC INT 1 SEC
13:16:00

SETUP ON BASE MARK

ANT P/N 701945-02 REV E
S/N CR6200548008

REC ProFlex 500 P/N 802077
S/N 2010380003

start 8:49 CST

* ANT HT IS NOT 2 m
TRIPOD IS ALL THE WAY DOWN

SHORELINE HAS ERODED to
MONUMENT

* NEED ANT HT MEASUREMENT

7/27/12

SWAP BASE TMRK

stop 12:12:00 utc

PHOTOS - 2X looking E
to Gulf, 1X looking W
to PELICAN, 1X MONUMENT

start REC INT 1 SEC
12:21:45

* REC WAS off

SWAP BASE MARK*

SET REC INT 1 SEC
7:42 CDT

ANT # 1.246?

*REMEASURE @ BREAK DOWN

SWAP BASE TMRK

Stop 23:29:30

start 30 SEC REC INT
23:35:45

SWAP BASE MARK

TRADE out ProPlex
will REINSTALL w/ Z-XTREME
IN A.M.

7/28/12

SWAP BASE TMRK

Stop 12:19:45

start 1SEC REC INT
12:27:45

MARK

start 1 SEC REC INT
12:42:00

AskTek Z XTREME
P/N 800889 REV D
S/N Z1200 542047

SWAP BASE TMRK

Stop 23:39:10

Start REC INT 30 S
25:44:00

SWAP BASE MARK

stop 23:54:45 ; REFUEL

start 30 SEC REC INT
23:59:30

7/29/12

SWAP BASE TMRK

Stop 12:16:15

SWAP FOR PROFLEX REC

SWAP BASE MARK

stp 12:32:45

START 1 SEC REC INT
12:42:27

SWAP BASE MARK

stop 23:18:30

start REC INT 30 SEC
23:23:00

SWAP BASE TMRK

LIDAR - ground control

~4:00 CDT (TOE going out -
EXPOSED MUDFLATS &
GULF-SHOE SHOALS

* NEED ANT, REC INFO
AND HT

SWAP BASE TMRK, MARK

7/31/12

SWAP BASE MRK 22:37

SWAP BASE MARK

stop 12:54:45

START 1 SEC REC INT
13:01:45

LIDAR GRD SUPPORT

N END of BERM

ASHTEK MARINE ANT
P/N 701975-01 REV A
S/N 5952

REC ZXTREME MODE | 800889 D
S/N ZE1200 526034

USGS SPCMCS FACS Operations Log - Kinematic Survey

SPCMSC FAN#		
Kinematic Rover	Recording Interval (s) 1.0s	Comments
Platform (boat, buggy, pole, etc)	Twin Vee	
Receiver Make/Model#	Ashtech Profex 500 802077	
Receiver S/N#	ZO1038002	
Antenna Model or P/N#	Thales CR - No Dome 701945.02 RevE	
Antenna S/N#	CR620054700S	
Antenna Height (m)		
Offset Diagram for Antenna?	No Diagram	

Primary Static Base Information	Recording Interval (s)	Comments
Base Location	~~Berm~~ N. Island in Chart. Chan	File conversion not working. Switch to ZX on day 2. See next page.
NGS PID # if applicable	N/A	
Base Site Name:	BERM	
Receiver Make/Model#	Ashtech PF500 P/N 802077	
Receiver S/N#	2010380003	
Antenna Model or P/N#	THALES CR ND P/N 701945.02RE	Install detailed in J. Bernier log book. Pics taken
Antenna S/N#	CR620053800 4	
Tripod Height (m)	2.000 m	

Secondary Static Base Information	Recording Interval (s)	Comments
Base Location	TMRK "Temporary" ΔMARK reset	→ on sound side E of the "Peliean" fish camp
NGS PID # if applicable	N/A	
Base Site Name	TMRK	
Receiver Make/Model#	Ashtech ZXtreme	
Receiver S/N#		
Antenna Model or P/N#	Thales CR ND	
Antenna S/N#		
Tripod Height (m)	2.000 m	

USGS SPCMCS FACS Operations Log - Kinematic Survey Page _____ of _____

SPCMSC FAN#	Crew:	Dates:
Kinematic Rover	Recording Interval (s)	Comments
Platform (boat, buggy, pole, etc)		
Receiver Make/Model#		
Receiver S/N#		
Antenna Model or P/N#		
Antenna S/N#	[redacted] CR	
Antenna Height (m)		
Offset Diagram? Photos?	No dig	

Primary Static Base Information	Recording Interval (s)	Comments
Base Location	Northern most Isl. Chand. Chain	changed receiver on 1° - Δ BERM
NGS PID # if applicable	n/a	
Base Site Name:	BERM	
Receiver Make/Model#	Ashtech Zextreme 800889 r.B	
Receiver S/N#	ZE1200 23717	
Antenna Model or P/N#	Thales CR ND 701945-02 r.E	
Antenna S/N#	CR620053800 4	
Tripod Height (m)	2.000m	
Diagram? Photo?		Anchor - Approach from NW - Anchor ~40m from shore

Secondary Static Base Information	Recording Interval (s)	Comments
Base Location	On Δ designated "MARK"	
NGS PID # if applicable	→	
Base Site Name	MARK	
Receiver Make/Model#	Zxtreme 800889 r. D	
Receiver S/N#	ZE1200 542647	
Antenna Model or P/N#	701945-02 r. E	
Antenna S/N#	CR620054800 8	
Tripod Height (m)	CFHT-SHORT 1.246?	
Diagram? Photo?		

USGS SPCMCS FACS Operations Log - Kinematic Survey

SPCMSC FAN# 12BFM04

Kinematic Receiver Log TVEE - Rover

	Local Time		UTC Time			
Date	Start	Stop	Start	Stop	Epochs	Comments
~~07/27/12~~	0819	1750	1319	2250		missed this log previous days not recorded or shut
07/26/12						
~~07/27/12~~	0755		1255			
07/28/12	0809	1855	1309	2355		
07/29/12	0801		1301			
07/30/12	1005		1505			late start setting up BGAN link
07/31/12	0755	1725	1255	2225		Break down base and remove

SPCMSC FAN#

Primary Static Base Receiver Log – TMRK

	Local Time Zone:		GPS			UTC Time or GPS Seconds			
Date	Start	Stop	Week	Session	RI	Start	Stop	Total Epochs	Comments
7/26 ~~07/27/12~~					1.0		0000		
7/26 ~~07/27/12~~					30.0	0005			
									OFF when we arrived
07/20/12	0915				1.0	1415			

USGS SPCMCS FACS Operations Log - Kinematic Survey

Page 1 of _____

SPCMSC FAN# 12BEM04

Secondary Static Base Receiver Log – BERM

	Local Time Zone:		day GPS			UTC Time or GPS Seconds			
Date	Start	Stop	Week	Session	RI	Start	Stop	Total Epochs	Comments
07/26/12 ~~07/27/12~~	809	~~2300~~ 1800	208	A	1.0	1309	2300		missed this log, previous days not logged on sheet
07/26/12 ~~07/27/12~~	~~2335~~	~~2~~	208						
07/26/12 ~~07/27/12~~	1805	0742 (	209		30.0	2305	1242		both (both) dead
07/27/12	0746		209		1.0	1246			
07/27/12		758	209		30.0		1258		
07/29/12	804	1835	210		1.0	1304	2335		
07/28/12	1838				30.0	2338			
~~07/29/12~~			211		1.0s				
					30.0s		*OFF		*off when arrived
07/30/12	0958	~~0958~~	212		1.0s	1458			left o/n due to T-storms
07/31/12		0745					1245		
07/31/12	0749	1720	213		1.0s	1249	2220		

USGS SPCMCS FACS Operations Log - Kinematic Survey

SPCMSC FAN#						
Primary Static Base Receiver Log – MARK						
	Local Time		UTC Time			
Date	Start	Stop	Start	Stop	Epochs	Comments
7/26 ~~07/27/12~~				2350		
7/26 ~~07/27/12~~			2355			
				1225		
07/30/12			1230			

SINGLE BEAM

USGS SPCMSC Logsheet - Sound Velocity

USGS SPCMSC FAN# _____ UTM Zone = 16 N Time Zone = CDT

SVP File Name	Date Taken	DOY YY	Time	Latitude or Easting	Longitude or Northing	Depth (m)	Hypack Target Taken	SWATHplus "Here and Now"
TGT SVP1 1537.8 (BOT)	07/23/12		142 pm	29 56 29.52	88 51 2671	3.64	yes	1537.80 * see back
1624.69 (MID) →							Name SVP072312	1624.69
1619.84 (SURF)							1:42	1619.84
TGT Name			UTC					
SV-1	07/24/12	206-12	1534			Surf	yes SV-1	1540.90
SVP-2	07/24/12	206-12	1736	30°03'55.67"	88°49'15.34"	Surf	yes	1540.42
						05m	SVP-2	1541.13
						N9.5m		1542.32
SV-2						Surf.	SV-2	1542.8
SV-3	07/25/12	207-12	1710	30°00'51.2830	88°51'13.4057	Surf.	SV-3	1544.79
SVP-2	07/26/12	207-12	1927				Surface ✓	1544.59
							2 meters	1541.23
							4 meters	1541.80
SV-4	07/26/12	207-12	2017	30°01'34.9079	88°50'44.2594"	≈1.0m		1543.44

* Not sure if the SVP probe is working correctly. readings are all over the place. a SOS of 1537 is most likely the correct value for SVP 1

SINGLE BEAM

USGS SPCMSC Logsheet - Sound Velocity

USGS SPCMSC FAN# 12BIm04 UTM Zone = 16N Time Zone = CDT

~~SVP File Name~~ TGT	Date Taken	DOY YY	Time	Latitude or Easting	Longitude or Northing	Depth (m)	Hypack Target Taken	SWATHplus "Here and Now"
SV-5	07/25/12	207-12	22.05	30 01 13.7968N	88 51 57.388W	1.0m	yes	1546.56
07/27/12 → Comparison	Post	on	07/26/12	TVEE	154206	CAT	15:40:00	
at back	of	VI	Prior	to	Survey	ops		
SVP-3	7/26/12	208-12	1415				Surface (8cs)	1541.8
							1.5m	1541.9
							3.0m	1542.3
SV-6	07/26/12	208-12	1845	29°57'33.697"	88°49'00.475"	Surf.	yes	1543.7
SV-7	07/26/12	208-12	21:45	30°01'07.673"	88°51'05.09"	Surf	yes	1549.25
	07/27/12							
							yes	
SVP-4	07/27/12	209-12	15:30	29°57'11.6245	88°48'28.106"	1.0m Surface	Surface	1542.57
						=3.0m	Mid	1544.30
						≈6.0m	Bottom	1543.30

SINGLE BEAM

USGS SPCMSC Logsheet - Sound Velocity

USGS SPCMSC FAN# 12BIM04 **UTM Zone =** 16 N **Time Zone =** CST ~~CDT~~

SVP File Name	Date Taken	DOY YY	Time	Latitude or Easting	Longitude or Northing	Depth (m)	Hypack Target Taken	SWATHplus "Here and Now"
SV-8	07/27/12	209-12	18:28	29 56 41.6233	88 48 36.2106	5.04	y	1542.61
SV-9	07/27/12	209-12	~~18~~ 2242	29 56 38.8855	88 47 53.6068	8.0	y	1542.55
SVP-5	07/28/12	210-12	1354	29 52 19.4617	88 49 07.6565	Surf	y	1541.85
↓						1.0		1541.74
↓						2.0		1542.17
SV-10	07/28/12	210-12	1855	30 01 39.1851	88 52 26.0017	Surf	y	1542.77
SV-11	07/28/12	210-12	22:52	30° 00' 57.489"	88° 52' 47.7408"		y	1543.55
SVP-6	07/29/12	211-12	16:37:24	30° 02' 16.004"	88° 52 44.4602	~~Surf~~ 5.4m	y	1538.23
↓						2.5m		1538.23
↓						5.4m		1538.23
SV-11	07/29/12	2112	19:28:20	30 02 41.2838	88 52 37.6545	S	y	1538.23
SV-X	07/30/12	212-12	16.25			S	y*	—

no variance broken? ↗ UH OH!

SV attempted no readings

Page _____ of _____

General Information		
Date:	07/23/2017	Weather Notes:
Julian Day:		
Mapping Project:	Chandeleur Berm 12B	IM03:04
Estimated Location:	"BERM"	
		Breezy · 5-15 KTS slight to moderate chop
Boat:	R/V Twin Vee	
Crew/Affiliation:	BT Reynolds / USGS St. Pete	
	Kyle OKelso / USGS St. Pete	

Boat Information		
Receiver Make/Model #	Ashtech Proflex 500	
Receiver S/N #		
Antenna Model # :	Thales choke Ring	
Antenna S/N #:		
**Antenna Height:		
Fathometer Make/Model:	Knudsen 320 BP	200 KHz
Power Setting		
Gain Setting		
TVG Setting		
Speed of Sound Setting		
*Bar Check	At PCM depth 0.92m Hypack 0.92-0.93	
Planned Line File Used:	TV Priority 1	
Planned Line File Used:		
Base used for Surveying:		

Base Station Information	BERM	TMARK
Base Location:	N. Chandeleur Is	Near Pelican
Base Site Name:	BERM	TMRK
Receiver Make/Model #:	Thales choke Ant	Thales choke ant
Receiver S/N #: (CR620054B003)	701945-02 Rev E	701945-02 Rev E
Antenna Make/Model # :	Ashtech Proflex 500	Ashtech Z extreme
Antenna S/N #:		800582 REV D SN ZXI200526034
Tripod Height:	2.0 m	2.0 m
Base Overnight?	yes *	

* Receiver established @ "BERM" lost Power sometime between ~~Friday~~ Saturday afternoon and Monday morning.

Lines Surveyed	Hypack Line	
Planned hnw to		
TV Priority 1		
	004 1419	
	005 - 1501	005 - ... extension of 004 line
	006 - 1615	
		Not reaching well to shallow H_2O especially with Seagrass
	Too shallow @ end of 006-1615	changed TVG to 20 log R before 006-1615
	003 - 1704	Transitted N to line 3, priority 1
	003 1732	Hit control S on accident instead of ending the line, decided to keep it going because it looks like it might get deeper echosounder is jumping

USGS SPCMSC FACS Operations Log - Single Beam Bathymetry

SPCMSC FAN #

Page 1 of

DOY YY	UTC Time	Line #	Hypack Line Name	Knudsen Reading	SOS (m/s)	Bar Check Reading (m)	Comments
205-12	→ on old	log sheet →					
206-12	1458	2(S)*	002-0958	P:1 AG-PG:1 TXBLNK 0.3	1540.9?		Change Primary Data on ΔBEAMS SWAP 2Xtreme for PPS00
↓	1538	2(S)	002-1538	Sens.:1 PD 0.8 ms chirp			HOST NMEA STRING Restart where left off
	1611	1(A)	001-1611	↓			6 trgt P→3 PG→8
				Power:1 AutoGain			"changed Settings"
				Processing Gain:1			PG→4
				Transmit Blank:0.3			range to 20 fixed
				Sensitivity:1			doubled back to reservey
				Pulse Type: 0.8ms/s chirp			"bad" Sounding
	1752	1(A) 2(G)	002-1752				changed range on fathometer back to 10m @ ≈ 18:07 UTC
	18:41	3(G)	003-1841				
	19:35	4(G)	004-1935				
	20:27	5(G)	005-2027				
	21:34	6(G)	006-2134	Gain→70 Power:3			changed Settings
				PG:2			stopped for SV_2
	21:53	6(G)	006-2153				
*(S)-Sound side (G)-Gulf side (A)-All							

USGS SPCMSC FACS Operations Log - Single Beam Bathymetry

SPCMSC FAN #

DOY YY	UTC Time	Line #	Hypack Line Name	Knudsen Reading	SOS (m/s)	Bar Check Reading (m)	Comments
207-12	15:55	1 TV-2	001-1555	GAIN-30, Pwr-1, PG-1 TX Blank-0.2, Sense-5	0.8 chirp		
	16:15	2 TV-2	002-1615				
	16:32	3 (S)	003-1632				settings seem to be working well for shallow H_2O
	16:50	4	004-1650		1544.7		SV-3 & end
	17:20	5	005-1720				
	17:41	6	006-1741				
	17:56	7	007-1756				
	18:15	8	008-1815				
	18:33	9	009-1833				
	18:54	10	010-1854				
	19:12	11	011-1912				
	19:35	11	011-1935		[redacted]		SVP cast SVP-3 after 011-1912
	19:41	12	012-1941		1544	5?	surface
	20:20	13	013-2020		1543		SV-4 after 012-1941
	21:01	14	014-2101				Ended @ old island platform
	21:25	15	015-2125				started West of old island platform
	21:50	16	016-2150				
	22:26	16	016-2226		1546.5		SV-5 after 016-2150
	22:35	17	017-2235				

USGS SPCMSC FACS Operations Log - Single Beam Bathymetry

SPCMSC FAN # 12BIM04 12BIM04_(Refix) Page _____ of _____

DOY YY	UTC Time	Line #	Hypack Line Name	Knudsen Reading	SOS (m/s)	Bar Check Reading (m)	Comments
~~208-12~~	14:17	TK3-19	019_1417	Gain 70, Pwr 1, PG 1, Tx Blank 0.2, Sense 5	1541.8		SVP_3 ~~at begin~~ to get Begin priority 3 out of wind
208-12	14:23	" 20	020_1423	↓	↓		Swell from the NW
↓	14:29	" 21	021_1429	↓	↓		
	14:35	" 22	022_1435	↓	↓		
	14:42	" 23	023_1442	↓	↓		
	14:49	" 24	024_1449	↓	↓		
	14:55	25	025_1455				
	15:02	26	026_1502				
	15:29	27	027_1529				
	15:15	28	028_1516				
	15:22	29	029_1522				
	15:29	30	030_1529				
	15:36	31	031_1536				
	15:44	32	032_1544				
	15:51	33	033_1551				
	15:59	34	034_1559				
	16:07	35	035_1607				
	16:14	36	036_1614				
	16:21	37	037_1621				
	16:31	38	038_1631				

USGS SPCMSC FACS Operations Log - Single Beam Bathymetry

SPCMSC FAN # 12BIM04 Page _____ of _____

DOY YY	UTC Time	Line #	Hypack Line Name	Knudsen Reading			SOS (m/s)	Bar Check Reading (m)	Comments
~~208-12~~	16:39	TV3-39	039-1639	G:70 1X PLNX	PWR:1 0.2	PG:1 5:5	1541.8		
208-12	16:47	" 40	040-1647						
	16:54	" 41	041-1654						Sprinkles
	17:02	" 42	042-1702						
	17:09	" 43	043 1709						
	17:17	" 44	044 1717						
	17:25	" 45	045 1725						
	17:33	" 46	046-1733						
	17:40	" 47	047-1740						
	17:48	" 48	048-1748						
	17:56	" 49	049-1756						
	18:03	" 50	050-1803						
	18:10	" 51	051-1810						
	18:18	" 52	052-1818						
	18:25	" 53	053-1825						
	18:33	" 54	054-1833						
	18:40	" 55	055-1840						SV-6 taken
	18:47	" 55	055-1847				1543.7		
	18:53	" 56	056-1853						fuel
	19:00	" 57	057-1900						Stopped line to fill tank
	19:12	" 57	057-1912						

USGS SPCMSC FACS Operations Log - Single Beam Bathymetry

SPCMSC FAN # 12BIM04 (12BIM04_) Make these #blocks Settings Page _____ of _____

DOY YY	UTC Time	Line #	Hypack Line Name (12 ~~BIM04~~)	Knudsen Reading			SOS (m/s)	Bar Check Reading (m)	Comments
208_12	19:20	~~TV3 058~~	058_1920	Gain	70	P:1	1541.8		~~Edit~~ Widen
	19:29	059	059_1929	Pr. Gain	1	Tx Blnk 0.2			
				Sensitivity	5				
	19:40	TV3 137	137_1940						Shoreline from TV359 heading N
									Large T-storm off to West - HDOP 0.9
									Zig-zagged between shore and shoal for a while
	20:17	TV3 134	134_2017						
									→ between shore and berm but navigable waters are restricted to middle of the channel
	20:53	TV-2 068	068_2053						changed to Priority II lines
									~~NW-SE~~ NW-SE crossing
	21:05	TV-2 011	011_2105						
			012_2118		NO GOOD				selected incorrect line name

USGS SPCMSC FACS Operations Log - Single Beam Bathymetry

SPCMSC FAN # Page _____ of _____

DOY YY	UTC Time	Line #	Hypack Line Name	Knudsen Reading			SOS (m/s)	Bar Check Reading (m)	Comments
				GAIN	PWR	PG			
208-12	21:19	010	010-2119	70	1	1	Sensitivity 5	Tx Blanking 0.2	
	21:28	009	009-2128						
	21:36	008	008-2136						
	21:51	007	007-2151						
	21:58	006	006-2158						
			005-2205						
			004-2212						
			003-2218						
			002-2224						

USGS SPCMSC FACS Operations Log - Single Beam Bathymetry

SPCMSC FAN # 12BIM04 Prefix: 12BIM04_ (END Knudsen) (SOS) Page 7 of _____

DOY YY	UTC Time	Line #	Hypack Line Name	Knudsen ~~Reading~~ Line	SOS (m/s) End	Bar Check Reading (m)	Comments for both HF & LF
209-12	13:44	SVP 136	136_1344	209-1343_100	1412		Same settings as 208-12
↓	14:14	139	139_1415	209_1414_101		*	Attempting to record the
	15:45	139	139_1545	209_1545_100	15:51:34	1542.57	Binary (waveform) and the
			SVP_4 taken aftn 139 - 1415				SEGY files on the Knudsen
	15:54	60	060_1554	209-1554-101	16:09:04	|	computer C: → current Projects →
	16:09	61	061_1609	209_1610_102	16:26:38	|	12BIM04 → 209-12
	16:26	62	062_1626	209_1626_103	16:42:16		
Accident →			062_1642	Junk Line			* Note: Knudsen computer
	16:42	63	063_1642	209_1643_104	17:01:18		does NOT have gps coming
	17:01	64	064_1701	209_1701_105	17:17:46		in to serial port 1
				at Tgt "Lofreq Knudsen"			
				changed Gain: AGC	PWR: 2		Knudsen Power Cable Fried -
				on LF only!			fixed and regained line 139
	17:17	65	065_1717	209_1718_106	17:34:20		Heading South.
	17:34	66	066_1736	209_1740_~~108~~ 107	*	SOS to 1543 *	
				209_1743_108	restart → something wierd w/ segy files		
				209_1746_200	- w/ new setup for file naming		
				1800:00			
	18:01	67	067_1801	209_1801-201	18:19:40		
	18:19	68	068_1819	209_1820-202	18:27:26		

USGS SPCMSC FACS Operations Log - Single Beam Bathymetry

SPCMSC FAN # 12BIM04 (12BIM04_)(209_) END TIME SOS Page 8 of

DOY YY	UTC Time	Line #	Hypack Line Name	Knudsen Reading Line	SOS (m/s)	Bar Check Reading (m)	Comments
209-12	18:34	TV3 141	141_1834	209_1835_203	18:44:40	1543	Headed N to avoid the
209-12	19:08	TVZ 014	014_1908	209_1909_204	19:14:47		storm, picked E-W
	19:14	15	015_1914	209_195_205	19:19:3		trending line - priority
	19:19	16	016_1919	1919_206	19:23:45		2 one
	19:23	17	017_1923	1924_207	19:28:19		Power: 2 PC: 5
	19:28	18	018_1928	1928_208	1933:59		PG→3
	19:33	19	019_1933	1934_209	1937:45		
	19:37	20	020_1937	1938_210	19:43:27		
	19:43	21	021_1943	1944_211	19:48:05		
	19:48	22	022_1948	1948_212	19:53:15		
	20:01	TV3 135	135_2001	2002_213	20:25:44		Too windy in Priority 2 switching back to P-3
	20:26	138	138_2026	2027_214	20:53:05		
	20:53	140	140_2053	2054_215	21:08:16		Took to E-W line 73
	21:09	072	072_2109	2108_216	21:26:28		PG-3, Fiddling w/ Tx blank at
Δ settings	Turn line		at TGT	LF: Gem ABC PG: 0			beginning of 2108_216
			TG Freq change	Seaglider off			
			LF freq				
	21:27	071	071_2127	2126_217	21:44:3		
✗	✗	✗	069_2144	✗			Delete - Wrong Line

USGS SPCMSC FACS Operations Log - Single Beam Bathymetry

SPCMSC FAN # 12BTM04 (12BEM04_) (209_/210_) KNUDSEN LINE END TIME Page 9 of _____

DOY YY	UTC Time	Line #	Hypack Line Name	Knudsen Reading	~~SOS~~ (m/s)	~~Bar Check Reading~~ (m)	Comments
209-12	21:46	TV3 070	070-2146	2146_218	22:00	:05	
	22:00	069	069_2200	2201-219	22:18	:52	
	22:18	068	068-2218	2223-220	22:30	:43	First Part of line is garbage - ~~on~~ ok
	22:45	142	142-2245	2245_221	22:52	1:10	SOS 1542.55
		TV_3					
210-12	14:09	73	073-1409	210-1408-200	14:25	:25	HF - Same as ~~before~~ (last few lines) LF - Antigua, Pwr -1, Pulse type 3.2ms
	14:25	74	074 1425	210-1425-201	↓ continued →		PG-4, Tx Blank - 0.2, Sente - 1
			075_1441	210_1425-201			* changed Pulse type to 1.6 at end of 073-1409
* Dodging T-storms				DELETED 2 Files Collected on plane from storm LF Numbering scheme		+1?	Mining!
	Switched to	TV-2					
	16:12	018	018-1612	210-1612-203		16:37:18	@ HF → LF Back to meter
	16:37	019	019-1637	1632-204		16:55:59	
	16:56	020	020-1656	210_1656_205		17:07:34	
	17:07	021	021-1707	210_1707_206		17:18:36	
	17:18	022	022-1718	210_1719_207		17:30:15	
	17:30	023	023-1730	210-1730-208		17:40:31	
	17:41	024	024-1741	1740-209		18:03:55	@ tgt change HP+LF
	18:03	025	025_1803	210_1804_210		18:23:18	PG: → 4 sensitivity: off
			026-1821	1823-211		18:44:43	

USGS SPCMSC FACS Operations Log - Single Beam Bathymetry

SPCMSC FAN # 12BTM04 (12BTM04_) (210_) knudsen end time Page 10 of

DOY YY	UTC Time	Line #	Hypack Line Name	Knudsen Reading	SOS (m/s)	Bar Check Reading (m)	Comments
210_12	18:44	~~W3~~ 27	027_1844	1845_212			
	18:56	27 cont.	027_1856	1856_213	19:07	47	* SOS-1542.77 (SV_10)
	19:06	28	028-1906	1908_214	19:29	07	
	19:29	29	029_1929	1929_215	20:02	51	
	20:03	28	028_2003	2002_216	20:09:36		knudsen 210_2003_217
	~~20:08~~	27	027_2008	2008_218	~~20:14:14~~		Hit button twice!
					20:17:01		
	20:17	26	026_2017	2017_219			
	20:22	25	025_2022	2023_220	20:25:07		
			~~024_2030~~	~~2030_221~~	20:29:44		
	20:30	24	024_2030	2030_221	20:34:35		
	20:37	23	023_2037	2034_222	20:40:25		
	20:40	22	022_2040	2040_223	20:44:28		
	20:45		~~027~~ n/a	2045_224	20:45:52		stopped to change knudsen
	20:46	21	021_2046	2047_300*	20:51:26		naming scheme 300 ~~224~~
	20:51	20	020_2051	2051_301	20:56:45		
	20:56	19	019_2056	2056_302	21:00:55		
	21:01	18	018_2101	2101_303	21:05:00		
	21:05	17	017_2105	2105_304	21:11:10		
	21:10	16	016_2110	2111_305	21:14:05		

USGS SPCMSC FACS Operations Log - Single Beam Bathymetry

SPCMSC FAN # 12BIM04 (12BIM04_ (2D_ Knud Line Name Knud End Time Page 11 of

DOY YY	UTC Time	Line #	Hypack Line Name	~~Knudsen Reading~~ Knud Line Name	SOS (m/s)	Bar Check Reading (m)	Comments
210-12	21:14	015	015_2114	2114_306	21:19	35	
	21:19	014	014_2119	2119_307	21:27	:04	
	21:33	030	030_2133	2133_308	22:00	:20	
			031_...				started wrong hypack line 31
	22:00	023	023_2200	2200_309	21:16	:10	
	22:15	022	022_2215	2216_310	22:27	:35	
	22:27	021	021_2227	2227_311	22:38	:05	
	22:37	020	020_2237	2238_312	22:49	:20	*SV-11 SOS 1543.55
	22:57	071	071_2257	2258_313	23:04	:25	Crossing heading S
					Bar check 211.12	0.92	or hypack actual distance from sounder to bar
						0.92	
Settings on Knudsen for 211-12							
	MM						
Gain	Power	Pulsetype	Processing Gain	TX Blank		Syncing	
HF 70	1	0.8ms chirp	0	0.2		off	
LF Agc	1	0.8 ms chirp	0	0.2		off	

USGS SPCMSC FACS Operations Log - Single Beam Bathymetry

SPCMSC FAN # 12BM04 ~~27 III 13~~ 211-12 Knud end Line time Page 12 of

DOY YY	UTC Time	Line #	Hypack Line Name	Knudsen ~~Reading~~ Line	SOS ~~(m/s)~~	Bar Check Reading (m)	Comments
SEE SETTINGS			ON PREVIOUS PAGE				Started GPS raw @ 13:01
		TV-2	(12BM04_)	(211_)			
211-12	13:15	031	031_1315	211-1315-300	13:40:05		
	13:39	032	032_1339	1340-301	14:07:45		
	14:07	033	033_1407	1408-302	14:31:47		
	14:31	034	034_1431	1432-303	14:59:20		*TGT changed HF TX BLNK→20.7
	14:59	035	035_1459	1459-304	15:18:50		
	15:19	036	036_1519	1519-305	15:45:45		
	15:46	037	037_1546	1546-306	16:04:30		
	16:04	038	038_1604	1604-307	16:29:55		*possible feature for swath invest.
	16:30	039	039_1630	1630-308	16:36:40		
	16:50	039	039_1650	1651-309	17:03:20		*possible feature for swath invest. - target taken
	17:03	040	040_1703	1703-310	17:30:37		
	17:31	041	041_1730	1731-311	17:52:42		
	17:52	042	042_1752	1753-312	18:22:10		
	18:22	043	043_1822	1822-313	18:41:30		
	18:41	044	044_1841	1848-314	19:10:56		
	19:11	045	~~NAV~~ 045_1911	1911-315			SVP 11 (SOG 1538.23 still not functional)
	19:32	~~045~~ 045	045_1932	S/a	19:42:35		

USGS SPCMSC FACS Operations Log - Single Beam Bathymetry

SPCMSC FAN # 12BIM04 (12BIM04_) 211_12 Knud. File stop time Page 13 of

DOY YY	UTC Time	TV2 Line #	Hypack Line Name	Knudsen Reading (211_)	SOS (m/s)	Bar Check Reading (m)	Comments
211_12	19:42	046	046_1942	1943_317	20:10:31		
	20:16	047	047_2010	2010_318	20:30:11		
	20:30	048	048_2030	2030_319	21:01:34		
	21:01	049	049_2101	2101_320	21:20:30		Add 321 to line 049 2101
	21:20	050	050_2120	2120_322	21:51:09		
	21:50	051	051_2150	2151_323	22:10:45		
	22:10	052	052_2210	2211_324	22:40:21		
212_12							
		TV-2	Hypack Line	Knudsen Line	Knudsen Line stop time		
212_12	15:20	069	069_1520 *	1520_300 add 1515_301	15:15 to 069		Began 212_12 by taking crossing line 069 Heading North, settings are the same as 211_12, * will have to check to see if SVP is functional attempted SVP → not working except to blank → 0.7
		066	066_	1629_302	16:52:11		
	16:52	065	065_1652	1652_303	17:21:00		
	17:21	064	064_1721	1721_304	17:41:50		
	17:42	063	063_1742	1742_305	18:12:50		
	18:13	062	062_1813	1813_306	18:33:20		

USGS SPCMSC FACS Operations Log - Single Beam Bathymetry

SPCMSC FAN # 12BIM04 — Knudsen Line ship time — Page 14 of ____

DOY YY	UTC Time	Line #	Hypack Line Name	Knudsen ~~Reading~~ LINE NAME	SOS ~~(m/s)~~	Bar Check ~~Reading (m)~~	Comments
			(12BIM04_)				
212_12	18:33	061	~~212_061_1833~~	212_1833_307	19:03:50		
	19:03	060	060_1903	1904_308	19:23:49		
	19:23	059	059_1923	1924_309	19:56:05		
	19:55	058	058_1955	1956_311	20:15:50		and 1955_310
	20:16	57	057_2016	2016_312			and 2047_313
	20:50	56	056_2050	2049_314	~~21:~~	21:06:55	
				?			?
	21:07	055	055_2107	~~2140_317~~	21:39:50		~~Hf 2140_321~~
	21:40	054	054_2140	2140_317	22:00:09		Hf 2140_321
	21:59	053	053_2159	2200_318	22:34:55		Hf 2200_322
		071	071_2237	~~2207_319~~			add 2231.39 to ?
				2238_319			Hf 2238_324

USGS SPCMSC FACS Operations Log - Single Beam Bathymetry

SPCMSC FAN # 12BIM04 — Knudsen Line Skip time — Page 14 of _____

DOY_YY	UTC Time	Line #	Hypack Line Name	Knudsen ~~Reading~~ LINE NAME	~~SOS (m/s)~~	~~Bar Check Reading (m)~~	Comments
			(12BIM04_)				
212_12	18:33	061	~~HF~~ 061_1833	212_1833_307	19:03:50		
	19:03	060	060_1903	1904_308	19:23:49		
	19:23	059	059_1923	1924_309	19:56:05		
	19:55	058	058_1955	1956_311	20:15:50		and 1955_310
	20:16	57	057_2016	2016_312			and 2047_313
	20:50	56	056_2050	2049_314	~~HF~~ 21:06:55		
				?			?
	21:07	055	055_2107	~~2140_317~~	21:39:50		~~HF 2140_321~~
	21:40	054	054_2140	2140_317	22:00:09		HF 2140_321
	21:59	053	053_2159	2200_318	22:34:55		HF 2200_322
		071	071_2237	~~2238_319~~			add 2231.39 to ?
				2238_3A			HF 2238_324
		~~IVHH~~	(12BIM04_) ~~IVHH~~	(213_)	Geo logged		no times anymore!
213_12	13:07	006*	006_1307	1306_300	~~B:Fix~~		*attempt cross berm at high tide
	13:21	001	001_1321	1321_301			
	13:35	002	002_1335	1335_302			line 145 - back
Knudsen settings		s/a	212_12				
	Gain	Power	Proc. Gain	TX Blnk	Sweep width	Pulse type	
HF	70	1	0	0.2	off		0.8 m/s ch
LF	AGC	1	0	0.2	off		0.8 m/s ch

USGS SPCMSC FACS Operations Log - Single Beam Bathymetry

SPCMSC FAN # 12BIM04 (12BIM04_)(213_) Page 15 of _____

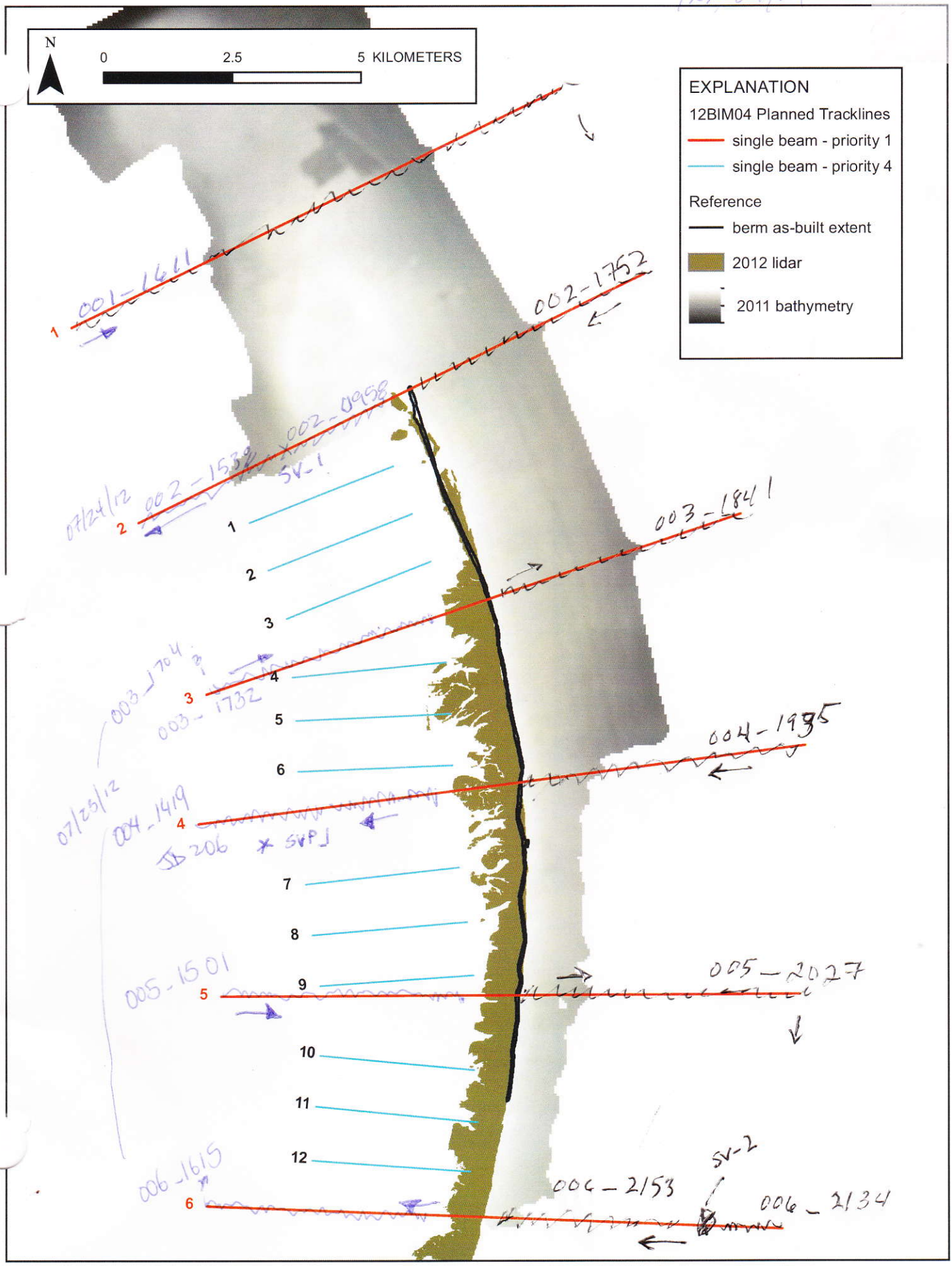
DOY YY	UTC Time	Line #	Hypack Line Name	Knudsen ~~Reading~~ line	SOS (m/s)	Bar Check Reading (m)	Comments
~~213~~/213_12)							
		TVIII					
213_12	13:45	003	003_1345	1345_303	1543	—	
	13:53	004	004_1353	1353_304			
	14:01	005	005_1401	1401_305			
	14:07	006	006_1407	1408_306			
	14:15	007	007_1415	1416_307			
	14:29	008	008_1429	1430_308			
	14:36	009	009_1436	1436_309			
	14:43	010	010_1443	1443_310			
	14:49	011	011_1449	1450_311			
	14:54	012	012_1454	1455_312			
	15:00	013	013_1500	1501_313			
	15:05	014	014_1505	1506_314			
	15:12	015	015_1512	1513_315			
	15:19	016	016_1519	1520_316			
	15:26	017	017_1526	1526_317			
	15:31	018	018_1531	1532_318		✱	Finished upper section of TV_3 heading down to lower section of TV_3

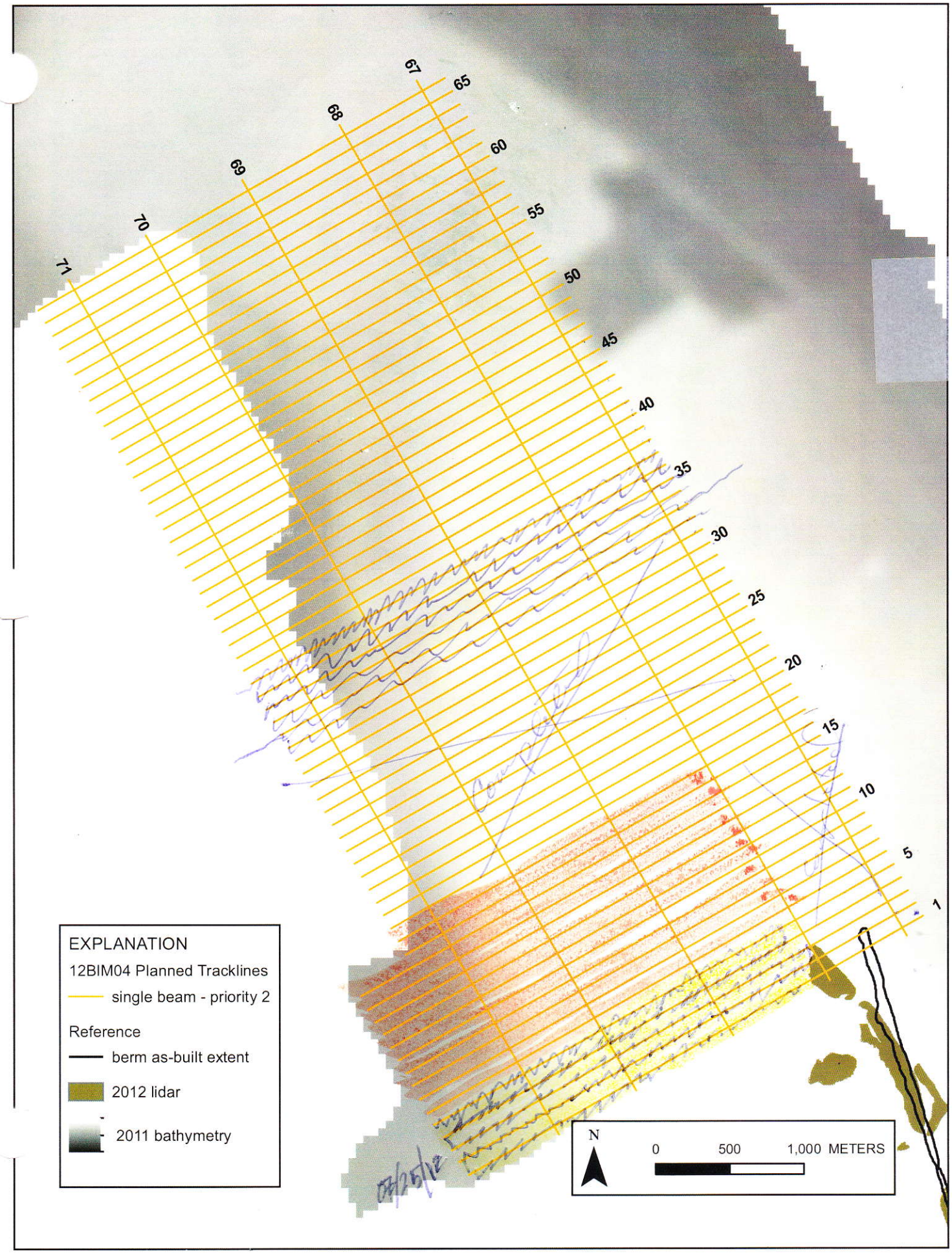
USGS SPCMSC FACS Operations Log - Single Beam Bathymetry

SPCMSC FAN # 12BIM04 (12BIM04_) (213_) Page 16 of _____

DOY_YY	UTC Time	TV III Line #	Hypack Line Name	Knudsen Reading (Line name)	SOS (m/s)	Bar Check Reading (m)	Comments
213_12	15:55	141	141-1555	1556_319	1543	—	crossing line heading down
	16:00	075	075_1600	1601_320			to shoreline #75
	16:10	077	077_1610	1610_321			skip lines picking up
	16:28	079	079_1628	1628_322			coverage...
	16:42	081	081_1642	1643_323			
	16:57	083	083_1657	1658_324			
	17:11	085	085_1711	1712_325			
	17:27	087	087_1727	1728_326			
	17:42	089	089_1742	1742_327			
	17:57	091	091_1757	1758_328			
	18:12	093	093_1812	1813_329			
	18:28	095	095_1828	1828_330			
	18:44	142	142_1844	1844_331			crossing line heading North
				2003_400			lots of "bad" returns
		TV_2	TV_2 crossing		HF_400, 401, 402, 403		HF TX blnk to 0.7m at tgts.
	20:03	067	067_2003	2003_400			Power to 2
			068_2051	2052_401,	HF 464,		Power back to 1 almost immediately

07/23, 07/24


N
0
2.5
5 KILOMETERS
EXPLANATION
12BIM04 Planned Tracklines
single beam - priority 1
single beam - priority 4
Reference
berm as-built extent
2012 lidar
2011 bathymetry
001-1611
002-1752
002-1538
002-0958
SV-1
07/24/12
003-1841
003-1704
003-1732
004-1935
07/25/12
004-1419
JD 206
SVP J
005-1501
005-2027
006-1615
006-2153
SV-2
006-2134
1
2
3
4
5
6
7
8
9
10
11
12


67
65
68
60
69
55
70
50
71
45
40
35
30
25
20
15
10
5
1
EXPLANATION
12BIM04 Planned Tracklines
single beam - priority 2
Reference
berm as-built extent
2012 lidar
2011 bathymetry
N
0
500
1,000 METERS