USGS SPCMSC FACS Overview Log - Swath Acquisition

USGS SPCMSC FAN#	13CCT04
Location	Petite Bois Pass -
Date (s)	8-14-2013 to
DOY_YY	227-2013 start survey
Survey Vessel or Platform	R/V Tommy Munro
Swath System/Frequency	468 kHz
SWATH*plus* version for acquisition	3.07.17
SXS file used for acquisition (if changes note the name and day)	SEA SWATHplus - H
Navigation for acquisition system (i.e OmniSTAR, WAAS, CORS Station, RTK)	OMNISTAR
Boat Motion for acquisition (i.e. F180, F190, F190R= wet pod, TSS)	F190R wet pod
Collecting External GPS for Navigation? (i.e. Ashtech Receivers)	collecting only as backup No (Yes) If yes fill in information below
Base Information	Receiver Model: NA - would have to use CORS station; Ant. Height (m): ; Ant. P/N#:
Boat Information	Receiver Model: Ashtech P/N 800889 RNB - ZE12B023777; Ant. Height (m): 7.138; Ant. P/N# SN=CR6200648 701945-02 REV E
Center of Reference Point (CRP) for acquisition (i.e. F190, swath tranducers,	F190R
SOS Sensor at head?	Yes
SVP Profiles (detailed log attached)	Yes
Technician(s)	DW; NTD; WP; JB; KK; JF, JK

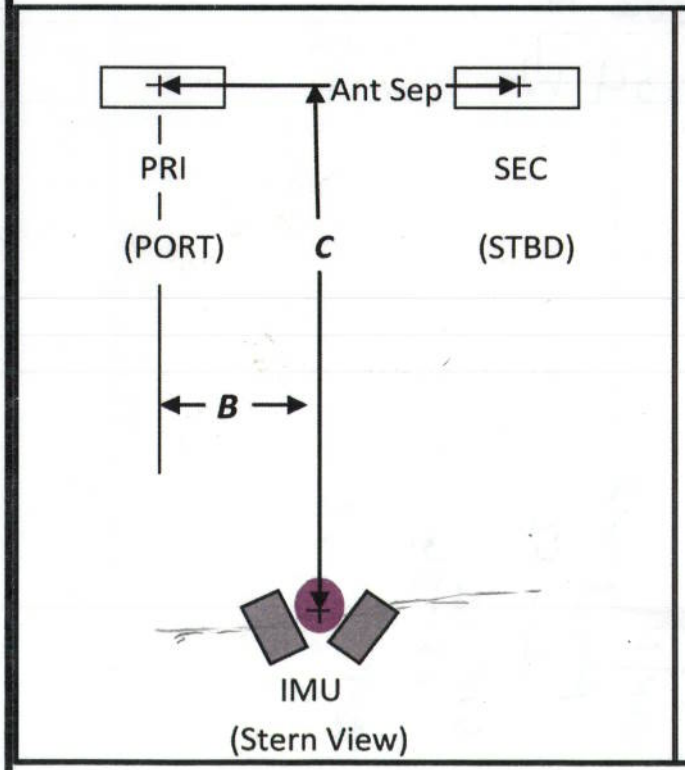
USGS SPCMSC FACS O w Log - Swath Acquisition

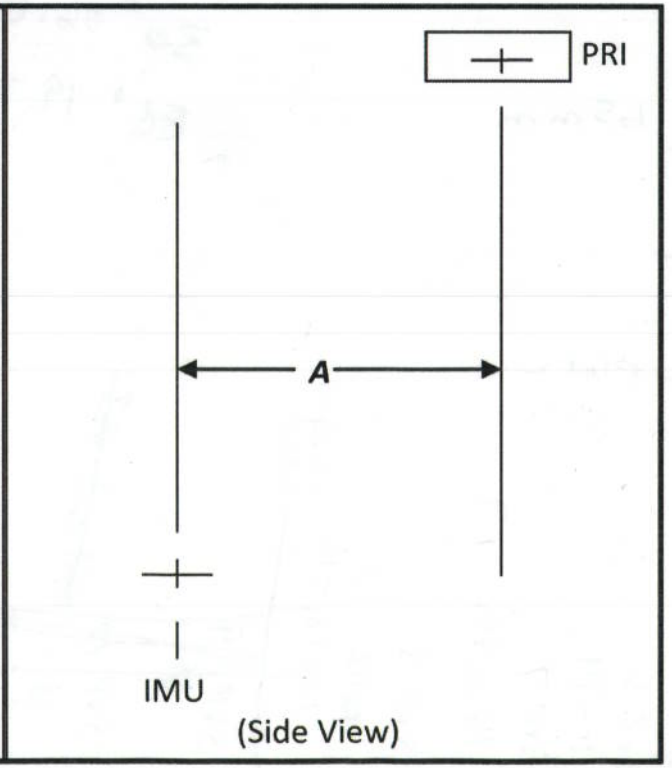
USGS SPCMSC FAN#	13CCT04	**Survey Vessel** R/V TOMMY MUNRO	
F190 Program Version	4.10	**File Name**	

Are F190R antenna offsets entered into the F190 program? (if entered into F190 program then the 'Position Antenna' tab in SWATHplus will be zeros. YES or NO

All measurements relative to F190 PRIMARY antenna.

A = PRIMARY	Is how many meters **FORWARD** of the IMU?	0.984 m
B = PRIMARY	Is how many meters **PORT** of the IMU?	0.070 m C= 7.053m (see table)
C = PRIMARY	Is how many meters **ABOVE** of the IMU?	~~707.8 cm +6cm (Dx 2 L1 Phase) − 11.6 cm (Dx IMU)~~ 702
Antenna Separation	How many meters between the Primary and Secondary Antennas	1.999m





Note: On vessels of opportunity, the antennas may be oriented with the primary antenna toward the bow and the secondary toward the stern (in a parallel orientation to the hull, lengthwise). If so indicate in space the space below.

Pole = 695.800 cM
Full plate = 2.000
Ant. Phase = 6.50
Nut = 1.00
705.30 cM
= 7.053m

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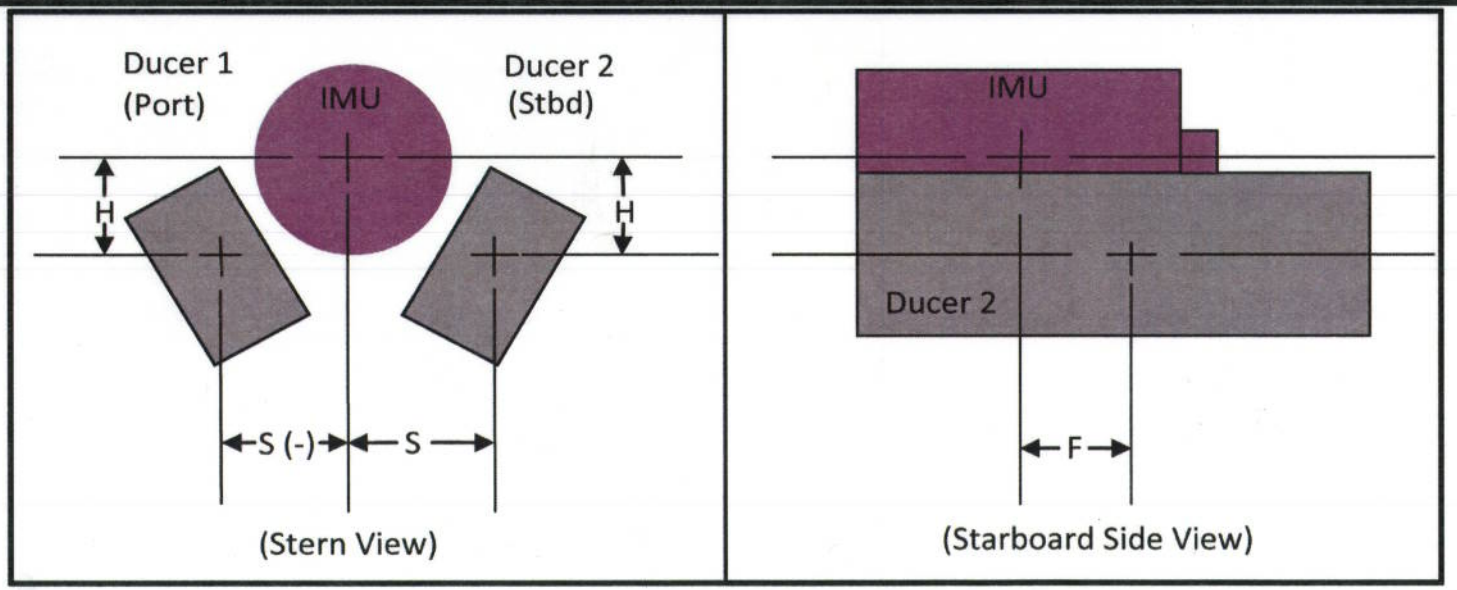
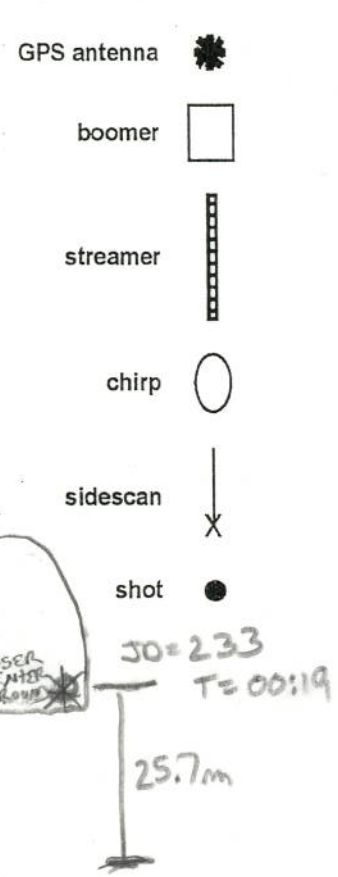
USGS SPCMSC FAN#	13CCT04		
SXS File(s)	13CCT04_227_A.sxs	When SVP Tabs 1-5 are filled then New *.sxs is saved with JD # B .sxs	
Transducer 01 - Port		**Transducer 02-Starboard**	
(H) Height Offset (m) DOWN is +	0.116	**(H) Height Offset (m) DOWN is +**	.116
(F) Forward Offset (m) FORWARD is +	0.069	**(F) Forward Offset (m) FORWARD is +**	.069
(S) Starboard Offset (m) Port is -	-0.062	**(S) Starboard Offset (m) STBD is +**	.062
Azimuth Offset (deg) Port is -90	-90	**Azimuth Offset (deg) STBD is +90**	+90
Elevation Offset (deg) Port is -30	-30	**Elevation Offset (deg) STBD is -30**	-30
Skew Offset (deg)	0.00	**Skew Offset (deg)**	0.00
Pitch Offset (deg)	0.00	**Pitch Offset (deg)**	0.00
Water Depth for SOS calculaton (m)	0.50	**Water Depth for SOS calculaton (m)**	0.50
Is there a heave offset value entered in the attitude sensor tab?	NO		

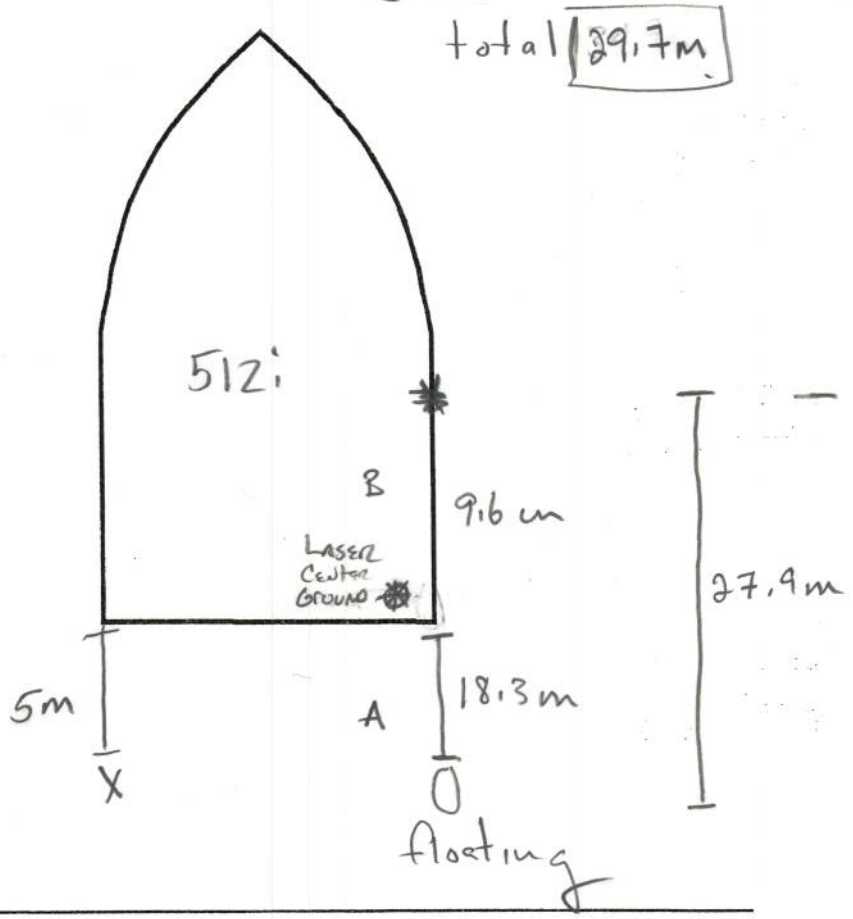


13CCT04 - 512i

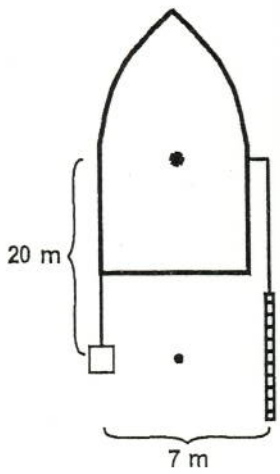
FILL OUT THE DIAGRAM TO SHOW ACQUISITION GEOMETRY. INCLUDE GPS-TO-SHOT DISTANCE, SLED-TO-SHOT DISTANCE, AND STREAMER-TO-SHOT DISTANCE.

start JD 231
A 19.9 m chirp to stern
B 9.8 m stern to GPS
total 29.7m

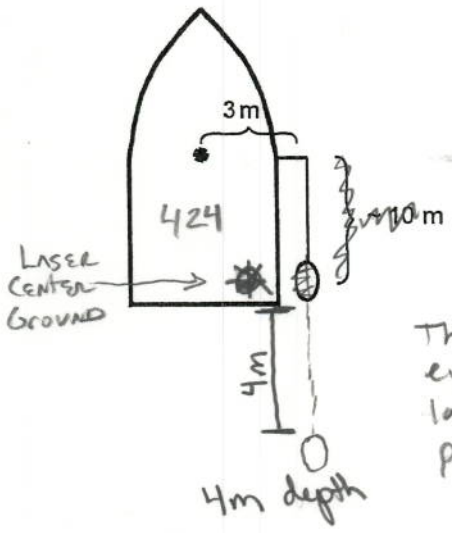




BOOMER EXAMPLE



CHIRP EXAMPLE



This layback was eyeballed from the laser center ground position.

ACTIVITY ID: 13CCTO4 R/V Tommy Munro **USGS CMG FACS OPERATION LOG** Page 1 of _____

EQUIPMENT CODE	ID	START DAY	START HOUR	START MINUTE	START COMMENT	END DAY	END HOUR	END MINUTE	END COMMENT	DEPTH (METERS)
ON SITE ~ 06:30AM				JD =						
SVP CAST		8/15/13 JD 227	06	~~30~~ 36	SVP_001				V000085.TXT = SVP_001	
			~~08~~	~~07~~					E = 353216.96 N = ~~3332731.08~~	
			08	07	Swath head in H_2O					
			08	27	Calibration commencing					
			08	27	External GPS Recording is - Ashtech Z-XTREME B3???A01.227					
SVPCAST 002		*	09	35	GPS Position from Ashtech because				LAT 30° 06' 44.55 LON 88° 31' 56.94	V000087.txt SVP-002
					we are calibrating F19012 & that is Hypack Position				CONVERTED VIA Hypack N = ~~3332228.29~~ E = 352353.53	
			10	13	CALIBRATION STILL GOING - JUST NOW below 1° ~ 0.84°					
HY	001-115	227	11	15	Roll cal line 1	227	11	23		
H+	13hr01	227	(00)	20					* swath computer time * * 00:20 (utc+13) ?! *	
HY	001-1124	227	11	24	Roll cal line 2	227	11	31		
H+	13hr02	227	(00)	24						
HY	001-1134	227	11	34	Roll cal line 3	227	11	41		
H+	13hr03	227	(00)	34						
HY	001-1144	227	11	44	Roll cal line 4	227	11	51		
H+	13hr04	227	(00)	44						

ACTIVITY ID: 13CCT 04 **USGS CMG FACS OPERATION LOG** Page 2 of _____

EQUIPMENT CODE	ID	START DAY	START HOUR	START MINUTE	START COMMENT	END DAY	END HOUR	END MINUTE	END COMMENT	DEPTH (METERS)
HY	001-1153	227	11	53	roll cal line 5	227	12	01		
H+	13hr05	227	(00)	53				* *	swath computer time * UTC + 9 hours *	
HY	001-1203	227	12	03	roll cal line 6	227	12	10		
H+	13hr06	227	(01)	03						
HY	001-1212	227	12	12	roll cal line 7	227	12	20		
H+	13hr07	227	(01)	12					END of Roll CAL	
SUPCAST	003	227	12	39	Did not hit bottom - end of rope deploying chirp - not stationary		E: 352919.69 N: 3332726.85		V00090.txt	9+ m
HY	001-1250	227	12	50	start line 1	227	14	00		
H+	13h001		12	50			13	32	file got too big	swath time fixed now utc
SS	130815135200		12	52			14	00		
C	13i001		12	56	beginning of line power + gain not adj.		14	00	filename "c"	
H+	13h006		13	32	parsing line file size		14	00	Warning >10km from nearest SOS	
SVP	004	227	14	04			E: 363459.71 N: 3331466.04		V0000092.txt	15+ m
HY	001A-1405	227	14	05	restart line	227	15	04		
H+	13h002	227	14	05		227	14	34	change lines every 30mins	
SS	130815150800		14	05			14	34	(file size too big)	
C	13i002		14	05			14	34	filename "c"	
H+	13h003	227	14	34		227	15	04	END Hypack line 1	
SS	130815153301		44	34			15	04		
C	13i003		14	34			15	04		

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USGS CMG FACS OPERATION LOG

EQUIPMENT CODE	ID	START DAY	START HOUR	START MINUTE	START COMMENT	END DAY	END HOUR	END MINUTE	END COMMENT	DEPTH (METERS)
HY	002-1505	227	15	05	transit between Hypack lines 1-2					
H+	13h004									
SS	130815160600									
C	13i004									
HY	002-1516	227	15	16	START Hypack line 2				time 16:10 Ashtech battery died B---B .227	
H+	13h005		15	18		227	16	00	New line - file size	
SS	130815161600		15	16			15	59		
C	13i005		15	16			15	59		
H+	13h006	227	16	00						
SS	130815165900		15	59			16	29		
C	13i006		15	59			16	29	New file size	
H+	13h007	227	~~16~~	~~30~~	17:04 Actual Start of Line - button Not Depressed / EOL = 17					
SS	130815 5173000		16	30			17	36		
C	13i007		16	30			17	36	~Shot 67300	
Hy	003-1750	227	17	50	SOL Heading E					
H+	13h008	227	17	49	"		18	42		
SS	130815185000	227	17	50	"		18	42		
C	13i008	227	17	50	Shot = 70100		18	42		
H+	13h009	227	18	46			19	36		
* SS	194700	227	18	48	130815194700		19	36		

SS computer on Eastern time

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USGS CMG FACS OPERATION LOG

EQUIPMENT CODE	ID	START DAY	START HOUR	START MINUTE	START COMMENT	END DAY	END HOUR	END MINUTE	END COMMENT	DEPTH (METERS)
C	13i009	227	18	45	SP= 83900		19	36	Shot ~ 95800	
SVP	005	227	18	45:30	Angled		–	–	V000094.TXT	11.5M
NOTE – Set time correctly internally w/in the SVP							20	16		
H+	13h010	227	19	37			20	16		13.7M
SS		227	19	37	130815203700 – computer time still EASTERN		20	16		13.7M
C	13i010	227	19	37	Shot 95829		20	16	SHOT = 10	13.7M.
Hy	–	–	–	–			20	16		
SVP	006	227	20	17	–	–	–	–	V000100.TXT	20M
Hy	004–2030	227	20	30	SOL 4 West	–	–	–		
H+	13h011		20	30			21	01		
SS	SEE COMMENT		20	30	130815203100 time adjusted		21	01		
C	13i011	227	20	30	Shot ~10800		21	01		
H+	13h012	227	21	01	File change		21	31		
C	13i012	227	21	01	SHOT ~11500		21	31	shot 123100	
SS		227	21	01	130821010 1		21	31		
H+	13h013	227	21	32			22	12		
SS		227	21	32	130815 213200		22	12		
C	13i013	227	21	32	Shot ~124000		22	12	shot 133200	11M
H+	13h014	227	22	12			22	55		11M
SS		227	22	12	130815221100		22	55		11M

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USGS CMG FACS OPERATION LOG

EQUIPMENT CODE	ID	START DAY	START HOUR	START MINUTE	START COMMENT	END DAY	END HOUR	END MINUTE	END COMMENT	DEPTH (METERS)
C	13i014	227	22	12	Shot 133200		22	55	Shot 143300	~11
Hy	–	–	–	–		227	22	55	EOL #4	~11
SVP	007	227	22	58					V000104.TXT	
Hy					SOL #5					
H+	13h015a		23	07	No Line 15 - 15a	23	42			
SS			23	07	130815230700	23	42			
C	13i015	"	23	07	SB 146200	23	42			
* GPS		227	22	58					EOF GPS file(s)	~11
* GPS			23	00	Session A (Same ST B???)				SOF GPS files	~11
H+	13h016	227	23	42		00	32			
SS		227			130815234200	00	32			
C	13i016	227	23	42		00	32			
H+	13h017	228	00				01	27		
SS		228	00		130816003300		01	27		
C	13i017	228	00				01	27		
Hy	–	–	–	–	–	228	01	27	EOL #5	
SVP	008 = V000108.TXT		01	29	Roll cal try 2	Line file = cal_end_of_5.lnw				15
Hy	007-0132		01	33	Roll cal 1					
H+	roll2_1	228	01	33	Roll cal Line 1					
Hy	006_0141	228	01	41	Roll cal 2					

Roll cal 2

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USGS CMG FACS OPERATION LOG

EQUIPMENT CODE	ID	START DAY	START HOUR	START MINUTE	START COMMENT	END DAY	END HOUR	END MINUTE	END COMMENT	DEPTH (METERS)
H+	roll2_2	228	01	41	ROLL 2 Line 2		01			15
HY	005-0149	228	01	49			01	54		15
H+	roll2_3	228	01	49	Roll 2 Line 3		01	54		15
HY	004-0157	228	01	57			02	02		14
H+	roll2_4	228	01	57	Roll 2 Line 4		02	02		14
HY	003-0205	228	02	06			02	10		15
H+	roll2_5	228	02	06	Roll 2 Line 5		02	10		15
HY	002-0214	228	02	14			02	19		14
H+	roll2_6	228	02	14	Roll 2 Line 6		02	19		14
HY	001-0223	228	02	23			02	27		14
H+	roll2_7	228	02	23	Roll 2 Line 7		02	27		14
END ROLL CAL TRY #2										
HY	006_0243	228	02	43	BACK to PLANNED SURVEY SOL #6 heading WEST					
H+	13h018	228	02	43			03	10		
SS		228	02	43	130816024400		03	10		
C	13i018	228	02	43	Shot 829		03	10	Shot 7360	
H+	13h019		03	11	File change		03	41		13
SS			03	11	130816031100.		03	41		13
* C	13i019	228	03	11	Shot 7440		03	35 *	Problem *	13

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USGS CMG FACS OPERATION LOG

EQUIPMENT CODE	ID	START DAY	START HOUR	START MINUTE	START COMMENT	END DAY	END HOUR	END MINUTE	END COMMENT	DEPTH (METERS)
NOTE: Chirp problem with cable - Stopped all data recording; took target in										
HYPACK		where to RESUME recording								
SVP	009	228	03	58					V0000111.TXT	
HY	006-0416									
H+										
		228	08	15					Return to Port to pick up 424	
Deploy Swath		228	~18	00						
SVP	010		17	37					V0000114.TXT	
NOTES - New Calibration file from scratch										
		A = 0.984m			GPS-Ashtech file started					
		B = 0.070m								
		C = 7.053m								
SVP	011	228	19	05					V0000118.TXT	
* Running Roll Cal #3										

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USGS CMG FACS OPERATION LOG

EQUIPMENT CODE	ID	START DAY	START HOUR	START MINUTE	START COMMENT	END DAY	END HOUR	END MINUTE	END COMMENT	DEPTH (METERS)
Hy	007-1906	228	19	06	Starting Roll cal w/ line 7				GOOD Line heading W -15M	
H+	Roll3-1	228	19	06	Roll 3 line 1					
~~Hy~~	~~006-1915~~	~~228~~	~~19~~	~~15~~					~~No Good, Boat~~	
~~H+~~	~~Roll3-2~~	~~228~~	~~19~~	~~15~~	~~Roll 3, line 2~~				~~offline~~	
~~Hy~~	~~006-1923~~	~~228~~	~~19~~	~~24~~	~~Line off~~				~~No good for roll cal~~	
~~H+~~	~~Roll3-2a~~	~~228~~								
Hy	006-	228	19	34			19	39	GOOD Line HEADING EAST 15M	
H+	Roll3-2b	228	19	34			19	39		
Hy	005-1944	228	19	44			19	48	GOOD Line	West 15M
H+	Roll3-3	228	19	44			19	48		
HY	004-1953	228	19	53			19	58	GOOD Line	
H+	Roll3-4	228	19	53			19	58		
HY	003-2003	228	20	03					GOOD Line	
H+	Roll3-5	228	20	03						
HY	002-2013	228	20	13			20	18	GOOD Line	
H+	Roll3-6	228	20	13			20	18		
HY	001-2022	228	20	22			20	27	GOOD Line	
H+	Roll3-7	228	20	22			20	27		
	END ROLL									

PC Clock

SENSOR — SENSOR — SENSOR

Roll CAL #3 5x5 13cct04_227_SVP#4

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USGS CMG FACS OPERATION LOG

EQUIPMENT CODE	ID	START DAY	START HOUR	START MINUTE	START COMMENT	END DAY	END HOUR	END MINUTE	END COMMENT	DEPTH (METERS)
		228	20	40						
SS	Deployed									
* C	Deployed = 424 is deployed									
F190	was restarted & loaded an old calibration file - used the Z value of 7.053M									
	from today's configuration file									
H+	Changed the SXS file - using 13CCTO4-228-a.SXS									
HY	006-2049	228	20	49	SOL 6	—	—	—		
H+	13h020	228	20	49			21	37		
SS		228	20	49	130816205000		21	37		
424 C	13c020	228	20	49	shot = 29900		21	37	shot = 14700?	
H+	13h021	228	21	38	File change		22	21		
SS		228	21	38	130816213900		22	21	WRECK CAPTURED	
C	13c021	228	21	38	shot = 14700	228	22	21		
H+	13h022	228	22	22		228	23	08		
SS		228	22	22	130816222 00	228	23	08		
C	13c022	228	22	22	shot = 25000	228	23	08	shot = 35900	
HY	—	—	—	—	—	228	23	08	EOL #6	
GPS		228	23	10	SOF	228			change out CARD for 229	
SVP	012	228	23	10					V000 .TXT	10M

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EQUIPMENT CODE	ID	START DAY	START HOUR	START MINUTE	START COMMENT	END DAY	END HOUR	END MINUTE	END COMMENT	DEPTH (METERS)
HY	007-2328	228	23	28	SOL #7					
H+	13h023	228	23	28		229	00	12	New JD 229	10
SS		228	23	28	130816-32800	229	00	12		
C	13C023	228	23	28	Shot = 40800	229	00	12		
H+	13h024	229	00	14			00	50		
SS		229	00	14	130817001300		00	50		
C	13i024	229	00	14	Shot = 51800		00	50		
H+	13h025	229	00	50	File change		01	39		
SS		229	00	50	130817		01	39		
C	13h025	229	00	50	Shot = 60700		01	39	shot = 72500	
HY	—	—	—	—	—	229	01	39	EOL 7	13m
HY		229	01	50	SOL 8					
H+	13h026	229	01	50			02	35		
SS		229			130817015100		02	35		
C	13C026	229			Shot 75000		02	30	partial line 13C026a - dd to 13C026	
SVP	013	229	02	35					Y0000123.DAT	
H+	13h027						03	56		
SS					130817023800		03	56		~9.5
C	13c27				shot 86000		03	56	Shot = 105,000	~9.5
HY	—	229	—	—	—	229	03	56	EOL 8	~9.5

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EQUIPMENT CODE	ID	START DAY	START HOUR	START MINUTE	START COMMENT	END DAY	END HOUR	END MINUTE	END COMMENT	DEPTH (METERS)
HY	009-0411	229	04	11	SOL #9	229	05	50		8.7
H+	13h028	229	04	11		229	04	56		8.7
SS		229	04	11	130817041100		04	56		8.7
C	13c028	229	04	11	shot= 108700		04	56		8.7
H+	13h029	229	04	54	File change	229	05	50		
SS		229	04	54	130817045700		05	50		
C	13c029	229	04	54			05	50	END line 09	
HY	010-0558	229	05	58	start line 10	229	06	56		
H+	13h030		05	58		229	06	38		9.7
SS			05	58	130817055900		06	38		
C	13c030		05	58			06	38		
H+	13h031	229	06	38	FILE change	229	06	56		8.0m
SS			06	38	130817063800		06	56		
C	13c031		06	38			06	56	END line 10	
SVP	14	229	07	00					V000125.txt	11.1m
HY	011-0711	229	07	11	start HY line 11	229	08	02		
H+	13h032		07	11			08	02		7.4m
SS			07	11	130817071100		08	02		
C	13c032		07	11			08	02	END line 11	

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USGS CMG FACS OPERATION LOG

EQUIPMENT CODE	ID	START DAY	START HOUR	START MINUTE	START COMMENT	END DAY	END HOUR	END MINUTE	END COMMENT	DEPTH (METERS)
HY	012-0807	229	08	07	Start line 12	229	08	23		
H+	13h033		08	07			08	23		5.2m
SS			08	07	130817080700		08	23		
C	13c033		08	07			08	23	END line 12	
HY	013-0841	229	08	41	Start line 13	229	10	13		
H+	13h034		08	41	tie line HEAD S	229	09	23		
SS			08	41	130817084100		09	23		
C	13c034		08	41			09	23		
H+	13h035	229	09	23	File change	229	10	13		
SS			09	23	130817092300		10	13		
C	13c035		09	23	shot 183750		10	13	END line 13	
SVP	15	229	10	17					Y000128.txt	
HY	014-1021	229	10	21	Start line 14	229	10	37		
H+	13h036		10	21	HEADING WEST		10	37		14.9m
SS			10	21	130817102100		10	37		
C	13c036		10	21			10	37	END line 14	
HY	015-1122	229	11	22	Start line 15	229	12	37		
H+	13h037		11	22	HEADING EAST	229	11	53		15.0m
SS			11	22	130817112200		11	53		
C	13c037		11	22			11	53		

<generator switch - power failure chirp + SS EOL 14>

ACTIVITY ID: 13cct 04 **USGS CMG FACS OPERATION LOG** Page 13 of -

EQUIPMENT CODE	ID	START DAY	START HOUR	START MINUTE	START COMMENT	END DAY	END HOUR	END MINUTE	END COMMENT	DEPTH (METERS)
H+	13h038	229	11	55	file change	229	12	37		~15m
SS			11	55	13081711550O		12	37		
C	13c038		11	54	shot~8900		12	37	END line 15	
HY	016-1240	229	12	40	START line 16	229	13	47		
H+	13h039		12	40	HEADING WEST	229	13	29		16.1m
SS			12	40	13081712400O		13	29		
C	13c039		12	40			13	29		
H+	13h040	229	13	29	file change	229	13	47		15m
SS			13	29	13081713290O		13	47		
C	13c040		13	29			13	47	END line 16	
HY	017-1352	229	13	52	START line 17	229	15	22		
H+	13h041		13	53	HEADING EAST	229	14	33		14.6m
SS			13	53	13081713530O		14	33		
C	13c041		13	53			14	33		
SVP	16	229	14	34					V0001316.txt	
H+	13h042		14	36	file change	229	15	22	V~o	14m
SS			14	36	13081714360O		15	22		
C	13c042		14	36			15	22	END line 17	
WEATHER HEADING into PORT										

ACTIVITY ID: 13CCT 04

USGS CMG FACS OPERATION LOG

EQUIPMENT CODE	ID	START DAY	START HOUR	START MINUTE	START COMMENT	END DAY	END HOUR	END MINUTE	END COMMENT	DEPTH (METERS)
August 18th – Weather Day										
		231								
SVP	017		07	17					V000133.txt	
GPS		231	07	19	Start B file recording				30 04 41.90 from Fugawi 88 22 31.08	
Hy	009–0737	231	07	37	start roll CAl	231	07	42		
H+	13hor1-3	231	07	37		231	07	42		16.5 m
Hy	008–0746	231	07	46		231	07	50		
A+	13hor2-3	231	07	46		231	07	50		16.4 m
Hy	007–0757	231	07	57		231	08	02		
H+	13hor3-3	231	07	57		231	08	02		
Hy	006–0808	231	08	08		231	08	13		
A+	13hor4-3	231	08	08		231	08	13		
Hy	005–0821	231	08	21		231	08	26		
H+	13hor5-3	231	08	21		231	08	26		16.6 m
Hy	004–0831	231	08	31		231	08	36		
H+	13hor6-3	231	08	31		231	08	36		16.3 m
Hy	003–0843	231	08	43		231	08	48		
H+	13hor7-3	231	08	43		231	08	48	END Roll CAl	16.7 m

ACTIVITY ID: 13cct04

USGS CMG FACS OPERATION LOG

EQUIPMENT CODE	ID	START DAY	START HOUR	START MINUTE	START COMMENT	END DAY	END HOUR	END MINUTE	END COMMENT	DEPTH (METERS)
Hy	018-0922	231	09	22	START line 18	231	10	31		
H+	13h043		09	22	HEADING NORTH	231	10	01		16.2 m
SS			09	23	130819092300		10	01		
C	13i043		09	22	~~15~~ m chirp to stern		19.9	(let more line out)		
					9.8m stern to GPS					
					increase ping rate from 4.0 to 5.0 Hz					
H+	13h044	231	10	01	file change	231	10	31		14.7m
SS			10	01	130819100100		10	31		
C	13i044		10	01	shot ~13500		10	31	END line 18	
Hy	019-1033	231	10	33	START line 19	231	12	22		
H+	13h045		10	33	HEADING WEST	231	11	24		11.7m
SS			10	33	130819103300		11	24		
C	13i045		10	33	shot ~22700		11	24		
H+	13h046	231	11	24	file change	231	12	22		11.1m
SS			11	24	130819112400		12	22		
C	13i046		11	24	shot ~37900		12	22	END line 19 – swap generato	
SVP	18	231	12	26					V000133.txt	12.7m
Hy	020-1237	231	12	37	START line 20	231	14	47		
H+	13h047		12	37	HEADING EAST	231	13	30		11 m
SS			12	37	130819123700		13	30		
C	13i047		12	37	shot = 0 PING 4 Hz Power 80		13	30		

ACTIVITY ID: 13cct04

USGS CMG FACS OPERATION LOG

EQUIPMENT CODE	ID	START DAY	START HOUR	START MINUTE	START COMMENT	END DAY	END HOUR	END MINUTE	END COMMENT	DEPTH (METERS)
H+	13h048	231	13	30	file change	231	14	28		11m
SS			13	30	130819 133000		14	28		
C	13i048		13	30	shot ~15000		14	28		
H+	13h049	231	14	28	file change	231	14	47		12.9m
SS			14	28	130819142800		14	47		
C	13i049		14	28	shot ~29000		14	47	END line 20	
Hy	021-1500	231	15	00	START line 21					
H+	13h050		15	00	HEADING ~~EAST~~	231	15	59		14.2m
SS			15	00	130819150000		15	59		
C	13i050		15	00	shot ~36750		15	59		
H+	13h051	231	15	59	file change	231	16	41		12.4m
SS			15	59	130819155900		16	41		
C			15	59	shot ~51000		16	41		
H+	13h052	231	16	41	file change		17	20		10.8m
SS			16	41	130819164100		17	20		
C	13i052		16	41			17	20	Shot = 70300??	10m
HY	-	-	-	-	-	231	17	20	EOL 21	10m
SVP	19	231	17	23	changed battery after this cast				V000139.DAT	10m
HY	022-	231	17	31	SOL 22 East	231	—	—		11m
H+	13h053	231	17	31		231	18	09		11m

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USGS CMG FACS OPERATION LOG

EQUIPMENT CODE	ID	START DAY	START HOUR	START MINUTE	START COMMENT	END DAY	END HOUR	END MINUTE	END COMMENT	DEPTH (METERS)
SS		231	17	31	1308191731 00		18	09		11 M
C	13i053	231	17	31	Shot 72750		18	09	Shot - ?	11 m
H+	13h054	231	18	10	File change		18	56		10.5M
SS		231	18	10	1308191810 00		18	56		
C	13i054	231	18	10	Shot 82270		18	56		
H+	13h055	231	18	56	File change		19	53		13m
SS		231	18	56	1308 19 1855 00		19	53		15 M
C	13i055	231	18	56	shot =	231	19	53		15M
HY	—	—	—	—	—	231	19	53	EOL 22	15M
HY	023-2000	231	20	00	SOL 23	231	—	—	—	13.5M
H+	13h056	231	20	00		231	20	40		
SS		231	20	00	1308192000 00	231	20	40		
C	13h056	231	20	00	Shot = 108800	231	20	40	shot = 119099?	
HY	—	231	—	—	File change	231	—	—	Break Line	
H+	13h057	231	20	43	File change	231	20	40		13
SS		231	20	43	1308192043 00	231	21	08	Noisy	13
C	13i057	231	20	43		231	21	41	V000143.TXT	13
SVP	020	231	20	41	Shot 119100	231	—	—	Angled cast	13
H+	13h058	231	21	41		231	22	22		10 m
SS	NO Line here SS is acting up - Noisy					—	—	—		10M

ACTIVITY ID: 13CCT04

USGS CMG FACS OPERATION LOG

EQUIPMENT CODE	ID	START DAY	START HOUR	START MINUTE	START COMMENT	END DAY	END HOUR	END MINUTE	END COMMENT	DEPTH (METERS)
C	13i058	231	21	41	shot 1329400		22	22		10.6
HY	—	—	—	—	—	231	22	22	EOL 23	10.6
SVP	021	231	22	27					V000146.TXT	
SS	15800	231	21	59	Noisy data - maybe weight possible VME/comm issue	Pulling SSS		to reseat	connection	
HY	024/22336	231	22	36	SOL 24	—	—	—		
H+	13h059	231	22	36		231	23	22		
SS		Still not working correctly								
C	13i059	231	22	36	146100 = shot		23	22		
H+	13h060	231	23	22	File change		00	15		
SS		Still Down					—	—		
C	13i060		23	22			00	15		
NOTE			23	57	SWATH MOUNT Loose	Pulled SSS	back on deck			
SVP	022	(PARTIAL)	23	58					V000150.TXT	
H+	13h061	232	00	16		232	01	02		
C	13i061	232	00	16	Shot = 170150	232	01	02		
H+	13h062	232	01	09			01	49		
C	13i062	232	01	09	shot 182900	232	01	49		
HY	—	232	—	—		232	01	02	EOL 24	
HY	025/0109	232	01	09	SOL 25	—	—	—	—	
H+	13h063	232	01	49		232	02	32		11.6

ACTIVITY ID: 13CCT04

USGS CMG FACS OPERATION LOG

EQUIPMENT CODE	ID	START DAY	START HOUR	START MINUTE	START COMMENT	END DAY	END HOUR	END MINUTE	END COMMENT	DEPTH (METERS)
C	13i063	232	01	49	shot = 192400	232	02	32		11.6
H+	13h064	232	02	32	File change		03	22		11.0
C	13i064	232	02	32	Shot = 202800		03	22		11.0
HY.	—	—	—	—			03	22	EOL 25	
SVP	023	232	03	24					V000153.TXT	11.0
HY	026-035	232	03	35	SOL 26	232				
H+	13h065	232	03	36		232	04	20		
C	13i065	232	03	36	Shots 219000	232	04	20	shot 222500	
H+	13i066	232	04	20	File change	232	05	12		
C	13i066	232	04	20	shot 228700	232	05	12		
Note	boat slowed		04	25	current					
H+	13h067	232	05	12	file change	232	05	58		14.4m
C	13i067	232	05	12	shot ~ 241200	232	05	58		
SS		232	05	12	13082005 1206	232	05	58	END LINE 26	
SVP	024	232	06	02					V000156.txt	~20m
Hy	027-0606	232	06	06	START LINE 27	232	08	28		
H+	13h068	232	06	06	HEADING WEST	232	07	01		~17m
C	13i068	232	06	06	shot ~ 254200	232	07	01		
SS		232	06	07	13082006 0700	232	07	01		

ACTIVITY ID: 13cct04

USGS CMG FACS OPERATION LOG

EQUIPMENT CODE	ID	START DAY	START HOUR	START MINUTE	START COMMENT	END DAY	END HOUR	END MINUTE	END COMMENT	DEPTH (METERS)
H+	13h069	232	07	01	file change	232	07	55		14.5m
C	13i069	232	07	01	shot ~ 267300	232	07	55		
SS		232	07	01	13082007010O	232	07	55		
H+	13h070	232	07	55	file change	232	08	28		12.3m
C	13i070	232	07	55	shot ~ 280200	232	08	28	shot ~ 288100	
SS		232	07	55	13082007550O	232	08	28	END line 27	
Hy	028-0836	232	08	36	START line 28	232	11	14		
H+	13h071	232	08	36	HEADING EAST	232	09	21		12m
C	13i071	232	08	36	shot ~ 290200	232	09	21	shot ~ 300900	
SS		232	08	36	13082008360O	232	09	21		
SVP	025	232	09	22					V000159.txt	15.6m
H+	13h072	232	09	25	file change	232	10	23		12.7m
C	13i072	232	09	25	shot ~ 301800	232	10	23		
SS		232	09	25	13082009250O	232	10	23		
H+	13h073	232	10	23	file change	232	11	14		13.5M
C	13i073	232	10	23	shot ~ 315800	232	11	14		
SS		232	10	23	13082010230O	232	11	14	END line 28	
Hy	029-1119	232	11	19	START line 29	232	13	34		
H+	13h074	232	11	19	HEADING WEST	232	12	08		10.1m
C	13i074	232	11	19	shot ~ 329400	232	12	08		
SS		232	11	19	13082011190O	232	12	08		

ACTIVITY ID: 13cct 04

USGS CMG FACS OPERATION LOG

EQUIPMENT CODE	ID	START DAY	START HOUR	START MINUTE	START COMMENT	END DAY	END HOUR	END MINUTE	END COMMENT	DEPTH (METERS)
H+	13h075	232	12	08	file change	232	12	56		13.7m
C	13i075	232	12	08	shot ~341000	232	12	56		
SS		232	12	08	130820120800	232	12	56		
H+	13h076	232	12	56	file change	232	13	34		12.7m
C	13i076	232	12	56	shot ~352600	232	13	34		
SS		232	12	56	130820125600	232	13	34	END line 29	
Hy	030-1345	232	13	35	START line 30	232	16	09		
H+	13h077	232	13	36	HEADING EAST	232	14	35		12.9m
C	13i077	232	13	35	shot ~1900 (powered off for generator switch)					
SS		232	13	36	130820134600	232	14	35		
H+	13h078	232	14	35	file change	232	15	22		13.1m
C	13i078	232	14	35	shot ~13900	232	15	22		
SS		232	14	35	130820143500	232	15	22		
H+	13h079	232	15	22	file change	232	16	09		14.9m
C	13i079	232	15	22	shot ~25000	232	16	09	shot ~36400	
SS		232	15	22	130820152200	232	16	09	END line 30	
Hy	031-1613	232	16	13	START line 31	232	16	52		
H+	13h080	232	16	13	HEADING WEST	232	16	52		17.8m
C	13i080	232	16	13	shot ~37250	232	16	52		
SS		232	16	13	130820161300	232	16	52		

ACTIVITY ID: 13CCTO4

USGS CMG FACS OPERATION LOG

EQUIPMENT CODE	ID	START DAY	START HOUR	START MINUTE	START COMMENT	END DAY	END HOUR	END MINUTE	END COMMENT	DEPTH (METERS)
H+	13h081	232	16	53	File Change	232	17	47		15.0m
C	13;081	232	16	53	shot 47000	232	17	47		
SS		232	16	53	13082016536 6	232	17	47		
H+	13h082	232	17	47	File change	232	18	31		12
C	13;082	232	17	47	shot 60450~	232	18	31		12
SS	13082017936	232	17	47	1308	232	18	31		12
HY	—	—	—	—	—	232	18	31	EOL 31	
HY	032 1839	232	18	39	SOL 32					13
H+	13h083	232	18	39			19	20		13
C	13;083	232	18	39	shot = 72500		19	20	82290	13
SS		232	18	39	13082018400 0		19	20		13
H+	13h084	232	19	20	File change		20	04		
C	13;084	232	19	20	shot = 82300		20	04		
SS		232	19	20	13082019210 0		20	04		
SVP	026		20	05	—	—	—	—	V000162	13.6
H+	13h085	232	20	06		232	21	20		13.6
C	13;085	232	20	06	shot 93200	232	21	20	shot	13.6
SS		232	20	06	13082006000	232	21	20		13.6
HY	—	—	—	—	—	232	21	20	EOL 31	
SVP	027	232	21	20					V000165.TXT	

ACTIVITY ID: 13CCT04

USGS CMG FACS OPERATION LOG

EQUIPMENT CODE	ID	START DAY	START HOUR	START MINUTE	START COMMENT	END DAY	END HOUR	END MINUTE	END COMMENT	DEPTH (METERS)
HY	033 2226	232	21	26	SOL 33-West	—	—	—	—	17
H+	13h086	232	21	26			22	16		17
SS		232	21	26	13082021260O		22	16		17
C	13i086	232	21	26	Sh= 112000		22	16		17
H+	13h087	232	22	16	File change		23	10		14
SS		232	22	16	13082022160O		23	10		14
C	13i087	232	22	16	Sh=124580		23	10		14
H+	13h088	232	23	11	File change		23	53		
SS		232	23	11	13082023100O		23	53		
C	13i088	232	23	11	Sh 137500		23	54		
HY		—	—	—	—	232	23	53	EOL 33	13
SVP	SVP28	232	23	54		232	—	—	V000164.TXT	
HY	034 0002		00	02	SOL 34	—	—	—	—	13
* H+	13h089	233	00	02			01	15		
SS		233	00	02	13082100030I		01	15		
C	13i089	233	00	02	Sh= 150000		01	15		
NOTE		233	00	19	Dropping chirp back => Range finder reading = 25.7m					
H+	13h090	233	01	15			02	32		13.9
SS		233	01	15	13082101160O		02	32		
C	13i090	233	01	15	Shot=167000		02	32		

ACTIVITY ID: 13CCT04

USGS CMG FACS OPERATION LOG

EQUIPMENT CODE	ID	START DAY	START HOUR	START MINUTE	START COMMENT	END DAY	END HOUR	END MINUTE	END COMMENT	DEPTH (METERS)
Hypack	035 037	233	02	35	SOL 35	—	—	—	—	
H+	13h091	233	02	35			03	46		
SS		233	02	35	130821023600		03	46		
C	13i091	233	02	35	sht 186600		03	46		
SVP	029	233	03	47					V000173.TXT	
H+	13h092	233	03	50			04	59		
SS		233	03	50	130821035000		04	59		
C	13i092	233	03	50	sh=204600		04	59	END SHOT -	
Hypack	036 037	233	05	07	SOL 36					
H+	13h093	233	05	07			06	00		
SS		233	05	07	130821050700		06	00		
C	13i093	233	05	07	shot - 223000		06	00		
H+	13h094	233	06	00	line chan	—	—	—	*SWATH DID NOT	RECORD*
SS		233	06	00	130821060000		06	54		
C	13i094	233	06	00	shot - 236300		06	54		
H+	13h095	233	06	54	file change		07	31		16.3 m
SS		233	06	54	130821065400		07	31		
C	13i095	233	06	54	shot ~248700		07	31	shot ~256750	
GPS		233	07	31	SWAP CARD				END LINE 36	
SVP	030	233	07	37	[illegible]				BATTERY DEAD	X

DID NOT RECORD

ACTIVITY ID: 13cct04

USGS CMG FACS OPERATION LOG

EQUIPMENT CODE	ID	START DAY	START HOUR	START MINUTE	START COMMENT	END DAY	END HOUR	END MINUTE	END COMMENT	DEPTH (METERS)
Hy	037-0745	233	07	45	START LINE 37		09	54		
H+	13h096	233	07	45			08	36		16.9m
C	13i096	233	07	45	shot ~261100		08	36		
SS		233	07	45	130821074500		08	36		
H+	13h097	233	08	36	file change		09	18		15.4m
C	13i097	233	08	36	shot ~273250		09	18		
SS		233	08	36	130821083600		09	18		
H+	13h098	233	09	18	file change		09	54		13.3m
C	13i098	233	09	18	shot ~283300		09	54	shot ~292000	
SS		233	09	18	130821091800		09	54	END LINE 37	
Hy	038-1001	233	10	01	START LINE 38		11	44		
H+	13h099	233	10	01	HEADING EAST		10	55		14.4m
C	13i099	233	10	01	shot ~293700		10	55		
SS		233	10	01	130821100100		10	55	out of disk space!	
H+	13h100	233	10	55	file change		11	44		
C	13i100	233	10	55	shot 306600		11	44	shot ~318500	
SS		233	10	58	130821105800		11	44	END line 38	
SVP	031	233	11	46					V000181.txt	19.2m

ACTIVITY ID: 13c of 04

USGS CMG FACS OPERATION LOG

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EQUIPMENT CODE	ID	START DAY	START HOUR	START MINUTE	START COMMENT	END DAY	END HOUR	END MINUTE	END COMMENT	DEPTH (METERS)
Hy	039–1201	233	12	01	START LINE 39		13	38		
H+	13h101	233	12	01	file LINE HEADING	North	12	53		16.7m
C	13i101	233	12	01	shot ~ 322500		12	53		
SS		233	12	01	130821120100		12	53		
H+	13h102	233	12	53	file change		13	38		14.7m
C	13i102	233	12	53	shot ~ 334900		13	38		
SS		233	12	53	130821125300		13	38	END LINE 39	
SVP	032	233	13	39					V000184.txt	9m
Hy	040–1355	233	13	55	START LINE 40		14	18		
H+	13h103	233	13	55	HEADING EAST		14	18		7.2m
C	13i103	233	13	55	GENERATOR SWITCH SHOT ~ 1275		14	18		
SS		233	13	55	130821135500		14	18	END LINE 40	
Hy	041–1421	233	14	21	START LINE 41		14	53		
H+	13h104	233	14	21	HEADING WEST		14	53		8.7m
C	13i104	233	14	21	shot ~ 7750		14	53	END LINE 41	shot ~ 15000
SS					SONAR FROZEN	– will not	re power			
Hy	042–1509	233	15	09	START LINE 42		15	54		
H4	13h105	233	15	09			15	54		7.6m
C	13i105	233	15	09	shot 19175		15	54		
SS		233	15	25	130821152500	reconnected	power			

ACTIVITY ID: 13cct04

USGS CMG FACS OPERATION LOG

EQUIPMENT CODE	ID	START DAY	START HOUR	START MINUTE	START COMMENT	END DAY	END HOUR	END MINUTE	END COMMENT	DEPTH (METERS)
Hypack	013 - 1555	233	15	55	START line 43	233	16	58		
H+	13h106	233	15	55	HEADING WEST	233	16	58		9.8m
SS		233	15	56	13082155800	233	16	58		
C	13i106	233	15	55	shot-30200	233	16	58	Shot 42...	
Hypack	044-1703	233	17	03	START line 44					
H+	13h107	233	17	04	Heading East	233	17	44		
SS		233	17	04	13082170400	233	17	44		
C	13i107	233	17	04	shot - 46800	233	17	44		
Hypack	—	—	—	—	New line (No Hypack Restart)					
H+	13h108	233	17	44			18	15		9.5m
SS		233	17	44	13082174400		18	15		
C	13i108	233	17	44	shot 56200		18	15		
SVPCAST	033	233	18	15	13CCT04_SVP-033				V000186.TXT	
Hypack	045-182	233	18	06	—	—	—	—		
H+	13h109	233	18	20			18	56		10.8m
SS		233	18	20	13082182000		18	56		
C	13i109	233	18	20	shot 64900		18	56		
H+	13h110	233	18	56	*ONLY 2 min of line		19	40	BUTTON NOT DEPRESSED - NO LINE	
SS		233	18	56	13082185600		19	40		
C	13i110	233	18	53	73400 = Sht		19	40		

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EQUIPMENT CODE	ID	START DAY	START HOUR	START MINUTE	START COMMENT	END DAY	END HOUR	END MINUTE	END COMMENT	DEPTH (METERS)
HY		233				233	19	40	EOL 45	
HY	046-1947	233	19	47	SOL 46 East	—	—	—	—	
H+	13h111	233	19	47			20	29		
SS		233	19	47	13082119470p		20	29		
C	13i111	233	19	47	85000		20	29		
H+	13i112	233	20	29			21	05		9m
SS		233	20	29	130821202900		21	05		
C	13h112	233	20	29	shut 95900		21	05	shut 104000	
HY	—	—	—	—	—	233	21	05	EOL 46	
HY	047	233	21	10	SOL 47 West	—	—	—		
H+	13h113	233	21	10			21	52		
SS		233	21	10	1308211000		21	52		
C	13h113	233	21	10	sht - 105700		21	52		
H+	13h114	233	21	52	file change		22	47		
SS		233	21	52	130821215200		22	47		
C	13i114	233	21	52	Sh = 115700		22	47		
HY	034	233	—	—			22	47	EOL 47	8.0
SVP	034	233	22	48	Cast 13cct04_SVP_34	—	—	—	V000188	
HY	048-1252	233	22	52	SOL 60 South	—	—	—		
H+	13h115	233	22	52		233	23	48		

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EQUIPMENT CODE	ID	START DAY	START HOUR	START MINUTE	START COMMENT	END DAY	END HOUR	END MINUTE	END COMMENT	DEPTH (METERS)
SS		233	22	52	13082122520O	233	23	48		8m
C	13i115	233	22	52	Sh=130200	233	23	48		
* Hypack	060-2357	233	23	37	had to restart Hypack - lost GPS					
H+	13h116	233	23	48			00	24		12M
SS			23	48	13082123490O		00	24		
C	13i116		23	48	Sh=143700		00	24		
HY	—	—	—	—	—	234	00	24	EOL 60	
HY	061-0027	234	00	27	SOL 61	234	—	—	—	15.5
H+	13h117	234	00	27		234	00	44		
SS		234	00	27	13082200280O	234	00	44		
C	13i117	234	00	27	Sh=152000	234	00	44		
HY		234	—	—	—	234	00	44	EOL 61	
SVP	035	234	00	46	—	234	—	—	V000191.TXT	15.5
HY	062-0052	234	00	52	SOL 62	234	—	—	—	
H+	13h118	234	00	52		234	01	36		
SS		234	00	52	13082200530O	234	01	36		15.5
C	13i118	234	00	52	Sh=159100	234	01	36		
H+	13h119	234	01	36	File change	234	02	24		12
SS		234	01	36	13082201370O	234	02	24		
C	13i119	234	01	36	Sh 169600	234	02	24		

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EQUIPMENT CODE	ID	START DAY	START HOUR	START MINUTE	START COMMENT	END DAY	END HOUR	END MINUTE	END COMMENT	DEPTH (METERS)
HY		—	—	—	—	234	02	24	EOL 62	
HY	048/0234	234	02	34	SOL 48	234	—	—	—	8-9 m
H+	13h120	234	02	34		234	03	17		
SS		234	02	34	1308 22023500	234	03	17		
C	13i120	234	02	34	shot = 183599	234	03	17		
H+	13h121	234	03	17	File change	234	03	58		9.7m
SS		234	03	17	130822031700	234	03	58		
C	13i121	234	03	17	shot = 193700	234	03	58		
HY	—	234	—	—	—	234	03	58	EOL 48	
SVP	036	234	03	59	—	—	—	—	V0001193.TXT	
H+	13h122	234	04	06		234	04	51		11m
SS		234	04	06	130822040600	234	04	51		
C	13i122	234	04	06	sh = 205699?	234	04	51		
HY	059/0406	234	04	06	SOL 59	—	—	—	—	10.2
H+	13h123	234	04	51		234	05	43		
SS		234	04	51	130822045200	234	05	43		
C	13i123	234	04	51	216700	234	05	43	EOL 59 shot ~229000	
HY	058-0602		05	52	SOL 58					
H+	13h124		05	52		234	06	56		
C	13i124		05	52	shot 231000	234	06	56		
SS			05	52	130822053000	234	06	32	sonar failed	

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EQUIPMENT CODE	ID	START DAY	START HOUR	START MINUTE	START COMMENT	END DAY	END HOUR	END MINUTE	END COMMENT	DEPTH (METERS)
#SVP	037	234	06	57					V000196.txt	
H+	13h125	234	07	00	file change		07	18		
C	13:125	234	07	00	shot ~ 247200		07	12	lost chirp lock	
Hy	058 0739	234	07	39	reconnected chirp		08	30		
H+	13h126	234	07	39			08	30		11.6m
C	13:126	234	07	39	shot 1850		08	30	shot ~14050	EOL 58
Hy	057 0846	234	08	46	SOL 57					
H+	13h127	234	08	46	heading west		09	32		
C	13:127	234	08	46	shot ~17850		09	32		
H+	13h128	234	09	32	file change		10	17		12.7m
C	13:128	234	09	32	shot ~28700		10	17		
H+	13h129	234	10	17	file change		10	57		10.4m
C	13:129	234	10	17	shot ~39600		10	57	EOL line 57	
End of survey										