200 kHz

depth diff

5.67 − 5.05 = .62
2.69 − 2.27 = .42
6.58 − 6.19 = .39
.50

420 kHz

~~5.26~~ 3.105 − 2.75 = .30

2.52
2.42
0.10

2.41
2.11
.30

February 1, 2007 (JD032) Possession Beach

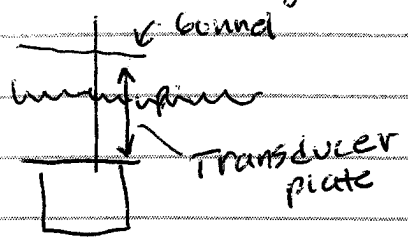
Today's weather is sunny, cold wind, slight breezy.
Forcast is for wind

Today's crew

Jessica Lacky Chief
David Finlayson Chief
Andrew Stevens Information Specialist
Andrew Schwartz GPS
Collin Smith Skipper

Transducer

			1st	
plate to gunnel	Forward	430 kHz	92 cm	
	Aft	200 kHz	91 cm	90 cm
			~~92 cm~~	



EVENT	TIME	EVENT	TIME
START line 150	17:08	start line	17:34

Shore parallel line
The biosonic was logging before this line
We weren't moving much so ignore
that data.

		Start (video + sounder)		Stop	
VIDEO	NEAR LINE 132	17:47		Stop	17:54

Echo sounder recording
VIDEO & sounder look very similar
LINE offshore

VIDEO	NEAR LINE 123	18:00		Stop	18:06

Echo Sounder recording
Again VIDEO + sounder look very similar
Correlation b/n VIDEO & sonar is excellent
LINE offshore

VIDEO	Near LINE 113	18:10		Stop	18:15

Echo sounder recording
Video is angled back from boat, not
as well synched w/ sounder this time
but not bad. Probably the lead from rope
is long enough sounder and VIDEO looking at different places

EVENT	TIME	EVENT	TIME
NEAR 103	18:19	Stop	18:23

VIDEO Echo sounder recording, LINE offshore

NEAR LINE ~~040~~ 093	18:28	Stop	18:32

VIDEO Echo sounder recording
WAVE Roll getting into data
LINE offshore

NEAR LINE 083 START 18:36 Stop 18:41

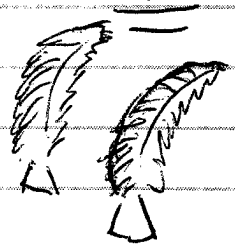
VIDEO Echo sounder recording
Still waves getting in data
LINE IS offshore

NEAR LINE 073 START 18:44 Stop 18:51

VIDEO ECHO Sounder recording
LINE IS offshore
VIDEO CAMERA IS TRACKING well w/ direction of Boat
a bit wavy
There are sea pens on the bed which may be showing up as isolated targets in sonar

NEAR LINE 063 START 18:55 Stop 19:01

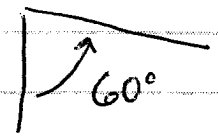
VIDEO Echo sounder recording
line is offshore
start of line was shellhash and gravel now back to sand w/ ~~the~~ ripples
maybe it will look different?



DOZENS of sea pens on this LINE

EVENT	TIME	EVENT	TIME

angle of line of VIDEO is ~60°
VIDEO seems to be pointing in direction of travel



NEAR LINE 053 START 19:07 STOP 19:10
VIDEO ECHO sounder recording
line is off shore
Sea Pens at > 8m depth

NEAR LINE 043 Start 19:14 STOP 19:16
VIDEO ECHO SOUNDER RECORDING
LINE IS offshore
Sea Pens at > 8m depth

NEAR LINE 044 START 19:17 Stop 19:18
VIDEO ECHO Sounder recording
line is off shore
Sea Pens at > 8m depth

NEAR LINE 033 START 19:23 Stop 19:24
VIDEO ECHO SOUNDER IS RECORDING
LINE IS OFFSHORE
Lot's of shell hash & Gravel
NO SEA GRASS

NEAR LINE 023 START 19:32 STOP 19:33
VIDEO IS GOING
SOUNDER IS FROZEN, Rebooting

EVENT	TIME	EVENT	TIME
NEAR LINE 23	19:38	STOP	19:41

VIDEO

Echo sounder recording
VIDEO RECORDING
pebbles, cobbles, hash
3D - ripples

NEAR LINE 13 START 19:46 STOP 19:52

VIDEO

ECHO sounder recording
VIDEO RECORDING
texture change on this line
* Red coralline algae
Boulders, urchins, KELP
VERY DIFFERENT ~~LINE~~ TEXTURE
—— OUT OF VIDEO TAPE ——
—— START TAPE #2 ——

20:14 Swapped out ~~power~~ battery on transducer after Bosonic stopped pinging during lunch break

NEAR LINE 5 START 20:23 STOP 20:29

VIDEO

ECHO SOUNDER RECORDING
VIDEO RECORDING
LINE colored
PINK STUFF on ROCKS
KELP
pebble PAVEMENT / shell Hash

CAMERA CAUGHT ON KELP!
TRANSDUCER GRAZING KELP, didn't seem to hit hard nor did it get hooked.

EVENT	TIME	EVENT	TIME
NEAR LINE 18	20:36	Stop	20:41

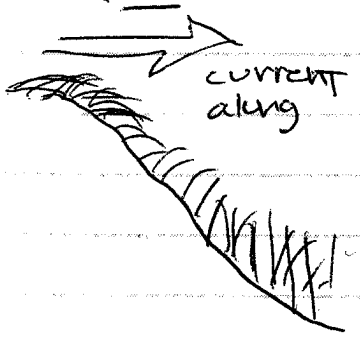
VIDEO — VIDEO + BIOSONIC RECORDING
LOTS OF ROCKS
Red algae (Pink stuff on Rocks)
Brown algae (kelp), Sea pens < 8m

200 kHz doesn't show much plant detail
GETS good bed return

LONGSHORE "LINE 149" START ~~12:48~~ 20:48 STOP 20:56
NO VIDEO — Informal "Filler" line as we transit
North to NEXT VIDEO LINE

NEAR LINE 48 START 20:59 STOP 21:01
VIDEO — VIDEO + BIOSONIC recording
Sea grass on terrace, then
plunged into deeper water

NEAR LINE 58 START 21:16
VIDEO — VIDEO + BIOSONIC RECORDING
strong current.



Sea grass laying flat at beginning
of LINE (NEAR SHORE CURRENT
or surface current)

deeper in profile Grass stands
up taller, current drops,
BIOSONIC Gets a better return.
Sea grass continuous until 21:20 (25m)

(COVER)

Program FROZE C2121

NEAR LINE 59 START 21:24 STOP 21:26
VIDEO & ECHO SOUNDER BIOSONIC
FLATTENED DOWN GRASS AT BEGINNING
OF LINE → 55.215
(VIDEO) → 22.467 END of SEA GRASS

21:56 REFRACTOMETER MEASUREMENT
22.5 % (22.5 ppt)

GRAB SAMPLES

~~14:12~~	47° 54' 26.0"	~~NO~~ TOO Hard
22:12	122° 22' 32.7"	NO Sed in bucket
22:16	47° 54' 42.3"	NO sediment
	122° 22' 29.9"	
22:18	47° 54' 42.0"	NO SEDIMENT
	122° 22' 30.6"	SEA GRASS
22:19	47° 54' 42.6"	SEA GRASS
	122° 22' 30.8"	SEDIMENTS
		NEAR LINE 40 ~4m depth
		SAMPLE #1
22:21	47° 54' 42.2"	SEA GRASS ~4m depth
	122° 22' 22 30.7"	SEDS
		Sample #2
		NEAR LINE 40
		MED/FINE SAND

GRAB SAMPLES

TIME	POSITION	NOTES
~~11~~		
22:25	47° 54' 49.4"	NEAR LINE 45
	122° 22' 30.9"	NO SEDIMENT
		~ 4m
22:26	47° 54' 49.3"	GRASS
	122° 22' 30.5"	NO SEDIMENT
		~ 4m
22:27	47° 54' 49.3"	NEAR LINE 45
	122° 22' 30.9"	SEDIMENT
		~ 4m water depth
		SEA GRASS, MED SAND
		SAMPLE #3
22:31	47° 54' 58.8"	NO SEDIMENT
	122° 22' 31.0"	
22:32	47° 54' 58.8"	NO SEDIMENT
	122° 22' 31.1"	
22:33	47° 54' 58.8"	SAMPLE #4
	122° 22' 31.1"	SOME sand
22:35	47° 54' 58.8"	integrating with
	122° 22' 31.0"	Sample #4 to
		get more in sample

m depth

h

GRAB SAMPLES (CONT)

TIME	LOCATION	NOTES
22:36	47° 54' 58.9" 122° 22' 31.1"	Sample #5 sand / Grass
22:39	47° 55' 06.4" 122° 22' 31.2"	Sample #6 NEAR LINE 55 FINE SAND, shells MORE organics ?
22:43	47° 55' 14.4" 122° 22' 30.1"	Sample #7 EEL GRASS, SAND
22:45	47° 55' 22.0" 122° 22' 26.8"	Sample #8 NEAR LINE 65 Sand
22:48	47° 55' 30.1" 122° 22' 22.5"	Sample #9 SLIGHTLY COARSER SAND ~ LINE 75 ?
23:02	47° 55' 37.8" 122° 22' 16.0"	Sample #10 LINE 85 Sand, sea Grass
23:05	47° 55' 43.4" 122° 22' 08.2"	Sample #11 LINE 95 Shell w/ barnacles MED SAND

NOTE All GRAB SAMPLES TAKEN WITH BOAT IN APPROXIMATLY 4m OF WATER, ESTIMATED BY BOAT Fathometer

TIME	LOCATION	NOTES
23:09	47° 55' 49.3" 122° 21' 59.8"	Sample #12 LINE 105 Sand + SEA GRASS
23:12	47° 55' 54.2" 122° 21' 50.7"	Sample #13 LINE 115 Sand + SEA GRASS
23:14	47° 56' 01.0" 122° 21' 43.1"	NO SAMPLE 1719 (HYPACK MARK)
23:17	47° 56' 00.0" 122° 21' 42.1"	Sample #14 LINE 125 SEA GRASS + SAND
23:19	47° 56' 07.8" 122° 21' 35.5"	Sample #15 LINE 135 Shells, SEA GRASS SAND
23:23	47° 56' 07.3" 122° 21' 34.6"	LINE 135 Sand, SEA GRASS Add to Sample #15
23:26	47° 56' 15.2" 122° 21' 29.8"	NO SAND LINE 145

GRAB SAMPLES (CONT)

TIME	LOCATION	NOTES
~~15~~ 23:28	47° 56' 15.3 122° 21' 29.4	Sample #16 LINE 145
MOVED BOAT DOWN TO THE SOUTH		
23:36	47° 54' 33.3" 122° 22' 31.8"	NO SEDIMENT
23:37	47° 54' 33.0" 122° 22' 32.3"	NO SEDIMENT Shell Hash LINE 35
23:39	47° 54' 32.8" 122° 22' 32.1"	NO SEDIMENT
23:41	47° 54' 33.4" 122° 22' 32.1"	Sample #17 Shell hash/Sand NEAR LINE 35