6-13 mod/demob to boxcore

6-14 boxcore (see Greg's ~~Brooks~~ Branan / Marci Marot)

6-15 boxcore / break stopcock to intake of
Starboard Generator need to find a replacement

6-16 Rich Young wps new stopcock / arrives late afternoon

6-17 Crew is Dave Bennett, Jack Kilding, Chadra Dreher
Dana Wiese
7:30a - Jack dives underboat inputs bon (plug) in stopcock
intake
- Replace Stopcock
9:00 - leave dock to test seismic / chirp system
chirp is working well = 4-20 kHz
secs and a slight chop
chirp resolution is very good with these settings
go over pcv 51, 52, 54
52 is large channel

6-18-00
Boomer Down - at dock
Dana worked on it all day
weather is calming will work w/chirp
only tomorrow if necessary

6-19-00 BSRS Seismic Dave B., Dana W. Chadra Jack K.
Boomer Down will use chirp only.

11:30 Z (6:30 CST) lv dock
weather good >1' swell, running to 7a line offshore
12:30z deploy chirp
Not deep enough retrieve
12:45z redeploy w/longer line (red) good
return to SOL 52c
12:58z start recording BSSOO-52c
chirp good
1325z turn 29° 12.406 N to ~~West~~ WSW
89° 52.817 W West South West

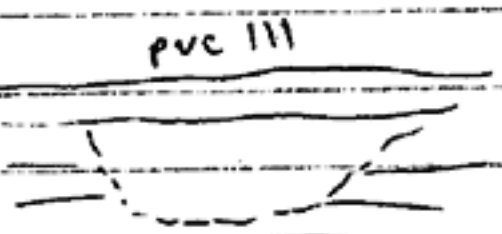
1346z going passed stand pipe seem's to be small waveleto on bottom surface, maybe due to stuff on bottom

1352z profile wipe out due to fish haven (stand-pipe)

1359z still wipe out bottom depression (subsidence) from sulfur withdrawl

1407z good data back, as we clear sulfur rigs

1409.22z possible incised channel



1425z EOL S2c.

1428z SOL BS300c_S3.

1438z c/c to more offshore

1444z pvc 112 general zone site for area characterization

1457z pvc 113 possible shelf sheet sands w/ 1m thick

1510z c/c lg mats of sargasso

1546z pvc 114 shelf sands ? w/ 1m of surface

1630z EOL S3

1632z SOL BS300c_S4

Seas are increasing 1-3'

Data ; OK

typical shelf stratigraphy

possible shelf sands w/ incised channels

1640z pvc 115 possible shelf sands

1806z pvc 116 "

1728z EOL 54

1728z pvc 117

1729z SOL BSS 00c — 55

date is not very good as we go downsers possibly on hard surface

1752z pvc 118 good place to hit the hard lower horizon that has come up near surface ~3m.

1830-1845z → pull up chirp as water gets shallower

1900z PVC 119 possible sand wt on surface?

1907z c/c due to shrimp Boat traffic

1918z EOL 55 turn East along shore in 10' of water

1920z SOL 56 BSS 00c — 56

1928z EOL 56 poorer condition

1930z SOL 57

1939z EOL 57 problem seas 2-4' w/ chop

EOD

6-2000 BSRS Grade Isle

1115Z /U Dock
No Boomer
weather 5-10 seas >1 from South

1140 SOL @ BSJ00c_58
west side Barataria Pass near rock
wave break

1151Z data marginal but useful

1151Z

Just inshore of pvc33

1213 EOL 58
Turn to SSE offshore into seas to try & get
better data

1215 SOL @SS00c_59

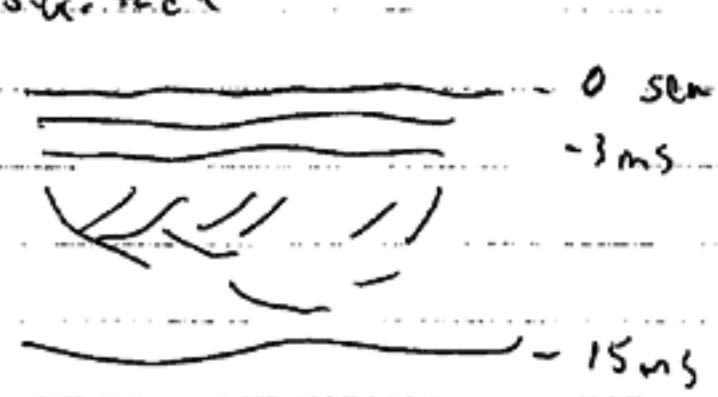
1226 inc. spd 3 → 4 kts

1305Z EOC 59
turn West data is better, pass near #44

1308Z BSS00c_60
data is better deeper horizon shows Bm
below sea floor

1315Z pvc120a * bedding near surface possible salt dept

1251Z pvc121 hard surface



1413 pvc 122 bed forms target upper 2ms

1437z pvc 123 looks like hard surface
weather is getting worse

1502z pvc 124 weather sloppy turning down sea due north
EOL 60 possible site data not good
Blow out sea anchor

1507z SOL BSS00c-61
Good direction data same so it may be real
hard surface 3.5ms below surface

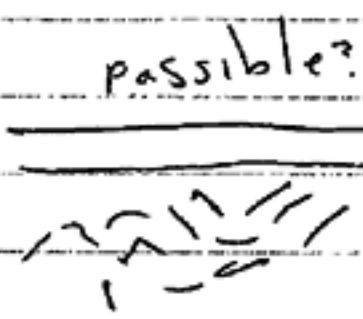
1520z pvc 125 hard surface w/ trans parent underneath
1.5ms below sea floor

1554z pvc 126 multiple horizons possible x bedding

1615z EOL 61

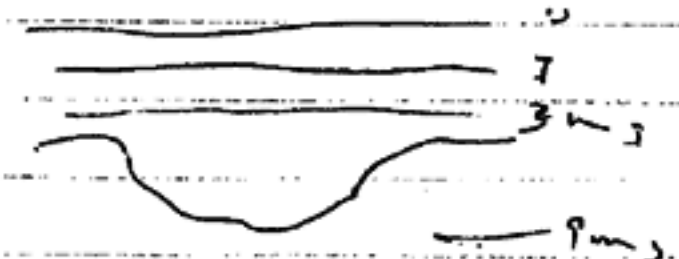
1616z SOL 62

1635z pvc 127 passible?



1735z pvc 128 apparent x bedding in upper 2ms

1816z pvc 129 incised channel



1822z EOL 62 data is Ok → good

1825z SOL BSS00c-63

1845z pvc 130 x-bedding possible incised

1859z pvc 131 "

1952z EOL 63 B/G at sea Anchor

1959z SOL BJS00c-64
going west along shore,
hard sand - No penetration / need boomer
for these lines

2051z EOL 64
turn offshore / change paper / restart line
turn in circle

to
2104z SOL BSS00c-65

2131z pvc 132 hrd? sand area

2223z pvc 133 sandy looking shelf sandy?

2230z EOL 65
EOD

Kirk Ludwick, Jack K. D.
Dana W. Chuck D.

10-24-00
1615z Work on Hatteras IV dock
Boomer & chirp working
run out to core BSS00-45
1645z fire up circle

1706z SOL BSS00c-66
good data / seas good >1'

1717z pvc 134 apparent hard surficial unit

1725z pvc 135 x bedding nylon detail

1858 pvc 136 possible channel @ 6 ms

1905 pvc 137 " @ 9 ms

1941 pvc 138 hrd unit 14 ms

2008z pvc 139 channel @ 2ms

2031z change paper on Chirp EDR 5
50K 6

2046z pvc 140 hard surface possible channels @ 1ms

2100z pvc 141 channel @ 3ms

2130z EOL 66

2131z SOL 67 BS500-67

2200z EOR 1 Boomer
S.O.R 2 Boomer 67c

2227z pvc 142 hard surface stong reflection

2250z pvc 143 looks like channels @ 2ms

2320z EOL 67 EOD

6-22-00 BS500 Keith Ludwig, Jack K
Dave W. Chandra D.

1045z lv dock

1145z SOL BS500_68
weather good >1' swell
data chirp & boomer

1214z pvc 144 x-bobbing ~2ms

1229z pvc 145 channel

1237z pvc 146 channel

1246z pvc 147 channel

1255Z pvc 148 poss. blk target in upper 2rds

1318Z pvc 149 " channels in upper 2rds

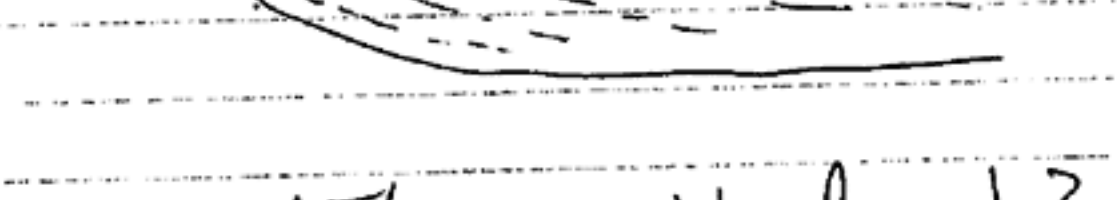
1352Z chirp EOL 6
SOR 7

1419Z pt. a. begin a channel } one feature
1429Z pt. b. ends channel } w/transparent interval

1429Z EOL 68

1431Z SOL 69

1508Z NSF=1 interesting feature fine grained filled trough



1527Z pvc 151 possible channel?

1535Z sargassum in starboard gen. break/in
EOL 69

1547Z SOL 70
1700Z. sargassum problem slow

1715Z pvc 152

1721Z pvc 153 x-bedding, pt. bar like

1735Z pvc 154 channeled area
This is a large area of deformation/erosion
incision?

1811Z pvc 155 incised channel

1840Z pvc 156 "

1905z EOL 70

2005z
1920z SOL 71/EOL 71

2004z SOL 72

2023z puc 157 incised channels x-bedded, 0.5 to 1 ms

2054z puc 158 large incised channel

2302 EOL 72

EOD

6-23-00

1140z In dock Keith, Jack, Dave

1205z gear in water

1208z SOL 73 Near shore G.I. warth wind chirp 5-10 calm near beach

1215z Boomer /data good

1240z change gain power on chirp better

1254z puc 158 possible barrow area, incised, x bedding shoreface

1318z EOL 73 @ Chinook Pass turn South

1317 SOL 74

1403 puc 159 incised channels in upper 4ms at chirp, deep channels on Boomer to 30ms

1426z puc 160 4ms below surface looks like possible channel or lethaea

1440z puc 161 similar to puc 160

1525z EOL 74

1528z SOL 75

1602z pvc 162 possible lg. channel 04ms

1744z pvc 163 possible inclusions looks sandy

1804z EOL 75

1814z SOL 76

1936z pvc 164 3 to 4ms down fluvial or deltaic

1940z EOR 8/SOR 9 Chop

1947z pvc 165 4ms - channel?

2012z EOL 76

2015z SOL 77

2121z pvc 166 mit 2ms deep in chirpsteps deltaics

2157z EOL 77

EOD

6/24/2000 Keith L, Daniel W, Mike Braun (BLM NO)

Grand Isle 1A - Chirp, boomer

11:52 - breakdown

12:14 SOL bss00_78 (Seis)

SOL bss00c78 (CHIRP)

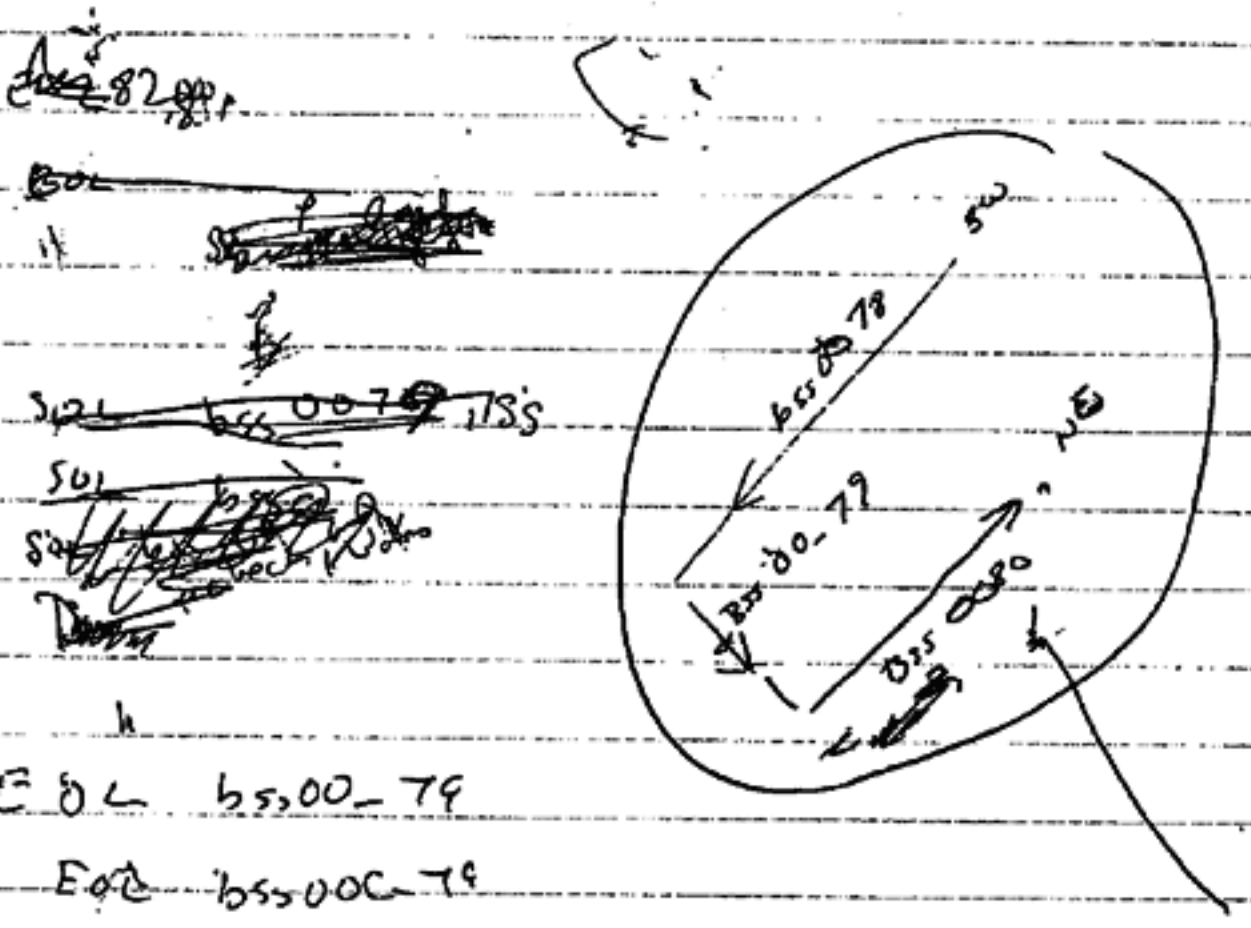
SOL bss0078 (MPU, depth) *

≈ 2ms of penetration - sw. heading

EOL

14:57 EOL bss00_78, bss00C_78, bss0078

15:04 SOL bss00_79



EOL bss00_79

EOL bss00C_79

EOL bss0079

SOL Bss00_80 15:33

SOL bss00C_80 15:33

SOL bss0080 15:33

EOL bss00_80 (Seismic) 16:20 paper takeup change

SOL bss00_80a (Seismic) 16:20

EOL bss00C_80 (Chirp) 16:30 paper change

SOL bss00C_80a (Chirp) 16:35

CHIRP - end of roll #10, start of roll #11

EOL bss00C_80a, (Chirp) } paper/plotter change ≈ 17:00

EOL bss00C_80a (Chirp) } paper/plotter change ≈ 17:00

EOL bss00_80a (

OYO plotter now plotting CHIRP, Alden now plotting Seismic

SOL bss00_80a SEIS - End of Roll #3, Start Roll 4

SOL CHIRP - End of Roll *

SOL bss00_81 (seis) 19:24 Healy JW

SOL bss00C_81 (chirp) 19:25

SOL bss0081 (NAV) 19:21

Healy JW

EOL bss00C_81 (seis) @ 20:00 ? } Note

SOL bss00C_81a (chirp) @20:00 ? }

EOL bss00C_81a (chirp) 20:03 out of grid

EOL bss00-81 (seis) 20:03

SOL bss00_82 20:12

SOL bss00C_82 20:17

SOL bss0082 20:12

21:47 EOL bss00_82 21:47 EOL BSS0082 // 22:04 SOL BSS00_82a, SOL BSS0082

EOL bss00C_82

EOL bss0082

6/25/2000 Keith L., Dena W., Mike Brown (UNOLS)

3.5 Generator-Injector Gun - Mini Water - 0-1Hz)

12:44 SOL BSS00_83 seis

BSS00C_83 chirp

BSS0083 nav

14:46 EOL bss00-83

EOL bss00C_83

14:47 SOL bss00-84

SOL bss00C-84

SOL

16:30 EOL bss0084 (seis)

EOL bss00C_84 (chirp)

EOL bss0084 (nav)

SOL bss00_85 17:07
SOL bss00C_85 17:07
SOL bss0085 17:15

18:08 EOL bss00C_85 - flat calm seas
18:10 SOL bss00C_85a - paper change

18:10 End of CHIRP roll #13, Start of roll #14

18:55 EOL bss00C_85a
18:55 EOL bss00_85
18:55 EOL bss0085

19:30 SOL bss00_86 (seis)
SOL bss00C_86 (chirp) - * NSF line (?) Interesting
SOL bss0086 (nav)

20:08 EOL bss00_86
EOL bss00C_86
EOL bss0086

20:44 SOL bss00_87
SOL bss00C_87 - * NSF line (Intensity)(?)
SOL bss0087

22:01 EOL bss00_87
EOL bss00C_87
EOL bss0087

6/26/2000 BSS Keith, Dana, Mike Brown (UNO)
~~Set~~ Left dock 8am (thunderstorms) - working east, 1-2' chop
Seismic (130 Joule-Huntec, Chirp
13:33 SOL {BSS00C_88
SOL BSS00_88
~~SOL BSS0088~~
SOL BSS0088

15:28 EOL BSS00C_88 (chirp)
EOL BSS00_88 (seis)
EOL BSS0088 (nav)

15:30 SOL bss 00C_89 - great chirp data (16:50 on)

SOL bss 00_89

SOL bss 0089

17:09 EOL bss00C 89

EOL bss 00_89

EOL bss0089

~~EOL~~

17:12 SOL bss00C_90 =

bss00_90 = Great seismic horizon rising up from 100ms to 30ms (done like) - at beginning of line

bss 0090

6-27-00

Crew: Dana W., Keith L., Mark K.

10:52 Partly cloudy, calm in Bay with virtually no wind

12:35 Have reached waypoint ~1.0' seas, nice weather

12:39 SOL BSS00c_93 Chirp

12:57 SOL BSS00_93 Seismic

12:49 EOL BSS00c_93

12:48 SOL BSS00c_93a

13:34:15 Strong reflector on chirp at ~7ms

13:36 strong reflectors rise to surface pvc167

13:40:19 raise chirp for decreasing H_2O depth (wd= 8.3m)
crossing vibracore site

13:42 chirp is relatively transparent

13:47:30 strong reflector on chirp at ~ 8ms
appears to rise toward surface

13:49:30 reflectors picking up becoming more prominent on chirp
possibly incision

13:51:22 very strong reflectors showing up on chirp at 6-8ms pvc168
pvc168 may be in center of an incised channel, basal reflector
at 6-8ms appears to be real and not a multiple
shows up as strong reflector on seismic at ~15ms

13:59 multiple good horizontal to subhorizontal reflectors on chirp that locally
appear to rise or fall,
Passing between numerous small platforms

14:05 89° 31.40 29° 11.138 Generator dead; seismic down

14:09 strong shallow reflectors on chirp

14:15 paving close to platform, generator back on, swinging around
to cover ground where generator was down
still having generator and AC problems

SOL

Suggested lines from Jim 6-27

Start offshore ~ 7 miles ties to line 9

89° 52.219 29° 11.440 wpt 15

heads NE through vc 72

89°51.853 29° 12.924 wpt 16

continue through vc 64

89 51.153 29° 16.008 wpt 17

northeast through vc 37

89 50.696 29° 17.526 wpt 18

to a sites VC 38 & 39

89 50.579 29° 17.934 wpt 19

right off Quatro Bayou

turn east through 86

89 49.013 29 17.894 wpt 20

through 89

89 46.682 29° 17.699 wpt 21

once through 89 turn toward SW through site 90

89 46.623 29° 17.378 wpt 22

now heading SW through 65

~~89 46.6~~ 89° 49.096 29° 13.563 wpt 23

turn west to go through 47

89° 50.412 29° 13.086 wpt 24

turn toward Quatro B. NE to vc 88

89° 47.999 29° 18.302 wpt 25

47.999

1.25

~~48.1~~

89 49.24

195 3.3 Nm

14:28 turning back around to track across missed line
14:29 losing chirp

15:08 Chirp transparent passing into strong reflector at ~ 7ms that appears to rise also evident on seismic

15:16 Chirp shows very prominent bottom and shallow subjacent reflectors appears to mimic incision on seismic. ~ pvc 467
Headed toward outlet

15:21 Turning toward Southeast toward next waypoint, water depth ~ 62m
headed directly across outlet of Sandy Point Bar
Seas picking up due to cause change and increasing weather

15:30 Weather very poor, heavy rain and increasing swells

15:37 Poor quality data, running parallel to wavefronts approaching from southwest. Hoping to stretch this course out to way point and then turn into waves and head offshore

15:53:36 Turning toward southwest headed offshore

EOL BSS00c_93a 16:00
EOL BSS00_93 15:58

~~16:00~~ 16:02 SOL BSS00c_94
~~16:20~~ 16:03 SOL BSS00_94

16:07 shallow reflector rising to surface on seismic

16:20 lower chirp, chirp is showing relatively transparent shallow reflectors
16:21 Raise chirp a bit
16:22 Seismic appears to be showing horizontal/subhorizontal shelf-like stratigraphy

16:45 Chirp data not so good, numerous unpredictable 2-3' swells
Possible shallow incisions on seismic records

16:47 Lower chirp

16:49 Offlapping reflectors showing up in both Chirp and Seismic

16:54 adjusting engines to log and clean-up chirp data

16:55 Strong reflectors in shallow interval on seismic at ~14-16 ms

17:00 Still seeing strong reflector in seismic at ~15 ms, seems to be rather continuous truncation surface with subtle incision below

17:01 Power down

17:03 Power back on

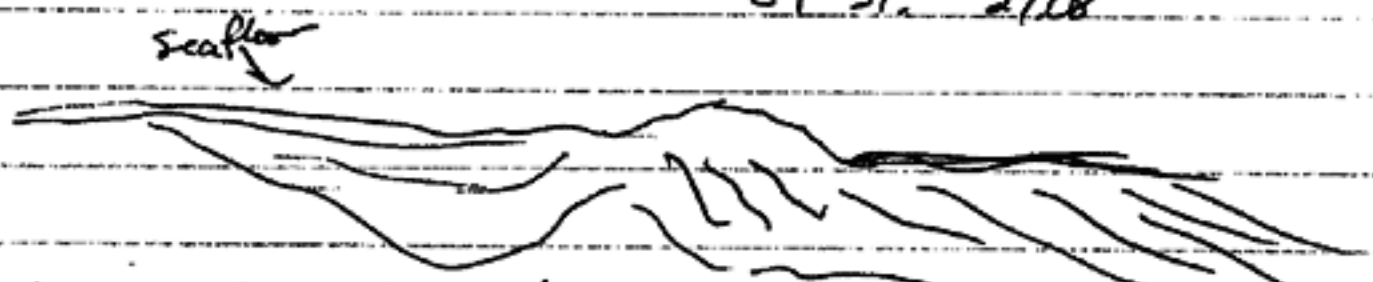
17:02 EOL BSS00c_94

17:08 SOL BSS00c_94a

17:11 "Ridge and Valley" reflectors on chirp PVC169
Appear to be domes of some sort, locally truncated at seafloor or in places appears to have raised seafloor?

17:23 Similar reflectors showing up on Chirp down to ~6ms below seafloor

89° 31. 29.08



A whole series of offlapping reflectors ~~[illegible]~~ below the seafloor truncation

THIS AREA MUST BE THOROUGHLY INVESTIGATED PVC sites 170, 171

17:48 Change course toward southeast

17:58 Major channel like features showing up in Chirp to as much as 10ms below seafloor, depth sounder record is reading through the channel fill. Higher frequency penetration perhaps suggest a "soft" channel fill.

18:21 EOL BS500c - 94a

18:23 EOL BS500_94

18:27 SOL BS500c_95

18:27 SOL BS500_95

18:50 very strong steeply ~~diff~~ dipping reflectors on chirp PVC173 truncated by seafloor, features are also evident in Boomer data to about 6-8 ms sub seafloor

18:58 Strong reflectors showing up on Chirp down to 2ms sub seafloor locally dipping to a termination at about 7ms sub seafloor

19:01 Rising again to truncation at seafloor, channel-fill reflectors seem to vary between transparent and strong. Although officially out of study area this ~~depo~~ section appears to be heavily channeled

19:18 Chirp showing to ~ 5ms below seafloor several strong reflectors. At least locally have lost the numerous channel-like reflectors and entered a zone of more "pancake-like" stratigraphy.

19:22 Lower most prominent reflector on chirp dropping away to ~ 5ms sub seafloor

19:24 rises slightly again to meet overlying horizontal reflectors.

19:29 joined chirp ~ 1 nm

41:53:41 approximately 1 mile offshore chirp and Boomer showing horizontal shelf stratigraphy

20:00 adjusting course toward southwest for fishing boat on port side should be crossing pipelines in this area

20:25 Strong reflectors compact directly below seafloor beginning to deepen as headed offshore

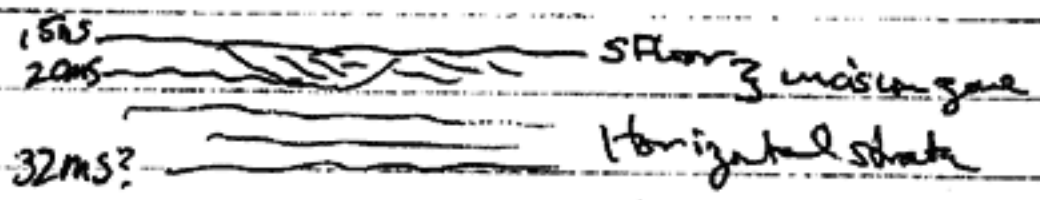
~~21:02~~

21:14 Steeply dipping reflectors marking channel? in Chirp
Up to now Chirp had been showing relatively transparent interval below seafloor.
Sub seafloor reflectors becoming more prominent passing to north of [redacted] pvc167

21:22 Chirp is not showing much in sub seafloor stratigraphy here
Boomer data data shows multiple channel-like features in shallow sub seafloor stratigraphy.

21:28 Strong channel-like reflector patterns on Chirp

21:46 Significant channel-like geometry of reflectors on chirp basal reflector at approximately 4ms below seafloor, water depth = 10.7m
Basal reflectors in the channels appear to consist of a strong reflector couplet
Boomer data seems to show horizontal stratigraphy below the incision zone just below the seafloor



21:58 Wavy parallel geometries in chirp, This area had previously been selected for vibrocoring, if it has not been cored it seems to be a good candidate (earlier picked pvc 153)

22:07 EOL DS500_95 chirp
22:07 EOL DS500_95 Boomer

22:07 Retrieve gear
00:22 Back at dock, fueled up and ready for tomorrow

Wednesday June 28
Crew: Keith L., Dana W., Mark K.

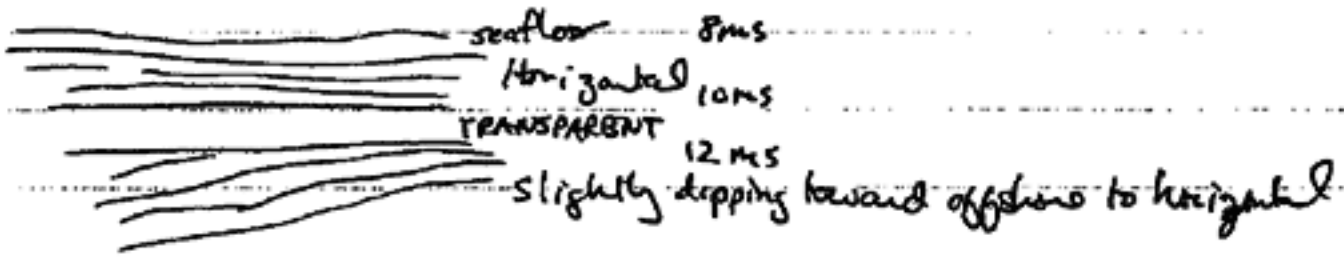
11:05 Leave dock, partially cloudy, winds SW 5-10 knots, 1-2' seas. Will work in acquiring a set of lines suggested by Jim F. offshore of Quatra Bayou.

11:52 SOL BS500c_96 chirp
12:01 SOL BS500_96 Boomer

12:12 Headed onshore toward Quatra Bayou running with seas data looks ok thus far

12:17 Nice data coming through on both systems
~~Mostly~~ Horizontal to slightly offshore dipping reflectors to approximately 10ms sub seafloor on Chirp

12:20 Large transparent channel-like feature on Chirp, poor to choppy internal reflections. Chirp showing 3 levels? of reflectors upper horizontal, transparent and lower channel-like reflectors internal



12:27 crossing line 9

12:38 Horizontal to sub horizontal shelf stratigraphy, several prominent reflectors coming through on Boomer. Strong primary reflector on Boomer at ~ 34-36ms appears to be veering entering into a slight "bowl"?

12:47 Very strong reflector on Chirp at ~ 2ms sub seafloor overlain by thin ~~semi~~ semi-transparent interval and hummocky to irregular reflections; below the primary reflector good data to about 10ms below that is horizontal to sub horizontal

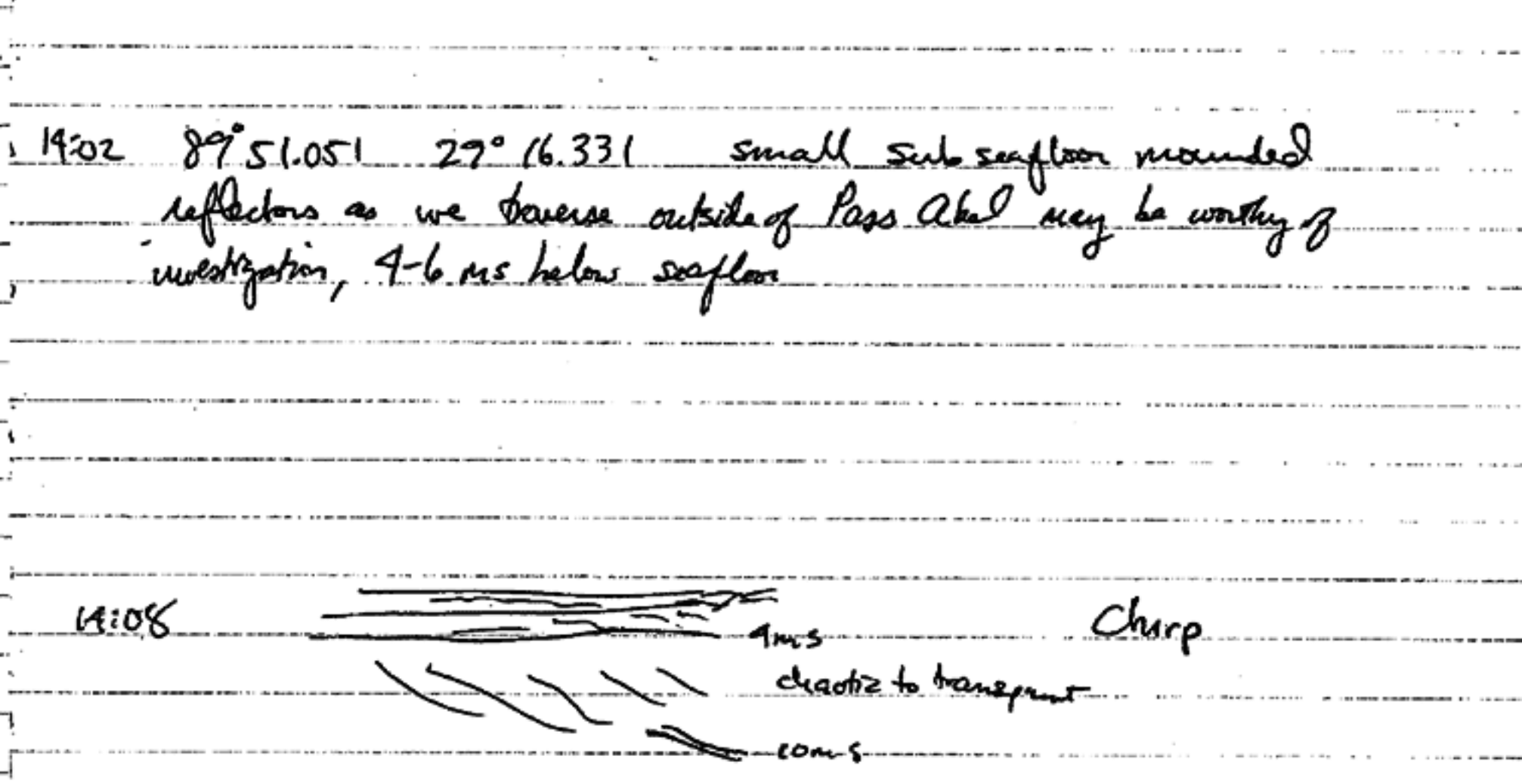
13:17 Appearance and disappearance of transparent interval in Chirp reflectors is interesting, would be nice to core along this line

29° 15.199
89° 51.329

13:42 File write error on Chirp
EOL BS500c_96
13:43 BOL BS500c-96a

13:52 Series of wavy reflectors on Chirp down to ~ 8ms sub seafloor

13:58 Begin channel like reflection geometry, landward dipping reflectors
29° 16.163 PVC 215
89. 51.102
Ut a channel edge I believe



89° 50.959 29° 16.6317 PVC 219
Looks like a series of stacked reflectors, stacking toward NE

14:26 Can hear the Boomer banging from the deck, strong seafloor reflector showing on both data as we traverse Quarter Bayou multiples below [illegible] showing up on Chirp, mostly transparent below seafloor

14:50 passing shrimp boat to starboard
14:59 to Site 86 to port .009 NM
15:10 Boat Nav down for a couple of minutes

15:00 EOL BS500c-96A paper out
15:03 EOL BS500-96

15:07 SOL BS500c-97
15:10 SOL BS500-97

15:28 Running shore parallel just east of Quahe Bayou
Chirp showing mostly horizontal reflections to ~4ms below seafloor, locally looks like some stacked reflections, data should tie nicely to upcoming vc sites 89, 90

15:37 Should be dead on Vibracore 89, will head slightly beyond and then turn toward southwest
15:37 Chirp down EOL BS500c-97 ★
15:46 Turning toward southwest, running into waves

16:06 Strong reflector on seismic system at approximately 4ms below seafloor

~~16:06 Chirp down~~

~~16:06 EOL BS500c-97~~

16:13 SOL BS500c-[redacted]97a Chirp back up

16:18 Significant reflectors at ~ 2.5ms below seafloor on Chirp system
Getting good returns on seismic, locally to 36 or more ms
Mostly horizontal to semi horizontal reflections

16:29 Shallow gas pockets?

16:56 29° 14.537 89° 48.46D 215
top of incised channel on chirp at 2ms sub seafloor
base of incision ~ 4ms below seafloor

FROM JACK 6-28

Turn of Offshore Island VC54

29 05.431 89 48.579

89 48.5

29 05.513

17:02 Mostly transparent returns (oxygen?) in chirp to ~ 2ms below seafloor where first prominent return is coming in. Some action below this level, small incisions and some topdrop. Upper transparent interval is fascinating, what is it?

17:22 Turning toward west making transit vibracore site #7

17:27 Wavy parallel stratigraphy in shallow interval shown on Chirp Eastern transparency in Chirp data perhaps related to depth of system relative to seafloor?

EOL BS500c_79
EOL BS500_97
SOL
SOL

17:49 Turning toward northeast, will hit vibracore site 88 heading with wave

19:16 Strong reflector at ~ 4ms below seafloor showing up on chirp Sounds like a hard bottom through here

29° 17.148' 89° 48.572 potential vibracore site ★ puc216
strong bottom return, subtle stacking of shallow reflectors

19:27 still very strong bottom return

19:44 Fugawi software not working today, navigation more tricky!
heading east shore parallel will turn out 2 / mile then swing around toward the southwest and traverse VC #54

19:55 Turning offshore toward VC site #59

EOL 19:55 BS500c_98
EOL 19:55 BS500_98

19:59 SOL BS500c-99
19:59 SOL BS500-99

21:06 Heading into seas, data quality decreasing
21:07,56 approximate location of vibrocore site 57
Looks like moderate to strong returns on Chirp
parallel horizontal reflections, numerous swells (wave)
appear to be coming through in data
21:38 Most of the returns are suggestive of shelf-like stratigraphy
horizontal parallel returns. Swells have made it
difficult to pick significant horizons. [redacted] offshore shallowly
dipping reflectors.

21:48 Transparent interval showing in Chirp at ~ 2ms below
seafloor.

21:54
[redacted] EOL BS500c_99
21:54 EOL BS500c_99

21:14 Gear retrieved, choppy seas

Thursday June 29

Crew: Keith L., Dana W., Del B., Mark K.

11:11 outside of Barataria Pass
Cloudy, wind NW 5-10 knots, 1-2' seas, choppy
Headed to outside Quatre Bayou. Will attempt to run seismic grid sent by Jack K. and Tim F.

11:40 seas are more like 2-3+ out beyond Pass Abel
gear deployed turning around to track straight across the first waypoint

SOL BS500c_100
SOL BS500_100

11:57 Not very pretty seas on current heading will try to run shore parallel and fly with the waves

1 ★ 89° 51.11 29° 15.09 Identified vc site shallow reflection and strong reflectors PVC 27

12:05 Headed onshore, pretty strong bottom return showing up on Chirp and another strong reflector ~4ms below seafloor

12:10 Reflectors varying from ~4ms below seafloor to ~2ms below seafloor
strong reflector at ~6ms below seafloor
89° 51.40 29° 15.29 potential site ★ PVC 28

12:12 swinging around to hit first waypoint
looks like we're coming up a high in the returns
difficult at times to separate multiples from real features

12:18:48 Channel-like feature on chirp very obvious return
89 51.81 29 15.34 ☆ pvc 219

12:21 Still swinging around for roughly west to northeast transect

12:23:26 89 51.56 29 15.17 ☆ pvc 220
very broad incision, although track at this point is oblique to features probably

12:24:00 ON TRACK HEADED TOWARD FIRST [redacted] WAYPOINT
Lots of dipping returns within which appear to be incised channels

12:27:00 Seismic systems offline right now

12:26 EOL BS500c_100
12:25 EOL BS500_100

12:30 SOL BS500c_101
12:30 SOL BS500_101

13:23 Chirp data is mostly good although "windows" with prominent multiples seem to be cropping up
Seismic data not bad in shallow sections

13:28 Some significant bright spots showing up in Chirp. No indicated pipelines and may actually be related to acoustic wipe out, sound losses or shell horizons?

13:39 Approaching waypoint at end of first line, will swing hard north to see how data looks with seas approaching on port

13:44 EOL BS500c_101
13:44 EOL BS500_101
13:49 Chirp out of paper
13:48 Headed into swells, too rough, retrieve gear head to other end to deploy and run back

14:46 Gear deployed at western end of today's grid. Have moved 2 lines landward. Headed to northeast with swells. The plan is to get data along this track. Hopefully seas will lay down and then will move 200m to line that trends between this course and the first one of today. Not a good day.

19:46 SOL BS500c_102
19:50 SOL BS500_102

15:02:15 Chirp showing some strong returns, ~4-8ms below seafloor

15:05
89°51.07' 29°16.25 wiped channel @ pvc 221
15:14 Steply dipping returns on Chirp
89°50.53' 29°16.39' channel with internal dipping returns pvc 222
15:18 Strong reflector at ~ 4ms sub seafloor on Chirp, thick transparent interval above. Review of cores suggests this transparent interval correlates to a mud/clay horizon.
15:21 Transparent interval rising and pinching out, strong returns coming into Chirp w/ pinch out of the transparent interval

15:24 Transparent zone coming back into view
15:39 Hard bottom
15:37 Strong return on chirp at ~ 4ms sub seafloor rising slightly
16:38:20 Reflector dropping away overlain by ~2ms transparent interval on Chirp overlain by more prominent returns
16:20: Chirp looking wiped out, run for bit to see if it changes
16:25 Retrieve gear and run to other end of area again

16:30 EOL BS500c_102
16:30 EOL BS500_102

17:16 SOL BS500_103
17:17 Gear redeployed heading northeast with swells
17:18 Chirp not functioning, loose connection
17:25 Back on line
17:29 SOL BS500c_103

17:37:20 Channel-like geometry in chirp with semi-transparent wavy reflections
29 15.904 85 58.765
strong basal return of feature at maximum of ~8ms sub seafloor
Slightly deep do vibracore?

17:41:24 steeply dipping moderate returns
89° 50.21 29° 15.95 looks like zone of stacked returns pvc 222
17:43:26 similar signals dipping toward west moving into
slight dome and channel like feature on other side

17:59:42 very strong shallow returns on Chirp
89° 49.08 29° 16.18 pvc 223

18:05 Seismic out of paper
18:45 nearing end of line, will retrieve gear and
head, oops change of plans!
18:50 Turning toward north, will see what data looks like
18:52 too much noise, retrieve gear and run to other side

18:54 EOL BSS00c-103
18:53 EOL BSS00-103

19:29 Gear redeployed, seas have calmed a bit

19:32 SOL BSS00c-104
19:32 SOL BSS00-104

19:57 Nice upper unit of high amplitude returns on Chirp to ~2ms
below seafloor, transparent to semi transparent below, locally
strong returns with significant dips. Laterally upper reflectors show subtle
truncations.

20:06 Lower level of reflectors in Chirp locally becoming more prominent
at 4-6ms sub seafloor

20:10 Subtle rise in upper reflectors shown on Chirp
20:19 Problem w/ seismic plotter
20:35 Sounds like a hard bottom also showing as strong return on Chirp
Lower level of reflectors at 4-6ms sub seafloor appears to
be rising

21:17 EoL BS500c_104
21:18 EoL BS500_104
21:30 Boom retrieved head for dock

Friday June 30
Crew: Keith L, Dana W., Mark K.,
12:10 Headed out of dock, Partly/mostly cloudy, several lines of thunderstorms moving through, time to see what's beyond the Pass

12:40 Have headed to outside of Barataria Pass ~ 7 Km waves from southwest, will head NE with seas NS to try and get deeper.

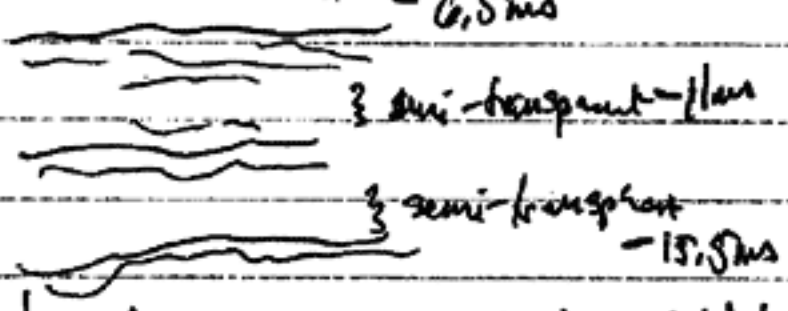
12:55 Gear deployed headed ~ N30E
12:59 SOL BS500c_105
13:03 SOL BS500_105
15:06 Good data seems to be coming in on Chirp
Good returns to ~10 ms below sea floor
Strong primary return at ~ 8-12 ms is showing up
Chaotic to subhorizontal moderate returns above
13:16:45 Nice returns in chirp, strong primary reflector at ~10 ms sub seafloor seems to be wavy and faulty

89° 52.91 29° 14.011 deep vibracore site to penetrate to at least ~7 ms sub seafloor pvc 229

13:19 Chirp seems to be relatively stable in these swells. However, the seismic source is riding high on swells and loosing tension at times

13:28 Reflectors wavy in chirp then fading again
89° 51.71 29° 14.33 small channel-like geometry on east side of a "high" pvc 229

13:38 Strong returns in chirp to a 8 ms sub seafloor, strong basal return with numerous strong returns above bounded by transparent reflectors
89° 50.69 29° 14.81 pvc 226



13:50 Continuing on beyond EOL waypoint to establish tie with lines of 3 days ago

14:10 Have crossed a tie line, prepare to ~~crank~~ gear and head back to western end of today's work area. Will run toward northeast with gear again.

14:47 EOL BS500c_105
14:44 EOL BS500_105

14:58 SOL BS500c_106
14:53 SOL BS500_106

1500 Strong return in Chirp at ~ 11 ms sub seafloor, probably too deep to hit with our vibracore, deeper coring should hit this thing

89°52.74 29°13.17 deep core pve227

15:30 shallow semi-transparent interval in Chirp data. Returns do not seem to be as strong on this line as previous possible multiples as well

15:39:45 lens-like geometry showing up in shallow reflectors of Chirp
89°50.39 29°13.92 potential vibracore site
pve228

15:52 Have passed beyond line endpoint, seas have come down a bit will turn toward southeast to test directions and data in a bit

15:57 very strong returns showing up in Chirp at shallow depths

16:07 Turning toward south to see how data looks, will parallel part of line shot 2 days ago that became poor quality due to weather

16:17 Turning into seas toward SW to see how data looks turning into swells, ~~large amplitude swells~~ long amplitude swells

16:22 Data looks decent headed into swells adjusting course to hit eastern waypoint for next line, hit waypoint and make traverse toward southwest

16:30 EOL BS500c_106
16:32 SOL BS500c_106a

17:00 89°50.47 29° 12.91 ✱ axis of large pc229
channel thinning up on chirp, base at 16-18ms
suggested deep core

17:28 preparing to turn toward southwest to come around and begin
northeast traverse
17:29 EOL BS500c-106a
17:29 EOL BS500-106

17:36 SOL BS500c-107
17:36 SOL BS500-107

17:51 Swinging around toward southwest and pick up intended
trackline

18:11 89°51.58 29° 12.01 strong rising reflectors ✱ deep vibracore site?
pc230
18:19 turning toward east
18:14:30 Change motors, switch to main
significant rise in all the reflectors, hum?

18:21:00 Lots of interesting reflections along this line. Deep cores would be quite useful
out here.

19:00 swinging around toward south, will hit next waypoint and
head southwest for several miles then head slightly west
of north for next critical trackline
19:04 EOL BS500c-107
19:04 EOL BS500-107
19:09 SOL BS500-108
19:11 SOL BS500c-108

19:41 Preparing to swing toward north
Chirp showing 2 semi transparent intervals separated by strong return
at ~2.5ms sub seafloor
19:45 Reflectors at ~1ms out seafloor strongly bundled
package
19:52 EOL BS500c-108
19:48 EOL BS500-108

19:52 SOL BSS00_109
19:56 SOL BSS00C109
20:11 passing through rain & lightning
20:55 turning towards ~~east~~ west will come around to run offshore & like parallel to this last track

21:26 SOL BSS 00c-110
21:26 SOL BSS 00-110

22:19 EOL BSS00c-110
22:19 EOL BSS00-110
00:00 EOD, Back at dock, good data on Lines 110

Sat. July 1, 2000
Crew - Keith L., Dana W., Gregg B.

~~SOL~~ bss 00c-111 - 12:01 mostly clouds, light wind
SOL - bss 00-111 -1206 1' swell - strong data

12:22 - Adjusted CHIRP for shallow water
12:36 Adjusted CHIRP - " "

12:53 - getting into shallow water (2m) - losing subbottom
- Adjust power/gain to enhance return
12:59 - raised fish to surface - shallow - change to TDG gain -
- Start turn to line 112

13:00 - EOL bss 00c-111 running beach line
13:06 - EOL bss 00 -111 marginal data
- SOL bss 00 -112 good weather - slight swell

13:17 - Lowered fish Data marginal - intermittent
13:20 - PVC 231 angled reflection reflection @ 1ms (+ multiple?!

w/in 1-2 ms below seafloor

13:35 turn to Line 113
1337 EOL bss 00112
EOL bss 00c 112

13:39 SOL bss 00-113 running alpslow lit - data
SOL bss 00c-113 marginal on beach line

14:38 EOL sss0c-113 ; sss00c-113
14:39 Turning to line 114 - CHIRP down - para out

SOL bss 00-114 - 14:48 Good data (5-6ms)
sss 00c-114 - 14:48
EOL bss 00_114, bss00c-115 - 15:18
15:06 - Adjusted Fish

15:17 turning to Line 115

SOL bss00
15:19 SOL bss-00c_115
SOL bss 00_115
SOL bss 0115

15:34 2-3 ms data - a little below
15:45 - adjusted fish - shallow

16:12 Approaching EOL 115

16:17 EOL bss 00 115
bss 00c 115

16:20 SOL bss.00 116 Data pretty good for shallow
bss 00c 116 using TVG ≈ 9ms.

16:30 - turning to Dip line - Still Line 116

17:28 - EOL bss 00 116
EOL bss 00c 116

Transit to concentration Area to west

18:09 - Approaching SOL 117

18:05 SOL ~~#7~~ sss 00c-117 Thunderstorm
18:10 SOL bss 00-117
18:44 - Core 48 - intercept

19:03 Core 49 intercept - Approach EOL 117 Still storing
3-4' swell from West
Pool Data!

1927 - SOL bss ooc 118 - close proximity to Core 50
bss oo 118 - note: WP#5 very consistent
had to adjust

1943 - Approaching Channel - dropped speed to 2.5-3 Kts to avoid traffic - may change course
- Data marginal - intermittent refl. @ 2ms - Transparent above
- Some refl. below, but in/out.
- 2ms reflector - hyperbolic / chaotic characteristics

20:12 - turning toward WP4 (S.W. course)
- same line #

20:20 - on course
- dropped pick

20:46 - Adjusted pick

21:11 - EOL bss ooc 118
bss oo 118
21:15 - SOL bss ooc 119 CHIRP - 8-10ms data
bss oo 119

21:42 - Slowed for traffic: adjusted pick
- Approach Core 50 intercept
- note: tried to tie into Core 50 - Too much traffic

21:48 - Course change to 269° - tie in w/ Core 48

22:10 - Approach line 120 - X Core 48

22:12 - EOL bss ooc 119
22:19 - EOL bss oo 118

22:14 - SOL bss ooc-120
22:17 - SOL bss oo -120

23:00 - intrusct core 43

23:01 - EOL bss 00c 120
EOL bss 00. 120

24:00 - Alvice Dock

July 2, 2000 Sunday crew - Keith L., Dana W., Greg B.

06:18 - Leave Dock wind 5-10 variable Smooth
(Local time) to light chop partly cloudy
11:15 Z on route to Eastern most
Area of Conductivity to Shoot
WPEI - E8

13:00 Z - Equipment deployed - approaching SOL 121

13:22 - collecting CHIRP ; changing paper on Seismic
- line not started yet

13:24 - SOL bss 00c 121 2-3 ms good data
SOL bss 00. 121 intermittent below

13:26 - bottom channel on CHIRP ≈ 3 ms relief
- EOL bss 00c 121 - mine detected
PVC - 29°06.3191' 89°28.5114'

13:28 - SOL bss 00c 121a - back online

13:30 - channel-like features on CHIRP
↑

13:45 Numerous 'channel-like' features 2± ms
↓ PVC 29°07.3194' 89°28.3398' (high priority?)
13:55 Loss channel features, 1-3 ms, parallel, continuous

14:05 raised CHIRP Fish
Strong reflector @ 1± ms - mimick sea floor
14:36 PVC 29°09.9290' 89°27.8919 (LP) buried multiple
14:45 Turned to shallow strike line
Some deep reflectors 3+ ms.

15:17 turning to catch core P-86-5 to GOL / SOL

15:11 EOL bss 00c 121a
EOL bss 00 121

15:16 SOL bss 00c 122 1-2 ms data
SOL bss 00 122 Some structure @ 2ms

* Note: Some question as to whether lines are plotted correctly - Seem to be going over some previous lines - Are LOS coordinates plotted incorrectly as well?

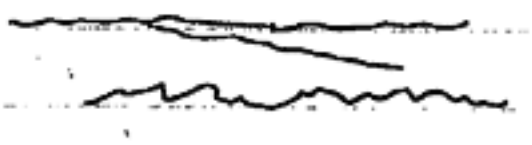
15:58 - channel like features 2± ms on CHIRP
2 ms good data PVC 29°09.3730' 89°30.3687' (P2)

16:03 - Lowered CHIRP fish

16:04 - Subbottom reflector - high relief - surface to 3ms
- good data 1-3ms

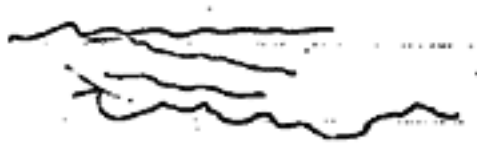
16:10 - Same as above
16:13 - PVC - 29°08.5114'; 89°30.7110' (P1)
16:24 - Same as above Seaward dipping reflector
good data to 3 ms

PVC 29°07.9161' (P-1)
89°30.9228' (priority-1)



16:41 - Lowered CHIRP fish
16:45 - Inlet channel PVC 29°06.8787'; 89°31.3750' (P-1)
16:50 - good Subbottom Steep angled reflector
- PVC 29°06.6774' (P-2) coming to surface
89°31.4547'
16:53 - good data - Low angled reflectors coming to surface
- channels?
- Approaching EOL

17:04 - EOL bss 00c 122 PVC 29°06.0147' (P-1)
bss 00 122 89°31.7164'
17:09 - SOL bss 00c 123
bss 00 123



17:34 - Starting turn to dip portion of line

17:56 - EOL bss 00c 123

18:01 - SOL bss 00c 123a

18:21 - Intermittent subbottom, 'channel-like', 2-3ms
- Storms building - wind 10-15 seas 1-2
PVC - 29° 08.8273' 89° 32.0174' (P-3)

18:50± - Adjusted CHIRP depth

19:02 - PVC 29° 10.8303; 89° 30.7180' (P-3)

19:14 - " " "

19:30 - Approaching EOL

19:24 - EOL bss 00c 123a

EOL bss 00 123

19:32 - SOL bss 00 124 Begin Full ZZ CHIRP

19:36 - SOL bss 00c 124 LAST Line!!!
- PVC 29° 12.3974'; 89° 30.5467' (P2)

19:50 - Intersect Cone 121
- Turning to dip portion of line.

21:39 - EOL bss 00c 124 PVC 29° 11.0589' P-3

EOL bss 00 124 89° 32.2964'

PVC 29° 09.2742' P-3

End of Day 89° 33.7277'

End of Seismics! PVC 29° 08.4175'

89° 34.3893' (P-4)

Fish On!

22:00 - Landed BLACK Tip!
- Deployed CHIRP w/o line
- Dramatic improvement in depth - Beach to shelf in