Jack cell# 813-580-3611

6/20 Seismic/Sidescan survey Crunch. No differential on the buoy today
Pit ne of Ft Myers airport
seas lt chop, crew Rich, Dena, Jim
1517 1535 Running la98_1 se of pit to pit (started as test file 2, have not started sidescan transects)
1520 35 pit se corner, 1532 pit ne corner
1533 ne pit, se corner (recording ~~500~~ ms)

la test 1 (sidescan) running 1537 ~~heading~~ heading ne towards transect start
1540 35 - ste turning around to start transect - lots of sailboats in area.
500 kHz sidescan - saving 100 m on a side, fish about 5' under surface
sel 1545 starting transects
depth (la981.fig) running
1601 end line - turning to 2nd transect
1602 sol la si_2 (seismic) turning around
sol la so_2
1606 turning ~~east~~ westward into lt chop, 1609 - completed turn
1626 Slowing down so Dena can play with his Dumbo
1628 - end of transect 2, turning for three
1630 turning for new transect, started new sidescan line la so 3
1633 eol seismic, 1634 sol la si_3
1651 eol. (transect three) turning into seas (west)
1653 sol la si_4, la so 4 in turn.
1713 ste end transect 4, turning eastward
1715 sol la si-5, la so_5
1724 edge of pit, 1727 come out of pit.
1741 eol turning around (west) ~~to~~ start la si-6, la so_6
1801 ~~bottom~~ flank edge of pit (se), 1803 ne flank
1808 line not recorded, turning around to re-run same name la si 6, la so_6,
1832 eol, turning around, heading west sol la si_7, la so 7
1841 edge of pit (se), 1842 edge of pit (ne)
1846 edge of pit (se), 1847, edge of pit (ne)
1851 eol, turning westward, sol la si-8, la so 8
1906 edge of pit (nw), 1908 se edge of pit, 1913 edge of pit
1914 eol, turning westward, sol la si_9, la so_9.
1930 edge of pit (se), la so 10?
1938 eol, turning eastward, sol la so_10, la si_10 la si 10?
2013 nw edge of pit
2018 eol, turning eastward, sol la so_11, la si_11
2020 airport landing light over pilings in sidescan

2023 edge of hole

2038 eol turning westward Sol lasi 13, laso 13

2058 eol at airport pier turning eastward. Sol lasi 14, laso 14

2117 eol, turning eastward

2124 turning around - restarting last transect laso 15a, lasi 15

2150 end of line at airport jetty, turning ne back toward hole end line.

Sidescan line crashed during last transect

6/24 Lponda - Side scan / Seismic Survey South Pt. Pit

Seas < 1 Ft, crew Dana, Shea, Rich, Jim

E-W transects across pits

No lasi 16

1419 Start recording lasi_17 (seismic), laso_17 (side scan) heading NW towards first point of transect

1424 increase speed to 4 Knots, 1428 turning onto pt.

1446 ~~tur~~ eol, turning south + west. Sol laso_18, lasi_18

1500 eol, turning south + east, sol laso-19, lasi-19

1517 eol, turning south + west. Sol laso_20, lasi_20

1520 seismic record adjustment.

1533 eol turning east, sol laso_21, lasi_21

1542 west side of pit, 1544 east side. (northern edge)

1549 eol turning west, sol laso-22, lasi-22

1558 east side of pit., 1600 west side of pit

1606 eol, turn west, lasi_23, laso_23 west

1616 edge of hole seen in side scan, edge seen in seismic.

1618 eastern edge.

1624 eol, turning eastward Sol lasi_24, laso_24

1632 west side of hole, 1634 east side of hole, 1636 Shallow scarp

1641 caught crab trap end line, turn westward

1651 scarp begin (~~on~~ west side), 1653 - pit ~~east~~ west side

1656 ~~west~~ east side of pit (scarp)

1709 east side of pit., 1711 pit trending west, 1712 ~~west~~ west side of pit

1718 turning east sol laso_27, lasi 27

1724 west side of pit., 1726 east side of pit.

1733 eol, turn ~~west~~ east, sol laso_28, lasi_28

1747 eol, turn ~~west~~ east, sol laso_29, lasi_29

1804 ~~tur~~ eol turn west sol laso_30, lasi_30

1816 eol end of survey

6/22 Side-Scan Launch - Inner Harbor

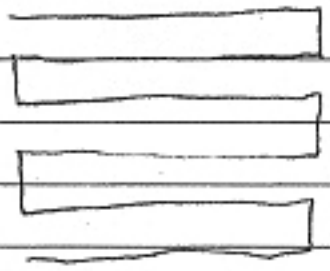
Set lines from "J" offshore "J" marker to airport, west to east, north to south

1) 30° 03.1', 90° 3.2'

30°03.1 90° 1.2' 1.92

30°02.24 90° 1.2'

30°02.24 90°3.2'



BOXCORE SITE 41
INNER HARBOR DREDGE PIT

1 Long Core DGPS ~~30°02.246'~~ 30°02.245 ~~54.7~~

~~90°02.256'~~ 90°02.269' 56.7
270

First attempt unsuccessful. It appeared from the "Dana-Cam" to fall over upon impact. Shrimp visible at bottom. from camera

2nd attempt 30°02.253' w.d. 52'

Full core 90°02.260'

Sidescan / seismic - inner harbor area.

1438 Recording seismic lasi_31, laso 31 - heading NE to first pt.

seas calm, crew Jack, Dana, Shea, Rich, Jim

1443 turning on line,

1502 col, turning west start transect 2 lasi_32, laso_32

1518 col, turning east " 3 lasi_33, laso_33

1540 col, turning west " 4 lasi_34, laso_34

1554 col, turning east " 5 lasi_35, laso_35

1617 col, turning west " 6 lasi_36, laso_36

1625 snag trap

1637 col during east " 7 lasi_37, laso_37

1658 col turning west " 8 lasi_38, laso_38

1713 col turning east " 9 lasi_39, laso_39

1736 col turning west " 10 lasi_40, laso_40

1752 col turning east " 11 lasi_41, laso_41

1755 Subtle ~~hole~~ hole west side of edge

1812 col turning west " 12 lasi_42, laso_42

1831 col turning east " 13 lasi_43, laso_43

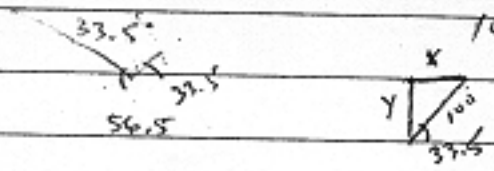
1834 Marker "J" passes 80 ft to starboard

1848 abundant crab trap seen in sidescan -

1850 eol, turning west start transect 14, lasi_44, laso_44
1853 ~~Come~~ F.H. canal edge (or pit) east side
1955 west edge of channel.
1910 eol turning east ~~star~~ start transect 15, lasi_45, laso_45
19310 feature in seismic, possible filled dredge
1971 east west edge of dredge pit.
1930 east edge of channel or pits maneuvering
1930 eol, turning west start transect 16, ~~turning~~ around traps. lasi/laso_47
1931 east edge of dredge, 1932 west edge
~~1932 west~~ 1933 east edge pit#2 (Box core pit), 1937 west edge of pit
1940 eol turning east ~~star~~ start transect 17, lasi, laso_47.
2001 maneuvering to avoid crab traps
2005 Schools of fish seen in side-scan (white fuzz)
2008 eol, turning west transect 18, lasi_48, laso_48
crab traps $< \frac{1}{8}$"
2021 party barge goes by - seen in sidescan
2025 Eol, end of seismic - Pull seismic

—

run in towards inlet - fire up side scan for inclose inlet survey.
sol sidescan laso_48a
halfway across inlet - ~~diagram~~ quite - dust Full
Restart line laso_48a 2054 west to east
eol laso, turning west. sol laso 49
eol turning east sol laso_50
- Filling in - inner harbor laso_51
turning back around to go through Seabrook bridge
start line laso_52, in inner harbor canal - turn around laso 53
back in lake - outside Seabrook bridge, ~~run~~ ~ 100m of light. airport
seawall, laso 54. 2144, 2154 end of line —



100 m = 0.05467 ' lat

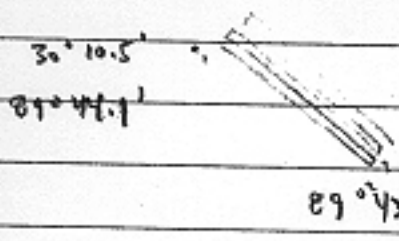
$\sin 33.5 = \frac{X}{100}$; $X = 100 \cdot \sin 33.5 = 55.194$ long.

$\cos 33.5 = \frac{Y}{100}$; $Y = 100 \cdot \cos 33.5 = 83.389$ lat.

100 m = 0.05467 ' lat ∴ 83.389 = 0.04559 ' lat.

$\frac{14}{1'}$ $\frac{12.5}{1}$ 1' lat = 0.893 ' long. ∴

100 m. = 0.05467 · 0.893 = 0.0488 ' long ∴ 55.194 = 0.027 ' long



1.) 30° 10.05 89° 44.1

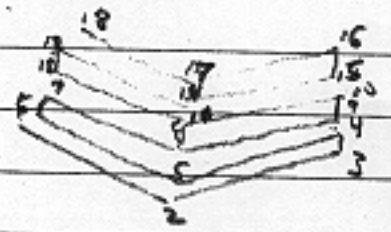
2.) 30° 09.35' 89° 43.1

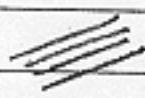
3.) 30° 09.396 89° 43.127

4.) 30° 10.096 89° 44.073

5.) 30° 10.05 89° 43.154

use same





30° 10.05'
89° 40.165'

1.) 30° 10.05' 89° 44.1

2.) 30° 09.35' 89° 43.1'

3.) 30° 10.05 89° 41.55

4.) 30° 10.096 89° 41.523

5.) 30° 09.395' 89° 43.127

6.) 30° 10.05559 89° 44.073

7.) 30° 10.141 89° 44.046

8.) 30° 09.441 89° 43.1

9.) 30° 10.1416 89° 41.496

10.) 30° 08.487 89° 43.073

11.) 30° 10.187 89° 44.019

12.) 30° 10.236 89° 43.992

13.) 30° 09.533 89° 43.046

14.) 30° 10.187 89° 41.469

increasing transect with from 100 m to 180 m

lat $\frac{.04559}{100} = \frac{X}{180}$; X = 0.082062

long; $\frac{0.027}{100} = \frac{X}{180}$; X = 0.0486

New 10.) 30° 10.2237 ; 89° 41.447

11.) 30° 09.523 ; 89° 43.0514

12.) 30° 10.223 ; 89° 43.9974

13.) 30° 10.3051 ; 89° 43.949

14.) 30° 9.6051 ; 89.43.0868 43.1

15.) 30° 10.306 ; 89° 41.348

16.) 30° 10.388 ; 89° 41.349

17.) 30° 09.697 ; 89° 42.857 43.199

18.) 30° 10.387 ; 89° 43.5004

6/23 Sidescan / Seismic Rigolets Pass

Survey Rigolets, Seas calm. Crew Rich, Dana, Jack, Jim
1st Survey east of Hwy 90 bridge "V" shaped. (coords. facing eg.)
~1510 Sol laso_55, lasi_55 at Hwy 90 bridge
1514 - assume course, transect 1
1537 turning north
1538 Sol laso_56, lasi_56 1 - 1a 1 1a
1609 turning around, starting transect 2a
Sol lasi_59, laso_57.
1620 turned northwest to Hwy 90 bridge (2b)
1632 turning around at bridge, start se transect 3a, laso_58, lasi_58
1713 lost GPS, heading ne 60° 30° 9.961 89° 44.830' at 11500 (trace from seismic)
1721 GPS back
1723 turning southwest, start transect 4a, laso_59, lasi_59
1740 turning northwest toward bridge transect 4b
1746 slowed speed
1752 Stop line turn around se (transect 5a) (laso_60, lasi_6
1800 - Resume course/direction for transect 5a.
1811:08 Sand waves visible on sidescan visible on seismic as well.
1820 turning northeast transect 5b
1855 turning around for southwest transect 5a Sol laso_61, lasi_61
1856:50 Power supply died - restart
1926 turning northeast toward bridge. Use overlap previous line.
1928 Sand ripples seen in sidescan - seismic
1931 at bridge, end line turn to north shore for parallel.
Sol lasi_62, laso_62
1937:10 - 1937:10 geoglasses donned gassed-out & seismic
1939 - increase speed.
1950 Side scan malfunction
2013 - After much confusion decided that we weren't recording
laso_62, Sol laso_62b
2125 - EOL laso_62b / 62
2127 Laso_65 / Laso 63 SOL sand waves in bottom of channel
2230 at Hwy 90 bridge - turning around, reoccupy north
2231 shore line that was not recorded. Sol Laso_64, lasi_64
2302 eol,

6/24 Seismic / Sidescan Rigolets / Chef Menteur

Haul up Rigolets west, move to Chef Seas calm, crew:
Rich, Dana, Shea, Jim

Running shoreline north line

1343 sol lasd-65, lasi-65 (847 local)

1350 turning to avoid shallow

1429 eol, turning south over the Middle Grounds sol lasd, lasi-66

1450 turning eastward back toward Rigolets, sol lasd, lasi-67

1527 linear, high reflective (white) features ~~appear~~ seen throughout sidescan appear to be ~~turbulence~~ as result of turbulence in the water column. Incoming tide

1533 heading east toward Rigolet. Sol lasd, lasi-68

1603 ~~At~~ Hwy 90 bridge, turning south and around back east Rigolets ~~thru~~ to lake

1608 02 turning onto outward line

~~1700~~ 1703 eol near middle Grounds, pull up gear head to Chef

1930 approaching entrance to Chef Menteur Pass sol lasi, lasd-~~69~~ 70

1920 Reach Hwy 90 (Rigolets) bridge - ~~head~~ turn around head back down centerline channel. lasi, lasd-71

1923 turning around to restart line at bridge record at 1926

2010 cob buoy hits hydrophone buoy, snags. End line - pull equipment. Run back up to Hwy 90 & Chef bridge

2046 at Hwy 90 bridge, deploy sidescan only head towards lake, lasd-72

End line at inlet

~~Re~~ Start line going through by marker at inlet, along SE shore

2137 sol lasd-73

2151 end of line near little Cedar Bayou east