

<i>JD</i>	<i>Time Local</i>	<i>Sub-Bottom</i>	<i>Resistiv ity</i>	<i>Hypack</i>	<i>Comments</i>
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SURVEY PARAMETERS:

All Survey Times are in UTC (ZD= +5 hrs), All positions are in UTM Zone 18 WGS84

*****All Survey Times are in UTC +4 hrs not +5 (added by VAC)

GPS Equipment: Lowrance LMS-480M

Crew: Bratton, Green, Bergeron

Edgetech: 424 Sub-Bottom, 4-24Khz, 2ms pulse

Resistivity: AGI Supersting R8 Marine Resistivity Meter ***50-m streamer (added by VAC)

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Tuesday April 13, 2010 JD 103

103					Streamer offset = -17.6m, Sounder 11cm below water line, depth offset not entered in GPS
103	0827	laf1	l1f1		Start perimeter line
103	0848		l1f2		Low battery on AGI
103	0848		l1f3		Low battery on AGI
103	0848		l1f4		Low battery on AGI
103	0852	laf2			424 file change
103	0900		l1f5		Low battery on AGI
103	0900		l1f6		Low battery on AGI

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103	0915		l1f7		Low battery on AGI
103	0917	laf3			424 file change
103	0927	l1f2			424 file change
103	0952	l1f2.001			424 file change
103	1018	l2f1	l2f1		Second half of perimeter line
103	1043	l3f1	l3f1		Third perimeter line
103	1214	l4f1	l4f1		line 204
103	1239	l4f1.001			424 file change
103	1304	l4f1.002			424 file change
103	1329	l4f1.003			424 file change
103	1354	l4f1.004			424 file change
103	1405	l5f1	l5f1		line 204
103	1438	l5f2	l5f2		line 205
103	1503	l5f2.001			424 file change
103	1528	l5f2.002			424 file change
104					Note: Data from today may be sketchy, as the weather got bad so did the conditions in the boat. We were taking on a lot of water due to the wind and waves
Wednesday April 14 2010 JD 104					
104					After drying out the computers and

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104					
104					
104	0834		l6f1		start line 8
					GPS problems due to water in connectors, files numbered l6f2 to l6f12 are probably bad, also files numbered l7f1 to l7f20 are also suspect.
104	0850		l6f2		
					Back to port for repairs, found lots of water and corrosion in GPS connectors and GPS distribution box, cleaned, dried and tested. Dumped AGI files and reloaded the CMD file.
104	1100				

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					line 4, Sting box lost the cable address file, took about an hour to debug and re-enter the proper address table for the streamer.
104	1339		I8f1		
104	1437		I9f1		line 2
104	1440		I9f2		low battery
104	1442		I9f3		low battery, replaced main
104	1547		I10f1		line 33
104	1620		I11f1		line 34
104	1630		I11f2		line 34, low battery, replaced
104	1638		I12f1		line 35
104	1657		I13f1		line 36
104	1714		I14f1		line 37
104	1730		I15f1		line 38
104	1744		I16f1		line 39
104	1800		I17f1		line 40
104	1816		I18f1		line 41
104	1840		I19f1		line 11

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104	1901		I19f2		line 11, boat ran out of gas
104	1948		I19f3		line 11, battery change
Thursday April 15 2010 JD 105					
105					Moved GPS antenna aft, streamer offset = -16m
105	0822		I20f1		line 8
105	0823		I20f2		line 8, accidentally hit power switch on AGI
105	0934		I21f1		line 41B
105	0945		I22f1		line 42
105	1006		I23f1		line 43
105	1028		I24f1		line 44
105	1042		I25f1		line 45
105	1101		I26f1		line 46
105	1105		I26f2		line 46, battery change
105	1151		I27f1		line 47
105	1207		I28f1		line 48
105	1225		I29f1		line 49
105	1248		I30f1		line 50
105	1325		I31f1		line 118

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105	1340		I32f1		line 112
105	1348		I33f1		line 23
105	1416		I35f1		line 21, note there is no file 34
105	1432		I36f1		line 19
105	1500		I37f1		line 17
105	1504		I37f2		line 17, battery change, boat ran out of gas
105	1516		I38f1		line 15
105	1602		I39f1		line 512, center grid lines
105	1613		I40f1		line 515
105	1626		I41f1		line 518
105	1638		I42f1		line 521
105	1651		I43f1		line 524
105	1703		I44f1		line 527
105	1715		I45f1		line 530
105	1728		I46f1		line 533
105	1740		I47f1		line 536
105	1753		I48f1		line 539
105	1804		I49f1		line 542
105	1812		I50f1		line 545

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105					End of survey, pull gear and boat

Indian River Bay,
Delaware - Geophysical
Surveying - CRP + seismics

Field Activity # 2010-006-FA

0600 - Adrian Green + Emile
Bergeron meet @ MOF
in Woods Hole, pick
up vehicle (Expedition)
w/ boat on trailer
(RV Knob - 16' Carolina
Skiff)

0630 - Pick up John Bratton
in North Falmouth,
leave for Delaware
ETA \approx 15:00

1030 - @ NYC

1330 - @ Delaware

1530 - @ hotel, Comfort Inn,
Rehoboth Beach

1630 - @ Indian River Marina,
approx. slip M-14,
launch boat, set up
gear

Scale: 1 square = _____

JB, AG, EB

Day 1 ①

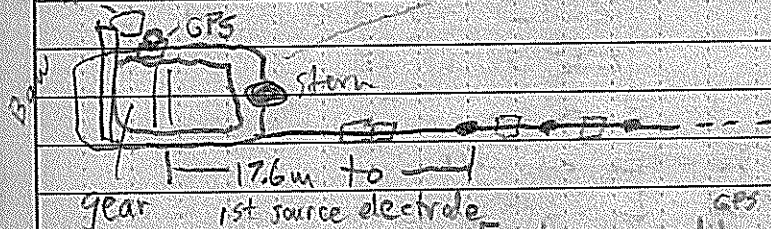
12 April 2010

PC, 50s-60s

1730 - continuing setup, some
software trouble with
Hypack navigation, EB
solved this @ night
by switching laptops
- set up Supersting
Continuous Resistivity
Profiling system w/
50 m streamer +

Edgetech 424 seismic system @ 16 kHz
YSI + fathometer / GPS

fish as below



~ 1800 - ran test lines out of
marina and back, AG-driver
~ 1845 - back to marina,
parked trailer, left
for hotel + Walmart

Scale: 1 square = _____

Indian River Bay (cont)
CRP + Seismics

- 0630 - meet @ hotel lobby,
leave for marina, will
survey shoreline lines to
start (201-206)
- 0700 - @ marina, setting up gear
- 0800 - cast off, head into inlet
to start line #201
- 0826 - Start line under inlet
bridge headed west
- 0855 - passing pier near
point w/ big gazebo
after passing Middle Island
shoals and channels to
Rehoboth Bay, approx.
high tide
- 0910 - passing White House Cove
running @ ~ 1 m water
depth, ~ 4-5 knots
- 0915 - @ White House Pt.
- 0925 - @ Pots Net Pt.
- 0932 - @ Lingo Pt. pier
- 0945 - @ Oak Orchard + Emily Gut
- 1005 - @ Frames Point

Scale: 1 square = _____

Day 2 (2)

JB/AG/EB

13 April 2010

Mostly cloudy,

50%, showers

- | | |
|---|---------------------------------------|
| 1010 - end line 201
near red-roofed
buildings by
Power Plant | fore cast,
med breeze out
of SE |
|---|---------------------------------------|

1018 - start line #202, E crossing
Indian River toward Rock Pt.

1043 - start line #203, Rock Pt.
into Pepper Creek, tide still in

1058 - end line #203, transit to
marina @ Pepper Creek for
gas + noodle float repairs

1115 - @ marina

1150 - leave marina, AG spills coffee

1200 - start line #204 along
shore W to E

1230 - @ Blackwater Cr., tide
falling ~ 0.3 m below max,
large paleochannel ~ 5 m
deep below creek mouth

1240 - @ Grays Point (shoal off pt.)
lots of sub-bottom structure

1257 - @ Ellis Pt., approaching
Holt's Landing, 1303 - leaving

Scale: 1 square = Holt's Landing

Indian River CRP
Day 2 (cont.)

1305 - ran aground just east of Holts Landing, jogged offshore somewhat

1325 - rounding Walter Point on White Neck

1335 - passing red nun #6 with big double paleochannel in sub-bottom

1338 - @ Pasture Pt.

- 1430 - ran into trouble with falling tide, running aground, and deteriorating weather: rain + strong NE winds forced crew to run for shelter across the bay to the marina. slow progress, failing systems

- 1615 - @ marina, demobe, pulled batteries to charge

Scale: 1 square = _____

JB/AG/EB

13 April 2010

50s, overcast,
med. NE wind

1715 - back @ hotel, set batteries to charge

drying eqpt. + downloading data;

Call from Holly

Michael on voicemail -

returned call, she

will be down with

students @ ~ 1100

tomorrow; we'll try

to coordinate taking

a break so we can

show her our setup

at IR Marina, Holts

Landing, or elsewhere

JB

Scale: 1 square = _____

Indian River CRP
Day 3

- 0630 - leave hotel, get gas
0700 - @ Marina, JB gets more gas, AG checking YSI, EB checking everything else
~0810 - cast off, chirp problems
0833 - start E-W line (black line) #8 @ Coast Guard station headed toward Pepper Ck. tide rising + almost high
0850 - forgot to start logging Hypack Nav. until now on this line
0900 - off White Neck, CRP sting box shutting off intermittently, EB troubleshooting
0906 - passing red buoy #27 on S side
~0950 - end line @ Rock Pt., pull chirp fish, untangle streamer
~1005 - start line #6 headed east

Scale: 1 square = _____

JB/AG/EB

Day 3 (4)

14 April 2010

50s-60s, clear

ENE breeze

- CRP problems for first part of line #6, OK after red channel mark #26 @ ~1020; sting box was losing GPS signal + stopping
1054 - @ red mark #20
1105 - veering to S a bit to extend line to marina entrance, fathometer seems to be giving constant data @ 2.2 m (not correct, shoal)
~1110 - fathometer back in
~1120 - back @ marina. trouble - shooting GPS feed to CRP, visit from Holly Michael and students (Christ Christina)
~1230 - cast off again, bad bathy
1240 - start line #4 E to W @ Little Ditch, CRP only, bathy fixed (redistribute load in boat)
1250 - more CRP errors, loop back while EB troubleshoots

Scale: 1 square = _____

Indian River CRP
Day 3 (cont.)

- 1320 - problem solved, positioning
to restart line #4
1330 - crossing shoal, swerved
to the south
1332 - restart Hypack logging
navigation, CRP
working smoothly
1422 - passing red mark #28
1430 - end of line #4
1433 - start line #2 (beginning
of line is approx #1 + #3)
1455 - turn @ waypoint off
line #3 (used as first
part of #2) to N + west
end of original line #2
1538 - end line #2
1543 - start line #33, headed
south (first N-S line),
break @ shore
1620 - #34 line started S-N
1638 - #35 started N-S
1652 - #36 started S-N @
Holts Landing just E

Scale: 1 square = _____

of pier

Day 3 (cont.) (5)

14 April 2010

60°, mostly sun

ENE mod. wind

JB/AG/EB

- 1710 - start line #37 N-S @
Pot Nets Cove
1730 - start line #38, S-N
just W of Ellis Pt.
1743 - start #39 @ Lingo Pt.
headed N-S
1759 - start #40 between
Gray's Pt. + Blackwater
Creek S-N
1815 - start #41 N-S just E
of Yellowbank Pt.
1830 - end of line #41, transit
to start of W-E line #11
to run composite w/
part of #10, #13, and
#206 (perimeter)
1839 - start line #11 @ Pepper
Creek heading W-E
1850 - out of gas, refill
1859 - start line #11 f2 @ (jump to #9)
Grays Pt., still headed E.
1915 - @ marina, demobe
2030 - leave for hotel

Scale: 1 square = _____

Indian River CRP

Day 4

- 0630 - load batteries in vehicle + leave hotel, get boat gas
- 0715 - setting up boat, move GPS pole + fathometer aft 1.6 m to keep in water better, previously ~ 10 cm, now the same but out of wake, tide rising
- 0800 - cast off, will resurvey line #8 E-W (file = 8b)
- 0821 - start line Bk, Coast Guard to Pepper Creek
- 0930 - end line 8b, start #41B to North, then pick up #42 headed SE from Frames Cove
- 0944 - start #42 (Hypack not logging)
- 1004 - start #43 - turned logging back on
- 1022 - End line #43 @ Emily Gut/Oak Orchard, start #44 N-S

Scale: 1 square = _____

JB/AG/EB

Day 4 (6)

15 April 2010

55-60°, Sunny
med WSW wind

- 1041 - end of #44 just E of Grays Pt., start #45 headed N, water temp = 13.9°C, wind shifting around to W or WNW
- 1059 - end #45 @ Pots Net Pt., turn S. for #46 to Ellis Pt., end of line shifted to the E to hit shore @ Holts Landing, beached boat - break
- 1145 - leaving Holts Landing, positioning for line #47 S-N from Ellis Pt.
- 1150 - Start #47
- 1205 - end #47, start #48 @ White House Pt., N-S
- 1222 - end #48, start #49 S-N from W. side of White Neck tip to Steels Cove
- 1245 - end #49, start #50 - long line to SW into White Creek area
- 1321 - end #50 @ Dermickson Pt.

Scale: 1 square = _____

Indian River CRP
Day 4 (cont.)
Last survey day

- 1324 - start line #118 @ White Creek headed NE
1337 - start line #112 from spoils area to Quillens Point; will start E-W lines again
1346 - start #23, toward Collins Crk & Walter Pt.
1431 - ran #21 back east after snag on crab pot, start #19
1456 - end #19, start #17
1507 - line interrupted to put gas in tank, ran #15 back
1545 - approaching Holt's Landing @ end of #15, then start Holt's grid; low tide (too bad)
1600 - start #512 (logging off)
1613 - start #515 - speed = 4 knots
#518 @ 1626, #521 @ 1638
#524 @ 1651, #527 @ ~1704

Scale: 1 square = _____

JB/AG/EB

Day 4 (cont.) (7)
15 April 2010
60s - hazy sun
med W wind

- ~1717 - start #530
(tighter spacing)
1728 - start #533 (E-W)
1740 - start #536
1753 - start #539
1804 - start #542, truncated
1812 - start #545, truncated
1817 - end #545 @ Ellis Pt.;
pull gear, shut down
transit to marina.
Pull boat, demobe.
out by ~1915

Indian River CRP 16 April 2010
Day 5

- 0700 - Leave Rehoboth Beach for home
~1530 - arrive N. Falmouth, drop off JB
+ 1600 - AG/EB drop boat + vehicle @ MOF in Woods Hole

Scale: 1 square = _____

end 2010-006-FA