

## **Appendix E-1 and 2: Field and Laboratory Notes**

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**LEVEL**

All-Weather Notebook

No. 311

Windward Environmental

LDW RI Sediment Transport

12/06/04 to

Field Logbook

Project # 04-08-06-23

Book 1 of

4 5/8" x 7" - 48 Numbered Pages

12/06/04

LDW RI Sediment Transport  
Geochronology + Sedflume Core  
Collection Effort (using 3" gravit/core)

Crew

Bob Conplith Windward  
Thai Do "  
Martin Hennessy (QEA)  
Charlie Eaton (Biomarine)  
Pat McMahon "  
Craig Jones (Sea Engineering) (Lab Setup) @ T117  
George Tate " (Coring)

Weather

Overcast/rain, <sup>AM</sup> 30-40°F, No wind  
<sup>PM</sup> 40-50°F

0730

Arrive Harbor Is. marina to load gear aboard the A/V Kittiwake

0830

Arrive South Park Marina to pick up the Sedflume core collection crew (Sea Engineering)

0900

Health + Safety Meeting

0915

on water heading to Station SF13

Station SF13 RAC 12/06/04  
~~Core Type~~ Core type = geochron + Sedflume

Sample ID	Coll. Time	Coll. Depth	Coordinates
<u>Sg 13</u>	<del>0955 1005</del>	<del>19.3 ft</del>	
Recovery = 84 cm	1020	19.4 18.1 ft.	

	Time	Depth	Coordinates
<u>SF 13</u>	1045	17.9 ft.	
Recovery = 48 cm			

Comments:

1<sup>st</sup> Attempte Sg13 0955 failed due to core catcher being inserted upside down.

2<sup>nd</sup> Attempt @ Sg13 1005 = 78 cm Recovery.  
Minimum 81 cm needed, core rejected.

3<sup>rd</sup> Attempt @ Sg13 1020 = 84 cm Recovery  
\* good core  
Predicted Tide 10.0 ft MLLW

1<sup>st</sup> Attempt @ SF 13 1045 = 48 cm Recovery  
\* good core  
Predicted Tide 10.6 ft MLLW

4  
12/06/04 LDW AI Sediment transport  
Geochronology + Sedflume core  
Collection effort Cont'd

Sample ID	Coll. Time	Coll. Depth	Coordinates
SF 17	1129	29.2 ft.	

Recovery = 46 cm

Comments: No geochronology core collection necessary for station 17.

1st Attempt @ SF 17 1129 = 46 cm Recovery

\* good core

Predicted Hde = 11.1 ft. MLLW

1200 met Angelita Rodriguez + Derole  
Pelletier @ S. Park marina to P/V  
more weights for gravity corer.  
Stopped for lunch.

Sample ID	Coll. Time	Coll. Depth	Coordinates
SF 12	1340	23.9 ft.	

Recovery = 54.5

Coll Time

Coll Depth

Coordinates

Sg 12	1321	22.9 ft.	
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Recovery = 80 cm

12/06/04<sup>5</sup>

Comments:

Sg 12 attempt #1 @ 1242 = 77 cm recovery  
Core rejected, minimum penetration not attained

Sg 12 attempt #2 @ 1255 = 78 cm recovery  
Core rejected, minimum penetration not attained

Sg 12 attempt #3 @ 1308 = 77 cm recovery  
Core rejected, minimum penetration not attained. Added more weight to Corer.

Sg 12 attempt #4 @ 1321 = 80 cm recovery  
Core retained, minimum penetration depth attained. \* Good core

Predicted Hde 10.7 ft MLLW

SF 12 attempt #1 @ 1340 = 54.5 cm recovery  
\* Good core

Sample ID	Coll. Time	Coll. Depth	Coordinates
Sg 11	1402	10.4 ft.	

Recovery: 96.5 cm

Coll. Time

Coll. Depth

Coordinates

SF 11	N/A*	N/A*	N/A*
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Recovery:

\* See comments

12/06/04 LDW RI Sediment Transport  
Geochronology + Sedflume Core collection  
effort Cont'd

Comments:

Sg 11 attempt #1 @ 1402 = 96.5 cm recovery  
\* Good Core  
predicted tide 10.4 ft. MLLW

SF 11 attempt #1 @ 1425 = 10 cm recovery  
Core rejected. Not enough recovery.  
\* Current is stronger on ebb tide.  
Decided to return to SF 11 another day.

Sample ID	Coll. Time	Coll. Depth	Coordinates
SF 9	1453	10.7	
Recovery = 48 cm			
Sample ID	Coll. Time	Coll. Depth	Coordinates
Sg 9	1445	10.7 ft.	
Recovery = 87.5 cm			

Comments:

SF 9 attempt #1 @ 1437 = 0 cm recovery  
Core rejected.

Sg 9 attempt #1 @ 1445 = 87.5 cm recovery  
\* Good Core 9 ft MLLW predicted tide

12/06/04

SF 9 attempt #2 @ 1453 = 48 cm recovery  
\* Good Core  
Predicted tide 8.7 ft MLLW

Sample ID	Coll. Time	Coll. Depth	Coordinates
Sg 10	1522	18.4	
Recovery = 80 cm			
Sample ID	Coll. Time	Coll. Depth	Coordinates
SF 10	1538	18.1	
Recovery = 40.6 cm			

Comments:

Sg 10 attempt #1 @ 1513 = 72 cm recovery  
Core rejected. Not enough recovery

Sg 10 attempt #2 @ 1522 = 80 cm recovery  
7.9 ft MLLW predicted tide

SF 10 attempt #1 @ 1538 = 40.6 cm recovery  
\* good core Predicted tide 7.4 ft. MLLW

1545 End of on-water Sampling. Return to  
S. Park Marina to drop off  
George Tate + the Sedflume Cores.

1640 Return to Harbor Is. Marina  
END OF DAY off water to drop off Cores @ ARI  
RAC 12/06/04

12/07/04

LDW RI Sediment Transport  
Geochronology + Sediment Core  
collection effort cont'd

Crew: Bob Compton (windward)  
Thoi Do " "  
Martha Hennessey (QEAT)  
Charlie Eaton (Biomarine)  
Tom Putnam " "  
George Tate (Sea Engineering)

Weather clouds, sunbrakes, Am 35-40°F

0700 Arrive Harbor Is. marina to load gear  
0815 Arrive South Park Marina to p/u  
0800 Sediment crew (George Tate)  
0830 Health + Safety meeting  
0845 on water heading to station SF16

Sample ID	Coll Time	Coll Depth	Coordinates
SF16 Rep#1	0905	24.7 ft.	
Recovery = 44.5 cm			
Comments:			
SF16 1 <sup>st</sup> Attempt @ 0905 = 44.5 cm recovery			
* good core predicted tide 7.1 ft MLLW			

12/07/04

Sample ID	Coll Time	Coll Depth	Coordinates
SF11	1103	11.1 ft.	
Recovery = 39 cm			
Comments: SF11 attempt #2 (Attempt #1 failed on 12/06/04)			
SF11 attempt #2 @ 1103 = 39 cm recovery			
* good core predicted tide 10.2 ft MLLW			

Sample ID	Coll Time	Coll Depth	Coordinates
SF16 Rep#2	1150	27.8 ft	
Recovery = 41 cm			
Comments:			
SF16 Rep#2 1 <sup>st</sup> Attempt @ 1150 = 41 cm			
* good core predicted tide 11.0 ft MLLW			

RAC  
12/07/04

12/07/04 LDW RI Sediment Transport

Geochronology + Seafloor Core  
Collection effort cont'd.

Sample ID	Coll Time	Coll Depth	Coordinates
SF 15	0957	27.6 ft	

Recovery:

Comments:

SF 15 attempt #1 @ 0947 = 0 cm Recovery  
No sample collected. Core push rod too long to use slide hammer.

SF 15 attempt #2 @ 0954 = 0 cm Recovery  
Sample lost. Sediment washed out of core box on retrieval.

SF 15 attempt #3 @ 0957 = 36 cm Recovery  
\* good core Predicted tide = 8.5 ft MLLW  
Upon inspection, core box was cracked and core had to be rejected. Heading to SF 8 and will return to SF 15 after SF 8.

SF 15 attempt #4 & not done. SF 15 will be attempted later in the week.

12/07/04

Sample ID	Coll Time	Coll Depth	Coordinates
Sg 8	1012	20.5 ft	
Recovery = 104 cm			
SF 8	1030	21.1 ft	
Recovery = 37 cm			

Comments:

Sg 8 attempt #1 @ 1012 = 104 cm Recovery  
\* Good core. Predicted tide 9.0 ft. MLLW

SF 8 attempt #1 @ 1030 = 37 cm Recovery  
\* good core. Predicted tide 9.4 ft. MLLW

1200 Lunch break

Sample ID	Coll Time	Coll Depth	Coordinates
SF 7	1304	27.8	
Recovery = 38 cm			
Sample ID	Coll Time	Coll Depth	Coordinates
Sg 7a	1323	27.8	
Sg 7b	1407	27.4	

Recovery = 81.5 cm for Sg 7a, 97 cm for Sg 7b

Comments: SF 7 attempt #1 @ 1257 = 32 cm Recovery  
Core rejected because minimum of 35 cm needed.

12/07/04 LDW R1 Sediment Transport

Geochronology + Sediment Core Collection  
effort cont'd.

## Comments:

SF 7 attempt #2 @ 1304 = 38 cm Recovery  
 Predicted tide = 11.2 ft. MLLW  
 \* good core

1240 - 1300 talked w/ Jeff Stern regarding  
 geochron core limited recovery (<70%).  
 Numerous options for other core options were  
 discussed. We concluded that continuing  
 w/ the 3" gravity corer would be  
 best and that at our next station  
 we would take an additional core  
 to cut open in the lab and look  
 @ the sediment characteristics. We  
 will relay our findings during lab  
 processing on 12/08. Additional core will be  
 taken @ Sg 7 (called Sg 7a + Sg 7b)

Sg 7a attempt #1 @ 1323 = 81.5 cm Recovery  
 \* good core Predicted tide 11.0 ft. MLLW

Sg 7b attempt #1 @ 1342 = 99 cm Recovery  
 \* good recovery, however sides were  
 significantly washed out (No overlying water)  
 Core was rejected.

12/07/04

Sg 7b attempt #2 @ 1353 = 103.5 cm recovery  
 \* good recovery, however sides were  
 significantly washed out (no overlying water)  
 Core rejected.

Sg 7b attempt #3 @ 1407 = 97 cm recovery  
 \* good core. Predicted tide 10.4 ft. MLLW

Sample ID	Coll. Time	Coll. Depth	Coordinates
SF 6 Rep #1	1439	28.1	
Recovery = 36 cm			
SF 6 Rep #2	1500	27.8	
Recovery = 40 cm			

## Comments:

SF 6 Rep #1 attempt #1 @ 1433 = 33 cm Recovery  
 core rejected (35 cm minimum needed)

SF 6 Rep #1 attempt #2 @ 1439 = 36 cm Recovery  
 \* good core Predicted tide 9.7 ft MLLW

SF 6 Rep #2 attempt #1 @ 1500 = 40 cm Recovery  
 \* good core Predicted tide 9.1 ft MLLW

Sample ID	Coll. Time	Coll. Depth	Coordinates
Sg 6	1521	27.7	
Recovery = 110 cm			

Comments: Sg 6 attempt #1 @ 1521 = 110 cm Recovery  
 \* good core. Predicted tide 8.5 ft. MLLW



12/07/04 LDW RI Sediment transport  
Geochronology + Sedflume core collection  
effort Cont'd.

1540 Return to S. Park Marina to unload  
Sedflume cores.

Return to Harbor Is. Marina to  
unload cores + deliver to ARI  
-off water-

END OF DAY

RAC  
12/07/04

12/09/04

Crew: Bob Conlith (windward)  
K-Y Su "  
Charlie Eaton (Biomarine)  
Tom Putnam "  
George Tate (Sen Engineering)

weather: overcast, cool 40-50, 5-10 mph wind

0730 net at Harbor Is. Marina  
0800 net George Tate at S. Park marina  
0830 Health + Safety mtg.  
0845 on water heading to SF 15

Sample ID	Coll Time	Coll Depth	Coordinates
SF 15	0853	26.1	

Recovery = 54.6 cm

Comments:

SF 15 attempt #1 @ 0847 = 10cm recovery  
Core rejected

SF 15 attempt #2 @ 0853 = 54.6cm recovery  
\* good core. Predicted tide = 6.5 ft. MLW

12/09/04 LDWRI Sediment Transport  
 Software + geodan core collection cont'd.

Sample ID	Coll. Time	Coll. Depth	Coordinates
SF 14	09:27	27.1	

Recovery = 35.5 cm

Comments:  
 SF 14 attempt #1 @ 09:27 35.5 cm recovery  
 \* good core. Predicted tide = 6.9 ft. MLLW

Sample ID	Coll. Time	Coll. Depth	Coordinates
SF 5	10:35	12.2	

Recovery = 36.8 cm  
 Sg 5 N/A\* N/A\*  
 Recovery = N/A

Comments:  
 SF 5 attempt #1 @ 10:15 = 14 cm Recovery  
 Core rejected. Sand/seeds in core slipped out causing large voids in the sample.

\* Station was moved slightly due to riprap surface on target station.  
 \* Noticeable sheen/droplets of what appeared to be petroleum coming to the surface naturally.

SF #5 attempt #2 @ 10:31 = Brake in Sampler  
 No recovery. Core rejected.

SF #5 attempt #2 @ 10:35 = 36.8 cm recovery  
 \* good core. Predicted tide = 8.1 ft MLLW

12/09/04

Sg #5 attempt #1 @ 10:58  
 30 cm recovery. Core rejected.  
 \* very coarse sand.

Sg #5 attempt #2 @ 11:11  
 30 cm recovery. Core rejected

\* 1100 conversation w/ Tad Dabler re:  
 possibility of re-mobilizing w/ a 4" corer  
 and re-sampling. Stopped gravity coring  
 until further notice from Tad.

Sample ID	Coll. Time	Coll. Depth	Coordinates
SF 4	11:40	21.4	

Recovery 45.7 cm

Comments:  
 SF 4 attempt #1 @ 11:40  
 @ 45.7 = 45.7 cm Recovery  
 \* good core. Predicted tide 9.7 ft. MLLW

1200 Lunch break

SF 4 station moved to 8 m NE of target location.  
 Barge tied up over station.

Sample ID	Coll. Time	Coll. Depth	Coordinates
SF 3	14:06	32.7	

Recovery = 40.6 cm

Comments: SF 3 attempt #1 @ 14:06 = 40.6 cm Recovery  
 \* good core. Predicted tide 11.3 ft. MLLW

12/09/04 LDW RI Sediment Transport  
Sedflume + Goodron. Core collection cont'd

~~RAC~~

~~12/09/04~~

Sample ID	Coll. Time	Coll. Depth	Coordinates
SF 2	1316	16.2 ft	

Recovery = 43.2 cm

Comments:

SF 2 attempt #1 @ 1316 = 43.2 cm Recovery.  
\* good core. Predicted tide = 11.3 ft. MLLW

Sample ID	Coll. Time	Coll. Depth	Coordinates
SF 1	1540	28.7	

Recovery = 35.6 cm

Comments:

SF 1 attempt #1 @ 1444 = 0 cm Recovery.

Last Sample

SF 1 attempt #2 @ 1455 = 0 cm Recovery

Last Sample

SF 1 attempt #3 @ 1520 = 30.5 cm Recovery

Core Rejected. Not enough Sample

SF 1 attempt #4 @ 1540 = 35.6 cm Recovery

\* good core. Predicted tide 9.5 ft. MLLW

1640  
~~1600~~

South Park  
Return to Harbor Is. Marim  
to unload gear + Sedflume  
Cores.

1700 off water (heading to ARI to  
help process cores from 12/09)

END OF DAY

~~RAC~~

~~12/09/04~~

20  
12/14/04 LOW RI Sediment Transport  
Geochem Core collection Cont'd

Crew: Bob Compton windward  
Mark Larve QEA  
Marty Hennessey "  
Charlie Eaton Bio/Marine  
Mark Hoffman "  
Peter Hoffman "

Weather: Overcast, rain, wind 10-20 mph

Station	Coll. Time	Coll. Depth	Coordinates
Sg 13	0852	22.5 ft	
Recovery = 119.5 cm			

Comments:

Attempt #4 @ Sg 13 (Attempts 1-3 done on 12/06)  
@ 0852, predicted tide = 11.9 ft MLLW  
119.5 cm recovery. \* Good core  
188 cm to top of 2" wt. = 64% recovery  
167 cm to bottom of wt. Stake = 71% recovery

Station	Coll. Time	Coll. Depth	Coordinates
Sg 9	0946	13.5 ft	
Recovery = 118 cm			

Comments: Sg 9 attempt #2 (Attempt #1 on 12/06)  
78 cm recovery @ 0930 core rejected

21  
12/14/04

Sg 9 attempt #3 @ 0946  
predicted tide 10.9 ft MLLW  
Predict penetration = 174 cm  
recovery = 118 cm (68%)

Station	Coll. Time	Coll. Depth	Coordinates
Sg 8	10:19	23.7	
Recovery 117 cm (62% recovery)			
Comments Sg 8 attempt #2 (Attempt #1 on 12/07) @ 10:19 9.8 ft MLLW predicted tide. good core			

Station	Coll. Time	Coll. Depth	Coordinates
Sg 7			

Recovery  
Comments

Sg 7 attempt #4 @ 1055 (Attempts 1-3 on 12/07)  
97 cm recovery (wood chunk stuck in  
core tip) core rejected.

Sg 7 attempt #5 @ 1111  
<60 cm recovery, core rejected.

Sg 7 attempt #6 @ 1127  
92 cm recovery, core rejected

Sg 7 attempt #7 @ 1139

~~80 cm~~ <80 cm recovery core rejected.

22  
12-14-04

Sg 7 attempt #4 @ 1153 95cm recovery.  
Core retained, but not optimal penetration  
recovery.

1210 Return to HI marina for lunch +  
to drop off core from Sg 13 for  
processing. Picked up Thai Do + dropped off  
Mark Latue for processing of core Sg 13 @

Station	Coll Time	Coll Depth	Coordinates	windward.
Recovery	1353	181b		
Comments	107cm	Recovery (83%)		

Sg 10 attempt #3 (Attempt 1-2 on 12/06)  
@ 1339 = <60 cm recovery Core rejected

Sg 10 attempt #4 @ 1353 = 107 cm recovery.

129 cm = penetration 107 cm recovery (83%).  
81 ft MLLW predicted tide.

wood Consey Seals + wood debris in bottom of  
Sandy Core.

Station	Coll Time	Coll Depth	Coordinates
Sg 12	1426	19.0 ft.	
Recovery	115 cm		

Comments: Sg 12 attempt #5 (Attempt #1-4 on 12/06)  
@ 1433 = 104.5 cm Recovery  
8.5 ft MLLW  
Predicted tide  
20.2 ft depth.

23  
12-14-04

Penetration = 260 cm Recovery = 104.5 cm  
we will attempt another core to see  
if the recovery % will increase.  
If ~~penetration~~ recovery % doesn't increase  
the core from attempt #5 will be  
retained.

Sg 12 attempt #6 @ 1426  
115 cm recovery 260 penetration (from top of  
weight stack). Core retained core from  
Attempt #5 returned to LDW.

Station	Coll Time	Coll Depth	Coordinates
Sg 11			
Recovery			

Comments Sg 11 attempt 2 (Attempt #1 on 12/06)  
@ 1443 = <40 cm recovery Core rejected

Sg 11 attempt 3 @ 1450 <40 cm  
recovery. Core rejected

Sg 11 attempt 4 @ 1459 = <40 cm  
recovery due to coarse sandy surface +  
compacted fines below. Core rejected.

Sg 11 attempt 5 @ 1511 = <50 cm recovery.  
Core rejected. will attempt again on  
12-15-04, core sediments (sand) makes  
for difficulty in penetration.

12-14-04

Station	Coll. Time	Coll. Depth	Coordinates
Recovery			
Comments			
Sg 1 attempt 1 @			= cm Recovery

1515 talked to processing team. Not enough mass per sample. Stopped sampling for the day. Possibly need to get a 4" corer.

END

RAC

12-14-04

<DW RI Sediment Transport Effort cont'd.  
(Start use of 4" gravity corer.)

12-16-04

Crew:	Bob Compton	Windward
	Thai Do	"
	Marty Hennessey	QEA
	Mark Larve	"
	Charlie Eaton	Bio marine
	Pat McMath	"

Weather clear, Sun wind 5-10 mph

0645 met @ Harbor IS marina to load gear. We'll be using a 4" gravity corer to re-do all 13 geochronology Stations.

0715 on water

Station	Coll. Time	Coll. Depth	Coordinates
Sg 7	0802	28.3'	
Recovery =	118cm	(79%)	

Comments:

Sg 7 attempt # 9 @ 0802 = 118 cm Recovery  
28.3' water depth ~~24.6' to top of top core~~  
Core penetration = 160 cm Core Recovery = 118 cm  
# good core 79%.

12-16-04

Station Call time. Coll depth Coordinates  
 Sg 13 0834 20.8  
 Recover 130 cm  
 Comments: Sg 13 attempt #5 @ 0834  
 Core penetration = 180 cm Core recovery = 130 cm  
 72% recovery \* good core

Station Call Time Coll Depth Coordinates  
 Sg 12 0854 23.7  
 Recover 123 cm (68%)  
 Comments: Sg 12 attempt #7 @ 0854  
 Core penetration = 182 cm Core recovery = 123  
 68% recovery. \* Good core

Station Call Time Coll Depth Coordinates  
 Sg 11  
 Recover  
 Comments: Sg 11 attempt #6 @ 0911  
 Core penetration = 142 cm Core Recovery = 50 cm  
 core rejected  
 Sg 11 attempt #7 @ 0924 core rejected.  
 Hit a rock.  
 Sg 11 attempt #8 @ 0950. Hit a rock +  
 broke core tube off. Will retrieve core later.  
 coordinates = 31.3280 / 18.4212

12-16-04

Station Call Time Coll Depth Coordinates  
 Sg 10 0934 23.5'  
 Recovered 101 cm  
 Comments = Sg 10 Attempt #5 @ 0934  
 Core penetration = 132 cm Core recovery = 101 cm  
 78% recovery

Station Call Time Coll Depth Coordinates  
 Sg 9 1027 ~~23.4~~  
 Recover 96 cm  
 Comments: Sg 9 attempt #4 @ 1006  
 Penetration = 168 cm Recovery = 78 cm  
 Core rejected.  
 Sg 9 attempt #5 @ 1015  
 Penetration = 165 cm Recovery = 96 cm Core rejected.  
 Sg 9 attempt #6 @ 1027  
 Penetration = 165 cm Recovery = 96 cm  
 58% recovery. Core retained.

Station Call Time Coll Depth Coordinates  
 Sg 8 1043 21.8  
 Recover = 133 cm  
 Comments Sg 8 attempt #3 @ 1043 AM  
 Penetration = 165 cm Recovery = 133 cm  
 81% recovery

12-16-04

1100 Met WW processing crew at  
S. Park marina to unload core  
+ Mark LaRue for core processing.

Station	Coll Time	Coll Depth	Coordinates
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Sg 6	1147	29.7	
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Recovery = 140 cm

Comments: Sg 6 attempt # 2 @

Penetration = 205 cm Recovery = 140 cm

68% recovery. Last 10 cm of recovery during core  
capping, so Lab recovery could vary from field recovery.

Station	Coll Time	Coll Depth	Coordinates
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Sg 4	1225	21.6	
------	------	------	--

Recovery 117

Comments: Sg 4 attempt # 1 @ 1215

Core rejected. pen. Recovery &lt; 40%. Lots of wood debris.

Sg 4 attempt # 2 @ 1225

Penetration = 170 cm Recovery = 117 cm 69%.

Station	Coll Time	Coll Depth	Coordinates
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Sg 3	1247	27.4	
------	------	------	--

Recovery 136 cm

Comments: Sg 3 attempt # 1 1247

175 cm penetration Recovery = 136 cm (78%).

12-16-04

Station	Coll. Time	Coll. Depth	Coordinates
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Sg 2

Recovery

Comments: Sg 2 attempt # 1 @ 1310

Sg 2 " # 2 @ 1314

Sg 2 " # 3 @ 1317

" " # 4 @ 1319

" " # 5 @ 1323

" " # 6 @ 1324

All six attempts failed due to hitting  
hard sediments and/or large wood debris.  
moving on to Sg 1

Station	Coll. Time	Coll Depth	Coordinates
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Sg 1

Recovery

Comments: Sg 1 attempt # 1 @ 1344

NO recovery due to hard/sandy sediments

Sg 1 attempt # 2 @ 1352

8 cm recovery. Hard/sandy sediments.

Aborted Sg 1 for now, off to Sg 5

Station	Coll. Time	Coll Depth	Coordinates
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Sg 5

Recovery

Comments = Sg 5 attempt # 3. 30 cm recovery. Core rejected



2-16-04

Sg5a + Sg5b were located under stationary barges.

Station Coll time Coll depth Coordinates

Sg5c

Recovery

Comments Sg5c attempt #1 1440  
30cm recovery. Core rejected.  
Sg5c is an alternate to Sg5  
chosen by QEA.

Sg5c attempt #2 @ 1451

40 cm recovery. Core rejected

Sg5c attempt #3 @ 1502

30 cm recovery, core rejected.

Sediments appear to be dense clay  
and will not allow full penetration.

New Station locations will need  
to be chosen for:

Sg1, Sg2, Sg5, and Sg11

1530 Unload gear at Harbor Is  
Marina. End of day on water

END

RAC 12-16-04

12.17.04

T:DO

08:30 Arrived to Harbor Island Marina,  
met up w/ Charlie Exton and Chris  
Coulter. Derek Pelletier & Thoi Do  
out for work. Overcast, foggy.  
Spoke to Jim Quzzini (QEA)  
carrier this morning. He said to  
get whatever we can at Sg5  
(alternate locations) and take 11b and  
11a and they'll decide which one  
to keep. They are working on alt.  
locs. for Sg1 and 2 and will call  
with coordinates. Jim said that  
we can keep whatever recovery  
we can get at Sg5. We will begin  
with Sg5 for the day.

0911 Sg5bC - 5 attempts, cores rejected

0903 Sg5b (attempt, core rejected)

0950 Sg5a - 2 attempts

(also 912, 0916, 0923, 0925)

0954 Sg5a 137cm recovery (85%)  
Coll. depth 29.0ft 12.5ft tide

Sg11a - 1041, 1054, 1107 (rejected)

Sg11b - 1124, 1136, 1222, 1231, 1244 (reject)

1244 - Sg11b <sup>24336</sup> 26cm recovery (31%)  
coll. depth 10.5A 9.2A tide

12.17.04

T.D.

1157 Sg 11 C 10ft. 10.6 tide  
 Corrected 06.29.05 36cm ~~30cm~~ recovery (52%) (31%)  
 Corrected 06.29.05 T.D.

1140 - Jim Quzdumi called with alternate coordinates for Sg1 and 2. He also said to take what we could from 11 a/b/c even if it's low recovery.

~~1114 Sg~~

~~1114~~ 1350. SEA called w/new alt. coord. for Sg1

1355, 1402, 1405, 1407 Sg 2a - rejected

1414 Sg 2 - 79m from target, rejected

1422 Sg 2 - rejected

1424 Sg 2 - 11.2m off target.

87cm recovery (71%)

127m penetration

coll. depth 10.0 ft. 6 SFT tile.

1512 Sg 1a - coll. depth 23.5f SEA tide

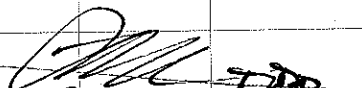
116m penetration

127m recovery (77%)

lost ~7cm during capping.

1615 - Finished coring, return to Harbor Island Marina. Take cores to ARI and return to office.

End of day

  
 T.D.  
 12.17.04

12.30.04

T.D.

08:50 Arrived at T117 to take SedFlume washwater grab sample.

(T.D. and K-Y Su)

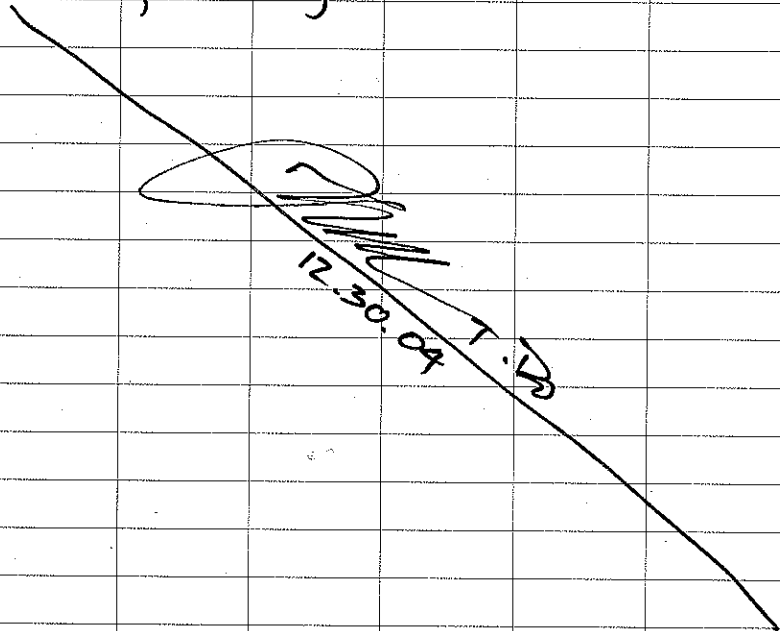
Took grab sample (using Wiskin sampler) @ ~1 to 1/2 m. below surface.

Water depth in tank ~2.5m.

09:00 Completed sampling. Took sample to ARI. (LDW-SF999)

09:18 Dropped off sample at ARI.

Return to Wardward. End of field day.

  
 12.30.04 T.D.

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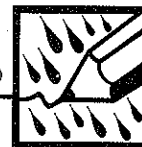
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**LEVEL**

All-Weather Notebook  
No. 311

Windward Environmental

LDW RI Sediment Transport

12/08/04 to

Lab Processing Logbook

Project # 04-0806-23

4 5/8" x 7" - 48 Numbered Pages

12.08.04

T. To

- 06:45 Met up with Martin Hennessey (GEA) and went to ARI (Thai To and Angelita Rodriguez (WW)).
- 07:20 Arrived at ARI, began set up, decon eqipt.
- 08:40 Began processing Sg 11. (Photos 31-35)
- 12:00 Bob Complita arrives
- 12:40 Bruce Nairn (King County) arrives.
- 13:00 Cut open test core Sg 7-b (Photos 36-40)
- No real conclusions were drawn from viewing the test core. We will continue processing the 1st core of the day and adjust the core catcher on 12/09/04 to see if we get better recoveries
- 13:50 Lunch
- 15:00 Continue processing Sg 11.
- 1600 checked sample wt. per jar by gram  
 Sample jar  $\approx$  126g  
 Sample jar + Sample  $\approx$  150g  
 Sample  $\approx$  24g
- 1630 Talked to Tad re: field duplicates + Sample weight.
- Conclusions = Take a 2cm sample instead of a 1cm sample for field duplicates. Sample will be randomly selected during processing.
- depth

12.08.04

Conclusions cont'd. = Concern was raised over enough sample mass being submitted for  $^{210}\text{Pb}$  +  $^{137}\text{Cs}$ . We decided to take approximately 60% of the sample for  $^{210}\text{Pb}$  +  $^{137}\text{Cs}$  and 40% of the sample for TOC + % moisture. Tad agreed.

1730  
 End processing core Sg 11

12.08.04  
 T. To

12.09.04

TDO

06:45 Picked up Martin Hennessy (OEA)  
Headed to ARI. (Thai Do and  
Angelita Rodriguez (WU)).

07:10 Arrived at ARI, began set-up.

07:30 Began processing Sg 8 (photos 41-45)

08:00 Took photos of processing  
(photos 46-54).

08:25 Called Tad to confirm 2cm  
increments for field duplicates

09:15 Tad called to inform us we  
may have to switch to 2cm  
increments to get enough  
volume for  $^{210}\text{Pb}$  +  $^{137}\text{Cs}$  analysis.  
He will call back when it is  
decided. In the meantime, we'll  
continue at 1cm increments.

10:30 Tad called. Still have not decided  
about 2cm increments. Instead,  
we'll just continue w/ 1cm increments  
and not list what it is to be  
analyzed for.

12:16 Finished processing Sg 8. Lunch  
break.

13:00 Began processing Sg 6 (photos 55-59)

12.09.04

T. Do

15:40 After numerous calls, we  
were advised that we need a min.  
50g for  $^{210}\text{Pb}$  +  $^{137}\text{Cs}$  analysis, and  
10g for conventionals. Began  
weighing out mass for samples with  
LDW-Sg6-35-36

16:50 Called Tad, told him avg ( $n=3$ )  
weight per 1-cm section is about  
60-65g, giving just enough to  
get the 50 + 10g for analysis.  
We'll continue with this method  
from here on.

17:00 Finished sampling for today.  
Core Sg 6 unfinished, will continue  
tomorrow. Clean up work-site.

17:30 End of day, head back to office.

~~12.09.04 TDO~~

12.10.04

TDO

07:30 T-DO and A. Rodriguez arrives at ARI. Met up w/ B. Compton, and began set-up.

07:55 Began processing (continue) core Sg6.

09:50 Ended processing core Sg6.  
Began dividing previously processed samples (before LDW-Sg6 - 35-36) into 50g:10g (radioisotopes: conventionals)

10:00 - Measured/weighted 3 empty jars.

- They averaged 116g. For radioisotopes, filled jars were filled to 166g (116+50) and for conventionals, jars were filled to 126g (116+10) when possible.

Began w/ Sg6 for sections 0-1 through 34-35 (sections 35-36 on were appropriately weighed.

13:00 of the samples to be submitted for analysis, LDW-Sg6 - (20-21), (25-26), and (30-31) all came up short for radioisotopes.

40, 30, 27g, respectively. (All had enough for conventionals. Many of the archive samples before (35-36) were also short on sample volume/mass.

12.14.04

MWelsch

1350

MWelsch, A Rodriguez, S Pierce  
Mark (QEA)

Photo of core - rubber stopper @  
bottom

depth of recovery = 46.75 in  
= 118.745 cm

Photos 60-66

Random # Selection

= 50 cm = FD

= ~~85 cm~~ ~~10 cm~~ = Matrix Spike

45-48 cm = Matrix Spike Dup

(worried that would not have enough material) Parent

1415

0-1 cm

Mass Spec = 19.9g

ARI = 10g

1419

~~1-2 cm = archive =~~

1442 (5-6) Mass Spec = 32g

ARI = ~11g

1500

Too little sample recovered per section.

Change to 4" core + restart

MW 12.14.04

12.16.04

mwetech

1242 - Began Sq 7

OK ~~Sample labels were printed as w/~~  
 ID: Sg07, but crossed out the "0"

- Took photos of core but b/c in black

PHOTOS: 816, 817, 818

Pvc pictures  
 will not

1300 - took sample 0-1

~~required a~~

1307 - appears sample volume won't be  
 a problem

1345 chose random numbers for  
 Field Duplicate = 35 cm  
 and matrix spike + matrix spike duplicate  
 @ 55 cm

MW + Mark from QEA conferred w/  
 QAPP regarding whether or not  
 we needed to vto matrix spike + ms dup  
 designate location for

We decided that we would  
 sample label for that will be  
 "CW-Sg7-55-57 MS, MSD"

12.16.04

## NOTES on Extruding the core

- 1) if core is not drained in the field, uncap to see if water ~~is~~ is present @ top of core  
 (Sg7 = there is)
- 2) Measure recovery w/ tape measure  
 Sg7 = 33 cm = "top of core  
 Subtract ~5 cm for stopper @ bottom  
 $153 - 5 = 148 - 33 = 115$  cm
- 3) - Fill tubing w/ water to try to siphon  
 off remaining water in headspace  
 - keep thumb on one end, stick other  
 end down to surface of sediment  
 put other end in bucket + release  
 thumb, suck remaining water out  
 of headspace
- 4) Raise pin w/ screw up above  
 threshold  
 stopper has threads
- 5) Take tape off of bottom  
 Put core on extruder  
 Put blue cap off and slip stopper onto  
 screw.

- 6) Release jack and lower tube clamp it in
- 7) Use large lever to move sediment to top of tube
- 8) One person holds core steady  
 other person loosens clamps and then releases the jack  
 ←  
 second person lower lever to  
 Result is core is lowered
- 9) ~~how~~ To take sample:  
 - lower big lever  
 - use guide to estimate 1cm  
 - first section is going to be concave

12.16.04 cont'd

1832 ~~1832~~ Total of 102 cm  
 core catcher disturbed last  
 4 cm (total = 106 cm)

- decon equipment
- fix sample labels

12/16/04



12.17.04  
Core = Sg13

MW

0940 154 cm tall - 2 cm at bottom = 152 cm  
31 cm = headspace  
(no water in headspace)  
123 cm = recovery

1000 Picked FD & MS, MSD sections  
50 cm 15 cm

1354 ~~154 cm~~ 114 cm recovery  
There was one cm of sediment  
above stopper but disturbed

MW 12/17/04

12/20/04

MW

Core Sg12 - approx 120 cm recovery  
(~~not~~ including stopper)

0747 Began processing  
30 cm = FD  
60 cm = MS, MSD

1124 Finished  
last section = 116-117 cm

\* ~~Was~~ 0.5 cm remained on stopper

Crew: M. Welsh

T. Do

S. Pierce

F. McNam

D. Pelletier

MW  
12/20/04

12/20/04  
 CORE Sg10 (collected 9:34 on 12/16/04) <sup>dmp</sup>  
 12.40 116 cm core recovery

10 cm = FD  
 75 cm = MS, MSD

Processing crew: F. McNair  
 M. Welsch  
 S. Pierce  
 T. Do  
 D. Pelletier

1344 air pocket found in core (small)  
 @ 34 cm depth  
 gone @ 36-37 cm

1450 Bottom 4.5 cm disturbed  
 by core cutter; discarded

1456 Finished last layer (109-110 cm)

dmp  
 12/20/04

12/21/04 <sup>mmw dmp</sup>

Core Sg9  
 collected 1027 am, 12/16/04

water remaining on top

149  
 58  
 - 91

91 cm = recovery

Crew: D. Pelletier M. Luxon  
 T. Do F. McNair  
 S. Pierce  
 M. Welsch

FD @ 20-22 cm  
 MS, MSD @ 60-62 cm

Start @ 8:15

Bottom

Bottom 3 cm dist. by  
 core cutter, not retained  
 Finish 88-89 cm @ 10:25

dmp 12/21/04

12/21/04

Core Sg 8

12/16/04 @ 1043 (collected)

128 cm recovery

10:30 Measured + prepped core

Same crew

10:53 Start Core

15 cm FA  
40 cm MS, MSD~~Break Core~~Break for lunch @ 12:00  
Last layer 48-49

1244 Return from lunch

1405 114 cm recovery  
lost 1 cm before stopper = disturbedQA/QC two coolers for  
drop off tomorrow @ ARI~~MW 12/21/04~~

DMP

12/22/04

dmp

Core Sg 6

12/16/04 @ 11:47

120 cm recovery, surface is uneven

8:30 measured + prepped core

8:40 Start Core

Crew: T. D.  
D. Pelletier  
M. Welsch5 cm FA  
25 cm MS, MSD1125 ~~less~~ 113 cm recoveryless than 1 cm remains  
on core stopper~~MW  
12/22/04~~

12/22/04

MW

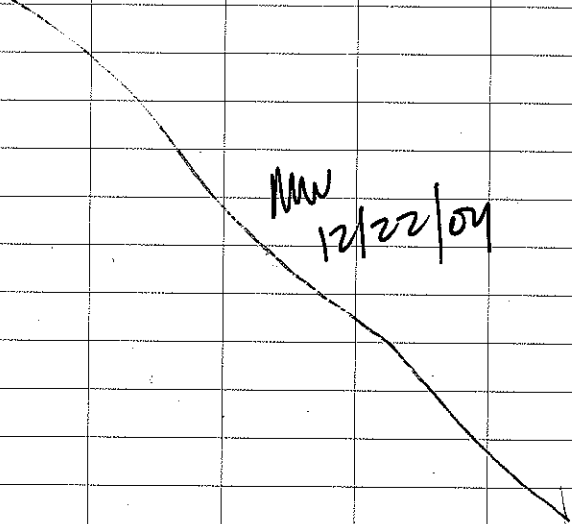
Core Sq 4  
collected 1225 12.16.04

108 cm recovery

10 cm = FD

35 cm = MS, MSD

MW  
12/22/04



12/27/04

MW

Core 3 = 12/16/04  
field recovery = 136 cm

Core 11b = 12/17/04  
field recovery = ~~36 cm~~ ~~43 cm~~ ~~43 cm~~ ~~43 cm~~

11c = 12/17/04  
field recovery = ~~36 cm~~ ~~43 cm~~ ~~43 cm~~ ~~43 cm~~

T.D.O.  
06-29-05T.D.O.  
06-29-05

Started with Core 3

15-17 cm = FD

25-27 cm = MS, MSD

finished @ 1346

Core 11b

Prepped @ 14:00

Crew: T. Do

KY Sue

M. Welsch

D. Pelletier

H. Anderson

43 cm recovery

0-2 cm FD

25-27 cm MS, MSD

Finished @ 1550

Started Core 11c

Recovery = 45 cm (see note)

←  
Stopper turned vertical while  
prepping core + piston forced  
through sediment.

Placed new stopper + kept  
core anyway

Start @ 1545

Crew: T. Do

H. Andersen

KV Sue

D. Pelletier

10 cm FD

30 cm MS, MSD

Disturbance from prep noted  
@ 30 cm depth.

Stopped sampling @ 34 cm  
due to disturbance.

(Additional 5 cm in core not  
processed)

Finished @ 1635

dmp  
12/27/04

12/28  
Prepping Core 5a (0954 12/17/04)

0810

Recovery

150 - 38 = 112 cm

Crew: T. Do

D. Pelletier

M. Welsch

FD @ : 30-32

MS, MSD @ : 40-42

1221 3/4 cm left on stopper

full recovery = 103 cm

---

Core 2 (on 12/17/04 @ 1424)

149

64

85 cm = recovery

Crew: MW,

TD,

LM, KYS

HA, DP

started core Sg 2 @ 14:05

FD @ 50-52

MS, MSD @ 60-62

16:38 taken last slice @ stopper

full recovery = 81 cm

End of processing day.

~~T. Do~~  
12.28.04

12/29/04

Core 1a collected on 12/17/04  
@ 1512

field notes indicate ~120cm recovery

Crew: TD, MW

FD = 5-7 cm

MS, MSD = 35-37 cm

Measured recovery

146
<del>151</del>
89
<hr/>
117 cm

Full recovery = 114 cm

12/29/04  
MW

