

APPENDIX F-1 BOAT FIELD NOTES

02.06.06 LDN Subsurface Sed. Sampling T.DD

0715 Arrive at South Park Marina
Weather: partly cloudy, sun, 40s (F)

0720 Meet up with Gary Maxwell and Bob Stuart (MCS)

0730 Tim Hammermeister (SAIC, EPA oversight) called - running late. I will call him when we are about ready to leave. Eric Parker and Don Peterson (Research Support Services - RSS) arrives.

0740 Chip Brackett (RETEC) arrives

0805 Tim Hammermeister arrives

0810 Health and Safety meeting

0820 Depart South Park Marina, Navigation check from end of dock (~1.7 ft. off)
Head to station 55

0900 Station 55 ~1.4 ft off target
Water depth: 8.5 ft.

0913 Eric Parker at bottom to get push probe depth for soft surface sediment (0.8 ft), over firm material on steep clay(?) slope, scattered rip rap.

0945 Collect R1
Penetration (final): 12.25 ft.

02.06.06

T.DD

0945 Recovery (final): 7.95 ft.
% Recovery = $(7.95/12.25) \times 100$
= 64.9%

Will attempt 2nd core for higher recovery.

1000 T. Hammermeister suggested that before we consider repositioning a target location/station b/c of low recovery, see if recoveries in top 6 ft. are also as low since that's where the chemistry samples are taken from. If not, perhaps we can keep the best of the 3 attempted cores even if overall % recovery does not meet 75% criteria (BAPP).

1010 Collect R2 (9.2 ft. water depth)
Penetration (final): 10.05 ft.
Recovery (final): 4.85 ft.
% Recovery: 48.3%

1020 Checked end of core tube to see what type of sediment may be preventing higher recovery: wood debris blocking core tube. Will try for 3rd core after moving further offshore.

02.06.06

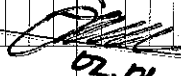
T.D

- 1050 Collect R3 (~22ft. off target)
water depth: 13.8 ft.
- 1055 Core tube slipped; Eric retrieves it.
- 1110 Core tube retrieved; reattempt R3
Penetration (final): 6.75 ft
Recovery (final): 3.85 ft.
% Recovery: 57.0%
- 1145 Talked to Benit regarding changing acceptance criteria, as discussed with T. Hammermeister. She will discuss with Kathy Gottfredsen and agencies, and will let us know.
- 1200 Drop off cores to T117 for processing and decision-making. Picked up more core tubes. We decided to continue with channel stations while Benit and PMS make decisions regarding 2^o acceptance criteria. Head to station 49
- 1244 Station 49, R1 (~8ft. off target)
Water depth: 28.9 ft.
Penetration (final): 13.65 ft.
Recovery (final): 11.65 ft.

02.06.06

T.D

- 1244 % Recovery: 85.3%
Acceptable core; move to station 48
- 1425 Station 48, R1 (~20ft. off target)
Water depth: 25 ft.
Penetration: 5.75 ft.
Recovery: 4.05 ft.
% Recovery: 70.4%
Core tube bent; G. Maxwell says it's a result from pulling up tube and force of current. ???
Out of empty core tubes, head back to T-117
- 1500 Dropped off cores at South Park Marina; loaded more core tubes. Head to station 53.
- 1520 Collect R1 (~9 ft off target)
Penetration: 13.55 ft.
Recovery: 11.15 ft.
% Recovery: 82.3%
- 1545 Acceptable core; return to South Park Marina.
- 1600 Arrive at South Park Marina; drop off core. End of sampling day.


02.06.06

02.07.06

T. Do

- 0745 Arrived at South Park Marina
Weather: clear, sun; 30s-40s. (9F)
Gary Maxwell and Bob Stuart (MCS),
Eric Parker and Don Peterson (RSS),
and Chip Brackett and Leslie
present.
- 0807 Depart South Park Marina. Performed
navigation check from end of dock and
Health and Safety meeting.
- 0815 Head to Station 56
- 0827 Arrived at station 56
- 0830 Collect R1 (~8 ft. off target)
Water depth: 7.5 ft.
Penetration: 6.55 ft.
Recovery: 3.85 ft
% Recovery: 58.8%
- 0845 Berit called to remind us to try for
10 ft. recovery (or refusal) and 75% recovery.
We can only accept less if it is because
of refusal.
- 0915 R1 tube empty; core catcher lost during
drive because a log was hit. Will try for
a second core. Will move a little further
away; (core tube R1 bent)

02.07.06

T. Do

- 0925 Collect R2 (~15 ft. off target)
Water depth: 7.8 ft.
Penetration: 5.45 ft.
Recovery: 3.75 ft
% Recovery: 68.8%
Lost gravel and sediment at the bottom.
Will try for R3 after moving further out
- 0958 Collect R3 ^{to} (~28 ft. off target)
Water depth: ~~8~~ 8.5 ft.
Penetration: 10.65 ft.
Recovery: 7.15 ft.
% Recovery: 67.1%
- 1004 Berit called to check on our status to
see if we have a core collected yet.
I told her we'll call back b/c the
3rd core was in progress.
- 1030 Transferred R2 & R3 cores to support
boat to take to T-117 for processing.
- 1040 Called Berit. Left message with
status update. Head to station 54
- 1050 Arrive at station 54. Setting up
- 1053 Berit called to discuss attempts at
station 56 and requested that we
call after each station. She will

02.07.06

T.Do

decide on how to proceed with the cores we received from station 56
Station 54

1107 Collect R1 (~5 ft. off target)

Water depth: 8.8 ft.

Penetration: 7.75 ft.

Recovery: 5.65 ft.

% Recovery: 72.9%

Cannot get closer to target b/c of logs and piling in the way. Also, distance from Mudhole and bow of boat prevents it.

1140 Will try for a 2nd core from south side of logs and piling. We suspect that the station, located on the north side of the logs and piling, may have been a dredged area(?)

1148 Repositioned boat to south side (OK w/T. Hammermeister)

1152 Collect R2 (26 ft. off station)

Water depth: 8.4 ft

Penetration: 7.15 ft.

Recovery: 5.55 ft.

% Recovery: 77.6%

1215 Take lunch break

1230 Called Benit to give her update on station 54.

02.07.06

T.Do

1240 Repositioning boat back to north side to be closer to target location for 3rd core.

will be closer to seep location (C)

Collect R3 (28 ft. off target)

1245 Tim Hammermeister talks to Benit. Called off collection of R3.

1250 Headed to station 52. Called and spoke to Jason @ Insurance Auto Auction to let them know we will be sampling around their property. He will pass on message to Erik (manager) and gave us the okay to proceed.

1305 At station 52 (~7 ft. off target)

Target station is ~7 ft to east? close to retaining wall and slag pile; Eric probes for spot

1316 Collect R1

Water depth: ~~7.4~~^{7.0} ft. 7.1 ft.

Penetration: 7.25 ft.

Recovery: 4.65 ft

% Recovery: 64.1%

Will try for another core for better recovery.

1355 Transfer cores to RSS boat to take to T-117 for processing. Called processing crew to let them know they are coming. Tim Hammermeister departs.

02.07.06

T-DO

- 1359 Collect R2 (1.7 ft. off target)
 Water depth: 5.9 ft.
 Penetration: 5.95 ft. N. 194178
 Recovery: 4.45 ft E. 1670796
 % Recovery: 74.8%
- 1404 Benit called to say she is leaving at 1530. If needed after that to call Kathy G.
- 1425 Reposition boat for R3.
- 1435 Collect R3 (23 ft. offshore of target)
 Water depth: 5.8 ft.
 Penetration: 10.25 ft. N. 194160
 Recovery: 5.95 ft E. 1276279
 % Recovery: 58.0%
- 1452 Angelita called and said that they need another core from station 54 because there was only ~3 ft. of sediment (washed/blipped out during retrieval?) She will call back to let us know if they need it for R1 or R2.
- 1500 Angelita called and said they can accept the ~~3rd~~ ^{2nd} additional core from either R1 or R2 locations for station 54.
- 1530 Called Angelita to let them know we cannot

02.07.06

T-DO

- sample at station 54 as planned because of falling tide. Anne Fitzpatrick and Benit requested we try an attempt at station 42.
- 1535 Headed to station 42
- 1545 Arrived at Station 42; positioned boat
- 1554 Collect R1 ~5 ft off station
 Water depth: 15.0 ft.
 Penetration: 12.05 ft N. 199908
 Recovery: 10.25 ft E. 1271361
 % Recovery: 85.1%
- (lost ~4 ft. of sed.) } Mud mole bore log indicated that core catcher failed so recovery may not be as high as measured in situ.
- 1620 Kathy Godtfredsen called and said to target stations downstream until we can resolve with MCS core catcher failure issues. Anne Fitzpatrick will discuss with them later today. We will not go back to any upstream stations until issues are resolved.
- 1628 Called Angelita to let them know we are coming back with cores for them.
- 1632 Head back to South Park Marina

02-07-06

T.D.O

- 1640 Returned to South Park Marina
 1645 Dropped off cores for processing crew
 1700 End of field sampling day. Meet up with processing crew and MCS crew to discuss options for improving percent recovery.

~~02-07-06 T.D.O~~

02-08-06

T.D.O

- 0730 Arrived at South Park Marina.
 Weather: overcast, 40's (°F)
 Meet up with Gary Maxwell and Bob Stuart (MCS), Eric Parker and Don Peterson (RSS), and Anne Fitzpatrick and Leslie McKee (BETEC)
 Discussed plan for today:
 resample stations 48 and 42 and go downstream stations 1-4 working our way upstream. Setting up.
- 0800 Depart South Park Marina. Perform navigation check from end of dock.
- 0810 Health and Safety meeting
- 0830 Setting anchors at station 48; prepped coring equipment
- 0846 Collect RZ (5 ft. off target)
 Penetration: 6.65 ft. N. 196658
 Recovery: 5.75 ft. E. 127453
 % Recovery: 86.5%
 Core's catcher end is plugged as it comes out of the sediment surface.
- 0910 Depart station 48, Headed to station 42.

water depth
30-40 ft

02.08.06

T. Do

- 0920 Arrived at station 42, set anchors, prepped coring equipment.
- 0942 Collect RZ (56 ft. off target)
 N: 199898 E: 1271361
 Penetration: 15.85 ft.
 Recovery: 12.85 ft
 % Recovery: 81.20%
 Water depth: ~~14.1 ft~~^{TD} 20.2 ft.
 screw plug inserted by diver, as core tube breaks the sediment surface.
 Good natural plug - diver had to scoop some out to insert screw plug
- 1015 Called processing crew to let them know we will be dropping off the two good cores for them to process.
- 1015 Transferred cores to RSS boat for them to shuttle cores back to South Park Marina for processing crew.
- 1020 Pulling anchors before heading to station 1
- 1025 Headed to station 1; called Bev to give her status update. Told her we've minimized loss by having diver insert screw plug as sediment core breaks the sediment surface. I will call her

02.08.06

T. Do

- with other station updates as the day progresses.
- 1050 Arrive at station 1, set anchors and prepared coring equipment. Anne Fitzpatrick departed RSS boat; John Nakayama (SAIC: EPA oversight) on board RSS boat.
- 1055 Health & Safety briefing for John Nakayama
- 1103 Collected R1 (~9 ft off target because of boat maneuverability issues with limited space for station located at Dock A at Harbor Island Marina)
 Water depth: 23.6 ft.
 N: 211302 E: not recorded
 Penetration: 1.75 ft.
 Recovery: 1.45 ft
 % Recovery: 82.9%
 Low recovery depth: hit something hard (early refusal) will retry; tube empty
 Collect R1b (~14 ft. off target see above)
 Water depth: 23.7 ft.
 N: 211310 E: 1266321
 Penetration: ~~6.45 ft~~^{TD} 6.25 ft.
 Recovery: ~~5.75 ft~~^{TD} 5.55 ft

02.08.06

T-Do

% Recovery: 88.8%

Will retry for R2 because need at least 6ft. recovered sed. & >60% recovery %, per discussion with Leslie McLee and Anne Fitzpatrick (via phone), BREC.

1206 Collect R2 (~10 ft. off target - see previous notes)
N: 211282 E: 1266316

Water depth: 25.3 ft.

Penetration: 6.55 ft.

Recovery: 6.15

% Recovery: 93.9%

Diver does not think any sediment was lost out of core catcher end. Core is accepted.

1235 Lunch break

1300 Head to Station 4 because no ships are present, set anchor lines and set up coring equipment.

1341 Collect R1 (~27 ft. off target - see notes 1348)
N: 210583 E: 1266940

Water depth: ~~34.3 ft.~~ 42.2 ft. (tide time 1427)

Penetration: 7.35 ft.

Recovery: 6.15 ft.

% Recovery: 83.7%

1344 Shannon called to let us know they are

02.08.06

T-Do

ready for more cores to process. I said we just started station 4, but will send the cores over afterwards and will call to let them know when we do.

1348 Diver notified us that there is a pile of gravel directly under our station location. He suggested we move off shore ~30 ft. The gravel pile runs along the length of the loading facility.

1355 Repositioned station 4

1420 During retrieval of tube, it was stuck in sediment. Had to run the hammer to shake core free from sediment, no apparent loss noticed by diver; boat lists to port side

1430 On board measurements indicates there may have been a loss of ~0.5 ft because of extraction from sediment bottom (use of hammer). Will determine if R2 is needed here.

1440 Talked to Benit, she suggested trying for another core.

1450 Called Shannon to let her know status.

02.08.06

T.D.O

1455 Collect RZ (N 28 ft off target)
 N: 210597 E: 1266933
 Water depth: 41.9 ft.
 Penetration: 9.0 ft.
 Recovery: 8.0 ft.
 % Recovery: 88.9%
 Core acceptable

1535 Pulled up anchors and head back to South Park Marina to drop off samples to processing crew.

1540 Called Shannon to let them know we are on our way. Also called Benit to give her an update/recap of today's sampling effort (left message)

1615 Arrive at South Park Marina. Offloaded core samples to processing crew.
 End of field sampling day.

~~T.D.O
02.08.06~~

02.09.06

T.D.O

0730 Arrived at South Park Marina
 Weather: clear, cold, 30's (to 50's later)
 Meet up with Gary Maxwell and Bob Stuart (MCS), Eric Parker and Don Peterson (RSS), Anne Fitzpatrick and Leslie McKee (DETECT). Went over plan for today: work at downstream stations 2, 3, 5, 6, and surrounding area. Set up equipment.

0745 Depart South Park Marina. Performed navigation check at end of dock.
 Head to station 3

0815 Arrived at station 3, set anchors and core equipment. Benit called to confirm that we are to take only one core from each station provided we are certain we hit refusal and have minimal sediment loss, if any, and that it's not a result of wood/rock debris preventing 100% recovery. Also, note sand.

0840 Pulled anchors and depart station 3 because of tug activity. Move to station 2

0850 Set anchors at station 2, set up eqpt/gear.

0900 Health and Safety meeting.

02.09.06

T. Do

- 0909 Collect R1 (~ 5 ft. off target)
 N: 211196 E: 1267032
 Water depth: 31.4 ft.
 Penetration Depth: 13.05 ft
 Recovery Depth: 13.05 ft
 % Recovery: 100%
 Core accepted.
- 0940 Pulled up anchors, head back to Station 3
- 0955 Setting anchors at Station 3
- 1001 Called Angelita to find out if processing crew is ready for more cores yet. They are still processing and may be ready in 30 minutes. I told her we'll call when we come, after we collect station 3
- 1018 Collect R1 (~ 7 ft. off target)
 N: 210648 E: 1266431
 Water depth: 57.0 ft.
 Penetration: 10.15 ft.
 Recovery: 8.85 ft.
 % Recovery: 87.2%
 Wind pushed us off target ~ 15 ft
 Diver inserted screw plug in situ.
- 1110 Pulled up anchors.
- 1127 Head back to South Park Marina to drop off

02.09.06

T. Do

- cores. Called Angelita to let know we are coming.
- 1139 Arrive at South Park Marina. Dropped off cores. Head to station 6. Called (courtesy) Bart Kalle of General Recycling to let him know we will be sampling offshore near their property boundary. He requested we call back when done. (Ann Fibra-bick stayed w/processing crew)
- 1210 Arrived at Station 6.
- 1220 Collect R1 (~ 8 ft off target) barge
 N: 209837 E: 126684
 Water depth: 41.9 ft.
 Penetration: 11.0 ft
 Recovery: 8.8 ft
 % Recovery: 80.0%
 Core accepted.
- 1245 Called Bart Kalle to let him know we are done working offshore of their property. (Left voicemail). Pulled up anchors to head to station 5.
- 1255 Arrived at Station 5. Set anchors and equipment. Called Angelita to get and give status update.

02.09.06

T. Do

1304

Collect R1

N: 210531

E: 1266043

Water depth: 18.7 ft.

Penetration: 6.85 ft.

Recovery: 6.25 ft but lost 3ft during extraction

% Recovery: 91.2% → 47.4%

Hit hard bottom/refusal. Core tube struck and had to be tapped out with hammer (MudMole). Port bow listing and partly submerged during extraction process which took ~ 20 minutes.

1400

Called Benit to find out if we should take a second core b/c of low recovery (loss of material) and unsure if we hit refusal or just debris that caused tip of core to be warped. She said to give it another try. I will call back w/update.

1410

Moved north a few meters b/c piling blocks movement south.

1415

Collect R2 (~20 ft from target) to north

N: 210543

E: 1266048

Water depth: 19.7 ft.

Penetration: 7.35 ft.

Recovery: 6.35 ft

02.09.06

T. Do

% Recovery: 86.4%

Core accepted.

1440

Called Benit: let her know we were successful with the 2nd core at Station 5.

1450

Transfer cores to RSS boat to shuttle back to South Park Marina for core processing team.

1457

Head back to South Park Marina.

1503

Called Angelita to let them know we are coming with cores for processing crew.

1508

Arrive at South Park Marina

1510

Transferred cores to core processing crew.
End of field sampling day

~~02.09.06 T. Do~~

02.10.06

T.DD

- 0735 Arrived at South Park Marina.
Weather: cold, clear, 30's (to 50's later)
Meet up with Gary Maxwell and Bob
Stuart (MCS), Eric Parker and Don
Peterson (RSS), and Leslie McKee (RETEC)
- 0740 MCS boat departs South Park Marina to
perform navigation check at end of dock,
before heading to station B.
- 0800 RSS boat departs South Park Marina. Headed
over to Harbor Island Marina to pick
up Kathy Godfredsen and Berit Bergquist
before heading to station B.
- 0815 Arrived at Harbor Island Marina, picked
up Kathy and Berit. Headed to station
B to meet up with MCS boat.
- 0820 Arrived at station B. Health and
safety meeting.
- 0825 Head to station 7 because of expected
tug and barge activity in next half
hour.
- 0830 Set anchors for station 7. Set up
equipment (Mantle and dive
gear)
- 0907 Collect R1 (~4ft off station)

02.10.06

T.DD

- N: 209605 E: 1266850
Water Depth: 34.0 ft.
Penetration: 11.0 ft.
Recovery: 9.1 ft.
% Recovery: 82.7%
Core accepted.
- 0920 Head back to Harbor Island Marina to
drop off Kathy and Berit before heading
to station B.
0925. At Harbor Island Marina - dropped off
Kathy and Berit; Head to station B.
0927. Arrive at station B. Unable to sample
because tug and barge expected to come
through. Head to station 10.
- 0930 Arrive at station 10. Set anchors and
equip. Called Shannon to get status
of processing crew.
- 0946 Collect R1 (~5 ft. off target)
N: 208776 E: 1267167
Water depth: 24.6 ft.
Penetration: 10.55 ft.
Recovery: 8.85 ft.
% Recovery: 83.9%
Core accepted.

02-10-06

T-Do

- 1014 Pulled anchors to head to station B.
- 1024 Arrive at station B. Begin setting anchors.
- 1045 Collect RI (~4 ft off target)
N: 201589 E: 1266614
- Water depth: 46.5 ft.
Penetration: 14.55 ft.
Recovery: 12.85 ft.
% Recovery: 88.3%
- Core accepted. (see 1103 notes)
- 1102 Called Shannon to ask someone come to Harbor Island Marina in about 20 minutes to pick up cores.
- 1103 Core catcher failed and we lost ~3 ft. of sediment. On deck recovery was measured at 9.75 ft. (67%). However, we still have enough recovered. Diver and mudhole operators observations are that penetration did not slow down much all the way down, and did not hit hard (sandy) material, before running out of core tube length.
- 1120 Called Shannon to change core pick-up location to 1st Ave S. boat ramp.
- 1135 Headed to 1st Ave. S. boat ramp.

02-10-06

T-Do

- 1140 Arrive at 1st Ave S. boat ramp. Drop off cores to processing team. Picked up more empty core tubes. Headed to station 23.
- 1147 Head over to station 23.
- 1152 Arrive at station 23. Break for lunch.
- 1205 Depart for station 32 because of nearby tug activity upstream poses as safety hazard for divers.
- 1212 Arrived at station 32. Set anchors and coiling equipment. Difficult anchoring because of swirling winds in Slip 2.
- 1243 Collect RI (~9 ft. off target)
N: 202959 E: 1269344
- Water depth: 25.6 ft.
Penetration: 11.75 ft.
Recovery: 11.25 ft.
% Recovery: 95.7%
- Core accepted.
- 1308 Pulled anchors. Head to station 3A.
- 1320 Unable to access station because of large barge. Moved to station 33.
- 1321 Called Angilita to check on access to station 34.

02.10.06

T.D.B.

1323 Arrived at station 33, set anchors and equipment.

1330. Called Shannon to ask if we can take a replicate sample core here instead of Station 34. She said okay.

1333 Collect R1

N:

E:

Water depth:

Penetration:

Recovery:

~~T.D.B.~~~~B Recovery.~~

1358 Too much wood and metal debris on and scattered around location. We have to move offshore. Resetting anchors.

1415 Collect R2 (26 ft. off target - see 1358 note)

N: 202056 E: 1269267

Water Depth: 24.1 ft.

Penetration: 13.05 ft.

Recovery: 10.85 ft.

% Recovery: 83.1%

Core accepted.

1445 Shannon called to check on our status. I told her we are collecting our replicate LDW-SC201 and then

02.10.06

T.D.B.

will call it a day.

1453 Collect R1 (~26 ft off target)

N: 202052 E: 1269266

Water Depth: 24.0 ft.

Penetration: 13.45 ft.

Recovery: 12.75 ft.

% Recovery: 93.4%

Core accepted.

1510 Lost ~1.2 ft. measured from on deck recovery. Recalculated recovery is 11.55 ft (84.6%)

1520 Pulled up anchors to head back to South Park Marina.

1525 Head back to South Park Marina.

1527 Called Shannon to let her know we are headed back and cores on MCS boat will arrive in about 30 minutes.

1540 Arrived at South Park Marina. Transferred cores to T-117 Processing crew.

1545 Offloaded supplies. End of field sampling day. Joined processing crew at T-117.

~~T.D.B.~~
02.10.06

02.13.06

T.D.D.

0720 Arrived at South Park Marina.
Weather: lightly showering; overcast; 40-50°F
Meet up with Gary Maxwell and Bibb
Stuart (MCS) and Eric Parker and Dan
Peterson (RSS). Set up equipment, mobilised
gear.

0730 MCS boat crew headed downstream. Leave
for navigation check at end of dock.

0740 Called Shawn Hillis (Manson Construction)
to let him know we plan to sample station
18 towards mid-late this week (left message).
Called Mike DePew (LaFarge) to let him know
we plan to sample stations 19 & 21 sometime
later this week and wanted to make sure no
barges will prevent access. We wanted to
know what contaminants we're looking for,
I replied PCBs and fluoranthene, he said he'll
call back with access dates.

0745 (RSS boat) departed South Park Marina. Headed
to meet up MCS boat at station 9 or 14.

0805 Arrive at station 14. Meet up with MCS boat.
Begin setting anchors and equipment.

0834 Collect R1 (5 ft off target)
N: 207055 E: 1267397

02.13.06

T.D.D.

Water depth: 4.6 ft.
Penetration: 12.65 ft.
Recovery: 11.75 ft.
% Recovery: 92.9%
Core accepted.

0905 Pulled anchors, head to station 11

0914 Kym Takasaki called to find out what
time core processing is meeting. I told her
noon and gave her WW field phone 2
number.

0915 Arrive at station 11. Begin to set anchors.
Called Shannon to let her know to expect
a call from Kym Takasaki. MCS boat
moved out to deeper waters to set up
Mud Hole.

0934 Collect R1 (17 ft. off target)
N: 208291 E: 1263908

Water depth: 7.6 ft.
Penetration: 5.95 ft.
Recovery: 5.05 ft.
% Recovery: 84.9%

0939 (Tug and barges passed by creating wakes)
1005 Called Brit to let her know about ~6 ft
of penetration for station 11. She said to

02.13.06

T.D.

- move on to next station; core accepted.
1007. Pulled anchors. Move on to station 9
- 1015 Arrive at station 9. Set anchors
- 1031 Collect R1 (1 ft off target)
N. 208919 E. 1260863
Water depth: 30 ft (diver measured)
Penetration: 12.85 ft.
Recovery: 8.55 ft.
% Recovery: 66.5%
- 1020 Called Angelita to let processing crew know we may have three cores ready in about an hour. Will call back.
- 1045 Core accepted. Called Angelita to let them know we are ready for pick up. They are not ready yet so we will meet up with them at noon at 1st Ave. S. boat ~~launch~~ ^{launch}.
- 1055 Pulled up anchors. Head to station 13
- 1108 Arrived at station 13. Set anchors
Collect R1 (2.6 ft off target)
N: 207096 E: 1267585
Water depth: 16.5 ft.
Penetration: 12.45 ft.
Recovery: 10.05 ft.

02.13.06

T.D.

- % Recovery: 80.7%
Core accepted
- 1140 Called Angelita to let her know we will be dropping off 4 cores in about 20 minutes at 1st Ave. S. boat ramp.
- 1145 Pulled anchors, head to 1st Ave. S. boat ramp to drop off cores for processing team.
- 1200 Arrived at 1st Ave. S. boat ramp. Dropped off cores.
- 1212 Lunch break.
- 1220 Called Kyle at Duwamish Shipyard to let him know we are planning on sampling (station 26) some time this week. He told us activity is light this week, except Thursday, so we are clear to proceed.
- 1240 Depart to station 26 to see if it is accessible for sampling.
- 1244 Station 26 is located under a barge. Moved on to station 16 in slip 1.
- 1249 Boat/hug activity at station 16. Moved on to station 17 at the end of slip 1.

02.13.06

T. Do

1253 Arrived at station 17. Waited for Manson
to moved DB Viking ^{DO} ~~out~~ before setting
anchors. Viking repositioned - staying for 1 month

1323 Set anchors

Collect R1 (~12 ft off target - see 1330 note)
N: 206552 E: 1268410

Water depth: 19.2 ft.

Penetration:

Recovery:

% Recovery:

Not accepted.

(Aborted: see
1343 note)

1330 Viking repositioned so that it is right on
target location. Viking crew (Manson)
said it will be staying there a month.
We could only get ~12 ft. from target.

1343 Hit something hard during drive; core tube
was empty and was repositioned and
resampled.

1352 Collect R2 (~20 ft. off target)
N: 206546 E: 1268465

Water depth: ~~3.3 ft.~~ 18.1 ft.Penetration: 3.3 ft. ^{TDO}

Recovery: 3.0 ft.

% Recovery: 90.1%

02.13.06

T. Do

Core accepted; May need to resample
at another date/time.

1410 Pulled anchors, headed to station 16

1418 Arrived at station 16, set anchors.

1431 Collect R1 (~10 ft. off target)

N: 206669 E: 1267959

Water depth: 32.3 ft.

Penetration: 13.55 ft

Recovery: 11.05 ft

% Recovery: 81.5%

Core accepted.

Dredge barge Westport (Manson) on
target location; this was as close as
we could get.

1452 Pulled anchors; depart for station 22.

1500 Arrived at Station 22. Set anchors.

1520 Collect R1 (~15 ft off target)

N: 205908 E: 1268174

Water depth: 12.0 ft.

Penetration: 9.3 ft.

Recovery: 7.9 ft.

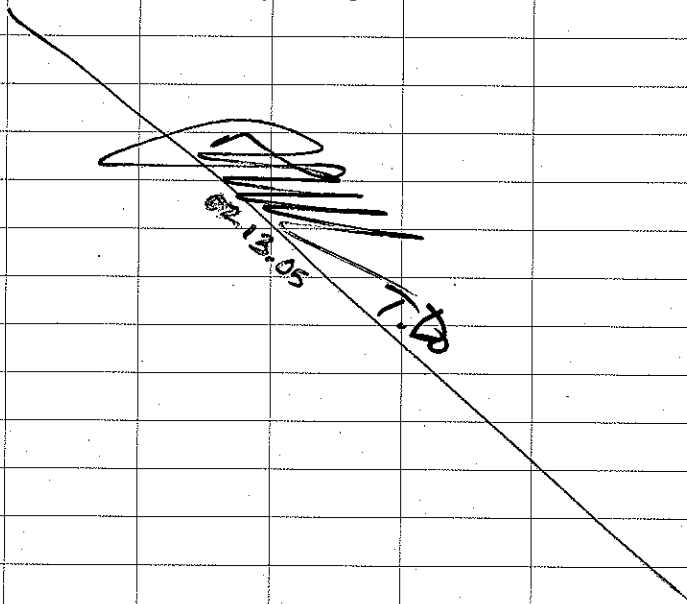
% Recovery: 84.9%

Core accepted. Hard material at refusal.
off target because of concrete debris.

02.13.06

T.D.

- 1540 Pulled anchors. Transfer cores from MCS boat to RSS boat to take back to South Park Marina for processing crew. End of coring for today.
- 1550 Headed for South Park Marina. Called Angelita to let processing crew we'll be there in about 10 minutes to drop off cores.
- 1602 Arrived at South Park Marina. Dropped off cores.
- 1605 Joined processing crew. End of on water sampling day.



02.14.06

T.D.

- 0730 Arrived at South Park Marina. Weather: overcast, cold, 30-40's (F). Meet up with Gary Maxwell and Bob Stuart (MCS) and Eric Parker and Don Peterson (RSS), mobilised gear and equipment.
- 0743 MCS boat departs South Park Marina and performed navigation check at end of dock, and headed for station 20.
- 0800 RSS boat departs for station 20
- 0815 Arrived at station 20. Tug activity prevents sampling at this time. Headed to station 27.
- 0824 Arrived at station 27. Set anchors
- 0837 Collect K1 (8ft off target)
 N: 204441 E: 1260518
 Water depth: 20.0 ft
 Penetration: 11.15 ft
 Recovery: 9.65 ft
 % Recovery: 86.5%
 Core accepted; hit refusal
- 0910 Pulled anchors. Moved on to station 28
- 0918 Arrived at station 28. Set anchors.
- 0932 Collect K1 (17ft off target)
 N: 204181 E: 12608195
 Water depth: 40.0 ft.

02.14.06

T.D.O

Penetration: 8.05 ft.

Recovery: ~~8.05~~ 3.25 ft.

% Recovery: 40.1%

Core accepted - will hold, per Benit.

Note: target coordinate is located under drydock at Duwamish Shipyard. Cannot move closer to target.

0052 Called Benit to let her know about low recovery/penetration at station 28.

0054. Benit called back and said to max on. We'll hold that core pending a decision.

1003 Pulled anchors. Moved to station 30

1012 Arrived at station 30. Set anchors.

1020 Collect R1 (1/6 ft off target)

N: 203593 E: 1268797

Water depth: 11.4 ft.

Penetration: 4.4 ft.

Recovery: 3.2 ft.

% Recovery: 72.7%

Will retry for another core. Moving offshore.

1049 Called Shannon to let processing crew we are making another attempt before offloading cores.

02.14.06

T.D.O

1059 Collect R2 (24 ft off target)

N: 203576 E: 1268785

Water depth: 18 ft.

Penetration: 6.9 ft.

Recovery: 6.2 ft.

% Recovery: 89.9%

Core accepted.

1122 Called Kathleen to set up pick up time for cores. Will drop off at 1st Ave. S. boat ramp in about 10 minutes.

1123 Pulled anchors, to head to 1st Ave. S. boat ramp.

1124 Benit called to see if we can resample station 17 after Manson moves the barge sitting on station. I said I am waiting to hear back from Manson and can sample it possibly tomorrow morning.

1139 Arrived at 1st Ave. S. boat ramp. Dropped off cores.

1150 Lunch break

1210 Headed back to station 17 to attempt R3. Sharon @ Manson called to say they moved DB Viking for us.

02.14.06

T. Do

- 1219 Arrived at station 17. Set anchors
- 1235 Shannon called. - said to see how station 17 turns out. if not well, propose new location. Also same with station 28 (attempted earlier)
- 1237 Collect R3 (17 ft. off target)
N: 206538 E: 1268436
Water depth: 21.4 ft.
Penetration: 7.45 ft.
Recovery: 4.85 ft.
% Recovery: 65.1%
Core kept, pending decision to relocate station: recovery still low
- 1304 Called Benit to let her know status of R3 at station 17.
- 1305 Called Shaun Hillis (Maroon) to let him know we're done at station 17 and he can max DB Viking back.
- 1307 Pulled up anchors. Move to station 19
- 1317 Arrive at station 19. Unable to sample because of tugboats and barge on location. May be able to sample tomorrow. Move to station 21.
- 1321 Arrive at station 21. Set anchors.

02.14.06

T. Do

- 1330 Collect R1 (3 ft. off target)
N: 206107 E: 1267456
Water depth: 34.0 ft.
Penetration: 12.15 ft.
Recovery: 11.25 ft.
% Recovery: 92.6%
Core accepted
- 1358 Pulled up anchors. Move to station 35
- 1414 Arrive at station 35. Set anchors. Had to move northward off target to avoid phone cable crossing.
- 1429 Collect R1 (21 ft. off target)
N: 201591 E: 1267253
Water depth: 116.8 ft.
Penetration: 3.05 ft.
Recovery: 2.65 ft.
% Recovery: 86.9%
Core rejected. Will try again. Tip of core highly deformed; hit something hard - rip rap?
- 1459 Called Shannon to check on status of processing. Let them know we will not need a pick-up until later at South Park Marina.

02-14-06

TDD

1505 Collect R2 (29 ft. off target)

N: 201602 E: 1269260

Water depth: 21.2 ft.

Penetration: 10.15 ft.

Recovery: 8.15 ft.

% Recovery: 80.3%

Core accepted. Hit refusal.

1533 Shannon called to check on our status. I told her we will be back in about 15 mins.

1535 Pulled up anchors. Transferred cores from MCS boat to RSS boat before heading back to South Park Marina.

1546 Depart for South Park Marina.

1555 Arrived at South Park Marina. Transferred cores to processing team.

1615 End of coring day. Joined processing team at T-17.

02-14-06 TDD

02-15-06

T-DD

0730 Arrived at South Park Marina.

Weather: clear, sun, cold - 30's

Meet up with Gary Maxwell and Bob Stuzart (MCS) and Eric Parker and Don Peterson (RSS). Mobilised gear and equipment.

0749 MCS boat departs South Park Marina to perform navigation check at end of dock and head to station 20.

0804 RSS boat departs marina for station 20.

0820 Arrived at Station 20. Set anchors.

0849 Collect R1 (6 ft. off target)
N: 206177 E: 1267735

Penetration: Do Water depth: 43.5 ft.

Penetration: 12.55 ft.

Recovery: 10.95 ft.

% Recovery: 87.3%

Core accepted.

0920 Pulled anchors, move to station 29.

0935 Arrived at Station 29. Set anchors.

1006 Collect R1 (2 ft. off target)
N: 204050 E: 1268033

Water depth: 8.0 ft.

Penetration: 6.45 ft.

02-15-06

T. Do

Recovery: 4.45 ft.

% Recovery: 69.0%

Core accepted. May need to re-sample.

1105 Pulled up anchors. Moving to station 36.

1115 Arrived at station 36. Set anchors.

1131 Collect R1 (3 ft. off target)

N: 201490 E: 1269988

Water depth: 16.1 ft.

Penetration: 12.3 ft.

Recovery: 10.2 ft.

% Recovery: 82.9%

Core accepted.

1150 Called Emily to let processing know to come to 1st Ave. S. boat ramp to pick up cores.

1200 Pulled up anchors.

1208 Dropped off cores for processing crew.

1215 Lunch break.

1240 At station 36, set anchors to take field replicate L2W-SC 202 T10

1255 Collect R1 (3 ft from parent core, 5 ft from target)

N: 201491 E: 1269986

Water depth: 16.5 ft.

Penetration: 12.5 ft.

02-15-06

T. Do

Recovery: 10.1 ft.

% Recovery: 80.8%

Core accepted.

1258 Benit called for status update.

1320 Pulled anchors to move to station 38.

1327 Arrived at station 38. Probed area: a lot of rocks/concrete rip rap. Move on to station 39.

1335 Arrived at station 39. Set anchors.

Target coordinates are on beach at this time. We had to move offshore to sample.

1353 Collect R1 (? ft. off target)

N: 200657 E: 1270056

Water depth: 9.8 ft.

Penetration: 12.35 ft.

Recovery: 10.05 ft.

% Recovery: 81.4% (74.1% from on-

Core accepted. deck recovery)

Extraction was very difficult. Diver observed some "pasty clay" in core tip when he was inserting the screw plug.

Examination on deck showed some small gravel, gray silt and some clay.

02-15-06

T.D.O.

- 1440 Pulled anchors. Moved to station 40.
- 1445 Arrived at station 40. Set anchors
- 1448 Called Angelita to get status of core processing. Notified her this will be our last station for today.
- 1500 Collect R1 (10 ft. off target)
 N: 200341 E: 1270307
 Water depth: 8.0 ft.
 Penetration: 5.4 ft.
 Recovery: 3.7 ft.
 % Recovery: 68.5%
 Core kept for decision. Will likely resample today or tomorrow.
- 1538 Collect R2 (24 ft off target offshore)
 N: 200337 E: 1270321
 Water depth: 9.1 ft.
 Penetration: 5.95 ft.
 Recovery: 3.95 ft.
 % Recovery: 66.4%
 R2 was collected after moving further offshore. Core accepted, pending decision to resample.
- 1607 Pulled anchors before heading back to South Park Marina to offload cores

02-15-06

T.D.O.

- for processing crew. Called Angelita to ask them to meet us at Marina in about ten minutes.
- 1620 Arrived at South Park Marina.
- 1625 Transferred cores to processing crew.
- 1645 End of coring day.
- 1700 Joined core processing team.

~~02-15-06 T.D.O.~~

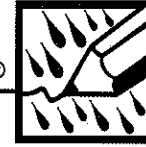
02.15.06

T-DO

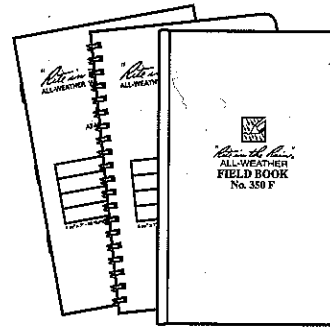
This page was intentionally left blank. New logbook started for 02.16.06

02.15.06
T-DO

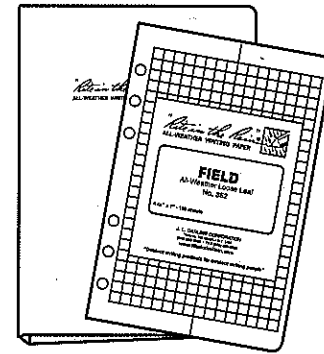
"Rite in the Rain"
ALL-WEATHER WRITING PAPER



"Outdoor writing products...
for outdoor writing people."



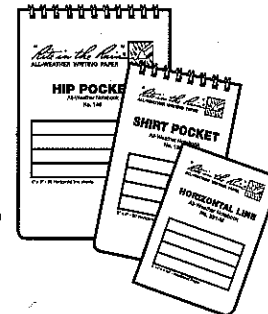
Bound Books / Notebooks



Loose Leaf / Field Binders

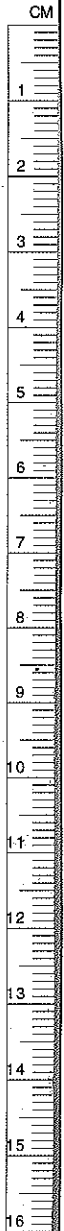


Copier Paper / All-Weather Pens



Memo Books

www.RiteintheRain.com



02-16-06

T-DB

- 0730 Arrived at South Park Marina.
Weather: cold, clear, 30's (low)
Meet up with Joanna Flower (Windward),
Gary Maxwell and Bob Stuart (MCS), and
Eric Parker and Cindy Stahl (RSS). Set
up equipment and gear
- 0815 MCS boat leaves South Park Marina to
perform navigation check at end of dock
and head to station 15 (Slip 1)
- 0820 RSS boat leaves South Park Marina to
head for station 15.
- 0843 Arrived at station 15. set anchors. ^{Health &} safety meeting
- 0845 Called Shawn Hillis (Manson) to check
on slip 1 activity. Left message.
- 0851 Collect R1 (7 ft off target)
N: 206021 E: 1267821
Water depth: 37.8 ft.
Penetration: 12.7 ft.
Recovery: 10.2 ft.
% Recovery: 80.3%
Core accepted.
- 0937 Pulled anchors. Move to station 18
- 0945 Arrive at Station 18. set anchors
(next page)

02-16-06

JMF

- 0953 Collect R1 (8ft off target)
N: 206336 E: 1267929
Water depth: 27.6 ft
penetration: 11.75 ft
recovery: 10.65 ft
% recovery: 90.6%
Core accepted
- 1022 pulled anchors. Move to station 12 ^{JMF}
- 1040 Arrive station 12, set anchors
- 1055 Collect R1 (~2ft off target)
N: 208217 E: 1266577
Water depth: 13.7 ft
Penetration: 9.55 ft
Recovery: 8.65 ft
% Recovery: 90.5%
Core accepted
- 1120 pulled anchors moved to station 24
- 1115 - Angie called for status update
- 1140 - Arrive station 24, could not
sample barge "Taku Provider"
on location, moved to station 23
- 1142 - Arrive station 23, set anchors
(NEXT PAGE)

4

2/16/06

to

JMF

1152 Collect station 18, R1 (3ft off target)

N: 205418 E: 1268229

Water depth: 23.2 ft

penetration: 12.35 ft

recovery: 11.55 ft

% recovery: 93.5%

Core accepted

1230 pulled anchors, headed to 1st ave
boat launch to transfer cores

1245 transferred cores to Rob Gilmore (MCS)

1250 Lunch break

1300 Called Ben to give status update.
Left message to call back.

1320 Headed to station 31

1333 Arrived at station 31, set anchors.

1345 Collect R1 (4ft off target)

N: 203092 E: 1268934

Water depth: 35.3 ft.

penetration: 7.5 ft.

recovery: 6.5 ft.

% recovery: 86.7%

Core accepted.

1350 Ben called for status update of
core samples collectedJMF⁵

02-16-06

1415 pulled anchors, headed to station 47

1435 Arrive station 47, set anchors

1454 Collect R1 (24ft off target due to riprap)

N: 197743 E: 1273361

Water depth: 5.2 ft

penetration: ~~8.8~~ 7.25

recovery: 4.75

% recovery: 65.5%

Core NOT acceptable, pending

1520 - Called Ben for status update
+ into on station 381525 - pulled anchors headed to
South Park Marina1535 transferred cores to Rob Gilmore (MCS)
+ finished boat core collectionJMF
2/16/06

02.17.06

T.Do

- 0730 Arrived at South Park Marina.
Weather: clear, sun, 20-30's° F, light-moderate winds. Meet up with Gary Maxwell and Bob Stuart (MCS) and Eric Parker and best friend Cindy Stahl (RSS). set up equipment and gear.
- 0741 MCS boat departs marina to perform navigation check at end of dock, and head to station 25.
- 0805 RSS boat departs marina to check out access to station 19 before going to station 25.
- 0819 Station 34 is accessible so we are going to sample it first.
- 0830 Arrive at station 34. Set anchors.
- 0841 Collect R1 (2 ft. off target)
N: 201999 E: 1268808
Water depth: 22.7 ft.
Penetration: 3.8 ft.
Recovery: 4.0 ft.
% Recovery: 105%
Core rejected
- 0904 Allison Hiltner called to set up date to come observe. I will call her on Monday after consulting with Deborah. (K.C. memo).

02.17.06

T.Do

- 0907 Core hit refusal only. May have hit a log or rock... diver speculates it may have been concrete.
- 0936 Collect R2 (28 ft. off target)
N: ²⁰²⁰¹⁴ 201999 E: ¹²⁶⁸⁸³ 126883
Water depth: ~~22.7~~ ^{23.7} 23.7 ft.
Penetration: 12.15 ft.
Recovery: 9.35 ft. (9.25 ft. on deck)
% Recovery: 77.0% (76.1% on deck)
Core accepted. Had to move offshore to avoid rip rap and debris and gravel.
- 1015 We will collect field replicate LDW-SC203 here.
- 1023 Collect R1 (28 ft. off target)
N: 202013 E: 1268832
Water depth: 24.4 ft.
Penetration: 12.05 ft.
Recovery: 9.05 ft. (8.95 ft. on deck)
% Recovery: 75.1% (73.4% on deck)
Core accepted.
- 1050 Pulled anchors. Move to station 24
- 1105 Arrived at station 24. Set anchors. The location target is under a barge

02.17.06

T.Do.

(Taken Provider). The sample will be taken about ~~26~~²⁶ ft. off station - close as possible to target.

1119 Collect R1 (26 ft. off target)
N: 205130 E: 1267860

Water depth: 26.3 ft.
Penetration: 12.15 ft.

Recovery: 12.05 ft (11.75 ft. on deck)
% Recovery: 99.7% (96.7% on deck)

Core accepted. Diver observed hard clay plug in core tip.

1144 Pulled anchors, Move to station 19 to check/recon for accessibility.

1150. Arrived at station 19. L2 Farge trader & trys ~~are~~^{are} still on target coordinates. Will move to station 25 for final core for today. (Extreme cold and windy conditions.)

1155 Arrive at station 25. Set anchors.

Collect R1 (6 ft. off target)
N: 204752 E: 1267953

Water depth: 14.8 ft.
Penetration: 5.1 ft.

Recovery: 3.8 ft. (3.7 ft. on deck)
% Recovery: 74.5% (72.5% on deck)

02.17.06

T.Do

Core rejected. Will be resampled.

1228 Benit called for status update.

1235 Angelita called for status update.

1245 Collect R2 (22 ft. off target).
N: 204751 E: 1267980

Water depth: 18.7 ft.
Penetration: 10.3 ft.

Recovery: 8.9 ft. (8.9 ft. on deck)
% Recovery: 90.5% ~~90.5%~~^{90.5%} (86.5% on deck)

Core rejected. Had to move offshore from target to avoid hard substrate.

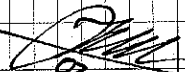
1310 Pulled anchors, head back to South Park Marina to offload cores and call it a day.

1315 Called Shannon to ask processing team to come pick up cores at South Park Marina in about 10-15 minutes.

1320 Headed back to South Park Marina.

1340 Returned to South Park Marina. Transferred cores to processing team.

1400 End of boat/core sampling day. Joined core processing team.


02.17.06 T.Do

2.20.06

J. Floner

- 0730 Arrive South Park Marina
 Weather: overcast, 30's, little to no wind
 Met Gary Maxwell + Bob Stuart
 (MCS) + Eric Parker + Don Peterson
 (RSS). Set up equipment + gear
- 0740 MCS left to perform nav check +
 head to station 19
- 0800 RSS left marina, headed to station 19
- 0815 MCS called letting us know that
 station 19 was still occupied
 by barge. Closest possible
 sampling location ~ 125 ft off
 target E: 1266998 N: 206356
- 0830 arrive station 26, still occupied
 by barge "scow 6". Closest JF
 closest sampling location ~ 56 ft
 E: 1268155 N: 204484
- 0845 arrive station 37, station occupied
 by barge "Bandon". Closest sampling
 location ~ 58 ft
~~E: not recorded N: JF~~
- 0850 arrive station 38. Set anchors
- 0919 collect R1 (~12 ft from target)
 N: 200938 E: 1269746

2.20.06

station 38 cont

J. Floner

- water depth: 6.1 ft
 penetration: 4.5 ft
 recovery: 3.6 ft
 % recovery: 80% refusal
 Collect JF core NOT ACCEPTED
- 0955 Collected R2 (~30 ft from target)
 N: 200959 E: 1269745
 water depth: 6.6 ft
 penetration: 5.55 ft
 recovery: 3.85 ft
 % recovery: 69.4%
 Core NOT ACCEPTED - refusal
- 1020: Pulled anchors, moved to station 41
- 1030: Arrive station 41, set anchors
- 1044 Collect R1 (0.7 ft off target)
 water depth: 15.6 ft
 penetration: 11.6 ft N: 200294
 recovery: 9.6 ft E: 1271170
 % recovery: 82.8%
 Core ACCEPTED
- 1110: pulled anchors, moved to station 46
 small barge occupied station
 "4410"? fire covering name
 + large barge w/ bag ~ 130 ft
 off target. Ketchikan

12

2/20/06

J. Flores

1125 Bill Haight called to say that "Bandon" will be moved Tues around 2pm + moved back on Thurs

1127 Headed to station 43

1130 set anchors station 43

1146 Collect R1 (~12 ft off target)

water depth: 8.4 ft

penetration: 4.8 ft 11.25 ft

recovery: 6.25 ft

N: 199298

% recovery: 55.6% E: 1271875

Core NOT accepted

1243 Collect R2 (~14 ft off target)

water depth: 7.5 ft

penetration: 11.65 ft N: 199291

recovery: 7.55 ft E: 1271871

% recovery: 64.8%

Core accepted, but pending

1330 pulled anchors, move to station ^{S.P.} ~~43~~ ^{S.P.} 45

1345 lunch break

1430 transferred cores to processing team

1440 headed to station ~~43~~ ^{S.P.} 45

1450 arrived station 45, set anchors

N: 198628 E: 1272645

2/20/06

J. Flores¹³

1456 - Collected R1 (10 ft from target)

water depth: 9.0 ft

penetration: 8.55 ft

recovery: 5.95 ft

% recovery: 69.6%

Core not acceptable

535 Collected R2 (~9 ft off target)

N: 198622 E: 1272635

water depth: 9.5 ft

penetration: 8.75 ft

recovery: 6.25 ft

% recovery: 71.4%

Core ACCEPTABLE, pending

1600 pulled anchors + returned to SP marina

1620 transferred cores to processing team. End of day

J. Flores
2/20/06

02-21-06

T-DO

- 0730 Arrive at South Park Marina.
Weather: overcast, 40°F, light wind, spot showers
Meet up with Gary Maxwell and Bob Stuart (MCS) and Eric Parker and Don Peterson (RSS).
Set up equipment and gear.
- 0740 MCS boat departs South Park Marina to perform navigation check and head to station 29 (Glacier Triangle)
- 0750 RSS boat departs South Park Marina. Headed to station 17 (Slip 1) for recon to see what vessel(s) may be blocking access for vibacover.
- 0805 MCS boat arrives at station 29. Set anchors.
- 0810 RSS boat arrives at station 17. Barges "Viking" and "Andrew" blocking access. Headed to station 29.
- 0815 Arrived at Station 29
- 0818 Collect R2 (~29 ft. off target)
N: 204054 E: 1268061
Water depth: 14.1 ft.
Penetration: 6.05 ft.
Recovery: 3.85 ft (3.45 ft on-deck)
% Recovery: 63.7% (60.3% on-deck)
Core rejected. Refusal. Will use vibacover.
- 0830 Called Shawn Hillis (Manson) to let him

02-21-06

T-DO

- Know barges Viking and Andrew are in the way for Thurs/Fri sampling. He said he will call us when they are moved.
- 0835 Susie McCroddy called. Said station 38 needs to be resampled. Rick Thomas (Ecology) will come out to give us guidance for locating a spot on Wednes. morning.
- 0855 Pulled anchors. Move to station 44.
- 0922 Arrived at Station 44. Set anchors
- 0935 Collect R1 (12 ft off station)
N: 198960 E: 1272242
Water depth: 10.4 ft.
Penetration: 1.0 ft.
Recovery: 0.8 ft (0.0 ft on-deck)
% Recovery: 80% (0% on-deck)
Core rejected. Tip wrapped. Will retry.
- 0942 Debra Wilkerson called to confirm time she is coming to meet us to observe coring process. (1230 pm)
- 0944 Allison Hiltner called to confirm time she is coming to meet us to observe coring process (1230 pm). Also mentioned there may be a press photographer.

02.21.06

T.D.D

- 1004 Collect R2 (20 ft. off target)
 N: 198925 E: 1272230
 Water depth: 12.0 ft.
 Penetration: 11.7 ft.
 Recovery: 5.9 ft (5.9 ft) on deck
 % Recovery: 50.4% (49.6% on deck)
 Core accepted b/c of 2 attempts made,
 Core tip had coarse gravel in it. May resample later.
- 1042 Brad Helland (Ecology) called to say
 that Rick Thomas will call later to set
 up meeting time to come direct us for
 station 38. Pulled anchors to move to
 station 45 for R3 (offshore attempt)
- 1049 Called Susie McGroddy to find out status
 of resampling station 49 for SNOCs.
 She will call back when she knows.
- 1050 Station 46 still occupied by barges.
- 1052 Arrived at station 45. Set anchors.
- 1105 Collect R3 (29 ft. off target - off shore)
 N: 198588 E: 1272047
 Water depth: 22.7 ft.
 Penetration: 7.7 ft.
 Recovery: 6.7 ft. (6.5 ft on deck)
 % Recovery: 87.0% (84.4 % on deck)

02.21.06

T.D.D

- Core accepted.
- 1125 Susie called. Still deciding on status
 of resampling station 49.
- 1130 Pulled anchors to head back to South
 Park Marina to drop off cores.
- 1135 Called Angelita to let processing crew
 know to come pick up cores in 5-10 minutes
- 1145 Arrived at South Park Marina. Dropped
 off sediment cores.
- 1155 Lunch break
- 1210 Debra Wilkison arrives.
- 1235 Allison Hiltner arrives.
1237. Health and safety briefing for boat (R3)
 Depart South Park Marina to meet up with
 VCS boat.
- 1240 Head to station 50
- 1245 Arrive station 50. Set anchors. ^{mes} Health & safety briefing
- 1245 Collect R1 (8 ft. off target)
 N: 194878 E: 1276048
 Water depth: 8.9 ft.
 Penetration: 9.25 ft.
 Recovery: 5.85 ft. (5.25 ft ^{on} deck)
 % Recovery: 69.2% (56.8 % on deck)
 Will retry for another core (R2)

02-21-06

T. Do

- 1327 Collect R2 (27 ft. off target)
 N: 194872 E: 1276017
 Water depth: 15.0 ft.
 Penetration: 9.4 ft.
 Recovery: 6.5 ft (5.8 ft on-deck)
 % Recovery: 61.1% (61.7% on deck)
 Core accepted pending decision to resample.
- 1358 Head to South Park Marina to drop off Allison Hiltner and Debra Willison.
- 1400 Arrive South Park Marina. Allison and Debra depart.
- 1402 Head to station 51
- 1412 Arrived at station 51. Too shallow to sample during ebbing tide. Heading to station 47 for R2
- 1420 Arrived at station 47 - too shallow to sample during ebbing tide. Will try tomorrow. Heading to station 41 for R2
- 1430 Arrived at station 41. Set anchors. Susie called to say that we have clearance to sample station 45, and Ecology will not be out tomorrow to resample station 38, it has been accepted (R1)

02-21-06

T. Do

- 1445 Collect R2 (9 ft. off target)
 N: 200286 E: 127165
 Water depth: 9.7 ft.
 Penetration: 15.4 ft.
 Recovery: 11.3 ft. (8.2 ft on deck)
 % Recovery: 73.4% (58.2% on deck)
 Core accepted pending decision: Loss of 3.1 ft. from bottom of core tip end because of soft silty sediment slipping out despite slow lifting of MudNode and diver plugging during extraction.
- 1515 Pulled anchors. Headed to station 37 to recon survey access for tomorrow.
- 1520 Access to station 37 appears clear for sampling tomorrow. Headed back to South Park Marina to drop off cores for processing and call it a day. Called Kathleen to ask processing crew to meet to pick up cores in about 10 minutes.
- 1530 Arrived at South Park Marina.
- 1535 Dropped off sediment cores.
- 1545 End of core sampling day. Joined processing crew at T-117.
- 1550 Met up with Allison Hiltner. Discussed

02.21.06

T.Do

Site access issues for some stations.


Station 19: she suggested moving further east or west along the shoreline as close as we can get to the target coordinates.

Station 26: she said we could sample eastward toward the channel, right against the barge that is blocking the target coordinates.

Station 46: she is aware access is limited and is okay not to sample (QAPP).

^{TDO} ~~Station~~ station 51: she suggested that if there is gravel, ^{TDO} riprap in the way to move further offshore to sample.

I also spoke to Allison earlier while she was on the boat (RSS) and asked her about provisions for sampling on Thursday and Friday with the Vibracore. If we still do not get good penetrations/recoveries, the agencies and clients will have to make do with the cores that we have.


02.21.06 T.Do

02.22.06

T.Do

0730 Arrive at South Park Marina.

Weather: overcast, 40's, intermittent showers.

Meet up with ~~Cam~~ ^{Mike} ~~Marshall~~ and ~~Bob~~ ~~Stratton~~ (MCS) and Eric Parker and ^{Kari} ~~Weather~~ (RSS). Set up equipment and gear.

0737 MCS boat departs South Park Marina to perform navigation check at end of dock before heading to station 51.

0743 MCS boat arrives at station 51. Set anchors.

0757 RSS boat departs South Park Marina and headed for station 51.

0803 RSS arrives at station 51. Health & Safety briefing

0758 Collect R1 ^{TDO} (20 ft. off target)

N: 194728 E: 1276135

Water depth: 8.5 ft.

Penetration: 10.55 ft

Recovery: 6.05 ft (5.95 ft. on deck)

% Recovery: 57.3% (56.4% on deck)

Will try for R2: low recovery.

0917 Collect R2 (20 ft. off target)

N: 194707 E: 1276135

Water depth: 11.9 ft.

Penetration: 7.0 ft.

Recovery: 4.3 ft (4.2 ft. on deck)

02-22-06

T.D.O

% Recovery: 61.4% (60.0% on deck)
Cores R1 & R2 accepted, pending decision to process, analyze, and/or resample

0950 Pulled anchors, move to station 49.

0946 Rick Huey (Ecology) called about new stations and plan for tomorrow to see if it would be okay for The Oregonian press photographer could come take photos. I told him the best location would probably be at station 40 (Trotsky) around 10:00 - 11:00.

1005 Arrived at station 49. Set anchors.

Bob Stuart (MCS), replaces Kai McArthur²

1021 Collect R2 (for VOCs) (8 ft. off target)
N: 195892 E: 1275498

Water depth: 28.0 ft.

Penetration: 15.4 ft.

Recovery: 12.8 ft. 11.8 ft. on deck

% Recovery: 83.1% (76.6% on deck)
Core accepted.

1013 Rick Huey called to say he'll plan on being w/ photographer tomorrow at Trotsky (Station 40) around 10:00.

1017 Susie McGroddy called for status update.

02-22-06

T.D.O

1042 Pulled anchors. Called Shannon to let processing crew to come pick up cores at South Park Marina in about 5 min.

1051 Arrived at South Park Marina.

1055 Dropped off cores for processing crew Scotty Emmons (DETER) joins crew.

1100 Depart South Park Marina. Head to Station 26. Ted Graham (LaFarge) called to say we should be able to access station 19 on Friday. I called Angelita to ask her to make sure it would be okay to sample station 19 with the Vibracore on Friday - she will check with Tad and Susie and will call Ted Graham back with final answer.

1117 Susie McGroddy called and said station 19 can be sampled on Friday.

1120 Arrived at station 26. Set anchors. Health & Safety briefing.

1126 Collect R1 (58 ft. off target) see notes
N: 204479 E: 1268157
Water depth: 35.4 ft
Penetration: 14.65 ft

02.22.06

T.D.O

Recovery: 12.35 ft (12.25 ft on deck)
 % Recovery: 84.3% (83.6% on deck)
 Core accepted: 58 ft off target okayed
 by Allison Hiltner (EPA) per discussion
 at T117 field lab (and c-wait) on 02.22.06

1200 Pulled anchors, before heading to station
 37 (Ship 3).

1217 Dropped off Scotty Emmons at Harbor
 Island Marina. Headed to meet up with
 MCS boat at station 37.

1230 Arrived at station 37. MCS boat on site,
 already anchored

Collect R1 (16 ft off target)
 N: 261435 E: 1270690

Water depth: 19.8 ft
 Penetration: 8.55 ft.

Recovery: 7.05 ft (6.85 ft on deck)
 % Recovery: 82.4% (80.1%)
 Core accepted. (2° criteria)

1240 Shannon called for status update.

1300 Called Kathleen to let processing
 crew know to come pick up cores at
 1st Ave. S. boat ramp. Pulled up anchors and
 headed to 1st Ave. S. boat ramp.

02.22.06

T.D.O

1330 Dropped off cores.

1335 Headed to station 47 to resample (R2)

1350 Arrived at station 47. Set anchors.

1359 Collect R2 (20 ft off target) * see note
 N: 197448 E: 1273341

Water depth: 5.1 ft.

Penetration: 8.85 ft.

Recovery: 5.55 ft. (4.95 ft. on deck)

% Recovery: 62.7% (54.8% on deck)

* Station off shore on rip rap.

Core accepted pending decision to resample
~~to return~~ or analyze. We are unable
 to try for R3 because of outgoing
 tide and the station target coordinates
 is on rip rap on shore. Any other attempts
 will take us beyond the accepted
 30-ft radius sampling area.

1430 Pulled anchors. Headed to station 43

1439 Arrived at station 43. Set anchors.

1450 Collect R3 (26 ft. off target)

N: 199287 E: 1271846

Water depth: 11.1 ft.

Penetration: 15.85 ft.

Recovery: 10.25 ft. (10.05 ft on deck)

02-22-06

T.D.D.

% Recovery: 64.7% (63.4% on deck)
Core accepted (pending decision?) meets QAPP revised

1520 Pulled anchors. Head to station 44.

1530 Arrived at station 44. Set anchors.

1539 Collect R3 (27 ft. off target)

N: 198940 E: 1272209

Water depth: 5.6 ft.

Penetration: 10.55 ft.

Recovery: 6.45 ft (6.45 ft on deck)

% Recovery: 61.1% (61.1% on deck)

Core accepted (2° criteria)

1605 Pulled anchors before heading back to South Park Marina.

1610 Called Shannon to have processing crew pick up cores at South Park Marina in 10 minutes.

1625 Arrived at South Park Marina. Dropped of sediment cores.

1630 End of coring day. End of coring using MudMole (MCS) and divers (RSS).

1640 Joined processing team at T-17.

~~T.D.D.~~
02.22.06 T.D.D.

02-23-06

T.D.D.

0740 Arrive at South Park Marina. Meet up with Bill Jaworsky, Dale Dickinson and Darrell Yates (Marine Sampling Systems - MSS). Set up equipment; mobilise gear.

0815 Nik Bacher (PETE) arrives.

0825 RAN Nancy Anne departs South Park Marina for station 5A. Weather: (5-20 kt. winds, 40°s, overcast; intermittent showers.

0835 Arrive at station 5A. Set up equipt. and anchors.

0906 Susie called and said Allison Hiltner is okay with station 2A being over 10 meters off location in the Glacier Triangle. I told Susie that we may not be able to access the triangle in the RAN Nancy Anne because of vertical clearance limits. I will call to let her know as soon as we determine if it cannot be accessed.

0915 Health and safety briefing

0920 Begin collecting R3 (16 ft. off target)

47 21.0380 N 122 18.4029 W

Water depth: 9.4 ft.

Penetration: 13 ft.

02-23-06

T.D.D

Recovery: 10.75 ft. on deck
 % Recovery: ~~76.8%~~ 76.8% 82.7% on deck.
 Core catcher had 50% med. multicolored sand with clay pockets.
 Core accepted.

1000 Depart station 54 to drop off core at F117. Called Angelita to meet us in a few mins.

1010 Dropped off cores at F117. and Mik Bucher. Headed to station 40

1025 Arrived at station 40. Set anchors.

1030 Collect R3 (7.5 ft. off target)

47 32.3593 122 19.9107

Water depth: 10.4 ft.

Penetration: 13 ft.

Recovery: 10 ft. on deck

% Recovery: 76.9% on deck

Core accepted. Core catcher end washed out, soupy sandy and silt.

1045 Depart station 40. Head to station 47.

1106 Arrived at station 47

1130 Collect R3 (20 ft. off target)

47 31.8945 N 122 19.1578 W

Water depth: 10.0 ft

02-23-06

T.D.D

Penetration: 13 ft.

Recovery: 10.3 ft. on deck

% Recovery: 79.2% on deck

Core catcher end contained medium gray/brown sand. Core accepted.

1150 Called Angelita to let her know we are dropping off cores at South Park Marina.

1200 Dropped off cores with Emily and Suzanne (Windward) for processing.

1215 Lunch break.

1220 Susie McGroddy called for status update

1230 Depart South Park Marina. Headed for stations 28/29.

1243 Arrived at station 28. Able to see that R/V Nancy Anne cannot access Glacier Triangle for station 29. I called Susie McGroddy to let her know.

1320 Collect R2 (~27 ft. off target)

47 32.9854 N 122 20.4408 W

Water depth: 11.9 ft.

Penetration: 3 ft

Recovery: 0, core empty, washed out

% Recovery: 0

02-23-06

T.D.

Will retry for R3

1335 Collect R3 (~ 28 ft off target)

AT 32.9849 N 122 20.4411 W

Water depth: 42 ft.

Penetration: 1 ft

Recovery: 0

% Recovery: 0%

Core hit something hard at 1 ft. Will
retry.1340 Called Susie to let her know we're
having problems at this station. She
will call back with answer.1345 Susie called back and said if needed,
we could sample on the east side of bay
dock towards navigation channel. I said
we'll make another attempt here before
doing that. (Okayed to be over 30 ft off).1400 Called Steve Penwick at Glacier (Triangle)
Cement Plant to see if cable can be
moved for us to access Station 29.
(Left message).1402 Unable to sample station 28 within
target coordinate's 30 ft. radius. Will
try to sample on east side of bay dock

02-23-06

T.D.

as per conversation with Susie (1345).

1415 Collect R3 ~ 30 ft off target

AT 32.9863 N 122 20.4302 W

Water depth: ~~42.2~~ ft. 43.6 ft.

Penetration: 13 ft.

Recovery: 9.8 ft on deck

% Recovery: 75.4% on deck

Core cutter end contained gray fine
sand and silt. Core tube slightly
bowed from extremely difficult penetration.
Core tube scraped up from ~ 3 ft. on down
Core accepted.1430 Called Shanon Hollis regarding access to
Station 17. He said it should be clear to
sample. (Manson)1440 Called Susie to give her status of
Station 28. She said station 51 is
okay not to resample. She needs
coordinates for Station 28. I will call
back.

1445 Headed to station 17.

1455 Arrived at station 17.

1510 Collect R4 (~ 5 ft. off target)

AT 33.3755 N 122 20.3900 W

02.23.06

T.D.O.

Penetration: 5.5 ft. , Water depth 20.0 ft.

Recovery: 5.2 ft. on deck

% Recovery: 98.1% on deck.

Core tip had black sandy silt, gravel and wood debris. Will hold on to core pending resample.

1515 Steve Penwick (Glacier) called to say that cable is not theirs, belongs to Port, so we could take it off if we are able. Called Susie to update & give coord. for ^{stake} 28

1530 Collect R5 (~ 6 ft. off target)
47 33.3761N 122 20.3911W

Water depth: 20.0 ft

Penetration: ~~30.0 ft.~~ 13 ft.

Recovery: 8.6 ft. on deck

% Recovery: 66.1% on deck.

Core accepted per 20 acceptance criteria. Core from R4 discarded on site.

1545 Called Shawn Hillis (Marina) to let him know we are done in Slip 1.

1600 Depart Station 17. Head back to South Park Marina. Surveyed access to station 29 - cannot undo cable. If we access it

02.23.06

T.D.O.

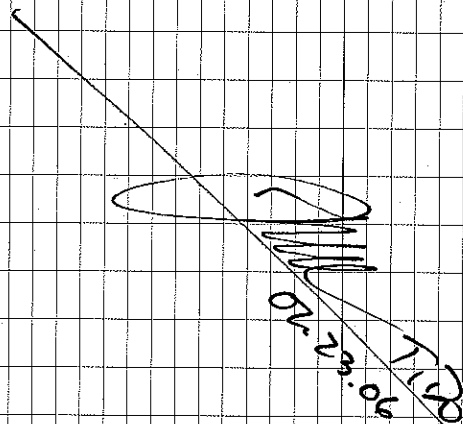
at low-low tide, we may not be able to clear the rip rap at the entrance.

1615 Called Angelita to let processing team know to come pick up cores at South Park Marina in about 5 minutes.

1620 Arrived at South Park Marina.

1625 Dropped off core samples. End of core sampling day.

1630 Joined processing crew at T-117.



02-24-06

T-Do

- 0745 Arrived at South Park Marina. Meet up with Bill Janovsky, Dale Dickinson and Danell Yates (MSS) and Nik Bacher (PETE).
- 0800 Ted Graham (LaFarge) called and said access cannot be until after noon (issues with divers' availability to move LaFarge Trader to new spot).
- 0817 Depart South Park Marina. Headed to station 50
0817 T-Do 50
- 0820 Arrived at station 50.
- 0828 Collect R3 (~6 ft off target)
47 31.4784N 122 18.4912W
Water depth: 11.6-12.9 ft (on slope)
Penetration: 13 ft.
Recovery: 8.75 ft. on deck
% Recovery: 67.3% on deck
Core catcher full of brown/gray medium-medium sand. Core accepted - meets amended BAPP criteria.
- 0825 Lloyd Harding (LaFarge) called and said they could possibly shift LaFarge Trader west ~ 200-300 ft. I told them that may be enough for us to sample. They should be able to move that by noon.

02-24-06

T-Do

- He will call when ready.
- 0845 Depart station 50. Return to South Park Marina.
- 0900 Called Angelita to give processing crew status update. Arrived at South Park Marina to wait for access to station 4A.
- 0950 Called Susie McGroddy to give her a status update.
- 1000 Dropped off core tube at T17 for processing crew.
- 1025 Departed South Park Marina. Headed for station 4b to survey accessibility. Nik Bacher remained behind with processing crew at T17.
- 1034 Arrived at station 4b. Target coordinate is blocked by barges "H-4" and "Susitua". Called Juan Garcia (Harden Boyer) to find out if they are moving the barges anytime soon. He said he could move it out of our way in about 30 minutes.
- 1055 Barges at station 4b have moved.
- 1100 Arrive at station 4b. Collect R1 (10 ft. off target)
47 32.0768N 122 19.4609W

02-24-06

T-DO

Water depth: 16.8 ft.

Penetration: 13 ft. ~~on deck~~ ~~TR~~

Recovery: 11.2 ft. on deck

% Recovery: 86.0% on deck.

Core accepted. Catcher had med. sand. (washed out).

1115 Called Juan Gouveia at Wholen Beyer to let him know we are done at Station 4b

1120 Susie called to say that station 19 needs to be sampled at high tide if the LaFarge Trader has not moved.

1130 Lloyd Harding (LaFarge) called and said they've moved the LaFarge Trader as much as they can today.

1133 Headed to station 19.

1150 Arrived at station 19. La Farge Trader is out of the way. The closest we could get to target location is ~30 ft. to north because dock is blocking access.

1155 Collect R1 (~30 ft off target)
 AT 33.3144N 122 20.7444W

Water depth: 30.8 ft.

Penetration: 6 ft.

Recovery: 2.7 ft on deck

02-24-06

T-DO

% Recovery: 45.0% on deck.

Core rejected. Will try for R2

1210 Susie called to say we need to resample station 2B, move out towards navigation channel, north a bit of where we sampled

1215 Core R1 had soupy sandy silt. We discarded it and will sample for R2.

1225 Collect R2 (~27 ft. off target)

AT 33.3150N 122 20.7420W

Water depth: 31.0 ft.

Penetration: 6 ft. ~~on~~

Recovery: 4.5 ft. on deck

% Recovery: 75.0% on deck.

Core rejected. Will try for R3

Core cutter end had gray silt, fine sand.

1245 Collect R3 (~33 ft. off target)

AT 33.3153N 122 20.7443W

Water depth: 32.2 ft.

Penetration: 8 ft.

Recovery: 2.5 ft on deck

% Recovery: 36.3% on deck

Had ~15 minutes of drive time

02.24.06

T.DD

Core cutter end had a 3.5" round rock jammed in it. Core rejected.

1310 Lunch break

1315 Called Susie to let her know we are having no success at station 19 so far and that the next attempts will be >30 ft to the west of the target coordinates, as close along the shoreline as possible, as per conversation with Allison Hiltner (EPA) on 02.21.06 during her site visit.

1320 Angelita called for status update.

1340 Collect R4 (~43 ft. off target)
47 33.3135N 122 20.7481W

Water depth: 29.8 ft.

Penetration: 5 ft.

Recovery: ^{3.6}3.6 ft on deck% Recovery: ^{31.0}66.0% on deck

Core retained pending decision to keep. Will try for R5, ^{rip top} moved out to avoid

1355 Collect R5 (~56 ft off target)

47 33.3172N 122 20.7466W

Water depth: 34.6 ft.

Penetration: 13 ft.

02.24.06

T.DD

Recovery: 12.1 ft on deck
% Recovery: 97.1% on deck.

Core accepted

1425 Called Angelita to ask processing crew to come to 1st Ave. S. boat ramp to pick up cores.

1434 Arrive at 1st Ave S. boat ramp.

1440 Dropped off cores & head to station 28.

1443 Head to station 28.

1448 Arrived at station 28.

1500 Collect R5 (~48 ft off target)
47 32.9930N 122 20.4271W

Water depth: 38.5 ft.

Penetration: 13 ft.

Recovery: 12.4 ft. on deck

% Recovery: 95.4% on deck

Core cutter washed out. Core accepted.

1515 Headed back to South Park Marina with last core.

1520 Called Ted Graham and Eloyd Harding (LaForge) to let them know we finished sampling at station 19.

1527 Called Angelita to send processing crew to pick up core at South Park Marina.

02-24-06

T.D.

- 1535 Arrived at South Park Marina.
- 1540 Dropped off core. End of LWD
Subsurface sediment coring.
- 1545 Joined core processing team at T-117.

~~02-24-06
T.D.~~

