

APPENDIX A:

FIELD LOG, CHAIN OF CUSTODY SHEETS, PHOTO LOG

NJMC MERI Laboratory CHAIN OF CUSTODY

Project: Ecorisk

Collector: ABB

<u>Sample #</u>	<u>Location</u>	<u>Sample Date:</u>	<u>Description</u>	<u>Parameter</u>	<u>Analyst</u>	<u>Preservative</u>
78204	Riverbend	9/15/03 Start: 1142 Stop: 1145	RM SD 01	Grain Size TOC % Moisture Heavy Metals	YL	4C
78205	Riverbend	9/15/03 Start 1256 Stop 1311	RM SD 02	Grain Size TOC % Moisture Heavy Metals	YL	4C

Custody Transferred By: ALM Date 9/15/03 1635
 Custody Relinquished To: A. Brett Date 9/15 1635

Custody Transferred By: _____ Date _____ Custody Relinquished To: _____ Date _____

NJMC MERI Laboratory CHAIN OF CUSTODY

Project: Ecorisk

Collector: ABB

<u>Sample #</u>	<u>Location</u>	<u>Sample Date:</u>	<u>Description</u>	<u>Parameter</u>	<u>Analyst</u>	<u>Preservative</u>
78206	Sec HS	9/15/03 1535 start 1537 stop	SHSM SD 01	Grain Size TOC % Moisture Heavy Metals	YL	4C
78207	Sec HS	9/15/03 1510 start 1512 stop	SHSM SD 02	Grain Size TOC % Moisture Heavy Metals	YL	4C
78208	Sec HS		SHSM SD 03	Grain Size TOC % Moisture Heavy Metals	YL	4C

1636

Custody Transferred By: ALB Date 9/15/03 Custody Relinquished To: A. Brett Bray Date 9/15/03

Custody Transferred By: _____ Date _____ Custody Relinquished To: _____ Date _____

NJMC MERI Laboratory CHAIN OF CUSTODY

Project: Ecorisk

Collector: ABB

<u>Sample #</u>	<u>Location</u>	<u>Sample Date:</u>	<u>Description</u>	<u>Parameter</u>	<u>Analyst</u>	<u>Preservative</u>
78206	Sec HS		SHSM SD 01	Grain Size TOC % Moisture Heavy Metals	YL	4C
78207	Sec HS		SHSM SD 02	Grain Size TOC % Moisture Heavy Metals	YL	4C
78208	Sec HS	9/16/03	SHSM SD 03	Grain Size TOC % Moisture Heavy Metals	YL	4C

Start 1350
Stop 1355

Custody Transferred By: ABB ¹⁶⁰⁰ Date 9/16/03 Custody Relinquished To: A. Brent Puz ¹⁶⁰⁰ Date 9/16/03

Custody Transferred By: _____ Date _____ Custody Relinquished To: _____ Date _____

NJMC MERI Laboratory CHAIN OF CUSTODY

Project: Ecorisk

Collector: ABB

<u>Sample #</u>	<u>Location</u>	<u>Sample Date:</u>	<u>Description</u>	<u>Parameter</u>	<u>Analyst</u>	<u>Preservative</u>
78209	Sawmill	9/16/03 1136/1138	SAW SD 01	Grain Size TOC % Moisture Heavy Metals	YL	4C
78210	Sawmill	9/16/03 1239/1245	SAW SD 02	Grain Size TOC % Moisture Heavy Metals	YL	4C

Custody Transferred By: ALB ¹⁰⁰⁰ Date 9/16/03 Custody Relinquished To: A. Brent King ¹⁶⁰⁰ Date 9/16/03
 Custody Transferred By: _____ Date _____ Custody Relinquished To: _____ Date _____



BIOLOGICAL SERVICES DIVISION
AQUATIC TOXICOLOGY LABORATORY

3450 Schuykill Road
Spring City, PA 19475-1124
(610) 792-1828 • Fax: (610) 792-1829

Client: ENSR Corporation
Address: 20 NEW ENGLAND AVE
Piscataway NJ 08851
Phone: 732-981-7200 X 3046
Samples: AC MODRESKI / SIM ACOOSEN
Project No.: 32568-321-0058

Client Contact: AC MODRESKI

Sample Disposal - Return To Client []
Disposal by Lab []

CHAIN OF CUSTODY

SAMPLE INFORMATION

No. Container: 3
Container Size: 350ml

Toxicity Test Requested

SAMPLE IN SAMPLER	TEMP AT LAB	Sample Identification	Matrix Code*	Sample Date	Sample Time	Acute	Chronic	Whole Sediment	Eu-triate	Biaccu-mulation	Product Efficacy	Other	Other	Other
		<u>SPWU-SD-01</u>	<u>SD0</u>	<u>9/16/03</u>	<u>14:03</u>									
		<u>SMU-SD-02</u>			<u>14:28</u>									
		<u>SISM-SD-03</u>			<u>13:50</u>									

Potential Hazard Identification:

Non-Hazard [] Flammable [] Unknown [] Skin-Irritant [] Poison []

Relinquished by:

AC Modreski

Print Name

AC Modreski

Received by:

Bob Sp...

Print Name

R. Zirk

Date:

9-16-03 1710

Special Instructions:

Matrix Codes:			
S	-	soil	GW
SE	-	sediment	ST
SL	-	sludge	PW
O	-	oil	DW
WW	-	waste water	RW
SW	-	surface water	X
		ground water	
		stormwater	
		processed water	
		dilution water	
		receiving water	
		other	

B-H Use Only

Samples Were: 1. Shipped or hand delivered Notes: 2. Chilled or ambient Notes: 3. Received broken / leaking Yes No 4. Received within holding times Yes No 5. Discrepancies between sample labels and COC record? Yes No

COC Tape Was: 1. Present on outer package Yes No 2. Unbroken on outer package Yes No 3. Present on sample Yes No 4. Unbroken on sample Yes No



BIOLOGICAL SERVICES DIVISION
AQUATIC TOXICOLOGY LABORATORY

3450 Schuylkill Road
Spring City, PA 19475-1124
(610) 792-1828 • Fax: (610) 792-1829

Client: ENSR Corporation
Address: 20 New Brunswick Ave
Piscataway NJ 08854
Phone: 732-981-0200 x3046
Samplers: AL MOJESKI
Project No.: 08507-321-0058

Client Contact: AL MOJESKI

Sample Disposal - Return To Client
Disposal by Lab

CHAIN OF CUSTODY

SAMPLE INFORMATION

No. Container: 4
Container Size: 35 gal

Toxicity Test Requested

SAMPLE IN SAMPLER	TEMP AT LAB	Sample Identification	Matrix Code*	Sample Date	Sample Time	Acute	Chronic	Whole Sediment	Elu-triate	Bioaccu-mulation	Product Efficacy	Other	Other	Other
		<u>RM-50-01/Levekes Marsh</u>	<u>SED</u>	<u>9/15/03</u>	<u>1450</u>			<input checked="" type="checkbox"/>						
		<u>RM-50-02/Ruckel Marsh</u>	<u>"</u>	<u>"</u>	<u>1305</u>			<input checked="" type="checkbox"/>						
		<u>SISM-50-02/S.H. Marsh</u>	<u>"</u>	<u>"</u>	<u>1506</u>			<input checked="" type="checkbox"/>						
		<u>SISM-50-01/S.H. Marsh</u>	<u>"</u>	<u>"</u>	<u>1537</u>			<input checked="" type="checkbox"/>						

Potential Hazard Identification:

Non-Hazard Flammable Unknown Skin-Irritant Poison

Relinquished by: [Signature] Print Name: AL MOJESKI Received by: [Signature] Print Name: R. Zick Date: 9-15-03 Time: 1800

Special Instructions:

Matrix Codes:	
S	soil
SE	sediment
SL	sludge
O	oil
MW	waste water
SW	surface water
GW	ground water
ST	stormwater
PW	processed water
DW	dilution water
RW	receiving water
X	other

B-H Use Only

Samples Were:

- Shipped or hand delivered
- Chilled or ambient
- Received broken / leaking
- Received within holding times
- Discrepancies between sample labels and COC record?

Notes:

COC Tape Was:

- Present on outer package
- Unbroken on outer package
- Present on sample
- Unbroken on sample

White Copy - B-H Labs Yellow Copy - Client



2235 Route 130, Dayton NJ 08810
 TEL: 732-329-0200 FAX: 732-329-3499/3480
 www.acctest.com

CHAIN OF CUSTODY

Client / Reporting Information

Project Information

FED-EX Tracking #

Requested Analysis

Matrix Codes

Company Name
 ENSR CORPORATION

Project Name
 MERT BEAUTIC SPMOULC

Accutest Quote #
 566-03/101 Rev 1

Accutest Job #

DW - Drinking Water
 GW - Ground Water
 WW - Water
 SW - Surface Water
 SO - Soil
 SL - Sludge
 OI - Oil
 LIQ - Other Liquid
 AIR - Air
 SOL - Other Solid
 WP - Wipe
 LAB USE ONLY

Address
 20 NEW BURGARD AVE
 City State Zip
 PLANTHURST NJ 07854

Street
 MENDOWANS
 City State
 NJ

Project Contact
 Project #
 Phone #
 732-981-0200 x 3046

Client Purchase Order #
 732-981-0116

Sampler's Name
 AC MONTESKI

Field ID / Point of Collection
 PM-50-01/Kupperon Marsh
 PM-50-02/Kupperon Marsh
 SHSM-50-02/Secaucus Marsh
 SHSM-50-01/Secaucus H.S. Marsh

Accutest Sample #

SUMMA #
 MECH/Vol #
 Date
 Time
 Sampled By
 Matrix
 # of bottles
 HCl
 NaOH
 HNO3
 H2SO4
 NONE
 NH4SO4
 MECH
 ENCORE

Collection

Number of preserved Bottles

8260 BTX 624 MTBE TBA 602 PAUG 603 PALG

8260 TBA 624 NAP +10 PPL STARS +15 MTBE

8270 ABN 625 BN PAH PADF +TICS STARS

SEE Accutest Quote #

Turnaround Time (Business Days)

Approved By / Date:

Comments / Remarks

Bottom Sediment Samples

Std 15 Business Days

Commercial "A"
 Commercial "B"
 NJ Reduced
 NJ Full
 Other

Commercial "A" = Results Only

Emergency & Rush T/A data available VIA LabLink

Reinquired by Sampler

Sample Custody must be documented below each time samples change possession, including courier delivery.

Date Time

Received by

Reinquired by

Received by

Date Time

Received by

On Ice Cooler Temp

Location MEADOWLANDS NJ

Date

Project / Client

Contact #s

MERI (FIELD)

BRETT BRAGIN

WP - 201-400-4664

CP - 201-638-7003

ACWTST

DIANE KOMAR

732-355-4652

B-H LABS

ROGER ZIRK

610-792-1828

MERI (LAB)

ED KUSSEVICK

201-460-4646

ENSR

NANCY BALMSTEAD

CP - 201-370-0132

NY

Location Meadowlands

Date 9/15/03

Project / Client - MERI / 08508-321-005B

0942 - ARENE MERI. INVENTARIED GEAR. LOADED TRUCKS AND HEADED TO MAKINA ON HACCENSACK RIVER

1015 - ARENE MARINA LOADED BOAT AND PERFORMED INITIAL DECOR OF PANAR, EKMAN, SPONS, BOWLS, AND BUCKETS. RECON COMPLETE 1030.

1035 Depart Marina for Riverbend Marsh

Crew: Capt. Ar. Mordesh (ENSR)
Jon Sorenson (ENSR)
Brett Bragin (MERI)

WEATHER: Overcast, large thunderheads. Wind: ENE
Temp: 70°-78° F Wind speed - 10-12 mph. Humid.

1116 ARENE Riverbend Marsh TIDE
Flooding... Phragmites to channel
Phragmites 6-7' in height. Mallard ducks observed on bank within shoreline vegetation
High tide - 9240 Low tide - 0630

NY

Location: MERRILLANDS, NJ Date: 9/15/03

Project / Client:

- 1118 Configuring GPS. Heading to RM-SD-01. First sample TOE IS FLOOD. Will come back to RMSP 02 AS TIDE SWITCHES TO GIVE CHANNEL WATER TO ACCESS AND EXIT MARSH.
- 1120 GPS SET. RECEIVING 6 STATIONS. NOW B. AWAITING POOP BUT LOOKS GOOD; and ready to get coordinates of first sample site w/ TRIMBLE XRS.
- 1131 Arrive RM-SD-01 IN RIVERMOUND Marsh. Open area @ 30' in width bordered by Phragmites with Spartina hummocks within water. Water depth @ 3-3.5 feet. Located at base of landfill (Malanku). 4mm detritus floating on water surface. MI site on old MERL MAPS. Crew: CAPT. AJ MADRISH (ENSEN) JUN. SENCHISEN (SENSOR) BRETT BRAGIN (MERC) VESZEL - 21' Privateer w/ 115 HP WEATHER: Overcast, Temp. 70°-75°F WIND NNE @ 8-12 mph. Humid w/ high chance of rain.

Location: MERRILLANDS, NJ Date: 9/15/03

Project / Client:

LAT: 40° 45' 18.23N LONG: 74° 05' 17.57W

- 1135 Water parameters taken with Hydrolab Mini Sonde Water Quality Multiprobe Sensor/Flex Parameter EXPANSION SYSTEM Serial # 36121. SURFACE SAMPLE TAKEN ONLY.
- RM-SD-01 - HYDROLAB
- Depth of H₂O (Hydrolab) - Surface
- Sed. Coll. depth - @ 3.5'
- H₂O temp - 24.53°C
- Sal - 11.92 ppt
- SpCon - 20.04 mg/cm
- DO% - 63.3
- DO mg/L - 3.84
- pH - 7.119
- Orp - 321
- TDS - 12.82
- 1142 RM-SD-01 (SEDIMENT SAMPLING)
- Used EKMAN DREDGE AFFIXED TO POLE (DIMENSIONS 6" x 6" x 6")
- SAMPLE TIMES FOR EACH LAB ARE AS FOLLOWS.

Project / Client

LAB	STAG	STP
MERC -	1142	1145
ACUTEST	1145	1150
B&H	1150	1159

MERC AND ACUTEST SEDIMENT PLACED IN DECONTAMINATED STAINLESS STEEL BOWL AND A STAINLESS STEEL SCOOP WAS USED TO TRANSFER SEDIMENT TO COLLECTION JAR. LATEX GLOVES WERE WORN DURING TRANSFER PROCEDURE. MERC samples placed in widemouth glass 2L container, labeled on lid and jar, and immediately chilled. Acutest sample placed in 8 oz glass amber bottle, labeled appropriately and chilled. Both lab sample containers were wrapped in bubble wrap prior to cooler placement. B&H lab sample placed in 3 gallon plastic bucket, labeled on lid and container, sealed, and

W

Project / Client

stored appropriately on deck. Will be chilled upon RETURN TO SHORE DUE TO LARGE SIZE OF CONTAINER. CALLED B&H labs to confirm this is okay and Roger Zirk stated that that would be fine as long as sample was iced by end of day.

1155 RM-SD-01 (Benthic Sample)
 Benthic samples taken with stainless steel petit Perre in triplicate with following start/stop times
 RM-SD-01A (REP 1) 1155 1204
 RM-SD-01B (REP 2) 1204 1214
 RM-SD-01C (REP 3) 1215 1223

Benthic samples sieved through 500 micron mesh stainless steel sieve. Each sample was placed in a pe-marked 4 gallon container prior to sieving. Perme was rinsed with sitender for exact

W

Location MEMPHISLANDS, NJ

Date 9/15/03

Project / Client

Sample to ensure that all sample was placed in sieve. Buckets also rinsed with sitewater when transferred to sieve work station. Sieve work station consisted of a milk crate used as a pedestal with a steel tub placed on top. Sample was transferred to sieve and gently rinsed with site water. Site water (@ 4 gallons) was placed in tub prior to sieving. Sieving conducted in a gentle swirling motion until all but particles smaller than 500 microns remained. Samples placed in plastic wide mouth containers and labeled on lid and container. Benthic samples preserved with 10% formalin.

1224.

OK

Location MEMPHISLANDS, NJ

Date 9/15/03

Project / Client

1220 Decontamination of gear initiated. Pans were rinsed clean with site water between each benthic sample to ensure data integrity. At end of sampling, bathos and sediment the following was conducted to Panax/Ekman, stainless steel spoons, stainless steel bowls, and any other gear used. Latex gloves were worn during decontamination. Jaws of both EKMAN AND PANAX, once decontaminated, were sealed shut during transfer to next site/station. NEW BUCKET USED.

DECONTAMINATION

① SITE WATER RINSE - 1220 / 1223

ALCONOX WASH

DIW RINSE

② Nitric Rinse 1223/1226

DIW RINSE

OK

② Acetone 1224 / 1228
 DIW Rinse
 1228 Decontamination complete. Boat deck rinsed with site water. Depart station

1251 Arrive station RM-SD-02. Label as D3 on old MERT maps.
 SAMPLE SITE IS A mosquito ditch @ 6-8' in width with a heavily vegetated shoreline of phragmites. Site located at base of Mulanka Landfill.

1253 RM-SD-02 Hydrolab Water Qual.
 - Vessel - Privateer (21') 115 HP
 - Crew - AL MONTESI (SENSOR)
 JON SORCHISEN (SENSOR)
 BRETT BRAGIN (MERT)
 TIDE - High - 1240 Low 0630
 TIDE Type - EBBING (close to slack)
 LAT: 40° 45' 09.89 N
 LONG: 74° 05' 19.39 W

(COORDINATES TAKEN w/ TRIMBLE GPS)

WEATHER: 70°-75°F, WINDS NNE

@ 10 mph SKIES OVERCAST WITH High humidity.

Hydrolab sample taken with surface under.

Temp - 24.74°C

Sal - 14.73 ppt

DO% - 54.0

DO mg/L - 3.41

SpCon - 24.33

PH - 7.20

Orp - 335

TDS - 1518

1256 RM-SD-02 (SEDIMENT SAMPLE)

USED EKMAN DREDGE (STAINLESS

STEEL 6"X6"X6" ATTACHED TO POLE)

SAMPLE TIMES FOR EACH LAD

AS FOLLOWS:

SAMPLE STOP

MERT - 1256

1311

ACQUEST - 1259

1313

B: H 1305

1356

COLLECTION DEPTH: 31'

SAMPLES placed in appropriate containers, labeled, and chilled.

Substrate highly organic consisting of a thick root mat and detritus. Very difficult to get a good grab of a large amount of sediment for each grab. Multiple grabs taken to fill B:H 3 gallon bucket. Bucket shaken gently and allowed to sit for @15 minutes to let sediment settle. Surface H₂O in bucket decanted and MORE SEDIMENT ADDED TO FILL Bucket. Benthic samples taken during the 15 minutes that bucket sat (Lip on top)

1320 RM-SD-02 (Benthic)

Benthic samples taken with stainless steel 6"x6"x6" EKMAN GRABS AFFIXED TO A POLE. TRIPlicate samples taken w/ following START/STOP TIMES.

MEXT OLD SIZE #-(D3)

RM-SD-02A (REP 1) 1320/1324

RM-SD-02B (REP 2) 1325/1334

RM-SD-02C (REP 3) 1330/1341

SAMPLES HANDLED SAME AS METHODOLOGY FOR SAMPLE RM-SD-01. SAMPLES DIFFICULT TO ACQUIRE BUT EVENTUALLY GOOD GRABS TAKEN ON AVERAGE, ONLY 1/2 OF EKMAN WAS WITH SEDIMENT/SAMPLE DUE TO ORGANIC CONTENT OF SUBSTRATE. SAMPLES SIEVED IN 500 MICRON SCREEN (STAINLESS STEEL) AT BENTHIC STOPPING STATION IN BOW OF VESSEL.

REP 1 (RM-SD-02A) PLACED IN 2 CONTAINERS and labeled as 1 of 2 and 2 of 2.

1345

Benthic samples preserved in 10% formalin. Gloves worn.

1356

SEDIMENT SAMPLE (B:H bucket) complete. 3 gallon bucket filled, sealed, and stored on DECK. LIP/CONTAINER labeled accordingly.

Location MEADOWSLANDS, NJ

Date 9/15/03

Project / Client

1357 Depart station. will move down channel to a more open area to perform decontamination. since boat beam is as wide as channel.

1357 Found open area. Beginning decontamination procedures with EKMAN, spoons, and Bowls. DECK WASHED DOWN WITH SITE WATER. DECONTAMINATION TUBES ARE AS FOLLOWS (GLOVES WORN) NEW WASH BUCKET USED

① Sitewater Rinse 1357-1359
Alconox Wash
DIW Rinse

② Nitric 1359-1403
DIW Rinse

③ Acetone 1403-1408
DIW Rinse

1408

Location MEADOWSLANDS, NJ

Date 9/15/03

Project / Client

1408 DECONTAMINATION COMPLETE FOR GEAR USED AT LAST SITE HEADQUARTERS TO SECAUCUS HIGH SCHOOL MARSH RECEIVED CALL FROM BETH LABS AND COORDINATED P/M TIME FOR 1730-1800 AT Piscataway Office (ENSR).

1410 - DECIDED, BASED ON WATER DEPTH AND TIDE TIMES, TO GO AND DO SHSM-SD-03 FIRST SINCE EBBING TIDE WILL REFIN MARSH QUICKLY. MAY HAVE ENOUGH TIME TO GET SAMPLES AT SHSM-SD-03 BEFORE WATER DEPTH TOO LOW. WILL DO OTHER SAMPLES IN DESCENDING ORDER AS WE EXIT THE MARSH WITH EBBING TIDE FROM SHSM-SD-03.

1445. Phragmites too thick and water level decreasing. Phragmites growth across channel close to SHSM-SD-03 making boat travel at this water depth

Location MERCOWLANDS NJ Date 9/15/03
Project / Client _____

Impassable. Will go ASBLEN AND
PERFORM SAMPLING AT SHSM-SD-02.
WILL COME BACK TOMORROW AS INCOMING
TIDE TO ACCESS SHSM-SD-03

1447

Asblen to next sampling site.

1459

ARRIVE AT SHSM-SD-02 within
Secaucus High School MREST.

Crew Capt. AL MOJESKI (ENSA)

Jon Senchusen (ENSE)

Brett Beavin (MERT)

Vessel - 21' Powerboat, 115 HP

TIDE - High - 1240 Low - 0630

TIDE EBBING

Collection Depth - 3.5'

LAT: 40° 48' 15.04" N

LONG: 74° 02' 51.02" W

Weather - 70° - 73°F, Wind NNE 10-12
mph with overcast skies.

STATION LOCATED AT INTERSECTION

OF MAIN CHANNEL AND MOSAID

DITCH. WIDTH OF DITCH @ 15-20'

bank to bank but 8' with

Phragmites

COORDINATES TAKEN w/ Trimble XRS.

Location MERCOWLANDS NJ Date 9/15/03
Project / Client _____

1501

SHSM - SD-02 (HYDROLAG)
(taken at water's surface)

Temp: 23.21°C

Salinity - 5.6 ppt

DO % - 44.5

DO mg/L - 3.14

SpCon - 9.940

pH - 7.17

Oap - 320

TDS - 61344

1506 SHSM-SD-02 (SEDIMENT)

USED EKMAN DREDGE AFFIXED
TO POLE (STAINLESS STEEL
6" x 6" x 6") Sediment lacking

organics and consisting of
muck silt, and sand. Sample
tines for each LAB ARE AS
FOLLOWS:

MERT - 1510/1512

B:H - 1504/1513

Accubest - 1508/1510

Collection Depth - 3.5'

Location: MERIDOWLANDS NJ Date: 9/15/03

Project / Client: _____

No Benthic samples (Biological) taken at this marsh.
Next benthic sampling for Biota at Kearny MARSHLANDS MARSH. Move old site # (5-8)

1513 Sediment Sampling complete. LABELED, CHILLED, OR STORED.

1516 Decontamination INITIATED FOR EXHAUST, SPOONS, AND STAINLESS STEEL BOWLS. Deck washed down with site water; Decon. times are as follows (glasses (latex) worn) New bucket used.

Sikewater Rinse 1516 / 1518

① { ALCOHOL

{ DIW RINSE

② { NITRIC

{ DIW RINSE

③ { ACETONE

{ DIW RINSE

✓

Location: MERIDOWLANDS NJ Date: 9/15/03

Project / Client: _____

1524 Decontamination complete

1528 Depart Station under level getting more shallow.

1530 ARRIVE SHSM-SD-01

Crew: GARY DE MOJESKA (OSK)

JOHN SANDERSON (OSK)

BRETT BENSON (MERT)

LABELED AS S-1 ON OLD

MERT MAPS.

Vessel - 21' RIVINGTON, 115 HP

TIME High-1240 Low 0030

TIDE EBBING

Collection Depth - 3.1'

LAT: 40° 48' 20.73N

LONG: 74° 02' 50.14W

GPS TAKEN WITH TRIMBLE XES

WEATHER: SAME AS SHSM-SD-02

STATION LOCATION: @ 50 feet from

main channel east of Hackensack

R. At interse ction of 10' wide

ditch running N/S and

channel running E/W.

✓

SAMPLE TAKEN ON SE CORNER
OF INTERSECTION IN DITCH ACROSS
FROM ENTRANCE TO HAWGANS
RIVER. Phragmites dominant
shoreline vegetation (6-8'
in height). Sediment soft
with muck/mud, silt, and
small percentage of sand.

1534 SHSM-SD-01 (HYDROLAB)

TAKEN AT WATER'S SURFACE

TEMP - 23.60°C

SAL - 6.48 ppt

DO% - 89.5

DO mg/L - 5.94

SpCon - 11.37

PH - 7.43

ORP - 326

TDS - 7.275

Water level decreasing rather
quickly.

Q

1535 SHSM-SD-01 (SEDIMENT)
SEDIMENT SAMPLES TAKEN
WITH STAINLESS STEEL
EKMAN GRABS AFFIXED TO
POLE (6"x6"x6"). Sediment
soft and easy to get
good grab. Times forearm
LAB AGE AS FOLLOWS:

MERE - 1535 / 1537

ACUTEST - 1537 / 1541

B: H - 1537 / 1546

MERE OLD SITE (S-1)

NO Benthic (Biological) samples
taken at this site according
to QAPP.

1545 - Starting to RAIN

1546 - SEDIMENT SAMPLING COMPLETE

SAMPLES LABELED, CHILLED, OR
STORED ACCORDING TO LAB
SPECIFICATIONS.

1547 - Had to REPAIR TRIGGER ON
EKMAN.

Q

Location MEADOWLANDS NJ

Date

9/15/03

Project / Client

1548 Rinsed gear with site water. Will perform full decontamination in morning since this is last site for the day.

1851 Depart station for marina. 1.7' deep entrance to marsh.

1600 Arrive Boat Dock. Tied dock vessel. And began unloading boat. Samples checked and reiced. Swapped Accutest sample to new cooler added new temperature blank and 3 bags of ice checked bubble wrap and packed coolers to prevent bottle breakage.

1618 Filled out Accutest Chain of Custody

1622 Completed Chain of Custody for Accutest. Will use Accutest Custody seal # 7816.

1635 Filled out Chain of Custody for MERRI.

Location MEADOWLANDS NJ

Date

9/15/03

Project / Client

1638 - Re-requested Sediment/Benthic samples to MERRI. FROST will make copies of COCs for our REZCOS. Grave samples for Riverbend Marsh and 8th Marsh.

1640 - Depart marina for EUSE. Have to pick up truck at EDISON on way.

1755 - Arrive EUSE. Met Roger Zink from B;H Labs.

1802 - Filled COC's for B;H and re-requested 4-3 gal pails of sediment to B;H.

1805 - Sealed cooler for Accutest. Placed a total of 8 bags of ice on samples. Called Accutest to confirm 9 AM pickup.

1840 - Depart EUSE.

Location: MEADOWLANDS NJ Date 9/16/03

Project / Client

9/16/03

0730 MET with Jim Anderson (ENSR)
new crew sub for Jon Zamboni
in Bradley Beach, NJ.

0735 Depart for MERT LAB

0905 Called Brett Bragin of MERT
to give location AT EXIT 150
on 6SP (traffic) should arrive
MERT LABS AT 0930.

0930 Arrive MERT.

0945 Called ENSR to confirm Accutest
plu of cooler. Accutest had not
plu'd sample yet.

0946 Called Diane Komar at
Accutest to see where plu.
and when plu would be. Left
message on her voicemail.

0947 Depart MERT for marina



Location: MEADOWLANDS NJ Date 9/16/03

Project / Client

0953 RECEIVED call from DIANE
KOMAR from Accutest. SAID
WE WERE SCHEDULED FOR
PLU and driver must be
running late. Reconfirmed
9AM pick ups for Alled and
Thurs

0958 Arrive Marina/boat dock.
Will commence loading boat
and decontaminating
gear.

1000 Checked gear. Loaded coolers
with appropriate bottles for
each lab. No bottle samples
for SHSM or Swimming marsh.
Loaded BOAT. Will use Ekman.

1015 Decontamination of Ekman,
spoons, stainless steel bowls
and buckets initiated. New
latex gloves worn during
decontamination process.
Decontamination start/stop
times are as follows:



Location MEADOWLANDS NJ Date 9/16/03

Project / Client

Siltwater 1015/1020

① ALCONOX

DIW RINSE

② NITRIC 1020/1030

DIW RINSE

③ ACETONE

DIW RINSE

1030/1040

1030 RECEIVED CALL FROM ENSR
CONFIRMING ACUTEST LAB
PICKUP.1045 Depart Marina for Sawmill
Marsh. EMBANKMENTS CLOSED FOR TRAVEL
TIDE High - 1319 Low - 0657
(AT AMTRAK SWING BRIDGE ON
HADDENSBURG)

CREW: CART AC MOORESA (ENSR)

JIM ANDERSON (ENSR)

BRETT BANGON (MEM)

JEFF MISUIK (MEM)

JEFF ASSISTING BRETT WITH

DEPLOYMENT OF GILL NET

FOR RETRIEVING TOMORROW.

Or

Location MEADOWLANDS NJ Date 9/16/03

Project / Client

WEATHER: Clear, Temp 74-75°F

WIND NW - 5-10 mph A

FINE DRizzle FOR SAMPLING

SAMPLERS: CART AC MOORESA (ENSR)
JIM ANDERSON (ENSR)* ALL EQUIPMENT DECONTAMINATED
AND READY FOR SAMPLING EFFORT1050 Discussed w/ Brett Bangon (MEM)
Sample locations on Sawmill.
Will do 1 at a fish sampling
location and one where benthic
invertebrates were taken by MEM1101 - SETTING Gill NET ON OPPOSITE
SIDE OF I-19 RAIL BRIDGE NET
WILL BE SET INSIDE AFTER

NET SET, WILL HEAD TO SHAWMILL.

Marsh. to do sediment sampling.

1105 NET SET PARALLEL TO SHORE
IN 8' TO 14' OF WATER ON OPPOSITE
SIDE OF I-19 BRIDGE (CRUISE)
INSIDE SET.

Or

1107

DEPART FOX SAWMILL MARSH.

All gear stowed and deck
SECURE.

1121

ARRIVE Sparrows Marsh at
SAW-SD-01. Picture 1 taken
of entrance. Fish nets located
on each side of sample channel.
Sample to be taken on EAST
SIDE OF CHANNEL. Picture 2
shows location and veg type of

sample site SAW-SD-01. SHORELINE
VEG. ALL SPARTINA, CHANNEL WIDTH
10-15' at mouth and decreases
IN WIDTH TO THE NORTH.

1125

SAW-SD-01 (MERCERLAND)

Temp - 25.33°C

Sal - 12.46 ppt

DO% - 58.0

Dissigle - 3.59

SpCon - 20.87

pH - 7.20

COP - 360

TDS - 13.37

Sample taken at SURFACE

✓

1130- SAW-SD-01 (SEDIMENT)

AKA - RESEARCH CREEK

CREW: AL MOORESH (ENSA)

Jim Anderson (ENSA)

BRETT BRIGIN (MERT)

Jeff Misnik (MERT)

- Sample taken within SPARTINA
hummocks along eastern shoreline

- Sample taken with 6" x 6" x 6"

EXPLAN STAINLESS STEEL CORO

ATTACHED TO A POLE

VESSEL - 2' PRYATEEK, 115 HP

WEATHER - Temp - 75°F, WIND

NW 5-10 mph, Clear and

Sunny.

TIDE - High - 1319 Low 0657

TIDE TYPE - FLOOD

LAT: 40° 45' 54.89N

LONG: 74° 05' 45.91W

COORDINATES TAKEN w/ TRIMBLE

XRS.

Sediment start/stop times

by lab are as follows:

Coll depth = 1.7'

✓

Location: MEADOWLANDS NJ Date 7/16/03

Project / Client

START	STOP
MERC 1136	1138
ACQUEST 1136	1145
B: H 1138	1204

SEDIMENT EASY TO ACQUIRE. SOFT WITH SOME ORGANIC CONTENT. MUCK/MUD WITH SAND/SILT.

1204 SEDIMENT SAMPLING COMPLETE. JARS LABELED ACCORDINGLY, CHILLED, OR STORED ON DECK AS PRESCRIBED BY INDIVIDUAL LAB. GLASS JARS bubble wrapped.

1205 DECONTAMINATION OF GEAR INITIATED WITH CLEANS WASH BUCKET. EKMAN, SPOONS, AND STAINLESS STEEL TROWELS DECON'OR DECK WASHED DOWN. THE FOLLOWING GIVES START/STOP TIMES FOR DECONTAMINATION OF GEAR.

① site water rinse 1205/1207
Alconox
DIW RINSE



Location: MEADOWLANDS NJ Date 7/16/03

Project / Client

② Nitric 1207/1209
DIW RINSE

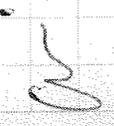
③ ACETONE 1209/1212
DIW RINSE

Disposable latex gloves worn during decontamination process. New Bucket will be used at next site for DECON.

1212 DECONTAMINATION COMPLETE

1214. DEPART STATION FOR STATION # SAW-SD-02

1220 ARRIVE AT STATION SAW-SD-02
Picture 3 taken of site facing N WEST TOWARDS TURNPIKE. Phragmites bordering shoreline with SPARTINA hummocks located in AlCOVE.



Location Meadowlands NJ Date 7/16/03

Project / Client

1225 SAW-SD-02 (HYDRO) (HYPOLAB)

LAT: 40° 46' 30.99 N

LONG: 74° 06' 02.10 W

Sample taken of SURFACE WATER.



Temp - 25.1°C SpCon 19.31

SAL 11.44‰ PH - 7.25

DO% 61.1 OLR - 358

TD_{mg/L} 3.75 TDS - 12.35

1224 SAW-SD-02 (SEDIMENT)

EQUIPMENT USED - EKMAN 6' 16' 16'

ATTACHED TO POLE (STAINLESS STEEL)

CREW - SAME AS PREVIOUS SAMPLE

SITE

VESSELS 21' PRAWLERS, 115 HP

TIDE - High - 1319 Low 0657

Tide Cycle - Rood

WEATHER - Sunny, Clear, Temp

75°F, Wind NW 5-10 mph in

gusts.

Location MEADOWLANDS NJ Date 9/16/03

Project / Client

Coll. Depth - 4.5'

LAT: 40° 46' 30.99 N

LONG: 74° 06' 02.10 W

COORDINATES TAKEN WITH GPS TRIMBLE XRS.

- SEDIMENT HARD (CLAY-LIKE)

HAVING DIFFICULTY RETRIEVING

FULL GRAB SAMPLE. SAMPLE BEING

TAKEN W/IN CHANNEL ALONG MUDFLAT

@ 3.5' FROM SPRAWL HURMOCK

MOVED BOAT CLOSER TO STARTING

WHERE SEDIMENT SOFTER AND

MORE ACCESSIBLE BY GRAB. COLL'

DEPTH STILL THE SAME.

SEDIMENT START / STOP TIMES

BY LAB ARE AS FOLLOWS:

MERI

1239/1245

ALOTEST

1226/1239

B5, H

1228/1255

Location: MEADOWLANDS, NJ Date: 9/16/03

Project / Client

1248 Began DECON OF BOWLS and stainless steel spoons. Still acquiring final sample for B&H will DECON EKMAN LAST WHILE ENROUTE TO NEXT STATION.

1255 Sediment sampling complete. Jars and bucket labeled on lid/container and iced or stored according to LAB SPECIFICATIONS. GLASS JARS Bubble wrapped.

1256 Depart STATION 'D'AW-SD-02 FINAC DECON OF EKMAN complete. Jaws closed DURING TRANSPORT AND placed facing STERN. Finally to SHSM-SD-03 to get FINAC sample at that marsh. Access should be a little easier since arrival will coincide w/

Location: MEADOWLANDS, NJ Date: 9/16/03

Project / Client

high tide.

1325 Arrive SEYMOUR H. SCHOOL MARSH. TIDE LOOKS GOOD. WILL TRY TO ACCESS SHSM-SD-03 BY BOAT.

1337 Arrive ON SITE SHSM-SD-03. PICTURE A facing EAST, PICTURE S facing W. Site fully overgrown by Phragmites. Preparing GPS and HydroLab for WA sample.

1340 SHSM-SD-03 (HYDROLAB)
Temp - 23.62°C
Sal - 6.35 ppt
DO% - 91.6
Dmg/L - 5.83
SpCon - 11.15
pH - 7.39
ORP - 333
TDS 7.133

Collection Depth: SURFACE 40.
1342 - PREPped deck for RAPID SEDIMENT SAMPLE.

Location: MEADOWLANDS, NJ Date 9/16/03
Project / Client

1344

S11SM-50-03 (SEDIMENT)

LAT: 40° 48' 12.44N

LONG: 74° 02' 47.67W

COLL. DEPTH - 3.4'

CREW: AL MODJESKI (ENSER)

JIM ANDERSON (ENSER)

BRETT BREWER (MERL)

JERR MISLUK (MERL)

TIDE - High 1319 Low 0657

TIDE - EBBING

WEATHER - 75° - 77° F, WIND

STILL NW - 5-10 mph, SKIES

CLEAR

SAMPLE TAKEN WITH EKMAN
(STAINLESS STEEL) AFFIXED TO POLE
(6" x 6" x 6" bucket).

Site Description - Overgrowth w/ phrag
ditch width @ 10-15' bank to
banks but channel not visible
due to amount of phragmites.
two small mosquito ditches
bisect the site N/S.
MERL 010 SITE # - S-7

Location: MEADOWLANDS, NJ Date 9/16/03
Project / Client

Sediment soft, organic, easy
to fill bucket of EKMAN

SEDIMENT STORED / STOP SAMPLE

TIMES ARE AS FOLLOWS BY

LAB:

START STOP

1344 1355

1344 1349

1350 1355

MERL

ACCURIST

B:H

Times include grab and transfer
of sediment from stainless
steel bowl and spoons.

1355

SEDIMENT Sampling Complete
Sample jars/buckets labeled
accordingly and iced/stored

as specified by manufacturer
LAB. Hydralab not functioning
properly. Batteries are dead.
Will check for alternate
WA monitor.

Location: MEADOWLANDS, NJ Date: 9/16/03

Project / Client

1400 Depart SHSM-30-03
ON way out took pictures of SHSM-30-02 and SHSM-30-01 with digital camera.
Pic 7- SHSM-30-02 sample area

Pic 6- SHSM-30-02 facing EAST TOWARDS OVERGROWN DITCH HEADING TO SITE 8.

Pic 8 - site 1 sample area facing SE

1415 ARRIVE AT BOAT DOCK. Attempting to obtain another WOM SONDE TO DO KERRARY Marsh. Unloading boat. WILL RETURN TO MERTI to check for gear, P/U new boat that can access Kerrary Marsh, and beatric gear.

Will DECONTAMINATE EKMAN, STAINLESS STEEL PANNES AND SPONS AT MARINA.

[Signature]

Location: MEADOWLANDS, NJ Date: 9/16/03

Project / Client

1426 DECONTAMINATION INITIATED
BUCKETS, SPONS, BOWLS, and EKMAN DECON'S WITH TIMES AS FOLLOWS. GIVE VERY DIRTY.

① SITE WATER RINSE 1426/1435
ALCONOX
DIW RINSE

② NITRIC 1435/1440
DIW RINSE

③ ACETONE 1440/1445
DIW RINSE

Clean gloves (latex) worn for DECONTAMINATION PROCEDURES.

1450. DEPART MARINA FOR MERTI LAB to see if they have new battery for Hydrolab. BERT LEFT @ 10 min earlier to check w/lab technician so we could mobilize as quickly to Kerrary Marsh.

[Signature]

Location: MEADOWLANDS NJ Date: 9/16/03

Project / Client

1510 Call from MERT Battery for HydroLAB needs charging no spare. Will do KENNY MARSH tomorrow afternoon.

1530 Called B:H Labs, Roger Zirk to p/p samples at 1700 rather than 1800 hours. Confirmed.

1540 Arrived MERT LAB. GOT SET FOR TOMORROW'S STAMPING EFFORT. Will DO ORITANI 1st in AM. MERT will supply Battery charger and sander and I will charge this evening 1000 COCs to MERT. Samples Relinquished to MERT, BRETT BIGGIN. Will GET COPIES OF COC tomorrow.

1610 Accutest cooker checked, added 7 bags ice, bubblewrap, etc. for 9am pickup on 9/17/03. Filtered out

CHAIN OF CUSTODY WILL USE ACCUTEST SEAL # 7688

1611 TOOK A DRIVE TO LOCATE ORITANI WITH BRETT BIGGIN. MADE SURE SITE WAS ACCESSIBLE. SITE IS ACCESSIBLE.

1630 DEPART FOR ENSK

1710 ARRIVE ENSK. FILLED OUT COC FOR B:H LAB. Relinquished sample at 1715 to Roger Zirk at B:H LABS.

1717 Checked Accutest cooker, sealed, and set up for 9 AM pickup on 9/17/03.

1720 Charging GPS and HydroLab batteries. Will come by OFFICE IN MORNING TO/PO GEAR PLEASE TO GOING TO ORITANI.

Location: MEADOWLANDS NJ Date: 9/16/03

Project / Client

Location MEADOWLANDS NJ

Date

9/16/03

Project / Client

1730 DEPART ENSR FOR BEADLEY BEACH, NJ RENEZYOUS POINT.
 1840 ARRIVE AT MORNING MEETING PLACE IN BEADLEY BEACH, NJ.
 UNLOAD GEAR AND RE-INVENTORY BOTTLES, GEAR FOR TOMORROW'S SAMPLING EFFORTS.



On

Location MEADOWLANDS NJ

Date

9/17/03

Project / Client

9/17/03

0700 - DEPART TO P/LU GPS and HYDROLAB CHARGING AT ENSR OFFICE IN VISCATAWAY NJ.

0815 - ARRIVE ENSR RETRIEVE HYDROLAB AND TAMBOR GPS UNIT. CHECKED GEAR and CONTAINERS PRIOR TO DEPARTURE TO OULTANI MARSH. WILL ACCESS SITES AT OULTANI MARSH BY LAND. A BOAT WILL NOT BE

USED AT THIS MARSH SITE WILL TAKE EXTRA SITE PHOTOGRAPHS OF METHODOLOGY PERFORMED FOR SEDIMENT COLLECTION FOR B&H LABS AS REQUESTED BY ROGER ZIEK (B&H).

0830 HydroLAB and GPS fully charged and loaded in truck

On

Location METACALANDS, NJDate 9/17/03

Project / Client

0838 Depart for Oritani Marsh
 Samples for Oritani Ave!
 Capt. Ac Modjeski (ENSR)
 Jim Anderson (ENSR)

0954 ARRIVE AT ORITANI MARSH
 SITE OM-SD-01. More old site
 #11.

Samplers: Capt. Ac Modjeski (ENSR)
 Jim Anderson (ENSR)

LAT: 40° 47' 58.14" N
 LONG: 74° 05' 13.76" W

TIDE: High Low

TIDE CYCLE -

COLL. DEPTH: BOTTOM (SD) - 15.2'

SITE DESCRIPTION: Fisherman's

CREEK LOCATED @ 50' E from

RR TRACKS and @ 25' E from

spillway. Shoreline vegetation

Phragmites. Pic 9 shows

site from RR TRACKS.

facing EAST. Pic 10 shows

sample site facing EAST.

ALSO LIVE STONES LOCATED

ALONG RR TRACKS WHICH

Location METACALANDS, NJDate 9/17/03

Project / Client

may be in sediment sample.
 Channel width E of sample @ 12-15'.

1020 OM-SD-01 (HYDROLAB)

Temp: -19.74°C

SAC: 7.27 ppt COLLECTION DEPTH -

DO₂: - 3.115 SURFACE H₂O

DO₅: - 2.24

SpCon - 12.06

pH - 6.95

ORP - 311

TDS - 8.112

TAKEN WITH LOBBE SURVEYOR 4A

AND HYDROLAB MINISCOPE

WATER QUALITY MULTIPROBE.

WEATHER - @ 70°F, WINDS NE

@ 10-20 mph and gusty. SKIES

Clear and Sunny.

1028 OM-SD-01 (SEDIMENT)

SAMPLE TAKEN w/ EKMAN

STAINLESS STEEL GRAB 6" x 6" x 6"

AFIXED TO PALE.

Sample taken @ 1-2 from

Phragmites dominant shoreline

Coll DEPT @ 1.5-2 FT.

Location: MEDDOWLANDS NJ Date: 9/17/03

Project / Client:

1054 Decontamination of EXMAN
Gears, Spoon, and Bowl INITIATED.

① Sile Water Rinse 1054/1059
Alconox
DIW Rinse

② Nitric 1059/1103
DIW Rinse

③ Acetone 1103/1106
DIW Rinse

Jaws closed on grab prior
to site DEPARTURE. NEW CATRX
GLOVES WORN DURING DECON
PROCEDURE. GEAR STORED
IN TRUCK to head to next site.

Will Depart Station OM-SP-01
for OM-SP-02, Hydrolab
working well.

Q

Location: MEDDOWLANDS NJ Date: 9/17/03

Project / Client:

TIDE - FLOODING Low
TIDE High
LAT: 40° 47' 58.14 N
LONG: 74° 05' 13.76 W

Sample collected by A. Mofjeski
and decontated by J. Anderson
Gears had to be lifted to
upper bank for DISPENSE DUE
TO LOWNESS OF WATER LEVEL.

TIMES Five sediment Sample
by lead are as follows:
Weather unchanged from 1020.

START STOP
MERL 1036 1042
B&H 1040 1049
Acrobat 1028 1035

1049 Sediment Sample Complete. All
Samples labeled accordingly
and placed in truck. Will be
iced upon RETURN to MERRI
LAB at 1200 hrs. Sed. Samples
placed in shaded area in
truck.

Q

Location Meadowlands NJ Date 9/17/03

Project / Client

1132 ARENE AT SAMPLE SITE

OM-SD-02 (MERY OLD SITE #2)

LAT: 40° 47' 43.02" N

LONG: 74° 05' 01.74" W

TIDE HIGH LOW

(AT AMTRAK SWING BRIDGE HACKENSACK R.)

TIDE CYCLE - FLOOD

SAMPLERS: CAPT. AC. MOORESEN (CENSE)

JIM ANDERSON (CENSE)

WATER COLUMN DEPTHS - 6" - 1'

SITE DESCRIPTION - Pic 11 Facing

NW DIRECTLY AT SAMPLE AREA.

SITE A SALT WATER PAVINE. MEADOWLANDS

By. Phragmites varying in height from

2' to 6'. A Plastic pole @ 8' (H)

high is located. on NW corner of

site. Site very shallow with H₂O

depth ranging from 6" to 1 ft.

Weather: 70°-75°F, Wind NE

10-20 mph (gusty), Clear and Sunny

Other pictures taken

Pic 12 - Collecting sediment with

EKMAN ON SITE FACETS NW

Location Meadowlands NJ Date 9/17/03

Project / Client

Pic 13 - DISPENSING SEDIMENT INTO

B-H bucket (0.5 gal)

Pic 14 - Dispensing sediment for

ACUTEST FROM STAINLESS

STEEL BOWL WITH STAINLESS

STEEL SPOON TO 802 AMBROS

JME.

1136 OM-SD-02 (HYDROCAR)

Sample taken at surface. By collecting

water in bucket. Water shallow

6" - 1' (Bottom water also mixed in surface)

Temp - 25.34°C

SAL - 8.42 ppt

DO₁₀ - 156.1DO_{MSL} - 191.08

PH - 8.28

SPCON - 14.52 µg/l

OUP - 319

TDS - 9.298

USED HYDROCAR SURVEYOR 4A AND

HYDROCAR MINI-SOPE.

9/17/03

Location: MERIDELLANDS, NJ Date

Project / Client

MEXE LAB WILL DO DECON AT
A SITE WHERE H₂O IS MORE
ACCESSIBLE AND DEEPER.

1205 - DECONTAMINATION OF EKMAN,
SPROCK, BOWL, AND BUCKET
INITIATED. PERFORMED near RE-TRACTS
WHERE H₂O MORE ACCESSIBLE.

① Site water Rinse 1205/1208

Alcohol

DW Rinse

1208/1211

Nitric

DW Rinse

② Acetone

DW Rinse

AM 1211/1214

AFTER DECON, JARS OF EKMAN CLOSED
SPECIM AND BOWL STORED APPROPRIATELY
BE TRANSPORT TO MELT.

1225 Depart station

1243 Arrive MELT. 12INS SAMPLES

AND PEELING FOR KERENYI

MPREST Sampling. Will do

Location: MERIDELLANDS, NJ Date 09/17/03

Project / Client

1140 OM-SD-02 (SEDIMENT)

SAMPLE RETRIEVED WITH

STAINLESS STEEL SWIMMING GEAR

6" x 6" x 6" AFFIXED TO POLE.

COLL DEPTH - 6" - 1ft (bottom)

LAT: 40° 47' 43.02"N

LONG: 74° 05' 01.74"W

WEATHER: SAME AS PREVIOUSLY

LOGGED AT 1132.

SAMPLES: SAME (JA, ANN)

ALL OTHER INFORMATION LOGGED

AT 1132. START / STOP TIMES

FOR SEDIMENT SAMPLING

ARE AS FOLLOWS. AND LISTED

BY LAB.

Start Stop

1153 1158

MELT

1148 1153

Accutest

1140 1147

B₂H

1158 Sediment Sampling complete.

All containers sealed, labeled,

glass wrapped in bubblewrap,

and stored for 12INS AT

Location: MEADOWLANDS NJ Date 9/17/03

Project / Client:

2 Benthic stations (duplicate)
 a duplicate sediment and
 a rinseate for Accutest. Rinseate
 NOT REQUIRED. Big other labs
 will use a smaller boat to
 access sample sites.

1315 Depart MERE. All glass bottles
 samples iced. B.H. Buckets
 (2) from Crittani placed in
 MERE LABS FOR WATER PLO PLAD
 IN air conditioned room until
 I pick up to give to B.H.
 lab (@ 1800 hrs).

1335 Arrive Kearny FRESHWATER MARSH
 LOADING BOAT AND LAUNCHER
 BOAT BRETT BRAGIN (MERE) going
 TO ASSIST WITH BOAT OPERATIONS
 AND BENTHIC SAMPLING.

1400 Depart Boat launch for 1st
 SAMPLING SITE.

1405 Arrived at KM-SD-01-MERE
 OLD SITE #7. CREW: Capt. AL M.,
 TIM ALDRISS (CENSER), BRETT
 BRAGIN (MERE)

Dr

Location: MEADOWLANDS NJ Date 9/17/03

Project / Client:

1410 KM-SD-01 (HYPOCCAS)
 LAT: 40° 45' 44.08" N
 LONG: 74° 07' 55.32" W
 NO TIDAL INFLUENCE, FW MARSH
 SITE DESCRIPTION: SIMILAR
 LOCATED AT BEGINNING OF
 LONG CHANNELLED DITCH. DOMINANT
 SHORELINE VEG. CATTAINS, PHEASANT,
 AND PURE WASTEWATER. PG #15
 FACING NORTH FROM SITE. PG #16
 FACING SOUTH OF SAMPLE SITE.
 Weather: 75°-77°F, WIND NNW
 @ 10-20 mph, SKIES CLEAR WITH
 CLOUDS STARTING TO FORM

Temp: 24.98°C

Sal: 0.92

DO %: 147.0

DO CONC: 10.40 mg/L

SPCONS: 1.723

PH: 8.09

OCP: 286

TDS: 1104

SURFACE WATER SAMPLE

Dr

Location MEADOWLANDS N.S.

Date 9/17/03

Project / Client

PIC 15 - FALLING N FROM SITE
PIC 16 - FALLING S FROM SITE

7417 KM-SD-01 (SEDIMENT)

SAMPLERS - CAPT AL MORTESI (LOW)
JIM ALDERSON (ENSA)

LAT: 40° 45' 44.98" N

LONG: 74° 07' 55.32" W

COLL DEPTH. BOTTOM - 2'

STRAIX / STOP TIMES ARE

GIVEN BELOW BY INDIVIDUAL

LAB. GIVES WORN BY ALL PERSONNEL

Start Stop

MEKE - 1433 1435

B&H - 1417 1429

Accutest 1429 1433

SEDIMENT SOFT AND OOZY. ENSY
TO COLLECT SEDIMENT SAMPLE
TAKEN WITH EKMAN STAINLESS
STEEL GRAB (6" x 6" x 6") WITH
ATTACHED POLE - SEDIMENT
SAMPLE TAKEN CLOSE TO FRAG.
MOUND (@ 3'-5' away)

Location MEADOWLANDS N.S.

Date 9/17/03

Project / Client

1435 - SEDIMENT SAMPLING COMPLETE.

GLASS CONTAINERS LABELED, SEALED,
CHILLED AND BUBBLED WRAPPED. BUCKET
SEALED, LABELED, AND STORED

ACCORDING TO LAB SPECIFICATIONS

1435 KM-SD-01 (BENTHOS)

BENTHIC SAMPLING DONE WITH

STAINLESS STEEL PETIT PONAR

GRAB. THE FOLLOWING SAMPLE

TIMES IN TRIPLICATE: GLOVES WORN

STRAIX STOP

KM-SD-01A (REP1) 1435 1441

KM-SD-01B (REP2) 1441 1450

KM-SD-01C (REP3) 1455 1504

PAID TO PICKING WITH FORMALIN

PONAR GRAB RINSED WITH SITE WATER

TO GET ALL ORGANISMS FROM SAMPLE.

Rep 1 - full bucket obtained (grab)

Rep 2 - full bucket obtained (grab)

Sieve rinsed and all buckets

to ensure sample integrity.

Rep 3 - full bucket (grab)

Location MEADOWLANDS NJ

Date 9/17/03

Project / Client

Benthic samples stored through
500 micron STAINLESS STEEL MESH.
Used same sieving systems
established in Riverbend marsh.
Samples placed in plastic
wide-mouth containers and labeled.
Rep 3 put in 2 jars.

Preservative times:

Rep 1 - 1443

Rep 2 - 1453

Rep 3 - 1505

Benthic sample preserved w/10%
Formalin.

AM
1510

Depart ~~station~~ ^{AM} KM-SD-01

1453 DECONTAMINATION OF EKMAN, Bowl,
Buckets and spoon.

① Site Water
Alconox
DIW RINSE

1453/1457

W

Location MEADOWLANDS NJ

Date 9/17/03

Project / Client

② Nitric 1457/1459

DIW RINSE

③ Acetone 1500/1510

DIW RINSE

- EKMAN DECONTAMINATED TWICE
SINCE SMALL SEDIMENT PARTICLES
WERE STILL VISIBLE AFTER 1st
DECON. NEW GLOVES WORN

1510 - DECON COMPLETE

1515 - DEPART KM-SD-01.

1535 ARRIVE KM-SD-02

SAMPLERS - CAPT AL MOORESKI (ENSE)

JIM ALDERSON (ENSE)

BUETT BERGIN (MERE)

LAT: 40° 45' 37.67N

LONG: 74° 07' 43.60 W

NO TIDE INFLUENCE (FW)

MARE AND SITE #13,

SITE DESCRIPTION: Open marsh

SITE located between two

W

Location: MEADOWLANDS NJ Date: 9/17/03

Project / Client

ISLANDS. PICTURE 17 - FACING EAST FROM SITE. PICTURE 18 - FACING WEST FROM SITE. PIC 19 - SSE OF SITE SHOWING SUNKEN TOTO EXPOSURE.

VESSEL: 14' ALUMINUM HULL w/ 25 HP motor (hand till)

Weather: 72-73°F, WIND NNW 10-20, CLEW

1541 KM-SD-02 (HYDROLAB)
LAT: 40° 45' 37.67 N
LONG: 74° 07' 43.60 W

Temp 24.39
Sal 1.32
DO% 144.5
Dmg/L 9.67
SpCon 2.448
pH 8.61
DOP 310
TDS 1.576

SAMPLE TAKEN FROM SURFACE WATER.

CR

Location: MEADOWLANDS NJ Date: 9/17/03

Project / Client

1545 KM-SD-02 (RINSATE BLANK)
6L RUBBER JARS FILLED and 1 plastic container w/ HNO₃.
SAMPLE COLLECTED WITH EKMAN TRANSFERRED TO STAINLESS STEEL BOWL w/ SPOON AND PLACED IN CONTAINERS. USED SUPPLIED DIW FROM LAB.

1559 KM-SD-02 RINSATE COMPLETE
INFUSED MESH DOES NOT NEED RINSATE.

1605 KM-SD-02 (SEDIMENT)
Sediment Sample taken with EKMAN STAINLESS STEEL GRAB (6" x 6" x 6") AFFIXED TO A PDE.

SAMPLERS: AL MOJESKI (ENSE)
JIM ANDERSON (ENSE)
(DURING BEAUTIFUL CONCURRENTLY FROM STERN WITH PANNAR (PENT))

LAT: 40° 45' 37.67 N
LONG: 74° 07' 43.60 W

SITE - OPEN WATER
COLL. DEPTH - 2-2.5'
VESSEL - 14' ALUM., 25 HP

CR

Location MEADOWLANDS NJ Date 9/17/03

Project / Client

TIMES OF SAMPLING	FOR EACH
LAB AS FOLLOWS	
start stop	
MERT 1619 1624	
ACCUTEST 1611 1618	
B:H 1613 1638	

Only getting 1/2 to 3/4 full grabs
 Sediment full of rhizomes and
 organics, detritus. HARD TO GET
 good sample.

1608 KM-SD-02 (Benthic)

Open water, using Raptor
 PUMP STAINLESS STEEL

START	STOP
1608	1617
1629	1641
1645	1655

Preservative times (10% formalin)

REP 1 - 1619	} all 1 jar each.
REP 2 - 1643	
REP 3 - 1656	

[Signature]

Location MEADOWLANDS NJ Date 9/17/03

Project / Client

ALL SAMPLES SIEVED IN 500
 MICRON MESH SIEVE (Benthic)
 SAMPLES PRESERVED IN 10%
 formalin

1634. Sediment samples for Accutest
 and MERT. Bubblewrapped and
 iced. All labels double checked.

1638. SEDIMENT SAMPLING COMPLETE.
 Bucket closed, labeled, and
 STORED ACCORDING TO LAB'S
 SPECIFICATIONS.

1644 Decontamination of ERMAR,
 spoon, bowl, and bucket.
 Clean latex gloves worn.

1656 DELON. DONE. ERMAR STORED
 WITH JARS CLOSED.

1657 Depart KM-SD-02 for final
 site. All gear stored and
 secure.

[Signature]

Location MEMPHISLANDS NJ Date 9/17/03

Project / Client

1707 Avenue A KM-SD-03
 Samplers - Capt. Ar Modzecki (Euse)
 Jim Anderson (Euse)
 Additional Crew - Brett Brown MFA
 LAT: 40° 45' 48.89 N
 LONG: 74° 07' 18.63 W
 Fw marsh / NO TIDAL INFLUENCE
 SITE WESTERN END OF KM ADJACENT
 TO POLANO SPRING BUILDING
 ALONG SHORELINE OF ISLAND
 ISLAND DOMINATED BY Purple
 LICHENS AND REMNANT CORAL
 STAMPS
 VESSEL - 14' ALUMINUM, 25 hp
 WEATHER - 69° - 72°F, WIND
 NNE 10-20 mph (breezy),
 SKIES CLEAR
 WATER DEPTH - 4'
 NO BENTHOS TAKEN HERE.

(Signature)

Location MEMPHISLANDS NJ Date 9/17/03

Project / Client

1715 KM-SD-03 (HYDROLAB)
 Temp - 23.96°C
 Sal - 1.32
 DO% - 132.11
 DOmg/L - 9.04
 SpCon - 2.465
 pH - 8.66
 ORP - 299
 TDS - 1.577

1723 KM-SD-03 (SEDIMENT)
 TIMES FOR INDIVIDUAL LABS
 ARE AS FOLLOWS: SEDIMENT
 SAMPLE taken with a 6"x6"x6"
 STAINLESS STEEL EXAMIN GLASS
 AFFIXED TO A POLE
 LAT: 40° 45' 48.89 N
 LONG: 74° 07' 18.63 W
 COLL DEPTH - 4'

START	STOP
1723	1728
1728	1731
1731	1743

MEMI
 ACATED
 B^{CH}

(Signature)

Date 9/17/03

Location MEROOWLANDS

Project / Client

1805 ARIENE BOAT LAUNCH.
TRAILERED BOAT, UNLOADED
SAMPLES AND GEAR TO TRUCKS.
CLEANED BOARD DECK.
NO NO DECOR OF GEAR RETURNED.
THIS IS LAST SITE OF SURVEY
AND GEAR WILL NOT BE
USED ANYMORE FOR THIS
SURVEY.

1840 ARIENE METAL LABS. MET
WITH B:H LABS AND
RETURNED SAMPLES.
FILLED OUT COC. AND INVENTORIED
BUCKET SAMPLES.

1845. SAMPLES RETURNED TO
B:H, ICED, AND PLACED
IN LARGE COOLERS.

1846 SAMPLES RETURNED TO
MET. COCS SIGNED
and all samples

Date 9/17/03

Location MEROOWLANDS

Project / Client

1731 Performing A DUPLICATE
SEDIMENT SAMPLE FOR
ACCURACY AND MET. B:H,
PER ROGER ZIEK, DOES NOT
REQUIRE A DUPLICATE SAMPLE.
START STOP

Accurist: 1733, 1737

MET: 1731, 1733

1743 SEDIMENT SAMPLING COMPLETE.
SAMPLES LABELED, BUBBLEWRAPPED,
AND ICED/STORAGED ACCORDING TO
INDIVIDUAL LAB SPECIFICATIONS.

1745 Depart. KM-SD-03 FOR
BOAT LAUNCH. SKIES CLOUDY
AND WINDS MORE CONSISTENT.
MAYBE THE "OUTER A BIT"
OF SAMPLES ARE ANTHROPOGENIC
DEBRIS SO MAY TAKE TIME
TO GET BACK TO BOAT
LAUNCH.

Location MEADOWLANDS US

Date

9/17/03

Project / Client

re-iced and accounted for.
 1847 RE-ICE ACUTEST COOLERS,
 checking sample labels, filled
 COCS, and repacked coolers
 to preserve samples. ACUTEST
 will p/o samples tomorrow
 at ENSR office @ 9-10AM.

1905 Depart METRI for ENSR
 office.

2000 ARRIVE ENSR. UNLOADED
 ACUTEST COOLERS, SEALED
 AND ARRANGED FOR AM
 PICKUP. WILL UNLOAD TRUCK
 TOMORROW AND STOW GEAR.

2025 Depart ENSR.



Date

Location

Project / Client



View showing mouth of main channel of Sawmill Creek Wildlife Management Area. Sample SAW-SD-001 taken along east side of channel.



Photo 2: View showing vegetation type along shoreline near sample site SAW-SD-001. Shoreline vegetation consists of smooth cordgrass (*Spartina alterniflora*).



Photo 3: View facing west showing Sawmill Wildlife Management Area with a shoreline dominated by *Phragmites* and a marsh dotted with *Spartina alterniflora*.



Photo 4: View facing east showing the interior of the Secaucus High School Marsh with thickly growing *Phragmites*.



Photo 5: View facing west showing the 21' privateer in the main channel surrounded by the dominant *Phragmites*.



Photo 6: View facing east towards overgrown banks of ditch heading into the third sampling site.



Photo 7: View showing the sampling area for Sample SHSM-SD-02.



Photo 8: View showing Oritani Marsh Sampling Site OM-SD-001, a tidal creek surrounded by thickly growing *Phragmites*.



Photo 9: View facing east from railroad tracks showing Oritani Marsh Sampling Site OM-SD-001.



Photo 10: View facing east showing Oritani Marsh Sampling Site OM-SD-002 in a salt panne surrounded by *Phragmites* and an ENSR scientist extracting the Eckman with a sediment sample.



Photo 11: View of an ENSR scientist dispensing the Oritani Marsh sediment sample from the Eckman sampling device into a bucket.



Photo 12: View of ENSR scientist dispensing sample for Accutest from a stainless steel bowl with a stainless steel spoon to an 8 ounce amber jar.



Photo 13: View facing north of Kearny Freshwater Marsh Sampling Site KM-SD-001 with purple loosestrife (*Lythrum salicaria*) and broad-leaved cattail (*Typha latifolia*) in the background.



Photo 14: View facing south showing Kearny Freshwater Marsh Sampling Site KM-SD-002.



Photo 15: View facing east showing open water at Kearny Freshwater Marsh with islands of *Phragmites* in background.



Photo 16: View facing west showing open water at Kearny Freshwater Marsh.



Photo 17: View facing southeast of Kearny Freshwater Marsh with sunken Ford Explorer.