



P.O. BOX 248, 1186 LOWER RIVER ROAD, CHARLESTON, TN 37310

Phone: (423) 336-4000

October 28 , 1996

Mr. James Craft  
Engineering Geologist  
New York State Department of Environmental Conservation  
Region 8 Office - Division of Hazardous Waste Remediation  
6274 East Avon - Lima Road  
Avon, NY 14414-9519

**Re: Olin Rochester RI/FS Quarterly Report No. 12  
Olin Chemicals (Site #628018a) 100 McKee Rd, Rochester, NY**

Dear Mr. Craft:

This is the twelfth quarterly report of progress on the Olin Rochester RI/FS, covering the period from July 1, 1996 through September 30, 1996.

**New Submittal:**

- As an attachment to this Quarterly Report, Olin hereby submits the onsite Feasibility Study (FS) Report. This FS evaluates and selects options for remediation on the Olin plant site. Per prior discussion, Olin will develop a separate offsite FS, addressing remedial options for offsite contaminants, i.e. for areas outside the boundary of the Olin plant.

**Work Progress and Scheduling:**

- Olin has submitted Phase I and Phase II RI reports and Phase II Addendum Reports, which address the progressive phases of investigation to date.
- Olin has been monitoring offsite groundwater and surface water in a program that exceeds the scope of those previously submitted reports. We have implemented a program of extended sampling, per informal notification to and approval by NYSDEC. The results of this extended sampling have included the sampling of offsite industrial and monitoring wells on properties near the Olin plant, the sampling of additional Barge Canal points, and the sampling of additional surface water points in the Dolomite Products Quarry.

- Olin continues to develop offsite information using the approach of best technical judgment, with informal notification and approval by NYSDEC. This approach allows us to proceed with tracking of offsite Olin related compounds in an expeditious, yet technically correct manner. Olin will convey the results of any and all additional offsite investigation steps via future quarterly reports.
- Olin continues to monitor the Barge Canal and Quarry for pyridine compounds, per agreement with NYSDEC. We are currently evaluating the potential health risk of detected levels of pyridine compounds in the Canal and Quarry, per request from NYSDEC and New York State Department of Health (NYSDOH). A letter report will be submitted to both agencies.
- Olin has completed the second semiannual groundwater sampling, and third quarterly Canal sampling for 1996, with results pending.
- Quarterly piezometric plots for June, 1996 are attached.
- Offsite monitoring well data are hereby submitted on the attached diskette.
- The onsite hydraulic containment system has been adjusted and augmented to achieve the flow rate and flow points prescribed by the computer model, as described in the Phase II Addendum Report. The additional bedrock pumping well has been installed and is operating. Hydraulic gradients induced by the adjusted pumping system will be monitored quarterly. The overburden pumping system will continue to operate until Olin and NYSDEC agree that it can be discontinued.
- As our investigation progresses, we believe that our semiannual monitoring program should evolve to reflect the areas of needed data development. Toward this end, I have attached a proposed list of monitoring wells, parameters and frequencies for semiannual monitoring during 1997. *Olin requests your approval of this monitoring list.* Of course, surface water sampling in the Barge Canal and in the Dolomite Products Quarry will continue on a quarterly basis.

**Tasks in Progress:**

- Olin has been working to gain access to install two monitor well clusters to the southeast of the Quarry, to determine whether any chloropyridines have bypassed the Quarry via natural groundwater flow. Access has been granted, and Olin plans to initiate drilling in late October, per my notification phone call to you of October 9, 1996. Olin has also requested drilling access for two well pairs on the west side of the Pfaudler property. Access agreement is pending.
- Olin is investigating the causality of upstream detections of pyridine compounds in the Barge Canal by acquiring reports via Freedom of Information requests, to determine the possible influence of other sites.
- Olin is developing a letter report addressing potential offsite risk issues for Canal water, as noted above.

**Community Relations:**

- Olin plans to release a fact sheet describing investigative and health risk-associated findings for Canal water detections. We have requested and received comments from NYSDEC, NYSDOH and Monroe County DOH on a draft fact sheet, and will resolve any agency questions or concerns in order to gain the concurrence and support of the agencies prior to the release of the fact sheet.

Olin will continue to communicate progress and issues with NYSDEC. Please direct any questions to me at 423 / 336-4587.

Sincerely,



Michael J. Bellotti  
Olin Corporation

att.

**List of Attachments:**

Onsite Feasibility Study report

Data diskette (Jim Craft copy only)

Piezometric plots: Overburden aquifer and Bedrock aquifer: June-1996

Proposed monitoring well schedule for 1997

Quarry and Canal analytical data for June-1996

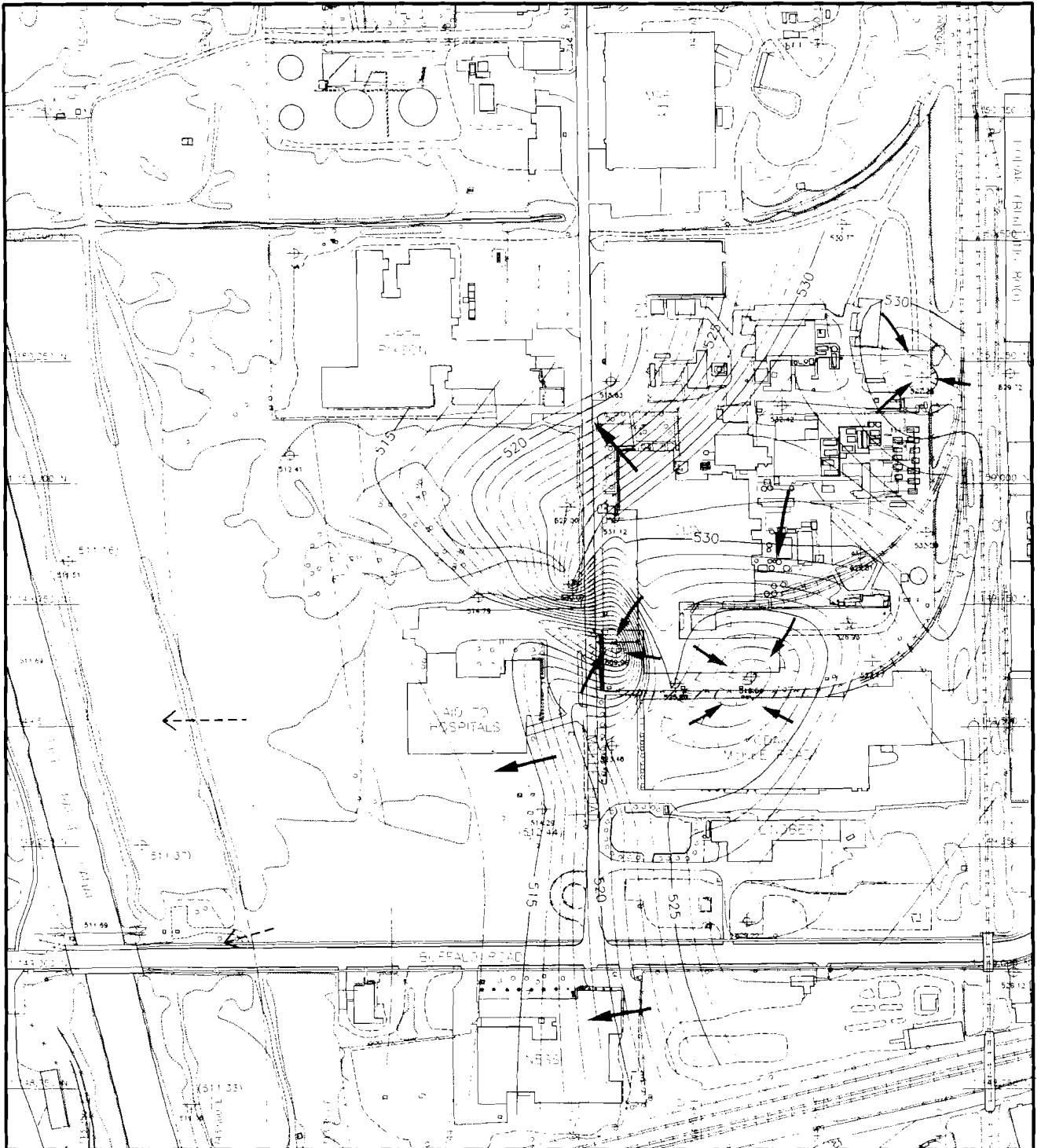
cc:

Mr. Joseph Ryan  
New York State Department of Environmental Conservation  
Division of Environmental Enforcement  
600 Delaware Avenue  
Buffalo, New York 14202-1073

Mr. Joseph White  
New York State Department of Environmental Conservation  
Division of Hazardous Waste Remediation  
50 Wolf Road  
Albany, New York 12433-1010

Mr. Steven Shost  
New York State Department of Health  
Bureau of Environmental Exposure Investigation  
2 University Place  
Albany, New York 12203

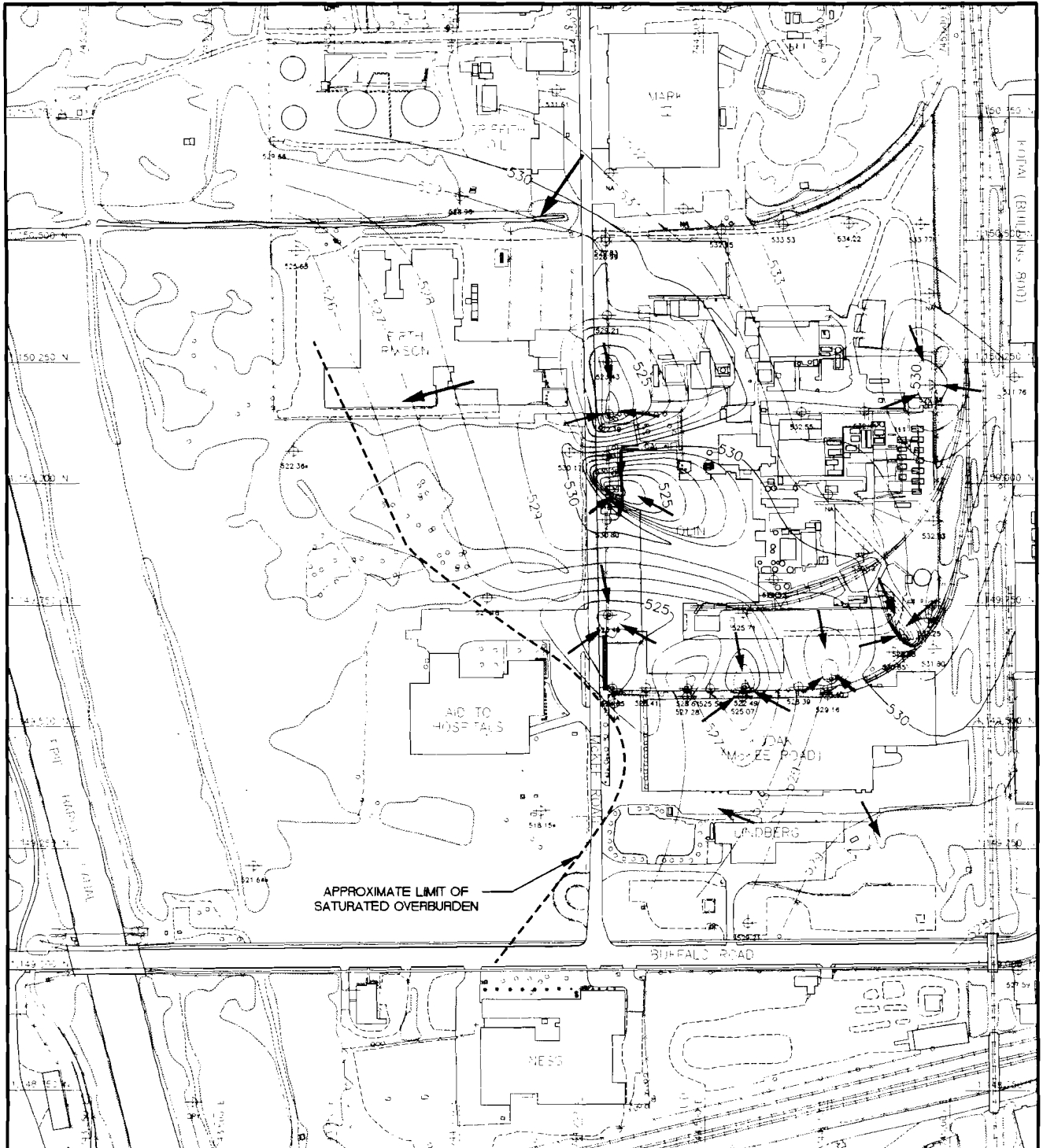
Mr. John E. Kranjc: Olin Rochester, NY  
Mr. William Norman: Olin Rochester, NY  
Ms. Laura Tew: Olin Charleston, TN  
Ms. Brenda Zona: Olin Norwalk, CT  
Mr. John Burns: Olin Charleston, TN  
Ms. Monica L. Fries Esq.: Husch & Eppenberger, St. Louis, MO  
Mr. Thomas Eschner: ABB, Portland, ME



1:500
1" = 200'

---

<p>--- PROPERTY BOUNDARY</p> <p>--- BEDROCK GROUNDWATER ELEVATION CONTOUR (ALL 5' INTERVAL)</p> <p>--- BEDROCK GROUNDWATER ELEVATION CONTOUR (ALL 1' INTERVAL)</p> <p>○ WELL (WATER ELEVATION AT WELL - 10' WATER TABLE)</p> <p>← INTERPRETED GROUNDWATER FLOW DIRECTION (DUAL W/ BEDROCK SYSTEM)</p>	<p>(6'0" TO 10' DEPT. METERS) ELEVATION AT 200' DEPT. BEDROCK WELL</p> <p>← INTERPRETED GROUNDWATER FLOW DIRECTION (DUAL W/ BEDROCK SYSTEM)</p> <p>--- 10' WATER TABLE</p> <p>--- 20' WATER TABLE</p>	<p><b>JUNE 1996</b></p> <p><b>BEDROCK GROUNDWATER</b></p> <p><b>INTERPRETED PIEZOMETRIC</b></p> <p><b>CONTOURS</b></p> <p style="font-size: small;">D. J. TRIMBY, DLS D. J. TRIMBY, DLS</p>
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SYMBOL	EXPLANATION	DATE
---	BOUNDARY OF CITY PROPERTY BOUNDARY	WATER LEVEL MEASUREMENT DATE: 3/19/96
---	OVERBURDEN (SAND/WATER) ELEVATION CONTOUR (MSL) 5' MATERIAL	
---	OVERBURDEN (SAND/WATER) ELEVATION CONTOUR (MSL) 10' MATERIAL	
+	PIEZOMETRIC ELEVATION AT WELL OR PIERCE POINT	
+	PIEZOMETRIC ELEVATION AT WELL IN OVERBURDEN AND SHALLOW BEDROCK WATER LEVEL TO DRAIN REFERENCE POINT	
←	INTERPRETED GROUNDWATER FLOW DIRECTION	

SCALE: 1"=100'

**JUNE 1996  
OVERBURDEN GROUNDWATER  
INTERPRETED PIEZOMETRIC  
CONTOURS**

JOHN WHELAN, P.E.  
P.O. BOX 1001, NEW YORK, NY

**Olin Rochester**  
**Proposed Groundwater Monitoring Wells**  
**1997**

Well	zone	onsite/ offsite	CURRENT		PROPOSED	
			Pyridines smpls/yr	VOC's smpls/yr	Pyridines smpls/yr	VOC's smpls/yr
BR103	BR	off	2	2	2	
BR104	BR	off	2	2	2	
BR105	BR	off	2	2	1	
BR106	BR	off	2	2	1	
BR107	BR	off	2	2	2	
BR108	BR	off			1	
BR111	BR	off	2		2	
BR112A	BR	off	2		2	
BR113	BR	off	2		2	
BR114	BR	off	2	2	2	
NESS-E	BR	off	2	2	2	
NESS-W	BR	off	2	2	2	
Pfau-1	BR	off	not drilled	not drilled	2	1
Pfau-2	BR	off	not drilled	not drilled	2	1
Quarry-1	BR	off	not drilled	not drilled	2	1
Quarry-2	BR	off	not drilled	not drilled	2	1
BR105D	BRD	off	2	2	1	
BR111D	BRD	off	2		2	
BR112D	BRD	off	2		2	
BR113D	BRD	off	2		2	
Pfau-1D	BRD	off	not drilled	not drilled	2	1
Pfau-2D	BRD	off	not drilled	not drilled	2	1
Quarry-1D	BRD	off	not drilled	not drilled	2	1
Quarry-2D	BRD	off	not drilled	not drilled	2	1
MW103	OB	off	2	2	1	
MW104	OB	off	2	2	1	
MW106	OB	off	2	2		
MW107	OB	off	2	2		
MW114	OB	off	2	2	1	
BR1	BR	on	2	2		
BR101	BR	on	2	2		
BR102	BR	on	2	2	1	1
BR2A	BR	on	2	2		
BR3	BR	on	2	2		
BR4	BR	on	2	2	1	1
BR5A	BR	on	2	2	1	1
BR6A	BR	on	2	2	1	1
BR7	BR	on			1	1
BR8	BR	on	2	2	1	1
BR2D	BRD	on	2	2		
BR3D	BRD	on	2	2		
B1	OB	on	2	2	1	1
B17	OB	on	2	2		
B6	OB	on	2	2	1	1
E1	OB	on	2	2	1	1
E3	OB	on	2	2	1	1

**APPROACH:**

*offsite: pyridines only as indicator to track Olin plume*

*onsite: site perimeter for pyridines and VOC's to monitor site boundary*

*onsite and offsite: wt levels at all wells quarterly*

*new wells: Quarry / Pfau-1 for pyridines and VOC's to develop well history*



7311-44  
July 19, 1996



RECEIVED

JUL 24 1996

Mr. Michael Bellotti  
Olin Chemical Corporation  
P.O. Box 248, Lower River Road  
Charleston, TN 37310

MICHAEL J. BELLOTTI

**Subject: Olin Rochester Site - 1996 Quarterly Erie Barge Canal Water and Quarry Sampling Results (2nd Quarter)**

Dear Mr. Bellotti:

This letter presents the results of chemical analysis and describes the sampling, analytical methodology, and analytical quality control for quarterly sampling conducted in June 1996 as follow up to the Phase II Remedial Investigation. Sampling results for 2nd-quarter 1996 surface-water samples collected from the Erie Barge Canal and the Dolomite Products Company quarry as part of the on-going quarterly monitoring program for the Olin Rochester site are enclosed.

### Sampling

Canal water samples and Dolomite Products Company (Dolomite) quarry surface-water samples were collected for selected pyridine analysis on June 20, 1996. Eight surface-water samples (SW-1, SW-2, SW-3, SW-4, SW-5, SW-6, SW-7, SW-8) and four quality control samples (Bailer Rinse Blank, SW-2 FD [field duplicate], SW-6 MATRIX SPIKE, and SW-6 MATRIX SPIKE DUPLICATE) were collected on June 20, 1996 from the established sampling locations along the Barge Canal as part of the quarterly Canal sampling program.

Seven surface-water samples were collected in June, 1996 as part of the quarry resampling program from the Dolomite quarry west of the Barge Canal. A seep sample (QS-4) collected from the previously sampled location QS-4, the southernmost seep location, is considered a surface-water sample for this report. The pond samples (QP-2, QP-3, QP-4, and QP-5) were collected from previously sampled locations in the Dolomite quarry ponds. The locations of these samples are shown on the attached map of the quarry.

The quarry outfall sample (QO-1) collected on June 20, 1996 was collected from a concrete "sewer box" located south of the Morey property and west of Interstate 390. The actual location of the outfall to the Erie Barge Canal was determined to be 600 feet north of Chili Avenue. This location was sampled on June 26, 1996, subsequent to sampling of the Erie Barge Canal and Quarry. These results are reported as SWQD02.

ABB Environmental Services, Inc.

BART\j5\t87\olinroch\phaseii\memos\2nd96SW.DOC

110 Free Street  
P O Box 7050  
Portland, Maine 04112-7050

Telephone (207) 775-5400

Fax (207) 772-4762



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## Analytical Procedures and Data Review

Surface-water samples were analyzed in accordance with 1991 New York State Category B Analytical Services Protocols (ASP) for selected pyridines (pyridine, 2-chloropyridine, 3-chloropyridine, 4-chloropyridine, 2,6-dichloropyridine, and p-fluoroaniline). The reporting limit for the selected pyridines is 10 micrograms per liter ( $\mu\text{g/L}$ ).

A preliminary review of the analytical results was performed for data quality assurance purposes. Sample results were reviewed for holding time compliance, surrogate standard recoveries, blank contamination, and matrix spike/matrix spike duplicate (MS/MSD) accuracy and precision. The results of the data review are discussed in the quality control section of this letter.

## Analytical Results

Four of the five selected pyridines (2-chloropyridine, 3-chloropyridine, and 2,6-dichloropyridine, and p-fluoroaniline) were detected in surface-water samples. Concentrations of selected pyridines were detected both above and below the Contract Required Quantitation Limit (CRQL). These results are summarized below; all results are expressed in  $\mu\text{g/L}$ .

<u>Sample Id</u>	<u>2-CPYR</u>	<u>3-CPYR</u>	<u>2,6-DCPYR</u>	<u>p-fluoroaniline</u>
SW-1	3 J	ND	0.3 J	ND
SW-4	1 J	ND	ND	ND
SW-5	0.9 J	ND	ND	ND
SW-6	1 J	ND	ND	ND
SWQD02	160	11 J	32	ND
QO-1	63	4 J	18	ND
QP-2	290	34	86	ND
QP-3	41	2 J	9 J	ND
QP-4	44	6 J	13	ND
QP-5	72	4 J	14	ND
QS-4	3800	120	1000	3 J

J = Estimated value above the method detection limit, but below the CRQL.  
ND = Not Detected      2-CPYR = 2-chloropyridine      3-CPYR = 3-chloropyridine  
2,6-DCPYR = 2,5-dichloropyridine

Surface water samples SW-2, SW-2 FD, SW-3, SW-7, and SW-8 were non-detect for the five selected pyridines at the standard reporting limit of 10  $\mu\text{g/L}$ .



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## Quality Control

One bailer rinse blank sample, one matrix spike/matrix spike duplicate (MS/MSD) sample, and one field duplicate sample were collected as quality control samples during the course of the March 1996 field event. No target compounds were reported in the bailer rinse blank.

Several samples required dilution due to the high concentration of 2-chloropyridine and/or 2,6-dichloropyridine. Sample SWQD02 required a dilution of two (2). Sample QP-2 required a dilution of two (2) and a further dilution of ten (10) was required. Sample QS-4 was analyzed at an initial dilution factor of five (5), and further dilutions of 50 and 200 were required. As a result of the dilution of sample QS-4, all surrogates were diluted out. It is not anticipated that this quality control issue will have an impact on the results.

The percent recovery (%R) of two method standard surrogates were outside QC limits in the reextraction of the matrix spike sample SW-6MS. The %R of surrogates Phenol-D5 and 2,4,6-Tribromophenol were outside QC limits. It is not anticipated that this quality control issue will have an impact on the results.

The subcontracting laboratory calculated compound-specific recovery limits for spike recoveries of selected pyridines using the large database of selected pyridine recovery data from the Olin Plant Site. Compound-specific control limits more accurately represent the recovery efficiency for these compounds, and allow both the laboratory and data review staff to determine when and if the laboratory procedure was out of control (matrix spike blank [MSB] results) or if there was a matrix interference (MS/MSD results).

The spike recoveries of p-fluoroaniline in the MSB and the MS/MSD associated with the June 1996 field event sample SW-6 were below QC limits. This may be an indication that the laboratory procedures, rather than sample matrix effects, resulted in the low spike recoveries. Additionally, the relative percent difference (RPD) of 3-chloropyridine and p-fluoroaniline in the MS/MSD associated with sample SW-6 was above QC limits. As a result, the associated sample and QC were re-extracted and the re-extractions were performed outside of hold times. It does not appear that there was a matrix interference, due to the fact that relative percent differences in the MSB and MSB duplicate recoveries of 2-chloropyridine, 3-chloropyridine, and p-fluoroaniline were above QC limits. Despite these quality control issues, it is not anticipated that the sample results are significantly affected.



## Conclusions

Results from the 1996 second quarter June canal surface-water sampling program indicated the presence of concentrations of 2-chloropyridine in four of eight surface water samples collected from established sampling locations along the canal (SW-1, SW-4, SW-5, SW-6) at estimated concentrations below the CRQL. Additionally, the presence of 2,6-dichloropyridine was reported at location SW-1.

The concentrations of 2-chloropyridine and 2,6-dichloropyridine reported in the sample from location SW-1 are an order of magnitude lower than the concentration reported in the first quarter results. The absence of selected pyridine concentrations in the second quarter results from sample locations SW-2, SW-3, SW-7, and SW-8 also indicate a decrease in concentrations as compared with first quarter results. Estimated concentrations of selected pyridines were reported at locations SW-4, SW-5, and SW-6.

The concentrations of chloropyridines reported in the results of second quarter 1996 canal surface water sampling are consistent with concentrations reported from 1994 and 1995 quarterly monitoring events, and indicate that pyridine concentrations reported in first quarter results may be related to seasonal low water levels in the Erie Barge Canal.

The selected chloropyridine results from the June 1996 field event quarry pond samples QP-2, QP-3, QP-4 and QP-5 indicate a general consistency between the first quarter and second quarter sample events in the nature and quantity of chloropyridine compounds reported in quarry pond surface-water.

Concentrations of 2-chloropyridine, 3-chloropyridine, and 2,6-chloropyridine reported in the second quarter 1996 results for the quarry seep sample QS-4 are approximately an order of magnitude higher than reported in the first quarter results, but similar to concentrations reported in September 1995.

Concentrations of selected pyridines were detected in samples from the sewer box (QO-1) and from location SWQD02. Since the quarry outfall was not sampled during the first quarter sampling event, first quarter results from sample QO-1 are not available for comparison to the second quarter results.



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Please call if you have any questions or comments on the material described in this letter.

Sincerely,

**ABB ENVIRONMENTAL SERVICES, INC.**

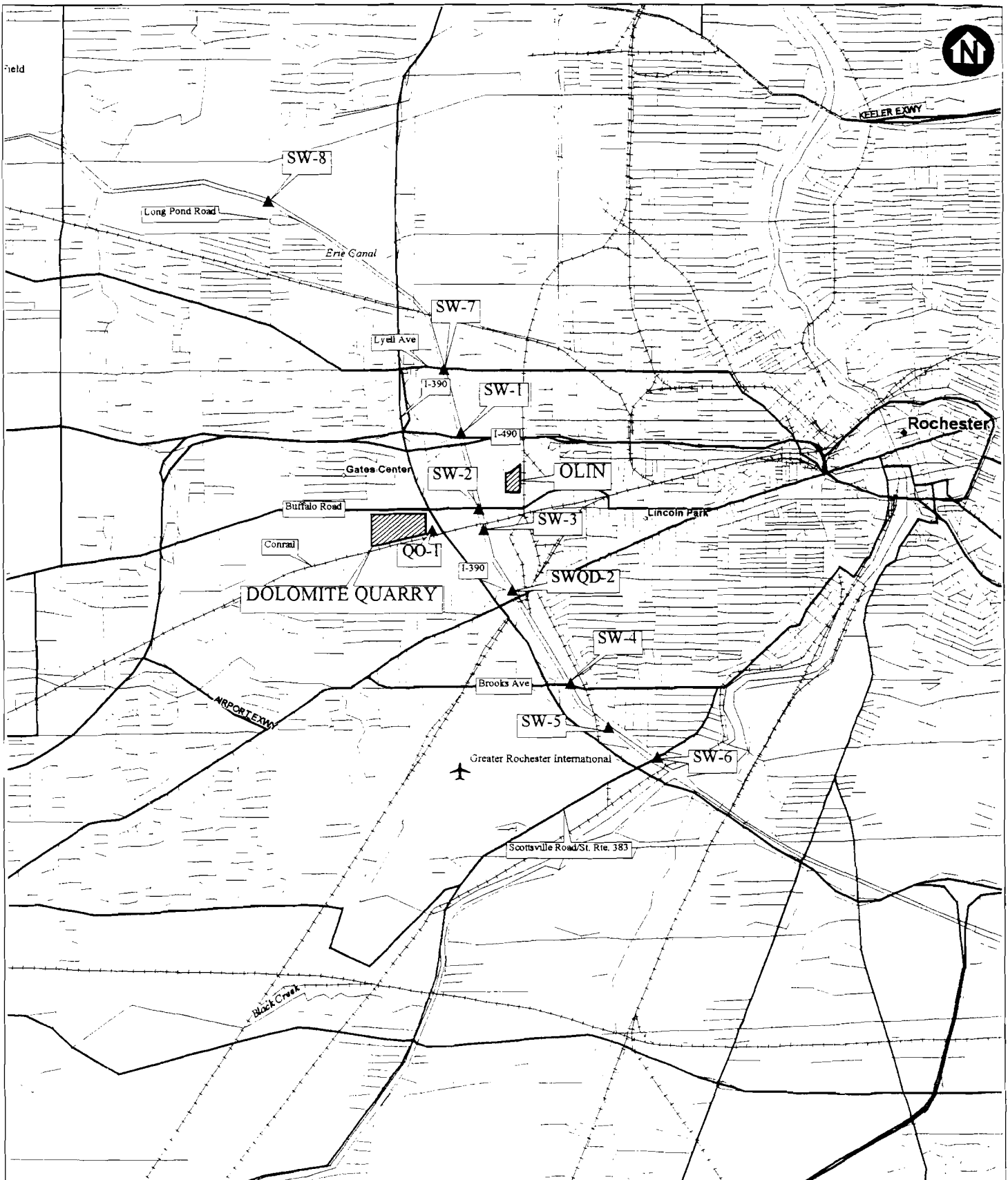
A handwritten signature in black ink, which appears to read 'Thomas R. Eschner'. The signature is written in a cursive style with a horizontal line at the end.

Thomas R. Eschner, R.G.  
Project Manager/Principal Hydrogeologist

TRE/pjk

Attachments: Sample Location Maps - Attachment 1  
Laboratory Data Summary Tables - Attachment 2  
Chain of Custody Forms - Attachment 3

cc: P. Kunkel  
N. Breton



**LEGEND**

▲ SURFACE WATER SAMPLE LOCATION

0 1 MILE 2 MILES



SCALE: 1" = 1 MILE

SOURCE: DeLorme Mapping 1995

**ATTACHMENT 1A**

**SAMPLE LOCATIONS  
ERIE BARGE CANAL**

**OLIN CHEMICALS  
PHASE II RI REPORT ADDENDUM  
ROCHESTER, N.Y.**



Buffalo Road

**Legend**

- QS-1 ▲ Seep Sample Location
- QP-1 ▲ Pond Sample Location
- QO-1 ▲ Outfall Sample Location

Access Road

Quarry Floor

Horizontal Seepage Zone (60' below rim)

QS-1

Scree

Drainage Ponds

QS-2

Culverts

QP-5

QP-4

QP-2

QP-3

QP-1

QS-3

(QO-1 Location of 6/20/96)

Quarry Walls (near vertical)

QS-4

Pipe

Erie Barge Canal

Former Quarry Discharge Outfall (QO-1)

Quarry Rim

Not to Scale

**ATTACHMENT 1B**

**SAMPLE LOCATIONS  
DOLOMITE PRODUCTS  
QUARRY**

OLIN CHEMICALS  
PHASE II RI REPORT ADDENDUM  
ROCHESTER, NEW YORK

PROJECT: Olin Rochester  
2nd Round 1996 Quarterly Monitoring

Table 1  
Laboratory Report of Analysis

LOCATION:		BAILER RINSE BLANK	QO-1	QP-2	QP-2 DL	QP-2 DL2	QP-3	QP-4	QP-5
DATE SAMPLED:		6/20/96	6/20/96	6/20/96	6/20/96	6/20/96	6/20/96	6/20/96	6/20/96
DATE ANALYZED:		6/28/96	6/28/96	6/26/96	6/28/96	6/28/96	6/26/96	6/26/96	6/26/96
SAMPLE TYPE:		RB	FS	FS	DL	D2	FS	FS	FS
ANALYTE	RL								
2,6-Dichloropyridine	10	10 U	18	89 E	86 D	110 D	9 J	13	14
2-Chloropyridine	10	10 U	63	340 E	250 DE	290 D	41	44	72
3-Chloropyridine	10	10 U	4 J	34	19 DJ	17 DJ	2 J	6 J	4 J
4-Chloropyridine	10	10 U	10 U	10 U	20 U	100 U	10 U	10 U	10 U
p-Fluoroaniline	10	10 U	10 U	10 U	20 U	100 U	10 U	10 U	10 U
Pyridine	10	10 U	10 U	10 U	20 U	100 U	10 U	10 U	10 U
DILUTION FACTOR:		1	1	1	2	10	1	1	1



PROJECT: Olin Rochester  
2nd Round 1996 Quarterly Monitoring

Table 1  
Laboratory Report of Analysis

		QS-4	QS-4 DL	QS-4 DL2	SW-1	SW-2	SW-2 FD	SW-3	SW-4
LOCATION:		QS-4	QS-4 DL	QS-4 DL2	SW-1	SW-2	SW-2 FD	SW-3	SW-4
DATE SAMPLED:		6/20/96	6/20/96	6/20/96	6/20/96	6/20/96	6/20/96	6/20/96	6/20/96
DATE ANALYZED:		6/28/96	6/28/96	6/28/96	6/28/96	6/26/96	6/28/96	6/28/96	6/28/96
SAMPLE TYPE:		FS	DL	D2	FS	FS	FD	FS	FS
ANALYTE	RL								
2,6-Dichloropyridine	10	520 E	1000 D	490 DJ	0.3 J	10 U	10 U	10 U	10 U
2-Chloropyridine	10	1800 E	4700 DE	3800 D	3 J	10 U	10 U	10 U	1 J
3-Chloropyridine	10	120	160 DJ	68 DJ	10 U	10 U	10 U	10 U	10 U
4-Chloropyridine	10	50 U	500 U	2000 U	10 U	10 U	10 U	10 U	10 U
p-Fluoroaniline	10	3 J	500 U	2000 U	10 U	10 U	10 U	10 U	10 U
Pyridine	10	50 U	500 U	2000 U	10 U	10 U	10 U	10 U	10 U
DILUTION FACTOR:		5	50	200	1	1	1	1	1

PROJECT: Olin Rochester  
2nd Round 1996 Quarterly Monitoring

Table 1  
Laboratory Report of Analysis

	SW-5	SW-6	SW-6RE	SW-7	SW-8	SWQD02	SWQD02 DL
LOCATION:	SW-5	SW-6	SW-6RE	SW-7	SW-8	SWQD02	SWQD02 DL
DATE SAMPLED:	6/20/96	6/20/96	6/20/96	6/20/96	6/20/96	6/26/96	6/26/96
DATE ANALYZED:	6/26/96	6/26/96	7/8/96	6/26/96	6/26/96	7/3/96	7/3/96
SAMPLE TYPE:	FS	FS	RE	FS	FS	FS	DL
ANALYTE	RL						
2,6-Dichloropyridine	10 U	10 U	17 U	10 U	10 U	32	32 D
2-Chloropyridine	10	0.9 J	1 J	10 U	10 U	120 E	160 D
3-Chloropyridine	10	10 U	17 U	10 U	10 U	10	11 DJ
4-Chloropyridine	10	10 U	17 U	10 U	10 U	10 U	21 U
p-Fluoroaniline	10	10 U	17 U	10 U	10 U	10 U	21 U
Pyridine	10	10 U	17 U	10 U	10 U	10 U	21 U
DILUTION FACTOR:	1	1	1.7	1	1	1	2.1

# RECRA ENVIRONMENTAL, INC.

CHAIN OF CUSTODY RECORD

PROJECT NO 5A5762					SITE NAME OWN ROCH. RI		NO OF CONTAINERS	IL AMBER BRIDGES (OLD)						REMARKS
SAMPLERS (SIGNATURE)														
STATION NO	DATE	TIME	COMP	GRAB	STATION LOCATION									
1	6-20-96	1100 1550	BY	X	QS-4	2	2						IL EXTRA VOL.	
2		1115			QP-2	2	2							
3		1125			QP-3	2	2							
4		1135			QP-4	2	2							
5		1140			QP-5	2	2							
6		1515			SW-1	2	2							
7		1215			SW-2	4	4						DUPLICATE	
8		1200			SW-3	2	2							
9		1315			SW-4	2	2							
10		1345			SW-5	2	2							
11		1255			SW-6	5	5						MS/MSD	
12		1410			SW-7	2	2							
13		1430			SW-8	2	2							
14		1550			QO-1	2	2							

RELINQUISHED BY (SIGNATURE) <i>[Signature]</i>	DATE/TIME 6-20-96 17:30	RECEIVED BY (SIGNATURE) <i>[Signature]</i>	RELINQUISHED BY (SIGNATURE)	DATE/TIME	RECEIVED BY (SIGNATURE)
RELINQUISHED BY (SIGNATURE)	DATE/TIME	RECEIVED BY (SIGNATURE)	RELINQUISHED BY (SIGNATURE)	DATE/TIME	RECEIVED BY (SIGNATURE)
RELINQUISHED BY (SIGNATURE)	DATE/TIME	RECEIVED FOR LABORATORY BY (SIGNATURE)	DATE/TIME	REMARKS	

Distribution: Original accompanies shipment copy to coordinator field files

000050

2446

# RECRA ENVIRONMENTAL, INC.

CHAIN OF CUSTODY RECORD

PROJECT NO 5A5762				SITE NAME OLIN ROCH. RI		NO OF CONTAINERS	REMARKS								
SAMPLERS (SIGNATURE) <i>J. Rickus</i>															
STATION NO	DATE	TIME	COMP	GRAB	STATION LOCATION	LABOR (PYRIDINES (100))									
15	6-20-96	1150		X	BAILER RINSE BLANK	2	2								
						35									
RELINQUISHED BY (SIGNATURE) <i>J. Rickus</i>			DATE/TIME 6-20-96 17 <sup>00</sup>	RECEIVED BY (SIGNATURE) <i>[Signature]</i>			RELINQUISHED BY (SIGNATURE)			DATE/TIME	RECEIVED BY (SIGNATURE)				
RELINQUISHED BY (SIGNATURE)			DATE/TIME	RECEIVED BY (SIGNATURE)			RELINQUISHED BY (SIGNATURE)			DATE/TIME	RECEIVED BY (SIGNATURE)				
RELINQUISHED BY (SIGNATURE)			DATE/TIME	RECEIVED FOR LABORATORY BY (SIGNATURE)			DATE/TIME	REMARKS							

Distribution: Original accompanies shipment copy to coordinator field files

000051

# RECRA ENVIRONMENTAL, INC.

## CHAIN OF CUSTODY RECORD

PROJECT NO 7311-44 (ABB-ES)					SITE NAME OLIN Ranchester					NO OF CON TAINERS	12 Amber 600LS							REMARKS
SAMPLERS (SIGNATURE) Tony Delano																		
STATION NO	DATE	TIME	COMP	GRAB	STATION LOCATION													REMARKS
QD02	6/24/96	1700		X	SWCRD02													
<del>10001 Delano 6/26/96</del>																		
RELINQUISHED BY (SIGNATURE)			DATE / TIME		RECEIVED BY (SIGNATURE)				RELINQUISHED BY (SIGNATURE)			DATE - TIME		RECEIVED BY (SIGNATURE)				
Tony Delano			6/26/96 1800		Fed-X				Fed-X									
RELINQUISHED BY (SIGNATURE)			DATE / TIME		RECEIVED BY (SIGNATURE)				RELINQUISHED BY (SIGNATURE)			DATE - TIME		RECEIVED BY (SIGNATURE)				
RELINQUISHED BY (SIGNATURE)			DATE / TIME		RECEIVED FOR LABORATORY BY (SIGNATURE)				DATE / TIME		REMARKS							
									6/27/96 10 <sup>15</sup>		Cooler = 5c							

Distribution: Original accompanies shipment copy to coordinator field files

000018

2063

000001

JUNE 1996  
QUARRY AND CANAL  
SAMPLING

SAMPLE DATA SUMMARY PACKAGE

SDG NARRATIVE

Laboratory Name: Recra Environmental, Inc.

Laboratory Code: RECNY

Contract Number: NY95-155

SDG Number: QO1

Sample Identifications:      QO-1  
                                      QP-2  
                                      QP-3  
                                      QP-4  
                                      QP-5  
                                      QS-4  
                                      SW-1  
                                      SW-2  
                                      SW-2 FD  
                                      SW-3  
                                      SW-4  
                                      SW-5  
                                      SW-6  
                                      SW-6 MATRIX SPIKE  
                                      SW-6 MATRIX SPIKE DUPLICATE  
                                      SW-7  
                                      SW-8

METHODOLOGY

Analyses were performed in accordance with 1991 New York State Analytical Services protocol.

COMMENTS

Comments pertain to data on one or all pages of this report.

The enclosed data has been reported utilizing data qualifiers (Q) as defined on the Organic Data Comment Page.

SEMIVOLATILE DATA

Semivolatile sample and standard areas are listed on the corresponding data system printouts.

Semivolatile data was processed utilizing Finnigan Autoquantitation and Recra Environmental's Analytical Information Management Systems (AIMS). All compounds determined to be present by the computer-generated autoquantitation were subjected to a manual ion search for secondary and tertiary ions. Unedited quantitation reports have been submitted with this analytical data package.

Sample QP-2 required a dilution of two (2) due to the high concentrations of 2-Chloropyridine and 2,6-Dichloropyridine. A further dilution of ten (10) was required.

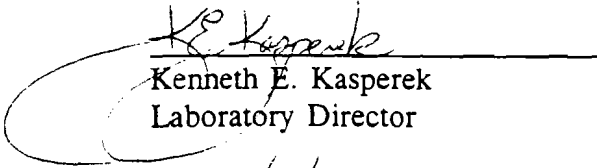
Sample QS-4 was analyzed at an initial dilution of five (5) due to the high concentrations of 2-Chloropyridine and 2,6-Dichloropyridine. Further dilutions of 50 and 200 were required. As a result of the required dilution, all surrogates were diluted out of samples QS-4 DL and QS-4 DL2.

Sample SW-6MSRE exhibited the recovery of surrogates Phenol-D5 and 2,4,6-Tribromophenol as outside QC limits. As per protocol, re-extraction was not required.

Matrix Spike Blank exhibits the spike recovery of p-Fluoroaniline as below QC limits. Samples SW-6MS and SW-6MSD both exhibit the spike recovery of p-Fluoroaniline as below QC limits and the relative percent difference of 3-Chloropyridine and p-Fluoroaniline as above QC limits. As a result, the associated sample and QC was re-extracted. These samples were re-extracted outside of hold time. Samples SW-6MSRE and SW-6MSDRE exhibit the relative percent difference of 3-Chloropyridine and p-Fluoroaniline as above QC limits.

Matrix Spike Blank1 and Matrix Spike Blank Duplicate1 exhibit the relative percent difference of 2-Chloropyridine, 3-Chloropyridine and p-Fluoroaniline as above QC limits.

"I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or his designee, as verified by the following signature."

  
Kenneth E. Kasperek  
Laboratory Director

7/11/96  
Date



Laboratory Name RECRA ENVIRONMENTAL, INC.

USEPA Defined Organic Data Qualifiers:

- U - Indicates compound was analyzed for but not detected.
- J - Indicates an estimate value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the mass spectral data indicate the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero.
- C - This flag applies to pesticide results where the identification has been confirmed by GC/MS.
- B - This flag is used when the analyte is found in the associated blank as well as in the sample.
- E - This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis.
- D - This flag identifies all compounds identified in an analysis at a secondary dilution factor.
- G - The TCLP Matrix Spike recovery was greater than the upper limit of the analytical method.
- L - The TCLP Matrix Spike recovery was lower than the lower limit of the analytical method.
- T - This flag is used when the analyte is found in the associated TCLP extraction blank as well as in the sample.
- N - Indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds, where the identification is based on a mass spectral library search. It is applied to all TIC results.
- P - This flag is used for a pesticide/Aroclor target analyte when there is greater than 25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on Form I and flagged with a "P".
- A - This flag indicates that a TIC is a suspected aldol-condensation product.

ABB ENVIRONMENTAL SERVICES INC  
 ABB ENV SERVICES - OLIN ROCHESTER PHASE II RI/FS **000008**  
 ASP91-2 - SEMIVOLATILES  
 ANALYSIS DATA SHEET

Client No.

BAILER RINSE BLANK

Name: Recra LabNet Contract: \_\_\_\_\_

Code: RECN Case No.: 5762 SAS No.: \_\_\_\_\_ SDG No.: 001

Matrix: (soil/water) WATER Lab Sample ID: A6294615

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: X26216.MSQ

Depth: (low/med) LOW Date Samp/Recv: 06/20/96 06/20/96

Disturbance: \_\_\_\_\_ decanted: (Y/N) N Date Extracted: 06/22/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/28/96

Injection Volume: 2.00 (uL) Dilution Factor: 1.00

Cleanup: (Y/N) N pH: 7.0

CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/L Q

S NO.	COMPOUND	UG/L	Q
0-86-1-----	Pyridine	10	U
9-09-1-----	2-Chloropyridine	10	U
6-60-8-----	3-Chloropyridine	10	U
L-PY-R-----	4-Chloropyridine	10	U
02-78-0-----	2,6-Dichloropyridine	10	U
1-40-4-----	p-Fluoroaniline	10	U

ABB ENVIRONMENTAL SERVICES INC  
 ABB ENV SERVICES - OLIN ROCHESTER PHASE II RI/FS  
 ASP91-2 - SEMIVOLATILES  
 ANALYSIS DATA SHEET

000009

Client No.

QO-1

Name: Recra LabNet

Contract: \_\_\_\_\_

Code: RECN

Case No.: 5762

SAS No.: \_\_\_\_\_

SDG No.: QO1

Matrix: (soil/water) WATER

Lab Sample ID: A6294614

Sample wt/vol: 1000.0 (g/mL) ML

Lab File ID: X26215.MSQ

Level: (low/med) LOW

Date Samp/Recv: 06/20/96 06/20/96

Disturbance: \_\_\_\_\_ decanted: (Y/N) N

Date Extracted: 06/22/96

Extracted Extract Volume: 1000 (uL)

Date Analyzed: 06/28/96

Injection Volume: 2.00 (uL)

Dilution Factor: 1.00

Cleanup: (Y/N) N pH: 7.0

CONCENTRATION UNITS:

NO.	COMPOUND	(ug/L or ug/Kg)	UG/L	Q
01-86-1-----	Pyridine		10	U
01-09-1-----	2-Chloropyridine		63	
01-60-8-----	3-Chloropyridine		4	J
01-PY-R-----	4-Chloropyridine		10	U
01-02-78-0-----	2,6-Dichloropyridine		18	
01-01-40-4-----	p-Fluoroaniline		10	U

ABB ENVIRONMENTAL SERVICES INC  
 ABB ENV SERVICES - OLIN ROCHESTER PHASE II RI/FS  
 ASP91-2 - SEMIVOLATILES  
 ANALYSIS DATA SHEET

000010

Client No.

QP-2

Name: Recra LabNet Contract: \_\_\_\_\_

Code: RECNY Case No.: 5762 SAS No.: \_\_\_\_\_ SDG No.: Q01

rix: (soil/water) WATER Lab Sample ID: A6294602  
 ple wt/vol: 1000.0 (g/mL) ML Lab File ID: X26189.MSQ  
 el: (low/med) LOW Date Samp/Recv: 06/20/96 06/20/96  
 oisture: \_\_\_\_\_ decanted: (Y/N) N Date Extracted: 06/21/96  
 ncentrated Extract Volume: 1000 (uL) Date Analyzed: 06/26/96  
 ection Volume: 2.00 (uL) Dilution Factor: 1.00  
 Cleanup: (Y/N) N pH: 7.0

S NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	UG/L Q
0-86-1-----	Pyridine	10	U
9-09-1-----	2-Chloropyridine	340	E
6-60-8-----	3-Chloropyridine	34	
L-PY-R-----	4-Chloropyridine	10	U
02-78-0-----	2,6-Dichloropyridine	89	E
1-40-4-----	p-Fluoroaniline	10	U

ABB ENVIRONMENTAL SERVICES INC  
 ABB ENV SERVICES - OLIN ROCHESTER PHASE II RI/FS  
 ASP91-2 - SEMIVOLATILES  
 ANALYSIS DATA SHEET

000011

Client No.

QP-2 DL

Name: Recra LabNet Contract: \_\_\_\_\_  
 Code: RECN Case No.: 5762 SAS No.: \_\_\_\_\_ SDG No.: Q01  
 Matrix: (soil/water) WATER Lab Sample ID: A6294602DL  
 Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: X26225.MSQ  
 Level: (low/med) LOW Date Samp/Recv: 06/20/96 06/20/96  
 Moisture: \_\_\_\_\_ decanted: (Y/N) N Date Extracted: 06/21/96  
 Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/28/96  
 Injection Volume: 2.00 (uL) Dilution Factor: 2.00  
 PC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	UG/L Q
110-86-1-----	Pyridine		20 U
109-09-1-----	2-Chloropyridine		250 DE
526-60-8-----	3-Chloropyridine		19 DJ
14CL-PY-R-----	4-Chloropyridine		20 U
2402-78-0-----	2,6-Dichloropyridine		86 D
371-40-4-----	p-Fluoroaniline		20 U

ABB ENVIRONMENTAL SERVICES INC  
 ABB ENV SERVICES - OLIN ROCHESTER PHASE II RI/FS  
 ASP91-2 - SEMIVOLATILES  
 ANALYSIS DATA SHEET

000012

Client No.

QP-2 DL2

Lab Name: Recra LabNet

Contract: \_\_\_\_\_

Lab Code: RECN

Case No.: 5762

SAS No.: \_\_\_\_\_

SDG No.: Q01

Matrix: (soil/water) WATER

Lab Sample ID: A6294602D2

Sample wt/vol: 1000.0 (g/mL) ML

Lab File ID: X26226.MSQ

Level: (low/med) LOW

Date Samp/Recv: 06/20/96 06/20/96

% Moisture: \_\_\_\_\_ decanted: (Y/N) N

Date Extracted: 06/21/96

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 06/28/96

Injection Volume: 2.00 (uL)

Dilution Factor: 10.00

GPC Cleanup: (Y/N) N pH: 7.0

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

110-86-1-----	Pyridine	100	U
109-09-1-----	2-Chloropyridine	290	D
626-60-8-----	3-Chloropyridine	17	DJ
4CL-PY-R-----	4-Chloropyridine	100	U
2402-78-0-----	2,6-Dichloropyridine	110	D
371-40-4-----	p-Fluoroaniline	100	U

ABB ENVIRONMENTAL SERVICES INC  
 ABB ENV SERVICES - OLIN ROCHESTER PHASE II RI/FS  
 ASP91-2 - SEMIVOLATILES  
 ANALYSIS DATA SHEET

000013

Client No.

QP-3

Lab Name: Recra LabNet Contract: \_\_\_\_\_

Lab Code: RECNY Case No.: 5762 SAS No.: \_\_\_\_\_ SDG No.: 001

Matrix: (soil/water) WATER Lab Sample ID: A6294603

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: X26190.MSQ

Level: (low/med) LOW Date Samp/Recv: 06/20/96 06/20/96

Moisture: \_\_\_\_\_ decanted: (Y/N) N Date Extracted: 06/21/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/26/96

Injection Volume: 2.00 (uL) Dilution Factor: 1.00

PC Cleanup: (Y/N) N pH: 7.0

CONCENTRATION UNITS:  
 (ug/L or ug/Kg) UG/L Q

CAS NO.	COMPOUND	UG/L	Q
110-86-1-1	Pyridine	10	U
109-09-1-2	2-Chloropyridine	41	
626-60-8-3	3-Chloropyridine	2	J
4CL-PY-R-4	4-Chloropyridine	10	U
2402-78-0-2,6	2,6-Dichloropyridine	9	J
371-40-4-p	p-Fluoroaniline	10	U

ABB ENVIRONMENTAL SERVICES INC  
 ABB ENV SERVICES - OLIN ROCHESTER PHASE II RI/FS  
 ASP91-2 - SEMIVOLATILES  
 ANALYSIS DATA SHEET

000014

Client No.

QP-4

Lab Name: Recra LabNet

Contract: \_\_\_\_\_

Lab Code: RECNV

Case No.: 5762

SAS No.: \_\_\_\_\_

SDG No.: Q01

Matrix: (soil/water) WATER

Lab Sample ID: A6294604

Sample wt/vol: 1000.0 (g/mL) ML

Lab File ID: X26191.MSQ

Level: (low/med) LOW

Date Samp/Recv: 06/20/96 06/20/96

Moisture: \_\_\_\_\_ decanted: (Y/N) N

Date Extracted: 06/21/96

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 06/26/96

Injection Volume: 2.00 (uL)

Dilution Factor: 1.00

SPC Cleanup: (Y/N) N pH: 7.0

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

Q

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	<u>UG/L</u>	<u>Q</u>
110-86-1-1-1-1-1-1	Pyridine		10	U
109-09-1-1-1-1-1-1	2-Chloropyridine		44	
626-60-8-1-1-1-1-1-1	3-Chloropyridine		6	J
4CL-PY-R-1-1-1-1-1-1	4-Chloropyridine		10	U
2402-78-0-1-1-1-1-1-1	2,6-Dichloropyridine		13	
371-40-4-1-1-1-1-1-1	p-Fluoroaniline		10	U



ABB ENVIRONMENTAL SERVICES INC  
 ABB ENV SERVICES - OLIN ROCHESTER PHASE II RI/FS  
 ASP91-2 - SEMIVOLATILES  
 ANALYSIS DATA SHEET

000015

Client No.

QP-5

Lab Name: Recra LabNet

Contract: \_\_\_\_\_

Lab Code: RECNY

Case No.: 5762

SAS No.: \_\_\_\_\_

SDG No.: Q01

Matrix: (soil/water) WATER

Lab Sample ID: A6294605

Sample wt/vol: 1000.0 (g/mL) ML

Lab File ID: X26176.MSQ

Level: (low/med) LOW

Date Samp/Recv: 06/20/96 06/20/96

Moisture: \_\_\_\_\_ decanted: (Y/N) N

Date Extracted: 06/21/96

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 06/26/96

Injection Volume: 2.00 (uL)

Dilution Factor: 1.00

PC Cleanup: (Y/N) N pH: 7.0

CONCENTRATION UNITS:  
 (ug/L or ug/Kg)

CAS NO.	COMPOUND	UG/L	Q
110-86-1-----	Pyridine	10	U
109-09-1-----	2-Chloropyridine	72	
626-60-8-----	3-Chloropyridine	4	J
4CL-PY-R-----	4-Chloropyridine	10	U
2402-78-0-----	2,6-Dichloropyridine	14	
371-40-4-----	p-Fluoroaniline	10	U

ABB ENVIRONMENTAL SERVICES INC  
 ABB ENV SERVICES - OLIN ROCHESTER PHASE II RI/FS  
 ASP91-2 - SEMIVOLATILES  
 ANALYSIS DATA SHEET

000016

Client No.

QS-4

Lab Name: Recra LabNet

Contract: \_\_\_\_\_

Lab Code: RECNY

Case No.: 5762

SAS No.: \_\_\_\_\_

SDG No.: Q01

Matrix: (soil/water) WATER

Lab Sample ID: A6294601

Sample wt/vol: 1000.0 (g/mL) ML

Lab File ID: X26223.MSQ

Level: (low/med) LOW

Date Samp/Recv: 06/20/96 06/20/96

Moisture: \_\_\_\_\_ decanted: (Y/N) N

Date Extracted: 06/21/96

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 06/28/96

Injection Volume: 2.00 (uL)

Dilution Factor: 5.00

SPEC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/L	
110-86-1-----	Pyridine		50	U
109-09-1-----	2-Chloropyridine		1800	E
626-60-8-----	3-Chloropyridine		120	
4CL-PY-R-----	4-Chloropyridine		50	U
2402-78-0-----	2,6-Dichloropyridine		520	E
371-40-4-----	p-Fluoroaniline		3	J

ABB ENVIRONMENTAL SERVICES INC  
 ABB ENV SERVICES - OLIN ROCHESTER PHASE II RI/FS  
 ASP91-2 - SEMIVOLATILES  
 ANALYSIS DATA SHEET

000017

Client No.

QS-4 DL

Lab Name: Recra\_LabNet Contract: \_\_\_\_\_  
 Lab Code: RECNY Case No.: 5762 SAS No.: \_\_\_\_\_ SDG No.: Q01  
 Matrix: (soil/water) WATER Lab Sample ID: A6294601DL  
 Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: X26224.MSQ  
 Level: (low/med) LOW Date Samp/Recv: 06/20/96 06/20/96  
 % Moisture: \_\_\_\_\_ decanted: (Y/N) N Date Extracted: 06/21/96  
 Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/28/96  
 Injection Volume: 2.00 (uL) Dilution Factor: 50.00  
 GPC Cleanup: (Y/N) N pH: 7.0

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/L	Q
110-86-1-----	Pyridine		500	U
109-09-1-----	2-Chloropyridine		4700	DE
626-60-8-----	3-Chloropyridine		160	DJ
4CL-PY-R-----	4-Chloropyridine		500	U
2402-78-0-----	2,6-Dichloropyridine		1000	D
371-40-4-----	p-Fluoroaniline		500	U

ABB ENVIRONMENTAL SERVICES INC  
 ABB ENV SERVICES - OLIN ROCHESTER PHASE II RI/FS  
 ASP91-2 - SEMIVOLATILES  
 ANALYSIS DATA SHEET

000018

Client No.

QS-4 DL2

Lab Name: Recra LabNet

Contract: \_\_\_\_\_

Lab Code: RECN

Case No.: 5762

SAS No.: \_\_\_\_\_

SDG No.: Q01

Matrix: (soil/water) WATER

Lab Sample ID: A6294601D2

Sample wt/vol: 1000.0 (g/mL) ML

Lab File ID: X26227.MSQ

Level: (low/med) LOW

Date Samp/Recv: 06/20/96 06/20/96

Moisture: \_\_\_\_\_ decanted: (Y/N) N

Date Extracted: 06/21/96

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 06/28/96

Injection Volume: 2.00 (uL)

Dilution Factor: 200.00

PC Cleanup: (Y/N) N pH: 7.0

CONCENTRATION UNITS:

(ug/L or ug/Kg)

UG/L

Q

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	<u>UG/L</u>	<u>Q</u>
110-86-1-----	Pyridine		2000	U
109-09-1-----	2-Chloropyridine		3800	D
626-60-8-----	3-Chloropyridine		68	DJ
4CL-PY-R-----	4-Chloropyridine		2000	U
2402-78-0-----	2,6-Dichloropyridine		490	DJ
371-40-4-----	p-Fluoroaniline		2000	U

ABB ENVIRONMENTAL SERVICES INC  
 ABB ENV SERVICES - OLIN ROCHESTER PHASE II RI/FS  
 ASP91-2 - SEMIVOLATILES  
 ANALYSIS DATA SHEET

000019

Client No.

SW-1

Lab Name: Recra LabNet Contract: \_\_\_\_\_  
 Lab Code: RECN Case No.: 5762 SAS No.: \_\_\_\_\_ SDG No.: 001  
 Matrix: (soil/water) WATER Lab Sample ID: A6294606  
 Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: X26219.MSQ  
 Level: (low/med) LOW Date Samp/Recv: 06/20/96 06/20/96  
 Moisture: \_\_\_\_\_ decanted: (Y/N) N Date Extracted: 06/21/96  
 Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/28/96  
 Injection Volume: 2.00 (uL) Dilution Factor: 1.00  
 HPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	UG/L Q
110-86-1-----	Pyridine	10	U
109-09-1-----	2-Chloropyridine	3	J
626-60-8-----	3-Chloropyridine	10	U
4CL-PY-R-----	4-Chloropyridine	10	U
2402-78-0-----	2,6-Dichloropyridine	0.3	J
371-40-4-----	p-Fluoroaniline	10	U

ABB ENVIRONMENTAL SERVICES INC  
 ABB ENV SERVICES - OLIN ROCHESTER PHASE II RI/FS  
 ASP91-2 - SEMIVOLATILES  
 ANALYSIS DATA SHEET

000020

Client No.

SW-2

Lab Name: Recra LabNet

Contract: \_\_\_\_\_

Lab Code: RECNY Case No.: 5762 SAS No.: \_\_\_\_\_ SDG No.: Q01

Matrix: (soil/water) WATER Lab Sample ID: A6294607

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: X26178.MSQ

Level: (low/med) LOW Date Samp/Recv: 06/20/96 06/20/96

Moisture: \_\_\_\_\_ decanted: (Y/N) N Date Extracted: 06/21/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/26/96

Injection Volume: 2.00 (uL) Dilution Factor: 1.00

PC Cleanup: (Y/N) N pH: 7.0

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

110-86-1-----	Pyridine	10	U
109-09-1-----	2-Chloropyridine	10	U
626-60-8-----	3-Chloropyridine	10	U
4CL-PY-R-----	4-Chloropyridine	10	U
2402-78-0-----	2,6-Dichloropyridine	10	U
371-40-4-----	p-Fluoroaniline	10	U

ABB ENVIRONMENTAL SERVICES INC  
 ABB ENV SERVICES - OLIN ROCHESTER PHASE II RI/FS  
 ASP91-2 - SEMIVOLATILES  
 ANALYSIS DATA SHEET

000021

Client No.

SW-2 FD

Lab Name: Recra LabNet

Contract: \_\_\_\_\_

Lab Code: RECN Case No.: 5762 SAS No.: \_\_\_\_\_ SDG No.: Q01

Matrix: (soil/water) WATER Lab Sample ID: A6294607FD

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: X26220.MSQ

Level: (low/med) LOW Date Samp/Recv: 06/20/96 06/20/96

Moisture: \_\_\_\_\_ decanted: (Y/N) N Date Extracted: 06/21/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/28/96

Injection Volume: 2.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 7.0

CONCENTRATION UNITS:  
 (ug/L or ug/Kg) UG/L Q

CAS NO.	COMPOUND	UG/L	Q
110-86-1-----	Pyridine	10	U
109-09-1-----	2-Chloropyridine	10	U
626-60-8-----	3-Chloropyridine	10	U
4CL-PY-R-----	4-Chloropyridine	10	U
2402-78-0-----	2,6-Dichloropyridine	10	U
371-40-4-----	p-Fluoroaniline	10	U

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Client No.

SW-3

Lab Name: Recra LabNet Contract: \_\_\_\_\_  
 Lab Code: RECN Case No.: 5762 SAS No.: \_\_\_\_\_ SDG No.: Q01  
 Matrix: (soil/water) WATER Lab Sample ID: A6294608  
 Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: X26221.MSQ  
 Level: (low/med) LOW Date Samp/Recv: 06/20/96 06/20/96  
 % Moisture: \_\_\_\_\_ decanted: (Y/N) N Date Extracted: 06/21/96  
 Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/28/96  
 Injection Volume: 2.00 (uL) Dilution Factor: 1.00  
 GPC Cleanup: (Y/N) N pH: 7.0

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/L	Q
110-86-1-----	Pyridine		10	U
109-09-1-----	2-Chloropyridine		10	U
626-60-8-----	3-Chloropyridine		10	U
4CL-PY-R-----	4-Chloropyridine		10	U
2402-78-0-----	2,6-Dichloropyridine		10	U
371-40-4-----	p-Fluoroaniline		10	U



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Client No.

SW-4

Lab Name: Recra LabNet Contract: \_\_\_\_\_  
 Lab Code: RECN Case No.: 5762 SAS No.: \_\_\_\_\_ SDG No.: 001  
 Matrix: (soil/water) WATER Lab Sample ID: A6294609  
 Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: X26222.MSO  
 Level: (low/med) LOW Date Samp/Recv: 06/20/96 06/20/96  
 % Moisture: \_\_\_\_\_ decanted: (Y/N) N Date Extracted: 06/21/96  
 Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/28/96  
 Injection Volume: 2.00 (uL) Dilution Factor: 1.00  
 GPC Cleanup: (Y/N) N pH: 7.0

CONCENTRATION UNITS:  
 (ug/L or ug/Kg) UG/L Q

CAS NO.	COMPOUND	UG/L	Q
110-86-1-----	Pyridine	10	U
109-09-1-----	2-Chloropyridine	1	J
626-60-8-----	3-Chloropyridine	10	U
4CL-PY-R-----	4-Chloropyridine	10	U
2402-78-0-----	2,6-Dichloropyridine	10	U
371-40-4-----	p-Fluoroaniline	10	U

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Client No.

SW-5

Name: Recra LabNet

Contract: \_\_\_\_\_

Code: RECNY Case No.: 5762 SAS No.: \_\_\_\_\_ SDG No.: 001

ix: (soil/water) WATER Lab Sample ID: A6294610

le wt/vol: 1000.0 (g/mL) ML Lab File ID: X26182.MSQ

l: (low/med) LOW Date Samp/Recv: 06/20/96 06/20/96

isture: \_\_\_\_\_ decanted: (Y/N) N Date Extracted: 06/21/96

entrated Extract Volume: 1000 (uL) Date Analyzed: 06/26/96

ction Volume: 2.00 (uL) Dilution Factor: 1.00

Cleanup: (Y/N) N pH: 7.0

CONCENTRATION UNITS:  
 (ug/L or ug/Kg) UG/L Q

NO.	COMPOUND	UG/L	Q
86-1-----	Pyridine	10	U
09-1-----	2-Chloropyridine	0.9	J
60-8-----	3-Chloropyridine	10	U
PY-R-----	4-Chloropyridine	10	U
78-0-----	2,6-Dichloropyridine	10	U
40-4-----	p-Fluoroaniline	10	U

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Client No.

SW-6

Name: Recra LabNet

Contract: \_\_\_\_\_

Code: RECN

Case No.: 5762

SAS No.: \_\_\_\_\_

SDG No.: 001

Matrix: (soil/water) WATER

Lab Sample ID: A6294611

Concentration: 1000.0 (g/mL) ML

Lab File ID: X26183.MSO

Level: (low/med) LOW

Date Samp/Recv: 06/20/96 06/20/96

Preparation: \_\_\_\_\_ decanted: (Y/N) N

Date Extracted: 06/21/96

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 06/26/96

Injection Volume: 2.00 (uL)

Dilution Factor: 1.00

Cleanup: (Y/N) N pH: 7.0

CONCENTRATION UNITS:  
 (ug/L or ug/Kg)

NO.	COMPOUND	UG/L	Q
86-1-----	Pyridine	10	U
09-1-----	2-Chloropyridine	1	J
60-8-----	3-Chloropyridine	10	U
PY-R-----	4-Chloropyridine	10	U
-78-0-----	2,6-Dichloropyridine	10	U
40-4-----	p-Fluoroaniline	10	U

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Client No.

SW-6RE

Name: Recra LabNet

Contract: \_\_\_\_\_

Code: RECNY

Case No.: 5762

SAS No.: \_\_\_\_\_

SDG No.: 001

Matrix: (soil/water) WATER

Lab Sample ID: A6294611RE

Concentration: 600.00 (g/mL) ML

Lab File ID: X26260.MSO

Level: (low/med) LOW

Date Samp/Recv: 06/20/96 06/20/96

Preparation: \_\_\_\_\_ decanted: (Y/N) N

Date Extracted: 07/02/96

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 07/08/96

Injection Volume: 2.00 (uL)

Dilution Factor: 1.00

Cleanup: (Y/N) N pH: 7.0

CONCENTRATION UNITS:

NO. COMPOUND (ug/L or ug/Kg) UG/L Q

86-1-----	Pyridine	17	U
09-1-----	2-Chloropyridine	1	J
60-8-----	3-Chloropyridine	17	U
PY-R-----	4-Chloropyridine	17	U
-78-0-----	2,6-Dichloropyridine	17	U
40-4-----	p-Fluoroaniline	17	U

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Client No.

SW-7

Name: Recra LabNet

Contract: \_\_\_\_\_

Code: RECN

Case No.: 5762

SAS No.: \_\_\_\_\_

SDG No.: Q01

Matrix: (soil/water) WATER

Lab Sample ID: A6294612

Concentration: 1000.0 (g/mL) ML

Lab File ID: X26186.MSQ

Level: (low/med) LOW

Date Samp/Recv: 06/20/96 06/20/96

Preparation: \_\_\_\_\_ decanted: (Y/N) N

Date Extracted: 06/21/96

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 06/26/96

Injection Volume: 2.00 (uL)

Dilution Factor: 1.00

Cleanup: (Y/N) N pH: 7.0

CONCENTRATION UNITS:  
 (ug/L or ug/Kg)

NO.	COMPOUND	UG/L	Q
86-1-----	Pyridine	10	U
09-1-----	2-Chloropyridine	10	U
60-8-----	3-Chloropyridine	10	U
PY-R-----	4-Chloropyridine	10	U
-78-0-----	2,6-Dichloropyridine	10	U
10-4-----	p-Fluoroaniline	10	U

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Client No.

SW-8

Name: Recra LabNet Contract: \_\_\_\_\_

Code: RECN Case No.: 5762 SAS No.: \_\_\_\_\_ SDG No.: Q01

Matrix: (soil/water) WATER Lab Sample ID: A6294613

Concentration: 1000.0 (g/mL) ML Lab File ID: X26187.MSO

Quality: (low/med) LOW Date Samp/Recv: 06/20/96 06/20/96

Preparation: \_\_\_\_\_ decanted: (Y/N) N Date Extracted: 06/21/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/26/96

Dilution Volume: 2.00 (uL) Dilution Factor: 1.00

Cleanup: (Y/N) N pH: 7.0

CONCENTRATION UNITS:  
 (ug/L or ug/Kg) UG/L Q

NO.	COMPOUND	UG/L	Q
86-1-----	Pyridine	10	U
09-1-----	2-Chloropyridine	10	U
60-8-----	3-Chloropyridine	10	U
PY-R-----	4-Chloropyridine	10	U
-78-0-----	2,6-Dichloropyridine	10	U
40-4-----	p-Fluoroaniline	10	U