

FAX (716) 428-6010 TDD/Voice 232-3260 Department of Environmental Services Office of the Commissioner City Hall, Room 300-B 30 Church Street Rochester, New York 14614-1290

July 8, 1994

Mary Jane Peachey, P.E. Division of Hazardous Waste Remediation New York State Department of Environmental Conservation 6274 E. Avon-Lima Road Avon, New York 14414

Re: Court Street Parking Garage Progress Report Number 1

Dear Mr. Cafe:

As required by Section III of the consent order between the City of Rochester and the New York State Department of Environmental Conservation, we are providing a report documenting the progress of the Court Street Parking Garage Site IRM. Hereafter, progress reports will be forwarded on a monthly basis through the end of the project.

I can be reached at 428-5978 if you have any questions. Thank you for you cooperation on this project.

Sincerely, Mark D. Gregor

Mark D. Gregor Environmental Specialist Division of Environmental Quality



Attach.

xc. R.Elliott,MC-DOH D.Napier,NYS-DOH James Hazel,NYS-DEC E.Doherty J.Brennan N.Burton S.Feuerstein D.Zariczny A.Klumpp T.Seeler



City of Rochester, New York Court Street Parking Garage Project Interim Remedial Measure July 8, 1994

Progress Report No. 1 Work Completed Through June 30, 1994

Prepared by the City of Rochester, New York Department of Environmental Services Division of Environmental Quality

Progress During the Reporting Period

In accordance with the approved work plan, Phase I soil removal activities (east of the Speedy's building) began in March 1994. LeChase Construction began excavation on March 21, after analytical results from in-situ soil samples were received. These samples were collected to profile the soil/waste streams and results were forwarded to Todd Caffoe, (Region 8/NYS-DEC) at that time. MARCOR representatives monitored the site for health and safety plan compliance and performed screening of the soils according to the work plan.

Excavation was completed to the target depth of the dense glacial till, 516 fmsl, and PVC vent pipe was installed as required in areas of contaminated soil that could not be excavated due to risk of structural damage to adjacent footers. Confirmational soil samples were collected and analyzed prior to backfilling and compacting for the road bed. Copies of these sample results were sent to Todd Caffoe. A total of 1588 tons of nonhazardous special waste soil and 277 tons of hazardous waste (F002) soil were sent for off-site disposal. Phase I is completed.

Phase II remedial activities began once the Speedy Cleaners building demolition was completed. Both the excavation contractor and the health and safety/environmental monitor changed to Bianchi Trison Corporation and Upstate Environmental respectively. After samples were collected to identify locations where perchloroethylene (PCE) was present, Bianchi Trison began Phase II excavation activities on May 4, 1994 and continued until May 13. During this time two underground storage tanks, one containing fuel oil and the other stoddard solvent, were also removed from the northwest section of the former building footprint. Bianchi Trison and Upstate were replaced on May 16 with LeChase and Marcor.

LeChase completed the excavation to 516 fmsl or uncontaminated soil conditions within the foundations of the former Speedy Cleaners building on May 24, 1994. Verification sampling as required by the work plan was performed on the eastern half of the footprint of the former Speedy's building. An additional separate section of vent pipe was installed in the north east section of the Phase II area and a connection made to the earlier Phase I vent pipe installation. A total of 2802 tons of soil characterized as special waste has been removed to date from the Phase II area as well as 1174 tons of soil identified as hazardous (F002) wastes.

Percent Completion: The overall IRM project is approximately 80% complete

Modifications to the Work Plan

Several changes in contractors occurred during the work to date reflecting the different contracts awarded by the City. The changes are described in the progress section above.

It became necessary to split the Phase II excavation work into separate stages because of the concern over the structural stability of Stone Street and the prohibitive added costs for temporary shoring. This change was conveyed in writing to Todd Caffoe in an April 18 letter (Attachment 1) from Mark Gregor.

Because PCE was encountered outside the footprint of the Speedy building prior to Phase I excavations, it became necessary to gather more waste profile samples for Method 8010 analyses than was originally required in the work plan. The additional sampling and analytical requirements were described in an April 28 letter (Attachment 2) from Mark Gregor to Todd Caffoe.

Problems Encountered

During excavation of the north central area of the former Speedy's site a gravel/ashfilled, stone-lined sump pit was encountered about 11 feet below grade. The pit had to be gradually excavated and drained because it contained a dark brown liquid with a strong solvent odor that upon analysis was determined to contain stoddard solvent and PCE. Approximately 750 gallons of the waste solvent were collected and drummed for disposal. Soil excavation was delayed briefly during this work.

Outside the project limits, but within the Court Street Garage footprint west of Stone Street, 4060 tons of gasoline contaminated soil was also removed. Excavation and disposal of this soil did not affect completion of the IRM activities.

Deliverables

Analytical data from soil samples were either provided via fax or reviewed directly with DEC staff. A complete set of all soil sample results is attached with this progress report (Attachment 3).

The final draft of the Site Investigation Report and Interim Remedial Measure Work Plan prepared by Seeler Associates was hand delivered to the Region 8 Office of the NYS-DEC on March 16, 1994 in conjunction with the execution of the order on consent for this project.

No other deliverables were required by the consent order during the reporting time period.

Actions for the Coming Month

The contractor awarded the garage construction project, Christa Construction, will be responsible for the remaining excavation of potentially contaminated soils that are in the footprint of the garage and tunnel. This will include the western half of the Phase II area below 516 fmsl and the tunnel area in what was previously Climax Alley. According to MEC Corporation, the excavation subcontractor to Christa, these Phase II excavation activities should resume the week of July 25, 1994. Soil removal beneath and west of Stone Street is currently underway.



DEQ930



FAX (716) 428-6010 TDD/Voice 232-3260 Department of Environmental Services Office of the Commissioner City Hall, Room 300-B 30 Church Street Rochester, New York 14614-1290

April 18, 1994

Todd Caffoe Environmental Engineer New York State Department of Environmental Conservation 6274 E. Avon-Lima Road Avon, New York 14414

Re: Court Street Parking Garage IRM schedule

Dear Mr. Caffoe:

As we discussed last week, the Phase II excavation activities described in the IRM work plan are being split between the demolition and excavation contractor and the contractor awarded the garage construction contract. Bianchi Trison, the demolition and excavation contractor, will excavate the foot print of the Speedys building to an elevation of 516 feet begining the week of April 24. The 516 foot elevation corresponds to the dense till layer identified in Figure 5 of the work plan and was the final depth of the Phase I excavation between Speedys and the Wintergarden. In order to avoid costly shoring, the deeper excavation to rock beneath the western third of Speedys will be performed by the garage contractor beginning in late May or early June.

The IRM scope of work for the project has not changed, only the timing of the excavation and completion of the soil gas vent system. This change will not affect our ability to comply with the terms of the consent order.

Let me know if you have any questions about this change.

Sincerely Mark D. Grege

Environmental Specialist

xc. R.Elliott D.Napier E.Dohery J.Brennan N.Burton S.Feurerstein D.Zariczny A.Klumpp T.Seeler





FAX (716) 428-6010 TDD/Voice 232-3260 Department of Environmental Services Office of the Commissioner City Hall, Room 300-B 30 Church Street Rochester, New York 14614-1290

April 28, 1994

Todd Caffoe Environmental Engineer New York State Department of Environmental Conservation 6274 E. Avon-Lima Road Avon, New York 11414

Re: Court Street Parking Garage IRM Work Plan modification

Dear Mr. Caffoe:

During the Phase 1 excavation activities along the east side of Speedys, we identified a limited area of perchloroethylene (PCE). Previously PCE had been detected only in one location beneath the first floor slab in the northern part of the building. As a result of finding PCE in an additional location, we believe that in order for us to adequately characterize the soil waste stream we need to perform additional sampling prior to excavation.

Our proposed revision is to add two additional sampling efforts. Once the first floor slab and the area already defined as PCE contaminated is removed, we propose to add a test pit sampling program on a 25 x 25 foot grid pattern over the entire exposed area. Samples will be collected in the same manner as identified in the verification sampling section of the work plan and analyzed for method 8010 compounds. Based on the results, we will proceed to excavate contaminated soil areas as special waste or F002 waste, if PCE is present. Excavation will continue until we reach the basement elevation. The basement floor slab will then be removed and the grid sampling procedure repeated. Based on the analytical results, excavation will continue to the dense till (515 ft. elevation). Verification sample procedures will be performed as in the work plan.

The excavation contractor expects to remove the first floor slab on Monday May 2. If you have any questions or concerns about the additional sampling efforts please let me know. If I am not in my office I have a cellular phone (746-5244). Thank you for your cooperation.

Sincerely.

Mark D. Gregor Environmental Specialist

xc. R.Elliott D.Napier T.Caffoe A.Klumpp J.Brennan

EEO Employer/Handicapped





FAX (716) 428-6010 TDD/Voice 232-3260 Department of Environmental Services

August 8, 1994

Mary Jane Peachey, P.E. Division of Hazardous Waste Remediation New York State Department of Environmental Conservation 6274 E. Avon-Lima Road Avon, New York 14414

Re: Court Street Parking Garage Progress Report Number 2

Dear Ms. Peachey:

As required by Section III of the consent order between the City of Rochester and the New York State Department of Environmental Conservation, we are providing the second progress report documenting work during the month of July 1994 on the Court Street Parking Garage Site IRM.

I can be reached at 428-5978 if you have any questions. Thank you for your cooperation on this project.

Sincerely,

Mark Shegor @

Mark D. Gregor Environmental Specialist Division of Environmental Quality

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Office of the Commissioner

Division of Environmental Quality 30 Church Street, Rm. 300B Rochester, New York 14614-1278

AUG - 9 1994

NYS DEPT. OF ENVIRONMENTAL CONSERVATION-REGION 8

(SUBSTS./REM.).

Attach.

xc. R.Elliott,MC-DOH D.Napier,NYS-DOH James Hazel,NYS-DEC E.Doherty J.Brennan N.Burton S.Feuerstein D.Zariczny A.Klumpp T.Seeler

EEO Employer/Handicapped

62

City of Rochester, New York Court Street Parking Garage Project Interim Remedial Measure August 8, 1994

Progress Report No. 2 Work Completed Through July 31, 1994

Prepared by the City of Rochester, New York Department of Environmental Services Division of Environmental Quality

Progress During the Reporting Period

As previously reported, Phase II remedial activities were performed during the month of July by the garage contractor, Christa Construction and its excavation subcontractor, MEC Corporation. Additional nonhazardous contaminated soil under the former Stone Street and Climax Alley right-of-way was excavated to the intermediate target elevation of 515-516 fmsl. In order to complete excavations at the west end of the garage and install shoring, some areas of contaminated soil were removed and temporarily staged on site. The base of the excavation completed by LeChase in June was covered with sheets of 8-mil polyethylene. The plastic served to prevent cross contamination in areas already excavated to 515-516 fmsl where staged soils were to be placed. In addition, the plastic was used as marker to define the depths of existing test pit data on soil waste characteristics. Soils below the plastic required additional test pitting and sampling to determine if perchloroethylene (PCE) was present.

During July, 9,218 tons of stoddard contaminated soil were transported to Mill Seat Landfill for disposal. An additional 880 tons of gasoline contaminated soil from the former service station location west of Stone Street were also removed from the site and disposed of at the Mill Seat Landfill.

MEC Corporation has continued to excavate to the target elevation of 515-516 fmsl in the vicinity of the former Speedy Cleaners building at the east end of the garage footprint.

On July 22 while augering to bedrock for a piling on the east end of the garage, MEC encountered contaminated water and soil. Auger cuttings were staged on plastic and a sample collected. The soil sample and a sample of the water were submitted for Method 8010 analyses. PCE was not detected in either sample. The stoddard contaminated water was pumped into 15 drums which were transported to a disposal facility. The laboratory results are provided in Attachment 1.

Test pit excavations, sampling and analysis of the soil that must still be removed to construct the garage were performed on two occasions. The first test pit was excavated and sampled on July 13 beneath the Rochester Telephone Corporation (RTC) transmission line suspension bridge located below the former Stone Street R-O-W. Stoddard contamination appeared to extended to approximately the western limits of the Stone Street R-O-W. Three additional test pits were performed on July 27 between the site entry ramp, located in the eastern third of the footprint of the Speedy's building, and the RTC bridge.

PCE was not detected in any of the soil samples collected (Attachment 2). Based on these results the City will characterize the remaining contaminated soil as special waste.

Various drums of waste generated during different phases of the project were shipped from the site in July: 3 labpack drums, 5 drums of stoddard/water/sludge, 25 drums of PCE/stoddard/water, and 15 drums of stoddard/water.

Percent Completion: The overall IRM project is approximately 85% complete based on revised estimates of the remaining volume of contaminated soil to be removed.

Modifications to the Work Plan

The change in contractors to Christa and MEC was noted in the previous section.

Additional waste profile samples for Method 8010 analyses were again collected. These samples were not required or identified in the original work plan as discussed in Progress Report Number 1.

Problems Encountered

Construction related delays slowed the contaminated soil removal process in early July. No additional problems were encountered.

Deliverables

Analytical results from soil and water samples were discussed directly with DEC staff. A complete set of all July sample results is attached with this progress report.

No other deliverables were required by the consent order during the reporting time period.

Actions for the Coming Month

Christa Construction and MEC, will be responsible for excavating approximately 6,000 tons of nonhazardous contaminated soils that remain in the footprint of the garage and tunnel. Over most of this area excavation will be to bedrock. Upon completion of the garage excavation, verification sampling of any remaining soils will be performed in accordance with the work plan. Sampling is tentatively planned for early September.

The preliminary designs for the final ventilation system layout are being prepared. A proposed layout and system will be submitted for DEC review in late August or early September.

Attachment 1

7-15-1994 09:25AM

FROM SEELER ASSOCIATES

TO

Iest pit under telephone bridge

Seeler Associates

Environmental Consultants 660 Reynolds Arcade Building - 16 East Main Street Rochester, New York 14614 Phone (716) 262-6070 - Fax (716) 262-6065

FAX TRANSMISSION

Ann Elumpp C.D.R.

Company:

Phone:

Fax:

TO:

FROM:

Date:

Pages Including this cover page:

428-6010

575 VON SCHONDONE

15-94

Comments:

SAMPLE RESULT BEL

TO

GENERAL TESTING CORPORATION 710 Exchange St., Rochester, H.Y (716)454-3760

LABORATORY REPORT-TRACOR 540 (T4) Column: 125P1000 CAREDPACK Analysis: Priority Pollutants Purgeable Organics (8020) BTEX

Analyst: SCOTT SABEL Date: 07/15/94 Tige: 07:49 Client: SEELER Job #: R94/02630 Sample #: -001

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Z - SOLID 92.5%

07/14/94 CRV

	IRsten.	I Area			Final Conc.	· .
Compound	I Time	Units	Conc.	Dil.	(ug/kg)	
Chloropethane	:	1	0_0	1	5,4	U
Broponethane	1	:	0.0	1 1	5.4	U
Vinyl Chloride	1	1	: 0_0 :	1 1	2.2	U
Chloroethane	1	1	0.0	1 1	2.2	U
Nethylene Chloride	1	1	: 0.00	1 1 1	1.1	U
Trichlorofluorgaethane	1	1	0_0	1 1	1.1	ប
1,1-Dichloroethene	1	1	0_0	1	1.1.1	U .
1,1-Bichloroethane	116.11	1	: 0.0	1 1	1.1	U
1,2-Bichloroethene(TOTAL)	1	1	: 0_0	1 1	1.1	U 1
Chloroform	1	1	0.0	1 1 1	1.1	U
1,2-Dichloroethane	1	1	0.0	1 1	1.1	U
1,1,1-Trichloroethane	1	1	1 0.0	1 1	1.1	U
Carbon Tetrachloride	1	1	0.0	1 1	1.1	U
Browodichloromethane	1	1	0_0	1 1	1.1	U
1,2-Dichloropropane	1	: ~	i 0.0	1 1	1.1	U
1,3-Dichloropropene (Cis)	1	1	0.0	1 .1 :	1.1	U -
Trichloroethene	1	1	: 0.0	1 1	1.1	U
1, 3-Dichloropropene (Trans):	1	0.0	1 1	2.2	U
Dibromochlorpaethane	1	1 .	0.0	1 1	2.2	u · ·
1,1,2-Trichleroethane	1	1	1 0.0	1 1	2.2	U
2-Chloroethylvinyl Ether	1	1	: 0_0	1 1	2.2	UJ
Broacfora	1	1	1 0.0	1 1	2.2	U
1, 1, 2, 2-Tetrachloroethane	1	1.	1 0.0	1 1	2.2	U
Tetrachloroethene	1	T	1 0.0	1 1	1.1	U
Chlorobenzene	1	1	1 0.0	: 1:	2.2	U .
1,3-Dichlorobenzene (B)	1 7.	1	1 . 0-0	1 11	. 2.2	U:
1,2-Bichlorobenzene (o)	1 1. 14	1 2 .12.	In. 0.0:	1 1.1	2.2.2.	U.S. Antin States
1,4-Dichlorobenzene (p)	1.	1 Yr.	1. 0.0	1 1	2.2	U
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BOID ONLY	1	1 1 10	1 0.0	1 1	2.2	U
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	IReten.	: Area	Total .	ant.	z • •.	IAccep.
Surrogate Standards	1 Tise	Units	Rec vry	IAdd.	RECOVERY	lieits
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1,2,3-Trichloropropane (2)]	1 .	1	30		150-141
Chlorofluorobenzene Hall	127.16	1 92.4	25.7	30		150-108
Chlorofluorobenzene PID	1	1	0.0	30	. 0	:60-140



07-28-1994 09:43AM

FROM SEELER ASSOCIATES

TO

Seeler Associates

Environmental Consultants 660 Reynolds Arcade Building - 16 East Main Street Rochester, New York 14614 Phone (716) 262-6070 - Fax (716) 262-6065

FAX TRANSMISSION

Mark Gregor C.D.R

Company:

Phone:

Fax:

TO:

FROM:

Date:

Pages Including this cover page:

Comments:

8-6010

SPEEDY Soil results

2

4 -

General Testing Corporation 710 Exchange St., Rochester, N.Y (716)454-3760

LABORATORY REPORT-T3 Analysis: Priority Pollutants 8010 Column: Restek Capillary 07/23/94 Curve

Analyst: DAVE LIPANI Date: 07/77/94 Time: 15:40 Client; SEELER Job #: R94/02774 Sample #: -001

TO

Z SOLID 93. 0Z

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	Reten.	Area	1.		Conc.	i i
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Chloromethane	1	1	1 0.0	1	5,4 6	:
Vinyl Chloride	1	1	: 0.00 :	1	2.2 0	1
Broepethane	1	1	1 0.0	1	5.4 5	3
Chloroethane	:	1 -	1 0.0 1	1	2.2 1	1
Trichlorofluoromethane	1	1	: 0.00 :	1	1.1 8	i
1,1-Dichloroethene	1	1	: 0.0 1	1	1.1 1	1
Methylene Chloride	1	1	1 0.0	1	1.1 1	1
1,2-Dichloroethene (TOT)	1	:	1 0.0 1	1 1	1.1 1	5
1,1-Bichloroethane	4	1	: 0.0	1	1.1 1	1
Chlorofore	1 .	:	1 0.0	1	1.1 1	1
1, 1, 1-Trichloroethane	F. Martin	1	: 0.0	1	1.11	1
Carbon Tetrachloride	1	1	1 0.0	.1	1.1 1	1
1,2-Dichloroethane	1 .	1	: 0.0	1	1.11	
Trichloroethene	1	1	1 0.0	1	1.11	1
1.2-Dichloropropane	1	1	; 0.0	1	1.11	
Bronodichloromethane	1	1	1 0.0	1	1.11	
2-Chlorosthylvinyl Ether	1 10 1	1 - 1	1 0.0	1	2.21	IJ
1.3-Dichloropropene (Cis)	1	1	: 0.0	1	1.11	1
1.3-Dichloropropene (Trans)	1	1: 1	1 0.0	1	2.21	1
1.1.2-Trichloroethane	-	:	1 0.0	1	2.21	
Tetrachloroethene	1	1	1 0.0	19. 19.	1.1 1	
Dibronochloronethane	1 -	1 - 1 - 1	1 0.0	1	2.21	
Chlorobenzene	1	1	: 0.0	. 1	2.21	1
Propofora	1	1	1 0.0	1	2.21	1
1,1.2.2-Tetrachloroethane	:	1	1 0.0	1	2.21	1
1,3-Dichlorobenzene (p)	1	1.	: 0.0	1 1	2.21	1
1,4-Dichlorobenzene (p)	1	1	1 0.0	1 1	2.21	3
1,2-Dichlorobenzene (a)	1	: `	: 0.0	1	2.21	3
BO10 UNLY	1	1	: 0.0	1 1	0,00	1
SO10 ENLY	1	:	1 0.0	1	0.00	
SCIO ONLY	1	1	1 0.0	1 1	0.00	
8010 ONLY	1	1	: 0.0	1 1	0.00	
TOTAL VOLATILES					0.00	
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Surrogate Standards	: Time	Units	IRec'vry	Add.	Recovery	Linits
Bronochlorosethane	117.55	1 263	1 21.3	30	71	66-128
Chlorafluorobenzene	130.09	1 153	: 25.3	30	84	60-108

7/28/94

TO

Seneral Testing Corporation 710 Exchange St., Rochester, N.Y (716)454-3760

LABORATORY REPORT-T3 Analysis: Priority Pollutants 8010 Column: Restek Capillary 07/23/94 Curve Analyst: DAVE LIPAHI Date: 07/27/94 Time: 16:46 Client: SEELER Job #: R94/02774 Sample #: -002

Z SOLID 92.4%

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	Reten.	Area	1		Conc.	
Compound	i 1180	UNITS	i Lonc.	U11.	(ug/kg)	
Chloromethane	1	1	0.0	1	5.4 U	
Vinyl Chloride	1	1	1 0.00 1	1	2.2 0	
Broscethane	1	1	1 0.0	1 1	5.4 0	
Chloroothane	1 .	1	1 0.0 1	1 1	2.2 0	
TrichlorofLuorosethane	1	1	1 0.00 1	1 1	1.1 U	
1,1-Dichloroethene	1. 1.	:	1 0.0 1	1 1	1.1 U	
Nethylene Chloride	1	1	1 0.0	1 1	1.1 U	
1,2-Dichlorpethene (TBT)	1	:	1 0.0 1	1 1	1.1 U	
1,1-Dichloroethane	I V	1	: 0.0	1 11	1.1 1	
Chloroform	1	1	1 0.0	1	1.1 U	
1, 1, 1-Trichloroethane	1	1	: 0.0	1 1	1.1 U	
Carbon Tetrachloride	1	1	1 0.0	1 1	1.1 U	
1,2-Dichloroethane	1	1	: 0.0	1 1	1.1 U	
Trichloroethene	:	1	1 0.0	1 1	1.1 U	
1,2-Dichloropropane	1	E	1 0.0	1 1	1.1 U	
Bromodichloromethane	1.	1	: 0.0	1 1	1.1 U	
2-Chlorcethylvinyl Ether	1	1 1	1 0.0	1 1	2.2 U	J
1,3-Dichloropropene (Cis)	1.	I.	; 0.0	1 1	1.1 U	
1,3-Dichloropropene (Trans)	H	1.	: 0.0	1 1	2.2 1	
1, 1, 2-Trichloroethane	1	1	1 0.0	1 1	2.2 U	
Tetrachloroethene	1	1	: 0.0	1 1	1.1 U	
Dibronochloromethane	1	T	1 0.0	1 1	2.2 0	
Chlorobenzene	1	1	: 0.0	1 1	2.2 0	
Broaufora	1	1	1 0.0	1 1	2.2 0	
1,1,2,2-Tetrachloroethane	1	1	1 0.0	1 1 1	2.2 0	
1,3-Dichlorobenzene (m)	1	1	1 0.0	1 1	2.2 0	
1,4-Dichlorobenzene (p)	1	1	1 0.0	1 1	2,2 U	
1,2-Dichlorobenzene (o)	:	1	1 0.0	1	Z.2 U	
BO10 DHLY	I	1	1 0.0	1 1	0.00	
BOID UNLY	1	1	0.0	1 1	0.00	
BOID ONLY	I	1	1 0.0	1 1	0.00	
BOID UNLY	:	-	: 0.0	1 1	0.00	
FUTAL VOLATILES	1	5 - C - C			0.00	1.1.
	Reten.	1 Area	Total	Ast.	Percent	Accep.
surrogate Standards	Time	iUnits	Rec'vry	Add_	Recovery	Liaits
Bronechloremethane	117.54	: 276	1 22.3	30	74	66-12B
Chlorofluorobenzene	130.09	1 163	: 27.0	30	90	60-108

7128/94

General Testing Corporation 710 Exchange St., Rochester, N.Y (716)454-3760

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LABORATORY REPORT-T3 Analysis: Priority Pollutants 8010 Column: Restek Capillary 07/23/94 Curve

Chlorofluorobenzene

Analyst: DAVE LIPANI Date: 07/27/94 Time: 17:44 Client: SEELER Job #: R94/02774 Sample #: -003

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				in and	Final	
	Reten.	Area	;	:	Conc.	
Ecepound	: Tise	Units	I Conc.	Dil.	(ug/kg)	
Chlorosethane	1	1	1 0.0	5	27	U
Vinyl Chloride	1	1	: 0.00	: 51	11	U
Brososethane	1	1	: 0.0	: 51	27	U
Chlorpethane	1	1	1 0.0	1 51	11	U
Trichlorofluoromethane	1	1	: 0.00	1 5 1	5.4	u
1, 1-Dichloroethene	1 .	1 76	: 0.0	1 5 1	5.4	U
Nethylene Chloride	:	1 ···	1 0.0	1 5	5.4	U
1,2-Bichloroethene (TOT)	:16.42	: 109	1 6.0	1 5 1	32	
1,1-Dichloroethane	1	t	1 0.0	1 5	5.4	U
Chloroform	1	:	1 0.0	1 5	5.4	U
1, 1, 1-Trichloroethane	1	1	: 0.0	1 5	5.4	U
Carbon Tetrachloride	1. 1. 1	1	: 0.0	: 5 :	5.4	U .
1,2-Dichloroethane	1.	:	1 0.0	1 5 1	5.4	U
Trichloroethene	1	:	: 0.0	: 5	5.4	U
1,2-Dichloropropane	1	1	1 0.0	: 5	5.4	U
Bronodichloromethane	:	1	: 0.0	1. 5	5.4	U
2-Chloroethylvinyl Ether	1	1	: 0.0	1 5	: 11	UJ
1.3-Dichloropropens (Cis)	1	1	1 0.0	1 5	5.4	U
1,3-Dichloropopene (Trans)	1	1	1 0.0	1 5	11	U
1,1,2-Trichlorgethane	1	1	: 0.0	1 5	11	U I
Tetrachloroethene	1	1	1 0.0	1 5	5.4	U
Dibrosochloromethane	1		: 0.0	1 5	: 11	U
Chlorobenzene	.1	1	: 0.0	1 5	. 11	U
Brosofors	1	:	1 0.0	1 5	1 11	U
1,1,2,2-Tetrachleroethanc	1	1	: 0.0	: 5	1 11	U
1,3-Dichlorobenzene (a)	1 .		1 0.0	1 5	1 11	υ
1,4-Bichlorobenzene (p)	3	1	: 0.0	: 5	1 11	u
1,2-Dichlarobenzene (o)	1	1	1 . 0.0	1 5	1 . 11	U
BO10 OHLY	4	:	: 0.0	5	0.00	
8010 DNLY	1	1	1 0.0	: 5	0.00	
BOIG DHLY	1	ŧ	1 0.0	: 5	0.00	
8010 DHLY	1	1	: 0.0	! 5	0.00	
TOTAL VOLATILES		~	and the second		. 32.00	
	Reten.	1 Area	ITotal	Ant.	Percent	Accep.
Surrogate Standards	Time	Units	Rec Tury	Add_	Recovery	Lisits
Brogochlorosethane	17.54	: 376	: 30.4	30	101	66-128

130.11 1 189 ;

31.3 1

30 ;

104

60-108

Analyst: DAVE LIPANI

Date: 07/27/94

JOD #: R94/02774

Time: Z3:36 Client: SEELER

Sample #: -003

RE-AWALYSIS DE TR-3

7/28/94

7P-3

LABORATORY REPORT-T3 Amalysis: Priority Pollutants 8010 Column: Restek Capillary

General Testing Corporation

710 Exchange Sti, Rochester, N.Y

07/23/94 Curve

(716)454-3760

X SOLID 92.3X

					Final	
	iReten.	I Area	1 1		Conc.	
Coopound	: Time	Units	Conc.	Dil.	(ug/Kg)	
hlorosethane	1	:	0.0	1	5.4 U	-
inyl Chloride	1	:	1 0.00	1 1	2.2 U	
romomethane	1	:	: 0.0	1	5.4 U	
hloroethane	1	1	1 0.0	. 1	2.2 U	
richlorofluoromethane	1	:	: 0.00	1 1	1.1 U	
1-Dichloroettene	1	1	: 0.0	1	1.1 U	
ethylene Chloride	1 .	1	1 0.0	1 1	1.1 U	6
.2-Bichlorpethene (TOT)	116.44	1 167	1 9.2	1	1 9.9	
,1-Dichloroethane	1	Por chine	1 0.0	1	1.1 U	-
hlorofora	1	1	1 0.0	1	1.1 U	
, 1, 1-Trichloroethane	1	1	1 0.0	1	1.1 U	
arbon Tetrachloride	E	1	1 0.0	1	1.1 U	
.Z-Dichloroethane	1	:	1 0.0	1	1.1 U	
richlorgethene	+	1	: 0.0	141	1.1 U	i
2-Dichloropropane	1 .	*	1 0.0	1	1 1.1 0	
onodichloroaethane	1	1	: 0.0	1	1.1 U	
Chloroethylvinyl Ether	1	1	: 0.0	1 1	2.2 0	J
3-Dichloropropene (Cis)	1 .		1 0.0	1	1.1 U	
3-Dichloropropene (Trans))	1	1 0.0	1	2.2 0	
1.2-Trichloroethane	1	1	1 0.0	1 1	2.2 0	
trachloroethene	1	1	1 0.0	1 1	: 1.1 U	
bromochloromethane	1	1	1 0.0	1 1	2.2 U	te ver of the
lorobenzene	:	1	: 0.0	1 1	: 2.2 U	1.5
osofora	1	to your	1 0.0	1 1	2.2 U	
1,2,2-Tetrachloroethane	1	1	1 0.0	1 1	2.2 U	
3-Dichlorobenzene (n)	1	t in	: 0.0	1	1 2.2 U	
4-Dichlorobenzene (p)	1	1	1 0.0	1 1	2.2 U	
2-Dichlorobenzene (o)	1	1	1 0_0	1	2.2 U	
10 DHLY	1		; 0.0	1	0.00	
10 DHLY	1	1	1 0.0	1	0.00	
DIO UNLY		1	0.0	1 1	0.00	
DID UNLY	1	1	: 0.0	1	0.90	
TAL VULATILES		1.1.1			9,90	
	Reten.	Area	Total	Ant.	Percent	Accep.
Irrogate Standards	Tipe	Units	Rec vry	Add.	Recovery	Lisits
ogochlorogethane	117.56	: 213	1 17.2	30	* 57	66-128
lorofluorobenzene	130.15	1 121	: 20.0	30	: 67	60-108

TO

Seeler Associates

Environmental Consultants 660 Reynolds Arcade Building - 16 East Main Street Rochester, New York 14614 Phone (716) 262-6070 - Fax (716) 262-6065

FAX TRANSMISSION

(.O.R.

MARK GREGOR

TO:

Company:

Phone:

Fax:

FROM:

Date:

Pages Including this cover page:

428-6010 Parts VON SCHONDORF 7-27-924

For

Comments:

MARK - RESMITS Will Fax groundwater to MARCOR

ADDDDDD ۵ * WATER SOIL SAMALE Originals Will Be Mailed Originals Will Not Be Mailed

TO

General Testing Corporation

A Full Service Environmental Laboratory

Date: Job Number: 10: Schondor ATTENTION: FAX NUMBER: 262 6065 PAGES TO POLLOW: FROM: INSTRUCTION/MESSAGE: 710000 ani 710 Exchange Street . Bochester, New York 14608 . (716) 454-3760 . Fax (716) 454-1245 85 Trinity Place . Hackensack, NJ 07601 . (201) 488-5242 . Fax (201) 488-6386

435 Lawrence Bell Drive . Amherst, NY 14221 . (716) 634-0454 . Fax (716) 634-9019

General Testing Corporation 710 Exchange St., Rochester, N.Y (718)454-3760

Analyst: DIANE LUCEY Date: 07/26/94 Time: 23:06 Client: SEELER Job #: R94/02749 Sample #: -001

TO

710 Eychange St Rochaster	LI V		Dates	67/26/9	4		
(716)454-3760			Time: 23:06				
			Clients	SEELER		2	
LABORATORY REPORT-TS			Job #:	894/027	49 IX		
Analysis: Prigrity Polluta	nts		Samle #:	-001	Allar a	21	
8010					100	1XX	
Column: Restek Camillary					C NO.		
07/13/94 Curve					(0)		
					0		
					Final		
	Reten.	Area			Coor.		
Conpound	Time	Units	Conc.	Dil.	(ug/1)		
	1	1	1			-	
Chlorosethane	1	1	1 0.00 1	1 1	5.0 8		
Vinyl Chloride	1	:	1 0.00	1 1	2.0 U		
Broapnethane	1	1	: 0.00	1 1	5.0 4		
Chloroethane	E C	1	1 0.00	1 1.	2.0 U		
Trichlorofluoromethane	1 1	1	1 0.00	1 1	1.0 U	a.t	
1,1-Dichloroethene	1	+	1 0.00	1 1	1.0 U		
Nethylene Chloride	1	F	: 0.00	1 1	1.0 U		
1,2-Dichloroethene (TOT)	1	1	1 0.0 1	1 1	1.0 U		
1,1-Dichloroethane	1	:	1 0.00	1 1	1.0 U		
Chlorofors	:	1	1 0.00	1 1	1.0 0		
1, 1, 1-Trichloroethane	1	1	1 0.00	1 1	1.0 1		
Carbon Tetrachloride	1	1	: 0.00 1	1 1	1.0 U		
1,2-Dichloroethane	T	#	1 0.0	1	1.0 U		
Trichlorpethene	1	1	1 0.0	1	1.0 U		
1,2-Dichloropropane	1	1	1 0.00	1	1.0 //		
Brogodichlorosethane	1	1	1 0.00		1.0 0		
2-Chloroethylvinyl Ether	1	1	: 0.00	1 1	2-0 1	J	
1.3-Dichloropropene (Cis)	1	1	1 0.00	1	1.0 0		
1.3-Dichloropropene (Trans)			: 0.00	1	2.0 U		
1, 1, 2-Trichloroethane	1	1	: g.0 1	1	2.0 1		
Tetrachloroethene	1		1 0.00	1	1.0 0		
Dibranochloromethane	1	1	1 0.00		2.0 0		
Chlorobenzene	1	1	1 0.00	1	2.0 U		
Brosofora	1	1	1 0.00	.1	2.0 U		
1, 1, 2, 2-Tetyachloroethane	1	R	0.00	1	2.0 0		
1,3-Dichlorobenzene (a)	1	1	: 0.00 :	1	2.0 0		
1,4-Dichlorobeszens (p)	:	1	1 0.00	1 1	2.0 U		
1,2-Dichlorobenzene (o)	1	1	1 0.00 ;	1 1	2.0 U		
SOID OMLY	t	1	: 0.00 :	1 1 1	2.0 0		
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BOID ONLY	:	1	1 0.00 1	1 1 1	2.0 1		
BOID ONLY	1	1	: 0.00	1 1	2.0 U		
TOTAL VOLATILES					0.00		
	IReten.	i Area	Total .	Ant.	Percent	Acces.	
Surrogate Standards	I Time	Units	Rec'vry	Add.	Recovery	Lisits	
Brosochloroaethana	119 57	1 150	1 22 7	20	00	60-100	
Chlorofiuorobenzene	129.94	1 78 6	1 28 9	30	94	60-121	
1.2.3-Trichloronroane	:35. 11	1 141	: 25.1	30	84	60-140	
Chlorofluorobenzene (Pid)	1	1	: 0.0	30	0	60-140	
	-	-			-		

TO

1

AL TESTING CORPORATION xchange St., Rochester, N.Y 454-3760

ATORY REPORT-TRACOR 540 (T4) A: 1%SP1000 CARBOPACK sis: Priority Pollutants able Organics (8010)

Analyst: JEFF ERYANT Date: 07/25/34 Time: '18:25 Client: SEELER Job #: R94/02748 Sample #: -001

> % - SELID 90.3% -----

194 CRV

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/					
				Final	
A Charles and a second s	Reten. Area			Conc.	
Compound	Time Units	Conc.	Di1	(ug/kg)	
omethane		0.0	: 1	5.5 1)
methane		0.0	: 1	5.5 1	U
Chloride		0.0	1 1	2.2 1	J
oethane		0.0	: 1	2.2	1
Jene Chloride		0.00	1	1.1 1	3
lorofluoromethone		0.0	S. 1. 21	1.1	J
ichloroethene		0.0	1	1.1.1	J
ichloroethane		0.0		1.1	U
tichloroethene(TOTAL)		0.0		1.1 1	1
oform		0.0	:	1.1	U
ichloroethane		0.0	:	1.1 1	1
-Trichloroethane		0.0	:	1.1	U
n Tetrachloride		0.0		1.1 1	J
dichloromethane		0.0	1. 1.	1.1 1	0
hichioropropane		0.0	:	1.1-1	j
highloropropene (Cis)		0.0	: :	1.1	
loroethene		0.0		1.1 1	J
highloropropene (Trans)		0.0		2.2	
mochloromethane		0.0		2.21	1
-Trichloroethane		0.0	1	2.2	J
orosthylyinyl Ether	1.4 7 1.7 1.8	0.0	1	2.21	13
form		0.0	1	2.2	5
2-Tetrachlorpethane	A Start at 1 at 1 at	0.0	I	2.2 1	3
schloroethene	Contraction (Contraction)	0.0	1 1	1.1	J
obenzene	S	0.0	1	2.21	1 1 1 1 1
Nichlorobenzene (m)		0.0	I	2.2	u ·
Dichlorobenzene (o)		0.0	1	2.2 1	1
Dichlorobenzone (p)		0.0	1	2.2	U
ONLY		0.0	1	0.01	0
ONLY		0.0	1	0.0	U. I
ONLY		0.0	1	0.01	U
ONLY		0.0	1 1	0.0	U
Volatiles			1.5	0.00	
	Roton . Area	Totol	Amt.	%	Accep.
ogate Standards	Time Units	Rec'vry	Add.	RECOVERY	Limits
ochloromethans (1)	10.39 153	21.9	30	73	66-128
3-Trichloropropane (2)			30		150-141
ofluorobenzene HALL	31.56 1 74.4	20.7	20	69	160-10B
ofluorobenzene PID		0.0	30	0	160-140
					1



FAX (716) 428-6010 TDD/Voice 232-3260 Department of Environmental Services

Mary Jane Peachey, P.E. Division of Hazardous Waste Remediation New York State Department of Environmental Conservation 6274 E. Avon-Lima Road Avon, New York 14414

Re: Court Street Parking Garage Progress Report Number 3

Dear Ms. Peachey:

As required by Section III of the consent order between the City of Rochester and the New York State Department of Environmental Conservation, we are providing the third progress report documenting work during the month of August 1994 on the Court Street Parking Garage Site IRM.

I can be reached at 428-5978 if you have any questions. Thank you for your cooperation on this project.

Sincerely

Mark D. Gregor Environmental Specialist Division of Environmental Quality

xc. R.Elliott, MC-DOH D. Napier NYS-DO

Attach.

D.Napier,NYS-DOH James Hazel,NYS-DEC E.Doherty J.Brennan N.Burton S.Feuerstein D.Zariczny A.Klumpp T.Seeler

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lad

Office of the Commissioner City Hall, Room 300-B 30 Church Street Rochester, New York 14614-1290

September 10, 1994



City of Rochester, New York Court Street Parking Garage Project Interim Remedial Measure September 10, 1994

Progress Report No. 3 Work Completed Through August 31, 1994

Prepared by the City of Rochester, New York Department of Environmental Services Division of Environmental Quality

Progress During the Reporting Period

As previously reported, Phase II remedial activities were performed during the month of August by the garage contractor, Christa Construction, and its excavation subcontractor, MEC Corporation. Additional nonhazardous contaminated soil from within the footprint of the Court Street Garage was excavated to the final target elevations, generally to bedrock or 504-505 fmsl.

During August, 10889 tons of stoddard contaminated soil were transported to Mill Seat Landfill for disposal. No drums of waste were generated at the site or disposed of during August.

MEC Corporation has completed the excavation to the target elevation of 504-505 fmsl in the vicinity of the former Speedy Cleaners building at the east end of the garage footprint with the exception of a ramp currently in place used to gain access to the excavation.

Sampling and analysis of soil remaining in the area of gasoline contamination west of Stone St. was performed by Seeler Associates on August 25. Two samples were collected and analyzed by EPA Method 8021. The laboratory results are provided in Attachment 1. The analysis showed that very minimal gasoline contamination, below the STARS memorandum clean-up standard, remains in the soil.

Percent Completion: The overall IRM project is approximately 95% complete based on revised estimates of the remaining volume of contaminated soil to be removed.

Modifications to the Work Plan

Samples for Method 8021 analyses were collected. These samples were not required or identified in the original work plan as discussed in Progress Report Number 1.

Problems Encountered

The volume of contaminated soil removed exceeded the original estimates as it was not expected that the contamination would continuously extend to bedrock. No additional problems were encountered.

Deliverables

Analytical results from soil samples were discussed directly with DEC staff. A complete set of all August sample results is attached with this progress report.

No other deliverables were required by the consent order during the reporting time period.

Actions for the Coming Month

Christa Construction and MEC will be excavating footings located in the northeast corner of the garage footprint. Contaminated soil generated from the footing excavations will be shipped to Mill Seat Landfill. Any remaining contamination will be remediated through the ventilation system currently being designed by the City of Rochester and Seeler Associates.

The preliminary designs for the final ventilation system layout are being prepared. A proposed layout and system will be submitted for DEC review by September 23.

Removal of the access ramp is tentatively scheduled for October. Any contaminated soil generated during the ramp removal will be shipped to Mill Seat Landfill. Verification sampling of any remaining soils will be performed in accordance with the work plan once the ramp is removed.

Gasoline Contamination

During initial excavation of the garage by Bianchi-Trison, an underground storage tank was discovered in the area west of Stone St. Three soil samples were taken by Upstate Environmental on April 11 and analyzed by EPA Method 8010 and 8020. The analysis showed minimal petroleum contamination, however OVA readings taken at the site and soil staining indicated the need for removal of contaminated soil. The initial removal of gasoline contaminated soil, 4060 tons, was performed as part of Bianchi-Trison's contract through June. The remaining 880 tons of gasoline contaminated soil located along Court St. was removed by MEC in July as part of the Christa Construction contract. Verification sampling of remaining soil was performed by Seeler Associates on August 25. Two soil samples (G-1 and G-2) were taken approximately 18 feet north of the shoring along Court St. and analyzed by EPA Method 8020. The analysis showed that the contaminated soil had been removed to below clean-up standards and that no further removal was necessary. Verification sampling results are provided in Attachment 1. The initial drawing of the gasoline contaminated area by CME Associates, the correspondence of July 13, 1994 to Bill Shutts of the DEC regarding the gasoline contamination, and the drawing by Seeler Associates indicating the locations of the verification samples are provided in Attachment 2.



Seeler Associates

Environmental Consultants 660 Reynolds Arcade Building - 16 East Main Street Rochester, New York 14614 Phone (716) 262-6070 - Fax (716) 262-6065

FAX TRANSMISSION

MAKK GREGOR

428-59.78

428-6010

C.D.R.

Pate VON SCHONDORF

TO:

Company:

Phone:

Fax:

FROM

Date:

Pages Including this cover page:

Comments:

SAMPLE RESULTS FROM Court St. GARAGE "GASOline AREA"

and the state of the	- 1			1	
Pral Testing Corporation Exchange St., Rocheste 3)454-3760 DRATORY REPORT-T3	n r, N.Y		Inalyst: Date: Time: Client: Job #: Sample#:	JEFF BRY 08/29/94 15:47 SEELER R94/0316 -001	GI
TYSIS: -TANK LIST			* SOLID	91.1%	
Compound	R.T. Time	Area Units	Conc.	Dil.	Final Cone. (ug/KG)
hyl t-butyl ether zens Jene ylens ylens ylene bropylbenzene .5-Trimethylbenzene .4-Trimethylbenzene .4-Trimethylbenzene sapropyltoluene utylbenzene hthalene	28.43 28.73 30.27 31.55 32.88 34.55 40.98	28.30 55.10 29.00 18.8 12.80 13.2 71.6	0.0 0.0 0.0 3.2 5.4 0.0 3.2 2.45 1.5 0.00 0.0 1.13 0.00 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0		1.1 U 1.1 U 1.1 U 3.6 6.0 2.2 U 3.5 2.7 1.6 1.1 U 1.1 U 1.1 U 1.1 U 1.1 U 1.1 U 1.1 U 1.1 U
#] Volatijes					25.16
	Reten.	Area	Total	Amt.	Percent Accep.
A-TRIELLOPOTOL	- [Units	Rep'vry	Add.	Recovery Limits
A TRIFLUORDIOLUENE	119.28	1 111	33.3	30	111 55-131

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Aby

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peral Testing Corporation N Exchange St., Rochester, N.Y .6)454-3760

ORATORY REPORT - T3

Analyst: JEFF BRYANT Date: 08/29/94 Time: 17:02 Client: SEELER Job #: R94/03165 Samplo#: -002

IJYSIS: I-TANK LIST

% SOLID 89.0%

	Compound	R.T. Time	Area Units	Conc.	Dil.	Cone. (ug/KG)		
hyl	t-butyl ether			0.0			1 1 1	-
zene		1. 1. 1. 1. 1.		0.0			1 1	n i
uene		22.70	10.90	1.1		a stand of the	1 2	•
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ylen	6	28.64	28.90	2.8	1		3 7	
ylen	•	1. 1. 1. 1.		0.0	1		2.3 (u
Aleu	e	30.20	15.40	1.7	1		1.9	
prop	ylbenzene			0.00	1		1.1 1	
ropy	benzene			0.0	1 1		1.1 1	1
+5-T	rimothylbenzene			· 0.00 j	1 1		1.1 0	
t-Bu	tylbenzene	1	I	0.0	1 1		1.1 1	5
-4-T	rimethylbenzene	7: 1		0.00 1	1 1		1.1 1	
-But	ylbenzens		1	0.00 1	11	4 ^	1.1 4	3
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nrna	iene	n 1 1 - 5 - 9 -	1	0.0 1	11		1.1 1	1 .

a1 \	101	at	i]	es.
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7.71

rogate Standards	Reten. Time	Ar		Total Rec'vry	Amt. Add.	Percent Recovery	Accep. Limits
A-TRIFLUORDTOLUENE	118.59		81	24.2			*******



	N Court St. Deme
ME Associates. Inc.	SHEET NO OF
ATERIALS TESTING DIVISIG	CALCULATED BY DATE
	CHECKED BY DATE DATE
	SCALE See learnd
South AVE EAST CURBLIN	E
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	54676H 05 0000 05 000 TANK
	SOIL REMOVAL
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City of Rochester

X (716) 428-6010 DD/Voice 232-3260 Department of Environmental Services Office of the Commissioner Division of Environmental Quality 30 Church Street, Rm. 300B Rochester, New York 14614-1278

uly 13, 1994.

ill Shutts

ew York State Department of Environmental Conservation 274 East Avon-Lima Road von, New York 14414

e: Court Street Parking Garage Area of Gasoline Contamination

ear Mr. Shutts:

ttached is the information that you requested regarding the area of petroleum fuel contamination noncountered during the excavation for the new Court Street Parking Garage. The best address hat we have for this location is 160 Court Street. A tank and contaminated soil were first iscovered at this location on April 8, 1994. The tank contained mostly water and was removed by the City's excavation contractor, Bianchi Trison Corporation. Because the garage will have two to mee parking levels below grade, all of the soil in the footprint of the garage is being removed, including the petroleum contaminated soil. Through the end of June 4,060 tons of petroleum ontaminated soil were removed. Additional soil removal is currently underway.

he following information is attached:

- 1. 1935 Plat Map showing the location of a gas station at 160 Court Street
- Sketch prepared by CME Associates of the area of contamination and soil removal dated April 29, 1994
- 3. An 11" x 17" sketch of excavation activities for the South Avenue to Stone Street block showing the tank location and sample locations
- 4. Analytical data from soil samples
- Court Street Parking Garage Project Interim Remedial Measure Progress Report Number 1 dated July 8, 1994

Letter to: Bill Shutts July 13, 1994 Page Two

I can be reached at 428-5978 if you have any further questions.

Sincerely, Mark D. Gregor

Environmental Specialist

Attachments

XC.

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Edward J. Doherty, Commissioner Anne Klumpp, Environmental Quality Johanna Brennan, Law Department Steve Feuerstein, Municipal Facilities Mary Jane Peachey, NYS-DEC Todd Caffoe, NYS-DEC

Seeler Associates ENVIRONMENTAL CONSULTANTS Pages Including Transmittal: 2 FAX 716-262-6065 FAX Transmission From: POTB VON SCHONDORF Date: 9-2-94 TO: MARK GREGOL Time: 2:20 Company: CITY OF EOCHESTER FAX #: 428-6010 MARK here is the figure you requested, if you cannot make out the weations GI is 163'N From SE corner of the STEEL SHEETING, 62 is 210 WFROM the SAME CORNER LOCATION, BOTH Samples were collected approximately 13' NORTH OF THE SHBETING 16 East Main Street, 660 Reynolds Arcade Building, Rochester, New York 14614 716-262-6070





City of Rochester



FAX (716) 428-6010 TDD/Voice 232-3260 Department of Environmental Services Office of the Commissioner Division of Environmental Quality 30 Church Street, Rm. 300B Rochester, New York 14614-1278

October 7, 1994

Mary Jane Peachey, P.E. Division of Hazardous Waste Remediation New York State Department of Environmental Conservation 6274 East Avon-Lima Road Avon, New York 14414

Re: Court Street Parking Garage Progress Report Number 4

Dear Ms. Peachey:

As required by Section III of the consent order between the City of Rochester and the New York State Department of Environmental Conservation, we are providing the fourth progress report documenting work during the month of September 1994 on the Court Street Parking Garage Site IRM.

I can be reached at 428-5978 if you have any questions. Thank you for your cooperation on this project.

Sincerely, Mark D. Gregor

Mark D. Gregor Environmental Specialist Division of Environmental Quality

Attachment

C;

R. Elliott, MCDOH D. Napier, NYSDOH James Hazel, NYSDEC E. Doherty J. Brennan N. Burton S. Feuerstein A. Klumpp T. Seeler



EEO Employer/Handicapped

City of Rochester, New York Court Street Parking Garage Project Interim Remedial Measure October 10, 1994

Progress Report No. 4 Work Completed Through September 30, 1994

Prepared by the City of Rochester, New York Department of Environmental Services Division of Environmental Quality

Progress During the Reporting Period

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As previously reported, Phase II remedial activities were performed during the month of September by the garage contractor, Christa Construction, and its excavation subcontractor, MEC Corporation. Additional nonhazardous contaminated soil from within the footprint of the Court Street Garage was excavated from the temporary access ramp being removed by MEC.

During September, 2226 tons of stoddard contaminated soil were transported to Mill Seat Landfill for disposal. No drums of waste were generated at the site or disposed of during September.

Christa Construction and MEC have been excavating for footings in the northeast corner of the garage footprint. Contaminated soil from the footing excavations has been staged on-site and will be sent to Mill Seat Landfill. Two test pits (TP-1 and TP-2) were excavated by MEC and sampled by Seeler Associates prior to beginning the footer excavations. Analysis showed that soils from TP-1 were below STARS criteria, consequently, soils to the west of TP-1 will not be excavated or included in the soil ventilation system. Results of the test pit analysis are provided in Attachment 1.

Percent Completion: The overall IRM project is approximately 97% complete based on revised estimates of the remaining volume of contaminated soil to be removed.

Modifications to the Work Plan

Samples for Method 8021 analyses were collected from TP-1 and TP-2. These samples were not required or identified in the original work plan as discussed in Progress Report Number 1.

The ventilation system design has been modified to include remediation of the four to

five feet of contaminated soil which will remain in the northeast area of the garage below the floor slab.

Problems Encountered

A three to four day delay in the construction schedule was incurred due to MEC modifying their work plans in response to the decision not to excavate the four to five feet of contaminated soil in the northeast area of the garage. No additional problems were encountered.

Deliverables

The preliminary design for the final ventilation system, which included the analysis from TP-1 and TP-2 was submitted to the DEC on September 22.

No other deliverables were required by the consent order during the reporting time period.

Actions for the Coming Month

Christa Construction and MEC will be completing the excavation of the access ramp. Contaminated soils from the ramp excavation will continue to be sent to Mill Seat Landfill. Verification sampling of any remaining soils will be performed in accordance with the work plan once the ramp is removed.

Gasoline Contamination

A meeting with Bill Shutts of the DEC was held at the site on September 8 to discuss the area of petroleum contamination, the removal efforts, and any possible remaining petroleum contamination. A copy of the August Progress Report, which detailed the testing and removal of the gasoline contaminated soil, was sent to Bill Shutts. Additional analytical results from samples taken from the south face to the excavation at the area of gasoline contamination by Seeler Associates will be plotted on a site drawing and submitted to Mr. Shutts also.



General Testing Corporation 710 Exchange St., Rochester, N.Y (716)454-3760

LABORATORY REPORT-T3

Analysis: 8021-TANK LIST Analyst: ROD HERRING Date: 09/08/94 Time: 19:37 Client: SEELER Job #: R94/03358 Sample#: -001

% SOLID 92.9%

Compound	R.T. Time	¦ Area ¦Units	Conc.	Dil.	Final Conc. (ug/KG)
Methyl t-butyl ether	i	-	0.0	1 1	1,1 U
Benzene	1	1	1 0.00	1 11	1.1 U
Toluene	1	1	1 0.0	1 11	1.1 U
Ethylbenzene	128.38	1 71.4	8.2	1 11	8.8
p-Xylene	1	1	1 0.0	1 11	2.2 U
m-Xylene	1	1	: 0.0	1 11	2.2 U
o-Xylene	130.25	1 184	1 20.2	1 1	22
Isopropylbenzene	131.53	1113.0	1 14.75	1	16
n-Propylbenzene	1	1	1 0.0	1	1.1 U
1,3,5-Trimethylbenzene	133.47	1232.0	: 17.96	1	19
tert-Butylbenzene	1	1	: 0.0	1 1	1.1 U
1,2,4-Trimethylbenzene	134.63	1 113	: 9,70	1 11	10
sec-Butylbenzene	1	1	: 0.00	1 1	1.1 U
p-Isopropyltoluene	135.51	155.90	: 7.2	1 1	7.8
n-Butylbenzene	136.54	1371.0	1 43.59	1 1	47
Naphthalene	1	1	: 0.0	1 1	1.1 U

Total Volatiles

130.76

Surrogate Standards	Reten.: Area	Total ! Amt.	Percent	Accep.
	Time !Units	!Rec'vry! Add.	Recovery	Limits
A, A, A-TRIFLUOROTOLUENE	18.65 : 99	29.8 30	99	55-131

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Pl.ps)

CENERAL TESTING

4 08:34 QLT84241542

General Testing Corporation 710 Exchange St., Rochester, N.Y (716)454-3760

LABORATORY REPORT-T3

Analysis: 8021-TANK LIST

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Analyst: ROD HERRING Date: 09/08/94 Time: 20:41 Client: SEELER Job #: R94/03358 Sample#: -002

ER P2 (P-17)

% SOLIB 91.2%

Compound	R.T. Time	: Area !Units		Conc.	1	Dil.	;;;;	Final Conc. (ug/KG)
Methyl t-butyl ether	1	;	1	0.0	:	500	1	550 U
Benzene	1	1	1	0.00	1	500	1	550 U
Toluene	1	1	ł.	0.0	1	500	Ł	550 U
Ethylbenzene	128.41	: 89.0	ł.	10.2	1	500	1	5600
p-Xylene	128.75	: 53	1	5.2	1	500	1	2800
m-Xylene	1	1	ł	0.0	1	500	1	1100 U
orXylene	130.27	1 250	-	27.4	1	500	1	15000
Isopropylbenzene	:31.55	1172.0	I	22.46	1	500	;	12000
n-Propylbenzene	132.93	1 237	ł	26.9	+	500	1	15000
1,3,5-Trimethylbenzene	133.48	1339.0	1	26.25	+	500	1	14000
tert-Butylbenzene	1 1	1	-	0.0	1	500	÷	550 U
1,2,4-Trimethylbenzene	134.63	1 699	1	60.01	1	500	1	33000
sec-Butylbenzene	1	1	1	0.00	1	500	;	550 U
p-Isopropyltoluene	135.52	160.50	1	7.8	+	500	ł	4300
n-Butylbenzene	136.55	1367.0	:	43.12	1	500	1	24000
Naphthalene	:	1	1	0.0	1	500	;	550 U

Total Volatiles			125700.0	0
Surrogate Standards	Reten.! Area Time !Units	Total Amt. Rec'vry! Add.	Percent Recovery	Accep. Limits
A, A, A-TRIFLUOROTOLUENE	118.66 1 102	30.6 30	1 10	2 55-131

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CENERAL TESTING

08/08/84 08:32 . QLT8424T542

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City of Rochester

FAX (716) 428-6010 TDD/Voice 232-3260 Department of Environmental Services Office of the Commissioner Division of Environmental Quality 30 Church Street, Rm. 300B Rochester, New York 14614-1278

November 8, 1994

Mary Jane Peachey, P.E. Division of Hazardous Waste Remediation New York State Department of Environmental Conservation 6274 East Avon-Lima Road Avon, New York 14414

Re: Court Street Parking Garage Progress Report Number 5

Dear Ms. Peachey:

As required by Section III of the consent order between the City of Rochester and the New York State Department of Environmental Conservation, we are providing the fifth progress report documenting work during the month of October, 1994 on the Court Street Parking Garage Site IRM.

I can be reached at 428-5978 if you have any questions. Thank you for your cooperation on this project.

Sincerely,

Mark D. Gregor Environmental Specialist Division of Environmental Quality

Attachment

c:

R. Elliott, MCDOH D. Napier, NYSDOH James Hazel, NYSDEC E. Doherty J. Brennan N. Burton S. Feuerstein A. Klumpp T. Seeler





City of Rochester, New York Court Street Parking Garage Project Interim Remedial Measure November 10, 1994

Progress Report No. 5 Work Completed Through October 31, 1994

Prepared by the City of Rochester, New York Department of Environmental Services Division of Environmental Quality

Progress During the Reporting Period

As previously reported, Phase II remedial activities were performed during the month of October by the garage contractor, Christa Construction, and its excavation subcontractor, MEC Corporation. Additional nonhazardous contaminated soil from within the footprint of the Court Street Garage was excavated from the temporary access ramp being removed by MEC.

During October, 521 tons of stoddard contaminated soil were transported to Mill Seat Landfill for disposal. No drums of waste were generated at the site or disposed of during October.

As described in the soil ventilation system proposal submitted to the DEC on September 22, existing site soil has been used as backfill on-site in the areas where slotted ventilation pipe will be installed. Any additional soil not usable on-site as backfill was shipped to Mill Seat Landfill for disposal.

Percent Completion: The overall IRM project is approximately 98% complete based on revised estimates of the remaining volume of contaminated soil to be removed. This estimate is based on the assumption that only contaminated soils in the area of the access ramp remains for removal.

Modifications to the Work Plan

There were no modifications to the work plan during the month of October.

Problems Encountered

MARCOR was not called to the site by MEC Construction during their work in areas of soil contamination on October 5, 6, and 7. Fifteen loads of contaminated soil were shipped to Mill Seat on October 6 without monitoring by MARCOR. The contractors have been advised that it is unacceptable to work in areas of contaminated soil without having MARCOR on site and must ensure in the future that all work performed will be in accordance with the Health and Safety Plan for the site.

Deliverables

A letter describing the plans to include the four to five feet of contaminated soils remaining under the floor slab in the northeast corner of the garage was submitted to Mary Jane Peachey on October 20. The letter is included as Attachment 1.

Actions for the Coming Month

Christa Construction and MEC will be completing the excavation of the access ramp. Contaminated soils from the ramp excavation will continue to be sent to Mill Seat Landfill. Verification sampling of any remaining soils will be performed in accordance with the work plan once the ramp is removed.

Discussions will be held with Seeler Associates, the building architect and the HVAC mechanical contractor regarding the location of the blower and the ventilation system details.

Gasoline Contamination

As was stated in the October 10 Progress Report, additional analytical results from samples taken from the south face of the excavation at the area of gasoline contamination by Seeler Associates will be plotted on a site drawing and sent to Bill Shutts.





City of Rochester

FAX (716) 428-6010 TDD/Voice 232-3260 Department of Environmental Services Office of the Commissioner Division of Environmental Quality 30 Church Street, Rm. 300B Rochester, New York 14614-1278

October 20, 1994.

Mary Jane Peachey, P.E. New York Department of Environmental Conservation 6274 E. Avon Lima Road Avon, New York 14414

Re: Court Street Parking Garage IRM Vent System - Work Plan modifications

Dear Ms. Peachey:

On September 22 we sent you proposed additions to the vent system layout for the Court Street Parking Garage Project. As described in our transmittal letter, one proposed section of vent pipe will be installed in an area where contaminated soil will remain below the lower floor slab. When discussing the proposed vent system with Todd Caffoe of your office he pointed out that the proposal to vent soils in this area could be construed as a deviation from our original work plan. This letter is to present our rationale and the need for the section of the system below the floor slab.

The Court Street Parking Garage extends from three levels below grade at South Avenue to two levels below grade at the eastern end where Speedy Cleaners was previously located. Lower level slab elevations increase from west to east. In the western portion of the garage, bedrock was required to be removed while at the east end of the site finish elevations are approximately five feet above rock. The approved work plan indicates that during Phase 2 "the excavation depth will equal what is required for building purposes plus an additional 2 feet of soil. If contaminated soil remains, excavation will continue until bedrock is encountered. In areas not planned for deep excavation, the soil will be removed following the procedures used during Phase I." Phase I procedures called for the removal of soils to the point where contaminant concentrations are below the guidance criteria or to the point where excavations could cause structural instability or are physically limited. Where such project related limitations apply, the work plan requires the use of a soil gas vent system.

Soil gas venting was substituted for excavation to rock on one other occasion during Phase 2 of the IRM. In May, during excavations in the area east of the garage shoring line, soil contaminated above the STAR's criteria was encountered at about the till elevation (515-516 fmsl). Because site access from Stone Street was soon to be eliminated, it was necessary to quickly construct a ramp from Court Street over the area, where the contaminated soils remained. At Todd Caffoe's request, an additional one to two feet of contaminated soil was removed. Vent pipe was then installed and the ramp completed. The change in approach allowed the garage construction project to continue with out any effect on the schedule.

EEO Employer/Handicapped

We believe our September plan to use soil venting instead of excavation to rock is also appropriate. When preparing the work plan, the excavation depth for the entire garage footprint was assumed to be bedrock or a foot or two above rock. The bottom elevation of the northeast end of the garage is actually several feet above rock. Recently footers were constructed through remaining till in this area. The installation of the footers now complicates soil removal from this area. Also because of the phasing of the garage construction, access to soils close to and beneath the current entrance ramp for verification sampling purposes is not possible until the ramp is removed later in the project. At that time, excavation of the remaining few feet of soil would be made difficult by cumbersome loading operations and reduced access for transport vehicles. The plan to install additional vent pipe instead of removing soils was prepared to address the limited areas of soil contamination where removal operations have become more complicated and costly. The remaining areas of contaminated soil are easily defined and limited both vertically and horizontally. The planned vent system should, therefore, be effective in preventing vapor infiltration into the garage and in reducing soil contaminant levels.

If you would like to discuss the proposed additions to the vent system or the remaining field activities necessary to complete the IRM, please let me know. We will submit the IRM report later this fall after final verification sample data are received.

Sincerel

Mark D. Gregor Environmental Specialist 428-5978

xc. T.Caffoe,NYS-DEC R.Elliott,MC-DOH D.Napier,NYS-DOC James Hazel, NYS-DEC E.Doherty J.Brennan N.Burton S.Feuerstein A.Klumpp T.Seeler





City of Rochester

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FAX (716) 428-6010 TDD/Voice 232-3260 Department of Environmental Services Office of the Commissioner Division of Environmental Quality 30 Church Street, Rm. 300B Rochester, New York 14614-1278 Tel.#: (716) 428-6011

December 8, 1994

Mary Jane Peachey, P.E. Division of Hazardous Waste Remediation New York State Department of Environmental Conservation 6274 E. Avon-Lima Road Avon, New York 14414

Re: Court Street Parking Garage Progress Report Number 6

Dear Ms. Peachey:

As required by Section III of the consent order between the City of Rochester and the New York State Department of Environmental Conservation, we are providing the sixth progress report documenting work during the month of November, 1994 on the Court Street Parking Garage Site IRM.

I can be reached at 428-5978 if you have any questions. Thank you for your cooperation on this project.

Sincerely. Mark D. Gregør

Mark D. Glegør Environmental Specialist Division of Environmental Quality

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DEC 1 2 1994

NYS DEPT. OF ENVIRONMENTAL CONSERVATION-REGION 8 (SUBSTS./REM.)

Attach. xc. R.Elliott,MC-DOH D.Napier,NYS-DOH James Hazel,NYS-DEC E.Doherty J.Brennan N.Burton S.Feuerstein A.Klumpp T.Seeler

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EEO Employer/Handicapped

City of Rochester, New York Court Street Parking Garage Project Interim Remedial Measure December 10, 1994

Progress Report No. 6 Work Completed Through December 2, 1994

Prepared by the City of Rochester, New York Department of Environmental Services Division of Environmental Quality

Progress During the Reporting Period

Additional unanticipated excavation and disposal of stoddard contaminated soil was required during late November. The previous excavation subcontractor, MEC Corporation, was removed from the job and had significantly under reported the amount of contaminated soil that needed to be excavated for garage construction purposes. The prime garage contractor, Christa Construction, retained A.V. Towner to complete the excavation work. A.V. Towner has been advised that it must complete work in areas of potentially contaminated soil with a health and safety monitor on site and that all excavation activities must be in accordance with the Work Plan and Health and Safety Plan for the site.

During the week of November 28, 1,639 tons of stoddard contaminated soil were removed and transported to Mill Seat Landfill increasing the total for the reporting period to 2,578 tons. Soil removal was monitored in accordance with the approved work plan and total corganic vapor levels continued to be detected in range of 10 to 150 parts per million. The excavation of several hundred cubic yards of soil to bedrock for the garage elevator shaft was required as well as the removal of the remaining portions of the access ramp and soils that MEC had cast onto the access ramp slope above the shoring on the east side of the garage.

No drums of waste were generated at the site or disposed of during November.

On November 7, fnal verification sampling was performed by Seeler Associates in accordance with the approved Work Plan. Nine locations were sampled, V8 to V16, and analyzed for Method 8021 compounds ("tank list") using NYSASP protocols. Todd Caffoe of NYSDEC Region 8 split samples at locations V8 to V12. Results were received in early December and are provided in Attachment 1 along with a sample location drawing. **Percent Completion:** The overall IRM project is approximately 99% complete based on revised estimates of the remaining volume of potentially contaminated soil to be removed. This estimate is based on the assumption that the only additional potentially contaminated soils left to be removed are where the tunnel connection must be made to the below grade levels of the parking garage.

Modifications to the Work Plan

There were no modifications to the work plan during the month of November.

Problems Encountered

During the collection of the verification samples on November 7, the garage contractor was observed applying an oil coating to the forms used when pouring foundations, footers, columns, etc. The form oil had a strong fuel oil odor and was applied by spraying from a pressure cylinder. During the process of coating the forms, a significant amount of over spray occurred. This procedure has apparently been used throughout the course of the garage construction.

While the level of contamination from the over spraying is probably not significant, the potential for the form oil on soils to create uncertainty about the verification sample results was noted. Many of the same petroleum compounds could be expected from both stoddard solvent and fuel oil. An attempt was made to sample soils at a depth of six inches to avoid potential interferences that might be caused by surficial contamination from the form oil.

Deliverables

The attached verification sample analytical results and location drawing were provided to Todd Caffoe, NYSDEC, via fax on December 6.

Actions for the Coming Month

Christa Construction and A.V. Towner may be completing the tunnel connection during December.

The City will meet with the NYSDEC on site to review the verification sample results and make final determinations regarding the locations of vent pipe.

Seeler Associates will continue to refine the ventilation system specifications and location with the garage architect and the HVAC mechanical contractor.

Gasoline Contamination

As was stated in the October 10 Progress Report, additional analytical results from samples taken from the south face of the excavation at the area of gasoline contamination by Seeler Associates. These data are now being plotted on a site drawing and will be sent to Bill Shutts of NYSDEC Region 8 when completed..

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226-2909

ORGANICS QUALIFIERS - 1991

- U Indicates compound was analyzed for but not detected. The sample quantitation limit must be corrected for dilution and for percent moisture.
- J Indicates an estimated value. The 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 isless than the sample quantitation limit but greater than zero.
- N Indicates presumptive evidence of a compound. This flag is only used for tenatively identified compound, where the identification is based on a mass spectral library search.
- P This flag is used for a pesticide/Arcolor 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".
- 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. If a sample or extract is re-analyzed at a higher dilution factor, as in the "E" flag above, the "DL" suffix is appended to the sample number on the Form I for the diluted sample, and ALL concentration values reported on that Form I are flagged with the "D" flag.
- A This flag indicates that a TTC is a suspected aldol-condensation product.
- X As specified in Case Narrative.

8-80 - B-82

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VOLAT	ILE ORGANICS	ANALYSIS	DATA SHEET	EFA	SAMPLE	NO
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ne:GENERAL TE	STING	Cont	tract:SEELER	1		
le: 10145	Case No.: -	SAS	5 No.:	SDG No.:	V11	
: (soil/water) SOIL		Lab Sampl	e ID: 437	4-2	
wt/vol:	5 (g/m	L)G	Lab File	ID: >J1	459	
(low/med)	LOW		Date Rece	ived: 11/	07/94	
ture: not dec	.8		Date Analy	yzed: 11/	19/94	
(pack/cap)	CAP		Dilution	Factor: 1	.0	
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t Volume: CAS NO.	(ul) Compound		CONCENTRATION UN (ug/L or ug/Kg)	NITS: UG/KG	Q	
t Volume: CAS NO.	(ut) COMPOUND		CONCENTRATION UN (ug/L or ug/Kg)	NITS: UG/KG	Q 1	i
t Volume: CAS NO. 1634-04-4	(ul) COMPOUND) Butyl_Et	(ug/L or ug/Kg)	NITS: UG/KG	Q U	
t Volume: CAS NO. 1634-04-4 71-43-2	(ul) COMPOUND) Butyl_Et	CONCENTRATION U (ug/L or ug/Kg)	NITS: UG/KG 5. 5.	Q 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
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t Volume: CAS NO. 1634-04-4 71-43-2 108-88-3 100-41-4	(ul) COMPOUND	-Butyl_Et	CONCENTRATION UN (ug/L or ug/Kg)	NITS: UG/KG 5. 5. 5. 5.	Q IU IU IU IU	
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t Volume: CAS NO. 1634-04-1 71-13-2 108-88-3 100-11-1 1330-20-7 1330-20-7	(ul) COMPOUND Methyl-t Benzene_ Toluene_ Ethylben (m+p)Xyl	-Butyl_Et	CONCENTRATION UN (ug/L or ug/Kg)	NITS: UG/KG 5. 5. 5. 5. 5. 5.		
t Volume: CAS NO. 1634-04-4 71-43-2 108-88-3 100-41-4 1330-20-7 98-82-8	(ul) COMPOUND Methyl-t Benzene_ Toluene_ Ethylben (m+p)Xyl Isopropy	-Butyl_Et	CONCENTRATION UI (ug/L or ug/Kg)	NITS: UG/KG 5. 5. 5. 5. 5. 5.	0 10 10 10 10 10 10 10 10 10 10 10 10 10	
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t Volume: CAS NO. 1634-04-1 71-13-2 108-88-3 100-11-1 1330-20-7 98-82-8 103-65-1 108-67-8 98-06-6 95-63-6 135-98-8 99-87-6 104-51-8	(ul) COMPOUND Benzene Toluene Ethylben (m+p)Xyl Callene 	-Butyl_Et	CONCENTRATION UI (ug/L or ug/Kg)	NITS: UG/KG 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5.		

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1/89 Rev.

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de: 10145 Case	No.1	SAS No. 1		SDG No.:	V11	
: (soil/water) SOI	(L		Lab Samp	le ID: 437	4-1	
wt/vol: 1	(q/mL) G		Lab File	ID: >J1	462	
(low/med) LOW			Date Reco	eived: 11/	07/94	
ture: not dec.8			Date Ana:	lyzed: 11/	19/94	
· (pack/cap) CAP			Dilution	Factor: 1	.0	
(pack/cap/ car						
extract Volume:	- (uL)					
extract Volume:	- (uL) (uL)	CONCEN		INT TO CA		
extract Volume: t Volume: CAS NO.	(uL) (uL)	CONCEN (ug/L	TRATION OF UG/Kg	UNITS:) UG/KG	Q	
extract Volume: t Volume: CAS NO, C	(uL) (uL) COMPOUND	CONCEN (ug/L	TRATION U	UNITS:) UG/KG	Q 	
• (pack/cap/ Car extract Volume: t Volume: CAS NO. 0 1634-04-4	(uL) (uL) COMPOUND	CONCEN (ug/L L_Ether	TRATION U or ug/Kg	UNITS:) UG/KG 27. 27	Q U U	
extract Volume: t Volume: CAS NO. 1634-04-4	(uL) (uL) COMPOUND Methyl-t-Buty Senzene	CONCEN (ug/L L_Ether	TRATION U or ug/Kg	UNITS:) UG/KG 27. 27. 27.	Q U U	
extract Volume: t Volume: CAS NO. C 1634-04-4	(uL) (uL) COMPOUND Methyl-t-Buty Benzene Coluene	CONCEN (ug/L l_Ether	TRATION UG/Kg	UNITS:) UG/KG 27. 27. 27. 27.	2 U U U U	
extract Volume: t Volume: CAS NO. () 1634-04-4	(uL) (uL) COMPOUND Methyl-t-Buty Benzene Coluene Sthylbenzene	CONCEN (ug/L L_Ether	TRATION UG/Kg	UNITS:) UG/KG 27. 27. 27. 27. 27. 27.	Q IU IU IU	
extract Volume: t Volume: CAS NO. () 1634-04-4	(uL) (uL) COMPOUND Methyl-t-Buty Senzene Coluene Sthylbenzene (m+p)Xylene	CONCEN (ug/L	TRATION UG/Kg	UNITS:) UG/KG 27. 27. 27. 27. 27. 27. 27. 27.	0 10 10 10 10 10	
extract Volume: t Volume: CAS NO. C 1634-04-4	(uL) (uL) COMPOUND Methyl-t-Buty Benzene Coluene Chylbenzene (m+p)Xylene Chylbenzene	CONCEN (ug/L	ITRATION U or ug/Kg	UNITS:) UG/KG 27. 27. 27. 27. 27. 27. 27. 27. 27.		
extract Volume: t Volume: CAS NO. C 1634-04-4	(uL) (uL) COMPOUND Methyl-t-Buty Benzene Coluene Sthylbenzene (m+p)Xylene Sthylbenzene (m+p)Xylene Sopropyl_Benzen	CONCEN (ug/L	ITRATION U or ug/Kg	UNITS:) UG/KG 27. 27. 27. 27. 27. 27. 27. 27. 27. 27.		
extract Volume: t Volume: CAS NO, C 1634-04-4	(uL) (uL) COMPOUND Methyl-t-Buty Benzene Coluene Coluene Sthylbenzene (m+p)Xylene Copropyl_Benzen Sopropyl_Benzen Sopropyl_Benzen Sopropyl_Benzen	CONCEN (ug/L L_Ether zene	TRATION U or ug/Kg	UNITS:) UG/KG 27. 27. 27. 27. 27. 27. 27. 27. 27. 27.		
extract Volume: t Volume: CAS NO. C 1634-04-4	(uL) (uL) (uL) COMPOUND Acthyl-t-Buty Benzene Coluene	CONCEN (ug/L L_Ether zene ylbenzene	DTRATION U or ug/Kg	UNITS:) UG/KG 27. 27. 27. 27. 27. 27. 27. 27. 27. 27.		
extract Volume: t Volume: CAS NO. C 1634-04-4	(uL) (uL) (uL) COMPOUND Methyl-t-Buty Senzene Coluene_ Coluene_ Coluene_ Coluene_ Coluene_ Coluene Col	CONCEN (ug/L L_Ether zene ylbenzene zene ylbenzene	TRATION U or ug/Kg	UNITS:) UG/KG 27. 27. 27. 27. 27. 27. 27. 27. 27. 27.		
extract Volume: t Volume: CAS NO. 0 1634-04-4 108-88-3	(uL) (uL) (uL) COMPOUND Methyl-t-Butyl Senzene Senzene Soluene Coluene Soluene Soluene Toluene Sopropyl_Bense 1, 3, 5-Trimethy tert-Butylbense 1, 2, 4-Trimethy sec-Butylbense	CONCEN (ug/L L_Ether zene ylbenzene zene ylbenzene ene	TRATION UG/Kg	UNITS:) UG/KG 27. 27. 27. 27. 27. 27. 27. 27. 27. 27.		
extract Volume: t Volume: CAS NO. 1634-04-4 1634-04-4	(uL) (uL) (uL) COMPOUND Methyl-t-Butyl Benzene Coluene	CONCEN (ug/L L_Ether zene ylbenzene ylbenzene cne uene	TRATION U or ug/Kg	UNITS:) UG/KG 27. 27. 27. 27. 27. 27. 27. 27. 27. 27.		
extract Volume: t Volume: CAS NO. 1634-04-4 1634-04-4	(uL) (uL) (uL) COMPOUND Methyl-t-Butyl Benzene Coluene_ Coluene Coluene Coluene Coluene_ Coluene Coluene Coluene_ Coluene	CONCEN (ug/L L_Ether zene ylbenzene_ zene ylbenzene tuene e	TRATION UG/Kg	UNITS:) UG/KG 27. 27. 27. 27. 27. 27. 27. 27. 27. 27.		

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FORM_I_VOA____

IA LPA DAMPLE M VOLATILE ORGANICS ANALYSIS DATA SHEET V10 me:GENERAL TESTING Contract:SEELER de: 10145 Case No.: SAS No.: SDG No.: V11 :: (soil/water) SOIL Lab Sample ID: 4374-3 wt/vol: 5 (g/mL) G Lab File ID: >J1446 (low/med) LOW Date Received: 11/07/94 ture: not dec.3 Date Analyzed: 11/18/94 : (pack/cap) CAP Dilution Factor: 1.0 extract Volume: (uL) CONCENTRATION UNITS: CAS NO. COMPOUND 100-41-4Benzene 5. 10 100-41-4Benzene 5. 10 100-41-4Benzene 5. 10 100-61-4Benzene 5. 10 100-64Benzene 5. 10 100-64Benzene 5. 10 100-65-1 S. 5. 10 1330-20-7 Wylene 1330-20-7 Sylene 130-65-1 13,5-Trimethylbenzene 101 5. 10 102-65-1 1,3,5-Trimethylbenzene 101 5. 10	IA LEFE DEFINITION OF DEFINITION					
me:GENERAL TESTING Contract:SEELER de: 10145 Case No.: SAS No.: SDG No.: V11 :: (soil/water) SOIL Lab Sample ID: 4374-3 wt/vol: 5 (q/mL) G Lab File ID: >J1446 (low/med) LOW Date Received: 11/07/94 ture: not dec.3 Date Analyzed: 11/18/94 :: (pack/cap) CAP Dilution Factor: 1.0 extract Volume: (uL) tVolume: (uL) CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q 1634-04-4BenzeneBenzene	me:GENERAL TESTING Contract:SEELER de: 10145 Case No.: SAS No.: SDG No.: V11 : (soil/water) SOIL Lab Sample ID: 4374-3 wt/vol: 5 (q/mL) G Lab File ID: >J1446 (low/med) LOW Date Received: 11/07/94 ture: not dec.3 Date Analyzed: 11/18/94 : (pack/cap) CAP Dilution Factor: 1.0 extract Volume: (uL) t Volume: (uL) CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q 1634-04-4Bernzene 5. U 1 100-641-4Bernzene 5. U 1 100-641-4Bernzene 5. U 1 103-62-7	VOLAT	IA ILE ORGANICS AN	ALYSIS DATA SHEET	LFF	DANTE IN
me:GENERAL TESTING Contract:SEELER de: 10145 Case No.: SAS No.: SDG No.: V11 :: (soil/water) SOIL Lab Sample ID: 4374-3 wt/vol: 5 (q/mL) G Lab File ID: >J1446 (low/med) LOW Date Received: 11/07/94 ture: not dec.3 Date Analyzed: 11/18/94 : (pack/cap) CAP Dilution Factor: 1.0 extract Volume: (uL) t Volume: (uL) CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q 1634-04-4Ethylbenzene 5. U 1 100-41-4	me:GENERAL TESTING Contract:SEELER de: 10145 Case No.: SAS No.: SDG No.: V11 : (soil/water) SOIL Lab Sample ID: 4374-3 wt/vol: 5 (q/mL) G Lab File ID: >J1446 (low/med) LOW Date Received: 11/07/94 ture: not dec.3 Date Analyzed: 11/18/94 : (pack/cap) CAP Dilution Factor: 1.0 extract Volume: (uL) t Volume: (uL) CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q 1634-04-4				I VIC	1
de: 10145 Case No.: SAS No.: SDG No.: V11 :: (soil/water) SOIL Lab Sample ID: 4374-3 wt/vol: 5 (g/mL) G Lab File ID: >J1446 (low/med) LOW Date Received: 11/07/94 ture: not dec.3 Date Analyzed: 11/18/94 :: (pack/cap) CAP Dilution Factor: 1.0 extract Volume: (uL) tv Volume: (uL) case NO. COMPOUND (uL) CONCENTRATION UNITS: CAS NO. COMPOUND 1634-04-4Benzene	de: 10145 Case No.: SAS No.: SDG No.: V11 : (soil/water) SOIL Lab Sample ID: 4374-3 wt/vol: 5 (g/mL) G Lab File ID: >J1446 (low/med) LOW Date Received: 11/07/94 ture: not dec.3 Date Analyzed: 11/18/94 : (pack/cap) CAP Dilution Factor: 1.0 extract Volume: (uL) t Volume: (uL) CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q 1634-04-4 Hethyl-t-Butyl_Ether S. U 1 108-08-3 Tolume S. U 1 108-08-3 Tolume S. U 1 1330-2C-7 Crwplene S. U 1 1330-2C-7 C%lene S. U 1 108-67-8 S. U 1 1 108-67-8	me:GENERAL TE	STING	Contract: SEELER	· · · ·	
:: (soil/water) SOIL Lab Sample ID: 4374-3 wt/vol: 5 (q/mL) G Lab File ID: >J1446 (low/med) LOW Date Received: 11/07/94 ture: not dec.3 Date Analyzed: 11/18/94 :: (pack/cap) CAP Dilution Factor: 1.0 extract Volume: (uL) ot Volume: (uL) CONCENTRATION UNITS: COMPOUND CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q 1634-04-4	: (soil/water) SOLL Lab Sample ID: 4374-3 wt/vol: 5 (g/mL) G Lab File ID: >J1446 (low/med) LOW Date Received: 11/07/94 ture: not dec.3 Date Analyzed: 11/18/94 : (pack/cap) CAP Dilution Factor: 1.0 extract Volume: (uL) t Volume: (uL) CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q 1634-04-4Benzene 5. U 1 108-68-3Benzene 5. U 1 108-68-3Benzene 5. U 1 1330-20-7	de: 10145	Case No.:	SAS No.:	SDG No.	V11
wt/vol: 5 (q/mL) G Lab File ID: >J1446 (low/med) LOW Date Received: 11/07/94 ture: not dec.3 Date Analyzed: 11/18/94 ture: not dec.3 Date Analyzed: 11/18/94 t: (pack/cap) CAP Dilution Factor: 1.0 extract Volume: (uL) (uL) CONCENTRATION UNITS: CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q 1634-04-4Benzene 5. U 1 71+43-2Benzene 5. U 1 108-68-3Benzene 5. U 1 100-41-4Benzene 5. U 1 1330-20-7Benzene 5. U 1 1330-20-7	wt/vol: 5 (q/mL) G Lab File ID: >J1446 (low/med) LOW Date Received: 11/07/94 ture: not dec.3 Date Analyzed: 11/18/94 ture: not dec.3 Date Analyzed: 11/18/94 : (pack/cap) CAP Dilution Factor: 1.0 extract Volume: (uL) (uL) CONCENTRATION UNITS: Q t Volume: (uL) CONCENTRATION UNITS: Q 1634-04-4	: (soil/water) SOIL	Lab Sa	mple ID: 437	74-3
(low/med) LOW Date Received: 11/07/94 sture: not dec.3 Date Analyzed: 11/18/94 sture: not dec.3 Date Analyzed: 11/18/94 i: (pack/cap) CAP Dilution Factor: 1.0 extract Volume: (uL) ot Volume: (uL) CAS NO. COMPOUND (uL) CONCENTRATION UNITS: CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q 1634-04-4	(low/med) LOW Date Received: 11/07/94 ture: not dec.3 Date Analyzed: 11/18/94 ture: not dec.3 Date Analyzed: 11/18/94 : (pack/cap) CAP Dilution Factor: 1.0 extract Volume: (uL) t Volume: (uL) CONCENTRATION UNITS: Q CAS NO. COMPOUND (uL) CONCENTRATION UNITS: CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q 1634-04-4	wt/vol:	5 (g/mL)	G Lab Fi	le ID: >J1	446
ture: not dec.3 Date Analyzed: 11/18/94 t: (pack/cap) CAP Dilution Factor: 1.0 extract Volume: (uL) (uL) tv Volume: (uL) (uL) CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q 1634-04-4Benzene 5. UU 1634-04-4Benzene 5. UU 100-41-4Benzene 5. UU 100-41-4Ethylbenzene 5. UU 1330-20-7	ture: not dec.3 Date Analyzed: 11/18/94 : (pack/cap) CAP Dilution Factor: 1.0 extract Volume:	(low/med)	LOW	Date R	eceived: 11	/07/94
h: (pack/cap) CAP Dilution Factor: 1.0 extract Volume: (uL) ot Volume: (uL) CAS NO. COMPOUND COMCENTRATION UNITS: Q 1634-04-4	: (pack/cap) CAP Dilution Factor: 1.0 extract Volume: (uL) t Volume: (uL) CAS NO. COMPOUND CONCENTRATION UNITS: CONCENTRATION UNITS: CAS NO. COMPOUND 1634-04-4Methyl-t-Butyl_Ether S. UU 71+43-2Benzene S. UU 108-68-3Benzene S. UU 108-62-8	ture: not dec	. 3	Date A	nalyzed: 11,	18/94
extract Volume: (uL) ot Volume: (uL) CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q 1634-04-4Methyl-t-Butyl_Ether S. U 1 71+43-2Benzene S. U 1 108-88-3Benzene S. U 1 108-68-3Benzene S. U 1 108-61-4	extract Volume: (uL) t Volume: (uL) CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q 1634-04-4	: (pack/cap)	CAP	Diluti	on Factor: 1	
bt Volume: (uL) CONCENTRATION UNITS: CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG 1 1634-04-4Methyl-t-Butyl_Ether 1634-04-4Methyl-t-Butyl_Ether 1 1634-04-4	t Volume: (uL) CONCENTRATION UNITS: CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q 1634-04-4	extract Volum	e: (uL)			
CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q 1634-04-4Methyl-t-Butyl_Ether 5. U 1 71+43-2Benzene 5. U 1 108-88-3Benzene 5. U 1 108-88-3Benzene 5. U 1 108-88-3Benzene 5. U 1 108-88-3	CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q 1634-04-4Methyl-t-Butyl_Ether 5. U 1 71+43-2Benzene 5. U 1 106-68-3Benzene 5. U 1 100-41-4Benzene 5. U 1 100-41-4	t Volume:	(uL)			
1634-04-4Methyl-t-Butyl_Ether 5. U 71-43-2Benzene 5. U 108-88-3Benzene 5. U 109-41-4Ethylbenzene 5. U 1330-20-7	1634-04-4Methyl-t-Butyl_Ether 5. U 71+43-2Benzene 5. U 106-68-3Benzene 5. U 106-68-3Benzene 5. U 106-68-3Benzene 5. U 106-68-3Benzene 5. U 106-61-4Ethylbenzene 5. U 1330-20-7	CAS NO.	COMPOUND	(ug/L or ug/	Kg) UG/KG	Q
71+43-2Benzene 5. U 108-88-3Benzene 5. U 100-41-4Benzene 5. U 100-41-4	71+43-2Benzene 5. U 108-88-3Benzene 5. U 108-88-3Benzene 5. U 108-88-3Benzene 5. U 108-88-3	1634-04-4	Methyl_t-Bu	ty) Ether	5.	
108-68-3Toluene 5. U 100-41-4Ethylbenzene 5. U 1330-20-7	108-68-3Toluene 5. U 100-41-4Ethylbenzene 5. U 1330-20-7	71-43-2	Benzene		5.	UU I
100-41-4	100-41-4Ethylbenzene 5. U 1330-20-7	108-88-3	Toluene	1	5.	IU I
1330-20-7(m+p)Xylene 5. U 1330-20-7	1330-20-7	100-41-4	Et:hylbenzen	e	5.	IU I
1330-20-7oXylene 5. 10 98-82-8	1330-20-7oXylene 5. U 98-82-8Isiopropyl_Benzene 5. U 103-65-1	1330-20-7	(mHp)Xylene		5.	IU I
98-82-8	98-82-8	1330-20-7	Xvlene		5.	IU I
103-65-1n-Propylbenzene 5. 10 108-67-81,3,5-Trimethylbenzene 5. 10 98-06-6	103-65-1 n-:Fropylbenzene 5. 10 108-67-81, 3, 5-Trimethylbenzene 5. 10 98-06-6	98-82-8	ISODTODVI B	enzene	5.	U I
108-67-81,3,5-Trimethylbenzenei 5. 10 98-06-6tert-Butylbenzenei 5. 10 95-63-6	108-67-81,3,5-Trimethylbenzene 5. U 98-06-6tert-Butylbenzene 5. U 95-63-6tert-Butylbenzene 5. U 135-98-8	103-65-1	n-Fropylben	zene	5.	IU I
98+06-6tert-Butylbenzene 5. U 95-63-6tert-Butylbenzene 5. U 135-98-8sec-Butylbenzene 5. U 99-87-6	98-06-6tert-Butylbenzene 5. U 95-63-6tert-Butylbenzene 5. U 135-98-8sec-Butylbenzene 5. U 99-87-6	108-67-8	1.3.5-Trime	thylbenzene	5.	U I
95-63-6	95-63-6	98-06-6	tert-Butylb	enzene	5.	IU I
135-98-8sec-Butylbenzene 5. U 99-87-6	135-98-8scc-Butylbenzene 5. U 99-87-6	95-63-6	1.2.4-Trime	thylbenzene	5.	UU I
99-87-6	99-87-5	135-98-8	sec-Butylbe	nzehé	5.	IU I
104-51-8n-Butylbenzene5. U 91-20-3Naphthalene 5. U	104-51-8n-Butylbenzene 5. U 91-20-3Naiphthalene 5. U	99-87-6	DIsopropyl	toluene	5.	iu i
91-20-3Naphthalene 5. U	91-20-3Naiphthalene 5. U	104-51-8	Butylbenz	ene	5.	IU I
		91-20-3	Naphthalene		5.	iv i

FORM_I_VOA____

VOLATI	1A LE ORGANICS ANAL	LYSIS DATA SHEET	LFA	SAMPLE NO
			V11	
ame: GENERAL TES	TING	Contract: SEELER	I	
de: 10145	Case No.:	SAS No.:	SDG No.:	V11
(soil/water)	SOIL	Lab Samp	ole ID: 437	4-4
wt/vol:	1 (g/mL) G	Lab File	ID: >J1	465
: (low/med)	LOW	Date Rod	eived: 11/	07/94
sture: not dec.	9	Date Ana	alyzed: 11/	19/94
1: (pack/cap)	CAP	Dilution	Factor: 1	.0
extract Volume	: (uL)			
ot Volume:	(uL)			
CAS NO.	COMPOUND	(ug/L or ug/Kg	UNITS: J) UG/KG	Q
	n,	1		1 i
1634-04-4	Methyl-t-But;	yl_Ether	27.	In I
71-43-2	Benzene		27.	10 1
108-88-3	Toluene		27.	10 1
100-41-4	Ethylbenzene,		13,	12 1
1330-20-7	(m+p) Xylene_		76.	1 1
1330-20-7		I	100.	1 1
98-82-8	Isopropyl_Be	nzene	72.	1 1
103-65-1	n-Propylbenz	ene	160.	T I
108-67-8	1, 3, 5-Trimet	hylbenzeneI	3600.	IEI
98-06-6	tert-Butylba	nzene	27,	10 1
95-63-6	1, 2, 4-Trimet	hylbenzene	7700.	IEI
135-98-8	sec-Butylben	zene	550,	1 1
99-87-6	p-Isopropylt	oluene	1900.	I E I
104-51-6	n-Butylbenze	ne	27.	10 1
91-20-3	Naphthalene_		26,	12 1

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FORM_I_VOA____

1A EFA SAMPLE NU. VOLATILE ORGANICS ANALYSIS DATA SHEET V11DL IME : GENERAL TESTING Contract:SEELER de: 10145 Case No.: --- SAS No.: ---SDG No.: V11 (: (soil/water) SOIL Lab Sample ID: 4374-4DL : wt/vol: (g/mL) G Lab File ID: >02543 4 (low/med) MED Date Received: --/--/-sture: not dec.9 Date Analyzed: 11/21/94 a: (pack/cap) CAP Dilution Factor: 1,0 extract Volume: 10000 (uL) ot Volume: 50 (uL) CONCENTRATION UNITS: CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q E. 1 1634-04-4-----Methyl-t-Butyl_Ether____ 1400. 10 | 71-43-2----Benzene__ 1400. 1U 1400. 108-68-3----Toluene_ U | 100-41-4----Ethylbenzene__ 1400. 10 1 1330-20-7-----(m+p)Xylene____ 1400. U 1400, U 98-82-8----Isopropyl Benzene 1400. U 103-65-1----n-Propylbenzene__ 1400. IU | 108-67-8-----1,3,5-Trimethylbenzene____ D 3600. 1 1 98-06-6----tert-Butylbenzene 1400. U 95-63-6-----1,2,4-Trimethylbenzene___ 8100, 1 D 135-98-8----sec-Butylbenzene____ 560. JJD | 99-87-6----p-Isopropyltoluene_ | 104-51-8-----n-Butylbenzene____ D 1500. 1400. U | 91-20-3----Naphthalene_ 1400. 1V

FORM_I_VOA___

	1A	EPA SA	AMPLE N
VOLATILE	CORGANICS ANAL	YSIS DATA SHEET	*
DO CONTRAT	TNC	Contract. SETTER	
ME:GENERAL ILSII	LNG	CONCLACT: SEELER	
de: 10145 Ca	ase No. :	SAS No.: SDG No.: V:	11
: (soil/water) S	5011.	Lab Sample ID: 4374-	5
wt/vol: 5	(g/mL) G	Lab File ID: >J144	9
(low/med) LO	OM	Date Received: 11/07,	/94
ture: not dec.9		Date Analyzed: 11/19,	/94
; (pack/cap) CA	AP	Dilution Factor: 1.0	
extract Volume:	(uL)		
extract Volume:	(uL)		
extract Volume: t Volume:	(uL) (uL)	CONCENTRATION UNITS:	
extract Volume: t Volume: CAS NO.	(uL) (uL) compound	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
extract Volume: t Volume: CAS NO.	(uL) (uL) COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
extract Volume: t Volume: CAS NO.	(uL) (uL) compound	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
extract Volume: t Volume: CAS NO. 1634-04-4	(uL) (uL) compound Methyl-t-Buty	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	
extract Volume: t Volume: CAS NO. 1634-04-4 71-43-2	(uL) (uL) compound Meithyl-t-Buty Benzene Toluene	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	
extract Volume: t Volume: CAS NO. 1634-04-4 71-43-2 108-88-3	(uL) (uL) compound Methyl-t-Buty Benzene Tolluene	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	
extract Volume: t Volume: CAS NO. 1634-04-4 71-43-2 108-88-3 100-41-4	(uL) (uL) compound Methyl-t-Buty Benzene Toluene Ethylbenzene	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	
extract Volume: t Volume: CAS NO. 1634-04-4 71-43-2 108-88-3 100-41-4 1330-20-7	(uL) (uL) COMPOUND Nethyl-t-Buty Benzene To:luene Ethylbenzene Ethylbenzene	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	
extract Volume: t Volume: CAS NO. 1634-04-4 71-43-2 108-88-3 100-41-4 1330-20-7 1330-20-7	(uL) (uL) COMPOUND Neithyl-t-Buty Benzene To:luene Ethylbenzene Ethylbenzene :Kylene Isionronyl Ber	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	
extract Volume: t Volume: CAS NO. 1634-04-4 71-43-2 108-88-3 100-41-4 1330-20-7 98-82-8	(uL) (uL) COMPOUND Meithyl-t-Buty Benzene To:luene Ethylbenzene Ethylbenzene Ethylbenzene Isiopropyl_Ben	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	
extract Volume: t Volume: CAS NO. 1634-04-4 71-43-2 108-88-3 100-41-4 1330-20-7 1330-20-7 98-82-8 103-65-1	(uL) (uL) (uL) COMPOUND Methyl-t-Buty Benzene To:Luene To:Luene Ethylbenzene Ethylbenzene Sthylene :Kylene 	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	
extract Volume: t Volume: CAS NO. 1634-04-4 71-43-2 108-88-3 100-41-4 1330-20-7 1330-20-7 98-82-8 103-65-1 108-67-8	(uL) (uL) (uL) COMPOUND Methyl-t-Buty Benzene To:luene To:luene Ethylbenzene Ethylbenzene Sthylbenzene Is:opropyl_Benzene I, 3, 5-Trimeth	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	
extract Volume: t Volume: CAS NO. 1634-04-4 1634-04-4 108-88-3 108-88-3 100-41-4 1330-20-7 1330-20-7 1330-20-7 98-82-8 108-67-8 98-05-6	(uL) (uL) (uL) COMPOUND Methyl-t-Buty Benzene Tolluene Tolluene Ethylbenzene Ethylbenzene Isopropyl_Ben n-Propylbenze 1, 3, 5-Trimeth tert-Butylben	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	
extract Volume: t Volume: CAS NO. 1634-04-4 71-43-2 108-88-3 100-41-4 1330-20-7 1330-20-7 98-82-8 108-67-8 98-06-6 95-63-6	(uL) (uL) (uL) COMPOUND Methyl-t-Buty Benzene Tolluene Tolluene Ethylbenzene Isopropyl_Ben n-Propylbenze 1, 3, 5-Trimeth tert-Butylber 1, 2, 4-Trimeth	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	
extract Volume: t Volume: CAS NO. 1634-04-4 71-43-2 108-88-3 100-41-4 1330-20-7 1330-20-7 98-82-8 108-67-8 98-06-6 95-63-6 135-98-8	(uL) (uL) (uL) COMPOUND Methyl-t-Buty Benzene Tolluene Tolluene Ethylbenzene Isopropyl_Ben Isopropyl_Ben 1, 3, 5-Trimeth tert-Butylbenze 1, 2, 4-Trimeth se c-Butylbenze	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	
extract Volume: t Volume: CAS NO. 1634-04-4 71-43-2 108-88-3 100-41-4 1330-20-7 1330-20-7 98-82-8 108-67-8 98-06-6 95-63-6 135-98-8 99-87-6	(uL) (uL) (uL) COMPOUND Methyl-t-Buty Benzene Tolluene Tolluene Ethylbenzene Isopropyl_Benzene Isopropyl_Benzene I, 3, 5-Trimeth tert-Butylbenzene I, 2, 4-Trimeth se c-Butylbenzene 	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG /1_Ether 5. /1_Ether 5. <	
extract Volume: t Volume: CAS NO. 1634-04-4 71-43-2 108-88-3 108-88-3 109-41-4 1330-20-7 1330-20-7 98-82-8 108-67-8 98-06-6 95-63-6 135-98-8 99-87-6 104-51-8	(uL) (uL) (uL) COMPOUND Meithyl-t-Buty Beinzene To:Luene To:Luene Ethylbenzene Isiopropyl_Ben n-:Kylene I, 3, 5-Trimeth te:rt-Butylbenzen I, 2, 4-Trimeth se c-Butylbenzen 	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG /1_Ether 5.	

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ume:GENERAL TESTINGContract:Side: 10145CaseNo.:SAS No.:i: (soil/water) SOIL1: wt/vol:5(g/mL) G: wt/vol:5(g/mL) G: (low/med)LOW: (low/med)LOW: (low/med)LOW: (pack/cap)CAPextractVolume:(uL)CONCENTCAS NO.COMPOUND(ug/L 1634-04-4Benzene	V13 SEELER 5DG No.: V11 Sab Sample ID: 4374-6 Sab File ID: >J1464 Date Received: 11/07/94 Date Analyzed: 11/19/94 Dilution Factor: 1.0
ide: 10145 Case No.: SAS No.: :: (soil/water) SOIL) : wt/vol: 5 (g/mL) G 1 : wt/vol: 5 (g/mL) G 1 : wt/vol: 5 (g/mL) G 1 : (low/med) LOW 1 : ture: not dec.9 1 : (pack/cap) CAP 1 extract Volume: (uL) CAS NO. COMPOUND (ug/L < 1634-04-4	5DG No.: V11 Gab Sample ID: 4374-6 Gab File ID: >J1464 Date Received: 11/07/94 Date Analyzed: 11/19/94 Dilution Factor: 1.0
<pre>(: (soil/water) SOIL) wt/vol: 5 (g/mL) G i (low/med) LOW f sture: not dec.9 I (low/med) CAP I extract Volume: (uL) cAs NO. COMPOUND (ug/L o 1634-04-4Methyl-t-Butyl_Ether</pre>	Cab Sample ID: 4374-6 Cab File ID: >J1464 Date Received: 11/07/94 Date Analyzed: 11/19/94 Dilution Factor: 1.0
wt/vol: 5 (q/mL) G 1 (low/med) LOW 1 (ture: not dec.9 1 (ture: not dec.9 1 (pack/cap) CAP 1 extract Volume: (uL) ot Volume: (uL) CONCENT (ug/L of 1634-04-4Methyl-t-Butyl_Ether 71-43-2Benzane	TRATION UNITS:
(low/med) LOW I sture: not dec.9 I (ture: not dec.9 I extract Volume: (uL) ot Volume: (uL) CAS NO. COMPOUND (ug/L of 1634-04-4Methyl-t-Butyl_Ether 71-43-2Benzane	Date Received: 11/07/94 Date Analyzed: 11/19/94 Dilution Factor: 1.0
iture: not dec.9 I i: (pack/cap) CAP I extract Volume: (uL) ot Volume: (uL) CAS NO. COMPOUND 1634-04-4Methyl-t-Butyl_Ether 71-43-2Benzane	Date Analyzed: 11/19/94 Dilution Factor: 1.0
<pre>i: (pack/cap) CAP I extract Volume: (uL) cAs NO. COMPOUND (ug/L < 1634-04-4Methyl-t-Butyl_Ether 71-43-2Benzane</pre>	Dilution Factor: 1.0
extract Volume: (uL) >t Volume: (uL) CAS NO. COMPOUND (ug/L < 1634-04-4Methyl-t-Butyl_Ether 71-43-2Benzane	TRATION UNITS:
CAS NO. COMPOUND (ug/L < 1634-04-4Methyl-t-Butyl_Ether 71-43-2Benzane	TRATION UNITS:
CAS NO. COMPOUND (ug/L <	WITON ONITS.
1634-04-4Methyl-t-Butyl_Ether 71-43-2Benzane	or ug/Kg) UG/KG Q
1634-04-4Methyl-t-Butyl_Ether 71-43-2Benzene	
71-43-2Benzene	I 5, [U]
	S. U
108-88-3Toluene	5. U
100-41-4Ethylbenzene	5. U
1330-20-7(m+p)Xylene	5. 10 1
1330-20-7o-Xylene	5. V
98-82-8Isopropyl_Benzene	5. U
103-65-1n-Propylbenzene	I 5. U I
108-67-81,3,5-Trimethylbenzene	5, U
98-06-6tert-Butylbenzene	S, [U]
95-63-61,2,4-Trimethylbenzene_	5. U
135-98-8sec-Butylbenzene	5, U
99-87-6p-Isopropyltoluene	5, (U)
104-51-8n-Butylbenzene	5. IU I
91-20-3Naphthalene	5. U I

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VOLAT	IA ILE ORGANICS A	NALYSIS DATA SHE	ET	FA SAFIFUE
				14
e:GENERAL TE	STING	Contract : SEE	LER I_	
e: 10145	Case No.:	SAS No.:	- SDG No	V11
(soil/water) SOIL	Lab	Sample ID: 4	374-7
wt/vol:	5 (g/mL)	G Lab	File ID: >	J1468
(low/med)	LOW	Dat	e Received: 1	1/07/94
ure: not dec	7	Dat	e Analyzed: 1	1/19/94
(pack/cap)	CAP	Dil	ution Factors	1.0
xtract volum	ue: (uL)			
Volume:	ue: (uL)	-		
CAS NO.	ue: (ul) (ul) comipound	CONCENTRA (ug/L or	TION UNITS: ug/Kg) UG/KG	Q
CAS NO.	(uL) (UL) COMIPOUND	CONCENTRA (ug/L or	TION UNITS: ug/Kg) UG/KG	Q 11
Volume: CAS NO. 1634-04-4	ul) (ul) COMIPOUND	CONCENTRA (ug/L or utyl_Ether	TION UNITS: ug/Kg) UG/KG	Q 1 1 10 1
Volume: CAS NO. 1634-04-4 71-43-2	(uL) (uL) COMIPOUND	CONCENTRA (ug/L or utyl_Ether	TION UNITS: ug/Kg) UG/KG	Q 1 10 10
Volume: CAS NO. 1634-04-4 71-43-2	(uL) (uL) COMIPOUND	CONCENTRA (ug/L or utyl_Ether	TION UNITS: ug/Kg) UG/KG	Q 1 10 10 10
Volume: CAS NO. 1634-04-4 71-43-2 108-88-3 100-41-4	(uL) (uL) COMPOUND Met:hyl-t-B Toluens Toluens Fthylbenze	CONCENTRA (ug/L or utyl_Ether	TION UNITS: ug/Kg) UG/KG	
CAS NO. 1634-04-4 71-43-2 108-88-3 100-41-4	(uL) (uL) COMPOUND Met:hyl-t-B Tol.uens Tol.uens Tol.uens Tol.uens 	CONCENTRA (ug/L or utyl_Ether	TION UNITS: ug/Kg) UG/KG	
Volume: CAS NO. 1634-04-4 71-43-2 108-88-3 100-41-4 1330-20-7 1330-20-7	(uL) (uL) COMPOUND 	CONCENTRA (ug/L or utyl_Ether	TION UNITS: ug/Kg) UG/KG	
CAS NO. 1634-04-4	(uL) (uL) COMIPOUND Met:hyl-t-B Herizene Toluene Toluene Etriylbenze (m+-p)Xylen C-Xylene 	CONCENTRA (ug/L or utyl_Ether me Benzene	TION UNITS: ug/Kg) UG/KG	
Xtract volume: Volume:	(uL) (uL) COMIPOUND Met:hyl-t-B Toluens Toluens Toluens Trylbenze 	CONCENTRA (ug/L or utyl_Ether e Benzene nzene	TION UNITS: ug/Kg) UG/KG	
Xtract volume: Volume:	(uL) (uL) COMIPOUND Met:hyl-t-B Toluene Toluene Toluene Toluene 	CONCENTRA (ug/L or utyl_Ether e Benzene ethylbenzene	TION UNITS: ug/Kg) UG/KG	
Xtract volume: Volume:	(uL) (uL) COMIPOUND Met:hyl-t-B Bernzene Tol.uene Tol.uene Tol.uene Tol.uene 	CONCENTRA (ug/L or utyl_Ether e Benzene ethylbenzene benzene	TION UNITS: ug/Kg) UG/KG	
Xtract volume: Volume:	(uL) (uL) COMIPOUND Met:hyl-t-B Benizene Tol.uene Tol.uene Tol.uene Tol.uene 	CONCENTRA (ug/L or utyl_Ether ne e Benzene ethylbenzene benzene ethylbenzene	TION UNITS: ug/Kg) UG/KG	
Xtract volume: Volume:	(uL) (uL) COMPOUND Met:hyl-t-B Benzene Tol.uena Tol.uena Ethylbenze 	CONCENTRA (ug/L or utyl_Ether ne e Benzene ethylbenzene ethylbenzene ethylbenzene enzene	TION UNITS: ug/Kg) UG/KG	
Xtract volume: Volume:	(uL) (uL) COMIPOUND Met:hyl-t-B Benzene Tol.uene Tol.uene Ethylbenze Ethylbenze 	CONCENTRA (ug/L or utyl_Ether ne e Benzene ethylbenzene ethylbenzene ethylbenzene enzene ltoluene	TION UNITS: ug/Kg) UG/KG	
Xtract volume: Volume:	(uL) (uL) (uL) COMPOUND Methyl-t-B Benzene Toluene Toluene Toluene 	CONCENTRA (ug/L or utyl_Ether ne e Benzene ethylbenzene ethylbenzene ethylbenzene itoluene zene	TION UNITS: ug/Kg) UG/KG	

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VOLATILE ORGANICS ANALYSIS DA	TA SHEET	PA SAMPLE NO.
Jame: GENERAL TESTING Contra	CT ISEELER	15
		······································
Code: 10145 Case No.: SAS N	O.t SDG NO	.: V11
ix: (soil/water) SOIL	Lab Sample ID: 4	374-8
le wt/vol: 5 (g/mL) G	Lab File ID: >.	71451
t: (low/med) LOW	Date Received: 1	1/07/94
sture: not dec.9	Date Analyzed: 1:	1/19/94
Mai (pack/cap) CAP	Dilution Factor:	1.0
L extract Volume: (uL)		
iot Volume: (uL)		
CAS NO. COMPOUND (ug	/L or ug/Kg) UG/KG	Q
1	1	1
1634-04-4Methyl-t-Butyl_Ether	5,	10 1
71-43-2Benzene		10 I
108-88-3Toluene	1 5.	IU I
100-41-4Ethylbenzene	5,	10 1
1330-20-7(m+p)Xylene	1 5.	IU I
1330-20-7o-Xylene	5.	IV I
98-82-8Isopropyl_Benzene	5.	U I
103-65-1n-Propylbenzene	1 5.	IU I
108-67-81.3.5-Trimethylbenze	ne i 5.	iu i
98-06-6tert-Butylbenzene	1 5.	iu i
95-63-61.2.4-Trimethylbenze	De 1 5	
135-98-8sec-Butylbenzene		10
99-87-6	5.	
1 104-51-8n-Butylbenzene	I 5.	10 1 10 1 10 1

FORM_I_VOA

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1A EPA SAMPLE NU. VOLATILE ORGANICS ANALYSIS DATA SHEET V16 me: GENERAL TESTING Contract: SEELER Case No.: --- SAS No.: --de: 10145 SDG No.: V11 : (soil/water) SOIL Lab Sample ID: 4374-9 wt/vol: 5 (g/mL) G Lab File ID: >J1461 (low/med) LOW Date Received: 11/07/94 ture: not dec.9 Date Analyzed: 11/19/94 I (pack/cap) CAP Dilution Factor: 1.0 extract Volume: ---(uL) t Volume: --(uL) CONCENTRATION UNITS: CAS NO. (ug/L or ug/Kg) UG/KG Q COMPOUND Ł 1634-04-4----Methyl-t-Butyl_Ether____ UI 5. 71-43-2----Benzene____ IU 5. 108-86-3----Toluene 5. U 100-41-4----Ethylbenzene 5. U 1330-20-7-----(m+p)Xylene__ 5. UI 1330-20-7----o-Xylene_ 1 5. U 98-82-8-----Isopropyl_Benzene 5. U 103-65-1----n-Propylbenzene_ 5. U 1 108-67-8-----1,3,5-Trimethylbenzene_____ 5. U 5. UI 95-63-6-----1, 2, 4-Trimethylbenzene____ 5. U 135-98-8-----sec-Butylbenzene__ 5. 10 99-87-6----p-Isopropyltoluene 5. U 104-51-8----n-Butylbenzene_____ 91-20-3-----Naphthalene_____ U 5. 5. U

FORM_I_VOA____

VOLATIL	E ORGANICS ANAL	LYSIS DATA SHEET		CPA SAMPLE	MIC
		Carbon at a SERIE		VTB	
merGENERAL TEST	TNG	CONTRACT: SEELE	к I		
de: 10145 C	ase No.:	5AS No.:	SDG N	o.: V11	
(soil/water)	WATER	Lab S	ample ID:	4374-10	
wt/vol: 5	(g/mL) MI	L Lab F	ile ID:	Q2505	
(low/med) L	WO	Date	Received	11/07/94	
sture: not dec.1	00	Date .	Analyzed:	11/19/94	
1: (pack/cap) C	АР	Dilut	ion Factor	1.0	
extract Volume:	(uL)				
ot Volume:	(uL)				
t Volume:	(uL)	CONCENTRATIO	ON UNITS	0	
CAS NO.	(uL) COMPOUND	CONCENTRATION (ug/L or ug	ON UNITS: /Kg) UG/L	Q	
CAS NO.	(uL) COMPOUND	CONCENTRATI (ug/L or ug	ON UNITS: /Kg) UG/L	Q	
CAS NO. 1634-04-4	(uL) COMPOUND	CONCENTRATIO (ug/L or ug	ON UNITS: /Kg) UG/L	Q I I I U	
CAS NO. 1634-04-4 71-43-2	(uL) COMPOUND Methyl-t-Buty Benzene	CONCENTRATIO (ug/L or ug yl_Ether	ON UNITS: /Kg) UG/L	0 I I I U	
CAS NO. 1634-04-4 71-43-2 108-88-3	(uL) COMPOUND Methyl-t-Buty Benzene	CONCENTRATIO (ug/L or ug yl_Ether	ON UNITS: /Kg) UG/L	Q IU IU IU	
CAS NO. 1634-04-4 71-43-2 108-88-3 100-41-4	(uL) COMPOUND Methyl-t-Buty Benzene Toluene Ethylbenzene	CONCENTRATIO (ug/L or ug	ON UNITS: /Kg) UG/L 5 5 5	Q IU . IU . IU . IU . IU	
CAS NO. 1634-04-4 71-43-2 108-88-3 100-41-4 1330-20-7	(uL) COMPOUND Methyl-t-Buty Benzene Toluene Ethylbenzene (m+p)Xylene	CONCENTRATIO (ug/L or ug	ON UNITS: /Kg) UG/L 5 5 5 5	Q IU IU IU IU IU IU	
CAS NO. 1634-04-4 71-43-2 108-88-3 100-41-4 1330-20-7 1330-20-7	(uL) COMPOUND Methyl-t-Buty Benzene Toluene Ethylbenzene (m+p)Xylene oXylene	CONCENTRATIO (ug/L or ug	ON UNITS: /Kg) UG/L	Q IU IU IU IU IU IU IU IU	
CAS NO. 1634-04-4 71-43-2 108-88-3 100-41-4 1330-20-7 98-82-8	(uL) COMPOUND Methyl-t-Buty Benzene Toluene Ethylbenzene (m+p)Xylene o-Xylene Isopropyl Ben	CONCENTRATIO (ug/L or ug	ON UNITS: /Kg) UG/L 5 5 5 5 5 5	Q IU IU IU IU IU IU IU IU IU IU IU	
CAS NO. 1634-04-4 71-43-2 108-88-3 100-41-4 1330-20-7 98-82-8 103-65-1	(uL) COMPOUND Methyl-t-Buty Benzene Toluene Ethylbenzene (m+p)Xylene o-Xylene Isopropyl_Ben n-Propylbenze	CONCENTRATIO	ON UNITS: /Kg) UG/L	Q IU IU IU IU IU IU IU IU IU IU	
CAS NO. 1634-04-4 71-43-2 108-88-3 100-41-4 1330-20-7 98-82-8 103-65-1 108-67-8	(uL) COMPOUND Methyl-t-Buty Benzene Toluene Ethylbenzene (m+p)Xylene Xylene 	CONCENTRATIO (ug/L or ug yl_Ether nzene ene	ON UNITS: /Kg) UG/L	Q IU IU IU IU IU IU IU IU IU IU IU IU IU	
CAS NO. 1634-04-4 71-43-2 108-88-3 100-41-4 1330-20-7 98-82-8 103-65-1 108-67-8 98-06-6	(uL) COMPOUND Methyl-t-Buty Benzene Toluene Ethylbenzene (m+p)Xylene Xylene 	CONCENTRATIO (ug/L or ug yl_Ether nzene ene hylbenzene nzene	ON UNITS: /Kg) UG/L	Q I I I I I I I I I I I I I I I I I I I	
CAS NO. 1634-04-4 71-43-2 108-88-3 100-41-4 1330-20-7 98-82-8 103-65-1 108-67-8 98-06-6 95-63-6	(uL) COMPOUND Methyl-t-Buty Benzene Toluene Ethylbenzene (m+p)Xylene o-Xylene Xylene 	CONCENTRATIO (ug/L or ug yl_Ether nzene ene hylbenzene nzene hylbenzene	ON UNITS: /Kg) UG/L	Q I I I I I I I I I I I I I I I I I I I	
CAS NO. 1634-04-4 71-43-2 108-88-3 108-88-3 108-88-3 108-88-3 108-82-3 1330-20-7 98-82-8 108-67-8 98-06-6 95-63-6 135-98-8	(uL) COMPOUND Methyl-t-Buty Benzene Toluene Ethylbenzene (m+p)Xylene Xylene 	CONCENTRATIG (ug/L or ug yl_Ether nzene ene hylbenzene azene hylbenzene zene	ON UNITS: /Kg) UG/L	Q I I I I I I I I I I I I I I I I I I I	
CAS NO. 1634-04-4 71-43-2 108-88-3 100-41-4 1330-20-7 1330-20-7 98-82-8 103-65-1 108-67-8 98-06-6 95-63-6 99-87-6	(uL) COMPOUND Methyl-t-Buty Benzene Toluene Toluene Ethylbenzene (m+p)Xylene o-Xylene Isopropyl_Benze 	CONCENTRATIG (ug/L or ug yl_Ether nzene ene hylbenzene azene hylbenzene azene oluene	ON UNITS: /Kg) UG/L	0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
CAS NO. CAS NO. 1634-04-4 71-43-2 108-88-3 100-41-4 1330-20-7 1330-20-7 98-82-8 103-65-1 108-67-8 98-06-6 98-06-6 98-06-6 99-87-6 104-51-8	(uL) COMPOUND Methyl-t-Buty Benzene Toluene Toluene Toluene 	CONCENTRATIG (ug/L or ug yl_Ether nzene ene hylbenzene azene azene cluene ne	ON UNITS: /Kg) UG/L	0 10 10 10 10 10 10 10 10 10 10 10 10 10	
CAS NO. 1634-04-4 71-43-2 108-88-3 100-41-4 1330-20-7 98-82-8 103-65-1 108-67-8 95-63-6 95-63-6 99-87-6 91-20-3	(uL) COMPOUND Methyl-t-Buty Benzene Toluene Toluene 	CONCENTRATIG (ug/L or ug yl_Ether nzene ene nylbenzene nylbenzene azene nylbenzene nylbenzene nylbenzene nylbenzene	ON UNITS: /Kg) UG/L 1 5 1	0 1 1 1 1 1 1 1 1 1 1 1 1 1	

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EFA SAMFLE NU. 14 VOLATILE ORGANICS ANALYSIS DATA SHEET VTBRE ame: GENERAL TESTING Contract: SEELER Dde: 10145 Case No.: --- SAS No.: --- SDG No.: V11 k! (soil/water) WATER Lab Sample ID: 4374-10RE a wt/vol: 5 (g/mL) ML Lab File ID: >02542 : (low/med) LOW Date Received: 11/07/94 sture: not dec.100 Date Analyzed: 11/21/94 a: (pack/cap) CAP Dilution Factor: 1.0 extract Volume: -- (uL) ot Volume: ---(uL) CONCENTRATION UNITS: CAS NO. COMPOUND (ug/L or ug/Kg) UG/L 0 | 1634-04-4-----Methyl-t-Butyl_Ether_____ | 71-43-2-----Benzene_____ | 108-88-3-----Toluene 10 5, 5. U | 108-88-3----Toluene_ 5. IU 100-41-4----Ethylbenzene 5. 10 1330-20-7----(m+p)Xylene_____ 5. U 1330-20-7----o-Xylene_ 10 5. 98-82-8----Isopropyl_Benzene 5. U | 103-65-1----n-Propylbenzene_ 5. 10 _____ 108-67-8-----1,3,5-Trimethylbenzene____] 11 5. | 98-06-6-----tert-Butylbenzene_ 5. U _ 5. | 95-63-6-----1,2,4-Trimethylbenzene____ .1 U | 135-98-8-----sec-Butylbenzene___ 5. U _ 99-87-6-----p-Isopropyltoluene_____ U 5, 104-51-8----n-Butylbenzene 5. U _ 91-20-3-----Naphthalene_____ 5. UI

FORM_I_VOA_____

1A VOLATILE ORGANICS ANALYS	IS DATA SHEET
ame:GENERAL TESTING C	ontract:SEELER
de: 10145 Case No.:	SAS No.: SDG No.: V11
: (soil/water) SOIL	Lab Sample ID: 4374-11
wt/vol: 5 (g/mL) G	Lab File ID: >J1467
(low/med) LOW	Date Received: 11/07/94
sture: not dec.8	Date Analyzed: 11/19/94
h: (pack/cap) CAP	Dilution Factor: 1.0
extract Volume: (uL)	
extract Volume: (uL) ot Volume: (uL)	
extract Volume: (uL) ot Volume: (uL) CAS NO. COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG Q
extract Volume: (uL) ot Volume: (uL) CAS NO. COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG Q
extract Volume: (uL) ot Volume: (uL) CAS NO. COMPOUND 1634-04-4Methyl-t-Butyl_ 71-43-2Benzene	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG Q Ether5. UU
extract Volume: (uL) ot Volume: (uL) CAS NO. COMPOUND 1634-04-4Methyl-t-Butyl_ 71-43-2Benzene 108-88-3Toluene	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG Q Ethor 5. UU 5. UU 5. UU
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FAX (716) 428-6010 TDD/Voice 232-3260 Department of Environmental Services Office of the Commissioner Division of Environmental Quality 30 Church Street, Rm. 300B Rochester, New York 14614-1278 Tel.#: (716) 428-6011

January 17, 1995

Mary Jane Peachey, P.E. Division of Hazardous Waste Remediation New York State Department of Environmental Conservation 6274 E. Avon-Lima Road Avon, New York 14414

Re: Court Street Parking Garage Progress Report Number 7

Dear Ms. Peachey:

As required by Section III of the consent order between the City of Rochester and the New York State Department of Environmental Conservation, we are providing the seventh progress report documenting work during the month of December, 1994 on the Court Street Parking Garage Site IRM.

I can be reached at 428-5978 if you have any questions. Thank you for your cooperation on this project.

Sincerely Mark D. Gregor,

Environmental Specialist

JAN 1 9 1095 NYS DEPT. OF ENVIRONMENTAL CONSERVATION-REGION 8 (SUBSTS./REM.

Attach.

xc. R.Elliott,MC-DOH D.Napier,NYS-DOH James Hazel,NYS-DEC E.Doherty J.Brennan N.Burton S.Feuerstein A.Klumpp T.Seeler

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City of Rochester, New York Court Street Parking Garage Project Interim Remedial Measure January 10, 1995

*

Progress Report No. 7 Work Completed Through December 31, 1994

Prepared by the City of Rochester, New York Department of Environmental Services Division of Environmental Quality

Progress During the Reporting Period

No contaminated soil was excavated from the site during this reporting period. The only remaining soil excavation that could result in the removal of contaminated soil, the tunnel connection, was not performed during December.

No drums of waste were generated at the site or disposed of during December.

On December 7, Mark Gregor (City Division of Environmental Quality) met with Todd Caffoe of Region 8 on site to review the results of the soil verification data and discuss the final vent system layout. On December 16, the City submitted a proposed final vent system layout to the NYSDEC, Monroe County Health Department and New York State Department of Health for comment and approval (See Attachment 1).

The City's ventilation system designer, Seeler Associates, continued to develop detailed system specifications and work with the garage architect to identify satisfactory locations within the garage for the system components. Seeler Associates also began preparing the final IRM report required by the Order on Consent.

Percent Completion: The IRM soil removal project is approximately 99.5 % complete based on the estimate of the remaining volume of potentially contaminated soil to be removed. This estimate is for the below grade tunnel connection to the garage.

We anticipate submitting the final vent system plans and specifications for NYSDEC approval in early February. The comprehensive IRM report should be ready for submission in early March.

Modifications to the Work Plan

The proposed final vent system layout incorporated modifications to the procedures in the approved Work Plan with respect to contaminated soil that will be left in place. Details of the City's proposed vent system layout are discussed in Attachment 1.

The City proposal is to leave approximately three to four feet of soil at the base of the northeast section of the garage. The verification sample results and field observations indicate that limited portions of the remaining soil are contaminated with compounds at levels in excess of the STARS guidance criteria. The analytical results from verification sampling indicated that the upper six inches of the remaining soil is, for the most part, uncontaminated. The Work Plan requires ventilation of areas where contamination exceeds STAR's guidance criteria.

The City plan involves the reallocation of remaining project resources to control vapor migration into the garage from areas outside the garage footprint. Seeps of the brown, solvent smelling liquid characteristic of the heavily contaminated areas encountered beneath the former dry cleaner have been observed on the shoring along the north side of the garage. It is the City's position that the soil on the north side of shoring represents a greater potential source of contamination and nuisance odors to the garage than the soil below the base floor slab. The City therefore proposes to install vent pipe in the select drain material that will be backfilled between the north foundation and the shoring.

Problems Encountered

No problems were encountered during the reporting period.

Deliverables

The verification sample analytical results and location drawing were provided to Todd Caffoe, NYSDEC, via fax on December 6. The City's proposal for the final vent system layout including drawings and summary data were submitted on December 16 to Mary Jane Peachey, NYSDEC Region 8 (Attachment 1).

Actions for the Coming Month

Seeler Associates will finalize the detailed drawings and specifications needed for the ventilation system based on the NYSDEC response to the City's proposed vent system modification. Installation of the vent system will be completed over the next few months as the garage construction is completed. The system should be operational by October, 1995.

The tunnel connection is tentatively scheduled for excavation at the end of February or early March.

Seeler Associates will continue to work on the final IRM report and provide the City with a draft for review and comment during February.

Gasoline Contamination

The completion of the site drawing identifying sample locations along the south face of the excavation has been delayed due to work load considerations and will be completed in February.

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Attachment 1



FAX (716) 428-6010 TDD/Voice 232-3260 Department of Environmental Services Office of the Commissioner Division of Environmental Quality 30 Church Street, Rfn. 300B Rochester, New York 14614-1278

December 16, 1994

Mary Jane Peachey, P.E. New York Department of Environmental Conservation 6274 E. Avon Lima Road Avon, New York 14414

Re: Court Street Parking Garage IRM Vent System - Work Plan final layout

Dear Ms. Peachey:

On September 22 we sent you proposed additions to the vent system layout for the Court Street Parking Garage Project and in a follow-up October 20 letter provided the rationale for the vent system expansion. Your November 23 response indicated that the final plans for the vent system would be dependent on the results of verification soil samples collected on November 7. We provided our sample results for locations V8 to V16 to Todd Caffoe on December 6 and received the NYSDEC split sample results (V8 to V12) the following day from Todd. Copies of the analytical data are provided in Attachment 1.

Table 1 is a summary of the soil analytical data indicating results for those locations where contaminants were detected by either the NYSDEC or City analyses. I have included the previous test pit data from soils just to the north of the November 7 verification sampling area as well. No characteristic site contaminants, petroleum or chlorinated solvents related to dry cleaning, were detected at V8, V9, V10, V12, V13, V14, V15, or V16. Figure 1. is a sample location drawing

The results indicate that, in all but one location, the upper six inches of the remaining three feet of soil are not contaminated. Of the recent verification sampling, the only location where volatile organic compounds exceed STAR's guidance values was at V-11. The test pit data and our experience with excavating soils at this elevation (502-506 fmsl) suggests that some low-level contamination may be present at depths greater than six inches. However, the remaining 2 - 2.5 feet of soil do not exhibit the heavy staining or the sustained strong odors encountered at the apparent source area (the stone lined sump pit discovered at elevation 517-519 fmsl) or just above the dense glacial till (elevation 514-516 fmsl). At this point, we would propose that the soil conditions indicated by the verification data do not warrant the active ventilation system proposed in September or require removal. The garage excavation process has resulted in the removal of the source area and all heavily contaminated soil within the footprint of the garage. We believe the intent of the removal action described in the approved work plan has been met.

Based on observations of the shoring on the north side of the garage excavation, we do, however, now propose to install a 62 foot section of 4-inch diameter slotted schedule 40 PVC vent pipe between the foundation and the shoring along the eastern end of the north side of the garage. A



revised proposed vent system layout is presented in Figure 2. In this area we have observed staining of the lagging and occasional small seeps of the same dark brown liquid possessing a petroleum solvent odor that was detected at various times during the soil removal process. The new section of vent pipe would be located above the garage perimeter drain system. The vent pipe would help prevent the accumulation of vapors in the drain system. The perimeter drain system is piped to a central drain location beneath the lower level of the garage where it runs through sand separators before being pumped to the storm sewer in Court Street. In addition to installing the vent pipe, we believe that it will be appropriate to periodically inspect the drain system and the sand separators for the possible presence of contamination from material entering the perimeter drain system.

We would like to determine the final system layout as soon as possible so that materials can be ordered, and we will provide the detailed drawings and specifications as soon as they are ready. Please let me know if you or Todd have any questions or would like to discuss the proposed revisions to the vent system. Thank you.

Sincerely

Environmental Specialist 428-5978

attach. xc. T.Caffoe,NYS-DEC R.Elliott,MC-DOH D.Napier,NYS-DOC James Hazel, NYS-DEC E.Doherty J.Brennan N.Burton S.Feuerstein A.Klumpp T.Seeler

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Sample Results (ug/kg)								
Compound	TP-1	TP-2	V-8 ^s	V-9 ^s	V-10 ⁵	V-11	V-11 ^s	
ethylbenzene	8.8	5600	nd	nd	nd	13j	2.7	
(m+p) xylene	nd	2800	na	na	na	76	na	
o-xylene	22	15000	na	na	na	100	na	
total xylene	na	na	nd	nd	nd	na .	94	
isopropylbenzene	16	12000	na	na	na	72	na	
n-propylbenzene	nd	15000	na	na	na	160	na	
1,3,5-trimethylbenzene	19	14000	na	na	na	3600e	na	
1,2,4-trimethylbenzene	10	33000	na	na	na	7700e	na	
sec-butylbenzene	nd	nd	na	na	na	550	na	
p-isopropyltoluene	7.8	4300	na	na	na	1900e	na	
napthalene	nd	nd	na	na	na	26j	na	
n-butylbenzene	47	24000	na	na	na	nd	na	
methylene chloride	na	na	1.5	1.3	1.5	na	1.4	
acetone	na	na	nd	nd	nd	na	7.6	
tetrachloroethylene	na	na	nd	nd	nd	na	5.4	
TIC's:	na	na	na	na	na	na		
unknown hydrocarbon							220j	
unknown hydrocarbon							280j	
propyl benzene isomer			1 + ^{- 9} 1				370j	
propyl benzene isomer							560j	
unknown hydrocarbon							950j	
propyl benzene isomer							520j	
unknown							210j	
propyl benzene isomer							620j	
butyl benzene isomer						•	370j	
butyl benzene isomer	- 4/4 -						470j	

Table 1. Court Street Parking Garage IRM Soil sample results for locations where contaminants were detected

Notes: S - indicates a NYSDEC split sample result .

nd - not detected during analysis

na - analysis not performed for this compound

j - estimated concentration

A











FAX (716) 428-6010 TDD/Voice 232-3260 Department of Environmental Services Office of the Commissioner City Hall, Room 300-B 30 Church Street Rochester, New York 14614-1290

July 8, 1994

Mary Jane Peachey, P.E. Division of Hazardous Waste Remediation New York State Department of Environmental Conservation 6274 E. Avon-Lima Road Avon, New York 14414

Re: Court Street Parking Garage Progress Report Number 1

Dear Mr. Cafe:

As required by Section III of the consent order between the City of Rochester and the New York State Department of Environmental Conservation, we are providing a report documenting the progress of the Court Street Parking Garage Site IRM. Hereafter, progress reports will be forwarded on a monthly basis through the end of the project.

I can be reached at 428-5978 if you have any questions. Thank you for you cooperation on this project.

Sincerely, Mark D. Gregor

Mark D. Gregor Environmental Specialist Division of Environmental Quality



Attach.

xc. R.Elliott,MC-DOH D.Napier,NYS-DOH James Hazel,NYS-DEC E.Doherty J.Brennan N.Burton S.Feuerstein D.Zariczny A.Klumpp T.Seeler



City of Rochester, New York Court Street Parking Garage Project Interim Remedial Measure July 8, 1994

Progress Report No. 1 Work Completed Through June 30, 1994

Prepared by the City of Rochester, New York Department of Environmental Services Division of Environmental Quality

Progress During the Reporting Period

In accordance with the approved work plan, Phase I soil removal activities (east of the Speedy's building) began in March 1994. LeChase Construction began excavation on March 21, after analytical results from in-situ soil samples were received. These samples were collected to profile the soil/waste streams and results were forwarded to Todd Caffoe, (Region 8/NYS-DEC) at that time. MARCOR representatives monitored the site for health and safety plan compliance and performed screening of the soils according to the work plan.

Excavation was completed to the target depth of the dense glacial till, 516 fmsl, and PVC vent pipe was installed as required in areas of contaminated soil that could not be excavated due to risk of structural damage to adjacent footers. Confirmational soil samples were collected and analyzed prior to backfilling and compacting for the road bed. Copies of these sample results were sent to Todd Caffoe. A total of 1588 tons of nonhazardous special waste soil and 277 tons of hazardous waste (F002) soil were sent for off-site disposal. Phase I is completed.

Phase II remedial activities began once the Speedy Cleaners building demolition was completed. Both the excavation contractor and the health and safety/environmental monitor changed to Bianchi Trison Corporation and Upstate Environmental respectively. After samples were collected to identify locations where perchloroethylene (PCE) was present, Bianchi Trison began Phase II excavation activities on May 4, 1994 and continued until May 13. During this time two underground storage tanks, one containing fuel oil and the other stoddard solvent, were also removed from the northwest section of the former building footprint. Bianchi Trison and Upstate were replaced on May 16 with LeChase and Marcor.

LeChase completed the excavation to 516 fmsl or uncontaminated soil conditions within the foundations of the former Speedy Cleaners building on May 24, 1994. Verification sampling as required by the work plan was performed on the eastern half of the footprint of the former Speedy's building. An additional separate section of vent pipe was installed in the north east section of the Phase II area and a connection made to the earlier Phase I vent pipe installation. A total of 2802 tons of soil characterized as special waste has been removed to date from the Phase II area as well as 1174 tons of soil identified as hazardous (F002) wastes.

Percent Completion: The overall IRM project is approximately 80% complete

Modifications to the Work Plan

Several changes in contractors occurred during the work to date reflecting the different contracts awarded by the City. The changes are described in the progress section above.

It became necessary to split the Phase II excavation work into separate stages because of the concern over the structural stability of Stone Street and the prohibitive added costs for temporary shoring. This change was conveyed in writing to Todd Caffoe in an April 18 letter (Attachment 1) from Mark Gregor.

Because PCE was encountered outside the footprint of the Speedy building prior to Phase I excavations, it became necessary to gather more waste profile samples for Method 8010 analyses than was originally required in the work plan. The additional sampling and analytical requirements were described in an April 28 letter (Attachment 2) from Mark Gregor to Todd Caffoe.

Problems Encountered

During excavation of the north central area of the former Speedy's site a gravel/ashfilled, stone-lined sump pit was encountered about 11 feet below grade. The pit had to be gradually excavated and drained because it contained a dark brown liquid with a strong solvent odor that upon analysis was determined to contain stoddard solvent and PCE. Approximately 750 gallons of the waste solvent were collected and drummed for disposal. Soil excavation was delayed briefly during this work.

Outside the project limits, but within the Court Street Garage footprint west of Stone Street, 4060 tons of gasoline contaminated soil was also removed. Excavation and disposal of this soil did not affect completion of the IRM activities.

Deliverables

Analytical data from soil samples were either provided via fax or reviewed directly with DEC staff. A complete set of all soil sample results is attached with this progress report (Attachment 3).

The final draft of the Site Investigation Report and Interim Remedial Measure Work Plan prepared by Seeler Associates was hand delivered to the Region 8 Office of the NYS-DEC on March 16, 1994 in conjunction with the execution of the order on consent for this project.

No other deliverables were required by the consent order during the reporting time period.

Actions for the Coming Month

The contractor awarded the garage construction project, Christa Construction, will be responsible for the remaining excavation of potentially contaminated soils that are in the footprint of the garage and tunnel. This will include the western half of the Phase II area below 516 fmsl and the tunnel area in what was previously Climax Alley. According to MEC Corporation, the excavation subcontractor to Christa, these Phase II excavation activities should resume the week of July 25, 1994. Soil removal beneath and west of Stone Street is currently underway.



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FAX (716) 428-6010 TDD/Voice 232-3260 Department of Environmental Services Office of the Commissioner City Hall, Room 300-B 30 Church Street Rochester, New York 14614-1290

April 18, 1994

Todd Caffoe Environmental Engineer New York State Department of Environmental Conservation 6274 E. Avon-Lima Road Avon, New York 14414

Re: Court Street Parking Garage IRM schedule

Dear Mr. Caffoe:

As we discussed last week, the Phase II excavation activities described in the IRM work plan are being split between the demolition and excavation contractor and the contractor awarded the garage construction contract. Bianchi Trison, the demolition and excavation contractor, will excavate the foot print of the Speedys building to an elevation of 516 feet begining the week of April 24. The 516 foot elevation corresponds to the dense till layer identified in Figure 5 of the work plan and was the final depth of the Phase I excavation between Speedys and the Wintergarden. In order to avoid costly shoring, the deeper excavation to rock beneath the western third of Speedys will be performed by the garage contractor beginning in late May or early June.

The IRM scope of work for the project has not changed, only the timing of the excavation and completion of the soil gas vent system. This change will not affect our ability to comply with the terms of the consent order.

Let me know if you have any questions about this change.

Sincerely Mark D. Grege

Environmental Specialist

xc. R.Elliott D.Napier E.Dohery J.Brennan N.Burton S.Feurerstein D.Zariczny A.Klumpp T.Seeler





FAX (716) 428-6010 TDD/Voice 232-3260 Department of Environmental Services Office of the Commissioner City Hall, Room 300-B 30 Church Street Rochester, New York 14614-1290

April 28, 1994

Todd Caffoe Environmental Engineer New York State Department of Environmental Conservation 6274 E. Avon-Lima Road Avon, New York 11414

Re: Court Street Parking Garage IRM Work Plan modification

Dear Mr. Caffoe:

During the Phase 1 excavation activities along the east side of Speedys, we identified a limited area of perchloroethylene (PCE). Previously PCE had been detected only in one location beneath the first floor slab in the northern part of the building. As a result of finding PCE in an additional location, we believe that in order for us to adequately characterize the soil waste stream we need to perform additional sampling prior to excavation.

Our proposed revision is to add two additional sampling efforts. Once the first floor slab and the area already defined as PCE contaminated is removed, we propose to add a test pit sampling program on a 25 x 25 foot grid pattern over the entire exposed area. Samples will be collected in the same manner as identified in the verification sampling section of the work plan and analyzed for method 8010 compounds. Based on the results, we will proceed to excavate contaminated soil areas as special waste or F002 waste, if PCE is present. Excavation will continue until we reach the basement elevation. The basement floor slab will then be removed and the grid sampling procedure repeated. Based on the analytical results, excavation will continue to the dense till (515 ft. elevation). Verification sample procedures will be performed as in the work plan.

The excavation contractor expects to remove the first floor slab on Monday May 2. If you have any questions or concerns about the additional sampling efforts please let me know. If I am not in my office I have a cellular phone (746-5244). Thank you for your cooperation.

Sincerely.

Mark D. Gregor Environmental Specialist

xc. R.Elliott D.Napier T.Caffoe A.Klumpp J.Brennan

EEO Employer/Handicapped





FAX (716) 428-6010 TDD/Voice 232-3260 Department of Environmental Services

August 8, 1994

Mary Jane Peachey, P.E. Division of Hazardous Waste Remediation New York State Department of Environmental Conservation 6274 E. Avon-Lima Road Avon, New York 14414

Re: Court Street Parking Garage Progress Report Number 2

Dear Ms. Peachey:

As required by Section III of the consent order between the City of Rochester and the New York State Department of Environmental Conservation, we are providing the second progress report documenting work during the month of July 1994 on the Court Street Parking Garage Site IRM.

I can be reached at 428-5978 if you have any questions. Thank you for your cooperation on this project.

Sincerely,

Mark Shegor @

Mark D. Gregor Environmental Specialist Division of Environmental Quality

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Office of the Commissioner

Division of Environmental Quality 30 Church Street, Rm. 300B Rochester, New York 14614-1278

AUG - 9 1994

NYS DEPT. OF ENVIRONMENTAL CONSERVATION-REGION 8

(SUBSTS./REM.).

Attach.

xc. R.Elliott,MC-DOH D.Napier,NYS-DOH James Hazel,NYS-DEC E.Doherty J.Brennan N.Burton S.Feuerstein D.Zariczny A.Klumpp T.Seeler

EEO Employer/Handicapped

62

City of Rochester, New York Court Street Parking Garage Project Interim Remedial Measure August 8, 1994

Progress Report No. 2 Work Completed Through July 31, 1994

Prepared by the City of Rochester, New York Department of Environmental Services Division of Environmental Quality

Progress During the Reporting Period

As previously reported, Phase II remedial activities were performed during the month of July by the garage contractor, Christa Construction and its excavation subcontractor, MEC Corporation. Additional nonhazardous contaminated soil under the former Stone Street and Climax Alley right-of-way was excavated to the intermediate target elevation of 515-516 fmsl. In order to complete excavations at the west end of the garage and install shoring, some areas of contaminated soil were removed and temporarily staged on site. The base of the excavation completed by LeChase in June was covered with sheets of 8-mil polyethylene. The plastic served to prevent cross contamination in areas already excavated to 515-516 fmsl where staged soils were to be placed. In addition, the plastic was used as marker to define the depths of existing test pit data on soil waste characteristics. Soils below the plastic required additional test pitting and sampling to determine if perchloroethylene (PCE) was present.

During July, 9,218 tons of stoddard contaminated soil were transported to Mill Seat Landfill for disposal. An additional 880 tons of gasoline contaminated soil from the former service station location west of Stone Street were also removed from the site and disposed of at the Mill Seat Landfill.

MEC Corporation has continued to excavate to the target elevation of 515-516 fmsl in the vicinity of the former Speedy Cleaners building at the east end of the garage footprint.

On July 22 while augering to bedrock for a piling on the east end of the garage, MEC encountered contaminated water and soil. Auger cuttings were staged on plastic and a sample collected. The soil sample and a sample of the water were submitted for Method 8010 analyses. PCE was not detected in either sample. The stoddard contaminated water was pumped into 15 drums which were transported to a disposal facility. The laboratory results are provided in Attachment 1.

Test pit excavations, sampling and analysis of the soil that must still be removed to construct the garage were performed on two occasions. The first test pit was excavated and sampled on July 13 beneath the Rochester Telephone Corporation (RTC) transmission line suspension bridge located below the former Stone Street R-O-W. Stoddard contamination appeared to extended to approximately the western limits of the Stone Street R-O-W. Three additional test pits were performed on July 27 between the site entry ramp, located in the eastern third of the footprint of the Speedy's building, and the RTC bridge.

PCE was not detected in any of the soil samples collected (Attachment 2). Based on these results the City will characterize the remaining contaminated soil as special waste.

Various drums of waste generated during different phases of the project were shipped from the site in July: 3 labpack drums, 5 drums of stoddard/water/sludge, 25 drums of PCE/stoddard/water, and 15 drums of stoddard/water.

Percent Completion: The overall IRM project is approximately 85% complete based on revised estimates of the remaining volume of contaminated soil to be removed.

Modifications to the Work Plan

The change in contractors to Christa and MEC was noted in the previous section.

Additional waste profile samples for Method 8010 analyses were again collected. These samples were not required or identified in the original work plan as discussed in Progress Report Number 1.

Problems Encountered

Construction related delays slowed the contaminated soil removal process in early July. No additional problems were encountered.

Deliverables

Analytical results from soil and water samples were discussed directly with DEC staff. A complete set of all July sample results is attached with this progress report.

No other deliverables were required by the consent order during the reporting time period.

Actions for the Coming Month

Christa Construction and MEC, will be responsible for excavating approximately 6,000 tons of nonhazardous contaminated soils that remain in the footprint of the garage and tunnel. Over most of this area excavation will be to bedrock. Upon completion of the garage excavation, verification sampling of any remaining soils will be performed in accordance with the work plan. Sampling is tentatively planned for early September.

The preliminary designs for the final ventilation system layout are being prepared. A proposed layout and system will be submitted for DEC review in late August or early September.

Attachment 1
7-15-1994 09:25AM

FROM SEELER ASSOCIATES

TO

Iest pit under telephone bridge

Seeler Associates

Environmental Consultants 660 Reynolds Arcade Building - 16 East Main Street Rochester, New York 14614 Phone (716) 262-6070 - Fax (716) 262-6065

FAX TRANSMISSION

Ann Elumpp C.D.R.

Company:

Phone:

Fax:

TO:

FROM:

Date:

Pages Including this cover page:

428-6010

575 VON SCHONDONE

15-94

Comments:

SAMPLE RESULT BEL

TO

GENERAL TESTING CORPORATION 710 Exchange St., Rochester, H.Y (716)454-3760

LABORATORY REPORT-TRACUR 540 (T4) Column: 125P1000 CAREDPACK Analysis: Priority Pollutants Purgeable Organics (8020) BTEX

Analyst: SCOTT SABEL Date: 07/15/94 Tige: 07:49 Client: SEELER Job #: R94/02630 Sample #: -001

..... . .

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Z - SOLID 92.5%

07/14/94 CRV

	IRsten.	I Area			Final Conc.	
Compound	I Time	Units	Conc.	Dil.	(ug/kg)	
Chloropethane	1	1	: 0.0	1 1	5,4	U
Broponethane	1	:	0.0	1 1	5.4	U
Vinyl Chloride	1	1	: 0_0	1 1	2.2	U
Chloroethane	1	1	0.0	1 1	2.2	U
Rethylene Chloride	1	1	: 0.00	1 11	1.1	U
Trichlorofluorosethane	1	1	0_0	1 11	1.1	ប
1,1-Dichloroethene	1	1	.0.0	1 11	1. 1.1	U .
1,1-Bichloroethane	116.11	1	: 0.0	1 1	1.1	U
1,2-Dichloroethene(TOTAL)	1	1	: 0_0	1 1	1.1	U (
Chloroform	1	1	0.0	1 1 1	1.1	U
1,2-Dichloroethane	1	1	0.0	: 1	1.1	U
1,1,1-Trichloroethane	1	1	1 0.0	1 1	1.1	U
Carbon Tetrachloride	1	1-	1 0.0	1 1	1.1	U
Browodichloromethane	1	1	0_0	1 1	1.1	U
1,2-Dichloropropane	1	: ~	i 0.0	1 1	1.1	U
1,3-Dichloropropene (Cis)	1	1	0.0	1 .1 :	1.1	U -
Trichloroethene	1	1	: 0.0	1 1	1.1	U
1, 3-Dichloropropene (Trans):	1	: 0.0	1 1	2.2	U
Dibromochlorpaethane	1	1 .	1 0.0	1 1	2.2	u
1,1.2-Trichleroethane	1 .	1	1 0.0	1 1	2.2	U
2-Chloroethylvinyl Ether	1	1	: 0_0	1 1	2.2	UJ
Broacfora	1	1	1 0.0	1 1	2.2	U
1, 1, 2, 2-Tetrachloroethane	1	1.	1 0.0	1 1	2.2	U
Tetrachloroethene	1	T	1 0.0	1 1	1.1	U
Chlorobenzene	1	1	1 0.0	1 1	2.2	U .
1,3-Dichlorobenzene (p)	1 7.	1	1 . 0-0	1 1	. 2.2	U:
1,2-Bichlorobenzene (o)	1 1. 14	1 2 .12.	In. 0.0:	1 1.	17	U.S. And Stand
1,4-Dichlorobenzene (p)	1.	L. A.	1. 0.0	1 1	2.2	U
8010 ONLY	1 here it	1	0.0	1	2.2.	Un a set startes
BOID .DHLY	119	1.14	1.0.0	1. 1.1.1	2.2	U
BOID ONLY	1	1. 1 10	1 0.0	1 1	1 2.2	U
8010 GNLY	1	1. 24	1	1 1	1 2.2	U
Total Volatiles'					0.00	al .
· · · · · · · · / ·	Reten-	: Area	Total	:Ant.	1 z · ··	Accep.
Surrogate Standards	I Time	Units	Rec*vry	IAdd.	RECOVERY	lieits
Bronochlorenethane (1	110.49	1 158	1 22.6	. 30	75	156-178
1,2,3-Trichloropropane (2)]	1	1	30		150-141
Chlorofluorobenzene HALL	127.15	1 92.4	25.7	1 30		160-108
Chlorofluorobenzene PTD	1	1	0.0	: 30	0	160-140
	-					



07-28-1994 09:43AM

FROM SEELER ASSOCIATES

TO

Seeler Associates

Environmental Consultants 660 Reynolds Arcade Building - 16 East Main Street Rochester, New York 14614 Phone (716) 262-6070 - Fax (716) 262-6065

FAX TRANSMISSION

Mark Gregor C.D.R

Company:

Phone:

Fax:

TO:

FROM:

Date:

Pages Including this cover page:

Comments:

8-6010

SPEEDY Soil results

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General Testing Corporation 710 Exchange St., Rochester, N.Y (716)454-3760

LABORATORY REPORT-T3 Analysis: Priority Pollutants 8010 Column: Restek Capillary 07/23/94 Curve

Analyst: DAVE LIPANI Date: 07/77/94 Time: 15:40 Client; SEELER Job #: R94/02774 Sample #: -001

TO

Z SOLID 93. 0Z

			·		Final	
	Reten.	Area	1.		Conc.	i i
Coepound	Time	Units	Conc.	Di1_	(ug/Kg)	
Chloromethane	1	1	1 0.0	1	5,4 6	:
Vinyl Chloride	1	1	: 0.00 :	1	2.2 0	1
Broepethane	1	1	1 0.0	1	5.4 8	3
Chloroethane	:	1 -	1 0.0 1	1	2.2 1	Į
Trichlorofluoromethane	1	1	: 0.00	1	1.1 t	1
1,1-Dichloroethene	1	1	: 0.0	1	1.1 L	3
Methylene Chloride	÷.	1	1 0.0	1	1.1 1	1
1,2-Dichloroethene (TOT)	1	1	1 0.0 1	1	1.1 1	5
1,1-Dichloroethane	4	1	: 0.0	1	1.11	1
Chlorofore	1 .	1	1 0.0	1	1.1 1	1
1, 1, 1-Trichloroethane	F. Yally	1 24	: 0.0	1	1.11	1
Carbon Tetrachloride	1	1	1 0.0	.1	1.1 1	1
1,2-Dichloroethane	1	1	: 0.0	1	1.11	
Trichloroethene	1	1	1 0.0	1	1.11	1
1.2-Dichloropropane	1		; 0.0	1	1.11	
Bronodichlorogethane	1	1	1 0.0		1.11	
2-Chlorosthylvinyl Ether	1. 10 1.	1-	1 0.0	1	2.21	IJ
1.3-Dichloroprobene (Cis)	11	i	: 0.0	1	1.11	1
1.3-Dichloropropene (Trans)	11	r 1	1 0.0	1	2.21	1
1.1.2-Trichloroethane			1 0.0	1	2.21	
Tetrachloroethene	1		1 0.0	20 800	1.11	
Dibropochloropethane	1 -	1	1 0.0		2.71	
Chlorobenzene	1		1 0.0	. i	2.21	
Brocofore			1 0.0	1	2.21	1
1.1.2.2-Tetrachlorpethane	-	1	1 0.0		2.21	
1.3-Dichlorobenzene (a)	1 - 31	1.	: 0.0	111	2.21	
1.4-Dichlorobenzene (p)	1	1	1 0.0	- 1	2.21	3
1,2-Dichlorobenzene (a)	1		: 0.0		2.21	1
BOID CHILY	1.	1	: 0.0	1	0.00	100
BO10 ENLY	1	1	1 0.0	1	0.00	
8010 ONLY	1	1	1 0.0	1	0.00	
8010 ONLY	1	1	: 0.0	1	0.00	
TOTAL VOLATILES					0.00	
	IReten.	t Area	iTotal	Ant.	Percent	Accep.
Surrogate Standards	: Time	Units	IRec'vry	Add.	Recovery	Linits
Broachlorosethane	117.55	263	21.3	30	71	66-128
Chlorafluorobenzena	130.09	1 153	: 25.3	30	84	60-108

7/28/94

TO

Seneral Testing Corporation 710 Exchange St., Rochester, N.Y (716)454-3760

LABORATORY REPORT-T3 Analysis: Priority Pollutants 8010 Column: Restek Capillary 07/23/94 Curve Analyst: DAVE LIPAHI Date: 07/27/94 Time: 16:46 Client: SEELER Job #: R94/02774 Sample #: -002

Z SOLID 92.4%

					FINEL	
	Reten.	Area	1		Conc.	
Compound	i 1180	UNITS	i Lonc.	U11.	(ug/kg)	1
Chloromethane	1	1	0.0	1	5.4 U	
Vinyl Chloride	1	1	1 0.00 1	1	2.2 0	
Broscethane	1	1	1 0.0	1 1	5.4 0	
Chlorosthane	1 .	1	1 0.0 1	1 1	2.2 0	
TrichlorofLuorosethane	1	:	1 0.00 1	1 1	1.1 0	
1,1-Dichloroethene	1	1	1 0.0	1 1 1	1.10	
Nethylene Chloride	1	1	1 0.0	1 1	1.1 U	
1,2-Dichlorpethene (TDT)	1	1	1 0.0 1	1 1	1.1 U	
1,1-Dichloroethane	E N	1	: 0.0	1 1	1.1 1	
Chloroform	1	1	1 0.0	1 1	1.1 U	,
1, 1, 1-Trichloroethane	1	1	1 0.0	1 1	1.1 U	
Carbon Tetrachloride	1	1	1 0.0	1 1	1.1 U	
1,2-Dichloroethane	1	1	: 0.0	1 1	1.1 U	
Trichloroethene	:	1	1 0.0	1 1	1.1 U	
1,2-Dichloropropane	1	E	1 0.0	1 1	1.1 U	
Bromodichloromethane	1.	1	: 0.0	1 1	1.1 U	
2-Chlorcethylvinyl Ether	1	1 1	1 0.0	1 1	2.2 U	J
1,2-Dichloropropene (Cis)	1.	I.	; 0.0	1 1	1.1 U	
1,3-Dichloropropene (Trans)	F1	1	: 0.0	1 1	2,2 1	
1, 1, 2-Trichloroethane	1	1	1 0.0	1 1	2.2 U	
Tetrachloroethene	1	1	: 0.0	1 1	1.1 U	
Dibromochloromethane	1	1	1 0.0	1 1	2.2 0	
Chlorobenzene	1	1	: 0.0	1 1	2.2 0	
Broasfora	1	1	1 0.0	1 1	2.2 0	
1,1,2,2-Tetrachloroethane	1	1	1 0.0	1 1	2.2 0	
1,3-Dichlorobenzene (m)	1	1	1 0.0	1 1	2.2 U	
1,4-Dichlorobenzene (p)	:	1	1 0.0	1 1	2,2 U	
1,2-Dichlorobenzene (o)	:	1	1 0.0	1	2.2 U	
BO10 DHLY	I	-	1 0.0	1	0.00	
BOID UNLY	1	1	0.0	1 1	0.00	
BOID ONLY	1	1	0.0	1 1	0.00	
BOID UNLY	:	1	: 0.0	1 1	0.00	
FUTAL VOLATILES		5 - C - C			0.00	112
	Reten.	i Area	Total	Ast.	Percent	Accep.
surrogace Standards	Time	units	Rec'vry	Add_	Recovery	Liaits
sropechloremethane	117.54	: 276	1 22.3	30	74	66-128
Chlorafluorobenzene	130.09	: 163	: 27.0	30	90	60-108

7128/94

General Testing Corporation 710 Exchange St., Rochester, N.Y (716)454-3760

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LABORATORY REPORT-T3 Analysis: Priority Pollutants 8010 Column: Restek Capillary 07/23/94 Curve

Chlorofluorobenzene

Analyst: DAVE LIPANI Date: 07/27/94 Time: 17:44 Client: SEELER Job #: R94/02774 Sample #: -003

Z SOLID

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-3

92.32

				in and	Final	
	Reten.	Area	;	:	Conc.	
Ecepound	: Tise	Units	I Conc.	Dil.	(ug/kg)	
Chlorosethane	1	1	1 0.0	5	27	U
Vinyl Chloride	1	1	: 0.00	: 51	11	U
Brososethane	1	1	: 0.0	: 51	27	U
Chlorpethane	1	1	1 0.0	1 5 1	11	U
Trichlorofluoromethane	1	1	: 0.00	1 5 1	5.4	u
1, 1-Dichloroethene	1 .	1 76	: 0.0	1 5 1	5.4	U
Nethylene Chloride	:	1 ···	1 0.0	1 5	5.4	U
1,2-Bichloroethene (TOT)	:16.42	: 109	1 6.0	1 5 1	32	
1,1-Dichloroethane	1	t	1 0.0	1 5	5.4	U
Chloroform	1	:	1 0.0	1 5	5.4	U
1, 1, 1-Trichloroethane	1	1	: 0.0	1 5	5.4	U
Carbon Tetrachloride	1. 1. 1	1	: 0.0	: 5 :	5.4	U .
1,2-Dichloroethane	1.	:	1 0.0	1 5 1	5.4	U
Trichloroethene	1	:	: 0.0	: 5	5.4	U
1,2-Dichloropropane	1	1	1 0.0	: 5	5.4	U
Bronodichloromethane	:	1	: 0.0	1. 5	5.4	U
2-Chloroethylvinyl Ether	1	1	: 0.0	1 5	: 11	UJ
1.3-Dichloropropens (Cis)	1	1	1 0.0	1 5	5.4	U
1,3-Dichloropopene (Trans)	1	1	1 0.0	1 5	11	U
1,1,2-Trichlorgethane	1	1	: 0.0	1 5	11	U I
Tetrachloroethene	1	1	1 0.0	1 5	5.4	U
Dibrosochloromethane	1		: 0.0	1 5	: 11	U
Chlorobenzene	.1	1	: 0.0	1 5	. 11	U
Brosofors	1	:	1 0.0	1 5	1 11	U
1,1,2,2-Tetrachleroethanc	1	1	: 0.0	: 5	1 11	U
1,3-Dichlorobenzene (a)	1		1 0.0	1 5	1 11	υ
1,4-Bichlorobenzene (p)	3	1	: 0.0	: 5	1 11	u
1,2-Dichlarobenzene (o)	1	1	1 . 0.0	1 5	1 . 11	U
BO10 OHLY	4	:	: 0.0	5	0.00	
8010 DNLY	1	1	1 0.0	: 5	0.00	
BOIG DHLY	1	ŧ	1 0.0	: 5	0.00	
8010 DHLY	1	1	: 0.0	! 5	0.00	
TOTAL VOLATILES		~	and the second		. 32.00	
	Reten.	1 Area	ITotal	Ant.	Percent	Accep.
Surrogate Standards	Time	Units	Rec Tury	Add_	Recovery	Lisits
Brogochlorosethane	17.54	: 376	: 30.4	30	101	66-128

130.11 1 189 ;

31.3 1

30 ;

104

60-108

Analyst: DAVE LIPANI

Date: 07/27/94

JOD #: R94/02774

Time: Z3:36 Client: SEELER

Sample #: -003

RE-AWALYSIS DE TR-3

7/28/94

7P-3

LABORATORY REPORT-T3 Amalysis: Priority Pollutants 8010 Column: Restek Capillary

General Testing Corporation

710 Exchange Sti, Rochester, N.Y

07/23/94 Curve

(716)454-3760

X SOLID 92.3X

					Final	
	iReten.	I Area	1 1		Conc.	
Coopound	: Time	Units	Conc.	Dil.	(ug/Kg)	
Chlorosethane	1	:	0.0	1	5.4 0	-
inyl Chloride	1	:	1 0.00	1 1	2.2 U	
romomethane	1	:	: 0.0	1	5.4 U	
hloroethane	1	1	1 0.0	1	2.2 U	
richlorofluoromethane	1	1	: 0,00	1 1	1.1 0	
,1-Dichloroethene	1	1	: 0.0	1	1.1 U	
ethylene Chloride	1 1	1	1 0.0	1 1	1.1 U	k.
,2-Bichlorbethene (TOT)	116.44	1 167	1 9.2	11	9.9	
. 1-Dichloroethane	1	1 Carlo	1 0.0	1	1.I U	
hlorofora	1	1	0.0	1 1	1_1 U	
, 1, 1-Trichloroethane	1	1	: 0.0	1	1.1 U	1
arbon Tetrachloride	E. C.	1	1 0.0	1	1.1 U	
,2-Dichloroethane	1	:	1 0.0	1	1.1 U	
richlorgethene	+	1	: 0.0	1 1	1.1 U	
,2-Dichloropropane	1 .	*	1 0.0	1 1	1.1 U	
renodichloroaethane	1	1	: 0.0	1 1	1.1 U	
-Chloroethylvinyl Ether	1	1	: 0.0	1 1	2.2 0	J
3-Dichloropropene (Cis)	1 .	1	1 0.0	1 1	1.1 U	
3-Dichloropropene (Trans)	1	1	1 0.0	1 1	2.2 0	
1,2-Trichloroethane	1	1	1 0.0	1 1	2.2 8	
trachloroethene	1	1	1 0.0	1 1	1.1 0	1
bromochloromethane	1	1	1 0.0	1 1	2.2 1	k is the
lorobenzene	:	1	1 0.0	1 1	: 2.2 U	1.5
osofora	1	1 years	1 0.0	1 1	2.2 U	
1,2,2-Tetrachloroethane	1	1	1 0.0	1 1	2.2 0	
3-Dichlorobenzene (m)	1.	t in	: 0.0	1	2.2 U	
4-Dichlorobenzene (p)		1	0.0	1	2.2 U	
2-Dichlorobenzene (o)			0_0	1	2.2 0	
	1		0.0	1	0.00	
	1		0.0	1	0.00	
	-	1	. 0.0	1	0.00	
TAL UN ATTIES		1	. 0.0	. 1	0.00	
WITH VULNIALES	Datas	1 Alena	IT-toT		9.90	A
urrogate Standards	: Time	iUnits	IRer fyry	Add.	Recovery	Limits
omochloromethane	117.56	1 213	1 17.2	30	* 57	66-128
nlorofluorobenzene	130.15	1 121	: 20.0	30	67	60-108

TO

Seeler Associates

Environmental Consultants 660 Reynolds Arcade Building - 16 East Main Street Rochester, New York 14614 Phone (716) 262-6070 - Fax (716) 262-6065

FAX TRANSMISSION

(.O.R.

MARK GREGOR

TO:

Company:

Phone:

Fax:

FROM:

Date:

Pages Including this cover page:

428-6010 Parts VON SCHONDORF 7-27-924

For

Comments:

MARK - RESMITS Will Fax groundwater to MARCOR

ADDDDDD ۵ * WATER SOIL SAMALE Originals Will Be Mailed Originals Will Not Be Mailed

TO

General Testing Corporation

A Full Service Environmental Laboratory

Date: Job Number: 10: Schondor ATTENTION: FAX NUMBER: 262 6065 PAGES TO POLLOW: FROM: INSTRUCTION/MESSAGE: 710000 ani 710 Exchange Street . Bochester, New York 14608 . (716) 454-3760 . Fax (716) 454-1245 85 Trinity Place . Hackensack, NJ 07601 . (201) 488-5242 . Fax (201) 488-6386

435 Lawrence Bell Drive . Amherst, NY 14221 . (716) 634-0454 . Fax (716) 634-9019

General Testing Corporation 710 Exchange St., Rochester, N.Y (718)454-3760

Analyst: DIANE LUCEY Date: 07/26/94 Time: 23:06 Client: SEELER Job #: R94/02749 Sample #: -001

TO

710 Eychange St Rochester	H V	Date: 07/26/94						
(716)454-3760	4 ISP 7	Time	Time: 27:06					
			Clients	Client: SEFIER				
LABORATORY REPORT-TS	894/027	49 IX						
Analysis: Prigrity Polluta	-001	Aller a	21					
8010					100	in		
Column: Restek Canillary					C Nr.)	0-0		
07/13/94 Curve					00			
					0			
					Final			
	Reten.	Area			Coor.			
Conpound	Time	Units	Conc.	Dil.	(ug/1)			
	1	1	1			-		
Chlorosethane	1	1	1 0.00 1	1 1	5.0 U			
Vinyl Chloride	1	:	1 0.00	1	2.0 U			
Broapnethane	1	1	: 0.00 1	1 1	5.0 0			
Chloroethane	£ 1	1	1 0.00 1	1 1.	2.0 U			
Trichlorofluoromethane	:	1	1 0.00 1	1 1	1.0 U	a.t		
1,1-Dichloroethene	1	+	1 0.00	1 1	1.0 U			
Nethylene Chloride	1	F	: 0.00 1	1 1	1.0 U			
1,2 Dichloroethene (TOT)	1	1	1 0.0 ;	1 1	1.0 U			
1,1-Dichloroethane	1	:	1 0.00 1	1 1	1.0 U			
Chlorofore	1	:	1 0.00	1 1	1.0 U			
1,1,1-Trichloroethane	1	1	1 0.00 1	1 1	1.0 1			
Carbon Tetrachloride	2	1	1 0.00 1	1 1	1.0 U			
1,2-Dichloroethane	I	1	1 0.0 1	11	1.0 U			
Trichlorpethene	1	1	1 0.0 1	1 1	1.0 U			
1,2-Dichloropropane	1	1	1 0.00 1	1 1	1.0 U			
Brosodichlorosethane	1	1	1 0.00 1	1 11	1.0 U			
2-Chloroethylvinyl Ether	1. 1	1	: 0.00 :	1 1	2.0 U	J		
1,3-Dichloropropene (Cis)	1	F	1 0.00 1	1 1	1.0 0			
1,3-Dichloropropene (Trans)	1	:	: 0.00 :	1 1	2.0 U			
1, 1, 2-Trichloroethane	t	1	1 9-9 1	1 1	2.0 U			
Tetrachloroethene	1	1	1 0.00	11	1.0 U			
Dibramochloromethane	1	1	1 0.00 1	1 1	2.0 U			
Chlorobenzene	1	1	1 0.00	1 11	2.0 U			
Brasefore	1	1	1 0.00 1	1 1	2.0 U			
1, 1, Z, 2-Tetrachloroethane	1	R	1 0_00	1 1	2.0 U			
1,3-Dichlorobenzene (a)	1	1	: 0.00 :	11	2.0 U			
1,4-Dichlorobeszene (p)	:	L	1 0.00 1	1 1	2.0 U			
1,2-Dichlorobenzene (o)	1	ĩ	0.00	1 1	2.0 U			
SOID CMLY	1	l	1 0.00 1	1,1	2.0 U			
BOID ONLY	I	 A. A. A. 	0.00	11	2.0 U			
BOID UNLY	:	1	1 0.00 1	1	2.0 U			
BOID CHLY	1	1	1 0.00	1 1	2.0 U			
TUTAL VOLATILES					0.00			
and the second s	Reten.	i Area	Total 1	Ant. I	Percent	Accep.		
Surrogate Standards	Time	Units	Rec'vry	Add.	Recovery	Lisits		
Bromochloromethane	118.57	150	26.7	30	89	60-138		
Chlorofluorobenzene	129.94	1 74.6	28.3	30	94	60-121		
1,2,3-Trichloropropane	:35.11	1 141	: 25.1 :	30	84	60-140		
Chlorofluorobenzene (Pid)	1	1	: 0.0 1	30	0	60-140		

TO

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AL TESTING CORPORATION xchange St., Rochester, N.Y 454-3760

ATORY REPORT-TRACOR 540 (T4) A: 1%SP1000 CARBOPACK sis: Priority Pollutants able Organics (8010)

Analyst: JEFF ERYANT Date: 07/25/34 Time: '18:25 Client: SEELER Job #: R94/02748 Sample #: -001

> % - SELID 90.3% -----

194 CRV

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/					
				Final	
	Reten. Area	1	1	Conc.	
Compound	Time Units	Conc.	Dil	(ug/kg)	
omethane		0.0	1 1	5.5	υ
methane		0.0	1 1	5.5	υ
Chlaride		0.0	1 . 1	2.2	บ
oethane		1 0.0	1 :	2.2	U
lene Chloride		1 0.00	1 1	1.1	U
lorofluoromethone		1 0.0		1.1	U
ichloroethene		0.0	1 1	1.1	U
lichloroethane		1 0.0	:	1.1	U
tichloroethene(TOTAL)		1 0.0		1.1	U
oform		1 0.0	1	1.1	U
lichloroethane		1 0.0		1.1	U
-Trichloroethane		0.0		1.1	U
n Tetrachloride		1 0.0		1.1	บ
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3-Trichloropropend (2)			1 30		150-141
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rofluorobenzene PID		0.0	20	0	160-140
	~				1



City of Rochester

FAX (716) 428-6010 TDD/Voice 232-3260 Department of Environmental Services

Mary Jane Peachey, P.E. Division of Hazardous Waste Remediation New York State Department of Environmental Conservation 6274 E. Avon-Lima Road Avon, New York 14414

Re: Court Street Parking Garage Progress Report Number 3

Dear Ms. Peachey:

As required by Section III of the consent order between the City of Rochester and the New York State Department of Environmental Conservation, we are providing the third progress report documenting work during the month of August 1994 on the Court Street Parking Garage Site IRM.

I can be reached at 428-5978 if you have any questions. Thank you for your cooperation on this project.

Sincerely

Mark D. Gregor Environmental Specialist Division of Environmental Quality

xc. R.Elliott, MC-DOH D. Napier NYS-DO

Attach.

D.Napier,NYS-DOH James Hazel,NYS-DEC E.Doherty J.Brennan N.Burton S.Feuerstein D.Zariczny A.Klumpp T.Seeler

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lad

Office of the Commissioner City Hall, Room 300-B 30 Church Street Rochester, New York 14614-1290

September 10, 1994



City of Rochester, New York Court Street Parking Garage Project Interim Remedial Measure September 10, 1994

Progress Report No. 3 Work Completed Through August 31, 1994

Prepared by the City of Rochester, New York Department of Environmental Services Division of Environmental Quality

Progress During the Reporting Period

As previously reported, Phase II remedial activities were performed during the month of August by the garage contractor, Christa Construction, and its excavation subcontractor, MEC Corporation. Additional nonhazardous contaminated soil from within the footprint of the Court Street Garage was excavated to the final target elevations, generally to bedrock or 504-505 fmsl.

During August, 10889 tons of stoddard contaminated soil were transported to Mill Seat Landfill for disposal. No drums of waste were generated at the site or disposed of during August.

MEC Corporation has completed the excavation to the target elevation of 504-505 fmsl in the vicinity of the former Speedy Cleaners building at the east end of the garage footprint with the exception of a ramp currently in place used to gain access to the excavation.

Sampling and analysis of soil remaining in the area of gasoline contamination west of Stone St. was performed by Seeler Associates on August 25. Two samples were collected and analyzed by EPA Method 8021. The laboratory results are provided in Attachment 1. The analysis showed that very minimal gasoline contamination, below the STARS memorandum clean-up standard, remains in the soil.

Percent Completion: The overall IRM project is approximately 95% complete based on revised estimates of the remaining volume of contaminated soil to be removed.

Modifications to the Work Plan

Samples for Method 8021 analyses were collected. These samples were not required or identified in the original work plan as discussed in Progress Report Number 1.

Problems Encountered

The volume of contaminated soil removed exceeded the original estimates as it was not expected that the contamination would continuously extend to bedrock. No additional problems were encountered.

Deliverables

Analytical results from soil samples were discussed directly with DEC staff. A complete set of all August sample results is attached with this progress report.

No other deliverables were required by the consent order during the reporting time period.

Actions for the Coming Month

Christa Construction and MEC will be excavating footings located in the northeast corner of the garage footprint. Contaminated soil generated from the footing excavations will be shipped to Mill Seat Landfill. Any remaining contamination will be remediated through the ventilation system currently being designed by the City of Rochester and Seeler Associates.

The preliminary designs for the final ventilation system layout are being prepared. A proposed layout and system will be submitted for DEC review by September 23.

Removal of the access ramp is tentatively scheduled for October. Any contaminated soil generated during the ramp removal will be shipped to Mill Seat Landfill. Verification sampling of any remaining soils will be performed in accordance with the work plan once the ramp is removed.

Gasoline Contamination

During initial excavation of the garage by Bianchi-Trison, an underground storage tank was discovered in the area west of Stone St. Three soil samples were taken by Upstate Environmental on April 11 and analyzed by EPA Method 8010 and 8020. The analysis showed minimal petroleum contamination, however OVA readings taken at the site and soil staining indicated the need for removal of contaminated soil. The initial removal of gasoline contaminated soil, 4060 tons, was performed as part of Bianchi-Trison's contract through June. The remaining 880 tons of gasoline contaminated soil located along Court St. was removed by MEC in July as part of the Christa Construction contract. Verification sampling of remaining soil was performed by Seeler Associates on August 25. Two soil samples (G-1 and G-2) were taken approximately 18 feet north of the shoring along Court St. and analyzed by EPA Method 8020. The analysis showed that the contaminated soil had been removed to below clean-up standards and that no further removal was necessary. Verification sampling results are provided in Attachment 1. The initial drawing of the gasoline contaminated area by CME Associates, the correspondence of July 13, 1994 to Bill Shutts of the DEC regarding the gasoline contamination, and the drawing by Seeler Associates indicating the locations of the verification samples are provided in Attachment 2.



Seeler Associates

Environmental Consultants 660 Reynolds Arcade Building - 16 East Main Street Rochester, New York 14614 Phone (716) 262-6070 - Fax (716) 262-6065

FAX TRANSMISSION

MAKK GREGOR

428-59.78

428-6010

C.D.R.

Pate VON SCHONDORF

TO:

Company:

Phone:

Fax:

FROM

Date:

Pages Including this cover page:

Comments:

SAMPLE RESULTS FROM Court St. GARAGE "GASOline AREA"

and the state of the	- 1			1	
Pral Testing Corporation Exchange St., Rocheste 3)454-3760 DRATORY REPORT-T3	n r, N.Y		Inalyst: Date: Time: Client: Job #: Sample#:	JEFF BRY 08/29/94 15:47 SEELER R94/0316 -001	GI
TYSIS: -TANK LIST			* SOLID	91.1%	
Compound	R.T. Time	Area Units	Conc.	Dil.	Final Cone. (ug/KG)
hyl t-butyl ether zens Jene ylens ylens ylene bropylbenzene .5-Trimethylbenzene .4-Trimethylbenzene .4-Trimethylbenzene sapropyltoluene utylbenzene hthalene	28.43 28.73 30.27 31.55 32.88 34.55 40.98	28.30 55.10 29.00 18.8 12.80 13.2 71.6	0.0 0.0 0.0 3.2 5.4 0.0 3.2 2.45 1.5 0.00 0.0 1.13 0.00 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0		1.1 U 1.1 U 1.1 U 3.6 6.0 2.2 U 3.5 2.7 1.6 1.1 U 1.1 U 1.1 U 1.1 U 1.1 U 1.1 U 1.1 U 1.1 U
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A TRIFLUORDIOLUENE	119.28	1 111	33.3	30	111 55-131

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Aby

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peral Testing Corporation N Exchange St., Rochester, N.Y .6)454-3760

ORATORY REPORT - T3

Analyst: JEFF BRYANT Date: 08/29/94 Time: 17:02 Client: SEELER Job #: R94/03165 Samplo#: -002

IJYSIS: I-TANK LIST

% SOLID 89.0%

	Compound	R.T. Time	Area Units	Conc.	Dil.	Final Conc. (ug/KG)		
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rogate Standards	Reten. Time	Ar		Total Rec'vry	Amt. Add.	Percent Recovery	Accep. Limits
A-TRIFLUORDTOLUENE	118.59		81	24.2			*******



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City of Rochester

X (716) 428-6010 DD/Voice 232-3260 Department of Environmental Services Office of the Commissioner Division of Environmental Quality 30 Church Street, Rm. 300B Rochester, New York 14614-1278

uly 13, 1994.

ill Shutts

ew York State Department of Environmental Conservation 274 East Avon-Lima Road von, New York 14414

e: Court Street Parking Garage Area of Gasoline Contamination

ear Mr. Shutts:

ttached is the information that you requested regarding the area of petroleum fuel contamination noncountered during the excavation for the new Court Street Parking Garage. The best address hat we have for this location is 160 Court Street. A tank and contaminated soil were first iscovered at this location on April 8, 1994. The tank contained mostly water and was removed by the City's excavation contractor, Bianchi Trison Corporation. Because the garage will have two to mee parking levels below grade, all of the soil in the footprint of the garage is being removed, including the petroleum contaminated soil. Through the end of June 4,060 tons of petroleum ontaminated soil were removed. Additional soil removal is currently underway.

he following information is attached:

- 1. 1935 Plat Map showing the location of a gas station at 160 Court Street
- Sketch prepared by CME Associates of the area of contamination and soil removal dated April 29, 1994
- 3. An 11" x 17" sketch of excavation activities for the South Avenue to Stone Street block showing the tank location and sample locations
- 4. Analytical data from soil samples
- Court Street Parking Garage Project Interim Remedial Measure Progress Report Number 1 dated July 8, 1994

Letter to: Bill Shutts July 13, 1994 Page Two

I can be reached at 428-5978 if you have any further questions.

Sincerely, Mark D. Gregor

Environmental Specialist

Attachments

XC.

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Edward J. Doherty, Commissioner Anne Klumpp, Environmental Quality Johanna Brennan, Law Department Steve Feuerstein, Municipal Facilities Mary Jane Peachey, NYS-DEC Todd Caffoe, NYS-DEC

Seeler Associates ENVIRONMENTAL CONSULTANTS Pages Including Transmittal: 2 FAX 716-262-6065 FAX Transmission From: POTB VON SCHONDORF Date: 9-2-94 TO: MARK GREGOL Time: 2:20 Company: CITY OF EOCHESTER FAX #: 428-6010 MARK here is the figure you requested, if you cannot make out the weations GI is 163'N From SE corner of the STEEL SHEETING, 62 is 210 WFROM the SAME CORNER LOCATION, BOTH Samples were collected approximately 13' NORTH OF THE SHBETING 16 East Main Street, 660 Reynolds Arcade Building, Rochester, New York 14614 716-262-6070





City of Rochester



FAX (716) 428-6010 TDD/Voice 232-3260 Department of Environmental Services Office of the Commissioner Division of Environmental Quality 30 Church Street, Rm. 300B Rochester, New York 14614-1278

October 7, 1994

Mary Jane Peachey, P.E. Division of Hazardous Waste Remediation New York State Department of Environmental Conservation 6274 East Avon-Lima Road Avon, New York 14414

Re: Court Street Parking Garage Progress Report Number 4

Dear Ms. Peachey:

As required by Section III of the consent order between the City of Rochester and the New York State Department of Environmental Conservation, we are providing the fourth progress report documenting work during the month of September 1994 on the Court Street Parking Garage Site IRM.

I can be reached at 428-5978 if you have any questions. Thank you for your cooperation on this project.

Sincerely, Mark D. Gregor

Mark D. Gregor Environmental Specialist Division of Environmental Quality

Attachment

C;

R. Elliott, MCDOH D. Napier, NYSDOH James Hazel, NYSDEC E. Doherty J. Brennan N. Burton S. Feuerstein A. Klumpp T. Seeler



EEO Employer/Handicapped

City of Rochester, New York Court Street Parking Garage Project Interim Remedial Measure October 10, 1994

Progress Report No. 4 Work Completed Through September 30, 1994

Prepared by the City of Rochester, New York Department of Environmental Services Division of Environmental Quality

Progress During the Reporting Period

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As previously reported, Phase II remedial activities were performed during the month of September by the garage contractor, Christa Construction, and its excavation subcontractor, MEC Corporation. Additional nonhazardous contaminated soil from within the footprint of the Court Street Garage was excavated from the temporary access ramp being removed by MEC.

During September, 2226 tons of stoddard contaminated soil were transported to Mill Seat Landfill for disposal. No drums of waste were generated at the site or disposed of during September.

Christa Construction and MEC have been excavating for footings in the northeast corner of the garage footprint. Contaminated soil from the footing excavations has been staged on-site and will be sent to Mill Seat Landfill. Two test pits (TP-1 and TP-2) were excavated by MEC and sampled by Seeler Associates prior to beginning the footer excavations. Analysis showed that soils from TP-1 were below STARS criteria, consequently, soils to the west of TP-1 will not be excavated or included in the soil ventilation system. Results of the test pit analysis are provided in Attachment 1.

Percent Completion: The overall IRM project is approximately 97% complete based on revised estimates of the remaining volume of contaminated soil to be removed.

Modifications to the Work Plan

Samples for Method 8021 analyses were collected from TP-1 and TP-2. These samples were not required or identified in the original work plan as discussed in Progress Report Number 1.

The ventilation system design has been modified to include remediation of the four to

five feet of contaminated soil which will remain in the northeast area of the garage below the floor slab.

Problems Encountered

A three to four day delay in the construction schedule was incurred due to MEC modifying their work plans in response to the decision not to excavate the four to five feet of contaminated soil in the northeast area of the garage. No additional problems were encountered.

Deliverables

The preliminary design for the final ventilation system, which included the analysis from TP-1 and TP-2 was submitted to the DEC on September 22.

No other deliverables were required by the consent order during the reporting time period.

Actions for the Coming Month

Christa Construction and MEC will be completing the excavation of the access ramp. Contaminated soils from the ramp excavation will continue to be sent to Mill Seat Landfill. Verification sampling of any remaining soils will be performed in accordance with the work plan once the ramp is removed.

Gasoline Contamination

A meeting with Bill Shutts of the DEC was held at the site on September 8 to discuss the area of petroleum contamination, the removal efforts, and any possible remaining petroleum contamination. A copy of the August Progress Report, which detailed the testing and removal of the gasoline contaminated soil, was sent to Bill Shutts. Additional analytical results from samples taken from the south face to the excavation at the area of gasoline contamination by Seeler Associates will be plotted on a site drawing and submitted to Mr. Shutts also.



General Testing Corporation 710 Exchange St., Rochester, N.Y (716)454-3760

LABORATORY REPORT-T3

Analysis: 8021-TANK LIST Analyst: ROD HERRING Date: 09/08/94 Time: 19:37 Client: SEELER Job #: R94/03358 Sample#: -001

% SOLID 92.9%

Compound	H R.T. H Time	¦ Area ¦Units	Conc.	Dil.	Final Conc. (ug/KG)
Methyl t-butyl ether	1	-	0.0	1 1	1,1 U
Benzene	1	1	1 0.00	1 11	1.1 U
Toluene	1	1	1 0.0	1	1.1 U
Ethylbenzene	128.38	1 71.4	8.2	1 1	8.8
p-Xylene	1	1	1 0.0	1 11	2.2 U
m-Xylene	1	1	: 0.0	1	2.2 U
o-Xylene	130.25	1 184	1 20.2	1 1	22
Isopropylbenzene	131.53	1113.0	1 14.75	1	16
n-Propylbenzene	1	1	1 0.0	1	1.1 U
1,3,5-Trimethylbenzene	133.47	1232.0	: 17.96	1	19
tert-Butylbenzene	1	1	: 0.0	1 1	1.1 U
1,2,4-Trimethylbenzene	134.63	1 113	: 9,70	1	10
sec-Butylbenzene	1	1	: 0.00	1 1	1.1 U
p-Isopropyltoluene	135.51	155.90	: 7.2	1 1	7.8
n-Butylbenzene	136.54	1371.0	1 43.59	1 1	47
Naphthalene	1	1	: 0.0	1 1	1.1 U

Total Volatiles

130.76

Surrogate Standards	Reten.: Area	Total : Amt.	Percent	Accep.
	Time !Units	Rec'vry: Add.	Recovery	Limits
A, A, A-TRIFLUOROTOLUENE	18.65 : 99	29.8 30	99	55-131

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CENERAL TESTING

4 08:34 QLT84241542

General Testing Corporation 710 Exchange St., Rochester, N.Y (716)454-3760

LABORATORY REPORT-T3

Analysis: 8021-TANK LIST

. . .

Analyst: ROD HERRING Date: 09/08/94 Time: 20:41 Client: SEELER Job #: R94/03358 Sample#: -002

ER P2 (P-17)

% SOLIB 91.2%

Compound	R.T. Time	Area Units		Conc.	! ! Dil.		; Final ; Conc. ; (ug/KG)	
Methyl t-butyl ether	1	;	1	0.0	:	500	1	550 U
Benzene	1	1	1	0.00	1	500	1	550 U
Toluene	1	1	ł.	0.0	1	500	Ł	550 U
Ethylbenzene	128.41	: 89.0	ł.	10.2	1	500	1	5600
p-Xylene	128.75	: 53	1	5.2	1	500	1	2800
m-Xylene	1	1	ł	0.0	1	500	1	1100 U
orXylene	130.27	1 250	-	27.4	1	500	1	15000
Isopropylbenzene	:31.55	1172.0	I	22.46	1	500	;	12000
n-Propylbenzene	132.93	1 237	ł	26.9	+	500	1	15000
1,3,5-Trimethylbenzene	133.48	1339.0	1	26.25	+	500	1	14000
tert-Butylbenzene	1 1	1	-	0.0	1	500	÷	550 U
1,2,4-Trimethylbenzene	134.63	1 699	1	60.01	1	500	1	33000
sec-Butylbenzene	1	1	1	0.00	1	500	;	550 U
p-Isopropyltoluene	135.52	160.50	1	7.8	+	500	ł	4300
n-Butylbenzene	136.55	1367.0	:	43.12	1	500	1	24000
Naphthalene	:	1	1	0.0	1	500	;	550 U

Total Volatiles			125700.0	0
Surrogate Standards	Reten.! Area Time !Units	Total Amt. Rec'vry! Add.	Percent Recovery	Accep. Limits
A, A, A-TRIFLUOROTOLUENE	118.66 1 102	30.6 30	1 10	2 55-131

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CENERAL TESTING

08/08/84 08:32 . QLT84241542

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City of Rochester

FAX (716) 428-6010 TDD/Voice 232-3260 Department of Environmental Services Office of the Commissioner Division of Environmental Quality 30 Church Street, Rm. 300B Rochester, New York 14614-1278

November 8, 1994

Mary Jane Peachey, P.E. Division of Hazardous Waste Remediation New York State Department of Environmental Conservation 6274 East Avon-Lima Road Avon, New York 14414

Re: Court Street Parking Garage Progress Report Number 5

Dear Ms. Peachey:

As required by Section III of the consent order between the City of Rochester and the New York State Department of Environmental Conservation, we are providing the fifth progress report documenting work during the month of October, 1994 on the Court Street Parking Garage Site IRM.

I can be reached at 428-5978 if you have any questions. Thank you for your cooperation on this project.

Sincerely,

Mark D. Gregor Environmental Specialist Division of Environmental Quality

Attachment

c:

R. Elliott, MCDOH D. Napier, NYSDOH James Hazel, NYSDEC E. Doherty J. Brennan N. Burton S. Feuerstein A. Klumpp T. Seeler




City of Rochester, New York Court Street Parking Garage Project Interim Remedial Measure November 10, 1994

Progress Report No. 5 Work Completed Through October 31, 1994

Prepared by the City of Rochester, New York Department of Environmental Services Division of Environmental Quality

Progress During the Reporting Period

As previously reported, Phase II remedial activities were performed during the month of October by the garage contractor, Christa Construction, and its excavation subcontractor, MEC Corporation. Additional nonhazardous contaminated soil from within the footprint of the Court Street Garage was excavated from the temporary access ramp being removed by MEC.

During October, 521 tons of stoddard contaminated soil were transported to Mill Seat Landfill for disposal. No drums of waste were generated at the site or disposed of during October.

As described in the soil ventilation system proposal submitted to the DEC on September 22, existing site soil has been used as backfill on-site in the areas where slotted ventilation pipe will be installed. Any additional soil not usable on-site as backfill was shipped to Mill Seat Landfill for disposal.

Percent Completion: The overall IRM project is approximately 98% complete based on revised estimates of the remaining volume of contaminated soil to be removed. This estimate is based on the assumption that only contaminated soils in the area of the access ramp remains for removal.

Modifications to the Work Plan

There were no modifications to the work plan during the month of October.

Problems Encountered

MARCOR was not called to the site by MEC Construction during their work in areas of soil contamination on October 5, 6, and 7. Fifteen loads of contaminated soil were shipped to Mill Seat on October 6 without monitoring by MARCOR. The contractors have been advised that it is unacceptable to work in areas of contaminated soil without having MARCOR on site and must ensure in the future that all work performed will be in accordance with the Health and Safety Plan for the site.

Deliverables

A letter describing the plans to include the four to five feet of contaminated soils remaining under the floor slab in the northeast corner of the garage was submitted to Mary Jane Peachey on October 20. The letter is included as Attachment 1.

Actions for the Coming Month

Christa Construction and MEC will be completing the excavation of the access ramp. Contaminated soils from the ramp excavation will continue to be sent to Mill Seat Landfill. Verification sampling of any remaining soils will be performed in accordance with the work plan once the ramp is removed.

Discussions will be held with Seeler Associates, the building architect and the HVAC mechanical contractor regarding the location of the blower and the ventilation system details.

Gasoline Contamination

As was stated in the October 10 Progress Report, additional analytical results from samples taken from the south face of the excavation at the area of gasoline contamination by Seeler Associates will be plotted on a site drawing and sent to Bill Shutts.





City of Rochester

FAX (716) 428-6010 TDD/Voice 232-3260 Department of Environmental Services Office of the Commissioner Division of Environmental Quality 30 Church Street, Rm. 300B Rochester, New York 14614-1278

October 20, 1994.

Mary Jane Peachey, P.E. New York Department of Environmental Conservation 6274 E. Avon Lima Road Avon, New York 14414

Re: Court Street Parking Garage IRM Vent System - Work Plan modifications

Dear Ms. Peachey:

On September 22 we sent you proposed additions to the vent system layout for the Court Street Parking Garage Project. As described in our transmittal letter, one proposed section of vent pipe will be installed in an area where contaminated soil will remain below the lower floor slab. When discussing the proposed vent system with Todd Caffoe of your office he pointed out that the proposal to vent soils in this area could be construed as a deviation from our original work plan. This letter is to present our rationale and the need for the section of the system below the floor slab.

The Court Street Parking Garage extends from three levels below grade at South Avenue to two levels below grade at the eastern end where Speedy Cleaners was previously located. Lower level slab elevations increase from west to east. In the western portion of the garage, bedrock was required to be removed while at the east end of the site finish elevations are approximately five feet above rock. The approved work plan indicates that during Phase 2 "the excavation depth will equal what is required for building purposes plus an additional 2 feet of soil. If contaminated soil remains, excavation will continue until bedrock is encountered. In areas not planned for deep excavation, the soil will be removed following the procedures used during Phase I." Phase I procedures called for the removal of soils to the point where contaminant concentrations are below the guidance criteria or to the point where excavations could cause structural instability or are physically limited. Where such project related limitations apply, the work plan requires the use of a soil gas vent system.

Soil gas venting was substituted for excavation to rock on one other occasion during Phase 2 of the IRM. In May, during excavations in the area east of the garage shoring line, soil contaminated above the STAR's criteria was encountered at about the till elevation (515-516 fmsl). Because site access from Stone Street was soon to be eliminated, it was necessary to quickly construct a ramp from Court Street over the area, where the contaminated soils remained. At Todd Caffoe's request, an additional one to two feet of contaminated soil was removed. Vent pipe was then installed and the ramp completed. The change in approach allowed the garage construction project to continue with out any effect on the schedule.

EEO Employer/Handicapped

We believe our September plan to use soil venting instead of excavation to rock is also appropriate. When preparing the work plan, the excavation depth for the entire garage footprint was assumed to be bedrock or a foot or two above rock. The bottom elevation of the northeast end of the garage is actually several feet above rock. Recently footers were constructed through remaining till in this area. The installation of the footers now complicates soil removal from this area. Also because of the phasing of the garage construction, access to soils close to and beneath the current entrance ramp for verification sampling purposes is not possible until the ramp is removed later in the project. At that time, excavation of the remaining few feet of soil would be made difficult by cumbersome loading operations and reduced access for transport vehicles. The plan to install additional vent pipe instead of removing soils was prepared to address the limited areas of soil contamination where removal operations have become more complicated and costly. The remaining areas of contaminated soil are easily defined and limited both vertically and horizontally. The planned vent system should, therefore, be effective in preventing vapor infiltration into the garage and in reducing soil contaminant levels.

If you would like to discuss the proposed additions to the vent system or the remaining field activities necessary to complete the IRM, please let me know. We will submit the IRM report later this fall after final verification sample data are received.

Sincerel

Mark D. Gregor Environmental Specialist 428-5978

xc. T.Caffoe,NYS-DEC R.Elliott,MC-DOH D.Napier,NYS-DOC James Hazel, NYS-DEC E.Doherty J.Brennan N.Burton S.Feuerstein A.Klumpp T.Seeler





City of Rochester

Jord file

FAX (716) 428-6010 TDD/Voice 232-3260 Department of Environmental Services Office of the Commissioner Division of Environmental Quality 30 Church Street, Rm. 300B Rochester, New York 14614-1278 Tel.#: (716) 428-6011

December 8, 1994

Mary Jane Peachey, P.E. Division of Hazardous Waste Remediation New York State Department of Environmental Conservation 6274 E. Avon-Lima Road Avon, New York 14414

Re: Court Street Parking Garage Progress Report Number 6

Dear Ms. Peachey:

As required by Section III of the consent order between the City of Rochester and the New York State Department of Environmental Conservation, we are providing the sixth progress report documenting work during the month of November, 1994 on the Court Street Parking Garage Site IRM.

I can be reached at 428-5978 if you have any questions. Thank you for your cooperation on this project.

Sincerely. Mark D. Gregør

Mark D. Glegør Environmental Specialist Division of Environmental Quality

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DEC 1 2 1994

NYS DEPT. OF ENVIRONMENTAL CONSERVATION-REGION 8 (SUBSTS./REM.)

Attach. xc. R.Elliott,MC-DOH D.Napier,NYS-DOH James Hazel,NYS-DEC E.Doherty J.Brennan N.Burton S.Feuerstein A.Klumpp T.Seeler

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EEO Employer/Handicapped

City of Rochester, New York Court Street Parking Garage Project Interim Remedial Measure December 10, 1994

Progress Report No. 6 Work Completed Through December 2, 1994

Prepared by the City of Rochester, New York Department of Environmental Services Division of Environmental Quality

Progress During the Reporting Period

Additional unanticipated excavation and disposal of stoddard contaminated soil was required during late November. The previous excavation subcontractor, MEC Corporation, was removed from the job and had significantly under reported the amount of contaminated soil that needed to be excavated for garage construction purposes. The prime garage contractor, Christa Construction, retained A.V. Towner to complete the excavation work. A.V. Towner has been advised that it must complete work in areas of potentially contaminated soil with a health and safety monitor on site and that all excavation activities must be in accordance with the Work Plan and Health and Safety Plan for the site.

During the week of November 28, 1,639 tons of stoddard contaminated soil were removed and transported to Mill Seat Landfill increasing the total for the reporting period to 2,578 tons. Soil removal was monitored in accordance with the approved work plan and total corganic vapor levels continued to be detected in range of 10 to 150 parts per million. The excavation of several hundred cubic yards of soil to bedrock for the garage elevator shaft was required as well as the removal of the remaining portions of the access ramp and soils that MEC had cast onto the access ramp slope above the shoring on the east side of the garage.

No drums of waste were generated at the site or disposed of during November.

On November 7, fnal verification sampling was performed by Seeler Associates in accordance with the approved Work Plan. Nine locations were sampled, V8 to V16, and analyzed for Method 8021 compounds ("tank list") using NYSASP protocols. Todd Caffoe of NYSDEC Region 8 split samples at locations V8 to V12. Results were received in early December and are provided in Attachment 1 along with a sample location drawing. **Percent Completion:** The overall IRM project is approximately 99% complete based on revised estimates of the remaining volume of potentially contaminated soil to be removed. This estimate is based on the assumption that the only additional potentially contaminated soils left to be removed are where the tunnel connection must be made to the below grade levels of the parking garage.

Modifications to the Work Plan

There were no modifications to the work plan during the month of November.

Problems Encountered

During the collection of the verification samples on November 7, the garage contractor was observed applying an oil coating to the forms used when pouring foundations, footers, columns, etc. The form oil had a strong fuel oil odor and was applied by spraying from a pressure cylinder. During the process of coating the forms, a significant amount of over spray occurred. This procedure has apparently been used throughout the course of the garage construction.

While the level of contamination from the over spraying is probably not significant, the potential for the form oil on soils to create uncertainty about the verification sample results was noted. Many of the same petroleum compounds could be expected from both stoddard solvent and fuel oil. An attempt was made to sample soils at a depth of six inches to avoid potential interferences that might be caused by surficial contamination from the form oil.

Deliverables

The attached verification sample analytical results and location drawing were provided to Todd Caffoe, NYSDEC, via fax on December 6.

Actions for the Coming Month

Christa Construction and A.V. Towner may be completing the tunnel connection during December.

The City will meet with the NYSDEC on site to review the verification sample results and make final determinations regarding the locations of vent pipe.

Seeler Associates will continue to refine the ventilation system specifications and location with the garage architect and the HVAC mechanical contractor.

Gasoline Contamination

As was stated in the October 10 Progress Report, additional analytical results from samples taken from the south face of the excavation at the area of gasoline contamination by Seeler Associates. These data are now being plotted on a site drawing and will be sent to Bill Shutts of NYSDEC Region 8 when completed..

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ORGANICS QUALIFIERS - 1991

- U Indicates compound was analyzed for but not detected. The sample quantitation limit must be corrected for dilution and for percent moisture.
- J Indicates an estimated value. The 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 isless than the sample quantitation limit but greater than zero.
- N Indicates presumptive evidence of a compound. This flag is only used for tenatively identified compound, where the identification is based on a mass spectral library search.
- P This flag is used for a pesticide/Arcolor 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".
- 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. If a sample or extract is re-analyzed at a higher dilution factor, as in the "E" flag above, the "DL" suffix is appended to the sample number on the Form I for the diluted sample, and ALL concentration values reported on that Form I are flagged with the "D" flag.
- A This flag indicates that a TTC is a suspected aldol-condensation product.
- X As specified in Case Narrative.

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99-87-6	extract Volume: (uL) t Volume: (uL) CAS NO. COMPOUND 1634-04-4Hethyl-t-Butyl 71-43-2Benzene 108-88-3Toluene 100-41-4Ethylbenzene 1330-20-7(m+p)Xylene 1330-20-7	CONCENTRATION UNITS: Q (ug/L or ug/Kg) UG/KG Q 27. U
104-51-8n-Butylbenzene 27. [U	extract Volume: (uL) t Volume: (uL) CAS NO. COMPOUND 1634-04-4Methyl-t-Butyl 71-43-2Benzene 108-88-3Toluene 100-41-4Ethylbenzene 1330-20-7(m+p)Xylene 1330-20-7	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG Q
	extract Volume: (uL) t Volume: (uL) CAS NO. COMPOUND 1634-04-4Methyl-t-Butyl 71-43-2Benzene	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG Q
	extract Volume: (uL) ot Volume: (uL) CAS NO. COMPOUND 1634-04-4 Methyl-t-Butyl 71-43-2 Benzene 108-88-3 Foluene 100-41-4 Ethylbenzene 1330-20-7 (m+p)Xylene 1330-20-7 Component 98-82-8 Isopropyl_Benz 103-65-1 Propylbenzer 108-67-8 1,3,5 Trimethy S-63-6 98-82-8 Sec-Butylbenzer 108-67-8 Sec-Butylbenzer 108-67-8 Sec-Butylbenzer 108-67-8 Sec-Butylbenzer 108-61-8 Sec-Butylbenzer	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG Q

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FORM_I_VOA____

IA LPA DAMPLE M VOLATILE ORGANICS ANALYSIS DATA SHEET V10 me:GENERAL TESTING Contract:SEELER de: 10145 Case No.: SAS No.: SDG No.: V11 :: (soil/water) SOIL Lab Sample ID: 4374-3 wt/vol: 5 (g/mL) G Lab File ID: >J1446 (low/med) LOW Date Received: 11/07/94 ture: not dec.3 Date Analyzed: 11/18/94 : (pack/cap) CAP Dilution Factor: 1.0 extract Volume: (uL) CONCENTRATION UNITS: CAS NO. COMFOUND 100-41-4Benzene 5. 10 100-41-4Benzene 5. 10 100-41-4Benzene 5. 10 100-64-6Benzene 5. 10 100-64-6Benzene 5. 10 100-64-6Benzene 5. 10 1330-20-7Benzene 5. 10 1330-20-7Benzene 5. 10 1330-20-7Benzene 5. 10 1330-20-7	IA LEFE DEFINITION OF DEFINITION					
me:GENERAL TESTING Contract:SEELER de: 10145 Case No.: SAS No.: SDG No.: V11 :: (soil/water) SOIL Lab Sample ID: 4374-3 wt/vol: 5 (q/mL) G Lab File ID: >J1446 (low/med) LOW Date Received: 11/07/94 ture: not dec.3 Date Analyzed: 11/18/94 :: (pack/cap) CAP Dilution Factor: 1.0 extract Volume: (uL) tVolume: (uL) CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q 1634-04-4BenzeneBenzene	me:GENERAL TESTING Contract:SEELER de: 10145 Case No.: SAS No.: SDG No.: V11 : (soil/water) SOIL Lab Sample ID: 4374-3 wt/vol: 5 (q/mL) G Lab File ID: >J1446 (low/med) LOW Date Received: 11/07/94 ture: not dec.3 Date Analyzed: 11/18/94 : (pack/cap) CAP Dilution Factor: 1.0 extract Volume: (uL) t Volume: (uL) CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q 1634-04-4Bernzene 5. U 1 100-641-4Bernzene 5. U 1 100-641-4	VOLAT	IA ILE ORGANICS AN	ALYSIS DATA SHEET	E.F.F.	DANGELE IN
me:GENERAL TESTING Contract:SEELER de: 10145 Case No.: SAS No.: SDG No.: V11 :: (soil/water) SOIL Lab Sample ID: 4374-3 wt/vol: 5 (q/mL) G Lab File ID: >J1446 (low/med) LOW Date Received: 11/07/94 ture: not dec.3 Date Analyzed: 11/18/94 : (pack/cap) CAP Dilution Factor: 1.0 extract Volume: (uL) t Volume: (uL) CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q 1634-04-4Ethylbenzene 5. U 1 100-41-4	me:GENERAL TESTING Contract:SEELER de: 10145 Case No.: SAS No.: SDG No.: V11 : (soil/water) SOIL Lab Sample ID: 4374-3 wt/vol: 5 (q/mL) G Lab File ID: >J1446 (low/med) LOW Date Received: 11/07/94 ture: not dec.3 Date Analyzed: 11/18/94 : (pack/cap) CAP Dilution Factor: 1.0 extract Volume: (uL) t Volume: (uL) CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q 1634-04-4				 V10	
de: 10145 Case No.: SAS No.: SDG No.: V11 :: (soil/water) SOIL Lab Sample ID: 4374-3 wt/vol: 5 (g/mL) G Lab File ID: >J1446 (low/med) LOW Date Received: 11/07/94 ture: not dec.3 Date Analyzed: 11/18/94 :: (pack/cap) CAP Dilution Factor: 1.0 extract Volume: (uL) tv Volume: (uL) case NO. COMPOUND (uL) CONCENTRATION UNITS: CAS NO. COMPOUND 1634-04-4Benzene	de: 10145 Case No.: SAS No.: SDG No.: V11 : (soil/water) SOIL Lab Sample ID: 4374-3 wt/vol: 5 (g/mL) G Lab File ID: >J1446 (low/med) LOW Date Received: 11/07/94 ture: not dec.3 Date Analyzed: 11/18/94 : (pack/cap) CAP Dilution Factor: 1.0 extract Volume: (uL) t Volume: (uL) CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q 1634-04-4 Hethyl-t-Butyl_Ether S. U 1 108-08-3 Tolume S. U 1 108-08-3 Tolume S. U 1 1330-2C-7 Crwplene S. U 1 1330-2C-7 C%lene S. U 1 108-67-8 S. U 1 1 108-67-8	me:GENERAL TE	STING	Contract:SEELER	1	
:: (soil/water) SOIL Lab Sample ID: 4374-3 wt/vol: 5 (q/mL) G Lab File ID: >J1446 (low/med) LOW Date Received: 11/07/94 ture: not dec.3 Date Analyzed: 11/18/94 :: (pack/cap) CAP Dilution Factor: 1.0 extract Volume: (uL) ot Volume: (uL) CONCENTRATION UNITS: COMPOUND CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q 1634-04-4	: (soil/water) SOLL Lab Sample ID: 4374-3 wt/vol: 5 (g/mL) G Lab File ID: >J1446 (low/med) LOW Date Received: 11/07/94 ture: not dec.3 Date Analyzed: 11/18/94 : (pack/cap) CAP Dilution Factor: 1.0 extract Volume: (uL) t Volume: (uL) CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q 1634-04-4Benzene 5. U 1 108-68-3Benzene 5. U 1 108-68-3Benzene 5. U 1 1330-20-7	de: 10145	Case No.:	SAS No.:	SDG No.	V11
wt/vol: 5 (q/mL) G Lab File ID: >J1446 (low/med) LOW Date Received: 11/07/94 ture: not dec.3 Date Analyzed: 11/18/94 ture: not dec.3 Date Analyzed: 11/18/94 t: (pack/cap) CAP Dilution Factor: 1.0 extract Volume: (uL) (uL) CONCENTRATION UNITS: CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q 1634-04-4Benzene 5. U 1 71+43-2Benzene 5. U 1 108-68-3Benzene 5. U 1 100-41-4Benzene 5. U 1 1330-20-7Benzene 5. U 1 1330-20-7	wt/vol: 5 (q/mL) G Lab File ID: >J1446 (low/med) LOW Date Received: 11/07/94 ture: not dec.3 Date Analyzed: 11/18/94 ture: not dec.3 Date Analyzed: 11/18/94 : (pack/cap) CAP Dilution Factor: 1.0 extract Volume: (uL) (uL) CONCENTRATION UNITS: Q t Volume: (uL) CONCENTRATION UNITS: Q 1634-04-4	: (soil/water) SOIL	Lab Sa	mple ID: 437	4-3
(low/med) LOW Date Received: 11/07/94 sture: not dec.3 Date Analyzed: 11/18/94 sture: not dec.3 Date Analyzed: 11/18/94 i: (pack/cap) CAP Dilution Factor: 1.0 extract Volume: (uL) ot Volume: (uL) CAS NO. COMPOUND (uL) CONCENTRATION UNITS: CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q 1634-04-4	(low/med) LOW Date Received: 11/07/94 ture: not dec.3 Date Analyzed: 11/18/94 ture: not dec.3 Date Analyzed: 11/18/94 : (pack/cap) CAP Dilution Factor: 1.0 extract Volume: (uL) t Volume: (uL) CONCENTRATION UNITS: Q CAS NO. COMPOUND (uL) CONCENTRATION UNITS: CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q 1634-04-4	wt/vol:	5 (g/mL)	G Lab Fi	le ID: >J1	446
ture: not dec.3 Date Analyzed: 11/18/94 t: (pack/cap) CAP Dilution Factor: 1.0 extract Volume: (uL) (uL) tv Volume: (uL) (uL) CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q 1634-04-4Benzene 5. UU 1634-04-4Benzene 5. UU 100-41-4Benzene 5. UU 100-41-4Ethylbenzene 5. UU 1330-20-7	ture: not dec.3 Date Analyzed: 11/18/94 : (pack/cap) CAP Dilution Factor: 1.0 extract Volume:	(low/med)	LOW	Date R	eceived: 11/	07/94
h: (pack/cap) CAP Dilution Factor: 1.0 extract Volume: (uL) ot Volume: (uL) CAS NO. COMPOUND COMCENTRATION UNITS: Q 1634-04-4	: (pack/cap) CAP Dilution Factor: 1.0 extract Volume: (uL) t Volume: (uL) CAS NO. COMPOUND CONCENTRATION UNITS: CONCENTRATION UNITS: CAS NO. COMPOUND 1634-04-4Methyl-t-Butyl_Ether S. UU 71+43-2Benzene S. UU 108-68-3Benzene S. UU 108-62-8	ture: not dec	. 3	Date A	nalyzed: 11/	18/94
extract Volume: (uL) ot Volume: (uL) CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q 1634-04-4Methyl-t-Butyl_Ether S. U 1 71+43-2Benzene S. U 1 108-88-3Benzene S. U 1 108-68-3Benzene S. U 1 108-61-4	extract Volume: (uL) t Volume: (uL) CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q 1634-04-4	: (pack/cap)	CAP	Diluti	on Factor: 1	
bt Volume: (uL) CONCENTRATION UNITS: CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG 1 1634-04-4Methyl-t-Butyl_Ether 1634-04-4Methyl-t-Butyl_Ether 1 1634-04-4	t Volume: (uL) CONCENTRATION UNITS: CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q 1634-04-4	extract Volum	e: (uL)			
CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q 1634-04-4Methyl-t-Butyl_Ether 5. U 1 71+43-2Benzene 5. U 1 108-88-3Benzene 5. U 1 108-88-3Benzene 5. U 1 108-88-3Benzene 5. U 1 108-88-3	CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q 1634-04-4Methyl-t-Butyl_Ether 5. U 1 71+43-2Benzene 5. U 1 106-68-3Benzene 5. U 1 100-41-4Benzene 5. U 1 100-41-4	t Volume:	(uL)			
1634-04-4Methyl-t-Butyl_Ether 5. U 71-43-2Benzene 5. U 108-88-3Benzene 5. U 109-41-4Ethylbenzene 5. U 1330-20-7	1634-04-4Methyl-t-Butyl_Ether 5. U 71+43-2Benzene 5. U 106-68-3Benzene 5. U 106-61-4Ethylbenzene 5. U 1330-20-7Benzene 5. U 1330-20-7	CAS NO.	COMPOUND	(ug/L or ug/	N UNITS: Kg) UG/KG	Q
71+43-2Benzene 5. U 108-88-3Benzene 5. U 100-41-4Benzene 5. U 100-41-4	71+43-2Benzene 5. U 108-88-3Benzene 5. U 108-88-3Benzene 5. U 108-88-3Benzene 5. U 108-88-3Benzene 5. U 108-88-3	1634-04-4	Methyl_t-Bu	ty) Ether	5.	
108-68-3Toluene 5. U 100-41-4Ethylbenzene 5. U 1330-20-7	108-68-3Toluene 5. U 100-41-4Ethylbenzene 5. U 1330-20-7	71-43-2	Benzene		5.	UU I
100-41-4	100-41-4Ethylbenzene 5. U 1330-20-7	108-88-3	Toluene	1	5.	IU I
1330-20-7(m+p)Xylene 5. U 1330-20-7	1330-20-7	100-41-4	Et:hylbenzen		5.	U I
1330-20-7oXylene 5. 10 98-82-8	1330-20-7oXylene 5. U 98-82-8Isiopropyl_Benzene 5. U 103-65-1	1330-20-7	(mHp)Xylene		5.	IU I
98-82-8	98-82-8	1330-20-7	Xvlene		5.	IU I
103-65-1n-Propylbenzene 5. 10 108-67-81,3,5-Trimethylbenzene 5. 10 98-06-6	103-65-1 n-:Fropylbenzene 5. 10 108-67-8 1,3,5-Trimethylbenzene 5. 10 98-06-6 tert-Butylbenzene 5. 10 95-63-6 tert-Butylbenzene 5. 10 135-98-8 sec-Butylbenzene 5. 10 99-87-6 rimethylbenzene 5. 10 104-51-8 n-Butylbenzene 5. 10 91-20-3 Neiphthalene 5. 10	98-82-8	ISODTODVI B	enzene	5.	U I
108-67-81,3,5-Trimethylbenzenei 5. 10 98-06-6tert-Butylbenzenei 5. 10 95-63-6	108-67-81,3,5-Trimethylbenzene 5. U 98-06-6tert-Butylbenzene 5. U 95-63-6tert-Butylbenzene 5. U 135-98-8	103-65-1	n-Fropylben	zene	5.	IU I
98+06-6tert-Butylbenzene 5. U 95-63-6tert-Butylbenzene 5. U 135-98-8sec-Butylbenzene 5. U 99-87-6	98-06-6tert-Butylbenzene 5. U 95-63-6tert-Butylbenzene 5. U 135-98-8sec-Butylbenzene 5. U 99-87-6	108-67-8	1.3.5-Trime	thylbenzene	5.	U I
95-63-6	95-63-61,2,4-Trimethylbenzene 5. U 135-98-8sec-Butylbenzene 5. U 99-87-6p-Isopropyltoluene 5. U 104-51-8	98-06-6	tert-Butylk	enzene	5.	10 1
135-98-8sec-Butylbenzene 5. U 99-87-6	135-98-8scc-Butylbenzene 5. U 99-87-6	95-63-6	1.2.4-Trime	thylbenzene	5.	UU I
99-87-6	99-87-5	135-98-8	sec-Butylbe	nzehé	5.	IU I
104-51-8n-Butylbenzene5. U 91-20-3Naphthalene 5. U	104-51-8n-Butylbenzene 5. U 91-20-3Naiphthalene 5. U	99-87-6	Isopropyl	toluene	5.	iu i
91-20-3Naphthalene 5. U	91-20-3Naiphthalene 5. U	104-51-8	Butylbenz	ene	5.	IU I
		91-20-3	Naphthalene		5.	IV I

FORM_I_VOA____

VOLATI	1A LE ORGANICS ANAI	LYSIS DATA SHEET	LFA	SAMPLE NO
			V11	
ame: GENERAL TES	TING	Contract: SEELER	I	
ode: 10145 (Case No.:	SAS No.:	SDG No.:	V11
(soil/water)	SOIL	Lab Samp	ole ID: 437	4-4
wt/vol:	1 (g/mL) G	Lab File	ID: >J1	465
: (low/med))	LOW	Date Rod	eived: 11/	07/94
sture: not dec.	9	Date Ana	lyzed: 11/	19/94
1: (pack/cap)	CAP	Dilution	Factor: 1	. 0
extract Volume	: (uL)			
ot Volume:	(uL)			
CAS NO.	COMPOUND	(ug/L or ug/Kg	UNITS: J) UG/KG	Q
	5	1		1 i
1634-04-4	Methyl-t-Buty	yl Ether	27.	In I
71-43-2	Benzene		27.	10 1
108-88-3	Toluene		27.	10 I
100-41-4	Ethylbenzene.		13,	12 1
1330-20-7	(m+p)Xylene_	1	76.	1 1
1330-20-7			100.	1 1
98-82-8	Isopropyl_Be	nzene	72.	1 1
103-65-1	n-Propylbenz	ene	160.	T I
108-67-8	1, 3, 5-Trimet	hylbenzeneI	3600.	IEI
98-06-6	tert-Butylba	nzene	27,	10 1
95-63-6	1, 2, 4-Trimet	hylbenzene	7700.	IEI
135-98-8	sec-Butylben	zene	550,	1 1
99-87-6	p-Isopropylt	oluene	1900.	I E I
104-51-8	n-Butylbenze	ne	27.	10 1
91-20-3	Naphthalene_		26,	12 1

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FORM_I_VOA____

1A EFA SAMPLE NU. VOLATILE ORGANICS ANALYSIS DATA SHEET V11DL IME : GENERAL TESTING Contract:SEELER de: 10145 Case No.: --- SAS No.: ---SDG No.: V11 (: (soil/water) SOIL Lab Sample ID: 4374-4DL : wt/vol: (g/mL) G Lab File ID: >02543 4 (low/med) MED Date Received: --/--/-sture: not dec.9 Date Analyzed: 11/21/94 a: (pack/cap) CAP Dilution Factor: 1,0 extract Volume: 10000 (uL) ot Volume: 50 (uL) CONCENTRATION UNITS: CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q E. 1 1634-04-4-----Methyl-t-Butyl_Ether____ 1400. 10 | 71-43-2----Benzene__ 1400. 1U 1400. 108-68-3----Toluene_ U | 100-41-4----Ethylbenzene__ 1400. 10 1 1330-20-7-----(m+p)Xylene____ 1400. U 1400, U 98-82-8----Isopropyl Benzene 1400. U 103-65-1----n-Propylbenzene__ 1400. IU | 108-67-8-----1,3,5-Trimethylbenzene____ D 3600. 1 1 98-06-6----tert-Butylbenzene 1400. U 95-63-6-----1,2,4-Trimethylbenzene___ 8100, 1 D 135-98-8----sec-Butylbenzene____ 560. JJD | 99-87-6----p-Isopropyltoluene_ | 104-51-8-----n-Butylbenzene____ D 1500. 1400. U | 91-20-3----Naphthalene_ 1400. 1V

FORM_I_VOA___

	1A	EPA SAMP.	LE N
VOLATILE	ORGANICS ANAL	YSIS DATA SHEET	
		Contract, SETER	
NE:GENERAL ILSII	LANG	CONCLACT: SELLER I	
ie: 10145 Ca	158 No.:	SAS No.: SDG No.: V11	
: (soil/water) S	501 I.	Lab Sample ID: 4374-5	
wt/vol: 5	(g/mL) G	Lab File ID: >J1449	
(low/med) LO	WC	Date Received: 11/07/94	
ture: not dec.9		Date Analyzed: 11/19/94	
; (pack/cap) CA	1P	Dilution Factor: 1.0	
extract Volume:	(uL)		
extract Volume:	(uL)		
extract Volume: t Volume:	(uL) (uL)	CONCENTRATION UNITS:	
extract Volume: t Volume: CAS NO.	(uL) (uL) compound	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG Q	1
extract Volume: t Volume: CAS NO.	(uL) (uL) compound	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG Q	
extract Volume: t Volume: CAS NO.	(uL) (uL) compound	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG Q	
extract Volume: t Volume: CAS NO. 1634-04-4	(uL) (uL) compound Methyl-t-Buty	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG Q yl_Ether	
extract Volume: t Volume: CAS NO. 1634-04-4 71-43-2	(uL) (uL) compound Methyl-t-Buty Benzene Toluene	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG Q yl_Ether	
extract Volume: t Volume: CAS NO. 1634-04-4 71-43-2 108-88-3	(uL) (uL) coMPOUND Netthyl-t-Buty Benzene Toluene	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG Q yl_Ether	
extract Volume: t Volume: CAS NO. 1634-04-4 71-43-2 108-88-3 100-41-4 1330-20-7	(uL) (uL) coMPOUND Methyl-t-Buty Benzene Toluene Ethylbenzene	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG Q yl_Ether	
extract Volume: t Volume: CAS NO. 1634-04-4 71-43-2 108-88-3 100-41-4 1330-20-7 1330-20-7	(uL) (uL) coMPOUND Methyl-t-Buty Benzene Tolluene Ethylbenzene Ethylbenzene	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG Q yl_Ether	
extract Volume: t Volume: CAS NO. 1634-04-4 71-43-2 108-88-3 108-88-3 100-41-4 1330-20-7 1330-20-7	(uL) (uL) (uL) coMPOUND Methyl-t-Buty Benzene Tolluene Ethylbenzene Ethylbenzene Ethylbenzene Kylene 	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG Q yl_Ether	
extract Volume: t Volume: CAS NO. 1634-04-4 71-43-2 108-88-3 109-41-4 1330-20-7 98-82-8	(uL) (uL) (uL) coMPOUND Meithyl-t-Buty Beinzene Tolluene Tolluene Ethylbenzene Ethylbenzene Sthylbenzene Isiopropyl_Ber	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG Q yl_Ether	
extract Volume: t Volume: CAS NO. 1634-04-4 71-43-2 108-88-3 109-41-4 1330-20-7 1330-20-7 98-82-8 103-65-1	(uL) (uL) (uL) coMPOUND Methyl-t-Buty Benzene Tolluene Tolluene Ethylbenzene Ethylbenzene Istopropyl_Benzene Istopropyl_Benzene	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG Q y1_Ether	
extract Volume: t Volume: CAS NO. 1634-04-4 71-43-2 108-88-3 100-41-4 1330-20-7 1330-20-7 98-82-8 103-65-1 108-67-8	(uL) (uL) (uL) coMPOUND Methyl-t-Buty Benzene Tolluene Tolluene Ethylbenzene Istopropyl_Benzene Istopropyl_Benzene Istopropyl_Benzene Istopropyl_Benzene Istopropyl_Benzene Istopropyl_Benzene Istopropyl_Benzene Istopropyl_Benzene Istopropyl_Benzene Istopropyl_Benzene Istopropyl_Benzene Istopropyl_Benzene Istopropyl_Benzene Istopropyl_Benzene 	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG Q y1_Ether	
extract Volume: t Volume: CAS NO. 1634-04-4 71-43-2 108-88-3 100-41-4 1330-20-7 1330-20-7 98-82-8 103-65-1 98-06-6	(uL) (uL) (uL) COMPOUND Neithyl-t-Buty Beinzene Tolluene Tolluene Ethylbenzene Ethylbenzene Ethylbenzene Isiopropyl_Benzene Isiopropyl_Benzene I, 3, 5-Trimeth tert-Butylbenzene	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG Q 1 5. 10	
extract Volume: t Volume: CAS NO. 1634-04-4 71-43-2 108-88-3 100-41-4 1330-20-7 1330-20-7 98-82-8 103-65-1 98-06-6 95-63-6	(uL) (uL) (uL) COMPOUND Meithyl-t-Buty Beinzene Tolluene Tolluene Ethylbenzene Ethylbenzene Ethylbenzene Isiopropyl_Benze Isiopropyl_Benze I, 3, 5-Trimeth -tert-Butylbenzene I, 2, 4-Trimeth	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG Q 1 5. 10	
extract Volume: t Volume: CAS NO. 1634-04-4 71-43-2 108-88-3 100-41-4 1330-20-7 1330-20-7 98-82-8 103-65-1 98-06-6 95-63-6 135-98-8	(uL) (uL) (uL) COMPOUND Meithyl-t-Buty Beinzene Tolluene Tolluene Ethylbenzene Ethylbenzene Isiopropyl_Benzene Isiopropyl_Benzene I, 3, 5-Trimeth -tert-Butylbenzene I, 2, 4-Trimeth se c-Butylbenzene	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG Q 1 5. 10	
extract Volume: t Volume: CAS NO. 1634-04-4 71-43-2 108-88-3 100-41-4 1330-20-7 1330-20-7 98-82-8 103-65-1 98-05-6 95-63-6 135-98-8 99-87-6	(uL) (uL) (uL) COMPOUND Meithyl-t-Buty Beinzene Tolluene Tolluene Tolluene Tsipropylbenzene Isipropylbenzene I, 3, 5-Trimeth tert-Butylben I, 2, 4-Trimeth se c-Butylbenzene 	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG Q y1_Ether 5. 10 5. 10 5. 10 5. 10 5. 10 5. 10 5. 10 5. 10 5. 10 5. 10 5. 10 nzene 5. 10 nzene 5. 10 hylbenzene 5. 10 oluene 5. 10	
extract Volume: t Volume: CAS NO. 1634-04-4 71-43-2 108-88-3 100-41-4 1330-20-7 1330-20-7 98-82-8 103-65-1 98-06-6 95-63-6 99-87-6 104-51-8	(uL) (uL) (uL) COMPOUND Metthyl-t-Buty Benzene Tolluene Tolluene Tolluene Tolluene Tolluene Tolluene Tolluene Tolluene Tolluene Tolluene Tolluene Tolluene Tolluene Tolluene Tolluene 	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG Q y1_Ether 5. 10 1 5. 10 5. 10 5. 10 1 5. 10 1 5. 10 1 5. 10 1 5. 10 1 5. 10 1 5. 10 1 5. 10 1 5. 10 1 5. 10 1 5. 10 1 5. 10 1 5. 10 1 5. 10 1 5. 10 1 5. 10 1 5. 10 1 5. 10 1 5. 10 1 5. 10	

FORM_I_VOA

ume:GENERAL TESTINGContract:Side: 10145CaseNo.:SAS No.:i: (soil/water) SOILL: wt/vol:5(g/mL) G: wt/vol:5(g/mL) G: (low/med)LOW: (low/med)LOW: ure: not dec.9D1: (pack/cap)CAPextractVolume:(uL)CONCENTCAS NO.COMPOUND11634-04-4Methyl-t-Butyl_Ether1108-88-3Toluene1100-41-4Ethylbenzene	EELER 5DG No.: V11 ab Sample ID: 4374-6 ab File ID: >J1464 ate Received: 11/07/94 ate Analyzed: 11/19/94 ilution Factor: 1.0
ide: 10145 Case No.: SAS No.: :: (soil/water) SOIL L : wt/vol: 5 (q/mL) G L : (low/med) LOW D D : ture: not dec.9 D D : ture: not dec.9 D D extract Volume: (uL) CONCENT cAS NO. COMPOUND (ug/L o 1634-04-4 Methyl-t-Butyl_Ether	5DG No.: V11 ab Sample ID: 4374-6 ab File ID: >J1464 ate Received: 11/07/94 ate Analyzed: 11/19/94 ilution Factor: 1.0
1634-04-4 Methyl-t-Butyl_Ether	ab Sample ID: 4374-6 ab File ID: >J1464 ate Received: 11/07/94 ate Analyzed: 11/19/94 ilution Factor: 1.0
wt/vol: 5 (q/mL) G L : (low/med) LOW D : (low/med) CAP D : (low/med) CAP D : (low/med) CAP D extract Volume:	ab File ID: >J1464 ate Received: 11/07/94 ate Analyzed: 11/19/94 ilution Factor: 1.0 RATION UNITS:
(low/med) LOW D sture: not dec.9 D i: (pack/cap) CAP D extract Volume: (uL) ot Volume: (uL) CAS NO. COMPOUND 1634-04-4	ate Received: 11/07/94 ate Analyzed: 11/19/94 ilution Factor: 1.0 RATION UNITS:
sture: not dec.9 D 1: (pack/cap) CAP D extract Volume: (uL) ot Volume: (uL) CAS NO. COMPOUND 1634-04-4 Methyl-t-Butyl_Ether 108-88-3 Toluene 100-41-4 Ethylbenzene	ate Analyzed: 11/19/94 ilution Factor: 1.0 RATION UNITS:
h: (pack/cap) CAP D extract Volume: (uL) ot Volume: (uL) CAS NO. COMPOUND 1634-04-4Methyl-t-Butyl_Ether 71-43-2Benzene 108-88-3Toluene 100-41-4Ethylbenzene	ilution Factor: 1.0 RATION UNITS:
extract Volume: (uL) ot Volume: (uL) CAS NO. COMPOUND (ug/L o 1634-04-4Methyl-t-Butyl_Ether 108-88-3Toluene 100-41-4Ethylbenzene	RATION UNITS:
ot Volume: (uL) CAS NO. COMPOUND (ug/L o 1634-04-4Methyl-t-Butyl_Ether 1034-04-4	RATION UNITS:
CAS NO. COMPOUND (ug/L o 1634-04-4Methyl-t-Butyl_Ether 71-43-2Benzene 108-88-3Toluene 100-41-4Ethylbenzene	CALLON ONLID.
1634-04-4Methyl-t-Butyl_Ether 71-43-2Benzene 108-88-3Toluene 100-41-4Ethylbenzene	r ug/Kg) UG/KG Q
1634-04-4Methyl-t-Butyl_Ether 71-43-2Benzene 108-88-3Toluene 100-41-4Ethylbenzene	
71-43-2Benzene 108-88-3Toluene 100-41-4Ethylbenzene	
108-88-3Toluene 100-41-4Ethylbenzene	S. U
100-41-4Ethylbenzene	5. IV I
	5. U I
1330-20-7(m+p)Xylene	I 5. 1U I
1330-20-7o-Xylene	5. V
98-82-8Isopropyl_Benzene	5, U
103-65-1n-Propylbenzene	5. U
108-67-81,3,5-Trimethylbenzene	5, U)
98-06-6tert-Butylbenzene	5, [U]
95-63-61,2,4-Trimethylbenzene	I 5. IU I
135-98-8sec-Butylbenzene	5, 10 1
99-87-6p-Isopropyltoluene	I 5. (U)
104-51-8n-Butylbenzene	5. IU I
91-20-3Naphthalene	

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FORM_I_VOA

VOLAT	1A TILE ORGANICS	ANALYSIS DATA	SHEET	Ern 3	MALLE .
				V14	
e:GENERAL TE	STING	Contract	SEELER	I	
e: 10145	Case No.:	- SAS NO.	: SDG	No. : V	/11
(soil/water) SOIL		Lab Sample ID	4374-	-7
wt/vol:	. 5 (g/mI	;) G	Lab File ID:	>J146	58
(low/med)	LOW		Date Received	11/07	7/94
ure: not dec	2.7		Date Analyzed	11/15	9/94
(pack/cap)	CAP		Dilution Facto	or: 1.0	D
Whynet Heles					
KUTACC VOLUM	ne: (ui	4)			
Volume:	(uL)	•)			
: Volume: CAS NO.	(uL) COMPOUND	') CONCE (ug/L	NTRATION UNITS or ug/Kg) UG/	: KG	Q
CAS NO.	(uL) COMIPOUND	/) CONCE (ug/L	NTRATION UNITS or ug/Kg) UG/	: KG	Q 11
Volume: CAS NO. 1634-04-4	(uL) COMIPOUND	<pre> .) CONCE (ug/L .Butyl_Ether)</pre>	NTRATION UNITS or ug/Kg) UG/	: KG 5.	Q 1
CAS NO.	(uL) COMIPOUND	<pre> .) CONCE (ug/L .Butyl_Ether</pre>	NTRATION UNITS or ug/Kg) UG/	5.	Q 10 1 10 1
Volume: CAS NO. 1634-04-4 71-43-2	(uL) COMPOUND	<pre>/) CONCE (ug/L .Butyl_Ether</pre>	NTRATION UNITS or ug/Kg) UG/	5. 5.	Q U 1 U 1 U 1
Volume: CAS NO. 1634-04-4 71-43-2 108-88-3 100-41-4	(uL) COMPOUND Benizene Toluene Fthylben	<pre> CONCE (ug/L -Butyl_Ether gene </pre>	NTRATION UNITS	5. 5. 5.	
CAS NO. 1634-04-4 71-43-2 108-88-3 100-41-4	(uL) COMPOUND Met:hyl-t- Tol.ueneTol.uene	<pre>conce (ug/L .Butyl_Ether rene</pre>	NTRATION UNITS	5. 5. 5. 5.	
CAS NO. 1634-04-4 71-43-2 108-88-3 100-41-4 1330-20-7	(uL) (uL) COMPOUND Met:hyl-t- Tol.uene Tol.uene Tol.uene Tol.uene 	<pre>/) CONCE (ug/L -Butyl_Ether ne</pre>	NTRATION UNITS	5. 5. 5. 5. 5.	
CAS NO. 1634-04-4 71-43-2 108-88-3 100-41-4 1330-20-7 98-82-8	(uL) COMIPOUND Met:hyl-t- Tol.uene_ Tol.uene_ Ethylben; (m+-p)Xyle 	<pre>conce (ug/L .Butyl_Ether reneBenzene</pre>	NTRATION UNITS	5. 5. 5. 5. 5. 5.	
Volume: CAS NO. 1634-04-4 71-43-2 108-88-3 100-41-4 1330-20-7 98-82-8 103-65-1	(uL) COMPOUND Met:hyl-t- Tol.uena Tol.uena Ethylbenz Chylena 	<pre>conce (ug/L .Butyl_Ether rene ne Benzene conzene</pre>	NTRATION UNITS or ug/Kg) UG/	5. 5. 5. 5. 5. 5. 5.	
Volume: CAS NO. 1634-04-4 71-43-2 108-88-3 100-41-4 1330-20-7 1330-20-7 98-82-8 103-65-1 108-67-8	(uL) COMIPOUND Met:hyl-t- Tol.uene_ Tol.uene_ Tol.uene_ Tol.uene_ 	conce (ug/L Butyl_Ether ene bne Benzene conzene imethylbenzene	NTRATION UNITS	5. 5. 5. 5. 5. 5. 5.	
CAS NO. 1634-04-4 71-43-2 108-88-3 100-41-4 1330-20-7 1330-20-7 98-82-8 103-65-1 108-67-8 98-06-6	(uL) COMIPOUND Met:hyl-t- Toluene_ Toluene_ Toluene_ 	CONCE (ug/L Butyl_Ether ene bne .Benzene benzene imethylbenzene lbenzene	NTRATION UNITS	5. 5. 5. 5. 5. 5. 5. 5. 5.	
CAS NO. 1634-04-4 71-43-2 108-88-3 100-41-4 1330-20-7 1330-20-7 98-82-8 103-65-1 108-67-8 98-06-6 95-63-6	(uL) (uL) COMPOUND Met:hyl-t- Benizenc Tol.uene Tol.uene 	CONCE (ug/L Butyl_Ether ene bne bne benzene wethylbenzene ylbenzene methylbenzene	NTRATION UNITS	5. 5. 5. 5. 5. 5. 5. 5. 5. 5.	
CAS NO. 1634-04-4 71-43-2 108-88-3 100-41-4 1330-20-7 1330-20-7 98-82-8 103-65-1 108-67-8 98-06-6 95-63-6 135-98-8	(uL) (uL) COMPOUND Met:hyl-t- Benizenc Tol.uene Tol.uene Tol.uene Tol.uene Tol.uene Tol.uene Tol.uene 	CONCE (ug/L Butyl_Ether ene bne bne benzene wethylbenzene lbenzene methylbenzene lbenzene	NTRATION UNITS	5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5.	
CAS NO. 1634-04-4 71-43-2 108-88-3 100-41-4 1330-20-7 1330-20-7 98-82-8 103-65-1 108-67-8 98-06-6 95-63-6 99-87-6	(uL) (uL) COMPOUND 	CONCE (ug/L Butyl_Ether Butyl_Ether ene ben ben ben jbenene methylben_ene ben_ene jben_ene benene joyltoluene	NTRATION UNITS	5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5.	
CAS NO. 1634-04-4 71-43-2 108-88-3 100-41-4 1330-20-7 1330-20-7 98-82-8 103-65-1 108-67-8 98-06-6 95-63-6 135-98-8 99-87-6 104-51-8	(uL) (uL) COMPOUND 	CONCE (ug/L -Butyl_Ether ene bne benzene imethylbenzene imethylbenzene imethylbenzene benzene pyltoluene enzene	NTRATION UNITS	5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5	

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VOLATILE ORGANICS ANALYSIS DA	TA SHEET	PA SAMPLE NO.
Jame: GENERAL TESTING Contra	CT ISEELER	15
		······································
Code: 10145 Case No.: SAS N	O.t SDG NO	.: V11
ix: (soil/water) SOIL	Lab Sample ID: 4	374-8
le wt/vol: 5 (g/mL) G	Lab File ID: >.	71451
t: (low/med) LOW	Date Received: 1	1/07/94
sture: not dec.9	Date Analyzed: 1:	1/19/94
Mai (pack/cap) CAP	Dilution Factor:	1.0
L extract Volume: (uL)		
iot Volume: (uL)		
CAS NO. COMPOUND (ug	/L or ug/Kg) UG/KG	Q
1	1	1
1634-04-4Methyl-t-Butyl_Ether	5,	10 1
71-43-2Benzene		10 I
108-88-3Toluene	1 5.	IU I
100-41-4Ethylbenzene	5,	10 1
1330-20-7(m+p)Xylene	1 5.	IU I
1330-20-7o-Xylene	5.	IV I
98-82-8Isopropyl_Benzene	5.	U I
103-65-1n-Propylbenzene	1 5.	IU I
108-67-81.3.5-Trimethylbenze	ne i 5.	iu i
98-06-6tert-Butylbenzene	1 5.	iu i
95-63-61.2.4-Trimethylbenze	De 1 5	
135-98-8sec-Butylbenzene		10
99-87-6	5.	
1 104-51-8n-Butylbenzene	I 5.	10 1 10 1 10 1

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1A EPA SAMPLE NU. VOLATILE ORGANICS ANALYSIS DATA SHEET V16 me: GENERAL TESTING Contract: SEELER Case No.: --- SAS No.: --de: 10145 SDG No.: V11 : (soil/water) SOIL Lab Sample ID: 4374-9 wt/vol: 5 (g/mL) G Lab File ID: >J1461 (low/med) LOW Date Received: 11/07/94 ture: not dec.9 Date Analyzed: 11/19/94 (pack/cap) CAP Dilution Factor: 1.0 extract Volume: ---(uL) t Volume: --(uL) CONCENTRATION UNITS: CAS NO. (ug/L or ug/Kg) UG/KG Q COMPOUND Ł 1634-04-4----Methyl-t-Butyl_Ether____ UI 5. 71-43-2----Benzene____ IU 5. 108-86-3----Toluene 5. U 100-41-4----Ethylbenzene 5. U 1330-20-7-----(m+p)Xylene__ 5. UI 1330-20-7----o-Xylene_ 1 5. U 98-82-8-----Isopropyl_Benzene 5. U 103-65-1----n-Propylbenzene_ 5. U 1 108-67-8-----1,3,5-Trimethylbenzene_____ 5. U 5. UI 95-63-6-----1, 2, 4-Trimethylbenzene____ 5. U 135-98-8-----sec-Butylbenzene__ 5. 10 99-87-6----p-Isopropyltoluene 5. U 104-51-8----n-Butylbenzene_____ 91-20-3-----Naphthalene_____ U 5. 5. U

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VOLATILE	ORGANICS ANAL	YSIS DATA SHEET		CPA SAMPLI	
		Cartan at a PET		VTB	
mergeneral TESTI	NG	CONTRACT: SEELE	R 1.		
de: 10145 Ca	se No.:	SAS No.:	SDG 1	No.: V11	
u (soil/water) W	ATER	Lab S	ample ID:	4374-10	
wt/vol: 5	(g/mL) MI	Lab F	ile ID:	>02505	
(low/med) LO	w	Date	Received	11/07/94	
ture: not dec.10	0	Date	Analyzed:	11/19/94	
: (pack/cap) CA	P	Dilut	ion Factor	r: 1.0	
extract Volume:	(uL)				
t Volume:	(uL)				
t Volume:	(uL)	CONCENTRATI	ON UNITS	0	
CAS NO.	(uL) Compound	CONCENTRATI (ug/L or ug	ON UNITS: /Kg) UG/L	Q	
CAS NO.	(uL) Compound	CONCENTRATI (ug/L or ug	ON UNITS: /Kg) UG/L	Q 	;
CAS NO.	(uL) COMPOUND -Methyl-t-Buty	CONCENTRATI (ug/L or ug	ON UNITS: /Kg) UG/L	Q 1 5. (U	-1
CAS NO. 1634-04-4 71-43-2	(uL) COMPOUND -Methyl-t-Buty -Benzene	CONCENTRATI (ug/L or ug /l_Ether	ON UNITS: /Kg) UG/L	Q 1 5. [U 5.]U	
CAS NO. 1634-04-4 71-43-2 108-88-3	(uL) COMPOUND -Methyl-t-Buty -Benzene	CONCENTRATI (ug/L or ug /l_Ether	ON UNITS: /Kg) UG/I.	Q 1 5. [U 5. [U 5. [U 5. [U	
CAS NO. 1634-04-4 71-43-2 108-88-3 100-41-4	(uL) COMPOUND -Methyl-t-Buty -Benzene -Toluene -Ethylbenzene	CONCENTRATI (ug/L or ug /l_Ether	ON UNITS: /Kg) UG/L	Q 5. IU 5. IU 5. IU 5. IU 5. IU	
CAS NO. 1634-04-4 71-43-2 108-88-3 100-41-4 1330-20-7	(uL) COMPOUND -Methyl-t-Buty -Benzene -Toluene -Ethylbenzene -(m+p)Xylene	CONCENTRATI (ug/L or ug /l_Ether	ON UNITS: /Kg) UG/L	Q 1 5. IU 5. IU 5. IU 5. IU 5. IU 5. IU	
CAS NO. 1634-04-4 71-43-2 108-88-3 100-41-4 1330-20-7 1330-20-7	(uL) COMPOUND -Methyl-t-Buty -Benzene -Toluene -Ethylbenzene -(m+p)Xylene -o-Xylene	CONCENTRATI (ug/L or ug /l_Ether	ON UNITS: /Kg) UG/L	Q 5. IU 5. IU 5. IU 5. IU 5. IU 5. IU 5. IU 5. IU	
CAS NO. 1634-04-4 71-43-2 108-88-3 100-41-4 1330-20-7 98-82-8	(uL) COMPOUND -Methyl-t-Buty -Benzene -Toluene -Toluene -Ethylbenzene -(m+p)Xylene -o-Xylene -Isopropyl Ber	CONCENTRATI (ug/L or ug /l_Ether	ON UNITS: /Kg) UG/L	Q 5. IU 5. IU 5. IU 5. IU 5. IU 5. IU 5. IU 5. IU 5. IU	
CAS NO. 1634-04-4 71-43-2 108-88-3 100-41-4 1330-20-7 98-82-8 103-65-1	(uL) COMPOUND -Methyl-t-Buty -Benzene -Toluene -Toluene -Ethylbenzene -(m+p)Xylene -o-Xylene -Isopropyl_Ber -n-Propylbenze	CONCENTRATI (ug/L or ug /l_Ether	ON UNITS: /Kg) UG/L	Q 5. [U 5. [U 5. [U 5. [U 5. [U 5. [U 5. [U 5. [U 5. [U 5. [U	
CAS NO. 1634-04-4 71-43-2 108-88-3 100-41-4 1330-20-7 1330-20-7 98-82-8 103-65-1 108-67-8	(uL) COMPOUND -Methyl-t-Buty -Benzene -Toluene -Ethylbenzene -(m+p)Xylene -o-Xylene -Isopropyl_Ber -n-Propylbenze -1,3,5-Trimeth	CONCENTRATI (ug/L or ug /l_Ether	ON UNITS: /Kg) UG/L	Q 1 5. 10 5.	
CAS NO. 1634-04-4 71-43-2 108-88-3 100-41-4 1330-20-7 1330-20-7 98-82-8 108-65-1 98-06-6	(uL) COMPOUND -Methyl-t-Buty -Benzene -Toluene -Toluene -Ethylbenzene -(m+p)Xylene -o-Xylene -Isopropyl_Ber -n-Propylbenze -1,3,5-Trimeth -tert-Butylber	CONCENTRATI (ug/L or ug /l_Ether	ON UNITS: /Kg) UG/L	Q 1 5. 10 5.	
CAS NO. 1634-04-4 71-43-2 108-88-3 100-41-4 1330-20-7 1330-20-7 98-82-8 108-65-1 98-06-6 95-63-6	(uL) COMPOUND -Methyl-t-Buty -Benzene -Toluene -Toluene -Ethylbenzene -(m+p)Xylene -o-Xylene -Isopropyl_Ber -n-Propylbenze -1,3,5-Trimeth -tert-Butylber -1,2,4-Trimeth	CONCENTRATI (ug/L or ug /l_Ether	ON UNITS: /Kg) UG/L	Q 1 5. 10 5.	
CAS NO. 1634-04-4 71-43-2 108-88-3 100-41-4 1330-20-7 1330-20-7 98-82-8 108-65-1 98-06-6 95-63-6 135-98-8	(uL) COMPOUND -Methyl-t-Buty -Benzene -Toluene -Toluene -Ethylbenzene -(m+p)Xylene -o-Xylene -Isopropyl_Benze -1,3,5-Trimeth -tert-Butylbenze -1,2,4-Trimeth -sec-Butylbenze	CONCENTRATI (ug/L or ug /l_Ether	ON UNITS: /Kg) UG/L	Q 1 5. 10 5.	
CAS NO. 1634-04-4 71-43-2 108-88-3 100-41-4 1330-20-7 98-82-8 103-65-1 108-67-8 98-06-6 95-63-6 99-87-6	(uL) COMPOUND -Methyl-t-Buty -Benzene -Toluene -Toluene -Ethylbenzene -(m+p)Xylene -o-Xylene -Isopropyl_Ber -n-Propylbenze -1,3,5-Trimeth -tert-Butylber -1,2,4-Trimeth -sec-Butylber -D-Isopropylte	CONCENTRATI (ug/L or ug /l_Ether nzene nylbenzene nylbenzene zene nylbenzene	ON UNITS: /Kg) UG/L	Q 1 5. IU 5. IU	
CAS NO. 1634-04-4	(uL) COMPOUND -Methyl-t-Buty -Benzene -Toluene -Toluene -Ethylbenzene -(m+p)Xylene -o-Xylene -Isopropyl_Ber -n-Propylbenze -1,3,5-Trimeth -tert-Butylber -1,2,4-Trimeth -sec-Butylbenzer -n-Butylbenzer	CONCENTRATI (ug/L or ug /l_Ether nzene nylbenzene nylbenzene nylbenzene nylbenzene ne	ON UNITS: /Kg) UG/L	Q 1 5. 10 5.	
CAS NO. 1634-04-4	(uL) COMPOUND -Methyl-t-Buty -Benzene -Toluene -Toluene -Ethylbenzene -(m+p)Xylene -Isopropyl_Benzen -n-Propylbenzen -1,3,5-Trimeth -tert-Butylbenzen -1,2,4-Trimeth -sec-Butylbenzen -n-Butylbenzen -n-Butylbenzen -n-Butylbenzen	CONCENTRATI (ug/L or ug /l_Ether	ON UNITS: /Kg) UG/L	Q 1 5. 10 5.	

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EFA SAMFLE NU. 14 VOLATILE ORGANICS ANALYSIS DATA SHEET VTBRE ame: GENERAL TESTING Contract: SEELER Dde: 10145 Case No.: --- SAS No.: --- SDG No.: V11 k! (soil/water) WATER Lab Sample ID: 4374-10RE a wt/vol: 5 (g/mL) ML Lab File ID: >02542 : (low/med) LOW Date Received: 11/07/94 sture: not dec.100 Date Analyzed: 11/21/94 a: (pack/cap) CAP Dilution Factor: 1.0 extract Volume: -- (uL) ot Volume: ---(uL) CONCENTRATION UNITS: CAS NO. COMPOUND (ug/L or ug/Kg) UG/L 0 | 1634-04-4-----Methyl-t-Butyl_Ether_____ | 71-43-2-----Benzene_____ | 108-88-3-----Toluene 10 5, 5. U | 108-88-3----Toluene_ 5. IU 100-41-4----Ethylbenzene 5. 10 1330-20-7----(m+p)Xylene_____ 5. U 1330-20-7----o-Xylene_ 10 5. 98-82-8----Isopropyl_Benzene 5. U | 103-65-1----n-Propylbenzene_ 5. 10 _____ 108-67-8-----1,3,5-Trimethylbenzene____] 11 5. | 98-06-6-----tert-Butylbenzene_ 5. U _ 5. | 95-63-6-----1,2,4-Trimethylbenzene____ .1 U | 135-98-8-----sec-Butylbenzene___ 5. U _ 99-87-6-----p-Isopropyltoluene_____ U 5, 104-51-8----n-Butylbenzene 5. U _ 91-20-3-----Naphthalene_____ 5. UI

FORM_I_VOA_____

1A VOLATILE ORGANICS ANALYS	IS DATA SHEET
ame:GENERAL TESTING C	ontract:SEELER
de: 10145 Case No.:	SAS No.: SDG No.: V11
: (soil/water) SOIL	Lab Sample ID: 4374-11
wt/vol: 5 (g/mL) G	Lab File ID: >J1467
(low/med) LOW	Date Received: 11/07/94
sture: not dec.8	Date Analyzed: 11/19/94
h: (pack/cap) CAP	Dilution Factor: 1.0
extract Volume: (uL)	
extract Volume: (uL) ot Volume: (uL)	
extract Volume: (uL) ot Volume: (uL) CAS NO. COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG Q
extract Volume: (uL) ot Volume: (uL) CAS NO. COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG Q
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City of Rochester

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FAX (716) 428-6010 TDD/Voice 232-3260 Department of Environmental Services Office of the Commissioner Division of Environmental Quality 30 Church Street, Rm. 300B Rochester, New York 14614-1278 Tel.#: (716) 428-6011

January 17, 1995

Mary Jane Peachey, P.E. Division of Hazardous Waste Remediation New York State Department of Environmental Conservation 6274 E. Avon-Lima Road Avon, New York 14414

Re: Court Street Parking Garage Progress Report Number 7

Dear Ms. Peachey:

As required by Section III of the consent order between the City of Rochester and the New York State Department of Environmental Conservation, we are providing the seventh progress report documenting work during the month of December, 1994 on the Court Street Parking Garage Site IRM.

I can be reached at 428-5978 if you have any questions. Thank you for your cooperation on this project.

Sincerely Mark D. Gregor,

Environmental Specialist

JAN 1 9 1095 NYS DEPT. OF ENVIRONMENTAL CONSERVATION-REGION 8 (SUBSTS./REM.

Attach.

xc. R.Elliott,MC-DOH D.Napier,NYS-DOH James Hazel,NYS-DEC E.Doherty J.Brennan N.Burton S.Feuerstein A.Klumpp T.Seeler

irmprtr6.let

City of Rochester, New York Court Street Parking Garage Project Interim Remedial Measure January 10, 1995

4

Progress Report No. 7 Work Completed Through December 31, 1994

Prepared by the City of Rochester, New York Department of Environmental Services Division of Environmental Quality

Progress During the Reporting Period

No contaminated soil was excavated from the site during this reporting period. The only remaining soil excavation that could result in the removal of contaminated soil, the tunnel connection, was not performed during December.

No drums of waste were generated at the site or disposed of during December.

On December 7, Mark Gregor (City Division of Environmental Quality) met with Todd Caffoe of Region 8 on site to review the results of the soil verification data and discuss the final vent system layout. On December 16, the City submitted a proposed final vent system layout to the NYSDEC, Monroe County Health Department and New York State Department of Health for comment and approval (See Attachment 1).

The City's ventilation system designer, Seeler Associates, continued to develop detailed system specifications and work with the garage architect to identify satisfactory locations within the garage for the system components. Seeler Associates also began preparing the final IRM report required by the Order on Consent.

Percent Completion: The IRM soil removal project is approximately 99.5 % complete based on the estimate of the remaining volume of potentially contaminated soil to be removed. This estimate is for the below grade tunnel connection to the garage.

We anticipate submitting the final vent system plans and specifications for NYSDEC approval in early February. The comprehensive IRM report should be ready for submission in early March.

Modifications to the Work Plan

The proposed final vent system layout incorporated modifications to the procedures in the approved Work Plan with respect to contaminated soil that will be left in place. Details of the City's proposed vent system layout are discussed in Attachment 1.

The City proposal is to leave approximately three to four feet of soil at the base of the northeast section of the garage. The verification sample results and field observations indicate that limited portions of the remaining soil are contaminated with compounds at levels in excess of the STARS guidance criteria. The analytical results from verification sampling indicated that the upper six inches of the remaining soil is, for the most part, uncontaminated. The Work Plan requires ventilation of areas where contamination exceeds STAR's guidance criteria.

The City plan involves the reallocation of remaining project resources to control vapor migration into the garage from areas outside the garage footprint. Seeps of the brown, solvent smelling liquid characteristic of the heavily contaminated areas encountered beneath the former dry cleaner have been observed on the shoring along the north side of the garage. It is the City's position that the soil on the north side of shoring represents a greater potential source of contamination and nuisance odors to the garage than the soil below the base floor slab. The City therefore proposes to install vent pipe in the select drain material that will be backfilled between the north foundation and the shoring.

Problems Encountered

No problems were encountered during the reporting period.

Deliverables

The verification sample analytical results and location drawing were provided to Todd Caffoe, NYSDEC, via fax on December 6. The City's proposal for the final vent system layout including drawings and summary data were submitted on December 16 to Mary Jane Peachey, NYSDEC Region 8 (Attachment 1).

Actions for the Coming Month

Seeler Associates will finalize the detailed drawings and specifications needed for the ventilation system based on the NYSDEC response to the City's proposed vent system modification. Installation of the vent system will be completed over the next few months as the garage construction is completed. The system should be operational by October, 1995.

The tunnel connection is tentatively scheduled for excavation at the end of February or early March.

Seeler Associates will continue to work on the final IRM report and provide the City with a draft for review and comment during February.

Gasoline Contamination

The completion of the site drawing identifying sample locations along the south face of the excavation has been delayed due to work load considerations and will be completed in February.

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Attachment 1



City of Rochester

FAX (716) 428-6010 TDD/Voice 232-3260 Department of Environmental Services Office of the Commissioner Division of Environmental Quality 30 Church Street, Rfn. 300B Rochester, New York 14614-1278

December 16, 1994

Mary Jane Peachey, P.E. New York Department of Environmental Conservation 6274 E. Avon Lima Road Avon, New York 14414

Re: Court Street Parking Garage IRM Vent System - Work Plan final layout

Dear Ms. Peachey:

On September 22 we sent you proposed additions to the vent system layout for the Court Street Parking Garage Project and in a follow-up October 20 letter provided the rationale for the vent system expansion. Your November 23 response indicated that the final plans for the vent system would be dependent on the results of verification soil samples collected on November 7. We provided our sample results for locations V8 to V16 to Todd Caffoe on December 6 and received the NYSDEC split sample results (V8 to V12) the following day from Todd. Copies of the analytical data are provided in Attachment 1.

Table 1 is a summary of the soil analytical data indicating results for those locations where contaminants were detected by either the NYSDEC or City analyses. I have included the previous test pit data from soils just to the north of the November 7 verification sampling area as well. No characteristic site contaminants, petroleum or chlorinated solvents related to dry cleaning, were detected at V8, V9, V10, V12, V13, V14, V15, or V16. Figure 1. is a sample location drawing

The results indicate that, in all but one location, the upper six inches of the remaining three feet of soil are not contaminated. Of the recent verification sampling, the only location where volatile organic compounds exceed STAR's guidance values was at V-11. The test pit data and our experience with excavating soils at this elevation (502-506 fmsl) suggests that some low-level contamination may be present at depths greater than six inches. However, the remaining 2 - 2.5 feet of soil do not exhibit the heavy staining or the sustained strong odors encountered at the apparent source area (the stone lined sump pit discovered at elevation 517-519 fmsl) or just above the dense glacial till (elevation 514-516 fmsl). At this point, we would propose that the soil conditions indicated by the verification data do not warrant the active ventilation system proposed in September or require removal. The garage excavation process has resulted in the removal of the source area and all heavily contaminated soil within the footprint of the garage. We believe the intent of the removal action described in the approved work plan has been met.

Based on observations of the shoring on the north side of the garage excavation, we do, however, now propose to install a 62 foot section of 4-inch diameter slotted schedule 40 PVC vent pipe between the foundation and the shoring along the eastern end of the north side of the garage. A



revised proposed vent system layout is presented in Figure 2. In this area we have observed staining of the lagging and occasional small seeps of the same dark brown liquid possessing a petroleum solvent odor that was detected at various times during the soil removal process. The new section of vent pipe would be located above the garage perimeter drain system. The vent pipe would help prevent the accumulation of vapors in the drain system. The perimeter drain system is piped to a central drain location beneath the lower level of the garage where it runs through sand separators before being pumped to the storm sewer in Court Street. In addition to installing the vent pipe, we believe that it will be appropriate to periodically inspect the drain system and the sand separators for the possible presence of contamination from material entering the perimeter drain system.

We would like to determine the final system layout as soon as possible so that materials can be ordered, and we will provide the detailed drawings and specifications as soon as they are ready. Please let me know if you or Todd have any questions or would like to discuss the proposed revisions to the vent system. Thank you.

Sincerely

Environmental Specialist 428-5978

attach. xc. T.Caffoe,NYS-DEC R.Elliott,MC-DOH D.Napier,NYS-DOC James Hazel, NYS-DEC E.Doherty J.Brennan N.Burton S.Feuerstein A.Klumpp T.Seeler

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	Sample Results (ug/kg)								
Compound	TP-1	TP-2	V-8 ^s	V-9 ^s	V-10 ^s	V-11	V-11 ^s		
ethylbenzene	8.8	5600	nd	nd	nd	13j	2.7		
(m+p) xylene	nd	2800	na	na	na	76	na		
o-xylene	22	15000	na	na	na	100	na		
total xylene	na	na	nd	nd	nd	na .	94		
isopropylbenzene	16	12000	па	na	na	72	na		
n-propylbenzene	nd	15000	na	na	na	160	na		
1,3,5-trimethylbenzene	19	14000	na	na	na	3600e	na		
1,2,4-trimethylbenzene	10	33000	na	na	na	7700e	na		
sec-butylbenzene	nd	nd	na	na	na	550	na		
p-isopropyltoluene	7.8	4300	na	na	na	1900e	na		
napthalene	nd	nd	па	na	na	26j	na		
n-butylbenzene	47	24000	na	na	na	nd	na		
methylene chloride	na	na	1.5	1.3	1.5	na	1.4		
acetone	na	na	nd	nd	nd	na	7.6		
tetrachloroethylene	na	na	nd	nd	nd	na	5.4		
TIC's:	na	na	na	na	na	na	11.12		
unknown hydrocarbon							220j		
unknown hydrocarbon							280j		
propyl benzene isomer			- 1 + ^{- 41}				370j		
propyl benzene isomer							560j		
unknown hydrocarbon							950j		
propyl benzene isomer							520j		
unknown							210j		
propyl benzene isomer							620j		
butyl benzene isomer	1					•	370j		
butyl benzene isomer							470j		

Table 1. Court Street Parking Garage IRM Soil sample results for locations where contaminants were detected

Notes: S - indicates a NYSDEC split sample result .

nd - not detected during analysis

na - analysis not performed for this compound

j - estimated concentration

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City of Rochester



FAX (716) 428-6010 TDD/Voice 232-3260 Department of Environmental Services Office of the Commissioner Division of Environmental Quality 30 Church Street, Rm. 300B Rochester, New York 14614-1278 Tel.#: (716) 428-6011

July 20, 1995

Mary Jane Peachey, P.E. Division of Hazardous Waste Remediation New York State Department of Environmental Conservation 6274 E. Avon-Lima Road Avon, New York 14414

Re: Court Street Parking Garage Progress Report Number 8

Dear Ms. Peachey:

As required by Section III of the consent order between the City of Rochester and the New York State Department of Environmental Conservation, we are providing the eighth progress report documenting work from the end of December, 1994 through June 30, 1995 on the Court Street Parking Garage Site IRM.

Soil removal activities were basically complete at the end of last year. Since that time, we have contacted Todd Caffore directly with any minor updates.

I can be reached at 428-5978 if you have any questions. Thank you for your cooperation on this project.

Sincerely Mark D. Gregor

Environmental Specialist

Attach.

xc. R.Elliott,MC-DOH D.Napier,NYS-DOH James Hazel,NYS-DEC E.Doherty J.Brennan S.Hauser N.Burton S.Feuerstein A.Klumpp T.Seeler imprtr6.let



EEO Employer/Handicapped

City of Rochester, New York Court Street Parking Garage Project Interim Remedial Measure July 19, 1995

Progress Report No. 8 Work Completed Through June 30, 1995



Prepared by the City of Rochester, New York Department of Environmental Services Division of Environmental Quality

Progress During the Reporting Period

During most of the reporting period, December 31, 1994 through June 30, 1995, no IRM activities were performed at the Court Street Parking Garage site. On June 8, 1995, 24 tons of stoddard contaminated soil was excavated from an area along the east side of the garage near the tunnel connection. The contaminated soil was transported to Mill Seat Landfill for disposal.

The NYSDEC response to the City's December 16, 1994 soil vent system layout proposal and work plan modification was issued January 5, 1995. Proposed detailed drawings and specifications were submitted to NYSDEC on March 20, 1995 and comments from NYSDEC were issued on April 7. The City's response to these comments was made May 15, 1995, and the NYSDEC approval letter for the system was issued May 31, 1995. Copies of all correspondence are provided in Attachment 1.

All sections of the soil vent system outside the footprint of the garage have been installed and connected. The PVC pipe foundation penetrations have been made and sealed as well.

Percent Completion:

The IRM soil removal activities are 100% complete.

Ventilation system plans are approved. The ventilation system installation is about 60% complete. System installation will be completed by November 12, 1995 as the parking garage is completed.

A draft IRM report has been prepared by Seeler Associates (now part of Camp, Dresser & Mckee Inc.) Revisions to the report are underway.

Modifications to the Work Plan

No work plan modifications were proposed or required during the reporting period.

Problems Encountered

The comprehensive IRM report, scheduled to be submitted to the NYSDEC in March 1995, has been delayed. The report is undergoing substantial formatting changes because it may also be used in legal proceedings regarding property condemnation valuations and/or remedial cost recovery.

Deliverables

The City's final vent system layout and detailed drawings and specifications were previously discussed. The final IRM report has been delayed.

Actions for the Coming Month

Remaining sections of ventilation system pipe, the system valving, moisture separators, etc., will be installed in September. (The top floor of the garage will be completed in September.) Blower installation and final connections will be made during October. LMC Industrial Contractors, Inc. will install the remaining portions of the soil ventilation system. City Environmental Quality staff will notify Region 8 staff of specific progress during the installation so that the NYSDEC has an opportunity to inspect the system.

An operation and maintenance plan will be prepared and submitted to the NYSDEC upon completion of the system.

Seeler Associaties will finalize the final IRM report. We now expect that a draft report will be submitted to the NYSDEC in early September.

Gasoline Contamination

A site drawing identifying soil sample locations in the area of gasoline contamination west of the former Stone Street right-of-way is provided as Attachment 2. All laboratory analytical data for this area are provided in Attachment 3. (Please note that the data were previously submitted with Progress Reports 2 and 3.)

The following table provides pertinent information about the samples:

Sample Date	Sample ID	Sampler	Description
April 11, 1994	Sample #1	UES	Grab sample of first encountered soil contamination
	Sample #2	UES	As above
	Sample #3	UES	As above
April 28, 1994	West	Seeler	Vertical composite of South wall after excavation
	Mid	Seeler	As above
	East	Seeler	As above
August 29, 1994	G-1	Seeler	Floor of excavation at finish grade
	G-2	Seeler	As above

Table 1. S	oil Samp	le Descript	ons - Court	Street	Garage	Gasoline	: Contamination
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Attachment 1

New York State Department of Environmental Conservation Region 8 Office - Division of Hazardous Waste Remediation 6274 East Avon-Lima Road Avon, New York 14414-9519

Telephone: (716) 226-2466



Langdon Marsh Commissioner

Peter J. Bush Regional Director

January 5, 1995

Mr. Mark Gregor City of Rochester Department of Environmental Services 30 Church Street - Room 300B Rochester, New York 14614-1278

Dear Mr. Gregor:

RE: Court Street Parking Garage IRM Vent System Piping Layout

Staff at the New York State Department of Environmental Conservation (the Department), the New York State Department of Health, and the Monroe County Health Department have reviewed the December 16, 1994 proposal for the soil venting system piping layout in conjunction with the verification sample data (samples V-1 through V-16). Based upon this review, the vent system proposed is a practical solution which will provide the most environmental benefit within the Phase I area of the excavation. Although the soils located in the area of sample V-11 are contaminated above the STARS criteria, the soils do not exhibit any odors nor is there evidence of seeps or staining. Further, the amount of soil appears relatively small and it is removed from the area of residual contamination. Removal of this soil would be difficult and provide little environmental benefit.

Upon consideration of these factors, the Department accepts the proposed vent system layout. Please submit the detailed drawings and specifications of the entire vent system for review and approval. Thank you for your continued cooperation.

Sincerely,

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Todd M. Caffoe, P.E. Environmental Engineer II Division of Hazardous Waste Remediation

c: M.J. Peachey J. Hazel D. Napier R. Elliott

City of Rochester



FAX (716) 428-6010 TDD/Voice 232-3260 Department of Environmental Services Office of the Commissioner Division of Environmental Quality 30 Church Street, Rm. 300B Rochester, New York 14614-1278

March 20, 19945

Mary Jane Peachey, P.E. New York Department of Environmental Conservation 6274 E. Avon Lima Road Avon, New York 14414

Re: Court Street Parking Garage IRM Vent System - Detailed Drawings

Dear Ms. Peachey:

As requested in Todd Caffoe's January 5 letter to me, I am providing proposed final detailed drawings with noted specifications for the Court Street Garage soil vent system. The design has been prepared in accordance with the approved piping system layout.

Enclosed are two copies of the following three draft drawings prepared by Seeler Associates:

1. Soil Gas Venilation System Layout

2. Layout of Pipng and Related Equipment for the Soil Vapor Extraction System (1 0f 2)

3. Electrical Layout for the Soil Vapor Extraction System (2 of 2)

We will provide fnal sealed drawings after addressing any comments that you may have. Please let me know if you or Todd have any questions. Thank you for your assistance.

Sincerely Mark D. Gregor

Environmental Specialist 428-5978

attach. xc.T.Caffoe,NYS-DIEC R.Elliott,MC-DOH D.Napier,NYS-DOC; James Hazel, NYS-DEC w/o attach E.Doherty w/oataclh J.Brennan w/o attach N.Burton w/o attach S.Feuerstein A.Klumpp T.Seeler g:\envqual\imchan2

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New York State Department of Environmental ConservationRegion 8 Office - Division of Hazardous Waste Remediation ICES6274 East Avon-Lima RoadAvon, New York 14414-951995 APR 11 PH 2: 14



Michael D. Zagata Commissioner

Telephone: (716) 226-2466

April 7, 1995

Mr. Mark Gregor City of Rochester Department of Environmental Services 30 Church Street - Room 300B Rochester, New York 14614–1278

Dear Mr. Gregor:

RE: Court Street IRM Soil Venting System Design

The New York State Department of Environmental Conservation (the Department), the New York State Department of Health (NYSDOH), and the Monroe County Health Department (MCHD) have reviewed the referenced document. We have the following comments:

- 1. The valves located at the manifold are designated as shut-off valves on drawing 1 of 2; however, they are designated as control valves on drawing 4. Please clarify.
- 2. To enable more control of vapor flow rates and to isolate branches of vent piping, the following recommendations must be addressed:
 - a. The branch of piping running to the north side of the parking garage and the branch running to the access tunnel should be separated.
 - b. Sampling ports and vacuum gauges should be added to each branch of the vent pipe system. They should be located on the inlet side of the control valves.
- 3. Once the system has been installed, an operation and maintenance plan must be submitted to the Department.

Please provide a written response and sealed drawings to the Department by April 21, 1995. Thank you for your cooperation.

Sincerely,

Todd M. Caffoe, P.E. Environmental Engineer II Division of Hazardous Waste Remediation

- c: M.J. Peachey
 - J. Hazel
 - D. Napier
 - R. Elliott



City of Rochester

FAX (716) 428-6010 TDD/Voice 232-3260 Department of Environmental Services Office of the Commissioner Division of Environmental Quality 30 Church Street, Rm. 300B Rochester, New York 14614-1278 Tel.#: (716) 428-6011

May 15, 1995

Todd Caffoe, P.E. New York State Department of Environmental Conservation 6274 E. Avon-Lima Road Avon, New York 14414-9519

Re: Court Street IRM Soil Ventilation System Design

Dear Mr. Cattoe:

I apologize for the delay in responding to your April 7, 1995 letter. We have reviewed your comments on our March 20, 1995 soil ventilation system design submittal and prepared the following responses:

Comment 1.

The valves located at the manifold are designated as shut-off valves on drawing 1 of 2; however, they are designated as control valves on drawing 4. Please clarify.

Response:

The valves are ball valves that will be operated to control air flow and optimize system performance. Ball valves will allow continuous flow adjustment from closed to fully open.

Comment 2a

The branch of piping running to the north side of the parking garage and the branch running to the access tunnel should be separated.

Response:

We have determined that given the proximity and nature of the contamination in the lower overburden around the northeast area of the garage, it will generally be necessary to operate the both legs of the garage perimeter ventilation system in the same manner (eg. valve position and vacuum setting). Seeps were observed at locations on both the east and north shoring as well. Although some additional operational flexibility would be gained by such a modification, we believe that the our proposed system layout will be effective.

Comment 2b.

Sampling ports and vacuum gauges should be added to each branch of the vent pipe system. They should be located on the inlet side of the control valves.

Response:

We agree and have prepared an additional drawing detailing the locations for sampling ports and vacuum gauges.

EEO Employer/Handicapped

Page 2

Comment 3.

Once the system has been installed, an operation and maintenance plan must be submitted to the Department.

Response :

An operations and maintenance plan will be prepared and submitted to your office upon installation of the system. Final installations will be completed in the Fall of 1995.

We are enclosing two sets of sealed final drawings with this response. Let me know if you have any additional questions or concerns. Thank you for your cooperation.

Sincerely,

ark D. Gre

Environmental Specialist

g:\envqual\i .nvent.bk! attach.

c: M.J.Peachey, NYSDEC w/o attach J.Hazel,NYSIDEC D.Napier,NY SDOH R.Elliott.NCIDOH E.Doherty w/o attach J.Brennan w/o attach S.Feuersten A.Klumpp

EEO Employer/Hantic apped

New York State Department of Environmental Conservation Region 8 Office - Division of Hazardous Waste Remediation 6274 East Avon-Lima Road Avon, New York 14414-9519



Telephone: (716) 226-2466

Michael D. Zagata Commissioner

May 31, 1995

Mr. Mark Gregor City of Rochester Department of Environmental Services 30 Church Street - Room 300B Rochester, New York 14-614-1278

Dear Mr. Gregor:

RE: Court Street RM Revised Soil Venting System Design

The New York State Department of Environmental Conservation (the Department), the New York State Department of Health (NYSDOH), and the Monroe County Health Department (MCHD) have reviewed the above referenced document. Based upon our review, the soil vent system design is approved. Please send me a revised schedule for installation and startup of the vent system by *June 15, 1995*.

Please feel free to contact me if you have any questions. Thank you for your cooperation.

Sincerely,

Todd M. Caffoe, P.E. Environmental Engineer II Division of Hazardous Waste Remediation

cc:	M.J. Peachey J. Hazel
	D. Napier
	R. Elliott

Attachment 2



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Attachment 3

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SERVICES Page 2 of 2 Volatiles ONE RESEARCH CIRCLE. AVERLY, NY 14892-1532 TELEPHONE (607) 565-8500 FAX (607) 565-4088 DATE : Apr 12, 9 LAB SAMPLE ID 40592 SAMPLE SQUACE COURT ST. BINGHAMTON ORIGIN UES SOIL 16 FT. BELOW GRADE N DESCRIPTION GRAB 04/11/94 by CLIENT BAMPLEDON 04/11/94 DATE RECEIVED P.O. NO. 22 . . Tetrechloroethene NO<12.5 chlored thrememethank . ND-12.5 Chiorobenzene 1. . ND <12.5 1,1,1,2-Torrachilaroethane ND<12.5 Ethy Benzene | ND <12.5 11 p-Kylenni/m-Xylene ND \$12.5 o-Xylena: ND-12.5 Bromoform ND<12.5 Bromobenzene 12.51>0H ND 412.5 1,1,2,2-Tetrachloroethanc 1,2,3-Trichlaropropane 4.51×QK 2-chiorotaluone NO<12:5 4-Chlorotolucine ND<12.5 1,3-Dichtarphenzeno. ND<12.5 1.4-0 Chilorobenizene: ND+12.5 1,2-Dichiorobenzone ND<12.5 Surridgiste Recovery (%) PID 113 ELCO 94 Jundrey Approved by: QUALITY ASSURANCE NY 10252: PA 68:80 NJ 73168 EPA NY 033 formation in this report s execurate to the best of our knowledge and ability. In no event shall our liability exceed. the most of these contine

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LAB SAMPLE 10 40593	SAMPLE SOURCE	COURT ST., E	INGHAMTON
Rob Gray	CESCRIPTION	GRAB	BELOW GRADE
Syracuse NY 13204	DATE RECEIVED	04/11/94	DI CHIENI
Halpgenated Volstile Organics Analyst Nethod 1.50646/8010/8020/5030 Units : Compounds Detected Results	: CM Notebook R UG/KG Date Analy	aferunce: 94-044-218 zed : 04/11/94	SAMPLE #2 SEE COFC
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Page 2 Of Volatilies ONE RESEARCH CIRCLE WAVERLY, NY 14802-1582 TELEPHONE (607) 565-8500 FAX (607) 565-4085 DATE : Apr 12, LAB SAMPLE ID : 40593 SAMPLE SOURCE COURT ST ... BINGHAMTON. OHIGIN : SOIL 16 FT. BELOW GRADE UES GRAB **DESCRIPTION**. 04/11/94 by CLIENT SAMPLED'ON 04/11/94 : DATE RECEIVED P.O. NO. Tatrachiohapthena N0<12.5 Chiarod Ibromomothane NO-12.5 Chlorobenzene NO<12.5 1,1,1,2-1 etrechtoraethine NO<12.5 Ethylbenzene 45 . 4 %. p-Xylena/m-Xylena ND<12.5 o-Xylane NO<12.5 Bromoform NC<12.5 Broniobonizene 12.51+ON 1;1;2;2-Yetrachloroething NU<12.5 1,2,3-Trichtoropropane ND<12.5 2-Chinrotoluche ND412.5 4+Chierotoluone 2.51>DK 1,3-Dichiorphenzene NO-12.5 1,4-Dichlorubenzene: NC<12.5 1,2-Dichiarobenzone KO<12.5. Surregate Recovery (%) : PID 118 ELCO 102 Jundacy Brozon QUALITY ASSURANCE Approved by: NY 10252 PA 5880 NJ 73168 EPA NY 033 formation in this report s accurate to the best of our knowledge and ability. In no event shall our liability exceed. 1hd ANDE

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VOIALIES ONE DESEADOR CIDOLE	Page 1 of
TELEPHONE (607) 555-3500	FAX (607) 505-4083
LAD SAMPLE ID : 40594	SAMPLE SOURCE COURT ST. BINGHAMTON
UES Rob Gray 215 Tully Street Syracuse NY 13204	ORIGIN SOIL 11 FT. BELOW GRADE GESCRIPTION GRADE GAMPLED ON 04/11/94 by CLIENT BATE RECEIVED 04/11/94
Kalngenated Volatile Organics Analyst : CM Method : SW84628010/8020/5030 Units : UG/KG Compounds Derected Results Dichlorodifluoromethere ND<12.5 Chioromethere ND<12.5	Notebook Reference : 94-044-219 Date Analyzod : 04/11/94 SAMPLE # 3 SEE COFC
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NY 10252 PA 61610 NJ 73168 EPA NY 033	OUALITY ASSURANCE.
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S AT E SERVICES Page 2 0 Volatiles ONE RESEARCH CIRCLE WAVERLY, NY 14802-1532 TELEPHONE (607) 565-8500 FAX (607) 565-4088 DATE Apr 12, 199 LAB SAMPLE ID : 40594 SAMPLE SOURCE COURT ST. BINGHAMTON ORIGIN SOIL 11 FT. BELOW GRADE UES DESCRIPTION GRAB 04/11/94 by CLIENT SAMPLED: ON 04/11/94 DATE RECEIVED P.O. NO. Terrachloroethene ND <12.5 Chiorodilicpmomethane ND <12.5 Chibrobenzone ND <12.5 1,1,1,2,Tetrachloroethane ND <12.5 Ethylbenzene ND<12.5 p-Xylene/m-Xyleng. 2.SI>QN 0-XY1,000 ... ND <12.5 Bronoform ND<12.5 Branobenzena. ND <12.5 1,1,2,2-Tesrachloroethane ND 412.5 1,2,3-tetchloropropane ND<12.5 Z-Chiorotaluene ND<12.5 4-chlorocolucne. ND<12.5 1,3.Ulchlonobenzone \$.51>QA 1,4 Ulchlorobanzene ND<12.5 1,2:Dichlarobenzene ND<12.5 Surrogata Recovery (%) PIO 108 ELCO . 94 Jundacy B Approved.by: NY 10252 PA 66180 NJ 73168 EPA NY 039 QUALITY ASSURANCE: Information in this report is accurate to the best of our knowledge and ability. In no event shall our liability exceed

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Volariles ONE RESEARCH CIRCLE TELEPHONE (607) 505-3500	Page 1 of FAX (607) \$65-4088
	DATE Apr 12, 1994
	SAMPLE SOURCE COURT ST , BINGHAMTON
Rob Gray 215 Tully Street	OHIGAN GROUNDWATER, EXEC. SITE OESCRIPTION GRAB SAMPLETION 04/11/94 by CLIENT 04/11/94
Syracuse NY 13204	P.O. NO.
Helogenatod Voletile Organics Analyst : CM Hethod : 50846/8010/8020/5030 Units : Ua/L Compounds Detected Results	Notebook Raferance : 94-044-216 Data Analyzed : 04/11/94
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Page 2 of 2 Volatiles ONE RESEARCH CIRCLE VERLY, NY 14898-1682 FAX (607) 565-4083 TELEPHONE (607) 565-3500 DATE Apr 12 19 LAB SAMPLE ID 112 40595 SAMPLE SQUACE COURT ST. BINGHAMTON ORIGIN GROUNDWATER, EXEC. SITE UES DESCRIPTION GRAB :04/11/94 by CLIENT GAMPLED ON 04/11/94 QATE RECEIVED P.O. NO. 1 23. St. Tetrachloroethene NO<0.5 Chlorodibromomethane ND <0.5 Ch) probenzene NU <0.5 ----1,1,1,2 Terrachiororthane ND 40.5 Ethyldenzona 30 A Light our 58 p-Xyleno/m-Xylane o-Xyleno 19 3 Bromotorm NU <0.5 Bromobenzend ND 40.5 Same 1, 1, 2, 2 Tetrachloroethane ND <0.5 1,2,5-Trichloropropane ND <0.5 2. Chlarotaluene ND <0.5 4-Chigratoluchic ND <0.5" 1,3-Dichlorobenzene ND <0.5 1,4-Dichlorobonzene NO-0.5 1,2-Dichlorobenzene NO -0.5 surrogate Recovery (%) PID 112 ELCO: 104 Landsey Approved by NY 10252 PA 08180 NJ 73168 EPA NY 033 QUADI ASSURANCE

tormation in this report is accurate to the best of our knowledge and ability. In no event shall our liability exceed the cost of these services. Your samples will be discarded after 14 days unless we are advised otherwise.

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