Terracon
Consulting Engineers & Scientists

Terracon Consultants, Inc.
11555 Clay Road, Suite 100
Houston, TX 77043
Phone (713) 690-8989
Fax (713) 690-8787
www.terracon.com

October 3, 2008

Mr. Gabriel Mussio
Division Manager, Energy and Environmental Management Division
City of Houston, Building Services Department
900 Bagby, 2nd Floor
Houston, Texas 77002

Phone: (713) 247-3232
Fax: (713) 837-7338
Email: gabriel.mussio@cityofhouston.net

Re: Lead-Based Paint Sampling Report
City of Houston Fleet Maintenance and SWAT Facility
801 Gillette Street
Houston, Texas
Terracon Project No. 92087499

Dear Mr. Mussio:

We are pleased to submit the enclosed Lead-Based Paint Sampling Report for the above-referenced site. This assessment was performed in accordance with your authorization dated August 5, 2008.

At your request, Terracon Consultants, Inc. (Terracon) collected paint chip samples from various components at the facility. Thirty-five (35) paint chip samples were collected from window sills, window frames, doors, door frames, beams, columns, burglar bars, gutters, bollards, ducts, pipes, floors guard rails and walls. The samples were placed in sealed containers, and mailed to Reservoirs Environmental, Inc. for analysis for lead content via EPA Method SW-846 3050B/Flame AA (7420). Based on the results of the laboratory analysis, twenty-nine (29) of the thirty-five (35) samples collected had detectible concentrations of lead. Of those, seven (7) are considered Lead-Based Paint (LBP - greater than 0.5% lead by weight). A copy of the laboratory report is attached as Appendix B.

The State of Texas has established the Texas Environmental Lead Reduction Rules (TELRR), which require any lead abatement activity in target housing or child-occupied facilities be performed by an individual certified by the State of Texas, through the Texas Department of State Health Services (TDSHS). Although the 801 Gillette Street facility does not meet the definition of "target housing" or a "child-occupied facility", samples were collected in general accordance with TELRR.

LBP is defined as paint containing greater than 0.5% lead by weight. A lead abatement activity is defined as any measure or set of measures designed to permanently eliminate LBP hazards, including: removal, encapsulation or enclosure of lead-based paint on surfaces or fixtures that are painted; preparation, cleanup and disposal related to such activities; and post-abatement clearance testing activities. The definition excludes renovation, remodeling, or landscaping activities that are not designed to permanently eliminate LBP hazards.

The Occupational Healthy and Safe Administration (OSHA) regulations govern exposure of workers to lead, regardless of the concentration of lead identified. The OSHA regulations, which have been established for general and construction industries, cover any type of workplace activity that could expose an employee to potential lead contamination (OSHA Standards 29 CFR 1926.62 and 1910.1025). The OSHA regulation defines specific training requirements, engineering controls and work practices for construction personnel subject to this standard. Although some of the painted materials were not classified as LBP as per EPA or TDSHS regulations, twenty-nine (29) of the samples exhibited detectable concentrations of lead and must be treated as lead-containing paint for the purpose of worker protection.

If the Client does not intend to renovate or demolish the facility, the lead-containing paint materials, which will remain in the facility, should be managed in place. It is recommended that this in-place management should include such operations as repairing any damaged materials which are not removed as part of any renovation/demolition operations, protecting the remaining lead-containing paint materials from further damage, and developing a plan to periodically monitor the condition of the lead-containing paint materials. Notification of the presence of the materials should also be made to employees and outside contractors so that they do not inadvertently disturb the remaining lead-containing paint materials.

If a renovation/demolition project which could disturb the lead-containing materials within the facility is to be conducted, it is recommended that the affected materials be removed, rendered sound and tight, or encapsulated with suitable materials by appropriately trained Lead Abatement personnel. The Lead Abatement personnel would remove, repair and/or prepare any surfaces which are to remain within the facility and would be tasked with waste minimization and disposal of the lead contaminated materials which require their attention. The work should be conducted within regulated work areas utilizing chemical strippers and/or any combination of mechanical and manual methods deemed appropriate. It is recommended that any painted metal building or facility components which is to be removed from the facility be segregated from the waste stream and transferred to a suitable metal recycling facility.

It is recommended that contracting personnel who may disturb the lead-containing paint materials within the facility be made aware of the lead content in the materials so that they may exercise proper OSHA procedures for personnel protection. As the facility is a public facility rather than Target Housing, HUD and TDSHS lead regulations do not apply to removal operations within the facility. It is, however, recommended that they be consulted as a general guideline for occupant protection and that OSHA notification be made to all employees or contractors working on any repair, renovation or demolition projects within the facility.

Terracon appreciates the opportunity to provide this service to the City of Houston. If you have any questions regarding this report, please contact Kevin Maloney at (713) 939-6415.

Sincerely,

Terracon Consultants, Inc.

Kevin P. Maloney
Houston Office
kpmaloney@terracon.com

Thomas R. Martens
Houston Office
trmartens@terracon.com

Attachments:

Appendix A	Lead-Based Paint Sample Results Table
Appendix B	Lead Laboratory Analytical Reports
Appendix B	Accreditation

APPENDIX A

LEAD-BASED PAINT SAMPLE RESULTS TABLE

CITY OF HOUSTON FLEET MAINTENANCE AND SWAT FACILITY
801 GILLETE STREET
HOUSTON, TEXAS

Terracon Project No. 92087499

Sample Number	Description/Location	Lead Concentration (%)
L-1	SWAT Bldg – Black metal east corridor, burglar bars	BDL
L-2	SWAT Bldg – Mechanical room wood tan, door jam	0.085
L-3	SWAT Bldg – Kitchen exterior metal tan door	BDL
L-4	SWAT Bldg – Exterior south side tan metal gutter	0.125
L-5	SWAT Bldg – Car port metal red beam	0.011
L-6	Vehicle Wash Bldg – West bay white CMU block	BDL
L-7	Vehicle Wash Bldg – Supply room red metal door	0.005
L-8	Vehicle Wash Bldg – West bay orange metal bollard	**5.080**
L-9	Vehicle maintenance car repair bldg – Office door brown metal	BDL
L-10	Vehicle maintenance car repair bldg – Maintenance area gray metal column	0.035
L-11	Vehicle maintenance car repair bldg – Maintenance area red metal column	0.089
L-12	Vehicle maintenance car repair bldg – Paint booth gray metal	0.025
L-13	Vehicle maintenance truck repair bldg – Maintenance area black/blue metal door	0.200
L-14	Vehicle maintenance truck repair bldg – Maintenance area black metal column	0.101
L-15	Vehicle maintenance truck repair bldg – Maintenance area gray wood bay door	**0.999**
L-16	Vehicle maintenance parts storage bldg - blue metal duct in the rest room locker area	BDL
L-17	Vehicle maintenance parts storage bldg - blue metal water pipe in the rest room locker area	0.061

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L-18	Vehicle maintenance parts storage bldg - white metal water pipe in the rest room locker area	0.056
L-19	Vehicle maintenance parts storage bldg - black CMU block wall in the rest room locker area	0.004
L-20	Vehicle maintenance parts storage bldg - white CMU block wall in the rest room locker area	0.021
L-21	Vehicle maintenance parts storage bldg – Lunch room gray drywall	BDL
L-22	Vehicle maintenance parts storage bldg – Lunch room gray concrete floor	0.005
L-23	Vehicle maintenance parts storage bldg – 2nd floor gray metal duct	0.014
L-24	Welding shop – gray concrete shop floor	0.008
L-25	Welding shop – white metal door jam, south exit door	0.077
L-26	Welding shop – white metal door, south exit door	0.036
L-27	Office building – east side white metal column	**5.047**
L-28	Office building – white metal beam	**3.724**
L-29	Office building - tire storage area yellow metal door jam	0.372
L-30	Office building – white concrete wall	0.010
L-31	Fuel station – red metal column	0.065
L-32	Fuel station – yellow metal bollard	**3.992**
L-33	Fuel station – yellow metal guard rail	**6.616**
L-34	Fuel station – Red metal door jam	0.009
L-35	Fuel station – Red metal exit door jam	**0.540**

1. **BDL – Below Detection Limit (detection limits varied from 0.003% to 0.008%)**
2. **Results in bold indicate paint containing greater than 0.5% lead by weight (defined as Lead-Based Paint)**

APPENDIX B

LEAD LABORATORY ANALYTICAL REPORTS

RESERVOIRS ENVIRONMENTAL, INC.

NVLAP Accredited Laboratory #101896
AIHA Certificate of Accredidation #480 LAB ID 101533

TABLE ANALYSIS: LEAD IN PAINT

RES Job Number:	**RES 160228-1**
Client:	**Terracon Consultants, Inc (TX)**
Client Project Number / P.O.:	**90308**
Client Project Description:	**COH-801 Gillette St.**
Date Samples Received:	**August 20, 2008**
Analysis Type:	**USEPA SW846 3050B / AA (7420)**
Turnaround:	**3 Day**
Date Samples Analyzed:	**August 21, 2008**

Client ID Number	Lab ID Number	Detection Limit (%)	LEAD CONCENTRATION (%)
L-1	EM 323064	0.006	BDL
L-2	EM 323065	0.003	0.085
L-3	EM 323066	0.006	BDL
L-4	EM 323067	0.003	0.125
L-5	EM 323068	0.005	0.011
L-6	EM 323069	0.004	BDL
L-7	EM 323070	0.004	0.005
L-8	EM 323071	0.005	5.080
L-9	EM 323072	0.004	BDL
L-10	EM 323073	0.005	0.035
L-11	EM 323074	0.005	0.089
L-12	EM 323075	0.005	0.025
L-13	EM 323076	0.005	0.200
L-14	EM 323077	0.003	0.101
L-15	EM 323078	0.003	0.999
L-16	EM 323079	0.008	BDL
L-17	EM 323080	0.004	0.061
L-18	EM 323081	0.005	0.056
L-19	EM 323082	0.003	0.004
L-20	EM 323083	0.003	0.021
L-21	EM 323084	0.004	BDL
L-22	EM 323085	0.004	0.005
L-23	EM 323086	0.004	0.014
L-24	EM 323087	0.004	0.008
L-25	EM 323088	0.004	0.077
L-26	EM 323089	0.003	0.036
L-27	EM 323090	0.004	5.047
L-28	EM 323091	0.003	3.724
L-29	EM 323092	0.003	0.372
L-30	EM 323093	0.004	0.010

BDL = Below Detection Limit

Data Qa _____

RESERVOIRS ENVIRONMENTAL, INC.

NVLAP Accredited Laboratory #101896
AIHA Certificate of Accredidation #480 LAB ID 101533

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Analysis Type:	**USEPA SW846 3050B / AA (7420)**
Turnaround:	**3 Day**
Date Samples Analyzed:	**August 21, 2008**

Client ID Number	Lab ID Number	Detection Limit (%)	LEAD CONCENTRATION (%)
L-31	EM 323094	0.004	0.065
L-32	EM 323095	0.005	3.992
L-33	EM 323096	0.003	6.616
L-34	EM 323097	0.003	0.009
L-35	EM 323098	0.008	0.540

*** Unless otherwise noted all quality control samples performed within specifications established by the laboratory.**

BDL = Below Detection Limit

Data Qa

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Terracon Consultants, Inc.
11555 Clay Road, Suite 100 • Houston, TX 77043

RES 160228

Page 1 of 3 Sampler(s) Initials / Signature:

Inspector:	(check)
Mustafa Birsen	
J Sumrall	

Terracon Project Information:	
Client:	City of Houston
Project Desc.:	COH- 801 Gillette St
Project No.:	92087499
P.O. No.:	90308
Date:	8/18/08 & 8/19/08

Analysis Requested	Turnaround
Flame AA SW-846 #7420	3 Day

Relinquished By: [signature] 8/19 Time: 3:15 pm

Received By: [signature] Date: 8/24/08 Time: 10:15a Samples Received 35

Sample No.	Sample Description / Location	Substrate	Paint Color			Condition	Field Notes
- L-1	SWM East corridor - door ring	Metal	Black			Good	Burglar Bars
- L-2	Mechanical room	Wood	tan			Good	Door jamb
- L-3	Kitchen - ext door	Metal	tan			Good	Door
- L-4	Ext S. side Gutter	Metal	tan			Poor	Gutter
- L-5	Ext Car port	Metal	red			Good	Beam
- L-6	Vehicle Wash West Bay	CMU Block	White			Good	CMU Block wall
- L-7	Supply room	Metal	red			Good	Door
- L-8	West Bay Bollard	Metal	gray			Good	Bollard
- L-9	Vehicle Maint (car rep) Office Door	Metal	Brown			Good	Door
- L-10	Maint Area	Metal	Gray			Good	Column

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Terracon Consultants, Inc.
11555 Clay Road, Suite 100 • Houston, TX 77043

Project Desc.: ***COH- 801 Gillette St***

RES 160228

Sample No.			Sample Description / Location	Substrate	Paint Color			Condition	Field Notes
	-	L-11	Paint area	Metal	Red			Good	Column
	-	L-12	Paint booth	Metal	Gray			Good	Paint booth
	-	L-13	Paint area (inside booth) Paint area	Metal	Black	Blue		Good	Door
	-	L-14	Paint area	Metal	Black			Good	door
	-	L-15	Paint area	Wood	Gray			Good	Bay door
	-	L-16	Paint storage Restroom / Locker	Metal	Blue			Good	Duct
	-	L-17	Restroom / Locker room	Metal	Blue			Good	Piping (water)
	-	L-18	Restroom / Locker room	Metal	White			Good	Piping (water)
	-	L-19	Restroom / Locker room	CMU	Black			Good	CMU block wall
	-	L-20	Restroom / Locker room	CMU	White			Good	CMU block wall

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Terracon Consultants, Inc.
11555 Clay Road, Suite 100 • Houston, TX 77043

Project Desc.: COH- 801 Gillette St

DES 164228

Sample No.			Sample Description / Location	Substrate	Paint Color			Condition	Field Notes
	-	L-21	Lunchroom	Drywall	Gray			Good	Soffit
	-	L-22	Lunchroom	Concrete	Gray			Good	Concrete floor
	-	L-23	2nd floor stairs	Metal	Gray			Good	Dust
	-	L-24	Walking Shop Shop floor	Concrete	Gray			Good	Shop floor
	-	L-25	S Ext Door	Metal	White	Red Canvas		Good	Door jamb
	-	L-26	S Ext Door	Metal	Gray			Good	Door
	-	L-27	Office Bldg. 1st floor Column	Metal	White			Good	Column
	-	L-28	Basin	Metal	White			Poor	Basin
	-	L-29	Office - Two Story Door jamb	Metal	Yellow			Poor	Door jamb
	-	L-30	Office Ext Concrete wall	Concrete	White			Poor	Ext wall
		L-31	Red Station Column	Metal	Red			Poor	Column
		L-32	Bollard	Metal	Yellow			Poor	Bollard
		L-33	Guard rail	Metal	Yellow			Poor	Guard rail
		L-34	Office	Metal	Red			Good	Door jamb
		L-35	Ext Door	Metal	Red			Good	Door jamb

Due Date: 8-25-08
Due Time: 10:15a

RES 160228

Reservoirs Environmental, Inc.

5801 Logan St. Denver, CO 80216 • Ph: 303 964-1986 • Fax 303-477-4275 • Toll Free: 866 RESI-ENV
Pager : 303-509-2098

Page ___ of ___

INVOICE TO: (IF DIFFERENT)

Company: TERRACON
Address: 11555 Clay Road, Suite 100
Houston TX 77043

Company:
Address:

CONTACT INFORMATION:

Contact:
Phone:
Fax:
Cell/pager:

Contact:
Phone:
Fax:
Cell/pager:

Final Data Deliverable Email Address:

Project Number and/or P.O. #: 94308
Project Description/Location: COH - 841 Gillette St.

ASBESTOS LABORATORY HOURS: Weekdays: 7am - 7pm

PLM / PCM / TEM ___ RUSH (Same Day) ___ PRIORITY (Next Day) ✓ STANDARD (Rush PCM = 2hr, TEM = 6hr.) 3 Day

CHEMISTRY LABORATORY HOURS: Weekdays: 8am - 5pm

Metal(s) / Dust ___ RUSH ___ 24 hr. ___ 3-5 Day

RCRA 8 / Metals & Welding Fume Scan / TCLP ___ RUSH ___ 5 day ___ 10 day

Prior notification is required for RUSH turnarounds.

Organics ___ 24 hr. ___ 3 day ___ 5 Day

"Turnaround times establish a laboratory priority, subject to laboratory volume and are not guaranteed. Additional fees apply for afterhours, weekends and holidays."

Special Instructions:

REQUESTED ANALYSIS

VALID MATRIX CODES

Air = A | Bulk = B
Dust = D | Paint = P
Soil = S | Wipe = W
Drinking Water = DW
Waste Water = WW
Other = O
ASTM E1792 approved wipe media only

LAB NOTES:

Client sample ID number (Sample ID's must be unique)	PLM - Short report, Long report, Point Count	TEM - AHERA, Level II, 7402, ISO, +/-, Quant, Semi-quant, Micro-vac, ISO-Indirect Preps	PCM - 7400A, 7400B, OSHA	DUST - Total, Respirable	METALS - Analyte(s) TCLP, RCRA 8, TCLP, Welding Fume, Metals Scan	ORGANICS - BTEX, MTBE, 8260, GRO, DRO	OTHER -	Sample Volume (L) / Area	Matrix Code	# Containers	Date Collected mm/dd/yy	Time Collected hh/mm a/p	EM Number (Laboratory Use Only)
1 L-1					X								3230064
2 -2													65
3 -3													66
4 -4													67
5 -5													68
6 -6													69
7 -7													70
8 -8													71
9 -9													72
10 -10													73
11 -11													74
12 -12													75
13 -13													76

Number of samples received: _____ (Additional samples shall be listed on attached long form.)

NOTE: REI will analyze incoming samples based upon information received and will not be responsible for errors or omissions in calculations resulting from the inaccuracy of original data. By signing client/company representative agrees that submission of the following samples for requested analysis as indicated on this Chain of Custody shall constitute an analytical services agreement with payment terms of NET 30 days, failure to comply with payment terms may result in a 1.5% monthly interest surcharge.

Relinquished By: Date/Time:

Laboratory Use Only
Received By: Date/Time: 8/20/08 @ 10:15a Carrier: Fedex

Sample Condition: On Ice Y/N Sealed Y/N Intact Y/N
Temp. (F°) _____

Results:	Contact	Page	Phone	Email	Fax	Date	Time	Initials	Contact	Page	Phone	Email	Fax	Date	Time	Initials
	Contact	Page	Phone	Email	Fax	Date	Time	Initials	Contact	Page	Phone	Email	Fax	Date	Time	Initials

REI LAB **Reservoirs Environmental, Inc.**
5801 Logan St. Denver, CO 80216 • Ph 303 964-1986 • Fax 303-477-4275 • Toll Free 866 RESI-ENV

RES Job # 160228

Page 2 of 2

Submitted by: Terracon

Client sample ID number (Sample ID's must be unique)	PLM - Short report, Long report, Point Count	TEM - AHERA, Level II, 7402, ISO, +/-, Quant, Semi-quant, Micro-vac, ISO-Indirect Preps	PCM - 7400A, 7400B, OSHA	DUST - Total, Respirable	METALS - Analyte(s) Pb	RCRA 8, TCLP, Welding Fume, Metals Scan	ORGANICS - BTEX, MTBE, 8260, GRO, DRO	OTHER -	Sample Volume (L) / Area	Matrix Code	# Containers	Date Collected mm/dd/yy	Time Collected hh/mm a/p	EM Number (Laboratory Use Only)
14 L-14					X									323077
15 -15														78
16 -16														79
17 -17														80
18 -18														81
19 -19														82
20 -20														83
21 -21														84
22 -22														85
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24 -24														87
25 -25														88
26 -26														89
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43														
44														

REQUESTED ANALYSIS

VALID MATRIX CODES

Air = A	Bulk = B
Dust = D	Paint = P
Soil = S	Wipe = W
Drinking Water = DW	
Waste Water = WW	
Other = O	

ASTM E1792 approved wipe media only

LAB NOTES:

APPENDIX C

ACCREDITATIONS

Be it known that

TERRACON CONSULTANTS INC

is certified to perform as a

Lead Firm

in the State of Texas and is hereby governed by the rights, privileges and responsibilities set forth in Texas Occupations Code, Chapter 1955 and Title 25, Texas Administrative Code, Chapter 295 relating to Texas Environmental Lead Reduction, as long as this license is not suspended or revoked.

David L. Lakey, M.D.
Commissioner of Health

License Number: 2110106

Control Number 6025

Expiration Date: 3/20/2010

(Void After Expiration Date)

VOID IF ALTERED NON-TRANSFERABLE

TEXAS DEPARTMENT OF STATE HEALTH SERVICES

Be it known that

MUSTAFA T BIRADER

is certified to perform as a

Lead Inspector

in the State of Texas and is hereby governed by the rights, privileges and responsibilities set forth in Texas Occupations Code, Chapter 1955 and Title 25, Texas Administrative Code, Chapter 295 relating to Texas Environmental Lead Reduction, as long as this license is not suspended or revoked.

David L. Lakey, M.D.
Commissioner of Health

License Number: 2060366

Expiration Date: 2/28/2010

Void After Expiration Date

VOID IF ALTERED

Control Number 6038

NON-TRANSFERABLE

The American Industrial Hygiene Association

CELEBRATING 30 Thirty Years of AIHA Accrediting Labs

SOUND DATA SMART DECISIONS

1974 - 2004

acknowledges that

Reservoirs Environmental Services, Inc.

2059 Bryant Street, Denver, CO 80211

Laboratory ID: 101533

has fulfilled the requirements of the AIHA Laboratory Quality Assurance Programs (LQAP), thereby, conforming to the ISO/IEC 17025:1999 international standard, *General Requirements for the Competence of Testing and Calibration Laboratories*. The above named laboratory, along with all premises from which key activities are performed, as listed above, have been accredited by AIHA in the following:

ACCREDITATION PROGRAMS

✓	**INDUSTRIAL HYGIENE**	Accreditation Expires: 02/01/2008
✓	**ENVIRONMENTAL LEAD**	Accreditation Expires: 02/01/2008
☐	**ENVIRONMENTAL MICROBIOLOGY**	Accreditation Expires:
☐	**FOOD**	Accreditation Expires:

Specific Field(s) of Testing (FoT)/Method(s) within each Accreditation Program for which the above named laboratory maintains accreditation is outlined on the attached **Scope of Accreditation**. Continued accreditation is contingent upon successful on-going compliance with LQAP requirements. This certificate is not valid without the attached **Scope of Accreditation.**

David Kahane, CIH
Chairperson, Analytical Accreditation Board

Roy M. Buchan, DrPH, CIH
President, AIHA

Date Issued: 02/24/2006