CORRESPONDENCE/MEMORANDUM

State of Wisconsin

DATE: December 12, 2003

TO: Andrew Boettcher - SER, Milwaukee

FROM: Charlene Khazae - RR/3

SUBJECT: St. Francis Auto Wreckers

Accompanying this memo is the completed data summary for the Site Assessment activities at the above site. Included with this summary are the sample summary tables, data summary tables, and the WDNR narrative. Also included for your review are the laboratory and EPA case narratives listing all the QC results and their possible effect on data quality. The volatile and semivolatile tentatively identified compound reporting sheets, with estimated concentrations, are also in the package.

I am sending this memo and all text and tables associated with your site work electronically via e-mail attachments. As always, if you have difficulty with the electronic files or have questions regarding this data package, please do not hesitate to contact me.

Cc: Mike Netzer - RR/3, electronic memo only
Mark Gordon - RR/3, electronic memo only
John Krahling - SER, electronic memo only
Chuck Warzecha - DOH, complete data summary
John Burnett - RR/3, complete data summary

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: _____

SUBJECT: Review of Data
Received for Review on November 6, 2003

FROM: Stephen L. Ostrodka, Chief (SMF-4J)
Superfund Field Services Section

TO: Data User: WDNR

We have reviewed the data for the following case:

Site name: St. Francis Auto Wreckers (WI)

Case number: 32260 SDG Number: E20E4

Number and Type of Samples: 8 water samples

Sample Numbers: E20E4-E20E9, E20F0, E20F1

Laboratory: A4 Scientific Hrs. for Review: _____

Following are our findings:

CC: Cecilia Moore
Region 5 TPO
Mail Code: SMF-4J

Laboratory: **A4 Scientific** Case Number : **32260**

Site Name: **St. Francis Auto Wreckers (WI)** SDG Number:

E20E4

Below is a summary of the out-of-control audits and the possible effects on the data for this case:

Eight water samples, numbered E20E4-E20E9, E20F0 and E20F1 were collected on 10/15/2003. The laboratory received the samples on 10/16/2003. A portion of samples E20E6 and E20F0 were broken upon receipt according to Form DC-1 (page 1409). The remaining samples were received in good condition. Sample E20F1 was analyzed only for volatile analytes. The remaining seven samples were analyzed for the full list of organic analytes according to CLP SOW OLC03.2 and reviewed according to USEPA CLP National Guidelines for Low Concentration Organic Data Review (June 2001).

Reviewed By: Steffanie Tobin (ESAT)

Date: December 1, 2003

Laboratory: **A4 Scientific** Case Number : **32260**
Site Name: **St. Francis Auto Wreckers (WI)** SDG Number:

E20E4

1. HOLDING TIME

The following volatile water samples were not properly preserved (pH=6). Hits for non-halogenated compounds are qualified "J" and non-detects are qualified "R".

E20E8
Acetone, Carbon Disulfide, Methyl Acetate, tert-Butyl Methyl Ether, 2-Butanone, Cyclohexane, Benzene, Methylcyclohexane, 4-Methyl-2-pentanone, Toluene, 2-Hexanone, Ethylbenzene, Xylenes (total), Styrene, Isopropylbenzene

The following volatile water samples were not properly preserved (pH=6). Hits for halogenated compounds are qualified "J" and non-detects are qualified "UJ".

E20E8
Dichlorodifluoromethane, Chloromethane, Vinyl Chloride, Bromomethane, Chloroethane, Trichlorofluoromethane, 1,1-Dichloroethene, 1,1,2-Trichloro-1,2,2-trifluoroethane, Methylene Chloride, trans-1,2-Dichloroethene, 1,1-Dichloroethane, cis-1,2-Dichloroethene, Bromochloromethane, Chloroform, 1,1,1-Trichloroethane, Carbon Tetrachloride, 1,2-Dichloroethane, Trichloroethene, 1,2-Dichloropropane, Bromodichloromethane, cis-1,3-Dichloropropene, trans-1,3-Dichloropropene, 1,1,2-Trichloroethane, Tetrachloroethene, Dibromochloromethane, 1,2-Dibromoethane, Chlorobenzene, Bromoform, 1,1,2,2-Tetrachloroethane, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, 1,2-Dichlorobenzene, 1,2-Dibromo-3-chloropropane, 1,2,4-Trichlorobenzene, 1,2,3-Trichlorobenzene

2. GC/MS TUNING AND GC INSTRUMENT PERFORMANCE

No problems were found for this qualification.

3. CALIBRATION

The following volatile samples are associated with a continuing calibration whose corresponding initial calibration has percent relative standard deviation (%RSD) outside primary criteria. Hits are qualified "J" and non-detects are flagged "UJ".

Bromomethane, Methylene Chloride
E20E4, E20E5, E20E6, E20E6DL, E20E7, E20E8, E20E9, E20F0, E20F1, VBLK94, VBLK95, VBLK96, VBLK97

Methyl Acetate
E20E4, E20E5, E20E6, E20E6DL, E20E6MSD, E20E7, E20E9, E20F0, E20F1, VBLK1H, VBLK1I, VBLK94, VBLK95, VBLK96, VBLK97, VHBLK01

1,2,3-Trichlorobenzene
E20E6MS, E20E6MSD, VBLK1H, VBLK1I, VHBLK01

Reviewed By: Steffanie Tobin (ESAT)
Date: December 1, 2003

Laboratory: **A4 Scientific** Case Number : **32260**
Site Name: **St. Francis Auto Wreckers (WI)** SDG Number:

E20E4

The following volatile samples are associated with a continuing calibration percent difference (%D) outside primary criteria. Hits are qualified "J" and non-detects are qualified "UJ".

Acetone
E20E4, E20E5, E20E7, E20E8, E20F0, E20F1, VBLK94, VBLK96

Methyl Acetate
E20E4, E20E5, E20E6MSD, E20E7, E20F0, E20F1, VBLK1H, VBLK1I, VBLK94, VHBLK01

Carbon Tetrachloride
VBLK1I, VHBLK01

1,2-Dichloroethane
E20E6, E20E6DL, E20E9, VBLK95, VBLK97

1,2,4-Trichlorobenzene
E20E6MS, E20E6MSD, VBLK1H

1,2,3-Trichlorobenzene
E20E6MS, E20E6MSD, VBLK1H, VBLK1I, VHBLK01

The following volatile samples are associated with an initial calibration in which a SMC/DMC exceeded percent relative standard deviation (%RSD) criteria. Hits and non-detects are not qualified.

E20E6MS, E20E6MSD, VBLK1H, VBLK1I, VHBLK01

The following semivolatile samples are associated with a continuing calibration whose corresponding initial calibration has percent relative standard deviation (%RSD) outside primary criteria. Hits are qualified "J" and non-detects are flagged "UJ".

Nitrobenzene, bis(2-Ethylhexyl)phthalate, Indeno(1,2,3-cd)pyrene, Dibenzo (a,h) - anthracene
E20E4, E20E5, E20E6, E20E6MS, E20E6MSD, E20E7, E20E8, E20E9, E20F0, SBLK7K

The following semivolatile samples are associated with a continuing calibration percent difference (%D) outside primary criteria. Hits are qualified "J" and non-detects are qualified "UJ".

Indeno(1,2,3-cd)pyrene, Dibenzo (a,h) - anthracene, Benzo (g,h,i) perylene
E20E8, E20E9, E20F0

The following semivolatile samples are associated with a continuing calibration in which a surrogate/DMC exceeded percent difference (%D) criteria. Hits and non-detects are not qualified.

Reviewed By: Steffanie Tobin (ESAT)
Date: December 1, 2003

E20E8, E20E9, E20F0

The following pesticide samples are associated with a three point initial calibration in which the % RSD of calibration factors exceeds criteria. Hits are qualified "J" and non-detects are qualified "UJ".

alpha-BHC, Methoxychlor
E20E4, E20E5, E20E6, E20E6MS, E20E6MSD, E20E7, E20E8, E20E9, E20F0, PBLK5A

4. METHOD BLANKS

The following volatile samples have analyte concentrations reported below the CRQL. The associated method blank concentration is less than the concentration criteria. Reported sample concentrations have been elevated to the CRQL. Hits are qualified "U" and non-detects are not flagged.

Chloromethane
E20E4, E20E5, E20E6DL, E20E7, E20E9, E20F0, E20F1

The following volatile samples have analyte concentrations reported at or above the CRQL. The associated method blank concentration is less than the concentration criteria. Hits are qualified "U" or "UJ" and non-detects are not flagged.

Chloromethane
E20E6, E20E8

5. DEUTERATED MONITORING COMPOUND AND SURROGATE RECOVERY

The following volatile samples have DMC recoveries above the upper limit of the criteria window. Hits are qualified "J" and non-detects are not flagged unless otherwise qualified in another statement.

E20E6MS
Dichlorodifluoromethane, Chloromethane, Vinyl Chloride, Bromomethane, Chloroethane, Carbon Disulfide, trans-1,2-Dichloroethene, 1,1-Dichloroethane, cis-1,2-Dichloroethene, Bromochloromethane, Chloroform

E20E7
Acetone, 2-Butanone, 4-Methyl-2-pentanone, 2-Hexanone

E20E8
Trichloroethene, Toluene, Tetrachloroethene, Ethylbenzene, Xylenes(total), Styrene, Isopropylbenzene, 1,1,2,2-Tetrachloroethane, 1,2-Dibromo-3-chloropropane

The following volatile samples have one or more DMC recovery values below the lower limit of the criteria window. Hits are biased low and qualified "J" and non-detects are qualified "UJ".

Laboratory: **A4 Scientific** Case Number : **32260**
Site Name: **St. Francis Auto Wreckers (WI)** SDG Number:
E20E4

E20E6
cis-1,3-Dichloropropene, trans-1,3-Dichloropropene, 1,1,2-Trichloroethane
E20E6MS
Cyclohexane, Benzene, Trichloroethene, Methylcyclohexane, 1,2-Dichloropropane, Bromodichloromethane, cis-1,3-Dichloropropene, Toluene, trans-1,3-Dichloropropene, 1,1,2-Trichloroethane, Tetrachloroethene, Dibromochloromethane, 1,2-Dibromoethane, Ethylbenzene, Xylenes(total), Styrene, Bromoform, Isopropylbenzene

E20E6MSD
Trichlorofluoromethane, 1,1-Dichloroethene, 1,1,2-Trichloro-1,2,2,-trifluoroethane, Methyl Acetate, Methylene Chloride, Methyl tert-Butyl Ether, 1,1-Dichloroethane, Bromochloromethane, Chloroform, 1,1,1-Trichloroethane, Carbon Tetrachloride, 1,2-Dichloroethane 1,1,2,2-Tetrachloroethane, 1,2-Dibromo-3-chloropropane

E20E8
Dibromochloromethane, 1,2-Dibromoethane, Bromoform

The following semivolatile samples have deuterated monitoring compound recovery above the upper limit of the criteria window. Hits are qualified "J" and non-detects are not flagged unless otherwise qualified in another statement.

E20E4, E20E6MS, E20E6MSD, E20E7
bis(2-Chloroethyl)ether, 2,2-oxybis(1-Chloropropane), bis(2-Chloroethoxy)methane, Fluoranthene, Pyrene, Benzo(a)anthracene, Chrysene

E20E5, E20E6, E20E9
Fluoranthene, Pyrene, Benzo(a)anthracene, Chrysene

E20E8
bis(2-Chloroethyl)ether, 2,2-oxybis(1-Chloropropane), bis(2-Chloroethoxy)methane, Hexachlorobenzene, Atrazine, Phenanthrene, Anthracene, Fluoranthene, Pyrene, Benzo(a)anthracene, Chrysene

The following semivolatile samples have deuterated monitoring compound recovery below the lower limit of the criteria window. Hits are qualified "J" and non-detects are qualified "UJ".

E20E6MSD
Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene, Dibenzo(a,h)-anthracene, Benzo (g,h,i) perylene

E20E8
4-Chloroaniline, Hexachlorocyclopentadiene, 3,3-Dichlorobenzidine

Reviewed By: Steffanie Tobin (ESAT)
Date: December 1, 2003

Laboratory: **A4 Scientific** Case Number : **32260**
Site Name: **St. Francis Auto Wreckers (WI)** SDG Number:
E20E4

E20E9
4-Chloroaniline, Hexachlorocyclopentadiene, 3,3-Dichlorobenzidine, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene, Dibenzo (a,h) - anthracene, Benzo (g,h,i) perylene

E20F0
2,4-Dichlorophenol, Hexachlorobutadiene, Caprolactam, 4-Chloro-3-methylphenol, 2,4,6-Trichlorophenol, 2,4,5-Trichlorophenol, 1,1'-Biphenyl, Dimethylphthalate, Diethylphthalate, 4,6-Dinitro-2-methylphenol, 1,2,4,5-Tetrachlorobenzene, Pentachlorophenol, Di-n-butylphthalate, Butylbenzylphthalate, bis(2-Ethylhexyl)phthalate, Di-n-octylphthalate

6A. MATRIX SPIKE/MATRIX SPIKE DUPLICATE

The relative percent difference (RPD) between the following volatile matrix spike and matrix spike duplicate recoveries is outside criteria. Hits for the outlier compounds in the unspiked sample E20E6 are estimated "J" and non-detects "UJ".

E20E6MS, E20E6MSD
1,1-Dichloroethene, Benzene, Trichloroethene, Toluene

The following volatile matrix spike/matrix spike duplicate samples have percent recovery outside criteria. Hits and non-detects for the outlier compounds in the unspiked sample E20E6 are qualified above.

E20E6MS
1,1-Dichloroethene

E20E6MSD
1,1-Dichloroethene, Benzene, Trichloroethene, Toluene

The following volatile matrix spike/matrix spike duplicate samples have percent recovery above the QC limit. Hits for the outlier compounds in the unspiked sample E20E6 are estimated "J" and non-detects not qualified.

E20E6MS, E20E6MSD
Chlorobenzene

The following semivolatile matrix spike/matrix spike duplicate samples have percent recovery outside criteria. Hits for the outlier compounds in the unspiked sample E20E6 are estimated "J" and non-detects are not flagged.

E20E6MS, E20E6MSD
4-Nitrophenol, Pentachlorophenol

Reviewed By: Steffanie Tobin (ESAT)
Date: December 1, 2003

Laboratory: **A4 Scientific** Case Number : **32260**
Site Name: **St. Francis Auto Wreckers (WI)** SDG Number:
E20E4

The following pesticide matrix spike/matrix spike duplicate samples have percent recovery outside criteria. Hits for the outlier compounds in the unspiked sample E20E6 are estimated "J" and non-detects "UJ".

E20E6MS, E20E6MSD
gamma-BHC (Lindane), Heptachlor, Aldrin, Dieldrin, Endrin, 4,4-DDT

6B. LABORATORY CONTROL SAMPLE (Pesticides)

No problems were found for this qualification.

7. FIELD BLANK AND FIELD DUPLICATE

Samples E20E8 (MW05) and E20E9 (MW06) may be duplicate samples since they were collected at the same time. Samples E20F0 and E20F1 were identified as the rinsate and trip blank, respectively. The results for samples E20E8 and E20E9 are presented in the following table:

Analytes dilution factor =	E20E8 1.0	E20E9 1.0	E20F0 1.0	E20F1 1.0
Chloroethane	ND	0.27 Φg/L	ND	ND
Acetone	39 Φg/L	22 Φg/L	ND	ND
Carbon Disulfide	ND	0.15 Φg/L	ND	ND
2-Butanone	ND	19 Φg/L	4.3 Φg/L	3.2 Φg/L
Chloroform	ND	ND	ND	0.16 Φg/L
Cyclohexane	0.93 Φg/L	0.58 Φg/L	ND	ND
Benzene	18 Φg/L	14 Φg/L	ND	ND
Methylcyclohexane	3.8 Φg/L	1.8 Φg/L	ND	ND
Toluene	0.36 Φg/L	0.30 Φg/L	ND	ND
Chlorobenzene	1.7 Φg/L	1.4 Φg/L	ND	ND
Xylenes	0.62 Φg/L	0.47 Φg/L	ND	ND
Isopropylbenzene	22 Φg/L	16 Φg/L	ND	ND

Reviewed By: Steffanie Tobin (ESAT)
Date: December 1, 2003

Laboratory: **A4 Scientific** Case Number : **32260**
Site Name: **St. Francis Auto Wreckers (WI)** SDG Number:

			E20E4	
1,2-Dichlorobenzene	0.53 Φg/L	0.48 Φg/L	ND	ND
VOA TICs	30	30	ND	ND
Di-n-butylphthalate	ND	2.3 Φg/L	2.1 Φg/L	NA
bis(2-Ethyl hexyl)phthalate	ND	3.2 Φg/L	ND	NA
SVOA TICs	29	25	8	NA
gamma-BHC	ND	ND	0.019 Φg/L	NA

Sample results are not qualified based upon the results of the field duplicates or QC blanks.

8. INTERNAL STANDARDS

The following volatile samples have internal standard area counts outside expanded criteria. Hits are qualified "J" and non-detects are qualified "R".

E20E6MS
Dichlorodifluoromethane, Chloromethane, Vinyl Chloride, Bromomethane, Chloroethane, Trichlorofluoromethane, 1,1-Dichloroethene, 1,1,2-Trichloro-1,2,2-trifluoroethane, Acetone, Carbon Disulfide, Methyl Acetate, Methylene Chloride, trans-1,2-Dichloroethene, Methyl tert-Butyl Ether, 1,1-Dichloroethane, cis-1,2-Dichloroethene, 2-Butanone, Bromochloromethane, Chloroform

The following semivolatile samples have internal standard area counts that are outside the lower limit of primary criteria. Hits are qualified "J" and non-detects are qualified "UJ".

E20E4, E20E5, E20E6, E20E6MS, E20E6MSD, E20E7
Pyrene, Butylbenzylphthalate, 3,3-Dichlorobenzidine, Benzo(a)anthracene, Chrysene, bis(2-Ethylhexyl)phthalate, Di-n-octylphthalate, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene, Dibenzo (a,h) - anthracene, Benzo (g,h,i) perylene

E20E8, E20E9
Pyrene, Butylbenzylphthalate, 3,3-Dichlorobenzidine, Benzo(a)anthracene, Chrysene, bis(2-Ethylhexyl)phthalate

9. COMPOUND IDENTIFICATION

After reviewing the mass spectra and chromatograms, it appears that all VOA, SVOA and Pest/PCB compounds were properly identified.

10. COMPOUND QUANTITATION AND REPORTED DETECTION LIMITS

Laboratory: **A4 Scientific** Case Number : **32260**
Site Name: **St. Francis Auto Wreckers (WI)** SDG Number:

E20E4

The following volatile samples have analyte concentrations below the quantitation limit (CRQL). All results below the CRQL are qualified "J".

E20E4
Acetone, 2-Butanone, Chlorobenzene, 1,4-Dichlorobenzene, 1,2-Dichlorobenzene

E20E5
Vinyl Chloride, Acetone, Carbon Disulfide, 2-Butanone

E20E6
trans-1,2-Dichloroethene, 1,1,2-Trichloroethane, 1,2-Dichlorobenzene

E20E6DL
Isopropylbenzene

E20E6MS
Methyl tert-Butyl Ether, 1,4-Dichlorobenzene, 1,2-Dichlorobenzene

E20E6MSD
Methylene Chloride, trans-1,2-Dichloroethene, Methyl tert-Butyl Ether, Cyclohexane, Methylcyclohexane, 1,2-Dichlorobenzene

E20E7
Acetone, 2-Butanone, Benzene

E20E8
Toluene

E20E9
Chloroethane, Carbon Disulfide, Toluene, Xylenes (total), 1,2-Dichlorobenzene

E20F0
2-Butanone

E20F1
2-Butanone, Chloroform

VBLK1H, VBLK1I
1,2,4-Trichlorobenzene

VBLK94, VBLK95, VBLK96, VBLK97
Chloromethane

Reviewed By: Steffanie Tobin (ESAT)
Date: December 1, 2003

Laboratory: **A4 Scientific** Case Number : **32260**
Site Name: **St. Francis Auto Wreckers (WI)** SDG Number:

E20E4

The following semivolatile samples have analyte concentrations below the quantitation limit (CRQL). All results below the CRQL are qualified "J".

E20E9
Di-n-butylphthalate, bis(2-Ethylhexyl)phthalate

E20F0
Di-n-butylphthalate

The following pesticide samples have analytes for which the percent difference between column results exceeds primary criteria. Hits are qualified "J".

E20E6MS, E20E6MSD
gamma-BHC (Lindane), Heptachlor, Aldrin, Dieldrin, Endrin, 4,4-DDT

E20F0
gamma-BHC (Lindane)

11. SYSTEM PERFORMANCE

GC/MS baseline indicated acceptable performance. GC baseline indicated acceptable performance

12. ADDITIONAL INFORMATION

The result of Vinyl chloride for VOA sample E20E6 was quantitated outside the QC limit. The Vinyl chloride result for the diluted samples E20E6DL should be used for sample validation.

The results of Vinyl chloride, Chloroethane, 1,1-Dichloroethane, Cis-1,2-Dichloroethene for VOA sample E20E6MS were quantitated outside the QC limit; The result of Vinyl chloride for VOA sample E20E6MSD was quantitated outside the QC limit; The results of Pentachlophenol for SVOA sample E20E6MS and E20E6MSD was quantitated outside the QC limit. No further dilutions or qualification are needed since these samples were only used for QC purposes.

Outstanding IS for the SVOA samples were not flagged with (*) on Form VIII LCSV-1 and LCSV-2 (page 539-544).

Reviewed By: Steffanie Tobin (ESAT)
Date: December 1, 2003

Laboratory: **A4 Scientific**
Site Name: **St. Francis Auto Wreckers (WI)**

Case Number : **32260**
SDG Number:
E20E4

Reviewed By: Steffanie Tobin (ESAT)
Date: December 1, 2003

CADRE Data Qualifier Sheet

Qualifiers	Data Qualifier Definitions
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
J	The analyte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the action limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
N	The analysis indicates the present of an analyte for which there is presumptive evidence to make a tentative identification.
NJ	The analysis indicates the present of an analyte for which there is presumptive evidence to make a tentative identification and the associated numerical value represents its approximate concentration.
R	The data are unusable. (The compound may or may not be present)
H	Sample result is estimated and biased high.
L	Sample result is estimated and biased low.

Low Concentration Volatile Sample Analysis
Tentatively Identified Compounds

Sample No.: E20E4

Sample Type:	Routine Sample		
Lab ID:	A4	Location:	MW01
Case No.:	32260	Matrix/Level:	Water/
SDG No.:	E20E4	File Name:	E20E4

CAS No.	Compound Name	RT	Concentration (UG/L)	Q*
	UNKNOWN	5.02	0.74	J
000103651	BENZENE, PROPYL-	12.43	4.6	JN
	UNKNOWN	13.69	2.3	J
	UNKNOWN	14.45	3.1	J
000496117	INDANE	14.52	12	JN
000141935	BENZENE, 1,3-DIETHYL-	14.66	1.6	JN
000104518	BENZENE, BUTYL-	14.76	1.4	JN
001074175	BENZENE, 1-METHYL-2-PROPYL-	15.10	2.3	JN
	UNKNOWN	15.49	1.3	J
000767588	INDAN, 1-METHYL-	15.61	6.1	JN
017059482	1H-INDENE, 2,3-DIHYDRO-1,6-DIMETHYL-	15.95	0.88	JN
	UNKNOWN	16.13	0.90	J
000095932	BENZENE, 1,2,4,5-TETRAMETHYL-	16.22	12	JN
000933982	BENZENE, 1-ETHYL-2,3-DIMETHYL-	16.33	3.1	JN
	UNKNOWN	16.71	6.7	J
000767588	INDAN, 1-METHYL-	17.07	7.6	JN
000141935	BENZENE, 1,3-DIETHYL-	17.13	2.9	JN
	UNKNOWN	17.25	0.97	J
097664192	BENZENE, 1-METHYL-2-(1-METHYL-2-PROPE	17.64	0.99	JN
	UNKNOWN	17.80	2.3	J
	UNKNOWN	17.97	0.90	J

*Q: Laboratory Qualifier

Low Concentration Semivolatile Sample Analysis
Tentatively Identified Compounds

Sample No.: E20E4

Sample Type: Routine Sample
Lab ID: A4
Case No.: 32260
SDG No.: E20E4

Location: MW01
Matrix/Level: Water/
File Name: E20E4

CAS No.	Compound Name	RT	Concentration (UG/L)	Q*
	UNKNOWN	4.12	3.6	J
	UNKNOWN	5.06	5.8	J
000622979	BENZENE, 1-ETHENYL-4-METHYL-	5.17	4.4	JN
	UNKNOWN	5.78	2.6	J
1000214955	1-METHYL-1-SILABENZOCYCLOBUTENE	5.83	3.9	JN
	UNKNOWN	6.09	4.8	J
	UNKNOWN	6.65	2.1	J
	UNKNOWN	6.74	5.2	J
	UNKNOWN	6.83	3.0	J
	UNKNOWN	6.91	2.9	J
	UNKNOWN	7.26	5.8	J
	UNKNOWN	7.34	2.3	J
	UNKNOWN	7.56	2.4	J
	UNKNOWN	7.83	2.1	J
	UNKNOWN	7.91	7.2	J
	UNKNOWN	8.10	3.4	J
	UNKNOWN	8.71	7.0	J
	UNKNOWN	8.81	2.9	J
	UNKNOWN	9.32	4.8	J
	UNKNOWN	9.57	12	J
	UNKNOWN	9.85	5.7	J
	UNKNOWN	13.32	37	J
	UNKNOWN	15.13	13	J
	UNKNOWN	15.36	11	J
	UNKNOWN	16.28	3.3	J
	UNKNOWN	16.51	4.1	J

*Q: Laboratory Qualifier

Low Concentration Volatile Sample Analysis
Tentatively Identified Compounds

Sample No.: E20E5

Sample Type: Routine Sample
Lab ID: A4
Case No.: 32260
SDG No.: E20E4

Location: MW02
Matrix/Level: Water/
File Name: E20E4

CAS No.	Compound Name	RT	Concentration (UG/L)	Q*
	UNKNOWN	11.80	0.63	J
	UNKNOWN	12.19	0.67	J
	UNKNOWN	13.20	0.81	J
	UNKNOWN	13.65	1.1	J
	UNKNOWN	14.47	0.81	J
	UNKNOWN	15.40	0.52	J

*Q: Laboratory Qualifier

Low Concentration Semivolatile Sample Analysis
Tentatively Identified Compounds

Sample No.: E20E5

Sample Type: Routine Sample
Lab ID: A4
Case No.: 32260
SDG No.: E20E4

Location: MW02
Matrix/Level: Water/
File Name: E20E4

CAS No.	Compound Name	RT	Concentration (UG/L)	Q*
	UNKNOWN	4.51	5.7	J
	UNKNOWN	4.61	6.4	J
	UNKNOWN	5.06	6.9	J
	UNKNOWN	5.68	6.0	J
	UNKNOWN	6.46	7.4	J
	UNKNOWN	6.98	5.7	J
	UNKNOWN	7.26	7.3	J
000085449	PHTHALIC ANHYDRIDE	7.43	10	JN
	UNKNOWN	7.60	7.2	J
	UNKNOWN	7.73	13	J
	UNKNOWN	7.92	12	J
	UNKNOWN	8.04	9.3	J
	UNKNOWN	8.12	5.6	J
	UNKNOWN	8.60	23	J
	UNKNOWN	8.72	14	J
	UNKNOWN	8.89	18	J
	UNKNOWN	9.09	11	J
	UNKNOWN	9.14	7.1	J
	UNKNOWN	9.32	6.0	J
000088197	BENZENESULFONAMIDE, 2-METHYL-	9.56	11	JN
	UNKNOWN	9.68	9.6	J
	UNKNOWN	9.74	11	J
	UNKNOWN	9.84	27	J
	UNKNOWN	10.12	7.6	J
	UNKNOWN	11.38	9.2	J
	UNKNOWN	12.79	56	J
	UNKNOWN	13.29	40	J
	UNKNOWN	13.79	9.9	J
	UNKNOWN	15.14	14	J
	UNKNOWN	15.41	6.5	J

*Q: Laboratory Qualifier

Low Concentration Volatile Sample Analysis
Tentatively Identified Compounds

		Sample No.:	E20E6
Sample Type:	Spike Original		
Lab ID:	A4	Location:	MW03
Case No.:	32260	Matrix/Level:	Water/
SDG No.:	E20E4	File Name:	E20E4

CAS No.	Compound Name	RT	Concentration (UG/L)	Q*
000060297	ETHYL ETHER	2.61	0.86	JN
000637923	PROPANE, 2-ETHOXY-2-METHYL-	4.28	1.6	JN
000592416	1-HEXENE	5.01	0.80	JN
003728561	1-ETHYL-4-METHYLCYCLOHEXANE	10.63	0.87	JN
000280659	BICYCLO[3.3.1]NONANE	10.98	1.1	JN
001674108	CYCLOHEXENE, 1,2-DIMETHYL-	12.29	5.7	JN
000280659	BICYCLO[3.3.1]NONANE	12.74	3.5	JN
001121375	METHANONE, DICYCLOPROPYL-	13.13	1.5	JN
000098066	BENZENE, TERT-BUTYL-	13.37	5.8	JN
000104518	BENZENE, BUTYL-	13.69	8.4	JN
002568903	BUTANE, 1,1'-[METHYLENEBIS(OXY)]BIS-	14.46	6.9	JN
000135013	BENZENE, 1,2-DIETHYL-	14.67	4.4	JN
004912929	1H-INDENE, 2,3-DIHYDRO-1,1-DIMETHYL-	15.96	6.4	JN
000099876	BENZENE, 1-METHYL-4-(1-METHYLETHYL)-	16.24	3.3	JN
004175535	1H-INDENE, 2,3-DIHYDRO-1,3-DIMETHYL-	16.72	2.6	JN

*Q: Laboratory Qualifier

Low Concentration Semivolatile Sample Analysis
Tentatively Identified Compounds

Sample No.: E20E6

Sample Type: Spike Original
Lab ID: A4
Case No.: 32260
SDG No.: E20E4

Location: MW03
Matrix/Level: Water/
File Name: E20E4

CAS No.	Compound Name	RT	Concentration (UG/L)	Q*
	UNKNOWN	2.90	2.0	J
	UNKNOWN	5.06	3.9	J
	UNKNOWN	6.68	2.3	J
	UNKNOWN	6.74	2.2	J
	UNKNOWN	7.26	2.9	J
	UNKNOWN	7.32	4.4	J
	UNKNOWN	7.45	2.4	J
	UNKNOWN	8.04	3.4	J
	UNKNOWN	8.11	4.8	J
	UNKNOWN	8.59	6.6	J
	UNKNOWN	8.82	3.8	J
	UNKNOWN	9.32	3.9	J
	UNKNOWN	9.74	4.6	J
	UNKNOWN	10.12	3.4	J
	UNKNOWN	10.24	2.2	J
	UNKNOWN	10.78	4.0	J
	UNKNOWN	11.39	4.4	J
	UNKNOWN	12.05	3.9	J
	UNKNOWN	13.27	70	J
	UNKNOWN	13.79	5.1	J
	UNKNOWN	14.88	3.9	J
	UNKNOWN	15.20	8.6	J
	UNKNOWN	16.25	3.2	J
	UNKNOWN	19.31	3.3	J
	UNKNOWN	19.89	4.7	J

*Q: Laboratory Qualifier

Low Concentration Volatile Sample Analysis
Tentatively Identified Compounds

Sample No.: E20E6DL

Sample Type:	Routine Sample		
Lab ID:	A4	Location:	MW03
Case No.:	32260	Matrix/Level:	Water/
SDG No.:	E20E4	File Name:	E20E4

CAS No.	Compound Name	RT	Concentration (UG/L)	Q*
	UNKNOWN	13.34	3.1	JD
	UNKNOWN	13.67	7.0	JD
	UNKNOWN	14.45	2.8	JD
	UNKNOWN	14.66	3.1	JD
004912929	1H-INDENE, 2,3-DIHYDRO-1,1-DIMETHYL-	15.95	4.4	JND

*Q: Laboratory Qualifier

Low Concentration Volatile Sample Analysis
Tentatively Identified Compounds

Sample No.: E20E6MS

Sample Type:	Matrix Spike		
Lab ID:	A4	Location:	MW03
Case No.:	32260	Matrix/Level:	Water/
SDG No.:	E20E4	File Name:	E20E4

CAS No.	Compound Name	RT	Concentration (UG/L)	Q*
	UNKNOWN	2.59	0.53	J

*Q: Laboratory Qualifier

Low Concentration Semivolatile Sample Analysis
Tentatively Identified Compounds

Sample No.: E20E6MS

Sample Type: Matrix Spike
Lab ID: A4
Case No.: 32260
SDG No.: E20E4

Location: MW03
Matrix/Level: Water/
File Name: E20E4

CAS No.	Compound Name	RT	Concentration (UG/L)	Q*
	UNKNOWN	2.90	2.0	J
	UNKNOWN	5.06	3.9	J
	UNKNOWN	6.68	2.3	J
	UNKNOWN	6.74	2.2	J
	UNKNOWN	7.26	2.9	J
	UNKNOWN	7.32	4.4	J
	UNKNOWN	7.45	2.4	J
	UNKNOWN	8.04	3.4	J
	UNKNOWN	8.11	4.8	J
	UNKNOWN	8.59	6.6	J
	UNKNOWN	8.82	3.8	J
	UNKNOWN	9.32	3.9	J
	UNKNOWN	9.74	4.6	J
	UNKNOWN	10.12	3.4	J
	UNKNOWN	10.24	2.2	J
	UNKNOWN	10.78	4.0	J
	UNKNOWN	11.39	4.4	J
	UNKNOWN	12.05	3.9	J
	UNKNOWN	13.27	70	J
	UNKNOWN	13.79	5.1	J
	UNKNOWN	14.88	3.9	J
	UNKNOWN	15.20	8.6	J
	UNKNOWN	16.25	3.2	J
	UNKNOWN	19.31	3.3	J
	UNKNOWN	19.89	4.7	J

*Q: Laboratory Qualifier

Low Concentration Volatile Sample Analysis
Tentatively Identified Compounds

Sample No.: E20E7

Sample Type:	Routine Sample		
Lab ID:	A4	Location:	MW04
Case No.:	32260	Matrix/Level:	Water/
SDG No.:	E20E4	File Name:	E20E4

CAS No.	Compound Name	RT	Concentration (UG/L)	Q*
	UNKNOWN	4.27	0.74	J

*Q: Laboratory Qualifier

Low Concentration Semivolatile Sample Analysis
Tentatively Identified Compounds

Sample No.: E20E7

Sample Type:	Routine Sample		
Lab ID:	A4	Location:	MW04
Case No.:	32260	Matrix/Level:	Water/
SDG No.:	E20E4	File Name:	E20E4

CAS No.	Compound Name	RT	Concentration (UG/L)	Q*
	UNKNOWN	7.26	4.9	J
	UNKNOWN	7.48	4.6	J
	UNKNOWN	7.80	4.3	J
	UNKNOWN	8.40	13	J
	UNKNOWN	9.57	3.3	J
	UNKNOWN	9.63	5.9	J
	UNKNOWN	10.16	2.6	J
	UNKNOWN	13.23	280	J
	UNKNOWN	15.80	7.9	J
	UNKNOWN	19.89	8.3	J

*Q: Laboratory Qualifier

Low Concentration Volatile Sample Analysis
Tentatively Identified Compounds

		Sample No.:	E20E8
Sample Type:	Routine Sample		
Lab ID:	A4	Location:	MW05
Case No.:	32260	Matrix/Level:	Water/
SDG No.:	E20E4	File Name:	E20E4

CAS No.	Compound Name	RT	Concentration (UG/L)	Q*
003073663	CYCLOHEXANE, 1,1,3-TRIMETHYL-	8.92	4.0	JN
	UNKNOWN	10.62	4.6	J
	UNKNOWN	10.97	11	J
	UNKNOWN	11.49	4.4	J
	UNKNOWN	11.98	10	J
	UNKNOWN	12.20	4.0	J
	UNKNOWN	12.29	2.7	J
000103651	BENZENE, PROPYL-	12.43	19	JN
002847725	DECANE, 4-METHYL-	13.08	12	JN
013151343	DECANE, 3-METHYL-	13.48	10	JN
001074175	BENZENE, 1-METHYL-2-PROPYL-	13.69	7.6	JN
013151354	DECANE, 5-METHYL-	13.80	6.5	JN
081983713	CYCLOHEXANE, 1,1-DIMETHYL-2-PROPYL-	14.06	4.2	JN
000493027	NAPHTHALENE, DECAHYDRO-, TRANS-	14.32	5.0	JN
000527844	BENZENE, 1-METHYL-2-(1-METHYLETHYL)-	14.44	2.6	JN
000135013	BENZENE, 1,2-DIETHYL-	14.53	8.0	JN
000135013	BENZENE, 1,2-DIETHYL-	14.66	3.0	JN
000538932	BENZENE, (2-METHYLPROPYL)-	14.77	5.0	JN
003891983	DODECANE, 2,6,10-TRIMETHYL-	15.37	2.2	JN
002870044	BENZENE, 2-ETHYL-1,3-DIMETHYL-	15.44	6.4	JN
000767588	INDAN, 1-METHYL-	15.61	7.8	JN
000933982	BENZENE, 1-ETHYL-2,3-DIMETHYL-	15.74	3.9	JN
004912929	1H-INDENE, 2,3-DIHYDRO-1,1-DIMETHYL-	15.95	3.9	JN
000095932	BENZENE, 1,2,4,5-TETRAMETHYL-	16.24	6.9	JN
001595160	BENZENE, 1-METHYL-4-(1-METHYLPROPYL)-	16.38	2.7	JN
003333139	BENZENE, 1-METHYL-4-(2-PROPENYL)-	16.72	3.8	JN
004912929	1H-INDENE, 2,3-DIHYDRO-1,1-DIMETHYL-	16.81	2.9	JN
017301234	UNDECANE, 2,6-DIMETHYL-	17.12	2.8	JN
001595160	BENZENE, 1-METHYL-4-(1-METHYLPROPYL)-	17.26	3.1	JN
054120626	BENZENE, ETHYL-1,2,4-TRIMETHYL-	17.80	4.0	JN

*Q: Laboratory Qualifier

Low Concentration Semivolatile Sample Analysis
Tentatively Identified Compounds

Sample No.: E20E8

Sample Type: Routine Sample
Lab ID: A4
Case No.: 32260
SDG No.: E20E4

Location: MW05
Matrix/Level: Water/
File Name: E20E4

CAS No.	Compound Name	RT	Concentration (UG/L)	Q*
	UNKNOWN	3.98	18	J
	UNKNOWN	4.43	18	J
	UNKNOWN	4.61	18	J
	UNKNOWN	5.01	16	J
	UNKNOWN	5.17	17	J
	UNKNOWN	5.20	27	J
	UNKNOWN	5.30	48	J
000135013	BENZENE, 1,2-DIETHYL-	5.39	21	JN
000095932	BENZENE, 1,2,4,5-TETRAMETHYL-	5.83	28	JN
000611018	BENZOIC ACID, 2,4-DIMETHYL-	7.72	110	JN
000603792	BENZOIC ACID, 2,3-DIMETHYL-	7.86	80	JN
	UNKNOWN	8.00	22	J
	UNKNOWN	8.70	19	J
	UNKNOWN	8.81	34	J
	UNKNOWN	8.92	25	J
	UNKNOWN	9.05	25	J
	UNKNOWN	9.11	23	J
	UNKNOWN	9.28	21	J
	UNKNOWN	9.60	26	J
	UNKNOWN	9.75	17	J
000934349	2(3H)-BENZOTHIAZOLONE	9.89	21	JN
	UNKNOWN	10.01	20	J
	UNKNOWN	10.13	16	J
	UNKNOWN	11.22	18	J
	UNKNOWN	11.40	28	J
	UNKNOWN	11.75	21	J
010544500	CYCLIC OCTAATOMIC SULFUR	12.05	87	JN
	UNKNOWN	12.81	28	J
	UNKNOWN	13.36	140	J

*Q: Laboratory Qualifier

Low Concentration Volatile Sample Analysis
Tentatively Identified Compounds

		Sample No.:	E20E9
Sample Type:	Routine Sample		
Lab ID:	A4	Location:	MW06
Case No.:	32260	Matrix/Level:	Water/
SDG No.:	E20E4	File Name:	E20E4

CAS No.	Compound Name	RT	Concentration (UG/L)	Q*
003073663	CYCLOHEXANE, 1,1,3-TRIMETHYL-	8.92	3.6	JN
004923788	CYCLOHEXANE, 1-ETHYL-2-METHYL-, TRANS	10.62	4.5	JN
000280659	BICYCLO[3.3.1]NONANE	10.96	7.8	JN
003296502	1H-INDENE, OCTAHYDRO-, TRANS-	11.88	3.4	JN
006783922	CYCLOHEXANE, 1,1,2,3-TETRAMETHYL-	11.98	4.5	JN
028588558	PENTALENE, OCTAHYDRO-2,5-DIMETHYL-	12.20	3.8	JN
006069983	CYCLOHEXANE, 1-METHYL-4-(1-METHYLETHY	12.29	4.0	JN
000103651	BENZENE, PROPYL-	12.43	17	JN
004551513	1H-INDENE, OCTAHYDRO-, CIS-	12.72	6.9	JN
017302282	NONANE, 2,6-DIMETHYL-	13.08	8.9	JN
000098066	BENZENE, TERT-BUTYL-	13.35	8.4	JN
000135988	BENZENE, (1-METHYLPROPYL)-	13.68	11	JN
001195319	CYCLOHEXENE, 1-METHYL-4-(1-METHYLETHY	13.88	4.7	JN
000493027	NAPHTHALENE, DECAHYDRO-, TRANS-	14.31	5.0	JN
000099876	BENZENE, 1-METHYL-4-(1-METHYLETHYL)-	14.44	4.7	JN
000135013	BENZENE, 1,2-DIETHYL-	14.54	12	JN
000135013	BENZENE, 1,2-DIETHYL-	14.67	3.9	JN
000538932	BENZENE, (2-METHYLPROPYL)-	14.77	4.7	JN
002870044	BENZENE, 2-ETHYL-1,3-DIMETHYL-	15.45	9.3	JN
000767588	INDAN, 1-METHYL-	15.61	15	JN
000099876	BENZENE, 1-METHYL-4-(1-METHYLETHYL)-	15.74	5.7	JN
004175535	1H-INDENE, 2,3-DIHYDRO-1,3-DIMETHYL-	15.96	5.3	JN
000527844	BENZENE, 1-METHYL-2-(1-METHYLETHYL)-	16.23	13	JN
001595160	BENZENE, 1-METHYL-4-(1-METHYLPROPYL)-	16.39	3.8	JN
001758856	BENZENE, 2,4-DIETHYL-1-METHYL-	16.58	3.0	JN
003333139	BENZENE, 1-METHYL-4-(2-PROPENYL)-	16.71	6.1	JN
000527844	BENZENE, 1-METHYL-2-(1-METHYLETHYL)-	17.10	2.9	JN
017059482	1H-INDENE, 2,3-DIHYDRO-1,6-DIMETHYL-	17.64	2.8	JN
004218488	BENZENE, 1-ETHYL-4-(1-METHYLETHYL)-	17.80	6.6	JN
004912929	1H-INDENE, 2,3-DIHYDRO-1,1-DIMETHYL-	17.98	3.4	JN

*Q: Laboratory Qualifier

Low Concentration Semivolatile Sample Analysis
Tentatively Identified Compounds

		Sample No.:	E20E9
Sample Type:	Routine Sample		
Lab ID:	A4	Location:	MW06
Case No.:	32260	Matrix/Level:	Water/
SDG No.:	E20E4	File Name:	E20E4

CAS No.	Compound Name	RT	Concentration (UG/L)	Q*
	UNKNOWN	3.98	15	J
	UNKNOWN	4.12	16	J
	UNKNOWN	4.31	14	J
000496117	INDANE	5.17	15	JN
000874419	BENZENE, 1-ETHYL-2,4-DIMETHYL-	5.20	25	JN
000141935	BENZENE, 1,3-DIETHYL-	5.30	45	JN
000135013	BENZENE, 1,2-DIETHYL-	5.34	14	JN
000141935	BENZENE, 1,3-DIETHYL-	5.39	19	JN
000095932	BENZENE, 1,2,4,5-TETRAMETHYL-	5.83	34	JN
000611018	BENZOIC ACID, 2,4-DIMETHYL-	7.71	81	JN
000603792	BENZOIC ACID, 2,3-DIMETHYL-	7.85	58	JN
	UNKNOWN	8.01	19	J
	UNKNOWN	8.70	18	J
000480637	BENZOIC ACID, 2,4,6-TRIMETHYL-	8.81	25	JN
	UNKNOWN	8.92	19	J
	UNKNOWN	9.11	22	J
	UNKNOWN	9.27	34	J
	UNKNOWN	9.43	21	J
	UNKNOWN	9.60	19	J
	UNKNOWN	9.89	13	J
	UNKNOWN	10.00	13	J
	UNKNOWN	11.40	15	J
010544500	CYCLIC OCTAATOMIC SULFUR	12.06	110	JN
	UNKNOWN	12.81	36	J
	UNKNOWN	13.34	54	J

*Q: Laboratory Qualifier

Low Concentration Semivolatile Sample Analysis
Tentatively Identified Compounds

Sample No.: E20F0

Sample Type: Field Blank
Lab ID: A4
Case No.: 32260
SDG No.: E20E4

Location: RS01
Matrix/Level: Water/
File Name: E20E4

CAS No.	Compound Name	RT	Concentration (UG/L)	Q*
	UNKNOWN	4.20	2.6	J
	UNKNOWN	5.06	2.6	J
	UNKNOWN	7.26	3.7	J
	UNKNOWN	11.02	3.6	J
	UNKNOWN	14.53	2.3	J
	UNKNOWN	15.18	2.4	J
	UNKNOWN	15.73	3.7	J
	UNKNOWN	19.54	2.9	J

*Q: Laboratory Qualifier

Low Concentration Semivolatile Sample Analysis
Tentatively Identified Compounds

Sample No.: SBLK7K

Sample Type: Method Blank
Lab ID: A4
Case No.: 32260
SDG No.: E20E4

Location:
Matrix/Level: Water/
File Name: E20E4

CAS No.	Compound Name	RT	Concentration (UG/L)	Q*
	UNKNOWN	3.94	2.4	J
	UNKNOWN	4.11	6.3	J
	UNKNOWN	4.52	5.3	J
	UNKNOWN	4.61	5.2	J
	UNKNOWN	5.06	4.8	J
	UNKNOWN	5.11	4.3	J
	UNKNOWN	5.78	3.6	J
	UNKNOWN	6.66	6.6	J
	UNKNOWN	6.74	2.2	J
	UNKNOWN	7.10	2.7	J
	UNKNOWN	7.26	7.9	J
	UNKNOWN	7.38	2.4	J
	UNKNOWN	7.58	2.6	J
	UNKNOWN	7.98	4.2	J
	UNKNOWN	8.08	3.8	J

*Q: Laboratory Qualifier

Low Concentration Volatile Sample Analysis
Tentatively Identified Compounds

		Sample No.:	VBLK1H
Sample Type:	Method Blank		
Lab ID:	A4	Location:	
Case No.:	32260	Matrix/Level:	Water/
SDG No.:	E20E4	File Name:	E20E4

CAS No.	Compound Name	RT	Concentration (UG/L)	Q*
	UNKNOWN	2.59	0.53	J

*Q: Laboratory Qualifier

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: _____

SUBJECT: Review of Data
Received for Review on _____

FROM: Stephen L. Ostrodka, Chief (SMF-4J)
Superfund Field Services Section

TO: Data User: WDNR

We have reviewed the data for the following case:

SITE NAME: ST.Francis Auto Wreckers (WI).

CASE NUMBER: 32260 SDG NUMBER: E20C7

Number and Type of Samples: 17 soil

Sample Numbers: E20C7-9, E20D0-9, E20E0-3

Laboratory: CEIMIC Hrs. for Review: _____

Following are our findings:

CC: Cecilia Moore
Region 5 TPO
Mail Code: SMF-4J

Case Number : 32260 **SDG Number:** E20C7
Site Name: ST.Francis Auto Wreckers **Laboratory:** CEIMIC

Below is a summary of the out-of-control audits and the possible effects on the data for this case:

Seventeen (17) soil samples, numbered *E20C7-9, E20D0-9 and E20E0-3* were collected on *10/14/03 and 10/15/03.* The lab received the samples on *10/16/03* in good condition. All samples were analyzed for the full list of organic analytes. All were analyzed according to CLP SOW OLM04.3.

Reviewed By: XuyenNguyen/Alion Science and Tech.
Date: 12/02/03

Case Number : 32260 SDG Number: E20C7
Site Name: ST.Francis Auto Wreckers Laboratory: CEIMIC

1. HOLDING TIME

No defects found.

2. GC/MS TUNING AND GC INSTRUMENT PERFORMANCE

No defects found.

3. CALIBRATION

The following volatile samples are associated with a continuing calibration whose corresponding initial calibration has percent relative standard deviation (%RSD) outside primary criteria. Hits are qualified "J" and non-detects are flagged "UJ".

Methylene Chloride
E20C7, E20C8, E20C9, E20D0, E20D1, E20D2, E20D3, E20D3MS, E20D3MSD, E20D4, E20D5, E20D6, E20D7, E20D8, E20D9, E20E0, E20E1, E20E2, E20E3, VBLKLH, VBLKLJ, VBLKLK, VHBLK01

The following volatile samples are associated with a continuing calibration percent difference (%D) outside primary criteria. Hits are qualified "J" and non-detects are qualified "UJ".

Bromomethane, Chloroethane
E20D3MS, E20D3MSD, E20D8, E20D9, E20E0, E20E1, E20E2, E20E3, VBLKLJ

Acetone
VBLKLK, VHBLK01

The following semivolatile samples are associated with a continuing calibration whose corresponding initial calibration has percent relative standard deviation (%RSD) outside primary criteria. Hits are qualified "J" and non-detects are flagged "UJ".

Atrazine
E20C7, E20C8, E20C9, E20D0, E20D1, E20D1DL, E20D2, E20D3, E20D3MS, E20D3MSD, E20D4, E20D5, E20D5MS, E20D5MSD, E20D6, E20D7, E20D8, E20D9, E20E0, E20E1, E20E2, E20E3, SBLKDZ, SBLKIS, SBLKIT

4. BLANKS

The following volatile samples have analyte concentrations reported above the CRQL and less than or equal to ten times (10X) the associated method blank concentration. Hits are qualified "U or UJ≅ and non-detects are not flagged.

Reviewed By: XuyenNguyen/Alion Science and Tech.
Date: 12/02/03

Case Number : 32260 SDG Number: E20C7
Site Name: ST.Francis Auto Wreckers Laboratory: CEIMIC

Methylene Chloride
E20C7, E20C8, E20C9, E20D0, E20D1, E20D2, E20D3, E20D3MS, E20D3MSD, E20D4, E20D5, E20D6, E20D7, E20D8, E20D9, E20E0, E20E1, E20E2, E20E3, VHBLK01

The following volatile samples have analyte concentrations reported below the CRQL and less than or equal to five times (5X) the associated method blank concentration. Reported sample concentrations have been elevated to the CRQL. Hits are qualified "U" and non-detects are not flagged.

cis-1,2-Dichloroethene
E20D3MS, E20D3MSD, E20D4, E20D8, E20D9, E20E0, E20E1, E20E2, VHBLK01

The following volatile samples have analyte concentrations reported below the CRQL and less than or equal to ten times (10X) the associated method blank concentration. Reported sample concentrations have been elevated to the CRQL. Hits are qualified "U" and non-detects are not flagged.

Acetone
VHBLK01

5. SYSTEM MONITORING COMPOUND AND SURROGATE RECOVERY

The following undiluted pesticide samples have surrogate percent recoveries of less than 10%. Hits are qualified "J" and non-detects are qualified "R".

E20E1, E20E3

The following pesticide samples have surrogate percent recoveries outside the lower limit of the criteria window, but greater than 10%. Hits are qualified "J" and non-detects are qualified "UJ".

E20D5, E20D7, E20D9, E20E0, E20E2

The following pesticide samples have surrogate percent recoveries outside the lower limit of the criteria window, but greater than 10%. Hit are not qualified on diluted samples.

E20E3DL

6. MATRIX SPIKE/MATRIX SPIKE DUPLICATE

The following volatile matrix spike/matrix spike duplicate samples have percent recovery outside criteria. Results for the outlier compounds in the unspiked sample E20D3 are estimated, AJ≅ and non-

detects are eatimated, AUJ≅.

E20D3MS, E20D3MSD
Benzene, Trichloroethene, Toluene, Chlorobenzene

The relative percent difference (RPD) between the following semivolatile matrix spike and matrix spike duplicate recoveries is outside criteria. Results for the outlier compounds in the unspiked sample E20D3 are estimated, AJ≅ and non-detects are eatimated, AUJ≅.

E20D3MS, E20D3MSD
Phenol, 2-Chlorophenol, N-Nitroso-di-n-propylamine, Acenaphthene

The following semivolatile matrix spike/matrix spike duplicate samples have percent recovery outside criteria. Results for the outlier compounds in the unspiked sample E20D3 are estimated, AJ≅ and non-detects are eatimated, AUJ≅.

E20D3MS
N-Nitroso-di-n-propylamine, Pentachlorophenol

E20D3MSD
Pentachlorophenol

The following semivolatile matrix spike/matrix spike duplicate samples have percent recovery below the extended QC criteria of 10%. Results for the outlier compounds in the unspiked sample E20D5 are estimated, AJ≅ and non-detects are eatimated, AR≅.

E20D5MS, E20D5MSD
Pentachlorophenol

7. FIELD BLANK AND FIELD DUPLICATE

No samples were identified as field blanks or field duplicates. Results are not qualified based upon the results of the field blank or field duplicates.

8. INTERNAL STANDARDS

No defects found.

9. COMPOUND IDENTIFICATION

After reviewing the mass spectra and chromatograms it appears that all VOA, SVOA, and

Case Number : 32260 SDG Number: E20C7
Site Name: ST.Francis Auto Wreckers Laboratory: CEIMIC

Pesticide/PCB compounds were properly identified.

10. COMPOUND QUANTITATION AND REPORTED DETECTION LIMITS

The following volatile samples have analyte concentrations below the quantitation limit (CRQL). All results below the CRQL are qualified "J".

E20D2
Trichlorofluoromethane

E20D3
Tetrachloroethene

E20D3MS, E20D3MSD
Acetone, Tetrachloroethene

E20D4
Trichloroethene, Tetrachloroethene

E20D5
Trichloroethene, Toluene

E20D8
Trichlorofluoromethane, Acetone

E20D9, E20E2
Trichlorofluoromethane

E20E3
Acetone

VBLKLH
Methylene Chloride, cis-1,2-Dichloroethane

VBLKLJ
cis-1,2-Dichloroethane, 1,2,4-Trichlorobenzene

VBLKLK
Acetone, cis-1,2-Dichloroethane

Adjusted CRQL values of the following volatile samples are less than the contract specified CRQLs.

Reviewed By: XuyenNguyen/Alion Science and Tech.
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The contract specified CRQL values are used by CADRE during data validation and reported for non-detected compounds.

E20D0

The following semivolatile samples have analyte concentrations below the quantitation limit (CRQL). All results below the CRQL are qualified "J".

E20C7, E20D6
Phenanthrene, Fluoranthene, Pyrene, Benzo(a)anthracene, Chrysene, bis(2-Ethylhexyl)phthalate, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene, Benzo (g,h,i) perylene.

E20C8
Phenanthrene, Fluoranthene, Pyrene, Benzo(a)anthracene, Chrysene, bis(2-Ethylhexyl)phthalate, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene, Dibenzo (a,h) - anthracene, Benzo (g,h,i) perylene

E20C9
Acenaphthylene, Acenaphthene, Dibenzofuran, Fluorene, Carbazole, bis(2-Ethylhexyl)phthalate, Dibenzo (a,h)- anthracene

E20D0
Fluoranthene, Pyrene, Benzo(a)anthracene, Chrysene, bis(2-thylhexyl)phthalate, Benzo(b)fluoranthene, Benzo(a)pyrene

E20D1
Naphthalene, 2-Methylnaphthalene, Acenaphthylene, Acenaphthene, Dibenzofuran, Fluorene, Carbazole, bis(2-Ethylhexyl)phthalate

E20D1DL
Acenaphthene, Dibenzofuran, Fluorene, Carbazole, Dibenzo (a,h) - anthracene

E20D2
Naphthalene, 2-Methylnaphthalene, Phenanthrene, Carbazole, Di-n-butylphthalate, bis(2-Ethylhexyl)phthalate, Indeno(1,2,3-cd)pyrene, Dibenzo (a,h) - anthracene, Benzo (g,h,i) perylene

E20D3
Phenanthrene, Di-n-butylphthalate, Benzo(a)anthracene, Chrysene, bis(2-Ethylhexyl)phthalate, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene, Dibenzo (a,h)

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Site Name: ST.Francis Auto Wreckers **Laboratory: CEIMIC**

- anthracene, Benzo(g,h,i) perylene

E20D3MS
Pentachlorophenol, Phenanthrene, Di-n-butylphthalate, Fluoranthene, Benzo(a)anthracene, Chrysene, bis(2-Ethylhexyl)phthalate, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene, Dibenzo (a,h) - anthracene, Benzo (g,h,i) perylene

E20D3MSD
Pentachlorophenol, Phenanthrene, Di-n-butylphthalate, Benzo(a)anthracene, Chrysene, bis(2-Ethylhexyl)phthalate, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene, Dibenzo (a,h) - anthracene, Benzo (g,h,i) perylene

E20D4
Benzaldehyde, bis(2-Ethylhexyl)phthalate

E20D5MS, E20D5MSD
Phenol, 2-Chlorophenol, N-Nitroso-di-n-propylamine, 4-Chloro-3-methylphenol, Acenaphthene, 4-Nitrophenol, 2,4-Dinitrotoluene, Pyrene

E20D7
Pentachlorophenol , Di-n-butylphthalate, bis(2-Ethylhexyl)phthalate

E20D8
Phenol, 2-Methylphenol, 2,4-Dimethylphenol

E20D9
bis(2-Ethylhexyl)phthalate

E20E0
Butylbenzylphthalate, bis(2-Ethylhexyl)phthalate

E20E1
Phenol, 2-Methylphenol, 4-Methylphenol, 2,4-Dimethylphenol, bis(2-Ethylhexyl)phthalate

E20E2
Di-n-butylphthalate, bis(2-Ethylhexyl)phthalate

E20E3
bis(2-Ethylhexyl)phthalate, Benzo (g,h,i) perylene

The following pesticide samples have analytes for which the percent difference between column results exceeds primary criteria. Hits are qualified AJ≅.

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E20C8
gamma-Chlordane

E20D1
4,4'-DDT, Endrin ketone

E20D2
4,4'-DDE, Endrin aldehyde, gamma-Chlordane

E20D3
4,4'-DDE

E20D3MS
Aldrin, Endosulfan sulfate

E20D3MSD
4,4'-DDE, 4,4'-DDT

E20D4
Heptachlor epoxide, Endrin aldehyde, gamma-Chlordane

E20D4DL
gamma-Chlordane, Aroclor-1254

E20D5
beta-BHC, 4,4'-DDE, Endrin ketone, Endrin aldehyde, gamma-Chlordane, Aroclor-1254

E20D6
4,4'-DDE, Endrin aldehyde, Aroclor-1260

E20D7
Endrin aldehyde, gamma-Chlordane, Aroclor-1254

E20D8
4,4'-DDT, Endrin aldehyde, gamma-Chlordane, Aroclor-1254

E20D9
4,4'-DDE, Endosulfan II, 4,4'-DDD, 4,4'-DDT, Endrin aldehyde, gamma-Chlordane, Aroclor-1260

Reviewed By: XuyenNguyen/Alion Science and Tech.
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E20D9DL, E20E3DL
4,4'-DDT

E20E0
Heptachlor epoxide, Endrin ketone, gamma-Chlordane, Aroclor-1254, Aroclor-1260

E20E1
Endosulfan I, 4,4'-DDT, Endrin aldehyde, Aroclor-1254

E20E1DL
4,4'-DDT, gamma-Chlordane

E20E2
Aldrin, Endosulfan I, 4,4'-DDT, Endrin aldehyde, gamma-Chlordane, Aroclor-1254

E20E3
4,4'-DDD, 4,4'-DDT

E20E3DL
4,4'-DDT

11. SYSTEM PERFORMANCE

GC/MS baseline indicated acceptable performance. The GC baseline for the pesticide analysis was acceptable.

12. ADDITIONAL INFORMATION

Verification of non-detected results and assignment of "U" qualifier when the reported value is less than CRQL.

E20C7, E20C8, E20C9, E20D0, E20D1, E20D2, E20D3, E20D3MS, E20D3MSD, E20D4, E20D5, E20D6, E20D7, E20D8, E20D9, E20E0, E20E1, E20E2, E20E3, VBLKLH,VBLKLJ, VBLKLK, VHBLK01
Verification of non-detected results and assignment of "U" qualifier when the reported value is less than CRQL.

E20C7, E20C8, E20C9, E20D0, E20D1, E20D1DL, E20D2, E20D3, E20D3MS, E20D3MSD, E20D4, E20D5, E20D5MS, E20D5MSD, E20D6, E20D7, E20D8, E20D9, E20E0, E20E1, E20E2, E20E3, SBLKDZ, SBLKIS, SBLKIT

Verification of non-detected results and assignment of "U" qualifier when the reported value is

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less than CRQL.

E20C7, E20C8, E20C8DL, E20C9, E20D0, E20D1, E20D2, E20D3, E20D3MS, E20D3MSD, E20D4, E20D4DL, E20D5, E20D6, E20D7, E20D7DL, E20D8, E20D9, E20D9DL, E20E0, E20E1, E20E1DL, E20E2, E20E2DL, E20E3, E20E3DL, PBLK01

The following pesticide samples have analytes that exceeded the instruments calibration range. For any analyte that exceeds the calibration range the diluted sample should be considered the final results.

E20C8
4,4'-DDE, 4,4'-DDT

E20D4, E20D7, E20E1, E20E2
Aroclor-1260

E20D9, E20E3
4,4-DDT

According to the hard copy data, Fluoranthene and Pyrene in soil sample SF-05 (E20D1) exceeded the linear range of the instrument. Sample was diluted and reanalyzed. Sample results for these compounds should come from the diluted sample. C. Khazae WDNR 12/11/03

All samples with this SDG arrived at the laboratory -16EC. The Protocol is 4EC ∀ 2EC.

Sample E20D5 was collected on 11/14/03 according to the Chain/Custody and sample tag. Form DC-1 shows the sample was received by the laboratory on 10/16/03.

Reviewed By: XuyenNguyen/Alion Science and Tech.
Date: 12/02/03

CADRE Data Qualifier Sheet

Qualifiers	Data Qualifier Definitions
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
J	The anlayte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the action limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
N	The analysis indicates the present of an analyte for which there is presumptive evidence to make a tentative identification.
NJ	The analysis indicates the present of an analyte for which there is presumptive evidence to make a tentative identification and the associated numerical value represents its approximate concentration.
R	The data are unusable. (The compound may or may not be present)

TICS

Semivolatile Sample Analysis
Tentatively Identified Compounds

		Sample No.:	E20C7
Sample Type:	Routine Sample		
Lab ID:	CEIMIC	Location:	SF-01
Case No.:	32260	Matrix/Level:	Soil/Low
SDG No.:	E20C7	File Name:	E20C7

CAS No.	Compound Name	RT	Concentration (UG/KG)	Q*
	UNKNOWN	5.40	240	J
	UNKNOWN	7.06	150	J
	UNKNOWN FATTY ACID	10.61	110	J
57103	HEXADECANOIC ACID	10.74	640	NJ
	UNKNOWN AMIDE	11.30	88	J
	UNKNOWN	11.38	260	J
	UNKNOWN ALCOHOL/ALKENE	12.43	100	J
	UNKNOWN AMIDE	14.24	100	J
	UNKNOWN ALDEHYDE	14.46	230	J
1454859	1-HEPTADECANOL	14.87	400	NJ
	UNKNOWN	15.01	98	J
192972	BENZO[E]PYRENE	15.83	120	NJ
	UNKNOWN	17.85	120	J
	UNKNOWN	19.61	240	J
83476	.GAMMA.-SITOSTEROL	20.47	330	NJ
	UNKNOWN	20.90	95	J
	UNKNOWN	21.41	120	J
	UNKNOWN	21.78	150	J

*Q: Laboratory Qualifier

Semivolatile Sample Analysis
Tentatively Identified Compounds

		Sample No.:	E20C8
Sample Type:	Routine Sample		
Lab ID:	CEIMIC	Location:	SF-02
Case No.:	32260	Matrix/Level:	Soil/Low
SDG No.:	E20C7	File Name:	E20C7

CAS No.	Compound Name	RT	Concentration (UG/KG)	Q*
	UNKNOWN	5.40	160	J
	UNKNOWN	7.06	95	J
	UNKNOWN KETONE	10.34	110	J
112390	HEXADECANOIC ACID, METHYL ESTER	10.61	87	NJ
57103	HEXADECANOIC ACID	10.73	410	NJ
	UNKNOWN	11.12	190	J
40487421	PENOXALINE	11.29	220	NJ
112801	OLEIC ACID	11.39	320	NJ
	UNKNOWN KETONE	13.73	110	J
77899106	(Z)14-TRICOSENYL FORMATE	14.46	560	NJ
112925	1-OCTADECANOL	14.88	1500	NJ
0000	2-PENTACOSANONE	15.01	320	NJ
	UNKNOWN	15.80	270	J
112889	1-OCTADECENE	16.57	190	NJ
	UNKNOWN	16.74	310	J
	UNKNOWN	17.40	250	J
	UNKNOWN	17.86	200	J
	UNKNOWN ALDEHYDE	18.13	140	J
	UNKNOWN	19.71	160	J
	UNKNOWN STEROID	20.48	550	J
	UNKNOWN STEROID	20.69	210	J
	UNKNOWN	20.91	170	J
	UNKNOWN	21.40	370	J

*Q: Laboratory Qualifier

Volatile Sample Analysis
Tentatively Identified Compounds

		Sample No.:	E20C9
Sample Type:	Routine Sample		
Lab ID:	CEIMIC	Location:	SF-03
Case No.:	32260	Matrix/Level:	Soil/Low
SDG No.:	E20C7	File Name:	E20C7

CAS No.	Compound Name	RT	Concentration (UG/KG)	Q*
	UNKNOWN SILOXANE	20.24	21	J

*Q: Laboratory Qualifier

Semivolatile Sample Analysis
Tentatively Identified Compounds

		Sample No.:	E20C9
Sample Type:	Routine Sample		
Lab ID:	CEIMIC	Location:	SF-03
Case No.:	32260	Matrix/Level:	Soil/Low
SDG No.:	E20C7	File Name:	E20C7

CAS No.	Compound Name	RT	Concentration (UG/KG)	Q*
	UNKNOWN	10.72	260	J
613127	ANTHRACENE, 2-METHYL-	10.90	230	NJ
	UNKNOWN PAH	11.00	180	J
781431	9,10-DIMETHYLANTHRACENE	11.38	180	NJ
238846	11H-BENZO[A]FLUORENE	12.01	320	NJ
243174	11H-BENZO[B]FLUORENE	12.13	600	NJ
	UNKNOWN PAH	12.21	240	J
	UNKNOWN PAH	12.38	360	J
	UNKNOWN PAH	12.63	260	J
82053	7H-BENZ[DE]ANTHRACEN-7-ONE	12.76	220	NJ
239350	BENZO[B]NAPHTHO[2,1-D]THIOPHENE	12.91	410	NJ
239010	BENZO(A)CARBAZOLE	13.51	480	NJ
	UNKNOWN	13.59	450	J
2498773	BENZ[A]ANTHRACENE, 1-METHYL-	13.79	140	NJ
1705846	TRIPHENYLENE, 2-METHYL-	13.89	290	NJ
3351288	CHRYSENE, 1-METHYL-	13.97	160	NJ
1090137	5,12-NAPHTHACENEDIONE	14.47	770	NJ
629969	1-EICOSANOL	14.88	640	NJ
	UNKNOWN	15.02	130	J
198550	PERYLENE	15.45	190	NJ
198550	PERYLENE	15.86	660	NJ
	UNKNOWN	16.32	78	J
	UNKNOWN PAH	16.59	130	J
	UNKNOWN PAH	17.14	120	J
215587	BENZO[B]TRIPHENYLENE	19.63	160	NJ
215587	BENZO[B]TRIPHENYLENE	19.78	180	NJ
	UNKNOWN	20.08	130	J
83476	.GAMMA.-SITOSTEROL	20.49	530	NJ
191264	DIBENZO[DEF,MNO]CHRYSENE	20.74	110	NJ
	UNKNOWN	21.11	150	J

*Q: Laboratory Qualifier

Semivolatile Sample Analysis
Tentatively Identified Compounds

		Sample No.:	E20D0
Sample Type:	Routine Sample		
Lab ID:	CEIMIC	Location:	SF-04
Case No.:	32260	Matrix/Level:	Soil/Low
SDG No.:	E20C7	File Name:	E20C7

CAS No.	Compound Name	RT	Concentration (UG/KG)	Q*
57103	HEXADECANOIC ACID	10.75	610	NJ
112801	OLEIC ACID	11.40	1100	NJ
3674735	PHENANTHRENE, 2,3,5-TRIMETHYL-	12.21	130	NJ
	UNKNOWN	12.84	260	J
	UNKNOWN	13.77	240	J
	UNKNOWN AMIDE	14.27	190	J
	UNKNOWN ALCOHOL/ALKENE	14.49	170	J
18435455	1-NONADECENE	14.91	120	NJ
205823	BENZO[J]FLUORANTHENE	15.27	0.0	N
	UNKNOWN	19.23	230	J
	UNKNOWN STEROID	20.50	270	J
514078	D-FRIEDOOLEAN-14-EN-3-ONE	20.83	160	NJ
	UNKNOWN	21.10	84	J
	UNKNOWN	21.25	110	J
	UNKNOWN	21.82	210	J

*Q: Laboratory Qualifier

Semivolatile Sample Analysis
Tentatively Identified Compounds

		Sample No.:	E20D1
Sample Type:	Routine Sample		
Lab ID:	CEIMIC	Location:	SF-05
Case No.:	32260	Matrix/Level:	Soil/Low
SDG No.:	E20C7	File Name:	E20C7

CAS No.	Compound Name	RT	Concentration (UG/KG)	Q*
1700103	1,3-CYCLOOCTADIENE	9.65	220	NJ
	UNKNOWN ORGANIC ACID	10.75	330	J
610480	ANTHRACENE, 1-METHYL-	10.92	190	NJ
	UNKNOWN PAH	11.02	190	J
112801	OLEIC ACID	11.42	180	NJ
2381217	PYRENE, 1-METHYL-	12.05	160	NJ
238846	11H-BENZO[A]FLUORENE	12.17	440	NJ
243174	11H-BENZO[B]FLUORENE	12.24	240	NJ
3442782	PYRENE, 2-METHYL-	12.30	220	NJ
2381217	PYRENE, 1-METHYL-	12.41	350	NJ
	UNKNOWN PAH	12.66	180	J
82053	7H-BENZ[DE]ANTHRACEN-7-ONE	12.79	180	NJ
239350	BENZO[B]NAPHTHO[2,1-D]THIOPHENE	12.95	320	NJ
	UNKNOWN PAH	13.51	410	J
	UNKNOWN	13.63	260	J
3351313	CHRYSENE, 3-METHYL-	13.93	220	NJ
	UNKNOWN	14.20	250	J
638664	OCTADECANAL	14.52	510	NJ
	UNKNOWN	14.93	750	J
198550	PERYLENE	15.49	720	NJ
205823	BENZO[J]FLUORANTHENE	15.92	2600	NJ
192972	BENZO[E]PYRENE	16.24	420	NJ
	UNKNOWN PAH	16.64	430	J
0000	1,2:7,8-DIBENZPHENANTHRENE	19.70	580	NJ
0000	1,2:7,8-DIBENZPHENANTHRENE	19.84	840	NJ
	UNKNOWN STEROID	20.54	450	J
191264	DIBENZO[DEF,MNO]CHRYSENE	20.84	530	NJ
	UNKNOWN	21.15	400	J
	UNKNOWN	21.85	450	J

*Q: Laboratory Qualifier

Semivolatile Sample Analysis
Tentatively Identified Compounds

		Sample No.:	E20D1DL
Sample Type:	Routine Sample		
Lab ID:	CEIMIC	Location:	SF-05
Case No.:	32260	Matrix/Level:	Soil/Low
SDG No.:	E20C7	File Name:	E20C7

CAS No.	Compound Name	RT	Concentration (UG/KG)	Q*
1700103	1,3-CYCLOOCTADIENE	9.67	320	NJD
	UNKNOWN	10.78	830	J
613127	ANTHRACENE, 2-METHYL-	10.95	400	NJ
	UNKNOWN PAH	11.07	400	J
112801	OLEIC ACID	11.46	440	NJ
243174	11H-BENZO[B]FLUORENE	12.09	260	NJD
238846	11H-BENZO[A]FLUORENE	12.21	690	NJ
243174	11H-BENZO[B]FLUORENE	12.28	390	NJ
3442782	PYRENE, 2-METHYL-	12.36	380	NJ
2381217	PYRENE, 1-METHYL-	12.47	550	NJ
239350	BENZO[B]NAPHTHO[2,1-D]THIOPHENE	13.00	400	NJ
82053	7H-BENZ[DE]ANTHRACEN-7-ONE	13.11	550	NJ
	UNKNOWN PAH	13.55	700	J
2381159	BENZ[A]ANTHRACENE, 10-METHYL-	13.98	300	NJD
	UNKNOWN	14.27	270	JD
	UNKNOWN ALDEHYDE	14.59	860	J
	UNKNOWN	15.00	380	J
	UNKNOWN	15.16	150	JD
192972	BENZO[E]PYRENE	15.56	310	NJD
	UNKNOWN	15.73	210	JD
	UNKNOWN	17.78	160	JD
215587	BENZO[B]TRIPHENYLENE	19.78	270	NJD
215587	BENZO[B]TRIPHENYLENE	19.92	440	NJ
	UNKNOWN	20.61	210	JD
0000	1,12-BENZPERYLENE	20.90	330	NJD
	UNKNOWN	21.22	260	JD
	UNKNOWN	21.94	200	JD
	UNKNOWN STEROID	22.34	430	J

*Q: Laboratory Qualifier

Semivolatile Sample Analysis
Tentatively Identified Compounds

		Sample No.:	E20D2
Sample Type:	Routine Sample		
Lab ID:	CEIMIC	Location:	SF-06
Case No.:	32260	Matrix/Level:	Soil/Low
SDG No.:	E20C7	File Name:	E20C7

CAS No.	Compound Name	RT	Concentration (UG/KG)	Q*
	UNKNOWN	5.41	220	J
	UNKNOWN	7.06	120	J
1700103	1,3-CYCLOOCTADIENE	9.64	760	NJ
	UNKNOWN	10.75	1400	J
112801	OLEIC ACID	11.41	120	NJ
243174	11H-BENZO[B]FLUORENE	12.17	98	NJ
	UNKNOWN	12.89	120	J
	UNKNOWN ALDEHYDE	14.53	210	J
	UNKNOWN	15.07	220	J
205823	BENZO[J]FLUORANTHENE	15.91	410	NJ
	UNKNOWN	16.83	180	J
124254	TETRADECANAL	17.05	150	NJ
	UNKNOWN	17.94	130	J
7390810	OXIRANE, HEXADECYL-	18.22	470	NJ
	UNKNOWN	18.59	110	J
	UNKNOWN	19.70	260	J
	UNKNOWN	19.87	340	J
	UNKNOWN STEROID	20.58	1300	J
	UNKNOWN STEROID	20.78	250	J
	UNKNOWN	20.99	120	J
	UNKNOWN STEROID	21.15	330	J
	UNKNOWN STEROID	21.50	670	J
	UNKNOWN STEROID	21.87	310	J
	UNKNOWN STEROID	22.10	150	J
1058613	STIGMAST-4-EN-3-ONE	22.94	680	NJ
	UNKNOWN	23.12	510	J

*Q: Laboratory Qualifier

Volatile Sample Analysis
Tentatively Identified Compounds

		Sample No.:	E20D3
Sample Type:	Spike Original		
Lab ID:	CEIMIC	Location:	SF-07
Case No.:	32260	Matrix/Level:	Soil/Low
SDG No.:	E20C7	File Name:	E20C7

CAS No.	Compound Name	RT	Concentration (UG/KG)	Q*
556672	CYCLOTETRASILOXANE, OCTAMETHYL-	20.24	8	NJ

*Q: Laboratory Qualifier

Semivolatile Sample Analysis
Tentatively Identified Compounds

		Sample No.:	E20D3
Sample Type:	Spike Original		
Lab ID:	CEIMIC	Location:	SF-07
Case No.:	32260	Matrix/Level:	Soil/Low
SDG No.:	E20C7	File Name:	E20C7

CAS No.	Compound Name	RT	Concentration (UG/KG)	Q*
	UNKNOWN	5.43	160	J
	UNKNOWN	7.09	77	J
	UNKNOWN	10.77	400	J
	UNKNOWN	11.45	670	J
	UNKNOWN	14.62	160	J
198550	PERYLENE	15.96	210	NJ
	UNKNOWN	17.11	150	J
	UNKNOWN ALDEHYDE	18.26	110	J
	UNKNOWN	19.73	120	J
	UNKNOWN	19.91	140	J
83476	.GAMMA.-SITOSTEROL	20.60	320	NJ
	UNKNOWN	21.52	110	J
	UNKNOWN	21.92	88	J
58220	TESTOSTERONE	22.98	140	NJ
	UNKNOWN	23.16	76	J

*Q: Laboratory Qualifier

Volatile Sample Analysis
Tentatively Identified Compounds

		Sample No.:	E20D4
Sample Type:	Routine Sample		
Lab ID:	CEIMIC	Location:	SF-08
Case No.:	32260	Matrix/Level:	Soil/Low
SDG No.:	E20C7	File Name:	E20C7

CAS No.	Compound Name	RT	Concentration (UG/KG)	Q*
	UNKNOWN SILOXANE	20.24	6	J

*Q: Laboratory Qualifier

Semivolatile Sample Analysis
Tentatively Identified Compounds

		Sample No.:	E20D4
Sample Type:	Routine Sample		
Lab ID:	CEIMIC	Location:	SF-08
Case No.:	32260	Matrix/Level:	Soil/Low
SDG No.:	E20C7	File Name:	E20C7

CAS No.	Compound Name	RT	Concentration (UG/KG)	Q*
57103	HEXADECANOIC ACID	10.79	300	NJD
57114	OCTADECANOIC ACID	11.51	390	NJ
	UNKNOWN AMIDE	12.41	190	JD
	UNKNOWN	12.50	410	J
	UNKNOWN	12.69	170	JD
	UNKNOWN	12.87	750	J
	UNKNOWN	12.94	1400	J
	UNKNOWN	15.49	3100	JD
26761400	1,2-BENZENEDICARBOXYLIC ACID, DIISODECYL	15.69	1000	NJ
	UNKNOWN PHTHALATE	15.92	600	J
	UNKNOWN STEROID	22.98	260	JD

*Q: Laboratory Qualifier

Volatile Sample Analysis
Tentatively Identified Compounds

		Sample No.:	E20D5
Sample Type:	Routine Sample		
Lab ID:	CEIMIC	Location:	SF-09
Case No.:	32260	Matrix/Level:	Soil/Low
SDG No.:	E20C7	File Name:	E20C7

CAS No.	Compound Name	RT	Concentration (UG/KG)	Q*
	BRANCHED ALKANE	19.85	16	J
	UNKNOWN ALKENE	21.01	22	J
	CYCLIC ALKANE	21.20	11	J
	CYCLIC ALKANE	21.27	19	J
	CYCLIC ALKANE	21.36	17	J
	CYCLIC ALKANE	21.42	15	J
	CYCLIC ALKANE	21.52	10	J
	CYCLIC ALKANE	21.57	19	J
	CYCLIC ALKANE	21.75	110	J
	CYCLIC ALKANE	21.83	24	J
	CYCLIC ALKANE	21.95	74	J
493027	NAPHTHALENE, DECAHYDRO-, TRANS-	22.04	430	NJ
	CYCLIC ALKANE	22.16	65	J
	CYCLIC ALKANE	22.32	220	J
	UNKNOWN	22.44	9	J
	UNKNOWN	22.49	40	J
	UNKNOWN ALDEHYDE	22.54	93	J
	CYCLIC ALKANE	22.60	7	J
281232	ADAMANTANE	22.65	63	NJ
	UNKNOWN	22.76	34	J
	CYCLIC ALKANE	22.83	120	J
2958761	NAPHTHALENE, DECAHYDRO-2-METHYL-	22.93	570	NJ
702794	ADAMANTANE, 1,3-DIMETHYL-	23.10	150	NJ
2958761	NAPHTHALENE, DECAHYDRO-2-METHYL-	23.22	340	NJ
	CYCLIC ALKANE	23.32	150	J
	UNKNOWN ALKENE	23.42	63	J
2958761	NAPHTHALENE, DECAHYDRO-2-METHYL-	23.56	47	NJ
2958761	NAPHTHALENE, DECAHYDRO-2-METHYL-	23.66	48	NJ
2958761	NAPHTHALENE, DECAHYDRO-2-METHYL-	23.77	130	NJ
	CYCLIC ALKANE	23.88	31	J
	UNKNOWN	23.98	150	J
	CYCLIC ALKANE	24.06	88	J
702794	ADAMANTANE, 1,3-DIMETHYL-	24.19	39	NJ

	UNKNOWN	24.27	9	J
	UNKNOWN	24.35	9	J
	UNKNOWN	24.53	19	J
	UNKNOWN	24.71	15	J
	UNKNOWN ALKENE	24.79	14	J
	UNKNOWN ALKENE	26.50	15	J

*Q: Laboratory Qualifier

Semivolatile Sample Analysis
Tentatively Identified Compounds

		Sample No.:	E20D5
Sample Type:	Spike Original		
Lab ID:	CEIMIC	Location:	SF-09
Case No.:	32260	Matrix/Level:	Soil/Med
SDG No.:	E20C7	File Name:	E20C7

CAS No.	Compound Name	RT	Concentration (UG/KG)	Q*
	UNKNOWN	7.06	26000	J
5948049	CYCLOHEXANONE, 2-METHYL-5-(1-METHYLETHEN	7.51	24000	NJ
	UNKNOWN	7.66	27000	J
	UNKNOWN AMIDE	14.69	24000	J
	UNKNOWN	15.66	91000	JD
	UNKNOWN	16.89	29000	J
	UNKNOWN	18.85	25000	J

*Q: Laboratory Qualifier

Volatile Sample Analysis
Tentatively Identified Compounds

		Sample No.:	E20D6
Sample Type:	Routine Sample		
Lab ID:	CEIMIC	Location:	SF-10
Case No.:	32260	Matrix/Level:	Soil/Low
SDG No.:	E20C7	File Name:	E20C7

CAS No.	Compound Name	RT	Concentration (UG/KG)	Q*
	UNKNOWN SILOXANE	20.24	10	J
	UNKNOWN	23.72	6	J

*Q: Laboratory Qualifier

Semivolatile Sample Analysis
Tentatively Identified Compounds

		Sample No.:	E20D6
Sample Type:	Routine Sample		
Lab ID:	CEIMIC	Location:	SF-10
Case No.:	32260	Matrix/Level:	Soil/Low
SDG No.:	E20C7	File Name:	E20C7

CAS No.	Compound Name	RT	Concentration (UG/KG)	Q*
	UNKNOWN	5.43	110	J
	UNKNOWN	7.10	130	J
	UNKNOWN ORGANIC ACID	10.26	77	J
2091294	9-HEXADECENOIC ACID	10.77	1000	NJ
	UNKNOWN ORGANIC ACID	11.46	350	J
	UNKNOWN ALCOHOL/ALKENE	12.90	93	J
301020	9-OCTADECENAMIDE, (Z)-	14.36	99	NJ
765275	1-EICOSYNE	14.58	270	NJ
	UNKNOWN	15.13	79	J
192972	BENZO[E]PYRENE	15.96	87	NJ
	UNKNOWN	19.84	240	J
	UNKNOWN	20.62	200	J
	UNKNOWN	21.05	91	J
	UNKNOWN	21.23	200	J
	UNKNOWN STEROID	22.99	200	J

*Q: Laboratory Qualifier

Volatile Sample Analysis
Tentatively Identified Compounds

		Sample No.:	E20D7
Sample Type:	Routine Sample		
Lab ID:	CEIMIC	Location:	SF-11
Case No.:	32260	Matrix/Level:	Soil/Low

SDG No.: E20C7 File Name: E20C7

CAS No.	Compound Name	RT	Concentration (UG/KG)	Q*
	UNKNOWN SILOXANE	20.24	38	J

*Q: Laboratory Qualifier

Semivolatile Sample Analysis
Tentatively Identified Compounds

Sample No.: E20D7

Sample Type: Routine Sample
Lab ID: CEIMIC
Case No.: 32260
SDG No.: E20C7

Location: SF-11
Matrix/Level: Soil/Med
File Name: E20C7

CAS No.	Compound Name	RT	Concentration (UG/KG)	Q*
	UNKNOWN	5.43	9500	J
576261	PHENOL, 2,6-DIMETHYL-	6.63	3200	NJ
57295304	3-HYDROXY-4-METHYLBENZALDEHYDE	6.99	2800	NJ
	UNKNOWN	7.10	6400	J
	UNKNOWN	7.54	5000	J
	UNKNOWN	7.59	4600	J
	UNKNOWN	8.04	5800	J
	UNKNOWN	8.14	6200	J
	UNKNOWN	8.20	16000	J
	UNKNOWN	8.44	2700	J
544638	TETRADECANOIC ACID	9.99	3000	NJ
57103	HEXADECANOIC ACID	10.78	88000	NJ
2467030	PHENOL, 2-[(4-HYDROXYPHENYL)METHYL]-	11.12	13000	NJ
	UNKNOWN	11.34	7600	J
	UNKNOWN	11.43	5900	J
57114	OCTADECANOIC ACID	11.49	51000	NJ
	UNKNOWN	11.62	16000	J
	UNKNOWN	11.69	6500	J
	UNKNOWN	11.83	10000	J
	UNKNOWN	12.02	7600	J
	UNKNOWN	12.09	5800	J
	UNKNOWN	12.77	6100	J
	UNKNOWN	12.83	6300	J
	UNKNOWN AMIDE	14.31	6800	J
	UNKNOWN	14.58	4600	J
	UNKNOWN	16.67	11000	J

UNKNOWN	16.81	15000	J
UNKNOWN	17.10	4300	J
UNKNOWN	17.60	6300	J

*Q: Laboratory Qualifier

Volatile Sample Analysis
Tentatively Identified Compounds

		Sample No.:	E20D8
Sample Type:	Routine Sample		
Lab ID:	CEIMIC	Location:	SF-12
Case No.:	32260	Matrix/Level:	Soil/Low
SDG No.:	E20C7	File Name:	E20C7

CAS No.	Compound Name	RT	Concentration (UG/KG)	Q*
	UNKNOWN SILOXANE	20.24	40	J

*Q: Laboratory Qualifier

Semivolatile Sample Analysis
Tentatively Identified Compounds

		Sample No.:	E20D8
Sample Type:	Routine Sample		
Lab ID:	CEIMIC	Location:	SF-12
Case No.:	32260	Matrix/Level:	Soil/Low
SDG No.:	E20C7	File Name:	E20C7

CAS No.	Compound Name	RT	Concentration (UG/KG)	Q*
57295304	3-HYDROXY-4-METHYLBENZALDEHYDE	6.99	3500	NJD
	UNKNOWN	7.54	2900	JD
	UNKNOWN	8.04	2700	J
	UNKNOWN	8.14	1900	J
544638	TETRADECANOIC ACID	9.99	2600	NJ
57103	HEXADECANOIC ACID	10.78	83000	NJD
2467030	PHENOL, 2-[(4-HYDROXYPHENYL)METHYL]-	11.12	6000	NJD
620928	PHENOL, 4,4'-METHYLENEBIS-	11.34	2600	NJ
57114	OCTADECANOIC ACID	11.48	50000	NJD
	UNKNOWN	11.69	2100	J
	UNKNOWN	12.76	3400	JD
	UNKNOWN	13.05	3000	JD
	UNKNOWN	14.56	3300	JD
	UNKNOWN	16.80	4200	JD
	UNKNOWN	17.57	3900	JD

*Q: Laboratory Qualifier

Volatile Sample Analysis
Tentatively Identified Compounds

		Sample No.:	E20D9
Sample Type:	Routine Sample		
Lab ID:	CEIMIC	Location:	SF-13

Case No.: 32260 Matrix/Level: Soil/Low
SDG No.: E20C7 File Name: E20C7

CAS No.	Compound Name	RT	Concentration (UG/KG)	Q*
	UNKNOWN SILOXANE	20.24	15	J

*Q: Laboratory Qualifier

Semivolatile Sample Analysis
Tentatively Identified Compounds

Sample No.: E20D9

Sample Type: Routine Sample
Lab ID: CEIMIC Location: SF-13
Case No.: 32260 Matrix/Level: Soil/Med
SDG No.: E20C7 File Name: E20C7

CAS No.	Compound Name	RT	Concentration (UG/KG)	Q*
	UNKNOWN	5.43	5000	J
	UNKNOWN	7.10	3800	J
	UNKNOWN AMIDE	14.33	27000	J

*Q: Laboratory Qualifier

Semivolatile Sample Analysis
Tentatively Identified Compounds

Sample No.: E20E0

Sample Type: Routine Sample
Lab ID: CEIMIC Location: SF-14
Case No.: 32260 Matrix/Level: Soil/Med
SDG No.: E20C7 File Name: E20C7

CAS No.	Compound Name	RT	Concentration (UG/KG)	Q*
	UNKNOWN	5.42	5900	JD
	UNKNOWN	7.09	3900	JD
	UNKNOWN	14.59	7900	JD
	UNKNOWN	15.44	15000	J
	UNKNOWN	15.82	9300	J

*Q: Laboratory Qualifier

Volatile Sample Analysis
Tentatively Identified Compounds

Sample No.: E20E1

Sample Type: Routine Sample
Lab ID: CEIMIC Location: SF-15
Case No.: 32260 Matrix/Level: Soil/Low
SDG No.: E20C7 File Name: E20C7

CAS No.	Compound Name	RT	Concentration (UG/KG)	Q*
	UNKNOWN SILOXANE	20.24	12	J

*Q: Laboratory Qualifier

Semivolatile Sample Analysis
Tentatively Identified Compounds

		Sample No.:	E20E1
Sample Type:	Routine Sample		
Lab ID:	CEIMIC	Location:	SF-15
Case No.:	32260	Matrix/Level:	Soil/Med
SDG No.:	E20C7	File Name:	E20C7

CAS No.	Compound Name	RT	Concentration (UG/KG)	Q*
	UNKNOWN	5.67	5100	JD
	UNKNOWN ALCOHOL/ALKENE	7.99	4900	JD
57103	HEXADECANOIC ACID	12.60	88000	NJD
	UNKNOWN ORGANIC ACID	12.99	4600	JD
57114	OCTADECANOIC ACID	13.39	39000	NJ
	UNKNOWN	13.51	4600	JD
	UNKNOWN	14.01	5200	JD
	UNKNOWN	14.29	7500	JD
	UNKNOWN	15.98	4800	JD
	UNKNOWN	16.44	7100	JD

*Q: Laboratory Qualifier

Volatile Sample Analysis
Tentatively Identified Compounds

		Sample No.:	E20E2
Sample Type:	Routine Sample		
Lab ID:	CEIMIC	Location:	SF-16
Case No.:	32260	Matrix/Level:	Soil/Low
SDG No.:	E20C7	File Name:	E20C7

CAS No.	Compound Name	RT	Concentration (UG/KG)	Q*
	UNKNOWN SILOXANE	20.24	15	J

*Q: Laboratory Qualifier

Semivolatile Sample Analysis
Tentatively Identified Compounds

		Sample No.:	E20E2
Sample Type:	Routine Sample		
Lab ID:	CEIMIC	Location:	SF-16
Case No.:	32260	Matrix/Level:	Soil/Med
SDG No.:	E20C7	File Name:	E20C7

CAS No.	Compound Name	RT	Concentration (UG/KG)	Q*
	UNKNOWN	5.67	6300	JD
	UNKNOWN	8.00	5800	JD
	UNKNOWN	8.55	7400	JD
90017	SALICYL ALCOHOL	8.61	6400	NJD
	UNKNOWN	9.19	6600	JD
	UNKNOWN	9.31	8100	JD
	UNKNOWN	9.40	21000	J

57103	HEXADECANOIC ACID	12.58	110000	NJD
2467029	PHENOL, 2,2'-METHYLENEBIS-	12.94	23000	NJ
620928	PHENOL, 4,4'-METHYLENEBIS-	13.18	22000	NJ
	UNKNOWN	13.26	12000	JD
57114	OCTADECANOIC ACID	13.35	59000	NJ
	UNKNOWN	13.48	12000	JD
	UNKNOWN	13.54	6200	JD
	UNKNOWN	13.68	7900	JD
	UNKNOWN PAH	13.88	5500	JD
	UNKNOWN	14.64	9900	JD
	UNKNOWN	16.38	8700	JD
	UNKNOWN	17.19	8200	JD
	UNKNOWN	18.36	12000	JD
	UNKNOWN	18.49	16000	J

*Q: Laboratory Qualifier

Volatile Sample Analysis
Tentatively Identified Compounds

		Sample No.:	E20E3
Sample Type:	Routine Sample		
Lab ID:	CEIMIC	Location:	SF-17
Case No.:	32260	Matrix/Level:	Soil/Low
SDG No.:	E20C7	File Name:	E20C7

CAS No.	Compound Name	RT	Concentration (UG/KG)	Q*
	UNKNOWN SILOXANE	20.24	10	J

*Q: Laboratory Qualifier

Semivolatile Sample Analysis
Tentatively Identified Compounds

		Sample No.:	E20E3
Sample Type:	Routine Sample		
Lab ID:	CEIMIC	Location:	SF-17
Case No.:	32260	Matrix/Level:	Soil/Med
SDG No.:	E20C7	File Name:	E20C7

CAS No.	Compound Name	RT	Concentration (UG/KG)	Q*
	UNKNOWN	5.66	3200	JD

535773	BENZENE, 1-METHYL-3-(1-METHYLETHYL)-	6.66	3800	NJD
	UNKNOWN	8.53	3300	JD
	UNKNOWN SILOXANE	14.25	6300	JD
	UNKNOWN	16.39	6100	JD

*Q: Laboratory Qualifier

Volatile Sample Analysis
Tentatively Identified Compounds

		Sample No.:	VBLKLK
Sample Type:	Method Blank		
Lab ID:	CEIMIC	Location:	
Case No.:	32260	Matrix/Level:	Soil/Low
SDG No.:	E20C7	File Name:	E20C7

CAS No.	Compound Name	RT	Concentration (UG/KG)	Q*
	UNKNOWN ALKENE	6.12	10	J

*Q: Laboratory Qualifier

ST. FRANCIS AUTO WRECKERS
Data Summary Narrative

General Information

Seventeen soil samples and six groundwater samples were collected for the complete target compound list (TCL) analyses of volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), and PCB/pesticides and for the complete target analyte list (TAL) analyses of metals and cyanide. One additional water sample, analyzed for all TCL and TAL parameters, served as a field rinsate blank. A trip blank, which accompanied the groundwater samples, was analyzed for VOCs only.

All analyses were performed at laboratories that participate in the USEPA's Contract Laboratory Program (CLP). All CLP generated data received a Level III data validation by an EPA contractor. These data packages include data summary tables and validators' narratives listing all quality control (QC) results and their possible effect on data quality. Also included are reporting sheets for VOC and SVOC tentatively identified compounds (TICs), and their estimated concentrations. The validators' narratives and TIC reporting sheets are included with this data summary for review.

WDNR prepared sample summary tables for soil and groundwater (Tables 1 and 2, respectively). Where necessary, the validators' narratives and data summary tables, prepared by an EPA contractor, have been modified by WDNR to aid the data user. Modifications to both tables and text appear in blue font.

SOIL

Organic Soil Data

VOCs

Laboratory instruments must be initially calibrated using a series of standards of known concentrations. This calibration is checked throughout the analysis by using one standard of known concentrations. If the compounds of these standards are not detected within appropriate ranges of the true values, all samples associated with the standards are flagged for the compounds outside the QC limits.

Positive results are estimated (J) and non-detected results are estimated (UJ) for the following compounds due to calibration outliers:

Methylene Chloride for all soil samples

Bromomethane and Chloroethane for soil samples SF-12 (E20D8), SF-13 (E20D9), SF-14 (E20E0), SF-15 (E20E1), SF-16 (E20E2), and SF-17 (E20E3).

All soil samples are associated with a laboratory blank that contained the common lab contaminant, Methylene Chloride. For sample results that are less than ten times (10X) the concentration of the associated blank concentration, the validator has deemed the results as undetected (U or UJ).

The following soil samples are associated with a laboratory blank that was found to contain cis-1,2-Dichloroethene. Positive detects that are less than 5X the blank concentration are flagged as undetected (U) for the following samples:

SF-08 (E20D4), SF-12 (E20D8), SF-13 (E20D9), SF-14 (E20E0), SF-15 (E20E1), and SF-16 (E20E2).

For the matrix spike/matrix spike duplicate (MS/MSD) samples, either accuracy (percent recovery) or precision (relative percent difference-RPD) was outside the QC limits. Positive results are estimated (J) and non-detected results are estimated (UJ) in the unspiked sample SF-07 (E20D3) for the following compounds:

Benzene, Trichloroethene, Toluene, and Chlorobenzene.

SVOCs

Positive results are estimated (J) and non-detected results are estimated (UJ) for the following compounds due to calibration outliers:

Atrazine for all diluted and undiluted soil samples.

For the MS/MSD samples, either accuracy (percent recovery) or precision (relative percent difference-RPD) was outside the QC limits. Positive results are estimated (J) and non-detected results are estimated (UJ) in the unspiked sample SF-07 (E20D3) for the following compounds:

Phenol; 2-Chlorophenol; N-Nitroso-di-n-propylamine; Pentachlorophenol; and Acenaphthene.

For the MS/MSD samples, either accuracy (percent recovery) or precision (relative percent difference-RPD) was outside the QC limits. Positive results are estimated (J) and non-detected results are unusable (R) in the unspiked sample SF-09 (E20D5) for Pentachlorophenol.

Results for Fluoranthene and Pyrene in SF-05 (E20D1) exceeded the linear range of the instrument and have been crossed off (→) on the data table. The sample was diluted and reanalyzed. Results for these compounds should come from the diluted sample.

A number of sample results in the VOC and SVOC fractions were detected below the contract required quantitation limit (CRQL) and are qualified as estimated (J). For a complete list of samples and affected compounds, please see the validator's narrative.

PCB/PESTICIDES

The following undiluted pesticide samples have surrogate percent recoveries of less than 10%. Positive detects are qualified as estimated (J) and non-detected results are unusable (R) for soil samples SF-15 (E20E1) and SF-17 (E20E3).

Positive detects are estimated (J) and non-detected results are estimated (UJ) due to low surrogate recoveries for the following soil samples:

> SF-09 (E20D5), SF-11 (E20D7), SF-13 (E20D9), SF-14 (E20E0), and SF-16 (E20E2).

A number of soil samples have analyte results in the PCB/pesticide fraction for which the percent difference between column results were outside acceptable QC limits and are flagged as estimated (J). For a complete list of compounds and affected samples, please see the validator's narrative. It should be noted for HRS purposes, the laboratory reports the lower of the two concentrations for sample results.

A few of the PCB/pesticide results exceeded the linear range of the instrument and were reanalyzed at a higher dilution. Analyte results that have exceeded the linear range of the instrument have been crossed off (→) and should be taken from the diluted sample.

Soil sample SF-16 (E20E2) is a field duplicate of SF-11 (E20D7) and SF-17 (E20E3) is a field duplicate of SF-13 (E20D9). Soil data is not qualified based on field duplicate precision, however, for HRS purposes, the lower of the two values should be used for scoring purposes.

Inorganic Soil Data

The following results are associated with a laboratory calibration check blank concentration that is either greater than the instrument detection limit (IDL) or has a negative concentration whose absolute value is greater than the IDL. The sample results are greater than the IDL, less than the CRQL, and are deemed as undetected (U).

> Antimony for soils SF-06 (ME20D2), SF-07 (ME20D3), SF-08 (ME20D4), SF-09 (ME20D5), SF-11 (ME20D7), SF-12 (ME20D8), SF-13 (ME20D9), SF-14 (ME20E0), SF-15 (ME20E1), SF-16 (ME20E2), and SF-17 (ME20E3)
>
> Barium for SF-03 (ME20C9), SF-04 (ME20D0), and SF-05 (ME20D1)
>
> Beryllium for all soil samples except SF-11 (ME20D7)
>
> Cadmium for SF-01 (ME20C7), SF-02 (ME20C8), SF-03 (ME20C9), SF-04 (ME20D0), and SF-05 (ME20D1)

Cobalt for SF-01 (ME20C7), SF-02 (ME20C8), SF-03 (ME20C9), SF-04 (ME20D0), SF-05 (ME20D1), SF-07 (ME20D3), SF-08 (ME20D4), SF-09 (ME20D5), SF-10 (ME20D6), SF-12 (ME20D8), SF-13 (ME20D9), SF-14 (ME20E0), and SF-17 (ME20E3)

Cyanide for SF-06 (ME20D2), SF-07 (ME20D3), SF-12 (ME20D8), SF-13 (ME20D9), SF-14 (ME20E0), SF-15 (ME20E1), and SF-17 (ME20E3)

Mercury in SF-04 (ME20D0)

Potassium in all soil samples except SF-01 (ME20C7)

Selenium for SF-12 (ME20D8) and SF-15 (ME20E1)

Silver for soil samples SF-01 (ME20C7), SF-02 (ME20C8), SF-03 (ME20C9), SF-04 (ME20D0), SF-07 (ME20D3), SF-09 (ME20D5), SF-10 (ME20D6), and SF-13 (ME20D9)

Sodium for SF-01 (ME20C7), SF-02 (ME20C8), SF-03 (ME20C9), SF-04 (ME20D0), SF-05 (ME20D1), SF-06 (ME20D2), SF-07 (ME20D3), SF-08 (ME20D4), SF-09 (ME20D5), SF-12 (ME20D8), SF-13 (ME20D9), SF-14 (ME20E0), and SF-17 (ME20E3)

Thallium for SF-11 (ME20D7) and SF-16 (ME20E2)

Vanadium for soil samples SF-08 (ME20D4), SF-12 (ME20D8), SF-13 (ME20D9), and SF-14 (ME20E0).

The following results are associated with a laboratory calibration check blank with a concentration either greater than the IDL or a negative concentration whose absolute value is greater than the IDL. Sample results are greater than the IDL, but less than 5X the concentration in the associated blank. Detects are biased high and estimated (J+).

Cyanide in soil sample SF-08 (ME20D4)

Mercury in SF-07 (ME20D3), SF-08 (ME20D4), SF-09 (ME20D5), and SF-10 (ME20D6)

Thallium in SF-15 (ME20E1).

For the MS/MSD samples, the percent recovery Manganese was high outside the QC limits, indicating a high bias. Positive results for all soils are estimated (J) and non-detected results are not affected.

For the MS/MSD samples, either accuracy (percent recovery) or precision (relative percent difference-RPD) was outside the QC limits. Positive results are estimated (J) and non-detected results are estimated (UJ) for the following:

Antimony and Copper for all soil samples.

The relative percent difference for laboratory duplicates for Chromium, Copper, and Potassium were not within acceptable limits. For all soil samples, positive detects are estimated (J) and non-detected results are estimated (UJ).

The following are associated with an interference check sample A (ICSA) which exhibited false positives for the trace metals listed below. Sample results that are less than 10X the ICSA concentrations are biased high and estimated (J+).

Arsenic in soil samples SF-01 (ME20C7), SF-02 (ME20C8), SF-03 (ME20C9), SF-04 (ME20D0), SF-05 (ME20D1), SF-07 (ME20D3), SF-09 (ME20D5), SF-10 (ME20D6), SF-11 (ME20D7), and SF-16 (ME20E2)

Copper in SF-10 (ME20D6)

Nickel in SF-01 (ME20C7), SF-02 (ME20C8), SF-03 (ME20C9), SF-04 (ME20D0), SF-05 (ME20D1), SF-07 (ME20D3), and SF-10 (ME20D6)

Silver in soils SF-06 (ME20D2), SF-08 (ME20D4), SF-14 (ME20E0), and SF-17 (ME20E3).

The following results are associated with an ICSA that exhibited false negative values for the trace elements below. Positive detects less than the absolute value of the ICSA are qualified as biased low and estimated (J-) and non-detected results are estimated (UJ).

Cadmium for (ME20C7), (ME20C8), (ME20C9), (ME20D0), (ME20D1), (ME20D3), (ME20D4), (ME20D5), and (ME20D6)

Selenium for all soil samples except SF-11 (E20D7) and SF-12 (E20D8).

The result for Arsenic in soil sample SF-12 (E20D8) was detected between the IDL and the CRQL; therefore, the value is estimated (J).

Soil sample SF-16 (ME20E2) is a field duplicate of SF-11 (ME20D7); SF-17 (ME20E3) is a field duplicate of SF-13 (ME20D9). Data is not qualified based on field duplicate precision. For HRS, the lower of the two values should be used.

GROUNDWATER

Organic Groundwater Data

VOCs

Groundwater sample MW05 (E20E8) was not properly preserved (pH 6). All positive detects in this sample are estimated (J). Non-detected halogenated compound results are estimated (UJ), while non-detected non-halogenated compound results are unusable (R).

Positive results are estimated (J) and non-detected results are estimated (UJ) for the following compounds due to calibration outliers:

> Acetone in water samples MW01 (E20E4), MW02 (E20E5), MW04 (E20E7), MW05 (E20E8), RS01 (E20F0), and TB (E20F1)
>
> Bromomethane and Methylene Chloride for all diluted and undiluted groundwater samples
>
> 1,2-Dichloroethane in MW03 and its diluted sample (E20E6 and E20E6DL) and MW06 (E20E9)
>
> Methyl Acetate for all diluted and undiluted samples except MW05 (E20E8).

Laboratory method blanks contained Chloromethane. Positive detects in all water samples have been deemed as undetected (U or UJ) and non-detected results are not affected.

The following have deuterated monitoring compound (DMC) recoveries above the upper QC limit. Positive detects are qualified as estimated (J) and non-detected results are not qualified on this basis. This applies to the following:

> Acetone; 2-Butanone; 4-Methyl-2-pentanone; and 2-Hexanone for sample MW04 (E20E7)
>
> Trichloroethene; Toluene; Tetrachloroethene; Ethylbenzene; Xylene (total); Styrene; Isopropylbenzene; 1,1,2,2-Tetrachloroethane; and 1,2-Dibromo-3-chloropropane in MW05 (E20E8).

The following have DMC recoveries below the lower QC limit. Positive detects are qualified as estimated (J) and non-detected results are estimated (UJ). This applies to the following:

> cis-1,3-Dichloropropene; trans-1,3-Dichloropropene; and 1,1,2-Trichloroethane for MW03 (E20E6)

Dibromochloromethane; 1,2-Dibromomethane; and Bromoform for MW05 (E20E8).

In the MS/MSD samples, the relative percent difference was outside acceptable QC limits for 1,1-Dichloroethene; Benzene; Trichloroethene; and Toluene. Results for these compounds in the unspiked sample, MW03 (E20E6), are estimated (J or UJ).

MS/MSD recoveries for Chlorobenzene were above the upper QC limit. The positive detect of this compound in the unspiked sample, MW03 (E20E6), is estimated (J).

The result for Vinyl Chloride in monitoring well sample MW03 (E20E6) exceeded the linear range of the instrument and has been crossed off (→) on the data summary table. The sample was diluted and reanalyzed. The value from the diluted sample should be used for Vinyl Chloride.

SVOCs

Positive results are estimated (J) and non-detected results are estimated (UJ) for the following compounds due to calibration outliers:

Nitrobenzene; bis(2-Ethylhexyl)phthalate; Indeno(1,2,3-cd)pyrene; and Dibenzo(a,h)anthracene in all aqueous samples

Benzo(g,h,i)perylene in MW05 (E20E8), MW06 (E20E9), and RS01 (E20F0).

The following semivolatile samples have DMC recoveries above the upper QC limit. Positive detects are qualified as estimated (J) and non-detected results are not qualified on this basis. This applies to the following:

bis(2-Chloroethyl)ether; 2,2-oxybis(1-Chloropropane); bis(2-Chloroethoxy)methane; Fluoranthene; Pyrene; Benzo(a)anthracene; and Chrysene for MW01 (E20E4) and MW04 (E20E7)

Fluoranthene; Pyrene; Benzo(a)anthracene; and Chrysene for MW02 (E20E5), MW03 (E20E6), and MW06 (E20E9)

bis(2-Chloroethyl)ether; 2,2-oxybis(1-Chloropropane); bis(2-Chloroethoxy)methane; Hexachlorobenzene; Atrazine; Phenanthrene; Anthracene; Fluoranthene; Pyrene; Benzo(a)anthracene; and Chrysene for MW05 (E20E8).

The following semivolatile samples have DMC recovery below the lower limit of the criteria window. Hits are qualified "J" and non-detects are qualified "UJ".

MW05 (E20E8) for 4-Chloroaniline; Hexachlorocyclopentadiene; and 3,3-Dichlorobenzidine

MW06 (E20E9) for 4-Chloroaniline; Hexachlorocyclopentadiene; 3,3-Dichlorobenzidine; Benzo(b)fluoranthene; Benzo(k)fluoranthene; Benzo(a)pyrene; Indeno(1,2,3-cd)pyrene; Dibenzo(a,h)anthracene; and Benzo (g,h,i) perylene

RS01 (E20F0) for 2,4-Dichlorophenol; Hexachlorobutadiene; Caprolactam; 4-Chloro-3-methylphenol; 2,4,6-Trichlorophenol; 2,4,5-Trichlorophenol; 1,1'-Biphenyl; Dimethylphthalate; Diethylphthalate; 4,6-Dinitro-2-methylphenol; 1,2,4,5-Tetrachlorobenzene; Pentachlorophenol; Di-n-butylphthalate; Butylbenzylphthalate; bis(2-Ethylhexyl)phthalate; and Di-n-octylphthalate.

The MS/MSD recoveries for 4-Nitrophenol and Pentachlorophenol were above the upper QC limit. Positive detects of these compounds in the unspiked sample, MW03 (E20E6), are estimated (J) and non-detected results are not qualified on this basis.

For the following, positive detects are estimated (J) and non-detected results are estimated (UJ) because of low internal standard recovery:

MW01 (E20E4), MW02 (E20E5), MW03 (E20E6), and MW04 (E20E7) for Pyrene; Butylbenzylphthalate; 3,3-Dichlorobenzidine; Benzo(a)anthracene; Chrysene; bis(2-Ethylhexyl)phthalate; Di-n-octylphthalate; Benzo(b)fluoranthene; Benzo(k)fluoranthene; Benzo(a)pyrene; Indeno(1,2,3-cd)pyrene; Dibenzo(a,h)anthracene, and Benzo (g,h,i) perylene

MW05 (E20E8) and MW06 (E20E9) for Pyrene; Butylbenzylphthalate; 3,3-Dichlorobenzidine; Benzo(a)anthracene; Chrysene; and bis(2-Ethylhexyl)phthalate.

A number of compounds in the VOC and SVOC fractions were detected below the CRQLs and are therefore qualified as estimated. For a complete list of samples and affected compounds, please see the validator's narrative.

PCB/PESTICIDED

Positive results are estimated (J) and non-detected results are estimated (UJ) for the following compounds due to calibration outliers:

alpha-BHC and Methoxychlor in all aqueous samples.

For the MS/MSD samples, either accuracy (percent recovery) or precision (relative percent difference-RPD) was outside the QC limits. Positive results are estimated (J) and non-detected results are estimated (UJ) in the unspiked sample, MW03 (E20E6), for gamma-BHC (Lindane); Heptachlor; Aldrin; Dieldrin; Endrin; and 4,4-DDT.

The percent difference between column results for gamma-BHC (Lindane) in sample RS01 (E20F0) was outside the acceptable QC limits. The detected value is estimated (J).

Monitoring well sample MW06 (E20E9) is a field duplicate of MW05 (E20E8). Data is not qualified based on field duplicate precision. For HRS scoring, the lower of the two values should be used.

The VOC trip blank contained 2-Butanone at 3.2 µg/L and Chloroform at 0.16 µg/L. The field rinsate blank contained 2-Butanone at 4.3 µg/L, Di-n-Butylphthalate at 2.1 µg/L, and gamma-BHC (Lindane) at 0.019 µg/L. For groundwater samples that contained the common laboratory contaminants, 2-Butanone and phthalate ester, at concentrations less than 10X the highest concentration in an associated blank, the WDNR has deemed the compound results as undetected for HRS purposes. Values for these positive detects have been crossed off the data summary table (—). For the non-common lab contaminants, Chloroform and gamma-BHC (Lindane), at concentrations less than 5X the concentration in an associated blank, the WDNR has deemed the compound results in the groundwater samples as undetected for HRS purposes. Values for positive detects have been crossed off the data summary table (—). Gamma-BHC (Lindane) was not present in any investigative sample.

Inorganic Groundwater Data

The following results are associated with a laboratory instrument calibration check blank that was found to contain analytes at concentrations greater than the IDL. Sample results are greater than the IDL, less than the CRDL, and qualified as undetected (U) by the validator.

MW01 (ME20E4) for Aluminum, Cobalt, Copper, Lead, Selenium, and Zinc

MW02 (ME20E5) for Aluminum, Antimony, Cobalt, Copper, Mercury, Selenium, and Vanadium

MW03 (ME20E6) for Aluminum, Cobalt, Copper, Lead, Mercury, and Zinc

MW04 (ME20E7) for Aluminum, Lead, Mercury, Selenium, and Zinc

MW05 (ME20E8) for Aluminum, Cobalt, Mercury, Selenium, and Zinc

MW06 (ME20E9) for Aluminum, Cobalt, Lead, Mercury, Selenium, Vanadium, and Zinc

RS01 (ME20F0) for Aluminum, Barium, Calcium, Iron, Magnesium, and Zinc

The Mercury result in monitoring well sample MW01 (ME20E4) is biased high and estimated (J+) because of contamination in an associated laboratory blank.

For the MS/MSD samples, percent recovery was low outside the QC limits for Silver. Positive results are estimated and biased low (J-) and non-detected results are estimated (UJ) in all groundwater samples for this analyte.

For Potassium and Sodium in all aqueous samples, positive detects are estimated (J) and non-detected results are estimated (UJ) because an ICP serial dilution percent difference was not within acceptable control limits.

The following are associated with an interference check sample A (ICSA) which exhibited false positives for the trace metals listed below. Sample results that are less than 10X the ICSA concentrations are biased high and estimated (J+).

Arsenic in sample MW02 (ME20E5)

Nickel in MW01 (ME20E4), MW02 (ME20E5), MW05 (ME20E8), and MW06 (ME20E9).

The following results are associated with an ICSA that exhibited false negative values for the trace elements below. Positive detects less than the absolute value of the ICSA are qualified as biased low and estimated (J-) and non-detected results are estimated (UJ).

Cadmium, Selenium, and Vanadium for MW01 (ME20E4), MW02 (ME20E5), MW04 (ME20E7), MW05 (ME20E8), and MW06 (ME20E9).

Sample results detected between the IDL and CRQL are estimated (J). For a complete listing of analytes and affected samples, please see the validator's narrative.

Monitoring well sample MW06 (ME20E9) is a field duplicate of MW05 (ME20E8). Data is not qualified based on field duplicate precision. For HRS scoring, the lower of the two values should be used.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: November 26, 2003

SUBJECT: Review of Data
Received for Review on October 31, 2003

FROM: Stephen L. Ostrodka, Chief (SMF-4J)
Superfund Technical Support Section

TO: Data User: WDNR

We have reviewed the data by CADRE for the following case:

SITE NAME: St. Francis Auto Wreckers (WI)

CASE NUMBER: 32260 SDG NUMBER: ME20E4

Number and Type of Samples: 7 water

Sample Numbers: ME20E4-E9, ME20F0

Laboratory: Chemtech Hrs. for Review: _____

Following are our findings:

CC: Cecilia Moore
Region 5 TPO
Mail Code: SMF-4J

Below is a summary of the out-of-control audits and the possible effects on the data for this case:

Seven (7) water samples, numbered ME20E4-E9, ME20F0, were collected

Case: 32260 **SDG: ME20E4**
Site: St. Francis Auto Wreckers **Laboratory: Chemtech**

on October 15, 2003. The lab received the samples on October 16, 2003 in good condition. All samples were analyzed for metals and cyanide. All samples were analyzed using CLP SOW ILM05.2 analysis procedure.

Mercury analysis was performed using a Cold Vapor AA Technique. Cyanide analysis was performed using MIDI Distillation procedure. The remaining inorganic analyses were performed using an Inductively Coupled Plasma-Atomic Emission Spectrometric procedure.

Changes were made to Form I by the reviewer.

Reviewed By: _____

Date: _____

Case: 32260 **SDG: ME20E4**
Site: St. Francis Auto Wreckers **Laboratory: Chemtech**

1. HOLDING TIME:

DC-10 The following inorganic soil samples were reviewed for holding time violations using criteria developed for water samples.

ME20E4, ME20E5, ME20E6, ME20E7, ME20E8, ME20E9
ME20F0

2. CALIBRATIONS:

No defects were found for the calibration or the CRDL standard.

3. BLANKS:

The following results are associated with an instrument calibration check blank concentration greater than the instrument detection limit (IDL). The following results are greater than the instrument detection limit, less than the CRQL, flagged AU≅ and reported to the CRQL.

Aluminum

ME20E4, ME20E5, ME20E6, ME20E7, ME20E8, ME20E9
ME20F0

Antimony

ME20E5

Barium

ME20F0

Calcium

ME20F0

Cobalt

ME20E4, ME20E5, ME20E6, ME20E8, ME20E9

Copper

ME20E4, ME20E5, ME20E6

Iron

ME20F0

Lead

ME20E4, ME20E6, ME20E7, ME20E9

Magnesium

ME20F0

Mercury

ME20E5, ME20E6, ME20E7, ME20E8, ME20E9

Selenium

Reviewed By: _____
Date: _____

Case: 32260 **SDG: ME20E4**
Site: St. Francis Auto Wreckers **Laboratory: Chemtech**

ME20E4, ME20E5, ME20E7, ME20E8, ME20E9

Vanadium

ME20E5, ME20E9

Zinc

ME20E4, ME20E6, ME20E7, ME20E8, ME20E9, ME20F0

The following results are associated with a calibration check blank concentration greater than the instrument detection limit (IDL). The results are greater than CRQL but less than 5 times the blank value and are flagged AJ+≅.

Mercury

ME20E4

4. MATRIX SPIKE/MATRIX SPIKE DUPLICATE AND LAB CONTROL SAMPLE:

The following results are associated with a matrix spike recovery that exceeded the lower control limit of 75%, it was in the range of 30-74%, indicating a low bias. The post-digestion spike was not required. Therefore, hits are qualified AJ-≅ and non-detects are qualified AUJ≅.

Silver

ME20E4, ME20E5, ME20E6, ME20E7, ME20E8, ME20E9
ME20F0

No defects were found for the laboratory control sample.

5. LABORATORY AND FIELD DUPLICATE

No defects were found for the matrix duplicate.

6. ICP ANALYSIS

DC-3 The following inorganic samples are associated with an ICP serial dilution percent difference which is not in control. The detected serial dilution result is less than the sample result, indicating a potential positive interference. Hits are qualified AJ≅ and non-detects are qualified AUJ≅.

Potassium

ME20E4, ME20E5, ME20E6, ME20E7, ME20E8, ME20E9
ME20F0

Sodium

ME20E4, ME20E5, ME20E6, ME20E7, ME20E8, ME20E9
ME20F0

The following results are associated with an interference check A standard (ISCA) which exhibited false positive values for the trace elements. The sample contains aluminum, calcium, iron, or magnesium at a level

Reviewed By: _____
Date: _____

Case: 32260 **SDG: ME20E4**
Site: St. Francis Auto Wreckers **Laboratory: Chemtech**

comparable to that of the ISCA. The sample also contains the trace analyte at a level comparable to the ICSA false positive value. Hits less than 10X the ICSA value are qualified AJ+≅.

Arsenic

ME20E5

Nickel

ME20E4, ME20E5, ME20E8, ME20E9

The following results are associated with an interference check A standard (ISCA) which exhibited false negative values for the trace elements. The sample contains aluminum, calcium, iron, or magnesium at a level comparable to that of the ICSA. The sample also contains the trace analyte at a level comparable to the absolute value of the ICSA false negative value. Hits less than 10X the absolute value of the ICSA are qualified AJ-≅ . Some non-detect readings are sufficiently high that the detection limit may be elevated. These non-detects are qualified AUJ≅.

Cadmium

ME20E4, ME20E5, ME20E7, ME20E8, ME20E9

Selenium

ME20E4, ME20E5, ME20E7, ME20E8, ME20E9

Vanadium

ME20E4, ME20E5, ME20E7, ME20E8, ME20E9

7. GFAA ANALYSIS

No GFAA analyses were performed for this case.

8. SAMPLE RESULTS

The following results are greater than the MDL but less than the CRQL, thus qualified AJ≅.

Arsenic

ME20E5, ME20E6

Chromium

ME20E6, ME20E9

Nickel

ME20E4, ME20E5, ME20E6, ME20E8, ME20E9

Reviewed By: _____

Date: _____

Case: 32260 **SDG: ME20E4**
Site: St. Francis Auto Wreckers **Laboratory: Chemtech**

ILM05.2 Data Qualifier Sheet

Qualifiers	Data Qualifier Definitions
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
J	The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting Quality Control (QC) criteria. The analyte may or may not be present in the sample.
UJ	The analyte was analyzed for, but not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: November 24, 2003

SUBJECT: Review of Data
Received for Review on October 31, 2003

FROM: Stephen L. Ostrodka, Chief (SMF-4J)
Superfund Technical Support Section

TO: Data User: WDNR

We have reviewed the data by CADRE for the following case:

SITE NAME: St. Francis Auto Wreckers (WI)

CASE NUMBER: 32260 SDG NUMBER: ME20C7

Number and Type of Samples: 17 soil

Sample Numbers: ME20C7-C9, ME20D0-D9, ME20E0-E3

Laboratory: Chemtech Hrs. for Review: _____

Following are our findings:

CC: Cecilia Moore
Region 5 TPO
Mail Code: SMF-4J

Below is a summary of the out-of-control audits and the possible effects on the data for this case:

Seventeen (17) soil samples, numbered ME20C7-C9, ME20D0-D9,

Case: 32260 **SDG: ME20C7**
Site: St. Francis Auto Wreckers **Laboratory: Chemtech**

ME20E0-E3, were collected on October 14-15, 2003. The lab received the samples on October 16, 2003 in good condition. All samples were analyzed for metals and cyanide. All samples were analyzed using CLP SOW ILM05.2 analysis procedure.

Mercury analysis was performed using a Cold Vapor AA Technique. Cyanide analysis was performed using MIDI Distillation procedure. The remaining inorganic analyses were performed using an Inductively Coupled Plasma-Atomic Emission Spectrometric procedure.

Changes were made to Form I, V, and VI by the reviewer.

Reviewed By: _____

Date: _____

Case: 32260 **SDG: ME20C7**
Site: St. Francis Auto Wreckers **Laboratory: Chemtech**

1. HOLDING TIME:

DC-10 The following inorganic soil samples were reviewed for holding time violations using criteria developed for water samples.

ME20C7, ME20C8, ME20C9, ME20D0, ME20D1, ME20D2
ME20D3, ME20D4, ME20D5, ME20D6, ME20D7, ME20D8
ME20D9, ME20E0, ME20E1, ME20E2, ME20E3

2. CALIBRATIONS:

No defects were found for the calibration or the CRDL standard.

3. BLANKS:

The following results are associated with a calibration check blank concentration greater than the instrument detection limit (IDL). The following results are greater than the instrument detection limit, less than the CRQL, flagged AU≅ and reported to the CRQL.

Antimony

ME20D2, ME20D3, ME20D4, ME20D5, ME20D7, ME20D8,
ME20D9, ME20E0, ME20E1, ME20E2, ME20E3

Barium

ME20C9, ME20D0, ME20D1

Beryllium

ME20C7, ME20C8, ME20C9, ME20D0, ME20D1, ME20D2,
ME20D3, ME20D4, ME20D5, ME20D6, ME20D8, ME20D9,
ME20E0, ME20E1, ME20E2, ME20E3

Cadmium

ME20C7, ME20C8, ME20C9, ME20D0, ME20D1

Cobalt

ME20C7, ME20C8, ME20C9, ME20D0, ME20D1, ME20D3,
ME20D4, ME20D5, ME20D6, ME20D8, ME20D9, ME20E0,
ME20E3

Cyanide

ME20D2, ME20D3, ME20D8, ME20D9, ME20E0, ME20E1,
ME20E3

Selenium

ME20D8, ME20E1

Silver

ME20C7, ME20C8, ME20C9, ME20D0, ME20D3, ME20D5,
ME20D6, ME20D9

Sodium

Reviewed By: _____
Date: _____

Case: 32260 **SDG: ME20C7**
Site: St. Francis Auto Wreckers **Laboratory: Chemtech**

ME20C7, ME20C8, ME20C9, ME20D0, ME20D1, ME20D2
ME20D3, ME20D4, ME20D5, ME20D8, ME20D9, ME20E0
ME20E3

Thallium

ME20D7, ME20E2

Vanadium

ME20D4, ME20D8, ME20D9, ME20E0

The following results are associated with a calibration check blank concentration greater than the instrument detection limit (IDL). The results are greater than CRQL but less than 5 times the blank value and are flagged AJ+≅.

Cyanide

ME20D4

Thallium

ME20E1

The following results are associated with a negative blank concentration whose absolute value is greater than the instrument detection limit (IDL). The following results are greater than the instrument detection limit, less than the CRQL, flagged AU≅ and reported to the CRQL.

Cyanide

ME20D2, ME20D3, ME20D8, ME20D9, ME20E0, ME20E1,
ME20E3

Mercury

ME20D0

Potassium

ME20C8, ME20C9, ME20D0, ME20D1, ME20D2, ME20D3,
ME20D4, ME20D5, ME20D6, ME20D7, ME20D8, ME20D9,
ME20E0, ME20E1, ME20E2, ME20E3

Sodium

ME20C7, ME20C8, ME20C9, ME20D0, ME20D1, ME20D2,
ME20D3, ME20D4, ME20D5, ME20D8, ME20D9, ME20E0,
ME20E3

Thallium

ME20D7, ME20E2

The following results are associated with a negative blank concentration whose absolute value is greater than the instrument detection limit (IDL). The results are greater than CRQL but less than 5 times the blank value

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and are flagged AJ-≅.

Mercury

ME20D3, ME20D4, ME20D5, ME20D6

4. MATRIX SPIKE/MATRIX SPIKE DUPLICATE AND LAB CONTROL SAMPLE:

The following results are associated with a matrix spike recovery that exceeded the upper control limit of 125%, indicating a high bias. The post- digestion recovery was acceptable; therefore, hits are qualified AJ≅ and non-detects are not qualified.

Manganese

ME20C7, ME20C8, ME20C9, ME20D0, ME20D1, ME20D2
ME20D3, ME20D4, ME20D5, ME20D6, ME20D7, ME20D8
ME20D9, ME20E0, ME20E1, ME20E2, ME20E3

The following results are associated with a matrix spike recovery that exceeded the lower control limit of 75% and was in the range 30-74%, indicating a low bias. The post-digestion recovery was acceptable at a level greater than 75%; therefore, hits are qualified AJ≅ and non-detects are qualified AUJ≅.

Antimony

ME20C7, ME20C8, ME20C9, ME20D0, ME20D1, ME20D2
ME20D3, ME20D4, ME20D5, ME20D6, ME20D7, ME20D8
ME20D9, ME20E0, ME20E1, ME20E2, ME20E3

The following results are associated with a matrix spike recovery that exceeded the lower control limit of 30%, indicating a low bias. The post-digestion recovery was acceptable at a level greater than 75%; therefore, hits are qualified AJ≅ and non-detects are qualified AUJ≅.

Copper

ME20C7, ME20C8, ME20C9, ME20D0, ME20D1, ME20D2
ME20D3, ME20D4, ME20D5, ME20D6, ME20D7, ME20D8
ME20D9, ME20E0, ME20E1, ME20E2, ME20E3

No defects were found for the laboratory control sample.

5. LABORATORY AND FIELD DUPLICATE

DC-3 The following inorganic samples are associated with laboratory duplicate results which did not meet relative percent difference (RPD) primary criteria. Hits are qualified AJ≅ and non-detects are qualified AUJ≅.

Copper

ME20C7, ME20C8, ME20C9, ME20D0, ME20D1, ME20D2
ME20D3, ME20D4, ME20D5, ME20D6, ME20D7, ME20D8
ME20D9, ME20E0, ME20E1, ME20E2, ME20E3

6. ICP ANALYSIS

DC-3 The following inorganic samples are associated with an ICP serial dilution percent difference which is not in control. The detected serial

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dilution result is less than the sample result, indicating a potential positive interference. Hits are qualified AJ≅ and non-detects are qualified AUJ≅.

Potassium

ME20C7, ME20C8, ME20C9, ME20D0, ME20D1, ME20D2
ME20D3, ME20D4, ME20D5, ME20D6, ME20D7, ME20D8
ME20D9, ME20E0, ME20E1, ME20E2, ME20E3

DC-4 The following inorganic samples are associated with an ICP serial dilution percent difference which is not in control. The serial dilution result is greater than the sample result, indicating a potential negative interference. Hits are qualified AJ≅ and non-detects are qualified AUJ≅.

Chromium

ME20C7, ME20C8, ME20C9, ME20D0, ME20D1, ME20D2
ME20D3, ME20D4, ME20D5, ME20D6, ME20D7, ME20D8
ME20D9, ME20E0, ME20E1, ME20E2, ME20E3

The following results are associated with an interference check A standard (ISCA) which exhibited false positive values for the trace elements. The sample contains aluminum, calcium, iron, or magnesium at a level comparable to that of the ISCA. The sample also contains the trace analyte at a level comparable to the ICSA false positive value. Hits less than 10X the ICSA value are qualified AJ+≅.

Arsenic

ME20C7, ME20C8, ME20C9, ME20D0, ME20D1, ME20D3,
ME20D5, ME20D6, ME20D7, ME20E2

Copper

ME20D6

Nickel

ME20C7, ME20C8, ME20C9, ME20D0, ME20D1, ME20D3,
ME20D6

Silver

ME20D2, ME20D4, ME20E0, ME20E3

The following results are associated with an interference check A standard (ISCA) which exhibited false negative values for the trace elements. The sample contains aluminum, calcium, iron, or magnesium at a level comparable to that of the ICSA. The sample also contains the trace analyte at a level comparable to the absolute value of the ICSA false negative value. Hits less than the absolute value of the ICSA are qualified AJ-≅ . Some non-detect readings are sufficiently high that the detection limit may be elevated. These non-detects are qualified AUJ≅.

Cadmium

ME20C7, ME20C8, ME20C9, ME20D0, ME20D1, ME20D3,
ME20D4, ME20D5, ME20D6

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Selenium

ME20C7, ME20C8, ME20C9, ME20D0, ME20D1, ME20D2 ME20D3, ME20D4, ME20D5, ME20D6, ME20D9, ME20E0, ME20E1, ME20E2, ME20E3

Vanadium

ME20D4, ME20D9, ME20E0

7. GFAA ANALYSIS

No GFAA analyses were performed for this case.

8. SAMPLE RESULTS

The following results are greater than the MDL but less than the CRQL, thus qualified AJ≡.

Arsenic

ME20D8

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Qualifiers	Data Qualifier Definitions
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
J	The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting Quality Control (QC) criteria. The analyte may or may not be present in the sample.
UJ	The analyte was analyzed for, but not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

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