UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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REGION III
CENTRAL REGIONAL LABORATORY
201 DEFENSE HIGHWAY
SUITE 200
ANNAPOLIS, MARYLAND 21401

QUALITY
ASSURANCE
BRANCH

114101

DATE : June 28, 1994

SUBJECT: Region III Data QA Review

FROM : for Cynthia E. Caporale Sue Stevens
Region III ESAT RPO (3ES30)

TO : Chris Corbett
Regional Project Manager (3HW24)

Attached is the inorganic data validation report for the Keystone Sanitation Site (Case 21843) completed by the Region III Environmental Services Assistance Team (ESAT) contractor under the direction of Region III ESD.

If you have any questions regarding this review, please call me at (410) 573-6832.

Attachment

cc: Marion Murphy, Roy F. Weston

TID File: 03940606

EPA202925

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Environmental Systems & Technologies Co.
Environmental Services Assistance Teams
Region 3
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Phone: (410) 268-7705
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DATE: June 23, 1994

SUBJECT: Inorganic Data Validation for Case 21843
Site: Keystone Sanitation

FROM: Mahmoud Hamid MH
Senior Oversight Chemist

Mahboobeh Mecanic MM
Senior Oversight Chemist

Helen German HG
Inorganic Data Reviewer

TO: Cynthia E. Caporale
ESAT Regional Project Officer

THROUGH: Dale S. Boshart DSB
ESAT Team Manager

OVERVIEW

The set of samples for Case 21843 was analyzed by ITAS Pittsburgh (ITPA) for total metals and cyanide (CN) according to the Contract Laboratory Program (CLP) Routine Analytical Services (RAS) Statement of Work (SOW) ILM02.1. The sample set consisted of thirty-three (33) unfiltered aqueous, thirty-two (32) filtered aqueous, and thirty (30) soil samples in six (6) Sample Delivery Groups (SDGs). Included in the case were one (1) unfiltered rinsate blank, two (2) each unfiltered and filtered field blanks, and one (1) field duplicate pair for each sample matrix.

One aqueous sample, MCQY11, exceeded the 20 µg/L Chemical Health Advisory Level for the analyte lead (Pb), with a reported concentration of 43.0 µg/L.

SUMMARY

All analytes were successfully analyzed in all samples. Areas of concern with respect to data usability are listed according to the seriousness of the problem in the following paragraphs.

The samples were analyzed under six (6) SDGs (MCQY00 and MCQY18, unfiltered aqueous; MCQA71 and MCQA88, filtered aqueous; MCQX79 and MCQY33, soil). Validation was performed on a SDG basis; field blank results were applied to aqueous samples based on matrix, and the rinsate blank results were applied to the soil samples.

MINOR ISSUES

Field (FB), preparation (PB), and continuing calibration (CCB) blanks had reported results greater than the Instrument Detection Limit (IDL) for the analytes listed below. Reported results for these analytes which are less than five times (<5X) the blank concentrations may be biased high and have been qualified "B".

SDG	Type Blank	Analyte
MCQY00	PB	Calcium (Ca), iron (Fe), sodium (Na), zinc (Zn)
	CCB	Copper (Cu), thallium (Tl)
MCQY18	PB	Ca, Zn
	CCB	Beryllium (Be), Cu
MCQA71	PB	Aluminum (Al), Fe, Na, Zn
	FB	Al, Cu, Fe, mercury (Hg)
MCQA88	PB	Fe, magnesium (Mg), Na, Zn
	FB	Al, Cu, Fe, Hg, Zn
MCQX79	CCB	Antimony (Sb), silver (Ag)
MCQY33	PB	Sb, potassium (K)
	CCB	Ag

The ICP serial dilution results were outside of the 10% control limit for the analytes Fe in SDG MCQA88 and Zn in SDGs MCQX79 and MCQX33. Reported results for these analytes in these SDGs are estimated and have been qualified "J", except where superseded by the previously mentioned "B" qualifier.

The soil laboratory duplicate results were outside the control limits (35% RPD) for the analyte cyanide (CN) in SDG MCQY33. Quantitation limits and reported results for this analyte in this SDG are estimated and have been qualified "UJ" and "J", respectively.

The CRDL standard recoveries were high and the matrix spike recoveries were low for the analyte antimony (Sb) in SDGs MCQX79 and MCQY33, resulting in opposing bias effects. Affected samples with reported results <2X CRDL are estimated and have been qualified "J"; the "J" qualifier has been superseded by the previously mentioned "B" qualifier.

CRDL standard recoveries were mixed (both high and low) for the analyte Cd in SDGs MCQX79 and MCQY33, resulting in opposing bias effects. Quantitation limits in the affected soil samples are estimated and have been qualified "UJ".

The CRDL standard recoveries were high for several analytes as listed below. The reported results which are <2XCRDL for these analytes may be biased high and have been qualified "K". The "K" qualifier has been superseded by the "B" qualifier for the Zn analyte in SDG MCQA88.

Analyte	SDG Number
Pb	MCQY18, MCQA88
Selenium (Se)	MCQY33
Tl	MCQA71, MCQY18
Zn	MCQA88

The CRDL standard recoveries were low for several analytes as listed below. The quantitation limits and reported results <2X CRDL for these analytes may be biased low and have been qualified "UL" and "L", respectively.

Analyte	SDG Number
Arsenic (As)	MCQY00, MCQY18, MCQA71, MCQA88, MCQX79, MCQY33
Pb	MCQY00
Silver (Ag)	MCQY18

The matrix spike recoveries were low for the CN analyte in SDG MCQY00 and for the Sb analyte in SDGs MCQX79 and MCQY33. Quantitation limits and reported results may be biased low and have been qualified "UL" and "L", respectively. The "L" qualifier has been superseded by the previously mentioned "B" qualifier for the Sb analyte in SDGs MCQX79 and MCQY33.

NOTES

The laboratory marked results for the Al analyte in SDG MCQX79 on Form Is with an * denoting laboratory duplicate results outside of the contractual control limits (20% RPD). For soil samples, however, the technical control limit of 35% RPD was not exceeded for this analyte. The affected data were not qualified during validation.

Field duplicate results for unfiltered aqueous samples MCQY09 and MCQY10 and for filtered aqueous samples MCQA80 and MCQA81 were within the control limits (20% RPD, ± CRDL). Field duplicate results for the soil samples MCQY41 and MCQY42 were within the technical control limits of 35% RPD or ± 2X CRDL.

Soil sample reported results are calculated on the basis of the raw data values (in ug/L), the gram weight of sample used, the volume of the digestate, and the %solids according to the following equation:

$$\text{mg/Kg} = \frac{(\text{raw value, } \mu\text{g/L})(\text{digestate volume, L})}{(\text{weight, g})(\%\text{solids}/100)}$$

To obtain quantitation limits, insert the IDL (Form X) for the raw value; refer to Form XIII to obtain each sample preparation weight and volume used. The quantitation limits thus obtained are specific for each sample and preparation method.

The data were reviewed in accordance with the National Functional Guidelines for Evaluating Inorganic Analyses, with modifications for use within Region III.

INFORMATION REGARDING REPORT CONTENT

Table 1A is a summary of qualifiers added to the laboratory's results during evaluation.

ATTACHMENTS

TABLE 1A	SUMMARY OF QUALIFIERS ON DATA SUMMARY AFTER DATA VALIDATION
TABLE 1B	CODES USED IN COMMENTS COLUMN
TABLE 2	GLOSSARY OF DATA QUALIFIER CODES
TABLE 3	DATA SUMMARY FORMS
APPENDIX A	RESULTS REPORTED BY LABORATORY FORM Is
APPENDIX B	TPO REPORT
APPENDIX C	SUPPORT DOCUMENTATION

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TABLE 1A
SUMMARY OF QUALIFIERS ON DATA SUMMARY
AFTER DATA VALIDATION

ANALYTE	SDG#	SAMPLES AFFECTED	POSITIVE VALUES	NON-DETECTED VALUES	BIAS	COMMENTS*
Al	MCQA71	MCQA71-MCQA76,MCQA78-MCQA84,MCQA86,MCQA87, MCQY55-MCQY57	B		HIGH	A (34.2 µg/L)
		MCQA77	B		HIGH	B (20.5 µg/L)
	MCQA88	MCQA88-MCQA91,MCQA94-MCQA96,MCQA98,MCQA99	B		HIGH	A (34.2 µg/L)
Sb	MCQX79	MCQX79,MCQX80,MCQX82	B			C (13.6 µg/L) D (52.9%,111.7%)
		MCQX81,MCQX83-MCQX86, MCQY53,MCQY54		UL	LOW	E (52.9%)
	MCQY33	MCQY33-MCQY35,MCQY38, MCQY45,MCQY48,MCQY52	B		HIGH	B (3.69 mg/Kg) D (53.7%,111.7%)
		MCQY36,MCQY37,MCQY39-MCQY44,MCQY46,MCQY47, MCQY49-MCQY51		UL	LOW	E (53.7%)
As	MCQY00	All samples	L	UL	LOW	F (86.2%)
	MCQY18	All samples		UL	LOW	F (84.1%,87.9%)
	MCQA71	All samples		UL	LOW	F (84.1%,87.9%, 89.1%)
	MCQA88	All samples		UL	LOW	F (86.3%)
	MCQX79	All samples	L		LOW	F (85.6%,88.9%, 76.4%)
	MCQY33	MCQY33-MCQY39,MCQY41, MCQY42,MCQY44-MCQY52	L		LOW	F (78.8%,80.0%)
Be	MCQY18	MCQY19,MCQY22-MCQY27, MCQY29	B		HIGH	C (0.2 µg/L)

* See explanation of Comments on Table 1B.

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TABLE 1A
SUMMARY OF QUALIFIERS ON DATA SUMMARY
AFTER DATA VALIDATION

ANALYTE	SDG#	SAMPLES AFFECTED	POSITIVE VALUES	NON-DETECTED VALUES	BIAS	COMMENTS*
Cd	MCQX79	All samples		UJ		G (88.3%,114%)
	MCQY33	All samples		UJ		G (88.3%,114%)
Ca	MCQY00	MCQY05,MCQY21	B		HIGH	B (12.9 µg/L)
	MCQY18	MCQY32	B		HIGH	B (12.8 µg/L)
Cu	MCQY00	MCQY05-MCQY10,MCQY12, MCQY17	B		HIGH	C (1.2 µg/L)
	MCQY18	All samples	B		HIGH	C (1.2 µg/L)
	MCQA71	MCQA71,MCQA72,MCQA76, MCQA82,MCQA84,MCQA85, MCQA87,MCQY56,MCQY57	B		HIGH	A (4.8 µg/L)
	MCQA88	MCQA88-MCQA91,MCQA93-MCQA99	B		HIGH	A (4.8 µg/L)
Fe	MCQY00	MCQY05,MCQY21	B		HIGH	B (12.5 µg/L)
	MCQA71	MCQA73-MCQA75,MCQA79 MCQA83,MCQY55,MCQY56	B		HIGH	A (17.9 µg/L)
		MCQA77	B		HIGH	B (8.4 µg/L)
	MCQA88	MCQA88-MCQA91,MCQA93, MCQA94,MCQA96-MCQA99	J			H (16.3%)
		MCQA92	B		HIGH	B (11.6 µg/L)
		MCQA95	B		HIGH	A (17.9 µg/L) H (16.3%)
Pb	MCQY00	MCQY01-MCQY10,MCQY12, MCQY13,MCQY17,MCQY20, MCQY21	L	UL	LOW	F (88.0%,80.8%)

* See explanation of Comments on Table 1B.

TABLE 1A
SUMMARY OF QUALIFIERS ON DATA SUMMARY
AFTER DATA VALIDATION

ANALYTE	SDG#	SAMPLES AFFECTED	POSITIVE VALUES	NON-DETECTED VALUES	BIAS	COMMENTS*
Pb	MCQY18	MCQY23,MCQY27	K		HIGH	I (113.3%,118.7%)
	MCQA88	MCQA92	K		HIGH	I (127.0%,128.5%)
Mg	MCQA88	MCQA92	B		HIGH	B (13.1 µg/L)
Hg	MCQA71	MCQA79-MCQA82,MCQA84, MCQY56,MCQY57	B		HIGH	A (0.31 µg/L)
	MCQA88	MCQA88,MCQA89,MCQA91, MCQA93-MCQA99	B		HIGH	A (0.31 µg/L)
K	MCQY33	MCQY33-MCQY37,MCQY39-MCQY44,MCQY46,MCQY47, MCQY50-MCQY52	B		HIGH	B (82.1 mg/Kg)
Se	MCQY33	MCQY33,MCQY34,MCQY36-MCQY42,MCQY44-MCQY49, MCQY51,MCQY52	K		HIGH	I (115%,118%)
Ag	MCQY18	All samples		UL	LOW	F (89.4%)
	MCQX79	MCQX79,MCQX80,MCQX82-MCQX84,MCQY53	B		HIGH	C (3.4 µg/L)
	MCQY33	MCQY33,MCQY34,MCQY37, MCQY43-MCQY45,MCQY48, MCQY49	B		HIGH	C (2.9 µg/L)
Na	MCQY00	MCQY05,MCQY21	B		HIGH	B (35.7 µg/L)
	MCQA71	MCQA77	B		HIGH	B (31.0 µg/L)
	MCQA88	MCQA92	B		HIGH	B (51.8 µg/L)
Tl	MCQY00	MCQY07-MCQY09,MCQY12, MCQY13,MCQY15	B		HIGH	C (5.1 µg/L)
	MCQY18	MCQY19,MCQY24	K		HIGH	I (115.0%)
	MCQA71	MCQA78,MCQA83	K		HIGH	I (115.0%)

* See explanation of Comments on Table 1B.

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TABLE 1A
SUMMARY OF QUALIFIERS ON DATA SUMMARY
AFTER DATA VALIDATION

ANALYTE	SDG#	SAMPLES AFFECTED	POSITIVE VALUES	NON-DETECTED VALUES	BIAS	COMMENTS*
Zn	MCQY00	MCQY01-MCQY10,MCQY12, MCQY14,MCQY15,MCQY17, MCQY20,MCQY21	B		HIGH	B (12.9 µg/L)
	MCQY18	All samples	B		HIGH	B (8.0 µg/L)
	MCQA71	All samples	B		HIGH	B (17.3 µg/L)
	MCQA88	MCQA88	B		HIGH	A (14.7 µg/L)
		MCQA89-MCQA91,MCQA93-MCQA99	B		HIGH	A (14.7 µg/L) I (111.2%,112.3%)
		MCQA92	B		HIGH	B (8.6 µg/L) I (111.2%,112.3%)
	MCQX79	All samples	J			H (39.9%)
	MCQY33	All samples	J			H (123.1%)
CN	MCQY00	All samples	L	UL	LOW	E (74.0%)
	MCQY33	All samples	J	UJ		J (119.4)

* See explanation of Comments on Table 1B.

TABLE 1B

CODES USED IN COMMENTS COLUMN

A = The field blank had a result >IDL (the result is in parentheses) and the reported results were <5x the blank concentration. The reported results may be biased high.

B = The preparation blank had a result >IDL (the result is in parentheses) and the reported results were <5x the blank concentration. The reported results may be biased high.

C = The CCB had a result >IDL (the result is in parentheses) and the reported results were <5x the blank concentration. The reported results may be biased high.

D = The matrix spike recovery was low and the CRDL standard recovery was high (% recoveries are in parentheses), resulting in opposing bias effects. The reported results <2X CRDL are estimated.

E = The matrix spike recovery was low (% recovery is in parentheses). Quantitation limits and reported results may be biased low.

F = The CRDL standard recovery was low (% recovery is in parentheses). Quantitation limits and reported results <2X CRDL may be biased low.

G = CRDL standard recoveries were both high and low (% recoveries are in parentheses). Quantitation limits are estimated.

H = The ICP serial dilution result was outside of the control limit (the result is in parentheses); quantitation limits and reported results are be estimated.

I = The CRDL standard recovery was high (% recovery is in parentheses). Reported results <2X CRDL may be biased high.

J = The laboratory duplicate result was outside of the control limit (actual RPD is in parentheses). Quantitation limits and reported results are estimated.

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TABLE 2

GLOSSARY OF DATA QUALIFIER CODES (INORGANIC)

CODES RELATED TO IDENTIFICATION
(confidence concerning presence or absence of analytes):

U = Not detected. The associated number indicates approximate sample concentration necessary to be detected.

(NO CODE) = Confirmed identification.

B = Not detected substantially above the level reported in laboratory or field blanks.

R = Unusable result. Analyte may or may not be present in the sample. Supporting data necessary to confirm result.

CODES RELATED TO QUANTITATION
(can be used for both positive results and sample quantitation limits):

J = Analyte Present. Reported value may not be accurate or precise.

K = Analyte present. Reported value may be biased high. Actual value is expected to be lower.

L = Analyte present. Reported value may be biased low. Actual value is expected to be higher.

[] = Analyte present. As values approach the IDL the quantitation may not be accurate.

UJ = Not detected, quantitation limit may be inaccurate or imprecise.

UL = Not detected, quantitation limit is probably higher.

OTHER CODES

Q = No analytical result.

DATA SUMMARY FORM: I N O R G A N I C S
TABLE 3
WATER SAMPLES
(ug/L)
(UNFILTERED)

Site Name: Keystone Sanitation

Case #: 21843 Sampling Date(s): 04/11/94 - 04/15/94

SDG MCQY00

+ Due to dilution, sample quantitation limit is affected.
See dilution table for specifics.

	Sample No.	MCQY00		MCQY01		MCQY02		MCQY03		MCQY04		MCQY05		MCQY06		MCQY07		MCQY08		MCQY09	
	Dilution Factor	1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0	
	Location	SW/SDSEEP1 Unfilt. of MCQA71		SW/SD2 Unfilt. of MCQA72		SW/SD3 Unfilt. of MCQA73		SW/SD4 Unfilt. of MCQA74		SW/SD5 Unfilt. of MCQA75		FB-1 Unfilt. of MCQA77 FIELD BLANK.		SW/SD1 Unfilt. of MCQA76		SW/SD19 Unfilt. of MCQA78		SW/SDSEEP2 Unfilt. of MCQA79		SW/SD20 Unfilt. of MCQA80 Field Dup. of MCQY10	
CRDL	ANALYTE																				
200	Aluminum	8740		221		2190		3670		[116]				[146]		230		[91.9]		[142]	
60	Antimony																				
10	*Arsenic	[2.2]	L		UL		UL		UL		UL		UL		UL		UL		UL		UL
200	Barium	[187]		[104]		[106]		[86.4]		[41.0]				[27.3]		[16.2]		[15.6]		[10.2]	
5	Beryllium	[0.53]																			
5	*Cadmium																				
5000	Calcium	19600		108000		38200		10900		20700		[34.5]	B	22300		12300		10000		13000	
10	*Chromium	[8.5]				[1.6]		[5.1]													
50	Cobalt	215		[36.1]		61.1		[6.1]		[2.0]				[2.5]							
25	Copper	[21.8]		[4.8]		[5.1]		[8.5]				[1.0]	B	[1.9]	B	[2.6]	B	[2.9]	B	[3.4]	B
100	Iron	12600		2860		3400		5670		258		[7.1]	B	420		510		175		414	
3	*Lead	18.4			UL	3.0	L	5.0	L		UL		UL		UL		UL		UL		UL
5000	Magnesium	12300		18300		16900		7160		7950		[33.6]		8710		[4750]		[4860]		7310	
15	Manganese	10000		8590		10400		45.6		442				226		55.2		56.7		19.6	
0.2	Mercury							0.23													
40	*Nickel	54.3		[11.0]		[8.8]		[8.0]													
5000	Potassium	9480		13700		[2760]		[2260]		[2190]				[3340]		[1130]		[1030]		[2080]	
5	Selenium	[3.4]																			
10	Silver																				
5000	Sodium	77600		61700		20100		7360		12100		[32.3]	B	23600		[4850]		5120		5870	
10	Thallium															[7.3]	B	[4.0]	B	[4.0]	B
	Vanadium	[11.3]				[2.5]		[5.4]													
	Zinc	93.3		59.1	B	43.8	B	37.4	B	[15.6]	B	[4.7]	B	26.1	B	29.7	B	24.4	B	40.3	B
	*Cyanide		UL		UL		UL		UL		UL		UL		UL		UL		UL		UL

Contract Required Detection Limit *Action Level Exists SEE NARRATIVE FOR CODE DEFINITIONS

revised 07/90

AR312331

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DATA SUMMARY FORM: I N O R G A N I C S

TABLE 3

WATER SAMPLES

(ug/L)

(UNFILTERED)

Site Name: Keystone Sanitation

Case #: 21843 Sampling Date(s): 04/11/94 - 04/15/94

SDG MCQY00

+ Due to dilution, sample quantitation limit is affected. See dilution table for specifics.

	Sample No.	MCQY10		MCQY11		MCQY12		MCQY13		MCQY14		MCQY15		MCQY16		MCQY17		MCQY20		MCQY21	
	Dilution Factor	1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0	
	Location	SW/SD25		SW/SD17		SW/SD9		SW/SD7		SW/SD15		SW/SD8		SW/SD6		SW/SD14		SW/SD21		FB-2	
		Unfilt. of MCQA81 Field Dup. of MCQY09		Unfilt. of MCQA82		Unfilt. of MCQA83		Unfilt. of MCQA84		Unfilt. of MCQA85		Unfilt. of MCQA86		Unfilt. of MCQA87		Unfilt. of MCQA88		Unfilt. of MCQA91		Unfilt. of MCQA92 FIELD BLANK.	
CRDL	ANALYTE																				
200	Aluminum	[140]		13200		2320		3370		6600		3340		9370		332		472			
60	Antimony																				
10	*Arsenic		UL	[7.3]	L		UL		UL		UL	[2.2]	L	[2.7]	L		UL		UL		UL
200	Barium	[10.1]		[108]		[61.5]		[48.0]		[93.1]		[79.5]		[109]		[27.4]		[21.2]			
5	Beryllium			[0.70]						[0.36]				[0.38]							
5	*Cadmium																				
5000	Calcium	13000		11800		7100		17600		10900		8510		20000		8160		14000		[9.4]	B
10	*Chromium			13.0		[2.4]		[4.5]		[5.5]		[2.6]		[9.0]							
50	Cobalt			[20.0]		[4.9]		[4.4]		[9.7]		[8.4]		[13.6]				[3.6]			
25	Copper	[1.3]	B	[23.2]		[5.5]	B	[9.4]		[11.5]		[9.1]		[15.3]		[5.2]	B	[6.1]			
100	Iron	418		30200		3760		6110		11500		6700		17400		593		921		[6.0]	B
3	*Lead		UL	43.0		[2.9]	L	4.2	L	10.7		9.6		10.5			UL		UL		UL
5000	Magnesium	7380		5300		[4520]		6700		[4910]		[4670]		7570		[3450]		5260			
15	Manganese	18.8		711		203		245		572		219		844		21.3		60.1			
0.2	Mercury																				
40	*Nickel			[16.2]				[7.5]				[6.6]		[11.9]							
5000	Potassium	[2130]		[2040]		[1690]		[4790]		[1980]		[2540]		12400		[1650]		[2130]			
5	Selenium																				
10	Silver																				
5000	Sodium	[5670]		[4140]		[3540]		5310		[2900]		[3720]		5640		[3390]		[4660]		[27.3]	B
	Thallium					[3.7]	B	[3.9]	B			[5.0]	B								
	Vanadium			[18.5]		[2.7]		[3.8]		[7.4]		[4.1]		[11.8]				[2.0]			
	Zinc	[16.1]	B	112		58.6	B	106		56.7	B	58.0	B	110		24.8	B	22.7	B	[5.4]	B
	*Cyanide		UL		UL		UL	[5.3]	L		UL		UL		UL		UL		UL		UL

ontract Required Detection Limit

*Action Level Exists

SEE NARRATIVE FOR CODE DEFINITIONS

revised 07/90

EPA202949

AR312332

DATA SUMMARY FORM: I N O R G A N I C S

TABLE 3

WATER SAMPLES

(ug/L)

(UNFILTERED)

Site Name: Keystone Sanitary Landfill

Case #: 21843 Sampling Date(s): 04/11/94 - 04/15/94

SDG MCQY18

+ Due to dilution, sample quantitation limit is affected. See dilution table for specifics.

Sample No.	MCQY18		MCQY19		MCQY22		MCQY23		MCQY24		MCQY25		MCQY26		MCQY27		MCQY28		MCQY29	
Dilution Factor	1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0	
Location	SW/SD18 Unfiltered of MCQA89		SW/SD24 Unfiltered of MCQA90		SW/SD13 Unfiltered of MCQA93		SW/SD26 Unfiltered of MCQA94		SW/SDSEEP3 Unfiltered of MCQA95		SW/SDBK Unfiltered of MCQA96		SW/SD12 Unfiltered of MCQA97		SW/SD10 Unfiltered of MCQA98		SW/SD22 Unfiltered of MCQA99		SW/SD27 Unfiltered of MCQY57	
CRDL ANALYTE																				
200 Aluminum	284		899		[63.9]		1530		459		400		1830		1610		[183]		681	
60 Antimony																				
10 *Arsenic		UL		UL		UL		UL		UL		UL		UL		UL		UL		UL
200 Barium	[15.0]		[31.6]		[30.9]		[49.0]		[101]		[27.7]		[68.7]		[60.5]		[23.1]		[37.3]	
5 Beryllium			[0.12]	B	[0.10]	B	[0.14]	B	[0.12]	B	[0.12]	B	[0.14]	B	[0.14]	B			[0.14]	B
5 *Cadmium																				
5000 Calcium	10800		15900		8490		11200		7000		10600		9400		7090		11800		6470	
10 *Chromium							[1.6]								[3.2]					
50 Cobalt	[3.0]		[2.1]				[2.2]		[1.8]		[2.6]		[3.7]		[3.0]					
25 Copper	[4.8]	B	[5.2]	B	[3.4]	B	[4.9]	B	[3.6]	B	[4.5]	B	[5.6]	B	[5.6]	B	[4.2]	B	[4.5]	B
100 Iron	513		1610		274		3400		629		892		2340		2530		471		931	
3 *Lead							[2.8]	K							[2.6]	K				
5000 Magnesium	[2950]		5540		[3650]		[3890]		6000		[4110]		[3180]		[4040]		5590		[3690]	
15 Manganese	55.8		123		52.2		147		58.2		73.3		448		176		79.0		48.9	
0.2 Mercury																				
40 *Nickel																				
5000 Potassium	[802]		[3890]		[3230]		[3260]		[1270]		[1280]		[3230]		[1170]		5070		[1290]	
5 Selenium																				
10 Silver		UL		UL		UL		UL		UL		UL		UL		UL		UL		UL
5000 Sodium	[3280]		6550		[4430]		[4530]		[4480]		10700		[3140]		[3260]		5480		[3990]	
Thallium			[3.9]	K					[4.5]	K										
Vanadium							[2.6]		[1.6]				[2.6]		[1.8]		[2.0]			
Zinc	[13.0]	B	20.8	B	[12.9]	B	20.8	B	21.7	B	[15.8]	B	22.8	B	29.0	B	[14.9]	B	21.8	B
*Cyanide																	8.7			

ontract Required Detection Limit

*Action Level Exists

SEE NARRATIVE FOR CODE DEFINITIONS

revised 07/90

EPA202950

AR312333

DATA SUMMARY FORM: I N O R G A N I C S
TABLE 3
WATER SAMPLES
(ug/L)
(UNFILTERED)

Site Name: Keystone Sanitary Landfill

Case #: 21843 Sampling Date(s): 04/11/94 - 04/15/94

SDG MCQY18

+ Due to dilution, sample quantitation limit is affected.
See dilution table for specifics.

	Sample No.	MCQY30		MCQY31		MCQY32													
	Dilution Factor	1.0		1.0		1.0													
	Location	SW/SD16		SW/SD11		RB-1													
		Unfiltered of MCQY56		Unfiltered of MCQY55															
CRDL	ANALYTE					RINSATE BLANK.													
200	Aluminum	236		[66.2]															
60	Antimony																		
10	*Arsenic		UL		UL		UL												
200	Barium	[21.7]		[41.2]															
5	Beryllium																		
5	*Cadmium																		
5000	Calcium	19000		5210		[30.2]	B												
10	*Chromium																		
50	Cobalt																		
25	Copper	[4.0]	B	[2.3]	B	[1.4]	B												
100	Iron	531		125		[9.4]													
3	*Lead																		
5000	Magnesium	6940		[4440]															
15	Manganese	41.3		[8.2]															
0.2	Mercury																		
40	*Nickel																		
5000	Potassium	[2750]		[1720]															
5	Selenium																		
10	Silver		UL		UL		UL												
5000	Sodium	5210		[3130]		[49.4]													
	Thallium																		
	Vanadium																		
	Zinc	[16.5]	B	23.3	B	[6.0]	B												
	*Cyanide	7.3																	

ontract Required Detection Limit

*Action Level Exists

SEE NARRATIVE FOR CODE DEFINITIONS

revised 07/90

EPA202951

AR312334

DATA SUMMARY FORM: I N O R G A N I C S

TABLE 3

WATER SAMPLES

(ug/L)

(FILTERED)

Site Name: Keystone Sanitation

Case #: 21843 Sampling Date(s): 04/11/94 - 04/15/94

SDG MCQA71

+ Due to dilution, sample quantitation limit is affected. See dilution table for specifics.

	Sample No.	MCQA71		MCQA72		MCQA73		MCQA74		MCQA75		MCQA76		MCQA77		MCQA78		MCQA79		MCQA80	
	Dilution Factor	1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0	
	Location	SW/SDSEEP1		SW/SD2		SW/SD3		SW/SD4		SW/SD5		SW/SD1		FB-1		SW/SD19		SW/SDSEEP2		SW/SD20	
		Filtered of MCQY00		Filtered of MCQY01		Filtered of MCQY02		Filtered of MCQY03		Filtered of MCQY04		Filtered of MCQY06		Filtered of MCQY05		Filtered of MCQY07		Filtered of MCQY08		Filtered of MCQY09	
CRDL	ANALYTE													FIELD BLANK.						Field Dup. of MCQA81	
200	Aluminum	[90.2]	B	[54.2]	B	[37.6]	B	[25.1]	B	[31.5]	B	[47.8]	B	[34.2]	B	[37.6]	B	[34.9]	B	[14.8]	B
60	Antimony																				
10	*Arsenic		UL		UL		UL		UL		UL		UL		UL		UL		UL		UL
200	Barium	[71.5]		[104]		[35.7]		[61.8]		[39.5]		[23.0]				[14.6]		[15.4]		[9.1]	
5	Beryllium																				
5	*Cadmium																				
5000	Calcium	17800		113000		38600		10900		20100		22600		[63.2]		12500		10000		12900	
10	*Chromium																				
50	Cobalt	108		[33.7]		[25.2]												[1.9]			
25	Copper	[2.1]	B	[5.2]	B							[1.2]	B								
100	Iron	[91.6]		231		[59.1]	B	[28.9]	B	[79.0]	B	[99.8]		[17.9]	B	135		[55.1]	B	110	
3	*Lead																				
5000	Magnesium	10900		19300		17100		6940		7770		8880		[35.9]		[4800]		[4940]		7390	
15	Manganese	6420		8890		7700		[10.0]		415		183		[0.70]		42.0		79.1		[8.8]	
0.2	Mercury	9.2		25.7		1.6		4.2		3.8		1.8		0.31				1.3	B	0.82	B
40	*Nickel	[27.3]		[12.0]		[6.4]															
5000	Potassium	7940		14400		[2410]		[1540]		[2020]		[3700]				[1220]		[991]		[1810]	
5	Selenium	[4.8]		5.7																	
10	Silver																				
5000	Sodium	81300		65900		20800		7510		12000		24100		[64.0]	B	[4660]		[4810]		5780	
	Thallium															[4.7]	K				
	Vanadium																				
	Zinc	30.7	B	[12.6]	B	[18.7]	B	[13.5]	B	[12.4]	B	[13.7]	B	[11.7]	B	[11.3]	B	[15.7]	B	[12.2]	B
	Cyanide		Q		Q		Q		Q		Q		Q		Q		Q		Q		Q

ntract Required Detection Limit

*Action Level Exists

SEE NARRATIVE FOR CODE DEFINITIONS

revised 07/90

EPA202952

AR312335

DATA SUMMARY FORM: I N O R G A N I C S

TABLE 3

WATER SAMPLES

(ug/L)

(FILTERED)

Site Name: Keystone Sanitation

Case #: 21843 Sampling Date(s): 04/11/94 - 04/15/94

SDG MCQA71

+ Due to dilution, sample quantitation limit is affected. See dilution table for specifics.

	Sample No.	MCQA81		MCQA82		MCQA83		MCQA84		MCQA85		MCQA86		MCQA87		MCQY55		MCQY56		MCQY57	
	Dilution Factor	1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0	
	Location	SW/SD25		SW/SD17		SW/SD9		SW/SD7		SW/SD15		SW/SD8		SW/SD6		SW/SD11		SW/SD16		SW/SD27	
		Filtered of MCQY10 Field Dup. of MCQA80		Filtered of MCQY11		Filtered of MCQY12		Filtered of MCQY13		Filtered of MCQY14		Filtered of MCQY15		Filtered of MCQY16		Filtered of MCQY31		Filtered of MCQY30		Filtered of MCQY29	
CRDL	ANALYTE																				
200	Aluminum	[17.5]	B	[106]	B	[49.7]	B	[80.4]	B	[189]		[75.6]	B	[127]	B	[22.8]	B	[41.4]	B	[119]	B
60	Antimony																				
10	*Arsenic		UL		UL		UL		UL		UL		UL		UL		UL		UL		UL
200	Barium	[9.2]		[13.1]		[38.0]		[22.2]		[23.4]		[46.3]		[31.4]		[39.1]		[18.6]		[30.9]	
5	Beryllium																				
5	*Cadmium																				
5000	Calcium	13000		8300		6760		16500		9910		7990		18000		5240		19400		6380	
10	*Chromium																				
50	Cobalt			[2.1]						[2.2]											
25	Copper			[1.7]	B			[2.3]	B	[2.1]	B			[2.8]	B			[2.1]	B	[1.3]	B
100	Iron	133		248		[79.5]	B	152		450		144		503		[14.0]		[85.8]	B	146	
3	*Lead																				
5000	Magnesium	7410		[3160]		[4240]		6070		[3890]		[4220]		5810		[4370]		6860		[3630]	
15	Manganese	[10.3]		119		63.2		41.4		94.0		88.5		427		[7.0]		17.2		22.3	
0.2	Mercury	0.84	B	1.1	B	1.6		1.2	B	3.2		1.6		5.6				0.48	B	1.4	B
40	*Nickel																				
5000	Potassium	[2150]		[1280]		[1210]		[4900]		[1910]		[1940]		11700		[1110]		[2900]		[959]	
5	Selenium																				
10	Silver																				
	Sodium	5770		[3720]		[3390]		5210		[2690]		[3470]		5560		[2660]		[4890]		[3700]	
	Thallium					[4.4]	B														
	Vanadium																				
	Zinc	[13.5]	B	[12.7]	B	[14.7]	B	[15.8]	B	[17.5]	B	[17.3]	B	[18.8]	B	21.1	B	23.1	B	21.1	B
	*Cyanide		Q		Q		Q		Q		Q		Q		Q		Q		Q		Q

ontract Required Detection Limit

*Action Level Exists

SEE NARRATIVE FOR CODE DEFINITIONS

revised 07/90

EPA202953

AR312336

DATA SUMMARY FORM: I N O R G A N I C S

TABLE 3

WATER SAMPLES

(ug/L)

(FILTERED)

Site Name: Keystone Sanitation

Case #: 21843 Sampling Date(s): 04/11/94 - 04/15/94

SDG MCQA88

+ Due to dilution, sample quantitation limit is affected. See dilution table for specifics.

	Sample No.	MCQA88		MCQA89		MCQA90		MCQA91		MCQA92		MCQA93		MCQA94		MCQA95		MCQA96		MCQA97	
	Dilution Factor	1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0	
	Location	SW/SD14		SW/SD18		SW/SD24		SW/SD21		FB-2		SW/SD13		SW/SD26		SW/SDSEEP3		SW/SDBK		SW/SD12	
		Filtered of MCQY17		Filtered of MCQY18		Filtered of MCQY19		Filtered of MCQY20		Filtered of MCQY21		Filtered of MCQY22		Filtered of MCQY23		Filtered of MCQY24		Filtered of MCQY25		Filtered of MCQY26	
CRDL	ANALYTE									FIELD BLANK.											
200	Aluminum	[149]	B	[24.8]	B	[120]	B	[36.6]	B					[17.5]	B	[21.4]	B	[27.9]	B	261	
60	Antimony					[14.5]															
10	*Arsenic		UL		UL		UL		UL		UL		UL		UL		UL		UL		UL
200	Barium	[25.2]		[12.7]		[26.1]		[17.2]				[30.1]		[31.5]		[96.9]		[24.4]		[49.0]	
5	Beryllium																				
5	*Cadmium																				
5000	Calcium	7630		10900		16100		13000		[118]		8480		8620		6730		10300		9200	
10	*Chromium																				
50	Cobalt																				
25	Copper	[6.7]	B	[2.9]	B	[4.0]	B	[2.9]	B	[4.8]		[3.6]	B	[1.9]	B	[3.6]	B	[1.0]	B	[2.8]	B
100	Iron	256	J	114	J	199	J	107	J	[13.5]	B	[73.1]	J	102	J	[22.2]	B	[68.2]	J	369	J
3	*Lead									[2.7]	K										
5000	Magnesium	[3410]		[3040]		5650		5080		[28.1]	B	[3770]		[3850]		5980		[4090]		[3110]	
15	Manganese	[5.3]		24.1		[4.3]		24.3				[7.6]		33.8		46.7		24.6		21.8	
0.2	Mercury	0.28	B	0.78	B	2.4		0.39	B	0.25		1.0	B	0.47	B	0.23	B	0.41	B	0.75	B
40	*Nickel																				
5000	Potassium	[1360]		[627]		[3940]		[1690]				[3480]		[3670]		[906]		[860]		[3280]	
5	Selenium																				
10	Silver																				
5000	Sodium	[3470]		[3110]		6680		[4760]		[100]	B	[4300]		[4490]		[4300]		10900		[2890]	
	Thallium																				
	Vanadium																				
	Zinc	41.1	B	[16.8]	B	29.0	B	20.9	B	[14.7]	B	[16.5]	B	[13.1]	B	23.5	B	[14.9]	B	[18.9]	B
	Cyanide		Q		Q		Q		Q		Q		Q		Q		Q		Q		Q

ntract Required Detection Limit

*Action Level Exists

SEE NARRATIVE FOR CODE DEFINITIONS

revised 07/90

EPA202954

AR312337

DATA SUMMARY FORM: I N O R G A N I C S
TABLE 3
WATER SAMPLES
(ug/L)
(FILTERED)

Site Name: Keystone Sanitation

Case #: 21843 Sampling Date(s): 04/11/94 - 04/15/94

SDG MCQA88

+ Due to dilution, sample quantitation limit is affected.
See dilution table for specifics.

Sample No.	MCQA98		MCQA99	
Dilution Factor	1.0		1.0	
Location	SW/SD10		SW/SD22	
	Filtered of MCQY27		Filtered of MCQY28	
CRDL ANALYTE				
200 Aluminum	[88.2]	B	[23.3]	B
60 Antimony	[16.8]			
10 *Arsenic		UL		UL
200 Barium	[40.0]		[20.5]	
5 Beryllium				
5 *Cadmium				
5000 Calcium	6630		12000	
10 *Chromium				
50 Cobalt				
25 Copper	[1.3]	B	[2.7]	B
100 Iron	126	J	[92.8]	J
3 *Lead				
5000 Magnesium	[3940]		5670	
15 Manganese	27.6		50.6	
0.2 Mercury	0.56	B	0.62	B
40 *Nickel				
5000 Potassium	[1020]		5030	
5 Selenium				
10 Silver				
5000 Sodium	[3260]		5380	
Thallium				
Vanadium			[1.8]	
Zinc	[19.8]	B	[15.3]	B
Cyanide		Q		Q

ntract Required Detection Limit

*Action Level Exists

SEE NARRATIVE FOR CODE DEFINITIONS

revised 07/90

EPA202955

AR312338

DATA SUMMARY FORM: I N O R G A N I C S

TABLE 3

SOIL SAMPLES

(mg/Kg)

Site Name: Keystone Sanitation

Case #: 21843 Sampling Date(s): 04/11/94 - 04/15/94

SDG MCQX79

+ Due to dilution, sample quantitation limit is affected.
See dilution table for specifics.

	Sample No.	MCQX79		MCQX80		MCQX81		MCQX82		MCQX83		MCQX84		MCQX85		MCQX86		MCQY53		MCQY54	
	Dilution Factor	1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0	
	% Solids	49.5		47.6		25.4		45.9		42.2		29.9		36.5		29.6		28.1		29.7	
	Location	SW/SD SEEP 3		SW/SD 10		SW/SD BK		SW/SD 16		SW/SD 27		SW/SD 12		SW/SD 22		SW/SD 11		SW/SD 13		SW/SD 26	
CRDL	ANALYTE																				
40	Aluminum	11100		13900		13800		13000		11700		12800		13400		8750		10900		13100	
12	Antimony	[8.0]	B	[8.5]	B		UL	[7.1]	B		UL		UL		UL		UL		UL		UL
2	Arsenic	[1.8]	L	4.7	L	[5.8]	L	5.8	L	[1.9]	L	[3.9]	L	[3.6]	L	[4.3]	L	[3.2]	L	[3.9]	L
40	Barium	120		128		[136]		[77.2]		[84.2]		174		[100]		[104]		174		190	
1	Beryllium	[0.61]		[0.62]		[0.7]		[0.47]		[0.65]		[0.57]		[0.42]		[0.56]		[0.57]		[0.65]	
1	Cadmium		UJ		UJ		UJ		UJ		UJ		UJ		UJ		UJ		UJ		UJ
1000	Calcium	[858]		3260		6340		7590		[1100]		[2610]		2860		[1400]		[1400]		18300	
2	Chromium	11.7		14.6		20.4		16.4		13.6		11.9		16.5		14.8		12.7		12.6	
10	Cobalt	[13.7]		21.6		[31.5]		[20.0]		[18.4]		[30.9]		[19.4]		[21.6]		[19.5]		[20.3]	
5	Copper	12.1		12.6		30.7		18.7		14.3		[13.6]		21.1		[14.7]		[15.5]		16.6	
20	Iron	17300		23100		35100		31500		21400		24200		31200		21600		25400		27100	
0.6	*Lead	16.7		23.9		28.2		17.8		20.8		13.4		19.4		25.1		20.9		20.2	
1000	Magnesium	[1200]		[1930]		[3470]		4190		[1870]		[1700]		3320		[1330]		[1440]		[1510]	
3	Manganese	185		1080		1980		759		433		2070		913		297		760		769	
0.1	Mercury																				
8	Nickel	[13.3]		16.8		31.8		17.5		[16.0]		[11.5]		[20.0]		[16.1]		[15.5]		[15.7]	
1000	Potassium	[579]		[767]		[809]		[390]		[677]		[969]		[490]		[264]		[783]		[637]	
1	Selenium	[1.4]		[1.5]																	
2	Silver	[0.75]	B	[1.1]	B			[0.85]	B	[0.88]	B	[1.9]	B					[2.1]	B		
1000	Sodium	[101]		[107]		[218]		[83.8]		[101]		[103]		[129]		[116]		[177]		[232]	
	hallium																				
	anadium	[14.5]		20.5		[20.0]		[16.1]		[15.5]		[18.2]		[15.6]		[12.3]		[15.8]		[17.5]	
	inc	55.8	J	74.9	J	137	J	95.5	J	88.4	J	60.2	J	110	J	71.8	J	74.6	J	82.7	J
	yanide																				

CF tract Required Detection Limit

*Action Level Exists

SEE NARRATIVE FOR CODE DEFINITIONS

revised 07/90

EPA202956

AR312339

DATA SUMMARY FORM: INORGANICS

TABLE 3

SOIL SAMPLES

(mg/Kg)

Site Name: Keystone Sanitation

Case #: 21843 Sampling Date(s): 04/11/94 - 04/15/94

SDG MCQY33

+ Due to dilution, sample quantitation limit is affected. See dilution table for specifics.

	Sample No.	MCQY33		MCQY34		MCQY35		MCQY36		MCQY37		MCQY38		MCQY39		MCQY40		MCQY41		MCQY42	
	Dilution Factor	1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0	
	% Solids	45.1		54.1		36.1		38.3		51.6		51.8		41.9		30.7		42.2		37.7	
	Location	SW/SD SEEP1		SW/SD2		SW/SD3		SW/SD4		SW/SD5		SW/SD1		SW/SD19		SW/SD SEEP2		SW/SD20		SW/SD25	
																		FIELD DUP. OF MCQY42		FIELD DUP. OF MCQY41	
CRDL	ANALYTE																				
40	Aluminum	11700		15000		12800		19900		11900		16200		15800		22500		12600		14700	
12	Antimony	[8.2]	B	[6.1]	B	[8.8]	B		UL		UL	[7.5]	B		UL		UL		UL		UL
2	Arsenic	[3.5]	L	[2.1]	L	[3.6]	L	[3.6]	L	[2.7]	L	[2.7]	L	5.6	L	9.0		[2.7]	L	[4.9]	L
40	Barium	126		90.0		258		132		90.1		[68.6]		96.0		[117]		[60.6]		[69.9]	
1	Beryllium	[0.61]		[0.72]		[0.59]		[0.70]		[0.53]		[0.72]		[0.53]		[0.84]		[0.30]		[0.35]	
1	Cadmium		UJ		UJ		UJ		UJ		UJ		UJ		UJ		UJ		UJ		UJ
1000	Calcium	[1060]		5550		5470		[1170]		4750		[1030]		[1830]		[1640]		[1170]		[1270]	
2	Chromium	14.1		20.6		14.4		20.9		14.7		16.7		15.4		23.4		12.0		14.8	
10	Cobalt	149		36.1		125		[18.4]		24.1		25.1		[20.9]		33.3		[12.3]		[14.9]	
5	Copper	18.0		34.9		18.6		29.5		19.4		27.7		18.4		22.1		22.1		27.1	
20	Iron	19200		38400		24700		30000		23800		36100		28300		37700		21300		27200	
0.6	*Lead	16.9		35.9		26.3		38.0		22.2		20.7		24.0		28.5		15.8		20.1	
1000	Magnesium	[2130]		5050		2830		2930		3780		2560		2490		[2770]		2570		3040	
3	Manganese	3470		899		9420		197		1010		633		1140		808		331		379	
0.1	Mercury							0.30													
8	Nickel	37.1		29.5		[19.6]		23.6		16.9		21.9		[15.1]		[21.2]		[14.0]		[15.9]	
1000	Potassium	[753]	B	[534]	B	[867]	B	[961]	B	[562]	B	[892]		[567]	B	[1190]	B	[448]	B	[551]	B
1	Selenium	[1.7]	K	[1.4]	K			[2.1]	K	[1.8]	K	[1.4]	K	[2.0]	K	[2.8]	K	[1.6]	K	[1.6]	K
2	Silver	[1.7]	B	[0.97]	B					[0.97]	B										
1000	Sodium	[282]		[173]		[182]		[197]		[145]		[184]		[119]		[184]		[150]		[142]	
2	Thallium																				
	anadium	[14.4]		[15.4]		[17.7]		[22.7]		[15.0]		[18.6]		[18.6]		[27.1]		[12.0]		[15.1]	
	inc	76.2	J	113	J	88.9	J	108	J	80.2	J	80.9	J	83.1	J	98.2	J	65.9	J	81.0	J
	yanide		UJ		UJ		UJ		UJ		UJ		UJ		UJ		UJ		UJ		UJ

CRI tract Required Detection Limit

*Action Level Exists

SEE NARRATIVE FOR CODE DEFINITIONS

revised 07/90

EPA202957

AR312340

DATA SUMMARY FORM: I N O R G A N I C S

TABLE 3

SOIL SAMPLES

(mg/Kg)

Site Name: Keystone Sanitation

Case #: 21843 Sampling Date(s): 04/11/94 - 04/15/94

SDG MCQY33

+ Due to dilution, sample quantitation limit is affected. See dilution table for specifics.

	Sample No.	MCQY43		MCQY44		MCQY45		MCQY46		MCQY47		MCQY48		MCQY49		MCQY50		MCQY51		MCQY52	
	Dilution Factor	1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0	
	% Solids	29.2		45.1		49.7		34.9		38.8		40.6		47.6		37.5		48.8		48.1	
	Location	SW/SD17		SW/SD9		SW/SD7		SW/SD15		SW/SD8		SW/SD6		SW/SD14		SW/SD18		SW/SD24		SW/SD21	
CRDL	ANALYTE																				
40	Aluminum	10800		17700		16700		14400		7020		19100		18500		12800		11800		13900	
12	Antimony		UL		UL	[8.6]	B		UL		UL	[7.8]	B		UL		UL		UL	[6.5]	B
2	Arsenic	[6.4]		[3.2]	L	5.7	L	[3.3]	L	[2.5]	L	5.2	L	4.6	L	[3.9]	L	[3.7]	L	5.8	L
40	Barium	[77.0]		136		109		[113]		[68.4]		133		129		[78.5]		90.4		92.6	
1	Beryllium	[0.44]		[0.73]		[0.61]		[0.68]		[0.46]		[0.66]		[0.57]		[0.46]		[0.51]		[0.51]	
1	Cadmium		UJ		UJ		UJ		UJ		UJ		UJ		UJ		UJ		UJ		UJ
1000	Calcium	[2150]		[1370]		[1810]		[2110]		[1080]		2930		[1820]		[2350]		4540		[1680]	
2	Chromium	13.0		17.1		18.1		17.0		8.0		18.7		16.4		16.9		14.4		15.3	
10	Cobalt	[14.2]		25.9		24.6		[25.1]		[18.0]		24.3		21.7		[17.4]		25.6		21.5	
5	Copper	[15.7]		20.5		19.4		22.4		[14.8]		21.5		15.5		23.1		18.5		16.3	
20	Iron	22700		27800		33500		32100		19100		31700		30500		27200		28500		29800	
0.6	*Lead	29.7		26.2		21.4		24.2		27.2		23.7		18.5		21.5		40.7		23.4	
1000	Magnesium	[1580]		2330		3000		[2470]		[1120]		2990		2720		[2490]		4140		2550	
3	Manganese	567		1150		1270		783		397		1180		1160		361		1250		1450	
0.1	Mercury																				
8	Nickel	[9.9]		18.5		22.7		[16.2]		[13.4]		21.0		[15.5]		[18.9]		18.6		16.5	
1000	Potassium	[804]	B	[753]	B	[824]		[530]	B	[350]	B	[1160]		[985]		[719]	B	[400]	B	[485]	B
1	Selenium			2.4	K	2.0	K	[2.8]	K	[1.9]	K	2.4	K	2.2	K			[1.5]	K	[1.7]	K
2	Silver	[1.5]	B	[1.0]	B	[1.5]	B					[0.95]	B	[1.1]	B						
	Sodium	[194]		[135]		[127]		[110]		[146]		[154]		[108]		[202]		[138]		[116]	
	Thallium																			[1.7]	
	Vanadium	[15.8]		[20.6]		19.9		[19.1]		[9.3]		[21.8]		22.5		[17.8]		[14.8]		[17.1]	
	Zinc	72.6	J	88.3	J	121	J	85.5	J	65.3	J	125	J	80.5	J	100	J	89.0	J	83.5	J
	Cyanide		UJ		UJ		UJ		UJ		UJ		UJ		UJ	1970	J		UJ		UJ

ntract Required Detection Limit

*Action Level Exists

SEE NARRATIVE FOR CODE DEFINITIONS

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EPA202958

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APPENDIX A

RESULTS REPORTED BY LABORATORY

FORM Is

APPENDIX A

RESULTS REPORTED BY LABORATORY

FORM Is

SDG MCQY00

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000004

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MCQY00

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQY00

Matrix (soil/water): WATER Lab Sample ID: MCQY00

Level (low/med): LOW__ Date Received: 04/15/94

% Solids: __0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	8740			P
7440-36-0	Antimony	13.2	U		P
7440-38-2	Arsenic	2.2	B		P
7440-39-3	Barium	187	B		P
7440-41-7	Beryllium	0.53	B		P
7440-43-9	Cadmium	2.6	U		P
7440-70-2	Calcium	19600			P
7440-47-3	Chromium	8.5	B		P
7440-48-4	Cobalt	215			P
7440-50-8	Copper	21.8	B		P
7439-89-6	Iron	12600			P
7439-92-1	Lead	18.4			P
7439-95-4	Magnesium	12300			P
7439-96-5	Manganese	10000			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	54.3			P
7440-09-7	Potassium	9480			P
7782-49-2	Selenium	3.4	B		P
7440-22-4	Silver	1.9	U		P
7440-23-5	Sodium	77600			P
7440-28-0	Thallium	3.7	U		P
7440-62-2	Vanadium	11.3	B		P
7440-66-6	Zinc	93.3			P
	Cyanide	5.0	U	N	AS

Color Before: BROWN____ Clarity Before: CLOUDY Texture: _____

Color After: BROWN____ Clarity After: CLOUDY Artifacts: _____

Comments:

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INORGANIC ANALYSES DATA SHEET

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EPA SAMPLE NO.

MCQY01

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQY00

Matrix (soil/water): WATER Lab Sample ID: MCQY01

Level (low/med): LOW__ Date Received: 04/15/94

% Solids: __0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	221			P
7440-36-0	Antimony_	13.2	U		P
7440-38-2	Arsenic__	2.2	U		P
7440-39-3	Barium___	104	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium__	2.6	U		P
7440-70-2	Calcium__	108000			P
7440-47-3	Chromium_	1.5	U		P
7440-48-4	Cobalt___	36.1	B		P
7440-50-8	Copper___	4.8	B		P
7439-89-6	Iron_____	2860			P
7439-92-1	Lead_____	1.4	U		P
7439-95-4	Magnesium	18300			P
7439-96-5	Manganese	8590			P
7439-97-6	Mercury__	0.20	U		CV
7440-02-0	Nickel___	11.0	B		P
7440-09-7	Potassium	13700			P
7782-49-2	Selenium_	3.0	U		P
7440-22-4	Silver___	1.9	U		P
7440-23-5	Sodium___	61700			P
7440-28-0	Thallium_	3.7	U		P
7440-62-2	Vanadium_	1.5	U		P
7440-66-6	Zinc_____	59.1			P
	Cyanide__	5.0	U	N	AS

Color Before: COLORLESS Clarity Before: CLOUDY Texture: _____

Color After: COLORLESS Clarity After: CLOUDY Artifacts: _____

Comments:

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INORGANIC ANALYSES DATA SHEET

JJUQ06

EPA SAMPLE NO.

MCQY02

Lab Name: ITAS PITTSBURGH Contract: 68-D2-0044

Lab Code: ITPA Case No.: 21843 SAS No.: SDG No.: MCQY00

Matrix (soil/water): WATER Lab Sample ID: MCQY02

Level (low/med): LOW Date Received: 04/15/94

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2190			P
7440-36-0	Antimony	13.2	U		P
7440-38-2	Arsenic	2.2	U		P
7440-39-3	Barium	106	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	2.6	U		P
7440-70-2	Calcium	38200			P
7440-47-3	Chromium	1.6	B		P
7440-48-4	Cobalt	61.1			P
7440-50-8	Copper	5.1	B		P
7439-89-6	Iron	3400			P
7439-92-1	Lead	3.0			P
7439-95-4	Magnesium	16900			P
7439-96-5	Manganese	10400			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	8.8	B		P
7440-09-7	Potassium	2760	B		P
7782-49-2	Selenium	3.0	U		P
7440-22-4	Silver	1.9	U		P
7440-23-5	Sodium	20100			P
7440-28-0	Thallium	3.7	U		P
7440-62-2	Vanadium	2.5	B		P
7440-66-6	Zinc	43.8			P
	Cyanide	5.0	U	N	AS

Color Before: COLORLESS Clarity Before: CLOUDY Texture:

Color After: COLORLESS Clarity After: CLOUDY Artifacts:

Comments:

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INORGANIC ANALYSES DATA SHEET

000007

EPA SAMPLE NO.

MCQY03

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQY00

Matrix (soil/water): WATER Lab Sample ID: MCQY03

Level (low/med): LOW __ Date Received: 04/15/94

% Solids: __0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	3670	_		P_
7440-36-0	Antimony_	13.2	U		P_
7440-38-2	Arsenic__	2.2	U		P_
7440-39-3	Barium___	86.4	B		P_
7440-41-7	Beryllium	0.10	U		P_
7440-43-9	Cadmium__	2.6	U		P_
7440-70-2	Calcium__	10900	_		P_
7440-47-3	Chromium_	5.1	B		P_
7440-48-4	Cobalt___	6.1	B		P_
7440-50-8	Copper___	8.5	B		P_
7439-89-6	Iron_____	5670	_		P_
7439-92-1	Lead_____	5.0	_		P_
7439-95-4	Magnesium	7160	_		P_
7439-96-5	Manganese	45.6	_		P_
7439-97-6	Mercury__	0.23	_		CV
7440-02-0	Nickel___	8.0	B		P_
7440-09-7	Potassium	2260	B		P_
7782-49-2	Selenium_	3.0	U		P_
7440-22-4	Silver___	1.9	U		P_
7440-23-5	Sodium___	7360	_		P_
7440-28-0	Thallium_	3.7	U		P_
7440-62-2	Vanadium_	5.4	B		P_
7440-66-6	Zinc_____	37.4	_		P_
_____	Cyanide__	5.0	U	N	AS

Color Before: COLORLESS Clarity Before: CLOUDY Texture: _____

Color After: COLORLESS Clarity After: CLOUDY Artifacts: _____

Comments:

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MCQY04

Lab Name: ITAS_PITTSBURGH Contract: 68-D2-0044

Lab Code: ITPA Case No.: 21843 SAS No.: SDG No.: MCQY00

Matrix (soil/water): WATER Lab Sample ID: MCQY04

Level (low/med): LOW Date Received: 04/15/94

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	116	B		P
7440-36-0	Antimony	13.2	U		P
7440-38-2	Arsenic	2.2	U		P
7440-39-3	Barium	41.0	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	2.6	U		P
7440-70-2	Calcium	20700			P
7440-47-3	Chromium	1.5	U		P
7440-48-4	Cobalt	2.0	B		P
7440-50-8	Copper	0.90	U		P
7439-89-6	Iron	258			P
7439-92-1	Lead	1.4	U		P
7439-95-4	Magnesium	7950			P
7439-96-5	Manganese	442			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	5.9	U		P
7440-09-7	Potassium	2190	B		P
7782-49-2	Selenium	3.0	U		P
7440-22-4	Silver	1.9	U		P
7440-23-5	Sodium	12100			P
7440-28-0	Thallium	3.7	U		P
7440-62-2	Vanadium	1.5	U		P
7440-66-6	Zinc	15.6	B		P
	Cyanide	5.0	U	N	AS

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MCQY05

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQY00

Matrix (soil/water): WATER Lab Sample ID: MCQY05

Level (low/med): LOW__ Date Received: 04/15/94

% Solids: __0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	10.9	U		P_
7440-36-0	Antimony_	13.2	U		P_
7440-38-2	Arsenic__	2.2	U		P_
7440-39-3	Barium___	0.60	U		P_
7440-41-7	Beryllium	0.10	U		P_
7440-43-9	Cadmium__	2.6	U		P_
7440-70-2	Calcium__	34.5	B		P_
7440-47-3	Chromium_	1.5	U		P_
7440-48-4	Cobalt___	1.6	U		P_
7440-50-8	Copper___	1.0	B		P_
7439-89-6	Iron_____	7.1	B		P_
7439-92-1	Lead_____	1.4	U		P_
7439-95-4	Magnesium	33.6	B		P_
7439-96-5	Manganese	0.50	U		P_
7439-97-6	Mercury__	0.20	U		CV
7440-02-0	Nickel___	5.9	U		P_
7440-09-7	Potassium	244	U		P_
7782-49-2	Selenium_	3.0	U		P_
7440-22-4	Silver___	1.9	U		P_
7440-23-5	Sodium___	32.3	B		P_
7440-28-0	Thallium_	3.7	U		P_
7440-62-2	Vanadium_	1.5	U		P_
7440-66-6	Zinc_____	4.7	B		P_
_____	Cyanide__	5.0	U	N	AS

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MCQY06

Lab Name: ITAS_PITTSBURGH Contract: 68-D2-0044

Lab Code: ITPA Case No.: 21843 SAS No.: SDG No.: MCQY00

Matrix (soil/water): WATER Lab Sample ID: MCQY06

Level (low/med): LOW Date Received: 04/15/94

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	146	B		P
7440-36-0	Antimony	13.2	U		P
7440-38-2	Arsenic	2.2	U		P
7440-39-3	Barium	27.3	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	2.6	U		P
7440-70-2	Calcium	22300			P
7440-47-3	Chromium	1.5	U		P
7440-48-4	Cobalt	2.5	B		P
7440-50-8	Copper	1.9	B		P
7439-89-6	Iron	420			P
7439-92-1	Lead	1.4	U		P
7439-95-4	Magnesium	8710			P
7439-96-5	Manganese	226			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	5.9	U		P
7440-09-7	Potassium	3340	B		P
7782-49-2	Selenium	3.0	U		P
7440-22-4	Silver	1.9	U		P
7440-23-5	Sodium	23600			P
7440-28-0	Thallium	3.7	U		P
7440-62-2	Vanadium	1.5	U		P
7440-66-6	Zinc	26.1			P
	Cyanide	5.0	U	N	AS

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MCQY07

Lab Name: ITAS PITTSBURGH Contract: 68-D2-0044

Lab Code: ITPA Case No.: 21843 SAS No.: SDG No.: MCQY00

Matrix (soil/water): WATER Lab Sample ID: MCQY07

Level (low/med): LOW Date Received: 04/15/94

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	230			P
7440-36-0	Antimony	13.2	U		P
7440-38-2	Arsenic	2.2	U		P
7440-39-3	Barium	16.2	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	2.6	U		P
7440-70-2	Calcium	12300			P
7440-47-3	Chromium	1.5	U		P
7440-48-4	Cobalt	1.6	U		P
7440-50-8	Copper	2.6	B		P
7439-89-6	Iron	510			P
7439-92-1	Lead	1.4	U		P
7439-95-4	Magnesium	4750	B		P
7439-96-5	Manganese	55.2			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	5.9	U		P
7440-09-7	Potassium	1130	B		P
7782-49-2	Selenium	3.0	U		P
7440-22-4	Silver	1.9	U		P
7440-23-5	Sodium	4850	B		P
7440-28-0	Thallium	7.3	B		P
7440-62-2	Vanadium	1.5	U		P
7440-66-6	Zinc	29.7			P
	Cyanide	5.0	U	N	AS

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FORM I - IN ILM02.1

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MCQY08

Lab Name: ITAS PITTSBURGH Contract: 68-D2-0044

Lab Code: ITPA Case No.: 21843 SAS No.: SDG No.: MCQY00

Matrix (soil/water): WATER Lab Sample ID: MCQY08

Level (low/med): LOW Date Received: 04/15/94

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	91.9	B		P
7440-36-0	Antimony	13.2	U		P
7440-38-2	Arsenic	2.2	U		P
7440-39-3	Barium	15.6	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	2.6	U		P
7440-70-2	Calcium	10000			P
7440-47-3	Chromium	1.5	U		P
7440-48-4	Cobalt	1.6	U		P
7440-50-8	Copper	2.9	B		P
7439-89-6	Iron	175			P
7439-92-1	Lead	1.4	U		P
7439-95-4	Magnesium	4860	B		P
7439-96-5	Manganese	56.7			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	5.9	U		P
7440-09-7	Potassium	1030	B		P
7782-49-2	Selenium	3.0	U		P
7440-22-4	Silver	1.9	U		P
7440-23-5	Sodium	5120			P
7440-28-0	Thallium	4.0	B		P
7440-62-2	Vanadium	1.5	U		P
7440-66-6	Zinc	24.4			P
	Cyanide	5.8	B	N	AS

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MCQY09

Lab Name: ITAS PITTSBURGH Contract: 68-D2-0044

Lab Code: ITPA Case No.: 21843 SAS No.: SDG No.: MCQY00

Matrix (soil/water): WATER Lab Sample ID: MCQY09

Level (low/med): LOW Date Received: 04/15/94

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	142	B		P
7440-36-0	Antimony	13.2	U		P
7440-38-2	Arsenic	2.2	U		P
7440-39-3	Barium	10.2	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	2.6	U		P
7440-70-2	Calcium	13000			P
7440-47-3	Chromium	1.5	U		P
7440-48-4	Cobalt	1.6	U		P
7440-50-8	Copper	3.4	B		P
7439-89-6	Iron	414			P
7439-92-1	Lead	1.4	U		P
7439-95-4	Magnesium	7310			P
7439-96-5	Manganese	19.6			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	5.9	U		P
7440-09-7	Potassium	2080	B		P
7782-49-2	Selenium	3.0	U		P
7440-22-4	Silver	1.9	U		P
7440-23-5	Sodium	5870			P
7440-28-0	Thallium	4.0	B		P
7440-62-2	Vanadium	1.5	U		P
7440-66-6	Zinc	40.3			P
	Cyanide	5.0	U	N	AS

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MCQY10

Lab Name: ITAS PITTSBURGH Contract: 68-D2-0044

Lab Code: ITPA Case No.: 21843 SAS No.: SDG No.: MCQY00

Matrix (soil/water): WATER Lab Sample ID: MCQY10

Level (low/med): LOW Date Received: 04/15/94

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	140	B		P
7440-36-0	Antimony	13.2	U		P
7440-38-2	Arsenic	2.2	U		P
7440-39-3	Barium	10.1	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	2.6	U		P
7440-70-2	Calcium	13000			P
7440-47-3	Chromium	1.5	U		P
7440-48-4	Cobalt	1.6	U		P
7440-50-8	Copper	1.3	B		P
7439-89-6	Iron	418			P
7439-92-1	Lead	1.4	U		P
7439-95-4	Magnesium	7380			P
7439-96-5	Manganese	18.8			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	5.9	U		P
7440-09-7	Potassium	2130	B		P
7782-49-2	Selenium	3.0	U		P
7440-22-4	Silver	1.9	U		P
7440-23-5	Sodium	5670			P
7440-28-0	Thallium	3.7	U		P
7440-62-2	Vanadium	1.5	U		P
7440-66-6	Zinc	16.1	B		P
	Cyanide	5.0	U	N	AS

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MCQY11

Lab Name: ITAS PITTSBURGH Contract: 68-D2-0044

Lab Code: ITPA Case No.: 21843 SAS No.: SDG No.: MCQY00

Matrix (soil/water): WATER Lab Sample ID: MCQY11

Level (low/med): LOW Date Received: 04/15/94

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	13200			P
7440-36-0	Antimony	13.2	U		P
7440-38-2	Arsenic	7.3	B		P
7440-39-3	Barium	108	B		P
7440-41-7	Beryllium	0.70	B		P
7440-43-9	Cadmium	2.6	U		P
7440-70-2	Calcium	11800			P
7440-47-3	Chromium	13.0			P
7440-48-4	Cobalt	20.0	B		P
7440-50-8	Copper	23.2	B		P
7439-89-6	Iron	30200			P
7439-92-1	Lead	43.0			P
7439-95-4	Magnesium	5300			P
7439-96-5	Manganese	711			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	16.2	B		P
7440-09-7	Potassium	2040	B		P
7782-49-2	Selenium	3.0	U		P
7440-22-4	Silver	1.9	U		P
7440-23-5	Sodium	4140	B		P
7440-28-0	Thallium	3.7	U		P
7440-62-2	Vanadium	18.5	B		P
7440-66-6	Zinc	112			P
	Cyanide	5.0	U	N	AS

Color Before: BROWN Clarity Before: OPAQUE Texture:

Color After: BROWN Clarity After: OPAQUE Artifacts:

Comments:

FORM I - IN ILM02.1

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U.S. EPA - CLP

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MCQY12

Lab Name: ITAS PITTSBURGH Contract: 68-D2-0044

Lab Code: ITPA Case No.: 21843 SAS No.: SDG No.: MCQY00

Matrix (soil/water): WATER Lab Sample ID: MCQY12

Level (low/med): LOW Date Received: 04/15/94

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2320			P
7440-36-0	Antimony	13.2	U		P
7440-38-2	Arsenic	2.2	U		P
7440-39-3	Barium	61.5	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	2.6	U		P
7440-70-2	Calcium	7100			P
7440-47-3	Chromium	2.4	B		P
7440-48-4	Cobalt	4.9	B		P
7440-50-8	Copper	5.5	B		P
7439-89-6	Iron	3760			P
7439-92-1	Lead	2.9	B		P
7439-95-4	Magnesium	4520	B		P
7439-96-5	Manganese	203			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	5.9	U		P
7440-09-7	Potassium	1690	B		P
7782-49-2	Selenium	3.0	U		P
7440-22-4	Silver	1.9	U		P
7440-23-5	Sodium	3540	B		P
7440-28-0	Thallium	3.7	B		P
7440-62-2	Vanadium	2.7	B		P
7440-66-6	Zinc	58.6			P
	Cyanide	5.0	U	N	AS

Color Before: BROWN Clarity Before: CLOUDY Texture:

Color After: BROWN Clarity After: CLOUDY Artifacts:

Comments:

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INORGANIC ANALYSES DATA SHEET

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EPA SAMPLE NO.

MCQY13

Lab Name: ITAS PITTSBURGH Contract: 68-D2-0044

Lab Code: ITPA Case No.: 21843 SAS No.: SDG No.: MCQY00

Matrix (soil/water): WATER Lab Sample ID: MCQY13

Level (low/med): LOW Date Received: 04/15/94

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3370			P
7440-36-0	Antimony	13.2	U		P
7440-38-2	Arsenic	2.2	U		P
7440-39-3	Barium	48.0	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	2.6	U		P
7440-70-2	Calcium	17600			P
7440-47-3	Chromium	4.5	B		P
7440-48-4	Cobalt	4.4	B		P
7440-50-8	Copper	9.4	B		P
7439-89-6	Iron	6110			P
7439-92-1	Lead	4.2			P
7439-95-4	Magnesium	6700			P
7439-96-5	Manganese	245			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	7.5	B		P
7440-09-7	Potassium	4790	B		P
7782-49-2	Selenium	3.0	U		P
7440-22-4	Silver	1.9	U		P
7440-23-5	Sodium	5310			P
7440-28-0	Thallium	3.9	B		P
7440-62-2	Vanadium	3.8	B		P
7440-66-6	Zinc	106			P
	Cyanide	5.3	B	N	AS

Color Before: BROWN Clarity Before: CLOUDY Texture:

Color After: BROWN Clarity After: CLOUDY Artifacts:

Comments:

FORM I - IN ILM02.1

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INORGANIC ANALYSES DATA SHEET

000018

EPA SAMPLE NO.

MCQY14

Lab Name: ITAS PITTSBURGH Contract: 68-D2-0044

Lab Code: ITPA Case No.: 21843 SAS No.: SDG No.: MCQY00

Matrix (soil/water): WATER Lab Sample ID: MCQY14

Level (low/med): LOW Date Received: 04/15/94

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	6600			P
7440-36-0	Antimony	13.2	U		P
7440-38-2	Arsenic	2.2	U		P
7440-39-3	Barium	93.1	B		P
7440-41-7	Beryllium	0.36	B		P
7440-43-9	Cadmium	2.6	U		P
7440-70-2	Calcium	10900			P
7440-47-3	Chromium	5.5	B		P
7440-48-4	Cobalt	9.7	B		P
7440-50-8	Copper	11.5	B		P
7439-89-6	Iron	11500			P
7439-92-1	Lead	10.7			P
7439-95-4	Magnesium	4910	B		P
7439-96-5	Manganese	572			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	5.9	U		P
7440-09-7	Potassium	1980	B		P
7782-49-2	Selenium	3.0	U		P
7440-22-4	Silver	1.9	U		P
7440-23-5	Sodium	2900	B		P
7440-28-0	Thallium	3.7	U		P
7440-62-2	Vanadium	7.4	B		P
7440-66-6	Zinc	56.7			P
	Cyanide	5.0	U	N	AS

Color Before: BROWN Clarity Before: CLOUDY Texture:

Color After: BROWN Clarity After: CLOUDY Artifacts:

Comments:

FORM I - IN ILM02.1

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MCQY15

Lab Name: ITAS PITTSBURGH Contract: 68-D2-0044

Lab Code: ITPA Case No.: 21843 SAS No.: SDG No.: MCQY00

Matrix (soil/water): WATER Lab Sample ID: MCQY15

Level (low/med): LOW Date Received: 04/15/94

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3340			P
7440-36-0	Antimony	13.2	U		P
7440-38-2	Arsenic	2.2	B		P
7440-39-3	Barium	79.5	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	2.6	U		P
7440-70-2	Calcium	8510			P
7440-47-3	Chromium	2.6	B		P
7440-48-4	Cobalt	8.4	B		P
7440-50-8	Copper	9.1	B		P
7439-89-6	Iron	6700			P
7439-92-1	Lead	9.6			P
7439-95-4	Magnesium	4670	B		P
7439-96-5	Manganese	219			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	6.6	B		P
7440-09-7	Potassium	2540	B		P
7782-49-2	Selenium	3.0	U		P
7440-22-4	Silver	1.9	U		P
7440-23-5	Sodium	3720	B		P
7440-28-0	Thallium	5.0	B		P
7440-62-2	Vanadium	4.1	B		P
7440-66-6	Zinc	58.0			P
	Cyanide	5.0	U	N	AS

Color Before: BROWN Clarity Before: CLOUDY Texture:

Color After: BROWN Clarity After: CLOUDY Artifacts:

Comments:

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INORGANIC ANALYSES DATA SHEET

JJ0020

EPA SAMPLE NO.

MCQY16

Lab Name: ITAS PITTSBURGH Contract: 68-D2-0044

Lab Code: ITPA Case No.: 21843 SAS No.: SDG No.: MCQY00

Matrix (soil/water): WATER Lab Sample ID: MCQY16

Level (low/med): LOW Date Received: 04/15/94

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	9370			P
7440-36-0	Antimony	13.2	U		P
7440-38-2	Arsenic	2.7	B		P
7440-39-3	Barium	109	B		P
7440-41-7	Beryllium	0.38	B		P
7440-43-9	Cadmium	2.6	U		P
7440-70-2	Calcium	20000			P
7440-47-3	Chromium	9.0	B		P
7440-48-4	Cobalt	13.6	B		P
7440-50-8	Copper	15.3	B		P
7439-89-6	Iron	17400			P
7439-92-1	Lead	10.5			P
7439-95-4	Magnesium	7570			P
7439-96-5	Manganese	844			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	11.9	B		P
7440-09-7	Potassium	12400			P
7782-49-2	Selenium	3.0	U		P
7440-22-4	Silver	1.9	U		P
7440-23-5	Sodium	5640			P
7440-28-0	Thallium	3.7	U		P
7440-62-2	Vanadium	11.8	B		P
7440-66-6	Zinc	110			P
	Cyanide	5.0	U	N	AS

Color Before: BROWN Clarity Before: OPAQUE Texture:

Color After: BROWN Clarity After: OPAQUE Artifacts:

Comments:

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MCQY17

Lab Name: ITAS PITTSBURGH _____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843 SAS No.: _____ SDG No.: MCQY00

Matrix (soil/water): WATER Lab Sample ID: MCQY17

Level (low/med): LOW__ Date Received: 04/15/94

% Solids: __0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	332			P
7440-36-0	Antimony	13.2	U		P
7440-38-2	Arsenic	2.2	U		P
7440-39-3	Barium	27.4	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	2.6	U		P
7440-70-2	Calcium	8160			P
7440-47-3	Chromium	1.5	U		P
7440-48-4	Cobalt	1.6	U		P
7440-50-8	Copper	5.2	B		P
7439-89-6	Iron	593			P
7439-92-1	Lead	1.4	U		P
7439-95-4	Magnesium	3450	B		P
7439-96-5	Manganese	21.3			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	5.9	U		P
7440-09-7	Potassium	1650	B		P
7782-49-2	Selenium	3.0	U		P
7440-22-4	Silver	1.9	U		P
7440-23-5	Sodium	3390	B		P
7440-28-0	Thallium	3.7	U		P
7440-62-2	Vanadium	1.5	U		P
7440-66-6	Zinc	24.8			P
	Cyanide	5.0	U	N	AS

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MCQY20

Lab Name: ITAS PITTSBURGH Contract: 68-D2-0044

Lab Code: ITPA Case No.: 21843 SAS No.: SDG No.: MCQY00

Matrix (soil/water): WATER Lab Sample ID: MCQY20

Level (low/med): LOW Date Received: 04/20/94

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	472			P
7440-36-0	Antimony	13.2	U		P
7440-38-2	Arsenic	2.2	U		P
7440-39-3	Barium	21.2	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	2.6	U		P
7440-70-2	Calcium	14000			P
7440-47-3	Chromium	1.5	U		P
7440-48-4	Cobalt	3.6	B		P
7440-50-8	Copper	6.1	B		P
7439-89-6	Iron	921			P
7439-92-1	Lead	1.4	U		P
7439-95-4	Magnesium	5260			P
7439-96-5	Manganese	60.1			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	5.9	U		P
7440-09-7	Potassium	2130	B		P
7782-49-2	Selenium	3.0	U		P
7440-22-4	Silver	1.9	U		P
7440-23-5	Sodium	4660	B		P
7440-28-0	Thallium	3.7	U		P
7440-62-2	Vanadium	2.0	B		P
7440-66-6	Zinc	22.7			P
	Cyanide	5.0	U	N	AS

Color Before: COLORLESS Clarity Before: CLOUDY Texture:

Color After: COLORLESS Clarity After: CLOUDY Artifacts:

Comments:

U.S. EPA - CLP

000023

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MCQY21

Lab Name: ITAS PITTSBURGH Contract: 68-D2-0044

Lab Code: ITPA Case No.: 21843 SAS No.: SDG No.: MCQY00

Matrix (soil/water): WATER Lab Sample ID: MCQY21

Level (low/med): LOW Date Received: 04/20/94

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	10.9	U		P
7440-36-0	Antimony	13.2	U		P
7440-38-2	Arsenic	2.2	U		P
7440-39-3	Barium	0.60	U		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	2.6	U		P
7440-70-2	Calcium	9.4	B		P
7440-47-3	Chromium	1.5	U		P
7440-48-4	Cobalt	1.6	U		P
7440-50-8	Copper	0.90	U		P
7439-89-6	Iron	6.0	B		P
7439-92-1	Lead	1.4	U		P
7439-95-4	Magnesium	12.1	U		P
7439-96-5	Manganese	0.50	U		P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	5.9	U		P
7440-09-7	Potassium	244	U		P
7782-49-2	Selenium	3.0	U		P
7440-22-4	Silver	1.9	U		P
7440-23-5	Sodium	27.3	B		P
7440-28-0	Thallium	3.7	U		P
7440-62-2	Vanadium	1.5	U		P
7440-66-6	Zinc	5.4	B		P
	Cyanide	5.0	U	N	AS

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FORM I - IN EPA 202970 ILM02.1

AR312363

APPENDIX A

RESULTS REPORTED BY LABORATORY

FORM Is

SDG MCQY18

U.S. EPA - CLP

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INORGANIC ANALYSES DATA SHEET

000003

EPA SAMPLE NO.

MCQY18

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQY18

Matrix (soil/water): WATER Lab Sample ID: MCQY18

Level (low/med): LOW__ Date Received: 04/20/94

% Solids: __0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	284			P
7440-36-0	Antimony	13.2	U		P
7440-38-2	Arsenic	2.2	U		P
7440-39-3	Barium	15.0	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	2.6	U		P
7440-70-2	Calcium	10800			P
7440-47-3	Chromium	1.5	U		P
7440-48-4	Cobalt	3.0	B		P
7440-50-8	Copper	4.8	B		P
7439-89-6	Iron	513			P
7439-92-1	Lead	1.4	U		P
7439-95-4	Magnesium	2950	B		P
7439-96-5	Manganese	55.8			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	5.9	U		P
7440-09-7	Potassium	802	B		P
7782-49-2	Selenium	3.0	U		P
7440-22-4	Silver	1.9	U		P
7440-23-5	Sodium	3280	B		P
7440-28-0	Thallium	3.7	U		P
7440-62-2	Vanadium	1.5	U		P
7440-66-6	Zinc	13.0	B		P
	Cyanide	5.0	U		AS

Color Before: COLORLESS Clarity Before: CLOUDY Texture: _____

Color After: COLORLESS Clarity After: CLOUDY Artifacts: _____

Comments:

FORM I - IN ILM02.1

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U.S. EPA - CLP

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MCQY19

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQY18

Matrix (soil/water): WATER Lab Sample ID: MCQY19

Level (low/med): LOW__ Date Received: 04/20/94

% Solids: __0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	899			P_
7440-36-0	Antimony_	13.2	U		P_
7440-38-2	Arsenic__	2.2	U		P_
7440-39-3	Barium___	31.6	B		P_
7440-41-7	Beryllium	0.12	B		P_
7440-43-9	Cadmium__	2.6	U		P_
7440-70-2	Calcium__	15900			P_
7440-47-3	Chromium_	1.5	U		P_
7440-48-4	Cobalt___	2.1	B		P_
7440-50-8	Copper___	5.2	B		P_
7439-89-6	Iron_____	16100			P_
7439-92-1	Lead_____	1.4	U		P_
7439-95-4	Magnesium	5540			P_
7439-96-5	Manganese	123			P_
7439-97-6	Mercury__	0.20	U		CV
7440-02-0	Nickel___	5.9	U		P_
7440-09-7	Potassium	3890	B		P_
7782-49-2	Selenium_	3.0	U		P_
7440-22-4	Silver___	1.9	U		P_
7440-23-5	Sodium___	6550			P_
7440-28-0	Thallium_	3.9	B		P_
7440-62-2	Vanadium_	1.5	U		P_
7440-66-6	Zinc_____	20.8			P_
_____	Cyanide__	5.0	U		AS

Color Before: COLORLESS Clarity Before: CLOUDY Texture: _____

Color After: COLORLESS Clarity After: CLOUDY Artifacts: _____

Comments:

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MCQY22

Lab Name: ITAS_PITTSBURGH Contract: 68-D2-0044

Lab Code: ITPA Case No.: 21843 SAS No.: SDG No.: MCQY18

Matrix (soil/water): WATER Lab Sample ID: MCQY22

Level (low/med): LOW Date Received: 04/20/94

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	63.9	B		P
7440-36-0	Antimony	13.2	U		P
7440-38-2	Arsenic	2.2	U		P
7440-39-3	Barium	30.9	B		P
7440-41-7	Beryllium	0.10	B		P
7440-43-9	Cadmium	2.6	U		P
7440-70-2	Calcium	8490			P
7440-47-3	Chromium	1.5	U		P
7440-48-4	Cobalt	1.6	U		P
7440-50-8	Copper	3.4	B		P
7439-89-6	Iron	274			P
7439-92-1	Lead	1.4	U		P
7439-95-4	Magnesium	3650	B		P
7439-96-5	Manganese	52.2			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	5.9	U		P
7440-09-7	Potassium	3230	B		P
7782-49-2	Selenium	3.0	U		P
7440-22-4	Silver	1.9	U		P
7440-23-5	Sodium	4430	B		P
7440-28-0	Thallium	3.7	U		P
7440-62-2	Vanadium	1.5	U		P
7440-66-6	Zinc	12.9	B		P
	Cyanide	5.0	U		AS

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MCQY23

Lab Name: ITAS_PITTSBURGH Contract: 68-D2-0044

Lab Code: ITPA Case No.: 21843 SAS No.: SDG No.: MCQY18

Matrix (soil/water): WATER Lab Sample ID: MCQY23

Level (low/med): LOW Date Received: 04/20/94

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1530			P
7440-36-0	Antimony	13.2	U		P
7440-38-2	Arsenic	2.2	U		P
7440-39-3	Barium	49.0	B		P
7440-41-7	Beryllium	0.14	B		P
7440-43-9	Cadmium	2.6	U		P
7440-70-2	Calcium	11200			P
7440-47-3	Chromium	1.6	B		P
7440-48-4	Cobalt	2.2	B		P
7440-50-8	Copper	4.9	B		P
7439-89-6	Iron	3400			P
7439-92-1	Lead	2.8	B		P
7439-95-4	Magnesium	3890	B		P
7439-96-5	Manganese	147			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	5.9	U		P
7440-09-7	Potassium	3260	B		P
7782-49-2	Selenium	3.0	U		P
7440-22-4	Silver	1.9	U		P
7440-23-5	Sodium	4530	B		P
7440-28-0	Thallium	3.7	U		P
7440-62-2	Vanadium	2.6	B		P
7440-66-6	Zinc	20.8			P
	Cyanide	5.0	U		AS

Color Before: BROWN Clarity Before: CLOUDY Texture:

Color After: BROWN Clarity After: CLOUDY Artifacts:

Comments:

U.S. EPA - CLP

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MCQY24

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQY18

Matrix (soil/water): WATER Lab Sample ID: MCQY24

Level (low/med): LOW__ Date Received: 04/20/94

% Solids: __0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	459			P
7440-36-0	Antimony	13.2	U		P
7440-38-2	Arsenic	2.2	U		P
7440-39-3	Barium	101	B		P
7440-41-7	Beryllium	0.12	B		P
7440-43-9	Cadmium	2.6	U		P
7440-70-2	Calcium	7000			P
7440-47-3	Chromium	1.5	U		P
7440-48-4	Cobalt	1.8	B		P
7440-50-8	Copper	3.6	B		P
7439-89-6	Iron	629			P
7439-92-1	Lead	1.4	U		P
7439-95-4	Magnesium	6000			P
7439-96-5	Manganese	58.2			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	5.9	U		P
7440-09-7	Potassium	1270	B		P
7782-49-2	Selenium	3.0	U		P
7440-22-4	Silver	1.9	U		P
7440-23-5	Sodium	4480	B		P
7440-28-0	Thallium	4.5	B		P
7440-62-2	Vanadium	1.6	B		P
7440-66-6	Zinc	21.7			P
	Cyanide	5.0	U		AS

Color Before: COLORLESS Clarity Before: CLOUDY Texture: _____

Color After: COLORLESS Clarity After: CLOUDY Artifacts: _____

Comments:

U.S. EPA - CLP

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MCQY25

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQY18

Matrix (soil/water): WATER Lab Sample ID: MCQY25

Level (low/med): LOW__ Date Received: 04/20/94

% Solids: __0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	400			P
7440-36-0	Antimony	13.2	U		P
7440-38-2	Arsenic	2.2	U		P
7440-39-3	Barium	27.7	B		P
7440-41-7	Beryllium	0.12	B		P
7440-43-9	Cadmium	2.6	U		P
7440-70-2	Calcium	10600			P
7440-47-3	Chromium	1.5	U		P
7440-48-4	Cobalt	2.6	B		P
7440-50-8	Copper	4.5	B		P
7439-89-6	Iron	892			P
7439-92-1	Lead	1.4	U		P
7439-95-4	Magnesium	4110	B		P
7439-96-5	Manganese	73.3			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	5.9	U		P
7440-09-7	Potassium	1280	B		P
7782-49-2	Selenium	3.0	U		P
7440-22-4	Silver	1.9	U		P
7440-23-5	Sodium	10700			P
7440-28-0	Thallium	3.7	U		P
7440-62-2	Vanadium	1.5	U		P
7440-66-6	Zinc	15.8	B		P
	Cyanide	5.0	U		AS

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

U.S. EPA - CLP

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MCQY26

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQY18

Matrix (soil/water): WATER Lab Sample ID: MCQY26

Level (low/med): LOW__ Date Received: 04/20/94

% Solids: __0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1830			P
7440-36-0	Antimony	13.2	U		P
7440-38-2	Arsenic	2.2	U		P
7440-39-3	Barium	68.7	B		P
7440-41-7	Beryllium	0.14	B		P
7440-43-9	Cadmium	2.6	U		P
7440-70-2	Calcium	9400			P
7440-47-3	Chromium	1.5	U		P
7440-48-4	Cobalt	3.7	B		P
7440-50-8	Copper	5.6	B		P
7439-89-6	Iron	2340			P
7439-92-1	Lead	1.4	U		P
7439-95-4	Magnesium	3180	B		P
7439-96-5	Manganese	448			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	5.9	U		P
7440-09-7	Potassium	3230	B		P
7782-49-2	Selenium	3.0	U		P
7440-22-4	Silver	1.9	U		P
7440-23-5	Sodium	3140	B		P
7440-28-0	Thallium	3.7	U		P
7440-62-2	Vanadium	2.6	B		P
7440-66-6	Zinc	22.8			P
	Cyanide	5.0	U		AS

Color Before: BROWN____ Clarity Before: CLOUDY Texture: _____

Color After: BROWN____ Clarity After: CLOUDY Artifacts: _____

Comments:

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MCQY27

Lab Name: ITAS_PITTSBURGH Contract: 68-D2-0044

Lab Code: ITPA Case No.: 21843 SAS No.: SDG No.: MCQY18

Matrix (soil/water): WATER Lab Sample ID: MCQY27

Level (low/med): LOW Date Received: 04/20/94

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1610			P
7440-36-0	Antimony	13.2	U		P
7440-38-2	Arsenic	2.2	U		P
7440-39-3	Barium	60.5	B		P
7440-41-7	Beryllium	0.14	B		P
7440-43-9	Cadmium	2.6	U		P
7440-70-2	Calcium	7090			P
7440-47-3	Chromium	3.2	B		P
7440-48-4	Cobalt	3.0	B		P
7440-50-8	Copper	5.6	B		P
7439-89-6	Iron	2530			P
7439-92-1	Lead	2.6	B		P
7439-95-4	Magnesium	4040	B		P
7439-96-5	Manganese	176			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	5.9	U		P
7440-09-7	Potassium	1170	B		P
7782-49-2	Selenium	3.0	U		P
7440-22-4	Silver	1.9	U		P
7440-23-5	Sodium	3260	B		P
7440-28-0	Thallium	3.7	U		P
7440-62-2	Vanadium	1.8	B		P
7440-66-6	Zinc	29.0			P
	Cyanide	5.0	U		AS

Color Before: COLORLESS Clarity Before: CLOUDY Texture:

Color After: COLORLESS Clarity After: CLOUDY Artifacts:

Comments:

U.S. EPA - CLP

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MCQY28

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQY18

Matrix (soil/water): WATER Lab Sample ID: MCQY28

Level (low/med): LOW__ Date Received: 04/20/94

% Solids: __0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	183	B		P
7440-36-0	Antimony	13.2	U		P
7440-38-2	Arsenic	2.2	U		P
7440-39-3	Barium	23.1	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	2.6	U		P
7440-70-2	Calcium	11800			P
7440-47-3	Chromium	1.5	U		P
7440-48-4	Cobalt	1.6	U		P
7440-50-8	Copper	4.2	B		P
7439-89-6	Iron	471			P
7439-92-1	Lead	1.4	U		P
7439-95-4	Magnesium	5590			P
7439-96-5	Manganese	79.0			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	5.9	U		P
7440-09-7	Potassium	5070			P
7782-49-2	Selenium	3.0	U		P
7440-22-4	Silver	1.9	U		P
7440-23-5	Sodium	5480			P
7440-28-0	Thallium	3.7	U		P
7440-62-2	Vanadium	2.0	B		P
7440-66-6	Zinc	14.9	B		P
	Cyanide	8.7			AS

Color Before: COLORLESS Clarity Before: CLOUDY Texture: _____

Color After: COLORLESS Clarity After: CLOUDY Artifacts: _____

Comments:

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MCQY29

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQY18

Matrix (soil/water): WATER Lab Sample ID: MCQY29

Level (low/med): LOW__ Date Received: 04/20/94

% Solids: __0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	681			P
7440-36-0	Antimony	13.2	U		P
7440-38-2	Arsenic	2.2	U		P
7440-39-3	Barium	37.3	B		P
7440-41-7	Beryllium	0.14	B		P
7440-43-9	Cadmium	2.6	U		P
7440-70-2	Calcium	6470			P
7440-47-3	Chromium	1.5	U		P
7440-48-4	Cobalt	1.6	U		P
7440-50-8	Copper	4.5	B		P
7439-89-6	Iron	931			P
7439-92-1	Lead	1.4	U		P
7439-95-4	Magnesium	3690	B		P
7439-96-5	Manganese	48.9			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	5.9	U		P
7440-09-7	Potassium	1290	B		P
7782-49-2	Selenium	3.0	U		P
7440-22-4	Silver	1.9	U		P
7440-23-5	Sodium	3990	B		P
7440-28-0	Thallium	3.7	U		P
7440-62-2	Vanadium	1.5	U		P
7440-66-6	Zinc	21.8			P
	Cyanide	5.0	U		AS

Color Before: COLORLESS Clarity Before: CLOUDY Texture: _____

Color After: COLORLESS Clarity After: CLOUDY Artifacts: _____

Comments:

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MCQY30

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQY18

Matrix (soil/water): WATER Lab Sample ID: MCQY30

Level (low/med): LOW__ Date Received: 04/20/94

% Solids: __0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	236			P
7440-36-0	Antimony	13.2	U		P
7440-38-2	Arsenic	2.2	U		P
7440-39-3	Barium	21.7	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	2.6	U		P
7440-70-2	Calcium	19000			P
7440-47-3	Chromium	1.5	U		P
7440-48-4	Cobalt	1.6	U		P
7440-50-8	Copper	4.0	B		P
7439-89-6	Iron	531			P
7439-92-1	Lead	1.4	U		P
7439-95-4	Magnesium	6940			P
7439-96-5	Manganese	41.3			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	5.9	U		P
7440-09-7	Potassium	2750	B		P
7782-49-2	Selenium	3.0	U		P
7440-22-4	Silver	1.9	U		P
7440-23-5	Sodium	5210			P
7440-28-0	Thallium	3.7	U		P
7440-62-2	Vanadium	1.5	U		P
7440-66-6	Zinc	16.5	B		P
	Cyanide	7.3			AS

Color Before: COLORLESS Clarity Before: CLOUDY Texture: _____

Color After: COLORLESS Clarity After: CLOUDY Artifacts: _____

Comments:

FORM I - IN ILM02.1

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MCQY31

Lab Name: ITAS_PITTSBURGH Contract: 68-D2-0044

Lab Code: ITPA Case No.: 21843 SAS No.: SDG No.: MCQY18

Matrix (soil/water): WATER Lab Sample ID: MCQY31

Level (low/med): LOW Date Received: 04/20/94

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	66.2	B		P
7440-36-0	Antimony	13.2	U		P
7440-38-2	Arsenic	2.2	U		P
7440-39-3	Barium	41.2	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	2.6	U		P
7440-70-2	Calcium	5210			P
7440-47-3	Chromium	1.5	U		P
7440-48-4	Cobalt	1.6	U		P
7440-50-8	Copper	2.3	B		P
7439-89-6	Iron	125			P
7439-92-1	Lead	1.4	U		P
7439-95-4	Magnesium	4440	B		P
7439-96-5	Manganese	8.2	B		P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	5.9	U		P
7440-09-7	Potassium	1720	B		P
7782-49-2	Selenium	3.0	U		P
7440-22-4	Silver	1.9	U		P
7440-23-5	Sodium	3130	B		P
7440-28-0	Thallium	3.7	U		P
7440-62-2	Vanadium	1.5	U		P
7440-66-6	Zinc	23.3			P
	Cyanide	5.0	U		AS

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

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INORGANIC ANALYSES DATA SHEET

000015

EPA SAMPLE NO.

MCQY32

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQY18

Matrix (soil/water): WATER Lab Sample ID: MCQY32

Level (low/med): LOW__ Date Received: 04/20/94

% Solids: __0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	10.9	U		P
7440-36-0	Antimony	13.2	U		P
7440-38-2	Arsenic	2.2	U		P
7440-39-3	Barium	0.60	U		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	2.6	U		P
7440-70-2	Calcium	30.2	B		P
7440-47-3	Chromium	1.5	U		P
7440-48-4	Cobalt	1.6	U		P
7440-50-8	Copper	1.4	B		P
7439-89-6	Iron	9.4	B		P
7439-92-1	Lead	1.4	U		P
7439-95-4	Magnesium	12.1	U		P
7439-96-5	Manganese	0.50	U		P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	5.9	U		P
7440-09-7	Potassium	244	U		P
7782-49-2	Selenium	3.0	U		P
7440-22-4	Silver	1.9	U		P
7440-23-5	Sodium	49.4	B		P
7440-28-0	Thallium	3.7	U		P
7440-62-2	Vanadium	1.5	U		P
7440-66-6	Zinc	6.0	B		P
	Cyanide	5.0	U		AS

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

FORM I - IN ILM02.1

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APPENDIX A

RESULTS REPORTED BY LABORATORY

FORM Is

SDG MCQA71

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INORGANIC ANALYSES DATA SHEET

J0U004
EPA SAMPLE NO.

MCQA71

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQA71

Matrix (soil/water): WATER Lab Sample ID: MCQA71

Level (low/med): LOW__ Date Received: 04/15/94

% Solids: __0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	90.2	B		P
7440-36-0	Antimony	13.2	U		P
7440-38-2	Arsenic	2.2	U		P
7440-39-3	Barium	71.5	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	2.6	U		P
7440-70-2	Calcium	17800			P
7440-47-3	Chromium	1.5	U		P
7440-48-4	Cobalt	108			P
7440-50-8	Copper	2.1	B		P
7439-89-6	Iron	91.6	B		P
7439-92-1	Lead	1.4	U		P
7439-95-4	Magnesium	10900			P
7439-96-5	Manganese	6420			P
7439-97-6	Mercury	9.2			CV
7440-02-0	Nickel	27.3	B		P
7440-09-7	Potassium	7940			P
7782-49-2	Selenium	4.8	B		P
7440-22-4	Silver	1.9	U		P
7440-23-5	Sodium	81300			P
7440-28-0	Thallium	3.7	U		P
7440-62-2	Vanadium	1.5	U		P
7440-66-6	Zinc	30.7			P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MCQA72

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQA71

Matrix (soil/water): WATER Lab Sample ID: MCQA72

Level (low/med): LOW__ Date Received: 04/15/94

% Solids: __0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	54.2	B		P_
7440-36-0	Antimony_	13.2	U		P_
7440-38-2	Arsenic__	2.2	U		P_
7440-39-3	Barium___	104	B		P_
7440-41-7	Beryllium	0.10	U		P_
7440-43-9	Cadmium__	2.6	U		P_
7440-70-2	Calcium__	113000	_		P_
7440-47-3	Chromium_	1.5	U		P_
7440-48-4	Cobalt___	33.7	B		P_
7440-50-8	Copper___	5.2	B		P_
7439-89-6	Iron_____	231	_		P_
7439-92-1	Lead_____	1.4	U		P_
7439-95-4	Magnesium	19300	_		P_
7439-96-5	Manganese	8890	_		P_
7439-97-6	Mercury__	25.7	_		CV
7440-02-0	Nickel___	12.0	B		P_
7440-09-7	Potassium	14400	_		P_
7782-49-2	Selenium_	5.7	_		P_
7440-22-4	Silver___	1.9	U		P_
7440-23-5	Sodium___	65900	_		P_
7440-28-0	Thallium_	3.7	U		P_
7440-62-2	Vanadium_	1.5	U		P_
7440-66-6	Zinc_____	12.6	B		P_
_____	Cyanide__		_		NR

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MCQA73

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQA71

Matrix (soil/water): WATER Lab Sample ID: MCQA73

Level (low/med): LOW__ Date Received: 04/15/94

% Solids: __0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	37.6	B		P
7440-36-0	Antimony	13.2	U		P
7440-38-2	Arsenic	2.2	U		P
7440-39-3	Barium	35.7	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	2.6	U		P
7440-70-2	Calcium	38600			P
7440-47-3	Chromium	1.5	U		P
7440-48-4	Cobalt	25.2	B		P
7440-50-8	Copper	0.90	U		P
7439-89-6	Iron	59.1	B		P
7439-92-1	Lead	1.4	U		P
7439-95-4	Magnesium	17100			P
7439-96-5	Manganese	7700			P
7439-97-6	Mercury	1.6			CV
7440-02-0	Nickel	6.4	B		P
7440-09-7	Potassium	2410	B		P
7782-49-2	Selenium	3.0	U		P
7440-22-4	Silver	1.9	U		P
7440-23-5	Sodium	20800			P
7440-28-0	Thallium	3.7	U		P
7440-62-2	Vanadium	1.5	U		P
7440-66-6	Zinc	18.7	B		P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

FORM I - IN ILM02.1

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INORGANIC ANALYSES DATA SHEET

000007

EPA SAMPLE NO.

MCQA74

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQA71

Matrix (soil/water): WATER Lab Sample ID: MCQA74

Level (low/med): LOW__ Date Received: 04/15/94

% Solids: __0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	25.1	B		P_
7440-36-0	Antimony_	13.2	U		P_
7440-38-2	Arsenic__	2.2	U		P_
7440-39-3	Barium___	61.8	B		P_
7440-41-7	Beryllium	0.10	U		P_
7440-43-9	Cadmium__	2.6	U		P_
7440-70-2	Calcium__	10900	_		P_
7440-47-3	Chromium_	1.5	U		P_
7440-48-4	Cobalt___	1.6	U		P_
7440-50-8	Copper___	0.90	U		P_
7439-89-6	Iron_____	28.9	B		P_
7439-92-1	Lead_____	1.4	U		P_
7439-95-4	Magnesium	6940	_		P_
7439-96-5	Manganese	10	B		P_
7439-97-6	Mercury__	4.2	_		CV
7440-02-0	Nickel___	5.9	U		P_
7440-09-7	Potassium	1540	B		P_
7782-49-2	Selenium_	3.0	U		P_
7440-22-4	Silver___	1.9	U		P_
7440-23-5	Sodium___	7510	_		P_
7440-28-0	Thallium_	3.7	U		P_
7440-62-2	Vanadium_	1.5	U		P_
7440-66-6	Zinc_____	13.5	B		P_
	Cyanide__		_		NR
			_		

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MCQA75

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQA71

Matrix (soil/water): WATER Lab Sample ID: MCQA75

Level (low/med): LOW__ Date Received: 04/15/94

% Solids: __0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	31.5	B		P_
7440-36-0	Antimony_	13.2	U		P_
7440-38-2	Arsenic__	2.2	U		P_
7440-39-3	Barium___	39.5	B		P_
7440-41-7	Beryllium	0.10	U		P_
7440-43-9	Cadmium__	2.6	U		P_
7440-70-2	Calcium__	20100	_		P_
7440-47-3	Chromium_	1.5	U		P_
7440-48-4	Cobalt___	1.6	U		P_
7440-50-8	Copper___	0.90	U		P_
7439-89-6	Iron_____	79.0	B		P_
7439-92-1	Lead_____	1.4	U		P_
7439-95-4	Magnesium	7770	_		P_
7439-96-5	Manganese	415	_		P_
7439-97-6	Mercury__	3.8	_		CV
7440-02-0	Nickel___	5.9	U		P_
7440-09-7	Potassium	2020	B		P_
7782-49-2	Selenium_	3.0	U		P_
7440-22-4	Silver___	1.9	U		P_
7440-23-5	Sodium___	12000	_		P_
7440-28-0	Thallium_	3.7	U		P_
7440-62-2	Vanadium_	1.5	U		P_
7440-66-6	Zinc_____	12.4	B		P_
	Cyanide__		_		NR

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

FORM I - IN ILM02.1

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MCQA76

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQA71

Matrix (soil/water): WATER Lab Sample ID: MCQA76

Level (low/med): LOW__ Date Received: 04/15/94

% Solids: __0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	47.8	B		P_
7440-36-0	Antimony_	13.2	U		P_
7440-38-2	Arsenic__	2.2	U		P_
7440-39-3	Barium___	23.0	B		P_
7440-41-7	Beryllium	0.10	U		P_
7440-43-9	Cadmium__	2.6	U		P_
7440-70-2	Calcium__	22600	_		P_
7440-47-3	Chromium_	1.5	U		P_
7440-48-4	Cobalt___	1.6	U		P_
7440-50-8	Copper___	1.2	B		P_
7439-89-6	Iron____	99.8	B		P_
7439-92-1	Lead____	1.4	U		P_
7439-95-4	Magnesium	8880	_		P_
7439-96-5	Manganese	183	_		P_
7439-97-6	Mercury__	1.8	_		CV
7440-02-0	Nickel___	5.9	U		P_
7440-09-7	Potassium	3700	B		P_
7782-49-2	Selenium_	3.0	U		P_
7440-22-4	Silver___	1.9	U		P_
7440-23-5	Sodium___	24100	_		P_
7440-28-0	Thallium_	3.7	U		P_
7440-62-2	Vanadium_	1.5	U		P_
7440-66-6	Zinc____	13.7	B		P_
	Cyanide__		_		NR
			_		

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MCQA77

Lab Name: ITAS_PITTSBURGH Contract: 68-D2-0044

Lab Code: ITPA Case No.: 21843 SAS No.: SDG No.: MCQA71

Matrix (soil/water): WATER Lab Sample ID: MCQA77

Level (low/med): LOW Date Received: 04/15/94

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	34.2	B		P
7440-36-0	Antimony	13.2	U		P
7440-38-2	Arsenic	2.2	U		P
7440-39-3	Barium	0.60	U		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	2.6	U		P
7440-70-2	Calcium	63.2	B		P
7440-47-3	Chromium	1.5	U		P
7440-48-4	Cobalt	1.6	U		P
7440-50-8	Copper	0.90	U		P
7439-89-6	Iron	17.9	B		P
7439-92-1	Lead	1.4	U		P
7439-95-4	Magnesium	35.9	B		P
7439-96-5	Manganese	0.70	B		P
7439-97-6	Mercury	0.31			CV
7440-02-0	Nickel	5.9	U		P
7440-09-7	Potassium	244	U		P
7782-49-2	Selenium	3.0	U		P
7440-22-4	Silver	1.9	U		P
7440-23-5	Sodium	64.0	B		P
7440-28-0	Thallium	3.7	U		P
7440-62-2	Vanadium	1.5	U		P
7440-66-6	Zinc	11.7	B		P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MCQA78

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQA71

Matrix (soil/water): WATER Lab Sample ID: MCQA78

Level (low/med): LOW__ Date Received: 04/15/94

% Solids: __0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	37.6	B		P_
7440-36-0	Antimony_	13.2	U		P_
7440-38-2	Arsenic__	2.2	U		P_
7440-39-3	Barium___	14.6	B		P_
7440-41-7	Beryllium	0.10	U		P_
7440-43-9	Cadmium__	2.6	U		P_
7440-70-2	Calcium__	12500	_		P_
7440-47-3	Chromium_	1.5	U		P_
7440-48-4	Cobalt___	1.6	U		P_
7440-50-8	Copper___	0.90	U		P_
7439-89-6	Iron_____	135	_		P_
7439-92-1	Lead_____	1.4	U		P_
7439-95-4	Magnesium	4800	B		P_
7439-96-5	Manganese	42.0	_		P_
7439-97-6	Mercury__	0.20	U		CV
7440-02-0	Nickel___	5.9	U		P_
7440-09-7	Potassium	1220	B		P_
7782-49-2	Selenium_	3.0	U		P_
7440-22-4	Silver___	1.9	U		P_
7440-23-5	Sodium___	4660	B		P_
7440-28-0	Thallium_	4.7	B		P_
7440-62-2	Vanadium_	1.5	U		P_
7440-66-6	Zinc_____	11.3	B		P_
_____	Cyanide__		_		NR
			_		

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.: 000012

MCQA79

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQA71

Matrix (soil/water): WATER Lab Sample ID: MCQA79

Level (low/med): LOW__ Date Received: 04/15/94

% Solids: __0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	34.9	B		P_
7440-36-0	Antimony_	13.2	U		P_
7440-38-2	Arsenic__	2.2	U		P_
7440-39-3	Barium___	15.4	B		P_
7440-41-7	Beryllium	0.10	U		P_
7440-43-9	Cadmium__	2.6	U		P_
7440-70-2	Calcium__	10000	_		P_
7440-47-3	Chromium_	1.5	U		P_
7440-48-4	Cobalt___	1.9	B		P_
7440-50-8	Copper___	0.90	U		P_
7439-89-6	Iron_____	55.1	B		P_
7439-92-1	Lead_____	1.4	U		P_
7439-95-4	Magnesium	4940	B		P_
7439-96-5	Manganese	79.1	_		P_
7439-97-6	Mercury__	1.3	_		CV
7440-02-0	Nickel___	5.9	U		P_
7440-09-7	Potassium	991	B		P_
7782-49-2	Selenium_	3.0	U		P_
7440-22-4	Silver___	1.9	U		P_
7440-23-5	Sodium___	4810	B		P_
7440-28-0	Thallium_	3.7	U		P_
7440-62-2	Vanadium_	1.5	U		P_
7440-66-6	Zinc_____	15.7	B		P_
_____	Cyanide__		_		NR
			_		

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MCQA80

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQA71

Matrix (soil/water): WATER Lab Sample ID: MCQA80

Level (low/med): LOW__ Date Received: 04/15/94

% Solids: __0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	14.8	B		P
7440-36-0	Antimony	13.2	U		P
7440-38-2	Arsenic	2.2	U		P
7440-39-3	Barium	9.1	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	2.6	U		P
7440-70-2	Calcium	12900			P
7440-47-3	Chromium	1.5	U		P
7440-48-4	Cobalt	1.6	U		P
7440-50-8	Copper	0.90	U		P
7439-89-6	Iron	110			P
7439-92-1	Lead	1.4	U		P
7439-95-4	Magnesium	7390			P
7439-96-5	Manganese	8.8	B		P
7439-97-6	Mercury	0.82			CV
7440-02-0	Nickel	5.9	U		P
7440-09-7	Potassium	1810	B		P
7782-49-2	Selenium	3.0	U		P
7440-22-4	Silver	1.9	U		P
7440-23-5	Sodium	5780			P
7440-28-0	Thallium	3.7	U		P
7440-62-2	Vanadium	1.5	U		P
7440-66-6	Zinc	12.2	B		P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MCQA81

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQA71

Matrix (soil/water): WATER Lab Sample ID: MCQA81

Level (low/med): LOW__ Date Received: 04/15/94

% Solids: __0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	17.5	B		P_
7440-36-0	Antimony_	13.2	U		P_
7440-38-2	Arsenic__	2.2	U		P_
7440-39-3	Barium___	9.2	B		P_
7440-41-7	Beryllium	0.10	U		P_
7440-43-9	Cadmium__	2.6	U		P_
7440-70-2	Calcium__	13000	_		P_
7440-47-3	Chromium_	1.5	U		P_
7440-48-4	Cobalt___	1.6	U		P_
7440-50-8	Copper___	0.90	U		P_
7439-89-6	Iron_____	133	_		P_
7439-92-1	Lead_____	1.4	U		P_
7439-95-4	Magnesium	7410	_		P_
7439-96-5	Manganese	10.3	B		P_
7439-97-6	Mercury__	0.84	_		CV
7440-02-0	Nickel___	5.9	U		P_
7440-09-7	Potassium	2150	B		P_
7782-49-2	Selenium_	3.0	U		P_
7440-22-4	Silver___	1.9	U		P_
7440-23-5	Sodium___	5770	_		P_
7440-28-0	Thallium_	3.7	U		P_
7440-62-2	Vanadium_	1.5	U		P_
7440-66-6	Zinc_____	13.5	B		P_
	Cyanide__		_		NR

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

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INORGANIC ANALYSES DATA SHEET

000015

EPA SAMPLE NO.

MCQA82

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQA71

Matrix (soil/water): WATER Lab Sample ID: MCQA82

Level (low/med): LOW__ Date Received: 04/15/94

% Solids: __0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	106	B		P_
7440-36-0	Antimony_	13.2	U		P_
7440-38-2	Arsenic__	2.2	U		P_
7440-39-3	Barium___	13.1	B		P_
7440-41-7	Beryllium	0.10	U		P_
7440-43-9	Cadmium__	2.6	U		P_
7440-70-2	Calcium__	8300	_		P_
7440-47-3	Chromium_	1.5	U		P_
7440-48-4	Cobalt___	2.1	B		P_
7440-50-8	Copper___	1.7	B		P_
7439-89-6	Iron_____	248	_		P_
7439-92-1	Lead_____	1.4	U		P_
7439-95-4	Magnesium	3160	B		P_
7439-96-5	Manganese	119	_		P_
7439-97-6	Mercury__	1.1	_		CV
7440-02-0	Nickel___	5.9	U		P_
7440-09-7	Potassium	1280	B		P_
7782-49-2	Selenium_	3.0	U		P_
7440-22-4	Silver___	1.9	U		P_
7440-23-5	Sodium___	3720	B		P_
7440-28-0	Thallium_	3.7	U		P_
7440-62-2	Vanadium_	1.5	U		P_
7440-66-6	Zinc_____	12.7	B		P_
	Cyanide__		_		NR
			_		__

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

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INORGANIC ANALYSES DATA SHEET

000016

EPA SAMPLE NO.

MCQA83

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQA71

Matrix (soil/water): WATER Lab Sample ID: MCQA83

Level (low/med): LOW__ Date Received: 04/15/94

% Solids: __0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	49.7	B		P
7440-36-0	Antimony	13.2	U		P
7440-38-2	Arsenic	2.2	U		P
7440-39-3	Barium	38.0	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	2.6	U		P
7440-70-2	Calcium	6760			P
7440-47-3	Chromium	1.5	U		P
7440-48-4	Cobalt	1.6	U		P
7440-50-8	Copper	0.90	U		P
7439-89-6	Iron	79.5	B		P
7439-92-1	Lead	1.4	U		P
7439-95-4	Magnesium	4240	B		P
7439-96-5	Manganese	63.2			P
7439-97-6	Mercury	1.6			CV
7440-02-0	Nickel	5.9	U		P
7440-09-7	Potassium	1210	B		P
7782-49-2	Selenium	3.0	U		P
7440-22-4	Silver	1.9	U		P
7440-23-5	Sodium	3390	B		P
7440-28-0	Thallium	4.4	B		P
7440-62-2	Vanadium	1.5	U		P
7440-66-6	Zinc	14.7	B		P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MCQA84

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQA71

Matrix (soil/water): WATER Lab Sample ID: MCQA84

Level (low/med): LOW__ Date Received: 04/15/94

% Solids: __0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	80.4	B		P
7440-36-0	Antimony	13.2	U		P
7440-38-2	Arsenic	2.2	U		P
7440-39-3	Barium	22.2	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	2.6	U		P
7440-70-2	Calcium	16500			P
7440-47-3	Chromium	1.5	U		P
7440-48-4	Cobalt	1.6	U		P
7440-50-8	Copper	2.3	B		P
7439-89-6	Iron	152			P
7439-92-1	Lead	1.4	U		P
7439-95-4	Magnesium	6070			P
7439-96-5	Manganese	41.4			P
7439-97-6	Mercury	1.2			CV
7440-02-0	Nickel	5.9	U		P
7440-09-7	Potassium	4900	B		P
7782-49-2	Selenium	3.0	U		P
7440-22-4	Silver	1.9	U		P
7440-23-5	Sodium	5210			P
7440-28-0	Thallium	3.7	U		P
7440-62-2	Vanadium	1.5	U		P
7440-66-6	Zinc	15.8	B		P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

300018

MCQA85

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQA71

Matrix (soil/water): WATER Lab Sample ID: MCQA85

Level (low/med): LOW__ Date Received: 04/15/94

% Solids: __0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	189	B		P_
7440-36-0	Antimony_	13.2	U		P_
7440-38-2	Arsenic__	2.2	U		P_
7440-39-3	Barium___	23.4	B		P_
7440-41-7	Beryllium	0.10	U		P_
7440-43-9	Cadmium__	2.6	U		P_
7440-70-2	Calcium__	9910	_		P_
7440-47-3	Chromium_	1.5	U		P_
7440-48-4	Cobalt___	2.2	B		P_
7440-50-8	Copper___	2.1	B		P_
7439-89-6	Iron_____	450	_		P_
7439-92-1	Lead_____	1.4	U		P_
7439-95-4	Magnesium	3890	B		P_
7439-96-5	Manganese	94.0	_		P_
7439-97-6	Mercury__	3.2	_		CV
7440-02-0	Nickel___	5.9	U		P_
7440-09-7	Potassium	1910	B		P_
7782-49-2	Selenium_	3.0	U		P_
7440-22-4	Silver___	1.9	U		P_
7440-23-5	Sodium___	2690	B		P_
7440-28-0	Thallium_	3.7	U		P_
7440-62-2	Vanadium_	1.5	U		P_
7440-66-6	Zinc_____	17.5	B		P_
_____	Cyanide__		_		NR

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MCQA86

Lab Name: ITAS_PITTSBURGH Contract: 68-D2-0044

Lab Code: ITPA Case No.: 21843 SAS No.: SDG No.: MCQA71

Matrix (soil/water): WATER Lab Sample ID: MCQA86

Level (low/med): LOW Date Received: 04/15/94

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	75.6	B		P
7440-36-0	Antimony	13.2	U		P
7440-38-2	Arsenic	2.2	U		P
7440-39-3	Barium	46.3	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	2.6	U		P
7440-70-2	Calcium	7990			P
7440-47-3	Chromium	1.5	U		P
7440-48-4	Cobalt	1.6	U		P
7440-50-8	Copper	0.90	U		P
7439-89-6	Iron	144			P
7439-92-1	Lead	1.4	U		P
7439-95-4	Magnesium	4220	B		P
7439-96-5	Manganese	88.5			P
7439-97-6	Mercury	1.6			CV
7440-02-0	Nickel	5.9	U		P
7440-09-7	Potassium	1940	B		P
7782-49-2	Selenium	3.0	U		P
7440-22-4	Silver	1.9	U		P
7440-23-5	Sodium	3470	B		P
7440-28-0	Thallium	3.7	U		P
7440-62-2	Vanadium	1.5	U		P
7440-66-6	Zinc	17.3	B		P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MCQA87

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQA71

Matrix (soil/water): WATER Lab Sample ID: MCQA87

Level (low/med): LOW__ Date Received: 04/15/94

% Solids: __0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	127	B		P_
7440-36-0	Antimony_	13.2	U		P_
7440-38-2	Arsenic__	2.2	U		P_
7440-39-3	Barium___	31.4	B		P_
7440-41-7	Beryllium	0.10	U		P_
7440-43-9	Cadmium__	2.6	U		P_
7440-70-2	Calcium__	18000	_		P_
7440-47-3	Chromium_	1.5	U		P_
7440-48-4	Cobalt___	1.6	U		P_
7440-50-8	Copper___	2.8	B		P_
7439-89-6	Iron_____	503	_		P_
7439-92-1	Lead_____	1.4	U		P_
7439-95-4	Magnesium	5810	_		P_
7439-96-5	Manganese	427	_		P_
7439-97-6	Mercury__	5.6	_		CV
7440-02-0	Nickel___	5.9	J		P_
7440-09-7	Potassium	11700	_		P_
7782-49-2	Selenium_	3.0	U		P_
7440-22-4	Silver___	1.9	U		P_
7440-23-5	Sodium___	5560	_		P_
7440-28-0	Thallium_	3.7	U		P_
7440-62-2	Vanadium_	1.5	U		P_
7440-66-6	Zinc_____	18.8	B		P_
_____	Cyanide__		_		NR

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MCQY55

Lab Name: ITAS_PITTSBURGH Contract: 68-D2-0044

Lab Code: ITPA Case No.: 21843 SAS No.: SDG No.: MCQA71

Matrix (soil/water): WATER Lab Sample ID: MCQY55

Level (low/med): LOW Date Received: 04/20/94

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	22.8	B		P
7440-36-0	Antimony	13.2	U		P
7440-38-2	Arsenic	2.2	U		P
7440-39-3	Barium	39.1	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	2.6	U		P
7440-70-2	Calcium	5240			P
7440-47-3	Chromium	1.5	U		P
7440-48-4	Cobalt	1.6	U		P
7440-50-8	Copper	0.90	U		P
7439-89-6	Iron	14.0	B		P
7439-92-1	Lead	1.4	U		P
7439-95-4	Magnesium	4370	B		P
7439-96-5	Manganese	7.0	B		P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	5.9	U		P
7440-09-7	Potassium	1110	B		P
7782-49-2	Selenium	3.0	U		P
7440-22-4	Silver	1.9	U		P
7440-23-5	Sodium	2660	B		P
7440-28-0	Thallium	3.7	U		P
7440-62-2	Vanadium	1.5	U		P
7440-66-6	Zinc	21.1			P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MCQY56

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQA71

Matrix (soil/water): WATER Lab Sample ID: MCQY56

Level (low/med): LOW__ Date Received: 04/20/94

% Solids: __0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	41.4	B		P
7440-36-0	Antimony	13.2	U		P
7440-38-2	Arsenic	2.2	U		P
7440-39-3	Barium	18.6	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	2.6	U		P
7440-70-2	Calcium	19400			P
7440-47-3	Chromium	1.5	U		P
7440-48-4	Cobalt	1.6	U		P
7440-50-8	Copper	2.1	B		P
7439-89-6	Iron	85.8	B		P
7439-92-1	Lead	1.4	U		P
7439-95-4	Magnesium	6860			P
7439-96-5	Manganese	17.2			P
7439-97-6	Mercury	0.48			CV
7440-02-0	Nickel	5.9	U		P
7440-09-7	Potassium	2900	B		P
7782-49-2	Selenium	3.0	U		P
7440-22-4	Silver	1.9	U		P
7440-23-5	Sodium	4890	B		P
7440-28-0	Thallium	3.7	U		P
7440-62-2	Vanadium	1.5	U		P
7440-66-6	Zinc	23.1			P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MCQY57

Lab Name: ITAS_PITTSBURGH Contract: 68-D2-0044

Lab Code: ITPA Case No.: 21843 SAS No.: SDG No.: MCQA71

Matrix (soil/water): WATER Lab Sample ID: MCQY57

Level (low/med): LOW Date Received: 04/20/94

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	119	B		P
7440-36-0	Antimony	13.2	U		P
7440-38-2	Arsenic	2.2	U		P
7440-39-3	Barium	30.9	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	2.6	U		P
7440-70-2	Calcium	6380			P
7440-47-3	Chromium	1.5	U		P
7440-48-4	Cobalt	1.6	U		P
7440-50-8	Copper	1.3	B		P
7439-89-6	Iron	146			P
7439-92-1	Lead	1.4	U		P
7439-95-4	Magnesium	3630	B		P
7439-96-5	Manganese	22.3			P
7439-97-6	Mercury	1.4			CV
7440-02-0	Nickel	5.9	U		P
7440-09-7	Potassium	959	B		P
7782-49-2	Selenium	3.0	U		P
7440-22-4	Silver	1.9	U		P
7440-23-5	Sodium	3700	B		P
7440-28-0	Thallium	3.7	U		P
7440-62-2	Vanadium	1.5	U		P
7440-66-6	Zinc	21.1			P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

APPENDIX A

RESULTS REPORTED BY LABORATORY

FORM Is

SDG MCQA88

U.S. EPA - CLP

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INORGANIC ANALYSES DATA SHEET

J0U003

EPA SAMPLE NO.

MCQA88

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQA88

Matrix (soil/water): WATER Lab Sample ID: MCQA88

Level (low/med): LOW__ Date Received: 04/20/94

% Solids: __0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	149	B		P_
7440-36-0	Antimony_	13.2	U		P_
7440-38-2	Arsenic__	2.2	U		P_
7440-39-3	Barium___	25.2	B		P_
7440-41-7	Beryllium	0.10	U		P_
7440-43-9	Cadmium__	2.6	U		P_
7440-70-2	Calcium__	7630	_		P_
7440-47-3	Chromium_	1.5	U		P_
7440-48-4	Cobalt___	1.6	U		P_
7440-50-8	Copper___	6.7	B		P_
7439-89-6	Iron_____	256	_	E	P_
7439-92-1	Lead_____	1.4	U		P_
7439-95-4	Magnesium	3410	B		P_
7439-96-5	Manganese	5.3	B		P_
7439-97-6	Mercury__	0.28	_		CV
7440-02-0	Nickel___	5.9	U		P_
7440-09-7	Potassium	1360	B		P_
7782-49-2	Selenium_	3.0	U		P_
7440-22-4	Silver___	1.9	U		P_
7440-23-5	Sodium___	3470	B		P_
7440-28-0	Thallium_	3.7	U		P_
7440-62-2	Vanadium_	1.5	U		P_
7440-66-6	Zinc_____	41.1	_		P_
	Cyanide__		_		NR

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

FORM I - IN ILM02.1

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MCQA89

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQA88

Matrix (soil/water): WATER Lab Sample ID: MCQA89

Level (low/med): LOW__ Date Received: 04/20/94

% Solids: __0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	24.8	B		P_
7440-36-0	Antimony_	13.2	U		P_
7440-38-2	Arsenic__	2.2	U		P_
7440-39-3	Barium___	12.7	B		P_
7440-41-7	Beryllium	0.10	U		P_
7440-43-9	Cadmium__	2.6	U		P_
7440-70-2	Calcium__	10900	_		P_
7440-47-3	Chromium_	1.5	U		P_
7440-48-4	Cobalt___	1.6	U		P_
7440-50-8	Copper___	2.9	B		P_
7439-89-6	Iron_____	114	_	E	P_
7439-92-1	Lead_____	1.4	U		P_
7439-95-4	Magnesium	3040	B		P_
7439-96-5	Manganese	24.1	_		P_
7439-97-6	Mercury__	0.78	_		CV
7440-02-0	Nickel___	5.9	U		P_
7440-09-7	Potassium	627	B		P_
7782-49-2	Selenium_	3.0	U		P_
7440-22-4	Silver___	1.9	U		P_
7440-23-5	Sodium___	3110	B		P_
7440-28-0	Thallium_	3.7	U		P_
7440-62-2	Vanadium_	1.5	U		P_
7440-66-6	Zinc_____	16.8	B		P_
_____	Cyanide__		_		NR

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MCQA90

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQA88

Matrix (soil/water): WATER Lab Sample ID: MCQA90

Level (low/med): LOW__ Date Received: 04/20/94

% Solids: __0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	120	B		P
7440-36-0	Antimony	14.5	B		P
7440-38-2	Arsenic	2.2	U		P
7440-39-3	Barium	26.1	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	2.6	U		P
7440-70-2	Calcium	16100			P
7440-47-3	Chromium	1.5	U		P
7440-48-4	Cobalt	1.6	U		P
7440-50-8	Copper	4.0	B		P
7439-89-6	Iron	199		E	P
7439-92-1	Lead	1.4	U		P
7439-95-4	Magnesium	5650			P
7439-96-5	Manganese	4.3	B		P
7439-97-6	Mercury	2.4			CV
7440-02-0	Nickel	5.9	U		P
7440-09-7	Potassium	3940	B		P
7782-49-2	Selenium	3.0	U		P
7440-22-4	Silver	1.9	U		P
7440-23-5	Sodium	6680			P
7440-28-0	Thallium	3.7	U		P
7440-62-2	Vanadium	1.5	U		P
7440-66-6	Zinc	29.0			P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MCQA91

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQA88

Matrix (soil/water): WATER Lab Sample ID: MCQA91

Level (low/med): LOW__ Date Received: 04/20/94

% Solids: __0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	36.6	B		P
7440-36-0	Antimony	13.2	U		P
7440-38-2	Arsenic	2.2	U		P
7440-39-3	Barium	17.2	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	2.6	U		P
7440-70-2	Calcium	13000			P
7440-47-3	Chromium	1.5	U		P
7440-48-4	Cobalt	1.6	U		P
7440-50-8	Copper	2.9	B		P
7439-89-6	Iron	107		E	P
7439-92-1	Lead	1.4	U		P
7439-95-4	Magnesium	5080			P
7439-96-5	Manganese	24.3			P
7439-97-6	Mercury	0.39			CV
7440-02-0	Nickel	5.9	U		P
7440-09-7	Potassium	1690	B		P
7782-49-2	Selenium	3.0	U		P
7440-22-4	Silver	1.9	U		P
7440-23-5	Sodium	4760	B		P
7440-28-0	Thallium	3.7	U		P
7440-62-2	Vanadium	1.5	U		P
7440-66-6	Zinc	20.9			P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

U.S. EPA - CLP

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MCQA92

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQA88

Matrix (soil/water): WATER Lab Sample ID: MCQA92

Level (low/med): LOW__ Date Received: 04/20/94

% Solids: __0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	10.9	U		P_
7440-36-0	Antimony_	13.2	U		P_
7440-38-2	Arsenic__	2.2	U		P_
7440-39-3	Barium___	0.60	U		P_
7440-41-7	Beryllium	0.10	U		P_
7440-43-9	Cadmium__	2.6	U		P_
7440-70-2	Calcium__	118	B		P_
7440-47-3	Chromium_	1.5	U		P_
7440-48-4	Cobalt___	1.6	U		P_
7440-50-8	Copper___	4.8	B		P_
7439-89-6	Iron_____	13.5	B	E	P_
7439-92-1	Lead_____	2.7	B		P_
7439-95-4	Magnesium	28.1	B		P_
7439-96-5	Manganese	0.50	U		P_
7439-97-6	Mercury__	0.25	_		CV
7440-02-0	Nickel___	5.9	U		P_
7440-09-7	Potassium	244	U		P_
7782-49-2	Selenium_	3.0	U		P_
7440-22-4	Silver___	1.9	U		P_
7440-23-5	Sodium___	100	B		P_
7440-28-0	Thallium_	3.7	U		P_
7440-62-2	Vanadium_	1.5	U		P_
7440-66-6	Zinc_____	14.7	B		P_
	Cyanide__		_		NR

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MCQA93

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQA88

Matrix (soil/water): WATER Lab Sample ID: MCQA93

Level (low/med): LOW__ Date Received: 04/20/94

% Solids: __0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	10.9	U		P_
7440-36-0	Antimony_	13.2	U		P_
7440-38-2	Arsenic__	2.2	U		P_
7440-39-3	Barium___	30.1	B		P_
7440-41-7	Beryllium	0.10	U		P_
7440-43-9	Cadmium__	2.6	U		P_
7440-70-2	Calcium__	8480	_		P_
7440-47-3	Chromium_	1.5	U		P_
7440-48-4	Cobalt___	1.6	U		P_
7440-50-8	Copper___	3.6	B		P_
7439-89-6	Iron_____	73.1	B	E	P_
7439-92-1	Lead_____	1.4	U		P_
7439-95-4	Magnesium	3770	B		P_
7439-96-5	Manganese	7.6	B		P_
7439-97-6	Mercury__	1.0	_		CV
7440-02-0	Nickel___	5.9	U		P_
7440-09-7	Potassium	3480	B		P_
7782-49-2	Selenium_	3.0	U		P_
7440-22-4	Silver___	1.9	U		P_
7440-23-5	Sodium___	4300	B		P_
7440-28-0	Thallium_	3.7	U		P_
7440-62-2	Vanadium_	1.5	U		P_
7440-66-6	Zinc_____	16.5	B		P_
	Cyanide__		_		NR

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MCQA94

Lab Name: ITAS_PITTSBURGH Contract: 68-D2-0044

Lab Code: ITPA Case No.: 21843 SAS No.: SDG No.: MCQA88

Matrix (soil/water): WATER Lab Sample ID: MCQA94

Level (low/med): LOW Date Received: 04/20/94

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	17.5	B		P
7440-36-0	Antimony	13.2	U		P
7440-38-2	Arsenic	2.2	U		P
7440-39-3	Barium	31.5	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	2.6	U		P
7440-70-2	Calcium	8620			P
7440-47-3	Chromium	1.5	U		P
7440-48-4	Cobalt	1.6	U		P
7440-50-8	Copper	1.9	B		P
7439-89-6	Iron	102		E	P
7439-92-1	Lead	1.4	U		P
7439-95-4	Magnesium	3850	B		P
7439-96-5	Manganese	33.8			P
7439-97-6	Mercury	0.47			CV
7440-02-0	Nickel	5.9	U		P
7440-09-7	Potassium	3670	B		P
7782-49-2	Selenium	3.0	U		P
7440-22-4	Silver	1.9	U		P
7440-23-5	Sodium	4490	B		P
7440-28-0	Thallium	3.7	U		P
7440-62-2	Vanadium	1.5	U		P
7440-66-6	Zinc	13.1	B		P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

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INORGANIC ANALYSES DATA SHEET

J00010

EPA SAMPLE NO.

MCQA95

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQA88

Matrix (soil/water): WATER Lab Sample ID: MCQA95

Level (low/med): LOW__ Date Received: 04/20/94

% Solids: __0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	21.4	B		P_
7440-36-0	Antimony_	13.2	U		P_
7440-38-2	Arsenic__	2.2	U		P_
7440-39-3	Barium___	96.9	B		P_
7440-41-7	Beryllium	0.10	U		P_
7440-43-9	Cadmium__	2.6	U		P_
7440-70-2	Calcium__	6730	_		P_
7440-47-3	Chromium_	1.5	U		P_
7440-48-4	Cobalt___	1.6	U		P_
7440-50-8	Copper___	3.6	B		P_
7439-89-6	Iron_____	22.2	B	E	P_
7439-92-1	Lead_____	1.4	U		P_
7439-95-4	Magnesium	5980	_		P_
7439-96-5	Manganese	46.7	_		P_
7439-97-6	Mercury__	0.23	_		CV
7440-02-0	Nickel___	5.9	U		P_
7440-09-7	Potassium	906	B		P_
7782-49-2	Selenium_	3.0	U		P_
7440-22-4	Silver___	1.9	U		P_
7440-23-5	Sodium___	4300	B		P_
7440-28-0	Thallium_	3.7	U		P_
7440-62-2	Vanadium_	1.5	U		P_
7440-66-6	Zinc_____	23.5	_		P_
	Cyanide__		_		NR
			_		

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MCQA96

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQA88

Matrix (soil/water): WATER Lab Sample ID: MCQA96

Level (low/med): LOW__ Date Received: 04/20/94

% Solids: __0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	27.9	B		P_
7440-36-0	Antimony_	13.2	U		P_
7440-38-2	Arsenic__	2.2	U		P_
7440-39-3	Barium___	24.4	B		P_
7440-41-7	Beryllium	0.10	U		P_
7440-43-9	Cadmium__	2.6	U		P_
7440-70-2	Calcium__	10300	_		P_
7440-47-3	Chromium_	1.5	U		P_
7440-48-4	Cobalt___	1.6	U		P_
7440-50-8	Copper___	1.0	B		P_
7439-89-6	Iron_____	68.2	B	E	P_
7439-92-1	Lead_____	1.4	U		P_
7439-95-4	Magnesium	4090	B		P_
7439-96-5	Manganese	24.6	_		P_
7439-97-6	Mercury__	0.41	_		CV
7440-02-0	Nickel___	5.9	U		P_
7440-09-7	Potassium	860	B		P_
7782-49-2	Selenium_	3.0	U		P_
7440-22-4	Silver___	1.9	U		P_
7440-23-5	Sodium___	10900	_		P_
7440-28-0	Thallium_	3.7	U		P_
7440-62-2	Vanadium_	1.5	U		P_
7440-66-6	Zinc_____	14.9	B		P_
_____	Cyanide__		_		NR

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MCQA97

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQA88

Matrix (soil/water): WATER Lab Sample ID: MCQA97

Level (low/med): LOW__ Date Received: 04/20/94

% Solids: __0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	261			P
7440-36-0	Antimony	13.2	U		P
7440-38-2	Arsenic	2.2	U		P
7440-39-3	Barium	49.0	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	2.6	U		P
7440-70-2	Calcium	9200			P
7440-47-3	Chromium	1.5	U		P
7440-48-4	Cobalt	1.6	U		P
7440-50-8	Copper	2.8	B		P
7439-89-6	Iron	369		E	P
7439-92-1	Lead	1.4	U		P
7439-95-4	Magnesium	3110	B		P
7439-96-5	Manganese	21.8			P
7439-97-6	Mercury	0.75			CV
7440-02-0	Nickel	5.9	U		P
7440-09-7	Potassium	3280	B		P
7782-49-2	Selenium	3.0	U		P
7440-22-4	Silver	1.9	U		P
7440-23-5	Sodium	2890	B		P
7440-28-0	Thallium	3.7	U		P
7440-62-2	Vanadium	1.5	U		P
7440-66-6	Zinc	18.9	B		P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

FORM I - IN ILM02.1

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MCQA98

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQA88

Matrix (soil/water): WATER Lab Sample ID: MCQA98

Level (low/med): LOW__ Date Received: 04/20/94

% Solids: __0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	88.2	B		P_
7440-36-0	Antimony_	16.8	B		P_
7440-38-2	Arsenic__	2.2	U		P_
7440-39-3	Barium___	40.0	B		P_
7440-41-7	Beryllium	0.10	U		P_
7440-43-9	Cadmium__	2.6	U		P_
7440-70-2	Calcium__	6630	_		P_
7440-47-3	Chromium_	1.5	U		P_
7440-48-4	Cobalt___	1.6	U		P_
7440-50-8	Copper___	1.3	B		P_
7439-89-6	Iron_____	126	_	E	P_
7439-92-1	Lead_____	1.4	U		P_
7439-95-4	Magnesium	3940	B		P_
7439-96-5	Manganese	27.6	_		P_
7439-97-6	Mercury__	0.56	_		CV
7440-02-0	Nickel___	5.9	U		P_
7440-09-7	Potassium	1020	B		P_
7782-49-2	Selenium_	3.0	U		P_
7440-22-4	Silver___	1.9	U		P_
7440-23-5	Sodium___	3260	B		P_
7440-28-0	Thallium_	3.7	U		P_
7440-62-2	Vanadium_	1.5	U		P_
7440-66-6	Zinc_____	19.8	B		P_
_____	Cyanide__		_		NR

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

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INORGANIC ANALYSES DATA SHEET

000014
EPA SAMPLE NO.

MCQA99

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQA88

Matrix (soil/water): WATER Lab Sample ID: MCQA99

Level (low/med): LOW__ Date Received: 04/20/94

% Solids: __0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	23.3	B		P_
7440-36-0	Antimony_	13.2	U		P_
7440-38-2	Arsenic__	2.2	U		P_
7440-39-3	Barium___	20.5	B		P_
7440-41-7	Beryllium	0.10	U		P_
7440-43-9	Cadmium__	2.6	U		P_
7440-70-2	Calcium__	12000	_		P_
7440-47-3	Chromium_	1.5	U		P_
7440-48-4	Cobalt___	1.6	U		P_
7440-50-8	Copper___	2.7	B		P_
7439-89-6	Iron____	92.8	B	E	P_
7439-92-1	Lead____	1.4	U		P_
7439-95-4	Magnesium	5670	_		P_
7439-96-5	Manganese	50.6	_		P_
7439-97-6	Mercury__	0.62	_		CV
7440-02-0	Nickel___	5.9	U		P_
7440-09-7	Potassium	5030	_		P_
7782-49-2	Selenium_	3.0	U		P_
7440-22-4	Silver___	1.9	U		P_
7440-23-5	Sodium___	5380	_		P_
7440-28-0	Thallium_	3.7	U		P_
7440-62-2	Vanadium_	1.8	B		P_
7440-66-6	Zinc____	15.3	B		P_
	Cyanide__		_		NR

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

FORM I - IN ILM02.1

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APPENDIX A

RESULTS REPORTED BY LABORATORY

FORM Is

SDG MCQX79

EPA 202997A

U.S. EPA - CLP

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MCQX79

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQX79

Matrix (soil/water): SOIL_ Lab Sample ID: MCQX79

Level (low/med): LOW__ Date Received: 04/20/94

% Solids: _49.5

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	11100		*	P
7440-36-0	Antimony	8.0	B	N	P
7440-38-2	Arsenic	1.8	B		P
7440-39-3	Barium	120			P
7440-41-7	Beryllium	0.61	B		P
7440-43-9	Cadmium	1.0	U		P
7440-70-2	Calcium	858	B		P
7440-47-3	Chromium	11.7			P
7440-48-4	Cobalt	13.7	B		P
7440-50-8	Copper	12.1			P
7439-89-6	Iron	17300			P
7439-92-1	Lead	15.7			P
7439-95-4	Magnesium	1200	B		P
7439-96-5	Manganese	185			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	13.3	B		P
7440-09-7	Potassium	579	B		P
7782-49-2	Selenium	1.4	B		P
7440-22-4	Silver	0.75	B		P
7440-23-5	Sodium	101	B		P
7440-28-0	Thallium	1.4	U		P
7440-62-2	Vanadium	14.5	B		P
7440-66-6	Zinc	55.8		E	P
	Cyanide	5.1	U		AS

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM

Color After: BROWN____ Clarity After: _____ Artifacts: YES___

Comments:
ARTIFACTS:__ROOTS,_WEEDS,_AND_WATER

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1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MCQX80

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQX79

Matrix (soil/water): SOIL_ Lab Sample ID: MCQX80

Level (low/med): LOW__ Date Received: 04/20/94

% Solids: _47.6

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	13900		*	P
7440-36-0	Antimony	8.5	B	N	P
7440-38-2	Arsenic	4.7			P
7440-39-3	Barium	128			P
7440-41-7	Beryllium	0.62	B		P
7440-43-9	Cadmium	1.0	U		P
7440-70-2	Calcium	3260			P
7440-47-3	Chromium	14.6			P
7440-48-4	Cobalt	21.6			P
7440-50-8	Copper	12.6			P
7439-89-6	Iron	23100			P
7439-92-1	Lead	23.9			P
7439-95-4	Magnesium	1930	B		P
7439-96-5	Manganese	1080			P
7439-97-6	Mercury	0.21	U		CV
7440-02-0	Nickel	16.8			P
7440-09-7	Potassium	767	B		P
7782-49-2	Selenium	1.5	B		P
7440-22-4	Silver	1.1	B		P
7440-23-5	Sodium	107	B		P
7440-28-0	Thallium	1.5	U		P
7440-62-2	Vanadium	20.5			P
7440-66-6	Zinc	74.9		E	P
	Cyanide	5.3	U		AS

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM

Color After: BROWN____ Clarity After: _____ Artifacts: YES___

Comments:
ARTIFACTS:__ROOTS,_WEEDS,_LEAVES,_AND_WATER

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MCQX81

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQX79

Matrix (soil/water): SOIL_ Lab Sample ID: MCQX81

Level (low/med): LOW__ Date Received: 04/20/94

% Solids: _25.4

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	13800		*	P
7440-36-0	Antimony	9.9	U	N	P
7440-38-2	Arsenic	5.8	B		P
7440-39-3	Barium	136	B		P
7440-41-7	Beryllium	0.70	B		P
7440-43-9	Cadmium	1.9	U		P
7440-70-2	Calcium	6340			P
7440-47-3	Chromium	20.4			P
7440-48-4	Cobalt	31.5	B		P
7440-50-8	Copper	30.7			P
7439-89-6	Iron	35100			P
7439-92-1	Lead	28.2			P
7439-95-4	Magnesium	3470	B		P
7439-96-5	Manganese	1980			P
7439-97-6	Mercury	0.39	U		CV
7440-02-0	Nickel	31.8			P
7440-09-7	Potassium	809	B		P
7782-49-2	Selenium	2.2	U		P
7440-22-4	Silver	1.4	U		P
7440-23-5	Sodium	218	B		P
7440-28-0	Thallium	2.8	U		P
7440-62-2	Vanadium	20.0	B		P
7440-66-6	Zinc	137		E	P
	Cyanide	9.8	U		AS

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM

Color After: BROWN____ Clarity After: _____ Artifacts: YES___

Comments:

ARTIFACTS: __ROOTS, _WEEDS, _AND_WATER

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MCQX82

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQX79

Matrix (soil/water): SOIL_ Lab Sample ID: MCQX82

Level (low/med): LOW__ Date Received: 04/20/94

% Solids: _45.9

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	13000		*	P
7440-36-0	Antimony	7.1	B	N	P
7440-38-2	Arsenic	5.8			P
7440-39-3	Barium	77.2	B		P
7440-41-7	Beryllium	0.47	B		P
7440-43-9	Cadmium	1.1	U		P
7440-70-2	Calcium	7590			P
7440-47-3	Chromium	16.4			P
7440-48-4	Cobalt	20.0	B		P
7440-50-8	Copper	18.7			P
7439-89-6	Iron	31500			P
7439-92-1	Lead	17.8			P
7439-95-4	Magnesium	4190			P
7439-96-5	Manganese	759			P
7439-97-6	Mercury	0.22	U		CV
7440-02-0	Nickel	17.5			P
7440-09-7	Potassium	390	B		P
7782-49-2	Selenium	1.3	U		P
7440-22-4	Silver	0.85	B		P
7440-23-5	Sodium	83.8	B		P
7440-28-0	Thallium	1.6	U		P
7440-62-2	Vanadium	16.1	B		P
7440-66-6	Zinc	95.5		E	P
	Cyanide	5.4	U		AS

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM

Color After: BROWN____ Clarity After: _____ Artifacts: YES___

Comments:
ARTIFACTS:__ROOTS,_WEEDS,_WORMS,_AND_WATER

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MCQX83

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQX79

Matrix (soil/water): SOIL_ Lab Sample ID: MCQX83

Level (low/med): LOW__ Date Received: 04/20/94

% Solids: _42.2

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	11700		*	P
7440-36-0	Antimony	6.0	U	N	P
7440-38-2	Arsenic	1.9	B		P
7440-39-3	Barium	84.2	B		P
7440-41-7	Beryllium	0.65	B		P
7440-43-9	Cadmium	1.2	U		P
7440-70-2	Calcium	1100	B		P
7440-47-3	Chromium	13.6			P
7440-48-4	Cobalt	18.4	B		P
7440-50-8	Copper	14.3			P
7439-89-6	Iron	21400			P
7439-92-1	Lead	20.8			P
7439-95-4	Magnesium	1870	B		P
7439-96-5	Manganese	433			P
7439-97-6	Mercury	0.24	U		CV
7440-02-0	Nickel	16.0	B		P
7440-09-7	Potassium	677	B		P
7782-49-2	Selenium	1.4	U		P
7440-22-4	Silver	0.88	B		P
7440-23-5	Sodium	101	B		P
7440-28-0	Thallium	1.7	U		P
7440-62-2	Vanadium	15.5	B		P
7440-66-6	Zinc	88.4		E	P
	Cyanide	5.9	U		AS

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM

Color After: BROWN____ Clarity After: _____ Artifacts: YES___

Comments:

ARTIFACTS: __ROOTS, _WEEDS, _AND_WATER

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MCQX84

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQX79

Matrix (soil/water): SOIL_ Lab Sample ID: MCQX84

Level (low/med): LOW__ Date Received: 04/20/94

% Solids: _29.9

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	12800		*	P
7440-36-0	Antimony	8.5	U	N	P
7440-38-2	Arsenic	3.9	B		P
7440-39-3	Barium	174			P
7440-41-7	Beryllium	0.57	B		P
7440-43-9	Cadmium	1.7	U		P
7440-70-2	Calcium	2610	B		P
7440-47-3	Chromium	11.9			P
7440-48-4	Cobalt	30.9	B		P
7440-50-8	Copper	13.6	B		P
7439-89-6	Iron	24200			P
7439-92-1	Lead	13.4			P
7439-95-4	Magnesium	1700	B		P
7439-96-5	Manganese	2070			P
7439-97-6	Mercury	0.33	U		CV
7440-02-0	Nickel	11.5	B		P
7440-09-7	Potassium	969	B		P
7782-49-2	Selenium	1.9	U		P
7440-22-4	Silver	1.9	B		P
7440-23-5	Sodium	103	B		P
7440-28-0	Thallium	2.4	U		P
7440-62-2	Vanadium	18.2	B		P
7440-66-6	Zinc	60.2		E	P
	Cyanide	8.4	U		AS

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM

Color After: BROWN____ Clarity After: _____ Artifacts: YES___

Comments:

ARTIFACTS: ROOTS, WEEDS, LEAVES, AND WATER

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MCQX85

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQX79

Matrix (soil/water): SOIL_ Lab Sample ID: MCQX85

Level (low/med): LOW__ Date Received: 04/20/94

% Solids: _36.5

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	13400		*	P
7440-36-0	Antimony_	7.0	U	N	P
7440-38-2	Arsenic__	3.6	B		P
7440-39-3	Barium___	100	B		P
7440-41-7	Beryllium	0.42	B		P
7440-43-9	Cadmium__	1.4	U		P
7440-70-2	Calcium__	2860			P
7440-47-3	Chromium_	16.5			P
7440-48-4	Cobalt___	19.4	B		P
7440-50-8	Copper___	21.1			P
7439-89-6	Iron_____	31200			P
7439-92-1	Lead_____	19.4			P
7439-95-4	Magnesium	3320			P
7439-96-5	Manganese	913			P
7439-97-6	Mercury__	0.27	U		CV
7440-02-0	Nickel___	20.0	B		P
7440-09-7	Potassium	490	B		P
7782-49-2	Selenium_	1.6	U		P
7440-22-4	Silver___	1.0	U		P
7440-23-5	Sodium___	129	B		P
7440-28-0	Thallium_	1.9	U		P
7440-62-2	Vanadium_	15.6	B		P
7440-66-6	Zinc_____	110		E	P
	Cyanide__	6.8	U		AS

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM

Color After: BROWN____ Clarity After: _____ Artifacts: YES___

Comments:

ARTIFACTS:__ROOTS,_WEEDS,_AND_WATER

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MCQX86

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQX79

Matrix (soil/water): SOIL_ Lab Sample ID: MCQX86

Level (low/med): LOW__ Date Received: 04/20/94

% Solids: _29.6

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	8750		*	P
7440-36-0	Antimony	8.8	U	N	P
7440-38-2	Arsenic	4.3	B		P
7440-39-3	Barium	104	B		P
7440-41-7	Beryllium	0.56	B		P
7440-43-9	Cadmium	1.7	U		P
7440-70-2	Calcium	1400	B		P
7440-47-3	Chromium	14.8			P
7440-48-4	Cobalt	21.6	B		P
7440-50-8	Copper	14.7	B		P
7439-89-6	Iron	21600			P
7439-92-1	Lead	25.1			P
7439-95-4	Magnesium	1330	B		P
7439-96-5	Manganese	297			P
7439-97-6	Mercury	0.34	U		CV
7440-02-0	Nickel	16.1	B		P
7440-09-7	Potassium	264	B		P
7782-49-2	Selenium	2.0	U		P
7440-22-4	Silver	1.3	U		P
7440-23-5	Sodium	116	B		P
7440-28-0	Thallium	2.5	U		P
7440-62-2	Vanadium	12.3	B		P
7440-66-6	Zinc	71.8		E	P
	Cyanide	8.4	U		AS

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM

Color After: BROWN____ Clarity After: _____ Artifacts: YES___

Comments:
ARTIFACTS: ROOTS, WEEDS, LEAVES, AND WATER

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MCQY53

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQX79

Matrix (soil/water): SOIL_ Lab Sample ID: MCQY53

Level (low/med): LOW__ Date Received: 04/20/94

% Solids: _28.1

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	10900		*	P
7440-36-0	Antimony	9.2	U	N	P
7440-38-2	Arsenic	3.2	B		P
7440-39-3	Barium	174			P
7440-41-7	Beryllium	0.57	B		P
7440-43-9	Cadmium	1.8	U		P
7440-70-2	Calcium	1400	B		P
7440-47-3	Chromium	12.7			P
7440-48-4	Cobalt	19.5	B		P
7440-50-8	Copper	15.5	B		P
7439-89-6	Iron	25400			P
7439-92-1	Lead	20.9			P
7439-95-4	Magnesium	1440	B		P
7439-96-5	Manganese	760			P
7439-97-6	Mercury	0.36	U		CV
7440-02-0	Nickel	15.5	B		P
7440-09-7	Potassium	783	B		P
7782-49-2	Selenium	2.1	U		P
7440-22-4	Silver	2.1	B		P
7440-23-5	Sodium	177	B		P
7440-28-0	Thallium	2.6	U		P
7440-62-2	Vanadium	15.8	B		P
7440-66-6	Zinc	74.6		E	P
	Cyanide	8.9	U		AS

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM

Color After: BROWN____ Clarity After: _____ Artifacts: YES___

Comments:
ARTIFACTS: __ROOTS, _WEEDS, _AND_WATER

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MCQY54

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQX79

Matrix (soil/water): SOIL_ Lab Sample ID: MCQY54

Level (low/med): LOW__ Date Received: 04/20/94

% Solids: _29.7

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	13100		*	P
7440-36-0	Antimony	8.5	U	N	P
7440-38-2	Arsenic	3.9	B		P
7440-39-3	Barium	190			P
7440-41-7	Beryllium	0.65	B		P
7440-43-9	Cadmium	1.7	U		P
7440-70-2	Calcium	18300			P
7440-47-3	Chromium	12.6			P
7440-48-4	Cobalt	20.3	B		P
7440-50-8	Copper	16.6			P
7439-89-6	Iron	27100			P
7439-92-1	Lead	20.2			P
7439-95-4	Magnesium	1510	B		P
7439-96-5	Manganese	769			P
7439-97-6	Mercury	0.34	U		CV
7440-02-0	Nickel	15.7	B		P
7440-09-7	Potassium	637	B		P
7782-49-2	Selenium	1.9	U		P
7440-22-4	Silver	1.2	U		P
7440-23-5	Sodium	232	B		P
7440-28-0	Thallium	2.4	U		P
7440-62-2	Vanadium	17.5	B		P
7440-66-6	Zinc	82.7		E	P
	Cyanide	8.4	U		AS

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM

Color After: BROWN____ Clarity After: _____ Artifacts: YES___

Comments:

ARTIFACTS: __ROOTS, _WEEDS, _AND_WATER

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APPENDIX A

RESULTS REPORTED BY LABORATORY

FORM Is

SDG MCQY33

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MCQY33

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQY33

Matrix (soil/water): SOIL_ Lab Sample ID: MCQY33

Level (low/med): LOW__ Date Received: 04/15/94

% Solids: _45.1

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	11700			P
7440-36-0	Antimony	8.2	B	N	P
7440-38-2	Arsenic	3.5	B		P
7440-39-3	Barium	126			P
7440-41-7	Beryllium	0.61	B		P
7440-43-9	Cadmium	1.1	U		P
7440-70-2	Calcium	1060	B		P
7440-47-3	Chromium	14.1			P
7440-48-4	Cobalt	149			P
7440-50-8	Copper	18.0			P
7439-89-6	Iron	19200			P
7439-92-1	Lead	16.9			P
7439-95-4	Magnesium	2130	B		P
7439-96-5	Manganese	3470			P
7439-97-6	Mercury	0.22	U		CV
7440-02-0	Nickel	37.1			P
7440-09-7	Potassium	753	B		P
7782-49-2	Selenium	1.7	B		P
7440-22-4	Silver	1.7	B		P
7440-23-5	Sodium	282	B		P
7440-28-0	Thallium	1.6	U		P
7440-62-2	Vanadium	14.4	B		P
7440-66-6	Zinc	76.2		E	P
	Cyanide	5.5	U	*	AS

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM

Color After: BROWN____ Clarity After: _____ Artifacts: YES___

Comments:
ARTIFACTS: FREE_WATER_AND_ROOTS

EPA 203004A

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MCQY34

Lab Name: ITAS_PITTSBURGH Contract: 68-D2-0044

Lab Code: ITPA Case No.: 21843 SAS No.: SDG No.: MCQY33

Matrix (soil/water): SOIL Lab Sample ID: MCQY34

Level (low/med): LOW Date Received: 04/15/94

% Solids: 54.1

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	15000			P
7440-36-0	Antimony	6.1	B	N	P
7440-38-2	Arsenic	2.1	B		P
7440-39-3	Barium	90.0			P
7440-41-7	Beryllium	0.72	B		P
7440-43-9	Cadmium	0.94	U		P
7440-70-2	Calcium	5550			P
7440-47-3	Chromium	20.6			P
7440-48-4	Cobalt	36.1			P
7440-50-8	Copper	34.9			P
7439-89-6	Iron	38400			P
7439-92-1	Lead	35.9			P
7439-95-4	Magnesium	5050			P
7439-96-5	Manganese	899			P
7439-97-6	Mercury	0.18	U		CV
7440-02-0	Nickel	29.5			P
7440-09-7	Potassium	534	B		P
7782-49-2	Selenium	1.4	B		P
7440-22-4	Silver	0.97	B		P
7440-23-5	Sodium	173	B		P
7440-28-0	Thallium	1.3	U		P
7440-62-2	Vanadium	15.4	B		P
7440-66-6	Zinc	113		E	P
	Cyanide	4.6	U	*	AS

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: BROWN Clarity After: Artifacts: YES

Comments:

ARTIFACTS: FREE_WATER_AND_ROOTS

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MCQY35

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQY33

Matrix (soil/water): SOIL_ Lab Sample ID: MCQY35

Level (low/med): LOW__ Date Received: 04/15/94

% Solids: _36.1

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	12800			P
7440-36-0	Antimony	8.8	B	N	P
7440-38-2	Arsenic	3.6	B		P
7440-39-3	Barium	258			P
7440-41-7	Beryllium	0.59	B		P
7440-43-9	Cadmium	1.4	U		P
7440-70-2	Calcium	5470			P
7440-47-3	Chromium	14.4			P
7440-48-4	Cobalt	125			P
7440-50-8	Copper	18.6			P
7439-89-6	Iron	24700			P
7439-92-1	Lead	26.3			P
7439-95-4	Magnesium	2830			P
7439-96-5	Manganese	9420			P
7439-97-6	Mercury	0.28	U		CV
7440-02-0	Nickel	19.6	B		P
7440-09-7	Potassium	867	B		P
7782-49-2	Selenium	4.7	U		P
7440-22-4	Silver	1.0	U		P
7440-23-5	Sodium	182	B		P
7440-28-0	Thallium	2.0	U		P
7440-62-2	Vanadium	17.7	B		P
7440-66-6	Zinc	88.9		E	P
	Cyanide	6.9	U	*	AS

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM

Color After: BROWN____ Clarity After: _____ Artifacts: YES___

Comments:

ARTIFACTS: FREE_WATER_AND_ROOTS

EPA 2030005A

U.S. EPA - CLP

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MCQY36

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQY33

Matrix (soil/water): SOIL_ Lab Sample ID: MCQY36

Level (low/med): LOW__ Date Received: 04/15/94

% Solids: _38.3

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	19900			P
7440-36-0	Antimony	6.9	U	N	P
7440-38-2	Arsenic	3.6	B		P
7440-39-3	Barium	132			P
7440-41-7	Beryllium	0.70	B		P
7440-43-9	Cadmium	1.4	U		P
7440-70-2	Calcium	1170	B		P
7440-47-3	Chromium	20.9			P
7440-48-4	Cobalt	18.4	B		P
7440-50-8	Copper	29.5			P
7439-89-6	Iron	30000			P
7439-92-1	Lead	38.0			P
7439-95-4	Magnesium	2930			P
7439-96-5	Manganese	197			P
7439-97-6	Mercury	0.30			CV
7440-02-0	Nickel	23.6			P
7440-09-7	Potassium	961	B		P
7782-49-2	Selenium	2.1	B		P
7440-22-4	Silver	0.99	U		P
7440-23-5	Sodium	197	B		P
7440-28-0	Thallium	1.9	U		P
7440-62-2	Vanadium	22.7	B		P
7440-66-6	Zinc	108		E	P
	Cyanide	6.5	U	*	AS

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM

Color After: BROWN____ Clarity After: _____ Artifacts: YES___

Comments:
ARTIFACTS: FREE_WATER_AND_ROOTS

U.S. EPA - CLP

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MCQY37

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQY33

Matrix (soil/water): SOIL_ Lab Sample ID: MCQY37

Level (low/med): LOW__ Date Received: 04/15/94

% Solids: _51.6

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	11900			P
7440-36-0	Antimony	5.0	U	N	P
7440-38-2	Arsenic	2.7	B		P
7440-39-3	Barium	90.1			P
7440-41-7	Beryllium	0.53	B		P
7440-43-9	Cadmium	0.99	U		P
7440-70-2	Calcium	4750			P
7440-47-3	Chromium	14.7			P
7440-48-4	Cobalt	24.1			P
7440-50-8	Copper	19.4			P
7439-89-6	Iron	23800			P
7439-92-1	Lead	22.2			P
7439-95-4	Magnesium	3780			P
7439-96-5	Manganese	1010			P
7439-97-6	Mercury	0.19	U		CV
7440-02-0	Nickel	16.9			P
7440-09-7	Potassium	562	B		P
7782-49-2	Selenium	1.8	B		P
7440-22-4	Silver	0.97	B		P
7440-23-5	Sodium	145	B		P
7440-28-0	Thallium	1.4	U		P
7440-62-2	Vanadium	15.0	B		P
7440-66-6	Zinc	80.2		E	P
	Cyanide	4.8	U	*	AS

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM

Color After: BROWN____ Clarity After: _____ Artifacts: YES___

Comments:

ARTIFACTS: FREE_WATER_AND_ROOTS

FORM I - IN ILM02.1

AR312428 EPA203006A

U.S. EPA - CLP

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MCQY38

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQY33

Matrix (soil/water): SOIL_ Lab Sample ID: MCQY38

Level (low/med): LOW__ Date Received: 04/15/94

% Solids: _51.8

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	16200			P
7440-36-0	Antimony	7.5	B	N	P
7440-38-2	Arsenic	2.7	B		P
7440-39-3	Barium	68.6	B		P
7440-41-7	Beryllium	0.72	B		P
7440-43-9	Cadmium	0.98	U		P
7440-70-2	Calcium	1030	B		P
7440-47-3	Chromium	16.7			P
7440-48-4	Cobalt	25.1			P
7440-50-8	Copper	27.7			P
7439-89-6	Iron	36100			P
7439-92-1	Lead	20.7			P
7439-95-4	Magnesium	2560			P
7439-96-5	Manganese	633			P
7439-97-6	Mercury	0.19	U		CV
7440-02-0	Nickel	21.9			P
7440-09-7	Potassium	892	B		P
7782-49-2	Selenium	1.4	B		P
7440-22-4	Silver	0.72	U		P
7440-23-5	Sodium	184	B		P
7440-28-0	Thallium	1.4	U		P
7440-62-2	Vanadium	18.6	B		P
7440-66-6	Zinc	80.9		E	P
	Cyanide	4.8	U	*	AS

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM

Color After: BROWN____ Clarity After: _____ Artifacts: YES___

Comments:

ARTIFACTS:__FREE_WATER_AND_ROOTS

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MCQY39

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQY33

Matrix (soil/water): SOIL_ Lab Sample ID: MCQY39

Level (low/med): LOW__ Date Received: 04/15/94

% Solids: _41.9

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	15800			P
7440-36-0	Antimony	6.1	U	N	P
7440-38-2	Arsenic	5.6			P
7440-39-3	Barium	96.0			P
7440-41-7	Beryllium	0.53	B		P
7440-43-9	Cadmium	1.2	U		P
7440-70-2	Calcium	1830	B		P
7440-47-3	Chromium	15.4			P
7440-48-4	Cobalt	20.9	B		P
7440-50-8	Copper	18.4			P
7439-89-6	Iron	28300			P
7439-92-1	Lead	24.0			P
7439-95-4	Magnesium	2490			P
7439-96-5	Manganese	1140			P
7439-97-6	Mercury	0.24	U		CV
7440-02-0	Nickel	15.1	B		P
7440-09-7	Potassium	567	B		P
7782-49-2	Selenium	2.0	B		P
7440-22-4	Silver	0.88	U		P
7440-23-5	Sodium	119	B		P
7440-28-0	Thallium	1.7	U		P
7440-62-2	Vanadium	18.6	B		P
7440-66-6	Zinc	83.1		E	P
	Cyanide	6.0	U	*	AS

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM

Color After: BROWN____ Clarity After: _____ Artifacts: YES___

Comments:
ARTIFACTS: FREE_WATER_AND_ROOTS

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INORGANIC ANALYSES DATA SHEET

000011

EPA SAMPLE NO.

MCQY40

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQY33

Matrix (soil/water): SOIL_ Lab Sample ID: MCQY40

Level (low/med): LOW__ Date Received: 04/15/94

% Solids: _30.7

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	22500			P
7440-36-0	Antimony	8.5	U	N	P
7440-38-2	Arsenic	9.0			P
7440-39-3	Barium	117	B		P
7440-41-7	Beryllium	0.84	B		P
7440-43-9	Cadmium	1.7	U		P
7440-70-2	Calcium	1640	B		P
7440-47-3	Chromium	23.4			P
7440-48-4	Cobalt	33.3			P
7440-50-8	Copper	22.1			P
7439-89-6	Iron	37700			P
7439-92-1	Lead	28.5			P
7439-95-4	Magnesium	2770	B		P
7439-96-5	Manganese	808			P
7439-97-6	Mercury	0.33	U		CV
7440-02-0	Nickel	21.2	B		P
7440-09-7	Potassium	1190	B		P
7782-49-2	Selenium	2.8	B		P
7440-22-4	Silver	1.2	U		P
7440-23-5	Sodium	184	B		P
7440-28-0	Thallium	2.4	U		P
7440-62-2	Vanadium	27.1	B		P
7440-66-6	Zinc	98.2		E	P
	Cyanide	8.1	U	*	AS

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM

Color After: BROWN____ Clarity After: _____ Artifacts: YES___

Comments:

ARTIFACTS: FREE_WATER_AND_ROOTS

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000012

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MCQY41

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQY33

Matrix (soil/water): SOIL_ Lab Sample ID: MCQY41

Level (low/med): LOW__ Date Received: 04/15/94

% Solids: _42.2

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	12600			P
7440-36-0	Antimony	6.1	U	N	P
7440-38-2	Arsenic	2.7	B		P
7440-39-3	Barium	60.6	B		P
7440-41-7	Beryllium	0.30	B		P
7440-43-9	Cadmium	1.2	U		P
7440-70-2	Calcium	1170	B		P
7440-47-3	Chromium	12.0			P
7440-48-4	Cobalt	12.3	B		P
7440-50-8	Copper	22.1			P
7439-89-6	Iron	21300			P
7439-92-1	Lead	15.8			P
7439-95-4	Magnesium	2570			P
7439-96-5	Manganese	331			P
7439-97-6	Mercury	0.24	U		CV
7440-02-0	Nickel	14.0	B		P
7440-09-7	Potassium	448	B		P
7782-49-2	Selenium	1.6	B		P
7440-22-4	Silver	0.88	U		P
7440-23-5	Sodium	150	B		P
7440-28-0	Thallium	1.7	U		P
7440-62-2	Vanadium	12.0	B		P
7440-66-6	Zinc	65.9		E	P
	Cyanide	5.9	U	*	AS

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM

Color After: BROWN____ Clarity After: _____ Artifacts: YES___

Comments:

ARTIFACTS: FREE_WATER_AND_ROOTS

FORM I - IN ILM02.1

AR312432 EPA 203008A

U.S. EPA - CLP

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MCQY42

Lab Name: ITAS_PITTSBURGH Contract: 68-D2-0044

Lab Code: ITPA Case No.: 21843 SAS No.: SDG No.: MCQY33

Matrix (soil/water): SOIL Lab Sample ID: MCQY42

Level (low/med): LOW Date Received: 04/15/94

% Solids: 37.7

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	14700			P
7440-36-0	Antimony	6.7	U	N	P
7440-38-2	Arsenic	4.9	B		P
7440-39-3	Barium	69.9	B		P
7440-41-7	Beryllium	0.35	B		P
7440-43-9	Cadmium	1.3	U		P
7440-70-2	Calcium	1270	B		P
7440-47-3	Chromium	14.8			P
7440-48-4	Cobalt	14.9	B		P
7440-50-8	Copper	27.1			P
7439-89-6	Iron	27200			P
7439-92-1	Lead	20.1			P
7439-95-4	Magnesium	3040			P
7439-96-5	Manganese	379			P
7439-97-6	Mercury	0.27	U		CV
7440-02-0	Nickel	15.9	B		P
7440-09-7	Potassium	551	B		P
7782-49-2	Selenium	1.6	B		P
7440-22-4	Silver	0.96	U		P
7440-23-5	Sodium	142	B		P
7440-28-0	Thallium	1.9	U		P
7440-62-2	Vanadium	15.1	B		P
7440-66-6	Zinc	81.0		E	P
	Cyanide	6.6	U	*	AS

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: BROWN Clarity After: Artifacts: YES

Comments:
ARTIFACTS: FREE_WATER_AND_ROOTS

FORM I - IN ILM02.1

AR312433

EPA203009

U.S. EPA - CLP

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MCQY43

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQY33

Matrix (soil/water): SOIL_ Lab Sample ID: MCQY43

Level (low/med): LOW__ Date Received: 04/15/94

% Solids: _29.2

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	10800			P
7440-36-0	Antimony	8.6	U	N	P
7440-38-2	Arsenic	6.4	B		P
7440-39-3	Barium	77.0	B		P
7440-41-7	Beryllium	0.44	B		P
7440-43-9	Cadmium	1.7	U		P
7440-70-2	Calcium	2150	B		P
7440-47-3	Chromium	13.0			P
7440-48-4	Cobalt	14.2	B		P
7440-50-8	Copper	15.7	B		P
7439-89-6	Iron	22700			P
7439-92-1	Lead	29.7			P
7439-95-4	Magnesium	1580	B		P
7439-96-5	Manganese	567			P
7439-97-6	Mercury	0.34	U		CV
7440-02-0	Nickel	9.9	B		P
7440-09-7	Potassium	804	B		P
7782-49-2	Selenium	2.0	U		P
7440-22-4	Silver	1.5	B		P
7440-23-5	Sodium	194	B		P
7440-28-0	Thallium	2.4	U		P
7440-62-2	Vanadium	15.8	B		P
7440-66-6	Zinc	72.6		E	P
	Cyanide	8.6	U	*	AS

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM

Color After: BROWN____ Clarity After: _____ Artifacts: YES___

Comments:

ARTIFACTS: FREE_WATER_AND_ROOTS

FORM I - IN ILM02.1

AR312434 EPA203009A

U.S. EPA - CLP

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MCQY44

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQY33

Matrix (soil/water): SOIL_ Lab Sample ID: MCQY44

Level (low/med): LOW__ Date Received: 04/15/94

% Solids: _45.1

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	17700			P
7440-36-0	Antimony	5.7	U	N	P
7440-38-2	Arsenic	3.2	B		P
7440-39-3	Barium	136			P
7440-41-7	Beryllium	0.73	B		P
7440-43-9	Cadmium	1.1	U		P
7440-70-2	Calcium	1370	B		P
7440-47-3	Chromium	17.1			P
7440-48-4	Cobalt	25.9			P
7440-50-8	Copper	20.5			P
7439-89-6	Iron	27800			P
7439-92-1	Lead	26.2			P
7439-95-4	Magnesium	2330			P
7439-96-5	Manganese	1150			P
7439-97-6	Mercury	0.22	U		CV
7440-02-0	Nickel	18.5			P
7440-09-7	Potassium	753	B		P
7782-49-2	Selenium	2.4			P
7440-22-4	Silver	1.0	B		P
7440-23-5	Sodium	135	B		P
7440-28-0	Thallium	1.6	U		P
7440-62-2	Vanadium	20.6	B		P
7440-66-6	Zinc	88.3		E	P
	Cyanide	5.5	U	*	AS

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM

Color After: BROWN____ Clarity After: _____ Artifacts: YES___

Comments:
ARTIFACTS: FREE_WATER_AND_ROOTS

U.S. EPA - CLP

000016

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MCQY45

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQY33

Matrix (soil/water): SOIL_ Lab Sample ID: MCQY45

Level (low/med): LOW__ Date Received: 04/15/94

% Solids: _49.7

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	16700			P
7440-36-0	Antimony	8.6	B	N	P
7440-38-2	Arsenic	5.7			P
7440-39-3	Barium	109			P
7440-41-7	Beryllium	0.61	B		P
7440-43-9	Cadmium	1.00	U		P
7440-70-2	Calcium	1810	B		P
7440-47-3	Chromium	18.1			P
7440-48-4	Cobalt	24.6			P
7440-50-8	Copper	19.4			P
7439-89-6	Iron	33500			P
7439-92-1	Lead	21.4			P
7439-95-4	Magnesium	3000			P
7439-96-5	Manganese	1270			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	22.7			P
7440-09-7	Potassium	824	B		P
7782-49-2	Selenium	2.0			P
7440-22-4	Silver	1.5	B		P
7440-23-5	Sodium	127	B		P
7440-28-0	Thallium	1.4	U		P
7440-62-2	Vanadium	19.9			P
7440-66-6	Zinc	121		E	P
	Cyanide	5.0	U	*	AS

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM

Color After: BROWN____ Clarity After: _____ Artifacts: YES___

Comments:
ARTIFACTS: ROOTS_AND_STONES

FORM I - IN ILM02.1

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1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MCQY46

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQY33

Matrix (soil/water): SOIL_ Lab Sample ID: MCQY46

Level (low/med): LOW__ Date Received: 04/15/94

% Solids: _34.9

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	14400			P
7440-36-0	Antimony	7.5	U	N	P
7440-38-2	Arsenic	3.3	B		P
7440-39-3	Barium	113	B		P
7440-41-7	Beryllium	0.68	B		P
7440-43-9	Cadmium	1.5	U		P
7440-70-2	Calcium	2110	B		P
7440-47-3	Chromium	17.0			P
7440-48-4	Cobalt	25.1	B		P
7440-50-8	Copper	22.4			P
7439-89-6	Iron	32100			P
7439-92-1	Lead	24.2			P
7439-95-4	Magnesium	2470	B		P
7439-96-5	Manganese	783			P
7439-97-6	Mercury	0.29	U		CV
7440-02-0	Nickel	16.2	B		P
7440-09-7	Potassium	530	B		P
7782-49-2	Selenium	2.8	B		P
7440-22-4	Silver	1.1	U		P
7440-23-5	Sodium	110	B		P
7440-28-0	Thallium	2.1	U		P
7440-62-2	Vanadium	19.1	B		P
7440-66-6	Zinc	85.5		E	P
	Cyanide	7.2	U	*	AS

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM

Color After: BROWN____ Clarity After: _____ Artifacts: YES___

Comments:
ARTIFACTS: FREE_WATER_AND_ROOTS

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1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MCQY47

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQY33

Matrix (soil/water): SOIL_ Lab Sample ID: MCQY47

Level (low/med): LOW__ Date Received: 04/15/94

% Solids: _38.8

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	7020			P
7440-36-0	Antimony	6.5	U	N	P
7440-38-2	Arsenic	2.5	B		P
7440-39-3	Barium	68.4	B		P
7440-41-7	Beryllium	0.46	B		P
7440-43-9	Cadmium	1.3	U		P
7440-70-2	Calcium	1080	B		P
7440-47-3	Chromium	8.0			P
7440-48-4	Cobalt	18.0	B		P
7440-50-8	Copper	14.8			P
7439-89-6	Iron	19100			P
7439-92-1	Lead	27.2			P
7439-95-4	Magnesium	1120	B		P
7439-96-5	Manganese	397			P
7439-97-6	Mercury	0.26	U		CV
7440-02-0	Nickel	13.4	B		P
7440-09-7	Potassium	350	B		P
7782-49-2	Selenium	1.9	B		P
7440-22-4	Silver	0.93	U		P
7440-23-5	Sodium	146	B		P
7440-28-0	Thallium	1.8	U		P
7440-62-2	Vanadium	9.3	B		P
7440-66-6	Zinc	65.3		E	P
	Cyanide	6.4	U	*	AS

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM

Color After: BROWN____ Clarity After: _____ Artifacts: YES___

Comments:
ARTIFACTS: FREE_WATER_AND_ROOTS

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MCQY48

Lab Name: ITAS_PITTSBURGH Contract: 68-D2-0044

Lab Code: ITPA Case No.: 21843 SAS No.: SDG No.: MCQY33

Matrix (soil/water): SOIL Lab Sample ID: MCQY48

Level (low/med): LOW Date Received: 04/15/94

% Solids: 40.6

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	19100			P
7440-36-0	Antimony	7.8	B	N	P
7440-38-2	Arsenic	5.2			P
7440-39-3	Barium	133			P
7440-41-7	Beryllium	0.66	B		P
7440-43-9	Cadmium	1.2	U		P
7440-70-2	Calcium	2930			P
7440-47-3	Chromium	18.7			P
7440-48-4	Cobalt	24.3			P
7440-50-8	Copper	21.5			P
7439-89-6	Iron	31700			P
7439-92-1	Lead	23.7			P
7439-95-4	Magnesium	2990			P
7439-96-5	Manganese	1180			P
7439-97-6	Mercury	0.25	U		CV
7440-02-0	Nickel	21.0			P
7440-09-7	Potassium	1160	B		P
7782-49-2	Selenium	2.4			P
7440-22-4	Silver	0.95	B		P
7440-23-5	Sodium	154	B		P
7440-28-0	Thallium	1.7	U		P
7440-62-2	Vanadium	21.8	B		P
7440-66-6	Zinc	125		E	P
	Cyanide	6.2	U	*	AS

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: BROWN Clarity After: Artifacts: YES

Comments:
ARTIFACTS: FREE_WATER_AND_ROOTS

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MCQY49

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQY33

Matrix (soil/water): SOIL_ Lab Sample ID: MCQY49

Level (low/med): LOW__ Date Received: 04/15/94

% Solids: _47.6

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	18500			P
7440-36-0	Antimony	5.3	U	N	P
7440-38-2	Arsenic	4.6			P
7440-39-3	Barium	129			P
7440-41-7	Beryllium	0.57	B		P
7440-43-9	Cadmium	1.0	U		P
7440-70-2	Calcium	1820	B		P
7440-47-3	Chromium	16.4			P
7440-48-4	Cobalt	21.7			P
7440-50-8	Copper	15.5			P
7439-89-6	Iron	30500			P
7439-92-1	Lead	18.5			P
7439-95-4	Magnesium	2720			P
7439-96-5	Manganese	1160			P
7439-97-6	Mercury	0.21	U		CV
7440-02-0	Nickel	15.5	B		P
7440-09-7	Potassium	985	B		P
7782-49-2	Selenium	2.2			P
7440-22-4	Silver	1.1	B		P
7440-23-5	Sodium	108	B		P
7440-28-0	Thallium	1.5	U		P
7440-62-2	Vanadium	22.5			P
7440-66-6	Zinc	80.5		E	P
	Cyanide	5.3	U	*	AS

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM

Color After: BROWN____ Clarity After: _____ Artifacts: YES___

Comments:

ARTIFACTS: FREE_WATER_AND_ROOTS

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MCQY50

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQY33

Matrix (soil/water): SOIL_ Lab Sample ID: MCQY50

Level (low/med): LOW__ Date Received: 04/20/94

% Solids: _37.5

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	12800			P
7440-36-0	Antimony	7.0	U	N	P
7440-38-2	Arsenic	3.9	B		P
7440-39-3	Barium	78.5	B		P
7440-41-7	Beryllium	0.46	B		P
7440-43-9	Cadmium	1.4	U		P
7440-70-2	Calcium	2350	B		P
7440-47-3	Chromium	16.9			P
7440-48-4	Cobalt	17.4	B		P
7440-50-8	Copper	23.1			P
7439-89-6	Iron	27200			P
7439-92-1	Lead	21.5			P
7439-95-4	Magnesium	2490	B		P
7439-96-5	Manganese	361			P
7439-97-6	Mercury	0.27	U		CV
7440-02-0	Nickel	18.9	B		P
7440-09-7	Potassium	719	B		P
7782-49-2	Selenium	1.6	U		P
7440-22-4	Silver	1.0	U		P
7440-23-5	Sodium	202	B		P
7440-28-0	Thallium	2.0	U		P
7440-62-2	Vanadium	17.8	B		P
7440-66-6	Zinc	100		E	P
	Cyanide	1970		*	AS

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM

Color After: BROWN____ Clarity After: _____ Artifacts: YES___

Comments:
ARTIFACTS: FREE_WATER_AND_ROOTS

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MCQY51

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQY33

Matrix (soil/water): SOIL_ Lab Sample ID: MCQY51

Level (low/med): LOW__ Date Received: 04/20/94

% Solids: _48.8

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	11800			P
7440-36-0	Antimony	5.3	U	N	P
7440-38-2	Arsenic	3.7	B		P
7440-39-3	Barium	90.4			P
7440-41-7	Beryllium	0.51	B		P
7440-43-9	Cadmium	1.0	U		P
7440-70-2	Calcium	4540			P
7440-47-3	Chromium	14.4			P
7440-48-4	Cobalt	25.6			P
7440-50-8	Copper	18.5			P
7439-89-6	Iron	28500			P
7439-92-1	Lead	40.7			P
7439-95-4	Magnesium	4140			P
7439-96-5	Manganese	1250			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	18.6			P
7440-09-7	Potassium	400	B		P
7782-49-2	Selenium	1.5	B		P
7440-22-4	Silver	0.76	U		P
7440-23-5	Sodium	138	B		P
7440-28-0	Thallium	1.5	U		P
7440-62-2	Vanadium	14.8	B		P
7440-66-6	Zinc	89.0		E	P
	Cyanide	5.1	U	*	AS

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM

Color After: BROWN____ Clarity After: _____ Artifacts: YES___

Comments:

ARTIFACTS: FREE_WATER_AND_ROOTS

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MCQY52

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQY33

Matrix (soil/water): SOIL_ Lab Sample ID: MCQY52

Level (low/med): LOW__ Date Received: 04/20/94

% Solids: _48.1

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	13900			P
7440-36-0	Antimony	6.5	B	N	P
7440-38-2	Arsenic	5.8			P
7440-39-3	Barium	92.6			P
7440-41-7	Beryllium	0.51	B		P
7440-43-9	Cadmium	1.1	U		P
7440-70-2	Calcium	1680	B		P
7440-47-3	Chromium	15.3			P
7440-48-4	Cobalt	21.5			P
7440-50-8	Copper	16.3			P
7439-89-6	Iron	29800			P
7439-92-1	Lead	23.4			P
7439-95-4	Magnesium	2550			P
7439-96-5	Manganese	1450			P
7439-97-6	Mercury	0.21	U		CV
7440-02-0	Nickel	16.5			P
7440-09-7	Potassium	485	B		P
7782-49-2	Selenium	1.7	B		P
7440-22-4	Silver	0.77	U		P
7440-23-5	Sodium	116	B		P
7440-28-0	Thallium	1.7	B		P
7440-62-2	Vanadium	17.1	B		P
7440-66-6	Zinc	83.5		E	P
	Cyanide	5.2	U	*	AS

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM

Color After: BROWN____ Clarity After: _____ Artifacts: YES___

Comments:
ARTIFACTS: FREE_WATER_AND_ROOTS

FORM I - IN ILM02.1

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APPENDIX B

TPO REPORT

TPO: [ ] ACTION [X] FYI **Region III**

INORGANIC REGIONAL DATA ASSESSMENT SUMMARY

CASE NO: 21843
SDG NO: MCQY00
SOW: ILMO2.1
NO. OF SAMPLES: Twenty (20)

LABORATORY: ITPA
DATA USER: Stevie Wilding
REVIEW COMPLETION DATE: 06/19/94
MATRIX: Aqueous (unfiltered)

REVIEWER: ESAT

	ICP	HG	CN
1. HOLDING TIMES	O	O	O
2. INITIAL CALIBRATIONS	O	O	O
3. CONTINUING CALIBRATIONS	M	O	O
4. FIELD BLANKS(F=NOT APPLICABLE)	O	O	O
5. LABORATORY BLANKS	M	O	O
6. ICS	O		
7. LCS	O		
8. DUPLICATE ANALYSIS	O	O	O
9. MATRIX SPIKE	O	O	M
10. MSA/ANALYTICAL SPIKE			
11. SERIAL DILUTION	O		
12. SAMPLE VERIFICATION	O	O	O
13. REGIONAL QC(F-NOT APPLICABLE)	F	F	F
14. OVERALL ASSESSMENT	M	O	M

O = No problems or minor problems that do not affect data usability
X = No more than about 5% of the data points are qualified as either estimated or unusable.
M = More than about 5% of the data points are qualified as estimated.
Z = More than about 5% of the data points are qualified as unusable.
A = TPO action requested; use in conjunction with one of the above codes.

TPO ACTION ITEMS:

AREAS OF CONCERN: Items 3A, 5A, 9C.

INORGANIC REGIONAL DATA ASSESSMENT SUMMARY NOTES

Case: 21843 **SDG:** MCQY00 **Matrix:** Aqueous (unfiltered)

Item 3A The preparation blank had a concentration >IDL for the following analytes:

Analyte	Concentration, µg/L
Ca	12.9
Fe	12.5
Na	35.7
Zn	12.9

One or more CCBs had reported results >IDL as listed below:

Analyte	Concentration, µg/L
Cu	1.2
Tl	5.1

Item 5A The CRDL standard recoveries were low for the analytes As (86.2%) and Pb (88.0%, 80.8%).

Item 9C The matrix spike recovery was low for the CN analyte (74.0%). The post-digestion spike recovery was 92.0%.

TPO: [ ] ACTION [X] FYI Region III

INORGANIC REGIONAL DATA ASSESSMENT SUMMARY

CASE NO: 21843
SDG NO: MCQY18
SOW: ILMO2.1
NO. OF SAMPLES: Thirteen (13)

LABORATORY: ITPA
DATA USER: Stevie Wilding
REVIEW COMPLETION DATE: 06/19/94
MATRIX: Aqueous (Unfiltered)

REVIEWER: ESAT

	ICP	HG	CN
1. HOLDING TIMES	O	O	O
2. INITIAL CALIBRATIONS	O	O	O
3. CONTINUING CALIBRATIONS	M	O	O
4. FIELD BLANKS(F=NOT APPLICABLE)	O	O	O
5. LABORATORY BLANKS	M	O	O
6. ICS	O		
7. LCS	O		
8. DUPLICATE ANALYSIS	O	O	O
9. MATRIX SPIKE	O	O	O
10. MSA/ANALYTICAL SPIKE			
11. SERIAL DILUTION	O		
12. SAMPLE VERIFICATION	O	O	O
13. REGIONAL QC(F-NOT APPLICABLE)	F	F	F
14. OVERALL ASSESSMENT	M	O	O

O = No problems or minor problems that do not affect data usability
X = No more than about 5% of the data points are qualified as either estimated or unusable.
M = More than about 5% of the data points are qualified as estimated.
Z = More than about 5% of the data points are qualified as unusable.
A = TPO action requested; use in conjunction with one of the above codes.

TPO ACTION ITEMS: _____

AREAS OF CONCERN: Items 3A, 5A.

EPA203017A

INORGANIC REGIONAL DATA ASSESSMENT SUMMARY NOTES

Case: 21843 **SDG:** MCQY18 **Matrix:** Aqueous (unfiltered)

Item 3A The CRDL standard recoveries were outside the control limits for the analytes listed below:

Analyte	Recovery, %
As	84.1, 87.9
Pb	113.3, 118.7
Ag	89.4
Tl	115

Item 5A The CCB or PB had a result >IDL for the analytes listed below:

Analyte	Concentration (µg/L)	Blank Type
Be	0.2	CCB
Ca	12.8	PB
Cu	1.2	CCB
Zn	8.0	PB

TPO: [ ] ACTION [X] FYI Region III

INORGANIC REGIONAL DATA ASSESSMENT SUMMARY

CASE NO: 21843
SDG NO: MCQA71
SOW: ILMO2.1
NO. OF SAMPLES: Twenty (20)

LABORATORY: ITPA
DATA USER: Stevie Wilding
REVIEW COMPLETION DATE: 06/19/94
MATRIX: Aqueous (filtered)

REVIEWER: ESAT

	ICP	HG	CN
1. HOLDING TIMES	O	O	O
2. INITIAL CALIBRATIONS	O	O	O
3. CONTINUING CALIBRATIONS	X	O	O
4. FIELD BLANKS(F=NOT APPLICABLE)	M	M	O
5. LABORATORY BLANKS	X	O	O
6. ICS	O		
7. LCS	O		
8. DUPLICATE ANALYSIS	O	O	O
9. MATRIX SPIKE	O	O	O
10. MSA/ANALYTICAL SPIKE			
11. SERIAL DILUTION	O		
12. SAMPLE VERIFICATION	O	O	O
13. REGIONAL QC(F-NOT APPLICABLE)	F	F	F
14. OVERALL ASSESSMENT	M	M	O

O = No problems or minor problems that do not affect data usability
X = No more than about 5% of the data points are qualified as either estimated or unusable.
M = More than about 5% of the data points are qualified as estimated.
Z = More than about 5% of the data points are qualified as unusable.
A = TPO action requested; use in conjunction with one of the above codes.

TPO ACTION ITEMS: _____

AREAS OF CONCERN: Items 3A, 4A, 4B, 5A.

INORGANIC REGIONAL DATA ASSESSMENT SUMMARY NOTES

Case: 21843 **SDG:** MCQA71 **Matrix:** Aqueous (filtered)

Item 3A The CRDL standard recoveries were low and high for the analytes As (84.1%, 87.9%, 89.1%) and Tl (115.0%), respectively.

Item 4A The field blank had a concentration >IDL for the following analytes:

Analyte	Concentration, µg/L
Al	34.2
Cu	4.8
Fe	17.9

Item 4B The field blank had a concentration >IDL for the Hg analyte (0.31 µg/L).

Item 5A The PB had a concentration >IDL for the following analytes:

Analyte	Concentration, µg/L
Al	20.5
Fe	8.4
Na	31.0
Zn	17.3

TPO: [ ] ACTION [X] FYI Region III

INORGANIC REGIONAL DATA ASSESSMENT SUMMARY

CASE NO: 21843
SDG NO: MCQA88
SOW: ILMO2.1
NO. OF SAMPLES: Twelve (12)

LABORATORY: ITPA
DATA USER: Stevie Wilding
REVIEW COMPLETION DATE: 06/19/94
MATRIX: Aqueous (filtered)

REVIEWER: ESAT

	ICP	HG	CN
1. HOLDING TIMES	_O_	_O_	_O_
2. INITIAL CALIBRATIONS	_O_	_O_	_O_
3. CONTINUING CALIBRATIONS	_M_	_O_	_O_
4. FIELD BLANKS(F=NOT APPLICABLE)	_M_	_M_	_O_
5. LABORATORY BLANKS	_X_	_O_	_O_
6. ICS	_O_		
7. LCS	_O_		
8. DUPLICATE ANALYSIS	_O_	_O_	_O_
9. MATRIX SPIKE	_O_	_O_	_O_
10. MSA/ANALYTICAL SPIKE			
11. SERIAL DILUTION	_X_		
12. SAMPLE VERIFICATION	_O_	_O_	_O_
13. REGIONAL QC(F-NOT APPLICABLE)	_F_	_F_	_F_
14. OVERALL ASSESSMENT	_M_	_M_	_O_

O = No problems or minor problems that do not affect data usability
X = No more than about 5% of the data points are qualified as either estimated or unusable.
M = More than about 5% of the data points are qualified as estimated.
Z = More than about 5% of the data points are qualified as unusable.
A = TPO action requested; use in conjunction with one of the above codes.

TPO ACTION ITEMS: _____

AREAS OF CONCERN: Items 3A, 4A, 4B, 5A, 11A.

EPA 203019A

INORGANIC REGIONAL DATA ASSESSMENT SUMMARY NOTES

Case: 21843 **SDG:** MCQA88 **Matrix:** Aqueous (filtered)

Item 3A The CRDL standard recoveries were low for the analyte As (86.3%) and high for the analytes Pb (127.0%, 128.5%) and Zn (111.2%, 112.3%).

Item 4A The field blank had a concentration >IDL for the following analytes:

Analyte	Concentration, µg/L
Al	34.2
Cu	4.8
Fe	17.9
Zn	14.7

Item 4B The field blank had a concentration >IDL for the Hg analyte (0.31 µg/L).

Item 5A The PB had a concentration >IDL for the following analytes:

Analyte	Concentration, µg/L
Fe	11.6
Mg	13.1
Na	51.8
Zn	8.6

Item 11A The serial dilution result for the analyte Fe was >10% different from the undiluted result (16.3%).

TPO: [ ] ACTION [X] FYI **Region III**

INORGANIC REGIONAL DATA ASSESSMENT SUMMARY

CASE NO: 21843
SDG NO: MCQX79
SOW: ILMO2.1
NO. OF SAMPLES: Ten (10)

LABORATORY: ITPA
DATA USER: Stevie Wilding
REVIEW COMPLETION DATE: 06/19/94
MATRIX: Soil

REVIEWER: ESAT

	ICP	HG	CN
1. HOLDING TIMES	O	O	O
2. INITIAL CALIBRATIONS	O	O	O
3. CONTINUING CALIBRATIONS	M	O	O
4. FIELD BLANKS(F=NOT APPLICABLE)	O	O	O
5. LABORATORY BLANKS	X	O	O
6. ICS	O		
7. LCS	O	O	
8. DUPLICATE ANALYSIS	O	O	O
9. MATRIX SPIKE	M	O	O
10. MSA/ANALYTICAL SPIKE			
11. SERIAL DILUTION	M		
12. SAMPLE VERIFICATION	O	O	O
13. REGIONAL QC(F-NOT APPLICABLE)	F	F	F
14. OVERALL ASSESSMENT	M	O	O

O = No problems or minor problems that do not affect data usability
X = No more than about 5% of the data points are qualified as either estimated or unusable.
M = More than about 5% of the data points are qualified as estimated.
Z = More than about 5% of the data points are qualified as unusable.
A = TPO action requested; use in conjunction with one of the above codes.

TPO ACTION ITEMS: _____

AREAS OF CONCERN: Items 3A, 4A, 9A, 11A

EPA203010A

INORGANIC REGIONAL DATA ASSESSMENT SUMMARY NOTES

Case: 21843 **SDG:** MCQX79 **Matrix:** Soil

Item 3A The CRDL standard recoveries were outside the control limits for the analytes listed below.

Analyte	Recovery, %
Sb	111.7
As	85.6, 88.9, 76.4
Cd	88.3, 114.1

Item 4A One or more CCBs had a concentration >IDL for the analyte Ag (3.4 µg/L).

Item 9A The matrix spike recovery for the Sb analyte was low (52.9%).

Item 11A The ICP serial dilution result was outside of the 10% control limit for Zn (39.9%) analyte.

TPO: [ ] ACTION [X] FYI Region III

INORGANIC REGIONAL DATA ASSESSMENT SUMMARY

CASE NO: 21843
SDG NO: MCQY33
SOW: ILMO2.1
NO. OF SAMPLES: Twenty (20)

LABORATORY: ITPA
DATA USER: Stevie Wilding
REVIEW COMPLETION DATE: 06/19/94
MATRIX: Soil

REVIEWER: ESAT

	ICP	HG	CN
1. HOLDING TIMES	_O_	_O_	_O_
2. INITIAL CALIBRATIONS	_O_	_O_	_O_
3. CONTINUING CALIBRATIONS	_M_	_O_	_O_
4. FIELD BLANKS(F=NOT APPLICABLE)	_O_	_O_	_O_
5. LABORATORY BLANKS	_M_	_O_	_O_
6. ICS	_O_		
7. LCS	_O_	_O_	
8. DUPLICATE ANALYSIS	_O_	_O_	_M_
9. MATRIX SPIKE	_M_	_O_	_O_
10. MSA/ANALYTICAL SPIKE			
11. SERIAL DILUTION	_M_		
12. SAMPLE VERIFICATION	_O_	_O_	_O_
13. REGIONAL QC(F-NOT APPLICABLE)	_F_	_F_	_F_
14. OVERALL ASSESSMENT	_M_	_O_	_M_

O = No problems or minor problems that do not affect data usability
X = No more than about 5% of the data points are qualified as either estimated or unusable.
M = More than about 5% of the data points are qualified as estimated.
Z = More than about 5% of the data points are qualified as unusable.
A = TPO action requested; use in conjunction with one of the above codes.

TPO ACTION ITEMS: _____

AREAS OF CONCERN: Items 3A, 4A, 8C, 9A, 11A.

EPA203021A

INORGANIC REGIONAL DATA ASSESSMENT SUMMARY NOTES

Case: 21843 SDG: MCQY33 Matrix: Soil

Item 3A The CRDL standard recoveries were outside the control limits for the analytes listed below.

Analyte	Recovery, %
Sb	111.7
As	78.8, 80.0
Cd	88.3, 114.1
Se	115.0, 118.7

Item 4A The PB had a concentration >IDL for the analytes Sb (3.69 mg/Kg) and K (82.1 mg/Kg), and one or more CCBs had a concentration >IDL for the analyte Ag (2.9 μg/L).

Item 8A The laboratory duplicate RPD was >35% for the CN analyte (119.4%).

Item 9A The matrix spike recovery for the Sb (53.7%) analyte was low.

Item 11A The ICP serial dilution result was outside of the 10% control limit for the Zn analyte (123.1%).

APPENDIX C

SUPPORT DOCUMENTATION

EPA

United States Environmental Protection Agency
Contract Laboratory Program Sample Management Office
PO Box 818 Alexandria, VA 22313
703-557-2490 FTS 557-2490

Inorganic Traffic Report & Chain of Custody Record

(For Inorganic CLP Analysis)

SAS No. (if applicable)

Case No. 21843

1. Sample Description (Enter in Column A): 1. Surface Water 2. Ground Water 3. Leachate 4. Rinsate 5. Soil/Sediment 6. Oil (High only) 7. Waste (High only) 8. Other (Specify)

2. Preservative (Enter in Column D): 1. HCl 2. HNO3 3. NaOH 4. H_2SO_4 5. $K_2CR_2O_7$ 6. Ice only 7. Other (Specify) N. Not preserved

3. Region No.: III

Sampling Co.: Weston

Sampler (Name): [redacted]

Sampler Signature: [redacted]

4. Type of Activity: Lead / Pre-Remedial / Remedial

SF				RIFS	X	CLEM	
PRP		PA		RD		REMA	
ST		SSI		RA		REM	
FED		LSI		O&M		OIL	
				NPLD		UST	

5. Date Shipped: 4/14/94

Carrier: Federal Express

Airbill Number: 0574393094

6. Ship To: [redacted]

ATTN: [redacted]

7. Date Received -- Receiv[redacted]: 4/15/94 [redacted]

Laboratory Contract Nu[redacted]ce: 68-D2-0044

8. Transfer to:

Date Received:

Received by:

Contract Number:

Price:

CLP Sample Numbers (from labels)	A Enter # from Box 1	B Conc. Low Med High	C Sample Type: Comp./Grab	D Preservative from Box 6	E - RAS Analysis: Metals Total	Metals Dissolved	Cyanide	Low Conc only: Nitrate/Nitrite	Low Conc only: Fluoride	High only: pH	High only: Conductivity	F Regional Specific Tracking Number or Tag Numbers	G Station Location Number	H Mo/Day/Year/Time Sample Collection	I Sampler Initials	J Corresp. CLP Org. Samp. No.	K Sample Condition on Receipt	L High Conc. Phases (Check below): Solids	Water - MIS Liq.	Non Water - Mis Liq.
MCQY00	1	L	G	3			✓					3-1151156	SW/SD SEEP1	4/11/94 0900	TH/AM	CPM18	OK			
MCQY00	1	L	G	2	✓							3-1151157	SW/SD SEEP1	4/11/94 0900	TH/AM	CPM18				
MCQY00	5	L	G	6	✓		✓					3-1151158	SW/SD SEEP1	4/11/94 0900	TH/AM	CPM18				
MCQA71	1	L	G	2		✓						3-1151159	SW/SD SEEP1	4/11/94 0900	TH/AM	CPM18				
MCQY01	5	L	G	6	✓		✓					3-1151166	SW/SD2	4/11/94 1130	TH/AM	CPM20				
MCQY01	1	L	G	3			✓					3-1151167	SW/SD2	4/11/94 1130	TH/AM	CPM20				
MCQY01	1	L	G	2	✓							3-1151168	SW/SD2	4/11/94 1130	TH/AM	CPM20				
MCQA72	1	L	G	2		✓						3-1151169	SW/SD2	4/11/94 1130	TH/AM	CPM20				
MCQY02	5	L	G	6	✓		✓					3-1151175	SW/SD3	4/11/94 1400	TH/YS	CPM21				
MCQY02	1	L	G	2	✓							3-1151176	SW/SD3	4/11/94 1400	TH/YS	CPM21	✓			

Shipment for Case complete? (Y/N): N

Page 1 of 7

Sample used for a spike and/or duplicate:

Additional Sampler Signatures: [redacted]

Chain of Custody Seal Number:

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
[redacted]	4/14/94 1800				
[redacted]					
[redacted]					

Relinquished by: (Signature)	Date / Time	Received for Laboratory by:	Date / Time	Remarks: Is custody seal intact? Y/N/none
[redacted]		[redacted]	4/15/94 0945	Sample ID's for Soils Change

[redacted] Samples ☐ Accepted (Signature)

Form 9110-1 ([redacted]. 5-91) Replaces EPA Form (2075-6), prev[redacted] may be used

EPA203024A

AR312458

000388

AR312459

EPA

United States Environmental Protection Agency
Contract Laboratory Program Sample Management Office
PO Box 818 Alexandria, VA 22313
703-557-2490 FTS 557-2490

Inorganic Traffic Report & Chain of Custody Record

(For Inorganic CLP Analysis)

SAS No. (if applicable)

Case No. 21843

1. Sample Description (Enter in Column A): 1. Surface Water 2. Ground Water 3. Leachate 4. Rinsate 5. Soil/Sediment 6. Oil (High only) 7. Waste (High only) 8. Other (Specify)

2. Preservative (Enter in Column D): 1. HCl 2. HNO3 3. NaOH 4. H_2SO_4 5. $K_2CR_2O_7$ 6. Ice only 7. Other (Specify) N. Not preserved

3. Region No.: III

Sampling Co.: Weston

5. Date Shipped: 4/14/94

Carrier: Federal Express

7. Date Received -- Received by: 4-15-94 [redacted]

Sampler (Name): [redacted]

Airbill Number: 0574393094

Laboratory Contract Number: 68-D2-0044

Sampler Signature: [redacted]

6. Ship To: [redacted]

ATTN: [redacted]

8. Transfer to

Date Received

Received by

Contract Number

Price

4. Type of Activity: Lead: SF, PRP, ST, FED; Pre-Remedial: PA, SSI, LSI; Remedial: RIFS, RD, RA, O&M, NPLD; Removal: CLEM, REMA, REM, OIL, UST

CLP Sample Numbers (from labels)	A Enter # from Box 1	B Conc. Low Med High	C Sample Type: Comp/Grab	D Preservative from Box 6	E - RAS Analysis: Metals Total	Metals Dissolved	Cyanide	Low Conc. only: Nitrate/Nitrite	Low Conc. only: Fluoride	High only: pH	High only: Conductivity	F Regional Specific Tracking Number or Tag Numbers	G Station Location Number	H Mo/Day/Year/Time Sample Collection	I Sampler Initials	J Corresp. CLP Org. Samp. No.	K Sample Condition on Receipt	L High Conc. Phases (Check below): Solids	Water Mis Liq.	Non Water Mis Liq.
MCQY02	1	L	G	3			✓					3-115 1177	SW/SD3	4/11/94 1400	TH/YS	CPM21				
MCQA73	1	L	G	2		✓						3-115 1178	SW/SD3	4/11/94 1400	TH/YS	CPM21				
MCQY03	5	L	G	6	✓		✓					3-115 1184	SW/SD4	4/11/94 1445	TH/YS	CPM22				
MCQY03	1	L	G	2	✓							3-115 1185	SW/SD4	4/11/94 1445	TH/YS	CPM22				
MCQY03	1	L	G	3			✓					3-115 1186	SW/SD4	4/11/94 1445	TH/YS	CPM22				
MCQA74	1	L	G	2		✓						3-115 1187	SW/SD4	4/11/94 1445	TH/YS	CPM22				
MCQY04	5	L	G	6	✓		✓					3-115 1193	SW/SD5	4/11/94 1545	TH/YS	CPM23				
MCQY04	1	L	G	2	✓							3-115 1194	SW/SD5	4/11/94 1545	TH/YS	CPM23				
MCQY04	1	L	G	3			✓					3-115 1195	SW/SD5	4/11/94 1545	TH/YS	CPM23				
MCQA75	1	L	G	2		✓						3-115 1196	SW/SD5	4/11/94 1545	TH/YS	CPM23				

Shipment for Case complete? (Y/N) Y

Page 1 of 7 2

Sample used for a spike and/or duplicate: —

Additional Sampler Signatures: [redacted]

Chain of Custody Seal Number

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
[redacted]	4/14/94 1800				
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks Is custody seal intact? Y/N/none	
[redacted]		[redacted]	4-15-94 0945	Sample ID's for Soils Chan[redacted]	

Split Samples ☐ Accepted (Signature)

EPA Form 9110-1 (Rev. 5-91) Replaces EPA Form (2075-6), previous edition which may be used

EPA203025

000389

EPA United States Environmental Protection Agency
Contract Laboratory Program Sample Management Office
PO Box 818 Alexandria, VA 22313
703-557-2490 FTS 557-2490

Inorganic Traffic Report & Chain of Custody Record

(For Inorganic CLP Analysis)

SAS No. (if applicable)

Case No. 21843

1. Sample Description (Enter in Column A): 1. Surface Water 2. Ground Water 3. Leachate 4. Rinsate 5. Soil/Sediment 6. Oil (High only) 7. Waste (High only) 8. Other (Specify)

2. Preservative (Enter in Column D): 1. HCl 2. HNO3 3. NaOH 4. H_2SO_4 5. $K_2CR_2O_7$ 6. Ice only 7. Other (Specify) N. Not preserved

3. Region No. III

Sampling Co. Weston

Sampler (Name) [redacted]

Sampler Signature [redacted]

4. Type of Activity: Lead: SF, PRP, ST, FED; Pre-Remedial: PA, SSI, LSI; Remedial: RIFS, RD, RA, O&M, NPLD; Removal: CLEM, REMA, REM, OIL, UST

5. Date Shipped 4/14/94

Carrier Federal Express

Airbill Number 0574393094

6. Ship To [redacted] port [redacted] hum [redacted] ATT [redacted]

7. Date Received -- Received by [redacted]

Laboratory Contract Number 68-D2-0044

8. Transfer to

Date Received

Received by

Contract Number

Price

CLP Sample Numbers (from labels)	A Enter # from Box 1	B Conc. Low Med High	C Sample Type: Comp./Grab	D Preservative from Box 6	E RAS Analysis: Metals Total	Metals Dissolved	Cyanide	Low Conc only Nitrate/Nitrite	Low Conc only Fluoride	High only pH	High only Conductivity	F Regional Specific Tracking Number or Tag Numbers	G Station Location Number	H Mo/Day/Year/Time Sample Collection	I Sampler Initials	J Corresp. CLP Org. Samp. No.	K Sample Condition on Receipt	L High Conc. Phases (Check below): Solids	Water-MIS Liq.	Non Water-MIS Liq.
MCQY06	5	L	G	6	✓		✓					3-1151202	SW/SD1	4/11/94 1630	AM/YS	CPM24	OK			
MCQY06	1	L	G	2	✓							3-1151203	SW/SD1	4/11/94 1630	AM/YS	CPM24				
MCQY06	1	L	G	3			✓					3-1151204	SW/SD1	4/11/94 1630	AM/YS	CPM24				
MCQA76	1	L	G	2		✓						3-1151205	SW/SD1	4/11/94 1630	AM/YS	CPM24				
MCQY05	1	L	G	2	✓							3-1151209	FB1	4/11/94 1730	[illegible]	CPM25				
MCQY05	1	L	G	3			✓					3-1151210	FB1	4/11/94 1730	[illegible]	CPM25				
MCQA77	1	L	G	2		✓						3-1151211	FB1	4/11/94 1730	[illegible]	CPM25				
MCQY07	5	L	G	6	✓		✓					3-1151217	SW/SD19	4/12/94 0900	TA/YS	CPM26				
MCQY07	1	L	G	2	✓							3-1151218	SW/SD19	4/12/94 0900	TA/YS	CPM26				
MCQY07	1	L	G	3			✓					3-1151219	SW/SD19	4/12/94 0900	TA/YS	CPM26	✓			

Shipment for Case complete? (Y/N) Y

Page 1 of 3

Sample used for a spike and/or duplicate: MCQY05 MCQA77

Additional Sampler Signatures [redacted]

Chain of Custody Seal Number

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
[redacted]	4/14/94 1800				
[redacted]					
[redacted]					

Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks Is custody seal intact? Y/N/none
[redacted]		[redacted]	4/15/94 0945	Sample ID's for Soils changed [redacted]

Split Samples ☐ Accepted (Signature)

Form 9110-1 (Rev. 5-91) Replaces EPA Form (2075-6), previous edition which may be used

EPA8030025A

AR312460

300390

EPA United States Environmental Protection Agency
Contract Laboratory Program Sample Management Office
PO Box 818 Alexandria, VA 22313
703-557-2490 FTS 557-2490

Inorganic Traffic Report & Chain of Custody Record

(For Inorganic CLP Analysis)

SAS No. (if applicable)

Case No. 21843

1. Sample Description (Enter in Column A): 1. Surface Water 2. Ground Water 3. Leachate 4. Rinsate 5. Soil/Sediment 6. Oil (High only) 7. Waste (High only) 8. Other (Specify)

2. Preservative (Enter in Column D): 1. HCl 2. HNO3 3. NaOH 4. H_2SO_4 5. $K_2CR_2O_7$ 6. Ice only 7. Other (Specify) N. Not preserved

3. Region No.: III

Sampling Co.: Weston

Sampler (Name): [redacted]

Sampler Signature: [redacted]

4. Type of Activity: Lead: SF, PRP, ST, FED; Pre-Remedial: PA, SSI, LSI; Remedial: RIFS, RD, RA, O&M, NPLD; Removal: CLEM, REMA, REM, OIL, UST

5. Date Shipped: 4/14/94

Carrier: Federal Express

Airbill Number: 0574393094

6. Ship To: [redacted]

ATTN: [redacted]

7. Date Received -- Re[redacted]: 4-15-94

Laboratory Contract Number: 68-D20044

Unit Price: [redacted]

8. Transfer to

Received by

Contract Number

Price

CLP Sample Numbers (from labels)	A Enter # from Box 1	B Conc. Low Med High	C Sample Type: Comp/Grab	D Preservative from Box 6	E - RAS Analysis: Metals Total	Metals Dissolved	Cyanide	Low Conc only Nitrate/Nitrite	Low Conc only Fluoride	High only pH	High only Conductivity	F Regional Specific Tracking Number or Tag Numbers	G Station Location Number	H Mo/Day/Year/Time Sample Collection	I Sampler Initials	J Corresp. CLP Org. Samp. No.	K Sample Condition on Receipt	L High Conc. Phases (Check below): Solids	Water MIS Liq.	Non Water MIS Liq.
MCQA78	1	L	G	2		✓						3-1151220	SW/SD19	4/12/94 0900	TH/YS	CPM26	OK			
MCQY08	1	L	G	2	✓							3-1151226	SW/SDSEEP2	4/12/94 1000	TH/JP	CPM27				
MCQY08	1	L	G	3			✓					3-1151227	SW/SDSEEP2	4/12/94 1000	TH/JP	CPM27				
MCQY08	5	L	G	6	✓		✓					3-1151228	SW/SDSEEP2	4/12/94 1000	TH/JP	CPM27				
MCQA79	1	L	G	2		✓						3-1151229	SW/SDSEEP2	4/12/94 1000	TH/JP	CPM27				
MCQY09	5	L	G	6	✓		✓					3-1151235	SW/SD20	4/12/94 1100	AM/YS	CPM28				
MCQY09	1	L	G	2	✓							3-1152136	SW/SD20	4/12/94 1100	AM/YS	CPM28				
MCQY09	1	L	G	3			✓					3-1152137	SW/SD20	4/12/94 1100	AM/YS	CPM28				
MCQA80	1	L	G	2		✓						3-1151238	SW/SD20	4/12/94 1100	AM/YS	CPM28				
MCQY10	5	L	G	6	✓		✓					3-1151244	SW/SD25	4/12/94 1200	AM/YS	CPM29				

Shipment for Case complete? (Y/N) Y

Page 1 of 4

Sample used for a spike and/or duplicate: MCQY10

Additional Sampler Signatures: [redacted]

Chain of Custody Seal Number

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
[redacted]	4/14/94 1800				
[redacted]					
[redacted]					

Received for Laboratory by: [redacted]

Date / Time: 4/15/94 0945

Remarks: Is custody seal intact? Y/N/none — Sample ID's for Soils Changed

Unit Samples ☐ Accepted (Signature)

[redacted]m 9110-1 (Rev. 5-91) Replaces EPA Form (2075-6), previous edition which may be used

EPA203026

AR312461

300391

EPA

United States Environmental Protection Agency
Contract Laboratory Program Sample Management Office
PO Box 818 Alexandria, VA 22313
703-557-2490 FTS 557-2490

Inorganic Traffic Report & Chain of Custody Record

(For Inorganic CLP Analysis)

SAS No. (if applicable):

Case No.: 21843

1. Sample Description (Enter in Column A): 1. Surface Water 2. Ground Water 3. Leachate 4. Rinsate 5. Soil/Sediment 6. Oil (High only) 7. Waste (High only) 8. Other (Specify)

2. Preservative (Enter in Column D): 1 HCl 2 HNO3 3 NaOH 4 H_2SO_4 5 $K_2CR_2O_7$ 6 Ice only 7 Other (Specify) N. Not preserved

3. Region No.: III

Sampling Co.: Weston

5. Date Shipped: 14 APR 94

Carrier: Federal Express

7. Date Received: 4/15/94 [redacted]

Sampler (Name): [redacted]

Airbill Number: 0574393094

Laboratory Contract Number: 68-D2-0014

Sampler Signature: [redacted]

6. Ship To: [redacted] EXPORT [redacted] ATTN: [redacted]

8. Transfer to

Received by

Contract Number

Price

4. Type of Activity: Lead / Pre-Remedial / Remedial / Removal

SF, PRP, ST, FED — PA, SSI, LSI — RIFS, RD, RA, O&M, NPLD — CLEM, REMA, REM, OIL, UST

CLP Sample Numbers (from labels)	A Enter # from Box 1	B Conc. Low Med High	C Sample Type: Comp./Grab	D Preservative from Box 6	E RAS Analysis: Metals Total	Metals Dissolved	Cyanide	Low Conc. only: Nitrate/Nitrite	Fluoride	High only: pH	Conductivity	F Regional Specific Tracking Number or Tag Numbers	G Station Location Number	H Mo/Day/Year/Time Sample Collection	I Sampler Initials	J Corresp. CLP Org. Samp. No.	K Sample Condition on Receipt	L High Conc. Phases (Check below): Solids	Water Mis Liq.	Non Water Mis Liq.
MCQY10	1	L	G	2	✓							3-1151245	SW/SD25	4/12/94 1200	AM/YS	CPM29	OK			
MCQY10	1	L	G	3			✓					3-1151246	SW/SD25	4/12/94 1200	AM/YS	CPM29				
MCQA81	1	L	G	2		✓						3-1151247	SW/SD25	4/12/94 1200	AM/YS	CPM29				
MCQY11	1	L	G	2	✓							3-1151253	SW/SD17	4/13/94 0900	TH/YS	CPM30				
MCQY11	1	L	C	3			✓					3-1151254	SW/SD17	4/13/94 0900	TH/YS	CPM30				
MCQY11	5	L	G	6	✓		✓					3-1151255	SW/SD17	4/13/94 0900	TH/YS	CPM30				
MCQA82	1	L	G	2		✓						3-1151256	SW/SD17	4/13/94 0900	TH/YS	CPM30				
MCQY12	1	L	G	2	✓							3-1151262	SW/SD9	4/13/94 0930	YS/AM	CPM31				
MCQY12	1	L	G	3			✓					3-1151263	SW/SD9	4/13/94 0930	YS/AM	CPM31				
MCQY12	5	L	G	6	✓		✓					3-1151264	SW/SD9	4/13/94 0930	YS/AM	CPM31	✓			

Shipment for Case complete? (Y/N):

Page 1 of 5

Sample used for a spike and/or duplicate: MCQY10 MCQA81

Additional Sampler Signatures: [redacted]

Chain of Custody Seal Number

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
[redacted]	4/14/94 1800				
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature) [redacted]	Date / Time	Remarks	Is custody seal intact? (Y/N/none)
			4/14/94 0945	Sample ID's for soils Change	

Samples [ ] Accepted (Signature)

Form 9110-1 (Rev. 5-91) Replaces EPA Form (2075-6), previous edition which may be used

EDA2030264

AR312462

011392

AR312463

EPA

United States Environmental Protection Agency
Contract Laboratory Program Sample Management Office
PO Box 818 Alexandria, VA 22313
703-557-2490 FTS 557-2490

Inorganic Traffic Report & Chain of Custody Record

(For Inorganic CLP Analysis)

SAS No. (if applicable)

Case No. 21843

1. Sample Description (Enter in Column A): 1. Surface Water 2. Ground Water 3. Leachate 4. Rinsate 5. Soil/Sediment 6. Oil (High only) 7. Waste (High only) 8. Other (Specify)

2. Preservative (Enter in Column D): 1. HCl 2. HNO3 3. NaOH 4. H_2SO_4 5. $K_2CR_2O_7$ 6. Ice only 7. Other (Specify) N. Not preserved

3. Region No.: III

Sampling Co.: Weston

5. Date Shipped: 14 APR 94

Carrier: Federal Express

7. Date Received – Received by: 4-15-94 [redacted]

Sampler (Name): [redacted]

Airbill Number: 0574393094

Laboratory Contract Number: 68-D2-0044

Sampler Signature: [redacted]

6. Ship To: [redacted]

ATTN: [redacted]

8. Transfer to

Date Received

Received by

Contract Number

Price

4. Type of Activity: Lead / Pre-Remedial / Remedial / Removal

SF, PRP, ST, FED, PA, SSI, LSI, RIFS, RD, RA, O&M, NPLD, CLEM, REMA, REM, OIL, UST

CLP Sample Numbers (from labels)	A Enter # from Box 1	B Conc. Low Med High	C Sample Type: Comp./Grab	D. Preservative from Box 6	E - RAS Analysis: Metals Total	Metals Dissolved	Cyanide	Low Conc only: Nitrate/Nitrite	Low Conc only: Fluoride	High only: pH	High only: Conductivity	F Regional Specific Tracking Number or Tag Numbers	G Station Location Number	H Mo/Day/Year/Time Sample Collection	I Sampler Initials	J Corresp. CLP Org. Samp. No.	K Sample Condition on Receipt	L High Conc. Phases (Check below): Solids	Water – MIS Liq.	Non Water – MIS Liq.
MCQA83	1	L	G	2		✓						3-1151265	SW/SD9	4/13/94 0930	YS/AM	CPM31	O			
MCQY13	1	L	G	2	✓							3-1151271	SW/SD7	4/13/94 1000	YS/AM	CPM32				
MCQY13	1	L	G	3			✓					3-1151272	SW/SD7	4/13/94 1000	YS/AM	CPM32				
MCQY13	5	L	G	6	✓		✓					3-1151273	SW/SD7	4/13/94 1000	YS/AM	CPM32				
MCQA84	1	L	G	2		✓						3-1151274	SW/SD7	4/13/94 1000	YS/AM	CPM32				
MCQY14	1	L	G	2	✓							3-1151280	SW/SD15	4/13/94 1030	TH/AM	CPM33				
MCQY14	1	L	G	3			✓					3-1151281	SW/SD15	4/13/94 1030	TH/AM	CPM33				
MCQY14	5	L	G	6	✓		✓					3-1151282	SW/SD15	4/13/94 1030	TH/AM	CPM33				
MCQA85	1	L	G	2		✓						3-1151283	SW/SD15	4/13/94 1030	TH/AM	CPM33				
MCQY15	1	L	G	2	✓							3-1151289	SW/SD8	4/13/94 1130	YS/AM	CPM34	✓			

Shipment for Case complete? (Y/N)

Page 1 of 6

Sample used for a spike and/or duplicate: —

Additional Sampler Signatures: [redacted]

Chain of Custody Seal Number

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
[redacted]	4/14/94 1800				
[redacted]shed by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
[redacted]ished by: (Signature)	Date / Time	Received for Laboratory by: (Signature) [redacted]	Date / Time [redacted]94 0945	Remarks: Is custody seal intact? Y/N/none — Sample ID's for Soils Change [redacted]	

[redacted] Samples ☐ Accepted (Signature)

[redacted]m 9110-1 (Rev. 5-91) Replaces EPA Form (2075-6), previous edition which may be used

EPA203027

0393

EPA

United States Environmental Protection Agency
Contract Laboratory Program Sample Management Office
PO Box 818 Alexandria, VA 22313
703-557-2490 FTS 557-2490

Inorganic Traffic Report & Chain of Custody Record

(For Inorganic CLP Analysis)

SAS No. (if applicable)

Case No. 21843

1. Sample Description (Enter in Column A): 1. Surface Water 2. Ground Water 3. Leachate 4. Rinsate 5. Soil/Sediment 6. Oil (High only) 7. Waste (High only) 8. Other (Specify)

2. Preservative (Enter in Column D): 1. HCl 2. HNO3 3. NaOH 4. H_2SO_4 5. $K_2CR_2O_7$ 6. Ice only 7. Other (Specify) N. Not preserved

3. Region No.: III

Sampling Co.: Weston

Sampler (Name): [redacted]

Sampler Signature: [redacted]

4. Type of Activity: Lead: SF, PRP, ST, FED; Pre-Remedial: PA, SSI, LSI; Remedial: RIFS [X], RD, RA, O&M, NPLD; Removal: CLEM, REMA, REM, OIL, UST

5. Date Shipped: 14 Apr 94

Carrier: Federal Express

Airbill Number: 0574393094

6. Ship To: [redacted]

ATTN: [redacted]

7. Date Received – Received by: 4-15-94 [redacted]

Laboratory Contract Number: 68-D2-0044

Unit Price

8. Transfer to

Date Received

Received by

Contract Number

Price

CLP Sample Numbers (from labels)	A Enter # from Box 1	B Conc. Low Med High	C Sample Type: Comp./Grab	D Preservative from Box 6	E - RAS Analysis: Metals Total	Metals Dissolved	Cyanide	Low Conc only Nitrate/Nitrite	Low Conc only Fluoride	High only pH	High only Conductivity	F Regional Specific Tracking Number or Tag Numbers	G Station Location Number	H Mo/Day/Year/Time Sample Collection	I Sampler Initials	J Corresp. CLP Org. Samp. No.	K Sample Condition on Receipt	L High Conc. Phases (Check below): Solids	Water – MIS Liq.	Non Water – MIS Liq.
MCQY15	1	L	G	3			✓					3-1151290	SW/SD8	4/13/94 1130	AM/YS	CPM34	OK			
MCQY15	5	L	G	6	✓		✓					3-1151291	SW/SD8	4/13/94 1130	AM/YS	CPM34				
MCQA86	1	L	G	2		✓						3-1151292	SW/SD8	4/13/94 1130	AM/YS	CPM34				
MCQY16	1	L	G	2	✓							3-1151298	SW/SD6	4/13/94 1200	AM/YS	CPM35				
MCQY16	1	L	G	3			✓					3-1151299	SW/SD6	4/13/94 1200	AM/YS	CPM35				
MCQY16	5	L	G	6	✓		✓					3-1151300	SW/SD6	4/13/94 1200	AM/YS	CPM35				
MCQA87	1	L	G	2		✓						3-1152401	SW/SD6	4/13/94 1200	AM/YS	CPM35				
MCQY17	1	L	G	2	✓							3-1152407	SW/SD14	4/13/94 1400	TH/YS	CPM36				
MCQY17	1	L	G	3			✓					3-1152408	SW/SD14	4/13/94 1400	TH/YS	CPM36				
MCQY17	5	L	G	6	✓		✓					3-1152409	SW/SD14	4/13/94 1400	TH/YS	CPM36	✓			

Shipment for Case complete? (Y/N) Y

Page 1 of 7

Sample used for a spike and/or duplicate: —

Additional Sampler Signatures: [redacted]

Chain of Custody Seal Number

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
[redacted]	4/14/94 1800				
...ished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
...ished by: (Signature)	Date / Time	Received for Laboratory by: (Signature) [redacted]	Date / Time: ...94 0945	Remarks: Sample ID's for Soils Changed	Is custody seal intact? Y/N/none

...n 9110-1 (Rev. 5-91) Replaces EPA Form (2075-6), previous edition which may be used

... Samples ☐ Accepted (Signature)

EPA203027A

AR312464

300394

EPA

United States Environmental Protection Agency
Contract Laboratory Program Sample Management Office
PO Box 818 Alexandria, VA 22313
703-557-2490 FTS 557-2490

Inorganic Traffic Report & Chain of Custody Record

(For Inorganic CLP Analysis)

SAS No. (if applicable):

Case No.: 21843

1. Sample Description (Enter In Column A)
   1. Surface Water
   2. Ground Water
   3. Leachate
   4. Rinsate
   5. Soil/Sediment
   6. Oil (High only)
   7. Waste (High only)
   8. Other (Specify)

2. Preservative (Enter In Column D)
   1. HCl
   2. HNO_3
   3. NaOH
   4. H_2SO_4
   5. $K_2CR_2O_7$
   6. Ice only
   7. Other (Specify)
   N. Not preserved

3. Region No.: III

Sampling Co.: Weston

5. Date Shipped: 04/19/94

Carrier: Federal Express

7. Date Received -- Received by: 4-20-94 [redacted]

Sampler (Name): [redacted]

Airbill Number: 1965145722

Laboratory Contract Number: 68-D20044

Sampler Signature: [redacted]

6. Ship To: [redacted]

ATTN: [redacted]

8. Transfer to:

Date Received:

Received by:

Contract Number:

Price:

4. Type of Activity

Lead		Pre-Remedial		Remedial		Removal	
SF				RIFS	X	CLEM	
PRP		PA		RD		REMA	
ST		SSI		RA		REM	
FED		LSI		O&M		OIL	
				NPLD		UST	

CLP Sample Numbers (from labels)	A Enter # from Box 1	B Conc. Low Med High	C Sample Type: Comp/ Grab	D Preservative from Box 6	E - RAS Analysis: Metals Total	Metals Dissolved	Cyanide	Low Conc only: Nitrate/ Nitrite	Fluoride	High only: pH	Conductivity	F Regional Specific Tracking Number or Tag Numbers	G Station Location Number	H Mo/Day/ Year/Time Sample Collection	I Sampler Initials	J Corresp. CLP Org. Samp. No.	K Sample Condition on Receipt	L High Conc. Phases (Check below): Solids	Water - MS Liq.	Non Water - Ms Liq.
MCQY50	5	L	G	6	✓		✓					3-1152482	SW/SD18	4/13/94	AM/YS	CPM37	OK			
MCQY18	1	L	G	2	✓							3-1152483	SW/SD18	4/13/94	AM/YS	CPM37				
MCQY18	1	L	G	3			✓					3-1152484	SW/SD18	4/13/94	AM/YS	CPM37				
MCQA89	1	L	G	2		✓						3-1152485	SW/SD18	4/13/94	AM/YS	—				
MCQY51	5	L	G	6	✓		✓					3-1152486	SW/SD24	4/13/94	TH/YS	CPM37				
MCQY19	1	L	G	2	✓							3-1152487	SW/SD24	4/13/94	TH/YS	CPM38				
MCQY19	1	L	G	3			✓					3-1152488	SW/SD24	4/13/94	TH/YS	CPM38				
MCQA90	1	L	G	2		✓						3-1152489	SW/SD24	4/13/94	TH/YS	—				
MCQY52	5	L	G	6	✓		✓					3-1152490	SW/SD-21	4/14/94	TH/YS	CPM38				
MCQY20	1	L	G	2	✓							3-1152491	SW/SD-21	4/14/94	TH/YS	CPM39	✓			

Shipment for Case complete? (Y/N):

Page 1 of 6

Sample used for a spike and/or duplicate: MCQY50, MCQY18, MCQA89

Additional Sampler Signatures: [redacted]

Chain of Custody Seal Number:

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
[redacted]	4/19/94 1600				
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature) [redacted]	Date / Time	Remarks	Is custody seal Intact? Y/N/none
			4/20/94	0945	

Split Samples ☐ Accepted (Signature)

EPA 0-1 (Rev. 5-91) Replaces EPA Form (2075-6), previous edition which may be used

EPA203028

AR312465

00395

EPA

United States Environmental Protection Agency
Contract Laboratory Program Sample Management Office
PO Box 818 Alexandria, VA 22313
703-557-2490 FTS 557-2490

Inorganic Traffic Report & Chain of Custody Record

(For Inorganic CLP Analysis)

SAS No. (if applicable):

Case No.: 21843

1. Sample Description (Enter In Column A)
1. Surface Water
2. Ground Water
3. Leachate
4. Rinsate
5. Soil/Sediment
6. Oil (High only)
7. Waste (High only)
8. Other (Specify)

2. Preservative (Enter In Column D)
1. HCl
2. HNO_3
3. NaOH
4. H_2SO_4
5. $K_2CR_2O_7$
6. Ice only
7. Other (Specify)
8. Not preserved

3. Region No.: III

Sampling Co.: Weston

Sampler (Name): [redacted]

Sampler Signature: [redacted]

4. Type of Activity: Lead / Pre-Remedial / Remedial / Removal
SF, PRP, ST, FED
PA, SSI, LSI
RIFS, RD, RA, O&M, NPLD
CLEM, REMA, REM, OIL, UST

5. Date Shipped: 04/14/94

Carrier: Federal Express

Airbill Number: 1765145722

6. Ship To: [redacted]

ATTN: [redacted]

7. Date Received -- Received by: 4-20-94 [redacted]

Laboratory Contract Number: 68-D20044

8. Transfer to:

Date Received:

Received by:

Contract Number:

Price:

CLP Sample Numbers (from labels)	A Enter # from Box 1	B Conc. Low Med High	C Sample Type: Comp. Grab	D Preservative from Box 6	E RAS Analysis: Metals Total	Metals Dissolved	Cyanide	Low Conc. only: Nitrate/Nitrite	Fluoride	High only: pH	Conductivity	F Regional Specific Tracking Number or Tag Numbers	G Station Location Number	H Mo/Day/Year/Time Sample Collection	I Sampler Initials	J Corresp. CLP Org. Samp. No.	K Sample Condition on Receipt	L High Conc. Phases (Check below): Solids	Water - Mis Liq.	Non Water - Mis Liq.
MCQY20	1	L	G	3			✓					3-1152492	SW/SD-21	4/14/94	TH/YS	CPM39	OK			
MCQA91	1	L	G	2		✓						3-1152493	SW/SD21	4/14/94	TH/YS	—				
MCQY53	5	L	G	6	✓		✓					3-1152494	SW/SD13	4/14/94	TH/YS	CPM898				
MCQY22	1	L	G	2	✓							3-1152495	SW/SD13	4/14/94	TH/YS	CPM42				
MCQY22	1	L	G	3			✓					3-1152496	SW/SD13	4/14/94	TH/YS	CPM42				
MCQA93	1	L	G	2		✓						3-1152497	SW/SD13	4/14/94	TH/YS	—				
MCQY54	5	L	G	6	✓		✓					3-1152498	SW/SD26	4/14/94	TH/YS	CPM82				
MCQY23	1	L	G	2	✓							3-1152499	SW/SD26	4/14/94	TH/YS	CPM43				
MCQY23	1	L	G	3			✓					3-1152500	SW/SD26	4/14/94	TH/YS	CPM43	✓			
MCQA94	1	L	G	2		✓						3-1151351	SW/SD26	4/14/94	TH/YS	—	✓			

Shipment for Case complete? (Y/N): Y

Page 1 of 6

Sample used for a spike and/or duplicate:

Additional Sampler Signatures: [redacted]

Chain of Custody Seal Number:

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
[redacted]	4/14/94 1600				
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks: Is custody seal intact? Y/N/none	
		[redacted]	4/20/94 0945		

Split Samples: ☐ Accepted (Signature)

Form 9110-1 (Rev. 5-91) Replaces EPA Form (2075-6), previous edition which may be used

AR312466

5PA2C3C284

96C0C6

EPA

United States Environmental Protection Agency
Contract Laboratory Program Sample Management Office
PO Box 818 Alexandria, VA 22313
703-557-2490 FTS 557-2490

Inorganic Traffic Report & Chain of Custody Record

(For Inorganic CLP Analysis)

SAS No. (if applicable):

Case No.: 21643

1. Sample Description (Enter in Column A): 1. Surface Water, 2. Ground Water, 3. Leachate, 4. Rinsate, 5. Soil/Sediment, 6. Oil (High only), 7. Waste (High only), 8. Other (Specify), 9. Other (Specify)

2. Preservative (Enter in Column D): 1. HCl, 2. HNO3, 3. NaOH, 4. H_2SO_4, 5. $K_2CR_2O_7$, 6. Ice only, 7. Other (Specify), 8. NaOH preserved

3. Region No.: III

Sampling Co.: WESTON

5. Date Shipped: 04/19/94

Carrier: Federal Express

7. Date Received -- Received by: 4-20-94 [redacted]

Sampler (Name): [redacted]

Airbill Number: 1965145722

Laboratory Contract Number: 68-D2-0044

Sampler Signature: [redacted]

6. Ship To: [redacted]

ATTN: [redacted]

8. Transfer to:

Date Received:

Received by: [redacted]

Contract Number:

Price:

4. Type of Activity: Lead: SF, PRP, ST, FED. Pre-Remedial: PA, SSI, LSI. Remedial: RIFS, RD, RA, O&M, NPLD. Removal: CLEM, REMA, REM, OIL, UST

CLP Sample Numbers (from labels)	A Enter # from Box 1	B Conc. Low Med High	C Sample Type: Comp./Grab	D Preservative from Box 6	E RAS Analysis: Metals Total	Metals Dissolved	Low Conc only Cyanide	Low Conc only Nitrate/Nitrite	Low Conc only Fluoride	High only pH	High only Conductivity	F Regional Specific Tracking Number or Tag Numbers	G Station Location Number	H Mo/Day/Year/Time Sample Collection	I Sampler Initials	J Corresp. CLP Org. Samp. No.	K Sample Condition on Receipt	L High Conc. Phases (Check below): Solids	Water - MS Liq.	Non Water - MS Liq.
MCQX79	5	L	G	6	✓		✓					3-1151352	SW/SD Seep 3	~~CPN83~~ 4/14/94	AM/JS	CPN83	OK			
MCQY24	1	L	G	2	✓							3-1151353	SW/SD Seep 3	4/14/94	AM/JS	CPM44				
MCQY24	1	L	G	3			✓					3-1151355	SW/SD Seep 3	4/14/94	AM/TH	CPM44				
MCQA95	1	L	G	2		✓						3-1151354	SW/SD Seep 3	4/14/94	AM/TH	—				
MCQX80	5	L	G	6	✓		✓					3-1151356	SW/SD 10	4/14/94	AM/TH	CPN84				
MCQY27	1	L	G	2	✓							3-1151357	SW/SD 10	4/14/94	AM/TH	CPM78				
MCQY27	1	L	G	3			✓					3-1151358	SW/SD 10	4/14/94	AM/TH	CPM78				
MCQA98	1	L	G	2		✓						3-1151359	SW/SD 10	4/14/94	AM/TH	—				
MCQX81	5	L	G	6	✓		✓					3-1151360	SW/SD BK	4/14/94	AM/TH	CPN85				
MCQY25	1	L	G	2	✓							3-1151361	SW/SD BK	4/14/94	AM/TH	CPM79				

Shipment for Case complete? (Y/N): Y

Page 1 of 6

Sample used for a spike and/or duplicate:

Additional Sampler Signatures: [redacted]

Chain of Custody Seal Number:

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
[redacted]	4/19/94 1600				
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature) [redacted]	Date / Time	Remarks	Is custody seal intact? Y/N/none
			4/21/94 0945		

Samples ☐ Accepted (Signature)

9110-1 (Rev. 5-91) Replaces EPA Form (2075-6), previous edition which may be used

AR312467

EPA203029

EPA United States Environmental Protection Agency
Contract Laboratory Program Sample Management Office
PO Box 818 Alexandria, VA 22313
703-557-2490 FTS 557-2490

Inorganic Traffic Report & Chain of Custody Record

(For Inorganic CLP Analysis)

SAS No. (if applicable):

Case No.: 21843

1. Sample Description (Enter in Column A): 1. Surface Water 2. Ground Water 3. Leachate 4. Rinsate 5. Soil/Sediment 6. Oil (High only) 7. Waste (High only) 8. Other (Specify)

2. Preservative (Enter in Column D): 1. HCl 2. HNO3 3. NaOH 4. H_2SO_4 5. $K_2CR_2O_7$ 6. Ice only 7. Other (Specify) N. Not preserved

3. Region No.: III

Sampling Co.: Weston

Sampler (Name): [redacted]

Sampler Signature: [redacted]

4. Type of Activity: Lead: SF, PRP, ST, FED; Pre-Remedial: PA, SSI, LSI; Remedial: RIFS, RD, RA, O&M, NPLD; Removal: CLEM, REMA, REM, OIL, UST

5. Date Shipped: 4/19/94

Carrier: Federal Express

Airbill Number: 1965145722

6. Ship To: [redacted]

ATTN: [redacted]

7. Date Received -- Received by: 4-20-94 [redacted]

Laboratory Contract Number: 68-D2-0044

8. Transfer to:

Date Received:

Received by:

Contract Number:

Price:

CLP Sample Numbers (from labels)	A Enter # from Box 1	B Conc. Low Med High	C Sample Type: Comp./Grab	D Preservative from Box 6	E RAS Analysis: Metals Total	Metals Dissolved	Cyanide	Low Conc only Nitrate/Nitrite	Low Conc only Fluoride	High only pH	High only Conductivity	F Regional Specific Tracking Number or Tag Numbers	G Station Location Number	H Mo/Day/Year/Time Sample Collection	I Sampler Initials	J Corresp. CLP Org. Samp. No.	K Sample Condition on Receipt	L High Conc. Phases (Check below): Solids	Water - MIS Liq.	Non Water - MIS Liq.
MCQX84	5	L	G	6	✓		✓					3-1151372	SW/SD12	4/14/94	TH/AM	CPN88	OK			
MCQY26	1	L	G	2	✓							3-1151373	SW/SD12	4/14/94	TH/AM	CPM82				
MCQY26	1	L	G	3			✓					3-1151374	SW/SD12	4/14/94	TH/AM	CPM82				
MCQA97	1	L	G	2		✓						3-1151375	SW/SD12	4/14/94	TH/AM	—				
MCQX85	5	L	G	6	✓		✓					3-1151376	SW/SD22	4/14/94	TH/AM	CPN89				
MCQY28	1	L	G	2	✓							3-1151377	SW/SD22	4/14/94	TH/AM	CPM83				
MCQY28	1	L	G	3			✓					3-1151378	SW/SD22	4/14/94	TH/AM	CPM83				
MCQA99	1	L	G	2		✓						3-1151379	SW/SD22	4/14/94	TH/AM	—				
MCQX86	5	L	G	6	✓		✓					3-1151380	SW/SD11	4/15/94	TH/AM	CPN90				
MCQY31	1	L	G	2	✓							3-1151381	SW/SD11	4/15/94	TH/AM	CPM84				

Shipment for Case complete? (Y/N): Y

Page 1 of 6 4

Sample used for a spike and/or duplicate:

Additional Sampler Signatures: [redacted]

Chain of Custody Seal Number:

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
[redacted]	4/19/94 1600				
[redacted]ished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
[redacted]ished by: (Signature)	Date / Time	Received for Laboratory by: (Signature) [redacted]	Date / Time: [redacted]94 0945	Remarks: Is custody seal intact? Y/N/none	

[redacted] Samples ☐ Accepted (Signature)

EPA2030284

AR312468

n 9110-1 (Rev. 5-91) Replaces EPA Form (2075-6), previous edition which may be used

EPA

United States Environmental Protection Agency
Contract Laboratory Program Sample Management Office
PO Box 818 Alexandria, VA 22313
703-557-2490 FTS 557-2490

Inorganic Traffic Report & Chain of Custody Record

(For Inorganic CLP Analysis)

SAS No. (if applicable):

Case No.: 21843

1. Sample Description (Enter in Column A)
   1. Surface Water
   2. Ground Water
   3. Leachate
   4. Rinsate
   5. Soil/Sediment
   6. Oil (High only)
   7. Waste (High only)
   8. Other (Specify)

2. Preservative (Enter in Column D)
   1. HCl
   2. HNO_3
   3. NaOH
   4. H_2SO_4
   5. $K_2CR_2O_7$
   6. Ice only
   7. Other (Specify)
   N. Not preserved

3. Region No.: III

Sampling Co.: Weston

5. Date Shipped: 4/19/94

Carrier: Federal Express

7. Date Received -- Received by: 4-20-94 [redacted]

Sampler (Name): [redacted]

Airbill Number: 1965145722

Laboratory Contract Number: 68-D2-0044

Sampler Signature: [redacted]

6. Ship To: [redacted]

ATTN: [redacted]

8. Transfer to:

Date Received:

Received by:

Contract Number:

Price:

4. Type of Activity

Lead		Pre-Remedial		Remedial		Removal	
SF				RIFS	X	CLEM	
PRP	X	PA		RD		REMA	
ST		SSI		RA		REM	
FED		LSI		O&M		OIL	
				NPLD		UST	

CLP Sample Numbers (from labels)	A Enter # from Box 1	B Conc. Low Med High	C Sample Type: Comp./Grab	D Preservative from Box 6	E - RAS Analysis: Metals Total	Metals Dissolved	Cyanide	Low Conc only: Nitrate/Nitrite	Fluoride	High only: pH	Conductivity	F Regional Specific Tracking Number or Tag Numbers	G Station Location Number	H Mo/Day/Year/Time Sample Collection	I Sampler Initials	J Corresp. CLP Org. Samp. No.	K Sample Condition on Receipt	L High Conc. Phases (Check below): Solids (%DT)	Water - MS Liq.	Non Water - Ms Liq.
MCQY25	1	L	G	3			✓					3-1151362	SW/SD BK	4/14/94	TH/AM	CPM79	OK			
MCQA96	1	L	G	2		✓						3-1151363	SW/SD BK	4/14/94	TH/AM	—				
MCQY52	5	L	G	6	✓		✓					3-1151364	SW/SD16	4/14/94	TH/AM	CPM86				
MCQY30	1	L	G	2	✓							3-1151365	SW/SD16	4/14/94	TH/AM	CPM80				
MCQY30	1	L	G	3			✓					3-1151366	SW/SD16	4/14/94	TH/AM	CPM80				
MCQY56	1	L	G	2		✓						3-1151367	SW/SD16	4/14/94	TH/AM	—				
MCQX83	5	L	G	6	✓		✓					3-1151368	SW/SD27	4/14/94	TH/AM	CPM87				
MCQY29	1	L	G	2	✓							3-1151369	SW/SD27	4/14/94	TH/AM	CPM81				
MCQY29	1	L	G	3			✓					3-1151370	SW/SD27	4/14/94	TH/AM	CPM81				
MCQY57	1	L	G	2		✓						3-1151371	SW/SD27	4/14/94	TH/AM	—				

Shipment for Case complete? (Y/N): Y

Page 1 of 5

Sample used for a spike and/or duplicate:

Additional Sampler Signatures: [redacted]

Chain of Custody Seal Number:

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
[redacted]	4/19/94 1600				
shed by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
shed by: (Signature)	Date / Time	Received for Laboratory by: (Signature) [redacted]	Date / Time: 04/20/94 0945	Remarks: Is custody seal intact? Y/N/none	

t Samples ☐ Accepted (Signature)

1 9110-1 (Rev. 5-91) Replaces EPA Form (2075-6); previous edition which may be used

EPA203030

AR312469

00399

EPA

United States Environmental Protection Agency
Contract Laboratory Program Sample Management Office
PO Box 818 Alexandria, VA 22313
703-557-2490 FTS 557-2490

Inorganic Traffic Report & Chain of Custody Record

(For Inorganic CLP Analysis)

SAS No. (if applicable)

Case No. 21543

1. Sample Description (Enter in Column A): 1. Surface Water 2. Ground Water 3. Leachate 4. Rinsate 5. Soil/Sediment 6. Oil (High only) 7. Waste (High only) 8. Other (Specify)

2. Preservative (Enter in Column D): 1. HCl 2. HNO3 3. NaOH 4. H_2SO_4 5. $K_2CR_2O_7$ 6. Ice only 7. Other (Specify) N. Not preserved

3. Region No.: III

Sampling Co.: WESTON

Sampler (Name): [redacted]

Sampler Signature: [redacted]

4. Type of Activity: Lead: SF, PRP, ST, FED; Pre-Remedial: PA, SSI, LSI; Remedial: RIFS, RD, RA, O&M, NPLD; Removal: CLEM, REMA, REM, OIL, UST

5. Date Shipped: 4/19/94

Carrier: FEDERAL EXPRESS

Airbill Number: 1965145722

6. Ship To: [redacted]

ATTN: [redacted]

7. Date Received -- Received by: 4-20-94 [redacted]

Laboratory Contract Number: 68-D2-0044

8. Transfer to

Date Received

Received by

Contract Number

Price

CLP Sample Numbers (from labels)	A Enter # from Box 1	B Conc. Low Med High	C Sample Type: Comp./Grab	D Preservative from Box 6	E - RAS Analysis: Metals Total	Metals Dissolved	Cyanide	Low Conc only: Nitrate/Nitrite	Low Conc only: Fluoride	High only: pH	High only: Conductivity	F Regional Specific Tracking Number or Tag Numbers	G Station Location Number	H Mo/Day/Year/Time Sample Collection	I Sampler Initials	J Corresp. CLP Org. Samp. No.	K Sample Condition on Receipt	L High Conc. Phases (Check below): Solids	Water - MIS Liq.	Non Water - MIS Liq.
MCQY37	1	L	G	3			✓					3-1151382	SW/SD11	4/15/94	AM/TH	CPM84	OK			
MCQY55	1	L	G	2		✓						3-1151383	SW/SD11	4/15/94	AM/TH	—				
MCQY32	4	L	G	2	✓							3-1151384	RB-1	4/15/94	AM/TH	CPM85				
MCQY37	4	L	G	3			✓					3-1151385	RB-1	4/15/94	AM/TH	CPM85				
MCQA92	1	L	G	2	(TF)	✓						3-1151386	FB-2	4/15/94	AM/TH	CPM41				
MCQY21	1	L	G	2	✓		(TF)					3-1151387	FB-2	4/15/94	AM/TH	CPM41				
MCQY21	1	L	G	3	(TF)		✓					3-1151388	FB-2	4/15/94	AM/TH	CPM41				
MCQA88	1	L	G	2		✓						3-1151389	SW/SD14	4/15/94	AM/TH	—				

Shipment for Case complete? (Y/N)

Page 1 of 6

Sample used for a spike and/or duplicate

Additional Sampler Signatures: [redacted]

Chain of Custody Seal Number

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
[redacted]	4/19/94 1600				

Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks	Is custody seal intact? Y/N/none
[redacted]		[redacted]	0940945		

Split Samples ☐ Accepted (Signature)

EPA203050A

AR312470

00400

rm 9110-1 (Rev. 5-91) Replaces EPA Form (2075-6), previous edition which may be used

PAGE_2_OF_10_ EPA SAMPLE SHIPPING LOG

TAT/WESTON

(1) (REQUIRED FOR ALL SAMPLES SENT THROUGH THE CONTRACT LAB PROGRAM)

PROJECT SITE NAME: Keystone Sanitary Landfill; EPA PROJECT OFFICER: Cris Corbitt
RAS NO. 21843; SAS NO.; TASK OR SET NO. 1
PROJECT SITE LEADER: Travis Helm; PHONE NO. (609) 461-4003
PROJECT SAMPLE COORDINATOR: Marian Murphy; PHONE NO. (609) 461-4003

SAS REQUEST: (DETALIS REQUIRED)
(10) Drinking Water Detection Levels for
1.) TOTAL METALS & CYANIDE
2.) DISSOLVED METALS

QC SAMPLE INFO AND/OR COMMENTS	CONC. (low/ med/ high)	SAMPLE PHASE (aq/ sol)	TYPE OR REQUEST org, dio inor, SAS	SAMPLE TRAFFIC REPORT NUMBER	ORGANICS OR INORGANICS LAB NAME	DATE SHIPPED	DATA RECEIVED (XX OUT ITEMS NOT REQUESTED) VOA	BNA	PEST	TCDD	METALS	CN	LAB NAME	SAS REQUES (itemize)	DATE SHIPPED	DATA REC'D
(2)	(3)	(4)	(5)	(6)	(7)	(8)	<--	---	---	(9)	---	-->	(11)	(12)	(13)	
	LOW	AQ	INO	MCQA76	ITPA	04/14/94	XX	XX	XX	XX		XX				
Field Blank	LOW	AQ	INO	MCQY05	ITPA	04/14/94	XX	XX	XX	XX	✓	✓	Rcd 5/19/94			
	LOW	AQ	INO	MCQA77	ITPA	04/14/94	XX	XX	XX	XX		XX				
	LOW	AQ	INO	MCQY07	ITPA	04/14/94	XX	XX	XX	XX	✓	✓	Rcd 5/19/94			
	LOW	SOL	INO	MCQY39	ITPA	04/14/94	XX	XX	XX	XX						
	LOW	AQ	INO	MCQA78	ITPA	04/14/94	XX	XX	XX	XX		XX				
	LOW	AQ	INO	MCQY08	ITPA	04/14/94	XX	XX	XX	XX	✓	✓	Rcd 5/19/94			
	LOW	SOL	INO	MCQY40	ITPA	04/14/94	XX	XX	XX	XX						
	LOW	AQ	INO	MCQA79	ITPA	04/14/94	XX	XX	XX	XX		XX				
	LOW	AQ	INO	MCQY09	ITPA	04/14/94	XX	XX	XX	XX	✓	✓	Rcd 5/19/94			
	LOW	SOL	INO	MCQY41	ITPA	04/14/94	XX	XX	XX	XX						
	LOW	AQ	INO	MCQA80	ITPA	04/14/94	XX	XX	XX	XX		XX				
MCQY09	LOW	AQ	INO	MCQY10	ITPA	04/14/94	XX	XX	XX	XX	✓	✓	Rcd 5/19/94			
CQY41	LOW	SOL	INO	MCQY42	ITPA	04/14/94	XX	XX	XX	XX						
QA80	LOW	AQ	INO	MCQA81	ITPA	04/14/94	XX	XX	XX	XX		XX				
	LOW	AQ	INO	MCQY11	ITPA	04/14/94	XX	XX	XX	XX	✓	✓	Rcd 5/19/94			
	LOW	SOL	INO	MCQY43	ITPA	04/14/94	XX	XX	XX	XX						

AMPLING: YES X; NO ; FINAL SHIPPING DATE: 04/19/94

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EPA020301A

AR312471

PAGE_1_OF_10_ EPA SAMPLE SHIPPING LOG

TAT/WESTON

(1) (REQUIRED FOR ALL SAMPLES SENT THROUGH THE CONTRACT LAB PROGRAM)

PROJECT SITE NAME: Keystone Sanitary Landfill ; EPA PROJECT OFFICER: Cris Corbitt
RAS NO. 21843 ; SAS NO. ; TASK OR SET NO. 1
PROJECT SITE LEADER: Travis Helm ; PHONE NO. (609) 461-4003
PROJECT SAMPLE COORDINATOR: Marian Murphy ; PHONE NO. (609) 461-4003

SAS REQUEST:(DETALIS REQUIRED)
(10)Drinking Water Detection Levels for
1.) TOTAL METALS & CYANIDE
2.) DISSOLVED METALS

QC SAMPLE INFO AND/OR COMMENTS	CONC. (low/ med/ high)	SAMPLE PHASE (aq/ sol)	TYPE OR REQUEST org, dio inor, SAS	SAMPLE TRAFFIC REPORT NUMBER	ORGANICS OR INORGANICS LAB NAME	DATE SHIPPED	DATA RECEIVED (XX OUT ITEMS NOT REQUESTED) VOA	BNA	PEST	TCDD	METALS	CN	LAB NAME	SAS REQUES (itemize)	DATE SHIPPED	DATA REC'D
(2)	(3)	(4)	(5)	(6)	(7)	(8)	<---	---	---	(9)	---	--->	(11)	(12)	(13)	
	LOW	AQ	INO	MCQY00	ITPA	04/14/94	XX	XX	XX	XX	✓	✓	Rcd 5/19/94			
	LOW	SOL	INO	MCQY33	ITPA	04/14/94	XX	XX	XX	XX						
	LOW	AQ	INO	MCQA71	ITPA	04/14/94	XX	XX	XX	XX		XX				
	LOW	AQ	INO	MCQY01	ITPA	04/14/94	XX	XX	XX	XX	✓	✓	Rcd 5/19/94			
	LOW	SOL	INO	MCQY34	ITPA	04/14/94	XX	XX	XX	XX						
	LOW	AQ	INO	MCQA72	ITPA	04/14/94	XX	XX	XX	XX		XX				
	LOW	AQ	INO	MCQY02	ITPA	04/14/94	XX	XX	XX	XX	✓	✓	Rcd 5/19/94			
	LOW	SOL	INO	MCQY35	ITPA	04/14/94	XX	XX	XX	XX						
	LOW	AQ	INO	MCQA73	ITPA	04/14/94	XX	XX	XX	XX		XX				
	LOW	AQ	INO	MCQY03	ITPA	04/14/94	XX	XX	XX	XX	✓	✓	Rcd 5/19/94			
	LOW	SOL	INO	MCQY36	ITPA	04/14/94	XX	XX	XX	XX						
	LOW	AQ	INO	MCQA74	ITPA	04/14/94	XX	XX	XX	XX		XX				
	LOW	AQ	INO	MCQY04	ITPA	04/14/94	XX	XX	XX	XX	✓	✓	Rcd 5/19/94			
	LOW	SOL	INO	MCQY37	ITPA	04/14/94	XX	XX	XX	XX						
	LOW	AQ	INO	MCQA75	ITPA	04/14/94	XX	XX	XX	XX		XX				
	LOW	AQ	INO	MCQY06	ITPA	04/14/94	XX	XX	XX	XX	✓	✓	Rcd 5/19/94			
	LOW	SOL	INO	MCQY38	ITPA	04/14/94	XX	XX	XX	XX						

SAMPLING: YES X ; NO ; FINAL SHIPPING DATE: 04/19/94

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EPA20305

AR312472

'AGE_4_OF_10_ EPA SAMPLE SHIPPING LOG

TAT/WESTON

)_____ (REQUIRED FOR ALL SAMPLES SENT THROUGH THE CONTRACT LAB PROGRAM)

'ROJECT SITE NAME:___Keystone Sanitary Landfill_____; EPA PROJECT OFFICER:_Cris Corbitt_____

'AS NO.____21843_____; SAS NO._____; TASK OR SET NO._____1_____

'ROJECT SITE LEADER:_Travis Helm_____; PHONE NO.(609) _461-4003____

'ROJECT SAMPLE COORDINATOR: Marian Murphy_____; PHONE NO.(609)_461-4003____

SAS REQUEST:(DETALIS REQUIRED)
(10)Drinking Water Detection Levels for
1.) TOTAL METALS & CYANIDE
2.) DISSOLVED METALS

QC SAMPLE INFO AND/OR COMMENTS	CONC. (low/ med/ high)	SAMPLE PHASE (aq/ sol)	TYPE OR REQUEST org, dio inor, SAS	SAMPLE TRAFFIC REPORT NUMBER	ORGANICS OR INORGANICS LAB NAME	DATE SHIPPED	DATA RECEIVED (XX OUT ITEMS NOT REQUESTED) VOA	BNA	PEST	TCDD	METALS	CN	LAB NAME	SAS REQUES (itemize)	DATE SHIPPED	DATA REC'D
(2)	(3)	(4)	(5)	(6)	(7)	(8)	<--			(9)		-->	(11)	(12)	(13)	
	LOW	SOL	INO	MCQY49	ITPA	04/14/94	XX	XX	XX	XX						
	LOW	AQ	INO	MCQA88	ITPA	04/19/94	XX	XX	XX	XX		XX				
	LOW	AQ	INO	MCQY18	ITPA	04/19/94	XX	XX	XX	XX						
	LOW	SOL	INO	MCQY50	ITPA	04/19/94	XX	XX	XX	XX						
	LOW	AQ	INO	MCQA89	ITPA	04/19/94	XX	XX	XX	XX		XX				
	LOW	AQ	INO	MCQY19	ITPA	04/19/94	XX	XX	XX	XX						
	LOW	SOL	INO	MCQY51	ITPA	04/19/94	XX	XX	XX	XX						
	LOW	AQ	INO	MCQA90	ITPA	04/19/94	XX	XX	XX	XX		XX				
	LOW	AQ	INO	MCQY20	ITPA	04/19/94	XX	XX	XX	XX	✓ ↓	✓ ↓	Rec'd 5/4/94			
	LOW	SOL	INO	MCQY52	ITPA	04/19/94	XX	XX	XX	XX						
	LOW	AQ	INO	MCQA91	ITPA	04/19/94	XX	XX	XX	XX		XX				
	LOW	AQ	INO	MCQY22	ITPA	04/19/94	XX	XX	XX	XX						
	LOW	SOL	INO	MCQY53	ITPA	04/19/94	XX	XX	XX	XX						
	LOW	AQ	INO	MCQA93	ITPA	04/19/94	XX	XX	XX	XX		XX				
	LOW	AQ	INO	MCQY23	ITPA	04/19/94	XX	XX	XX	XX						
	LOW	SOL	INO	MCQY54	ITPA	04/19/94	XX	XX	XX	XX						
	LOW	AQ	INO	MCQA94	ITPA	04/19/94	XX	XX	XX	XX		XX				

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EDA203032A

'MPLING: YES____X_____; NO_____; FINAL SHIPPING DATE:___04/19/94_____

AR312473

PAGE_3_OF_10_ EPA SAMPLE SHIPPING LOG

TAT/WESTON

(1) (REQUIRED FOR ALL SAMPLES SENT THROUGH THE CONTRACT LAB PROGRAM)

PROJECT SITE NAME: Keystone Sanitary Landfill; EPA PROJECT OFFICER: Cris Corbitt
RAS NO. 21843; SAS NO. ; TASK OR SET NO. 1
PROJECT SITE LEADER: Travis Helm; PHONE NO. (609) 461-4003
PROJECT SAMPLE COORDINATOR: Marian Murphy; PHONE NO. (609) 461-4003

SAS REQUEST: (DETALIS REQUIRED)
(10) Drinking Water Detection Levels for
1.) TOTAL METALS & CYANIDE
2.) DISSOLVED METALS

QC SAMPLE INFO AND/OR COMMENTS	CONC. (low/ med/ high)	SAMPLE PHASE (aq/ sol)	TYPE OR REQUEST org, dio inor, SAS	SAMPLE TRAFFIC REPORT NUMBER	ORGANICS OR INORGANICS LAB NAME	DATE SHIPPED	DATA RECEIVED (XX OUT ITEMS NOT REQUESTED) VOA	BNA	PEST	TCDD	METALS	CN	LAB NAME	SAS REQUES (itemize)	DATE SHIPPED	DATA REC'D
(2)	(3)	(4)	(5)	(6)	(7)	(8)	<--	---	---	(9)	---	-->	(11)	(12)	(13)	
	LOW	AQ	INO	MCQA82	ITPA	04/14/94	XX	XX	XX	XX		XX				
	LOW	AQ	INO	MCQY12	ITPA	04/14/94	XX	XX	XX	XX	✓ ↓	✓↓	Rec'd 5/19/94			
	LOW	SOL	INO	MCQY44	ITPA	04/14/94	XX	XX	XX	XX						
	LOW	AQ	INO	MCQA83	ITPA	04/14/94	XX	XX	XX	XX		XX				
	LOW	AQ	INO	MCQY13	ITPA	04/14/94	XX	XX	XX	XX	✓ ↓	✓↓	Rec'd 5/19/94			
	LOW	SOL	INO	MCQY45	ITPA	04/14/94	XX	XX	XX	XX						
	LOW	AQ	INO	MCQA84	ITPA	04/14/94	XX	XX	XX	XX		XX				
	LOW	AQ	INO	MCQY14	ITPA	04/14/94	XX	XX	XX	XX	✓ ↓	✓↓	Rec'd 5/19/94			
	LOW	SOL	INO	MCQY46	ITPA	04/14/94	XX	XX	XX	XX						
	LOW	AQ	INO	MCQA85	ITPA	04/14/94	XX	XX	XX	XX		XX				
	LOW	AQ	INO	MCQY15	ITPA	04/14/94	XX	XX	XX	XX	✓ ↓	✓↓	Rec'd 5/19/94			
	LOW	SOL	INO	MCQY47	ITPA	04/14/94	XX	XX	XX	XX						
	LOW	AQ	INO	MCQA86	ITPA	04/14/94	XX	XX	XX	XX		XX				
	LOW	AQ	INO	MCQY16	ITPA	04/14/94	XX	XX	XX	XX	✓ ↓	✓↓	Rec'd 5/19/94			
	LOW	SOL	INO	MCQY48	ITPA	04/14/94	XX	XX	XX	XX						
	LOW	AQ	INO	MCQA87	ITPA	04/14/94	XX	XX	XX	XX		XX				
	LOW	AQ	INO	MCQY17	ITPA	04/14/94	XX	XX	XX	XX	✓ ↓	✓↓	Rec'd 5/19/94			

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(14) SAMPLING: X; NO ; FINAL SHIPPING DATE: 04/18/94

HR312474

EPA203032

PAGE_6_OF_10_ EPA SAMPLE SHIPPING LOG

TAT/WESTON

(1) (REQUIRED FOR ALL SAMPLES SENT THROUGH THE CONTRACT LAB PROGRAM)

PROJECT SITE NAME: Keystone Sanitary Landfill ; EPA PROJECT OFFICER: Cris Corbitt
RAS NO. 21843 ; SAS NO. ; TASK OR SET NO. 1
PROJECT SITE LEADER: Travis Helm ; PHONE NO. (609) 461-4003
PROJECT SAMPLE COORDINATOR: Marian Murphy ; PHONE NO. (609) 461-4003

SAS REQUEST: (DETALIS REQUIRED)
(10) Drinking Water Detection Levels for
1.) TOTAL METALS & CYANIDE
2.) DISSOLVED METALS

QC SAMPLE INFO AND/OR COMMENTS	CONC. (low/ med/ high)	SAMPLE PHASE (aq/ sol)	TYPE OR REQUEST org, dio inor, SAS	SAMPLE TRAFFIC REPORT NUMBER	ORGANICS OR INORGANICS LAB NAME	DATE SHIPPED	DATA RECEIVED (XX OUT ITEMS NOT REQUESTED) VOA	BNA	PEST	TCDD	METALS	CN	LAB NAME	SAS REQUES (itemize)	DATE SHIPPED	DATA REC'D
(2)	(3)	(4)	(5)	(6)	(7)	(8)	<--			(9)		-->	(11)	(12)	(13)	
	LOW	AQ	INO	MCQA97	ITPA	04/19/94	XX	XX	XX	XX		XX				
	LOW	SOL	INO	MCQX85	ITPA	04/19/94	XX	XX	XX	XX						
	LOW	AQ	INO	MCQY28	ITPA	04/19/94	XX	XX	XX	XX						
	LOW	AQ	INO	MCQA99	ITPA	04/19/94	XX	XX	XX	XX		XX				
	LOW	SOL	INO	MCQX86	ITPA	04/19/94	XX	XX	XX	XX						
	LOW	AQ	INO	MCQY31	ITPA	04/19/94	XX	XX	XX	XX						
	LOW	AQ	INO	MCQY55	ITPA	04/19/94	XX	XX	XX	XX		XX				
Rins Blank	LOW	AQ	INO	MCQY32	ITPA	04/19/94	XX	XX	XX	XX						
Field Blank	LOW	AQ	INO	MCQA92	ITPA	04/19/94	XX	XX	XX	XX		XX				
Field Blank	LOW	AQ	INO	MCQY21	ITPA	04/19/94	XX	XX	XX	XX	✓	✓	Rec'd 5/19/94			

EPA203033A

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FI... SAMPLING: YES X ; NO ; FINAL SHIPPING DATE: 04/19/94
(14)

AR312475

PAGE_5_OF_10_ EPA SAMPLE SHIPPING LOG

TAT/WESTON

(1) (REQUIRED FOR ALL SAMPLES SENT THROUGH THE CONTRACT LAB PROGRAM)

PROJECT SITE NAME: Keystone Sanitary Landfill ; EPA PROJECT OFFICER: Cris Corbitt

RAS NO. 21843 ; SAS NO. ; TASK OR SET NO. 1

PROJECT SITE LEADER: Travis Helm ; PHONE NO. (609) 461-4003

PROJECT SAMPLE COORDINATOR: Marian Murphy ; PHONE NO. (609) 461-4003

SAS REQUEST: (DETALIS REQUIRED)
(10) Drinking Water Detection Levels for
1.) TOTAL METALS & CYANIDE
2.) DISSOLVED METALS

QC SAMPLE INFO AND/OR COMMENTS	CONC. (low/ med/ high)	SAMPLE PHASE (aq/ sol)	TYPE OR REQUEST org, dio inor, SAS	SAMPLE TRAFFIC REPORT NUMBER	ORGANICS OR INORGANICS LAB NAME	DATE SHIPPED	DATA RECEIVED (XX OUT ITEMS NOT REQUESTED) VOA	BNA	PEST	TCDD	METALS	CN	LAB NAME	SAS REQUES (itemize)	DATE SHIPPED	DATA REC'D
(2)	(3)	(4)	(5)	(6)	(7)	(8)	<---	---	---	(9)	---	--->	(11)	(12)	(13)	
	LOW	SOL	INO	MCQX79	ITPA	04/19/94	XX	XX	XX	XX	✓	✓	Recd 5/20/94			
	LOW	AQ	INO	MCQY24	ITPA	04/19/94	XX	XX	XX	XX	✓	✓	Recd 5/20/94			
	LOW	AQ	INO	MCQA95	ITPA	04/19/94	XX	XX	XX	XX	✓	XX	Recd 5/19/94			
	LOW	SOL	INO	MCQX80	ITPA	04/19/94	XX	XX	XX	XX	✓	✓	Recd 5/20/94			
	LOW	AQ	INO	MCQY27	ITPA	04/19/94	XX	XX	XX	XX	✓	✓	Recd 5/20/94			
	LOW	AQ	INO	MCQA98	ITPA	04/19/94	XX	XX	XX	XX	✓	XX	Recd 5/19/94			
	LOW	SOL	INO	MCQX81	ITPA	04/19/94	XX	XX	XX	XX	✓	✓	Recd 5/20/94			
	LOW	AQ	INO	MCQY25	ITPA	04/19/94	XX	XX	XX	XX	✓	✓	Recd 5/20/94			
	LOW	AQ	INO	MCQA96	ITPA	04/19/94	XX	XX	XX	XX	✓	XX	Recd 5/19/94			
	LOW	SOL	INO	MCQX82	ITPA	04/19/94	XX	XX	XX	XX	✓	✓	Recd 5/20/94			
	LOW	AQ	INO	MCQY30	ITPA	04/19/94	XX	XX	XX	XX	✓	✓	Recd 5/20/94			
	LOW	AQ	INO	MCQY56	ITPA	04/19/94	XX	XX	XX	XX		XX				
	LOW	SOL	INO	MCQX83	ITPA	04/19/94	XX	XX	XX	XX	✓	✓	Recd 5/20/94			
	LOW	AQ	INO	MCQY29	ITPA	04/19/94	XX	XX	XX	XX	✓	✓	Recd 5/20/94			
	LOW	AQ	INO	MCQY57	ITPA	04/19/94	XX	XX	XX	XX		XX				
	LOW	SOL	INO	MCQX84	ITPA	04/19/94	XX	XX	XX	XX	✓	✓	Recd 5/25/94			
	LOW	AQ	INO	MCQY26	ITPA	04/19/94	XX	XX	XX	XX	✓	✓	Recd 5/20/94			

FINAL SAMPLING: X ; NO ; FINAL SHIPPING DATE: 04/19

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000029

3
BLANKS

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQY00

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L_

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum	10.9	U	10.9	U	10.9	U	-11.3	B	10.900	U	P
Antimony	13.2	U	13.2	U	13.2	U	13.2	U	13.200	U	P
Arsenic	2.2	U	2.2	U	2.2	U	2.2	U	2.200	U	P
Barium	0.6	U	0.6	U	0.6	U	0.6	U	0.600	U	P
Beryllium	-0.2	B	0.1	U	0.1	U	0.1	U	-0.150	B	P
Cadmium	2.6	U	2.6	U	2.6	U	2.6	U	2.600	U	P
Calcium	2.7	U	2.7	U	2.7	U	4.5	B	12.910	B	P
Chromium	1.5	U	1.5	U	-1.7	B	1.5	U	1.500	U	P
Cobalt	1.6	U	1.6	U	-1.7	B	1.6	U	1.600	U	P
Copper	0.9	U	0.9	U	0.9	U	1.2	B	0.900	U	P
Iron	4.4	U	4.4	U	4.4	U	4.4	U	12.460	B	P
Lead	1.4	U	-1.5	B	1.4	U	-1.9	B	1.400	U	P
Magnesium	12.1	U	12.1	U	12.1	U	12.1	U	12.100	U	P
Manganese	0.5	U	0.5	U	0.5	U	0.5	U	0.500	U	P
Mercury	0.2	U	0.2	U	0.2	U	0.2	U	0.200	U	CV
Nickel	5.9	U	-6.0	B	5.9	U	5.9	U	5.900	U	P
Potassium	244.0	U	244.0	U	-271.0	B	-309.4	B	244.000	U	P
Selenium	3.0	U	3.0	U	3.0	U	3.0	U	3.000	U	P
Silver	1.9	U	1.9	U	1.9	U	1.9	U	1.900	U	P
Sodium	9.7	U	9.7	U	9.7	U	9.7	U	35.780	B	P
Thallium	4.4	B	3.7	U	5.1	B	3.7	U	3.700	U	P
Vanadium	1.5	U	1.5	U	1.5	U	1.5	U	1.500	U	P
Zinc	2.0	U	2.0	U	2.0	U	2.0	U	12.910	B	P
Cyanide	10.0	U	10.0	U	10.0	U	10.0	U	5.000	U	AS

AR312477 EPA203 035A

APPENDIX C

SUPPORT DOCUMENTATION

SDG MCQY00

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3
BLANKS

000030

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQY00

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L_

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum			10.9	U							P
Antimony			13.2	U							P
[illegible]nic			2.2	U							P
[illegible]um			0.6	U							P
Beryllium			0.1	U							P
Cadmium			2.6	U							P
Calcium			2.7	U							P
Chromium			1.5	U							P
Cobalt			1.6	U							P
Copper			0.9	U							P
Iron			4.4	U							P
Lead			-1.9	B							P
Magnesium			12.1	U							P
Manganese			0.5	U							P
Mercury			0.2	U	0.2	U	0.2	U			CV
Nickel			5.9	U							P
Potassium			244.0	U							P
Selenium			3.0	U							P
Silver			1.9	U							P
Sodium			9.7	U							P
Thallium			4.0	B							P
Vanadium			1.5	U							P
Zinc			2.0	U							P
Cyanide			10.0	U	10.0	U	10.0	U	5.000	U	AS

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000056

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ANALYSIS RUN LOG

Lab Name: ITAS_PITTSBURGH _____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.:MCQY00

Instrument ID Number: TRACE _____ Method: P_

Start Date: 05/05/94 End Date: 05/05/94

EPA Sample No.	D/F	Time	% R	Analytes																								
				ALK	BS	ASA	BAE	BED	CAR	CRO	CUE	FEB	PIG	MIN	MIG	HIT	NIT	KEI	SEG	ALA	NIL	TIN	VIN	ZIN	CIN
S0	1.00	0855				X								X						X			X		
S	1.00	0858																							
S	1.00	0901				X								X						X			X		
S	1.00	0905																							
ICV	1.00	0908				X														X					
ICV	1.00	0911												X									X		
ICB	1.00	0915				X								X						X			X		
ICSA	1.00	0918				X								X						X			X		
ICSAB	1.00	0922				X								X						X			X		
CRI	1.00	0925				X								X						X			X		
CCV	1.00	0929				X								X						X			X		
CCB	1.00	0932				X								X						X			X		
ZZZZZZ	1.00	0936																							
PBW	1.00	0939				X								X						X			X		
LCSW	1.00	0942				X														X					
LCSW	1.00	0946												X									X		
MCQY00	1.00	0949				X								X						X			X		
MCQY00L	5.00	0953				X								X						X			X		
MCQY01	1.00	0956				X								X						X			X		
MCQY02	1.00	1000				X								X						X			X		
MCQY03	1.00	1003				X								X						X			X		
MCQY04	1.00	1007				X								X						X			X		
CCV	1.00	1010				X								X						X			X		
CCB	1.00	1014				X								X						X			X		
MCQY05	1.00	1017				X								X						X			X		
MCQY05D	1.00	1021				X								X						X			X		
MCQY05S	1.00	1024				X								X						X			X		
MCQY06	1.00	1027				X								X						X			X		
MCQY07	1.00	1031				X								X						X			X		
MCQY08	1.00	1034				X								X						X			X		
MCQY09	1.00	1038				X								X						X			X		
MCQY10	1.00	1041				X								X						X			X		

FORM XIV - IN ILM02.

AR312480 EPA203036A

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ANALYSIS RUN LOG

Lab Name: ITAS PITTSBURGH _____ Contract: 68-D2-0044

Lab Code: ITPA __ Case No.: 21843 _ SAS No.: _____ SDG No.:MCQY00

Instrument ID Number: TRACE _____ Method: P_

Start Date: 05/05/94 End Date: 05/05/94

EPA Sample No.	D/F	Time	% R	Analytes																									
				ALB	SB	ASA	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	KS	SE	AG	AL	TI	VI	ZN	CN
MCQY11	1.00	1045				X									X						X			X			
MCQY12	1.00	1048				X									X						X			X			
CCV	1.00	1052				X									X						X			X			
CCB	1.00	1055				X									X						X			X			
MCQY13	1.00	1059				X									X						X			X			
MCQY14	1.00	1102				X									X						X			X			
MCQY15	1.00	1106				X									X						X			X			
MCQY16	1.00	1109				X									X						X			X			
[illegible]Y17	1.00	1113				X									X						X			X			
[illegible]Y20	1.00	1116				X									X						X			X			
MCQY21	1.00	1119				X									X						X			X			
ICSA	1.00	1123				X									X						X			X			
ICSAB	1.00	1126				X									X						X			X			
CRI	1.00	1130				X									X						X			X			
CCV	1.00	1133				X									X						X			X			
CCB	1.00	1137				X									X						X			X			

FORM XIV - IN ILM02.1

AR312481

EPA203037

U.S. EPA - CLP

14

ANALYSIS RUN LOG

000058

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA___ Case No.: 21843_ SAS No.: _____ SDG No.:MCQY00

Instrument ID Number: JA61E_____ Method: P_

Start Date: 05/05/94 End Date: 05/05/94

EPA Sample No.	D/F	Time	% R	Analytes																									
				ALUMINUM	ANTIMONY	ARSENIC	BARIUM	BERYLLIUM	CADMIUM	CALCIUM	CHROMIUM	COBALT	COPPER	IRON	LEAD	MAGNESIUM	MANGANESE	MERCURY	NICKEL	POTASSIUM	SELENIUM	SILVER	SODIUM	THALLIUM	VANADIUM	ZINC	CYANIDE
S0	1.00	0521		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X	
S	1.00	0524																					X				
S	1.00	0526		X	X			X						X					X				X				
S	1.00	0529																									
S	1.00	0531									X																
S	1.00	0533					X		X	X		X	X			X	X			X						X	
S	1.00	0536																								X	
ICV	1.00	0538			X																						
ICV	1.00	0541		X			X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X	
ICB	1.00	0543		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X	
ICSA	1.00	0546		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X	
ICSAB	1.00	0548		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X	
CRI	1.00	0550			X			X	X		X	X	X	X				X		X			X			X	X
CCV	1.00	0553																					X				
CCV	1.00	0555		X	X		X	X	X	X	X	X	X	X		X	X		X	X			X		X	X	
CCB	1.00	0558		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X	
PBW	1.00	0610		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X	
LCSW	1.00	0613			X																						
LCSW	1.00	0615		X			X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X	
MCQY00	1.00	0619		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X	
MCQY00L	5.00	0622		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X	
MCQY01	1.00	0624		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X	
MCQY02	1.00	0627		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X	
MCQY03	1.00	0629		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X	
MCQY04	1.00	0632		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X	
CCV	1.00	0634																					X				
CCV	1.00	0637		X	X		X	X	X	X	X	X	X	X		X	X		X	X			X		X	X	
CCB	1.00	0639		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X	
MCQY05	1.00	0642		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X	
MCQY05D	1.00	0644		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X	
MCQY05S	1.00	0647		X	X		X	X	X		X	X	X	X			X		X			X			X	X	
MCQY06	1.00	0649		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X	

FORM XIV - IN ILM02.

AR312482.

EPA203037A

U.S. EPA - CLP

14

ANALYSIS RUN LOG

000059

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.:MCQY00

Instrument ID Number: JA61E_____ Method: P_

Start Date: 05/05/94 End Date: 05/05/94

EPA Sample No.	D/F	Time	% R	ALBS	BAS	BAE	CDA	CRO	CUE	FBG	MNG	HNI	KSE	AGA	NAL	TIN	VIN	ZIN	CIN
MCQY07	1.00	0651		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MCQY08	1.00	0654		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MCQY09	1.00	0656		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MCQY10	1.00	0659		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MCQY11	1.00	0701		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MCQY12	1.00	0704		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCV	1.00	0706													X				
CCV	1.00	0709		X	X	X	X	X	X	X	X	X	X		X		X	X	X
[illegible]	1.00	0711		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
[illegible]Y13	1.00	0714		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MCQY14	1.00	0716		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MCQY15	1.00	0718		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MCQY16	1.00	0721		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MCQY17	1.00	0723		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MCQY20	1.00	0726		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MCQY21	1.00	0728		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICSA	1.00	0732		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICSAB	1.00	0735		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CRI	1.00	0737			X		X	X	X	X			X		X		X	X	X
CCV	1.00	0740													X				
CCV	1.00	0742		X	X	X	X	X	X	X	X	X	X		X		X	X	X
CCB	1.00	0745		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

FORM XIV - IN ILM02.1

AR312483 EPA203038

U.S. EPA - CLP

5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MCQY05S

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21943_ SAS No.: _____ SDG No.: MCQY00

Matrix (soil/water): WATER Level (low/med): LOW___

% Solids for Sample: _0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum	75-125	1967.1900		10.9000	U	2000.00	98.4		P
Antimony	75-125	483.9500		13.2000	U	500.00	96.8		P
Arsenic	75-125	2013.1700		2.2000	U	2000.00	100.7		P
Barium	75-125	1985.7000		0.6000	U	2000.00	99.3		P
Beryllium	75-125	49.7200		0.1000	U	50.00	99.4		P
Cadmium	75-125	51.5500		2.6000	U	50.00	103.1		P
Calcium									NR
Chromium	75-125	199.5900		1.5000	U	200.00	99.8		
Cobalt	75-125	530.3500		1.6000	U	500.00	106.1		
Copper	75-125	255.2800		1.0300	B	250.00	101.7		P
Iron	75-125	1016.8300		7.1100	B	1000.00	101.0		P
Lead	75-125	495.3700		1.4000	U	500.00	99.1		P
Magnesium									NR
Manganese	75-125	514.6100		0.5000	U	500.00	102.9		P
Mercury	75-125	1.0120		0.2000	U	1.00	101.2		CV
Nickel	75-125	518.9600		5.9000	U	500.00	103.8		P
Potassium									NR
Selenium	75-125	2067.2100		3.0000	U	2000.00	103.4		P
Silver	75-125	49.4100		1.9000	U	50.00	98.8		P
Sodium									NR
Thallium	75-125	1965.9300		3.7000	U	2000.00	98.3		P
Vanadium	75-125	496.5300		1.5000	U	500.00	99.3		P
Zinc	75-125	529.8100		4.7400	B	500.00	105.0		P
Cyanide	75-125	73.9710		5.0000	U	100.00	74.0	N	AS

Comments:

FORM V (Part 1) - IN ILM02.1

AR312484

EPA203284

U.S. EPA - CLP

J00035

5B

POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MCQY05A

Lab Name: ITAS PITTSBURGH Contract: 68-D2-0044

Lab Code: ITPA Case No.: 21843 SAS No.: SDG No.: MCQY00

Matrix (soil/water): WATER Level (low/med): LOW

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Added (SA)	%R	Q	M
Aluminum									NR
Antimony									NR
Arsenic									NR
Barium									NR
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									NR
Iron									NR
Lead									NR
Magnesium									NR
Manganese									NR
Mercury									NR
Nickel									NR
Potassium									NR
Selenium									NR
Silver									NR
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR
Cyanide		18.40	B	10.00	U	20.0	92.0		AS

Comments:

FORM V (Part 2) - IN ILM02.1

AR312485

EPA203039

U.S. EPA - CLP

2B
CRDL STANDARD FOR AA AND ICP

000028

Lab Name: ITAS PITTSBURGH Contract: 68-D2-0044

Lab Code: ITPA Case No.: 21843 SAS No.: _____ SDG No.: MCQY00

AA CRDL Standard Source: FISHERRICCAM

ICP CRDL Standard Source: MALLINRICCAA

Concentration Units: ug/L

Analyte	CRDL Standard for AA True	Found	%R	CRDL Standard for ICP Initial True	Initial Found	Initial %R	Final Found	Final %R
Aluminum								
Antimony				120.0	111.73	93.1	124.00	103.3
Arsenic				20.0	18.78	93.9	17.23	86.2
Barium								
Beryllium				10.0	9.85	98.5	10.11	101
Cadmium				10.0	9.69	96.9	11.65	11
Calcium								
Chromium				20.0	19.13	95.6	20.05	100.2
Cobalt				100.0	105.20	105.2	107.35	107.4
Copper				50.0	50.21	100.4	51.03	102.1
Iron								
Lead				6.0	5.28	88.0	4.85	80.8
Magnesium								
Manganese				30.0	30.52	101.7	30.52	101.7
Mercury	0.2	0.26	130.0					
Nickel				80.0	78.33	97.9	83.87	104.8
Potassium								
Selenium				10.0	10.35	103.5	9.46	94.6
Silver				20.0	19.38	96.9	19.11	95.6
Sodium								
Thallium				20.0	21.70	108.5	21.73	108.6
Vanadium				100.0	96.50	96.5	97.49	97.5
Zinc				40.0	39.68	99.2	41.43	103.6

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COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

000002

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D3-0044

Lab Code: ITPA__ Case No.: 21843 SAS No.: _____ SDG No.: MCQY00

SOW No.: ILM03.1

EPA Sample No.	Lab Sample ID
_MCQY00_____	_MCQY00_____
_MCQY01_____	_MCQY01_____
_MCQY02_____	_MCQY02_____
_MCQY03_____	_MCQY03_____
_MCQY04_____	_MCQY04_____
_MCQY05_____	_MCQY05_____
_MCQY05D_____	_MCQY05D_____
_MCQY05S_____	_MCQY05S_____
_MCQY06_____	_MCQY06_____
_MCQY07_____	_MCQY07_____
_MCQY08_____	_MCQY08_____
_MCQY09_____	_MCQY09_____
_MCQY10_____	_MCQY10_____
_MCQY11_____	_MCQY11_____
_MCQY12_____	_MCQY12_____
_MCQY13_____	_MCQY13_____
_MCQY14_____	_MCQY14_____
_MCQY15_____	_MCQY15_____
_MCQY16_____	_MCQY16_____
_MCQY17_____	_MCQY17_____

Were ICP interelement corrections applied ? Yes/No YES

Were ICP background corrections applied ? Yes/No YES
If yes - were raw data generated before application of background corrections ? Yes/No NO_

Comments:

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

Signature: David A. Dunlap Name: David A. Dunlap

Date: 5/17/94 Title: Project Manager

AR312487

REVIEWED BY: _____ EPA203040
DATE: 5/11/94

U.S. EPA - CLP

000003

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843 SAS No.: _____ SDG No.:MCQY00

SOW No.: ILM02.1

EPA Sample No.	Lab Sample ID
_MCQY20_____	_MCQY20_____
_MCQY21_____	_MCQY21_____

Were ICP interelement corrections applied ? Yes/No YES

Were ICP background corrections applied ? Yes/No YES

If yes - were raw data generated before application of background corrections ? Yes/No NO_

Comments:

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

Signature: David A. Dunlap Name: David A. Dunlap

Date: 5/17/94 Title: Project Manager

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EPA203040A

00001

CASE NARRATIVE

Laboratory Name:	ITAS Pittsburgh, Pennsylvania
Laboratory Code:	ITPA
Project Name:	USEPA/CLP
Inorganic SOW:	ILM02.1
Project Number:	662004
Work Order Number:	Q404152/218
Contract Number:	68-D2-0044
Case Number:	21843
SDG Number:	MCQY00

MAY 19 1994
RECEIVED

Sample Number:

MCQY00	MCQY05	MCQY10	MCQY15
MCQY01	MCQY06	MCQY11	MCQY16
MCQY02	MCQY07	MCQY12	MCQY17
MCQY03	MCQY08	MCQY13	MCQY20
MCQY04	MCQY09	MCQY14	MCQY21

Shipment

Twenty water samples were received at the ITAS Pittsburgh Laboratory on April 15 and 20, 1994, for metals and cyanide analysis.

Metals

A duplicate digestion and a matrix spike were performed on sample MCQY05. A serial dilution was performed on sample MCQY00.

Cyanide Analysis

A duplicate and matrix spike were performed on sample MCQY05.

The matrix spike recovery exceeded the 75 to 125 percent control limit. All associated results were flagged with an "N" qualifier.

AR312489 EPA203041

APPENDIX C

SUPPORT DOCUMENTATION

SDG MCQY18

EPA2030 41A

U.S. EPA - CLP

2B
CRDL STANDARD FOR AA AND ICP

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQY18

AA CRDL Standard Source: FISHERRICCAM

ICP CRDL Standard Source: MALLINRICCAA

Concentration Units: ug/L

Analyte	CRDL Standard for AA True	Found	%R	CRDL Standard for ICP Initial True	Initial Found	Initial %R	Final Found	Final %R
Aluminum								
Antimony				120.0	115.79	96.5	124.94	104.1
Arsenic				20.0	16.82	84.1	17.58	87.9
Barium								
Beryllium				10.0	9.95	99.5	10.00	100.0
Cadmium				10.0	10.51	105.1	10.93	109.3
Calcium								
Chromium				20.0	19.49	97.4	20.09	100.4
Cobalt				100.0	104.00	104.0	103.83	103.8
Copper				50.0	50.70	101.4	51.32	102.6
Iron								
Lead				6.0	6.80	113.3	7.12	118.7
Magnesium								
Manganese				30.0	29.23	97.4	29.62	98.7
Mercury	0.2	0.21	105.0					
Nickel				80.0	78.62	98.3	80.62	100.8
Potassium								
Selenium				10.0	9.92	99.2	10.64	106.4
Silver				20.0	18.17	90.8	17.89	89.4
Sodium								
Thallium				20.0	21.22	106.1	23.00	115.0
Vanadium				100.0	96.41	96.4	96.10	96.1
Zinc				40.0	40.16	100.4	39.88	99.7

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3
BLANKS

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQY18

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L_

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum	10.9	U	10.9	U	10.9	U	10.9	U	10.900	U	P
Antimony	13.2	U	13.2	U	13.2	U	13.2	U	13.200	U	P
Arsenic	2.2	U	2.2	U	2.2	U	2.2	U	2.200	U	[illegible]
Barium	0.6	U	0.6	U	0.6	U	0.6	U	0.600	U	[illegible]
Beryllium	0.1	U	0.1	B	0.2	B	0.1	U	0.100	U	P
Cadmium	2.6	U	2.6	U	2.6	U	2.6	U	2.600	U	P
Calcium	9.1	B	6.3	B	5.4	B	7.0	B	12.830	B	P
Chromium	1.5	U	1.5	U	1.5	U	1.5	U	1.500	U	P
Cobalt	1.6	U	1.6	U	1.6	U	1.6	U	1.600	U	P
Copper	0.9	U	0.9	U	1.2	B	0.9	U	0.900	U	P
Iron	4.4	B	4.4	U	8.3	B	4.4	U	5.780	B	P
Lead	1.4	U	1.4	U	1.4	U	1.4	U	1.400	U	P
Magnesium	12.1	U	12.1	U	12.1	U	12.1	U	12.100	U	P
Manganese	0.5	U	0.5	U	0.5	U	0.5	U	0.500	U	P
Mercury	0.2	U	0.2	U	0.2	U	0.2	U	0.200	U	CV
Nickel	5.9	U	5.9	U	5.9	U	5.9	U	5.900	U	P
Potassium	244.0	U	244.0	U	244.0	U	244.0	U	244.000	U	P
Selenium	3.0	U	3.0	U	3.0	U	3.0	U	3.000	U	P
Silver	1.9	U	1.9	U	1.9	U	-1.9	B	1.900	U	P
Sodium	9.7	U	9.7	B	9.7	U	9.7	U	18.760	B	P
Thallium	3.7	U	3.7	U	3.7	U	3.7	U	3.700	U	P
Vanadium	1.5	U	1.5	U	1.5	U	1.5	U	1.500	U	P
Zinc	4.4	B	4.0	B	4.2	B	3.8	B	7.980	B	P
Cyanide	10.0	U	10.0	U	10.0	U	10.0	U	5.000	U	AS

EPA 203 042A

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3
BLANKS

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQY18

Preparation Blank Matrix (soil/water): _____

Preparation Blank Concentration Units (ug/L or mg/kg): _____

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum			10.9	U							P
Antimony			13.2	U							P
[illegible]nic			2.2	U							P
[illegible]um			0.6	U							P
Beryllium			0.1	U							P
Cadmium			2.6	U							P
Calcium			5.6	B							P
Chromium			1.5	U							P
Cobalt			1.6	U							P
Copper			0.9	U							P
Iron			4.4	U							P
Lead			1.4	U							P
Magnesium			12.1	U							P
Manganese			0.5	U							P
Mercury			0.2	U							CV
Nickel			5.9	U							P
Potassium			-244.3	B							P
Selenium			3.0	U							P
Silver			-1.9	B							P
Sodium			9.7	U							P
Thallium			3.7	U							P
Vanadium			1.5	U							P
Zinc			3.7	B							P
Cyanide											NR

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ANALYSIS RUN LOG

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.:MCQY18

Instrument ID Number: JA61E_____ Method: P_

Start Date: 05/11/94 End Date: 05/11/94

EPA Sample No.	D/F	Time	% R	Analytes																										
				ALK	BS	ABS	BAE	BED	CDA	CRO	CUE	FEB	PBG	MNG	MNG	HGI	NI	KS	SE	AGI	NAL	TLI	VIN	ZIN	CIN
S0	1.00	2055		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X	
S	1.00	2059																		X							
S	1.00	2101		X	X			X						X					X				X				
S	1.00	2103																									
S	1.00	2105									X																
S	1.00	2107					X		X	X		X	X			X	X			X						X	
S	1.00	2110																							X		
ICV	1.00	2113			X																						
ICV	1.00	2115		X			X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X	
ICB	1.00	2117		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X	
ICSA	1.00	2120		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X	
ICSAB	1.00	2122		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X	
CRI	1.00	2125			X			X	X		X	X	X				X		X			X			X	X	
CCV	1.00	2127																				X					
CCV	1.00	2130		X	X		X	X	X	X	X	X	X	X		X	X		X	X			X		X	X	
CCB	1.00	2132		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X	
PBW	1.00	2135		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X	
LCSW	1.00	2137			X																						
LCSW	1.00	2139		X			X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X	
MCQY18	1.00	2142		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X	
MCQY18D	1.00	2144		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X	
MCQY18S	1.00	2147		X	X		X	X	X		X	X	X	X			X		X			X			X	X	
MCQY19	1.00	2149		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X	
MCQY19L	5.00	2152		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X	
MCQY22	1.00	2154		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X	
MCQY23	1.00	2156		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X	
CCV	1.00	2159																				X					
CCV	1.00	2202		X	X		X	X	X	X	X	X	X	X		X	X		X	X			X		X	X	
CCB	1.00	2204		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X	
MCQY24	1.00	2206		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X	
MCQY25	1.00	2209		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X	
MCQY26	1.00	2211		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X	

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ANALYSIS RUN LOG

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.:MCQY18

Instrument ID Number: JA61E_____ Method: P_

Start Date: 05/11/94 End Date: 05/11/94

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
MCQY27	1.00	2214		X	X	_	X	X	X	X	X	X	X	X	_	X	X	_	X	X	_	X	X	_	X	X	_
MCQY28	1.00	2216		X	X	_	X	X	X	X	X	X	X	X	_	X	X	_	X	X	_	X	X	_	X	X	_
MCQY29	1.00	2218		X	X	_	X	X	X	X	X	X	X	X	_	X	X	_	X	X	_	X	X	_	X	X	_
MCQY30	1.00	2221		X	X	_	X	X	X	X	X	X	X	X	_	X	X	_	X	X	_	X	X	_	X	X	_
MCQY31	1.00	2223		X	X	_	X	X	X	X	X	X	X	X	_	X	X	_	X	X	_	X	X	_	X	X	_
MCQY32	1.00	2226		X	X	_	X	X	X	X	X	X	X	X	_	X	X	_	X	X	_	X	X	_	X	X	_
CCV	1.00	2229		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	X	_	_	_	_	_
CCV	1.00	2231		X	X	_	X	X	X	X	X	X	X	X	_	X	X	_	X	X	_	_	X	_	X	X	_
[illegible]	1.00	2233		X	X	_	X	X	X	X	X	X	X	X	_	X	X	_	X	X	_	X	X	_	X	X	_
[illegible]A	1.00	2236		X	X	_	X	X	X	X	X	X	X	X	_	X	X	_	X	X	_	X	X	_	X	X	_
ICSAB	1.00	2238		X	X	_	X	X	X	X	X	X	X	X	_	X	X	_	X	X	_	X	X	_	X	X	_
CRI	1.00	2241		_	X	_	_	X	X	_	X	X	X	_	_	_	X	_	X	_	_	X	_	_	X	X	_
CCV	1.00	2243		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	X	_	_	_	_	_
CCV	1.00	2246		X	X	_	X	X	X	X	X	X	X	X	_	X	X	_	X	X	_	_	X	_	X	X	_
CCB	1.00	2248		X	X	_	X	X	X	X	X	X	X	X	_	X	X	_	X	X	_	X	X	_	X	X	_

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ANALYSIS RUN LOG

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.:MCQY18

Instrument ID Number: TRACE_____ Method: P_

Start Date: 05/16/94 End Date: 05/16/94

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	1118				X									X						X			X			
S	1.00	1122																									
S	1.00	1124				X									X						X			X			
S	1.00	1128																									
ICV	1.00	1130				X															X						
ICV	1.00	1134													X									X			
ICB	1.00	1137				X									X						X			X			
ICSA	1.00	1140				X									X						X			X			
ICSAB	1.00	1143				X									X						X			X			
CRI	1.00	1147				X									X						X			X			
CCV	1.00	1150				X									X						X			X			
CCB	1.00	1153				X									X						X			X			
PBW	1.00	1156				X									X						X			X			
LCSW	1.00	1159				X															X						
LCSW	1.00	1202													X									X			
MCQY18	1.00	1206				X									X						X			X			
MCQY18D	1.00	1209				X									X						X			X			
MCQY18S	1.00	1212				X									X						X			X			
MCQY19	1.00	1215				X									X						X			X			
MCQY19L	5.00	1218				X									X						X			X			
MCQY22	1.00	1222				X									X						X			X			
MCQY23	1.00	1225				X									X						X			X			
CCV	1.00	1228				X									X						X			X			
CCB	1.00	1231				X									X						X			X			
MCQY24	1.00	1234				X									X						X			X			
MCQY25	1.00	1238				X									X						X			X			
MCQY26	1.00	1241				X									X						X			X			
MCQY27	1.00	1244				X									X						X			X			
MCQY28	1.00	1247				X									X						X			X			
MCQY29	1.00	1250				X									X						X			X			
MCQY30	1.00	1254				X									X						X			X			
MCQY31	1.00	1257				X									X						X			X			

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14

ANALYSIS RUN LOG

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.:MCQY18

Instrument ID Number: TRACE_____ Method: P_

Start Date: 05/16/94 End Date: 05/16/94

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
MCQY32	1.00	1300				X									X						X			X			
CCV	1.00	1303				X									X						X			X			
CCB	1.00	1306				X									X						X			X			
ICSA	1.00	1310				X									X						X			X			
ICSAB	1.00	1313				X									X						X			X			
CRI	1.00	1316				X									X						X			X			
CCV	1.00	1319				X									X						X			X			
CCB	1.00	1323				X									X						X			X			

FORM XIV - IN ILM02.1

AR312497

EPA203045

00001

CASE NARRATIVE

MAY 20 1994 RECEIVED

Laboratory Name:	ITAS Pittsburgh, Pennsylvania
Laboratory Code:	ITPA
Project Name:	USEPA/CLP
Inorganic SOW:	ILM02.1
Project Number:	662004
Work Order Number:	Q404219
Contract Number:	68-D2-0044
Case Number:	21843
SDG Number:	MCQY18

Sample Number:

MCQY18	MCQY24	MCQY27	MCQY30
MCQY19	MCQY25	MCQY28	MCQY31
MCQY22	MCQY26	MCQY29	MCQY32
MCQY23			

Shipment

Thirteen water samples were received at the ITAS Pittsburgh Laboratory on April 20, 1994, for metals and cyanide analysis.

Metals

A duplicate digestion and a matrix spike were performed on sample MCQY18. A serial dilution was performed on sample MCQY19.

Cyanide Analysis

A duplicate and matrix spike were performed on sample MCQY18.

AR312498 EPA2030458

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843 SAS No.: _____ SDG No.: MCQY18

SOW No.: ILM02.1

EPA Sample No.	Lab Sample ID
MCQY18	MCQY18
MCQY18D	MCQY18D
MCQY18S	MCQY18S
MCQY19	MCQY19
MCQY22	MCQY22
MCQY23	MCQY23
MCQY24	MCQY24
MCQY25	MCQY25
MCQY26	MCQY26
MCQY27	MCQY27
MCQY28	MCQY28
MCQY29	MCQY29
MCQY30	MCQY30
MCQY31	MCQY31
MCQY32	MCQY32

Were ICP interelement corrections applied ? Yes/No YES

Were ICP background corrections applied ? Yes/No YES

If yes - were raw data generated before application of background corrections ? Yes/No NO_

Comments:

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

Signature: David A. Dunlop Name: David A. Dunlop

Date: 6/19/94 Title: Project Manager

EPA203046

AR312499 REVIEWED BY: LSC

APPENDIX C

SUPPORT DOCUMENTATION

SDG MCQA71

3
BLANKS

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQA71

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L_

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum	10.9	U	10.9	U	10.9	U	10.9	U	20.530	B	P
Antimony	13.2	U	13.2	U	13.2	U	13.2	U	13.200	U	P
Arsenic	2.2	U	2.2	U	2.2	U	2.2	U	2.200	U	[illegible]
Barium	0.6	U	0.6	U	0.6	U	0.6	U	0.600	U	[illegible]
Beryllium	0.1	U	0.1	U	0.1	U	0.1	U	0.100	U	P
Cadmium	2.6	U	2.6	U	2.6	U	2.6	U	2.600	U	P
Calcium	4.2	B	4.2	B	2.7	U	2.7	U	5.930	B	P
Chromium	1.5	U	1.5	U	1.5	U	1.5	U	-1.900	B	P
Cobalt	1.6	U	1.6	U	1.6	U	1.6	U	1.600	U	P
Copper	0.9	U	0.9	U	0.9	U	0.9	U	0.900	U	P
Iron	4.4	U	4.4	U	4.4	U	4.4	U	8.420	B	P
Lead	1.4	U	1.4	U	1.4	U	1.4	U	1.400	U	P
Magnesium	12.1	U	16.2	B	12.1	U	12.1	U	12.100	U	P
Manganese	0.6	B	0.7	B	0.5	U	0.5	U	0.500	U	P
Mercury	0.2	U	0.2	U	0.2	U	0.2	U	0.200	U	CV
Nickel	5.9	U	5.9	U	5.9	U	5.9	U	5.900	U	P
Potassium	-339.5	B	244.0	U	-337.5	B	244.0	U	-421.420	B	P
Selenium	3.0	U	3.0	U	3.0	U	3.0	U	3.000	U	P
Silver	1.9	U	1.9	U	1.9	U	1.9	U	1.900	U	P
Sodium	9.7	U	9.7	U	9.7	U	9.7	U	30.960	B	P
Thallium	3.7	U	3.7	U	3.7	U	3.7	U	3.700	U	P
Vanadium	1.5	U	1.5	U	1.5	U	1.5	U	-2.300	B	P
Zinc	2.4	B	4.0	B	2.9	B	3.3	B	17.330	B	P
Cyanide											NR

EPA203048A

2B

CRDL STANDARD FOR AA AND ICP

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQA71

AA CRDL Standard Source: FISHERRICCAM

ICP CRDL Standard Source: MALLINRICCAA

Concentration Units: ug/L

	CRDL Standard for AA			CRDL Standard for ICP				
					Initial		Final	
Analyte	True	Found	%R	True	Found	%R	Found	%R
Aluminum								
Antimony								
Arsenic				20.0	16.82	84.1	17.58	87.9
Barium								
Beryllium								
Cadmium								
Calcium								
Chromium								
Cobalt								
Copper								
Iron								
Lead				6.0	6.80	113.3	7.12	118.7
Magnesium								
Manganese								
Mercury	0.2	0.26	130.0					
Nickel								
Potassium								
Selenium				10.0	9.92	99.2	10.64	106.4
Silver								
Sodium								
Thallium				20.0	21.22	106.1	23.00	115.0
Vanadium								
Zinc								

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000030

2B
CRDL STANDARD FOR AA AND ICP

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQA71

AA CRDL Standard Source: FISHERRICCAM

ICP CRDL Standard Source: MALLINRICCAA

Concentration Units: ug/L

	CRDL Standard for AA			CRDL Standard for ICP				
				Initial			Final	
Analyte	True	Found	%R	True	Found	%R	Found	%R
Aluminum								
Antimony								
Arsenic				20.0			17.82	89.1
Barium								
Beryllium								
Cadmium								
Calcium								
Chromium								
Cobalt								
Copper								
Iron								
Lead				6.0			6.57	109.5
Magnesium								
Manganese								
Mercury								
Nickel								
Potassium								
Selenium				10.0			10.96	109.6
Silver								
Sodium								
Thallium				20.0			21.88	109.4
Vanadium								
Zinc								

AR312503 EPA2030494

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Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843 SAS No.: _____ SDG No.:MCQA71

SOW No.: ILM02.1

EPA Sample No.	Lab Sample ID
MCQA71	MCQA71
MCQA72	MCQA72
MCQA73	MCQA73
MCQA74	MCQA74
MCQA75	MCQA75
MCQA76	MCQA76
MCQA77	MCQA77
MCQA77D	MCQA77D
MCQA77S	MCQA77S
MCQA78	MCQA78
MCQA79	MCQA79
MCQA80	MCQA80
MCQA81	MCQA81
MCQA81D	MCQA81D
MCQA81S	MCQA81S
MCQA82	MCQA82
MCQA83	MCQA83
MCQA84	MCQA84
MCQA85	MCQA85
MCQA86	MCQA86

Were ICP interelement corrections applied ? Yes/No YES

Were ICP background corrections applied ? Yes/No YES

If yes - were raw data generated before application of background corrections ? Yes/No NO_

Comments:

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

Signature: Dan Dunlop Name: David A. Dunlop

Date: 5/18/94 Title: Project Manager

EPA203050

AR312504

REVIEWED BY: MTW

U.S. EPA - CLP

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843 SAS No.: _____ SDG No.:MCQA71

SOW No.: ILM02.1

EPA Sample No.	Lab Sample ID
_MCQA87_____	_MCQA87_____
_MCQY55_____	_MCQY55_____
_MCQY56_____	_MCQY56_____
_MCQY57_____	_MCQY57_____

Were ICP interelement corrections applied ? Yes/No YES

Were ICP background corrections applied ? Yes/No YES
If yes - were raw data generated before application of background corrections ? Yes/No NO_

Comments:

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

Signature: David A. Dunlop Name: David A. Dunlop

Date: 5/19/94 Title: Project Manager

00001

CASE NARRATIVE

MAY 20 1994 RECEIVED

Laboratory Name:	ITAS Pittsburgh, Pennsylvania
Laboratory Code:	ITPA
Project Name:	USEPA/CLP
Inorganic SOW:	ILM02.1
Project Number:	662004
Work Order Number:	Q404153/226
Contract Number:	68-D2-0044
Case Number:	21843
SDG Number:	MCQA71

Sample Number:

MCQA71	MCQA76	MCQA81	MCQA86
MCQA72	MCQA77	MCQA82	MCQA87
MCQA73	MCQA78	MCQA82	MCQY55
MCQA74	MCQA79	MCQA84	MCQY56
MCQA75	MCQA80	MCQA85	MCQY57

Shipment

Twenty water samples were received at the ITAS Pittsburgh Laboratory on April 15 and 20, 1994, for metals analysis.

Metals

A duplicate digestion and a matrix spike were performed on sample MCQA77 and MCQA81. A serial dilution was performed on sample MCQA71.

Mercury for sample MCQA72 was over the calibration range, and required a dilution.

AR312506 EPA203051

APPENDIX C

SUPPORT DOCUMENTATION

SDG MCQA88

3
BLANKS

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQA88

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L_

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum	10.9	U	10.9	U	10.9	U	10.9	U	10.900	U	P
Antimony	13.2	U	13.2	U	13.2	U	13.2	U	13.200	U	P
Arsenic	2.2	U	2.2	U	2.2	U	2.2	U	2.200	U	P
Barium	0.6	U	0.6	U	0.6	U	0.6	U	0.600	U	[illegible]
Beryllium	0.1	U	0.1	U	0.1	B	0.1	B	0.100	U	[illegible]
Cadmium	2.6	U	2.6	U	2.6	U	2.6	U	2.600	U	P
Calcium	4.0	B	2.7	U	2.7	U	2.7	U	9.520	B	P
Chromium	1.5	U	1.5	U	1.5	U	1.5	U	1.500	U	P
Cobalt	1.6	U	1.6	U	1.6	U	1.6	U	1.600	U	P
Copper	0.9	U	0.9	U	0.9	U	0.9	U	0.900	U	P
Iron	4.4	U	4.4	U	4.4	U	4.4	U	11.590	B	P
Lead	1.4	U	1.4	U	1.4	U	1.4	U	1.400	U	P
Magnesium	12.1	U	12.1	U	12.1	U	12.1	U	13.110	B	P
Manganese	0.5	U	0.5	U	0.5	U	0.5	U	0.500	U	P
Mercury	0.2	U	0.2	U	0.2	U	0.2	U	0.200	U	CV
Nickel	5.9	U	5.9	U	5.9	U	5.9	U	5.900	U	P
Potassium	244.0	U	244.0	U	244.0	U	244.0	U	244.000	U	P
Selenium	3.0	U	3.0	U	3.0	U	3.0	U	3.000	U	P
Silver	1.9	U	1.9	U	1.9	U	1.9	U	1.900	U	P
Sodium	9.7	U	9.7	U	9.7	U	9.7	U	51.750	B	P
Thallium	3.7	U	3.7	U	3.7	U	3.7	U	3.700	U	P
Vanadium	1.5	U	1.5	U	1.5	U	1.5	U	1.500	U	P
Zinc	2.0	U	2.0	U	2.0	U	2.0	U	8.560	B	P
Cyanide											NR

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9

ICP SERIAL DILUTION

000031

EPA SAMPLE NO.

MCQA88L

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQA88

Matrix (soil/water): WATER Level (low/med): LOW__

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Aluminum	148.99	B	133.55	B	10.4		P
Antimony	13.20	U	66.00	U			P
Arsenic	2.20	U	11.00	U			P
Barium	25.24	B	26.60	B	5.4		P
Beryllium	0.10	U	0.50	U			P
Cadmium	2.60	U	13.00	U			P
Calcium	7628.50		7791.20	B	2.1		P
Chromium	1.50	U	7.50	U			P
Cobalt	1.60	U	8.00	U			P
Copper	6.73	B	16.75	B	148.9		P
Iron	255.79		297.45	B	16.3	E	P
Lead	1.40	U	7.00	U			P
Magnesium	3407.52	B	3491.90	B	2.5		P
Manganese	5.27	B	5.40	B	2.5		P
Mercury							NR
Nickel	5.90	U	29.50	U			P
Potassium	1362.86	B	1220.00	U	100.0		P
Selenium	3.00	U	15.00	U			P
Silver	1.90	U	9.50	U			P
Sodium	3466.77	B	3463.40	B	0.1		P
Thallium	3.70	U	18.50	U			P
Vanadium	1.50	U	7.50	U			P
Zinc	41.14		63.80	B	55.1		P

EPA203054

FORM IX - IN

ILM02.1

AR312509

2B
CRDL STANDARD FOR AA AND ICP

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQA88

AA CRDL Standard Source: FISHERRICCAM

ICP CRDL Standard Source: MALLINRICCAA

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
					Initial		Final	
	True	Found	%R	True	Found	%R	Found	%R
Aluminum								
Antimony				120.0	131.81	109.8	128.80	107.3
Arsenic				20.0	19.25	96.2	17.26	86.3
Barium								
Beryllium				10.0	9.79	97.9	9.56	95.6
Cadmium				10.0	9.99	99.9	9.43	94.3
Calcium								
Chromium				20.0	19.30	96.5	17.94	8[illegible]
Cobalt				100.0	107.12	107.1	105.67	105.7
Copper				50.0	51.06	102.1	50.64	101.3
Iron								
Lead				6.0	7.69	128.2	7.62	127.0
Magnesium								
Manganese				30.0	30.89	103.0	30.36	101.2
Mercury	0.2	0.21	105.0					
Nickel				80.0	78.14	97.7	83.26	104.1
Potassium								
Selenium				10.0	10.14	101.4	10.13	101.3
Silver				20.0	18.91	94.6	18.06	90.3
Sodium								
Thallium				20.0	19.52	97.6	20.41	102.0
Vanadium				100.0	95.56	95.6	94.92	94.9
Zinc				40.0	44.47	111.2	44.92	112.3

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2B

CRDL STANDARD FOR AA AND ICP

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQA88

AA CRDL Standard Source: FISHERRICCAM

ICP CRDL Standard Source: MALLINRICCAA

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
					Initial		Final	
	True	Found	%R	True	Found	%R	Found	%R
Aluminum								
Antimony				120.0			121.12	100.9
Arsenic				20.0			20.16	100.8
Barium								
Beryllium				10.0			9.69	96.9
Cadmium				10.0			9.28	92.8
Calcium								
Chromium				20.0			18.47	92.4
Cobalt				100.0			105.19	105.2
Copper				50.0			51.89	103.8
Iron								
Lead				6.0			7.71	128.5
Magnesium								
Manganese				30.0			30.63	102.1
Mercury								
Nickel				80.0			79.44	99.3
Potassium								
Selenium				10.0			12.10	121.0
Silver				20.0			19.19	96.0
Sodium								
Thallium				20.0			19.65	98.2
Vanadium				100.0			96.00	96.0
Zinc				40.0			44.16	110.4

EPA203055

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14

ANALYSIS RUN LOG

Lab Name: ITAS PITTSBURGH Contract: 68-D2-0044

Lab Code: ITPA Case No.: 21843 SAS No.: _____ SDG No.: MCQA88

Instrument ID Number: TRACE Method: P

Start Date: 05/13/94 End Date: 05/13/94

EPA Sample No.	D/F	Time	% R	ALBS	ASA	BBE	CDA	CRC	CUE	FBG	MGN	MGI	HNI	KSE	ASG	NAL	TIN	VIN	ZIN	CN
S0	1.00	0843			X						X				X			X		
S	1.00	0846																		
S	1.00	0849			X						X				X			X		
S	1.00	0853																		
ICV	1.00	0856			X										X					
ICV	1.00	0859									X							X		
ICB	1.00	0903			X						X				X			X		
ICSA	1.00	0906			X						X				X			X		
ICSAB	1.00	0910			X						X				X			X		
CRI	1.00	0913			X						X				X			X		
CCV	1.00	0917			X						X				X			X		
CCB	1.00	0920			X						X				X			X		
ZZZZZZ	1.00	0924																		
ZZZZZZ	1.00	0927																		
ZZZZZZ	1.00	0931																		
ZZZZZZ	1.00	0934																		
ZZZZZZ	1.00	0938																		
ZZZZZZ	1.00	0941																		
ZZZZZZ	1.00	0945																		
ZZZZZZ	1.00	0948																		
ZZZZZZ	1.00	0952																		
ZZZZZZ	1.00	0955																		
CCV	1.00	0959			X						X				X			X		
CCB	1.00	1002			X						X				X			X		
ZZZZZZ	1.00	1005																		
ZZZZZZ	1.00	1009																		
ZZZZZZ	1.00	1012																		
ICSA	1.00	1016			X						X				X			X		
ICSAB	1.00	1019			X						X				X			X		
CRI	1.00	1023			X						X				X			X		
CCV	1.00	1026			X						X				X			X		
CCB	1.00	1030			X						X				X			X		

AR312512 EPA-203055A

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ANALYSIS RUN LOG

000047

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.:MCQA88

Instrument ID Number: TRACE_____ Method: P_

Start Date: 05/13/94 End Date: 05/13/94

EPA Sample No.	D/F	Time	% R	ALBS	ASA	BAE	BED	CAR	COU	CUE	FEB	PIG	MIN	HIG	NII	KIE	SIG	ANA	NIL	TIN	VIN	ZIN	CIN
PBW	1.00	1055			X							X					X			X			
LCSW	1.00	1059			X												X						
LCSW	1.00	1102										X								X			
MCQA88	1.00	1105			X							X					X			X			
MCQA88L	5.00	1108			X							X					X			X			
MCQA89	1.00	1111			X							X					X			X			
MCQA89D	1.00	1115			X							X					X			X			
MCQA89S	1.00	1118			X							X					X			X			
MCQA90	1.00	1121			X							X					X			X			
MCQA91	1.00	1124			X							X					X			X			
CCV	1.00	1127			X							X					X			X			
CCB	1.00	1131			X							X					X			X			
MCQA92	1.00	1134			X							X					X			X			
MCQA93	1.00	1137			X							X					X			X			
MCQA94	1.00	1140			X							X					X			X			
MCQA95	1.00	1143			X							X					X			X			
MCQA96	1.00	1147			X							X					X			X			
MCQA97	1.00	1150			X							X					X			X			
MCQA98	1.00	1153			X							X					X			X			
MCQA99	1.00	1156			X							X					X			X			
CCV	1.00	1159			X							X					X			X			
CCB	1.00	1203			X							X					X			X			
ICSA	1.00	1206			X							X					X			X			
ICSAB	1.00	1209			X							X					X			X			
CRI	1.00	1212			X							X					X			X			
CCV	1.00	1215			X							X					X			X			
CCB	1.00	1219			X							X					X			X			

FORM XIV - IN

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Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843 SAS No.: _____ SDG No.:MCQA88

SOW No.: ILM02.1

EPA Sample No.	Lab Sample ID
MCQA88	MCQA88
MCQA89	MCQA89
MCQA89D	MCQA89D
MCQA89S	MCQA89S
MCQA90	MCQA90
MCQA91	MCQA91
MCQA92	MCQA92
MCQA93	MCQA93
MCQA94	MCQA94
MCQA95	MCQA95
MCQA96	MCQA96
MCQA97	MCQA97
MCQA98	MCQA98
MCQA99	MCQA99

Were ICP interelement corrections applied ? Yes/No YES

Were ICP background corrections applied ? Yes/No YES
If yes - were raw data generated before application of background corrections ? Yes/No NO_

Comments:

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

Signature: David A Dunlap Name: David A Dunlap

Date: 5/17/94 Title: Project Manager

COVER PAGE - IN EPA 2030564 ILM02.1

AR312514

REVIEWED BY: mtw
DATE: 5/16/94

00001

CASE NARRATIVE

MAY 19 1994
RECEIVED

Laboratory Name:	ITAS Pittsburgh, Pennsylvania
Laboratory Code:	ITPA
Project Name:	USEPA/CLP
Inorganic SOW:	ILM02.1
Project Number:	662004
Work Order Number:	Q404229
Contract Number:	68-D2-0044
Case Number:	21843
SDG Number:	MCQA88

Sample Number:

MCQA88	MCQA91	MCQA94	MCQA97
MCQA89	MCQA92	MCQA95	MCQA98
MCQA90	MCQA93	MCQA96	MCQA99

Shipment

Twelve water samples were received at the ITAS Pittsburgh Laboratory on April 20, 1994, for metals analysis.

Metals

A duplicate digestion and a matrix spike were performed on sample MCQA89. A serial dilution was performed on sample MCQA88.

The serial dilution percent difference exceeded the control limit for iron. All associated results were flagged with an "E" qualifier.

EPA203057

AR312515

APPENDIX C

SUPPORT DOCUMENTATION

SDG MCQX79

2B
CRDL STANDARD FOR AA AND ICP

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQX79

AA CRDL Standard Source: FISHERRICCAM

ICP CRDL Standard Source: MALLINRICCAA

Concentration Units: ug/L.

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
					Initial		Final	
	True	Found	%R	True	Found	%R	Found	%R
Aluminum								
Antimony				120.0	134.05	111.7	126.79	105.7
Arsenic				20.0	17.13	85.6	17.78	88.9
Barium								
Beryllium				10.0	9.98	99.8	9.88	98.8
Cadmium				10.0	11.41	114.1	8.83	8[illegible]
Calcium								
Chromium				20.0	21.10	105.5	18.70	93.5
Cobalt				100.0	104.89	104.9	103.50	103.5
Cooper				50.0	49.92	99.8	50.32	100.6
Iron								
Lead				6.0	7.26	121.0	6.61	110.2
Magnesium								
Manganese				30.0	30.27	100.9	30.82	102.7
Mercury	0.2	0.17	85.0					
Nickel				80.0	83.77	104.7	82.55	103.2
Potassium								
Selenium				10.0	9.10	91.0	10.28	102.8
Silver				20.0	20.97	104.8	20.96	104.8
Sodium								
Thallium				20.0	20.34	101.7	19.23	96.2
Vanadium				100.0	98.45	98.4	97.58	97.6
Zinc				40.0	40.59	101.5	42.61	106.5

 EPA2030594

2B
CRDL STANDARD FOR AA AND ICP

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQX79

AA CRDL Standard Source: FISHERRICCAM

ICP CRDL Standard Source: MALLINRICCAA

Concentration Units: ug/L

Analyte	CRDL Standard for AA True	Found	%R	CRDL Standard for ICP Initial True	Initial Found	Initial %R	Final Found	Final %R
Aluminum								
Antimony				120.0			129.11	107.6
Arsenic				20.0			15.27	76.4
Barium								
Beryllium				10.0			10.04	100.4
Cadmium				10.0			9.96	99.6
Calcium								
Chromium				20.0			20.94	104.7
Cobalt				100.0			109.69	109.7
Copper				50.0			50.73	101.5
Iron								
Lead				6.0			7.33	122.2
Magnesium								
Manganese				30.0			31.10	103.7
Mercury								
Nickel				80.0			83.79	104.7
Potassium								
Selenium				10.0			9.78	97.8
Silver				20.0			20.97	104.8
Sodium								
Thallium				20.0			18.22	91.1
Vanadium				100.0			99.60	99.6
Zinc				40.0			45.41	113.5

3
BLANKS

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQX79

Preparation Blank Matrix (soil/water): SOIL_

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum	10.9	U	10.9	U	10.9	U	10.9	U	2.724	B	P
Antimony	13.2	U	13.2	U	13.2	U	20.1	B	2.640	U	P
Arsenic	2.2	U	2.2	U	2.2	U	2.2	U	-0.490	B	P
Barium	0.6	U	0.6	U	0.6	U	0.6	U	0.120	U	[illegible]
Beryllium	0.1	U	0.1	U	0.1	U	0.1	U	0.020	U	[illegible]
Cadmium	2.6	U	2.6	U	2.6	U	2.6	U	0.520	U	P
Calcium	4.2	B	3.6	B	3.0	B	2.8	B	2.364	B	P
Chromium	-1.5	B	1.5	U	1.5	U	1.5	U	0.300	U	P
Cobalt	1.6	U	1.6	U	1.9	B	1.6	U	0.320	U	P
Copper	0.9	U	0.9	U	0.9	U	0.9	U	0.180	U	P
Iron	4.4	U	4.4	U	4.4	U	4.4	U	7.268	B	P
Lead	1.4	U	1.4	U	1.4	U	1.4	U	0.364	B	P
Magnesium	12.1	U	12.1	U	12.1	U	12.1	U	2.420	U	P
Manganese	0.5	U	0.5	U	0.5	U	0.5	U	0.114	B	P
Mercury	0.2	U	0.2	U	0.2	U	0.2	U	0.100	U	CV
Nickel	5.9	U	5.9	U	5.9	U	5.9	U	1.180	U	P
Potassium	244.0	U	244.0	U	244.0	U	244.0	U	48.800	U	P
Selenium	3.0	U	3.0	U	3.0	U	3.0	U	0.600	U	P
Silver	1.9	U	1.9	U	2.0	B	2.9	B	0.380	U	P
Sodium	9.7	U	9.7	U	9.7	U	9.7	U	5.002	B	P
Thallium	3.7	U	3.7	U	3.7	U	3.7	U	-1.188	B	P
Vanadium	1.5	U	1.5	U	1.5	U	1.5	U	0.300	U	P
Zinc	2.5	B	2.2	B	2.6	B	3.2	B	0.916	B	P
Cyanide	10.0	U	10.0	U	10.0	U	10.0	U	2.500	U	AS

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3
BLANKS

000021

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQX79

Preparation Blank Matrix (soil/water): _____

Preparation Blank Concentration Units (ug/L or mg/kg): _____

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum			10.9	U	12.5	B	10.9	U			P
Antimony			13.2	U	13.6	B	13.2	U			P
Arsenic			2.2	U	2.2	U	2.2	U			P
Barium			0.6	U	0.6	U	0.6	U			P
Beryllium			0.1	U	0.1	U	-0.1	B			P
Cadmium			2.6	U	2.6	U	2.6	U			P
Calcium			2.7	U	13.6	B	4.7	B			P
Chromium			1.5	U	1.5	U	1.5	U			P
Cobalt			1.6	U	1.6	U	1.6	U			P
Copper			0.9	U	0.9	U	0.9	U			P
Iron			4.4	U	4.4	U	4.4	U			P
Lead			1.4	U	1.4	U	1.4	U			P
Magnesium			12.1	U	12.1	U	12.1	U			P
Manganese			0.5	U	0.6	B	0.5	U			P
Mercury			0.2	U	0.2	U	0.2	U			CV
Nickel			5.9	U	5.9	U	5.9	U			P
Potassium			244.0	U	244.0	U	244.0	U			P
Selenium			3.0	U	3.0	U	3.0	U			P
Silver			1.9	U	3.4	B	1.9	U			P
Sodium			9.7	U	9.7	U	9.7	U			P
Thallium			3.7	U	3.7	U	3.7	U			P
Vanadium			1.5	U	1.5	U	1.5	U			P
Zinc			3.1	B	3.6	B	2.8	B			P
Cyanide											NR

Run Samples MCQ453,54 MCQX79-82

MCQX83-86

FORM III - IN

ILM02.1

AR312520

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.00051

14

ANALYSIS RUN LOG

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.:MCQX79

Instrument ID Number: JA61E_____ Method: P_

Start Date: 05/16/94 End Date: 05/17/94

EPA Sample No.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	2112		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X	
S	1.00	2115																				X					
S	1.00	2117		X	X			X						X					X				X				
S	1.00	2119																									
S	1.00	2122									X																
S	1.00	2124					X		X	X		X	X			X	X			X						X	
S	1.00	2126																							X		
ICV	1.00	2129			X																						
ICV	1.00	2131		X			X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X	
ICB	1.00	2134		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		[illegible]		
ICSA	1.00	2136		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		[illegible]		
ICSAB	1.00	2139		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X	
CRI	1.00	2143			X			X	X		X	X	X				X		X			X			X	X	
CCV	1.00	2146																				X					
CCV	1.00	2149		X	X		X	X	X	X	X	X	X	X		X	X		X	X			X		X	X	
CCB	1.00	2151		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X	
ZZZZZZ	1.00	2153																									
ZZZZZZ	1.00	2156																									
ZZZZZZ	1.00	2158																									
ZZZZZZ	1.00	2201																									
ZZZZZZ	1.00	2203																									
ZZZZZZ	1.00	2205																									
ZZZZZZ	1.00	2208																									
ZZZZZZ	1.00	2210																									
ZZZZZZ	1.00	2213																									
ZZZZZZ	1.00	2215																									
CCV	1.00	2218																				X					
CCV	1.00	2220		X	X		X	X	X	X	X	X	X	X		X	X		X	X			X		X	X	
CCB	1.00	2223		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X	
ZZZZZZ	1.00	2225																									
ZZZZZZ	1.00	2228																									
ZZZZZZ	1.00	2230																									

FORM XIV - IN ILM02.1

AR312521

EPA203061A

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000052

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ANALYSIS RUN LOG

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.:MCQX79

Instrument ID Number: JA61E_____ Method: P_

Start Date: 05/16/94 End Date: 05/17/94

EPA Sample No.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	2233																									
ZZZZZZ	1.00	2235																									
ZZZZZZ	1.00	2237																									
ZZZZZZ	1.00	2240																									
ZZZZZZ	1.00	2242																									
ZZZZZZ	1.00	2245																									
ZZZZZZ	1.00	2247																									
CCV	1.00	2250																				X					
CCV	1.00	2252		X	X		X	X	X	X	X	X	X	X		X	X		X	X			X		X	X	
CCB	1.00	2255		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X	
ZZZZZZ	1.00	2257																									
ZZZZZZ	1.00	2300																									
ZZZZZZ	1.00	2302																									
ZZZZZZ	1.00	2305																									
ZZZZZZ	1.00	2307																									
ZZZZZZ	1.00	2309																									
ZZZZZZ	1.00	2315																									
ICSA	1.00	2318		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X	
ICSAB	1.00	2320		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X	
CRI	1.00	2323			X			X	X		X	X	X				X		X			X			X	X	
CCV	1.00	2326																				X					
CCV	1.00	2328		X	X		X	X	X	X	X	X	X	X		X	X		X	X			X		X	X	
CCB	1.00	2331		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X	
PBS	1.00	2337		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X	
LCSS	5.00	2339								X																	
LCSS	1.00	2342		X	X		X	X	X		X	X	X	X		X	X		X	X		X	X		X	X	
MCQY53	1.00	2344		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X	
MCQY53L	5.00	2347		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X	
MCQY54	1.00	2349		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X	
MCQX79	1.00	2351		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X	
MCQX80	1.00	2354		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X	
MCQX81	1.00	2356		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X	

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ANALYSIS RUN LOG

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.:MCQX79

Instrument ID Number: JA61E_____ Method: P_

Start Date: 05/16/94 End Date: 05/17/94

EPA Sample No.	D/F	Time	% R	Analytes																											
				ALK	BS	ASA	BAE	BED	CDA	CRO	CIU	CEB	FIG	PMI	MIN	MIG	HII	NIE	KIG	SIA	ANL	NIT	IVI	ZIN	CIN
MCQX82	1.00	2359		X	X		X	X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X	X		X	X	
CCV	1.00	0002																					X								
CCV	1.00	0004		X	X		X	X	X	X	X	X	X	X	X		X	X		X	X			X		X	X	X				
CCB	1.00	0006		X	X		X	X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X	X				
MCQX83	1.00	0009		X	X		X	X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X	X				
MCQX84	1.00	0011		X	X		X	X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X	X				
MCQX85	1.00	0014		X	X		X	X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X	X				
MCQX86	1.00	0016		X	X		X	X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X	X				
MCQX86D	1.00	0019		X	X		X	X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X	X				
MCQX86S	1.00	0021			X		X	X	X		X	X	X	X				X		X			X									
MCQX86A	1.00	0025			X																										
ICSA	1.00	0027		X	X		X	X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X	X				
ICSAB	1.00	0030		X	X		X	X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X	X				
CRI	1.00	0032			X			X	X		X	X	X	X				X		X			X			X	X					
CCV	1.00	0035																					X								
CCV	1.00	0037		X	X		X	X	X	X	X	X	X	X	X		X	X		X	X			X		X	X	X				
CCB	1.00	0040		X	X		X	X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X	X				

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5A
SPIKE SAMPLE RECOVERY

000027

EPA SAMPLE NO.

MCQX86S

Lab Name: ITAS_PITTSBURGH Contract: 68-D2-0044

Lab Code: ITPA Case No.: 21843 SAS No.: SDG No.: MCQX79

Matrix (soil/water): SOIL Level (low/med): LOW

% Solids for Sample: 29.6

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									NR
Antimony	75-125	176.9869		8.8306	U	334.49	52.9	N	P
Arsenic	75-125	1142.4672		4.2815	B	1337.97	85.1		P
Barium	75-125	1410.9981		103.8199	B	1337.97	97.7		P
Beryllium	75-125	31.5694		0.5553	B	33.45	92.7		P
Cadmium	75-125	31.3286		1.7394	U	33.45	93.7		P
Calcium									NR
Chromium	75-125	142.2732		14.8314		133.80	95.2		P
Cobalt	75-125	361.6404		21.5882	B	334.49	101.7		P
Copper	75-125	178.0573		14.7244	B	167.25	97.7		P
Iron									NR
Lead	75-125	331.4490		25.1338		334.49	91.6		P
Magnesium									NR
Manganese	75-125	695.6115		297.2103		334.49	119.1		P
Mercury	75-125	1.8547		0.3378	U	1.69	109.7		CV
Nickel	75-125	345.6315		16.1426	B	334.49	98.5		P
Potassium									NR
Selenium	75-125	1136.4664		2.0070	U	1337.97	84.9		P
Silver	75-125	32.5194		1.2711	U	33.45	97.2		P
Sodium									NR
Thallium	75-125	1202.2478		2.4752	U	1337.97	89.9		P
Vanadium	75-125	338.4332		12.3428	B	334.49	97.5		P
Zinc	75-125	398.8761		71.7688		334.49	97.8		P
Cyanide	75-125	89.5084		8.4459	U	84.46	106.0		AS

Comments:

U.S. EPA - CLP

5B
POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MCQX86A

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQX79

Matrix (soil/water) : SOIL__ Level (low/med): LOW___

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Added (SA)	%R	Q	M
Aluminum									NR
Antimony		126.10		13.20	U	120.0	105.1		P
Arsenic									NR
Barium									NR
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									
Iron									
Lead									NR
Magnesium									NR
Manganese									NR
Mercury									NR
Nickel									NR
Potassium									NR
Selenium									NR
Silver									NR
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR
Cyanide									NR

Comments:

AR312525 EPA203063A

U.S. EPA - CLP

6
DUPLICATES

EPA SAMPLE NO.

MCQX86D

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQX79

Matrix (soil/water): SOIL_ Level (low/med): _LOW__

% Solids for Sample: _29.6 % Solids for Duplicate: __27.7

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum		8746.3206		7094.7485		20.9	*	P
Antimony		8.8306	U	8.8306	U			P
Arsenic		4.2815	B	3.2847	B	26.3		P
Barium		103.8199	B	85.9178	B	18.9		P
Beryllium		0.5553	B	0.4683	B	17.0		P
Cadmium		1.7394	U	1.7394	U			P
Calcium		1399.2507	B	1393.7985	B	0.4		P
Chromium	6.7	14.8314		11.1854		28.0		P
Cobalt		21.5882	B	21.0329	B	2.6		P
Copper		14.7244	B	12.7375	B	14.5		P
Iron		21581.1814		17844.9625		19.0		P
Lead		25.1338		21.9093		13.7		P
Magnesium		1330.5258	B	1285.3158	B	3.5		P
Manganese		297.2103		283.4694		4.7		P
Mercury		0.3378	U	0.3378	U			CV
Nickel		16.1426	B	14.5438	B	10.4		P
Potassium		263.9617	B	482.8271	B	58.6		P
Selenium		2.0070	U	2.0070	U			P
Silver		1.2711	U	1.2711	U			P
Sodium		115.7747	B	132.5127	B	13.5		P
Thallium		2.4752	U	2.4752	U			P
Vanadium		12.3428	B	11.0918	B	10.7		P
Zinc	13.4	71.7688		59.8140		18.2		P
Cyanide		8.4459	U	8.4459	U			AS

FORM VI - IN ILM02.1

AR312526

EPA203064

U.S. EPA - CLP

9

ICP SERIAL DILUTION

EPA SAMPLE NO.

MCQY53L

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQX79

Matrix (soil/water): SOIL_ Level (low/med): LOW__

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Aluminum	15582.56		15512.90		0.4		P
Antimony	13.20	U	71.70	B			P
Arsenic	4.59	B	11.00	U	100.0		P
Barium	249.16		241.20	B	3.2		P
Beryllium	0.82	B	0.70	B	14.6		P
Cadmium	2.60	U	13.00	U			P
Calcium	2011.67	B	2003.60	B	0.4		P
Chromium	18.24		20.00	B	9.6		P
Cobalt	27.90	B	35.80	B	28.3		P
Copper	22.26	B	21.40	B	3.9		P
Iron	36424.19		36489.15		0.2		P
Lead	29.90		36.90		23.4		P
Magnesium	2067.08	B	2076.60	B	0.5		P
Manganese	1089.38		1087.55		0.2		P
Mercury							NR
Nickel	22.24	B	29.50	U	100.0		P
Potassium	1122.25	B	1734.90	B	54.6		P
Selenium	3.00	U	15.00	U			P
Silver	2.95	B	14.40	B	388.1		P
Sodium	253.53	B	289.15	B	14.0		P
Thallium	3.70	U	18.50	U			P
Vanadium	22.63	B	23.50	B	3.8		P
Zinc	106.94		149.65		39.9	E	P

FORM IX - IN ILM02.1

AR312527 EPA203064A

10

Instrument Detection Limits (Quarterly)

Lab Name: ITAS_PITTSBURGH Contract: 68-D2-0044

Lab Code: ITPA Case No.: 21843 SAS No.: SDG No.: MCQX79

ICP ID Number: TRACE Date: 04/15/94

Flame AA ID Number :

Furnace AA ID Number :

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum			200		NR
Antimony			60		NR
Arsenic	189.04		10	2.2	P
Barium			200		NR
Beryllium			5		NR
Cadmium			5		NR
Calcium			5000		NR
Chromium			10		NR
Cobalt			50		NR
Copper			25		NR
Iron			100		NR
Lead	220.35		3	1.4	P
Magnesium			5000		NR
Manganese			15		NR
Mercury			0.2		NR
Nickel			40		NR
Potassium			5000		NR
Selenium	196.03		5	3.0	P
Silver			10		NR
Sodium			5000		NR
Thallium	190.86		10	3.7	P
Vanadium			50		NR
Zinc			20		NR

Comments:

10
Instrument Detection Limits (Quarterly)

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQX79

ICP ID Number: JA61E_____ Date: 04/15/94

Flame AA ID Number : _____

Furnace AA ID Number : _____

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum	308.22		200	10.9	P
Antimony	206.84		60	13.2	P
Arsenic			10		NR
Barium	493.41		200	0.6	P
Beryllium	313.04		5	0.1	P
Cadmium	228.80		5	2.6	P
Calcium	317.93		5000	2.7	P
Chromium	267.72		10	1.5	P
Cobalt	228.62		50	1.6	P
Copper	324.75		25	0.9	P
Iron	259.94		100	4.4	P
Lead			3		NR
Magnesium	279.08		5000	12.1	P
Manganese	257.61		15	0.5	P
Mercury			0.2		NR
Nickel	231.60		40	5.9	P
Potassium	766.49		5000	244.0	P
Selenium			5		NR
Silver	328.07		10	1.9	P
Sodium	588.99		5000	9.7	P
Thallium			10		NR
Vanadium	292.40		50	1.5	P
Zinc	213.86		20	2.0	P

Comments:

Instrument Detection Limits (Quarterly)

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQX79

ICP ID Number: _____ Date: 04/15/94

Flame AA ID Number : LEEMAN_PS200

Furnace AA ID Number : _____

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum			200		NR
Antimony			60		NR
Arsenic			10		NR
Barium			200		NR
Beryllium			5		NR
Cadmium			5		NR
Calcium			5000		NR
Chromium			10		NR
Cobalt			50		NR
Copper			25		NR
Iron			100		NR
Lead			3		NR
Magnesium			5000		NR
Manganese			15		NR
Mercury	253.70		0.2	0.2	CV
Nickel			40		NR
Potassium			5000		NR
Selenium			5		NR
Silver			10		NR
Sodium			5000		NR
Thallium			10		NR
Vanadium			50		NR
Zinc			20		NR

Comments:

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PREPARATION LOG

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.:_21843_ SAS No.: _____ SDG No.:MCQX79

Method: P_

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
LCSS	05/11/94	1.00	200
MCQX79	05/11/94	1.04	200
MCQX80	05/11/94	1.05	200
MCQX81	05/11/94	1.05	200
MCQX82	05/11/94	1.01	200
MCQX83	05/11/94	1.05	200
MCQX84	05/11/94	1.04	200
MCQX85	05/11/94	1.04	200
MCQX86	05/11/94	1.01	200
MCQX86D	05/11/94	1.01	200
MCQX86S	05/11/94	1.01	200
MCQY53	05/11/94	1.02	200
MCQY54	05/11/94	1.05	200
PBS	05/11/94	1.00	200

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PREPARATION LOG

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.:_21843_ SAS No.: _____ SDG No.:MCQX79

Method: CV

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
LCSS	04/26/94	0.05	100
MCQX79	04/26/94	0.20	100
MCQX80	04/26/94	0.20	100
MCQX81	04/26/94	0.20	100
MCQX82	04/26/94	0.20	100
MCQX83	04/26/94	0.20	100
MCQX84	04/26/94	0.20	100
MCQX85	04/26/94	0.20	100
MCQX86	04/26/94	0.20	100
MCQX86D	04/26/94	0.20	100
MCQX86S	04/26/94	0.20	100
MCQY53	04/26/94	0.20	100
MCQY54	04/26/94	0.20	100
PBS	04/26/94	0.20	100

FORM XIII - IN ILM02.1

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EPA203067

13

PREPARATION LOG

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.:_21843_ SAS No.: _____ SDG No.:MCQX79

Method: AS

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
ICV	05/02/94	500.0	250
LCSS	05/02/94	5.00	250
MCQX79	05/02/94	1.00	250
MCQX80	05/02/94	1.00	250
MCQX81	05/02/94	1.00	250
MCQX82	05/02/94	1.00	250
MCQX83	05/02/94	1.00	250
MCQX84	05/02/94	1.00	250
MCQX85	05/02/94	1.00	250
MCQX86	05/02/94	1.00	250
MCQX86D	05/02/94	1.00	250
MCQX86S	05/02/94	1.00	250
MCQY53	05/02/94	1.00	250
MCQY54	05/02/94	1.00	250
PBS	05/02/94	1.00	250

EPA203067A

C0001

CASE NARRATIVE

Laboratory Name:	ITAS Pittsburgh, Pennsylvania
Laboratory Code:	ITPA
Project Name:	USEPA/CLP
Inorganic SOW:	ILM02.1
Project Number:	662004
Work Order Number:	Q404231
Contract Number:	68-D2-0044
Case Number:	21843
SDG Number:	MCQX79

MAY 20 1994 RECEIVED

Sample Number:

MCQX79	MCQX82	MCQX85	MCQY53
MCQX80	MCQX83	MCQX86	MCQY54
MCQX81	MCQX84		

Shipment

Ten soil samples were received at the ITAS Pittsburgh Laboratory on April 20, 1994, for metals and cyanide analysis.

No QC was assigned; lab chose MCQX86 as QC sample.

Metals

A duplicate digestion and a matrix spike were performed on sample MCQX86. A serial dilution was performed on sample MCQY53.

The matrix spike recovery exceeded the 75 to 125 percent control limit for antimony. All associated results were flagged with an "N" qualifier.

The serial dilution percent difference exceeded the control limit for zinc. All associated results were flagged with an "E" qualifier.

The duplicate digestion RPD exceeded the 20 percent control limit for aluminum. All associated results were flagged with a "*" qualifier.

Cyanide Analysis

A duplicate and matrix spike were performed on sample MCQX86.

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COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-C1-0044

Lab Code: ITPA__ Case No.: 21843 SAS No.: _____ SDG No.: MCQX79

SOW No.: ILM02.1

EPA Sample No.	Lab Sample ID
MCQX79	MCQX79
MCQX80	MCQX80
MCQX81	MCQX81
MCQX82	MCQX82
MCQX83	MCQX83
MCQX84	MCQX84
MCQX85	MCQX85
MCQX86	MCQX86
MCQX86D	MCQX86D
MCQX86S	MCQX86S
MCQY53	MCQY53
MCQY54	MCQY54

Were ICP interelement corrections applied ? Yes/No YES

Were ICP background corrections applied ? Yes/No YES
If yes - were raw data generated before application of background corrections ? Yes/No NO_

Comments:

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

Signature: David A. Dunlap Name: David A. Dunlap

Date: 5/19/94 Title: Project Manager

COVER PAGE - IN EPA2030684 ILM02.

AR312535

REVIEWED BY: mtw
DATE: 5/17/94

APPENDIX C

SUPPORT DOCUMENTATION

SDG MCQY33

U.S. EPA - CLP

2B
CRDL STANDARD FOR AA AND ICP

00027

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQY33

AA CRDL Standard Source: FISHERRICCAM

ICP CRDL Standard Source: MALLINRICCAA

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
				Initial			Final	
	True	Found	%R	True	Found	%R	Found	%R
Aluminum								
Antimony				120.0	134.05	111.7	126.79	105.7
Arsenic				20.0	15.77	78.8	16.01	80.0
Barium								
Beryllium				10.0	9.98	99.8	9.88	98.8
Cadmium				10.0	11.41	114.1	8.83	88.3
Calcium								
Chromium				20.0	21.10	105.5	18.70	9[illegible]
Cobalt				100.0	104.89	104.9	103.50	103.5
Copper				50.0	49.92	99.8	50.32	100.6
Iron								
Lead				6.0	7.05	117.5	6.90	115.0
Magnesium								
Manganese				30.0	30.27	100.9	30.82	102.7
Mercury	0.2	0.17	85.0					
Nickel				80.0	83.77	104.7	82.55	103.2
Potassium								
Selenium				10.0	11.50	115.0	11.87	118.7
Silver				20.0	20.97	104.8	20.96	104.8
Sodium								
Thallium				20.0	19.41	97.0	18.76	93.8
Vanadium				100.0	98.45	98.4	97.58	97.6
Zinc				40.0	40.59	101.5	42.61	106.5

AR312537

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U.S. EPA - CLP

3
BLANKS

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQY33

Preparation Blank Matrix (soil/water): SOIL_

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum	10.9	U	10.9	U	10.9	U	10.9	U	3.712	B	P
Antimony	13.2	U	13.2	U	13.2	U	20.1	B	3.690	B	P
Arsenic	2.2	U	2.2	U	2.2	U	2.2	U	0.440	U	P
Barium	0.6	U	0.6	U	0.6	U	0.6	U	0.120	U	P
Beryllium	0.1	U	0.1	U	0.1	U	0.1	U	0.020	U	P
Cadmium	2.6	U	2.6	U	2.6	U	2.6	U	0.520	U	P
Calcium	4.2	B	3.6	B	3.0	B	2.8	B	1.768	B	P
Chromium	-1.5	B	1.5	U	1.5	U	1.5	U	0.300	U	P
Cobalt	1.6	U	1.6	U	1.9	B	1.6	U	0.584	B	P
Copper	0.9	U	0.9	U	0.9	U	0.9	U	0.180	U	P
Iron	4.4	U	4.4	U	4.4	U	4.4	U	0.944	B	P
Lead	1.4	U	1.4	U	1.4	U	1.4	U	0.332	B	P
Magnesium	12.1	U	12.1	U	12.1	U	12.1	U	2.420	U	P
Manganese	0.5	U	0.5	U	0.5	U	0.5	U	0.100	U	P
Mercury	0.2	U	0.2	U	0.2	U	0.2	U	0.100	U	CV
Nickel	5.9	U	5.9	U	5.9	U	5.9	U	1.180	U	P
Potassium	244.0	U	244.0	U	244.0	U	244.0	U	82.086	B	P
Selenium	3.0	U	3.0	U	3.0	U	3.0	U	0.600	U	P
Silver	1.9	U	1.9	U	2.0	B	2.9	B	0.514	B	P
Sodium	9.7	U	9.7	U	9.7	U	9.7	U	4.548	B	P
Thallium	3.7	U	3.7	U	3.7	U	3.7	U	0.740	U	P
Vanadium	1.5	U	1.5	U	1.5	U	1.5	U	0.328	B	P
Zinc	2.5	B	2.2	B	2.6	B	3.2	B	0.518	B	P
Cyanide	10.0	U	10.0	U	10.0	U	10.0	U	2.500	U	AS

All analytes except As, Pb, Se, Tl, Hg, CN

Samples MCQY33-38

Samples MCQY39-48

MCQY 49-52

FORM III - IN ILM02.1

AR312538

ANALYSIS RUN LOG

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.:MCQY33

Instrument ID Number: JA61E_____ Method: P_

Start Date: 05/16/94 End Date: 05/16/94

EPA Sample No.	D/F	Time	% R	Analytes																											
				ALK	SB	SAS	BA	BE	CD	CA	CR	CO	CU	CE	FB	PB	MG	MN	HG	NI	KS	SE	AG	AL	NA	TL	VI	ZN	CN
S0	1.00	2112		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X		X	X	
S	1.00	2115																					X							
S	1.00	2117		X	X			X						X					X				X							
S	1.00	2119																												
S	1.00	2122									X																			
S	1.00	2124					X		X	X		X	X			X	X			X								X		
S	1.00	2126																										X		
ICV	1.00	2129			X																									
ICV	1.00	2131		X			X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X		X	X	
ICB	1.00	2134		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X		X	X	
ICSA	1.00	2136		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X		[illegible]		
ICSAB	1.00	2139		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X		X	X	
CRI	1.00	2143			X			X	X		X	X	X				X		X			X			X	X		X	X	
CCV	1.00	2146																					X							
CCV	1.00	2149		X	X		X	X	X	X	X	X	X	X		X	X		X	X			X		X			X	X	
CCB	1.00	2151		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X		X	X	
PBS	1.00	2153		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X		X	X	
LCSS	5.00	2156								X																				
LCSS	1.00	2158		X	X		X	X	X		X	X	X	X		X	X		X	X		X	X		X	X		X	X	
MCQY33	1.00	2201		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X		X	X	
MCQY33L	5.00	2203		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X		X	X	
MCQY34	1.00	2205		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X		X	X	
MCQY35	1.00	2208		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X		X	X	
MCQY36	1.00	2210		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X		X	X	
MCQY37	1.00	2213		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X		X	X	
MCQY38	1.00	2215		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X		X	X	
CCV	1.00	2218																					X							
CCV	1.00	2220		X	X		X	X	X	X	X	X	X	X		X	X		X	X			X		X			X	X	
CCB	1.00	2223		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X		X	X	
MCQY39	1.00	2225		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X		X	X	
MCQY40	1.00	2228		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X		X	X	
MCQY41	1.00	2230		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X		X	X	

AR312539 EPA203071A

U.S. EPA - CLP

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ANALYSIS RUN LOG

000061

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.:MCQY33

Instrument ID Number: JA61E_____ Method: P_

Start Date: 05/16/94 End Date: 05/16/94

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
MCQY42	1.00	2233		X	X	_	X	X	X	X	X	X	X	X	_	X	X	_	X	X	_	X	X	_	X	X	_
MCQY43	1.00	2235		X	X	_	X	X	X	X	X	X	X	X	_	X	X	_	X	X	_	X	X	_	X	X	_
MCQY44	1.00	2237		X	X	_	X	X	X	X	X	X	X	X	_	X	X	_	X	X	_	X	X	_	X	X	_
MCQY45	1.00	2240		X	X	_	X	X	X	X	X	X	X	X	_	X	X	_	X	X	_	X	X	_	X	X	_
MCQY46	1.00	2242		X	X	_	X	X	X	X	X	X	X	X	_	X	X	_	X	X	_	X	X	_	X	X	_
MCQY47	1.00	2245		X	X	_	X	X	X	X	X	X	X	X	_	X	X	_	X	X	_	X	X	_	X	X	_
MCQY48	1.00	2247		X	X	_	X	X	X	X	X	X	X	X	_	X	X	_	X	X	_	X	X	_	X	X	_
CCV	1.00	2250		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	X	_	_	_	_	_
[illegible]	1.00	2252		X	X	_	X	X	X	X	X	X	X	X	_	X	X	_	X	X	_	_	X	_	X	X	_
[illegible]	1.00	2255		X	X	_	X	X	X	X	X	X	X	X	_	X	X	_	X	X	_	X	X	_	X	X	_
MCQY49	1.00	2257		X	X	_	X	X	X	X	X	X	X	X	_	X	X	_	X	X	_	X	X	_	X	X	_
MCQY50	1.00	2300		X	X	_	X	X	X	X	X	X	X	X	_	X	X	_	X	X	_	X	X	_	X	X	_
MCQY50D	1.00	2302		X	X	_	X	X	X	X	X	X	X	X	_	X	X	_	X	X	_	X	X	_	X	X	_
MCQY50S	1.00	2305		_	X	_	X	X	X	_	X	X	X	_	_	_	X	_	X	_	_	X	_	_	X	X	_
MCQY51	1.00	2307		X	X	_	X	X	X	X	X	X	X	X	_	X	X	_	X	X	_	X	X	_	X	X	_
MCQY52	1.00	2309		X	X	_	X	X	X	X	X	X	X	X	_	X	X	_	X	X	_	X	X	_	X	X	_
MCQY50A	1.00	2315		_	X	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
ICSA	1.00	2318		X	X	_	X	X	X	X	X	X	X	X	_	X	X	_	X	X	_	_	X	_	X	X	_
ICSAB	1.00	2320		X	X	_	X	X	X	X	X	X	X	X	_	X	X	_	X	X	_	X	X	_	X	X	_
CRI	1.00	2323		_	X	_	_	X	X	_	X	X	X	_	_	_	X	_	X	_	_	X	_	_	X	X	_
CCV	1.00	2326		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	X	_	_	_	_	_
CCV	1.00	2328		X	X	_	X	X	X	X	X	X	X	X	_	X	X	_	X	X	_	_	X	_	X	X	_
CCB	1.00	2331		X	X	_	X	X	X	X	X	X	X	X	_	X	X	_	X	X	_	X	X	_	X	X	_

FORM XIV - IN ILM02.1

AR312540

EPA203072

U.S. EPA - CLP

5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MCQY50S

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQY33

Matrix (soil/water): SOIL__ Level (low/med): LOW___

% Solids for Sample: _37.5

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									NR
Antimony	75-125	143.0987		7.0400	U	266.67	53.7	N	P
Arsenic	75-125	920.5973		3.8560	B	1066.67	85.9		P
Barium	75-125	1102.4533		78.5120	B	1066.67	96.0		P
Beryllium	75-125	24.9493		0.4640	B	26.67	91.8		P
Cadmium	75-125	24.9387		1.3867	U	26.67	93.5		P
Calcium									NR
Chromium	75-125	116.4107		16.9013		106.67	93.3		P
Cobalt	75-125	278.8480		17.4453	B	266.67	98.0		
Copper	75-125	152.0320		23.1093		133.33	96.7		
Iron									NR
Lead	75-125	273.2853		21.5093		266.67	94.4		P
Magnesium									NR
Manganese	75-125	619.1413		361.1733		266.67	96.7		P
Mercury	75-125	1.2960		0.2667	U	1.33	97.4		CV
Nickel	75-125	272.8000		18.8693	B	266.67	95.2		P
Potassium									NR
Selenium	75-125	963.7760		1.6000	U	1066.67	90.4		P
Silver	75-125	24.8853		1.0133	U	26.67	93.3		P
Sodium									NR
Thallium	75-125	990.8480		1.9733	U	1066.67	92.9		P
Vanadium	75-125	272.0427		17.7920	B	266.67	95.3		P
Zinc	75-125	349.0240		100.3680		266.67	93.2		P
Cyanide		74.5353		1971.0720		66.67	-2844.7		AS

Comments:

AR312541 EPA203072A

U.S. EPA - CLP

5B
POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MCQY50A

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQY33

Matrix (soil/water) : SOIL__ Level (low/med): LOW___

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Added (SA)	%R	Q	M
Aluminum									NR
Antimony		117.13		13.20	U	120.0	97.6		P
Arsenic									NR
Barium									NR
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									NR
Iron									NR
Lead									NR
Magnesium									NR
Manganese									NR
Mercury									NR
Nickel									NR
Potassium									NR
Selenium									NR
Silver									NR
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR
Cyanide									NR

Comments:

U.S. EPA - CLP

6
DUPLICATES

EPA SAMPLE NO.

MCQY50D

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQY33

Matrix (soil/water): SOIL_ Level (low/med): _LOW__

% Solids for Sample: _37.5 % Solids for Duplicate: __43.3

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum		12847.3600		12212.7040		5.1		P
Antimony		7.0400	U	7.0400	U			P
Arsenic		3.8560	B	4.0480	B	4.9		P
Barium		78.5120	B	76.9067	B	2.1		P
Beryllium		0.4640	B	0.4907	B	5.6		P
Cadmium		1.3867	U	1.3867	U			P
Calcium		2348.6027	B	2162.1280	B	8.3		P
Chromium	5.3	16.9013		16.0907		4.9		P
Cobalt		17.4453	B	16.8533	B	3.5		P
Copper	13.3	23.1093		22.4000		3.1		P
Iron		27244.2560		27648.0693		1.5		P
Lead		21.5093		21.8933		1.8		P
Magnesium		2493.8933	B	2433.0773	B	2.5		P
Manganese		361.1733		353.1147		2.3		P
Mercury		0.2667	U	0.2667	U			CV
Nickel		18.8693	B	15.7280	B	18.2		P
Potassium		719.0880	B	471.6373	B	41.6		P
Selenium		1.6000	U	2.0373	B	200.0		P
Silver		1.0133	U	1.0133	U			P
Sodium		202.1013	B	181.4240	B	10.8		P
Thallium		1.9733	U	1.9733	U			P
Vanadium		17.7920	B	17.5307	B	1.5		P
Zinc		100.3680		97.1787		3.2		P
Cyanide		1971.0720		497.7053		119.4	*	AS

FORM VI - IN ILM02.1

AR312543

EPA203073A

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9

ICP SERIAL DILUTION

EPA SAMPLE NO.

MCQY33L

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQY33

Matrix (soil/water): SOIL_ Level (low/med): LOW__

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Aluminum	26954.22		26633.00		1.2		P
Antimony	18.76	B	66.00	U	100.0		P
Arsenic	7.98	B	11.00	U	100.0		P
Barium	289.67		283.00	B	2.3		P
Beryllium	1.41	B	1.10	B	22.0		P
Cadmium	2.60	U	13.00	U			P
Calcium	2440.11	B	2390.10	B	2.0		P
Chromium	32.41		31.20	B	3.7		P
Cobalt	343.78		343.25		0.2		P
Copper	41.40		36.10	B	12.8		P
Iron	44231.18		43879.85		0.8		P
Lead	38.95		41.40		6.3		P
Magnesium	4902.66	B	4871.60	B	0.6		P
Manganese	7972.87		7852.15		1.5		P
Mercury							NR
Nickel	85.29		75.20	B	11.8		P
Potassium	1732.95	B	1407.75	B	18.8		P
Selenium	3.99	B	15.00	U	100.0		P
Silver	3.84	B	10.90	B	183.9		P
Sodium	648.50	B	651.95	B	0.5		P
Thallium	3.70	U	18.50	U			P
Vanadium	33.15	B	31.60	B	4.7		P
Zinc	175.16		390.80		123.1	E	P

10
Instrument Detection Limits (Quarterly)

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQY33

ICP ID Number: TRACE_____ Date: 04/15/94

Flame AA ID Number : _____

Furnace AA ID Number : _____

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum			200		NR
Antimony			60		NR
Arsenic	189.04		10	2.2	P
Barium			200		NR
Beryllium			5		NR
Cadmium			5		NR
Calcium			5000		NR
Chromium			10		NR
Cobalt			50		NR
Copper			25		NR
Iron			100		NR
Lead	220.35		3	1.4	P
Magnesium			5000		NR
Manganese			15		NR
Mercury			0.2		NR
Nickel			40		NR
Potassium			5000		NR
Selenium	196.03		5	3.0	P
Silver			10		NR
Sodium			5000		NR
Thallium	190.86		10	3.7	P
Vanadium			50		NR
Zinc			20		NR

Comments:

10

Instrument Detection Limits (Quarterly)

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQY33

ICP ID Number: JA61E_____ Date: 04/15/94

Flame AA ID Number : _____

Furnace AA ID Number : _____

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum	308.22		200	10.9	P
Antimony	206.84		60	13.2	P
Arsenic			10		NR
Barium	493.41		200	0.6	P
Beryllium	313.04		5	0.1	P
Cadmium	228.80		5	2.6	P
Calcium	317.93		5000	2.7	P
Chromium	267.72		10	1.5	P
Cobalt	228.62		50	1.6	P
Copper	324.75		25	0.9	P
Iron	259.94		100	4.4	P
Lead			3		NR
Magnesium	279.08		5000	12.1	P
Manganese	257.61		15	0.5	P
Mercury			0.2		NR
Nickel	231.60		40	5.9	P
Potassium	766.49		5000	244.0	P
Selenium			5		NR
Silver	328.07		10	1.9	P
Sodium	588.99		5000	9.7	P
Thallium			10		NR
Vanadium	292.40		50	1.5	P
Zinc	213.86		20	2.0	P

Comments:

10

Instrument Detection Limits (Quarterly)

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843_ SAS No.: _____ SDG No.: MCQY33

ICP ID Number: _____ Date: 04/15/94

Flame AA ID Number : LEEMAN_PS200

Furnace AA ID Number : _____

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum			200		NR
Antimony			60		NR
Arsenic			10		NR
Barium			200		NR
Beryllium			5		NR
Cadmium			5		NR
Calcium			5000		NR
Chromium			10		NR
Cobalt			50		NR
Copper			25		NR
Iron			100		NR
Lead			3		NR
Magnesium			5000		NR
Manganese			15		NR
Mercury	253.70		0.2	0.2	CV
Nickel			40		NR
Potassium			5000		NR
Selenium			5		NR
Silver			10		NR
Sodium			5000		NR
Thallium			10		NR
Vanadium			50		NR
Zinc			20		NR

Comments:

13
PREPARATION LOG

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.:_21843_ SAS No.: _____ SDG No.:MCQY33

Method: P_

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
LCSS	05/13/94	1.00	200
MCQY33	05/13/94	1.02	200
MCQY34	05/13/94	1.02	200
MCQY35	05/13/94	1.05	200
MCQY36	05/13/94	1.00	200
MCQY37	05/13/94	1.02	200
MCQY38	05/13/94	1.02	200
MCQY39	05/13/94	1.03	200
MCQY40	05/13/94	1.01	200
MCQY41	05/13/94	1.02	200
MCQY42	05/13/94	1.05	200
MCQY43	05/13/94	1.05	200
MCQY44	05/13/94	1.03	200
MCQY45	05/13/94	1.05	200
MCQY46	05/13/94	1.01	200
MCQY47	05/13/94	1.05	200
MCQY48	05/13/94	1.05	200
MCQY49	05/13/94	1.05	200
MCQY50	05/13/94	1.00	200
MCQY50D	05/13/94	1.00	200
MCQY50S	05/13/94	1.00	200
MCQY51	05/13/94	1.03	200
MCQY52	05/13/94	1.02	200
PBS	05/13/94	1.00	200

13
PREPARATION LOG

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.:_21843_ SAS No.: _____ SDG No.:MCQY33

Method: CV

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
LCSS	04/26/94	0.05	100
MCQY33	04/26/94	0.20	100
MCQY34	04/26/94	0.20	100
MCQY35	04/26/94	0.20	100
MCQY36	04/26/94	0.20	100
MCQY37	04/26/94	0.20	100
MCQY38	04/26/94	0.20	100
MCQY39	04/26/94	0.20	100
MCQY40	04/26/94	0.20	100
MCQY41	04/26/94	0.20	100
MCQY42	04/26/94	0.20	100
MCQY43	04/26/94	0.20	100
MCQY44	04/26/94	0.20	100
MCQY45	04/26/94	0.20	100
MCQY46	04/26/94	0.20	100
MCQY47	04/26/94	0.20	100
MCQY48	04/26/94	0.20	100
MCQY49	04/26/94	0.20	100
MCQY50	04/26/94	0.20	100
MCQY50D	04/26/94	0.20	100
MCQY50S	04/26/94	0.20	100
MCQY51	04/26/94	0.20	100
MCQY52	04/26/94	0.20	100
PBS	04/26/94	0.20	100

13
PREPARATION LOG

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.:_21843_ SAS No.: _____ SDG No.:MCQY33

Method: AS

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
ICV	04/25/94	500.0	250
LCSS	04/25/94	5.00	250
MCQY33	04/25/94	1.00	250
MCQY34	04/25/94	1.00	250
MCQY35	04/25/94	1.00	250
MCQY36	04/25/94	1.00	250
MCQY37	04/25/94	1.00	250
MCQY38	04/25/94	1.00	250
MCQY39	04/25/94	1.00	250
MCQY40	04/25/94	1.00	250
MCQY41	04/25/94	1.00	250
MCQY42	04/25/94	1.00	250
MCQY43	04/25/94	1.00	250
MCQY44	04/25/94	1.00	250
MCQY45	04/25/94	1.00	250
MCQY46	04/25/94	1.00	250
MCQY47	04/25/94	1.00	250
MCQY48	04/25/94	1.00	250
MCQY49	04/25/94	1.00	250
MCQY50	04/25/94	1.00	250
MCQY50D	04/25/94	1.00	250
MCQY50S	04/25/94	1.00	250
MCQY51	04/25/94	1.00	250
MCQY52	04/25/94	1.00	250
PBS	04/25/94	1.00	250

C00001

CASE NARRATIVE

MAY 20 1994 RECEIVED

Laboratory Name:	ITAS Pittsburgh, Pennsylvania
Laboratory Code:	ITPA
Project Name:	USEPA/CLP
Inorganic SOW:	ILM02.1
Project Number:	662004
Work Order Number:	Q404156/230
Contract Number:	68-D2-0044
Case Number:	21843
SDG Number:	MCQY33

Sample Number:

MCQY33	MCQY38	MCQY43	MCQY48
MCQY34	MCQY39	MCQY44	MCQY49
MCQY35	MCQY40	MCQY45	MCQY50
MCQY36	MCQY41	MCQY46	MCQY51
MCQY37	MCQY42	MCQY47	MCQY52

Shipment

Twenty soil samples were received at the ITAS Pittsburgh Laboratory on April 15 and 20, 1994, for metals and cyanide analysis.

The traffic report assigned the same sample IDs to both, the soils and TMCN waters. A memo to file from the sampler assigned new IDs to the soils. Communication records concerning this can be found near the end of the data package.

Metals

A duplicate digestion and a matrix spike were performed on sample MCQY50. A serial dilution was performed on sample MCQY33.

The matrix spike recovery exceeded the 75 to 125 percent control limit for antimony. All associated results were flagged with an "N" qualifier.

The serial dilution percent difference exceeded the control limit for zinc. All associated results were flagged with an "E" qualifier.

Sample MCQY35 was over the linear range for the manganese interelement correction on selenium and was analyzed diluted for selenium.

Cyanide Analysis

A duplicate and matrix spike were performed on sample MCQY50.

The duplicate RPD exceeded the 20 percent control limit. All associated results were flagged with "*" qualifier. Samples MCQY50 and MCQY50D were over the calibration range, and were analyzed diluted.

AR312551
EPA203077A

U.S. EPA - CLP

000002 ~~000004~~ VB 5/18/94

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843 SAS No.: _____ SDG No.: MCQY33

SOW No.: ILM02.1

EPA Sample No.	Lab Sample ID
MCQY33	MCQY33
MCQY34	MCQY34
MCQY35	MCQY35
MCQY36	MCQY36
MCQY37	MCQY37
MCQY38	MCQY38
MCQY39	MCQY39
MCQY40	MCQY40
MCQY41	MCQY41
MCQY42	MCQY42
MCQY43	MCQY43
MCQY44	MCQY44
MCQY45	MCQY45
MCQY46	MCQY46
MCQY47	MCQY47
MCQY48	MCQY48
MCQY49	MCQY49
MCQY50	MCQY50
MCQY50D	MCQY50D
MCQY50S	MCQY50S

Were ICP interelement corrections applied ? Yes/No YES

Were ICP background corrections applied ? Yes/No YES
If yes - were raw data generated before application of background corrections ? Yes/No NO

Comments:

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

Signature: David A Dunlap Name: David A Dunlap

Date: 5/19/94 Title: Project Manager

AR312552

REVIEWED BY: LSC

U.S. EPA - CLP

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: ITAS_PITTSBURGH_____ Contract: 68-D2-0044

Lab Code: ITPA__ Case No.: 21843 SAS No.: _____ SDG No.:MCQY33

SOW No.: ILM02.1

EPA Sample No.	Lab Sample ID
_MCQY51_____	_MCQY51_____
_MCQY52_____	_MCQY52_____

Were ICP interelement corrections applied ? Yes/No YES

Were ICP background corrections applied ? Yes/No YES

If yes - were raw data generated before application of background corrections ? Yes/No NO_

Comments:

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

Signature: David A. Dunlop Name: David A. Dunlop

Date: 5/19/94 Title: Project Manager

WESTON
MANAGERS DESIGNERS/CONSULTANTS
5 Underwood Court
Delran, NJ 08075
Phone: 609-461-4003
Fax: 609-461-4916

TECHNICAL ASSISTANCE TEAM FOR EMERGENCY RESPONSE REMOVAL AND PREVENTION
EPA CONTRACT 68-WO-0036

MEMO TO FILE

****
* RE: CLP CASE NUMBER 21843 *
****

COPY ORIGINAL IS FILED IN
CSF MCQA71 CASE 21843
SIGNED David Dulp
DATE 5/11/94

April 18, 1994

[redacted]

Dear [redacted]

This memo is written to correct CLP sample numbers for the sediment samples for Inorganic Traffic Report & Chain of Custody numbers I350781-87 and to correct the CLP sample number for the corresponding sample tags. The water and sediment samples were assigned the same CLP sample number. The designated QC samples were also incorrect and the correct QC designation will follow on Inorganic Traffic Report & Chain of Custody number I350788 on April 20, 1994. Encolsed are the new CLP sample numbers with tag # indicated. Below is a table with the corrections for both Inorganic Traffic Report & Chain of Custody and sample tag:

ITR/COC #	LINE #s	NEW CLP #	TAG #s	STA LOC
I350781	3	MCQY33	T3-1151158	SW/SD SEEP1
I350781	5	MCQY34	T3-1151166	SW/SD2
I350781	9	MCQY35	T3-1151175	SW/SD3
I350782	3	MCQY36	T3-1151184	SW/SD4
I350782	8	MCQY37	T3-1151193	SW/SD5
I350783	1	MCQY38	T3-1151202	SW/SD1
I350783	8	MCQY39	T3-1151217	SW/SD19
I350784	4	MCQY40	T3-1151228	SW/SDSEEP2

Roy F. Weston, Inc.
MAJOR PROGRAMS DIVISION
In Association with Foster Wheeler Enviresponse, Inc., Resource Applications, Inc., C.C. Johnson & Malhotra, P.C., R.E. Sarriera Associates, and GRB Environmental Services, Inc.

ITR/COC #	LINE #s	NEW CLP #	TAG #s	STA LOC
I350784	6	MCQY41	T3-1151235	SW/SD20
I350784	10	MCQY42	T3-1151244	SW/SD25
I350785	6	MCQY43	T3-1151255	SW/SD17
I350785	10	MCQY44	T3-1151264	SW/SD9
I350786	4	MCQY45	T3-1151273	SW/SD7
I350786	8	MCQY46	T3-1151282	SW/SD15
I350787	2	MCQY47	T3-1151291	SW/SD8
I350787	6	MCQY48	T3-1151300	SW/SD6
I350787	10	MCQY49	T3-1152409	SW/SD14

Please note these changes.

COPY ORIGINAL IS FILED IN
CSF MCQA71 CASE 21843
SIGNED [illegible]
DATE 5/11/94

Sincerely,
ROY F. WESTON, INC.
Marian Murphy
Marian Murphy
For Sampler Travis Helm

cc: Regional Sample Control Center (RSCC)
EPA RPM Chris Corbitt
TAT Central Analytical Files
[redacted] Region III Sample Coordinator

EPA-203-079A