Analytical Technologies, Inc.

2709-D Pan American Freeway, NE Albuquerque, NM 87107
Phone (505) 344-3777 FAX (505) 344-4413

ATI I.D. **504384**

May 3, 1995

Sparton Technology Inc.
9621 Coors Rd NW
Albuquerque, NM 87114

Project Name/Number: AGMP-2Q95 2Q95-A

Attention: John Wakefield

On **04/19/95**, Analytical Technologies, Inc., (ADHS License No. AZ0015), received a request to analyze **aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

EPA method 8010 analyses were performed by Analytical Technologies, Inc., Albuquerque, NM.

All other analyses were performed by Analytical Technologies, Inc., 225 Commerce Drive, Fort Collins, CO.

If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.

Letitia Krakowski, Ph.D.
Project Manager

H. Mitchell Rubenstein, Ph.D.
Laboratory Manager

MR:jt

Enclosure

Analytical Technologies, Inc.

CLIENT	: SPARTON TECHNOLOGY INC.	DATE RECEIVED	: 04/19/95
PROJECT #	: 2Q95-A		
PROJECT NAME	: AGMP-2Q95	REPORT DATE	: 05/03/95

ATI ID: 504384

ATI #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	MW-19	AQUEOUS	04/19/95
02	MW-20	AQUEOUS	04/19/95
03	MW-9	AQUEOUS	04/19/95
04	MW-14	AQUEOUS	04/19/95
05	MW-21	AQUEOUS	04/19/95
06	TRIP BLANK	AQUEOUS	04/13/95

---TOTALS---

MATRIX	#SAMPLES
AQUEOUS	6

ATI STANDARD DISPOSAL PRACTICE

The samples from this project will be disposed of in thirty (30) days from the date of this report. If an extended storage period is required, please contact our sample control department before the scheduled disposal date.

Analytical Technologies, Inc.

TOTAL ORGANIC CARBON

Method 415.2

Lab Name: Analytical Technologies, Inc.

Date Collected: 04/19/95

Client Name: ATI-NM

Date Analyzed: 04/25/95

Client Project ID: Sparton -- 504384

Sample Matrix: Water

Lab Workorder Number: 95-04-158

Sample ID	Lab Sample ID	Volume Injected (mL)	TOC Conc. (mg/L)	TOC AVG	RPD
Reagent Blank	RB 95-04-158	1	< 1.0	< 1.0	N/A
MW-19	95-04-158-01	1	< 1.0		
	95-04-158-01DUP	1	< 1.0	< 1.0	N/A
MW-20	95-04-158-02	1	1		
	95-04-158-02DUP	1	1	1	0
MW-9	95-04-158-03	1	2		
	95-04-158-03DUP	1	2	2	0
MW-14	95-04-158-04	1	1		
	95-04-158-04DUP	1	1	1	0
MW-21	95-04-158-05	1	< 1.0		
	95-04-158-05DUP	1	< 1.0	< 1.0	N/A

Analytical Technologies, Inc.

TOTAL ORGANIC HALIDE

Modified Method 9020 TOX

Lab Name: Analytical Technologies, Inc.

Date Collected: 04/19/95

Client Name: ATI-NM

Date Extracted: 04/24/95

Client Project ID: Sparton -- 504384

Date Analyzed: 04/24/95

Lab Workorder Number: 95-04-158

Sample Matrix: Water

Sample ID	Lab Sample ID	Sample Volume (mL)	TOX Conc. (ug/L)
Reagent Blank	WRB95-04-158	100	< 20
MW-19	95-04-158-01	100	70
MW-20	95-04-158-02	100	< 20
MW-9	95-04-158-03	100	590

Analytical Technologies, Inc.

TOTAL ORGANIC HALIDE

Modified Method 9020 TOX

Lab Name: Analytical Technologies, Inc.

Client Name: ATI-NM

Client Project ID: Sparton -- 504384

Lab Workorder Number: 95-04-158

Date Collected: 04/19/95

Date Extracted: 04/25/95

Date Analyzed: 04/25/95

Sample Matrix: Water

Sample ID	Lab Sample ID	Sample Volume (mL)	TOX Conc. (ug/L)
Reagent Blank	WRB95-04-158	100	< 20
MW-14	95-04-158-04	100	470
MW-21	95-04-158-05	100	160

Analytical Technologies, Inc.

TOTAL ORGANIC HALIDE MATRIX SPIKE RESULTS

Modified Method 9020 TOX

Sample ID

In House

Lab Name: Analytical Technologies, Inc.

Client Name: ATI-NM

Lab Sample ID: 95-04-091-03

Sample Matrix: Water

Date Extracted: 04/24/95

Date Analyzed: 04/24/95

Analyte	Spike Added (ug/L)	Sample Concentration (ug/L)	MS Concentration (ug/L)	MS Percent Recovery
2,4,6-Trichlorophenol	200	40	230	95

Analytical Technologies, Inc.

CONDUCTIVITY
Method 9050

Lab Name: Analytical Technologies, Inc.

Date Collected: 04/19/95

Client Name: ATI-NM

Date Analyzed: 04/25/95

Client Project ID: Sparton -- 504384

Sample Matrix: Water

Lab Workorder Number: 95-04-158

Sample ID	Lab Sample ID	Conductivity (umhos/cm)
MW-19	95-04-158-01	650
MW-20	95-04-158-02	560
MW-9	95-04-158-03	690
MW-14	95-04-158-04	710
MW-21	95-04-158-05	560

Analytical Technologies, Inc.

CONDUCTIVITY

Method 9050

Quality Control

Lab Name: Analytical Technologies

Date Collected: 04/19/95

Client Name: ATI-NM

Date Analyzed: 04/25/95

Client Project ID: Sparton--504384

Sample Matrix: Water

Lab Workorder Number: 95-04-158

Lab Sample ID	Conductivity (umhos/cm)	RPD
95-04-176-02	640	6
95-04-176-02 DUP	600	

Analytical Technologies, Inc.

CORROSIVITY
Method 9040

Lab Name: Analytical Technologies, Inc.

Date Collected: 04/19/95

Client Name: ATI-NM

Date Analyzed: 04/21/95

Client Project ID: Sparton -- 504384

Sample Matrix: Liquid

Lab Workorder Number: 95-04-158

Sample ID	Lab Sample ID	Corrosivity (pH)
MW-19	95-04-158-01	7.4
MW-20	95-04-158-02	7.6
MW-9	95-04-158-03	7.5
MW-14	95-04-158-04	8.1
MW-21	95-04-158-05	7.7

Analytical Technologies, Inc.

CORROSIVITY

Method 9040

Quality Control

Lab Name: Analytical Technologies

Date Collected: 04/21/95

Client Name: ATI-NM

Date Analyzed: 04/21/95

Client Project ID: Sparton--504384

Sample Matrix: Water

Lab Workorder Number: 95-04-158

Sample ID	Lab Sample ID	Conductivity (umhos/cm)	RPD
MW-19	95-04-158-01 95-04-158-01 DUP	7.4 7.4	0

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY RESULTS

TEST : PURGEABLE HALOCARBONS (EPA 8010)
CLIENT : SPARTON TECHNOLOGY INC. ATI I.D.: 504384
PROJECT # : 2Q95-A
PROJECT NAME : AGMP-2Q95

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	MW-19	AQUEOUS	04/19/95	NA	04/21/95	1
02	MW-20	AQUEOUS	04/19/95	NA	04/21/95	1
03	MW-9	AQUEOUS	04/19/95	NA	04/21/95	1

PARAMETER	UNITS	01	02	03
1,1-DICHLOROETHENE	UG/L	3.1	<0.2	39 D(10)A
TRICHLOROETHENE	UG/L	92 D(10)	0.2	790 D(100)
SURROGATE:				
BROMOCHLOROMETHANE (%)		85	89	87

D(10)=DILUTED 10X, ANALYZED 04/21/95
D(10)A=DILUTED 10X, ANALYZED 04/24/95
D(100)=DILUTED 100X, ANALYZED 04/21/95

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY RESULTS

TEST : PURGEABLE HALOCARBONS (EPA 8010)
CLIENT : SPARTON TECHNOLOGY INC. ATI I.D.: 504384
PROJECT # : 2Q95-A
PROJECT NAME : AGMP-2Q95

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
04	MW-14	AQUEOUS	04/19/95	NA	04/21/95	1
05	MW-21	AQUEOUS	04/19/95	NA	04/22/95	1
06	TRIP BLANK	AQUEOUS	04/13/95	NA	04/21/95	1

PARAMETER	UNITS	04	05	06
1,1-DICHLOROETHENE	UG/L	17 D(10)A	6.0	<0.2
TRICHLOROETHENE	UG/L	1000 D(100)	160 D(10)	<0.2

SURROGATE:

BROMOCHLOROMETHANE (%)	86	89	84

D(10)=DILUTED 10X, ANALYZED 04/21/95
D(10A)=DILUTED 10X, ANALYZED 04/24/95
D(100)=DILUTED 100X, ANALYZED 04/21/95

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY RESULTS - QUALITY CONTROL

REAGENT BLANK

TEST	: EPA 8010	ATI I.D.	: 504384
BLANK I.D.	: 042195	MATRIX	: AQUEOUS
CLIENT	: SPARTON TECHNOLOGY INC.	DATE EXTRACTED	: NA
PROJECT #	: 2Q95-A	DATE ANALYZED	: 04/21/95
PROJECT NAME	: AGMP-2Q95	DIL. FACTOR	: 1

PARAMETER	UNITS	
1,1-DICHLOROETHENE	UG/L	<0.2
TRICHLOROETHENE	UG/L	<0.2
SURROGATE:		
BROMOCHLOROMETHANE (%)		80

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY RESULTS - QUALITY CONTROL

REAGENT BLANK

TEST	: EPA 8010	ATI I.D.	: 504384
BLANK I.D.	: 042495	MATRIX	: AQUEOUS
CLIENT	: SPARTON TECHNOLOGY INC.	DATE EXTRACTED	: NA
PROJECT #	: 2Q95-A	DATE ANALYZED	: 04/24/95
PROJECT NAME	: AGMP-2Q95	DIL. FACTOR	: 1

PARAMETER	UNITS	
1,1-DICHLOROETHENE	UG/L	<0.2
TRICHLOROETHENE	UG/L	<0.2
SURROGATE:		
BROMOCHLOROMETHANE (%)		85

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - QUALITY CONTROL

MSMSD

TEST	: PURGEABLE HALOCARBONS (EPA 8010)		
MSMSD #	: 50438402	ATI I.D.	: 504384
CLIENT	: SPARTON TECHNOLOGY INC.	DATE EXTRACTED	: NA
PROJECT #	: 2Q95-A	DATE ANALYZED	: 04/24/95
PROJECT NAME	: AGMP-2Q95	SAMPLE MATRIX	: AQUEOUS
REF. I.D.	: 50438402	UNITS	: UG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD
1,1-DICHLOROETHENE	<0.2	10	8.0	80	7.9	79	1
TRICHLOROETHENE	0.2	10	11	108	12	118	9

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

AnalyticalTechnologies,Inc., Albuquerque, NM
San Diego • Phoenix • Seattle • Pensacola • Ft. Collins • Portland • Albuquerque

CHAIN OF CUSTODY

DATE: 4-19-95 PAGE 1 OF 2

ATI LAB I.D. 504384

PLEASE FILL THIS FORM IN COMPLETELY. SHADED AREAS ARE FOR LAB USE ONLY.

PROJECT MANAGER: John M Wakefield

COMPANY: Sparton Technology Inc
ADDRESS: 9621 Coors Rd. NW
Albuquerque NM 87114
PHONE: (505) 892-5300
FAX: (505) 892-5515

BILL TO: John Wakefield
COMPANY: Sparton Tech. Inc
ADDRESS: 4901 Rockaway Blvd SE
Rio Rancho NM 87124

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB ID	Petroleum Hydrocarbons (418.1)	(MOD 8015) Gas/Diesel	Diesel/Gasoline/BTXE/MTBE (MOD 8015/8020)	BTXE/MTBE (8020)	pH	Electrical Conductivity	Chlorinated Hydrocarbons (601/8010)	Aromatic Hydrocarbons (602/8020)	SDWA Volatiles (502.1/503.1), 502.2 Reg. & Unreg.	TOC	TOX	Pesticides/PCB (608/8080)	Herbicides (615/8150)	Base/Neutral/Acid Compounds GC/MS (625/8270)	Volatile Organics GC/MS (624/8240)	Polynuclear Aromatics (610/8310)	SDWA Primary Standards - Arizona	SDWA Secondary Standards - Arizona	SDWA Primary Standards - Federal	SDWA Secondary Standards - Federal	The 13 Priority Pollutant Metals	RCRA Metals by Total Digestion	RCRA Metals by TCLP (1311)	NUMBER OF CONTAINERS
MW-19	4-19-95	1131	Aq.	01					X	X	X			X	X													9
MW-20	4-19-95	1245	Aq.	02					X	X	X			X	X													9
MW-9	4-19-95	1240	Aq	03					X	X	X			X	X													9
MW-14	4-19-95	1328	Aq.	04					X	X	X			X	X													9
MW-21	4-19-95	1340	Aq.	05					X	X	X			X	X													9
~~MW-16~~	~~4-19-95~~		~~Aq~~						X	X	X			X	X	→ Delete Not Sampled ←												9
Trip Blank	4-13-95	0840	Aq.	06							X																	1

007158

PROJECT INFORMATION		SAMPLE RECEIPT	
PROJ. NO.:	2Q95-A	NO. CONTAINERS	46
PROJ. NAME:	AGMP-2Q95	CUSTODY SEALS	Y / N / NA
P.O. NO.:		RECEIVED INTACT	Y
SHIPPED VIA:	Delivered	RECEIVED COLD	Y

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

(RUSH) ☐ 24hr ☐ 48hr ☐ 72hr ☐ 1 WEEK (NORMAL) ☒ 2 WEEK

Comments:
C of C Seals on Cooler

SAMPLED & RELINQUISHED BY: 1.	RELINQUISHED BY: 2.	RELINQUISHED BY: 3.
Signature: [signature] Time: 1550	Signature: Time:	Signature: Time:
Printed Name: John M. Wakefield Date: 4/19/95	Printed Name: Date:	Printed Name: Date:
Company: STI Phone: 892-5300	Company:	Company:

RECEIVED BY: 1.	RECEIVED BY: 2.	RECEIVED BY: (LAB) 3.
Signature: Time:	Signature: Time:	Signature: [signature] Time: 1550
Printed Name: Date:	Printed Name: Date:	Printed Name: [signature] Date: 4/19/95
Company:	Company:	Analytical Technologies, Inc.

ATI Labs: San Diego (619) 458-9141 • Phoenix (602) 496-4400 • Seattle (206) 228-8335 • Pensacola (904) 474-1001 • Portland (503) 684-0447 • Albuquerque (505) 344-3777 DISTRIBUTION: White, Canary - ATI • Pink - ORIGINATOR

Analytical Technologies, Inc. Albuquerque, NM

Chain of Custody

DATE 4/19/95 PAGE 1 OF 1

NETWORK PROJECT MANAGER: LETITIA KRAKOWSKI

COMPANY: **Analytical Technologies, Inc.**

ADDRESS: 2709-D Pan American Freeway, NE
Albuquerque, NM 87107

CLIENT PROJECT MANAGER:

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB ID	TOX	TOC	ORGANIC LEAD	SULFIDE	SURFACTANTS (MBAS)	632/632 MOD	619/619 MOD	610/8310	PH	FC	8240 (TCLP 1311) ZHE	Diesel/Gasoline/BTXE/MTBE/ (MOD 8015/8020)	Volatile Organics GC/MS (624/8240)	NACE	ASBESTOS	BOD	TOTAL COLIFORM	FECAL COLIFORM	GROSS ALPHA/BETA	RADIUM 226/228	AIR - O2, CO2, METHANE	AIR/Diesel/Gasoline/BTXE/ (MOD 8015/8020)	NUMBER OF CONTAINERS
504384 -01	4/19	1131	AQ	01	X	X							X	X													6
-02	↓	1245	↓	02	X	X							X	X													6
-03	↓	1240	↓	03	X	X							X	X													6
-04	↓	1328	↓	04	X	X							X	X													6
-05	↓	1340	↓	05	X	X							X	X													6

4 TOX
2 EX

PROJECT INFORMATION	
PROJECT NUMBER:	504384
PROJECT NAME:	Sparton
QC LEVEL:	STD. IV
QC REQUIRED:	MS MSD BLANK
TAT:	STANDARD RUSH!

SAMPLE RECEIPT	
TOTAL NUMBER OF CONTAINERS	30
CHAIN OF CUSTODY SEALS	
INTACT?	
RECEIVED GOOD COND./COLD	Yes
LAB NUMBER	95-04-158

DUE DATE: 5/3 0
RUSH SURCHARGE:
CLIENT DISCOUNT: 10 %

WO#LK401

SAMPLES SENT TO:	
SAN DIEGO	
FT. COLLINS	X
RENTON	
PENSACOLA	
PORTLAND	
PHOENIX	
FIBERQUANT	

RELINQUISHED BY: 1.	RELINQUISHED BY: 2.
Signature: [signature] Time: 1730	Signature: Time:
Printed Name: Dannette Date 4/19/95	Printed Name: Date
Analytical Technologies, Inc. Albuquerque	Company: FED EX
RECEIVED BY: (LAB) 1.	**RECEIVED BY: (LAB) 2.**
Signature: Time:	Signature: Debi Burdick Time: 10:00a
Printed Name: Date:	Printed Name: DEBI BURDICK Date: 4/21/95
Company: FED EX	Company: ATI

007159

ATI Labs: San Diego (619) 458-9141 • Phoenix (602) 496-4400 • Seattle (206) 228-8335 • Pensacola (904) 474-1001 • Portland (503) 684-0447 • Albuquerque (505) 344-3777 DISTRIBUTION: White, Canary - ATI • Pink - ORIGINATOR

CLIENT: SPARTON TECHNOLOGY, INC.
ATI ACCESSION #: 504384

METHOD	TEST	DATE ANALYZED	DETECTION LIMIT	ANALYST
9040	pH (Corrosivity)	04/21/95	Units	PS
9050	CONDUCTIVITY	04/25/95	µmho's/CM	JH
415.2	TOTAL ORGANIC CARBON	04/25/95	<1.0 mg/l	SPH
9020	TOTAL ORGANIC HALIDE	04/24/95 04/25/95	<20 ug/l	SPH
8010	VOLATILE ORGANICS	04/21/95 04/22/95 04/24/95	see attached sheets	JE

CLIENT: SPARTON TECHNOLOGY, INC.
ATI ACCESSSION #: 504384

ATI'S DETECTION LIMITS FOR METHOD 8010 - AQUEOUS
1X DILUTION

COMPOUND	DETECTION LIMIT (UG/L)
BROMODICHLOROMETHANE	0.2
BROMOFORM	0.5
BROMOMETHANE	1.0
CARBON TETRACHLORIDE	0.2
CHLOROBENZENE	0.5
CHLOROETHANE	0.5
CHLOROFORM	0.5
CHLOROMETHANE	1.0
DIBROMOCHLOROMETHANE	0.2
1,2-DIBROMOETHANE (EDB)	0.2
1,2-DICHLOROBENZENE	0.5
1,3-DICHLOROBENZENE	0.5
1,4-DICHLOROBENZENE	0.5
1,1-DICHLOROETHANE	0.2
1,2-DICHLOROETHANE (EDC)	0.5
1,1-DICHLOROETHENE	0.2
CIS-1,2-DICHLOROETHENE	0.2
TRANS-1,2-DICHLOROETHENE	1.0
1,2-DICHLOROPROPANE	0.2
CIS-1,3-DICHLOROPROPENE	0.2
TRANS-1,3-DICHLOROPROPENE	0.2
METHYLENE CHLORIDE	2.0
1,1,2,2-TETRACHLOROETHANE	0.2
TETRACHLOROETHENE	0.5
1,1,1-TRICHLOROETHANE	1.0
1,1,2-TRICHLOROETHANE	0.2
TRICHLOROETHENE	0.2
TRICHLOROFLUOROMETHANE	0.2
VINYL CHLORIDE	0.5

CLIENT: SPARTON TECHNOLOGY, INC.
ATI ACCESSSION #: 504384

ATI'S DETECTION LIMITS FOR METHOD 8010 - AQUEOUS
10X DILUTION

COMPOUND	DETECTION LIMIT (UG/L)
BROMODICHLOROMETHANE	2.0
BROMOFORM	5.0
BROMOMETHANE	10.0
CARBON TETRACHLORIDE	2.0
CHLOROBENZENE	5.0
CHLOROETHANE	5.0
CHLOROFORM	5.0
CHLOROMETHANE	10.0
DIBROMOCHLOROMETHANE	2.0
1,2-DIBROMOETHANE (EDB)	2.0
1,2-DICHLOROBENZENE	5.0
1,3-DICHLOROBENZENE	5.0
1,4-DICHLOROBENZENE	5.0
1,1-DICHLOROETHANE	2.0
1,2-DICHLOROETHANE (EDC)	5.0
1,1-DICHLOROETHENE	2.0
CIS-1,2-DICHLOROETHENE	2.0
TRANS-1,2-DICHLOROETHENE	10.0
1,2-DICHLOROPROPANE	2.0
CIS-1,3-DICHLOROPROPENE	2.0
TRANS-1,3-DICHLOROPROPENE	20.0
METHYLENE CHLORIDE	2.0
1,1,2,2-TETRACHLOROETHANE	2.0
TETRACHLOROETHENE	5.0
1,1,1-TRICHLOROETHANE	10.0
1,1,2-TRICHLOROETHANE	2.0
TRICHLOROETHENE	2.0
TRICHLOROFLUOROMETHANE	2.0
VINYL CHLORIDE	5.0

CLIENT: SPARTON TECHNOLOGY, INC.
ATI ACCESSSION #: 504384

ATI'S DETECTION LIMITS FOR METHOD 8010 - AQUEOUS
100X DILUTION

COMPOUND	DETECTION LIMIT (UG/L)
BROMODICHLOROMETHANE	20
BROMOFORM	50
BROMOMETHANE	100
CARBON TETRACHLORIDE	20
CHLOROBENZENE	50
CHLOROETHANE	50
CHLOROFORM	50
CHLOROMETHANE	100
DIBROMOCHLOROMETHANE	20
1,2-DIBROMOETHANE (EDB)	20
1,2-DICHLOROBENZENE	50
1,3-DICHLOROBENZENE	50
1,4-DICHLOROBENZENE	50
1,1-DICHLOROETHANE	20
1,2-DICHLOROETHANE (EDC)	50
1,1-DICHLOROETHENE	20
CIS-1,2-DICHLOROETHENE	20
TRANS-1,2-DICHLOROETHENE	100
1,2-DICHLOROPROPANE	20
CIS-1,3-DICHLOROPROPENE	20
TRANS-1,3-DICHLOROPROPENE	200
METHYLENE CHLORIDE	20
1,1,2,2-TETRACHLOROETHANE	20
TETRACHLOROETHENE	50
1,1,1-TRICHLOROETHANE	100
1,1,2-TRICHLOROETHANE	20
TRICHLOROETHENE	20
TRICHLOROFLUOROMETHANE	20
VINYL CHLORIDE	50

Analytical Technologies, Inc.

2709-D Pan American Freeway, NE Albuquerque, NM 87107
Phone (505) 344-3777 FAX (505) 344-4413

ATI I.D. **504393**

May 2, 1995

Sparton Technology Inc.
9621 Coors Rd. NW
Albuquerque, NM 87114

Project Name/Number: AGMP-2Q95 2Q95-A

Attention: John M. Wakefield

On **04/21/95**, Analytical Technologies, Inc., (ADHS License No. AZ0015), received a request to analyze **aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

EPA method 150.1 (pH) analyses were performed by Analytical Technologies, Inc., 11 East Olive Road, Pensacola, FL.

EPA method 8010 analyses were performed by Analytical Technologies, Inc., Albuquerque, NM.

All other analyses were performed by Analytical Technologies, Inc., 225 Commerce Drive, Fort Collins, CO.

If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.

Letitia Krakowski, Ph.D.
Project Manager

H. Mitchell Rubenstein, Ph.D.
Laboratory Manager

MR:jt

Enclosure

Analytical Technologies, Inc.

CLIENT	: SPARTON TECHNOLOGY INC.	DATE RECEIVED	: 04/21/95
PROJECT #	: 2Q95-A		
PROJECT NAME	: AGMP-2Q95	REPORT DATE	: 05/02/95

ATI ID: 504393

ATI #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	MW-16	AQUEOUS	04/21/95
02	MW-22	AQUEOUS	04/21/95
03	FIELD BLANK	AQUEOUS	04/21/95
04	TRIP BLANK	AQUEOUS	04/13/95

---TOTALS---

MATRIX	#SAMPLES
AQUEOUS	4

ATI STANDARD DISPOSAL PRACTICE

The samples from this project will be disposed of in thirty (30) days from the date of this report. If an extended storage period is required, please contact our sample control department before the scheduled disposal date.

Analytical Technologies, Inc. GAS CHROMATOGRAPHY RESULTS

TEST : PURGEABLE HALOCARBONS (EPA 8010)
CLIENT : SPARTON TECHNOLOGY INC. ATI I.D.: 504393
PROJECT # : 2Q95-A
PROJECT NAME : AGMP-2Q95

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	MW-16	AQUEOUS	04/21/95	NA	04/25/95	1
02	MW-22	AQUEOUS	04/21/95	NA	04/25/95	1
03	FIELD BLANK	AQUEOUS	04/21/95	NA	04/25/95	1

PARAMETER	UNITS	01	02	03
1,1-DICHLOROETHENE	UG/L	200 D(10)	10	<0.2
TRICHLOROETHENE	UG/L	7100 D(500)	100 D(10)	<0.2
SURROGATE:				
BROMOCHLOROMETHANE (%)		83	84	83

D(10)=DILUTED 10X, ANALYZED 04/26/95
D(500)=DILUTED 500X, ANALYZED 04/26/95

Analytical Technologies, Inc. GAS CHROMATOGRAPHY RESULTS

TEST : PURGEABLE HALOCARBONS (EPA 8010)
CLIENT : SPARTON TECHNOLOGY INC. ATI I.D.: 504393
PROJECT # : 2Q95-A
PROJECT NAME : AGMP-2Q95

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
04	TRIP BLANK	AQUEOUS	04/13/95	NA	04/25/95	1

PARAMETER	UNITS	04
1,1-DICHLOROETHENE	UG/L	<0.2
TRICHLOROETHENE	UG/L	<0.2
SURROGATE:		
BROMOCHLOROMETHANE (%)		88

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY RESULTS - QUALITY CONTROL

REAGENT BLANK

TEST	: EPA 8010	ATI I.D.	: 504393
BLANK I.D.	: 042595	MATRIX	: AQUEOUS
CLIENT	: SPARTON TECHNOLOGY INC.	DATE EXTRACTED	: NA
PROJECT #	: 2Q95-A	DATE ANALYZED	: 04/25/95
PROJECT NAME	: AGMP-2Q95	DIL. FACTOR	: 1

PARAMETER	UNITS	
1,1-DICHLOROETHENE	UG/L	<0.2
TRICHLOROETHENE	UG/L	<0.2
SURROGATE:		
BROMOCHLOROMETHANE (%)		81

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY RESULTS - QUALITY CONTROL

REAGENT BLANK

TEST	: EPA 8010	ATI I.D.	: 504393
BLANK I.D.	: 042695	MATRIX	: AQUEOUS
CLIENT	: SPARTON TECHNOLOGY INC.	DATE EXTRACTED	: NA
PROJECT #	: 2Q95-A	DATE ANALYZED	: 04/26/95
PROJECT NAME	: AGMP-2Q95	DIL. FACTOR	: 1

PARAMETER	UNITS	
1,1-DICHLOROETHENE	UG/L	<0.2
TRICHLOROETHENE	UG/L	<0.2
SURROGATE:		
BROMOCHLOROMETHANE (%)		87

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - QUALITY CONTROL

MSMSD

TEST	: PURGEABLE HALOCARBONS (EPA 8010)		
MSMSD #	: 50439303	ATI I.D.	: 504393
CLIENT	: SPARTON TECHNOLOGY INC.	DATE EXTRACTED	: NA
PROJECT #	: 2Q95-A	DATE ANALYZED	: 04/26/95
PROJECT NAME	: AGMP-2Q95	SAMPLE MATRIX	: AQUEOUS
REF. I.D.	: 50439303	UNITS	: UG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD
1,1-DICHLOROETHENE	<0.2	10	8.0	80	7.3	73	9
TRICHLOROETHENE	<0.2	10	11	110	10	100	10

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

Analytical Technologies, Inc.

CONDUCTIVITY
Method 9050

Lab Name: Analytical Technologies, Inc.

Date Collected: 04/21/95

Client Name: ATI-NM

Date Analyzed: 04/25/95

Client Project ID: Sparton -- 504393

Sample Matrix: Water

Lab Workorder Number: 95-04-176

Sample ID	Lab Sample ID	Conductivity (umhos/cm)
MW-16	95-04-176-01	970
MW-22	95-04-176-02	640
Field Blank	95-04-176-03	1.3
Trip Blank	95-04-176-04	2.4

Analytical Technologies, Inc.

CONDUCTIVITY

Method 9050

Quality Control

Lab Name: Analytical Technologies

Date Collected: 04/21/95

Client Name: ATI-NM

Date Analyzed: 04/25/95

Client Project ID: Sparton--504393

Sample Matrix: Water

Lab Workorder Number: 95-04-176

Sample ID	Lab Sample ID	Conductivity (umhos/cm)	RPD
MW-22	95-04-176-02 95-04-176-02 DUP	640 600	6

Analytical Technologies, Inc.

TOTAL ORGANIC CARBON

Method 415.2

Lab Name: Analytical Technologies, Inc.

Date Collected: 04/13,21/95

Client Name: ATI-NM

Date Analyzed: 04/25/95

Client Project ID: Sparton -- 504393

Sample Matrix: Water

Lab Workorder Number: 95-04-176

Sample ID	Lab Sample ID	Volume Injected (mL)	TOC Conc. (mg/L)	TOC AVG	RPD
Reagent Blank	RB 95-04-176	1	< 1.0	< 1.0	N/A
MW-16	95-04-176-01	1	1		
	95-04-176-01DUP	1	2	1.5	67
MW-22	95-04-176-02	1	< 1.0		
	95-04-176-02DUP	1	< 1.0	< 1.0	N/A
Field Blank	95-04-176-03	1	< 1.0		
	95-04-176-03DUP	1	< 1.0	< 1.0	N/A
Trip Blank	95-04-176-04	1	< 1.0		
	95-04-176-04DUP	1	< 1.0	< 1.0	N/A

Analytical Technologies, Inc.

TOTAL ORGANIC HALIDE

Modified Method 9020 TOX

Lab Name: Analytical Technologies, Inc.

Client Name: ATI-NM

Client Project ID: Sparton -- 504393

Lab Workorder Number: 95-04-176

Date Collected: 04/13,21/95

Date Extracted: 04/25/95

Date Analyzed: 04/25/95

Sample Matrix: Water

Sample ID	Lab Sample ID	Sample Volume (mL)	TOX Conc. (ug/L)
Reagent Blank	WRB95-04-176	100	< 20
MW-22	95-04-176-02	100	110
Field Blank	95-04-176-03	100	< 20
Trip Blank	95-04-176-04	100	< 20

Analytical Technologies, Inc.

TOTAL ORGANIC HALIDE

Modified Method 9020 TOX

Lab Name: Analytical Technologies, Inc.

Client Name: ATI-NM

Client Project ID: Sparton -- 504393

Lab Workorder Number: 95-04-176

Date Collected: 04/21/95

Date Extracted: 04/26/95

Date Analyzed: 04/26/95

Sample Matrix: Water

Sample ID	Lab Sample ID	Sample Volume (mL)	TOX Conc. (ug/L)
Reagent Blank	WRB95-04-176	100	< 20
MW-16	95-04-176-01	5	6100

Analytical **Technologies,** Inc.

TOTAL ORGANIC HALIDE MATRIX SPIKE RESULTS

Modified Method 9020 TOX

Sample ID

In House

Lab Name: Analytical Technologies, Inc.

Client Name: ATI-NM

Lab Sample ID: 95-04-133-01

Sample Matrix: Water

Date Extracted: 04/25/95

Date Analyzed: 04/25/95

Analyte	Spike Added (ug/L)	Sample Concentration (ug/L)	MS Concentration (ug/L)	MS Percent Recovery
2,4,6-Trichlorophenol	200	40	280	120

Analytical Technologies, Inc.

"FINAL REPORT FORMAT - MULTIPLE"

Accession: 504704
Client: ANALYTICAL TECHNOLOGIES, INC.
Project Number: 504393
Project Name: SPARTON TECHNOLOGIES
Project Location: AGMP-2Q95
Test: Group of Single Wetchem
QcLevel: II

Parameter:	Unit:	Result:	R.L:	Batch:	Q:
Client ID: 504393-01			Lab ID: 001		
PH (150.1)	UNITS	7.5	NA	PHW087	
Comments:					
Client ID: 504393-02			Lab ID: 002		
PH (150.1)	UNITS	7.3	NA	PHW087	
Comments:					
Client ID: 504393-03			Lab ID: 003		
PH (150.1)	UNITS	5.7	NA	PHW087	
Comments:					
Client ID: 504393-04 (TB)			Lab ID: 004		
PH (150.1)	UNITS	5.7	NA	PHW087	
Comments:					

Analytical Technologies, Inc.

"FINAL REPORT FORMAT - MULTIPLE"

Accession: 504704
Client: ANALYTICAL TECHNOLOGIES, INC.
Project Number: 504393
Project Name: SPARTON TECHNOLOGIES
Project Location: AGMP-2Q95
Test: Group of Single Wetchem

Client ID:	Lab Matrix: ID:	Date/Time Sampled:	Date Received:
504393-01	001 WATER	21-APR-95 1203	22-APR-95
504393-02	002 WATER	21-APR-95 0922	22-APR-95
504393-03	003 WATER	21-APR-95 0938	22-APR-95
504393-04 (TB)	004 WATER	13-APR-95 N/S	22-APR-95

Analytical Technologies, Inc.

"Method Report Summary"

Accession Number: 504704
Client: ANALYTICAL TECHNOLOGIES, INC.
Project Number: 504393
Project Name: SPARTON TECHNOLOGIES
Project Location: AGMP-2Q95
Test: Group of Single Wetchem

Client Sample Id:	Parameter:	Unit:	Result:
504393-01	PH (150.1)	UNITS	7.5
504393-02	PH (150.1)	UNITS	7.3
504393-03	PH (150.1)	UNITS	5.7
504393-04 (TB)	PH (150.1)	UNITS	5.7

Analytical Technologies, Inc.

"WetChem Quality Control Report"

Parameter:	PH
Batch Id:	PHW087
Blank Result:	N/A
Anal. Method:	150.1
Prep. Method:	N/A
Analysis Date:	22-APR-95
Prep. Date:	22-APR-95

Sample Duplication

Sample Dup:	504704-1
Rept Limit:	N/A
Sample Result:	7.50
Dup Result:	7.51
Sample RPD:	0.01
Max RPD:	0.12
Dry Weight%	N/A

Matrix Spike

Sample Spiked:	N/A
Rept Limit:	N/A
Sample Result:	
Spiked Result:	
Spike Added:	
% Recovery:	
% Rec Limits:	
Dry Weight%	

ICV

ICV Result:	9.88
True Result:	10.00
% Recovery:	99
% Rec Limits:	90-110

LCS

LCS Result:	6.98
True Result:	6.87
% Recovery:	102
% Rec Limits:	97-103

Analytical Technologies, Inc.

"Quality Control Comments"

Batch Id:	Comments:
PHW087	PH LCS: MALLINCKRODT; LOT #: 7100KDGT/7708

AnalyticalTechnologies,Inc., Albuquerque, NM
San Diego ▪ Phoenix ▪ Seattle ▪ Pensacola ▪ Ft. Collins ▪ Portland ▪ Albuquerque

CHAIN OF CUSTODY

DATE: 4-21-95 JMW 4-20-95 PAGE 1 OF 1

ATI LAB I.D. 504393

PLEASE FILL THIS FORM IN COMPLETELY. SHADED AREAS ARE FOR LAB USE ONLY.

PROJECT MANAGER: John M. Wakefield

COMPANY: Spurton Technology Inc.
ADDRESS: 9621 Coors Rd. NW
Albuquerque NM 87114
PHONE: (505) 892-5300
FAX: (505) 892-5515

BILL TO: John Wakefield
COMPANY: Spurton Tech Inc.
ADDRESS: 4901 Rockaway Blvd. SE
Rio Rancho NM 87124

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB ID	Petroleum Hydrocarbons (418.1)	(MOD 8015) Gas/Diesel	Diesel/Gasoline/BTXE/MTBE (MOD 8015/8020)	BTXE/MTBE (8020)	pH	Electrical Conductivity	Chlorinated Hydrocarbons (601/8010)	Aromatic Hydrocarbons (602/8020)	SDWA Volatiles (502.1/503.1), 502.2 Reg. & Unreg.	TOC	TOX	Pesticides/PCB (608/8080)	Herbicides (615/8150)	Base/Neutral/Acid Compounds GC/MS (625/8270)	Volatile Organics GC/MS (624/8240)	Polynuclear Aromatics (610/8310)			SDWA Primary Standards - Arizona	SDWA Secondary Standards - Arizona	SDWA Primary Standards - Federal	SDWA Secondary Standards - Federal			The 13 Priority Pollutant Metals	RCRA Metals by Total Digestion	RCRA Metals by TCLP (1311)		NUMBER OF CONTAINERS
MW-16	JMW 4-21-95	1203	Aq.	01					X	X	X			X	X																		9
MW-22	JMW 4-21-95	0922	Aq.	02					X	X	X			X	X																		9
Field Blank	4-21-95	0938	Aq.	03					X	X	X			X	X																		9
Trip Blank	4-13-95	—	Aq.	04					X	X	X			X	X																		5

007182

PROJECT INFORMATION		SAMPLE RECEIPT	
PROJ. NO.: 2095-A		NO. CONTAINERS	32
PROJ. NAME: AGMP-2095		CUSTODY SEALS	Y/N/NA
P.O. NO.:		RECEIVED INTACT	Y
SHIPPED VIA: Delivered		RECEIVED COLD	Y

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

(RUSH) ☐ 24hr ☐ 48hr ☐ 72hr ☐ 1 WEEK (NORMAL) ☒ 2 WEEK

Comments:
Cut C Seals on Cooler

SAMPLED & RELINQUISHED BY: 1.	RELINQUISHED BY: 2.	RELINQUISHED BY: 3.
Signature: John M. Wakefield Time: 1248	Signature: Don A. Gutierrez Time: 1520	Signature: Time:
Printed Name: John Wakefield Date: 4-21-95 JMW	Printed Name: Don A. Gutierrez Date: 4-21-95	Printed Name: Date:
Company: STI Phone: 892-5300	Company: STI	Company:

RECEIVED BY: 1.	RECEIVED BY: 2.	RECEIVED BY: (LAB) 3.
Signature: Don A. Gutierrez Time: 1520	Signature: Time:	Signature: Time: 1520
Printed Name: Don A. Gutierrez Date: 4-21-95	Printed Name: Date:	Printed Name: Diana Lutter Date: 4/21/95
Company: STI	Company:	Analytical Technologies, Inc.

ATI Labs: San Diego (619) 458-9141 • Phoenix (602) 496-4400 • Seattle (206) 228-8335 • Pensacola (904) 474-1001 • Portland (503) 684-0447 • Albuquerque (505) 344-3777 DISTRIBUTION: White, Canary - ATI • Pink - ORIGINATOR

AnalyticalTechnologies,Inc. Albuquerque, NM

Chain of Custody

DATE 4/21/95 PAGE 1 OF 1

NETWORK PROJECT MANAGER: LETITIA KRAKOWSKI

COMPANY: **Analytical Technologies, Inc.**

ADDRESS: 2709-D Pan American Freeway, NE
Albuquerque, NM 87107

CLIENT PROJECT MANAGER:

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB ID	TOX	TOC	ORGANIC LEAD	SULFIDE	SURFACTANTS (MBAS)		632/632 MOD	619/619 MOD	610/8310	OH	8240 (TCLP 1311) ZHE		Diesel/Gasoline/BTXE/MTBE/ (MOD 8015/8020)	Volatile Organics GC/MS (624/8240)		NACE	ASBESTOS		BOD	TOTAL COLIFORM	FECAL COLIFORM		GROSS ALPHA/BETA	RADIUM 226/228		AIR - O2, CO2, METHANE	AIR/Diesel/Gasoline/BTXE/ (MOD 8015/8020)	NUMBER OF CONTAINERS
504393-01	4/21	1203	AQ											X																			1
-02	4/21	0922												X																			1
-03	4/21	0938												X																			1
-04 (T/B)	4/13	/												X																			1

PROJECT INFORMATION	SAMPLE RECEIPT	
PROJECT NUMBER: 504393	TOTAL NUMBER OF CONTAINERS	4
PROJECT NAME: SPARTON	CHAIN OF CUSTODY SEALS	4
QC LEVEL: STD IV	INTACT?	4
QC REQUIRED: MS MSD BLANK	RECEIVED GOOD COND./COLD	Y
TAT: STANDARD RUSH!	LAB NUMBER 504393-4	

DUE DATE: 5/5/95
RUSH SURCHARGE: —
CLIENT DISCOUNT: 10 %

Sat 4/22
Please ANALYZE ASAP

SAMPLES SENT TO:
- SAN DIEGO
- FT. COLLINS
- RENTON
- PENSACOLA X
- PORTLAND
- PHOENIX
- FIBERQUANT

RELINQUISHED BY: 1.	RELINQUISHED BY: 2.
Signature: Time: 1700	Signature: Time:
Printed Name: Date 4/21/95	Printed Name: Date
Analytical Technologies, Inc. Albuquerque	Company:
RECEIVED BY: (LAB) 1.	**RECEIVED BY: (LAB) 2.**
Signature: Time: 0959	Signature: Time:
Printed Name: Date: 4/22/95	Printed Name: Date:
Company:	Company:

ATI Labs: San Diego (619) 458-9141 • Phoenix (602) 496-4400 • Seattle (206) 228-8335 • Pensacola (904) 474-1001 • Portland (503) 684-0447 • Albuquerque (505) 344-3777 DISTRIBUTION: White, Canary - ATI • Pink - ORIGINATOR

Analytical Technologies, Inc. Albuquerque, NM

Chain of Custody 95-04-176

DATE 4/21/95 PAGE 1 OF 1

NETWORK PROJECT MANAGER: LETITIA KRAKOWSKI

COMPANY: **Analytical Technologies, Inc.**

ADDRESS: 2709-D Pan American Freeway, NE
Albuquerque, NM 87107

CLIENT PROJECT MANAGER:

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB ID	TOX	TOC	ORGANIC LEAD	SULFIDE	SURFACTANTS (MBAS)		632/632 MOD	619/619 MOD	610/8310	~~TDS~~ 4/19/95	Electrical Conductivity	8240 (TCLP 1311) ZHE		Diesel/Gasoline/BTXE/MTBE/ (MOD 8015/8020)	Volatile Organics GC/MS (624/8240)		NACE	ASBESTOS		BOD	TOTAL COLIFORM	FECAL COLIFORM		GROSS ALPHA/BETA	RADIUM 226/228		AIR - O2, CO2, METHANE	AIR/Diesel/Gasoline/BTXE/ (MOD 8015/8020)	NUMBER OF CONTAINERS
504393 -01	4/21	1203	AQ	01	X	X								X	X																	5	6
-02	↓	0922	↓	02	X	X								X	X																	5	6
-03	↓	0938	↓	03	X	X								X	X																	5	6
-04 (TB)	4/13	—	↓	04	X	X								X	X																		4

4 TOC LEX

3 2H 1E

PROJECT INFORMATION	
PROJECT NUMBER:	504393
PROJECT NAME:	Bruton
QC LEVEL:	STD IV
QC REQUIRED:	MS MSD BLANK
TAT:	STANDARD RUSH!

SAMPLE RECEIPT	
TOTAL NUMBER OF CONTAINERS	18
CHAIN OF CUSTODY SEALS	NA
INTACT?	NA
RECEIVED GOOD COND/COLD	Y
LAB NUMBER	

DUE DATE: 5/5
RUSH SURCHARGE: 0
CLIENT DISCOUNT: 10 %

WO# LK405

SAMPLES SENT TO:	
SAN DIEGO	
FT. COLLINS	X
RENTON	
PENSACOLA	
PORTLAND	
PHOENIX	
FIBERQUANT	

RELINQUISHED BY: 1.	RELINQUISHED BY: 2.
Signature: [signature] Time: 1730	Signature: Time:
Printed Name: Dianne Cutler Date: 4/21/95	Printed Name: Date
Analytical Technologies, Inc. Albuquerque	Company: FED-X
RECEIVED BY: (LAB) 1.	**RECEIVED BY: (LAB) 2.**
Signature: Time:	Signature: [signature] Time: 9:45
Printed Name: Date:	Printed Name: L. Kelly Date: 4-22-95
Company: FED-X	Company: ATI

007184

ATI Labs: San Diego (619) 458-9141 • Phoenix (602) 496-4400 • Seattle (206) 228-8335 • Pensacola (904) 474-1001 • Portland (503) 684-0447 • Albuquerque (505) 344-3777 DISTRIBUTION: White, Canary - ATI • Pink - ORIGINATOR

----- Common Footnotes Wet Chem -----

N/A = NOT APPLICABLE.
N/S = NOT SUBMITTED.
N/C = SAMPLE AND DUPLICATE RESULTS ARE AT OR BELOW ATI REPORTING LIMIT; THEREFORE, THE RPD IS "NOT CALCULABLE" AND NO CONTROL LIMITS APPLY.
ND = NOT DETECTED ABOVE REPORTING LIMIT.
DISS. OR D = DISSOLVED
T & D = TOTAL AND DISSOLVED
R = REACTIVE
T = TOTAL
G = SAMPLE AND/OR DUPLICATE RESULT IS BELOW 5 X ATI REPORTING LIMIT AND THE ABSOLUTE DIFFERENCE BETWEEN THE SAMPLE AND DUPLICATE RESULT IS AT OR BELOW ATI REPORTING LIMIT; THEREFORE, THE RESULTS ARE "IN CONTROL".
Q = THE ANALYTICAL (POST-DIGESTION) SPIKE IS REPORTED DUE TO THE MATRIX (PRE-DIGESTION) SPIKE BEING OUTSIDE ACCEPTANCE LIMITS.
# = ELEVATED REPORTING LIMIT DUE TO INSUFFICIENT SAMPLE.
+ = ELEVATED REPORTING LIMIT DUE TO DILUTION INTO CALIBRATION RANGE.
* = ELEVATED REPORTING LIMIT DUE TO MATRIX INTERFERENCE.
@ = ADJUSTED REPORTING LIMIT DUE TO SAMPLE MATRIX (DILUTION PRIOR TO PREPARATION).
P = ANALYTICAL (POST-DIGESTION) SPIKE
I = DUPLICATE INJECTION
& = AUTOMATED
F = SAMPLE SPIKED > 4 X SPIKE CONCENTRATION.
N/C+ = NOT CALCULABLE
N/C* = NOT CALCULABLE; SAMPLE SPIKED > 4 X SPIKE CONCENTRATION.
H = SAMPLE AND/OR DUPLICATE IS BELOW 5 X ATI REPORTING LIMIT AND THE ABSOLUTE DIFFERENCE BETWEEN THE RESULTS EXCEEDS THE ATI REPORTING LIMIT; THEREFORE, THE RESULTS ARE "OUT OF CONTROL".
A = SAMPLE AND DUPLICATE RESULTS ARE "OUT OF CONTROL".
Z = THE SAMPLE RESULT FOR THE SPIKE IS BELOW REPORTING LIMIT. HOWEVER, THIS RESULT IS REPORTED FOR ACCURATE QC CALCULATIONS.
NH= SAMPLE AND / OR DUPLICATE RESULT IS BELOW 5 X ATI REPORTING LIMIT AND THE RESULTS EXCEED THE ATI REPORTING LIMIT; THEREFORE, THE RESULTS ARE "OUT OF CONTROL" SAMPLE IS NON-HOMOGENOUS.
(*) = DETECTION LIMITS RAISED DUE TO CLP METHOD NOT REQUIRING A CONCENTRATION STEP FOR CN.

(CA) = SEE CORRECTIVE ACTIONS FORM.

SW-846, 3RD EDITION, SEPTEMBER 1986 AND REVISION 1, JULY 1992.
EPA 600/4-79-020, REVISED MARCH 1983.
STANDARD METHODS, 17TH ED., 1989
NIOSH MANUAL OF ANALYTICAL METHODS, 3RD EDITION.
ANNUAL BOOK OF ASTM STANDARDS, VOLUME 11.01, 1991.

1. COLIFORM. COLIFORM PRECISION IS MEASURED BY THE ABSOLUTE DIFFERENCE BETWEEN THE LOGARITHM OF COLONIES PER 100 MLS OF SAMPLE ON DUPLICATE PLATES.

2. PH. PH PRECISION IS MEASURED BY THE ABSOLUTE DIFFERENCE BETWEEN THE SAMPLE AND THE DUPLICATE ANALYSIS.

3. FLASHPOINT. FLASHPOINT PRECISION IS MEASURED BY THE ABSOLUTE DIFFERENCE BETWEEN THE SAMPLE AND DUPLICATE ANALYSIS. IF FLASHPOINT IS LESS THAN 25 DEGREES CELSIUS, THE DETECTION LIMIT BECOMES THE INITIAL STARTING TEMPERATURE.

RPD = RELATIVE PERCENT DIFFERENCE (OR DEVIATION).

RPT LIMIT = REPORTING LIMITS BASED ON METHOD DETECTION LIMIT STUDIES.

DPH = DOLLY P. HWANG	RB = REBECCA BROWN	CD = CHRISTY DRAPER
DBH = DONALD B. HAND	BF = BLANCA FACH	SL = STEPHANIE LOWRY
TT = TONY TINEO	NB = NANCY L. BRASCH	
JHS = JOSEPH SAUNDERS	MM = MARY MOLONEY	
NSB = NANCY S. BUTLER	CF = CHRISTINE FOSTER	

METHOD	TEST	DATE ANALYZED	DETECTION LIMIT	ANALYST
150.1	pH	04/22/95	Units	BF
9050	CONDUCTIVITY	04/25/95	µmho's/CM	JH
415.2	TOTAL ORGANIC CARBON	04/25/95	<1.0 mg/l	SPH
9020	TOTAL ORGANIC HALIDE	04/25/95	<20 ug/l	SPH
8010	VOLATILE ORGANICS	04/25/95 04/26/95	see attached sheets	JE

CLIENT: SPARTON TECHNOLOGY, INC.
ATI ACCESSSION #: 504393

ATI'S DETECTION LIMITS FOR METHOD 8010 - AQUEOUS
1X DILUTION

COMPOUND	DETECTION LIMIT (UG/L)
BROMODICHLOROMETHANE	0.2
BROMOFORM	0.5
BROMOMETHANE	1.0
CARBON TETRACHLORIDE	0.2
CHLOROBENZENE	0.5
CHLOROETHANE	0.5
CHLOROFORM	0.5
CHLOROMETHANE	1.0
DIBROMOCHLOROMETHANE	0.2
1,2-DIBROMOETHANE (EDB)	0.2
1,2-DICHLOROBENZENE	0.5
1,3-DICHLOROBENZENE	0.5
1,4-DICHLOROBENZENE	0.5
1,1-DICHLOROETHANE	0.2
1,2-DICHLOROETHANE (EDC)	0.5
1,1-DICHLOROETHENE	0.2
CIS-1,2-DICHLOROETHENE	0.2
TRANS-1,2-DICHLOROETHENE	1.0
1,2-DICHLOROPROPANE	0.2
CIS-1,3-DICHLOROPROPENE	0.2
TRANS-1,3-DICHLOROPROPENE	0.2
METHYLENE CHLORIDE	2.0
1,1,2,2-TETRACHLOROETHANE	0.2
TETRACHLOROETHENE	0.5
1,1,1-TRICHLOROETHANE	1.0
1,1,2-TRICHLOROETHANE	0.2
TRICHLOROETHENE	0.2
TRICHLOROFLUOROMETHANE	0.2
VINYL CHLORIDE	0.5

CLIENT: SPARTON TECHNOLOGY, INC.
ATI ACCESSSION #: 504393

ATI'S DETECTION LIMITS FOR METHOD 8010 - AQUEOUS
10X DILUTION

COMPOUND	DETECTION LIMIT (UG/L)
BROMODICHLOROMETHANE	2.0
BROMOFORM	5.0
BROMOMETHANE	10.0
CARBON TETRACHLORIDE	2.0
CHLOROBENZENE	5.0
CHLOROETHANE	5.0
CHLOROFORM	5.0
CHLOROMETHANE	10.0
DIBROMOCHLOROMETHANE	2.0
1,2-DIBROMOETHANE (EDB)	2.0
1,2-DICHLOROBENZENE	5.0
1,3-DICHLOROBENZENE	5.0
1,4-DICHLOROBENZENE	5.0
1,1-DICHLOROETHANE	2.0
1,2-DICHLOROETHANE (EDC)	5.0
1,1-DICHLOROETHENE	2.0
CIS-1,2-DICHLOROETHENE	2.0
TRANS-1,2-DICHLOROETHENE	10.0
1,2-DICHLOROPROPANE	2.0
CIS-1,3-DICHLOROPROPENE	2.0
TRANS-1,3-DICHLOROPROPENE	20.0
METHYLENE CHLORIDE	2.0
1,1,2,2-TETRACHLOROETHANE	2.0
TETRACHLOROETHENE	5.0
1,1,1-TRICHLOROETHANE	10.0
1,1,2-TRICHLOROETHANE	2.0
TRICHLOROETHENE	2.0
TRICHLOROFLUOROMETHANE	2.0
VINYL CHLORIDE	5.0

CLIENT: SPARTON TECHNOLOGY, INC.
ATI ACCESSSION #: 504393

ATI'S DETECTION LIMITS FOR METHOD 8010 - AQUEOUS
200X DILUTION

COMPOUND	DETECTION LIMIT (UG/L)
BROMODICHLOROMETHANE	40
BROMOFORM	100
BROMOMETHANE	200
CARBON TETRACHLORIDE	40
CHLOROBENZENE	100
CHLOROETHANE	100
CHLOROFORM	100
CHLOROMETHANE	200
DIBROMOCHLOROMETHANE	40
1,2-DIBROMOETHANE (EDB)	40
1,2-DICHLOROBENZENE	100
1,3-DICHLOROBENZENE	100
1,4-DICHLOROBENZENE	100
1,1-DICHLOROETHANE	40
1,2-DICHLOROETHANE (EDC)	100
1,1-DICHLOROETHENE	40
CIS-1,2-DICHLOROETHENE	40
TRANS-1,2-DICHLOROETHENE	200
1,2-DICHLOROPROPANE	40
CIS-1,3-DICHLOROPROPENE	40
TRANS-1,3-DICHLOROPROPENE	40
METHYLENE CHLORIDE	400
1,1,2,2-TETRACHLOROETHANE	40
TETRACHLOROETHENE	100
1,1,1-TRICHLOROETHANE	200
1,1,2-TRICHLOROETHANE	40
TRICHLOROETHENE	40
TRICHLOROFLUOROMETHANE	40
VINYL CHLORIDE	100

CLIENT: SPARTON TECHNOLOGY, INC.
ATI ACCESSSION #: 507393

ATI'S DETECTION LIMITS FOR METHOD 8010 - AQUEOUS
500X DILUTION

COMPOUND	DETECTION LIMIT (UG/L)
BROMODICHLOROMETHANE	100
BROMOFORM	250
BROMOMETHANE	500
CARBON TETRACHLORIDE	100
CHLOROBENZENE	250
CHLOROETHANE	250
CHLOROFORM	250
CHLOROMETHANE	500
DIBROMOCHLOROMETHANE	100
1,2-DIBROMOETHANE (EDB)	100
1,2-DICHLOROBENZENE	250
1,3-DICHLOROBENZENE	250
1,4-DICHLOROBENZENE	250
1,1-DICHLOROETHANE	100
1,2-DICHLOROETHANE (EDC)	250
1,1-DICHLOROETHENE	100
CIS-1,2-DICHLOROETHENE	100
TRANS-1,2-DICHLOROETHENE	500
1,2-DICHLOROPROPANE	100
CIS-1,3-DICHLOROPROPENE	100
TRANS-1,3-DICHLOROPROPENE	100
METHYLENE CHLORIDE	1000
1,1,2,2-TETRACHLOROETHANE	100
TETRACHLOROETHENE	250
1,1,1-TRICHLOROETHANE	500
1,1,2-TRICHLOROETHANE	100
TRICHLOROETHENE	100
TRICHLOROFLUOROMETHANE	100
VINYL CHLORIDE	250