

SPARTON

SPARTON TECHNOLOGY

File ST/Reel 93

August 26, 1993

CERTIFIED MAIL
RETURN RECEIPT REQUESTED



Mr. Steven M. Alexander
RCRA Technical Compliance Program Manager
HAZARDOUS AND RADIOACTIVE MATERIALS BUREAU
New Mexico Environment Department
P.O. Box 26110
525 Camino de los Marquez
Santa Fe, New Mexico 87502

Re: CME Lab Reports

Dear Mr. Alexander:

Enclosed are copies of two laboratory reports from Analytical Technologies, Inc. (ATI Report Nos. 307357 and 307360) for groundwater samples collected during the CME. Monitoring Wells, MW-15, 32, 36, 41, 44, 53, 55, 56, 58, 60, 61 and 62 were split sampled with NMED on July 26 and 27, 1993. These samples were analyzed for Volatile Organics (EPA Method 8240) and 13 EPA Priority Pollutant Metals, (EPA Series 200 Method). Sample MW-15 was analyzed for additional, annual parameters as specified in the Alternate Groundwater Monitoring Program and this data is included in the ATI Report #370360.

Also enclosed is a summary table comparing STI's and NMED's results for all parameters detected in the 12 CME wells.

If you need additional information or have any questions please contact John Wakefield or myself at (505) 892-5300. Thank you for your attention to this matter.

Sincerely,
SPARTON TECHNOLOGY, INC.

W.M.

Richard D. Mico
Vice President and General Manager

Enclosures

002903

cc: (w/o enclosures)
Mr. J. Appel
Mr. P. Chandler
Mr. G. Richardson
Mr. J. Wakefield



GCMS - RESULTS

REAGENT BLANK

TEST : VOLATILE ORGANICS (EPA 8240)

CLIENT : SPARTON TECH., INC.
PROJECT # : 3Q NMED CME
PROJECT NAME : CRFGW MON
CLIENT I.D. : REAGENT BLANK

ATI I.D. : 307360
DATE ANALYZED : 08/07/93
UNITS : UG/L
DILUTION FACTOR : N/A

COMPOUNDS	RESULTS
CHLOROMETHANE	<10
BROMOMETHANE	<10
VINYL CHLORIDE	<1
CHLOROETHANE	<1
METHYLENE CHLORIDE	<5
ACETONE	<10
CARBON DISULFIDE	<1
1,1-DICHLOROETHENE	<1
1,1-DICHLOROETHANE	<1
1,2-DICHLOROETHENE (TOTAL)	<1
CHLOROFORM	<1
1,2-DICHLOROETHANE	<1
2-BUTANONE (MEK)	<10
1,1,1-TRICHLOROETHANE	<1
CARBON TETRACHLORIDE	<1
VINYL ACETATE	<10
BROMODICHLOROMETHANE	<1
1,1,2,2-TETRACHLOROETHANE	<1
1,2-DICHLOROPROPANE	<1
TRANS-1,3-DICHLOROPROPENE	<1
TRICHLOROETHENE	<1
DIBROMOCHLOROMETHANE	<1
1,1,2-TRICHLOROETHANE	<1
BENZENE	<1
CIS-1,3-DICHLOROPROPENE	<1
2-CHLOROETHYLVINYLEETHER	<10
BROMOFORM	<5
2-HEXANONE (MBK)	<10
4-METHYL-2-PENTANONE (MIBK)	<10
TETRACHLOROETHENE	<1
TOLUENE	<1
CHLOROBENZENE	<1
ETHYLBENZENE	<1
STYRENE	<1
TOTAL XYLENES	<1

SURROGATE PERCENT RECOVERIES

1,2-DICHLOROETHANE-D4 (%)	94
BROMOFLUOROBENZENE (%)	92
TOLUENE-D8 (%)	98

002904



GCMS - RESULTS

REAGENT BLANK

TEST : VOLATILE ORGANICS (EPA 8240)

ATI I.D. : 307360

CLIENT : SPARTON TECH., INC.
 PROJECT # : 3Q NMED CME
 PROJECT NAME : CRFGW MON
 CLIENT I.D. : REAGENT BLANK

DATE ANALYZED : 08/09/93
 UNITS : UG/L
 DILUTION FACTOR : N/A

COMPOUNDS	RESULTS
CHLOROMETHANE	<10
BROMOMETHANE	<10
VINYL CHLORIDE	<1
CHLOROETHANE	<1
METHYLENE CHLORIDE	<5
ACETONE	<10
CARBON DISULFIDE	<1
1,1-DICHLOROETHENE	<1
1,1-DICHLOROETHANE	<1
1,2-DICHLOROETHENE (TOTAL)	<1
CHLOROFORM	<1
1,2-DICHLOROETHANE	<1
2-BUTANONE (MEK)	<10
1,1,1-TRICHLOROETHANE	<1
CARBON TETRACHLORIDE	<1
VINYL ACETATE	<10
BROMODICHLOROMETHANE	<1
1,1,2,2-TETRACHLOROETHANE	<1
1,2-DICHLOROPROPANE	<1
TRANS-1,3-DICHLOROPROPENE	<1
TRICHLOROETHENE	<1
DIBROMOCHLOROMETHANE	<1
1,1,2-TRICHLOROETHANE	<1
BENZENE	<1
CIS-1,3-DICHLOROPROPENE	<1
2-CHLOROETHYLVINYLETHER	<10
BROMOFORM	<5
2-HEXANONE (MBK)	<10
4-METHYL-2-PENTANONE (MIBK)	<10
TETRACHLOROETHENE	<1
TOLUENE	<1
CHLOROBENZENE	<1
ETHYLBENZENE	<1
STYRENE	<1
TOTAL XYLENES	<1

SURROGATE PERCENT RECOVERIES

1,2-DICHLOROETHANE-D4 (%)	90
BROMOFLUOROBENZENE (%)	96
TOLUENE-D8 (%)	99

002905



GCMS - RESULTS

REAGENT BLANK

TEST : VOLATILE ORGANICS (EPA 8240)

ATI I.D. : 307360

CLIENT : SPARTON TECH., INC.
PROJECT # : 3Q NMED CME
PROJECT NAME : CRFGW MON
CLIENT I.D. : REAGENT BLANK

DATE ANALYZED : 08/08/93
UNITS : UG/L
DILUTION FACTOR : N/A

Table with 2 columns: COMPOUNDS and RESULTS. Lists various organic compounds and their corresponding results, mostly showing values less than 10 or 5.

SURROGATE PERCENT RECOVERIES

Table with 2 columns: Surrogate Name and Percent Recovery. Lists 1,2-DICHLOROETHANE-D4 (%), BROMOFUOROENZENE (%), and TOLUENE-D8 (%).

002906



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

PROJECT MANAGER: John M. Wakefield

COMPANY: Spartan Technology Inc.
 ADDRESS: 9621 Coors Rd. NW
 Albuquerque NM 87114
 PHONE: 505 892-5300
 FAX: 505 898-0450

BILL TO: "
 COMPANY: "
 ADDRESS: 4901 Rockaway Blvd SE
 Rio Rancho NM 87124

ANALYSIS REQUEST

Petroleum Hydrocarbons (418.1)	(MOD 8015) Gas/Diesel	Diesel/Gasoline/BTXE/MTBE (MOD 8015/8020)	BTXE/MTBE (8020)	PH, Spec. Cond, Cl, SO ₄ , Cr + 6 TKN, NO ₃	Chlorinated Hydrocarbons (601/8010)	Aromatic Hydrocarbons (602/8020)	SDWA Volatiles (502.1/503.1), 502.2 Reg. & Unreg.	TCC	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)	P, Mn, Ni, Na, Cu + 3	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
																							15
																							3
																							3
																							3
																							3
																							3
																							3
																							3
																							3

SAMPLE ID	DATE	TIME	MATRIX	LAB ID
MW-61	7-27-93	0926	HCl/HNO ₃	01
MW-60	"	0943	HCl/HNO ₃	02
MW-36	"	1020	" "	03
MW-44	"	1056	" "	04
MW-32	"	1321	" "	05
MW-41	"	1242	" "	06
MW-15	"	1356	" "	07

PROJECT INFORMATION	SAMPLE RECEIPT
PROJ. NO.: 307360 (CME)	NO. CONTAINERS: 26
PROJ. NAME: CRFGW Man	CUSTODY SEALS: Y/N/NA
P.O. NO.: 39404-1-08	RECEIVED INTACT: Y
SHIPPED VIA: Pelivered	RECEIVED COLD: Y

SAMPLED & RELINQUISHED BY: 1.	RELINQUISHED BY: 2.	RELINQUISHED BY: 3.
Signature: [Signature] Printed Name: John M. Wakefield Date: 7-27-93 Company: STI Phone: 892-5300	Signature: [Signature] Printed Name: Peter H Metzner Date: 7-27-93 Company: METRIC Corp.	Signature: [Signature] Printed Name: [Blank] Date: [Blank] Company: [Blank]

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

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

Comments: ColC Seals on Cooler

00290

RECEIVED BY: 1.	RECEIVED BY: 2.	RECEIVED BY: (LAB) 3.
Signature: [Signature] Printed Name: Peter H Metzner Date: 7-27-93 Company: Metric Corp.	Signature: [Signature] Printed Name: [Blank] Date: [Blank] Company: [Blank]	Signature: [Signature] Printed Name: Terri Dettre Date: 7/27/93 Company: Analytical Technologies, Inc.



Analytical Technologies, Inc.

QUALITY CONTROL DATA

ATI I.D. : 307360

TEST : VOLATILE ORGANICS (EPA 8240)

CLIENT : SPARTON TECH., INC.
PROJECT # : 3Q NMED CME
PROJECT NAME : CRFGW MON
REF I.D. : 30736007

DATE ANALYZED : 08/09/93
SAMPLE MATRIX : AQUEOUS
UNITS : UG/L

Table with 8 columns: COMPOUNDS, SAMPLE RESULT, CONC. SPIKED, SPIKED SAMPLE, % REC., DUP. SPIKED SAMPLE, DUP. % REC., RPD. Rows include 1,1-DICHLOROETHENE, TRICHLOROETHENE, CHLOROBENZENE, TOLUENE, and BENZENE.

% Recovery = (Spike Sample Result - Sample Result) / Spike Concentration X 100

RPD (Relative % Difference) = (Spiked Sample Result - Duplicate Spike Sample Result) / Average of Spiked Sample X 100

Chain of Custody

NETWORK PROJECT MANAGER: BETH PROFFITT					ANALYSIS REQUEST																							
COMPANY: Analytical Technologies, Inc. ADDRESS: 2709-D Pan American Freeway, NE Albuquerque, NM 87107					TOX	TOC	ORGANIC LEAD	SULFIDE	SURFACTANTS (MBAS)	632/632 MOD	619/619 MOD	610/8310	PH. Spec. Cont., Cl, SO ₄ , Cr+6, TKN, NO ₃	8240 (TCLP 1311) ZHE	Diesel/Gasoline/BTEX/MTBE/ (MOD 8015/8020)	Volatile Organics GC/MS (624/8249)	13 Priority Pollutant Metals	NACE	ASBESTOS	B, Mn, Ni, Na, Cr+3	BOD	TOTAL COLIFORM	FECAL COLIFORM	GROSS ALPHA/BETA	RADIUM 226/228	AIR - O ₂ , CO ₂ , METHANE	AIR/Diesel/Gasoline/BTEX/ (MOD 8015/8020)	NUMBER OF CONTAINERS
CLIENT PROJECT MANAGER: <u>JS</u>																												
SAMPLE ID	DATE	TIME	MATRIX	LAB ID																								
307360-1	7/27/93	0926	RD	1										X	Y												1	
-2		0943		2										X	Y												1	
-3		1020		3										Y	Y												1	
-4		1056		4										Y	Y												1	
-5		1321		5										Y	Y												1	
-6		1242		6										Y	Y												1	
-7		1356		7								X	X	X	Y			X									1	

PROJECT INFORMATION			SAMPLE RECEIPT			SAMPLES SENT TO:		RELINQUISHED BY: 1.		RELINQUISHED BY: 2.	
PROJECT NUMBER: 307360	TOTAL NUMBER OF CONTAINERS: 24		CHAIN OF CUSTODY SEALS: NA			SAN DIEGO	Signature: <u>[Signature]</u>	Time: 1730	Signature:	Time:	
PROJECT NAME: STI	INTACT?: Y		RECEIVED GOOD COND./COLD: Y			FT. COLLINS	Printed Name: <u>[Signature]</u>	Date: 7/27/93	Printed Name:	Date:	
QC LEVEL: STD. IV	LAB NUMBER: 307360					RENTON	Analytical Technologies, Inc. Albuquerque		Company:		
QC REQUIRED: MS MSD BLANK						PENSACOLA	RECEIVED BY: (LAB) 1.		RECEIVED BY: (LAB) 2.		
TAT: STANDARD RUSHI						PHOENIX	Signature:	Time:	Signature:	Time:	
DUE DATE: 8/10/93						BARRINGER	Printed Name:	Date:	Printed Name: <u>R. Tubaszewski</u>	Date: 9/47	
RUSH SURCHARGE: 0						FIBERQUANT	Company:		Printed Name: <u>R. Tubaszewski</u>	Date: 7/27/93	
CLIENT DISCOUNT: 10 %									Company: <u>ATI - Phy</u>		

002909



Chain of Custody

NETWORK PROJECT MANAGER: BETH PROFFITT					ANALYSIS REQUEST																				
COMPANY: Analytical Technologies, Inc. ADDRESS: 2709-D Pan American Freeway, NE Albuquerque, NM 87107					TOX	TOC	ORGANIC LEAD	SULFIDE	SURFACTANTS (MBAS)	632/632 MOD	619/619 MOD	610/6310	8240 (TCCLP 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 - O ₂ , CO ₂ , METHANE	AIR/Diesel/Gasoline/BTXE/ (MOD 8015/8020)	NUMBER OF CONTAINERS
SAMPLE ID	DATE	TIME	MATRIX	LAB ID																					
307360-7	7/27/93	1356	RQ	01	XX																				2 Tox

PROJECT INFORMATION		SAMPLE RECEIPT		SAMPLES SENT TO:	RELINQUISHED BY: 1.	RELINQUISHED BY: 2.
PROJECT NUMBER: <u>307360</u>	TOTAL NUMBER OF CONTAINERS: <u>2</u>	CHAIN OF CUSTODY SEALS: <u>N</u>	INTACT?: <u>N/A</u>	SAN DIEGO	Signature: <u>[Signature]</u> Time: <u>1730</u>	Signature: _____ Time: _____
PROJECT NAME: <u>STI</u>	RECEIVED GOOD COND./COLD: <u>Y</u>	LAB NUMBER: _____		FT. COLLINS	Printed Name: <u>Terri Dettre</u> Date: <u>7/27/93</u>	Printed Name: _____ Date: _____
QC LEVEL: <u>STD</u> IV				PENSACOLA	Analytical Technologies, Inc. Albuquerque	Company: _____
QC REQUIRED: <u>MS MSD BLANK</u>				PHOENIX	RECEIVED BY: (LAB) 1.	
TAT: <u>STANDARD</u> RUSHI				BARRINGER	Signature: <u>Val Robins</u> Time: <u>10:15 am</u>	Signature: _____ Time: _____
DUE DATE: <u>8/10/93</u>				FIBERQUANT	Printed Name: <u>Val Robins</u> Date: <u>7-28-93</u>	Printed Name: _____ Date: _____
RUSH SURCHARGE: _____					Company: <u>ATI</u>	Company: _____
CLIENT DISCOUNT: <u>10</u> %						

W.O. # 14564
Minimum SAMPLE

002910



GCMS - RESULTS

ATI I.D. : 30736001

TEST : VOLATILE ORGANICS (EPA 8240)

CLIENT : SPARTON TECH., INC.
PROJECT # : 3Q NMED CME
PROJECT NAME : CRFGW MON
CLIENT I.D. : MW-61
SAMPLE MATRIX : AQUEOUS

DATE SAMPLED : 07/27/93
DATE RECEIVED : 07/27/93
DATE EXTRACTED : N/A
DATE ANALYZED : 08/08/93
UNITS : UG/L
DILUTION FACTOR : 2

COMPOUNDS	RESULTS
CHLOROMETHANE	<20
BROMOMETHANE	<20
VINYL CHLORIDE	<2
CHLOROETHANE	<2
METHYLENE CHLORIDE	<10
ACETONE	<20
CARBON DISULFIDE	<2
1,1-DICHLOROETHENE	15
1,1-DICHLOROETHANE	<2
1,2-DICHLOROETHENE (TOTAL)	<2
CHLOROFORM	<2
1,2-DICHLOROETHANE	<2
2-BUTANONE (MEK)	<20
1,1,1-TRICHLOROETHANE	7
CARBON TETRACHLORIDE	<2
VINYL ACETATE	<20
BROMODICHLOROMETHANE	<2
1,1,2,2-TETRACHLOROETHANE	<2
1,2-DICHLOROPROPANE	<2
TRANS-1,3-DICHLOROPROPENE	<2
TRICHLOROETHENE	490 D
DIBROMOCHLOROMETHANE	<2
1,1,2-TRICHLOROETHANE	<2
BENZENE	<2
CIS-1,3-DICHLOROPROPENE	<2
2-CHLOROETHYLVINYLEETHER	<20
BROMOFORM	<10
2-HEXANONE (MBK)	<20
4-METHYL-2-PENTANONE (MIBK)	<20
TETRACHLOROETHENE	2
TOLUENE	<2
CHLOROBENZENE	<2
ETHYLBENZENE	<2
STYRENE	<2
TOTAL XYLENES	<2

SURROGATE PERCENT RECOVERIES

1,2-DICHLOROETHANE-D4 (%)	89
BROMOFLUOROBENZENE (%)	99
TOLUENE-D8 (%)	93

002911



Analytical **Technologies**, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : VOLATILE ORGANICS (EPA 8240)

ATI I.D. : 30736001

COMPOUNDS

RESULTS

NO ADDITIONAL COMPOUNDS

002912



GCMS - RESULTS

ATI I.D. : 30736002

TEST : VOLATILE ORGANICS (EPA 8240)

CLIENT : SPARTON TECH., INC.
 PROJECT # : 3Q NMED CME
 PROJECT NAME : CRFGW MON
 CLIENT I.D. : MW-60
 SAMPLE MATRIX : AQUEOUS

DATE SAMPLED : 07/27/93
 DATE RECEIVED : 07/27/93
 DATE EXTRACTED : N/A
 DATE ANALYZED : 08/07/93
 UNITS : UG/L
 DILUTION FACTOR : 1

COMPOUNDS	RESULTS
CHLOROMETHANE	<10
BROMOMETHANE	<10
VINYL CHLORIDE	<1
CHLOROETHANE	<1
METHYLENE CHLORIDE	<5
ACETONE	<10
CARBON DISULFIDE	<1
1,1-DICHLOROETHENE	<1
1,1-DICHLOROETHANE	<1
1,2-DICHLOROETHENE (TOTAL)	<1
CHLOROFORM	<1
1,2-DICHLOROETHANE	<1
2-BUTANONE (MEK)	<10
1,1,1-TRICHLOROETHANE	<1
CARBON TETRACHLORIDE	<1
VINYL ACETATE	<10
BROMODICHLOROMETHANE	<1
1,1,2,2-TETRACHLOROETHANE	<1
1,2-DICHLOROPROPANE	<1
TRANS-1,3-DICHLOROPROPENE	<1
TRICHLOROETHENE	4
DIBROMOCHLOROMETHANE	<1
1,1,2-TRICHLOROETHANE	<1
BENZENE	<1
CIS-1,3-DICHLOROPROPENE	<1
2-CHLOROETHYLVINYLETHER	<10
BROMOFORM	<5
2-HEXANONE (MBK)	<10
4-METHYL-2-PENTANONE (MIBK)	<10
TETRACHLOROETHENE	<1
TOLUENE	<1
CHLOROBENZENE	<1
ETHYLBENZENE	<1
STYRENE	<1
TOTAL XYLENES	<1

SURROGATE PERCENT RECOVERIES

1,2-DICHLOROETHANE-D4 (%)	94
BROMOFLUOROBENZENE (%)	93
TOLUENE-D8 (%)	98

002913



Analytical **Technologies**, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : VOLATILE ORGANICS (EPA 8240)

ATI I.D. : 30736002

COMPOUNDS

RESULTS

NO ADDITIONAL COMPOUNDS

002914



GCMS - RESULTS

ATI I.D. : 30736003

TEST : VOLATILE ORGANICS (EPA 8240)

CLIENT : SPARTON TECH., INC.
 PROJECT # : 3Q NMED CME
 PROJECT NAME : CRFGW MON
 CLIENT I.D. : MW-36
 SAMPLE MATRIX : AQUEOUS

DATE SAMPLED : 07/27/93
 DATE RECEIVED : 07/27/93
 DATE EXTRACTED : N/A
 DATE ANALYZED : 08/07/93
 UNITS : UG/L
 DILUTION FACTOR : 1

COMPOUNDS	RESULTS
CHLOROMETHANE	<10
BROMOMETHANE	<10
VINYL CHLORIDE	<1
CHLOROETHANE	<1
METHYLENE CHLORIDE	<5
ACETONE	<10
CARBON DISULFIDE	<1
1,1-DICHLOROETHENE	5
1,1-DICHLOROETHANE	<1
1,2-DICHLOROETHENE (TOTAL)	<1
CHLOROFORM	<1
1,2-DICHLOROETHANE	<1
2-BUTANONE (MEK)	<10
1,1,1-TRICHLOROETHANE	2
CARBON TETRACHLORIDE	<1
VINYL ACETATE	<10
BROMODICHLOROMETHANE	<1
1,1,2,2-TETRACHLOROETHANE	<1
1,2-DICHLOROPROPANE	<1
TRANS-1,3-DICHLOROPROPENE	<1
TRICHLOROETHENE	25
DIBROMOCHLOROMETHANE	<1
1,1,2-TRICHLOROETHANE	<1
BENZENE	<1
CIS-1,3-DICHLOROPROPENE	<1
2-CHLOROETHYLVINYLETHER	<10
BROMOFORM	<5
2-HEXANONE (MBK)	<10
4-METHYL-2-PENTANONE (MIBK)	<10
TETRACHLOROETHENE	<1
TOLUENE	<1
CHLOROBENZENE	<1
ETHYLBENZENE	<1
STYRENE	<1
TOTAL XYLENES	<1

SURROGATE PERCENT RECOVERIES

1,2-DICHLOROETHANE-D4 (%)	92
BROMOFLUOROBENZENE (%)	92
TOLUENE-D8 (%)	99

002915



Analytical **Technologies**, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : VOLATILE ORGANICS (EPA 8240)

ATI I.D. : 30736003

COMPOUNDS

RESULTS

NO ADDITIONAL COMPOUNDS

002916



GCMS - RESULTS

ATI I.D. : 30736004

TEST : VOLATILE ORGANICS (EPA 8240)

CLIENT : SPARTON TECH., INC.
 PROJECT # : 3Q NMED CME
 PROJECT NAME : CRFGW MON
 CLIENT I.D. : MW-44
 SAMPLE MATRIX : AQUEOUS

DATE SAMPLED : 07/27/93
 DATE RECEIVED : 07/27/93
 DATE EXTRACTED : N/A
 DATE ANALYZED : 08/07/93
 UNITS : UG/L
 DILUTION FACTOR : 1

COMPOUNDS	RESULTS
CHLOROMETHANE	<10
BROMOMETHANE	<10
VINYL CHLORIDE	<1
CHLOROETHANE	<1
METHYLENE CHLORIDE	<5
ACETONE	<10
CARBON DISULFIDE	<1
1,1-DICHLOROETHENE	<1
1,1-DICHLOROETHANE	<1
1,2-DICHLOROETHENE (TOTAL)	<1
CHLOROFORM	<1
1,2-DICHLOROETHANE	<1
2-BUTANONE (MEK)	<10
1,1,1-TRICHLOROETHANE	<1
CARBON TETRACHLORIDE	<1
VINYL ACETATE	<10
BROMODICHLOROMETHANE	<1
1,1,2,2-TETRACHLOROETHANE	<1
1,2-DICHLOROPROPANE	<1
TRANS-1,3-DICHLOROPROPENE	<1
TRICHLOROETHENE	<1
DIBROMOCHLOROMETHANE	<1
1,1,2-TRICHLOROETHANE	<1
BENZENE	<1
CIS-1,3-DICHLOROPROPENE	<1
2-CHLOROETHYLVINYLEETHER	<10
BROMOFORM	<5
2-HEXANONE (MBK)	<10
4-METHYL-2-PENTANONE (MIBK)	<10
TETRACHLOROETHENE	<1
TOLUENE	<1
CHLOROBENZENE	<1
ETHYLBENZENE	<1
STYRENE	<1
TOTAL XYLENES	<1

SURROGATE PERCENT RECOVERIES

1,2-DICHLOROETHANE-D4 (%)	85
BROMOFLUOROBENZENE (%)	100
TOLUENE-D8 (%)	94

002917



Analytical **Technologies**, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : VOLATILE ORGANICS (EPA 8240)

ATI I.D. : 30736004

COMPOUNDS

RESULTS

NO ADDITIONAL COMPOUNDS

002918

GCMS - RESULTS

ATI I.D. : 30736005

TEST : VOLATILE ORGANICS (EPA 8240)

 CLIENT : SPARTON TECH., INC.
 PROJECT # : 3Q NMED CME
 PROJECT NAME : CRFGW MON
 CLIENT I.D. : MW-32
 SAMPLE MATRIX : AQUEOUS

 DATE SAMPLED : 07/27/93
 DATE RECEIVED : 07/27/93
 DATE EXTRACTED : N/A
 DATE ANALYZED : 08/07/93
 UNITS : UG/L
 DILUTION FACTOR : 25

COMPOUNDS	RESULTS
CHLOROMETHANE	<250
BROMOMETHANE	<250
VINYL CHLORIDE	<25
CHLOROETHANE	<25
METHYLENE CHLORIDE	<125
ACETONE	<250
CARBON DISULFIDE	<25
1,1-DICHLOROETHENE	1000
1,1-DICHLOROETHANE	50
1,2-DICHLOROETHENE (TOTAL)	<25
CHLOROFORM	<25
1,2-DICHLOROETHANE	<25
2-BUTANONE (MEK)	<250
1,1,1-TRICHLOROETHANE	380
CARBON TETRACHLORIDE	<25
VINYL ACETATE	<250
BROMODICHLOROMETHANE	<25
1,1,2,2-TETRACHLOROETHANE	<25
1,2-DICHLOROPROPANE	<25
TRANS-1,3-DICHLOROPROPENE	<25
TRICHLOROETHENE	4400
DIBROMOCHLOROMETHANE	<25
1,1,2-TRICHLOROETHANE	<25
BENZENE	<25
CIS-1,3-DICHLOROPROPENE	<25
2-CHLOROETHYLVINYLEETHER	<250
BROMOFORM	<125
2-HEXANONE (MBK)	<250
4-METHYL-2-PENTANONE (MIBK)	<250
TETRACHLOROETHENE	56
TOLUENE	<25
CHLOROBENZENE	<25
ETHYLBENZENE	<25
STYRENE	<25
TOTAL XYLENES	<25

SURROGATE PERCENT RECOVERIES

1,2-DICHLOROETHANE-D4 (%)	101
BROMOFLUOROBENZENE (%)	104
TOLUENE-D8 (%)	93

002919



Analytical **Technologies**, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : VOLATILE ORGANICS (EPA 8240)

ATI I.D. : 30736005

COMPOUNDS

RESULTS

NO ADDITIONAL COMPOUNDS

002920



GCMS - RESULTS

ATI I.D. : 30736006

TEST : VOLATILE ORGANICS (EPA 8240)

CLIENT : SPARTON TECH., INC.
 PROJECT # : 3Q NMED CME
 PROJECT NAME : CRFGW MON
 CLIENT I.D. : MW-41
 SAMPLE MATRIX : AQUEOUS

DATE SAMPLED : 07/27/93
 DATE RECEIVED : 07/27/93
 DATE EXTRACTED : N/A
 DATE ANALYZED : 08/07/93
 UNITS : UG/L
 DILUTION FACTOR : 2

COMPOUNDS	RESULTS
CHLOROMETHANE	<20
BROMOMETHANE	<20
VINYL CHLORIDE	<2
CHLOROETHANE	<2
METHYLENE CHLORIDE	64
ACETONE	<20
CARBON DISULFIDE	<2
1,1-DICHLOROETHENE	59
1,1-DICHLOROETHANE	<2
1,2-DICHLOROETHENE (TOTAL)	<2
CHLOROFORM	<2
1,2-DICHLOROETHANE	<2
2-BUTANONE (MEK)	<20
1,1,1-TRICHLOROETHANE	95
CARBON TETRACHLORIDE	<2
VINYL ACETATE	<20
BROMODICHLOROMETHANE	<2
1,1,2,2-TETRACHLOROETHANE	<2
1,2-DICHLOROPROPANE	<2
TRANS-1,3-DICHLOROPROPENE	<2
TRICHLOROETHENE	370
DIBROMOCHLOROMETHANE	<2
1,1,2-TRICHLOROETHANE	<2
BENZENE	<2
CIS-1,3-DICHLOROPROPENE	<2
2-CHLOROETHYLVINYLEETHER	<20
BROMOFORM	<10
2-HEXANONE (MBK)	<20
4-METHYL-2-PENTANONE (MIBK)	<20
TETRACHLOROETHENE	5
TOLUENE	<2
CHLOROBENZENE	<2
ETHYLBENZENE	<2
STYRENE	<2
TOTAL XYLENES	<2

SURROGATE PERCENT RECOVERIES

1,2-DICHLOROETHANE-D4 (%)	109
BROMOFLUOROBENZENE (%)	105
TOLUENE-D8 (%)	95

002921



Analytical **Technologies**, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : VOLATILE ORGANICS (EPA 8240)

ATI I.D. : 30736006

COMPOUNDS

RESULTS

NO ADDITIONAL COMPOUNDS

002922



GCMS - RESULTS

ATI I.D. : 30736007

TEST : VOLATILE ORGANICS (EPA 8240)

CLIENT : SPARTON TECH., INC.
 PROJECT # : 3Q NMED CME
 PROJECT NAME : CRFGW MON
 CLIENT I.D. : MW-15
 SAMPLE MATRIX : AQUEOUS

DATE SAMPLED : 07/27/93
 DATE RECEIVED : 07/27/93
 DATE EXTRACTED : N/A
 DATE ANALYZED : 08/09/93
 UNITS : UG/L
 DILUTION FACTOR : 1

COMPOUNDS	RESULTS
CHLOROMETHANE	<10
BROMOMETHANE	<10
VINYL CHLORIDE	<1
CHLOROETHANE	<1
METHYLENE CHLORIDE	<5
ACETONE	<10
CARBON DISULFIDE	<1
1,1-DICHLOROETHENE	3
1,1-DICHLOROETHANE	<1
1,2-DICHLOROETHENE (TOTAL)	<1
CHLOROFORM	<1
1,2-DICHLOROETHANE	<1
2-BUTANONE (MEK)	<10
1,1,1-TRICHLOROETHANE	23
CARBON TETRACHLORIDE	<1
VINYL ACETATE	<10
BROMODICHLOROMETHANE	<1
1,1,2,2-TETRACHLOROETHANE	<1
1,2-DICHLOROPROPANE	<1
TRANS-1,3-DICHLOROPROPENE	<1
TRICHLOROETHENE	56
DIBROMOCHLOROMETHANE	<1
1,1,2-TRICHLOROETHANE	<1
BENZENE	<1
CIS-1,3-DICHLOROPROPENE	<1
2-CHLOROETHYLVINYLEETHER	<10
BROMOFORM	<5
2-HEXANONE (MBK)	<10
4-METHYL-2-PENTANONE (MIBK)	<10
TETRACHLOROETHENE	1
TOLUENE	<1
CHLOROBENZENE	<1
ETHYLBENZENE	<1
STYRENE	<1
TOTAL XYLENES	<1

SURROGATE PERCENT RECOVERIES

1,2-DICHLOROETHANE-D4 (%)	92
BROMOFLUOROBENZENE (%)	98
TOLUENE-D8 (%)	100

002923



Analytical **Technologies**, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : VOLATILE ORGANICS (EPA 8240)

ATI I.D. : 30736007

COMPOUNDS

RESULTS

NO ADDITIONAL COMPOUNDS

002924

STI-NMED Split Sampling Results
 Comprehensive Groundwater Monitoring Event
 Sampled July 26 and 27, 1993

Well No. Sample Team	MW-15		MW-32		MW-36		MW-41	
	STI	NMED	STI	NMED	STI	NMED	STI	NMED
Organics (ppb)								
1,1-Dichloroethene	3	5	1000	600	5	<1	59	83
1,1-Dichloroethane			50	<50				
Methylene Chloride							64	90
1,1,1-Trichloroethane	23	24	380	360	2	<1	95	110
Trichloroethene	56	61	4400	4300	25	4	370	380
Tetrachloroethene	1	1	56	<50			5	7
Metals (ppm)								
Arsenic	0.008	0.008						
Cadmium								
Chromium					0.052	0.057		
Copper								
Lead							0.003	<0.002
Nickel			0.038	0.033				
Selenium								
Zinc								

Blanks = < Detection Limits

002925

STI-NMED Split Sampling Results
 Comprehensive Groundwater Monitoring Event
 Sampled July 26 and 27, 1993

Well No. Sample Team	MW-58		MW-60		MW-61		MW-62	
	STI	NMED	STI	NMED	STI	NMED	STI	NMED
Organics (ppb)								
1,1-Dichloroethene					15	14	18	15
1,1-Dichloroethane								
Methylene Chloride								
1,1,1-Trichloroethane					7	5	14	15
Trichloroethene	62	62	4	5	490	410	3	4
Tetrachloroethene					2	3		
Metals (ppm)								
Arsenic	0.006	<0.005						
Cadmium								
Chromium	0.165	0.159						
Copper			0.012	<0.010				
Lead								
Nickel								
Selenium							<0.005	0.014
Zinc							0.034	<0.020

Blanks = < Detection Limits

002926

STI-NMED Split Sampling Results
 Comprehensive Groundwater Monitoring Event
 Sampled July 26 and 27, 1993

Well No. Sample Team	MW-44		MW-53		MW-55		MW-56	
	STI	NMED	STI	NMED	STI	NMED	STI	NMED
Organics (ppb)								
1,1-Dichloroethene							9	7
1,1-Dichloroethane								
Methylene Chloride								
1,1,1-Trichloroethane								
Trichloroethene			33	30	240	250	320	320
Tetrachloroethene								
Metals (ppm)								
Arsenic	<0.005	0.005	<0.005	0.005				
Cadmium							<0.0005	0.0017
Chromium			0.109	0.114	0.129	0.130	0.421	0.438
Copper								
Lead			<0.002	0.004				
Nickel								
Selenium								
Zinc								

Blanks = < Detection Limits

002927