Received 8-24-93
3Q 1993 CME 12 wells.
mw-61, 60, 36, 44, 32, 41, 15
for m8240 + 13 PP metals
and Stale well mw-15 for
CME parameters + Annual Parameters

Analytical Technologies, Inc.

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

ATI I.D. 307360

August 19, 1993

Sparton Technology, Inc.
4901 Rockaway Blvd., SE
Rio Rancho, NM 87124-4469

Project Name/Number: CRFGW MON 3QNMED CME

Attention: John Wakefield

On **07/27/93**, Analytical Technologies, Inc. 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.

D indicates the compound was analyzed at a greater dilution.

Total Organic Halide and Total Organic Carbon analyses were performed by ATI, Fort Collins.

All other analyses were performed by ATI, Phoenix.

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

Adela M. Cantu
Senior Organic Chemist

Letitia Krakowski
Acting Laboratory Manager

LAK:jd

Enclosure

Analytical Technologies, Inc.

ACCESSION #: 307360

PARAMETER	METHOD	DATE ANALYZED	ANALYST
Chloride	325.2	07/29/93	C. Warren
Electrical Conductivity	120.1	07/29/93	M. Jarman
Nitrate	353.2	07/28/93	M. Rivera
pH	150.1	08/04/93	T. Kehler
Sulfate	375.2	07/29/93	C. Warren
Total Kjeldahl Nitrogen	351.2	08/11/93	N. Milan
Silver	200.7	08/04/93	J. Hrubant
Arsenic	206.2	07/30/93	K. Jagger
Boron	200.7	07/30/93	J. Hrubant
Beryllium	200.7	08/04/93	J. Hrubant
Cadmium	213.2	08/02/93	K. Jagger
Chromium, Total	200.7	08/04/93	J. Hrubant
Chromium, Hexavalent	7196	07/28/93	V. Nielsen
Copper	200.7	08/04/93	J. Hrubant
Mercury	245.1	07/30/93	P. Van Cooney
Manganese	200.7	08/04/93	J. Hrubant
Sodium	200.7	07/30/93	J. Hrubant
Nickel	200.7	08/04/93	J. Hrubant
Lead	239.2	07/29/93	K. Jagger
Antimony	200.7	08/04/93	J. Hrubant
Selenium	270.2	08/02/93	M. Wilson
Thallium	279.2	08/03/93	K. Jagger
Zinc	200.7	08/04/93	J. Hrubant
Volatile Organics (1)	8240	08/08/93	M. Bergenheier
Volatile Organics (2-6)	8240	08/07/93	M. Bergenheier
Volatile Organics (7)	8240	08/09/93	M. Bergenheier
Total Organic Carbon	415.2	08/06/93	S. Hall
Total Organic Halide	9020M	08/03/93	S. Hall

Reference(s): Methods for Chemical Analysis of Water and Wastes, March, 1983 EPA-600 4-79-020.

Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, (SW 846, 3rd ed.)

Analytical Technologies, Inc.

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

DATE RECEIVED : 07/27/93
REPORT DATE : 08/19/93

ATI I.D. : 307360

ATI #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	MW-61	AQUEOUS	07/27/93
02	MW-60	AQUEOUS	07/27/93
03	MW-36	AQUEOUS	07/27/93
04	MW-44	AQUEOUS	07/27/93
05	MW-32	AQUEOUS	07/27/93
06	MW-41	AQUEOUS	07/27/93
07	MW-15	AQUEOUS	07/27/93

----- TOTALS -----

MATRIX	# SAMPLES
AQUEOUS	7

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.

GENERAL CHEMISTRY RESULTS

ATI I.D. : 307360

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

DATE RECEIVED : 07/27/93
REPORT DATE : 08/19/93

PARAMETER	UNITS	07
CHLORIDE (EPA 325.2)	MG/L	29
CHROMIUM HEXAVALENT EPA 7196	MG/L	<0.02
CONDUCTIVITY, (UMHOS/CM)		650
NITRATE AS N (EPA 353.2)	MG/L	4.3
PH (EPA 150.1)	UNITS	8.0
SULFATE (EPA 375.2)	MG/L	89
KJELDAHL NITROGEN (351.2)	MG/L	<0.2
TOTAL ORGANIC CARBON	MG/L	1
TOTAL ORGANIC HALIDE	UG/L	70

Analytical Technologies, Inc.

GENERAL CHEMISTRY - QUALITY CONTROL

CLIENT : SPARTON TECH., INC.
PROJECT # : 3Q NMED CME
PROJECT NAME : CRFGW MON ATI I.D. : 307360

PARAMETER	UNITS	ATI I.D.	SAMPLE RESULT	DUP. RESULT	RPD	SPIKED SAMPLE	SPIKE CONC	% REC
CHLORIDE	MG/L	30792601	150	150	0	310	150	107
CHROMIUM HEXAVALENT	MG/L	30736007	<0.02	<0.02	NA	0.16	0.15	107
CONDUCTIVITY(UMHOS/CM)		30796911	4210	4230	0.5	NA	NA	NA
NITRATE AS NITROGEN	MG/L	30793601	0.06	0.06	0	2.09	2.00	102
PH	UNITS	30796701	8.6	8.6	0	NA	NA	NA
SULFATE	MG/L	30792601	50	51	2	100	50	100
TOTAL KJELDAHL NITROGE	MG/L	30736201	<0.2	<0.2	NA	1.9	2.0	95
TOTAL ORGANIC CARBON	MG/L	30736007	1	1	0	NA	NA	NA
TOTAL ORGANIC HALIDE	UG/L	930717102	790	NA	NA	4900	4000	103

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

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

Analytical Technologies, Inc.

METALS RESULTS

ATI I.D. : 307360

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

DATE RECEIVED : 07/27/93
REPORT DATE : 08/19/93

PARAMETER	UNITS	01	02	03	04	05
SILVER (EPA 200.7/6010)	MG/L	<0.010	<0.010	<0.010	<0.010	<0.010
ARSENIC (EPA 206.2/7060)	MG/L	<0.005	<0.005	<0.005	<0.005	<0.005
BERYLLIUM (EPA 200.7/6010)	MG/L	<0.005	<0.005	<0.005	<0.005	<0.005
CADMIUM (EPA 213.2/7131)	MG/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
CHROMIUM (EPA 200.7/6010)	MG/L	<0.010	<0.010	0.052	<0.010	<0.010
COPPER (EPA 200.7/6010)	MG/L	<0.010	0.012	<0.010	<0.010	<0.010
MERCURY (EPA 245.1/7470)	MG/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
NICKEL (EPA 200.7/6010)	MG/L	<0.020	<0.020	<0.020	<0.020	0.038
LEAD (EPA 239.2/7421)	MG/L	<0.002	<0.002	<0.002	<0.002	<0.002
ANTIMONY (EPA 200.7/6010)	MG/L	<0.05	<0.05	<0.05	<0.05	<0.05
SELENIUM (EPA 270.2/7740)	MG/L	<0.005	<0.005	<0.005	<0.005	<0.005
THALLIUM (EPA 279.2/7841)	MG/L	<0.005	<0.005	<0.005	<0.005	<0.005
ZINC (EPA 200.7/6010)	MG/L	<0.020	<0.020	<0.020	<0.020	<0.020

Analytical Technologies, Inc.

METALS RESULTS

ATI I.D. : 307360

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

DATE RECEIVED : 07/27/93
REPORT DATE : 08/19/93

PARAMETER	UNITS	06	07
SILVER (EPA 200.7/6010)	MG/L	<0.010	<0.010
ARSENIC (EPA 206.2/7060)	MG/L	<0.005	0.008
BORON (EPA 200.7/6010)	MG/L	-	0.13
BERYLLIUM (EPA 200.7/6010)	MG/L	<0.005	<0.005
CADMIUM (EPA 213.2/7131)	MG/L	<0.0005	<0.0005
CHROMIUM (EPA 200.7/6010)	MG/L	<0.010	<0.010
TRIVALENT CHROMIUM (EPA 7196	MG/L	-	<0.02
COPPER (EPA 200.7/6010)	MG/L	<0.010	<0.010
MERCURY (EPA 245.1/7470)	MG/L	<0.0002	<0.0002
MANGANESE (EPA 200.7/6010)	MG/L	-	<0.010
SODIUM (EPA 200.7/6010)	MG/L	-	51.1
NICKEL (EPA 200.7/6010)	MG/L	<0.020	<0.020
LEAD (EPA 239.2/7421)	MG/L	0.003	<0.002
ANTIMONY (EPA 200.7/6010)	MG/L	<0.05	<0.05
SELENIUM (EPA 270.2/7740)	MG/L	<0.005	<0.005
THALLIUM (EPA 279.2/7841)	MG/L	<0.005	<0.005
ZINC (EPA 200.7/6010)	MG/L	<0.020	<0.020

Analytical Technologies, Inc.

METALS - QUALITY CONTROL

CLIENT : SPARTON TECH., INC.
PROJECT # : 3Q NMED CME
PROJECT NAME : CRFGW MON ATI I.D. : 307360

PARAMETER	UNITS	ATI I.D.	SAMPLE RESULT	DUP. RESULT	RPD	SPIKED SAMPLE	SPIKE CONC	% REC
SILVER	MG/L	30736002	<0.010	<0.010	NA	0.462	0.500	92
SILVER	MG/L	30736005	<0.010	<0.010	NA	0.460	0.500	92
ARSENIC	MG/L	30736004	<0.005	<0.005	NA	0.058	0.050	116
ARSENIC	MG/L	30736007	0.008	0.009	12	0.061	0.050	106
BORON	MG/L	30791301	<0.10	<0.10	NA	1.02	1.00	102
BERYLLIUM	MG/L	30736002	<0.005	<0.005	NA	0.464	0.500	93
BERYLLIUM	MG/L	30736005	<0.005	<0.005	NA	0.461	0.500	92
CADMIUM	MG/L	30736004	<0.0005	<0.0005	NA	0.0055	0.0050	110
CADMIUM	MG/L	30736007	<0.0005	<0.0005	NA	0.0050	0.0050	100
CHROMIUM	MG/L	30736002	<0.010	<0.010	NA	0.989	1.00	99
CHROMIUM	MG/L	30736005	<0.010	<0.010	NA	0.985	1.00	98
COPPER	MG/L	30736002	0.012	<0.010	NA	0.478	0.500	93
COPPER	MG/L	30736005	<0.010	<0.010	NA	0.480	0.500	96
MERCURY	MG/L	30735901	<0.0002	<0.0002	NA	0.0052	0.0050	104
MERCURY	MG/L	30736003	<0.0002	<0.0002	NA	0.0049	0.0050	98
MANGANESE	MG/L	30849902	2.13	2.15	0.9	3.09	1.00	96
SODIUM	MG/L	30791301	23.7	23.7	0	75.3	50.0	103
NICKEL	MG/L	30736002	<0.020	<0.020	NA	0.970	1.00	97
NICKEL	MG/L	30736005	0.038	0.033	14	1.01	1.00	97
LEAD	MG/L	30736004	<0.002	<0.002	NA	0.051	0.050	102
LEAD	MG/L	30736007	<0.002	<0.002	NA	0.051	0.050	102
ANTIMONY	MG/L	30736002	<0.05	<0.05	NA	1.02	1.00	102
ANTIMONY	MG/L	30736005	<0.05	<0.05	NA	1.01	1.00	101
SELENIUM	MG/L	30736004	<0.005	<0.005	NA	0.048	0.050	96
SELENIUM	MG/L	30736007	<0.005	<0.005	NA	0.049	0.050	98
THALLIUM	MG/L	30736004	<0.005	<0.005	NA	0.052	0.050	104
THALLIUM	MG/L	30736007	<0.005	<0.005	NA	0.054	0.050	108
ZINC	MG/L	30736002	<0.020	<0.020	NA	0.506	0.500	101
ZINC	MG/L	30736005	<0.020	<0.020	NA	0.500	0.500	100

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

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