American Environmental Network, Inc.

1Q 1997
SVE Pilot Test

AEN I.D. 702365

March 5, 1997

SPARTON TECHNOLOGIES
9621 COORS RD.
ALBUQUERQUE, NM 87114

Project Name SVE PILOT TEST
Project Number 22797

Attention: JOHN M. WAKEFIELD

On 2/28/97 American Environmental Network (NM), Inc. (ADHS License No. AZ0015), received a request to analyze **air** 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.

Per client instruction, HCl was not analyzed.

Samples "VR-1 Initial" and "Acuvac Emission" had limited sample present, indicating that a small leak in the air bag may have been present.

Samples were analyzed by EPA method 8010/8020, but target analytes that were over instrument range were analyzed by EPA method 8240 in order to produce results that were within linear range.

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

Kimberly D. McNeill
Project Manager

H. Mitchell Rubenstein, Ph. D.
General Manager

OGC-002054

MR: mt
Enclosure

2709-D Pan American Freeway, NE • Albuquerque, NM 87107 • (505) 344-3777 • Fax (602) 344-4413

American Environmental Network, Inc.

CLIENT	: SPARTON TECHNOLOGIES	AEN I.D.	: 702365
PROJECT #	: 22797	DATE RECEIVED	: 2/28/97
PROJECT NAME	: SVE PILOT TEST	REPORT DATE	: 3/5/97

AEN ID. #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	VR-1 INITIAL	AIR	2/27/97
02	VR-1 SECOND	AIR	2/27/97
03	VR-1 THIRD	AIR	2/27/97
04	ACUVAC EMISSION	AIR	2/27/97
05	VR-1 FOURTH	AIR	2/27/97
06	VR-1 DAY 2 INIITIAL	AIR	2/28/97

American Environmental Network, Inc.

GAS CHROMOTOGRAPHY RESULTS

TEST : PURGEABLE HALOCARBONS / AROMATICS (EPA 8010/8020)
CLIENT : SPARTON TECHNOLOGIES AEN I.D.: 702365
PROJECT # : 22797
PROJECT NAME : SVE PILOT TEST

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	VR-1 INITIAL	AIR	2/27/97	NA	2/28/97	200
02	VR-1 SECOND	AIR	2/27/97	NA	2/28/97	200
03	VR-1 THIRD	AIR	2/27/97	NA	2/28/97	200

PARAMETER	DET. LIMIT	UNITS	01	02	03
BENZENE	0.05	MG/M ^{3}	< 10	< 10	< 10
BROMODICHLORMETHANE	0.02	MG/M ^{3}	< 4.0	< 4.0	< 4.0
BROMOFORM	0.05	MG/M ^{3}	< 10	< 10	< 10
BROMOMETHANE	0.10	MG/M ^{3}	< 20	< 20	< 20
CARBON TETRACHLORIDE	0.02	**MG/M ^{3}**	< 4.0	< 4.0	**4.4**
CHLOROBENZENE	0.05	MG/M ^{3}	< 10	< 10	< 10
CHLOROETHANE	0.05	MG/M ^{3}	< 10	< 10	< 10
CHLOROFORM	0.05	MG/M ^{3}	< 10	< 10	< 10
CHLOROMETHANE	0.10	MG/M ^{3}	< 20	< 20	< 20
DIBROMOCHLOROMETHANE	0.02	MG/M ^{3}	< 4.0	< 4.0	< 4.0
1,2-DIBROMOETHANE (EDB)	0.02	MG/M ^{3}	< 4.0	< 4.0	< 4.0
1,2-DICHLOROBENZENE	0.05	MG/M ^{3}	< 10	< 10	< 10
1,3-DICHLOROBENZENE	0.05	MG/M ^{3}	< 10	< 10	< 10
1,4-DICHLOROBENZENE	0.05	MG/M ^{3}	< 10	< 10	< 10
1,1-DICHLOROETHANE	0.03	MG/M ^{3}	< 6.0	< 6.0	< 6.0
1,2-DICHLOROETHANE (EDC)	0.05	MG/M ^{3}	< 10	< 10	< 10
1,1-DICHLOROETHENE	0.02	**MG/M ^{3}**	**260**	**310**	**310**
cis-1,2-DICHLOROETHENE	0.02	MG/M ^{3}	< 4.0	< 4.0	< 4.0
trans-1,2-DICHLOROETHENE	0.10	MG/M ^{3}	< 20	< 20	< 20
1,2-DICHLOROPROPANE	0.02	MG/M ^{3}	< 4.0	< 4.0	< 4.0
cis-1,3-DICHLOROPROPENE	0.05	MG/M ^{3}	< 10	< 10	< 10
trans-1,3-DICHLOROPROPENE	0.02	MG/M ^{3}	< 4.0	< 4.0	< 4.0
ETHYLBENZENE	0.05	**MG/M ^{3}**	**99**	**120**	**110**
METHYL-t-BUTYL ETHER	0.25	MG/M ^{3}	< 50	< 50	< 50
METHYLENE CHLORIDE	0.20	MG/M ^{3}	< 40	< 40	< 40
1,1,2,2-TETRACHLOROETHANE	0.05	MG/M ^{3}	< 10	< 10	< 10
TETRACHLOROETHENE	0.05	**MG/M ^{3}**	**160**	**190**	**180**
TOLUENE	0.05	**MG/M ^{3}**	**2000 A**	**2800 A**	**2400 A**
1,1,1-TRICHLOROETHANE	0.10	**MG/M ^{3}**	**2700 A**	**3500 A**	**3100 A**
1,1,2-TRICHLOROETHANE	0.02	**MG/M ^{3}**	**5.2**	**6.7**	**7.0**
TRICHLOROETHENE	0.03	MG/M ^{3}	**8600 A**	**13000 A**	**11000 A**
TRICHLOROFLUOROMETHANE	0.02	MG/M ^{3}	< 4.0	< 4.0	< 4.0
VINYL CHLORIDE	0.05	MG/M ^{3}	< 10	< 10	< 10
TOTAL XYLENES	0.05	**MG/M ^{3}**	**290**	**350**	**350**
TRICHLOROTRIFLUOROETHANE	0.20	MG/M ^{3}	< 40	< 40	< 40
SURROGATE:					
BROMOCHLOROMETHANE (%)			95	84	93
SURROGATE LIMITS	(73 - 117)				
TRIFLUOROTOLUENE (%)			88	82	86
SURROGATE LIMITS	(69 - 117)				

CHEMIST NOTES: **SAMPLE ID # 01 HAD VERY LITTLE SAMPLE TO WORK WITH**
A = SAMPLES ANALYZED USING ALTERNATE METHOD 8240 TO INCREASE LINEAR RANGE

American Environmental Network, Inc.

GAS CHROMOTOGRAPHY RESULTS

TEST : PURGEABLE HALOCARBONS / AROMATICS (EPA 8010/8020)
CLIENT : SPARTON TECHNOLOGIES AEN I.D.: 702365
PROJECT # : 22797
PROJECT NAME : SVE PILOT TEST

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
04	ACUVAC EMISSION	AIR	2/27/97	NA	2/28/97	200
05	VR-1 FOURTH	AIR	2/27/97	NA	2/28/97	200
06	VR-1 DAY 2 INIITIAL	AIR	2/28/97	NA	2/28/97	200

PARAMETER	DET. LIMIT	UNITS	04	05	06
BENZENE	0.05	MG/M ^{3}	< 10	< 10	< 10
BROMODICHLORMETHANE	0.02	MG/M ^{3}	< 4.0	< 4.0	< 4.0
BROMOFORM	0.05	MG/M ^{3}	< 10	< 10	< 10
BROMOMETHANE	0.10	MG/M ^{3}	< 20	< 20	< 20
CARBON TETRACHLORIDE	0.02	MG/M ^{3}	< 4.0	< 4.0	< 4.0
CHLOROBENZENE	0.05	MG/M ^{3}	< 10	< 10	< 10
CHLOROETHANE	0.05	MG/M ^{3}	< 10	< 10	< 10
CHLOROFORM	0.05	MG/M ^{3}	< 10	< 10	< 10
CHLOROMETHANE	0.10	MG/M ^{3}	< 20	< 20	< 20
DIBROMOCHLOROMETHANE	0.02	MG/M ^{3}	< 4.0	< 4.0	< 4.0
1,2-DIBROMOETHANE (EDB)	0.02	**MG/M ^{3}**	< 4.0	**12**	< 4.0
1,2-DICHLOROBENZENE	0.05	MG/M ^{3}	< 10	< 10	< 10
1,3-DICHLOROBENZENE	0.05	MG/M ^{3}	< 10	< 10	< 10
1,4-DICHLOROBENZENE	0.05	MG/M ^{3}	< 10	< 10	< 10
1,1-DICHLOROETHANE	0.03	MG/M ^{3}	< 6.0	< 6.0	< 6.0
1,2-DICHLOROETHANE (EDC)	0.05	MG/M ^{3}	< 10	< 10	< 10
1,1-DICHLOROETHENE	0.02	**MG/M ^{3}**	**96**	**270**	**270**
cis-1,2-DICHLOROETHENE	0.02	MG/M ^{3}	< 4.0	< 4.0	< 4.0
trans-1,2-DICHLOROETHENE	0.10	MG/M ^{3}	< 20	< 20	< 20
1,2-DICHLOROPROPANE	0.02	MG/M ^{3}	< 4.0	< 4.0	< 4.0
cis-1,3-DICHLOROPROPENE	0.05	MG/M ^{3}	< 10	< 10	< 10
trans-1,3-DICHLOROPROPENE	0.02	MG/M ^{3}	< 4.0	< 4.0	< 4.0
ETHYLBENZENE	0.05	**MG/M ^{3}**	< 10	**100**	**100**
METHYL-t-BUTYL ETHER	0.25	MG/M ^{3}	< 50	< 50	< 50
METHYLENE CHLORIDE	0.20	MG/M ^{3}	< 40	< 40	< 40
1,1,2,2-TETRACHLOROETHANE	0.05	MG/M ^{3}	< 10	< 10	< 10
TETRACHLOROETHENE	0.05	**MG/M ^{3}**	< 10	**150**	**160**
TOLUENE	0.05	**MG/M ^{3}**	**49**	**2100 A**	**2100 A**
1,1,1-TRICHLOROETHANE	0.10	**MG/M ^{3}**	< 20	**2800 A**	**2700 A**
1,1,2-TRICHLOROETHANE	0.02	**MG/M ^{3}**	< 4.0	**6.1**	**5.3**
TRICHLOROETHENE	0.03	**MG/M ^{3}**	**440 E**	**9800 A**	**9800 A**
TRICHLOROFLUOROMETHANE	0.02	MG/M ^{3}	< 4.0	< 4.0	< 4.0
VINYL CHLORIDE	0.05	MG/M ^{3}	< 10	< 10	< 10
TOTAL XYLENES	0.05	**MG/M ^{3}**	< 10	**310**	**320**
TRICHLOROTRIFLUOROETHANE	0.20	MG/M ^{3}	< 40	< 40	< 40
SURROGATE:					
BROMOCHLOROMETHANE (%)			94	86	86
SURROGATE LIMITS	(73 - 117)				
TRIFLUOROTOLUENE (%)			83	83	85
SURROGATE LIMITS	(69 - 117)				

CHEMIST NOTES: SAMPLE ID # 04 HAD A SMALL HOLE IN THE BAG, INSUFFICIENT SAMPLE VOLUME FOR REANALYSIS
A = SAMPLES ANALYZED USING ALTERNATE METHOD 8240 TO INCREASE LINEAR RANGE
E = ESTIMATED VALUE BEYOND LINEAR RANGE

American Environmental Network, Inc.

GAS CHROMOTOGRAPHY RESULTS
REAGENT BLANK

TEST	: PURGEABLE HALOCARBONS / AROMATICS (EPA 8010/8020)		
BLANK I.D.	: 022897	AEN I.D.	: 702365
CLIENT	: SPARTON TECHNOLOGIES	DATE EXTRACTED	: N/A
PROJECT #	: 22797	DATE ANALYZED	: 2/28/97
PROJECT NAME	: SVE PILOT TEST	SAMPLE MATRIX	: AIR

PARAMETER	UNITS	
BENZENE	MG/M ^{3}	<0.05
BROMODICHLORMETHANE	MG/M ^{3}	<0.02
BROMOFORM	MG/M ^{3}	<0.05
BROMOMETHANE	MG/M ^{3}	<0.10
CARBON TETRACHLORIDE	MG/M ^{3}	<0.02
CHLOROBENZENE	MG/M ^{3}	<0.05
CHLOROETHANE	MG/M ^{3}	<0.05
CHLOROFORM	MG/M ^{3}	<0.05
CHLOROMETHANE	MG/M ^{3}	<0.10
DIBROMOCHLOROMETHANE	MG/M ^{3}	<0.02
1,2-DIBROMOETHANE (EDB)	MG/M ^{3}	<0.02
1,2-DICHLOROBENZENE	MG/M ^{3}	<0.05
1,3-DICHLOROBENZENE	MG/M ^{3}	<0.05
1,4-DICHLOROBENZENE	MG/M ^{3}	<0.05
1,1-DICHLOROETHANE	MG/M ^{3}	<0.03
1,2-DICHLOROETHANE (EDC)	MG/M ^{3}	<0.05
1,1-DICHLOROETHENE	MG/M ^{3}	<0.02
cis-1,2-DICHLOROETHENE	MG/M ^{3}	<0.02
trans-1,2-DICHLOROETHENE	MG/M ^{3}	<0.10
1,2-DICHLOROPROPANE	MG/M ^{3}	<0.02
cis-1,3-DICHLOROPROPENE	MG/M ^{3}	<0.02
trans-1,3-DICHLOROPROPENE	MG/M ^{3}	<0.02
ETHYLBENZENE	MG/M ^{3}	<0.05
METHYL -t-BUTYL ETHER	MG/M ^{3}	<0.25
METHYLENE CHLORIDE	MG/M ^{3}	<0.20
1,1,2,2-TETRACHLOROETHANE	MG/M ^{3}	<0.05
TETRACHLOROETHENE	MG/M ^{3}	<0.05
TOLUENE	MG/M ^{3}	<0.05
1,1,1-TRICHLOROETHANE	MG/M ^{3}	<0.10
1,1,2-TRICHLOROETHANE	MG/M ^{3}	<0.02
TRICHLOROETHENE	MG/M ^{3}	<0.03
TRICHLOROFLUOROMETHANE	MG/M ^{3}	<0.02
VINYL CHLORIDE	MG/M ^{3}	<0.05
TOTAL XYLENES	MG/M ^{3}	<0.05

SURROGATE:		
BROMOCHLOROMETHANE (%)		98
SURROGATE LIMITS	(73 - 117)	
TRIFLUOROTOLUENE (%)		86
SURROGATE LIMITS	(69 - 117)	

CHEMIST NOTES:
N/A

American Environmental Network, Inc.

GAS CHROMOTOGRAPHY RESULTS
REAGENT BLANK

TEST	: PURGEABLE HALOCARBONS / AROMATICS (EPA 8010/8020)		
BLANK I.D.	: 022697	AEN I.D.	: 702365
CLIENT	: SPARTON TECHNOLOGIES	DATE EXTRACTED	: N/A
PROJECT #	: 22797	DATE ANALYZED	: 2/26/97
PROJECT NAME	: SVE PILOT TEST	SAMPLE MATRIX	: AIR

PARAMETER	UNITS	
BENZENE	MG/M ^{3}	<0.05
BROMODICHLORMETHANE	MG/M ^{3}	<0.02
BROMOFORM	MG/M ^{3}	<0.05
BROMOMETHANE	MG/M ^{3}	<0.10
CARBON TETRACHLORIDE	MG/M ^{3}	<0.02
CHLOROBENZENE	MG/M ^{3}	<0.05
CHLOROETHANE	MG/M ^{3}	<0.05
CHLOROFORM	MG/M ^{3}	<0.05
CHLOROMETHANE	MG/M ^{3}	<0.10
DIBROMOCHLOROMETHANE	MG/M ^{3}	<0.02
1,2-DIBROMOETHANE (EDB)	MG/M ^{3}	<0.02
1,2-DICHLOROBENZENE	MG/M ^{3}	<0.05
1,3-DICHLOROBENZENE	MG/M ^{3}	<0.05
1,4-DICHLOROBENZENE	MG/M ^{3}	<0.05
1,1-DICHLOROETHANE	MG/M ^{3}	<0.03
1,2-DICHLOROETHANE (EDC)	MG/M ^{3}	<0.05
1,1-DICHLOROETHENE	MG/M ^{3}	<0.02
cis-1,2-DICHLOROETHENE	MG/M ^{3}	<0.02
trans-1,2-DICHLOROETHENE	MG/M ^{3}	<0.10
1,2-DICHLOROPROPANE	MG/M ^{3}	<0.02
cis-1,3-DICHLOROPROPENE	MG/M ^{3}	<0.02
trans-1,3-DICHLOROPROPENE	MG/M ^{3}	<0.02
ETHYLBENZENE	MG/M ^{3}	<0.05
METHYL -t-BUTYL ETHER	MG/M ^{3}	<0.25
METHYLENE CHLORIDE	MG/M ^{3}	<0.20
1,1,2,2-TETRACHLOROETHANE	MG/M ^{3}	<0.05
TETRACHLOROETHENE	MG/M ^{3}	<0.05
TOLUENE	MG/M ^{3}	<0.05
1,1,1-TRICHLOROETHANE	MG/M ^{3}	<0.10
1,1,2-TRICHLOROETHANE	MG/M ^{3}	<0.02
TRICHLOROETHENE	MG/M ^{3}	<0.03
TRICHLOROFLUOROMETHANE	MG/M ^{3}	<0.02
VINYL CHLORIDE	MG/M ^{3}	<0.05
TOTAL XYLENES	MG/M ^{3}	<0.05

SURROGATE:		
BROMOCHLOROMETHANE (%)		102
SURROGATE LIMITS	(73 - 117)	
TRIFLUOROTOLUENE (%)		90
SURROGATE LIMITS	(69 - 117)	

CHEMIST NOTES:
N/A

American Environmental Network, Inc.

GC/MS RESULTS

TEST	: VOLATILE ORGANICS EPA METHOD 8240		
CLIENT	: SPARTON TECHNOLOGY, INC.	AEN I.D. :	702365
PROJECT #	: 022797		
PROJECT NAME	: SVE PILOT TEST		

SAMPLE ID #	BATCH	MATRIX	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
REAGENT BLANK	022897	AQUEOUS	N/A	02/28/97	1

PARAMETER	DET. LIMIT		UNITS
Dichlorodifluoromethane	1.0	< 1.0	MG/M ^{3}
Chloromethane	1.0	< 1.0	MG/M ^{3}
Vinyl Chloride	1.0	< 1.0	MG/M ^{3}
Bromomethane	1.0	< 1.0	MG/M ^{3}
Chloroethane	1.0	< 1.0	MG/M ^{3}
Trichlorofluoromethane	1.0	< 1.0	MG/M ^{3}
Acetone	10	< 10	MG/M ^{3}
1,1-Dichloroethene	1.0	< 1.0	MG/M ^{3}
Iodomethane	1.0	< 1.0	MG/M ^{3}
Methylene Chloride	1.0	< 1.0	MG/M ^{3}
cis-1,2-Dichloroethene	1.0	< 1.0	MG/M ^{3}
1,1-Dichloroethane	1.0	< 1.0	MG/M ^{3}
trans-1,2-Dichloroethene	1.0	< 1.0	MG/M ^{3}
2-Butanone	10	< 10	MG/M ^{3}
Carbon Disulfide	1.0	< 1.0	MG/M ^{3}
Chloroform	1.0	< 1.0	MG/M ^{3}
1,2-Dichloroethane	1.0	< 1.0	MG/M ^{3}
Vinyl Acetate	1.0	< 1.0	MG/M ^{3}
1,1,1-Trichloroethane	1.0	< 1.0	MG/M ^{3}
Carbon Tetrachloride	1.0	< 1.0	MG/M ^{3}
Benzene	1.0	< 1.0	MG/M ^{3}
1,2-Dichloropropane	1.0	< 1.0	MG/M ^{3}
Trichloroethene	1.0	< 1.0	MG/M ^{3}
Bromodichloromethane	1.0	< 1.0	MG/M ^{3}
2-Chloroethyl Vinyl Ether	10	< 10	MG/M ^{3}
cis-1,3-Dichloropropene	1.0	< 1.0	MG/M ^{3}
trans-1,3-Dichloropropene	1.0	< 1.0	MG/M ^{3}
1,1,2-Trichloroethane	1.0	< 1.0	MG/M ^{3}
Toluene	1.0	< 1.0	MG/M ^{3}
1,2-Dibromoethane	1.0	< 1.0	MG/M ^{3}
4-Methyl-2-Pentanone	10	< 10	MG/M ^{3}
2-Hexanone	10	< 10	MG/M ^{3}
Dibromochloromethane	1.0	< 1.0	MG/M ^{3}
Tetrachloroethene	1.0	< 1.0	MG/M ^{3}
Chlorobenzene	1.0	< 1.0	MG/M ^{3}
Ethylbenzene	1.0	< 1.0	MG/M ^{3}
m&p Xylenes	1.0	< 1.0	MG/M ^{3}
o-Xylene	1.0	< 1.0	MG/M ^{3}
Styrene	1.0	< 1.0	MG/M ^{3}
Bromoform	1.0	< 1.0	MG/M ^{3}
1,1,2,2-Tetrachloroethane	1.0	< 1.0	MG/M ^{3}
1,3-Dichlorobenzene	1.0	< 1.0	MG/M ^{3}
1,4-Dichlorobenzene	1.0	< 1.0	MG/M ^{3}
1,2-Dichlorobenzene	1.0	< 1.0	MG/M ^{3}

American Environmental Network, Inc.

GC/MS RESULTS

TEST	: VOLATILE ORGANICS EPA METHOD 8240		
CLIENT	: SPARTON TECHNOLOGY, INC.	AEN I.D. :	702365
PROJECT #	: 022797		
PROJECT NAME	: SVE PILOT TEST		

SAMPLE ID #	BATCH	MATRIX	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
REAGENT BLANK	022897	AQUEOUS	N/A	02/28/97	1

PARAMETER	DET. LIMIT	UNITS
SURROGATE % RECOVERY		
1,2-Dichloroethane-d4		106
		(76 - 114)
Toluene-d8		104
		(88 - 110)
Bromofluorobenzene		108
		(86 - 115)

American Environmental Network, Inc.

GAS CHROMOTOGRAPHY QUALITY CONTROL
MSMSD

TEST	: PURGEABLE HALOCARBONS / AROMATICS (EPA 8010/8020)		
MSMSD #	: 702360-01	AEN I.D.	: 702365
CLIENT	: SPARTON TECHNOLOGIES	DATE EXRACTED	: N/A
PROJECT #	: 22797	DATE ANALYZED	: 2/26/97
PROJECT NAME	: SVE PILOT TEST	SAMPLE MATRIX	: AIR
		UNITS	: MG/M ^{3}

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.05	1.00	0.87	87	0.86	86	1	(82 -128)	20
TOLUENE	<0.05	1.00	0.88	88	0.89	89	1	(87 -128)	20
1,1-DICHLOROETHENE	<0.02	1.00	1.02	102	0.96	96	6	(40 - 120)	20
TRICHLOROETHENE	<0.03	1.00	1.13	113	1.18	118	4	(89 - 127)	20
CHLOROBENZENE	<0.05	1.00	0.89	89	0.90	90	1	(87 - 124)	20

CHEMIST NOTES:
N/A

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

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

AnalyticalTechnologies of New Mexico, Inc., Albuquerque, NM
San Diego • Phoenix • Seattle • Pensacola • Ft. Collins • Portland • Albuquerque • Anchorage

CHAIN OF CUSTODY

DATE: 2-27-97 PAGE: 1 OF 1

ATI LAB I.D. 70 23 65

OGC-002061

SHADED AREAS ARE FOR LAB USE ONLY

PLEASE FILL THIS FORM IN COMPLETELY.

PROJECT MANAGER: John M. Wakefield

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

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

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB I.D.	Petroleum Hydrocarbons (418.1) TRPH	(MOD.8015) Diesel/Direct/Inject		(M8015) Gas/Purge & Trap	Gasoline/BTEX & MTBE (M8015/8020)	BTXE/MTBE (8020)	BTEX & Chlorinated Aromatics (602/8020)	BTEX/MTBE/EDC & EDB (8020/8010/Short)	Chlorinated Hydrocarbons (601/8010)	8010/8020	504 EDB ☐ / DBCP ☐	Polynuclear Aromatics (610/8310)	Volatile Organics (624/8240) GC/MS	Volatile Organics (8260) GC/MS		Pesticides/PCB (608/8080)	Herbicides (615/8150)	Base/Neutral/Acid Compounds GC/MS (625/8270)		General Chemistry			Priority Pollutant Metals (13)	Target Analyte List Metals (23)	RCRA Metals (8)	RCRA Metals by TCLP (Method 1311)			NUMBER OF CONTAINERS
VR-1 Initial	2-27-97	0944	Air	-01										X																			1
VR-1 Second	2-27-97	1148	Air	-02										X																			1
VR-1 Third	"	1345	Air	-03										X																			1
AcuVac Emission	"	1551	Air	-04										X																			1
VR-1 Fourth	"	1602	Air	-05										X																			1
VR-1 Day 2 Initial	2-28-97	0859	Air	-06										X																			1

PROJECT INFORMATION
PROJ. NO.: 022797
PROJ. NAME: SVE Pilot test
P.O. NO.: Pending
SHIPPED VIA: Delivered

SAMPLE RECEIPT
NO. CONTAINERS: 6
CUSTODY SEALS: Y / N / NA
RECEIVED INTACT: YES
BLUE ICE/ICE: OK

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS
(RUSH) ☐ 24hr ☐ 48hr ☐ 72hr ☐ 1 WEEK (NORMAL) ☒ 2 WEEK
CERTIFICATION REQUIRED: ☐ NM ☐ OTHER
METHANOL PRESERVATION ☐

COMMENTS:
VR-1 Initial Bag leaked ??
attempt to analyze.
HCl concentration on AcuVac Emission Sample is it possible?

RELINQUISHED BY: 1.	RELINQUISHED BY: 2.
Signature: John M. Wakefield Time: 0900 2-28-97	Signature: Don Gutierrez Time: 0930
Printed Name: John M. Wakefield Date: 2-27-97	Printed Name: Don Gutierrez Date: 2.28.97
Company: STI	Company: STI
RECEIVED BY: 1.	**RECEIVED BY: (LAB) 2.**
Signature: Don Gutierrez Time: 0900	Signature: John Caldwell Time: 0930
Printed Name: Don Gutierrez Date: 2-28-97	Printed Name: John Caldwell Date: 2/28/97
Company: STI	Analytical Technologies of New Mexico

STATE OF NEW MEXICO DEPARTMENT OF HEALTH

SCIENTIFIC LABORATORY DIVISION

P.O. Box 4700
Albuquerque, NM 87196-4700

700 Camino de Salud, NE
[505] 841-2500

ORGANIC CHEMISTRY SECTION [505] 841-2570

REPORT TO CLIENT

Attn: Rob Pine
Ground Water Quality Bureau
P.O. Box 26110
Santa Fe, New Mexico 87502

SLD No.: OR- 9700411
REQUEST ID No.: 154988
RECEIVED AT SLD: 2/27/97
SLD COPY USER 55321

SAMPLE COLLECTION: DATE: 2/26/97 TIME: 1142 BY: Pin
SAMPLING LOCATION: Sparton Pilot Test Sample #2
SAMPLE MATRIX: Gas REPORTING UNITS: uG/L

Remarks: Tedlar Gas Bag Sample

EPA METHOD 8260 Modified MASS SPECTROMETER VOLATILES BY PURGE AND TRAP

DATE EXTRACTED: N/A
DATE ANALYZED: 2/28/97 2 Days: Within EPA Analysis Time
AIR SAMPLE VOL (mL): 0.01

ANALYSIS No.: OR- 9700411
SLD BATCH No.: 066A&B
DILUTION FACTOR: 100.00
REQUEST ID No.: 154988

Barometric Pressure During Analayis in mm of Mercury: 636

CAS #	ANALYTE NAME	CONCENTRATION		QUAL.	Sample Detection Limit	
		uG/L$_{air}$	ppm V/V		uG/L$_{air}$	ppm V/V
71-43-2	Benzene			U	500.0	184.04
108-86-1	Bromobenzene			U	500.0	91.43
74-97-5	Bromochloromethane			U	500.0	111.28
75-27-4	Bromodichloromethane*			U	500.0	87.53
75-25-2	Bromoform*			U	500.0	56.74
24-83-9	Bromomethane			U	500.0	151.11
78-93-3	2-Butanone (MEK)			U	5000.0	1993.77
104-51-8	n-Butylbenzene			U	500.0	107.13
135-98-8	sec-Butylbenzene			U	500.0	107.13
98-06-6	tert-Butylbenzene			U	500.0	107.13
1634-04-4	tert-Butyl methyl ether (MTBE)			U	5000.0	1631.27
56-23-5	Carbon tetrachloride			U	500.0	93.22
108-90-7	Chlorobenzene (monochlorobenzene)			U	500.0	127.04
75-00-3	Chloroethane			U	500.0	220.85
67-66-3	Chloroform*			U	500.0	120.63
74-87-3	Chloromethane			U	500.0	287.10
95-49-8	2-Chlorotoluene			U	500.0	113.93
106-43-4	4-Chlorotoluene			U	500.0	113.93
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)			U	500.0	60.57
124-48-1	Dibromochloromethane*			U	500.0	69.02
106-93-4	1,2-Dibromoethane (Ethylene dibromide (EDB))			U	500.0	76.36
74-95-3	Dibromomethane			U	500.0	152.71
95-50-1	1,2-Dichlorobenzene (o-Dichlorobenzene)			U	500.0	97.65
541-73-1	1,3-Dichlorobenzene (m-Dichlorobenzene)			U	500.0	97.65
106-46-7	1,4-Dichlorobenzene (p-Dichlorobenzene)			U	500.0	97.65
75-71-8	Dichlorodifluoromethane			U	500.0	118.64
75-34-3	1,1-Dichloroethane			U	500.0	145.00
107-06-2	1,2-Dichloroethane			U	500.0	145.00
75-35-4	1,1-Dichloroethene	340	100	J	500.0	147.99
156-59-2	cis-1,2-Dichloroethene			U	500.0	147.99
156-60-5	trans-1,2-Dichloroethene			U	500.0	147.99
78-87-5	1,2-Dichloropropane			U	500.0	127.04
142-28-9	1,3-Dichloropropane			U	500.0	127.04
590-20-7	2,2-Dichloropropane			U	500.0	127.04
563-58-6	1,1-Dichloropropene			U	500.0	129.33
1006-01-5	cis-1,3-Dichloropropene			U	500.0	129.33

1006-02-6	trans-1,3-Dichloropropene			U	500.0	129.33
100-41-4	Ethylbenzene			U	500.0	135.43
87-68-3	Hexachlorobutadiene			U	500.0	55.00
98-82-8	Isopropylbenzene			U	500.0	119.63
99-87-6	4-Isopropyltoluene			U	500.0	106.33
75-09-2	Methylene chloride (Dichloromethane)			U	1000.0	337.77
91-20-3	Naphthalene			U	500.0	90.86
103-65-1	Propylbenzene			U	500.0	119.63
100-42-5	Styrene			U	500.0	138.03
630-20-6	1,1,1,2-Tetrachloroethane			U	500.0	85.45
79-34-5	1,1,2,2-Tetrachloroethane			U	500.0	85.45
127-18-4	Tetrachloroethene			U	500.0	86.48
109-99-9	Tetrahydrofuran (THF)			U	5000.0	1993.77
108-88-3	Toluene	2400	760		500.0	156.03
87-61-5	1,2,3-Trichlorobenzene			U	500.0	79.31
120-82-1	1,2,4-Trichlorobenzene			U	500.0	79.31
71-55-6	1,1,1-Trichloroethane	2800	610		500.0	107.93
79-00-5	1,1,2-Trichloroethane			U	500.0	107.93
79-01-6	Trichloroethene	10000	2200		500.0	109.58
75-69-4	Trichlorofluoromethane			U	500.0	104.02
96-18-4	1,2,3-Trichloropropane			U	500.0	97.65
95-63-6	1,2,4-Trimethylbenzene			U	500.0	119.63
108-67-8	1,3,5-Trimethylbenzene			U	500.0	119.63
75-01-4	Vinyl chloride			U	500.0	231.53
95-47-6	o-Xylene#			U	500.0	135.43
N/A	p- & m-Xylene#			U	500.0	135.43
N/A	#Total Xylenes#			U	500.0	135.43
N/A	*Total Trihalomethanes*		N/A	U	500.0	

Laboratory Remarks: **Average recovery of the TCE Gas Calibration Standard was 89%.**
Results are the average of analyses run on 2/28/97.

LABORATORY BATCH QUALITY CONTROL SUMMARY			
SURROGATE RECOVERIES:	SURROGATE COMPOUNDS	CONCENTRATION (uG/L$_{air}$)	% RECOVERY
	Toluene - D8	**4955**	**99.1%**
	4 - Bromofluorobenzene	**5135**	**102.7%**
	1,2 - Dichlorobenzene - D4	**5265**	**105.3%**
LABORATORY FORTIFIED BLANK RECOVERIES	The % recoveries for compounds in the batch spike were from 80% to 120% with the exception of the compounds listed below (concentrations are relative to sample dilution): COMPOUND CONCENTRATION (uG/L) % RECOVERY **No Exceptions**		
LABORATORY BLANKS	No target compounds were detected above the sample detection limit in laboratory blankwith the exception of the compound(s) listed below (concentrations are relative to sample dilution): COMPOUND CONCENTRATION (uG/L) **No Exceptions**		

ANALYST: **Patrick Basile** QC APPROVED BY: **Ken Sherrell**

DEFINITIONS

**	Concentration Exceeds EPA's allowable Maximum Contamination Level
CAS#	Chemical Abstract Services Number - Unique number to help identify analytes listed by different names
CONC.	Concentration (ug/L) of analyte actually detected in the sample
QUAL	Qualifier of analytical results as follows:
	B Analyte was detected in laboratory blank
	J Analyte was detected at a level below which an accurate quanitation can be given (~5 * SDL)
	U No analyte was detected above the Sample Detection Limit.
SDL	Sample Detection Limit - The lowest concentration which can be differentiated from Zero with 99% confidence taking sample size (compositing) into account.
ug/L	Concentration Units - micrograms per liter which is approximately equivalent to Parts Per Billion (ppb)

Request ID No. **ORGANIC CHEMISTRY ANALYTICAL REQUEST FORM** [2] SLD's Accession No.

Request ID No. 154988-B

OR

Scientific Laboratory Division
700 Camino de Salud, NE (P.O. Box 4700)
Albuquerque, NM 87106 (87196-4700)
Phone: 505-841-2500/ -2570/ -2566

OR

For SL OR 0R9700411

[3] User Code: 553211

Date & Time of Receipt at SLD: 97 FEB 27 PM 3:11

[4] Sample Priority: 3 *If 1 or 2 call SLD*

[5] Submitter Code: 418 WSS Code: - User's Site ID:

[6] *Sample Temp. Receipt @ SLD:* ____ °C

[7] Facility or WSS Name: SPIRITION

Facility/WSS Location: *If No WSS Code Complete 8, 9 & 10*

[8] County: Bernalillo

[9] City: Albuquerque

[10] State: *or CHANGE* NM *TO*

[11] Sampling Location: SPIRITION PILOT TEST SAMPLE #2

[12] Sample Collection: On: 02 / 26 / 97 (Date: MM / DD / YY) By: Pine (Last Name) Rob (First Name)

At: 11 : 42 (Time: 24:00 Hour Clock)

[13] Sample Info. Contact: Ph: [ ] - 827 - 0178

If not collector, per box 12, Please print name here:

[14] *Reports are mailed to the address specified by the Submitter Code and WSS Code (when present). However, if one of the following applies, please check ☒ appropriate boxes below and complete address form.*

☐ New Address for: ☐ Submitter ☐ WSS / Client

☐ Send an additional Report to ➔

Name:

Address:

City: *State:* *Zip:*

[15] **Field Data:** *(When appropriate)*

Temperature: ____ °C; pH: ____

Chlorinated ? ☐ YES or ☐ NO (Please Check Box)

Chlorine Residual: ____ mG/L

Sulfate: ____ mG/L

SDWA Compositing:
☐ No Compositing Permitted
☐ Within This System Only
☐ Within All Systems

[16] **Field Remarks:** *(Optional)*
Sample should have high TCE and Toluene

Sample Type: *(Check ☒ only one)*
☐ Water ■ Vapor ☐ Tissue ☐ Other: ☐ Liquid:
☐ Soil ☐ Plant ☐ Blood ☐ Solid:

[18] **Preservation:** *(Check ☒ all that apply)*
☐ No Preservation
☐ Stored at 4°C ☐ Preserved with HCl to pH < 2 ☐ Other:

[19] **Analyses Requested:** *Please Check ☒ the appropriate box(es) below to indicate your analytical request(s); and, please indicate the number of bottles & vials submitted:* Bottles ____ Vials ____.

Volatile Screens:
☐-(754) Aromatic & Halogenated Volatiles (EPA 8021)
■-(765) Mass Spectrometer Volatiles (EPA 8260)
☐-(774) Volatile Organic Compounds [VOC's] (EPA 502.2)
☐-(766) SDWA Total Trihalomethanes (EPA 502.2)

Other Specific Compounds or Classes:
☐-(___) ____
☐-(___) ____

Remarks:

OGC-002092

Semivolatile Screens:
☐-(789) Drinking Water Semivolatile Screens **(Indented list)**
- ☐-(775) EDB, DBCP & TCP (EPA 504.1)
- ☐-(758) Acid Herbicides (EPA 515.2)
- ☐-(772) Carbamates (EPA 531.1)
- ☐-(781) Glyphosate (EPA 547)
- ☐-(782) Endothall (EPA 548.1)
- ☐-(783) Diquat (EPA 549.1)
- ☐-(788) SOC (EPA 525.2)

☐-(755) Base/Neutral Semivolatiles (No Acids) (EPA 8270)
☐-(756) Base/Neutral/Acids Semivolatiles (EPA 625/8270)
☐-(760) Organochlorine Pesticides / PCB's (EPA 608)
☐-(751) Hydrocarbon Fuel Screen (Modified EPA 8015)
☐-(768) Disinfection Byproducts Screen **(Indented list)**
- ☐-(771) Haloacetic Acids (EPA 552.2)
- ☐-(769) Haloacetonitriles / THM's (EPA 551.1)
- ☐-(770) Chloral Hydrate (EPA 551.1)
- ☐-(773) Total Organic Halides [TOX] (EPA 5320b)

Organic Section Sample Collection Guidelines

(SLD-#) & Test Description	Approx. No. of Analytes Reported	Maximum Holding Time (days)	Sample Container	General Preservation Footnotes	Preservation Comments for Chlorinated Waters
VOLATILE ORGANIC COMPOUNDS:					
(754) Aromatic and Halogenated Volatiles	63	14	40 mL Glass Vial in duplicate	A, B, E	
(774) SDWA Volatile Organic Compounds, VOC-1's	63	14	40 mL Glass Vial in duplicate	A, B, E	Sample should be Unchlorinated
(766) SDWA Trihalomethanes	4	14	40 mL Glass Vial in duplicate	A, C, E	
(765) Volatile Organic Compounds, VOC's, by GC/MS	63	14	40 mL Glass Vial in duplicate	A, B, E	
SEMIVOLATILE ORGANIC COMPOUNDS:					
(758) Acid Herbicides	13	14	1 L Amber Glass	A, B, D	50 mG Sodium Sulfite per 1 L Bottle
(755) Base/Neutral Semivolatiles Organic Compounds by GC/MS	52	7	1 L Amber Glass in duplicate	A, B	
(756) Base/Neutral /Acid Semivolatile Organic Compounds by GC/MS	92	7	1 L Amber Glass in duplicate	A, B	
(772) Carbamate Pesticides	10	28	40 mL Glass Vial	A, C, D	3 mG Sodium Thiosulfate per 40 mL Vial
(783) Diquat	1	7	1 L Amber Plastic	A, C, D	100 mG/L Sodium Thiosulfate per 1 L Bottle
(775) EDB, DBCP & TCP	3	14	40 mL Glass Vial in duplicate	A, D	Sample should be Unchlorinated
(782) Endothall	1	7	40 mL Glass Vial in duplicate	A, D	4 mG Sodium Thiosulfate per 40 mL Vial
(781) Glyphosate	1	14	40 mL Amber Glass Vial	A, D	3 mG Sodium Thiosulfate per 40 mL Vial
(751) Hydrocarbon Fuel Screen (TPH and Hydrocarbon Range ID)	N/A	14	1 L Amber Glass in duplicate	A, B	
(760) Organochlorine Pesticides and PCB's	39	7	1 L Amber Glass in duplicate	A, B, D	100 mG/L Sodium Thiosulfate per 1 L Bottle
(788) Semivolatile Organic Compounds by GC/MS	72	14	1 L Amber Glass in duplicate	A, B, D	50 mG/L Sodium Sulfite per 1 L Bottle

Preservation Footnotes:

A = Cool samples to 4°C.
B = Reduce pH to 2 with Hydrochloric Acid, HCl.
C = As supplied by SLD, sample containers contain perservatives (check container label); Do **NOT** Rinse Container.
D = Chlorinated systems should request dechlorinating agents for SLD-#'s 775, 768, 772, 781, 782, 783 and 788. Add dechlorinating agent after filling bottle half full, then finish filling bottle. Do **NOT** add acid.
E = Fill bottle completely; i.e. **No** Air Bubble.

* * * * * Please Use Chain-Of-Custody Form Only When Requirements Mandate * * * * *

Single Sample **Chain-Of-Custody Form** *Single Sample*

We, the undersigned, certify that on 2/27/97 (Date) at 14:38 (Time) the sample identified on the container(s) and reverse of this request form by "*Request ID No.:* 154988" was transferred with evidentiary seal(s):

(check applicable box) ☐ not present, ☒ present & intact, ☐ present & damaged.

Released by: [signature] (Signature) & Received by: [signature] (Signature)

Additional Transfer, If Applicable:

We, the undersigned, certify that on 2-27-97 (Date) at 1510 (Time) the sample identified on the container(s) and reverse of this request form by "*Request ID No.:* 154988" was transferred with evidentiary seal(s):

(check applicable box) ☐ not present, ☒ present & intact, ☐ present & damaged.

Released by: [signature] (Signature) & Received by: [signature] (Signature)

OGC-002093

STATE OF NEW MEXICO | DEPARTMENT OF HEALTH

SCIENTIFIC LABORATORY DIVISION

P.O. Box 4700
Albuquerque, NM 87196-4700

700 Camino de Salud, NE
[505] 841-2500

ORGANIC CHEMISTRY SECTION [505] 841-2570

REPORT TO CLIENT:

Attn: Rob Pine
Ground Water Quality Bureau
P.O. Box 26110
Santa Fe, New Mexico 87502

SLD No.: OR- 9700421
REQUEST ID No.: 154990
RECEIVED AT SLD: 2/28/97
SLD COPY USER 55321

SAMPLE COLLECTION: DATE: 2/26/97 TIME: 1658 BY: Pin
SAMPLING LOCATION: Sparton Pilot Test Sample #4
SAMPLE MATRIX: Gas REPORTING UNITS: uG/L

Remarks: Tedlar Gas Bag Sample

EPA METHOD 8260 Modified MASS SPECTROMETER VOLATILES BY PURGE AND TRAP

DATE EXTRACTED: N/A
DATE ANALYZED: 2/28/97 2 Days: Within EPA Analysis Time
AIR SAMPLE VOL (mL): 0.01

ANALYSIS No.: OR- 9700421
SLD BATCH No.: 066A&B
DILUTION FACTOR: 100.00
REQUEST ID No.: 154990

Barometric Pressure During Analayis in mm of Mercury: 636

CAS #	ANALYTE NAME	CONCENTRATION		QUAL.	Sample Detection Limit	
		uG/L$_{air}$	ppm V/V		uG/L$_{air}$	ppm V/V
71-43-2	Benzene			U	500.0	184.04
108-86-1	Bromobenzene			U	500.0	91.43
74-97-5	Bromochloromethane			U	500.0	111.28
75-27-4	Bromodichloromethane*			U	500.0	87.53
75-25-2	Bromoform*			U	500.0	56.74
24-83-9	Bromomethane			U	500.0	151.11
78-93-3	2-Butanone (MEK)			U	5000.0	1993.77
104-51-8	n-Butylbenzene			U	500.0	107.13
135-98-8	sec-Butylbenzene			U	500.0	107.13
98-06-6	tert-Butylbenzene			U	500.0	107.13
1634-04-4	tert-Butyl methyl ether (MTBE)			U	5000.0	1631.27
56-23-5	Carbon tetrachloride			U	500.0	93.22
108-90-7	Chlorobenzene (monochlorobenzene)			U	500.0	127.04
75-00-3	Chloroethane			U	500.0	220.85
67-66-3	Chloroform*			U	500.0	120.63
74-87-3	Chloromethane			U	500.0	287.10
95-49-8	2-Chlorotoluene			U	500.0	113.93
106-43-4	4-Chlorotoluene			U	500.0	113.93
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)			U	500.0	60.57
124-48-1	Dibromochloromethane*			U	500.0	69.02
106-93-4	1,2-Dibromoethane (Ethylene dibromide (EDB))			U	500.0	76.36
74-95-3	Dibromomethane			U	500.0	152.71
95-50-1	1,2-Dichlorobenzene (o-Dichlorobenzene)			U	500.0	97.65
541-73-1	1,3-Dichlorobenzene (m-Dichlorobenzene)			U	500.0	97.65
106-46-7	1,4-Dichlorobenzene (p-Dichlorobenzene)			U	500.0	97.65
75-71-8	Dichlorodifluoromethane			U	500.0	118.64
75-34-3	1,1-Dichloroethane			U	500.0	145.00
107-06-2	1,2-Dichloroethane			U	500.0	145.00
75-35-4	1,1-Dichloroethene	410	120	J	500.0	147.99
156-59-2	cis-1,2-Dichloroethene			U	500.0	147.99
156-60-5	trans-1,2-Dichloroethene			U	500.0	147.99
78-87-5	1,2-Dichloropropane			U	500.0	127.04
142-28-9	1,3-Dichloropropane			U	500.0	127.04
590-20-7	2,2-Dichloropropane			U	500.0	127.04
563-58-6	1,1-Dichloropropene			U	500.0	129.33
1006-01-5	cis-1,3-Dichloropropene			U	500.0	129.33

1006-02-6	trans-1,3-Dichloropropene			U	500.0	129.33
100-41-4	Ethylbenzene			U	500.0	135.43
87-68-3	Hexachlorobutadiene			U	500.0	55.00
98-82-8	Isopropylbenzene			U	500.0	119.63
99-87-6	4-Isopropyltoluene			U	500.0	106.33
75-09-2	Methylene chloride (Dichloromethane)			U	1000.0	337.77
91-20-3	Naphthalene			U	500.0	90.86
103-65-1	Propylbenzene			U	500.0	119.63
100-42-5	Styrene			U	500.0	138.03
630-20-6	1,1,1,2-Tetrachloroethane			U	500.0	85.45
79-34-5	1,1,2,2-Tetrachloroethane			U	500.0	85.45
127-18-4	Tetrachloroethene			U	500.0	86.48
109-99-9	Tetrahydrofuran (THF)			U	5000.0	1993.77
108-88-3	Toluene	2400	740		500.0	156.03
87-61-5	1,2,3-Trichlorobenzene			U	500.0	79.31
120-82-1	1,2,4-Trichlorobenzene			U	500.0	79.31
71-55-6	1,1,1-Trichloroethane	3200	690		500.0	107.93
79-00-5	1,1,2-Trichloroethane			U	500.0	107.93
79-01-6	Trichloroethene	12000	2700		500.0	109.58
75-69-4	Trichlorofluoromethane			U	500.0	104.02
96-18-4	1,2,3-Trichloropropane			U	500.0	97.65
95-63-6	1,2,4-Trimethylbenzene			U	500.0	119.63
108-67-8	1,3,5-Trimethylbenzene			U	500.0	119.63
75-01-4	Vinyl chloride			U	500.0	231.53
95-47-6	o-Xylene#			U	500.0	135.43
N/A	p- & m-Xylene#			U	500.0	135.43
N/A	#Total Xylenes#			U	500.0	135.43
N/A	*Total Trihalomethanes*		N/A	U	500.0	

Laboratory Remarks: **Average recovery of the TCE Gas Calibration Standard was 89%.**
Results are the average of analyses run on 2/28/97.

LABORATORY BATCH QUALITY CONTROL SUMMARY			
SURROGATE RECOVERIES:	SURROGATE COMPOUNDS	CONCENTRATION (uG/L$_{air}$)	% RECOVERY
	Toluene - D8	**5115**	**102.3%**
	4 - Bromofluorobenzene	**5020**	**100.4%**
	1,2 - Dichlorobenzene - D4	**5420**	**108.4%**
LABORATORY FORTIFIED BLANK RECOVERIES	The % recoveries for compounds in the batch spike were from 80% to 120% with the exception of the compounds listed below (concentrations are relative to sample dilution): COMPOUND CONCENTRATION (uG/L) % RECOVERY **No Exceptions**		
LABORATORY BLANKS	No target compounds were detected above the sample detection limit in laboratory blankwith the exception of the compound(s) listed below (concentrations are relative to sample dilution): COMPOUND CONCENTRATION (uG/L) **No Exceptions**		

ANALYST: **Patrick Basile** QC APPROVED BY: **Ken Sherrell**

DEFINITIONS

**	Concentration Exceeds EPA's allowable Maximum Contamination Level
CAS#	Chemical Abstract Services Number - Unique number to help identify analytes listed by different names
CONC.	Concentration (ug/L) of analyte actually detected in the sample
QUAL	Qualifier of analytical results as follows:
	B Analyte was detected in laboratory blank
	J Analyte was detected at a level below which an accurate quanitation can be given (~5 * SDL)
	U No analyte was detected above the Sample Detection Limit.
SDL	Sample Detection Limit - The lowest concentration which can be differentiated from Zero with 99% confidence taking sample size (compositing) into account.
ug/L	Concentration Units - micrograms per liter which is approximately equivalent to Parts Per Billion (ppb)

Request ID No.

ORGANIC CHEMISTRY ANALYTICAL REQUEST FORM

[2] SLD's Accession No.

Request ID No. 154990-B

OR

Scientific Laboratory Division
700 Camino de Salud, NE (P.O. Box 4700)
Albuquerque, NM 87106 (87196-4700)
Phone: 505-841-2500/ -2570/ -2566

OR

For SLD Use Only: OR-__/__-__ OR9700421

[3] User Code: 55321

Date & Time of Receipt at SLD: 97 FEB 28 AM 9:09

[4] Sample Priority: 3 *If 1 or 2 call SLD*

[5] Submitter Code: 418 WSS Code: ___-___ User's Site ID: _____

[6] *Sample Temp. Receipt @ SLD:* ____°C

[7] Facility or WSS Name: SPAIRTION

Facility/WSS Location: *If No WSS Code Complete 8, 9 & 10*

[8] County: Bernalillo

[9] City: Albuquerque

[10] State: *or CHANGE* NM *TO* ___

[11] Sampling Location: SPAIRTION PILOT TEST Sample #4

[12] Sample Collection: On: 02 / 26 / 97 (Date: MM / DD / YY) By: Pine (Last Name) Rob (First Name)

At: 16 : 58 (Time: 24:00 Hour Clock)

[13] Sample Info. Contact: Ph: [ ] - 827 - 0178

If not collector, per box 12, Please print name here: _____

[14] *Reports are mailed to the address specified by the Submitter Code and WSS Code (when present). However, if one of the following applies, please check ☒ appropriate boxes below and complete address form.*

☐ New Address for: ☐ Submitter ☐ WSS / Client

☐ Send an additional Report to ➻

Name: _____

Address: _____

City: _____ *State:* _____ *Zip:* _____

[15] Field Data: *(When appropriate)*

Temperature: ____°C; pH: ____

Chlorinated ? ☐ YES or ☐ NO (Please Check Box)

Chlorine Residual: ____mG/L

Sulfate: ____ mG/L

SDWA Compositing:
☐ No Compositing Permitted
☐ Within This System Only
☐ Within All Systems

[16] Field Remarks: *(Optional)*

Sample should have high TCE and Toluene

[17] Sample Type: *(Check ☒ only one)*
☐ Water ■ Vapor ☐ Tissue ☐ Other: ☐ Liquid:
☐ Soil ☐ Plant ☐ Blood ☐ Solid: _____

[18] Preservation: *(Check ☒ all that apply)*
☐ No Preservation
☐ Stored at 4°C ☐ Preserved with HCl to pH < 2 ☐ Other: _____

[19] Analyses Requested: *Please Check ☒ the appropriate box(es) below to indicate your analytical request(s); and, please indicate the number of bottles & vials submitted:* Bottles ____ Vials ____.

Volatile Screens:

☐-(754) Aromatic & Halogenated Volatiles (EPA 8021)
■-(765) Mass Spectrometer Volatiles (EPA 8260)
☐-(774) Volatile Organic Compounds [VOC's] (EPA 502.2)
☐-(766) SDWA Total Trihalomethanes (EPA 502.2)

Other Specific Compounds or Classes:

☐-(___) _____
☐-(___) _____

Remarks: _____

Semivolatile Screens:

☐-(789) Drinking Water Semivolatile Screens **(Indented list)**
- ☐-(775) EDB, DBCP & TCP (EPA 504.1)
- ☐-(758) Acid Herbicides (EPA 515.2)
- ☐-(772) Carbamates (EPA 531.1)
- ☐-(781) Glyphosate (EPA 547)
- ☐-(782) Endothall (EPA 548.1)
- ☐-(783) Diquat (EPA 549.1)
- ☐-(788) SOC (EPA 525.2)

☐-(755) Base/Neutral Semivolatiles (No Acids) (EPA 8270)
☐-(756) Base/Neutral/Acids Semivolatiles (EPA 625/8270)
☐-(760) Organochlorine Pesticides / PCB's (EPA 608)
☐-(751) Hydrocarbon Fuel Screen (Modified EPA 8015)
☐-(768) Disinfection Byproducts Screen **(Indented list)**
- ☐-(771) Haloacetic Acids (EPA 552.2)
- ☐-(769) Haloacetonitriles / THM's (EPA 551.1)
- ☐-(770) Chloral Hydrate (EPA 551.1)
- ☐-(773) Total Organic Halides [TOX] (EPA 5320b)

OGC-002100

Please RETAIN A COPY of your completed form for your records

Organic Section Sample Collection Guidelines

(SLD-#) & Test Description	Approx. No. of Analytes Reported	Maximum Holding Time (days)	Sample Container	General Preservation Footnotes	Preservation Comments for Chlorinated Waters
VOLATILE ORGANIC COMPOUNDS:					
(754) Aromatic and Halogenated Volatiles	63	14	40 mL Glass Vial in duplicate	A, B, E	
(774) SDWA Volatile Organic Compounds, VOC-1's	63	14	40 mL Glass Vial in duplicate	A, B, E	Sample should be Unchlorinated
(766) SDWA Trihalomethanes	4	14	40 mL Glass Vial in duplicate	A, C, E	
(765) Volatile Organic Compounds, VOC's, by GC/MS	63	14	40 mL Glass Vial in duplicate	A, B, E	
SEMIVOLATILE ORGANIC COMPOUNDS:					
(758) Acid Herbicides	13	14	1 L Amber Glass	A, B, D	50 mG Sodium Sulfite per 1 L Bottle
(755) Base/Neutral Semivolatiles Organic Compounds by GC/MS	52	7	1 L Amber Glass in duplicate	A, B	
(756) Base/Neutral /Acid Semivolatile Organic Compounds by GC/MS	92	7	1 L Amber Glass in duplicate	A, B	
(772) Carbamate Pesticides	10	28	40 mL Glass Vial	A, C, D	3 mG Sodium Thiosulfate per 40 mL Vial
(783) Diquat	1	7	1 L Amber Plastic	A, C, D	100 mG/L Sodium Thiosulfate per 1 L Bottle
(775) EDB, DBCP & TCP	3	14	40 mL Glass Vial in duplicate	A, D	Sample should be Unchlorinated
(782) Endothall	1	7	40 mL Glass Vial in duplicate	A, D	4 mG Sodium Thiosulfate per 40 mL Vial
(781) Glyphosate	1	14	40 mL Amber Glass Vial	A, D	3 mG Sodium Thiosulfate per 40 mL Vial
(751) Hydrocarbon Fuel Screen (TPH and Hydrocarbon Range ID)	N/A	14	1 L Amber Glass in duplicate	A, B	
(760) Organochlorine Pesticides and PCB's	39	7	1 L Amber Glass in duplicate	A, B, D	100 mG/L Sodium Thiosulfate per 1 L Bottle
(788) Semivolatile Organic Compounds by GC/MS	72	14	1 L Amber Glass in duplicate	A, B, D	50 mG/L Sodium Sulfite per 1 L Bottle

Preservation Footnotes:

A = Cool samples to 4°C.
B = Reduce pH to 2 with Hydrochloric Acid, HCl.
C = As supplied by SLD, sample containers contain perservatives (check container label); Do **NOT** Rinse Container.
D = Chlorinated systems should request dechlorinating agents for SLD-#'s 775, 768, 772, 781, 782, 783 and 788. Add dechlorinating agent after filling bottle half full, then finish filling bottle. Do **NOT** add acid.
E = Fill bottle completely; i.e. **No** Air Bubble.

* * * * * Please Use Chain-Of-Custody Form Only When Requirements Mandate * * * * *

Single Sample **Chain-Of-Custody Form** *Single Sample*

We, the undersigned, certify that on 2/28/97 (Date) at 9:07 (Time) the sample identified on the container(s) and reverse of this request form by "*Request ID No.:* 154990" was transferred with evidentiary seal(s):

(check applicable box) ☐ not present, ☒ present & intact, ☐ present & damaged. 9:10 AM

Released by: _____ (Signature) & Received by: _____ (Signature) 2/28/97

Additional Transfer, If Applicable:

We, the undersigned, certify that on _____ (Date) at _____ (Time) the sample identified on the container(s) and reverse of this request form by "*Request ID No.:*_____" was transferred with evidentiary seal(s):

(check applicable box) ☐ not present, ☐ present & intact, ☐ present & damaged.

Released by: _____ (Signature) & Received by: _____ (Signature)

Request ID No. **ORGANIC CHEMISTRY ANALYTICAL REQUEST FORM** SLD's Accession No.

Request ID No. 154989-B

OR

Scientific Laboratory Division
700 Camino de Salud, NE (P.O. Box 4700)
Albuquerque, NM 87106 (87196-4700)
Phone: 505-841-2500/ -2570/ -2566

OR

For SLD OR- 0R9700412

3 User Code: 553211

Date & Time of Receipt at SLD:

4 Sample Priority: 3 *If 1 or 2 call SLD*

97 FEB 27 PM 3:11

5 Submitter Code: 418 WSS Code: - User's Site ID:

6 Sample Temp. Receipt @ SLD: °C

Facility or WSS Name: SPIRITION

Facility/WSS Location: *If No WSS Code Complete 8, 9 & 10*

8 County: Bernalillo

9 City: Albuquerque

10 State: *or CHANGE* NM *TO*

11 Sampling Location: SPIRITION PILOT TEST Sample #3

12 Sample Collection: On: 02 / 26 / 97 (Date: MM / DD / YY) By: Pine (Last Name) Rob (First Name)

At: 13 : 40 (Time: 24:00 Hour Clock)

13 Sample Info. Contact: Ph: [ ] - 827 - 0178

If not collector, per box 12, Please print name here:

14 *Reports are mailed to the address specified by the Submitter Code and WSS Code (when present). However, if one of the following applies, please check ☒ appropriate boxes below and complete address form.*

☐ New Address for: ☐ Submitter ☐ WSS / Client

☐ Send an additional Report to

Name:

Address:

City: *State:* *Zip:*

15 **Field Data:** *(When appropriate)*

Temperature: °C; pH:

Chlorinated ? ☐ YES or ☐ NO (Please Check Box)

Chlorine Residual: mG/L

Sulfate: mG/L

SDWA Compositing:
☐ No Compositing Permitted
☐ Within This System Only
☐ Within All Systems

16 **Field Remarks:** *(Optional)*
Sample should have high TCE and Toluene

Sample Type: *(Check ☒ only one)*
☐ Water ■ Vapor ☐ Tissue ☐ Other: ☐ Liquid:
☐ Soil ☐ Plant ☐ Blood ☐ Solid:

18 **Preservation:** *(Check ☒ all that apply)*
☐ No Preservation
☐ Stored at 4°C ☐ Preserved with HCl to pH < 2 ☐ Other:

19 **Analyses Requested:** *Please Check ☒ the appropriate box(es) below to indicate your analytical request(s); and, please indicate the number of bottles & vials submitted:* Bottles ____ Vials ____.

Volatile Screens:
☐-(754) Aromatic & Halogenated Volatiles (EPA 8021)
■-(765) Mass Spectrometer Volatiles (EPA 8260)
☐-(774) Volatile Organic Compounds [VOC's] (EPA 502.2)
☐-(766) SDWA Total Trihalomethanes (EPA 502.2)

Other Specific Compounds or Classes:
☐-(___)
☐-(___)

Remarks:

OGC-002096

Semivolatile Screens:
☐-(789) Drinking Water Semivolatile Screens (**Indented list**)
- ☐-(775) EDB, DBCP & TCP (EPA 504.1)
- ☐-(758) Acid Herbicides (EPA 515.2)
- ☐-(772) Carbamates (EPA 531.1)
- ☐-(781) Glyphosate (EPA 547)
- ☐-(782) Endothall (EPA 548.1)
- ☐-(783) Diquat (EPA 549.1)
- ☐-(788) SOC (EPA 525.2)

☐-(755) Base/Neutral Semivolatiles (No Acids) (EPA 8270)
☐-(756) Base/Neutral/Acids Semivolatiles (EPA 625/8270)
☐-(760) Organochlorine Pesticides / PCB's (EPA 608)
☐-(751) Hydrocarbon Fuel Screen (Modified EPA 8015)
☐-(768) Disinfection Byproducts Screen (**Indented list**)
- ☐-(771) Haloacetic Acids (EPA 552.2)
- ☐-(769) Haloacetonitriles / THM's (EPA 551.1)
- ☐-(770) Chloral Hydrate (EPA 551.1)
- ☐-(773) Total Organic Halides [TOX] (EPA 5320b)

Please RETAIN A COPY of your completed form for your records

Organic Section Sample Collection Guidelines

(SLD-#) & Test Description	Approx. No. of Analytes Reported	Maximum Holding Time (days)	Sample Container	General Preservation Footnotes	Preservation Comments for Chlorinated Waters
VOLATILE ORGANIC COMPOUNDS:					
(754) Aromatic and Halogenated Volatiles	63	14	40 mL Glass Vial in duplicate	A, B, E	
(774) SDWA Volatile Organic Compounds, VOC-1's	63	14	40 mL Glass Vial in duplicate	A, B, E	Sample should be Unchlorinated
(766) SDWA Trihalomethanes	4	14	40 mL Glass Vial in duplicate	A, C, E	
(765) Volatile Organic Compounds, VOC's, by GC/MS	63	14	40 mL Glass Vial in duplicate	A, B, E	
SEMIVOLATILE ORGANIC COMPOUNDS:					
(758) Acid Herbicides	13	14	1 L Amber Glass	A, B, D	50 mG Sodium Sulfite per 1 L Bottle
(755) Base/Neutral Semivolatiles Organic Compounds by GC/MS	52	7	1 L Amber Glass in duplicate	A, B	
(756) Base/Neutral /Acid Semivolatile Organic Compounds by GC/MS	92	7	1 L Amber Glass in duplicate	A, B	
(772) Carbamate Pesticides	10	28	40 mL Glass Vial	A, C, D	3 mG Sodium Thiosulfate per 40 mL Vial
(783) Diquat	1	7	1 L Amber Plastic	A, C, D	100 mG/L Sodium Thiosulfate per 1 L Bottle
(775) EDB, DBCP & TCP	3	14	40 mL Glass Vial in duplicate	A, D	Sample should be Unchlorinated
(782) Endothall	1	7	40 mL Glass Vial in duplicate	A, D	4 mG Sodium Thiosulfate per 40 mL Vial
(781) Glyphosate	1	14	40 mL Amber Glass Vial	A, D	3 mG Sodium Thiosulfate per 40 mL Vial
(751) Hydrocarbon Fuel Screen (TPH and Hydrocarbon Range ID)	N/A	14	1 L Amber Glass in duplicate	A, B	
(760) Organochlorine Pesticides and PCB's	39	7	1 L Amber Glass in duplicate	A, B, D	100 mG/L Sodium Thiosulfate per 1 L Bottle
(788) Semivolatile Organic Compounds by GC/MS	72	14	1 L Amber Glass in duplicate	A, B, D	50 mG/L Sodium Sulfite per 1 L Bottle

Preservation Footnotes:

A = Cool samples to 4°C.
B = Reduce pH to 2 with Hydrochloric Acid, HCl.
C = As supplied by SLD, sample containers contain perservatives (check container label); Do **NOT** Rinse Container.
D = Chlorinated systems should request dechlorinating agents for SLD-#'s 775, 768, 772, 781, 782, 783 and 788. Add dechlorinating agent after filling bottle half full, then finish filling bottle. Do **NOT** add acid.
E = Fill bottle completely; i.e. **No** Air Bubble.

* * * * * Please Use Chain-Of-Custody Form Only When Requirements Mandate * * * * *

Single Sample **Chain-Of-Custody Form** *Single Sample*

We, the undersigned, certify that on 2/27/97 (Date) at 14:38 (Time) the sample identified on the container(s) and reverse of this request form by "*Request ID No.:* 154989" was transferred with evidentiary seal(s):

(check applicable box) ☐ not present, ☒ present & intact, ☐ present & damaged.

Released by: [signature] (Signature) & Received by: [signature] (Signature)

Additional Transfer, If Applicable:

We, the undersigned, certify that on 2-27-97 (Date) at 1510 (Time) the sample identified on the container(s) and reverse of this request form by "*Request ID No.:* 154989" was transferred with evidentiary seal(s):

(check applicable box) ☐ not present, ☒ present & intact, ☐ present & damaged.

Released by: [signature] (Signature) & Received by: [signature] (Signature)

[1] Request No. Request ID No. 154987-B

ORGANIC CHEMISTRY ANALYTICAL REQUEST FORM

[2] SLD's Accession No.

OR

Scientific Laboratory Division
700 Camino de Salud, NE (P.O. Box 4700)
Albuquerque, NM 87106 (87196-4700)
Phone: 505-841-2500/ -2570/ -2566

OR

For SLD OR- 0R9700410

[3] User Code: 553211

Date & Time of Receipt at SLD: 97 FEB 27 PM 3:11

[4] Sample Priority: 3 *If 1 or 2 call SLD*

[5] Submitter Code: 418

WSS Code: ___-___

User's Site ID: ___

[6] *Sample Temp. Receipt @ SLD:* ____ °C

[7] Facility or WSS Name: SIPIAIRITIOIN

Facility/WSS Location: *If No WSS Code Complete 8, 9 & 10*

[8] County: Bernalillo

[9] City: Albuquerque

[10] State: *or CHANGE* NM *TO* ___

[11] Sampling Location: SIPIAIRITIOIN PIILIOITI TIEISITI Sample #1

[12] Sample Collection: On: 02 / 26 / 97 (Date: MM / DD / YY) By: Pline (Last Name) Rob (First Name)

At: 9 : 38 (Time: 24:00 Hour Clock)

[13] Sample Info. Contact: Ph: [ ] - 827 - 0178

If **not** collector, per box 12, Please **print** name here: ____

[14] *Reports are mailed to the address specified by the Submitter Code and WSS Code (when present). However, if one of the following applies, please check ☒ appropriate boxes below and complete address form.*

☐ New Address for: ☐ Submitter ☐ WSS / Client

☐ Send an additional Report to ➻

Name: ____

Address: ____

City: ____ *State:* ____ *Zip:* ____

[15] **Field Data:** *(When appropriate)*

Temperature: ____ °C; pH: ____

Chlorinated ? ☐ YES or ☐ NO (Please Check Box)

Chlorine Residual: ____ mG/L

Sulfate: ____ mG/L

SDWA Compositing:
☐ No Compositing Permitted
☐ Within This System Only
☐ Within All Systems

[16] **Field Remarks:** *(Optional)*

Sample should have high TCE and Toluene

[17] **Sample Type:** *(Check ☒ only one)*
☐ Water ■ Vapor ☐ Tissue ☐ Other: ☐ Liquid:
☐ Soil ☐ Plant ☐ Blood ☐ Solid: ____

[18] **Preservation:** *(Check ☒ all that apply)*
☐ No Preservation
☐ Stored at 4°C ☐ Preserved with HCl to pH < 2 ☐ Other: ____

[19] **Analyses Requested:** *Please Check ☒ the appropriate box(es) below to indicate your analytical request(s); and, please indicate the number of bottles & vials submitted:* Bottles ____ Vials ____.

Volatile Screens:
☐-(754) Aromatic & Halogenated Volatiles (EPA 8021)
■-(765) Mass Spectrometer Volatiles (EPA 8260)
☐-(774) Volatile Organic Compounds [VOC's] (EPA 502.2)
☐-(766) SDWA Total Trihalomethanes (EPA 502.2)

Other Specific Compounds or Classes:
☐-(___) ____
☐-(___) ____

Remarks: ____

OGC-002088

Semivolatile Screens:
☐-(789) Drinking Water Semivolatile Screens **(Indented list)**
- ☐-(775) EDB, DBCP & TCP (EPA 504.1)
- ☐-(758) Acid Herbicides (EPA 515.2)
- ☐-(772) Carbamates (EPA 531.1)
- ☐-(781) Glyphosate (EPA 547)
- ☐-(782) Endothall (EPA 548.1)
- ☐-(783) Diquat (EPA 549.1)
- ☐-(788) SOC (EPA 525.2)

☐-(755) Base/Neutral Semivolatiles (No Acids) (EPA 8270)
☐-(756) Base/Neutral/Acids Semivolatiles (EPA 625/8270)
☐-(760) Organochlorine Pesticides / PCB's (EPA 608)
☐-(751) Hydrocarbon Fuel Screen (Modified EPA 8015)
☐-(768) Disinfection Byproducts Screen **(Indented list)**
- ☐-(771) Haloacetic Acids (EPA 552.2)
- ☐-(769) Haloacetonitriles / THM's (EPA 551.1)
- ☐-(770) Chloral Hydrate (EPA 551.1)
- ☐-(773) Total Organic Halides [TOX] (EPA 5320b)

Please RETAIN A COPY of your completed form for your records

Organic Section Sample Collection Guidelines

(SLD-#) & Test Description	Approx. No. of Analytes Reported	Maximum Holding Time (days)	Sample Container	General Preservation Footnotes	Preservation Comments for Chlorinated Waters
VOLATILE ORGANIC COMPOUNDS:					
(754) Aromatic and Halogenated Volatiles	63	14	40 mL Glass Vial in duplicate	A, B, E	
(774) SDWA Volatile Organic Compounds, VOC-1's	63	14	40 mL Glass Vial in duplicate	A, B, E	Sample should be Unchlorinated
(766) SDWA Trihalomethanes	4	14	40 mL Glass Vial in duplicate	A, C, E	
(765) Volatile Organic Compounds, VOC's, by GC/MS	63	14	40 mL Glass Vial in duplicate	A, B, E	
SEMIVOLATILE ORGANIC COMPOUNDS:					
(758) Acid Herbicides	13	14	1 L Amber Glass	A, B, D	50 mG Sodium Sulfite per 1 L Bottle
(755) Base/Neutral Semivolatiles Organic Compounds by GC/MS	52	7	1 L Amber Glass in duplicate	A, B	
(756) Base/Neutral /Acid Semivolatile Organic Compounds by GC/MS	92	7	1 L Amber Glass in duplicate	A, B	
(772) Carbamate Pesticides	10	28	40 mL Glass Vial	A, C, D	3 mG Sodium Thiosulfate per 40 mL Vial
(783) Diquat	1	7	1 L Amber Plastic	A, C, D	100 mG/L Sodium Thiosulfate per 1 L Bottle
(775) EDB, DBCP & TCP	3	14	40 mL Glass Vial in duplicate	A, D	Sample should be Unchlorinated
(782) Endothall	1	7	40 mL Glass Vial in duplicate	A, D	4 mG Sodium Thiosulfate per 40 mL Vial
(781) Glyphosate	1	14	40 mL Amber Glass Vial	A, D	3 mG Sodium Thiosulfate per 40 mL Vial
(751) Hydrocarbon Fuel Screen (TPH and Hydrocarbon Range ID)	N/A	14	1 L Amber Glass in duplicate	A, B	
(760) Organochlorine Pesticides and PCB's	39	7	1 L Amber Glass in duplicate	A, B, D	100 mG/L Sodium Thiosulfate per 1 L Bottle
(788) Semivolatile Organic Compounds by GC/MS	72	14	1 L Amber Glass in duplicate	A, B, D	50 mG/L Sodium Sulfite per 1 L Bottle

Preservation Footnotes:

A = Cool samples to 4°C.
B = Reduce pH to 2 with Hydrochloric Acid, HCl.
C = As supplied by SLD, sample containers contain perservatives (check container label); Do **NOT** Rinse Container.
D = Chlorinated systems should request dechlorinating agents for SLD-#'s 775, 768, 772, 781, 782, 783 and 788. Add dechlorinating agent after filling bottle half full, then finish filling bottle. Do **NOT** add acid.
E = Fill bottle completely; i.e. No Air Bubble.

* * * * * Please Use Chain-Of-Custody Form Only When Requirements Mandate * * * * *

Single Sample **Chain-Of-Custody Form** *Single Sample*

We, the undersigned, certify that on 2/27/97 (Date) at 14:38 (Time) the sample identified on the container(s) and reverse of this request form by "*Request ID No.:* 154987" was transferred with evidentiary seal(s):

(check applicable box) ☐ not present, ☒ present & intact, ☐ present & damaged.

Released by: [signature] (Signature) & Received by: [signature] (Signature)

Additional Transfer, If Applicable:

We, the undersigned, certify that on 2-27-97 (Date) at 1510 (Time) the sample identified on the container(s) and reverse of this request form by "*Request ID No.:* 154987" was transferred with evidentiary seal(s):

(check applicable box) ☐ not present, ☒ present & intact, ☐ present & damaged.

Released by: [signature] (Signature) & Received by: [signature] (Signature)

OGC-002089

STATE OF NEW MEXICO DEPARTMENT OF HEALTH

SCIENTIFIC LABORATORY DIVISION

P.O. Box 4700
Albuquerque, NM 87196-4700

700 Camino de Salud, NE
[505] 841-2500

ORGANIC CHEMISTRY SECTION [505] 841-2570

REPORT TO CLIENT: X

Attn: Rob Pine
Ground Water Quality Bureau
P.O. Box 26110
Santa Fe, New Mexico 87502

SLD No.: OR- 9700410
REQUEST ID No.: 154987
RECEIVED AT SLD: 2/27/97
SLD COPY USER 55321

SAMPLE COLLECTION: DATE: 2/26/97 TIME: 938 BY: Pin
SAMPLING LOCATION: Sparton Pilot Test Sample #1
SAMPLE MATRIX: Gas REPORTING UNITS: uG/L

Remarks: Tedlar Gas Bag Sample

EPA METHOD 8260 Modified MASS SPECTROMETER VOLATILES BY PURGE AND TRAP

DATE EXTRACTED: N/A
DATE ANALYZED: 2/27/97 1 Days: Within EPA Analysis Time
AIR SAMPLE VOL (mL): 0.01

ANALYSIS No.: OR- 9700410
SLD BATCH No.: 066A&B
DILUTION FACTOR: 100.00
REQUEST ID No.: 154987

Barometric Pressure During Analayis in mm of Mercury: 636

RECEIVED MAR 26 By

CAS #	ANALYTE NAME	CONCENTRATION uG/L$_{air}$	CONCENTRATION ppm V/V	QUAL.	Sample Detection Limit uG/L$_{air}$	Sample Detection Limit ppm V/V
71-43-2	Benzene			U	500.0	184.04
108-86-1	Bromobenzene			U	500.0	91.43
74-97-5	Bromochloromethane			U	500.0	111.28
75-27-4	Bromodichloromethane*			U	500.0	87.53
75-25-2	Bromoform*			U	500.0	56.74
24-83-9	Bromomethane			U	500.0	151.11
78-93-3	2-Butanone (MEK)			U	5000.0	1993.77
104-51-8	n-Butylbenzene			U	500.0	107.13
135-98-8	sec-Butylbenzene			U	500.0	107.13
98-06-6	tert-Butylbenzene			U	500.0	107.13
1634-04-4	tert-Butyl methyl ether (MTBE)			U	5000.0	1631.27
56-23-5	Carbon tetrachloride			U	500.0	93.22
108-90-7	Chlorobenzene (monochlorobenzene)			U	500.0	127.04
75-00-3	Chloroethane			U	500.0	220.85
67-66-3	Chloroform*			U	500.0	120.63
74-87-3	Chloromethane			U	500.0	287.10
95-49-8	2-Chlorotoluene			U	500.0	113.93
106-43-4	4-Chlorotoluene			U	500.0	113.93
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)			U	500.0	60.57
124-48-1	Dibromochloromethane*			U	500.0	69.02
106-93-4	1,2-Dibromoethane (Ethylene dibromide (EDB))			U	500.0	76.36
74-95-3	Dibromomethane			U	500.0	152.71
95-50-1	1,2-Dichlorobenzene (o-Dichlorobenzene)			U	500.0	97.65
541-73-1	1,3-Dichlorobenzene (m-Dichlorobenzene)			U	500.0	97.65
106-46-7	1,4-Dichlorobenzene (p-Dichlorobenzene)			U	500.0	97.65
75-71-8	Dichlorodifluoromethane			U	500.0	118.64
75-34-3	1,1-Dichloroethane			U	500.0	145.00
107-06-2	1,2-Dichloroethane			U	500.0	145.00
75-35-4	1,1-Dichloroethene	310	90	J	500.0	147.99
156-59-2	cis-1,2-Dichloroethene			U	500.0	147.99
156-60-5	trans-1,2-Dichloroethene			U	500.0	147.99
78-87-5	1,2-Dichloropropane			U	500.0	127.04
142-28-9	1,3-Dichloropropane			U	500.0	127.04
590-20-7	2,2-Dichloropropane			U	500.0	127.04
563-58-6	1,1-Dichloropropene			U	500.0	129.33
1006-01-5	cis-1,3-Dichloropropene			U	500.0	129.33

1006-02-6	trans-1,3-Dichloropropene			U	500.0	129.3
100-41-4	Ethylbenzene			U	500.0	135.43
87-68-3	Hexachlorobutadiene			U	500.0	55.00
98-82-8	Isopropylbenzene			U	500.0	119.63
99-87-6	4-Isopropyltoluene			U	500.0	106.33
75-09-2	Methylene chloride (Dichloromethane)			U	1000.0	337.77
91-20-3	Naphthalene			U	500.0	90.86
103-65-1	Propylbenzene			U	500.0	119.63
100-42-5	Styrene			U	500.0	138.03
630-20-6	1,1,1,2-Tetrachloroethane			U	500.0	85.45
79-34-5	1,1,2,2-Tetrachloroethane			U	500.0	85.45
127-18-4	Tetrachloroethene			U	500.0	86.48
109-99-9	Tetrahydrofuran (THF)			U	5000.0	1993.77
108-88-3	Toluene	3300	1000		500.0	156.03
87-61-5	1,2,3-Trichlorobenzene			U	500.0	79.31
120-82-1	1,2,4-Trichlorobenzene			U	500.0	79.31
71-55-6	1,1,1-Trichloroethane	2900	640		500.0	107.93
79-00-5	1,1,2-Trichloroethane			U	500.0	107.93
79-01-6	Trichloroethene	12000	2500		500.0	109.58
75-69-4	Trichlorofluoromethane			U	500.0	104.02
96-18-4	1,2,3-Trichloropropane			U	500.0	97.65
95-63-6	1,2,4-Trimethylbenzene			U	500.0	119.63
108-67-8	1,3,5-Trimethylbenzene			U	500.0	119.63
75-01-4	Vinyl chloride			U	500.0	231.53
95-47-6	o-Xylene*			U	500.0	135.43
N/A	p- & m-Xylene*			U	500.0	135.43
N/A	*Total Xylenes*			U	500.0	135.43
N/A	*Total Trihalomethanes*		N/A	U	500.0	

Laboratory Remarks: **Average recovery of the TCE Gas Calibration Standard was 89%.**
Results are the average of analyses run on 2/27/97 and 2/28/97.

LABORATORY BATCH QUALITY CONTROL SUMMARY

	SURROGATE COMPOUNDS	CONCENTRATION (uG/L$_{air}$)	% RECOVERY
SURROGATE RECOVERIES:	Toluene - D8	5025	100.5%
	4 - Bromofluorobenzene	5050	101.0%
	1,2 - Dichlorobenzene - D4	5165	103.3%

LABORATORY FORTIFIED BLANK RECOVERIES

The % recoveries for compounds in the batch spike were from 80% to 120% with the exception of the compounds listed below (concentrations are relative to sample dilution):

COMPOUND CONCENTRATION (uG/L) % RECOVERY

No Exceptions

LABORATORY BLANKS

No target compounds were detected above the sample detection limit in laboratory blankwith the exception of the compound(s) listed below (concentrations are relative to sample dilution):

COMPOUND CONCENTRATION (uG/L)

No Exceptions

ANALYST: **Patrick Basile** QC APPROVED BY: **Ken Sherrell**

DEFINITIONS

**	Concentration Exceeds EPA's allowable Maximum Contamination Level
CAS#	Chemical Abstract Services Number - Unique number to help identify analytes listed by different names
CONC.	Concentration (ug/L) of analyte actually detected in the sample
QUAL	Qualifier of analytical results as follows:
	B Analyte was detected in laboratory blank
	J Analyte was detected at a level below which an accurate quanitation can be given (~5 * SDL)
	U No analyte was detected above the Sample Detection Limit.
SDL	Sample Detection Limit - The lowest concentration which can be differentiated from Zero with 99% confidence taking sample size (compositing) into account.
ug/L	Concentration Units - micrograms per liter which is approximately equivalent to Parts Per Billion (ppb)

STATE OF NEW MEXICO DEPARTMENT OF HEALTH

SCIENTIFIC LABORATORY DIVISION

P.O. Box 4700 700 Camino de Salud, NE
Albuquerque, NM 87196-4700 [505] 841-2500

ORGANIC CHEMISTRY SECTION [505] 841-2570

REPORT TO CLIENT

Attn: Rob Pine
Ground Water Quality Bureau
P.O. Box 26110
Santa Fe, New Mexico 87502

SLD No.: OR- 9700412
REQUEST ID No.: 154989
RECEIVED AT SLD: 2/27/97
SLD COPY USER 55321

SAMPLE COLLECTION: DATE: 2/26/97 TIME: 1340 BY: Pin
SAMPLING LOCATION: Sparton Pilot Test Sample #3
SAMPLE MATRIX: Gas REPORTING UNITS: uG/L

Remarks: Tedlar Gas Bag Sample

EPA METHOD 8260 Modified MASS SPECTROMETER VOLATILES BY PURGE AND TRAP

DATE EXTRACTED: N/A
DATE ANALYZED: 2/28/97 2 Days: Within EPA Analysis Time
AIR SAMPLE VOL (mL): 0.01

ANALYSIS No.: OR- 9700412
SLD BATCH No.: 066A&B
DILUTION FACTOR: 100.00
REQUEST ID No.: 154989

Barometric Pressure During Analayis in mm of Mercury: 636

CAS #	ANALYTE NAME	CONCENTRATION		QUAL.	Sample Detection Limit	
		uG/L$_{air}$	ppm V/V		uG/L$_{air}$	ppm V/V
71-43-2	Benzene			U	500.0	184.04
108-86-1	Bromobenzene			U	500.0	91.43
74-97-5	Bromochloromethane			U	500.0	111.28
75-27-4	Bromodichloromethane*			U	500.0	87.53
75-25-2	Bromoform*			U	500.0	56.74
24-83-9	Bromomethane			U	500.0	151.11
78-93-3	2-Butanone (MEK)			U	5000.0	1993.77
104-51-8	n-Butylbenzene			U	500.0	107.13
135-98-8	sec-Butylbenzene			U	500.0	107.13
98-06-6	tert-Butylbenzene			U	500.0	107.13
1634-04-4	tert-Butyl methyl ether (MTBE)			U	5000.0	1631.27
56-23-5	Carbon tetrachloride			U	500.0	93.22
108-90-7	Chlorobenzene (monochlorobenzene)			U	500.0	127.04
75-00-3	Chloroethane			U	500.0	220.85
67-66-3	Chloroform*			U	500.0	120.63
74-87-3	Chloromethane			U	500.0	287.10
95-49-8	2-Chlorotoluene			U	500.0	113.93
106-43-4	4-Chlorotoluene			U	500.0	113.93
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)			U	500.0	60.57
124-48-1	Dibromochloromethane*			U	500.0	69.02
106-93-4	1,2-Dibromoethane (Ethylene dibromide (EDB))			U	500.0	76.36
74-95-3	Dibromomethane			U	500.0	152.71
95-50-1	1,2-Dichlorobenzene (o-Dichlorobenzene)			U	500.0	97.65
541-73-1	1,3-Dichlorobenzene (m-Dichlorobenzene)			U	500.0	97.65
106-46-7	1,4-Dichlorobenzene (p-Dichlorobenzene)			U	500.0	97.65
75-71-8	Dichlorodifluoromethane			U	500.0	118.64
75-34-3	1,1-Dichloroethane			U	500.0	145.00
107-06-2	1,2-Dichloroethane			U	500.0	145.00
75-35-4	1,1-Dichloroethene	340	99	J	500.0	147.99
156-59-2	cis-1,2-Dichloroethene			U	500.0	147.99
156-60-5	trans-1,2-Dichloroethene			U	500.0	147.99
78-87-5	1,2-Dichloropropane			U	500.0	127.04
142-28-9	1,3-Dichloropropane			U	500.0	127.04
590-20-7	2,2-Dichloropropane			U	500.0	127.04
563-58-6	1,1-Dichloropropene			U	500.0	129.33
1006-01-5	cis-1,3-Dichloropropene			U	500.0	129.33

1006-02-6	trans-1,3-Dichloropropene			U	500.0	129.33
100-41-4	Ethylbenzene			U	500.0	135.43
87-68-3	Hexachlorobutadiene			U	500.0	55.00
98-82-8	Isopropylbenzene			U	500.0	119.63
99-87-6	4-Isopropyltoluene			U	500.0	106.33
75-09-2	Methylene chloride (Dichloromethane)			U	1000.0	337.77
91-20-3	Naphthalene			U	500.0	90.86
103-65-1	Propylbenzene			U	500.0	119.63
100-42-5	Styrene			U	500.0	138.03
630-20-6	1,1,1,2-Tetrachloroethane			U	500.0	85.45
79-34-5	1,1,2,2-Tetrachloroethane			U	500.0	85.45
127-18-4	Tetrachloroethene			U	500.0	86.48
109-99-9	Tetrahydrofuran (THF)			U	5000.0	1993.77
108-88-3	Toluene	2300	710		500.0	156.03
87-61-5	1,2,3-Trichlorobenzene			U	500.0	79.31
120-82-1	1,2,4-Trichlorobenzene			U	500.0	79.31
71-55-6	1,1,1-Trichloroethane	2700	590		500.0	107.93
79-00-5	1,1,2-Trichloroethane			U	500.0	107.93
79-01-6	Trichloroethene	10000	2300		500.0	109.58
75-69-4	Trichlorofluoromethane			U	500.0	104.02
96-18-4	1,2,3-Trichloropropane			U	500.0	97.65
95-63-6	1,2,4-Trimethylbenzene			U	500.0	119.63
108-67-8	1,3,5-Trimethylbenzene			U	500.0	119.63
75-01-4	Vinyl chloride			U	500.0	231.53
95-47-6	o-Xylene#			U	500.0	135.43
N/A	p- & m-Xylene#			U	500.0	135.43
N/A	#Total Xylenes#			U	500.0	135.43
N/A	*Total Trihalomethanes*		N/A	U	500.0	

Laboratory Remarks: **Average recovery of the TCE Gas Calibration Standard was 89%.**
Results are the average of analyses run on 2/28/97.

LABORATORY BATCH QUALITY CONTROL SUMMARY			
SURROGATE RECOVERIES:	SURROGATE COMPOUNDS	CONCENTRATION (uG/L$_{air}$)	% RECOVERY
	Toluene - D8	**4970**	**99.4%**
	4 - Bromofluorobenzene	**5020**	**100.4%**
	1,2 - Dichlorobenzene - D4	**5305**	**106.1%**
LABORATORY FORTIFIED BLANK RECOVERIES	The % recoveries for compounds in the batch spike were from 80% to 120% with the exception of the compounds listed below (concentrations are relative to sample dilution): COMPOUND CONCENTRATION (uG/L) % RECOVERY **No Exceptions**		
LABORATORY BLANKS	No target compounds were detected above the sample detection limit in laboratory blankwith the exception of the compound(s) listed below (concentrations are relative to sample dilution): COMPOUND CONCENTRATION (uG/L) **No Exceptions**		

ANALYST: **Patrick Basile** QC APPROVED BY: **Ken Sherrell**

DEFINITIONS

**	Concentration Exceeds EPA's allowable Maximum Contamination Level
CAS#	Chemical Abstract Services Number - Unique number to help identify analytes listed by different names
CONC.	Concentration (ug/L) of analyte actually detected in the sample
QUAL	Qualifier of analytical results as follows:
	B Analyte was detected in laboratory blank
	J Analyte was detected at a level below which an accurate quanitation can be given (~5 * SDL)
	U No analyte was detected above the Sample Detection Limit.
SDL	Sample Detection Limit - The lowest concentration which can be differentiated from Zero with 99% confidence taking sample size (compositing) into account.
ug/L	Concentration Units - micrograms per liter which is approximately equivalent to Parts Per Billion (ppb)

OGC-002095

SPARTON VAPOR RECOVERY WELLS

FEBRUARY 20 & MARCH 20, 1997

			1,1-DCE	1,1,1-TCA	TCE	Toluene
VR-1	Sparton	2/20/97	150 (1000)	1200 (2000)	7400 E(2000)	7500 (1000)
		3/20/97	100 (500)	2600 (2000)	13000 (2000)	6400 (2000)
	NMED	2/20/97	380 (100)	5200 (100)	25000 (100)	8300 (100)
		3/20/97	310 (100)	2900 (100)	24000 (100)	7300 (100)
VR-2	Sparton	2/20/97	150 (2000)	1200 (2000)	3600 (2000)	ND (100)
		3/20/97	57 (100)	430 (2000)	1800 (2000)	ND (100)
	NMED	2/20/97	320 (66)	2300 (66)	6600 (66)	360 (66)
		3/20/97	250 (40)	960 (40)	6700 (40)	740 (40)
VR-3	Sparton	2/20/97	87 E(20)	220 (1000)	870 (1000)	ND
		3/20/97	33 (500)	370 (500)	840 (500)	ND
	NMED	2/20/97	110 (40)	850 (40)	2000 (40)	ND
		3/20/97	78 (10)	340 (10)	1200 (10)	ND
VR-4	Sparton	2/20/97	94 (50)	1600 (2000)	3800 (2000)	ND
		3/20/97	41 (50)	310 (2000)	1200 (2000)	ND
	NMED	2/20/97	ND (66)	1100 (66)	2600 (66)	ND
		3/20/97	120 (10)	430 (10)	2400 (10)	ND
VR-5	Sparton	2/20/97	130 (50)	610 (2000)	2300 (2000)	ND
		3/20/97	29 (50)	170 E(50)	860 (2000)	ND
	NMED	2/20/97	200 (66)	980 (66)	2500 (66)	ND
		3/20/97	190 (10)	530 (10)	2400 (10)	ND

Concentrations in ug/l

Number in ( ) is Dilution Factor

E = Estimated Value, Out of Range