## APPENDIX C ANALYTICAL LABORATORY REPORTS



P.O. BOX 557,COTTON ROAD MEADVILLE, PENNSYLVANIA 16335 PHONE: (814) 724-6242 FAX: (814) 333-1466 5815 AIRPORT ROAD ROANOKE, VIRGINIA 24012 PHONE: (703) 265-2544 FAX: (703) 362-1663

09/26/95

TO:

DELPHI HARRISON THRM.SYS ATTN: MS. CATHERINE VER

200 UPPER MOUNTAIN RD.

LOCKPORT

NY 14094

P.O. # HH48888

.

ACCOUNT NO. 01220

**ANALYTICAL REPORT FORM** 

				PAGE 3		
	SAMPLE ID :	MW-1 09/19/95	MW-2 09/19/95	MW-3 09/19/95	MW-4 09/19/95	
PARAMETER	LAB ID DATE RECEIVED:	50920412 09/20/95	50920413 09/20/95	50920414 09/20/95	50920415 09/20/95	

	· · ·			
VOLATILE COMPOUNDS	UNITS = MG/L			
CHLOROMETHANE	<1.0 D	<1.0 D	<1.0 D	<1.0 D
BROMOMETHANE	<1.0 D	<1.0 D	<1.0 D	<1.0 D
VINYL CHLORIDE	<1.0 D	3.5	1.1	<1.0 D
CHLOROETHANE	<1.0 D	<1.0 D	<1.0 D	<1.0 D
METHYLENE CHLORIDE	<0.5 D	<0.5 D	<0.5 D	<0.5 D
ACETONE	<10 D	<10 D	<10 D	<10 D
CARBON DISULFIDE	<0.5 D	<0.5 D	<0.05 D	<0.5 D
1,1,-DICHLOROETHENE	<0.5 D	<0.5 D	<0.05 D	<0.5 D
1,1,-DICHLOROETHANE	<0.5 D	<0.5 D	<0.05 D	<0.5 D
1,2-DICHLORO***	11	93	160	170
CHLOROFORM	<0.5 D	<0.5 D	<0.5 D	<0.5 D
1,2-DICHLOROETHANE	<0.5 D	<0.5 D	<0.5 D	<0.5 D
2-BUTANONE	<10 D	<10 D	<10 D	<0.5 D
1,1,1-TRICHLOROETHA*	<0.5 D	<0.5 D	. <0.5 D .	<0.5 D
CARBON TETRACHLORIDE	<0.5 D	<0.5 D	<0.5 D	<0.5 D
VINYL ACETATE	<5.0 D	<5.0 D	<5.0 D	<5.0 D
BROMODICHLOROMETHANE	<0.5 D	<0.5 D	<0.5 D	<0.5 D
1,1,2,2-TETRACHLORO*	<0.5 D	<0.5 D		<0.5 D
1,2-DICHLOROPROPANE	<0.5 D	<0.5 D	<0.5 D	<0.5 D
TRANS-1,3-DICHLOROP*	<0.5 D	<0.5 D	<0.5 D	<0.5 D
TRICHLOROETHENE	6,500	590	0.6	0.6
DIBROMOCHLOROMETHANE	<0.5 D	<0.5 D	<0.5 D	<0.5 D
1,1,2-TRICHLOROETHA*	<0.5 D	<0.5 D	<0.5 D	<0.5 D
BENZENE	<0.5 D	<0.5 D	2.7	2.7
CIS-1,3-DICHLOROPRO*	<0.5 D	<0.5 D	<0.5 D	<0.5 D

<sup>\*</sup>Some of the above names have been abbreviated. Please reference the enclosed list for their complete names.

#### **MEADVILLE DIVISION**

J.I.H.A. Accreditation No. 98
J.S. Public Health Services Approved Facility
A D.E.R. Laboratory I.D. No. 20-073
PA Dept. of Agriculture Approved Dairy Laboratory
NY Dept. of Health Laboratory I.D. No. 10552
IY Dept. of Env. Conservation Approved Facility

ND Dept. of Health Cert. No. R-083 MD Dept. of Health Cert. No. 130 VA Dept. of Health Laboratory I.D. No. 00145 WV Dept. of Health Certification No. 9907C NC Dept. of Natural Resources Cert. No. 236 MI Dept. of Public Health Approved Facility U.S. Office of Surface Mining Approved Facility **ROANOKE DIVISION** 

VA Dept. of Health Laboratory I.D. No. 00143

D-52



P.O. BOX 557,COTTON ROAD MEADVILLE, PENNSYLVANIA 16335 PHONE: (814) 724-6242 FAX: (814) 333-1466 5815 AIRPORT ROAD ROANOKE, VIRGINIA 24012 PHONE: (703) 265-2544 FAX: (703) 362-1663

09/26/95

TO:

DELPHI HARRISON THRM.SYS ATTN: MS. CATHERINE VER 200 UPPER MOUNTAIN RD. P.O. # HH48888

LOCKPORT

NY 14094

ACCOUNT NO. 01220

#### **ANALYTICAL REPORT FORM**

	ANALI HOAL HEI OM I OM			PAGE 4	
	SAMPLE ID :	MW-1 09/19/95	MW-2 09/19/95	MW-3 09/19/95	MW-4 09/19/95
PARAMETER	LAB ID DATE RECEIVED:			50920 <b>414</b> 09/20/95	50920415 09/20/95
VOLATILE COMPOUNDS	(Cont.) UNITS	= MG/L			
2-CHLOR* VINYL ETH BROMOFORM	<b>ER</b>	<1.0 D <0.5 D	<1.0 D <0.5 D	<1.0 D <0.5 D	<1.0 D <0.5 D
2-HEXANONE 4-METHYL-2-PENTANO	NR:	<5.0 D	<5.0 D <5.0 D	<5.0 D	<5.0 D <5.0 D
TETRACHLOROETHENE		<0.5 D	<0.5 D	<0.5 D	<0.5 D
TOLUENE CHLOROBENZENE		<0.5 D <0.5 D	<0.5 D <0.5 D	2.7 <0.5 D	2.6 <0.5 D
ETHYL BENZENE STYRENE		<0.5 D	<0.5 D <0.5 D	1.5 <0.5 D	1.5 <0.5 D
TOTAL XYLENES		<0.5 D	<0.5 D	2.6	2.8

Please reference the following page(s) for date and analyst.

\*Some of the above names have been abbreviated. Please reference the enclosed list for their complete names.

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NY Dept. of Health Laboratory I.D. No. 10552
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VA Dept. of Health Laboratory I.D. No. 00143

D-53

< =LESS THAN

>=GREATER THAN

w.f.=WILL FOLLOW



P.O. BOX 557,COTTON ROAD MEADVILLE, PENNSYLVANIA 16335 PHONE: (814) 724-6242 FAX: (814) 333-1466 5815 AIRPORT ROAD ROANOKE, VIRGINIA 24012 PHONE: (703) 265-2544 FAX: (703) 362-1663

09/26/95

TO:

DELPHI HARRISON THRM.SYS

ATTN: MS. CATHERINE VER

200 UPPER MOUNTAIN RD.

LOCKPORT

NY 14094

P.O. # HH48888

ACCOUNT NO. 01220

#### ANALYTICAL REPORT FORM

PAGE

5

SAMPLE ID

TRIP BLANK

LAB ID

50920416

DATE RECEIVED:

09/20/95

PARAMETER	RESULTS	Units	DATE AND ANALYST
VOLATILE COMPOUNDS			
Chloromethane	<0.010	MG/L	09/23/95 MAJOR/
Bromomethane	<0.010		ECKLUND
Vinyl Chloride	<0.010		
Chloroethane	<0.010		
Methylene Chloride	<0.005		
Acetone	<0.10		
Carbon Disulfide	<0.005		
1,1-Dichloroethene	<0.005	,	
1,1-Dichloroethane	<0.005		
1,2-Dichloroethenes (Total)***	<0.005		
Chloroform	<0.005		
1,2-Dichloroethane	<0.005		
2-Butanone	<0.10	•	•
1,1,1-Trichloroethane	<0.005		$S_{i}$
Carbon Tetrachloride	<0.005		
Vinyl Acetate	<0.050		
Bromodichloromethane	<0.005	i	
1,1,2,2-Tetrachloroethane	<0.005		
1,2-Dichloropropane	<0.005		
trans-1,3-Dichloropropene	<0.005		
Trichloroethene	<0.005		•
Dibromochloromethane	<0.005		
1,1,2-Trichloroethane	<0.005		

\*\*\*EPA Methods 601 and 624 and SW 846 Methods 8010 and 8240 do not differentiate the co-eluting cis and trans-1,2-dichloroethenes. The result reported is the sum of both compounds.

**MEADVILLE DIVISION** 

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VA Dept. of Health Laboratory I.D. No. 00143

D-54

KEY:

< =LESS THAN

>=GREATER THAN

w.f.=WILL FOLLOW



P.O. BOX 557,COTTON ROAD MEADVILLE, PENNSYLVANIA 16335 PHONE: (814) 724-6242 FAX: (814) 333-1466 5815 AIRPORT ROAD ROANOKE, VIRGINIA 24012 PHONE: (703) 265-2544 FAX: (703) 362-1663

09/26/95

TO:

DELPHI HARRISON THRM.SYS

ATTN: MS. CATHERINE VER 200 UPPER MOUNTAIN RD.

LOCKPORT

NY 14094

P.O. # HH48888

ACCOUNT NO. 01220

#### ANALYTICAL REPORT FORM

PAGE 6

SAMPLE ID

TRIP BLANK

LAB ID

50920416

DATE RECEIVED:

09/20/95

PARAMETER	RESULTS	UNITS	DATE AND ANALYST
VOLATILE COMPOUNDS Continued			
Benzene	<0.005	MG/L	09/23/95 MAJOR/
cis-1,3-Dichloropropene	<0.005		ECKLUND
2-Chloroethylvinyl ether	<0.010		
Bromoform	<0.005		
2-Hexanone	<0.050		
4-Methyl-2-pentanone	<0.050		
Tetrachloroethene	<0.005	,	
Toluene	<0.005		
Chlorobenzene	<0.005		
Ethylbenzene	<0.005		•
Styrene	<0.005		
Total Xylenes	<0.005		

Volatile Compounds - Method 8240A

"Test Methods for Evaluating Solid Waste: Physical/Chemical Methods", SW-846, Third Edition, U.S. Environmental Protection Agency. Revised 1986.

ASST. LABORATORY DIRECTOR

Andrew K. Ecklund

pc: Mr. Steve Blair, GZA

MEADVILLE DIVISION

I.H.A. Accreditation No. 98
I.S. Public Health Services Approved Facility
A D.E.R. Laboratory I.D. No. 20-073
PA Dept. of Agriculture Approved Dairy Laboratory
NY Dept. of Health Laboratory I.D. No. 10552

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ROANOKE DIVISION
VA Dept. of Health Laboratory I.D. No. 00143

D-55

PO. Box 557, Cotton Road Meadville, Pennsylvania 16335-0557 Phone: Area Code 814/724-6242 FAX: Area Code 814/333-1466



ENVIRONMENTAL OCCUPATIONAL HEALTH FOOD SCIENCE SPECIALISTS

Bromodichloromethane

Unabbreviated Listing of Hazardous Substance List Compounds

VOL	ATIL	E CC	IMPOL	JNDS

Chloromethane

1,1,2,2-Tetrachloroethane Bromomethane Vinyl Chloride 1,2-Dichloropropane trans-1,3-Dichloropropene Chloroethane Trichloroethene Methylene Chloride Dibromochloromethane Acetone 1,1,2-Trichloroethane Carbon Disulfide Benzene 1,1-Dichloroethene cis-1,3-Dichloropropene 1,1-Dichloroethane 2-Chloroethyl Vinyl Ether 1,2-Dichloroethylenes (Total)\*\*\* Chloroform Bromoform 2-Hexanone 1.2-Dichloroethane

2-Butanone 4-Methyl-2-pentanone

1,1,1-Trichloroethane Tetrachloroethene

Carbon Tetrachloride Toluene

Vinyl Acetate Chlorobenzene

Ethyl Benzene

Styrene

Total Xylenes

\*\*\*EPA Methods 601 and 624 and SW 846 Methods 8010 and 8240 do not differentiate the co-eluting cis and trans-1,2-dichloroethenes. The result reported to you is the sum of both compounds.



P.O. BOX 557,COTTON ROAD **MEADVILLE, PENNSYLVANIA 16335** PHONE: (814) 724-6242 FAX: (814) 333-1466

**5815 AIRPORT ROAD ROANOKE, VIRGINIA 24012** PHONE: (703) 265-2544 FAX: (703) 362-1663

TO:

Results expressed as MG/KG or % are calculated on an as received weight basis, with two exceptions: % volatile solids and % fixed solids (% ash) are expressed on a dry weight basis.

#### ANALYTICAL REPORT FORM

CODE B:

This analyte was detected in the associated blank as well as in the sample. It indicates possible/probable contamination. The data user may subtract the blank value from the sample value at his/her discretion.

CODE D:

Detection limit change due to a dilution.

CODE R:

The percent recovery on the spiked sample associated with this sample was not within the acceptance limits of 75% - 125%

CODE S:

This result was obtained by Method of Standard Additions.

CODE NA:

Not Applicable

CODE ND:

Not Detectable

PRC:

Preparation Reference Control

VOID:

The sample plus spike concentration exceeded the linear range of

the standard curve.

CODE Q:

Values for parameters quantified in this sample have been adjusted for recoveries of the analytical matrix spike.

The adjustments have been based on the matrix recoveries from this sample. Adjusted values are not given where sample values were less than the detection limit or where spike recoveries are

equal to 100%

CODE J:

This result is an estimated value. It indicates that the compound meets the mass spectral data identification criteria. The result is less than the quantitation limit but greater

than zero.

LI.H.A. Accreditation No. 98 U.S. Public Health Services Approved Facility PA D.E.R. Laboratory I.D. No. 20-073 PA Dept. of Agriculture Approved Dairy Laboratory HY Dept. of Health Laboratory I.D. No. 10552 NY Dept. of Env. Conservation Approved Facility

ND Dept. of Health Cert. No. R-083 MD Dept. of Health Cert. No. 130 VA Dept. of Health Laboratory I.D. No. 00145 WV Dept. of Health Certification No. 9907C NC Dept. of Natural Resources Cert. No. 236 MI Dept. of Public Health Approved Facility U.S. Office of Surface Mining Approved Facility

**ROANOKE DIVISION** VA Dept. of Health Laboratory I.D. No. 00143

### FREE-COL LABORATORIES, INC. VOA REPEAT CONTROL INFORMATION (CLP - DUPLICATE SAMPLE LIMITS)

	(CLP - DU	PLIC	ATE	SAMP	TE LIMI.	rs)			
	Data 9-21-95 3-3-1	'n	na-	. /	ea a	^			
	Date $9-21-95$ Analyst Samples associated with th	:	17501	-/-	ECRLUN.	<u> </u>			
	509-20-424	is i	epea	t co	ntrol:				
	309-20-424								
	509-20-408 7411								
	301-20-408 3411								
	Sample used as repeat cont	~~1.		ar	9-10-1	10			
	Sample used as repeat cont AD = Absolute Difference	.101.	DE	D =	Pelativ	Perce	nt Di	fforo	700
	im importate billerence		KE	<i>D</i> –	VETOCTA	e rerce	nt Di.	riere	nce
	<u>Parameter</u>	Samr	n Re	neat	Accept	Accept	100	avd F	ile
				lue		RPD	AD/		<u> </u>
	Units =	<u> </u>	<u> </u>			<u> </u>	110/		
		•							
	Chloromethane	<10	<	io		•	0	- 8	20
	Bromomethane	1		i			1		19
	Vinyl chloride			Ţ-		27			28
	Chloroethane	V		T					07
	Methylene chloride	45	•	< 5		17	Ψ		21
	Acrolein			_				8	00
	Acrylonitrile							8	01
4	1,1-Dichloroethene	<u> &lt;5</u>		<5_			2	8	13
1 14	1,1-Dichloroethane			4-		41			11
43aHI	trans-1,2-Dichloroethenes					28			14
	Chloroform			+		14			09
- ^	1,2-Dichloroethane			┼					12
•	1,1,1-Trichloroethane			<del> </del>		27			25
	Carbon tetrachloride		<del>-</del>	+					04
	Bromodichloromethane	$-\!\!\!\!+$		<del>├</del>		79			10
	1,2-Dichloropropane			<del> </del>					15
	<u>trans-1,3-Dichloropropene</u> <u>Trichloroethene</u>	<del>- 1</del>		lacktriangle		22	<del></del>		17
	Benzene	2		2		32 49	-0		27
	Dibromochloromethane	<u> </u>		5		<del>49</del> 70	#		302 306
	1,1,2-Trichloroethane	1		7-		70			326
	cis-1,3-Dichloropropene	<del>+</del>		<del></del>					316
	2-Chloroethyl vinyl ether	210	2	10					308
	Bromoform	25		5					303
	Tetrachloroethene	45		<u> </u>		33			323
	1,1,2,2-Tetrachloroethane								322
	Toluene					38	- 1		324
	Chlorobenzene					24			305
	Ethyl benzene					5			318
	1,3-Dichlorobenzene								330
	1,2-Dichlorobenzene				. •	•			329
	1,4-Dichlorobenzene	<u> </u>		/		36			331
	Acetone	2,00	<	100		26	<u> </u>	٠. ٤	336

FREE-COL LABORATORIES, INC. VOA REPEAT CONTROL INFORMATION (CLP - DUPLICATE SAMPLE LIMITS)

Samples associated with t	: Sck this rep	lund peat con	majoe ntrol:			
509-20-424 509-20-408-7411						
Sample used as repeat con AD = Absolute Difference	ntrol:_	RPD = 1	<i>909-</i> Relativo	18-069 e Percen	t Diffe	rence
Parameter Units = Mg/L	Samp.		Accept	Accept RPD	Assayd AD/RPD	
3-Chloro-1-propene Dichlorodifluoromethane						***************************************
Methyl Ethyl Ketone	<100	400			Ð	
MIBK	<50	250			( 0	
1,1,1,2-Tetrachloroethan Trichlorofluoromethane	<u>e</u>					
1,2,3-Trichloropropane						
1,2-Dibromomethane		<del></del>				
Cis-1.2-Dichloroethane						
Xvlene	41	38		·····	7.80	70
vinyl Acetato	<50	C50			Ð	
extbon disulfide	<b>&lt;5</b>	45			Ī	
Styrene	<b>~5</b>	15	·		:	
methyl Butyl Ketone	<50	<50				

### Free-Col Laboratories, Inc. Surrogate Spike Information Method \$260

te: 9.21-95

Analyst: Ecklund Major

Type: W = Low/Medium Water

S = Low/Medium Soil/Sediment

				4-Bromofluoro-
	Limits: Water Soil/Sediment	Dibromofluoromethane 86-118 80-129	<u>Toluene-d</u> 8 88-110 81-117	benzene 86-115 74-121
rpe S/W)	Free-Col I.D.			
	509-20-408	ଟ୍ର	104	94
	509-20-409	92	104	99
	509-20-410	95	102	96
	509.20-411	92	104	96
	509-20-424	98	103	95

### FREE-COL LABORATORIES, INC. VOA REFERENCE CONTROL INFORMATION (CLP - CALIBRATION VERIFICATION LIMITS)

Data 9-21-95	Analyst Ecklund Maicr
Samples associa	ted with this reference control:
509-20-424	
509-20-408-	411

	Parameter	Target	Acceptance	<u>Assaved</u>	File#
		Value	Limits	Value	
	•	uq/L	ug/L	ug/L	
				20.1	
	Chloromethane	20	5.4-34.5	23.4	223
	Bromomethane	20	8.1-39.8	19.4	222
	<u>Vinvl chloride</u>	20	1.3-42.4	0.01	232
	Chloroethane	20	4.0-36.9	199	209
	Methvlene chloride	20	11.5-31.4	18.3	224
	Acrolein	62	4.2-105.4		201
	<u>Acrvlonitrile</u>	58	13.2-116.0		202
	1,1-Dichloroethene	20	10.9-32.4	ハフ、フ	216
i	1,1-Dichloroethane	20	15.3-28.0	16.8	214
1000	<del>trans</del> -1,2-Dichloroethene	20	13.6-28.3	17.2	217
	Chloroform	20	15.5-26.2	18.1	211
•	1,2-Dichloroethane	20	7.5-34.5	22.4	215
	1,1,1-Trichloroethane	20	13.6-29.8	<i>8</i> 0,5	228
	Carbon tetrachloride	20	7.7-28.1	20.5	206
	Bromodichloromethane	20	9.7-30.1	21.7	212
•	1.2-Dichloropropane	20	15.2-28.0	25.2	218
	trans-1,3-Dichloropropene	20	12.7-25.6	. 18.9	220
	Trichloroethene	20	14.0-27.3	23.4	230
	Benzene	20	14.2-28.1	21,4	203
	Dibromochloromethane	20	4.1-29.5	20.0	208
	1,1,2-Trichloroethane	20	14.2-28.5	21.4	229
	cis-1,3-Dichloropropene	20	10.1-27.2	19.0	219
	2-Chloroethvl vinvl ether	20	9.9-32.5	\$2. <del>5</del>	210
	Bromoform	20	2.3-31.1	90.6	205
	Tetrachloroethene	20	13.0-28.7	223	226
	1,1,2,2-Tetrachloroethane	20	14.7-26.1	19.6	225
	Toluene	20	15.1-25.7	21.6	227
	Chlorobenzene	20	11.1-28.9	al.1	207
	Ethvl benzene	20	13.2-27.7	921	221
	1.3-Dichlorobenzene	26	18.2-36.9	0.26	234
	1,2-Dichlorobenzene	26	11.0-42.2	27.4	233
	1,4-Dichlorobenzene	20	3.0-36.1	20.9	235
	Diethvl Benzene	44	25.9-62.9		237
	Ethvl Ether	35	26.9-49.4		236
	Xvlenes	44	21.0-66.7	49.1	238
	MEK	20	9.1-39.4	31.2	240
	Acetone	20	9.6-38.0	14.5	242

### FREE-COL LABORATORIES, INC. VOA REFERENCE CONTROL INFORMATION (CLP - CALIBRATION VERIFICATION LIMITS)

509-20-408->411				
Parameter	<u>Target</u> <u>Value</u> ug/L	Acceptance Limits ug/L	Assayed Value ug/L	File
MIBK	20	14.0-29.7	20.8	243
Tetrahydrofuran	45	34.8-60.3	,	244
Carbondisulfide	20	11.0-30.4	16.4	245
Styrene	20	12.4-30.0	19.5	246
Vinyl Acetate	20	11.0-27.5	16.0	247
Amyl Acetate	44	14.7-64.6		248
Methyl Butyl Ketone	20	10.3-33.9	90.5	249
			·	***************************************

# FREE-COL LABORATORIES, INC. VOA BLANK INFORMATION (CLP - CALIBRATION BLANK LIMITS)

Samples associated with the 509- 20-424	113 Diank.	
307- 30- 427		
509-20-408-7411		
_		
<u>Parameter</u>	Blank Value	
Units = UGIL		
onites =	•	
Chloromethane	<10	
Bromomethane		
Vinyl chloride		
Chloroethane		
Methylene chloride	<b>&lt;</b> 5	-
Acrolein		
Acrylonitrile	· -	
1,1-Dichloroethene	くら	
1,1-Dichloroethane		
trans-1,2-Dichloroethene		
Chloroform		
1,2-Dichloroethane		
1,1,1-Trichloroethane		
Carbon tetrachloride		
Bromodichloromethane		
1,2-Dichloropropane		
trans-1,3-Dichloropropene		
Trichloroethene		
Benzene		
Dibromochloromethane		•
1.1.2-Trichloroethane	,	
cis-1,3-Dichloropropene	V	
2-Chloroethyl vinyl ether	<10	
Bromoform	<u> </u>	•
Tetrachloroethene		
1,1,2,2-Tetrachloroethane		
Toluene		·
Chlorobenzene		
Ethyl benzene		
1,3-Dichlorobenzene		
1.2-Dichlorobenzene		
1,4-Dichlorobenzene		
Xylene	· · · · · · · · · · · · · · · · · · ·	
2-Butanone - MEK	<100	
4-Methyl-2-pentanone	<50	

## FREE-COL LABORATORIES, INC. VOA BLANK INFORMATION (CLP - CALIBRATION BLANK LIMITS)

Date 9-21-95 Anal	Lyst Ecklund Major	:
Samples associated with thi	s blank:	
509-20-424		
509-20-468 -7411		
<u>Parameter</u>	Blank Value	
1101		
Units = Uglc	·	
	/	
Carbon Disulfide	<u> </u>	
Vinyl Acetate	<50	
2-Hexanone - MBK	<50	
Dichlorofluoromethane		
1,1,1,2-Tetrachloroethane		
Trichlorofluoromethane		
1,2,3-Trichloropropane		
3-Chloro-1-propene		
1,2-Dibrmomethane		
cis,1,2-Dichloroethene		

### FREE-COL LABORATORIES, INC. VOA SPIKED CONTROL INFORMATION (CLP - ANALYTICAL SPIKED SAMPLE LIMITS)

Ι	Date 9-2195 Analyst (	Echlum	d Imaior	-			•
9	Date $9-3195$ Analyst Samples associated with the	is spi	ked cor	itrol:			
	509-20-408→411	•					
	5x29-30-434						
		~~~~					
	Sample used as spiked cont	rol:_	509-18-	069			
	PARAMETER	SPIKE	SPIKED	SAMPLE	ACCEPT.	ASSYD	FILE
					LIMITS	% REC.	
		UG/L	UG/L	UG/L	% REC.		
	Chloromethane	20	24	<10	28-189	120	520
	Bromomethane	20	24		31-212	105	519
	Vinvl chloride	20	18	1/	22-185	90	528
	Chloroethane	20	مَاد	$\overline{}$	52-170	130	507
	Methvlene chloride	20	22	<b>45</b>	63-148	110	521
	Acrolein	62	<del>-</del>		22-185	_	500
	Acrvlonitrile	58		-	53-187	_	501
	1,1-Dichloroethene	20	19	45	50-158	95	513
_	1,1-Dichloroethane	20	100		73-141	80	511
Į	trans-1,2-Dichloroethene	20	16		63-151	80	514
	Chloroform	20	17		68-141	8≤	509
	1,2-Dichloroethane	20	24		52-157	190	512
	1,1,1-Trichloroethane	20	<del>2</del> 0		58-155	100	525
_ •	Carbon tetrachloride	20	26		40-141	130	504
_	Bromodichloromethane	20	24		46-150	120	510
	1.2-Dichloropropane	20	23		67-145	115	515
	trans-1,3-Dichloropropene	20	21		56-141	105	517
	Trichloroethene	20	ക്ട		64-129	. 125	527
	Benzene	20	22	-	70-144	110	502
	Dibromochloromethane	20	21		27-158	105	506
	1,1,2-Trichloroethane	20	<i>3</i> 2	\/_	59-149	110	<u>526</u>
	cis-1,3-Dichloropropene	20	20	<u> </u>	46-151	100	516
	2-Chloroethvl vinvl ether		19	<10		95	508
	Bromoform	20	22	<u> </u>	, 0 130	110	<u>503</u>
	Tetrachloroethene	20	91		48-163	. 105	<u>523</u>
	1,1,2,2-Tetrachloroethane		19		46-164	<u>95</u>	522
	Toluene	20	<u> 5</u> 5-		72-131	_ الم	524
	Chlorobenzene	20	21		70-131	105	<u>505</u>
	Ethyl benzene	20	20		61-140	100	518
	1,3-Dichlorobenzene	26	<u> </u>		58-163	110	530
	1.2-Dichlorobenzene	26	24	<del></del>	42-159		529
	1,4-Dichlorobenzene	20	18		33-177	90	531
	Diethyl Benzene	44			71-137		533
	Ethyl Ether Xvlenes	35	<u> </u>	1	62-160		532
	MEK	44	84	41		<u>98</u>	534
	MER	20		<10	× 63-179	চিട	<u>536</u>

# FREE-COL LABORATORIES, INC. VOA SPIKED CONTROL INFORMATION (CLP - ANALYTICAL SPIKED SAMPLE LIMITS)

Date 9-21-95 Analyst Ecklund Major							
Samples associated with this spiked control:							
509.20-408-3411							
509.20-424							
					<del></del>		
Sample used as spiked co	ontrol:	509-18-	C69				
of the control of the control of							
PARAMETER	SPIKE	SPIKED		TW.		FILE	
	ADDED	RESULT			% REC.		
	UG/L	UG/L	<u>UG/L</u>	% REC.			
		16-	1477	51-175	80	538	
Acetone	20	16 24			120	539	
MIBK	20	27	<u> </u>	71-140		535	
Ethyl Acetate	45			71-140	_		
Tetrahydrofuran	45	<del></del>	75		80		
Carbondisulfide	20	10	<5 <5		95		
Styrene	20				60		
Vinyl Acetate	20	12	<50				
Amvl Acetate	44		750		95		
Methvl Butvl Ketone	20	19	>50				
•							
			,				
,							

### Free-Col Laboratories, Inc. Surrogate Spike Information Method \$260

te: 9-23-95	Analyst: ECKLUNG
te: 9-23-95	Analyst: ECKLUNC

Frits: & Recovery

Type: W = Low/Medium Water

S = Low/Medium Soil/Sediment

Type	Limits: Water Soil/Sediment	Dibromofluoromethane 86-118 80-120	<u>Toluene-d</u> 8 88-110 81-117	4-Bromofluoro- benzene 86-115 74-121
(S/W)	Free-Col I.D.			
<u>w</u>	509-20-412	91	98	93
	509-20-413	91	107	98
w	509-20-414	98	102	98
w	509-20-415	91	98	97
l w	509-20-416	90	104	106
S	509-20-429	91	101	97
5	509-20-430	95	103	99
5	509-20-431	100	100	93
	509-20-432-	104	100	88
Real of the second seco				

### FREE-COL LABORATORIES, INC. VOA REFERENCE CONTROL INFORMATION (CLP - CALIBRATION VERIFICATION LIMITS)

Date 9.23.95 Analyst Ecilland
Samples associated with this reference control:
<u>509-70-400/407</u>
5071-71-4007-407
509.30-412→416
509·20 429 → 432-

	<u>Parameter</u>	Target Value ug/L	Acceptance Limits ug/L	Assaved Value ug/L	<u>File#</u>
	Chloromethane	20	5.4-34.5	19.8	223
	Bromomethane	20	8.1-39.8	20.5	222
	Vinvl chloride	20	1.3-42.4	17.7	232
	Chloroethane	20	4.0-36.9	<i>عا.</i> لہ	209
	Methylene chloride	20	11.5-31.4	17.2	224
	Acrolein	62	4.2-105.4		201
	Acrvlonitrile	58	13.2-116.0		202
	1,1-Dichloroethene	20	10.9-32.4	17.4	216
	1,1-Dichloroethane	20	15.3-28.0	19.6	214
total	trans-1,2-Dichloroethenes	20	13.6-28.3	17.0	217
	Chloroform	20	15.5-26.2	19.6	211
	1,2-Dichloroethane	20	7.5-34.5	<u> </u>	215
	1,1,1-Trichloroethane	20	13.6-29.8	19.7	228
	Carbon tetrachloride	20	7.7-28.1	23.3	206
	Bromodichloromethane	20	9.7-30.1	ط.33	212
	1,2-Dichloropropane	20	15.2-28.0	21.7	218
	trans-1,3-Dichloropropene	20	12.7-25.6	· 20.5	220
	Trichloroethene	20	14.0-27.3	<del>5</del> 2.9	230
	Benzene	20	14.2-28.1	20.1	203
	Dibromochloromethane	20	4.1-29.5	<u> </u>	208
	1,1,2-Trichloroethane	20	14.2-28.5	317	229
	cis-1,3-Dichloropropene	20	10.1-27.2	20.4	219
	2-Chloroethvl vinvl ether	20	9.9-32.5	<u> </u>	210
	Bromoform	20	2.3-31.1	23.4	205
	<u>Tetrachloroethene</u>	20	13.0-28.7	23,7	226
	1,1,2,2-Tetrachloroethane	20	14.7-26.1	17.4	225
	Toluene	20	15.1-25.7	909	227
	Chlorobenzene	20	11.1-28.9	20.6	207
	Ethvl benzene	20	13.2-27.7	910	221
	1.3-Dichlorobenzene	26	18.2-36.9	26.9	234
	1,2-Dichlorobenzene	26	11.0-42.2	267	233
	1,4-Dichlorobenzene	20	3.0-36.1	21.1	235
	<u>Diethvl Benzene</u>	44 -	25.9-62.9		237
	Ethvl Ether	35	26.9-49.4		236
	Xvlenes	44	21.0-66.7	406	238
	MEK	20	9.1-39.4	17.9	240
	Acetone	20	9.6-38.0	16.0	242
					7

### FREE-COL LABORATORIES, INC. VOA REFERENCE CONTROL INFORMATION (CLP - CALIBRATION VERIFICATION LIMITS)

Target Value ug/L	Acceptance Limits ug/L	<u>Assayed</u> <u>Value</u> ug/L	<u>File</u> #
20	14.0-29.7	17.6	243
45	34.8-60.3		244
20	11.0-30.4		245
20	12.4-30.0		246
20	11.0-27.5	16.8	247
44	14.7-64.6		248
20	10.3-33.9		249
70			
20			
31		<u> 32.み</u>	
			-
	Value ug/L  20 45 20 20 20 44 20 20 20	Value ug/L     Limits ug/L       20     14.0-29.7       45     34.8-60.3       20     11.0-30.4       20     12.4-30.0       20     11.0-27.5       44     14.7-64.6       20     10.3-33.9       20     20	Value ug/L         Limits ug/L         Value ug/L           20         14.0-29.7         17.6           45         34.8-60.3         —           20         11.0-30.4         20.9           20         12.4-30.0         19.1           20         11.0-27.5         16.8           20         10.3-33.9         17.3           20         16.8           20         18.7

# FREE-COL LABORATORIES, INC. VOA BLANK INFORMATION (CLP - CALIBRATION BLANK LIMITS)

	Date 9-23-95 Analy	st Echlund				
	Samples associated with this	blank:	•			
	509-20-412 -> 446					
	39-80-918-3-766					
	Parameter	Blank Value				
	1101.					
	Units = USIC					
	O	/10				
	Chloromethane	<10				
	Bromomethane					
	Vinyl chloride					
	Chloroethane	V				
	Methylene chloride	<u> </u>				
	Acrolein					
	<u>Acrylonitrile</u>					
	1,1-Dichloroethene	45				
	1,1-Dichloroethane					
to tol	trans-1,2-Dichloroethene					
	Chloroform					
	1,2-Dichloroethane					
	1,1,1-Trichloroethane					
	Carbon tetrachloride		•			
	Bromodichloromethane					
	1,2-Dichloropropane					
	trans-1,3-Dichloropropene					
	Trichloroethene					
	Benzene					
	Dibromochloromethane		•			
	1,1,2-Trichloroethane	,				
	cis-1.3-Dichloropropene	V				
	2-Chloroethyl vinyl ether <10					
	Bromoform	<b>&lt;</b> 5				
	<u>Tetrachloroethene</u>					
	1,1,2,2-Tetrachloroethane		•			
	Toluene Toluene					
	Chlorobenzene					
	Ethyl benzene		,			
	1,3-Dichlorobenzene					
	1,2-Dichlorobenzene					
	1,4-Dichlorobenzene					
	Xylene	——————————————————————————————————————				
	2-Butanone - MEK	<100				
	4-Methyl-2-pentanone	<b>450</b>				
	Acetone	<100				
	Syrene	75				
	- T - CH-	~ <u>~</u>				

# FREE-COL LABORATORIES, INC. VOA BLANK INFORMATION (CLP - CALIBRATION BLANK LIMITS)

Date 9-23-95 Anal Samples associated with thi 509-20-412-416	yst <u>ECklind</u> s blank:	
<u> </u>		
·		
<u>Parameter</u>	Blank Value	
Units = ug/	<del>_</del>	
Carbon Disulfide	(5	
Vinyl Acetate	<b>&lt;50</b>	
2-Hexanone - MBK	<50	
Dichlorofluoromethane	<2	
1,1,1,2-Tetrachloroethane		
Trichlorofluoromethane		
1,2,3-Trichloropropane		
3-Chloro-1-propene		
1,2-Dibrmomethane		
cis,1,2-Dichloroethene		
	· · · · · · · · · · · · · · · · · · ·	

### FREE-COL LABORATORIES, INC. VOA SPIKED CONTROL INFORMATION (CLP - ANALYTICAL SPIKED SAMPLE LIMITS)

Ι	Date 9-23-95 Analyst 9	Ecklin	d Imaio	<u></u>			
2	Samples associated with th	is spi	ked cor	ntrol:			
_	509-20-400/407						
	5×29-3×2.439 +33×						
_	5.09-20-412-416						
_	509-21-400-7407						
5	Sample used as spiked cont	:rol: <u></u>	5091->	1-403			
_							
1	PARAMETER	SPIKE					FILE
		<u>ADDED</u>	RESULT	RESULT	<u>LIMITS</u>	% REC.	
		UG/L	UG/L	UG/L	% REC.		
9	Chloromethane	20	15	<10	28-189	75	520
	Bromomethane	20	30		31-212	100	519
1	Vinvl chloride	20	18	,	22-185	90	528
(	Chloroethane	20	19	<b>V</b>	52-170	95	507
. ]	Methvlene chloride	20	160	<b>&lt;</b> S	63-148	80	521
	Acrolein	62		•	22-185	~	500
	Acrylonitrile	58	_		- 53-187	_	501
	1,1-Dichloroethene	20	16	<5	50-158	60	513
	1,1-Dichloroethane	20	15		73-141	75	511
-	trans-1,2-Dichloroethene	20	is	·	63-151	75	514
	Chloroform .	20	16		68-141	80	509
	1,2-Dichloroethane	20	93		52-157	110	512
	1,1,1-Trichloroetháne	20	25		58-155	125	525
	Carbon tetrachloride	20	20		40-141	100	504
	Bromodichloromethane	20	33 33		46-150	110	510
	1,2-Dichloropropane	20	_ 22	1/	67-145	110	515 -
	trans-1,3-Dichloropropene		17	V	56-141	\$2	517
	Trichloroethene	20	30	<u> </u>	64-129	<del>. 190</del>	527
	Benzene	20	<i>≥</i> 0	<u> </u>	70-144	100	502
	Dibromochloromethane	20	18		27-158	90	506
	1,1,2-Trichloroethane	20	<i>∞</i>		59-149	100	526
	cis-1,3-Dichloropropene	20			46-151	28	516
	2-Chloroethvl vinvl ether		24	<u> &lt;10</u>		190	508
	Bromoform	20		<5		85	503
	<u>Tetrachloroethene</u>	20	<u> 32 </u>		<del>&gt; 48-163</del>	100	523
	1,1,2,2-Tetrachloroethane		16	<u>&lt;\$</u>	46-164	80	522
	Toluene	20	<u>डा</u>		72-131	105	
	Chlorobenzene	20	<u> </u>		70-131	100	
	Ethyl benzene	20	21		61-140	105	518
	1,3-Dichlorobenzene	26	54		58-163		
	1,2-Dichlorobenzene	26	34		42-159	95	529
	1,4-Dichlorobenzene	20	19	<u> </u>	33-177	95	531
	Diethyl Benzene Ethyl Ether	44			71-137		533
	Xylenes	35	115:		62-160		532
	MEK	44	47		72-130	107	534
		20	160	<u> </u>	0063-179	<u>08</u>	<u>536</u>

## FREE-COL LABORATORIES, INC. VOA SPIKED CONTROL INFORMATION (CLP - ANALYTICAL SPIKED SAMPLE LIMITS)

Date 9-33-95 Analyse Samples associated with	t Ecklu	<u>md IMa</u>	jw			
Samples associated with	this spi	ked con	Prol:			
<u>509-20-406/407</u>						
509-21-400->407						
_		0 -				
Sample used as spiked co	ntrol: 5	16-60×	<u> 403</u>			
DADAMEMED		an	~	3 CCEDE	3 C C T T T	<b></b>
PARAMETER				ACCEPT.		FILE
•		RESULT			% REC.	
	<u>UG/L</u>	UG/L	UG/L	% REC.		
3			•	61 155		500
Acetone	20		<del></del>	51-175		538
MIBK	20			53-160		539
Ethvl Acetate	45			71-140		535
Tetrahydrofuran	45					
Carbondisulfide	20				·	
Stvrene	20					
Vinvl Acetate	20					
Amvl Acetate	44					
Methvl Butvl Ketone	20					
Dichlorodyluromethano	20	26	くプ		130	
Trichlorofluoronethans	20	15	<b>4</b> 2		75	
Freco-113	3)	142	118		77	
				-		

### FREE-COL LABORATORIES, INC. VOA REPEAT CONTROL INFORMATION (CLP - DUPLICATE SAMPLE LIMITS)

	· · · · · · · · · · · · · · · · · · ·		ID OZMILI	ob biniri	<b>.</b>		•
	Date 9/23/95 Analyst	MA	コンド				
	Samples associated with th	is re	neat col	ntrol·			
	509-20-4127416	110 10	peac co.	ilcici.			
					*****		
	509-20-424-7432	)		·			
				· · · · · · · · · · · · · · · · · · ·		<del></del>	
	Sample used as repeat cont	rol:	50	9-21-4	05		
	AD = Absolute Difference		RPD = 1	Relative	Percen	t Diffe	rence
	Parameter	Samp.	Repeat	Accept	Accept	<u>Assayd</u>	File
	Units = Mg/L		Value		RPD	AD/RPD	
	Units =		•				
		-					
	Chloromethane	210	<10			O	820
	Bromomethane .	}	1			]	819
	Vinyl chloride	}			27		828
	Chloroethane	V	V				807
	Methylene chloride	<5	<5		17	V	821
	Acrolein	_	-				800
	Acrylonitrile	-	-				801
	1,1-Dichloroethene	15	45			Ð	813
	1,1-Dichloroethane	1	. 1		41	1	811
	trans-1,2-Dichloroethene				28		814
	Chloroform				14		809
-:	1,2-Dichloroethane						812
	1,1,1-Trichloroethane				27		825
	Carbon tetrachloride						804
	Bromodichloromethane			-	79		810
	1,2-Dichloropropane					•	815
	trans-1,3-Dichloropropene						817
	<u>Trichloroethene</u>				32		827
	Benzene				49		802
	Dibromochloromethane				70		806
	1,1,2-Trichloroethane						826
	cis-1,3-Dichloropropene	<u>V</u>	<u> </u>				816
	2-Chloroethyl vinyl ether						808
	Bromoform	25	15				803
	<u>Tetrachloroethene</u>				33		823
	1,1,2,2-Tetrachloroethane						822
	Toluene				38	•	824
	Chlorobenzene				24		805
	Ethyl benzene				5		818
	1,3-Dichlorobenzene						830
	1,2-Dichlorobenzene		=				829
	1.4-Dichlorobenzene		Ψ		36	V	831
	Acetone	<10 C	<100		26	#	836

FREE-COL LABORATORIES, INC. VOA REPEAT CONTROL INFORMATION (CLP - DUPLICATE SAMPLE LIMITS)

Date $\frac{9/3/95}{}$ Analyst Samples associated with the	/N his rep	ATOK peat com	ntrol:			
509-20-412 7 416						
509-20-429-432						
Sample used as repeat con AD = Absolute Difference	trol:_		<i>-09-21-</i> Relative		t Differ	rence
<u>Parameter</u>				Accept		<u>File</u>
Units = US/L	<u>Value</u> -	<u>Value</u>	<u>AD</u>	RPD	AD/RPD	
3-Chloro-1-propene		á.				
Dichlorodifluoromethane						
Methyl Ethyl Ketone	400	<100			8	
MIBK	250	250			Ð	
1,1,1,2-Tetrachloroethane						
Trichlorofluoromethane						
1,2,3-Trichloropropane						
1,2-Dibromomethane						
Cis-1.2-Dichloroethane			1.			
Xylene	<i>&lt;5</i>	25			Ð	
CATOM disulfide	<b>45</b>	<5				
unyl acetati	<50	250				
mathyl Ruly/ Ketone	<50	<50	-			
stykene	25	15			· * *	

# FIGURE E2 ENVIRONMENTAL SAMPLE DESCRIPTION

### ATTACHMENT #2

### CHAIN OF CUSTODY RECORD

EC 3:	1) WASTEWAT 5) SLUDGE 9) OTHER	LABO	ULTS REQUIRED BY:  AL RESULTS NEEDED?  DRATORY: Free - C  2) DRINKING WATER  6) SOLID WASTE	3) MONITOI 7) OIL	C RING WELL	LOCKPORT, NPHONE: (716) 4 CONTACT:  4) SOIL  8) INDUST	OUNTAIN ROAD  IEW YORK 14094  28 - 685 - 2 300  Steve Blain  RIAL HYGIENE
LE DESCR	IPTION: Soil	- P.	reeded to nee	is time.	Sumples	should	6 4
	7857	id a.	needed to me	st holding t	1763		
					• • • • • • • • • • • • • • • • • • • •		SAMPLE BOTTLE
AMPLE #	LOCATION	TIME	PARAMETERS		<del></del>		LOT# (OPTIONAL)
9 5/15	AP-11 2-3	3 00	SW 846	Method &	240		
1	AP-11 5.5-6	1	(	~			·
	AP-12 6-6.5			/			
		ccu		- 1 1 07	40		
Raiss		3 000		TOTAL OC	<del>7</del>	<del> </del>	·
¥ 3	MW-1	1	SW 846 /	1. M. J 829			
	MW-2	11 15	(	· ·			
	MW-3	11 20					
<u></u>	NW-4	1130	I Y			······································	
III NA DET	Trip Blank ECTION LEVELS REQU	DED0	· V		<del>.</del>		
ii aw bei	ECTION LEVELS HEQU	IHEU?		•		•	
S BLE INT	ERFERENCES:	<del></del>					`.
APON FOR	TEST (COMPARISON C	OF AREAS	BACKGROUND, ETC.)			ì	
							•
						<u> </u>	••
	STIVED BY: (0.TETA)	10	Inci	TLES RELINQUISH	יבט פעי יוט	TECTIME) IH	RD PERSONNEL
TILES HE	CEIVED BY: (DATE/TIN	ΛΕ) (HI <b>×</b> ⁄	RO PERSONNELI BOT	ILES RELINQUISE	120 B1. (U/	ATE THAIC) IN	rio i missimissi
TILES BEI	INQUISHED BY: (DATE		(HRD PERSONNEL) BO	ITLES RECEIVED E	BY: (DATE	TIME) (LAB P	ERSONNEL
			ind the state of t	lion FO	2.4	9-20-95	40
SAMPLEC	OLLECTED BY:		I V	CEIVED BY: [DATE	, TIME, LAB		
. ∤ov	ary Klaminsk	,		ani Wa	,	_	
_ 0	ary frianciast	- 0	<i>U. i.</i>	July 100	<u> </u>		N-77



LOCKPORT

### FREE-COL LABORATORIES, INC.

P.O. BOX 557, COTTON ROAD MEADVILLE, PENNSYLVANIA 16335 PHONE: (814) 724-6242 FAX: (814) 333-1466

5815 AIRPORT ROAD ROANOKE, VIRGINIA 24012 PHONE: (703) 265-2544 FAX: (703) 362-1663

#### 10/19/95

TO:

DELPHI HARRISON THRM.SYS ATTN: MS. CATHY VER 200 UPPER MOUNTAIN RD.

NY 14094

P.O. # HH48888

ACCOUNT NO. 01220

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<b></b>				OI1	

	ANAL	YTICAL REP	PAGE 1		
	SAMPLE ID :	MW-3 10/11/95	MW-4 10/11/95	MW-2 10/11/95	
PARAMETER	LAB ID DATE RECEIVED:	51011524 10/11/95	51011525 10/11/95	51011526 10/11/95	·

VOLATILE COMPOUNDS	Units = Mg/L		
CHLOROMETHANE	<1.0 D	<1.0 D	<1.0 D
BROMOMETHANE	<1.0 D	<1.0 D	<1.0 D
VINYL CHLORIDE	1.4	1.7	2.2
CHLOROETHANE	<1.0 D	<1.0 D	<1.0 D
METHYLENE CHLORIDE	<0.5 D	<0.5 D	<0.5 D
ACETONE	<10 D	<10 D	<10 D
CARBON DISULFIDE	<0.5 D	<0.5 D	<0.05 D
1,1,-DICHLOROETHENE	0.5	<0.5 D	<0.05 D
1,1,-DICHLOROETHANE	<0.5 D	<0.5 D	<0.05 D
1,2-DICHLORO***	230	220	77
CHLOROFORM	<0.5 D	<0.5 D	<0.5 D
1,2-dichloroethane	<0.5 D	<0.5 D	<0.5 D
2-BUTANONE	<10 D	<10 D	<10 D
1,1,1-TRICHLOROETHA*	<0.5 D	<0.5 D	<0.5 D
CARBON TETRACHLORIDE	<0.5 D	<0.5 D	<0.5 D
VINYL ACETATE	<5.0 D	<5.0 D	<5.0 D
BROMODICHLOROMETHANE	<0.5 D	<0.5 D	<0.5 D
1,1,2,2-TETRACHLORO*	<0.5 D	<0.5 D	` <0.5 D
1,2-DICHLOROPROPANE	<0.5 D	<0.5 D	<0.5 D
TRANS-1,3-DICHLOROP*	<0.5 D	<0.5 D	<0.5 D
TRICHLOROETHENE	0.7	0.7	450
DIBROMOCHLOROMETHANE	<0.5 D	<0.5 D	<0.5 D
1,1,2-TRICHLOROETHA*	<0.5 D	<0.5 D	<0.5 D
BENZENE	3.2	3.2	<0.5 D
CIS-1,3-DICHLOROPRO*	<0.5 D	<0.5 D	<0.5 D

<sup>\*</sup>Some of the above names have been abbreviated. Please reference the enclosed list for their complete names.

#### **MEADVILLE DIVISION**

A.I.H.A. Accreditation No. 98 U.S. Public Health Services Approved Facility PA D.E.R. Laboratory I.D. No. 20-073 PA Dept. of Agriculture Approved Dairy Laboratory NY Dept. of Health Laboratory I.D. No. 10662 NY Dept. of Env. Conservation Approved Facility

NO Dept. of Health Cert. No. R-083 MD Dept. of Health Cert. No. 130 VA Dept. of Health Laboratory I.D. No. 00145 WV Dept. of Health Certification No. 9907C NC Dept. of Natural Resources Cert. No. 236 MI Dept. of Public Health Approved Facility U.S. Office of Surface Mining Approved Facility **ROANOKE DIVISION** 

VA Dept. of Health Laboratory I.D. No. 00143

KEY:

< =LESS THAN

>=GREATER THAN

w.f.-WILL FOLLOW



P.O. BOX 657,COTTON ROAD MEADVILLE, PENNSYLVANIA 16335 PHONE: (814) 724-6242 FAX: (814) 333-1466 5815 AIRPORT ROAD ROANOKE, VIRQINIA 24012 PHONE: (703) 265-2544 FAX: (703) 382-1863

10/19/95

TO:

DELPHI HARRISON THRM.SYS ATTN: MS. CATHY VER

200 UPPER MOUNTAIN RD.

LOCKPORT

NY 14094

P.O. # HH48888

ACCOUNT NO. 01220

	PAGE 2				
	SAMPLE ID :	MW-3 10/11/95	MA-4 10/11/95	MW-2 10/11/95	100 MH 607 MH 608 MH 609 MH 607 M
01014	LAB ID	51011524	51011525	51011526	
PARAMETER	DATE RECEIVED:	10/11/95	10/11/95	10/11/95	
VOLATILE COMPOUNT 2-CHLOR* VINYL E		= MG/L <1.0 D	<1.0 D	<1.0 D	
BROMOFORM 2-HEXANONE		<0.5 D <5.0 D	<0.5 D <5.0 D	<0.5 D <5.0 D	
4-METHYL-2-PENTA TETRACHLOROETHER		<5.0 D <0.5 D	<5.0 D <0.5 D	<5.0 D <0.5 D	٠
TOLUENE CHLOROBENZENE		3.0 <0.5 D	3.0 <0.5 D	<0.5 D	
ETHYL BENZENE		1.6	1.7	<0.5 D	
STYRENE TOTAL XYLENES		<0.5 D 2.9	<0.5 D 2.9	<0.5 D <0.5 D	

Please reference the following page(s) for date and analyst.

\*Some of the above names have been abbreviated. Please reference the enclosed list for their complete names.

MEADVILLE DIVISION

A.I.H.A. Accreditation No. 88

U.S. Public Health Services Approved Facility

PA.D.E.R. Laboratory I.D. No. 20-073

PA Dept. of Agriculture Approved Deiry Laboratory

NY Dept. of Health Laboratory I.D. No. 10562

ND Dept. of Health Cert. No. H-063 MD Dept. of Health Cert. No. 130 VA Dept. of Health Laboratory I.D. No. 00145 WV Dept. of Health Certification No. 9907C NC Dept. of Natural Resources Cert. No. 236 MI Dept. of Public Health Approved Facility U.S. Office of Surface Mining Approved Facility ROANOKE DIVISION
VA Dept. of Health Laboratory I.D. No. 00143

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w.f.-WILL FOLLOW

OCT-19-1995 12:28

NY Dept. of Env. Conservation Approved Facility

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P.O. BOX 567,COTTON ROAD MEADVILLE, PENNSYLVANIA 16335 PHONE: (814) 724-6242 FAX: (814) 333-1486 5815 AIRPORT ROAD ROANOKE, VIRGINIA 24012 PHONE: (703) 265-2544 FAX: (703) 362-1063

10/19/95

TO:

DELPHI HARRISON THRM.SYS ATTN: MS. CATHY VER 200 UPPER MOUNTAIN RD.

LOCKPORT

NY 14094

P.O. # HH48888

ACCOUNT NO. 01220

A	M	A I	V	TH	~ 4	l I		EI	20	DT	EC	RM	
-	11.7	м.			-		П			n		/nm	

·	ANAL	T HUAL REP	PAGE 3		
	SAMPLE ID :	MW-5 10/11/95	MW-6 10/11/95	MW-1 10/11/95	• • • • • • • • • • • • • • • • • • •
PARAMETER	LAB ID DATE RECEIVED:	51011527 10/11/95	51011528 10/11/95	51011529 10/11/95	

UNIAMYIE COMPONING	I BITMO NO O		
VOLATILE COMPOUNDS CHLOROMETHANE	UNITS = MG/L	43.0.5	43 O B
	(1.0 D	<1.0 D	<1.0 D
BROMOMETHANE	<1.0 D	<1.0 D	<1.0 D
VINYL CHLORIDE	1.7	1.0	<1.0 D
CHLOROETHANE	<1.0 D	<1.0 D	$\langle 1.0 D$
METHYLENE CHLORIDE	<0.5 D	<0.5 D	<0.5 D
ACETONE	<10 D	<10 D	<10 D
CARBON DISULFIDE	<0.5 D	<0.5 D	<0.5 D
1,1,-DICHLOROETHENE	<0.5 D	<0.5 D	<0.5 D
1,1,-DICHLOROETHANE	<0.5 D	<0.5 D	<0.5 D
1,2-DICHLORO***	77	21	19
CHLOROFORM	<0.5 D	<0.5 D	<0.5 D
1,2-DICHLOROETHANE	<0.5 D	<0.5 D	<0.5 D
2-BUTANONE	<10 D	<10 D	<10 D
1,1,1-TRICHLOROETHA*	<0.5 D	<0.5 D	<0.5 D
CARBON TETRACHLORIDE	<0.5 D	<0.5 D	<0.5 D
VINYL ACETATE	<5.0 D	<5.0 D	<5.0 D
BROMODICHLOROMETHANE	<0.5 D		<0.5 D
1,1,2,2-TETRACHLORO*	<0.5 D	<0.5 D	<0.5 D
1,2-DICHLOROPROPANE	<0.5 D	<0.5 D	<0.5 D
TRANS-1,3-DICHLOROP*	<0.5 D	<0.5 D	<0.5 D
TRICHLOROETHENE	470	900	870
DIBROMOCHLOROMETHANE	<0.5 D	<0.5 D	<0.5 D
1,1,2-TRICHLOROETHA*	<0.5 D	<0.5 D	<0.5 D
BENZENE	<0.5 D	<0.5 D	<0.5 D
CIS-1,3-DICHLOROPRO*	<0.5 D	<0.5 D	<0.5 D
• • • • • • • • • • • • • • • • • • • •	·	· · · · · ·	1012 0

<sup>\*</sup>Some of the above names have been abbreviated. Please reference the enclosed list for their complete names.

MEADVILLE DIVISION

A.I.H.A. Accreditation No. 98
U.S. Public Neelth Services Approved Facility
PA.C.E.R. Laboratory I.D. No. 20-073
PA Dept. of Agriculture Approved Dairy Laboratory
NY Dept. of Health Laboratory I.D. No. 10562
NY Dept. of Emt. Conservation Approved Facility

ND Dept. of Health Cert. No. R-083 MD Dept. of Health Cert. No. 130 VA Dept. of Health Laboratory I.D. No. 00145 WV Dept. of Health Certification No. 9907C NC Dept. of Natural Resources Cert. No. 236 MI Dept. of Public Health Approved Facility U.S. Office of Surface Mining Approved Facility **HOANOKE DIVISION** 

VA Dept. of Health Laboratory I.D. No. 00143

KEY:

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P.O. BOX 557,COTTON ROAD **MEADVILLE, PENNSYLVANIA 16335** PHONE: (814) 724-6242 FAX: (814) 333-1468

**5815 AIRPORT ROAD** ROANOKE, VIRGINIA 24012 PHONE: (703) 265-2644 FAX: (703) 362-1663

10/19/95

TO:

DELPHI HARRISON THRM. SYS ATTN: MS. CATHY VER

200 UPPER MOUNTAIN RD. LOCKPORT NY 14094 P.O. # HH48888

ACCOUNT NO. 01220

	ANAL	YTICAL REP	PAGE 4		
	SAMPLE ID :	<b>M-5</b>	MH-6	MW-1	
		10/11/95	10/11/95	10/11/95	
	LAB ID	51011527	51011528	51011529	
PARAMETER	DATE RECEIVED:	10/11/95	10/11/95	10/11/95	
VOLATILE COMPOUNDS  2-CHLOR* VINYL ETHE  EROMOFORM		<1.0 D <0.5 D	<1.0 D <0.5 D	<1.0 D <0.5 D	
2-HEXANONE		<5.0 D	<5.0 D	<5.0 D	
4-METHYL-2-PENTANON TETRACHLOROETHENE	ALS.	<5.0 D <0.5 D	<5.0 D <0.5 D	<5.0 D <0.5 D	
TOLUENE CHLOROBENZENE		<0.5 D <0.5 D	<0.5 D	<0.5 D <0.5 D	
ETHYL BENZENE		<0.5 D	<0.5 D	<0.5 D	
STYRENE		<0.5 D	<0.5 D	<0.5 D	
TOTAL XYLENES		<0.5 D	<0.5 D	<0.5 D	

Please reference the following page(s) for date and analyst.

\*Some of the above names have been abbreviated. Please reference the enclosed list for their complete names.

MEADVILLE DIVISION

A.I.H.A. Accreditation No. 96 U.S. Public Health Services Approved Facility PA D.E.R. Laboratory I.D. No. 20-073 PA Dept. of Agriculture Approved Delry Laboratory NY Dept. of Heelth Laboratory I.D. No. 10552 NY Dept. of Env. Conservation Approved Facility

ND Dept. of Health Cert. No. R-083 MD Dept. of Health Cert. No. 130 VA Dept. of Health Laboratory I.D. No. 00145 WV Dept. of Health Certification No. 9907C NC Dept. of Natural Resources Cert. No. 236 MI Dept. of Public Health Approved Facility U.S. Office of Surface Mining Approved Facility ROANOKE DIVISION

VA Dept. of Health Laboratory I.D. No. 00143

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RO. BOX 557,COTTON ROAD MEADVILLE, PENNSYLYANIA 16335 PHONE: (814) 724-6242 FAX: (814) 333-1466 5815 AIRPORT ROAD ROANOKE, VIRGINIA 24012 PHONE: (703) 265-2544 FAX: (703) 362-1663

10/19/95

TO:

DELPHI HARRISON THRM.SYS

ATTN: MS. CATHY VER 200 UPPER MOUNTAIN RD.

LOCKPORT

NY 14094

P.O. # HH48888

ACCOUNT NO. 01220

**ANALYTICAL REPORT FORM** 

PAGE 5

SAMPLE ID

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10/11/95

LAB ID

51011530

DATE RECEIVED:

10/11/95

PARAMETER	RESULTS	Units	DATE AND	analyst
VOLATILE COMPOUNDS		•	•	
Chloromethane	<0.010	MG/L	10/17/95	ECKLUND/
Bromomethane	<0.010	1671	10/11/10	MAJOR
Vinyl Chloride	<0.010			I MINUM
Chloroethane	<0.010			
Methylene Chloride	<0.005			
Acetone	<0.10		•	
Carbon Disulfide	<0.005			
1,1-Dichloroethene	<0.005			
1,1-Dichloroethane	<0.005			
1,2-Dichloroethenes (Total)***	<0.005	*		•
Chloroform	<0.005			
1,2-Dichloroethane	<0.005			
2-Butanone	<0.10			
1,1,1-Trichloroethane	<0.005			
Carbon Tetrachloride	<0.005		<u>.</u>	
Vinyl Acetate	<0.050			
Bromodichloromethane	<0.005		·.	
1,1,2,2-Tetrachloroethane	<0.005			
1,2-Dichloropropane	<0.005			
trans-1,3-Dichloropropene	<0.005			
Trichloroethene	<0.005			
Dibromochloromethane	<0.005			
1,1,2-Trichloroethane	<0.005		•	
	70.002			

**MEADVILLE DIVISION** 

A.I.H.A. Accreditation No. 98
U.S. Public Health Services Approved Facility
PA.D.E.R. Laboratory I.D. No. 20-073
PA Dept. of Agriculture Approved Deiry Laboratory
NY Dept. of Health Laboratory I.D. No. 10582
NY Dept. of Env. Conservation Approved Facility

ND Dept. of Health Cert. No. R-083 MD Dept. of Health Cert. No. 130 YA Dept. of Health Laboratory I.D. No. 00145 WV Dept. of Health Certification No. 9907C NC Dept. of Natural Resources Cert. No. 236 MI Dept. of Public Health Approved Facility U.S. Office of Surface Mining Approved Facility ROANOKE DIVISION

VA Dept. of Health Laboratory I.D. No. 00143

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P.O. BOX 557, COTTON ROAD **MEADVILLE, PENNSYLVANIA 16335** PHONE: (814) 724-8242 FAX: (814) 333-1466

**5815 AIRPORT ROAD ROANOKE, VIRGINIA 24012** PHONE: (703) 285-2544 FAX: (703) 362-1663

10/19/95

TO:

DELPHI HARRISON THRM.SYS

ATTN: MS. CATHY VER 200 UPPER MOUNTAIN RD.

LOCKPORT

NY 14094

P.O. # HH48888

ACCOUNT NO. 01220

#### ANALYTICAL REPORT FORM

PAGE

6

SAMPLE ID

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10/11/95

LAB ID

51011530

DATE RECEIVED:

10/11/95

PARAMETER	RESULTS	UNITS	date and	ANALYST
VOLATILE COMPOUNDS Continued				
Benzene	<0.005	MG/L	10/17/95	ECKLUND/
cis-1,3-Dichloropropene	<0.005	•		MAJOR
2-Chloroethylvinyl ether	<0.010			
Bromoform	<0.005			
2-Hexanone	<0.050			
4~Methyl-2-pentanone	<0.050			
Tetrachloroethene	<0.005			
Toluene	<0.005			
Chlorobenzene	<0.005			
Ethylbenzene	<0.005	*.		
Styrene	<0.005			
Total Xylenes	<0.005			

\*\*\* BPA Methods 601 and 624 and SW 846 Methods 8010 and 8240 do not differentiate the co-eluting cis and trans-1,2-dichloroethenes. The result reported is the sum of both compounds.

Volatile Compounds - Nethod 8240A

"Test Methods for Evaluating Solid Waste: Physical/Chemical Nethods", SW-846, Third Edition, U.S. Environmental Protection Agency. Revised 1986.

**MEADVILLE DIVISION** 

A.I.H.A. Accreditation No. 98 U.S. Public Health Services Approved Facility PA D.E.R. Leboratory I.D. No. 20-073 PA Dept. of Agriculture Approved Dairy Laboratory NY Dept. of Health Laboratory I.D. No. 10682 NY Dept. of Env. Conservation Approved Facility

ND Dept. of Health Cert. No. R-083 MD Dept. of Health Cert. No. 130 VA Dept. of Health Laboratory LD. No. 00145 WV Dept. of Health Certification No. 9907C NC Dept. of Natural Resources Cert. No. 236 Mi Dept. of Public Health Approved Facility U.S. Office of Surface Mining Approved Facility ROAROKE DIVISION

VA Dept. of Health Laboratory I.D. No. 00143

KEY:

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w.i. =WILL FOLLOW

#### FREE-COL LABORATORIES, INC. P.O. Box 557, Cotton Road Meastwile, Perraylyshia 18305-0557 Phone: Area Code 814/724-8242 FAX: Area Code 814/333-1486



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ENVIRONMENTAL OCCUPATIONAL HEALTH FOOD SCIENCE SPECIALISTS

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### Unabbreviated Listing of Hazardous Substance List Compounds

VOL	ATI	LE	COMPOUND	<u>5</u>

Chloromethane

Bromomethane

Vinyl Chloride

Chloroethane

Methylene Chloride

Acetone

Carbon Disulfide

1.1-Dichloroethene

1.1-Dichloroethane

1,2-Dichloroethylenes (Total) \*\*\*

Chloroform

1.2-Dichloroethane

2-Butanone

1,1,1-Trichloroethane

Carbon Tetrachloride

Vinyl Acetate

Ethyl Benzene

Styrene

Total Xylenes

\*\*\*EPA Methods %601 and %624 and SW 846 Methods 8010 and 8240 do not differentiate the compluting cis and trans-1,2-dichloroethenes. The result reported to you is the sum of both compounds.

Bromodichloromethane

1,1,2,2-Tetrachloroethane

1,2-Dichloropropane

trans-1,3-Dichloropropens

Trichloroethene

Dibromochloromethane

1.1.2-Trichloroethane

Benzene

cis-1,3-Dichloropropene

2-Chloroethyl Vinyl Ether

Bromoform

2-Hexanone

4-Methyl-2-pentanone

Tetrachloroethene

Toluene

Chlorobenzene



P.O. BOX 557,COTTON ROAD MEADVILLE, PENNSYLVANIA 16335 PHONE: (814) 724-8242 FAX: (814) 533-1486 5815 AIRPORT ROAD ROANOKE, VIRGINIA 24012 PHONE: (703) 265-2544 FAX: (703) 362-1863

TO:

#### **ANALYTICAL REPORT FORM**

CODE B:

This analyte was detected in the associated blank as well as in the sample. It indicates possible/probable contamination. The data user may subtract the blank value at his/her discretion.

CODE D:

Detection limit change due to a dilution.

CODE R:

The percent recovery on the spiked sample associated with this sample was not within the acceptance limits of 75% - 125%

CODE S:

This result was obtained by Method of Standard Additions.

CODE NA:

Not Applicable

CODE ND:

Not Detectable

PRC:

Preparation Reference Control

VOID:

The sample plus spike concentration exceeded the linear range of

the standard curve.

CODE Q:

Values for parameters quantified in this sample have been adjusted for recoveries of the analytical matrix spike.

The adjustments have been based on the matrix recoveries from this sample. Adjusted values are not given where sample values were less than the detection limit or where spike recoveries are

equal to 100%

COLFRS THAN

CODE J:

This result is an estimated value. It indicates that the compound meets the mass spectral data identification criteria. The result is less than the quantitation limit.

MEADVILLE DIVISION

A.L.H.A. Accreditation No. 95
U.S. Public Health Services Approved Facility
PA.D.E.P. Laboratory L.D. No. 20-072
PA. Dept. of Agriculture Approved Delry Laboratory
NY Dept. of Health Laboratory I.D. No. 10562
NY Dept. of

ND Dept. of Health Cert. No. R-083
MD Dept. of Health Cert. No. 130
VA Dept. of Health Cert. No. 130
WV Dept. of Health Certification No. 9007C
NC Dept. of Natural Resources Cert. No. 236
MI Dept. of Public Health Approved Facility
U.S. Office of Surface Mining Approved Facility

ROANOKE DIVISION VA Dept. of Health Laboratory I.D. No. 00143

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OCT-19-1995 12:31

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### ENVIRONMENTAL SAMPLE DESCRIPTION

### ATTACHMENT #2

### CHAIN OF CUSTODY RECORD

): <u>[[]</u>	145	RESULTS REQUIRED BY VERBAL RESULTS NEEDED?		200 UPPER A LOCKPORT.	NEW YORK 14094
	•		VATER D MONITO	CONTACT:	Steve Blair
CE :	1) WASTEWATER 5) SLUDGE 9) OTHER	6) SOLID WAS	TE 7) OIL	8) INDUS	TRIAL HYGIENE
DESCRIPTION:	MW-4,	Please lest mw-z, mw-s,	samples in	the following	v-1
		PARAMETERS		·	SAMPLE BOTTLE
	ATION TIM		111 00		3
7	· · · · · · · · · · · · · · · · · · ·		Method 82	90	
		30			3
		35	<del> </del>	•	3
,	W-5 8	40			3
M	W-6 8	. 05			
1					3
/rix	Blank	U U			
IL OFFICE ON A				The second secon	· · · · · · · · · · · · · · · · · · ·
DM DETECTION	LEVELS REQUIRE	:07			
BLE INTERFERE	ENCES:				
NI COR THOSE					
AN FUH (ES)	(COMPARISON OF	AREAS,BACKGROUND, ETC.)			
					•
ES RECEIVED	BY: (DATE/TIME	) [HRO PERSONNEL]	IROTILES RELINQUIS	HED BY: (DATE/TIME)	IHAD PERSONNELI
11.60		16.		•	
LENAELINOUIS	HED BY: (DATE)	IME) (HRD PERSONNELL	BOTTLES RECEIVED	BY: (DATE/TIME) ILAB	PERSONNEL
WALE COLLECTE	DBY: DI	////S	RECEIVED BY: [DAT	E TIME, LAB SIGNATURE	
Statu	The !	7/1/95	Dulant.	Sergger 10/1	1/95 19:25
207 12 12	95 12:28				

P.02 D-86

95%



P.O. BOX 557, COTTON ROAD **MEADVILLE, PENNSYLVANIA 16335** PHONE: (814) 724-6242 FAX: (814) 333-1466

01/19/96

TO:

DELPHI HARRISON THRM.SYS

ATTN: MS. CATHY VER 200 UPPER MOUNTAIN RD.

LOCKPORT

NY 14094-1896

P.O. # HH48938

ACCOUNT NO. 01220

ANALYTICAL REPORT FORM

PAGE

1

SAMPLE ID

MW-3D

TRIP BLANK

01/16/96

01/15/96

LAB ID

60117049

60117050

DATE RECEIVED: PARAMETER

01/17/96

01/17/96

VOLATILE COMPOUNDS	UNITS = MG/L	
CHLOROMETHANE	<0.010	<0.010
BROMOMETHANE	<0.010	<0.010
VINYL CHLORIDE	<0.010	<0.010
CHLOROETHANE	<0.010	<0.010
METHYLENE CHLORIDE	<0.005	<0.005
ACETONE	<0.10	<0.10
CARBON DISULFIDE	<0.005	<0.005
1,1,-DICHLOROETHENE	<0.005	<0.005
1,1,-DICHLOROETHANE	<0.005	<0.005
1,2-DICHLORO***	<0.005	<0.005
CHLOROFORM	<0.005	0.023
1,2-DICHLOROETHANE	<0.005	<0.005
2-BUTANONE	<0.10	<0.10
1,1,1-TRICHLOROETHA*	<0.005	<0.005
CARBON TETRACHLORIDE	<0.005	<0.005
VINYL ACETATE	<0.050	<0.050
BROMODICHLOROMETHANE	<0.005	0.011
1,1,2,2-TETRACHLORO*	<0.005	<0.005
1,2-DICHLOROPROPANE	<0.005	<0.005
TRANS-1,3-DICHLOROP*	<0.005	<0.005
TRICHLOROETHENE	<0.005	<0.005
DIBROMOCHLOROMETHANE	<0.005	<0.005
1,1,2-TRICHLOROETHA*	<0.005	<0.005
BENZENE	<0.005	<0.005
CIS-1,3-DICHLOROPRO*	<0.005	<0.005

<sup>\*</sup>Some of the above names have been abbreviated. Please reference the enclosed list for their complete names.

<=LESS THAN

#### ( "EADVILLE DIVISION

I.H.A. Accreditation No. 98 S. Public Health Services Approved Facility 水 D.E.R. Laboratory I.D. No. 20-073 PA Dept. of Agriculture Approved Dairy Laboratory

KEY:

NY Dept. of Health Laboratory I.D. No. 10552 NY Dept. of Env. Conservation Approved Facility ND Dept. of Health Cert. No. R-083 MD Dept. of Health Cert. No. 130 VA Dept. of Health Laboratory I.D. No. 00145

WV Dept. of Health Certification No. 9907C NC Dept. of Natural Resources Cert. No. 236 MI Dept. of Public Health Approved Facility
U.S. Office of Surface Mining Approved Facility

w.f.=WILL FOLLOW >=GREATER THAN



P.O. BOX 557, COTTON ROAD MEADVILLE, PENNSYLVANIA 16335 PHONE: (814) 724-6242 FAX: (814) 333-1466

01/19/96

TO:

DELPHI HARRISON THRM.SYS ATTN: MS. CATHY VER

200 UPPER MOUNTAIN RD.

LOCKPORT

FA RAMETER

NY 14094-1896

P.O. # HH48938

ACCOUNT NO. 01220

ANALYTICAL	REPORT	FORM	PAGE	2

SAMPLE ID : MW-3D TRIP BLANK 01/16/96 01/15/96

LAB ID 60117049 60117050 DATE RECEIVED: 01/17/96 01/17/96

VOLATILE COMPOUNDS UNITS = MG/L (Cont.) 2- HLOR\* VINYL ETHER <0.010 <0.010 BRUMOFORM <0.005 <0.005 2-NEXANONE <0.050 <0.050 4-NETHYL-2-PENTANONE <0.050 <0.050 TEX RACHLOROETHENE <0.005 <0.005 TCL VENE <0.005 <0.005 CHI OROBENZENE <0.005 <0.005 ETTAYL BENZENE <0.005 <0.005 ST/ KENE <0.005 <0.005 TONAL XYLENES <0.005 <0.005

DANB AND ANALYST
01.18/96 ECKLUND/MAJOR

\*Some of the above names have been abbreviated. Please Inference the enclosed list for their complete names.

MEADVILLE DIVISION

I.H.A. Accréditation No. 98
S. Public Health Services Approved Facility
A D.S.R. Labratory I.D. No. 20-073
PA Dept. of Agriculture Approved Dairy Laboratory

NY Dept. of Health Laboratory I.D. No. 10552 NY Dept. of Env. Conservation Approved Facility ND Dept. of Health Cert. No. R-083 MD Dept. of Health Cert. No. 130 VA Dept. of Health Laboratory I.D. No. 00145 WV Dept. of Health Certification No. 9907C NC Dept. of Natural Resources Cert. No. 23(m) MI Dept. of Public Health Approved Facility U.S. Office of Surface Mining Approved Facility



P.O. BOX 557, COTTON ROAD MEADVILLE, PENNSYLVANIA 16335 PHONE: (814) 724-6242 FAX: (814) 333-1466

01/19/96

TO:

DELPHI HARRISON THRM.SYS ATTN: MS. CATHY VER 200 UPPER MOUNTAIN RD.

LOCKPORT

NY 14094-1896

P.O. # HH48938

ACCOUNT NO. 01220

ANALYTICAL REPORT FORM

PAGE 3

SAMPLE ID

MW-3D

01/16/96

LAB ID

60117049

DATE RECEIVED:

01/17/96

PARAMETER

RESULTS

UNITS

DATE AND ANALYST

Specific Conductance

13,800

UMHOS/CM

01/19/96

ARNETT

pc: GZA GEOENVIRONMENTAL STEVE BLAIR

ASST. LABORATORY DIRECTOR

"EADVILLE DIVISION

H.A. Accreditation No. 98 . Public Health Services Approved Facility PSPD.E.R. Laboratory I.D. No. 20-073 PA Dept. of Agriculture Approved Dairy Laboratory NY Dept. of Health Laboratory I.D. No. 10552 NY Dept. of Env. Conservation Approved Facility ND Dept. of Health Cert. No. R-083 MD Dept. of Health Cert. No. 130 VA Dept. of Health Laboratory I.D. No. 00145 WV Dept. of Health Certification No. 9907C NC Dept. of Natural Resources Cert. No. 236 MI Dept. of Public Health Approved Facility U.S. Office of Surface Mining Approved Facility

PO. Box 557, Cotton Road Meadville, Pennsylvania 16335-0557 Phone: Area Code 814/724-6242 FAX: Area Code 814/333-1466



ENVIRONMENTAL OCCUPATIONAL HEALTH FOOD SCIENCE SPECIALISTS

#### Unabbreviated Listing of Hazardous Substance List Compounds

#### VOLATILE COMPOUNDS

	Chloromethane	Bromodichloromethane
زيا	Bromomethane	1,1,2,2-Tetrachloroethane
Section Section	Vinyl Chloride	1,2-Dichl <sup>†</sup> oropropane
	Chloroethane	trans-1,3-Dichloropropene
	Methylene Chloride	Trichloroethene
	Acetone	Dibromochloromethane
e i	Carbon Disulfide	1,1,2-Trichloroethane
	1,1-Dichloroethene	Benzene
	1,1-Dichloroethane	cis-1,3-Dichloropropene
a sa <b>at</b>	1,2-Dichloroethylenes (Total)***	2-Chloroethyl Vinyl Ether
	Chloroform	Bromoform
ټ.	1,2-Dichloroethane	2-Hexanone
	2-Butanone	4-Methyl-2-pentanone
. 1	1,1,1-Trichloroethane	Tetrachloroethene
	Carbon Tetrachloride	Toluene
•	Vinyl Acetate ·	Chlorobenzene

Styrene

Total Xylenes

Ethyl Benzene

\*\*\*EPA Methods 601 and 624 and SW 846 Methods 8010 and 8240 do not differentiate the co-eluting cis and trans-1,2-dichloroethenes. The result reported to you is the sum of both compounds.

P.O. Box 557, Cotton Road Meadville, Pennsylvania 16335-0557 Phone: Area Code 814/724-6242 FAX: Area Code 814/333-1466



ENVIRONMENTAL
OCCUPATIONAL HEALTH
FOOD SCIENCE
SPECIALISTS

#### QUALITY CONTROL INFORMATION

Free-Col Laboratories analyzes control samples at specified frequencies during the analyses for the purpose of evaluating and documenting the precision and accuracy of the results. The attached guality control data, prepared at the time of analysis, reflect the results obtained for the various types of controls from the batch of samples described as follows:

General Motors	Sample	Identif:	ication
----------------	--------	----------	---------

Free-Col ID

MW-3D 01/16/96 TRIP BLANK 01/15/96 60117049 60117050

P.O. Box 557, Cotton Road Meadville, Pennsylvania 16335-0557 Phone: Area Code 814/724-6242 FAX: Area Code 814/333-1466



ENVIRONMENTAL OCCUPATIONAL HEALTH FOOD SCIENCE SPECIALISTS

DELPHI HARRISON THRM. SYS. GENERAL MOTORS CORPORATION

MW-3D

SAMPLE DATE: 01/30/96 P.O.# HH48938



P.O. BOX 557, COTTON ROAD MEADVILLE, PENNSYLVANIA 16335 PHONE: (814) 724-6242 FAX: (814) 333-1466

02/05/96

TO:

DELPHI HARRISON THRM.SYS

ATTN: MS. CATHY VER 200 UPPER MOUNTAIN RD.

LOCKPORT

NY 14094-1896

P.O. # HH48938

ACCOUNT NO. 01220

•	ANAL	YTICAL REP	ORT FORM	PAGE	1	
	SAMPLE ID :	MW-3D 01/30/96	TRIP BLANK 01/15/96	1 0000 Main ann agus ann ann ann	mad were also core also dies een com also d	
PARAMETER	LAB ID DATE RECEIVED:	60131409 01/31/96	60131410 01/31/96		<b>:</b> :	

VOLATILE COMPOUNDS	UNITS = MG/L	
CHLOROMETHANE	<0.010	<0.010
BROMOMETHANE	<0.010	<0.010
VINYL CHLORIDE	<0.010	<0.010
CHLOROETHANE	<0.010	<0.010
METHYLENE CHLORIDE	<0.005	<0.005
ACETONE	<0.10	<0.10
CARBON DISULFIDE	<0.005	<0.005
1,1,-DICHLOROETHENE	<0.005	<0.005
1,1,-DICHLOROETHANE	<0.005	<0.005
1,2-DICHLORO***	<0.005	<0.005
CHLOROFORM	<0.005	0.025
1,2-DICHLOROETHANE	<0.005	<0.005
2-BUTANONE	<0.10	<0.10
1,1,1-TRICHLOROETHA*	<0.005	<0.005
CARBON TETRACHLORIDE	<0.005	<0.005
VINYL ACETATE	<0.050	<0.050
BROMODICHLOROMETHANE	<0.005	0.010
1,1,2,2-TETRACHLORO*	<0.005	<0.005
1,2-DICHLOROPROPANE	<0.005	<0.005
TRANS-1,3-DICHLOROP*	<0.005	<0.005
TRICHLOROETHENE	<0.005	<0.005
DIBROMOCHLOROMETHANE	<0.005	<0.005
1,1,2-TRICHLOROETHA*	<0.005	<0.005
BENZENE	<0.005	<0.005
CIS-1,3-DICHLOROPRO*	<0.005	<0.005

<sup>\*</sup>Some of the above names have been abbreviated. Please reference the enclosed list for their complete names.

#### MEADVILLE DIVISION

A.I.H.A. Accreditation No. 98
U.S. Public Health Services Approved Facility
PA D.E.R. Laboratory I.D. No. 20-073
PA Dept. of Agriculture Approved Dairy Laboratory

NY Dept. of Health Laboratory I.D. No. 10552 NY Dept. of Env. Conservation Approved Facility ND Dept. of Health Cert. No. R-083 MD Dept. of Health Cert. No. 130 VA Dept. of Health Laboratory I.D. No. 00145 Wy Dept. of Health Certification No. 9907( NC Dept. of Natural Resources Cert. No. 2 MI Dept. of Public Health Approved Facility U.S. Office of Surface Mining Approved Fa



P.O. BOX 557, COTTON ROAD MEADVILLE, PENNSYLVANIA 16335 PHONE: (814) 724-6242 FAX: (814) 333-1466

02/05/96

TO:

DELPHI HARRISON THRM.SYS

P.O. # HH48938

ATTN: MS. CATHY VER 200 UPPER MOUNTAIN RD.

LOCKPORT

NY 14094-1896

ACCOUNT NO. 01220

#### **ANALYTICAL REPORT FORM**

PAGE 2

	SAMPLE	ID	:	MW-3D 01/30/96	TRIP BLANK 01/15/96
PARAMETER	LAB ID DATE RE	CEIVEI	): 	60131409 01/31/96	60131410 01/31/96
VOLATILE COMPOUNDS	(Cont.)	UNITS	=	MG/L	
2-CHLOR* VINYL ETHE	R.			<0.010	<0.010
BROMOFORM				<0.005	<0.005
2-HEXANONE				<0.050	<0.050
4-METHYL-2-PENTANON	Œ			<0.050	<0.050
TETRACHLOROETHENE				<0.005	<0.005
TOLUENE				<0.005	<0.005
CHLOROBENZENE	•			<0.005	<0.005
ETHYL BENZENE				<0.005	<0.005
STYRENE				<0.005	<0.005
TOTAL XYLENES				<0.005	<0.005

Volatile Compounds - Method 8240A

"Test Methods for Evaluating Solid Waste: Physical/Chemical Methods", SW-846, Third Edition, U.S. Environmental Protection Agency. Revised 1986.

DATE AND ANALYST 02/01/96 MAJOR

ASST. LABORATORY DIRECTOR

\*Some of the above names have been abbreviated. Please reference the enclosed list for their complete names.

pc: Mr. Steve Blair, GZA

MEADVILLE DIVISION

A.I.H.A. Accreditation No. 98
U.S. Public Health Services Approved Facility
PA D.E.R. Laboratory I.D. No. 20-073
PA Dept. of Agriculture Approved Dairy Laboratory

NY Dept. of Health Laboratory I.D. No. 10552 NY Dept. of Env. Conservation Approved Facility ND Dept. of Health Cert. No. R-083 MD Dept. of Health Cert. No. 130 VA Dept. of Health Laboratory I.D. No. 00145 WV Dept. of Health Certification No. 9907C NC Dept. of Natural Resources Cert. No. 236 MI Dept. of Public Health Approved Facility U.S. Office of Surface Mining Approved Facilit

FREE-COL LABORATORIES, INC.			YES NO MEADVILLE, PA 814 333-1466 Fax	SPIKE 16335-0557	YES NO	METHODS STATE PROJECT NAME / NUMBER	YES NO DELPHI THERMAL	IPLER'S NAME / DATE	YES NO BART A. KLETTKE 1-30-46	STATE OF THE STATE	SIS REQUES		Volatiles 8240 , 2 - 40 mil Vials	Trip Blank												THE RATIOS ONLY	Relinouished Time Time	1 7 15 Sample rec. at lab	Means of del. to lab	Sample cooler temp, upon receipt	Sample check in started /-3/	316/96 Sample check in completed	/ /96 Samples refrigerated upon receipt at tab	/ /96 Samples refrigerated upon receipt from client (Yes) No.
	TYPE	Wastewater	Monitoring Well	Drinking Water	PWS#	NPDES / SPDES	Solid Waste	I.H.	Other		- 1	· · · · · · · · · · · · · · · · · · ·	Water Grab	DI Water				HS#									ORGANIZATION	147	000-10-10	الح		Fruild		
JOF CUSTODY RECORD	1 2 2	al	Steve Blair	364 Nagel Drive	Buffalo	NY ZIP CODE 14225 N	685-2300 FAX (716)685-3629			SAMPLE INFORMATION	TIME SAMPLE ID	谁在接着情况。 我们把是那些少少的一种人的一些一种的情况。	09:45 MW-3D	: Trip Blank			}	of 1 lease lest					•	•			STORMS STORY STRUCTURE STORY S	6	Control of the contro		hai With	Constant Helling		그 그 모든 경우 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그
CH/ 10	DILL	COMPANY				ja ja		ASE ORDI	CLIENT NUMBER	7S 3 18 5 1	DATE	京 日本教学 は書から		2 / /96	36/ / 8	4 / /96	96/ / 9	96/ / 9	96/ / 2	96/ / 8	96/ / 6	10 / /96	11 / /96	12 / /96	13 / /96	14 / /96	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	Rece.	<u> </u>	2 1 /300/90	1 18/196		_	96/ / /

PO. Box 557, Cotton Road Meadville; Pennsylvania 16335-0557 Phone: Area Code 814/724-6242 FAX: Area Code 814/333-1466



ENVIRONMENTAL OCCUPATIONAL HEALTH FOOD SCIENCE SPECIALISTS

#### Unabbreviated Listing of Hazardous Substance List Compounds

#### VOLATILE COMPOUNDS

Chloromethane Bromodichloromethane Bromomethane 1,1,2,2-Tetrachloroethane 1,2-Dichloropropane Vinyl Chloride Chloroethane trans-1,3-Dichloropropene Trichloroethene Methylene Chloride Acetone Dibromochloromethane Carbon Disulfide 1,1,2-Trichloroethane Benzene 1,1-Dichloroethene cis-1,3-Dichloropropene 1,1-Dichloroethane 2-Chloroethyl Vinyl Ether 1,2-Dichloroethylenes (Total)\*\*\* Chloroform : Bromoform 2-Hexanone 1,2-Dichloroethane 4-Methy1-2-pentanone 2-Butanone Tetrachloroethene 1,1,1-Trichloroethane Carbon Tetrachloride Toluene

Vinyl Acetate Chlorobenzene

Ethyl Benzene

Styrene

Total Xylenes

\*\*\*EPA Methods 601 and 624 and SW 846 Methods 8010 and 8240 do not differentiate the co-eluting cis and trans-1,2-dichloroethenes. The result reported to you is the sum of both compounds.

P.O. Box 557, Cotton Road Meadville, Pennsylvania 16335-0557 Phone: Area Code 814/724-6242 FAX: Area Code 814/333-1466



ENVIRONMENTAL
OCCUPATIONAL HEALTH
FOOD SCIENCE
SPECIALISTS

#### QUALITY CONTROL INFORMATION

Free-Col Laboratories analyzes control samples at specified frequencies during the analyses for the purpose of evaluating and documenting the precision and accuracy of the results. The attached quality control data, prepared at the time of analysis, reflect the results obtained for the various types of controls from the batch of samples described as follows:

General Motors Sample Identification	<u>Free-Col ID</u>
MW-3D 01/30/96	60131409
TRIP BLANK 01/15/96	60131410

### FREE-COL LABORATORIES, INC. VOA SPIKED CONTROL INFORMATION (CLP - ANALYTICAL SPIKED SAMPLE LIMITS)

Date 2-1-96 Analyst	Ehleir	d m	aier			
Samples associated with th	is spi	ked con	Etal:			
602-01-400						
<u>601-31-409/410</u>						
601-31074						
		56.1 21	1109			
Sample used as spiked cont	roT: R	201-31-	-90-1			
		catzen	CAMPLE	ACCEPT.	ASSYD	FILE
PARAMETER		RESULT	RESULT	LIMITS	% REC.	
		UG/L	UG/L	% REC.		
	UG/L	<u>UG/11</u>	06/1	* ((2)		
Chloromethane	20	16.1	<10	28-189	ිපිට	520
Bromomethane	20	15.4		31-212	77	519
Vinvl chloride	20	14.0		22-185	70	528
Chloroethane	20	17.0	V	52-170	85	507·
Methylene chloride	20	27.0	<5	63-148	135	521
Acrolein	62			22-185		500
Acrylonitrile	58			53-187	_	<u>501</u>
1,1-Dichloroethene	20	16.2	<b>&lt;</b> 5	50-158		· 513
1,1-Dichloroethane	20	16.2		73-141	90	<u>511</u> `
trans-1,2-Dichloroethenes		18.8		63-151	94	514
Chloroform	20	19.4		68-141-		509
1,2-Dichloroethane	20	<i>2</i> 0.0		52-157	100	512
1,1,1-Trichloroethane	20 .	18.9		58-155	94	525
Carbon tetrachloride	20 ·	<i><b>213</b></i>		40-141	106	504
Bromodichloromethane	20	18.9		46-150	94	510
1.2-Dichloropropane	20	19.2		67-145	Gle	515
trans-1.3-Dichloropropene		17.4		56-141	87	517
Trichloroethene	20	19.7		64-129	98	527
Benzene	20	સાક		70-144	106	502
Dibromochloromethane	20	17.3		27-158	86	506
1,1,2-Trichloroethane	20_	19,4	1/	59-149	97	526
cis-1.3-Dichloropropene	20	18,0	Ψ	46-151	90	516
2-Chloroethvl vinvl ether	r 20	16.6	<10	4-186	<u> </u>	508
Bromoform	20	16.4	<b>&lt;</b> \$	6-150	ව්ථ	503
Tetrachloroethene	20	186		48-163	93	523
1,1,2,2-Tetrachloroethan	e 20	17.4		46-164	87	522
Toluene	20 -			72-131	97	524
Chlorobenzene	20	18.9		70-131	94	505
Ethvl benzene	20	18.5	$\overline{}$	61-140		518
1,3-Dichlorobenzene	26			58-163		530
1,2-Dichlorobenzene	26			42-159		529
1,4-Dichlorobenzene	20			33-177		531
Diethvl Benzene	44			71-137		533
Ethvl Ether	35			62-160		532
Xvlenes	44	39.8	<u>&lt;5</u>	72-130		534
MEK	20	18.9	<100	O 63-179	74	536

# FREE-COL LABORATORIES, INC. VOA SPIKED CONTROL INFORMATION (CLP - ANALYTICAL SPIKED SAMPLE LIMITS)

SULT R 3/L U 38 <	RESULT	ACCEPT. LIMITS % REC.	ASSYD % REC.	FILE
SIKED SESULT RESTA	RESULT	ACCEPT.	ASSYD % REC.	FILE
SIKED SESULT RESTA	RESULT	LIMITS	ASSYD % REC.	FILE
SULT R 3/L U 38 <	RESULT	LIMITS	ASSYD % REC.	FIL
SULT R 3/L U 38 <	RESULT	LIMITS	% REC.	
3 <u>8</u> <	JG/L	३ REC.		
	(100	51-175	119	538
10		53-160	84	539
<u> </u>	<u> </u>	$\frac{33-160}{71-140}$		535
		71-140		
<u> </u>	15-		an	
18:7	<del>- 52</del>			
<u>0.02</u>	<u> </u>			
<u> </u>		·		
17,0	<u> </u>		<u> </u>	
				•
١	8.1 8.8 20.0 	<u> </u>	20.0 <sd< td=""><td>20.0 (SD 100)</td></sd<>	20.0 (SD 100)

### FREE-COL LABORATORIES, INC. VOA BLANK INFORMATION (CLP - CALIERATION BLANK LIMITS)

Date 2-1-96 Analys	=t Ecklund / Ma	
Samples associated with this 602-01-400	blank:	
GO1-31-409/410		
601-31-074		
<u>Parameter</u>	Blank Value	
Units = Mg/L	•	
Chloromethane	<1,0	<u>.</u>
Bromomethane		
Vinyl chloride		
Chloroethane		
Methylene chloride	<b>45</b>	
Acrolein		
Acrylonitrile		·
1,1-Dichloroethene	<b>&lt;</b> 5	
1,1-Dichloroethane		
trans-1,2-Dichloroethenes		
Chloroform		
1,2-Dichloroethane		
1,1,1-Trichloroethane	·	
Carbon tetrachloride		•
Bromodichloromethane		
1,2-Dichloropropane		
trans-1,3-Dichloropropene		
Trichloroethene		
Benzene		
Dibromochloromethane		
1,1,2-Trichloroethane		
cis-1,3-Dichloropropene	V	
2-Chloroethyl vinyl ether	<10	
Bromoform	<5	
Tetrachloroethene		
1,1,2,2-Tetrachloroethane		
Toluene		
Chlorobenzene		
Ethyl benzene	V	
1,3-Dichlorobenzene		
1,2-Dichlorobenzene	-	
1,4-Dichlorobenzene		
Xylene	<b>45</b>	
2-Butanone - MEK	<100	
4-Methyl-2-pentanone	(50	
Acetone	<100	·
Syrene	<5	

## FREE-COL LABORATORIES, INC. VOA BLANK INFORMATION (CLP - CALIBRATION BLANK LIMITS)

Date 2-1-96	Analyst Ecklund Majon	
Samples associated with	this blank:	
(002-01-400		
601-31-409/410		
•		
<u>Parameter</u>	<u>Blank Value</u>	
Units = UNIL		
		#
Carbon Disulfide	45	
Vinyl Acetate	<b>&lt;50</b>	
2-Hexanone - MBK	<u> </u>	
	130	<del></del>
Dichlorofluoromethane		
1,1,1,2-Tetrachloroetha	ine	
Trichlorofluoromethane		
1,2,3-Trichloropropane		
3-Chloro-1-propene		
1,2-Dibrmomethane		
cis,1,2-Dichloroethene		
·		

#### FREE-COL LABORATORIES, INC. VOA REPEAT CONTROL INFORMATION (CLP - DUPLICATE SAMPLE LIMITS)

Date 2-1-96	(CLP - DO.					
Col-01-YUC    Col-31-YO9    Col-31-YO9	Data 21.01 a 2007 601	i. Pr. mod	Ima:	~/		
Col-31-409/40   Col-31-409   Sample used as repeat control: Col-31-409   AD = Absolute Difference   RPD = Relative Percent Difference   Parameter   Sample Repeat Accept   Accept   Assayd File   Value   Value   AD   RPD   AD/RPD	Date Analyst Co	iara	seet cor	trol.		
Col-3j-079   Sample used as repeat control:   Col-3j-4C9	samples associated with th	T2 TeF	year con	icioi.		
Sample used as repeat control:   GO/-31-409	601 31 169/110					
Sample used as repeat control:   COI - 31-UCF   AD = Absolute Difference   RPD = Relative Percent Difference   Parameter   Value   Value   AD   RPD   AD/RPD						
Parameter   Yalue   Yalue   Accept   Accept   Absavd   File   Yalue   Yalue   AD   RPD   AD   RPD	601-31-019					
Parameter   Yalue   Yalue   Accept   Accept   Absavd   File   Yalue   Yalue   AD   RPD   AD   RPD	Sample used as repeat cont	701·6	1-31-4	i09 ,		
Parameter   Yalue   Yalue   Accept   Accept   Absavd   File   Yalue   Yalue   AD   RPD   AD   RPD	AD = Absolute Difference		RPD = F	Relative Per	cent Diffe	rence
Value   Value   AD   RPD   AD/RPD	AD - ADSOIGE DIFFERENCE				å	
Value   Value   AD   RPD   AD/RPD	Parameter	Samp.	Repeat	Accept Acce	pt Assavd	<u>File</u>
Chloromethane						
Chloromethane	Units = Ugil					
Signal		•			- 1	
Stomomethane	Chloromethane	<10	<10		Ø_	820
Vinyl chloride         27         828           Chloroethane         7         807           Methylene chloride         5         17         821           Acrolein         -         800           Acrylonitrile         -         801           1.1-Dichloroethene         5         813           1.1-Dichloroethane         41         811           Lrass-1,2-Dichloroethanes         28         814           Chloroform         14         809           1,2-Dichloroethane         27         825           Carbon tetrachloride         804         812           Bromodichloromethane         79         810           1,2-Dichloropropane         815         817           trichloroethene         32         827           Benzene         49         802           Dibromochloromethane         70         806           1,2-Trichloroethane         826         836           1,2-Trichloroethane         33         826           cis-1,3-Dichloropropene         33         823           Tetrachloroethene         33         823           1,1,2,2-Tetrachloroethane         33         823           Toluene </td <td></td> <td></td> <td>:</td> <td></td> <td></td> <td>819</td>			:			819
Chloroethane         W         807           Methylene chloride         5         5         17         821           Acrolein         -         800         801         -         801           1,1-Dichloroethene         -         813         -         813           1,1-Dichloroethane         -         41         811         -           1,2-Dichloroethane         -         28         814         -         -         809         -         -         809         -         -         809         -         -         814         -         809         -         -         814         809         -         -         814         809         -         -         814         809         -         -         814         809         -         -         809         -         -         814         809         -         -         825         -         825         -         814         -         -         825         -         -         825         -         -         825         -         -         825         -         -         825         -         -         825         -         -         -         - <td></td> <td></td> <td></td> <td>27</td> <td></td> <td>828</td>				27		828
Methylene chloride         45         45         17         821           Acrolein		V	: \$		1	
Acrolein Acrylonitrile		<5	<b>45</b>	17		
Acrylonitrile		-	_			
1,1-Dichloroethane						
1,1-Dichloroethane		<b>&lt;</b> 5	<b>&lt;</b> 5		$\varphi$	
Chloroform						
Chloroform       14       809         1,2-Dichloroethane       27       825         Carbon tetrachloride       804         Bromodichloromethane       79       810         1,2-Dichloropropane       815         trans-1,3-Dichloropropene       32       827         Trichloroethene       32       827         Benzene       49       802         Dibromochloromethane       70       806         1,1,2-Trichloroethane       826         cis-1,3-Dichloropropene       816         2-Chloroethyl vinyl ether       808         Bromoform       \$5       803         Tetrachloroethane       33       823         1,1,2,2-Tetrachloroethane       38       824         Toluene       38       824         Chlorobenzene       24       805         Ethyl benzene       5       818         1,2-Dichlorobenzene       -       829         1,4-Dichlorobenzene       -       836         1,4-Dichlorobenzene       -       836         -       -       836				28		
1,1-Trichloroethane				- 14_		
Carbon tetrachloride       804         Bromodichloromethane       79       810         1,2-Dichloropropane       815         trans-1,3-Dichloropropene       817         Trichloroethene       32       827         Benzene       49       802         Dibromochloromethane       70       806         1,1,2-Trichloroethane       826         cis-1,3-Dichloropropene       816         2-Chloroethyl vinyl ether <io< td="">       IO       808         Bromoform       5       803         Tetrachloroethene       33       823         1,1,2,2-Tetrachloroethane       38       824         Toluene       38       824         Chlorobenzene       5       818         1,3-Dichlorobenzene       5       818         1,2-Dichlorobenzene       36       839         1,4-Dichlorobenzene       36       836</io<>	1,2-Dichloroethane					
Bromodichloromethane   79   810				27		
1,2-Dichloropropane	Carbon tetrachloride					
1,2-Dichloropropene       817         Trichloroethene       32       827         Benzene       49       802         Dibromochloromethane       70       806         1,1,2-Trichloroethane       826         cis-1,3-Dichloropropene       816         2-Chloroethyl vinyl ether (NO)       808         Bromoform       5       803         Tetrachloroethene       33       823         1,1,2,2-Tetrachloroethane       38       824         Chlorobenzene       24       805         Ethyl benzene       5       818         1,3-Dichlorobenzene       -       830         1,2-Dichlorobenzene       -       831         1,4-Dichlorobenzene       -       36       831         836       836	Bromodichloromethane			79		
Trichloroethene       32       827         Benzene       49       802         Dibromochloromethane       70       806         1,1,2-Trichloroethane       826         cis-1,3-Dichloropropene       816         2-Chloroethvl vinvl ether       808         Bromoform       5       803         Tetrachloroethene       33       823         1,1,2,2-Tetrachloroethane       38       824         Chlorobenzene       24       805         Ethvl benzene       5       818         1,3-Dichlorobenzene       -       830         1,2-Dichlorobenzene       -       830         1,4-Dichlorobenzene       -       36       -         1,4-Dichlorobenzene       -       36       -         -       836       -       831	1,2-Dichloropropane		·			
Benzene   49   802	trans-1,3-Dichloropropene					
Dibromochloromethane       70       806         1,1,2-Trichloroethane       826         cis-1,3-Dichloropropene       816         2-Chloroethyl vinyl ether < 10	Trichloroethene					
1,1,2-Trichloroethane	Benzene					
Side				70_		
2-Chloroethyl vinyl ether <10 <10			· .			
Bromoform		<u> </u>				
Tetrachloroethene       33       823         1,1,2,2-Tetrachloroethane       822         Toluene       38       824         Chlorobenzene       24       805         Ethvl benzene       5       818         1,3-Dichlorobenzene       -       830         1,2-Dichlorobenzene       -       36       -         1,4-Dichlorobenzene       -       36       -         2,36       -       831						
1,1,2,2-Tetrachloroethane   38		<u> </u>	<u> </u>			
Toluene  Chlorobenzene  Ethyl benzene  1,3-Dichlorobenzene  1,2-Dichlorobenzene  1,4-Dichlorobenzene  38 824 805 818 5 818 61 830 61 830 61 831 630 630 836 630 836				33		
Chlorobenzene       24       805         Ethvl benzene       5       818         1,3-Dichlorobenzene       -       830         1,2-Dichlorobenzene       -       36       -         1,4-Dichlorobenzene       -       36       -         20       836       -       831		≘ _		20		
Ethvl benzene 5 818  1,3-Dichlorobenzene - 830  1,2-Dichlorobenzene - 36 - 831  1,4-Dichlorobenzene - 36 - 831						
1,3-Dichlorobenzene - 830 1,2-Dichlorobenzene - 36 - 831 1,4-Dichlorobenzene - 36 - 831					<del></del>	
1,3-Dichlorobenzene - 829 1,4-Dichlorobenzene - 36 - 831 1,4-Dichlorobenzene - 36 - 836						
1,4-Dichlorobenzene 36 831 1,4-Dichlorobenzene 36						
1,4-Dichiorobenzene				~~~		
Acetone CIOO CIOO 20 0 830			<del></del>			
	Acetone	$\leq 100$	ح درن	<u> </u>		

FREE-COL LABORATORIES, INC. VOA REPEAT CONTROL INFORMATION (CLP - DUPLICATE SAMPLE LIMITS)

Parameter Samp. Repeat Accept Value Value AD	e Percent Difference
Parameter  Samp. Repeat Accept Value Value AD	
Parameter  Samp. Repeat Accept Value Value AD	
Parameter  Samp. Repeat Accept Value Value AD	
Parameter Samp. Repeat Accept Value Value AD	
Value Value AD	
Value Value AD	Accept Assayd File
	RPD AD/RPD
Units = Ugl	
3-Chloro-1-propene	
Dichlorodifluoromethane Methyl Ethyl Ketone <100 <100	Ø
Methyl Ethyl Ketone <ioo <50="" <50<="" <ioo="" mibk="" td=""><td><u>Ø</u></td></ioo>	<u>Ø</u>
1,1,1,2-Tetrachloroethane	
Trichlorofluoromethane	
1,2,3-Trichloropropane	
1,2-Dibromomethane	
Cis-1.2-Dichloroethane	
Xvlene <5 <5	Q
Sturene <5 <5	
Carlom Dissulide <5 <5	
Methul Butill Ketme (50 <50	
Virul Acotate <50 (50	V

# FREE-COL LABORATORIES, INC. 7CA REFERENCE CONTROL INFORMATION (CLP - CALIBRATION VERIFICATION LIMITS)

Data 2-1-96	2-21 ys= Echlund/Major	-
Samples associated	with this reference donorol:	
		-

601-31-409/410 601-31-074 -602-01-40

<u>Parameter</u>	Tarcet Value ug/L	<u>Acceptance</u> <u>Limits</u> · <u>uc/L</u>	Assaved Value uc/L*	Files
Chlamathana	20	5.4-34.5	<u> 22.8</u>	223
Chloromethane	20	8.1-39.8	17.7	222
Bromomethane Vinvl chloride	20	1.3-42.4	16.6	232
Chloroethane	20	4.0-36.9	14.3	209
Methylene chloride	20	11.5-31.4	18.4	224
Acrolein	62	4.2-105.4		201
Actionitrile	58	13.2-116.0	-	202
1.1-Dichloroethene	20	10.9-32.4	19.6	215
1.1-Dichloroethane	20	15.3-28.0	19,5	214
-trans-1.2-DichloroetheneS	20	13.6-28.3	<i>a</i> 1.2	217
Chloroform	20	15.5-26.2	20.2	211
1.2-Dichlorgethane		7.5-34.5	17.1	215
1.1.1-Trichloroethane	20	13.6-29.8	<u> ఎ</u> 0.9	228
Carbon tetrachloride	20	. 7.7-28.1	20.3	<u> 206</u>
Bromodichloromethane	20	9.7-30.1	18.4	212
1.2-Dichloropropane	20	15.2-28.0	19.9	218
trans-1.3-Dichloropropene	20	12.7-25.6	· 16.6	220
Trichloroethene	20	14.0-27.3	20.6	230
Benzene	20	14.2-28.1	17.0	203
Dibromochloromethane	20	4.1-29.5	17.2	208
1.1.2-Trichloroethane	20	14.2-28.5	19.4	229
cis-1.3-Dichloropropene	20	10.1-27.2	13.4	219
2-Chlorcethyl vinyl ether	20	9.9-32.5	<i>a</i> 0,2	210
Bromoform	20	2.3-31.1	15.3	205
Tetrachloroethene	20	13.0-28.7	20.6	225
1.1.2.2-Tetrachloroethane	20	14.7-26.1	17.0	225
Toluene :	20	· 15.1-25.7	<u> </u>	227
Chlorobenzene	20	11.1-28.9	19.6	207
Ethvl benzene	20	13.2-27.7	<u> </u>	221
1.3-Dichlorobenzene	26	18.2-36.9		234
1.2-Dichlorobenzene	26	11.0-42.2		233
1.4-Dichlorobenzene	20	3.0-36.1	-	235
Diethyl Benzene	<b>ं</b> दं	25.9-62.9		237
Ethvl Ether	35	26.9-49.4		236
Xvlenes	44	21.0-66.7		238
MEK	20	9.1-39.4	15.2	240
Acetone	20	9.6-38.0	13.9	242

# FREE-COL LABORATORIES, INC. VOA REFERENCE CONTROL INFORMATION (CLP - CALIBRATION VERIFICATION LIMITS)

Parameter	<u>Target</u> Value	Acceptance Limits	<u>Assayed</u> Value	File
	ug/L	ug/L	ug/L	
	20	14.0-29.7	17.1	243
MIBK	45	34.8-60.3		244
Tetrahvdrofuran Carbondisulfide	20	11.0-30.4	30.8	245
Stvrene Stvrene	20	12.4-30.0	19.6	246
Vinvl Acetate	20	11.0-27.5	QO.1	247
Amvl Acetate	44	14.7-64.6		248
Methyl Butyl Ketone	20	10.3-33.9	15.5	249
		•		

#### Pree-Col Laboratories, Inc. Surrogate Spike Information Method 8260

4P-1-6 ====

2=21yst= Erkland major

its: & Recovery

'pe: W = Low/Medium Water

S = Low/Medium Soil/Sediment

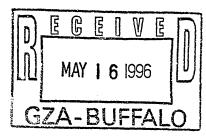
	Dibromofluoromethane	Toluene dg		4-Bromofluoro- benzene
Limits: Water Soil/Sediment	86-118 86-129	88-110 81-117	ź	86-115 . 74-121
Pree-Col I.D.	•			

3/H1	. Free Cur 1.u.			•
	•		!	·
w_	601-31-409	104	99	පිපි :
w	601-31-410	97	99	විරි
•				
5	· GOI-31-074	103	98	- 84
S	GO2-01-400	108	92	85
		•		

P.O. Box 557, Cotton Road Meadville, Pennsylvania 16335-0557 Phone: Area Code 814/724-6242 FAX: Area Code 814/333-1486



ENVIRONMENTAL OCCUPATIONAL HEALTH FOOD SCIENCE SPECIALISTS



DELPHI HARRISON THRM. SYS. GENERAL MOTORS CORPORATION

MONITORING WELLS #3-8

SAMPLE DATES: 04/30/96 P.O.# HH48938



P.O. BOX 557, COTTON ROAD **MEADVILLE, PENNSYLVANIA 16335** PHONE: (814) 724-6242 FAX: (814) 333-1466

05/13/96

TO:

DELPHI HARRISON THRM.SYS

ATTN: MS. CATHERINE VER 200 UPPER MOUNTAIN RD.

LOCKPORT

NY 14094-1896

P.O. # HH48938

ACCOUNT NO. 01220

		REPORT	
<b>ABIAI</b>	/11/ N		
	, , , , , , , , , , , , , , , , , , ,	DEFUNI	

	ANAL	YTICAL RE	PORT FORM	PAGE 1		,
· · · · · · · · · · · · · · · · · · ·	SAMPLE ID :	MW-4 04/30/96	MW-5 04/30/96	MW-6 04/30/96	MW-3 04/30/96	
	LAB ID DATE RECEIVED:	60501416 05/01/96			60501419 05/01/96	
		<b>1</b>				
VOLATILE COMPOUNDS	UNITS = MG/	L				
CHLOROMETHANE		<1 D	<1 D	<1 D	<1 D	
BROMOMETHANE	•	<1 D	<1 D	<1 D	<1 D	
VINYL CHLORIDE		40	<1 D	3.4	2.6	
CHLOROETHANE		<1 D	<1 D	<1 D	<1 D	
METHYLENE CHLORIDE		<0.5 D	<0.5 D	<0.5 D	<0.5 D	
ACETONE		<10 D	<10 D		<10 D	
CARBON DISULFIDE		<0.5 D	<0.5 D	<0.5 D	<0.5 D	
1,1,-DICHLOROETHENE		<0.5 D	<0.5 D	<0.5 D	<0.5 D	
1,1,-DICHLOROETHANE		<0.5 D	<0.5 D	<0.5 D	<0.5 D	
1,2-DICHLORO***		170	0.7	5.3	310	
CHLOROFORM		<0.5 D	<0.5 D		<0.5 D	
1,2-DICHLOROETHANE		<0.5 D			<0.5 D	
2-BUTANONE		<10 D	<10 D		<10 D	
1,1,1-TRICHLOROETHA*		<0.5 D			<0.5 D	
CARBON TETRACHLORIDE		<0.5 D	<0.5 D		<0.5 D	
VINYL ACETATE	•	<5 D	<5 D		<5 D	
BROMODICHLOROMETHANE		<0.5 D		<0.5 D		
1,1,2,2-TETRACHLORO*		<0.5 D		<0.5 D		
1,2-DICHLOROPROPANE		<0.5 D	<0.5 D	<0.5 D	<0.5 D	
TRANS-1,3-DICHLOROP*	Y Y	<0.5 D		<0.5 D	<0.5 D	
TRICHLOROETHENE		32	<b>.</b> 33	6.9	0.6	
DIBROMOCHLOROMETHANE			<0.5 D	<0.5 D	<0.5 D	-
1,1,2-TRICHLOROETHA*		<0.5 D	<0.5 D	<0.5 D	<0.5 D	
BENZENE		<0.5 D		<0.5 D	3.4	
CIS-1,3-DICHLOROPRO*		<0.5 D	<0.5 D	<0.5 D	<0.5 D	

<sup>\*</sup>Some of the above names have been abbreviated. Please reference the enclosed list for their complete names.

#### **TEADVILLE DIVISION**

LI.H.A. Accreditation No. 98 J.S. Public Health Services Approved Facility PA D.E.R. Laboratory I.D. No. 20-073 PA Dept. of Agriculture Approved Dairy Laboratory NY Dept. of Health Laboratory I.D. No. 10552 NY Dept. of Env. Conservation Approved Facility ND Dept. of Health Cert. No. R-083 MD Dept. of Health Cert. No. 130 VA Dept. of Health Laboratory I.D. No. 00145

WV Dept. of Health Certification No. 9907C NC Dept. of Natural Resources Cert. No. 236 MI Dept. of Public Health Approved Facility U.S. Office of Surface Mining Approved Facilit

<=LESS THAN KEY: >=GREATER THAN w.f.=WILL FOLLOW



P.O. BOX 557, COTTON ROAD MEADVILLE, PENNSYLVANIA 16335 PHONE: (814) 724-6242 FAX: (814) 333-1466

05/13/96

TO:

DELPHI HARRISON THRM.SYS

ATTN: MS. CATHERINE VER

200 UPPER MOUNTAIN RD. LOCKPORT N

NY 14094-1896

P.O. # HH48938

ACCOUNT NO. 01220

#### ANALYTICAL REPORT FORM

	ANAI	PAGE			
	SAMPLE ID :	MW-4 04/30/96	MW-5 04/30/96	MW-6 04/30/96	MW-3 04/30/96
	·	04/30/30	04/30/30	04/30/30	04/30/30
	LAB ID	60501416	60501417	60501418	60501419
PARAMETER	DATE RECEIVED:	05/01/96	05/01/96	05/01/96	05/01/96
VOLATILE COMPOUN	DS (Cont.) UNITS =	MG/L			
2-CHLOR* VINYL E	THER	<1 D	<1 D	<1 D	<1 D
BROMOFORM		<0.5 D	<0.5 D	<0.5 D	<0.5 D
2-HEXANONE		<5 D	<5 D	<5 D	<5 D
		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	10 0		14 6
4-METHYL-2-PENTA	NONE	<5 D	<5 D	<5 D	<5 D
		–			
		<5 D	<5 D	<5 D	<5 D
TETRACHLOROETHEN TOLUENE		<5 D <0.5 D	<5 D 27	<5 D 57	<5 D <0.5 D
4-METHYL-2-PENTA TETRACHLOROETHEN TOLUENE CHLOROBENZENE ETHYL BENZENE		<5 D <0.5 D <0.5 D	<5 D 27 <0.5 D	<5 D 57 <0.5 D	<5 D <0.5 D 3.7
TETRACHLOROETHEN TOLUENE CHLOROBENZENE		<5 D <0.5 D <0.5 D <0.5 D	<5 D 27 <0.5 D <0.5 D	<5 D 57 <0.5 D <0.5 D	<5 D <0.5 D 3.7 <0.5 D

Please reference the following page(s) for date and analyst.

\*Some of the above names have been abbreviated. Please reference the enclosed list for their complete names.

EADVILLE DIVISION

J.H.A. Accreditation No. 98

U.S. Public Health Services Approved Facility
PA D.E.R. Laboratory I.D. No. 20-073

\ Dept. of Agriculture Approved Dairy Laboratory

NY Dept. of Health Laboratory I.D. No. 10552 NY Dept. of Env. Conservation Approved Facility ND Dept. of Health Cert. No. R-083 MD Dept. of Health Cert. No. 130 VA Dept. of Health Laboratory I.D. No. 00145 WV Dept. of Health Certification No. 9907C NC Dept. of Natural Resources Cert. No. 236 MI Dept. of Public Health Approved Facility U.S. Office of Surface Mining Approved Facility



P.O. BOX 557, COTTON ROAD MEADVILLE, PENNSYLVANIA 16335 PHONE: (814) 724-6242 FAX: (814) 333-1466

05/13/96

TO:

DELPHI HARRISON THRM.SYS

ATTN: MS. CATHERINE VER

200 UPPER MOUNTAIN RD. LOCKPORT N

NY 14094-1896

P.O. # HH48938

E.O. # 1111-0000

ACCOUNT NO. 01220

#### ANALYTICAL REPORT FORM

				PAGE 3
	SAMPLE ID :	MW-7 04/30/96	MW-8 04/30/96	TRIP BLANK
PARAMETER	LAB ID DATE RECEIVED:	60501420 05/01/96	60501421 05/01/96	60501422 05/01/96

VOLATILE COMPOUNDS	UNITS = MG/L		<b>,</b>	
CHLOROMETHANE	- * **********************************	1 D	<1 D	<0.010
BROMOMETHANE	<	1 D	<1 D	<0.010
VINYL CHLORIDE	1	8	2.1	<0.010
CHLOROETHANE			<1 D ·	<0.010
METHYLENE CHLORIDE	· <b>&lt;</b>	0.5 D	<0.5 D	<0.005
ACETONE	<	10 D	<10 D	<0.10
CARBON DISULFIDE	<	0.5 D		<0.005
1,1,-DICHLOROETHENE	<	0.5 D		<0.005
1,1,-DICHLOROETHANE				<0.005
1,2-DICHLORO***				<0.005
CHLOROFORM				<0.005
1,2-DICHLOROETHANE	<	0.5 D	<0.5 D	<0.005
2-BUTANONE	<b>(</b>	10 D	<10 D	<0.10
1,1,1-TRICHLOROETHA*		0.5 D	<0.5 D	<0.005
CARBON TETRACHLORIDE	· · · · · · · · · · · · · · · · · · ·	0.5 D		<0.005
VINYL ACETATE	<	(5 D		<0.050
BROMODICHLOROMETHANE		(0.5 D		<0.005
1,1,2,2-TETRACHLORO*		(0.5 D		<0.005
1,2-DICHLOROPROPANE		(0.5 D		<0.005
TRANS-1,3-DICHLOROP*		(0.5 D	<0.5 D	<0.005
TRICHLOROETHENE			5.6	<0.005
DIBROMOCHLOROMETHANE				<0.005
1,1,2-TRICHLOROETHA*		(0.5 D		<0.005
BENZENE		(0.5 D	<0.5 D	<0.005
CIS-1,3-DICHLOROPRO*	· · · · · · · · · · · · · · · · · · ·	(0.5 D	<0.5 D	<0.005

<sup>\*</sup>Some of the above names have been abbreviated. Please reference the enclosed list for their complete names.

\*EADVILLE DIVISION
I.H.A. Accreditation No. 98
S. Public Health Services Approved Facility
PA D.E.R. Laboratory I.D. No. 20-073
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KEY: <=LESS THAN >=GREATER THAN W.f.=WILL FOLLOW



P.O. BOX 557, COTTON ROAD MEADVILLE, PENNSYLVANIA 16335 PHONE: (814) 724-6242 FAX: (814) 333-1466

05/13/96

TO:

DELPHI HARRISON THRM.SYS

ATTN: MS. CATHERINE VER 200 UPPER MOUNTAIN RD.

LOCKPORT

NY 14094-1896

P.O. # HH48938

ACCOUNT NO. 01220

,	ANAL	YTICAL REI	PORT FORM	PAGE 4	
	SAMPLE ID :	MW-7 04/30/96	MW-8 04/30/96	TRIP BLANK	
PARAMETER	LAB ID DATE RECEIVED:	60501420 05/01/96	60501421 05/01/96	60501422 05/01/96	
VOLATILE COMPOUNDS	(Cont.) UNITS =	MG/L			
2-CHLOR* VINYL ETH BROMOFORM 2-HEXANONE	<b>5</b> R	<1 D <0.5 D <5 D	<1 D <0.5 D <5 D	<0.010 <0.005 <0.050	
4-METHYL-2-PENTANO TETRACHLOROETHENE	NE	<5 D <0.5 D	<5 D 48	<0.050 <0.005	
TOLUENE CHLOROBENZENE ETHYL BENZENE		<0.5 D <0.5 D <0.5 D	<0.5 D <0.5 D <0.5 D	<0.005 <0.005 <0.005	
STYRENE TOTAL XYLENES		<0.5 D <0.5 D	<0.5 D	<0.005 <0.005	

Volatile Compounds - Method 8240A

"Test Methods for Evaluating Solid Waste: Physical/Chemical Methods", SW-846, Third Edition, U.S. Environmental Protection Agency. Revised 1986.

DATE AND ANALYST

05/08/96 ECKLUND/MAJOR

ASST. LABORATORY DIRECTOR

\*Some of the above names have been abbreviated. Please reference the enclosed list for their complete names.

pc: Mr. Steve Blair, GZA

"EADVILLE DIVISION

I.H.A. Accreditation No. 98 S. Public Health Services Approved Facility PA D.E.R. Laboratory I.D. No. 20-073 PA Dept. of Agriculture Approved Dairy Laboratory NY Dept. of Health Laboratory I.D. No. 10552 NY Dept. of Env. Conservation Approved Facility ND Dept. of Health Cert. No. R-083 MD Dept. of Health Cert. No. 130 VA Dept. of Health Laboratory I.D. No. 00145

WV Dept, of Health Certification No. 9907C NC Dept. of Natural Resources Cert. No. 236 MI Dept. of Public Health Approved Facility U.S. Office of Surface Mining Approved Facility

w.f.=WILL FOLLOW <=LESS THAN >=GREATER THAN



P.O. BOX 557, COTTON ROAD MEADVILLE, PENNSYLVANIA 16335 PHONE: (814) 724-6242 FAX: (814) 333-1466

TO:

#### ANALYTICAL REPORT FORM

CODE B:

This analyte was detected in the associated blank as well as in the sample. It indicates possible/probable contamination. The data user may subtract the blank value at his/her discretion.

CODE D:

Detection limit change due to a dilution.

CODE R:

The percent recovery on the spiked sample associated with this sample was not within the acceptance limits of 75% - 125%

CODE S:

This result was obtained by Method of Standard Additions.

CODE NA:

Not Applicable

CODE ND:

Not Detectable

PRC:

Preparation Reference Control

VOID:

The sample plus spike concentration exceeded the linear range of

the standard curve.

CODE Q:

Values for parameters quantified in this sample have been adjusted for recoveries of the analytical matrix spike.

The adjustments have been based on the matrix recoveries from this sample. Adjusted values are not given where sample values were less than the detection limit or where spike recoveries are

equal to 100%

CODE J:

This result is an estimated value. It indicates that the compound meets the mass spectral data identification criteria.

The result is less than the quantitation limit.

MEADVILLE DIVISION

LH.A. Accreditation No. 98 8. Public Health Services Approved Facility PA D.E.R. Laboratory I.D. No. 20-073 PA Dept. of Agriculture Approved Dairy Laboratory NY Dept. of Health Laboratory I.D. No. 10552 NY Dept. of Env. Conservation Approved Facility ND Dept. of Health Cert. No. R-083 MD Dept. of Health Cert. No. 130 VA Dept. of Health Laboratory I.D. No. 00145 WV Dept. of Health Certification No. 9907C NC Dept. of Natural Resources Cert. No. 236 MI Dept. of Public Health Approved Facility U.S. Office of Surface Mining Approved Facility

PO. Box 557, Cotton Road Meadville, Pennsylvania 16335-0557 Phone: Area Code 814/724-6242 FAX: Area Code 814/333-1466



ENVIRONMENTAL
OCCUPATIONAL HEALTH
FOOD SCIENCE
SPECIALISTS

Chlorobenzene

#### Unabbreviated Listing of Hazardous Substance List Compounds

	VOLATILE COMPOUNDS	
100	Chloromethane	Bromodichloromethane
	Bromomethane	1,1,2,2-Tetrachloroethane
	Vinyl Chloride	1,2-Dichloropropane
	Chloroethane	trans-1,3-Dichloropropene
	Methylene Chloride	Trichloroethene
roza Kosa	Acetone	Dibromochloromethane
	Carbon Disulfide	1,1,2-Trichloroethane
* 1	1,1-Dichloroethene	Benzene
na d	1,1-Dichloroethane	cis-1,3-Dichloropropene
	1,2-Dichloroethylenes (Total)***	2-Chloroethyl Vinyl Ether
	Chloroform	Bromoform
	1,2-Dichloroethane	2-Hexanone
	2-Butanone	4-Methyl-2-pentanone
lav.	1,1,1-Trichloroethane	Tetrachloroethene
	Carbon Tetrachloride	Toluene
	1,2-Dichloroethane 2-Butanone	2-Hexanone 4-Methyl-2-pentanone

Ethyl Benzene

Vinyl Acetate

Styrene

Total Xylenes

\*\*\*EPA Methods 601 and 624 and SW 846 Methods 8010 and 8240 do not differentiate the co-eluting cis and trans-1,2-dichloroethenes. The result reported to you is the sum of both compounds.

P.O. Box 557, Cotton Road Meadville, Pennsylvania 16335-0557 Phone: Area Code 814/724-6242 FAX: Area Code 814/333-1466



ENVIRONMENTAL OCCUPATIONAL HEALTH FOOD SCIENCE SPECIALISTS

#### QUALITY CONTROL INFORMATION

Free-Col Laboratories analyzes control samples at specified frequencies during the analyses for the purpose of evaluating and documenting the precision and accuracy of the results. The attached quality control data, prepared at the time of analysis, reflect the results obtained for the various types of controls from the batch of samples described as follows:

Gener	al Motors	Sample Identification	• *	Free-Col ID
MW-4	04/30/96	•		60501416
MW-5	04/30/96			60501417
MW-6	04/30/96			60501418
MW-3	04/30/96			60501419
MW-7	04/30/96			60501420
8-WM	04/30/96			60501421
TRIP	BLANK			60501422

#### Pree-Col Laboratories, Inc. Surrogate Spike Information Method 8250

=	5/8/96
	5/9/96

Ecklung

4-Bremofluore-

s: & Recovery

e: W = Low/Medica Water

S = Low/Medica Soil/Sediment

	Lizits:	Dibromofluoromethane	Toluene dg	benzene
	Water Soil/Sediment	86-118 80-178	88-110 81-117	86-115 . 74-121
<u>은</u> 평)	Free Col I.D.			·
W	605-01-430	94	100	112
V	605-01-416	109	110	92
<b>√</b>	605-01-417	<i>j</i> /4	109	90
N	605-01-418	- 110	106	94
<u> </u>	605-01-419	109	106	89
V	605-01-420	97	104	92
7	405-01-421	104	104	94
W	605-01-422	97	/0,3	96
***************************************				
		•		

Xvlenes

MEK

### FREE-COL LABORATORIES, INC. VOA SPIKED CONTROL INFORMATION (CLP - ANALYTICAL SPIKED SAMPLE LIMITS)

Date 5-16-96 Date 5-16-96 Analyst T. Lata / Ecklouk Samples associated with this spiked control: 605-01-430 605-01-466/407 605-61-416-7422 605-07-406/407 Sample used as spiked control: 6.05-09-090 PARAMETER SPIKE SPIKED SAMPLE ACCEPT. ASSYD FILE ADDED RESULT RESULT LIMITS 3 REC. UG/L % REC. UG/L UG/L 82 % 520 Chloromethane 16.5 <2 28-189 20 Bromomethane 22.9 20 31-212 519 Vinvl chloride 16.7 22-185 528 20 18.3 Chloroethane 92 52-170 20 507 Methylene chloride 24.4 20 63-148 521 Acrolein < 10 22-185 62 500 Acrylonitrile 48.5 58 410 53-187 501 1.1-Dichloroethene 16.2 42 50-158 513-20 1.1-Dichloroethane 20. 20 73-141 104 511 trans-1.2-Dichloroethene 18.4 20 63-151 42 514 Chloroform 23.6 68-141-118 20 509 1.2-Dichloroethane 23.2 20 52-157 11L 512 1.1.1-Trichloroethane 19.9 20\_ 58-155 100 525 20.2 . Carbon tetrachloride 20 40-141 101 504 Bromodichloromethane 22.9 114 20 46-150 510 1.2-Dichloropropane 20 23. 67-145 112 515 21.4 trans-1,3-Dichloropropene 20 107 56-141 517 <u>Trichloroethene</u> 23.9 120 20 64-129 527 23.5 118 Benzene 20 70-144 502 Dibromochloromethane 19.8 27-158 20 506 1.1.2-Trichloroethane 21. 526 20 59-149 cis-1,3-Dichloropropene 20 21.6 46-151 108 516 2-Chloroethvl vinvl ether 20 23.0 4-186 115 508 Bromoform 6-150 503 20 Tetrachloroethene 20 48-163 523 1,1,2,2-Tetrachloroethane 20 24.2 522-46-164 Toluene 524 20 72-131 Chlorobenzene 21.3 70-131 106 505 ---20 Ethvl benzene 20 23,3 61-140 518 1,3-Dichlorobenzene אס ו 28.1 58-163 530 26 1,2-Dichlorobenzene 27. 26 42-159 106 529 1,4-Dichlorobenzene 33**-177** 108 531 20 <u>Diethvl Benzene</u> 71-137 44 533 Ethvl Ether 35 62-160 532

51.7

23.1

<2

<100

72-130

63-179

534

536

44

20

#### FREE-COL LABORATORIES, INC. VOA REFERENCE CONTROL INFORMATION (CLP - CALIBRATION VERIFICATION LIMITS)

Date 5-8-96 Analyst T. Lata / Estilus Samples associated with this reference control:

605-06-633 605-01-406/407

605-08-406/407 625-01-4167422

603 01-400/401	6 -	01-916 7	+22	
<u>Parameter</u>	Target Value ug/L	Acceptance Limits ug/L	Assayed Value ug/L	File#
Chloromethane	20	5.4-34.5	18.1	223
Bromomethane	20	8.1-39.8	21.6	222
Vinyl chloride	20	1.3-42.4	19.2	232
Chloroethane	20	4.0-36.9	19.8	209
Methylene chloride	20	11.5-31.4	20.8	224
Acrolein	62	4.2-105.4	<i>55</i> ,3	201
Acrylonitrile	58	13.2-116.0	61.9	202
1,1-Dichloroethene	20	10.9-32.4	20.2	216
1,1-Dichloroethane	20	15.3-28.0	19.8	214
trans-1,2-Dichloroethene	20	13.6-28.3	20.4	217
Chloroform	20	15.5-26.2	20.4 20.3	211 •
1,2-Dichloroethane	20	7.5-34.5	20.3	215
1,1,1-Trichloroethane	20	13.6-29.8	20.9	228
Carbon tetrachloride	20	7.7-28.1	19.4	206
Bromodichloromethane	20	9.7-30.1	19.9	212
1,2-Dichloropropane	20	15.2-28.0	20.6	218
trans-1,3-Dichloropropene	20	12.7-25.6	19.8	220
Trichloroethene	20	14.0-27.3	20.4	230
Benzene	20	14.2-28.1	20.9	203
Dibromochloromethane	20	4.1-29.5	19.8	208
1,1,2-Trichloroethane	20	14.2-28.5	20.3	229
cis-1,3-Dichloropropene	20	10.1-27.2	19.6	219
2-Chloroethyl vinyl ether	20	9.9-32.5	20.4	210
Bromoform	20	2.3-31.1	19.4	205
<u>Tetrachloroethene</u>	20	13.0-28.7	19.9	226
1,1,2,2-Tetrachloroethane	20	14.7-26.1	21.5	225
Toluene	20	15.1-25.7	20.7	227
Chlorobenzene	20	11.1-28.9	20.3	207
Ethyl benzene	20	13.2-27.7	20.0	221
1,3-Dichlorobenzene	26	18.2-36.9	26.1	234 = 233 = 2
1,2-Dichlorobenzene	26	11.0-42.2	26.2	233
1,4-Dichlorobenzene	20	3.0-36.1	20.2	235
Diethyl Benzene	44	25.9-62.9		237
Ethyl Ether	35	26.9-49.4		236
Xylene	44	21.0-66.7	44.7	238
MEK	20	9.1-39.4	20.8	240
Acetone	20	9.6-38.0	20.9	242

# FREE-COL LABORATORIES, INC. VOA REFERENCE CONTROL INFORMATION (CLP - CALIBRATION VERIFICATION LIMITS)

<u>arameter</u>	<u>Target</u> <u>Value</u>	<u>Acceptance</u> <u>Limits</u>	<u>Assayed</u> Value	File
	ug/L	ug/L	ug/L	
IIBK	20	14.0-29.7	21.0	243
Tetrahydrofuran	45	34.8-60.3		244
Carbondisulfide	20	11.0-30.4	16.9	• 245
Styrene	20	12.4-30.0	20.0	246
Vinyl Acetate	20	11.0-27.5	17.6	247
Amyl Acetate	44	14.7-64.6	~	248
Methyl Butyl Ketone	20	10.3-33.9	21.2	249
Freon 173			29.6	
Dirhloro flooromethine			20.9	
Trichlorofluoromethene			20.3	

## FREE-COL LABORATORIES, INC. VOA BLANK INFORMATION (CLP - CALIBRATION BLANK LIMITS)

)ate 5/8/96 Analy	est Tiklund	
Samples associated with this	blank:	
605-06-033	605-01-406/407	
605-01-46-7422	605-01-430	
605-63-406/407		
Parameter //a /	Blank Value	
Units = Mg/L	-	
Chloromethane		
Bromomethane	1	
Vinyl chloride		
Chloroethane		
Methylene chloride	<u> </u>	
Acrolein	<10	•
Acrylonitrile	<b>∠10</b>	
1,1-Dichloroethene	<2	
1,1-Dichloroethane		
trans-1,2-Dichloroethene		
Chloroform		
1,2-Dichloroethane		
1,1,1-Trichloroethane		
Carbon tetrachloride		
Bromodichloromethane		
1,2-Dichloropropane		
trans-1,3-Dichloropropene		
Trichloroethene		
Benzene		
Dibromochloromethane		
1,1,2-Trichloroethane		
cis-1,3-Dichloropropene		
2-Chloroethyl vinyl ether		
Bromoform		
Tetrachloroethene		
1,1,2,2-Tetrachloroethane		
Toluene		
Chlorobenzene		
Ethyl benzene		
1,3-Dichlorobenzene		
1.2-Dichlorobenzene		
1,4-Dichlorobenzene	Y	# 200 Bes 200
Xylene	<b>LZ</b>	
2-Butanone - MBK	<u> </u>	
4-Methyl-2-pentanone	<50	
Acetone	≥100	
Syrene	<i>د</i> ک	

### FREE-COL LABORATORIES, INC. VOA BLANK INFORMATION (CLP - CALIBRATION BLANK LIMITS)

Date 5/8/96 Analy Samples associated with this	s blank:	
<u>Parameter</u>	Blank Value	
Units = Mg/L	_	
Carbon Disulfide	< < 5	
Vinyl Acetate	<50	
2-Hexanone - MBK	<50	
Dichlorofluoromethane	<b>-</b>	
1,1,1,2-Tetrachloroethane		
Trichlorofluoromethane		
1,2,3-Trichloropropane		
3-Chloro-1-propene	-	
1,2-Dibrmomethane		
cis.1.2-Dichloroethene	42	
Dichlono Difluoromethane	<b>42</b>	
Frem-113	45	

#### FREE-COL LABORATORIES, INC. VOA REPEAT CONTROL INFORMATION (CLP - DUPLICATE SAMPLE LIMITS)

Date5/8/96 Analyst		Ec	Klu	nd			
Samples associated with th			at cor	itrol:			
605-06-033		.500	1.6	5-01-4	106/407		
605-01-416-7422				25-01-	10 6 /407 430		
605-08-406/407							
60-17-17							
Sample used as repeat cont	rol:		60	5-01-	-430		
AD = Absolute Difference		R	PD = 1	Relativ	e Percer	t Dif:	erence
Im imported prefettines		-					
Parameter .	Samo	. R	epeat	Accept	Accept	Assay	yd File
mg/L			alue		RPD	AD/RI	<u>2D</u>
Units =							
	<del></del>						
Chloromethane	1002		< 0.02			0 7	820
Bromomethane	1						819
Vinvl chloride					27		828
Chloroethane							807
Methylene chloride	V		V		17		821
Acrolein	20.1		20.1				800
Acrylonitrile	20.1		20.1				801
1,1-Dichloroethene	Lo. 67	2.	c 0.02				813
1,1-Dichloroethane	1				41		811
trans-1,2-Dichloroethene					28		814
Chloroform					14		809
1,2-Dichloroethane	4						812
1,1,1-Trichloroethane	0.06		0.06		27	02	
Carbon tetrachloride	20.0	2	Z 0.03	2		O'	
Bromodichloromethane	1	ساساس بيس بيد بري			79	<u> </u>	810
1,2-Dichloropropane							815
trans-1,3-Dichloropropens							817
Trichloroethene	<u> </u>		Ψ		32		827
Benzene	0.0		0.03		49	0%	
Dibromochloromethane	۷٥.	<u>02</u>	20.0	2	70		
1,1,2-Trichloroethane		<b>}</b>					826 816
cis-1,3-Dichloropropene			A STATE OF THE STATE OF		The Control of the Co		816
2-Chloroethyl vinyl ether	<u> </u>						808
Bromoform		<u> </u>					803 823
<u>Tetrachloroethene</u>		<b>-</b>	<del>- +</del>		33	<del>- 1</del>	822
1,1,2,2-Tetrachloroethane	5				20	46	
Toluene		22	0.7		38	00	
Chlorobenzene		02		17	24	07	
Ethyl benzene		02	0.0 Co.		5	O'	
1,3-Dichlorobenzene	20	-72	· · ·	<u> </u>		1	829
1.2-Dichlorobenzene		+			36		831
1,4-Dichlorobenzene Acetone		<del>V</del> 0.1	20	-/	26	4	836
Acetone	—	7.1					

FREE-COL LABORATORIES, INC. VOA REPEAT CONTROL INFORMATION (CLP - DUPLICATE SAMPLE LIMITS)

Date $\frac{5/9/46}{2}$ Analyst Samples associated with the		Kluna eat con	•			
Sample used as repeat con AD = Absolute Difference	ntrol:	RPD = R	•	01-430 Percen	) t Diffe	cence
Parameter Units = mg/L		<u>Repeat</u> Value		Accept RPD	Assayd AD/RPD	File
3-Chloro-1-propene					•	
Dichlorodifluoromethane	20.02	< 0.03	-		6%	
Methyl Ethyl Ketone	< 1.0	21.0			07.	
MIBK	< 0.5	< 0.5			0%	
1,1,1,2-Tetrachloroethan				~~~		
Trichlorofluoromethane	< 0.02	<0.0	2		07.	<u> </u>
1,2,3-Trichloropropane						
1,2-Dibromomethane					- 57	,
<u>Cis-1.2-Dichloroethane</u> Xvlene	<0.02				07	
SMRENE	0.06				15%	
Mother Butul Ketone	0.02				07	
Fron -113	20.50			~	0%	
F 1 80H -1130	< 0.50	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	50	<del></del>	6%	<u> </u>
				<del> </del>		

### FREE-COL LABORATORIES, INC. VOA BLANK INFORMATION (CLP - CALIBRATION BLANK LIMITS)

Date <u> 5/9/40</u> Analy	ist T.Lata /A. Ecklond
Date $\frac{5/9/40}{\text{Analy}}$ Samples associated with this	blank:
605-01-430	605-01-406/407
6.5-01-4167422	
605-08-406/407	
Parameter	Blank Value
Units = ly/L	· -
Chloromethane	42
Bromomethane	
Vinyl chloride	
Chloroethane	
Methylene chloride	V
Acrolein	210
Acrylonitrile	2/0
1,1-Dichloroethene	42
1,1-Dichloroethane	
trans-1,2-Dichloroethene	
Chloroform	
1,2-Dichloroethane	
1,1,1-Trichloroethane	
Carbon tetrachloride	
Bromodichloromethane	
1,2-Dichloropropane	
trans-1,3-Dichloropropene Trichloroethene	
Benzene	
Dibromochloromethane	
1,1,2-Trichloroethane	
cis-1,3-Dichloropropene	
2-Chloroethyl vinyl ether	
Bromoform	
Tetrachloroethene	
1,1,2,2-Tetrachloroethane	
Toluene	Conservation of the conser
Chlorobenzene	
Ethyl benzene	
1,3-Dichlorobenzene	
1,2-Dichlorobenzene	
1,4-Dichlorobenzene	<u>V</u>
Xylene	42
2-Butanone - MEK	<b>∠/60</b>
4-Methyl-2-pentanone	<b>450</b>
Acetone	2100
CUTANA	/ 3

# FREE-COL LABORATORIES, INC. VOA BLANK INFORMATION (CLP - CALIBRATION BLANK LIMITS)

· · · · · · · · · · · · · · · · · · ·		
<u>Parameter</u>	Blank Value	
Units = Ug/L	_	
<u>Carbon Disulfide</u>	45	
Vinyl Acetate	L50	
2-Hexanone - MBK	250	· · · · · · · · · · · · · · · · · · ·
Dichlorofluoromethane		
1,1,1,2-Tetrachloroethane		
Trichlorofluoromethane	<b>ム</b> 入	
1,2,3-Trichloropropane		
3-Chloro-1-propene		
1,2-Dibrmomethane		
cis,1,2-Dichloroethene	Z.J.	
Dichloro di fluoro methane	41	
Freon-113		

## Limits in effect as of May 18, 1995

## FREE-COL LABORATORIES, INC. VOA REFERENCE CONTROL INFORMATION (CLP - CALIBRATION VERIFICATION LIMITS)

Date 5-9-96 Analyst T.L.44 / A. Ecklund Samples associated with this reference control:

605-01-430	605-01-406/407
605-01-4167422	
605-68-406/407	

Parameter	Target	<u>Acceptance</u>	Assayed	File#
	Value	Limits	Value	
	ug/L	uq/L	ug/L	
Chloromethane	20	5.4-34.5	17.8	223
Bromomethane	20	8.1-39.8	19.9	222
Vinyl chloride	20	1.3-42.4	19.9 19.2 17.9	232
<u>Chloroethane</u>	20	4.0-36.9	17.9	209
Methylene chloride	20	11.5-31.4	18.5	224
Acrolein	62	4.2-105.4	30.7	201
Acrylonitrile	58	13.2-116.0	49.1	202
1,1-Dichloroethene	20	10.9-32.4	16.8	216
1,1-Dichloroethane	20	15.3-28.0	18.8	214
trans-1,2-Dichloroethene	20	13.6-28.3	18.1	217
Chloroform	20	15.5-26.2	20.	211 •
1,2-Dichloroethane	20	7.5-34.5	21.4 17.8	215
1,1,1-Trichloroethane	20	13.6-29.8	17.8	228
Carbon tetrachloride	20	7.7-28.1	20.1	206
Bromodichloromethane	20	9.7-30.1	20,1	212
1,2-Dichloropropane	20	15.2-28.0	21.1	218
trans-1,3-Dichloropropene	20	12.7-25.6	19.7	220
Trichloroethene	20	14.0-27.3	20.3	230
Benzene	20	14.2-28.1	23.4	203
Dibromochloromethane	20	4.1-29.5	19.7	208
1,1,2-Trichloroethane	20	14.2-28.5	18.8	229
cis-1,3-Dichloropropene	20	10.1-27.2	19.2	219
2-Chloroethyl vinyl ether	20	9.9-32.5	21.8	210
Bromoform	20	2.3-31.1	17.1	205
Tetrachloroethene	20	13.0-28.7	18.1	226
1,1,2,2-Tetrachloroethane	20	14.7-26.1	20.9	225
Toluene	20	15.1-25.7	205	227
Chlorobenzene	20	11.1-28.9	19.8	207 憲章
Ethyl benzene	20	13.2-27.7	21.8	2217
1,3-Dichlorobenzene	26	18.2-36.9	25.3	234
1,2-Dichlorobenzene	26	11.0-42.2	25.4	233
1,4-Dichlorobenzene	20	3.0-36.1	19.6	235
Diethyl Benzene	44	25.9-62.9		237
Ethyl Ether .	35	26.9-49.4		236
Xylene	44	21.0-66.7	47.0	238
MEK	20	9.1-39.4	18.6	240
Acetone	20	9.6-38.0	18.0	242

## Limits in effect as of May 18, 1995

# FREE-COL LABORATORIES, INC. VOA REFERENCE CONTROL INFORMATION (CLP - CALIBRATION VERIFICATION LIMITS)

<u>Parameter</u>	<u>Target</u> <u>Value</u> ug/L	Acceptance Limits ug/L	<u>Assayed</u> <u>Value</u> ug/L	<u>File</u>
MIBK	20	14.0-29.7	19.9	243
Tetrahydrofuran	45	34.8-60.3		244
Carbondisulfide	20	11.0-30.4	17.7	* 245
Styrene	20	12.4-30.0	20.7	246
Vinyl Acetate	20	11.0-27.5	નું ૦. ૪	247
Amyl Acetate	44	14.7-64.6		248
Methyl Butyl Ketone	20	10.3-33.9	19.8	249
	·		28.5	
Fresh 113 Trichlorofluopomething			20.8	
Dichlors difluoro methane			21.3	

## FIGURE E2 ENVIRONMENTAL SAMPLE DESCRIPTION AND

## CHAIN OF CUSTODY RECORD

T 4/1	7/96		TS REQUIRED BY:		200 UPPER A LOCKPORT	NVISION, GMC MOUNTAIN ROAD NEW YORK 14094
		LABOR	ATORY: Free -	Col Labs	PHONE: (716)	199-685-2300 Sheve Blair
a !	1) WASTEWAT 5) SLUDGE 9) OTHER	ER	2) DRINKING WATER 6) SOLID WASTE	3) MONITORING WE	ELL 4) SOIL	TRIAL HYGIENE
ESCRIPTION:						
						Jeangle Bottle
E# LOC	ATION	TIME	PARAMETERS			SAMPLE BOTTLE
1/30/86 MW	1.9	, 45	5W-896	Method 82	90	
Mu	V-5	200				
MU	v-6	2 15		·		
Mu	N-3	2 35				
MI	<b>ル</b> ーフ	2 35				
Mu	v-8	2 45-	`			
100	o Blank		V			
	0 00000					
DETECTION	i myru o prou	uacoa.				
DETECTION	LEVELS REQU	went -		•		
E INTERFERE	ENCES:					
<del></del>						
FOR TEST	(COMPARISON (	OF AREAS,BA	ACKGROUND, ETC.)			
		·		3		ye ,
						-
RECEIVED (	BY: (DATE/TIN	/E) (HAO		TLES RELINQUISHED BYS	5/1/96	HRO PERSONNELI
LINQUIS	HED BY: (DAT	ETIME)	•	TIZES RECEIVED BY: (DA		PERSONNELI 11:35
PLE COLLECTE	D 8Y:		REC	CEIVED BY: (DATE, TIME, L	AB SIGNATURE 5-1-96	
n gapelaalaa		•		Grahew Li		3-13-9

P.O. Box 557, Cotton Road Meadville, Pennsylvania 16335-0557 Phone: Area Code 814/724-6242 FAX: Area Code 814/333-1486



ENVIRONMENTAL
OCCUPATIONAL HEALTH
FOOD SCIENCE
SPECIALISTS

DELPHI HARRISON THRM. SYS. GENERAL MOTORS CORPORATION

MW-6

MW-5

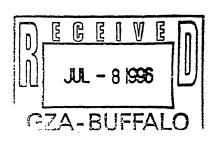
MW-4

MW-3

MW-7

8-WM

SAMPLE DATES: 06/20/96 P.O.# HH48938





P.O. BOX 557, COTTON ROAD MEADVILLE, PENNSYLVANIA 16335 PHONE: (814) 724-6242 FAX: (814) 333-1466

06/28/96

TO:

DELPHI HARRISON THRM.SYS

P.O. # HH48938

200 UPPER MOUNTAIN RD.

LOCKPORT

NY 14094

ACCOUNT NO. 01220

#### ANALYTICAL REPORT FORM

		• .			PAGE 1		
		SAMPLE ID :	MW-6 06/20/96	MW-5 06/20/96	MW-4 06/20/96	MW-3 06/20/96	
Secretary Secret	PARAMETER	LAB ID DATE RECEIVED:	60626434 06/26/96	60626435 06/26/96	60626436 06/26/96	60626 <b>437</b> 06/26/96	
Company of the Compan			•				
	VOLATILE COMPOUNDS	UNITS = MG/	'L			•	
	CHLOROMETHANE		<1 D	<1 D	<1 D	<1 D	
	BROMOMETHANE		<1 D	<1 D	<1 D	<1 D	,
	VINYL CHLORIDE		2.6	<1 D	19	<1 D	
	CHLOROETHANE		<1 D	<1 D	<1 D	<1 D	
	METHYLENE CHLORIDE		<0.5 D	<0.5 D	<0.5 D	<0.5 D	
	ACETONE		<10 D	<10 D	<10 D	<10 D	
	CARBON DISULFIDE		<0.5 D	<0.5 D	<0.5 D	<0.5 D	
97	1,1,-DICHLOROETHENE		<0.5 D	<0.5 D		<0.5 D	
and the second	1,1,-DICHLOROETHANE		<0.5 D	<0.5 D	<0.5 D	<0.5 D	
	1,2-DICHLORO***		7.9	4.3	110	200	
3	CHLOROFORM		<0.5 D	<0.5 D	<0.5 D	<0.5 D	
	1,2-DICHLOROETHANE		<0.5 D		<0.5 D	<0.5 D	
	2-BUTANONE		<10 D	<10 D	<10 D	<10 D	
977 278	1,1,1-TRICHLOROETHA		<0.5 D	<0.5 D	<0.5 D	<0.5 D	
	CARBON TETRACHLORID	E	<0.5 D	<0.5 D	<0.5 D	<0.5 D	
<u> </u>	VINYL ACETATE		<5 D	<5 D	<5 D	<5 D	
7.4	BROMODICHLOROMETHAN		<0.5 D	<0.5 D	<0.5 D	<0.5 D	
	1,1,2,2-TETRACHLORO		<0.5 D	<0.5 D	<0.5 D	<0.5 D	
3	1,2-DICHLOROPROPANE		<0.5 D	<0.5 D	<0.5 D	<0.5 D	
	TRANS-1,3-DICHLOROP	*	<0.5 D	<0.5 D	<0.5 D	<0.5 D	,
703	TRICHLOROETHENE		8.5	<b>-</b> 680	19	<0.5 D	
្ឋា	DIBROMOCHLOROMETHAN		<0.5 D			<0.5 D	
	1,1,2-TRICHLOROETHA	<b>.</b> *	<0.5 D		<0.5 D	<0.5 D	
đą.	BENZENE		<0.5 D	<0.5 D	<0.5 D	2.0	
	CIS-1,3-DICHLOROPRO	) <b>*</b>	<0.5 D	<0.5 D	<0.5 D	<0.5 D	

\*Some of the above names have been abbreviated. Please reference the enclosed list for their complete names.

#### **EADVILLE DIVISION**

.H.A. Accreditation No. 98
U.S. Public Health Services Approved Facility
PA D.E.R. Laboratory I.D. No. 20-073
C Dept. of Agriculture Approved Dairy Laboratory

KEY:

NY Dept. of Health Laboratory I.D. No. 10552 NY Dept. of Env. Conservation Approved Facility ND Dept. of Health Cert. No. R-083 MD Dept. of Health Cert. No. 130 VA Dept. of Health Laboratory I.D. No. 00145 WV Dept. of Health Certification No. 9907C NC Dept. of Natural Resources Cert. No. 236 MI Dept. of Public Health Approved Facility U.S. Office of Surface Mining Approved Facility

<=LESS THAN >=GREATER THAN w.f.=WILL FOLLOW



P.O. BOX 557, COTTON ROAD MEADVILLE, PENNSYLVANIA 16335 PHONE: (814) 724-6242 FAX: (814) 333-1466

06/28/96

TO:

DELPHI HARRISON THRM.SYS

P.O. # HH48938

200 UPPER MOUNTAIN RD.

LOCKPORT

NY 14094

ACCOUNT NO. 01220

### ANALYTICAL REPORT FORM

				PAGE 2	
	SAMPLE ID :	MW-6 06/20/96	MW-5 06/20/96	MW-4 06/20/96	MW-3 06/20/96
PARAMETER	LAB ID DATE RECEIVED:	60626434 06/26/96	60626 <b>4</b> 35 06/26/96	60626436 06/26/96	60626437 06/26/96
VOLATILE COMPOUNDS	(Cont.) UNITS =	= MG/T.	ाक बंद्रिय केंद्रिय करता होता क्ष्मा क्ष्मा विद्या करता होता है जाता है जाता है जाता है जाता है जाता है जाता ह	(a) disa dala (a) disa disa disa disa disa disa disa disa	
_	, , , , , , , , , , , , , , , , , , , ,	•	/1 D	21° D	<b>/1.5</b> .
2-CHLOR* VINYL ETHE	ur.	<1 D	<1 D	<1 D	<1 D
BROMOFORM		<0.5 D	<0.5 D	<0.5 D	<0.5 D
2-HEXANONE		<5 D	<5 D	<5 D	<5 D
4-METHYL-2-PENTANON	Œ	<5 D	<5 D	<5 D	<5 D
TETRACHLOROETHENE		64	110	<0.5 D	<0.5 D
TOLUENE		<0.5 D	<0.5 D	<0.5 D	1.2
CHLOROBENZENE		<0.5 D	<0.5 D	<0.5 D	<0.5 D
ETHYL BENZENE		<0.5 D	<0.5 D	<0.5 D	<0.5 D
STYRENE		<0.5 D	<0.5 D	<0.5 D	<0.5 D
TOTAL XYLENES		<0.5 D	<0.5 D	<0.5 D	0.7

Please reference the following page(s) for date and analyst.

\*Some of the above names have been abbreviated. Please reference the enclosed list for their complete names.

**EADVILLE DIVISION** .H.A. Accreditation No. 98 ్.3. Public Health Services Approved Facility PA D.E.R. Laboratory I.D. No. 20-073 PA Dept. of Agriculture Approved Dairy Laboratory

NY Dept. of Health Laboratory I.D. No. 10552 NY Dept. of Env. Conservation Approved Facility ND Dept. of Health Cert. No. R-083 MD Dept. of Health Cert. No. 130 VA Dept. of Health Laboratory I.D. No. 00145

WV Dept. of Health Certification No. 9907C NC Dept. of Natural Resources Cert. No. 236 MI Dept. of Public Health Approved Facility U.S. Office of Surface Mining Approved Facility



P.O. BOX 557, COTTON ROAD MEADVILLE, PENNSYLVANIA 16335 PHONE: (814) 724-6242 FAX: (814) 333-1466

06/28/96

TO:

DELPHI HARRISON THRM.SYS

P.O. # HH48938

200 UPPER MOUNTAIN RD.

LOCKPORT

NY 14094

ACCOUNT NO. 01220

### **ANALYTICAL REPORT FORM**

				PAGE 3	
	SAMPLE ID :	MW-7 06/20/96	MW-8 06/20/96	TRIP BLANK 06/19/96	
PARAMETER	LAB ID DATE RECEIVED:	60626438 06/26/96	60626439 06/26/96	60626440 06/26/96	

VOLATILE COMPOUNDS	UNITS	= MG/L		
CHLOROMETHANE		<1 D	<1 D	<0.010
BROMOMETHANE	•	<1 D	<1 D	<0.010
VINYL CHLORIDE		2.4	20	<0.010
CHLOROETHANE		<1 D	<1 D	<0.010
METHYLENE CHLORIDE		<0.5 D	<0.5 D	<0.005
ACETONE		<10 D	<10 D	<0.10
CARBON DISULFIDE		<0.5 D	<0.5 D	<0.005
1,1,-DICHLOROETHENE		<0.5 D	<0.5 D	<0.005
1,1,-DICHLOROETHANE		<0.5 D	<0.5 D	<0.005
1,2-DICHLORO***		24	120	<0.005
CHLOROFORM		<0.5 D	<0.5 D	<0.005
1,2-DICHLOROETHANE		<0.5 D	<0.5 D	<0.005
2-BUTANONE		<10 D	<10 D	<0.10
1,1,1-TRICHLOROETHA*		<0.5 D	<0.5 D	<0.005
CARBON TETRACHLORIDE		<0.5 D	<0.5 D	<0.005
VINYL ACETATE		<5 D	<5 D	<0.050
BROMODICHLOROMETHANE			<0.5 D	<0.005
1,1,2,2-TETRACHLORO*		<0.5 D	<0.5 D	<0.005
1,2-DICHLOROPROPANE		<0.5 D	<0.5 D	<0.005
TRANS-1,3-DICHLOROP*		<0.5 D	<0.5 D	<0.005
TRICHLOROETHENE		1,100	19	<0.005
DIBROMOCHLOROMETHANE		<0.5 D	<0.5 D	<0.005
1,1,2-TRICHLOROETHA*		<0.5 D	<0.5 D	<0.005
BENZENE		<0.5 D	<0.5 D	<0.005
CIS-1,3-DICHLOROPRO*		<0.5 D	<0.5 D	<0.005
	CHLOROMETHANE BROMOMETHANE VINYL CHLORIDE CHLOROETHANE METHYLENE CHLORIDE ACETONE CARBON DISULFIDE 1,1,-DICHLOROETHANE 1,2-DICHLOROETHANE 1,2-DICHLOROETHANE 2-BUTANONE 1,1,1-TRICHLOROETHANE 2-BUTANONE 1,1,1-TRICHLOROETHANE VINYL ACETATE BROMODICHLOROMETHANE 1,1,2,2-TETRACHLORO* 1,2-DICHLOROPROPANE TRANS-1,3-DICHLOROP* TRICHLOROETHANE DIBROMOCHLOROMETHANE 1,1,2-TRICHLOROETHANE 1,1,2-TRICHLOROETHANE 1,1,2-TRICHLOROETHANE 1,1,2-TRICHLOROETHANE 1,1,2-TRICHLOROETHANE BENZENE	CHLOROMETHANE BROMOMETHANE VINYL CHLORIDE CHLOROETHANE METHYLENE CHLORIDE ACETONE CARBON DISULFIDE 1,1,-DICHLOROETHENE 1,1,-DICHLOROETHANE 1,2-DICHLOROETHANE 1,2-DICHLOROETHANE 2-BUTANONE 1,1,1-TRICHLOROETHANE 2-BUTANONE 1,1,1-TRICHLOROETHANE VINYL ACETATE BROMODICHLOROMETHANE 1,1,2,2-TETRACHLORO* 1,2-DICHLOROPROPANE TRANS-1,3-DICHLOROP* TRICHLOROETHENE DIBROMOCHLOROMETHANE 1,1,2-TRICHLOROETHA* BENZENE	CHLOROMETHANE  BROMOMETHANE  VINYL CHLORIDE  CHLOROETHANE  CHLOROETHANE  METHYLENE CHLORIDE  ACETONE  CARBON DISULFIDE  CARBON DISULFIDE  1,1,-DICHLOROETHENE  1,2-DICHLOROETHANE  CHLOROFORM  1,2-DICHLOROETHANE  20.5 D  1,2-DICHLOROETHANE  CHLOROFORM  1,1,1-TRICHLOROETHANE  2-BUTANONE  1,1,1-TRICHLOROETHANE  CARBON TETRACHLORIDE  VINYL ACETATE  BROMODICHLOROMETHANE  1,2,2-TETRACHLORO*  1,2-DICHLOROPROPANE  TRANS-1,3-DICHLOROP*  TRICHLOROETHENE  DIBROMOCHLOROMETHANE  1,100  DIBROMOCHLOROMETHANE  1,100  DIBROMOCHLOROMETHANE  1,1,2-TRICHLOROETHA*  CO.5 D  1,1,2-TRICHLOROETHA*  CO.5 D  1,1,2-TRICHLOROETHANE  1,100  DIBROMOCHLOROMETHANE  1,100  DIBROMOCHLOROMETHANE  1,100  DIBROMOCHLOROMETHANE  CO.5 D  CO.5 D	CHLOROMETHANE  BROMOMETHANE  VINYL CHLORIDE  CHLOROETHANE  CHLOROETHANE  CHLOROETHANE  CHLOROETHANE  CO.5 D  ACETONE  CARBON DISULFIDE  CARBON DISULFIDE  CARBON DISULFIDE  CARBON DISULFIDE  CO.5 D  CO.5 D

<sup>\*</sup>Some of the above names have been abbreviated. Please reference the enclosed list for their complete names.

MADVILLE DIVISION
A H.A. Accreditation No. 98
U.S. Public Health Services Approved Facility
PA D.E.R. Laboratory I.D. No. 20-073
P. Dept. of Agriculture Approved Dairy Laboratory

NY Dept. of Health Laboratory I.D. No. 10552 NY Dept. of Env. Conservation Approved Facility ND Dept. of Health Cert. No. R-083 MD Dept. of Health Cert. No. 130 VA Dept. of Health Laboratory I.D. No. 00145 WV Dept. of Health Certification No. 9907C NC Dept. of Natural Resources Cert. No. 236 MI Dept. of Public Health Approved Facility U.S. Office of Surface Mining Approved Facility



P.O. BOX 557, COTTON ROAD MEADVILLE, PENNSYLVANIA 16335 PHONE: (814) 724-6242 FAX: (814) 333-1466

06/28/96

TO:

DELPHI HARRISON THRM.SYS

P.O. # HH48938

200 UPPER MOUNTAIN RD.

LOCKPORT

NY 14094

ACCOUNT NO. 01220

#### **ANALYTICAL REPORT FORM**

				PAGE 4	
	SAMPLE ID :	MW-7 06/20/96	MW-8 06/20/96	TRIP BLANK 06/19/96	
PARAMETER	LAB ID DATE RECEIVED:	60626438 06/26/96	60626439 06/26/96	60626 <b>44</b> 0 06/26/96	
VOLATILE COMPOU	NDS (Cont.) UNITS =	: MG/L			
2-CHLOR* VINYL		<1 D	<1 D	<0.010	
BROMOFORM		<0.5 D	<0.5 D	<0.005	
2-HEXANONE		<5 D	<5 D	<0.050	
4-METHYL-2-PENT	ANONE	<5 D	<5 D	<0.050	
TETRACHLOROETHE	NE	<0.5 D	<0.5 D	<0.005	
TOLUENE		<0.5 D	<0.5 D	<0.005	
CHLOROBENZENE		<0.5 D	<0.5 D	<0.005	
ETHYL BENZENE		<0.5 D	<0.5 D	<0.005	
STYRENE		<0.5 D	<0.5 D	<0.005	
TOTAL XYLENES		<0.5 D	<0.5 D	<0.005	

Volatile Compounds - Method 8240A "Test Methods for Evaluating Solid Waste: Physical/Chemical Methods", SW-846, Third Edition, U.S. Environmental Protection Agency. Revised 1986.

DATE AND ANALYST 06/28/96 ECKLUND

ASST. LABORATORY DIRECTOR

andrew K.

\*Some of the above names have been abbreviated. Please reference the enclosed list for their complete names.

pc: Mr. Steve Blair, GZA

SADVILLE DIVISION
I.H.A. Accreditation No. 98
S. Public Health Services Approved Facility
PA D.E.R. Laboratory I.D. No. 20-073
PA Dept. of Agriculture Approved Dairy Laboratory

NY Dept. of Health Laboratory I.D. No. 10552 NY Dept. of Env. Conservation Approved Facility ND Dept. of Health Cert. No. R-083 MD Dept. of Health Cert. No. 130 VA Dept. of Health Laboratory I.D. No. 00145 WV Dept. of Health Certification No. 9907C NC Dept. of Natural Resources Cert. No. 238 MI Dept. of Public Health Approved Facility U.S. Office of Surface Mining Approved Facility



P.O. BOX 557, COTTON ROAD MEADVILLE, PENNSYLVANIA 16335 PHONE: (814) 724-6242 FAX: (814) 333-1466

o:

ANALYTICAL REPORT FORM

CODE B:

This analyte was detected in the associated blank as well as in the sample. It indicates possible/probable contamination. The data user may subtract the blank value at his/her discretion.

CODE D:

Detection limit change due to a dilution.

CODE R:

The percent recovery on the spiked sample associated with this sample was not within the acceptance limits of 75% - 125%

CODE S:

This result was obtained by Method of Standard Additions.

CODE NA:

Not Applicable

CODE ND:

Not Detectable

PRC:

Preparation Reference Control

VOID:

The sample plus spike concentration exceeded the linear range of

the standard curve.

CODE Q:

Values for parameters quantified in this sample have been adjusted for recoveries of the analytical matrix spike. The adjustments have been based on the matrix recoveries from this sample. Adjusted values are not given where sample values were less than the detection limit or where spike recoveries are

equal to 100%

CODE J:

This result is an estimated value. It indicates that the compound meets the mass spectral data identification criteria.

The result is less than the quantitation limit.

**HEADVILLE DIVISION** 

A. A. Accreditation No. 98
J. Public Health Services Approved Facility
PAULE.R. Laboratory I.D. No. 20-073
PA Dept. of Agriculture Approved Dairy Laboratory

NY Dept. of Health Laboratory I.D. No. 10552 NY Dept. of Env. Conservation Approved Facility ND Dept. of Health Cert. No. R-083 MD Dept. of Health Cert. No. 130 VA Dept. of Health Laboratory I.D. No. 00145 WV Dept. of Health Certification No. 9907C NC Dept. of Natural Resources Cert. No. 236 MI Dept. of Public Health Approved Facility U.S. Office of Surface Mining Approved Facility

#### FREE-COL LABORATORIES, INC. PO. Box 557, Cotton Road Meadville, Pennsylvania 16335-0557 Phone: Area Code 814/724-5749

Phone: Area Code 814/724-6242 FAX: Area Code 814/333-1466



ENVIRONMENTAL OCCUPATIONAL HEALTH FOOD SCIENCE SPECIALISTS

4-Methyl-2-pentanone

Tetrachloroethene

Chlorobenzene

### Unabbreviated Listing of Hazardous Substance List Compounds

The same of the same of	VOLATILE COMPOUNDS	
	Chloromethane	Bromodichloromethane
J	Bromomethane	1,1,2,2-Tetrachloroethane
Section of the	Vinyl Chloride	1,2-Dichloropropane
Sã Sã	Chloroethane	trans-1,3-Dichloropropene
Paristic Services	Methylene Chloride	Trichloroethene
	Acetone	Dibromochloromethane
	Carbon Disulfide	1,1,2-Trichloroethane
	1,1-Dichloroethene	Benzene
3	1,1-Dichloroethane	cis-1,3-Dichloropropene
*Port of Const.	1,2-Dichloroethylenes (Total)***	2-Chloroethyl Vinyl Ether
nort over	Chloroform	Bromoform
	1,2-Dichloroethane	2-Hexanone
3		

Carbon Tetrachloride Toluene

**"** 

Vinyl Acetate .

Ethyl Benzene

1,1,1-Trichloroethane

2-Butanone

Styrene

Total Xylenes

\*\*\*EPA Methods 601 and 624 and SW 846 Methods 8010 and 8240 do not differentiate the co-eluting cis and trans-1,2-dichloroethenes. The result reported to you is the sum of both compounds.

P.O. Box 557, Cotton Road Meadville, Pennsylvania 16335-0557 Phone: Area Code 814/724-6242 FAX: Area Code 814/333-1488



ENVIRONMENTAL OCCUPATIONAL HEALTH FOOD SCIENCE SPECIALISTS

#### QUALITY CONTROL INFORMATION

Free-Col Laboratories analyzes control samples at specified frequencies during the analyses for the purpose of evaluating and documenting the precision and accuracy of the results. The attached quality control data, prepared at the time of analysis, reflect the results obtained for the various types of controls from the batch of samples described as follows:

General Motors Sample Identification	Free-Col ID
MW-6 06/20/96	60626434
MW-5 06/20/96	60626435
MW-4 06/20/96	60626436
MW-3 06/20/96	60626437
MW-7 06/20/96	60626438
MW-8 06/20/96	60626439
TRIP BLANK 06/19/96	60626440

### Free-Col Laboratories, Inc. Surrogate Spike Information Method 8240

6/28/96

Analyst: Ecklund

### % Recovery

W = Low/Medium Water

S = Low/Medium Soil/Sediment

	1,2-Dichloro-		4-Bromofluoro-
	ethane-d <sub>4</sub>	Toluene-dg	benzene
Limits:	<u>-</u>		•
Water	76-114	88-110	86-115
Soil/Sediment	70-121	81-117	74-121

### Pree-Col I.D.

	666-26-434	107	98	108
19	606-26-435	100	108	106
, 4. 1	606-26-436	98	102	106
	606-26-437	90	98	105
¥.	606-26-438	96	99	102
	600 26-439	97	/e <u>2</u>	103
	(OCE 26 - 440,	94	97	9i
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			April 1995	
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			and the second of the second o	
			$(x_1, \dots, x_n) = (x_1, \dots, x_n$	The second section of the second section secti
		·		
				•

# FREE-COL LABORATORIES, INC. VOA BLANK INFORMATION (CLP - CALIBRATION BLANK LIMITS)

Date6-/28/96 Analy	yst Ecklurial	
Samples associated with this		-
606-26-434-7440		
<u>Parameter</u>	<u>Blank Value</u>	
units -		
Units =	<u>.</u>	
Chloromethane	< 10	
Bromomethane	6</td <td></td>	
Vinyl chloride		
Chloroethane	<10	
Methylene chloride	< <u> </u>	
Acrolein		
Acrylonitrile		***
1,1-Dichloroethene	< <u>5</u>	
1,1-Dichloroethane	<5	
trans-1,2-Dichloroethene	25 25	
Chloroform	<5	
1,2-Dichloroethane	<5	
1.1.1-Trichloroethane	<u> </u>	
Carbon tetrachloride		
Bromodichloromethane	<u>&lt;5</u>	
<u>l,2-Dichloropropane</u> trans-1,3-Dichloropropene	(5	
Trichloroethene	<5	
Benzene	45	
Dibromochloromethane	<i>25</i>	
1,1,2-Trichloroethane	25	
cis-1,3-Dichloropropene	<i>C</i> 5	
2-Chloroethyl vinyl ether	4/0	
Bromoform	<5	
Tetrachloroethene	<b>25</b>	
1,1,2,2-Tetrachloroethane	<5	
Toluene	25	
Chlorobenzene	25	
Ethyl benzene	< 45	
1,3-Dichlorobenzene	-	
1,2-Dichlorobenzene	-	
1,4-Dichlorobenzene	-	
XVlene	<5	
2-Butanone - MEK		
4-Methyl-2-pentanone	250	
Acetone	<150	
wene .		

## FREE-COL LABORATORIES, INC. VOA BLANK INFORMATION CLP - CALIBRATION BLANK LIMITS)

	LIBRATION BLANK LIMIT	S)
Date $6/28/96$ Anal Samples associated with this	1vat Exhlund	
Samples associated with thi	is blank:	
606-26-434 7440		
<u>Parameter</u>	Blank Value	
ugh		
Units =		
Combon Dimuliida	<5	e de la companya de l
Carbon Disulfide Vinyl Acetate	250	
2-Hexanone - MBK	<50	
Dichlorofluoromethane		
1,1,1,2-Tetrachloroethane		
Trichlorofluoromethane 1,2,3-Trichloropropane		
3-Chloro-1-propene		
1,2-Dibrmomethane		
cis,1,2-Dichloroethene		
		· · · · · · · · · · · · · · · · · · ·
·		
	8	
	•	

## FREE-COL LABORATCRIES, INC. VOA REFERENCE CONTROL INFORMATION (CLP - CALIBRATION VERIFICATION LIMITS)

Date	6/28/96	_Analyst	Ecklun	<u>Q - / </u>	
Samples	associate	d with this	reference	control:	
· · · · · · · · · · · · · · · · · · ·	606-21	134-4411			

	Parameter	Target	<u>Acceptance</u>	<u>Assayed</u>	<u>File</u> #
		<u>Value</u>	<u>Linits</u>	<u>Value</u>	
		nd/F	ug/L	nd/F	
	Chloromethane	20	5.4-34.5	20.6	223
	Bromomethane	20	8.1-39.8	22.+	222
	Vinyl chloride	20	1.3-42.4	19.0	232
	Chloroethane	20	4.0-36.9	22.5	209
	Methylene chloride	20	11.5-31.4	19.0	224
	Acrolein	62	4.2-105.4		201
	Acrylonitrile	58	13.2-116.0		202
	1,1-Dichloroethene	20	10.9-32.4	20,3	216
	1,1-Dichloroethane	20	15.3-28.0	21.5	214
	trans-1,2-Dichloroethenes	20	13.6-28.3	20.0	217
	Chloroform	20	15.5-26.2	22.8	211
	1,2-Dichloroethane	20	7.5-34.5	12.8	215
	1,1,1-Trichloroethane	20	13.6-29.8	23.6	228
	Carbon tetrachloride	20	7.7-28.1	19.6	206
	Bromodichloromethane	20	9.7-30.1	2 i.c	212
	1,2-Dichloropropane	20	15.2-28.0	22.3	218
	trans-1,3-Dichloropropene	20	12.7-25.6	18.2	220
	Trichloroethene	20	14.0-27.3	21.6	230
	Benzene	20	14.2-28.1	20.7	203
	Dibromochloromethane	20	4.1-29.5	17.8	208
	1,1,2-Trichloroethane	20	14.2-28.5	17.7	229
	cis-1,3-Dichloropropene	20	10.1-27.2	17.6	219
	2-Chloroethyl vinyl ether	20	9.9-32.5	16.3	210
	Bromoform	20	2.3-31.1	21.2	205
	Tetrachloroethene	20	13.0-28.7	19.1	226
	1,1,2,2-Tetrachloroethane	20	14.7-26.1	21.7	225
	Toluene	20	15.1-25.7	17.5	227
	Chlorobenzene	20	11.1-28.9	20.0	207
2	Ethyl benzene	20	13.2-27.7	21.9	221
	1.3-Dichlorobenzene	26	18.2-36.9		234
	1,2 Dichlorobenzene	26	11.0-42.2	~	233
	1 # Dichlorobenzene	20	3.0-36.1		235
	Diethyl Benzene	44	25.9-62.9		237
	Ethyl Ether .	35	26.9-49.4		236
	.Xvlene	44	21.0-66.7	50.8	238
	MEK	20	9.1-39.4	72.1	240
	<u>Acetone</u>	20	9.6-38.0	21.4	242
	ENTERNO THE CONTRACT OF THE PROPERTY OF THE CONTRACT OF THE CO				

Limits in effect as of May 18, 1995

## FREE-COL LABORATORIES, INC. VOA REFERENCE CONTROL INFORMATION (CLP - CALIBRATION VERIFICATION LIMITS)

Samples associated with		nce control:		
<u>Parameter</u>	<u>Target</u> <u>Value</u> <u>ug/L</u>	Acceptance Limits ug/L	Assayed Value ug/L	File#
MIBK	20	14.0-29.7	17.2	243
Tetrahvdrofuran	45	34.8-60.3		244
Carbondisulfide	20	11.0-30.4	20.6	• 245
Styrene	20	12.4-30.0	19.5	245
Vinyl Acetate	20	11.0-27.5	23.3	247
Amyl Acetate	44	14.7-64.6		248
Methyl Butyl Ketone	20	10.3-33.9	18.6	249
***************************************				· .

## FREE-COL LABORATORIES, INC. VOA REPEAT CONTROL INFORMATION (CLP - DUPLICATE SAMPLE LIMITS)

Date 6/29/96 Analyst		Ecklu	nd		
sambres associated with th	ns reb	peat con	trol:		<del></del>
<u>606-26-434</u>	790	<del></del>			
					<del></del>
Sample used as repeat cont	rol:_	600	6-28-025		
AD = Absolute Difference		RPD = F	Relative Percer	nt Diffe	erence
<u>Parameter</u>	Samp.	Repeat	Accept Accept	Assayo	i File
Units = ug/L	- Value	<u>Value</u>	<u>AD</u> <u>RPD</u>	<u>AD/RPI</u>	<u> </u>
Chloromethane	< 10°	< 10		$\Theta$	820
Bromomethane		i			819
Vinyl chloride			27		828
Chloroethane	V	$\nu$			807
Methylene chloride	25	25	17	<u> </u>	821
Acrolein					800
Acrylonitrile		_		-	801
1,1-Dichloroethene	<5	<5	1	<del>0</del> -	813
1,1-Dichloroethane		1	41		811
trans-1,2-Dichloroethene			28		814
Chloroform			14		809
1,2-Dichloroethane					812
1,1,1-Trichloroethane			27		825
Carbon tetrachloride					804
Bromodichloromethane			. 79		810
1,2-Dichloropropane					815
trans-1.3-Dichloropropens	2				817
Trichloroethene			32		827
Benzene			49		802
Dibromochloromethane			70		806
1,1,2-Trichloroethane					826
cis-1,3-Dichloropropene	V	ν Ψ			816
2-Chloroethyl vinyl ether	r 210	0 410			808
Bromoform	< 5	5 25	•		803
<u>Tetrachloroethene</u>	i	1	.33		823
1,1,2,2-Tetrachloroethan	e				822
- Toluene			38		824
Chlorobenzene		T	24		805
Ethyl benzene	$\overline{\psi}$		5	$\forall$	818
1.3-Dichlorobenzene				_	830
1,2-Dichlorobenzene		-			829
L.4-Dichlorobenzene			36		831
Acetone	41	00 00	υ 26	<u> </u>	836

Limits in effect as of May 18, 1995

FREE-COL LABORATORIES, INC.
VOA REPEAT CONTROL INFORMATION
(CLP - DUPLICATE SAMPLE LIMITS)

606-76-434>440
Sample used as repeat control: 606-28-025
AD = Absolute Difference RPD = Relative Percent Difference
Parameter  Samp. Repeat Accept Accept Assayd Fil  Value Value AD RPD AD/RPD
Units =
3-Chloro-1-propene
Dichlorodifluoromethane
Methyl Ethyl Ketone 2100 c100 0
MIBK 250 250 0
1,1,1,2-Tetrachloroethane
Trichlorofluoromethane
1,2,3-Trichloropropane
1,2-Dibromomethane
Cis-1.2-Dichloroethane Xvlene <5 <5
Unyl Acetate <50 250 CArbon disultide <5 25
Styrene ' <5 <5
5 (1) (2) (3) (3) (3) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4

## FREE-COL LABORATORIES, INC. VOA SPIKED CONTROL INFORMATION (CLP - ANALYTICAL SPIKED SAMPLE LIMITS)

Date 6/28/96 Analyst	80	Klund	0			
Samples associated with the	is spi	ked cor	itrol:			
161.77 (01651)	76				·	
606-26-434-744	0					
Samle weed as sailed cone	1-	11	6-28027			
Sample used as spiked cont	1101:	60	6 2021			
PARAMETER	קאוסף	מבאומס	CAMPLE	ACCEPT.	ASSYD	FILE
the second secon		RESULT	RESULT	LIMITS	% REC.	
	UG/L	UG/L	UG/L	% REC.	<u> </u>	
	<u>56/11</u>	<u>96/19</u>	<u>3671</u>			
Chloromethane	20	23	<10	28-189	115	520
Bromomethane	20	19	< 10	31-212	95	519
Vinvl chloride	20	22	< 10	22-185	i16"	528
Chloroethane	20	1.7	5</td <td>52-170</td> <td>25</td> <td>507</td>	52-170	25	507
Methylene chloride	20	24	<5	63-148	12c	521
Acrolein	52		_	22-185		500
Acrvlonitrile	58	-	_	53-187		501
1,1-Dichloroethene	20	22	<5	50-158	110:	. 513
1.1-Dichloroethane	20	21	<5	73-141	105	511
trans-1.2-Dichloroethenes		.20	25	63-151	100	514
Chloroform	20	22	<5	68-141-	110	509
1,2-Dichloroethane	20	21	e 5	52-157	105	512
1.1.1-Trichloroethane	20 -	21	<5	58-155	105	525
.Carbon tetrachloride	20 ·	24	<5	40-141	120	504
Bromodichloromethane	20	12	<5	46-150	90	510
1.2-Dichloropropane	20	17	<5	67-145	85	515
trans-1,3-Dichloropropene	≥ 20	16	<5	56-141	80	517
<u>Trichloroethene</u>	20	17	<5	64-129	<u>85</u>	527
Benzene	20	23	<5	70-144	<u> 115</u>	502
<u>Dibromochloromethane</u>	20	18	<5	27-158	90	506
1,1,2-Trichloroethane	20	12	<5	59-149	90	526
cis-1,3-Dichloropropene	20	10	<5	46-151	20	516
2-Chloroethvl vinvl ether		20	0</td <td>4-186</td> <td>150</td> <td>508</td>	4-186	150	508
Bromofórm	20	19	<5	6-150	45	503
Tetrachloroethene	20	20	<5	48-163	100	<u> 523</u> -
1,1,2,2-Tetrachloroethan		20	<5	46-164	100	522
Toluene	20 .		<5	72-131	95	5247
Chlorobenzene	20	21	<5	70-131	j05	<u>505</u>
Ethvl benzene	20	23	<5	61-140	115	518
1.3-Dichlorobenzene	26			58-163		530
1.2-Dichlorobenzene	26			42-159		<u>529</u>
1.4-Dichlorobenzene	20			33-177		531
Diethyl Benzene	44			71-137		533
Ethvl Ether	35			62-160		532
<u>Xvlenes</u>	44	50,4	<5 (1)	72-130		<u>534</u>
MEK	20	18	00</td <td>63-179</td> <td>10</td> <td><u>536</u></td>	63-179	10	<u>536</u>

limits in effect as of May 18, 1995

## FREE-COL LABORATORIES, INC. VCA SPIKED CONTROL INFORMATION (CLP - ANALYTICAL SPIKED SAMPLE LIMITS)

606-26-434 74	40					
Sample used as spiked c	ontrol:_		606-Z	8-027		· · · · · · · · · · · · · · · · · · ·
<u>Parameter</u>		RESULT		ACCEPT. LIMITS % REC.		FILE
<u>Acetone</u>	20	22	<100	51-175	110	538
MIBK	20	22	<50	53-150	110	539
Ethvl Acetate	45			71-140		535
Tetrahvdrofuran	45	~	•			
Carbondisulfide	20	22	<5		110	
Styrene	20	20	<5		100	
Vinvl Acetate	20	12	250		90	
Amvl Acetate .	- ५५				-	
<u>Methvl Butvl Retone</u>	20	18	C50		90	
					· · · · · · · · · · · · · · · · · · ·	:
			·	•		

## FIGURE E2 ENVIRONMENTAL SAMPLE DESCRIPTION AND

## CHAIN OF CUSTODY RECORD

(6/20/96 1) WASTEWAT 5) SLUDGE 9) OTHER ESCRIPTION: Place MW-4 MW-3	VERBAL LABOF	TS REQUIRED BY:  RESULTS NEEDED?  RATORY: Free - (  2) DRINKING WAT  6) SOLID WASTE  ST IN THE	ER ③ MON 7) OIL	T	200 UPPER M LOCKPORT, I PHONE: (716) CONTACT: L 4) SOIL 8) INDUS	IVISION, GMC OUNTAIN ROAD NEW YORK 14094 159-685-2300 Steve Blots TRIAL HYGIENE
3						
LE# LOCATION	TIME	PARAMETERS				SAMPLE BOTTLE
10 MW-5	6/20/8	5W-846	Method	8240	)	
15 MW-4			and the second s			
40 MW-6		11				
7°   Mw-3		[1			·	
3 MW-7		()				
MW-8		` ((				
Trip Bank	11	(, (				
DETECTION LEVELS REQU	IRED?					
EINTERFERENCES:			•			
FOR TEST (COMPARISON	of Areas.	ACKGROUND, ETC.)				•
S RECEIVED BY: (DATE/TI	HE) (HR		OTTLES RELINC		<b>\</b>	HRO PERSONNEL
REMNOUSHED BY: (DAT	ETIME)	[HAD PERSONNEL]	OTTLES RECEIV	FD BY: (DA	TEATIME) (LAB	PERSONNELI
COCLECTED BY:			RECEIVED BY: (0	DATE, TIME, L	ab signaturei -26-96	

P.O. Box 557, Cotton Road Meadville, Pennsylvania 16335-0557 Phone: Area Code 814/724-6242 FAX: Area Code 814/333-1466



ENVIRONMENTAL
OCCUPATIONAL HEALTH
FOOD SCIENCE
SPECIALISTS



DELPHI HARRISON THRM. SYS. GENERAL MOTORS CORPORATION

MONITORING WELLS #'s 10,9,8,6,4,3,7,11

SAMPLE DATES: 10/30/96 P.O.# HH48938



LOCKPORT

### FREE-COL LABORATORIES, INC.

P.O. BOX 557, COTTON ROAD MEADVILLE, PENNSYLVANIA 16335 PHONE: (814) 724-6242 FAX: (814) 333-1466

11/11/96

TO:

DELPHI HARRISON THRM.SYS ATTN: MS. CATHERINE VER 200 UPPER MOUNTAIN RD.

\* .

NY 14094

P.O. # HH48938

ACCOUNT NO. 01220

			•	•	-
	ANAL	YTICAL REP	PORT FORM	PAGE 1	
	SAMPLE ID :	MW-10 10/30/96	MW-9 10/30/96	MW-8 10/30/96	MW-6 10/30/96
PARAMETER	LAB ID DATE RECEIVED:	61101408 11/01/96	61101409 11/01/96		
DLATILE COMPOUNDS	UNITS = MG/	/L			
HLOROMETHANE		<0.1 D	<0.1 D	<0.010	<0.1 D
ROMOMETHANE	•	<0.1 D	<0.1 D	<0.010	<0.1 D
INYL CHLORIDE		0.11	0.1	0.047	1.9
HLOROETHANE		<0.1 D		<0.010	<0.1 D
THYLENE CHLORIDE		<0.05 D	<0.05 D	<0.005	<0.05 D
CETONE		<1 D	<1 D	<0.10	<1 D
ARBON DISULFIDE		<0.05 D	<0.05 D	<0.005	
1,-DICHLOROETHENE		<0.05 D	<0.05 D		
1,-DICHLOROETHANE		<0.05 D	<0.05 D	<0.005	
,2-DICHLORO***		1.8	3.3	1.5	
HLOROFORM		<0.05 D			
,2-DICHLOROETHANE		<0.05 D	<0.05 D	<0.005	
-BUTANONE		<1 D	<1 D	<0.10	<1 D
,1,1-TRICHLOROETHA	*	<0.05 D	<0.05 D	<0.005	
ARBON TETRACHLORID		<0.05 D		<0.005	
INYL ACETATE		<0.5 D	<0.5 D	<0.050	
ROMODICHLOROMETHAN	E	<0.05 D		<0.005	<0.05 D
1,2,2-TETRACHLORO	*	<0.05 D	<0.05 D	<0.005	<0.05 D
2-DICHLOROPROPANE		<0.05 D	<0.05 D	<0.005	<0.05 D
RANS-1,3-DICHLOROP		<0.05 D	<0.05 D	<0.005	<0.05 D
RICHLOROETHENE		0.98	2.2	0.20	1.8
IBROMOCHLOROMETHAN	E	<0.05 D	<0.05 D	<0.005	<0.05 D
,1,2-TRICHLOROETHA	*	<0.05 D	<0.05 D	<0.005	<0.05 D
ENZENE		<0.05 D	<0.05 D	<0.005	<0.05 D
	.4.	40 AF -	40 AF B	/A AAE	70 0E D

<sup>\*</sup>Some of the above names have been abbreviated. Please reference the enclosed list for their complete names.

#### ADVILLE DIVISION

A.H.A. Accreditation No. 98
U.S. Public Health Services Approved Facility
C.D.E.R. Laboratory I.D. No. 20-073
Dept. of Agriculture Approved Dairy Laboratory

CIS-1,3-DICHLOROPRO\*

NY Dept. of Health Laboratory I.D. No. 10552 NY Dept. of Env. Conservation Approved Facility ND Dept. of Health Cert. No. R-083 MD Dept. of Health Cert. No. 130 VA Dept. of Health Laboratory I.D. No. 00145

<0.05 D

WV Dept. of Health Certification No. 9907C NC Dept. of Natural Resources Cert. No. 236 MI Dept. of Public Health Approved Facility U.S. Office of Surface Mining Approved Facil

<0.05 D

<0.005

<0.05 D



LOCKPORT

### FREE-COL LABORATORIES, INC.

P.O. BOX 557, COTTON ROAD MEADVILLE, PENNSYLVANIA 16335 PHONE: (814) 724-6242 FAX: (814) 333-1466

11/11/96

TO:

DELPHI HARRISON THRM.SYS ATTN: MS. CATHERINE VER 200 UPPER MOUNTAIN RD.

NY 14094

P.O. # HH48938

ACCOUNT NO. 01220

	ANAL	YTICAL RE	PAGE 2			
	SAMPLE ID :	MW-10 10/30/96	MW-9 10/30/96	MW-8 10/30/96	MW-6 10/30/96	
PARAMETER	LAB ID DATE RECEIVED:	61101408 11/01/96	61101409 11/01/96	61101410 11/01/96	61101411 11/01/96	
VOLATILE COMPOUNDS	(Cont.) UNITS =	MG/L				
2-CHLOR* VINYL ETHE BROMOFORM 2-HEXANONE 4-METHYL-2-PENTANON TETRACHLOROETHENE TOLUENE CHLOROBENZENE ETHYL BENZENE STYRENE TOTAL XYLENES		<0.1 D <0.05 D <0.5 D <0.5 D 0.12 <0.05 D <0.05 D <0.05 D <0.05 D	<0.1 D <0.05 D <0.5 D <0.5 D 0.21 <0.05 D <0.05 D <0.05 D <0.05 D	<0.010 <0.005 <0.050 <0.050 0.024 <0.005 <0.005 <0.005 <0.005 <0.005	<0.1 D <0.05 D <0.5 D <0.5 D 8.4 <0.05 D <0.05 D <0.05 D <0.05 D <0.05 D <0.05 D	

Please reference the following page(s) for date and analyst.

\*Some of the above names have been abbreviated. Please reference the enclosed list for their complete names.

**EADVILLE DIVISION** 

U.S. Public Health Services Approved Facility
D.E.R. Laboratory I.D. No. 20-073
Dept. of Agriculture Approved Dairy Laboratory

NY Dept. of Health Laboratory I.D. No. 10552 NY Dept. of Env. Conservation Approved Facility ND Dept. of Health Cert. No. R-083 MD Dept. of Health Cert. No. 130 VA Dept. of Health Laboratory I.D. No. 00145 WV Dept. of Health Certification No. 9907C NC Dept. of Natural Resources Cert. No. 236 MI Dept. of Public Health Approved Facility U.S. Office of Surface Mining Approved Facilit



P.O. BOX 557, COTTON ROAD MEADVILLE, PENNSYLVANIA 16335 PHONE: (814) 724-6242 FAX: (814) 333-1466

11/11/96

TO:

DELPHI HARRISON THRM.SYS ATTN: MS. CATHERINE VER 200 UPPER MOUNTAIN RD.

LOCKPORT

NY 14094

P.O. # HH48938

ACCOUNT NO. 01220

	ANAL	YTICAL REF	PAGE 3		
	SAMPLE ID :	MW-4 10/30/96	MW-3 10/30/96	MW-7 10/30/96	MW-11 10/30/96
PARAMETER	LAB ID DATE RECEIVED:	61101412 11/01/96			
VOLATILE COMPOUNDS	UNITS = MG/	L			
CHLOROMETHANE	,	<1 D	<1 D	<1 D	<1 D
BROMOMETHANE		<1 D	<1 D	<1 D	<1 D
VINYL CHLORIDE		14	1.3	2.3	13
CHLOROETHANE		<1 D	<1 D	<1 D	
METHYLENE CHLORIDE		<0.5 D	<0.5 D	<0.5 D	<0.5 D
ACETONE		<10 D	<10 D	<10 D	<10 D
CARBON DISULFIDE		<0.5 D	<0.5 D	<0.5 D	<0.5 D
1,1,-DICHLOROETHENE		<0.5 D	<0.5 D	<0.5 D	<0.5 D
1,1,-DICHLOROETHANE	) 	<0.5 D	<0.5 D	<0.5 D	<0.5 D
1,2-DICHLORO***		120	210	32	120
CHLOROFORM		<0.5 D	<0.5 D	<0.5 D	<0.5 D
1,2-DICHLOROETHANE		<0.5 D	<0.5 D	<0.5 D	<0.5 D
2-BUTANONE		<10 D	<10 D	<10 D	<10 D
1,1,1-TRICHLOROETHA	<b>.</b> *	<0.5 D	<0.5 D	<0.5 D	<0.5 D
CARBON TETRACHLORID	E	<0.5 D	<0.5 D	<0.5 D	<0.5 D
VINYL ACETATE		<5 D	<5 D	<5 D	<5 D
BROMODICHLOROMETHAN	E	<0.5 D	<0.5 D	<0.5 D	<0.5 D
1,1,2,2-TETRACHLORO	*	<0.5 D		<0.5 D	<0.5 D
1,2-DICHLOROPROPANE		<0.5 D	<0.5 D	<0.5 D	<0.5 D
TRANS-1,3-DICHLOROP	*	<0.5 D	<0.5 D	<0.5 D	<0.5 D
TRICHLOROETHENE		34	<0.5	790	36
DIBROMOCHLOROMETHAN	E	<0.5 D	<0.5 D	<0.5 D	<0.5 D
1,1,2-TRICHLOROETHA	*	<0.5 D	<0.5 D		
BENZENE		<0.5 D	2.3	<0.5 D	<0.5 D
CIS-1,3-DICHLOROPRO	*	<0.5 D	<0.5 D	<0.5 D	<0.5 D

<sup>\*</sup>Some of the above names have been abbreviated. Please reference the enclosed list for their complete names.

#### MEADVILLE DIVISION

A.I.H.A. Accreditation No. 98
U.S. Public Health Services Approved Facility
A D.E.R. Laboratory I.D. No. 20-073
A Dept. of Agriculture Approved Dairy Laboratory

NY Dept. of Health Laboratory I.D. No. 10552 NY Dept. of Env. Conservation Approved Facility ND Dept. of Health Cert. No. R-083 MD Dept. of Health Cert. No. 130 VA Dept. of Health Laboratory I.D. No. 00145 WV Dept. of Health Certification No. 9907C NC Dept. of Natural Resources Cert. No. 23€ MI Dept. of Public Health Approved Facility U.S. Office of Surface Mining Approved Facil



P.O. BOX 557, COTTON ROAD MEADVILLE, PENNSYLVANIA 16335 PHONE: (814) 724-6242 FAX: (814) 333-1466

11/11/96

TO:

DELPHI HARRISON THRM.SYS ATTN: MS. CATHERINE VER 200 UPPER MOUNTAIN RD. P.O. # HH48938

LOCKPORT

NY 14094

ACCOUNT NO. 01220

	ANAL	YTICAL REP	ORT FORM	PAGE 4			
SI	AMPLE ID :	MW-4 10/30/96	MW-3 10/30/96	MW-7 10/30/96	MW-11 10/30/96		
	AB ID ATE RECEIVED:	61101412 11/01/96	61101413 11/01/96	61101414 11/01/96	61101415 11/01/96		
VOLATILE COMPOUNDS (Cont.) UNITS = MG/L							
2-CHLOR* VINYL ETHER		<1 D	<1 D	<1 D	<1 D		
BROMOFORM		<0.5 D	<0.5 D	<0.5 D	<0.5 D		
2-HEXANONE	• • • • • • • • • • • • • • • • • • • •	<5 D	<5 D	<5 D	<5 D		
4-METHYL-2-PENTANONE		<5 D	<0.5 D	<5 D	<5 D		
TETRACHLOROETHENE		<0.5 D	<0.5 D	<0.5 D	<0.5 D		
TOLUENE		<0.5 D	2.3	<0.5 D	<0.5 D		
CHLOROBENZENE		<0.5 D	<0.5 D	<0.5 D	<0.5 D		
ETHYL BENZENE		<0.5 D	1.5	<0.5 D	<0.5 D		
STYRENE		<0.5 D	<0.5 D	<0.5 D	<0.5 D		
TOTAL XYLENES		<0.5 D	2.8	<0.5 D	<0.5 D		

Please reference the following page(s) for date and analyst.

\*Some of the above names have been abbreviated. Please reference the enclosed list for their complete names.

ADVILLE DIVISION

An.H.A. Accreditation No. 98
U.S. Public Health Services Approved Facility
And D.E.R. Laboratory I.D. No. 20-073
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P.O. BOX 557, COTTON ROAD MEADVILLE, PENNSYLVANIA 16335 PHONE: (814) 724-6242 FAX: (814) 333-1466

11/11/96

TO:

DELPHI HARRISON THRM.SYS

ATTN: MS. CATHERINE VER 200 UPPER MOUNTAIN RD.

LOCKPORT

NY 14094

P.O. # HH48938

ACCOUNT NO. 01220

ANALYTICAL REPORT FORM

PAGE

5

SAMPLE ID

TRIP BLK.

10/25/96

LAB ID

61101416

DATE RECEIVED:

11/01/96

PARAMETER	RESULTS	UNITS	DATE AND	analyst
VOLATILE COMPOUNDS				
Chloromethane	<0.010	MG/L	11/07/96	ECKLUND
Bromomethane	<0.010			
Vinyl Chloride	<0.010			
Chloroethane	<0.010			
Methylene Chloride	<0.005			
Acetone	<0.10			
Carbon Disulfide	<0.005			
1,1-Dichloroethene	<0.005			
1,1-Dichloroethane	<0.005	,		
1,2-Dichloroethenes (Total)***	<0.005			
Chloroform	0.030			•
1,2-Dichloroethane	<0.005			
2-Butanone	<0.10			
1,1,1-Trichloroethane	<0.005			
Carbon Tetrachloride	<0.005			
Vinyl Acetate	<0.050			
Bromodichloromethane	0.011			•
1,1,2,2-Tetrachloroethane	<0.005			
1,2-Dichloropropane	<0.005			
trans-1,3-Dichloropropene	<0.005			
Trichloroethene	<0.005			
Dibromochloromethane	<0.005			
1,1,2-Trichloroethane	<0.005			

\*\*\*EPA Methods 601 and 624 and SW 846 Methods 8010 and 8240 do not differentiate the co-eluting cis and trans-1,2-dichloroethenes. The result reported is the sum of both compounds.

#### **EADVILLE DIVISION**

Li.H.A. Accreditation No. 98
U.S. Public Health Services Approved Facility
PA D.E.R. Laboratory I.D. No. 20-073
Dept. of Agriculture Approved Dairy Laboratory

NY Dept. of Health Laboratory I.D. No. 10552 NY Dept. of Env. Conservation Approved Facility ND Dept. of Health Cert. No. R-083 MD Dept. of Health Cert. No. 130 VA Dept. of Health Laboratory I.D. No. 00145 WV Dept. of Health Certification No. 9907C NC Dept. of Natural Resources Cert. No. 236 MI Dept. of Public Health Approved Facility U.S. Office of Surface Mining Approved Facili

KEY

<=LESS THAN

>=GREATER THAN

w.f.=WILL FOLLOW



P.O. BOX 557, COTTON ROAD MEADVILLE, PENNSYLVANIA 16335 PHONE: (814) 724-6242 FAX: (814) 333-1466 11/11/96

TO:

DELPHI HARRISON THRM.SYS ATTN: MS. CATHERINE VER 200 UPPER MOUNTAIN RD.

LOCKPORT

NY 14094

P.O. # HH48938

ACCOUNT NO. 01220

ANALYTICAL REPORT FORM

PAGE 6

SAMPLE ID

TRIP BLK.

10/25/96

LAB ID

61101416

DATE RECEIVED:

11/01/96

PARAMETER	RESULTS	UNITS	DATE AND	ANALYST
VOLUME COMPOURING CONTINUES				
<u>VOLATILE COMPOUNDS</u> Continued		<del>-</del> -	44 (05 (06	
Benzene	<0.005	MG/L	11/07/96	ECKLUND
cis-1,3-Dichloropropene	<0.005			
2-Chloroethylvinyl ether	<0.010			
Bromoform	<0.005			
2-Hexanone	<0.050			
4-Methyl-2-pentanone	<0.050			
Tetrachloroethene	<0.005			
Toluene	<0.005	4.		
Chlorobenzene	<0.005			
Ethylbenzene	<0.005		•	
Styrene	<0.005			
Total Xylenes	<0.005			

Volatile Compounds - Method 8240A

"Test Methods for Evaluating Solid Waste: Physical/Chemical Methods", SW-846, Third Edition, U.S. Environmental Protection Agency. Revised 1986.

pc: Mr. Steve Blair, GZA

**EADVILLE DIVISION** 

A.I.H.A. Accreditation No. 98
U.S. Public Health Services Approved Facility
A.D.E.R. Laboratory I.D. No. 20-073
A Dept. of Agriculture Approved Dairy Laboratory

NY Dept. of Health Laboratory I.D. No. 10552 NY Dept. of Env. Conservation Approved Facility ND Dept. of Health Cert. No. R-083 MD Dept. of Health Cert. No. 130 VA Dept. of Health Laboratory I.D. No. 00145

WV Dept. of Health Certification No. 9907C NC Dept. of Natural Resources Cert. No. 236 MI Dept. of Public Health Approved Facility U.S. Office of Surface Mining Approved Facil

-COENTED THAN

WF-WILL FOLLOW

QUALITY ASSURANCE SUPERVISOR
FREE-COL LABORATORIES

Meadville, Pennsylvania 16335-0557 Phone: Area Code 814/724-8242 FAX: Area Code 814/333-1486



Chlorobenzene

ENVIRONMENTAL OCCUPATIONAL HEALTH FOOD SCIENCE SPECIALISTS

Unabbreviated Listing of Hazardous Substance List Compounds

#### VOLATILE COMPOUNDS

Chloromethane	Bromodichloromethane
Bromomethane	1,1,2,2-Tetrachloroethane
Vinyl Chloride	1,2-Dichloropropane
Chloroethane	trans-1,3-Dichloropropene
Methylene Chloride	Trichloroethene
Acetone	Dibromochloromethane
Carbon Disulfide	1,1,2-Trichloroethane
1,1-Dichloroethene	Benzene
1,1-Dichloroethane	cis-1,3-Dichloropropene
1,2-Dichloroethylenes (Total)***	2-Chloroethyl Vinyl Ether
Chloroform	Bromoform
1,2-Dichloroethane	2-Hexanone
2-Butanone	4-Methyl-2-pentanone
1,1,1-Trichloroethane	Tetrachloroethene
Carbon Tetrachloride	Toluene

Styrene

Total Xylenes

Vinyl Acetate

Ethyl Benzene

\*\*\*EPA Methods 601 and 624 and SW 846 Methods 8010 and 8240 do not differentiate the co-eluting cis and trans-1,2-dichloroethenes. The result reported to you is the sum of both compounds.



P.O. BOX 557, COTTON ROAD MEADVILLE, PENNSYLVANIA 16335 PHONE: (814) 724-6242 FAX: (814) 333-1466

TO:

#### ANALYTICAL REPORT FORM

CODE B:

This analyte was detected in the associated blank as well as in the sample. It indicates possible/probable contamination. The data user may subtract the blank value at his/her discretion.

CODE D:

Detection limit change due to a dilution.

CODE R:

The percent recovery on the spiked sample associated with this sample was not within the acceptance limits of 75% - 125%

CODE S:

This result was obtained by Method of Standard Additions.

CODE NA:

Not Applicable

CODE ND:

Not Detectable

PRC:

Preparation Reference Control

VOID:

The sample plus spike concentration exceeded the linear range of

the standard curve.

CODE Q:

Values for parameters quantified in this sample have been adjusted for recoveries of the analytical matrix spike. The adjustments have been based on the matrix recoveries from this sample. Adjusted values are not given where sample values were less than the detection limit or where spike recoveries are

equal to 100%

CODE J:

This result is an estimated value. It indicates that the compound meets the mass spectral data identification criteria.

The result is less than the quantitation limit.

A Accreditation No. 98

J.S. Public Health Services Approved Facility

A D.E.R. Laboratory I.D. No. 20-073

Popt. of Agriculture Approved Dairy Laboratory

NY Dept. of Health Laboratory I.D. No. 10552 NY Dept. of Env. Conservation Approved Facility ND Dept. of Health Cert. No. R-083 MD Dept. of Health Cert. No. 130 VA Dept. of Health Laboratory I.D. No. 00145 WV Dept. of Health Certification No. 9907C NC Dept. of Natural Resources Cert. No. 236 MI Dept. of Public Health Approved Facility U.S. Office of Surface Mining Approved Facilit

## FIGURE E2 ENVIRONMENTAL SAMPLE DESCRIPTION

## CHAIN OF CUSTODY RECORD

.TE	10/30/46	VERBAL RE	REQUIRED BY:		200 LO	RRISON DIVISION. GMC UPPER MOUNTAIN ROAD CKPORT, NEW YORK 14094
+ -		_ LABORAT	ORY: Free -	61	PHONE	:: (716) 4 <del>28 <u>6</u>55-2300</del> ACT: <u>65/ese Blah</u>
"ICE YPE	5) SLUDGE 9) OTHER	6	) DRINKING WATE ) SOLID WASTE	7) OIL	8)	SOIL COZA INDUSTRIAL HYGIENE
J-	MW-10, MW-	e tes	+ in +) -8, MW-6	he tollow	MW-3	MW-7, MW-1
7						
MPLE #	LOCATION	TIME P	ARAMETERS			SAMPLE BOTTLE LOT # (OPTIONAL)
	MW-6	1050	iw 846 -	Method 8	240	
	MW-7	1143	; /			
	-MW-3	1,34	,			
1	MW-8	1249	11			
	MW-9 MW-10	209	, ,			
	Mw-4	3 /3	11			
	MW-11	3 30	/ \			
A DE	TECTION LEVELS REQU	8 / 1		•		
	ITERFERENCES:					
ASON FO	R TEST (COMPARISON	OF AREAS,BACK	GROUND, ETC )			
	-					
TILES A	ECEIVED BY: (DATE/TI	ME) (HRO PE	RSONNELI BO	TTLES RELINQUISH	ED BY: (DATE/TI	ME) [HRO PERSONNEL]
<u> </u>	ELINQUISHED BY: (DAT	E/TIME) (HAI	D PERSONNELL TOC	TIVES RECEIVED B	Y: (DATE/TIME)	(LAS PERSONNEL)
SAMPLE	COLLECTED BY:		AE	ECEIVED BY: (DATE,		
				In W	ett !!-	1-96

P.O. Box 557, Cotton Road Meadville, Pennsylvania 16335-0557 Phone: Area Code 814/724-6242 FAX: Area Code 814/333-1486



ENVIRONMENTAL
OCCUPATIONAL HEALTH
FOOD SCIENCE
SPECIALISTS

DELPHI HARRISON THRM. SYS. GENERAL MOTORS CORPORATION

MW-5

SAMPLE DATES: 10/31/96 P.O.# HH48938



P.O. BOX 557, COTTON ROAD MEADVILLE, PENNSYLVANIA 16335 PHONE: (814) 724-6242 FAX: (814) 333-1466

11/14/96

TO:

DELPHI HARRISON THRM.SYS

ATTN: MS. CATHERINE VER 200 UPPER MOUNTAIN RD.

LOCKPORT

NY 14094-1896

P.O. # HH48938

ACCOUNT NO. 01220

ANALYTICAL REPORT FORM

PAGE

1

SAMPLE ID

MW-5

10/31/96

LAB ID

61101417

DATE RECEIVED:

11/01/96

	DATE RECEIVED:	11/01/96			
PARAMETER		RESULTS	UNITS	DATE AND ANALYST	
VOLATILE COMPOUNDS					
Chloromethane	***	<1 D	MG/L	11/07/96 ECKLUND	
Bromomethane		<1 D			
Vinyl Chloride		<1 D			
Chloroethane		<1 D			
Methylene Chloride		<0.5 D			
Acetone		<10 D			
Carbon Disulfide		<0.5 D			
1,1-Dichloroethene	•	<0.5 D			
1,1-Dichloroethane	4-1-1-1-1-1	<0.5 D			
1,2-Dichloroethenes	(Total)***	3.4			
Chloroform		<0.5 D			
1,2-Dichloroethane		<0.5 D			
2-Butanone		<10 D			
1,1,1-Trichloroetha		<0.5 D			
Carbon Tetrachlorid	е	<0.5 D			
Vinyl Acetate	•	<5 D		· .	
Bromodichloromethan		<0.5 D			
1,1,2,2-Tetrachloro		<0.5 D			
1,2-Dichloropropane		<0.5 D			

\*\*\*EPA Methods 601 and 624 and SW 846 Methods 8010 and 8240 do not differentiate the co-eluting cis and trans-1,2-dichloroethenes. The result reported is the sum of both compounds.

<0.5 D

<0.5 D

<0.5 D

390

#### **EADVILLE DIVISION**

A.i.H.A. Accreditation No. 98
U.S. Public Health Services Approved Facility
C. D.E.R. Laboratory I.D. No. 20-073
C. Dept. of Agriculture Approved Dairy Laboratory

trans-1,3-Dichloropropene

Trichloroethene

Dibromochloromethane

1,1,2-Trichloroethane

NY Dept. of Health Laboratory I.D. No. 10552 NY Dept. of Env. Conservation Approved Facility ND Dept. of Health Cert. No. R-083 MD Dept. of Health Cert. No. 130 VA Dept. of Health Laboratory I.D. No. 00145 WV Dept. of Health Certification No. 9907C NC Dept. of Natural Resources Cert. No. 236 MI Dept. of Public Health Approved Facility U.S. Office of Surface Mining Approved Facility



P.O. BOX 557, COTTON ROAD MEADVILLE, PENNSYLVANIA 16335 PHONE: (814) 724-6242 FAX: (814) 623-1466

TO:

DELPHI HARRISON THRM.SYS

200 UPPER MOUNTAIN RD.

IN: MS. CATHERINE VER

LOCKPORT

NY 14094-1896

P.O. # HH48938

ACCOUNT NO. 01220

ANALYTICAL REPORT FORM

PAGE

2

SAMPLE ID

MW-5

10/31/96

LAB ID

61101417

DATE RECEIVED:

11/01/96

PARAMETER		RESULTS	UNITS	DATE AND	ANALYST
VOLATILE COMPOUNDS Continued	-	40.5.5		11 /05 /05	
Benzene		<0.5 D	MG/L	11/07/96	ECKLUND
cis-1,3-Dichloropropene		<0.5 D			
2-Chloroethylvinyl ether		<1 D			
Bromoform		<0.5 D			
2-Hexanone		<5 D			
4-Methyl-2-pentanone		<5 D			
Tetrachloroethene		89			
Toluene		<0.5 D			
Chlorobenzene		<0.5 D	,		
Ethylbenzene		<0.5 D		•	
Styrene		<0.5 D			

Volatile Compounds - Method 8240A

Total Xylenes

"Test Methods for Evaluating Solid Waste: Physical/Chemical Methods", SW-846, Third Edition, U.S. Environmental Protection Agency. Revised 1986.

<0.5 D

pc: Mr. Steve Blair, GZA

ADVILLE DIVISION

A.I.H.A. Accreditation No. 98
U.S. Public Health Services Approved Facility
E. D.E.R. Laboratory I.D. No. 20-073
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QUALITY ASSURANCE SUPER... FREE-COL LABORATORIES



P.O. BOX 557, COTTON ROAD **MEADVILLE, PENNSYLVANIA 16335** PHONE: (814) 724-6242 FAX: (814) 333-1466

TO:

#### ANALYTICAL REPORT FORM

CODE B:

This analyte was detected in the associated blank as well as in the sample. It indicates possible/probable contamination. The data user may subtract the blank value at his/her discretion.

CODE D:

Detection limit change due to a dilution.

CODE R:

The percent recovery on the spiked sample associated with this sample was not within the acceptance limits of 75% - 125%

CODE S:

This result was obtained by Method of Standard Additions.

CODE NA:

Not Applicable

CODE ND:

Not Detectable

PRC:

Preparation Reference Control

VOID:

The sample plus spike concentration exceeded the linear range of the standard curve.

CODE Q:

Values for parameters quantified in this sample have been adjusted for recoveries of the analytical matrix spike. The adjustments have been based on the matrix recoveries from this sample. Adjusted values are not given where sample values were less than the detection limit or where spike recoveries are

equal to 100%

CODE J:

This result is an estimated value. It indicates that the compound meets the mass spectral data identification criteria.

The result is less than the quantitation limit.

**ADVILLE DIVISION** 

H.A. Accreditation No. 98 U.S. Public Health Services Approved Facility PA D.E.R. Laboratory I.D. No. 20-073 Dept. of Agriculture Approved Dairy Laboratory NY Dept. of Health Laboratory I.D. No. 10552 NY Dept. of Env. Conservation Approved Facility ND Dept. of Health Cert. No. R-083 MD Dept. of Health Cert. No. 130 VA Dept. of Health Laboratory I.D. No. 00145

WV Dept. of Health Certification No. 9907C NC Dept. of Natural Resources Cert. No. 236 MI Dept. of Public Health Approved Facility U.S. Office of Surface Mining Approved Facilit

P.O. Box 557, Cotton Road Meadville, Pennsylvania 16335-0557 Phone: Area Code 814/724-6242 FAX: Area Code 814/333-1468



ENVIRONMENTAL OCCUPATIONAL HEALTH FOOD SCIENCE SPECIALISTS

#### QUALITY CONTROL INFORMATION

Free-Col Laboratories analyzes control samples at specified frequencies during the analyses for the purpose of evaluating and documenting the precision and accuracy of the results. The attached quality control data, prepared at the time of analysis, reflect the results obtained for the various types of controls from the batch of samples described as follows:

General Motors Sample Identification

Free-Col ID

MW-5 10/31/96

61101417

#### Pree-Col Laboratories, Inc. Sorrogate Spike Information Method 8250

	11-6-96	Amalyst:	Goldund	
7	11-7-96			

Le: 1 Recovery

:: W = Lov/Medic Water

S = Lov/Media Soil/Sediment

	Limits: Water Soil/Sediment Pree-Col I.D.	Dibracflucraethare  86-118 80-128	Toltene-dg 88-110 81-117	4-Bresoficors- benzene 86-115 74-121
	611-01-408 611-01-409 611-01-410 611-01-411 611-01-412 611-01-413 -1-11-01-414 611-01-416	100 106 105 96 - 98 - 97 - 104 108	97 92 88 94 97 95 97	109 108 102 102 106 106 104
	611-01-415 611-01-417	/03 /04	104 101	10C. 11C

### FREE-COL LABORATORIES, INC. VOA REFERENCE CONTROL INFORMATION (CLP - CALIBRATION VERIFICATION LIMITS)

Date 11-6-96 Analyst ECKlund
Samples associated with this reference control:

611-01-408->417

<u>Parameter</u>	Target Value ug/L	Acceptance Limits ug/L	<u>Assaved</u> <u>Value</u> ug/L	File#
Chloromethane	20	5.4-34.5	12:7	223
Bromomethane	20	7.8-39.4	18.8	222
Vinvl chloride	20	1.5-41.7	17.3	232
Chloroethane	20	4.6-36.4	18.1	209
Methylene chloride	20	11.8-31.3	19.6	224
Acrolein	62	4.5-104.4	<u></u>	201
Acrylonitrile	58	13.2-115.2		202
1,1-Dichloroethene	20	11.3-32.1	19.7	216
1,1-Dichloroethane	20	15.5-27.8	17.7	214
trans-1,2-Dichloroethene	20	13.6-28.3	20.4	217
Chloroform	20	15.7-26.1	17.8	211
1,2-Dichloroethane	20	8.1-34.0	19.6	215
1,1,1-Trichloroethane	20	12.8-30.1	16.3	228
Carbon tetrachloride	20	8.0-27.8	129	206
Bromodichloromethane	20	9.8-29.7	19.8	212
1,2-Dichloropropane	20	14.7-28.2	26.3	218
trans-1,3-Dichloropropene	20	12.7-25.6	19.1	220
Trichloroethene	20	14.1-27.1	17.3	230
Benzene	20	14.3-27.8	18.9	203
Dibromochloromethane	20	4.8-29.2	22.7	208
1,1,2-Trichloroethane	20	14.3-28.2	19.5	229
cis-1,3-Dichloropropene	20	10.3-26.8	13.2	219
2-Chloroethvl vinvl ether	20	10.1-32.1	21.7	210
Bromoform	20	3.0-30.6	31.6	205
Tetrachloroethene	20	13.3-28.4	227	226
1,1,2,2-Tetrachloroethane	20	14.7-26.1	30.1	225
Toluene	20	15.2-25.6	20.1	227
Chlorobenzene	20	11.5-28.6	195	207
Ethvl benzene	20	13.4-27.6	i3.3	221
1,3-Dichlorobenzene	26	18.5-36.7	24.9	234
1,2-Dichlorobenzene	26	11-5-41.9	24.4	233
1,4-Dichlorobenzene	20	3.7-35.6	19.3	235
Diethvl Benzene	44	25.9-62.9	-	237
Ethyl Ether	35	26.9-49.5		236
Xvlene	44	21.0-66.7	40.6	238
MEK	20	9.1-39.4	23.0	240
Acetone	20	9.6-38.0	£1.7	242

## FREE-COL LABORATORIES, INC. VOA REFERENCE CONTROL INFORMATION (CLP - CALIBRATION VERIFICATION LIMITS)

Date //-6-96 Analys	t	Echlund	•	
Samples associated with	this refere	nce control:		
611-01-407 -> 417				
<u>Parameter</u>	<u>Target</u> <u>Value</u> ug/L		Assaved Value ug/L	File#
MIBK	20	14.0-29.7	21.7	243
Tetrahydrofuran	45	34.8-60.3		244
Carbondisulfide	20	11.0-30.4	17.6	245
Styrene	20	12.4-30.0	18.8	246
Vinvl Acetate	20	11.0-27.5	22.3	247
Amvl Acetate	44	14.7-64.6		248
Methyl Butyl Ketone	20	10.3-33.9	€2.0	249

## FREE-COL LABORATORIES, INC. VOA BLANK INFORMATION (CLP - CALIBRATION BLANK LIMITS)

Date //-6-96 Analy	st Echlund	
Samples associated with this	blank:	
<u> </u>		
£11-01-409 74	17	
Damanahan	D1 1: 37-1	
Parameter	<u>Blank Value</u>	
Units = NY/L		
Units =	•	
Chloromethane	<10	
Bromomethane	£10	
Vinyl chloride	410	
Chloroethane	<10	
Methylene chloride	<b>&lt;</b> 5	
Acrolein		
Acrylonitrile		
1,1-Dichloroethene	45	
1,1-Dichloroethane	1	
trans-1,2-Dichloroethene		
Chloroform		
1,2-Dichloroethane	,	
1,1,1-Trichloroethane		
Carbon tetrachloride		
Bromodichloromethane		
1.2-Dichloropropane		
trans-1,3-Dichloropropene		
Trichloroethene		
Benzene		
Dibromochloromethane	<u> </u>	
1.1.2-Trichloroethane		
cis-1,3-Dichloropropene	<u> </u>	
2-Chloroethyl vinyl ether	<10	
Bromoform	<5	
Tetrachloroethene		
1.1.2.2-Tetrachloroethane		
<u>Toluene</u> <u>Chlorobenzene</u>		
Ethyl benzene		
1,3-Dichlorobenzene		
1,2-Dichlorobenzene		
1,4-Dichlorobenzene	<del></del>	
Xylene	<5	
2-Butanone - MEK	<100	
4-Methyl-2-pentanone	<50	
Acetone	<100 ·	
Syrene	<b>45</b>	

# FREE-COL LABORATORIES, INC. VOA BLANK INFORMATION (CLP - CALIBRATION BLANK LIMITS)

	417	
Parameter	Blank Value	
Jnits =	Manufacture.	•
Carbon Disulfide	<5	
Vinyl Acetate	<50	
2-Hexanone - MBK	<50	
Dichlorofluoromethane		
L,1,1,2-Tetrachloroethan	e ·	
richlorofluoromethane		
L,2,3-Trichloropropane		
3-Chloro-1-propene		
L,2-Dibrmomethane		
cis,1,2-Dichloroethene		

## FREE-COL LABORATORIES, INC. VOA REFERENCE CONTROL INFORMATION (CLP - CALIBRATION VERIFICATION LIMITS)

Date		/7	196	Analys	st	Echlus	nd.	 
Sampl	es '	ass	ociated	with	this	reference	control:	

#### 6-11-01-4087 417

Parameter	Target Value ug/L	Acceptance Limits ug/L	Assaved Value ug/L	File#
Chloromethane	20	5.4-34.5	17.0	223
Bromomethane	20	7.8-39.4	18.4	222
Vinyl chloride	20	1.5-41.7	17.5	232
Chloroethane	20	4.6-36.4	17.6	209
Methvlene chloride	20	11.8-31.3	18.3	224
Acrolein	62	4.5-104.4		201
Acrvlonitrile	58	13.2-115.2		202
1,1-Dichloroethene	20	11.3-32.1	19.4	216
1,1-Dichloroethane	20	15.5-27.8	17.5	214
trans-1,2-Dichloroethenes	20	13.6-28.3	20.4	217
Chloroform	20	15.7-26.1	18.6	211
1,2-Dichloroethane	20	8.1-34.0	204	215
1,1,1-Trichloroethane	20	12.8-30.1	18.2	228
Carbon tetrachloride	20	8.0-27.8	18.6	206
Bromodichloromethane	20	9.8-29.7	19.1	212
1,2-Dichloropropane	20	14.7-28.2	16.5	218
trans-1,3-Dichloropropene	20	12.7-25.6	17.4	220
Trichloroethene	20	14.1-27.1	18.3	230
Benzene	20	14.3-27.8	19.3	203
Dibromochloromethane	20	4.8-29.2	19.6	208
1,1,2-Trichloroethane	20	14.3-28.2	17.2	229
cis-1,3-Dichloropropene	20	10.3-26.8	16.4	219
2-Chloroethvl vinvl ether	20	10.1-32.1	20,1	210
Bromoform	20	3.0-30.6	20.8	205
Tetrachloroethene	20	13.3-28.4	17.0	226
1,1,2,2-Tetrachloroethane	20	14.7-26.1	22.0	225
Toluene	20	15.2-25.6	17.8	227
Chlorobenzene	20	11.5-28.6	19.2	207
Ethvl benzene	20	13.4-27.6	17.8	221
1,3-Dichlorobenzene	26	18.5-36.7	-	234
1,2-Dichlorobenzene	26	11.5-41.9		233
1,4-Dichlorobenzene	20	3.7-35.6	<u> ن</u>	235
Diethvl Benzene	44	25.9-62.9	-	237
Ethyl Ether	35	26.9-49.5	-	236
Xylene	44	21.0-66.7	41.2	238
MEK	20	9.1-39.4	23.2	240
Acetone	20	9.6-38.0	21.3	242

## FREE-COL LABORATORIES, INC. VOA REFERENCE CONTROL INFORMATION (CLP - CALIBRATION VERIFICATION LIMITS)

Samples associated with  6/1-01-408 >		ence control:		
Parameter	<u>Target</u> <u>Value</u> ug/L	Acceptance Limits ug/L	Assaved Value ug/L	File
MIBK	20	14.0-29.7	20.1	243
Tetrahydrofuran	<u> </u>	34.8-60.3	•	244
Carbondisulfide	20	11.0-30.4	17.7	245
Styrene	20	12.4-30.0	12.4	246
Vinvl Acetate	20	11.0-27.5	18:7	247
Amyl Acetate	44	14.7-64.6		248
Methyl Butyl Ketone	20	10.3-33.9	22.0	249

## FREE-COL LABORATORIES, INC. VOA BLANK INFORMATION (CLP - CALIBRATION BLANK LIMITS)

Date ///7/96 Analys	st Ecklund
Samples associated with this	blank:
611-01-408 7 417	
Parameter ,	Blank Value
ugh	Diam varae
Units =	
Chloromethane	< 10
Bromomethane	
Vinyl chloride	
Chloroethane	<u> </u>
Methylene chloride	<5
Acrolein	
Acrylonitrile	
1,1-Dichloroethene	<u> </u>
1,1-Dichloroethane	
trans-1,2-Dichloroethene	
Chloroform	
1,2-Dichloroethane	
1.1.1-Trichloroethane	
Carbon tetrachloride Bromodichloromethane	
1,2-Dichloropropane	
trans-1,3-Dichloropropene	
Trichloroethene	
Benzene	
Dibromochloromethane	
1.1.2-Trichloroethane	
cis-1,3-Dichloropropene	Ψ
2-Chloroethyl vinyl ether	<10
Bromoform	<5
Tetrachloroethene	
1,1,2,2-Tetrachloroethane	
Toluene	
Chlorobenzene	
Ethyl benzene	
1,3-Dichlorobenzene	
1.2-Dichlorobenzene	
1,4-Dichlorobenzene	
Xylene	V
2-Butanone - MEK	<100
4-Methyl-2-pentanone	<50
Acetone	70</td

## FREE-COL LABORATORIES, INC. VOA BLANK INFORMATION (CLP - CALIBRATION BLANK LIMITS)

611-01-403->4	47	
<u>Parameter</u>	Blank Value	
Jnits = Mg/L		
Carbon Disulfide	<50	
Vinyl Acetate	< 50	-
2-Hexanone - MBK	<50	
Dichlorofluoromethane		
,1,1,2-Tetrachloroethan	16	
richlorofluoromethane		
.2.3-Trichloropropane		
3-Chloro-1-propene		
.,2-Dibrmomethane		
is.1.2-Dichloroethene		

FREE-COL LABORATORIES, INC. VOA REPEAT CONTROL INFORMATION (CLP - DUPLICATE SAMPLE LIMITS)

Date///7/96 Analyst	Eck	lund	······································		
Samples associated with the	nis re	peat co	ntrol:		
16 35-462 5412					
611-01-487 2417	<del>.</del>	·			
Sample used as repeat cont	-rol·		111-05-079		
Sample used as repeat cont AD = Absolute Difference		RDD =	Relative Percer	t Diffe	rence
		1 <b>41 1</b> 2.		Dillo.	
<u>Parameter</u>	Samp.	Repeat	Accept Accept	Assavd	File
112 /		Value		AD/RPD	
Units = ug/L					
	•				
Chloromethane	<10	<b>L16</b>		<del>- 0</del>	820
Bromomethane	1				819
Vinvl chloride			27		828
Chloroethane	<u> </u>	<u> </u>			807
Methylene chloride	·5	<b>&lt;</b> 5	17	V	821
Acrolein	_			-	800
Acrylonitrile		-		•	801
1,1-Dichloroethene	15	<5_		<i>.</i>	813
1,1-Dichloroethane			41		811
trans-1,2-Dichloroethene			28		814
Chloroform			14		809
1,2-Dichloroethane					812
1,1,1-Trichloroethane			27		825
<u>Carbon tetrachloride</u>					804
Bromodichloromethane			79		810
1,2-Dichloropropane					815
trans-1,3-Dichloropropene					817
Trichloroethene			32		827
Benzene			49		802
Dibromochloromethane			70		806
1,1,2-Trichloroethane		!			826
cis-1,3-Dichloropropene	V	Ÿ			816
2-Chloroethyl vinvl ether	<10	Lic			808
Bromoform	< 5	<u> </u>			803
Tetrachloroethene			33		823
1,1,2,2-Tetrachloroethane					822
Toluene Chlorobenzene			38		824
		<del></del>	24		805
Ethyl benzene 1,3-Dichlorobenzene			5	<u> </u>	818
1,2-Dichlorobenzene				<u>t</u>	830
1,4-Dichlorobenzene	<del></del>	<del></del>	20	<del></del>	829
Acetone			36	<u> </u>	831
VCE FOILE	< 100	<b>د/</b> م	26	V	836

FREE-COL LABORATORIES, INC.
VOA REPEAT CONTROL INFORMATION
(CLP - DUPLICATE SAMPLE LIMITS)

6/1-01-408 - 341	· <del></del>				·	
271-01-908 - 591				·		
Comple wood or money con		Ŀ	11-05-	079		
Sample used as repeat cor AD = Absolute Difference	10101.				t Differ	rence
AD - ADSOIGLE Dillerence	•	RED - 1				
Parameter	Samo.	Repeat	Accept	Accept	<u>Assavd</u>	File
sig/L	Value	Value	AD	RPD	AD/RPD	
Units =						
3-Chloro-1-propene						
Dichlorodifluoromethane						
Methyl Ethyl Ketone	<100	<100			<u> </u>	
MIBK	< 50	<50			لمبنع.	
1,1,1,2-Tetrachloroethane	9					
<u>Trichlorofluoromethane</u>						
1,2,3-Trichloropropane						
1,2-Dibromomethane						
Cis-1,2-Dichloroethane						
Xvlene	25	< 5			<u>.e</u>	
METHY BUTYL KETONE	<50	250				
STYRENE		<b>45</b>				
CARBON DIGNIFIDE	<5	` < <u>\</u>				
VINYL ACETATE	<b>45</b> 7	c <57	5		<b>V</b>	

### FREE-COL LABORATORIES, INC. . VOA SPIKED CONTROL INFORMATION (CLP - ANALYTICAL SPIKED SAMPLE LIMITS)

Date 1//7/96 Analyst	É	cklein	rd_			
Samples associated with the	nis sp	iked cor	itrol:			
611-01-408 7417						····
Sample used as spiked cont	trol:_	15	11-05-	083		
DADAMEMED	CDIVE	CDIEED	CAMDIE	ACCEPT.	ASSVD	FIL
PARAMETER				LIMITS	% REC.	<u> </u>
	UG/L	UG/L	UG/L	% REC.	<u> </u>	
•	06/11	<u>0G/11</u>	<u>00/ H</u>	<u>• 100.</u>		
Chloromethane	20	18	< 10	31-187	90	520
Bromomethane	20	13	1	34-207	90	519
Vinvl chloride	20	16:		26-183	80	528
Chloroethane	20	17	V	55-168	35	507
Methylene chloride	20	:2ス	<i>&lt;5</i>	63-151	110	521
Acrolein	62			23-183		<u>500</u>
Acrylonitrile	58			52-186		501
1,1-Dichloroethene	20	HU	<5	52-159	160	513
1,1-Dichloroethane	20	17		73-144	75	511
trans-1,2-Dichloroethene	20	18		64-151	90	514
Chloroform	20	17		68-142	35	509
1,2-Dichloroethane	20	20	j.	<u>54-155</u>	100	512
1,1,1-Trichloroethane	20	18		<u>59-158</u>	<i>ने ए</i>	525
Carbon tetrachloride	20	1/2	· L	39-147	80	504
Bromodichloromethane	20	16:		47-148	80	510
1,2-Dichloropropane	20	16		67-144	<u>₹</u> 5	515
trans-1,3-Dichloropropene		15	<u> </u>	56-141	75	517
Trichloroethene	20	18	<u>F</u>	64-130	90	527
Benzene	20	20	<u> </u>	71-142	j&0 170	502
Dibromochloromethane	20	16	#	29-155	80	506
1,1,2-Trichloroethane	20	16	11/	61-146	<i>80</i>	526
cis-1,3-Dichloropropene	20	17	V	46-149	<i>85</i>	516
2-Chloroethyl vinvl ether		16	c iij	7-183	30	508
Bromoform	20	1/4	<'>-	10-149	<u> 30</u>	503
Tetrachloroethene	20	16	•	50-160		523
1,1,2,2-Tetrachloroethane		3,3	<u>lı</u>	44-163	118	522
Toluene	20	16		73-130	20	<u>524</u>
Chlorobenzene	20	19	<del></del>	72-131	90	505
Ethyl benzene	20	1.?	<u>*</u>	62-139	90	518
1,3-Dichlorobenzene	26			60-161		530
1,2-Dichlorobenzene	26			45-157		529
1,4-Dichlorobenzene	20			<u>36-174</u>		531
Diethyl Benzene	44			71-137		533
Ethyl Ether	35			62-160	- 07	532
Xylenes	44	44.1	<u> </u>	72-130	93	534
MEK	20	2.3	<150	63-179	110	536

## FREE-COL LABORATORIES, INC. VOA SPIKED CONTROL INFORMATION (CLP - ANALYTICAL SPIKED SAMPLE LIMITS)

Date ///7/96 Anal	yst	Eckl	und			
Samples associated wit	h this spi	iked cor	ntrol:			
6/1-01-408	7 +17					
Sample used as spiked	control:_		611-0	5-083		
<u>PARAMETER</u>	SPIKE ADDED UG/L	RESULT		ACCEPT. LIMITS % REC.	ASSYD % REC.	FILE
Acetone	20	23	00</td <td>72-154</td> <td>115</td> <td>538</td>	72-154	115	538
MIBK	20	<i>i5</i>	<50	53-160	75	539
Ethvl Acetate	45	_	_	71-140		535
Tetrahydrofuran	45	~			_	
Carbondisulfide	20	24	<5		120	
Styrene	20	17	<5-		85	
Vinvl Acetate	20	18	<50		30	
Amyl Acetate	44	_	_		_	
Methyl Butyl Ketone	20	25	<50		125	
			,	<u> </u>		

### ENVIRONMENTAL SAMPLE DESCRIPTION

### CHAIN OF CUSTODY RECORD

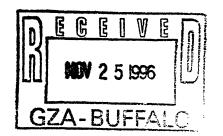
TE.	10/31/46	RESULTS REC	TS NEEDED?	-	HARRISON DIVISION, GMC 200 UPPER MOUNTAIN ROAD LOCKPORT, NEW YORK 1409	14
- S- 2		LABORATOR	: Free - lol	COV	ITACT: 5/eine 13	2300
YPE:	5) SLUDGE 9) OTHER	6) S	OLID WASTE 7) OIL	NITORING WELL	4) SOIL 8) INDUSTRIAL HYGIEN	ΝE
TE DESC	RIPTION: Please	etist hose	after those	collector	on 10/30/48	6
<u>.</u> .J		·				
JAMPLE #	1004704				SAMPLE BOT	
		i	AMETERS	1 2200	LOT # (OPTIO	אאנו
	MW-5 P		N-846 - Metho	1 0270		-
	194W-3 F	<u>    5 u</u>	1-870 MEFNOC	1 5,490		
-				<del></del>		
<b>.</b>						
]				والمرافقة والقافر والمحاولة والمرافقة والمرافق		
M DE	TECTION LEVELS REQU	IRED?			<del>-</del>	
] EIN	TERFERENCES:					
ASON FOR	R TEST (COMPARISON	OF AREAS,BACKGRO	UND. ETC.)			
R	e linguished		Reco	ei ved		
TILES RE	PENED BY: (DATE/TI)	ME) (HAD PERSO	NNELI BOTTLES RELIN	<del>QUISHED</del> BY: (DATE	TIME) (HAO PERSONNEI	<del>П</del>
:3 A 5	MANUSHED BY: (DAT	<i>1/96</i> E/TIME) (HRO PE	RSONNELI BOTTLEŞ RECE		IE) [LAS PERSONNEL]	
			00	Jee J	1-96 1220	
SAMPLE	COLLECTED BY:		[3388] ¬ ·	DATE, TIME, LAB SIG	11-1-96	
_ =			Thates		196 - 11/14/96	



P.O. BOX 557, COTTON ROAD MEADVILLE, PENNSYLVANIA 16335 PHONE: (814) 724-6242 FAX: (814) 333-1466

**ANALYTICAL REPORT FORM** 

11/19/96



TO:

DELPHI HARRISON THRM.SYS MS. CATHERINE VER

LAB ID

200 UPPER MOUNTAIN RD.

LOCKPORT

NY 14094-1896

P.O. # HH48938

ACCOUNT NO. 01220

PAGE

#### SAMPLE ID MW-5P 10/31/96 61101418 DATE RECEIVED: 11/01/96

PARAMETER	RESULTS	UNITS	DATE	AND	ANALYST
VOLATILE COMPOUNDS					
Chloromethane	<3,000 D	MG/KG	11/15	/96	ECKLUND
Bromomethane	<3,000 D				
Vinyl Chloride	<3,000 D				
Chloroethane	<3,000 D				
Methylene Chloride	<1,500 D				
Acetone	<30,000 D				
Carbon Disulfide	<1,500 D				
1,1-Dichloroethene	<1,500 D				
1,1-Dichloroethane	<1,500 D	* *			
1,2-Dichloroethenes (Total)***	<1,500 D	٠.			
Chloroform	<1,500 D			,	•
1,2-Dichloroethane	<1,500 D				
2-Butanone	<30,000 D				
1,1,1-Trichloroethane	<1,500 D				
Carbon Tetrachloride	<1,500 D				
Vinyl Acetate	<15,000 D				
Bromodichloromethane	<1,500 D				
1,1,2,2-Tetrachloroethane	<1,500 D				
1,2-Dichloropropane	<1,500 D				• •
trans-1,3-Dichloropropene	<1,500 D				
Trichloroethene	430,000				
Dibromochloromethane	<1,500 D				
1,1,2-Trichloroethane	<1,500 D				

<sup>\*\*\*</sup>EPA Methods 601 and 624 and SW 846 Methods 8010 and 8240 do not differentiate the co-eluting cis and trans-1,2-dichloroethenes. The result reported is the sum of both compounds.

#### \*\*EADVILLE DIVISION

.I.H.A. Accreditation No. 98 J.S. Public Health Services Approved Facility PA D.E.R. Laboratory I.D. No. 20-073 PA Dept. of Agriculture Approved Dairy Laboratory NY Dept. of Health Laboratory I.D. No. 10552 NY Dept. of Env. Conservation Approved Facility ND Dept. of Health Cert. No. R-083 MD Dept. of Health Cert. No. 130 VA Dept. of Health Laboratory I.D. No. 00145

WV Dept. of Health Certification No. 9907C NC Dept. of Natural Resources Cert. No. 236 MI Dept. of Public Health Approved Facility U.S. Office of Surface Mining Approved Facili



P.O. BOX 557, COTTON ROAD MEADVILLE, PENNSYLVANIA 16335 PHONE: (814) 724-6242 FAX: (814) 333-1466 11/19/96

TO:

DELPHI HARRISON THRM.SYS

ATTN: MS. CATHERINE VER 200 UPPER MOUNTAIN RD.

LOCKPORT

NY 14094-1896

P.O. # HH48938

ACCOUNT NO. 01220

ANALYTICAL REPORT FORM

PAGE 3

11/15/96

SAMPLE ID

: MW-5P

10/31/96

LAB ID

61101418

RESULTS

DATE RECEIVED:

11/01/96

UNITS

MG/KG

DATE AND ANALYST

**ECKLUND** 

VOLATILE COMPOUNDS Continued

Benzene <1,500 D
cis-1,3-Dichloropropene <1,500 D
2-Chloroethylvinyl ether <3,000 D
Bromoform <1,500 D

2-Hexanone <15,000 D 4-Methyl-2-pentanone <15,000 D Tetrachloroethene 640,000

Toluene <1,500 D
Chlorobenzene <1,500 D
Ethylbenzene <1,500 D
Styrene <1,500 D

Total Xylenes

PARAMETER

<1,500 D

Volatile Compounds - Method 8240A

\*Test Methods for Evaluating Solid Waste: Physical/Chemical Methods\*, SW-846, Third Edition, U.S. Environmental Protection Agency. Revised 1986.

QUALITY ASSURANCE SURERV.....
FREE-COL LABORATORIES

pc: Mr. Steve Blair, GZA

**EADVILLE DIVISION** 

I.H.A. Accreditation No. 98 U.S. Public Health Services Approved Facility PA D.E.R. Laboratory I.D. No. 20-073 PA Dept. of Agriculture Approved Dairy Laboratory NY Dept. of Health Laboratory I.D. No. 10552 NY Dept. of Env. Conservation Approved Facility ND Dept. of Health Cert. No. R-083 MD Dept. of Health Cert. No. 130 VA Dept. of Health Laboratory I.D. No. 00145 WV Dept. of Health Certification No. 9907C NC Dept. of Natural Resources Cert. No. 236 MI Dept. of Public Health Approved Facility U.S. Office of Surface Mining Approved Facili

KEY: <=LESS THAN >=GREATER THAN W.f.=WILL FOLLOW



P.O. BOX 557, COTTON ROAD MEADVILLE, PENNSYLVANIA 16335 PHONE: (814) 724-6242 FAX: (814) 333-1466

TO:

Results expressed as MG/KG or % are calculated on an as received weight basis, with two exceptions: % volatile solids and % fixed solids (% ash) are expressed on a dry weight basis.

#### ANALYTICAL REPORT FORM

CODE B:

This analyte was detected in the associated blank as well as in the sample. It indicates possible/probable contamination. The data user may subtract the blank value from the sample value at his/her discretion.

CODE D:

Detection limit change due to a dilution.

CODE R:

The percent recovery on the spiked sample associated with this sample was not within the acceptance limits of 75% - 125%

CODE S:

This result was obtained by Method of Standard Additions.

CODE NA:

Not Applicable

CODE ND:

Not Detectable

PRC:

Preparation Reference Control

VOID:

The sample plus spike concentration exceeded the linear range of the standard curve.

CODE Q:

Values for parameters quantified in this sample have been adjusted for recoveries of the analytical matrix spike. The adjustments have been based on the matrix recoveries from this sample. Adjusted values are not given where sample values were less than the detection limit or where spike recoveries are equal to 100%

CODE J:

This result is an estimated value. It indicates that the compound meets the mass spectral data identification criteria. The result is less than the quantitation limit but greater than zero.

MEADVILLE DIVISION

ALH.A. Accreditation No. 98

Public Health Services Approved Facility

D.E.R. Laboratory I.D. No. 20-073

PhiDept. of Agriculture Approved Dairy Laboratory

NY Dept. of Health Laboratory I.D. No. 10552 NY Dept. of Env. Conservation Approved Facility ND Dept. of Health Cert. No. R-083 MD Dept. of Health Cert. No. 130 VA Dept. of Health Laboratory I.D. No. 00145 WV Dept. of Health Certification No. 9907C NC Dept. of Natural Resources Cert. No. 236 MI Dept. of Public Health Approved Facility U.S. Office of Surface Mining Approved Facili

P.O. Box 557, Cotton Road Meadville, Pennsylvania 16335-0557 Phone: Area Code 814/724-6242 FAX: Area Code 814/333-1468



ENVIRONMENTAL
OCCUPATIONAL HEALTH
FOOD SCIENCE
SPECIALISTS

#### QUALITY CONTROL INFORMATION

Free-Col Laboratories analyzes control samples at specified frequencies during the analyses for the purpose of evaluating and documenting the precision and accuracy of the results. The attached quality control data, prepared at the time of analysis, reflect the results obtained for the various types of controls from the batch of samples described as follows:

General Motors Sample Identification

Free-Col ID

MW-5P 10/31/96

61101418

#### Special Notes:

1. The results on the analytical report may be given as mg/kg and related control value results may be given on the quality control data sheet as mg/L. The reason for this difference is that many control values are expressed in terms of the final concentration of the solvent or acid extract of a solid waste or oil sample.

#### Pre-Col Laboratories, Inc. Somrogate Spike Information Method \$250

11/15/96

2-21-5= Ecklund

التحادي

: W = Low/Medic Water

S = Low/Media Soil/Sediment

		Dibrumofluorumethane	<u>Toluese-d</u> g	4-Armofitera-
<b>6</b> 23 .	Linites	•		
	Water	86-118	88-110	86-115 . 74-121
B(1)20	Soil/Sediment	80-179	81-117	17-121
F 5				•
=	Pres-Col I.D.		•	r
				•
	611-13-096	108	99	104
	1,1, 12, 117	93	92	102
	611-13-112	73	<u> </u>	100
b.;)	1-11-14-076	94	94	106
	•	•		•
	611-13-126	- 95	44	164
	611-14-118	90	40 98	105
-	611-14-119	96 97	<u> 78</u> 91	104
**************************************	6/1-14-120	95	92	97
	611-14-127	95 95	91	102
	611-08-415	96	96	103
	1.11-08-416	9.7	96	104
			99	101
	611-01-418	103	97	701
T;				
				• •
<u> </u>				
**				
		•		
		•	•	

### FREE-COL LABORATORIES, INC. VOA REFERENCE CONTROL INFORMATION (CLP - CALIBRATION VERIFICATION LIMITS)

Date 1/15/76 Analyst Echlund Samples associated with this reference control:

611-08-415/416

<u>Parameter</u>	Target	<u>Acceptance</u>	Assaved	File#
	<u>Value</u>	<u>Limits</u>	<u>Value</u>	
	ug/L	ug/L	ug/L	
Chloromethane	20	5.4-34.5	21.4	223
Bromomethane	20	7.8-39.4	20.2	222
Vinvl chloride	20	1.5-41.7	13.0	232
Chloroethane	20	4.6-36.4	16.6	209
Methvlene chloride	20	11.8-31.3	12.2	224
Acrolein	62	4.5-104.4	36.0	201
Acrylonitrile	58	13.2-115.2	54.3	202
1,1-Dichloroethene	20	11.3-32.1	17.1	216
1,1-Dichloroethane	20	15.5-27.8	A= == 17.0	214
trans-1,2-Dichloroethene	20	13.6-28.3	17. 20.2	217
Chloroform	20	15.7-26.1	17.9	211
1,2-Dichloroethane	20	8.1-34.0	70.0	215
1,1,1-Trichloroethane	20	12.8-30.1	12.7	228
Carbon tetrachloride	20	8.0-27.8	19.4	206
Bromodichloromethane	20	9.8-29.7	17.0.	212
1,2-Dichloropropane	20	14.7-28.2	13.6	218
trans-1,3-Dichloropropene	20	12.7-25.6	<u> </u>	220
Trichloroethene	20	14.1-27.1	19.3	230
Benzene	20	14.3-27.8	127	203
Dibromochloromethane	20	4.8-29.2	20.9	208
1,1,2-Trichloroethane	20	14.3-28.2	21.8	229
cis-1,3-Dichloropropene	20	10.3-26.8	22.5	219
2-Chloroethvl vinvl ether	20	10.1-32.1	20.2	210
Bromoform	20	3.0-30.6	23.0	205
<u>Tetrachloroethene</u>	20	13.3-28.4	22.0	226
1,1,2,2-Tetrachloroethane	20	14.7-26.1	16.2	225
Toluene	20	15.2-25.6	20.9	227
Chlorobenzene	20	11.5-28.6	20.5	207
Ethvl benzene	20	13.4-27.6	18.6	221
1,3-Dichlorobenzene	26	18.5-36.7	25.7	234
1,2-Dichlorobenzene	26 .	11.5-41.9	25.4	233
1,4-Dichlorobenzene	20	3.7-35.6	19.7	235
Diethyl Benzene	44	25.9-62.9	-	237
Ethyl Ether	35	26.9-49.5		236
Xvlene	44	21.0-66.7	42.7	238
MEK	20	9.1-39.4	17.1	240
Acetone	20	9.6-38.0	17.6	242

FREE-COL LABORATORIES, INC.

VOA REPEAT CONTROL INFORMATION
(CLP - DUPLICATE SAMPLE LIMITS)

Date Analyst Samples associated with the		Gili	lund			
Date //// Analyst _	· · · · · ·	2000	otrol:			
Samples associated with the	ms rei	peat COI	TETOT:			
611-08-415/416						
111						
611-01-418	·					
Cample word as wonest sont	1.		111- 00-	-41		
Sample used as repeat cont AD = Absolute Difference	-101:—	PDD - 1	Polativo	Percen	+ Differ	CARCA
AD - ADSOIDTE DITTETENCE		RPD - 1	VETUCTAE	rercen	C DILLE	ence
Parameter .	Samn	Peneat	Accept	Accept	Assayd	File
Farameter		Value		RPD	AD/RPD	
Units = Ng/L	Varue	varue	₩.	TITE.	<u></u>	
UIII CS	-	•				
Chloromethane	25	15			<del>L</del>	820
Bromomethane	1	1			)	819
Vinvl chloride				27		828
Chloroethane	1	<b>V</b>				807
Methylene chloride	L2_	٤2		17		821
Acrolein	£10	210				800
Acrylonitrile	Z10	~10				801
1,1-Dichloroethene	42	<b>Z</b> 2				813
1,1-Dichloroethane	1			41		811
trans-1,2-Dichloroethene				28		814
Chloroform				14		809
1,2-Dichloroethane				·		812
1,1,1-Trichloroethane				27		825
Carbon tetrachloride						804
Bromodichloromethane				79		810
1,2-Dichloropropane						815
trans-1,3-Dichloropropene						817
Trichloroethene				32		827
Benzene				49		802
Dibromochloromethane				70		806
1,1,2-Trichloroethane						<u>826</u>
cis-1,3-Dichloropropene	V	V				816
2-Chloroethyl vinyl ether		- <5				808
Bromoform	<u> </u>	<u> </u>				803
<u>Tetrachloroethene</u>				33		823
1,1,2,2-Tetrachloroethane						822
Toluene				38		824
Chlorobenzene				24		805
Ethyl benzene				5		818
1,3-Dichlorobenzene						830
1,2-Dichlorobenzene				·		829
1,4-Dichlorobenzene	<u> </u>	Υ		36		831
Acetone	2100	400		26	V	836

FREE-COL LABORATORIES, INC. VOA REPEAT CONTROL INFORMATION (CLP - DUPLICATE SAMPLE LIMITS)

Date /	1/15/96 Analyst associated with t	his rep	Echlic Deat Cor	me ntrol:	•	·	
							<del></del>
·							
Sample us	sed as repeat con	trol:		611-08	- 415		
	olute Difference					t Diffe	rence
Parameter	<u> </u>	Samp.	Repeat	Accept	Accept	Assayd	File
Units =	Mg/L	<u>Value</u>	<u>Value</u>	<u>AD</u>	RPD	AD/RPD	
-	<del></del>			,			
3-Chloro-	-1-propene						
	difluoromethane				:		
Methvl Et	hvl Ketone	<100	£100			Đ	
MIBK		<50	2.50			P	
1,1,1,2-7	<u> Tetrachloroethane</u>		`				
Trichlore	ofluoromethane						
1,2,3-Tri	chloropropane						
1,2-Dibro	omomethane						
Cis-1,2-I	Dichloroethane	<2	12			Ð	
Xvlene		<2	22				
mething	Butch Ketons	<b>&lt;5</b> 0	<b>&lt;5</b> 0				
- Styres		<2	£2				
carbon	disultide	<5	<5				
vinul	Acetate	<50	<50			¥	
					,		

## FREE-COL LABORATORIES, INC. VOA BLANK INFORMATION (CLP - CALIBRATION BLANK LIMITS)

Date ///5/96 Analys	st Echlund
Samples associated with this	
•	
611-08-415/416	
611-01-417	
4-11-01-416	
<u>Parameter</u>	Blank Value
linite = righ	
Units =	
Chlamanakhana	<5
<u>Chloromethane</u> <u>Bromomethane</u>	
Vinyl chloride	
Chloroethane	
Methylene chloride	<u> </u>
Acrolein	410
Acrylonitrile	<b>۷</b>  0
1,1-Dichloroethene	<b>2</b> 2
1,1-Dichloroethane	
trans-1,2-Dichloroethene	
Chloroform	
1,2-Dichloroethane	
1,1,1-Trichloroethane	
Carbon tetrachloride	
Bromodichloromethane	
1,2-Dichloropropane trans-1,3-Dichloropropene	
Trichloroethene	
Benzene	
Dibromochloromethane	
1,1,2-Trichloroethane	
cis-1,3-Dichloropropene	V
2-Chloroethyl vinyl ether	45
Bromoform	
Tetrachloroethene	
1,1,2,2-Tetrachloroethane	
Toluene Chlorobenzene	
Ethyl benzene	
1,3-Dichlorobenzene	
1,2-Dichlorobenzene	
1,4-Dichlorobenzene	
Xylene	
2-Butanone - MEK	Liq
4-Methyl-2-pentanone	< <i>i</i> 0
Acetone	<10
Syrana	47-

# FREE-COL LABORATORIES, INC. VOA BLANK INFORMATION (CLP - CALIBRATION BLANK LIMITS)

Date 11/15/96 Analyst Echlung Samples associated with this blank:					
<u>Parameter</u>	Blank Value				
Units = ugh					
Carbon Disulfide	<5				
Vinyl Acetate	<b>4</b> /0				
2-Hexanone - MBK	0</td <td></td>				
Dichlorofluoromethane	_				
1,1,1,2-Tetrachloroethane	A 1				
Trichlorofluoromethane					
1,2,3-Trichloropropane	<5				
3-Chloro-1-propene					
1,2-Dibrmomethane	£2				
cis,1,2-Dichloroethene	<b>42</b>				
THE	<5				

### FREE-COL LABORATORIES, INC. VOA SPIKED CONTROL INFORMATION (CLP - ANALYTICAL SPIKED SAMPLE LIMITS)

Date ///5/96 Analyst Echelung
Samples associated with this spiked control:

Samples associated with this spiked control: 611-08-415/416 611-01-418 Sample used as spiked control: 611-08-012 PARAMETER SPIKE SPIKED SAMPLE ACCEPT. ASSYD ADDED RESULT RESULT LIMITS % REC. UG/L UG/L % REC. UG/L <5 Chloromethane 31-187 34-207 Bromomethane <u>Vinvl chloride</u> 26-183  $\overline{oldsymbol{
u}}$ 55-168 Chloroethane Methylene chloride <1 63-151 Acrolein 23-183 52-186 Acrylonitrile <10 52-159 <u>1,1-Dichloroethene</u> 1,1-Dichloroethane 73-144 trans-1,2-Dichloroethene 64-151 Chloroform 68-142 1,2-Dichloroethane 54-155 1,1,1-Trichloroethane 59-158 <u>Carbon tetrachloride</u> 39-147 Bromodichloromethane 47-148 67-144 1,2-Dichloropropane trans-1,3-Dichloropropene 56-141 64-130 <u>Trichloroethene</u> 71-142 Benzene Dibromochloromethane 29-155 1,1,2-Trichloroethane 61-146 <u>cis-1,3-Dichloropropene</u> 46-149 2-Chloroethvl vinvl ether 7-183 Bromoform CZ 10-149 ن را <u>Tetrachloroethene</u> 50-160 1,1.2,2-Tetrachloroethane 44-163 Toluene 73-130 <u>Chlorobenzene</u> 72-131 Ethvl benzene 62-139 <u>1,3-Dichlorobenzene</u> 60-161 1,2-Dichlorobenzene 45-157 1,4-Dichlorobenzene 36-174 Diethvl Benzene 71-137 Ethyl Ether 62-160 72-130 <2 <u>Xylenes</u> < 12 63-179 

### FREE-COL LABORATORIES, INC. VOA SPIKED CONTROL INFORMATION (CLP - ANALYTICAL SPIKED SAMPLE LIMITS)

Sample used as spiked co	ntrol:_	E	11-08	-012		
PARAMETER	ADDED			ACCEPT. LIMITS % REC.	ASSYD % REC.	FILE
Acetone	20	19	<10	72-154	95	538
MIBK	20	20	<10	53-160	100	539
Ethyl Acetate	45	_		71-140	-	535
Tetrahvdrofuran	45	_	_		_	
Carbondisulfide	20	20	<5		100	
Styrene	20	20	< Z		100	
Vinyl Acetate	20 -	19	< 10		45	
Amyl Acetate	44	_			_	
Methvl Butvl Ketone	20	iS	<b>۷/</b> ۷		90	
cis-112 - Dichloroethene	20	95	76		9.5	

## FREE-COL LABORATORIES, INC. VOA REFERENCE CONTROL INFORMATION (CLP - CALIBRATION VERIFICATION LIMITS)

<u>Parameter</u>	<u>Target</u> <u>Value</u>	Acceptance Limits	<u>Assaved</u> <u>Value</u> <u>ug/L</u>	File
	ug/L	ug/L	<u>nd/1</u>	
MIBK	20	14.0-29.7	20,0	243
Tetrahydrofuran	45	34.8-60.3	42.1	244
Carbondisulfide	20	11.0-30.4	21.4	245
Styrene	20	12.4-30.0	19.8	246
Vinvl Acetate	20	11.0-27.5	19.6	247
Amvl Acetate	44	14.7-64.6		248
Methyl Butyl Ketone	20	10.3-33.9	16.1	249

P.O. Box 557, Cotton Road Meadville, Pennsylvania 16335-0557 Phone: Area Code 814/724-6242 FAX: Area Code 814/333-1468



ENVIRONMENTAL OCCUPATIONAL HEALTH FOOD SCIENCE SPECIALISTS

DELPHI HARRISON THRM. SYS. GENERAL MOTORS CORPORATION

MONITORING WELLS #'S 10,9,8,6,4,3S,7,5,11

SAMPLE DATES: 11/21/96 P.O.# HH48938



P.O. BOX 557, COTTON ROAD MEADVILLE, PENNSYLVANIA 16335 PHONE: (814) 724-6242 FAX: (814) 333-1466

12/03/96

TO:

DELPHI HARRISON THRM.SYS

ATTN: MS. CATHERINE VER 200 UPPER MOUNTAIN RD.

LOCKPORT

NY 14094

P.O. # HH48938

ACCOUNT NO. 01220

	ANAI	YTICAL REI	PORT FORM	PAGE 1
	SAMPLE ID :	MW 10 11/21/96	MW 9 11/21/96	MW 8 11/21/96
PARAMETER	LAB ID DATE RECEIVED:	61122412 11/22/96	61122413 11/22/96	61122414 11/22/96
VOLATILE COMPOUNDS	UNITS = MG/	'L		
CHLOROMETHANE	•	<0.1 D	<0.1 D	<0.010
BROMOMETHANE		<0.1 D	<0.1 D	<0.010
VINYL CHLORIDE	•	<0.1 D	0.16	0.049
CHLOROETHANE		<0.1 D	<0.1 D	<0.010
METHYLENE CHLORIDE		<0.05 D	<0.05 D	<0.005
ACETONE		<1 D	<1 D	<0.10
CARBON DISULFIDE		<0.05 D	<0.05 D	<0.005
1,1,-DICHLOROETHENE		<0.05 D	<0.05 D	0.005
L,1,-DICHLOROETHANE		<0.05 D	<0.05 D	<0.005
L,2-DICHLORO***		1.7	3.2	2.6
CHLOROFORM		<0.05 D	<0.05 D	<0.005
1,2-DICHLOROETHANE		<0.05 D	<0.05 D	<0.005
2-BUTANONE		<1 D	<1 D	<0.10
1,1,1-trichloroetha		<0.05 D	<0.05 D	<0.005
CARBON TETRACHLORIDI	3	<0.05 D	<0.05 D	<0.005
VINYL ACETATE		<0.5 D	<0.5 D	<0.050
BROMODICHLOROMETHANI		<0.05 D	<0.05 D	<0.005
1,1,2,2-TETRACHLORO		<0.05 D	<0.05 D	<0.005
1,2-DICHLOROPROPANE		<0.05 D	<0.05 D	<0.005
TRANS-1,3-DICHLOROP	<b>k</b>	<0.05 D	<0.05 D	<0.005
TRICHLOROETHENE	_	0.87	2.0	0.22
DIBROMOCHLOROMETHANI		<0.05 D	<0.05 D	<0.005
1,1,2-TRICHLOROETHA	K	<0.05 D	<0.05 D	<0.005
BENZENE	•	<0.05 D	<0.05 D	<0.005
CIS-1,3-DICHLOROPRO		<0.05 D	<0.05 D	<0.005

<sup>\*</sup>Some of the above names have been abbreviated. Please reference the enclosed list for their complete names.

Please reference the following page(s) for date and analyst.

#### EADVILLE DIVISION

L.H.A. Accreditation No. 98
U.S. Public Health Services Approved Facility
PA D.E.R. Laboratory I.D. No. 20-073
A Dept. of Agriculture Approved Dairy Laboratory

NY Dept. of Health Laboratory I.D. No. 10552 NY Dept. of Env. Conservation Approved Facility ND Dept. of Health Cert. No. R-083 MD Dept. of Health Cert. No. 130 VA Dept. of Health Laboratory I.D. No. 00145 WV Dept. of Health Certification No. 9907C NC Dept. of Natural Resources Cert. No. 236 MI Dept. of Public Health Approved Facility U.S. Office of Surface Mining Approved Facilit



P.O. BOX 557, COTTON ROAD MEADVILLE, PENNSYLVANIA 16335 PHONE: (814) 724-6242 FAX: (814) 333-1466

12/03/96

TO:

DELPHI HARRISON THRM.SYS

ATTN: MS. CATHERINE VER 200 UPPER MOUNTAIN RD.

LOCKPORT

NY 14094

P.O. # HH48938

ACCOUNT NO. 01220

	ANAL	YTICAL REF	PORT FORM	PAGE 2	
	SAMPLE ID :	MW 10 11/21/96	MW 9 11/21/96	MW 8 11/21/96	
ARAMETER	LAB ID DATE RECEIVED:	61122412 11/22/96	61122413 11/22/96	61122414 11/22/96	
LATITE COMPOUNDS	S (Cont ) HNITE -	· MC/T			
LATILE COMPOUNDS	<del></del>		<0.1 D	<0.010	
CHLOR* VINYL ETE	<del></del>	<0.1 D	<0.1 D <0.05 D	<0.010 <0.005	
CHLOR* VINYL ET	<del></del>		<0.1 D <0.05 D <0.5 D		
CHLOR* VINYL ET	HER	<0.1 D <0.05 D	<0.05 D	<0.005	
CHLOR* VINYL ET COMOFORM HEXANONE	HER	<0.1 D <0.05 D <0.5 D	<0.05 D <0.5 D	<0.005 <0.050	
CHLOR* VINYL ETH COMOFORM HEXANONE METHYL-2-PENTANO	HER	<0.1 D <0.05 D <0.5 D <0.5 D	<0.05 D <0.5 D <0.5 D	<0.005 <0.050 <0.050	
CHLOR* VINYL ET COMOFORM HEXANONE METHYL—2—PENTAN TRACHLOROETHENE	HER	<0.1 D <0.05 D <0.5 D <0.5 D 0.22	<0.05 D <0.5 D <0.5 D 0.06	<0.005 <0.050 <0.050 0.022	
CHLOR* VINYL ETH OMOFORM HEXANONE METHYL-2-PENTANO TRACHLOROETHENE OLUENE	HER	<0.1 D <0.05 D <0.5 D <0.5 D 0.22 <0.05 D	<0.05 D <0.5 D <0.5 D 0.06 <0.05 D	<0.005 <0.050 <0.050 0.022 <0.005	
CHLOR* VINYL ETH COMOFORM HEXANONE METHYL-2-PENTANC TRACHLOROETHENE LUENE LOROBENZENE	HER	<0.1 D <0.05 D <0.5 D <0.5 D 0.22 <0.05 D <0.05 D	<0.05 D <0.5 D <0.5 D 0.06 <0.05 D <0.05 D	<0.005 <0.050 <0.050 0.022 <0.005 <0.005	

Please reference the following page(s) for date and analyst.

\*Some of the above names have been abbreviated. Please reference the enclosed list for their complete names.

#### EADVILLE DIVISION

L.H.A. Accreditation No. 98
U.S. Public Health Services Approved Facility
PA D.E.R. Laboratory I.D. No. 20-073
A Dept. of Agriculture Approved Dairy Laboratory

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P.O. BOX 557, COTTON ROAD MEADVILLE, PENNSYLVANIA 16335 PHONE: (814) 724-6242 FAX: (814) 333-1466

12/03/96

TO:

DELPHI HARRISON THRM.SYS

ATTN: MS. CATHERINE VER

200 UPPER MOUNTAIN RD.

LOCKPORT

NY 14094

P.O. # HH48938

ACCOUNT NO. 01220

			PORT FORM		
	SAMPLE ID :	MW 6	MW 4	MW 3S	
		11/21/96	11/21/96	11/21/96	
	LAB ID	61122415	61122416	61122417	
PARAMETER	DATE RECEIVED:	11/22/96	11/22/96	11/22/96	

VOLATILE COMPOUNDS	UNITS = MG/	L		
CHLOROMETHANE		<0.1 D	<1 D	<1 D
BROMOMETHANE		<0.1 D	<1 D	<1 D
VINYL CHLORIDE		3.1	18	1.6
CHLOROETHANE		<0.1 D	<1 D	<1 D
METHYLENE CHLORIDE		0.05 D	<0.5 D	<0.5 D
ACETONE		<1 D	<10 D	<10 D
CARBON DISULFIDE		<0.05 D	<0.5 D	<0.5 D
1,1,-DICHLOROETHENE		<0.05 D	<0.5 D	<0.5 D
1,1,-DICHLOROETHANE		<0.05 D	<0.5 D	<0.5 D
1,2-DICHLORO***		8.2	120	190
CHLOROFORM		<0.05 D	<0.5 D	<0.5 D
1,2-DICHLOROETHANE		<0.05 D	<0.5 D	<0.5 D
2-BUTANONE		<1 D	<10 D	<10 D
1,1,1-TRICHLOROETHA*		<0.05 D	<0.5 D	<0.5 D
CARBON TETRACHLORIDE		<0.05 D	<0.5 D	<0.5 D
VINYL ACETATE		<0.5 D	<5 D	<5 D
BROMODICHLOROMETHANE		<0.05 D	<0.5 D	<0.5 D
1,1,2,2-TETRACHLORO*		<0.05 D	<0.5 D	<0.5 D
1,2-DICHLOROPROPANE		<0.05 D	<0.5 D	<0.5 D
TRANS-1,3-DICHLOROP*		<0.05 D	<0.5 D	<0.5 D
TRICHLOROETHENE		11	37	<0.5 D
DIBROMOCHLOROMETHANE		<0.05 D	<0.5 D	<0.5 D
1,1,2-TRICHLOROETHA*		<0.05 D	<0.5 D	<0.5 D
BENZENE		<0.05 D	<0.5 D	2.4
CIS-1,3-DICHLOROPRO*		<0.05 D	<0.5 D	<0.5 D

<sup>\*</sup>Some of the above names have been abbreviated. Please reference the enclosed list for their complete names.

#### **MEADVILLE DIVISION**

A.I.H.A. Accreditation No. 98 U.S. Public Health Services Approved Facility PA D.E.R. Laboratory I.D. No. 20-073 PA Dept. of Agriculture Approved Dairy Laboratory NY Dept. of Health Laboratory I.D. No. 10552 NY Dept. of Env. Conservation Approved Facility ND Dept. of Health Cert. No. R-083 MD Dept. of Health Cert. No. 130 VA Dept. of Health Laboratory I.D. No. 00145 WV Dept. of Health Certification No. 9907C NC Dept. of Natural Resources Cert. No. 236 MI Dept. of Public Health Approved Facility U.S. Office of Surface Mining Approved Facili

Please reference the following page(s) for date and analyst.



P.O. BOX 557, COTTON ROAD MEADVILLE, PENNSYLVANIA 16335 PHONE: (814) 724-6242 FAX: (814) 333-1466

12/03/96

TO:

DELPHI HARRISON THRM.SYS

ATTN: MS. CATHERINE VER

200 UPPER MOUNTAIN RD. LOCKPORT

NY 14094

P.O. # HH48938

ACCOUNT NO. 01220

	ANAL	YTICAL REF	ORT FORM	PAGE	4	
	SAMPLE ID :	MW 6 11/21/96	MW 4 11/21/96	MW 35 11/21/96		
PARAMETER	LAB ID DATE RECEIVED:	61122415 11/22/96	61122416 11/22/96	61122 <b>4</b> 17 11/22/96		
		. 🔖				
VOLATILE COMPOUNDS	(Cont.) UNITS =	= MG/L				
	•	= MG/L <0.1 D	<1 D	<1 D	4	
2-CHLOR* VINYL ETH	•	•	<1 D <0.5 D	<1 D <0.5 D		
2-CHLOR* VINYL ETH BROMOFORM	•	<0.1 D	-			
2-CHLOR* VINYL ETH BROMOFORM 2-HEXANONE	- IER	<0.1 D <0.05 D	<0.5 D	<0.5 D		
2-CHLOR* VINYL ETH BROMOFORM 2-HEXANONE 4-METHYL-2-PENTANO	- IER	<0.1 D <0.05 D <0.5 D	<0.5 D <5 D	<0.5 D <5 D		
2-CHLOR* VINYL ETH BROMOFORM 2-HEXANONE 4-METHYL-2-PENTANO TETRACHLOROETHENE	- IER	<0.1 D <0.05 D <0.5 D <0.5 D	<0.5 D <5 D <5 D	<0.5 D <5 D <5 D		
VOLATILE COMPOUNDS 2-CHLOR* VINYL ETH BROMOFORM 2-HEXANONE 4-METHYL-2-PENTANO TETRACHLOROETHENE TOLUENE CHLOROBENZENE	- IER	<0.1 D <0.05 D <0.5 D <0.5 D 57	<0.5 D <5 D <5 D <0.5 D	<0.5 D <5 D <5 D <0.5 D		
2-CHLOR* VINYL ETH BROMOFORM 2-HEXANONE 4-METHYL-2-PENTANO TETRACHLOROETHENE TOLUENE	- IER	<0.1 D <0.05 D <0.5 D <0.5 D 57 <0.05 D	<0.5 D <5 D <5 D <0.5 D <0.5 D	<0.5 D <5 D <5 D <0.5 D 2.3		
2-CHLOR* VINYL ETH BROMOFORM 2-HEXANONE 4-METHYL-2-PENTANO TETRACHLOROETHENE TOLUENE CHLOROBENZENE	- IER	<0.1 D <0.05 D <0.5 D <0.5 D 57 <0.05 D <0.05 D	<0.5 D <5 D <5 D <0.5 D <0.5 D <0.5 D <0.5 D	<0.5 D <5 D <5 D <0.5 D 2.3 <0.5 D		

\*Some of the above names have been abbreviated. Please reference the enclosed list for their complete names.

Please reference the following page(s) for date and analyst.

#### MEADVILLE DIVISION

A.I.H.A. Accreditation No. 98
U.S. Public Health Services Approved Facility
A.D.E.R. Laboratory I.D. No. 20-073
A Dept. of Agriculture Approved Dairy Laboratory

NY Dept. of Health Laboratory I.D. No. 10552 NY Dept. of Env. Conservation Approved Facility ND Dept. of Health Cert. No. R-083 MD Dept. of Health Cert. No. 130 VA Dept. of Health Laboratory I.D. No. 00145 WV Dept. of Health Certification No. 9907C NC Dept. of Natural Resources Cert. No. 23 MI Dept. of Public Health Approved Facility U.S. Office of Surface Mining Approved Fac



P.O. BOX 557, COTTON ROAD MEADVILLE, PENNSYLVANIA 16335 PHONE: (814) 724-6242 FAX: (814) 333-1466

12/03/96

TO:

DELPHI HARRISON THRM.SYS

ATTN: MS. CATHERINE VER 200 UPPER MOUNTAIN RD.

LOCKPORT

NY 14094

P.O. # HH48938

ACCOUNT NO. 01220

	SAMPLE ID :	MW 7 11/21/96	MW 5 11/21/96	MW 11 11/21/96	
PARAMETER	LAB ID DATE RECEIVED:	61122418 11/22/96	61122419 11/22/96		
					taka atau atau dalih dapa atau taka care dana basin dana anya ngan ngan
OLATILE COMPOUNDS	UNITS = MG/	L			
HLOROMETHANE		<1 D	<1 D	<0.1 D	
BROMOMETHANE		<1 D	<1 D	<0.1 D	
VINYL CHLORIDE		3.1	<1 D	0.15	
HLOROETHANE		<1 D	<1 D	<0.1 D	
TETHYLENE CHLORIDE		<0.5 D	<0.5 D	<0.05 D	
ACETONE		<10 D	<10 D	<1 D	
ARBON DISULFIDE		<0.5 D	<0.5 D	<0.05 D	
,1,-DICHLOROETHENE		<0.5 D	<0.5 D	<0.05 D	
L,1,-DICHLOROETHANE		<0.5 D	<0.5 D	<0.05 D	
L,2-DICHLORO***		35	1.8	2.9	
CHLOROFORM			<0.5 D	<0.05 D	
1,2-DICHLOROETHANE		<0.5 D	<0.5 D		
2-BUTANONE		<10 D	<10 D	<1 D	
L,1,1-TRICHLOROETHA	k	<0.5 D	<0.5 D	<0.05 D	
CARBON TETRACHLORIDI		<0.5 D	<0.5 D	<0.05 D	
VINYL ACETATE		<5 D	<5 D	<0.5 D	
BROMODICHLOROMETHANI	<b>E</b>	<0.5 D	<0.5 D	<0.05 D	
L,1,2,2-TETRACHLORO		<0.5 D	<0.5 D	<0.05 D	
1,2-DICHLOROPROPANE		<0.5 D	<0.5 D	<0.05 D	
TRANS-1,3-DICHLOROP		<0.5 D	<0.5 D	<0.05 D	
TRICHLOROETHENE		850	260	1.9	
DIBROMOCHLOROMETHANI	3	<0.5 D	<0.5 D	<0.05 D	
1,1,2-TRICHLOROETHA	k	<0.5 D	<0.5 D	<0.05 D	
BENZENE		<0.5 D	<0.5 D	<0.05 D	
CIS-1,3-DICHLOROPRO	k	<0.5 D	<0.5 D	<0.05 D	

<sup>\*</sup>Some of the above names have been abbreviated. Please reference the enclosed list for their complete names.

#### **EADVILLE DIVISION**

Al.H.A. Accreditation No. 98
U.S. Public Health Services Approved Facility
PA D.E.R. Laboratory I.D. No. 20-073
A Dept. of Agriculture Approved Dairy Laboratory

NY Dept. of Health Laboratory I.D. No. 10552 NY Dept. of Env. Conservation Approved Facility ND Dept. of Health Cert. No. R-083 MD Dept. of Health Cert. No. 130 VA Dept. of Health Laboratory I.D. No. 00145 WV Dept. of Health Certification No. 9907C NC Dept. of Natural Resources Cert. No. 236 MI Dept. of Public Health Approved Facility U.S. Office of Surface Mining Approved Facilit

Please reference the following page(s) for date and analyst.



P.O. BOX 557, COTTON ROAD MEADVILLE, PENNSYLVANIA 16335 PHONE: (814) 724-6242 FAX: (814) 333-1466

12/03/96

TO:

DELPHI HARRISON THRM.SYS ATTN: MS. CATHERINE VER 200 UPPER MOUNTAIN RD.

LOCKPORT

NY 14094

P.O. # HH48938

ACCOUNT NO. 01220

			PORT FORM	بعن مين وين نيسة منها هني ومن وينه بينت فينت وينت وينت وينت فينة فينة منها فين فينه الأنف النف النف وينس مين ب
	SAMPLE ID :		MW 5	MW 11
		11/21/96	11/21/96	11/21/96
	LAB ID	61122418	61122419	61122420
PARAMETER	DATE RECEIVED:	11/22/96	11/22/96	11/22/96
-CHLOR* VINYL	-	<1 D	<1 D	<0.1 D
	-	•	<1 D	∠0.1 D
-CHLOR* VINYL ROMOFORM	-	<1 D <0.5 D	<0.5 D	<0.05 D
-CHLOR* VINYL ROMOFORM -HEXANONE	ETHER	<1 D <0.5 D <5 D	<0.5 D <5 D	<0.05 D <0.5 D
-CHLOR* VINYL ROMOFORM -HEXANONE -METHYL-2-PENT	ETHER ANONE	<1 D <0.5 D <5 D <5 D	<0.5 D <5 D <5 D	<0.05 D <0.5 D <0.5 D
-CHLOR* VINYL ROMOFORM -HEXANONE -METHYL-2-PENT ETRACHLOROETHE	ETHER ANONE	<1 D <0.5 D <5 D	<0.5 D <5 D	<0.05 D <0.5 D
-CHLOR* VINYL ROMOFORM -HEXANONE -METHYL-2-PENT ETRACHLOROETHE DLUENE	ETHER ANONE	<1 D <0.5 D <5 D <5 D <0.5 D	<0.5 D <5 D <5 D 120	<0.05 D <0.5 D <0.5 D 0.07
-CHLOR* VINYL ROMOFORM -HEXANONE -METHYL-2-PENT ETRACHLOROETHE OLUENE HLOROBENZENE ITHYL BENZENE	ETHER ANONE	<1 D <0.5 D <5 D <5 D <0.5 D <0.5 D <0.5 D <0.5 D	<0.5 D <5 D <5 D 120 <0.5 D <0.5 D <0.5 D <0.5 D	<0.05 D <0.5 D <0.5 D 0.07 <0.05 D <0.05 D <0.05 D
OLATILE COMPOUNT -CHLOR* VINYL ROMOFORM -HEXANONE -METHYL-2-PENT ETRACHLOROETHE OLUENE HLOROBENZENE THYL BENZENE TYRENE OTAL XYLENES	ETHER ANONE	<1 D <0.5 D <5 D <5 D <0.5 D <0.5 D <0.5 D	<0.5 D <5 D <5 D 120 <0.5 D <0.5 D	<0.05 D <0.5 D <0.5 D 0.07 <0.05 D <0.05 D

\*Some of the above names have been abbreviated. Please reference the enclosed list for their complete names.

Please reference the following page(s) for date and analyst.

#### **MEADVILLE DIVISION**

A.I.H.A. Accreditation No. 98 U.S. Public Health Services Approved Facility PA D.E.R. Laboratory I.D. No. 20-073 PA Dept. of Agriculture Approved Dairy Laboratory NY Dept. of Health Laboratory I.D. No. 10552 NY Dept. of Env. Conservation Approved Facility ND Dept. of Health Cert. No. R-083 MD Dept. of Health Cert. No. 130 VA Dept. of Health Laboratory I.D. No. 00145 WV Dept. of Health Certification No. 9907C NC Dept. of Natural Resources Cert. No. 236 MI Dept. of Public Health Approved Facility U.S. Office of Surface Mining Approved Facili



P.O. BOX 557, COTTON ROAD MEADVILLE, PENNSYLVANIA 16335 PHONE: (814) 724-6242 FAX: (814) 333-1466

12/03/96

TO:

DELPHI HARRISON THRM.SYS ATTN: MS. CATHERINE VER 200 UPPER MOUNTAIN RD.

LOCKPORT

NY 14094

P.O. # HH48938

ACCOUNT NO. 01220

**ANALYTICAL REPORT FORM** 

PAGE

7

SAMPLE ID

TRIP BLANK

11/21/96

LAB ID

61122421

DATE RECEIVED:

11/22/96

DAIB RECEIVED	• 11/22/30			٠,
PARAMETER	RESULTS	UNITS	DATE AND ANALYS	T
VOLATILE COMPOUNDS				
Chloromethane	<0.010	MG/L	11/27/96 ECKLUN	D
Bromomethane	<0.010			
Vinyl Chloride	<0.010			
Chloroethane	<0.010			
Methylene Chloride	<0.005			
Acetone	<0.1			
Carbon Disulfide	<0.005			
1,1-Dichloroethene	<0.005			
1,1-Dichloroethane	<0.005			
1,2-Dichloroethenes (Total)***	<0.005			
Chloroform	<0.005			
1,2-Dichloroethane	<0.005			
2-Butanone	<0.1			
1,1,1-Trichloroethane	<0.005			
Carbon Tetrachloride	<0.005			
Vinyl Acetate	<0.050			
Bromodichloromethane	<0.005			
1,1,2,2-Tetrachloroethane	<0.005			
1,2-Dichloropropane	<0.005			
trans-1,3-Dichloropropene	<0.005			
Trichloroethene	<0.005			
Dibromochloromethane	<0.005			
1,1,2-Trichloroethane	<0.005			

<sup>\*\*\*</sup>EPA Methods 601 and 624 and SW 846 Methods 8010 and 8240 do not differentiate the co-eluting cis and trans-1,2-dichloroethenes. The result reported is the sum of both compounds.

#### MEADVILLE DIVISION

A.I.H.A. Accreditation No. 98
U.S. Public Health Services Approved Facility
PA D.E.R. Laboratory I.D. No. 20-073
PA Dept. of Agriculture Approved Dairy Laboratory

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### FREE-COL LABORATORIES, INC.

P.O. BOX 557, COTTON ROAD MEADVILLE, PENNSYLVANIA 16335 PHONE: (814) 724-6242 FAX: (814) 633/1466

TO: DELPHI HARRISON THRM.SYS

ATTN: MS. CATHERINE VER 200 UPPER MOUNTAIN RD.

LOCKPORT

NY 14094

P.O. # HH48938

ACCOUNT NO. 01220

ANALYTICAL REPORT FORM

PAGE 8

8

SAMPLE ID

TRIP BLANK

11/21/96

LAB ID

61122421

DATE RECEIVED:

11/22/96

PARAMETER	RESULTS	UNITS	DATE AND	ANALYST
<u>VOLATILE COMPOUNDS</u> Continued				
Benzene	<0.005	MG/L	11/27/96	ECKLUND
cis-1,3-Dichloropropene	<0.005			
2-Chloroethylvinyl ether	<0.010			
Bromoform	<0.005			
2-Hexanone	<0.050			
4-Methyl-2-pentanone	<0.050			
Tetrachloroethene	<0.005			
Toluene	<0.005			
Chlorobenzene	<0.005	•		
Ethylbenzene	<0.005			
Styrene	<0.005			

Volatile Compounds - Method 8240A "Test Methods for Evaluating Solid Waste: Physical/Chemical Methods", SW-846, Third Edition, U.S. Environmental Protection Agency. Revised 1986.

<0.005

QUALITY ASSURANCE SUPERVISOR

pc: Mr. Steve Blair, GZA

**EADVILLE DIVISION** 

U.S. Public Health Services Approved Facility
PA D.E.R. Laboratory I.D. No. 20-073
A Dept. of Agriculture Approved Dairy Laboratory

Total Xylenes

NY Dept. of Health Laboratory I.D. No. 10552 NY Dept. of Env. Conservation Approved Facility ND Dept. of Health Cert. No. R-083 MD Dept. of Health Cert. No. 130 VA Dept. of Health Laboratory I.D. No. 00145 WV Dept. of Health Certification No. 9907C NC Dept. of Natural Resources Cert. No. 236 MI Dept. of Public Health Approved Facility U.S. Office of Surface Mining Approved Facilit

KEY:

<=LESS THAN

>=GREATER THAN

w.f.=WILL FOLLOW



#### FREE-COL LABORATORIES, INC.

P.O. BOX 557, COTTON ROAD MEADVILLE, PENNSYLVANIA 16335 PHONE: (814) 724-6242 FAX: (814) 333-1466

TO:

#### ANALYTICAL REPORT FORM

CODE B:

This analyte was detected in the associated blank as well as in the sample. It indicates possible/probable contamination. The data user may subtract the blank value at his/her discretion.

CODE D:

Detection limit change due to a dilution.

CODE R:

The percent recovery on the spiked sample associated with this sample was not within the acceptance limits of 75% - 125%

CODE S:

This result was obtained by Method of Standard Additions.

CODE NA:

Not Applicable

CODE ND:

Not Detectable

PRC:

Preparation Reference Control

VOID:

The sample plus spike concentration exceeded the linear range of

the standard curve.

CODE Q:

Values for parameters quantified in this sample have been adjusted for recoveries of the analytical matrix spike.

The adjustments have been based on the matrix recoveries from this sample. Adjusted values are not given where sample values were less than the detection limit or where spike recoveries are

equal to 100%

CODE J:

This result is an estimated value. It indicates that the compound meets the mass spectral data identification criteria.

The result is less than the quantitation limit.

MEADVILLE DIVISION

H.A. Accreditation No. 98
3. Public Health Services Approved Facility
PA D.E.R. Laboratory I.D. No. 20-073
PA Dept. of Agriculture Approved Dairy Laboratory

NY Dept. of Health Laboratory I.D. No. 10552 NY Dept. of Env. Conservation Approved Facility ND Dept. of Health Cert. No. R-083 MD Dept. of Health Cert. No. 130 VA Dept. of Health Laboratory I.D. No. 00145 WV Dept. of Health Certification No. 9907C NC Dept. of Natural Resources Cert. No. 236 MI Dept. of Public Health Approved Facility U.S. Office of Surface Mining Approved Facilit

Phone: Area Code 814/724-6242 FAX: Area Code 814/333-1466



Chlorobenzene

ENVIRONMENTAL OCCUPATIONAL HEALTH FOOD SCIENCE SPECIALISTS.

Unabbreviated Listing of Hazardous Substance List Compounds

#### VOLATILE COMPOUNDS

Chloromethane Bromodichloromethane Bromomethane 1,1,2,2-Tetrachloroethane Vinyl Chloride 1,2-Dichloropropane Chloroethane trans-1,3-Dichloropropene Methylene Chloride Trichloroethene Acetone Dibromochloromethane Carbon Disulfide 1,1,2-Trichloroethane 1,1-Dichloroethene Benzene 1,1-Dichloroethane cis-1,3-Dichloropropene 1,2-Dichloroethylenes (Total)\*\*\* 2-Chloroethyl Vinyl Ether Chloroform Bromoform 1,2-Dichloroethane 2-Hexanone 2-Butanone 4-Methyl-2-pentanone 1,1,1-Trichloroethane Tetrachloroethene Carbon Tetrachloride Toluene

Total Xylenes

Styrene

Vinyl Acetate

Ethyl Benzene

\*\*\*EPA Methods 601 and 624 and SW 846 Methods 8010 and 8240 do not differentiate the co-eluting cis and trans-1,2-dichloroethenes. result reported to you is the sum of both compounds.

#### FREE-COL LABORATORIES, INC.

P.O. Box 557, Cotton Road Meadville, Pennsylvania 16335-0557 Phone: Area Code 814/724-6242 FAX: Area Code 814/333-1486



ENVIRONMENTAL OCCUPATIONAL HEALTH FOOD SCIENCE SPECIALISTS

#### QUALITY CONTROL INFORMATION

Free-Col Laboratories analyzes control samples at specified frequencies during the analyses for the purpose of evaluating and documenting the precision and accuracy of the results. The attached quality control data, prepared at the time of analysis, reflect the results obtained for the various types of controls from the batch of samples described as follows:

General Motors Sample Identification Fi	ree-Col ID
MW 10 11/21/96 63	1122412
MW 9 11/21/96 63	1122413
MW 8 11/21/96 63	1122414
MW 6 11/21/96 6:	1122415
MW 4 11/21/96 6:	1122416
MW 3S 11/21/96 6:	1122417
MW 7 11/21/96 63	1122418
MW 5 11/21/96 6:	1122419
MW 11 11/21/96 6:	1122420
TRIP BLANK 11/21/96 6:	1122421

### Free-Col Laboratories, LTD. Surrogate Spike Information Method 8260

Date:	//	/27	196	_ Analyst	Ecklernet	

Units: % Recovery

Type: W = Low/Medium Water

S = Low/Medium Soil/Sediment

	Limits:	Dibromofluoromethane	<u>Toluene-d</u> 8	4-Bromofluoro- benzene
	Water Soil/Sediment	86-118 80-128	88-110 81-117	86-115 74-121
Type (S/W)	Free-Col I.D.			
	611-22-412	103	102	102
-	611-22-413	104	102	100
	611-22-414	101	101	104
	611-22-415	98	101	100
<u>:</u>	611-22-416	92	101	99
	611-22-417	96	102	101
	611-22-418	92	107	100
	611-22-419	109	93	98
	611-22.420	94	94	96
	611-22-421	100	93	90
<del></del>				
			a de la companya de l	
		<u>.</u>		

# FREE-COL LABORATORIES, INC. VOA BLANK INFORMATION (CLP - CALIBRATION BLANK LIMITS)

Date 1/27/96 Analys	+ Ecle lean I
Samples associated with this	hlank:
Damples associated with this	Didnk.
<u>Parameter</u>	Blank Value
Units = Mg/L	
Units =	
Chloremothane	<10
<u>Chloromethane</u> <u>Bromomethane</u>	
Vinyl chloride	
Chloroethane	
Methylene chloride	45
Acrolein	
Acrylonitrile	<10
1,1-Dichloroethene	45
1,1-Dichloroethane	
trans-1,2-Dichloroethene	
Chloroform	
1,2-Dichloroethane	
1,1,1-Trichloroethane	
<u>Carbon tetrachloride</u>	
Bromodichloromethane	
1,2-Dichloropropane	
trans-1,3-Dichloropropene	
<u>Trichloroethene</u> Benzene	
<u>Dibromochloromethane</u>	
1,1,2-Trichloroethane	
cis-1,3-Dichloropropene	
2-Chloroethyl vinyl ether	0</td
Bromoform	<5
Tetrachloroethene	
1,1,2,2-Tetrachloroethane	
Toluene	
Chlorobenzene	
Ethyl benzene	
1,3-Dichlorobenzene	
1,2-Dichlorobenzene	
1,4-Dichlorobenzene	<u> </u>
Xylene	<5
2-Butanone - MEK	<160
4-Methyl-2-pentanone	<50
Acetone	04</td

# FREE-COL LABORATORIES, INC. VOA BLANK INFORMATION (CLP - CALIBRATION BLANK LIMITS)

	· · · · · · · · · · · · · · · · · · ·	
<u>Parameter</u>	Blank Value	
Units = ug/		
Carbon Disulfide	< <i>5</i>	
Vinyl Acetate	<50	
2-Hexanone - MBK	<50	
Dichlorofluoromethane		
1,1,1,2-Tetrachloroethane		
Trichlorofluoromethane		· · ·
1,2,3-Trichloropropane		
3-Chloro-1-propene		
1,2-Dibrmomethane		
cis,1,2-Dichloroethene	<5	

## FREE-COL LABORATORIES, INC. VOA REFERENCE CONTROL INFORMATION (CLP - CALIBRATION VERIFICATION LIMITS)

Date ///27/96 Analyst Eiklund
Samples associated with this reference control:

Parameter	Target	Acceptance	Assaved	File#
	Value	Limits	Value	
	ug/L	ug/L	ug/L	
			•	
Chloromethane	20	5.4-34.5	18.9	223
Bromomethane	20	7.8-39.4	17.5	222
<u>Vinyl chloride</u>	20	1.5-41.7	16.4	232
<u>Chloroethane</u>	20	4.6-36.4	17.0	209
Methylene chloride	20	11.8-31.3	19.5	224
Acrolein	62	4.5-104.4		201
Acrylonitrile	58	13.2-115.2		202
1,1-Dichloroethene	20	11.3-32.1	13.1	216
1,1-Dichloroethane	20	15.5-27.8	19.9	214
trans-1,2-Dichloroethene	20	13.6-28.3	23.7	217
Chloroform	20	15.7-26.1	19.4	211
1,2-Dichloroethane	20	8.1-34.0	21.7	215
1,1,1-Trichloroethane	20	12.8-30.1	16.8	228
Carbon tetrachloride	20	8.0-27.8	18.2	<u> 206</u>
Bromodichloromethane	20	9.8-29.7	19.4	212
1,2-Dichloropropane	20	14.7-28.2	17.1	218
trans-1,3-Dichloropropene	20	12.7-25.6	12.8	220
Trichloroethene	20	14.1-27.1	19.4	230
Benzene	20	14.3-27.8	22.3	203
Dibromochloromethane	20	4.8-29.2	18.2	208
1,1,2-Trichloroethane	20	14.3-28.2	18.7	229
cis-1,3-Dichloropropene	20	10.3-26.8	19.3	219
2-Chloroethyl vinyl ether	20	10.1-32.1	17.0	210
Bromoform	20	3.0-30.6	20.9	205
<u>Tetrachloroethene</u>	20	13.3-28.4	19.5	226
1,1,2,2-Tetrachloroethane	20	14.7-26.1	20.2	225
Toluene	20	15.2-25.6	19.9	227
Chlorobenzene	20	11.5-28.6	19.7	207
Ethyl benzene	20	13.4-27.6	20.2	221
1,3-Dichlorobenzene	26	18.5-36.7	25.1	234
1,2-Dichlorobenzene	26	11.5-41.9	25.6	233
1,4-Dichlorobenzene	20	3.7-35.6	19.6	235
Diethyl Benzene	44	25.9-62.9		237
Ethyl Ether	35	26.9-49.5	-	236
Xylene	44	21.0-66.7	45.8	238
MEK	20	9.1-39.4	23.C	240
Acetone	20	9.6-38.0	17.5	242

## FREE-COL LABORATORIES, INC. VOA REFERENCE CONTROL INFORMATION (CLP - CALIBRATION VERIFICATION LIMITS)

MIBK       20       14.0-29.7       /8.0       2         Tetrahydrofuran       45       34.8-60.3       -       2         Carbondisulfide       20       11.0-30.4       /9.9       2         Styrene       20       12.4-30.0       20.3       2         Vinyl Acetate       20       11.0-27.5       71.7       2         Amyl Acetate       44       14.7-64.6       -       2	<u>Parameter</u>	<u>Target</u> <u>Value</u>	<u>Acceptance</u> <u>Limits</u>	<u>Assayed</u> <u>Value</u>	<u>File</u>
Tetrahydrofuran       45       34.8-60.3       -       2         Carbondisulfide       20       11.0-30.4       /9.9       2         Styrene       20       12.4-30.0       20.3       2         Vinyl Acetate       20       11.0-27.5       71.7       2         Amyl Acetate       44       14.7-64.6       -       2		ug/L	<u>ug/L</u>	ug/L	
Tetrahydrofuran       45       34.8-60.3       -       2         Carbondisulfide       20       11.0-30.4       /9.9       2         Styrene       20       12.4-30.0       203       2         Vinyl Acetate       20       11.0-27.5       71.7       2         Amyl Acetate       44       14.7-64.6       -       2	MIBK	20	14.0-29.7	18.0	243
Carbondisulfide       20       11.0-30.4       /9.9       2         Styrene       20       12.4-30.0       20.3       2         Vinyl Acetate       20       11.0-27.5       71.7       2         Amyl Acetate       44       14.7-64.6       —       2				_	244
Styrene         20         12.4-30.0         203         2           Vinyl Acetate         20         11.0-27.5         #1.7         2           Amyl Acetate         44         14.7-64.6         —         2				19.9	245
Vinvl Acetate         20         11.0-27.5         M.Z         2           Amyl Acetate         44         14.7-64.6         —         2				203	246
Amyl Acetate 44 14.7-64.6 — 2					247
					248
			10.3-33.9	20.2	249

FREE-COL LABORATORIES, INC.
VOA REPEAT CONTROL INFORMATION
(CLP - DUPLICATE SAMPLE LIMITS)

Date _//_27/96 Analyst _	£0	klun	<u>_</u> l		
Samples associated with t	his rep	peat co	ntrol:		
-	·				·
				<del></del>	
		/	11 22-111	<del></del>	
Sample used as repeat con	trol:_		11-22-41	/	
AD = Absolute Difference		RPD = 0	Relative Per	cent Diffe	rence
Demonstrati	_				
<u>Parameter</u>			Accept Acce		
Units = Mg/L	<u>value</u>	<u>Value</u>	<u>AD RPD</u>	<u>AD/RPD</u>	
Units =	-		Section 1		
Chlorensham				·	
Chloromethane	<u> </u>	21		<u> </u>	820
Bromomethane	<1	<u> </u>		<u>e</u>	819
Vinyl chloride	1.6	1.7	27	6.19.	828
Chloroethane	<u> </u>	<1		<u>.e-</u>	807
Methylene chloride	20.5	20.5	17	€	821
Acrolein			·		800
Acrylonitrile					801
1,1-Dichloroethene	<0.5	c 0.5		€	813
1,1-Dichloroethane	20.5	<u> </u>	41	<u> </u>	
trans-1,2-Dichloroethenes		190	28	<del></del>	814
Chloroform	20.5	20.5	14	<u> </u>	809
1,2-Dichloroethane					812
1,1,1-Trichloroethane			27		<u>825</u>
Carbon tetrachloride					804
Bromodichloromethane			79		810
1,2-Dichloropropane					815
trans-1,3-Dichloropropene		<del></del>			817
Trichloroethene	<del></del>		32	<u> </u>	827
Benzene	2.4	2.5	49	4.1%	802
Dibromochloromethane	<0.5	co.5	70	<u> </u>	806
1,1,2-Trichloroethane		<del></del>			826
cis-1,3-Dichloropropene	<u> </u>	· · · · · · · · · · · · · · · · · · ·			816
2-Chloroethyl vinyl ether		<u> </u>			808
Bromoform	20.5	20.5			803
<u>Tetrachloroethene</u>	<del></del>		33		823
1,1,2,2-Tetrachloroethane		V	·	Ψ	822
Toluene	2.3	2.2	38	4.47.	824
Chlorobenzene	20.5	60.5	24	· <del>&amp;</del>	<u>805</u>
Ethyl benzene	1.8	1.8	5	<del></del>	818
1,3-Dichlorobenzene					830
1,2-Dichlorobenzene					829
1,4-Dichlorobenzene	-		36		831
Acetone	< 10	<b>210</b>	26	Ð	836

Limits in effect as of August 5, 1996

FREE-COL LABORATORIES, INC.
VOA REPEAT CONTROL INFORMATION
(CLP - DUPLICATE SAMPLE LIMITS)

Cample wood as report so	n+mal.	/	11-27	- 417		
Sample used as repeat co AD = Absolute Difference		RPD = 1	Relative	e Percen	t Diffe	re
Parameter	Samp.	Repeat	Accept	Accept	Assayd	F
Inits = mg/	<u>Value</u>	<u>Value</u>	<u>AD</u>	RPD	AD/RPD	
Units =					- 9	
3-Chloro-1-propene						
Dichlorodifluoromethane						
Methyl Ethyl Ketone	C /G	40			Û	
MIBK	٧5-	<5			Ą	
1,1,1,2-Tetrachloroethan	e					
Trichlorofluoromethane						
1,2,3-Trichloropropane						
1,2-Dibromomethane						
Cis-1,2-Dichloroethane						
Xvlene	3.3	3,3			<del>Ġ</del>	
CARbon disvibide	< 0.5					
MNY/ Acetate	25	<5			Û-	
STYrene	<0.5	20.5			<del>S</del>	
MBK	<5				0	

## FREE-COL LABORATORIES, INC. VOA SPIKED CONTROL INFORMATION (CLP - ANALYTICAL SPIKED SAMPLE LIMITS)

Date 11/2=1/96 Analyst		Echli	ind			
Samples associated with the	nis sp	iked cor	ntrol:			
-	-					
************************************						
Sample used as spiked con-	trol:_		611-22-	711		
DADAMEMED	CDIVE	CDIVED	CAMDIE	A CCEDM	X C C VID	ETTI
PARAMETER		RESULT		ACCEPT. LIMITS	% REC.	FILE
	UG/L	UG/L	UG/L	% REC.	S REC.	
	06/11	06/11	<u>00/11</u>	& REC.		
Chloromethane	20	19	< 10	31-187	95	520
Bromomethane	20	18	1	34-207	90	519
Vinyl chloride	20	16		26-183	ZD	528
Chloroethane	20		V	55-168	85	507
Methylene chloride	20	20	<5	63-151	100	521
Acrolein	62			23-183		500
Acrylonitrile	58			52-186		501
1,1-Dichloroethene	20	18	<5	52-159	90	513
1,1-Dichloroethane	20	20		73-144	100	511
trans-1,2-Dichloroethene	20	24		64-151	120	514
Chloroform	20	1.7		68-142	85	509
1,2-Dichloroethane	20	22		54-155	110	512
1,1,1-Trichloroethane	20	17		<u>59-158</u>	25	<u>525</u>
Carbon tetrachloride	20	18		<u> 39-147</u>	90	504
Bromodichloromethane	20	13	<u>·</u>	47-148	90	510
1,2-Dichloropropane	20	22		67-144	110	515
trans-1,3-Dichloropropene		19		56-141	95	517
Trichloroethene	20	19		64-130	95	527
Benzene	20	22		71-142	110	502
Dibromochloromethane	20	19		29-155	95 95	506
1,1,2-Trichloroethane	20	19	$\overline{}$	61-146		526
cis-1,3-Dichloropropene	20	19 17		46-149	95 85	516
2-Chloroethyl vinyl ether	20		<u> </u>	7-183		508
Bromoform	20	<u> 21</u>	<5	10-149	201	503
Tetrachloroethene	20	<u>20</u>		50-160	100	523
1,1,2,2-Tetrachloroethane	20	20		44-163	100	522 524
<u>Toluene</u> Chlorobenzene	20	20		73-130	100	505
Ethvl benzene	20	<del>20</del>		72-131 62-139	105	518
1,3-Dichlorobenzene	20 26	21 25	<del>-                                    </del>	60-161	765 46	530
1,2-Dichlorobenzene	26	26		45-157	100	529
1,4-Dichlorobenzene	20	20	<del></del>	36-174		531
Diethyl Benzene	44	-		71-137	100	533
Ethyl Ether	35			62-160		532
Xylenes	44	46	<5	72-130	104	534
MEK	20	23	<100 ·	63-179	115	536
21941	<u></u>	<u></u>		<del></del>		

Limits in effect as of August 5, 1996

## FREE-COL LABORATORIES, INC. VOA SPIKED CONTROL INFORMATION (CLP - ANALYTICAL SPIKED SAMPLE LIMITS)

Sample used as spiked o	control:_		611-22	-411		
<u>PARAMETER</u>	SPIKE ADDED UG/L			ACCEPT. LIMITS % REC.	ASSYD % REC.	FILI
Acetone MIBK	20 20	17	<100 <50	72-154 53-160	75 90	538 539
Ethyl Acetate	45	10		71-140	70	535
Tetrahydrofuran	45	<del></del>			-7	
Carbondisulfide	20	20	55		100	
Styrene	20	20	25		100	
Vinyl Acetate	20	20	<50		100	
Amyl Acetate	44					
Methyl Butyl Ketone	20	20	<50		100	
		<del> </del>				
	····					

```
Multation Report File. GI1122417
  € GZ1122417, TI
  2/1/96/14:17:00
 iple: 5 ML PURGE
 15 5. :
 · la:
                            Instrument: 5100
                                                                0.000
                                                    Weight:
                            Analyst: AE/GB/BH
 mitted by: -
                                                    Acct. No.:
 DINT=AREA * REF AMNT/(REF AREA * RESP FACT) * *1000.0
 sp. fac. from average of whole .RL
 ් Name
 1 PENTAFLUOROBENZENE (INT. STD.)
   DIBROMOFLUOROMETHANE (SURR. STD.)
 CHLOROMETHANE
BROMOMETHANE
VINYL CHIOPIN
   YINYL CHLORIDE
   CHRLOROETHANE
   ACRYLONITRILE
   CARBON DISULFIDE
  ACETONE
  METHYLENE CHLORIDE
   TRANS-1, 2-DICHLORGETHENE
12 1,1-DICHLORGETHANE
  VINYL ACETATE
   CIS-1, 2-DICHLORDETHENE
15
  METHYL ETHYL KETONE(2-BUTANONE
15 CHLOROFORM
 7 1,1,1-TRICHLORDETHANE
№S - TRICHLOROFLUOROMETHANE
19 DICHLORODIFLUORGMETHANE
[0 1,1,2-TRICHLORG-1,2,2-TRIFLUGROETHANE
1 TETRAHYDROFURAN
22 METHYL-TERT-BUTYL ETHER
83 ETHYL ETHER
4 1,4-DIFLUROBENZENE(INT STD)
25 TOLUENE D-8(SUR.STD.)
25 CARBON TETRACHLORIDE
27 BENZENE
28
   1,2-DICHLORGETHANE
29 TRICHLORDETHENE
30 1,2-DICHLOROPROPANE
31 BROMODICHLOROMETHANE
32 DIBROMOMETHANE
33 2-CHLOROETHYL VINYL ETHER
34 TRANS-1, 3-DICHLOROPROPENE
35 METHYL ISOBUTYL KETONE
35 TOLUENE .
37 CIS-1, 3-DICHLOROPROPENE
38
   1,1,2-TRICHLOROETHANE
39 CHLOROBENZENE-D5(INT STD)
10 BROMOFLUOROBENZENE(SURR STD)
11
    TETRACHLOROETHENE
12 METHYL BUTYL KETONE
13 DIBROMOCHLOROMETHANE
4 1,2-DIBROMOETHANE
 5 CHLOROBENZENE
 5 ETHYL BENZENE
 7 O-XYLENE
```

	48 49 50	Mane M, P-XYLENE STYRENE BROMOFORM							w <del>-</del> - 1
	No 11 13 13	m/z Scan 168 370 113 394 NOT FOUND	Time 5:52 6:15	Ref 1 1	RRT 1.000 1.065	Meth A BB A BB	Area(Hght) 37522. 27046.	Amount 50.000 MG/L 50.237 MG/L	%Tot 1.68 1.68
	4 5	NOT FOUND 62 176	2: 47	1	0. 476	A BB	27939.	16.703 MG/L	0. 56
	్క	NOT FOUND						×100 = 1	670.
	7 [] 3	NOT FOUND						·	
	9	NOT FOUND NOT FOUND							
	11	NOT FOUND							
	12	NOT FOUND 43 301	4: 45	1	0.814	A BB	570.	0.410 MG/L	
	14	61 354 NOT FOUND	5: 37	1,	0.957	A BB	1643480.	1924. 500 MG/L	64.51 192,450.
	1 i	NOT FOUND					•	7100 =	1-12/1001
	17 []15	NOT FOUND NOT FOUND			•				
	17	NOT FOUND			ದ ಕಾರಣ	A BB	4182	20. 703 MG/L	0. 69
	20 r:21	85 219 NOT FOUND	3: 28	1	0.592	ממ ה	7:02.	29. 700	
	22	NOT FOUND							•
	23 24	NOT FOUND	7: 53	24	1.000	A BB	51183.	50.000 MG/L	
-	25 25	98 713 NOT FOUND	11:18	24	1. 435	A BB	581629.	440. 208 MG/L	UTO = 2497.
	27	78 465	7: 22	24	0. 736	A BB	33488.	0724.972 MG/L	0. 84
i	28	NOT FOUND 95 543	8: 37	24	1.093	A BB	1311	3. 290 HG/L	0.11
	30	NOT FOUND							
	31 32	NOT FOUND NOT FOUND							
-	<sup>13</sup> 33	NOT FOUND NOT FOUND							
	35	NOT FOUND					327206.	1 <del>93.695</del> MG/L	. 6.66
	ା 36 37	91 725 NOT FOUND	11:30	24	1.459	A BB	32/208.	22.5 × 100	
	୍ଜି ଅଞ	NOT FOUND	45.00	20	1.000	A BB	494572.	50.000 MG/L	1.68
•	95 40	117 946 95 1146	15: 00 18: 10	39 39	1. 211	A BB	275823.	52.155 MG/L	
	41 42	NOT FOUND							
	<sup>123</sup> 43	NOT FOUND							
	44 45							× 600 -	1,823
-	46	91 961	15: 14	39	1.015		276915. 40863.	18. 236 MG/L 3. 256 MG/L	_ 0. 61 _ 0. 11
	47 [] 48		16: 32 15: 25	39 39	1.103 1.027	A VB	348808.	29 778 MG/L	1.00
	· 49	104 1051	16: 40	39	1. 111	A BB	193.	0.018 MG/L ×100 =	
	50	אטו רטטאט						100 =	3,300.

Data: GI1122417. TI 11/27/96 14:17:00 Sample: 5 ML PURGE

Conds.:

Formula: Submitted by: - Instrument: 5100

Weight:

Analyst: AE/GB/BH

Acct. No. :

AMOUNT=AREA \* REF AMNT/(REF AREA \* RESP FACT) \* \*1000.0 Resp. fac. from average of whole .RL

No Name

51 1,2,3-TRICHLOROPROPANE

52 1,4-DICHLOROBENZENE-D4 (INT. STD.)

53 1, 1, 2, 2-TETRACHLORDETHANE

54 1,3-DICHLOROBENZENE

55 1,2-DICHLOROBENZENE

56 1,4-DICHLOROBENZENE

57 ISOPROPYL BENZENE

58 NAPHTHALENE

							*	
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount
51	NOT	FOUND	•					
52	152	1338	21:13	52	1.000	A BB	241096.	50.000 MG/L
53	NOT	FOUND						
54	NOT	FOUND						
55	NOT	FOUND						
56	NOT	FOUND						
57	105	1103	17: 27	52	0.824	A BB	<b>7637</b> .	0.642 MG/L
52	MOT	FOUND						

# FIGURE E2 ENVIRONMENTAL SAMPLE DESCRIPTION AND

ATTACHMENT #2

### CHAIN OF CUSTODY RECORD

. (E:_	11/21/96	RESULTS REQUIRE VERBAL RESULTS NEE	DED?		200 UPPER M LOCKPORT. 1	IVISION. GMC OUNTAIN ROAD NEW YORK 14094
YPE:	5) SLUDGE	TER 2) DRINKII 6) SOLID V	NG WATER 3	MONITORING WELL	CONTACT: - 4) SOIL 8) INDUST	Steve Bair UZA TRIAL HYGIENE
1 1	1 W-11	MW-6, MV	v-q, MW	-3, MW-7	Mw-s	
SAMPLE#	LOCATION	TIME PARAMETE				SAMPLE BOTTLE LOT # (OPTIONAL)
	MW-10.	1216	SW-846	Method 8	246	
	mw-4,	1307				
	MW-8.	1405				
	MW-5;	1506				
	MW-35.	75-35	V			
	TECTION LEVELS REQU TERFERENCES:	MEDA.				
SON FOF	RTEST (COMPARISON	OF AREAS,BACKGROUND, E	ਜ <b>c</b> .)			
						•
TILES RE	CEIVED BY: (DATE/THE	ME) (HAP PERSONNELL		ELINQUISHED BY: (D	/22/96	RO PERSONNELI
S RE	LINQUISHED BY: (DAT	WILL WIZZIAR	IELI BOTILES F	Dato 1	3:13 11-2	ERSONNELI
SAMPLEC	OLLECTED BY:	<del>J</del>	RECEIVED	BY: [DATE, TIME, LAB	SIGNATURE	96 14:25
			Poli moun	hed by the	Kril	2/04/46 16:26

### FIGURE E2 ENVIRONMENTAL SAMPLE DESCRIPTION

ATTACHMENT #2

### CHAIN OF CUSTODY RECORD

TE:	11/21/96	-	ILTS REQUIRED AL RESULTS NEEDS				200 UPPER	DIVISION, GMC MOUNTAIN ROAD
- 1	···	LABO	PATORY:	ree -	61		LOCKPORT. PHONE: (716)	NEW YORK 14094 439 -685 -236
YPE:	1) WASTEWA 5) SLUDGE 9) OTHER		2) DRINKING 6) SOLID WA	3 WATER		ITORING WE	CONTACT: LL 4) SOIL	Steve Bland GZA STRIAL HYGIENE
PLE DESCR	RIPTION: <u>See</u>	s Sa	mpling a	order	OA	page	10 f z	2
		· · · · · · · · · · · · · · · · · · ·						
SAMPLE #	LOCATION	TIME	PARAMETER	S				SAMPLE BOTTLE
	MW-11	1600	5	W 846	Mei	thod-8	3240	
	Trip Blank		· ·		//			
<u>.</u> ]				·	,			
N DET	ECTION LEVELS REQU	JIRED?						
TEINT	TERFERENCES:							
SON FOR	TEST (COMPARISON	OF AREAS,	BACKGROUND, ETC	C.)				•
TLES REC	CEIVED BY: (DATE/TI	ME) (HE	O PERSONNELI L	BOTTL	ES RELINQ	JISHED BY: (	DATE/TIME) (I	HRD PERSONNEL
SRE	LINQUISHED BY: (DAT	Utun.	1/22/96 //:	45 8011	Mhu Es receive	D BY: (DAT	11/22/90 E/TIME) (LAS	FERSONNELI
	Thomas & Mu	llujan	11/22/96 13	5:13 B	ie St	2atr		13:13
SAMPLEC	OLLECTED BY:	<del></del>	alandara di Maria di	RECEI Dau	VED BY: (D. Dene K	ATE, TIME, LA	B SIGNATURE;	2-96 14.2
				71 (	<i>ii</i>	1 177	1 10/	161 11:31