Remedial Investigation Report
Volume II
Analytical Data Summaries

NASSAU COUNTY FIREMAN'S TRAINING CENTER

Bethpage, New York

Nassau County Department of Public Works

September 1991

PROJECT: 0726 - 39 - 1

MALCOLM PIRNIE

ENVIRONMENTAL ENGINEERS, SCIENTISTS & PLANNERS

THOMAS S. GULOTTA
COUNTY EXECUTIVE

LUDWIG C. HASL, P.E.
COMMISSIONER

COUNTY OF NASSAU
DEPARTMENT OF PUBLIC WORKS
MINEOLA, NEW YORK 11501-4822

October 16, 1991

Mr. George Heitzman, P.E.
New York State Department of
Environmental Conservation
Bureau of Eastern Remedial Action
50 Wolf Road
Room 222
Albany, New York 12233-4011

RE: Remedial Investigation and Endangerment
Assessment Reports
Fireman's Training Center
Bethpage, New York

Dear Mr. Heitzman:

Please find enclosed for your review and comments five (5) copies each of the final draft Remedial Investigation (RI) and Endangerment Assessment (EA) reports for the Fireman's Training Center site in Bethpage, New York.

If there are any questions concerning the reports, please contact me at (516) 997-8282.

Very truly yours,

Peter J. Witkowski

Peter J. Witkowski
Director of Hazardous Waste Services Unit

PJW:jm

Enclosures (5)

cc: Deputy Commissioner Steven A. Fangmann
Ms. Gail Suchman, New York State Department of Law
(Enclosures 2)
Mr. Anthony Candela, New York State Department of
Environmental Conservation
(Enclosures 2)
Dr. Nancy Kim, New York State Department of Health
(Enclosures 2)
James J. Periconi, Esq., New York State Department
of Environmental Conservation
(Enclosures 2)

APPENDIX E

ANALYTICAL DATA SUMMARIES

Soil

TABLE 1.0
30900-0940
MALCOLM-PIRNIE, INC.
EPA TCL VOLATILE ORGANICS

All values are ug/Kg.

	Sample Identification		
Dilution Factor	1.00	1.05	
Method Blank I.D.	>B9300	>B9300	
Compound	Method Blank	W-35 34-38' Comp	Method Detection Limits with no Dilution
Chloromethane	U	U	10
Bromomethane	U	U	10
Vinyl Chloride	U	U	10
Chloroethane	U	U	10
Methylene Chloride	1J	U	5
Acetone	12	~~138~~ U	~~10~~ 120
Carbon Disulfide	U	U	5
1,1-Dichloroethene	U	U	5
1,1-Dichloroethane	U	U	5
1,2-Dichloroethene (total)	U	U	5
Chloroform	U	U	5
1,2-Dichloroethane	U	U	5
2-Butanone	U	U	10
1,1,1-Trichloroethane	U	U	5
Carbon Tetrachloride	U	U	5
Vinyl Acetate	U	U	10
Bromodichloromethane	U	U	5
1,2-Dichloropropane	U	U	5
cis-1,3-Dichloropropene	U	U	5
Trichloroethene	U	U	5
Dibromochloromethane	U	U	5
1,1,2-Trichloroethane	U	U	5
Benzene	U	U	5
trans-1,3-Dichloropropene	U	U	5
Bromoform	U	U	5
4-Methyl-2-pentanone	U	U	10
2-Hexanone	U	U	10
Tetrachloroethene	U	U	5
1,1,2,2-Tetrachloroethane	U	U	5
Toluene	U	1J	5
Chlorobenzene	U	U	5
Ethylbenzene	U	U	5
Styrene	U	0.9J	5
Xylene (total)	U	1J	5

U, J, B - See Appendix for definition.
Note: Sample detection limit = MDL x dilution factor.

Soil

TABLE 1.1
30900-0940
MALCOLM-PIRNIE, INC.
EPA TCL VOLATILE ORGANICS

All values are ug/Kg.

	Sample Identification			
Dilution Factor	1.00	1.18	1.18	
Method Blank I.D.	>B9243	>B9243	>B9243	
Compound	Method Blank	W-40 39-41'	W-36 35-36'	Method Detection Limits with no Dilution
Chloromethane	U	U	U	10
Bromomethane	U	U	U	10
Vinyl Chloride	U	U	U	10
Chloroethane	U	U	U	10
Methylene Chloride	U	U	1J	5
Acetone	10	~~43B~~ U	~~53B~~ U	~~10~~ 100
Carbon Disulfide	U	U	U	5
1,1-Dichloroethene	U	U	U	5
1,1-Dichloroethane	U	U	U	5
1,2-Dichloroethene (total)	U	U	U	5
Chloroform	U	U	U	5
1,2-Dichloroethane	U	U	U	5
2-Butanone	U	U	U	10
1,1,1-Trichloroethane	U	U	U	5
Carbon Tetrachloride	U	U	U	5
Vinyl Acetate	U	U	U	10
Bromodichloromethane	U	U	U	5
1,2-Dichloropropane	U	U	U	5
cis-1,3-Dichloropropene	U	U	U	5
Trichloroethene	U	U	U	5
Dibromochloromethane	U	U	U	5
1,1,2-Trichloroethane	U	U	U	5
Benzene	U	U	U	5
trans-1,3-Dichloropropene	U	U	U	5
Bromoform	U	U	U	5
4-Methyl-2-pentanone	U	U	U	10
2-Hexanone	U	U	U	10
Tetrachloroethene	U	U	U	5
1,1,2,2-Tetrachloroethane	U	U	U	5
Toluene	U	U	U	5
Chlorobenzene	U	U	U	5
Ethylbenzene	U	U	U	5
Styrene	U	U	U	5
Xylene (total)	U	U	U	5

U, J, B - See Appendix for definition.
Note: Sample detection limit = MDL x dilution factor.

Soil

TABLE 1.2
30900-0940
MALCOLM-PIRNIE, INC.
EPA TCL VOLATILE ORGANICS

All values are ug/Kg.

	Sample Identification			
Dilution Factor	125.00	137.50	152.50	
Method Blank I.D.	>B9267	>B9267	>B9267	
Compound	Method Blank	W-37 34-36'	W-38 35-37'	Method Detection Limits with no Dilution
Chloromethane	U	U	U	10
Bromomethane	U	U	U	10
Vinyl Chloride	U	U	U	10
Chloroethane	U	U	U	10
Methylene Chloride	U	U	U	5
Acetone	U	U	U	10
Carbon Disulfide	U	U	U	5
1,1-Dichloroethene	U	U	U	5
1,1-Dichloroethane	U	U	U	5
1,2-Dichloroethene (total)	U	U	U	5
Chloroform	U	U	U	5
1,2-Dichloroethane	U	U	U	5
2-Butanone	U	U	U	10
1,1,1-Trichloroethane	U	U	U	5
Carbon Tetrachloride	U	U	U	5
Vinyl Acetate	U	U	U	10
Bromodichloromethane	U	U	U	5
1,2-Dichloropropane	U	U	U	5
cis-1,3-Dichloropropene	U	U	U	5
Trichloroethene	U	U	U	5
Dibromochloromethane	U	U	U	5
1,1,2-Trichloroethane	U	U	U	5
Benzene	U	U	U	5
trans-1,3-Dichloropropene	U	U	U	5
Bromoform	U	U	U	5
4-Methyl-2-pentanone	U	U	U	10
2-Hexanone	330J	U	U	10
Tetrachloroethene	U	U	U	5
1,1,2,2-Tetrachloroethane	U	U	U	5
Toluene	U	3,000J	87J	5
Chlorobenzene	U	U	U	5
Ethylbenzene	U	3,300	U	5
Styrene	U	U	U	5
Xylene (total)	U	16,000	610J	5

U, J - See Appendix for definition.
Note: Sample detection limit = MDL x dilution factor.

Aqueous

TABLE 1.3
30900-0940
MALCOLM-PIRNIE, INC.
EPA TCL VOLATILE ORGANICS

All values are ug/L.

	Sample Identification			
Dilution Factor	1.0	1.0	1.0	
Method Blank I.D.	>A0824	>A0824	>A0824	
Compound	Method Blank	FB#1 4/12/90	TB#1 4/12/90	Method Detection Limits with no Dilution
Chloromethane	U	U	U	10
Bromomethane	U	U	U	10
Vinyl Chloride	U	U	U	10
Chloroethane	U	U	U	10
Methylene Chloride	3J	U	2JB	5
Acetone	14	10B	5JB	10
Carbon Disulfide	U	U	U	5
1,1-Dichloroethene	U	U	U	5
1,1-Dichloroethane	U	U	U	5
1,2-Dichloroethene (total)	U	U	U	5
Chloroform	U	100	2J	5
1,2-Dichloroethane	U	U	U	5
2-Butanone	U	U	U	10
1,1,1-Trichloroethane	U	U	U	5
Carbon Tetrachloride	U	U	U	5
Vinyl Acetate	U	U	U	10
Bromodichloromethane	U	12	U	5
1,2-Dichloropropane	U	U	U	5
cis-1,3-Dichloropropene	U	U	U	5
Trichloroethene	U	U	U	5
Dibromochloromethane	U	U	U	5
1,1,2-Trichloroethane	U	U	U	5
Benzene	U	U	U	5
trans-1,3-Dichloropropene	U	U	U	5
Bromoform	U	U	U	5
4-Methyl-2-pentanone	U	U	U	10
2-Hexanone	U	U	U	10
Tetrachloroethene	U	U	U	5
1,1,2,2-Tetrachloroethane	U	U	U	5
Toluene	U	U	U	5
Chlorobenzene	U	U	U	5
Ethylbenzene	U	U	U	5
Styrene	U	U	U	5
Xylene (total)	U	U	U	5

U, J, B - See Appendix for definition.
Note: Sample detection limit = MDL x dilution factor.

TABLE 2.0
30900-0940
MALCOLM-PIRNIE, INC.
VOLATILE TENTATIVELY IDENTIFIED COMPOUNDS

Sample Identification: Method Blank >B9300

CAS#	Compound	RT	Estimated Concentration, ug/Kg
	None detected		

Sample Identification: W-35 34-38' Comp

CAS#	Compound	RT	Estimated Concentration, ug/Kg
	None detected		

Sample Identification: Method Blank >B9243

CAS#	Compound	RT	Estimated Concentration, ug/Kg
	Unknown	10.59	6J

Sample Identification: W-40 39-41'

CAS#	Compound	RT	Estimated Concentration, ug/Kg
	None detected		

Sample Identification: W-36 35-36'

CAS#	Compound	RT	Estimated Concentration, ug/Kg
	None detected		

J - See Appendix for definition.

TABLE 2.1
30900-0940
MALCOLM-PIRNIE, INC.
VOLATILE TENTATIVELY IDENTIFIED COMPOUNDS

Sample Identification: Method Blank >B9267

CAS#	Compound	RT	Estimated Concentration, ug/Kg
	None detected		

Sample Identification: W-37 34-36'

CAS#	Compound	RT	Estimated Concentration, ug/Kg
	Unknown isomer of methyl ethyl benzene	25.23	12,000J
611143	1-ethyl-2-methyl benzene	23.51	11,000J
	Unknown alkene	25.13	10,000J
	Unknown alkene	25.75	10,000J
	Unknown	25.95	10,000J
	Unknown alkene	25.65	9,800J
	Unknown alkane	12.99	8,800J
	Unknown alkene	24.81	7,900J
	Unknown	15.66	7,700J
	Unknown alkene	26.27	7,300J

Sample Identification: W-38 35-37'

CAS#	Compound	RT	Estimated Concentration, ug/Kg
	Unknown	24.12	11,000J
	Unknown alkene	25.65	6,600J
	Unknown alkene	23.31	4,800J
	Unknown alkene	22.40	4,600J
	Unknown alkene	25.23	4,200J
	Unknown alkene	22.63	3,000J
	Unknown alkene	25.78	3,000J
	Unknown	21.72	2,900J
	Unknown alkene	26.17	2,300J
	Unknown alkene	19.89	2,200J

J - See Appendix for definition.

TABLE 2.2
30900-0940
MALCOLM-PIRNIE, INC.
VOLATILE TENTATIVELY IDENTIFIED COMPOUNDS

Sample Identification: Method Blank >A0824

CAS#	Compound	RT	Estimated Concentration, ug/L
	None detected		

Sample Identification: FB#1 4/12/90

CAS#	Compound	RT	Estimated Concentration, ug/L
1223911	N-phenyl benzenamine	26.03	16J
	Unknown	7.47	6J
	Unknown siloxane	24.06	5J

Sample Identification: TB#1 4/12/90

CAS#	Compound	RT	Estimated Concentration, ug/L
	None detected		

J - See Appendix for definition.

TABLE 3.0
30900-0940
MALCOLM-PIRNIE, INC.
EPA TCL SEMI-VOLATILE ORGANICS

All values are ug/L.

	Sample Identification		
Dilution Factor	1.0	1.0	
Method Blank I.D.	>C6535	>C6535	
Compound	Method Blank	FB#1 4/12/90	Method Detection Limits with no Dilution
Phenol	U	U	10
bis(2-Chloroethyl)ether	U	U	10
2-Chlorophenol	U	U	10
1,3-Dichlorobenzene	U	U	10
1,4-Dichlorobenzene	U	U	10
Benzyl alcohol	U	U	10
1,2-Dichlorobenzene	U	U	10
2-Methylphenol	U	U	10
bis(2-Chloroisopropyl)ether	U	U	10
4-Methylphenol	U	U	10
N-Nitroso-di-n-propylamine	U	U	10
Hexachloroethane	U	U	10
Nitrobenzene	U	U	10
Isophorone	U	U	10
2-Nitrophenol	U	U	10
2,4-Dimethylphenol	U	U	10
Benzoic acid	U	U	50
bis(2-Chloroethoxy)methane	U	U	10
2,4-Dichlorophenol	U	U	10
1,2,4-Trichlorobenzene	U	U	10
Naphthalene	U	U	10
4-Chloroaniline	U	U	10
Hexachlorobutadiene	U	U	10
4-Chloro-3-methylphenol	U	U	10
2-Methylnaphthalene	U	U	10
Hexachlorocyclopentadiene	U	U	10
2,4,6-Trichlorophenol	U	U	10
2,4,5-Trichlorophenol	U	U	50
2-Chloronaphthalene	U	U	10
2-Nitroaniline	U	U	50
Dimethylphthalate	U	U	10
Acenaphthylene	U	U	10
2,6-Dinitrotoluene	U	U	10

U - See Appendix for definition.
Note: Sample detection limit = MDL x dilution factor.

TABLE 3.0
30900-0940
MALCOLM-PIRNIE, INC.
EPA TCL SEMI-VOLATILE ORGANICS

All values are ug/L.

	Sample Identification		
Dilution Factor	1.0	1.0	
Method Blank I.D.	>C6535	>C6535	
Compound	Method Blank	FB#1 4/12/90	Method Detection Limits with no Dilution
3-Nitroaniline	U	U	50
Acenaphthene	U	U	10
2,4-Dinitrophenol	U	U	50
4-Nitrophenol	U	U	50
Dibenzofuran	U	U	10
2,4-Dinitrotoluene	U	U	10
Diethylphthalate	U	U	10
4-Chlorophenyl-phenylether	U	U	10
Fluorene	U	U	10
4-Nitroaniline	U	U	50
4,6-Dinitro-2-methylphenol	U	U	50
N-Nitrosodiphenylamine (1)	U	U	10
4-Bromophenyl-phenylether	U	U	10
Hexachlorobenzene	U	U	10
Pentachlorophenol	U	U	50
Phenanthrene	U	U	10
Anthracene	U	U	10
Di-n-butylphthalate	U	1J	10
Fluoranthene	U	U	10
Pyrene	U	U	10
Butylbenzylphthalate	U	U	10
3,3'-Dichlorobenzidine	U	U	20
Benzo(a)anthracene	U	U	10
Chrysene	U	U	10
bis(2-Ethylhexyl)phthalate	2J	9JB	10
Di-n-octylphthalate	U	U	10
Benzo(b)fluoranthene	U	U	10
Benzo(k)fluoranthene	U	U	10
Benzo(a)pyrene	U	U	10
Indeno(1,2,3-cd)pyrene	U	U	10
Dibenzo(a,h)anthracene	U	U	10
Benzo(g,h,i)perylene	U	U	10

U, J, B, (1) - See Appendix for definition.
Note: Sample detection limit = MDL x dilution factor.

TABLE 3.1
30900-0940
MALCOLM-PIRNIE, INC.
EPA TCL SEMI-VOLATILE ORGANICS

All values are ug/Kg.

	Sample Identification			
Dilution Factor	1.00	1.19	1.08	
Method Blank I.D.	>C6553	>C6553	>C6553	
Compound	Method Blank	W-38 35-37'	W-35 34-38' Comp	Method Detection Limits with no Dilution
Phenol	U	U	U	330
bis(2-Chloroethyl)ether	U	U	U	330
2-Chlorophenol	U	U	U	330
1,3-Dichlorobenzene	U	U	U	330
1,4-Dichlorobenzene	U	U	U	330
Benzyl alcohol	U	U	U	330
1,2-Dichlorobenzene	U	U	U	330
2-Methylphenol	U	U	U	330
bis(2-Chloroisopropyl)ether	U	U	U	330
4-Methylphenol	U	U	U	330
N-Nitroso-di-n-propylamine	U	U	U	330
Hexachloroethane	U	U	U	330
Nitrobenzene	U	U	U	330
Isophorone	U	U	U	330
2-Nitrophenol	U	U	U	330
2,4-Dimethylphenol	U	U	U	330
Benzoic acid	120J	U	U	1,600
bis(2-Chloroethoxy)methane	U	U	U	330
2,4-Dichlorophenol	U	U	U	330
1,2,4-Trichlorobenzene	U	U	U	330
Naphthalene	U	U	U	330
4-Chloroaniline	U	U	U	330
Hexachlorobutadiene	U	U	U	330
4-Chloro-3-methylphenol	U	U	U	330
2-Methylnaphthalene	U	U	U	330
Hexachlorocyclopentadiene	U	U	U	330
2,4,6-Trichlorophenol	U	U	U	330
2,4,5-Trichlorophenol	U	U	U	1,600
2-Chloronaphthalene	U	U	U	330
2-Nitroaniline	U	U	U	1,600
Dimethylphthalate	U	U	U	330
Acenaphthylene	U	U	U	330
2,6-Dinitrotoluene	U	U	U	330

U, J - See Appendix for definition.
Note: Sample detection limit = MDL x dilution factor.

TABLE 3.1
30900-0940
MALCOLM-PIRNIE, INC.
EPA TCL SEMI-VOLATILE ORGANICS

All values are ug/Kg.

	Sample Identification			
Dilution Factor	1.00	1.19	1.08	
Method Blank I.D.	>C6553	>C6553	>C6553	
Compound	Method Blank	W-38 35-37'	W-35 34-38' Comp	Method Detection Limits with no Dilution
3-Nitroaniline	U	U	U	1,600
Acenaphthene	U	U	U	330
2,4-Dinitrophenol	U	U	U	1,600
4-Nitrophenol	U	U	U	1,600
Dibenzofuran	U	U	U	330
2,4-Dinitrotoluene	U	U	U	330
Diethylphthalate	24J	~~39JB~~ U	~~48JB~~ U	330
4-Chlorophenyl-phenylether	U	U	U	330
Fluorene	U	U	U	330
4-Nitroaniline	U	U	U	1,600
4,6-Dinitro-2-methylphenol	U	U	U	1,600
N-Nitrosodiphenylamine (1)	U	U	U	330
4-Bromophenyl-phenylether	U	U	U	330
Hexachlorobenzene	U	U	U	330
Pentachlorophenol	U	U	U	1,600
Phenanthrene	U	U	U	330
Anthracene	U	U	U	330
Di-n-butylphthalate	37J	~~250JB~~ U	~~70JB~~ U	330
Fluoranthene	U	U	U	330
Pyrene	U	12J	U	330
Butylbenzylphthalate	U	45J	130J	330
3,3'-Dichlorobenzidine	U	U	U	660
Benzo(a)anthracene	U	U	U	330
Chrysene	U	U	U	330
bis(2-Ethylhexyl)phthalate	530	~~1,200B~~ U	~~1,300B~~ U	330
Di-n-octylphthalate	U	43J	96J	330
Benzo(b)fluoranthene	U	U	U	330
Benzo(k)fluoranthene	U	U	U	330
Benzo(a)pyrene	U	U	U	330
Indeno(1,2,3-cd)pyrene	U	U	U	330
Dibenzo(a,h)anthracene	U	U	U	330
Benzo(g,h,i)perylene	U	U	U	330

U, J, B, (1) - See Appendix for definition.
Note: Sample detection limit = MDL x dilution factor.

TABLE 3.2
30900-0940
MALCOLM-PIRNIE, INC.
EPA TCL SEMI-VOLATILE ORGANICS

All values are ug/Kg.

	Sample Identification				
Dilution Factor	1.00	1.20	1.15	11.49	
Method Blank I.D.	>C6566	>C6566	>C6566	>C6566	
Compound	Method Blank	W-40 39-41'	W-36 35-36'	W-37 34-36'	Method Detection Limits with no Dilution
Phenol	U	U	U	U	330
bis(2-Chloroethyl)ether	U	U	U	U	330
2-Chlorophenol	U	U	U	U	330
1,3-Dichlorobenzene	U	U	U	U	330
1,4-Dichlorobenzene	U	U	U	U	330
Benzyl alcohol	U	U	U	U	330
1,2-Dichlorobenzene	U	U	U	U	330
2-Methylphenol	U	U	U	U	330
bis(2-Chloroisopropyl)ether	U	U	U	U	330
4-Methylphenol	U	U	U	U	330
N-Nitroso-di-n-propylamine	U	U	U	U	330
Hexachloroethane	U	U	U	U	330
Nitrobenzene	U	U	U	U	330
Isophorone	U	U	U	U	330
2-Nitrophenol	U	U	U	U	330
2,4-Dimethylphenol	U	U	U	U	330
Benzoic acid	43J	U	U	U	1,600
bis(2-Chloroethoxy)methane	U	U	U	U	330
2,4-Dichlorophenol	U	U	U	U	330
1,2,4-Trichlorobenzene	U	U	U	U	330
Naphthalene	U	U	U	6,700	330
4-Chloroaniline	U	U	U	U	330
Hexachlorobutadiene	U	U	U	U	330
4-Chloro-3-methylphenol	U	U	U	U	330
2-Methylnaphthalene	U	U	U	47,000	330
Hexachlorocyclopentadiene	U	U	U	U	330
2,4,6-Trichlorophenol	U	U	U	U	330
2,4,5-Trichlorophenol	U	U	U	U	1,600
2-Chloronaphthalene	U	U	U	U	330
2-Nitroaniline	U	U	U	U	1,600
Dimethylphthalate	U	U	U	U	330
Acenaphthylene	U	U	U	U	330
2,6-Dinitrotoluene	U	U	U	U	330

U, J - See Appendix for definition.
Note: Sample detection limit = MDL x dilution factor.

TABLE 3.2
30900-0940
MALCOLM-PIRNIE, INC.
EPA TCL SEMI-VOLATILE ORGANICS

All values are ug/Kg.

	Sample Identification				
Dilution Factor	1.00	1.20	1.15	11.49	
Method Blank I.D.	>C6566	>C6566	>C6566	>C6566	
Compound	Method Blank	W-40 39-41'	W-36 35-36'	W-37 34-36'	Method Detection Limits with no Dilution
3-Nitroaniline	U	U	U	U	1,600
Acenaphthene	U	U	U	U	330
2,4-Dinitrophenol	U	U	U	U	1,600
4-Nitrophenol	U	U	U	U	1,600
Dibenzofuran	U	U	U	U	330
2,4-Dinitrotoluene	U	U	U	U	330
Diethylphthalate	17J	~~38JB~~ U	~~38JB~~ U	U	330
4-Chlorophenyl-phenylether	U	U	U	U	330
Fluorene	U	U	U	5,600	330
4-Nitroaniline	U	U	U	U	1,600
4,6-Dinitro-2-methylphenol	U	U	U	U	1,600
N-Nitrosodiphenylamine (1)	U	U	U	U	330
4-Bromophenyl-phenylether	U	U	U	U	330
Hexachlorobenzene	U	U	U	U	330
Pentachlorophenol	U	U	U	U	1,600
Phenanthrene	U	U	24J	9,300	330
Anthracene	U	U	U	U	330
Di-n-butylphthalate	21J	~~26JB~~ U	~~27JB~~ U	U	330
Fluoranthene	U	U	34J	500J	330
Pyrene	U	U	30J	1,200J	330
Butylbenzylphthalate	U	U	34J	U	330
3,3'-Dichlorobenzidine	U	U	U	U	660
Benzo(a)anthracene	U	U	U	U	330
Chrysene	U	U	U U	U	330
bis(2-Ethylhexyl)phthalate	150J	~~220JB~~ U	~~290JB~~	~~1,100JB~~ 1500U	330
Di-n-octylphthalate	U	U	29J	590J	330
Benzo(b)fluoranthene	U	U	U	U	330
Benzo(k)fluoranthene	U	U	U	U	330
Benzo(a)pyrene	U	U	U	U	330
Indeno(1,2,3-cd)pyrene	U	U	U	U	330
Dibenzo(a,h)anthracene	U	U	U	U	330
Benzo(g,h,i)perylene	U	U	U	U	330

U, J, B, (1) - See Appendix for definition.
Note: Sample detection limit = MDL x dilution factor.

TABLE 4.0
30900-0940
MALCOLM-PIRNIE, INC.
SEMI-VOLATILE TENTATIVELY IDENTIFIED COMPOUNDS

Sample Identification: Method Blank >C6535

CAS#	Compound	RT	Estimated Concentration, ug/L
	None detected		

Sample Identification: FB#1 4/12/90

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown	35.04	19J
	Unknown	45.23	13J
	Unknown acid	29.12	10J

Sample Identification: Method Blank >C6553

CAS#	Compound	RT	Estimated Concentration, ug/Kg
	Aldol condensation product	8.11	45,000JA
	Unknown acid ester	7.38	4,000J
	Unknown acid ester	9.71	1,400J
	Unknown acid	29.14	790J
	Unknown acid ester	11.20	620J
	Unknown hydrocarbon	10.07	350J
	Unknown acid ester	6.62	270J
541026	Cyclopentasiloxane,decamethyl	14.14	210J
	Unknown alkane	6.83	190J
	Unknown acid ester	11.65	170J
	Unknown alkane	6.11	150J
	Unknown	10.22	140J

J, A, B - See Appendix for definition.

TABLE 4.1
30900-0940
MALCOLM-PIRNIE, INC.
SEMI-VOLATILE TENTATIVELY IDENTIFIED COMPOUNDS

Sample Identification: W-38 35-37'

CAS#	Compound	RT	Estimated Concentration, ug/Kg
	Aldol condensation product	8.15	60,000JAB
	Unknown acid	29.15	12,000JB
	Unknown acid ester	7.39	6,000JB
	Unknown acid ester	9.70	2,100JB
	Unknown acid ester	11.17	930JB
	Unknown hydrocarbon	10.05	630JB
	Unknown acid ester	6.62	510JB
	Unknown phthalate	24.04	450J
	Unknown acid ester	11.62	330JB
	Unknown	10.21	240JB
	Unknown alkane	6.82	230JB
	Unknown	14.11	200J
	Unknown	26.92	170J
	Unknown	6.50	170J

Sample Identification: W-35 34-38'

CAS#	Compound	RT	Estimated Concentration, ug/Kg
	Aldol condensation product	8.11	57,000JAB
	Unknown acid ester	7.36	5,200JB
	Unknown acid ester	9.69	1,800JB
	Unknown acid	29.12	1,000JB
	Unknown acid ester	11.18	830JB
	Unknown acid ester	6.62	490JB
	Unknown acid ester	11.63	270JB

Sample Identification: Method Blank >C6566

CAS#	Compound	RT	Estimated Concentration, ug/Kg
	Aldol condensation product	8.05	43,000JA
	Unknown acid ester	7.30	4,000J
	Unknown acid ester	9.62	1,400J
	Unknown acid ester	11.13	600J

J, A, B - See Appendix for definition.

TABLE 4.2
30900-0940
MALCOLM-PIRNIE, INC.
SEMI-VOLATILE TENTATIVELY IDENTIFIED COMPOUNDS

Sample Identification: Method Blank >C6566 (Continued)

CAS#	Compound	RT	Estimated Concentration, ug/Kg
	Unknown	9.99	450J
	Unknown acid ester	6.54	310J
	Unknown	10.15	290J
	Unknown acid	29.06	190J
	Unknown acid ester	11.58	170J

Sample Identification: W-40 39-41'

CAS#	Compound	RT	Estimated Concentration, ug/Kg
	Aldol condensation product	8.07	56,000JAB
	Unknown acid ester	7.36	4,500JB
	Unknown acid ester	9.71	1,500JB
	Unknown acid ester	11.20	670JB
	Unknown	10.07	370JB
	Unknown ketone	6.97	320J
	Unknown acid ester	6.64	240JB
	Unknown	10.22	230JB
	Aldol condensation product	8.13	200JA
	Unknown	44.21	160J

Sample Identification: W-36 35-36'

CAS#	Compound	RT	Estimated Concentration, ug/Kg
	Aldol condensation product	8.07	50,000JAB
	Unknown acid ester	7.36	4,000JB
	Unknown acid ester	9.70	1,300JB
	Unknown acid ester	11.19	610JB
	Unknown	34.96	190J
	Aldol condensation product	8.13	160JA
	Unknown acid ester	11.64	160JB
	Unknown acid ester	6.64	160JB

J, A, B - See Appendix for definition.

TABLE 4.3
30900-0940
MALCOLM-PIRNIE, INC.
SEMI-VOLATILE TENTATIVELY IDENTIFIED COMPOUNDS

Sample Identification: W-37 34-36'

CAS#	Compound	RT	Estimated Concentration, ug/Kg
	Unknown alkane	21.97	98,000J
	Unknown alkane	19.46	92,000J
	Unknown alkane	18.06	91,000J
	Unknown alkane	20.76	90,000J
	Unknown alkane	23.15	85,000J
	Unknown branched alkane	24.24	68,000J
	Aldol condensation product	7.95	66,000JAB
	Unknown branched alkane	22.05	62,000J
	Unknown alkane	13.30	57,000J
	Unknown alkane	18.93	56,000J
	Unknown branched alkane	21.35	54,000J
	Unknown branched alkane	25.29	52,000J
	Unknown branched alkane	23.25	38,000J
	Unknown dimethyl naphthalene	18.68	37,000J
	Unknown branched alkane	26.30	37,000J
	Unknown branched alkane	17.73	34,000J
	Unknown	22.51	29,000J
	Unknown branched alkane	27.25	29,000J
	Unknown trimethyl naphthalene	20.43	28,000J
	Unknown dimethyl naphthalene	18.45	28,000J
	Unknown trimethyl naphthalene	20.14	28,000J

J, A, B - See Appendix for definition.

Aqueous

TABLE 5.0
30900-0940
MALCOLM-PIRNIE, INC.
EPA TCL PESTICIDES/PCB's

All values are ug/L.

	Sample Identification		
Dilution Factor	1.0	1.0	
Method Blank I.D.	0413 -B07	0413 -B07	
Compound	Method Blank	FB#1 4/12/90	Method Detection Limits with no Dilution
alpha-BHC	U	U	0.05
beta-BHC	U	U	0.05
delta-BHC	U	U	0.05
gamma-BHC	U	U	0.05
Heptachlor	U	U	0.05
Aldrin	U	U	0.05
Heptachlor Epoxide	U	U	0.05
Endosulfan I	U	U	0.05
Dieldrin	U	U	0.10
4,4'-DDE	U	U	0.10
Endrin	U	U	0.10
Endosulfan II	U	U	0.10
4,4'-DDD	U	U	0.10
Endosulfan Sulfate	U	U	0.10
4,4'-DDT	U	U	0.10
Methoxychlor	U	U	0.50
Endrin-Ketone	U	U	0.10
alpha-Chlordane	U	U	0.50
gamma-Chlordane	U	U	0.50
Toxaphene	U	U	1.0
PCB - 1016	U	U	0.5
PCB - 1221	U	U	0.5
PCB - 1232	U	U	0.5
PCB - 1242	U	U	0.5
PCB - 1248	U	U	0.5
PCB - 1254	U	U	1.0
PCB - 1260	U	U	1.0

U - See Appendix for definition.
Note: Sample detection limit = MDL x dilution factor.

Soil

TABLE 5.1
30900-0940
MALCOLM-PIRNIE, INC.
EPA TCL PESTICIDES/PCB's

All values are ug/Kg.

	Sample Identification				
Dilution Factor	1.00	1.20	1.15	1.15	
Method Blank I.D.	0417 -B02	0417 -B02	0417 -B02	0417 -B02	
Compound	Method Blank	W-40 39-41'	W-36 35-36'	W-37 34-36'	Method Detection Limits with no Dilution
alpha-BHC	U	U	U	U	8.0
beta-BHC	U	U	U	U	8.0
delta-BHC	U	U	U	U	8.0
gamma-BHC	U	U	U	U	8.0
Heptachlor	U	U	1.3J	U	8.0
Aldrin	U	U	U	U	8.0
Heptachlor Epoxide	U	U	U	U	8.0
Endosulfan I	U	U	U	U	8.0
Dieldrin	U	U	U	U	16
4,4'-DDE	U	U	U	U	16
Endrin	U	U	U	U	16
Endosulfan II	U	U	U	U	16
4,4'-DDD	U	U	U	U	16
Endosulfan Sulfate	U	U	U	U	16
4,4'-DDT	U	U	U	U	16
Methoxychlor	U	U	U	U	80
Endrin-Ketone	U	U	U	U	16
alpha-Chlordane	U	U	U	U	80
gamma-Chlordane	U	U	U	U	80
Toxaphene	U	U	U	U	160
PCB - 1016	U	U	U	U	80
PCB - 1221	U	U	U	U	80
PCB - 1232	U	U	U	U	80
PCB - 1242	U	U	U	U	80
PCB - 1248	U	U	U	U	80
PCB - 1254	U	U	29J	U	160
PCB - 1260	U	U	U	U	160

U, J - See Appendix for definition.
Note: Sample detection limit = MDL x dilution factor.

Soil

TABLE 5.2
30900-0940
MALCOLM-PIRNIE, INC.
EPA TCL PESTICIDES/PCB's

All values are ug/Kg.

	Sample Identification			
Dilution Factor	1.00	1.19	1.08	
Method Blank I.D.	0419 -B01	0419 -B01	0419 -B01	
Compound	Method Blank	W-38 35-37'	W-35 34-38' Comp	Method Detection Limits with no Dilution
alpha-BHC	U	U	U	8.0
beta-BHC	U	U	U	8.0
delta-BHC	U	U	U	8.0
gamma-BHC	U	U	U	8.0
Heptachlor	U	U	U	8.0
Aldrin	U	U	U	8.0
Heptachlor Epoxide	U	U	U	8.0
Endosulfan I	U	U	U	8.0
Dieldrin	U	U	U	16
4,4'-DDE	U	U	U	16
Endrin	U	U	U	16
Endosulfan II	U	U	U	16
4,4'-DDD	U	U	U	16
Endosulfan Sulfate	U	U	U	16
4,4'-DDT	U	U	U	16
Methoxychlor	U	U	U	80
Endrin-Ketone	U	U	U	16
alpha-Chlordane	U	U	U	80
gamma-Chlordane	U	U	U	80
Toxaphene	U	U	U	160
PCB - 1016	U	U	U	80
PCB - 1221	U	U	U	80
PCB - 1232	U	U	U	80
PCB - 1242	U	U	U	80
PCB - 1248	U	U	U	80
PCB - 1254	U	U	U	160
PCB - 1260	U	U	U	160

U, J, B - See Appendix for definition.
Note: Sample detection limit = MDL x dilution factor.

TABLE 6.0
30900-0940
MALCOLM-PIRNIE, INC.
TAL METALS PLUS CYANIDE

All values are mg/Kg dry basis unless noted.

Parameter	W-40 39-41'	W-36 35-36'	FB#1 4/12/90**
Aluminum	403N*	758N*	115B
Antimony	2.9U	2.7U	13.0U
Arsenic	1.5BW	4.9	1.0U
Barium	1.8B	2.5B	10.2B
Beryllium	0.22U	0.21U	1.0U
Cadmium	0.44U	0.41U	2.0U
Calcium	33.1BU	26.3BU	10,300
Chromium	4.7	3.8	2.0U
Cobalt	0.93B	2.1B	2.0U
Copper	7.3	6.2	445
Iron	1,870	2,950	102
Lead	1.1	2.3	1.0B
Magnesium	25.5B	24.6B	1,760B
Manganese	16.1*	16.5*	21.4
Mercury	0.12BR	0.11U	0.20U
Nickel	1.3U	1.2U	6.2B
Potassium	121B	117B	1,460B
Selenium	0.23UW	0.22UW	1.2B
Silver	1.1U	1.0U	5.0U
Sodium	127BU	95.4B	8,710
Thallium	0.23U	0.22U	1.0U
Vanadium	2.7B	4.8B	2.0U
Zinc	3.5U	3.3B	23.4
Cyanide	0.62U	0.56U	10.0U

B, N, U, W, * - See Metals Appendix for definition.

**ug/L

TABLE 6.1
30900-0940
MALCOLM-PIRNIE, INC.
TAL METALS PLUS CYANIDE

All values are mg/Kg dry basis unless noted.

Parameter	W-37 34-36'	W-38 35-37'	W-35 34-38'
Aluminum	598N*	765N*	759N*
Antimony	3.0U	2.9U	2.7U
Arsenic	3.8BS	3.0	1.8BW
Barium	3.5B	4.5B	2.6B
Beryllium	0.23U	0.31B	0.20U
Cadmium	0.46U	0.44U	0.41U
Calcium	42.6BU	41.2BU	52.1BU
Chromium	3.5U	4.4	5.3
Cobalt	1.3B	1.1B	1.5B
Copper	5.4B	4.7B	2.9U
Iron	2,490	4,270	2,690
Lead	1.1	1.1B	1.3
Magnesium	34.1B	44.9B	33.5B
Manganese	7.5*	26.3*	31.9*
Mercury	0.09U	0.11U	0.09U
Nickel	1.4U	1.3U	1.2U
Potassium	125U	123B	144B
Selenium	0.22UW	0.24U	0.21UW
Silver	1.1U	1.1U	1.0U
Sodium	108BU	115BU	118BU
Thallium	0.22U	0.24U	0.21U
Vanadium	4.1B	5.3B	5.5B
Zinc	3.7U	4.0B	3.3U
Cyanide	0.60U	0.63U	0.58U

B, N, U, W, * - See Metals Appendix for definition.

TABLE 7.0
30900-0940
MALCOLM-PIRNIE, INC.
INORGANICS

All values are mg/Kg dry basis unless noted.

Parameter	W-40 39-41'	W-36 35-36'	FB#1 4/12/90*
Petroleum Hydrocarbons	129	37.6	<1.0

Parameter	W-37 34-36'	W-38 35-37'	W-35 34-38' Comp
Petroleum Hydrocarbons	16,800	<6.42	<13.4

APPENDIX

U - Indicates that the compound was analyzed for but not detected.

J - Indicates that the compound was analyzed for and determined to be present in the sample. The mass spectrum of the compound meets the identification criteria of the method. The concentration listed is an estimated value, which is less than the specified minimum detection limit but is greater than zero.

B - This flag is used when the analyte is found in the blanks as well as the sample. It indicates possible sample contamination and warns the data user to use caution when applying the results of this analyte.

N - Indicates that the compound was analyzed for but not requested as an analyte. Value will not be listed on tabular result sheet.

X - Matrix spike compound.

(1) - Cannot be separated from diphenylamine.

(2) - Decomposes to azobenzene. Measured and calibrated as azobenzene.

A - This flag indicates that a TIC is a suspected aldol condensation product.

E - Indicates that it exceeds calibration curve range.

D - This flag identifies all compounds identified in an analysis at a secondary dilution factor.

APPENDIX/METALS DATA

C - Concentration qualifiers

U - Indicates analyte result less than instrument detection limit (IDL)

B - Indicates analyte result between IDL and contract required detection limit (CRDL)

Q - QC qualifiers

E - Reported value is estimated because of the presence of interference

M - Duplicate injection precision not met

N - Spiked sample recovery not within control limits

S - The reported value was determined by the method of standard additions (MSA)

W - Post-digest spike recovery furnace analysis was out of 85-115 percent control limit, while sample absorbance was less than 50 percent of spike absorbance

* - Duplicate analysis not within control limit

+ - Correlation coefficient for MSA is less than 0.995

M - Method codes

P - ICP

A - Flame AA

F - Furnace AA

CV - Cold vapor AA (manual)

C - Cyanide

NR - Not Required

Soil

TABLE 1.0
30900-0973
MALCOLM-PIRNIE, INC.
EPA TCL VOLATILE ORGANICS

All values are ug/Kg.

	Sample Identification		
Dilution Factor	1.00	1.08	
Method Blank I.D.	>B9300	>B9300	
Compound	Method Blank	W-34 36-38'	Method Detection Limits with no Dilution
Chloromethane	U	U	10
Bromomethane	U	U	10
Vinyl Chloride	U	U	10
Chloroethane	U	U	10
Methylene Chloride	1J	U	~~5~~ 10
Acetone	12	19~~B~~ U	10
Carbon Disulfide	U	U	5
1,1-Dichloroethene	U	U	5
1,1-Dichloroethane	U	U	5
1,2-Dichloroethene (total)	U	U	5
Chloroform	U	U	5
1,2-Dichloroethane	U	U	5
2-Butanone	U	U	10
1,1,1-Trichloroethane	U	U	5
Carbon Tetrachloride	U	U	5
Vinyl Acetate	U	U	10
Bromodichloromethane	U	U	5
1,2-Dichloropropane	U	U	5
cis-1,3-Dichloropropene	U	U	5
Trichloroethene	U	U	5
Dibromochloromethane	U	U	5
1,1,2-Trichloroethane	U	U	5
Benzene	U	U	5
trans-1,3-Dichloropropene	U	U	5
Bromoform	U	U	5
4-Methyl-2-pentanone	U	U	10
2-Hexanone	U	U	10
Tetrachloroethene	U	U	5
1,1,2,2-Tetrachloroethane	U	U	5
Toluene	U	U	5
Chlorobenzene	U	U	5
Ethylbenzene	U	U	5
Styrene	U	U	5
Xylene (total)	U	0.7J	5

U, J, B - See Appendix for definition.
Note: Sample detection limit = MDL x dilution factor.

Soil

TABLE 1.1
30900-0973
MALCOLM-PIRNIE, INC.
EPA TCL VOLATILE ORGANICS

All values are ug/Kg.

	Sample Identification		
Dilution Factor	1.00	1.16	
Method Blank I.D.	>B9329	>B9329	
Compound	Method Blank	B7-P 153-160'	Method Detection Limits with no Dilution
Chloromethane	U	U	10
Bromomethane	U	U	10
Vinyl Chloride	U	U	10
Chloroethane	U	U	10
Methylene Chloride	2J	~~23~~ U	~~5~~ ~~20~~
Acetone	15	13~~B~~ U	10
Carbon Disulfide	U	U	5
1,1-Dichloroethene	U	U	5
1,1-Dichloroethane	U	U	5
1,2-Dichloroethene (total)	U	U	5
Chloroform	U	U	5
1,2-Dichloroethane	U	U	5
2-Butanone	U	U	10
1,1,1-Trichloroethane	U	U	5
Carbon Tetrachloride	U	U	5
Vinyl Acetate	U	U	10
Bromodichloromethane	U	U	5
1,2-Dichloropropane	U	U	5
cis-1,3-Dichloropropene	U	U	5
Trichloroethene	U	U	5
Dibromochloromethane	U	U	5
1,1,2-Trichloroethane	U	U	5
Benzene	U	U	5
trans-1,3-Dichloropropene	U	U	5
Bromoform	U	U	5
4-Methyl-2-pentanone	U	U	10
2-Hexanone	U	U	10
Tetrachloroethene	U	U	5
1,1,2,2-Tetrachloroethane	U	U	5
Toluene	U	U	5
Chlorobenzene	U	U	5
Ethylbenzene	U	U	5
Styrene	U	U	5
Xylene (total)	U	2J	5

U, J, B - See Appendix for definition.
Note: Sample detection limit = MDL x dilution factor.

TABLE 1.2
30900-0973
MALCOLM-PIRNIE, INC.
EPA TCL VOLATILE ORGANICS

Aqueous

All values are ug/L.

	Sample Identification			
Dilution Factor	1.0	1.0	1.0	
Method Blank I.D.	>A0969	>A0969	>A0969	
Compound	Method Blank	FB#2 04/24/90	TB#2 04/24/90	Method Detection Limits with no Dilution
Chloromethane	U	U	U	10
Bromomethane	U	U	U	10
Vinyl Chloride	U	U	U	10
Chloroethane	U	U	U	10
Methylene Chloride	U	U	U	5
Acetone	U	13J	13J	10
Carbon Disulfide	U	U	U	5
1,1-Dichloroethene	U	U	U	5
1,1-Dichloroethane	U	U	U	5
1,2-Dichloroethene (total)	U	U	U	5
Chloroform	U	U	U	5
1,2-Dichloroethane	U	U	U	5
2-Butanone	U	UR	UR	10R
1,1,1-Trichloroethane	U	U	U	5
Carbon Tetrachloride	U	U	U	5
Vinyl Acetate	U	U	U	10
Bromodichloromethane	U	U	U	5
1,2-Dichloropropane	U	U	U	5
cis-1,3-Dichloropropene	U	U	U	5
Trichloroethene	U	U	U	5
Dibromochloromethane	U	U	U	5
1,1,2-Trichloroethane	U	U	U	5
Benzene	U	U	U	5
trans-1,3-Dichloropropene	U	U	U	5
Bromoform	U	U	U	5
4-Methyl-2-pentanone	U	U	U	10
2-Hexanone	U	U	U	10
Tetrachloroethene	U	U	U	5
1,1,2,2-Tetrachloroethane	U	U	U	5
Toluene	U	U	U	5
Chlorobenzene	U	U	U	5
Ethylbenzene	U	U	U	5
Styrene	U	U	U	5
Xylene (total)	U	U	U	5

U - See Appendix for definition.
Note: Sample detection limit = MDL x dilution factor.

TABLE 2.0
30900-0973
MALCOLM-PIRNIE, INC.
VOLATILE TENTATIVELY IDENTIFIED COMPOUNDS

Sample Identification: Method Blank >B9300

CAS#	Compound	RT	Estimated Concentration, ug/Kg
	None detected		

Sample Identification: W-34 36-38'

CAS#	Compound	RT	Estimated Concentration, ug/Kg
	None detected		

Sample Identification: Method Blank >B9329

CAS#	Compound	RT	Estimated Concentration, ug/Kg
	None detected		

Sample Identification: B7-P 153-160'

CAS#	Compound	RT	Estimated Concentration, ug/Kg
	Unknown	10.41	6J

Sample Identification: Method Blank >A0969

CAS#	Compound	RT	Estimated Concentration, ug/L
	None detected		

J - See Appendix for definition.

TABLE 2.1
30900-0973
MALCOLM-PIRNIE, INC.
VOLATILE TENTATIVELY IDENTIFIED COMPOUNDS

Sample Identification: FB#2 04/24/90

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown siloxane	24.52	7J

Sample Identification: TB#2 04/24/90

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown siloxane	24.55	13J

J - See Appendix for definition.

TABLE 3.0
30900-0973
MALCOLM-PIRNIE, INC.
EPA TCL SEMI-VOLATILE ORGANICS

All values are ug/Kg.

	Sample Identification		
Dilution Factor	1.00	1.12	
Method Blank I.D.	>C6573	>C6573	
Compound	Method Blank	W-34 36-38'	Method Detection Limits with no Dilution
Phenol	U	U	330
bis(2-Chloroethyl)ether	U	U	330
2-Chlorophenol	U	U	330
1,3-Dichlorobenzene	U	U	330
1,4-Dichlorobenzene	U	U	330
Benzyl alcohol	U	U	330
1,2-Dichlorobenzene	U	U	330
2-Methylphenol	U	U	330
bis(2-Chloroisopropyl)ether	U	U	330
4-Methylphenol	U	U	330
N-Nitroso-di-n-propylamine	U	U	330
Hexachloroethane	U	U	330
Nitrobenzene	U	U	330
Isophorone	U	U	330
2-Nitrophenol	U	U	330
2,4-Dimethylphenol	U	U	330
Benzoic acid	U	U	1,600
bis(2-Chloroethoxy)methane	U	U	330
2,4-Dichlorophenol	U	U	330
1,2,4-Trichlorobenzene	U	U	330
Naphthalene	U	U	330
4-Chloroaniline	U	U	330
Hexachlorobutadiene	U	U	330
4-Chloro-3-methylphenol	U	U	330
2-Methylnaphthalene	U	U	330
Hexachlorocyclopentadiene	U	U	330
2,4,6-Trichlorophenol	U	U	330
2,4,5-Trichlorophenol	U	U	1,600
2-Chloronaphthalene	U	U	330
2-Nitroaniline	U	U	1,600
Dimethylphthalate	U	U	330
Acenaphthylene	U	U	330
2,6-Dinitrotoluene	U	U	330

U - See Appendix for definition.
Note: Sample detection limit = MDL x dilution factor.

TABLE 3.0
30900-0973
MALCOLM-PIRNIE, INC.
EPA TCL SEMI-VOLATILE ORGANICS

All values are ug/Kg.

	Sample Identification		
Dilution Factor	1.00	1.12	
Method Blank I.D.	>C6573	>C6573	
Compound	Method Blank	W-34 36-38'	Method Detection Limits with no Dilution
3-Nitroaniline	U	U	1,600
Acenaphthene	U	U	330
2,4-Dinitrophenol	U	U	1,600
4-Nitrophenol	U	U	1,600
Dibenzofuran	U	U	330
2,4-Dinitrotoluene	U	U	330
Diethylphthalate	U	23J	330
4-Chlorophenyl-phenylether	U	U	330
Fluorene	U	U	330
4-Nitroaniline	U	U	1,600
4,6-Dinitro-2-methylphenol	U	U	1,600
N-Nitrosodiphenylamine (1)	U	U	330
4-Bromophenyl-phenylether	U	U	330
Hexachlorobenzene	U	U	330
Pentachlorophenol	U	U	1,600
Phenanthrene	U	U	330
Anthracene	U	U	330
Di-n-butylphthalate	24J	25JB U	330
Fluoranthene	U	U	330
Pyrene	U	U	330
Butylbenzylphthalate	U	40J	330
3,3'-Dichlorobenzidine	U	U	660
Benzo(a)anthracene	U	U	330
Chrysene	U	U	330
bis(2-Ethylhexyl)phthalate	560	1,100B U	330
Di-n-octylphthalate	U	49J	330
Benzo(b)fluoranthene	U	U	330
Benzo(k)fluoranthene	U	U	330
Benzo(a)pyrene	U	U	330
Indeno(1,2,3-cd)pyrene	U	U	330
Dibenzo(a,h)anthracene	U	U	330
Benzo(g,h,i)perylene	U	U	330

U, J, B, (1) - See Appendix for definition.
Note: Sample detection limit = MDL x dilution factor.

TABLE 3.1
30900-0973
MALCOLM-PIRNIE, INC.
EPA TCL SEMI-VOLATILE ORGANICS

All values are ug/L.

	Sample Identification		
Dilution Factor	1.0	1.0	
Method Blank I.D.	>H8503	>H8503	
Compound	Method Blank	FB#2 04/24/90	Method Detection Limits with no Dilution
Phenol	U	U	10
bis(2-Chloroethyl)ether	U	U	10
2-Chlorophenol	U	U	10
1,3-Dichlorobenzene	U	U	10
1,4-Dichlorobenzene	U	U	10
Benzyl alcohol	U	U	10
1,2-Dichlorobenzene	U	U	10
2-Methylphenol	U	U	10
bis(2-Chloroisopropyl)ether	U	U	10
4-Methylphenol	U	U	10
N-Nitroso-di-n-propylamine	U	U	10
Hexachloroethane	U	U	10
Nitrobenzene	U	U	10
Isophorone	U	U	10
2-Nitrophenol	U	U	10
2,4-Dimethylphenol	U	U	10
Benzoic acid	U	U	50
bis(2-Chloroethoxy)methane	U	U	10
2,4-Dichlorophenol	U	U	10
1,2,4-Trichlorobenzene	U	U	10
Naphthalene	U	U	10
4-Chloroaniline	U	U	10
Hexachlorobutadiene	U	U	10
4-Chloro-3-methylphenol	U	U	10
2-Methylnaphthalene	U	U	10
Hexachlorocyclopentadiene	U	U	10
2,4,6-Trichlorophenol	U	U	10
2,4,5-Trichlorophenol	U	U	50
2-Chloronaphthalene	U	U	10
2-Nitroaniline	U	U	50
Dimethylphthalate	U	U	10
Acenaphthylene	U	U	10
2,6-Dinitrotoluene	U	U	10

U - See Appendix for definition.
Note: Sample detection limit = MDL x dilution factor.

TABLE 3.1
30900-0973
MALCOLM-PIRNIE, INC.
EPA TCL SEMI-VOLATILE ORGANICS

All values are ug/L.

	Sample Identification		
Dilution Factor	1.0	1.0	
Method Blank I.D.	>H8503	>H8503	
Compound	Method Blank	FB#2 04/24/90	Method Detection Limits with no Dilution
3-Nitroaniline	U	U	50
Acenaphthene	U	U	10
2,4-Dinitrophenol	U	U	50
4-Nitrophenol	U	U	50
Dibenzofuran	U	U	10
2,4-Dinitrotoluene	U	U	10
Diethylphthalate	U	U	10
4-Chlorophenyl-phenylether	U	U	10
Fluorene	U	U	10
4-Nitroaniline	U	U	50
4,6-Dinitro-2-methylphenol	U	U	50
N-Nitrosodiphenylamine (1)	U	U	10
4-Bromophenyl-phenylether	U	U	10
Hexachlorobenzene	U	U	10
Pentachlorophenol	U	U	50
Phenanthrene	U	U	10
Anthracene	U	U	10
Di-n-butylphthalate	0.9J	U	10
Fluoranthene	U	U	10
Pyrene	U	U	10
Butylbenzylphthalate	U	U	10
3,3'-Dichlorobenzidine	U	U	20
Benzo(a)anthracene	U	U	10
Chrysene	U	U	10
bis(2-Ethylhexyl)phthalate	2J	2JB U	10
Di-n-octylphthalate	U	U	10
Benzo(b)fluoranthene	U	U	10
Benzo(k)fluoranthene	U	U	10
Benzo(a)pyrene	U	U	10
Indeno(1,2,3-cd)pyrene	U	U	10
Dibenzo(a,h)anthracene	U	U	10
Benzo(g,h,i)perylene	U	U	10

U, J, B, (1) - See Appendix for definition.
Note: Sample detection limit = MDL x dilution factor.

TABLE 3.2
30900-0973
MALCOLM-PIRNIE, INC.
EPA TCL SEMI-VOLATILE ORGANICS

All values are ug/Kg.

	Sample Identification		
Dilution Factor	1.00	1.16	
Method Blank I.D.	>H8533	>H8533	
Compound	Method Blank	B7-P 153-160'	Method Detection Limits with no Dilution
Phenol	U	U	330
bis(2-Chloroethyl)ether	U	U	330
2-Chlorophenol	U	U	330
1,3-Dichlorobenzene	U	U	330
1,4-Dichlorobenzene	U	U	330
Benzyl alcohol	U	U	330
1,2-Dichlorobenzene	U	U	330
2-Methylphenol	U	U	330
bis(2-Chloroisopropyl)ether	U	U	330
4-Methylphenol	U	U	330
N-Nitroso-di-n-propylamine	U	U	330
Hexachloroethane	U	U	330
Nitrobenzene	U	U	330
Isophorone	U	U	330
2-Nitrophenol	U	U	330
2,4-Dimethylphenol	U	U	330
Benzoic acid	U	U	1,600
bis(2-Chloroethoxy)methane	U	U	330
2,4-Dichlorophenol	U	U	330
1,2,4-Trichlorobenzene	U	U	330
Naphthalene	U	U	330
4-Chloroaniline	U	U	330
Hexachlorobutadiene	U	U	330
4-Chloro-3-methylphenol	U	U	330
2-Methylnaphthalene	U	U	330
Hexachlorocyclopentadiene	U	U	330
2,4,6-Trichlorophenol	U	U	330
2,4,5-Trichlorophenol	U	U	1,600
2-Chloronaphthalene	U	U	330
2-Nitroaniline	U	U	1,600
Dimethylphthalate	U	U	330
Acenaphthylene	U	U	330
2,6-Dinitrotoluene	U	U	330

U - See Appendix for definition.
Note: Sample detection limit = MDL x dilution factor.

TABLE 3.2
30900-0973
MALCOLM-PIRNIE, INC.
EPA TCL SEMI-VOLATILE ORGANICS

All values are ug/Kg.

	Sample Identification		
Dilution Factor	1.00	1.16	
Method Blank I.D.	>H8533	>H8533	
Compound	Method Blank	B7-P 153-160'	Method Detection Limits with no Dilution
3-Nitroaniline	U	U	1,600
Acenaphthene	U	U	330
2,4-Dinitrophenol	U	U	1,600
4-Nitrophenol	U	U	1,600
Dibenzofuran	U	U	330
2,4-Dinitrotoluene	U	U	330
Diethylphthalate	U	U	330
4-Chlorophenyl-phenylether	U	U	330
Fluorene	U	U	330
4-Nitroaniline	U	U	1,600
4,6-Dinitro-2-methylphenol	U	U	1,600
N-Nitrosodiphenylamine (1)	U	U	330
4-Bromophenyl-phenylether	U	U	330
Hexachlorobenzene	U	U	330
Pentachlorophenol	U	U	1,600
Phenanthrene	U	U	330
Anthracene	U	U	330
Di-n-butylphthalate	U	40J U	330
Fluoranthene	U	U	330
Pyrene	U	U	330
Butylbenzylphthalate	U	2,700	330
3,3'-Dichlorobenzidine	U	U	660
Benzo(a)anthracene	U	U	330
Chrysene	U	U	330
bis(2-Ethylhexyl)phthalate	310J	790B U	330
Di-n-octylphthalate	U	270J	330
Benzo(b)fluoranthene	U	U	330
Benzo(k)fluoranthene	U	U	330
Benzo(a)pyrene	U	U	330
Indeno(1,2,3-cd)pyrene	U	U	330
Dibenzo(a,h)anthracene	U	U	330
Benzo(g,h,i)perylene	U	U	330

U, J, B, (1) - See Appendix for definition.
Note: Sample detection limit = MDL x dilution factor.

TABLE 4.0
30900-0973
MALCOLM-PIRNIE, INC.
SEMI-VOLATILE TENTATIVELY IDENTIFIED COMPOUNDS

Sample Identification: Method Blank >C6573

CAS#	Compound	RT	Estimated Concentration, ug/Kg
	Aldol condensation product	8.02	41,000JA
	Unknown acid ester	7.29	3,400J
	Unknown acid ester	9.63	1,200J
	Unknown acid	29.04	660J
	Unknown acid ester	11.12	530J
	Unknown	10.00	290J
541026	Cyclopentasiloxane, deca...	14.06	180J
	Unknown acid ester	6.73	150J
	Unknown hydrocarbon	6.02	150J
	Unknown acid ester	6.55	150J

Sample Identification: W-34 36-38'

CAS#	Compound	RT	Estimated Concentration, ug/Kg
	Aldol condensation product	8.07	57,000JAB
	Unknown acid ester	7.30	5,000JB
	Unknown acid ester	9.64	1,700JB
	Unknown acid	29.05	1,100JB
	Unknown acid ester	11.11	770JB
	Unknown acid ester	6.54	400JB
	Unknown acid ester	11.58	240JB
	Unknown	5.38	170J

Sample Identification: Method Blank >H8503

CAS#	Compound	RT	Estimated Concentration, ug/L
	None detected		

J, A, B - See Appendix for definition.

TABLE 4.1
30900-0973
MALCOLM-PIRNIE, INC.
SEMI-VOLATILE TENTATIVELY IDENTIFIED COMPOUNDS

Sample Identification: FB#2 04/24/90

CAS#	Compound	RT	Estimated Concentration, ug/L
	None detected		

Sample Identification: Method Blank >H8533

CAS#	Compound	RT	Estimated Concentration, ug/Kg
	Aldol condensation product	9.76	69,000JA
	Unknown acid ester	9.09	3,200J
	Unknown acid ester	11.28	1,900J
	Unknown acid ester	8.94	1,800J
	Unknown acid ester	12.75	810J
141797	3-Penten-2-one,4-methyl	8.37	630J
	Unknown acid ester	8.27	600J
	Unknown acid	31.01	300J
	Unknown acid ester	11.57	260J
	Unknown acid ester	13.22	190J
625332	3-Penten-2-one	6.89	140J
	Aldol condensation product	8.09	130JA

Sample Identification: B7-P 153-160'

CAS#	Compound	RT	Estimated Concentration, ug/Kg
	Aldol condensation product	9.77	88,000JAB
	Unknown acid ester	9.10	4,200JB
	Unknown acid ester	11.26	2,500JB
	Unknown acid ester	8.94	2,300JB
	Unknown acid ester	12.72	1,100JB
	Unknown acid ester	8.29	630JB
141797	3-Penten-2-one,4-methyl	8.37	560JB
	Unknown acid ester	11.54	370JB
	Unknown acid ester	13.19	240JB
	Unknown	7.11	210J
625332	3-Penten-2-one	6.88	200JB
	Unknown	37.86	200J
	Unknown	8.16	170J

J, A, B - See Appendix for definition.

Soil

TABLE 5.0
30900-0973
MALCOLM-PIRNIE, INC.
EPA TCL PESTICIDES/PCB's

All values are ug/Kg.

	Sample Identification		
Dilution Factor	1.00	1.12	
Method Blank I.D.	0419 -B01	0419 -B01	
Compound	Method Blank	W-34 36-38'	Method Detection Limits with no Dilution
alpha-BHC	U	U	8.0
beta-BHC	U	U	8.0
delta-BHC	U	U	8.0
gamma-BHC	U	U	8.0
Heptachlor	U	3.2J	8.0
Aldrin	U	U	8.0
Heptachlor Epoxide	U	U	8.0
Endosulfan I	U	U	8.0
Dieldrin	U	U	16
4,4'-DDE	U	U	16
Endrin	U	U	16
Endosulfan II	U	U	16
4,4'-DDD	U	U	16
Endosulfan Sulfate	U	U	16
4,4'-DDT	U	U	16
Methoxychlor	U	U	80
Endrin-Ketone	U	U	16
alpha-Chlordane	U	U	80
gamma-Chlordane	U	U	80
Toxaphene	U	U	160
PCB - 1016	U	U	80
PCB - 1221	U	U	80
PCB - 1232	U	U	80
PCB - 1242	U	U	80
PCB - 1248	U	U	80
PCB - 1254	U	U	160
PCB - 1260	U	U	160

U, J - See Appendix for definition.
Note: Sample detection limit = MDL x dilution factor.

Soil

TABLE 5.1
30900-0973
MALCOLM-PIRNIE, INC.
EPA TCL PESTICIDES/PCB's

All values are ug/Kg.

	Sample Identification		
Dilution Factor	1.00	?.??	
Method Blank I.D.	0427 -B05	0427 -B05	
Compound	Method Blank	B7-P 153-160'	Method Detection Limits with no Dilution
alpha-BHC	U	U	8.0
beta-BHC	U	U	8.0
delta-BHC	U	U	8.0
gamma-BHC	U	U	8.0
Heptachlor	U	1.2J	8.0
Aldrin	U	U	8.0
Heptachlor Epoxide	U	U	8.0
Endosulfan I	U	U	8.0
Dieldrin	U	U	16
4,4'-DDE	U	U	16
Endrin	U	U	16
Endosulfan II	U	U	16
4,4'-DDD	U	U	16
Endosulfan Sulfate	U	U	16
4,4'-DDT	U	U	16
Methoxychlor	U	U	80
Endrin-Ketone	U	U	16
alpha-Chlordane	U	U	80
gamma-Chlordane	U	U	80
Toxaphene	U	U	160
PCB - 1016	U	U	80
PCB - 1221	U	U	80
PCB - 1232	U	U	80
PCB - 1242	U	U	80
PCB - 1248	U	U	80
PCB - 1254	U	U	160
PCB - 1260	U	U	160

U, J - See Appendix for definition.
Note: Sample detection limit = MDL x dilution factor.

Aqueous

TABLE 5.2
30900-0973
MALCOLM-PIRNIE, INC.
EPA TCL PESTICIDES/PCB's

All values are ug/L.

	Sample Identification		
Dilution Factor	1.0	1.0	
Method Blank I.D.	0425 -B02	0425 -B02	
Compound	Method Blank	FB#2 04/24/90	Method Detection Limits with no Dilution
alpha-BHC	U	U	0.05
beta-BHC	U	U	0.05
delta-BHC	U	U	0.05
gamma-BHC	U	U	0.05
Heptachlor	U	U	0.05
Aldrin	U	U	0.05
Heptachlor Epoxide	U	U	0.05
Endosulfan I	U	U	0.05
Dieldrin	U	U	0.10
4,4'-DDE	U	U	0.10
Endrin	U	U	0.10
Endosulfan II	U	U	0.10
4,4'-DDD	U	U	0.10
Endosulfan Sulfate	U	U	0.10
4,4'-DDT	U	U	0.10
Methoxychlor	U	U	0.50
Endrin-Ketone	U	U	0.10
alpha-Chlordane	U	U	0.50
gamma-Chlordane	U	U	0.50
Toxaphene	U	U	1.0
PCB - 1016	U	U	0.5
PCB - 1221	U	U	0.5
PCB - 1232	U	U	0.5
PCB - 1242	U	U	0.5
PCB - 1248	U	U	0.5
PCB - 1254	U	U	1.0
PCB - 1260	U	U	1.0

U - See Appendix for definition.
Note: Sample detection limit = MDL x dilution factor.

TABLE 6.0
30900-0973
MALCOLM-PIRNIE, INC.
TAL METALS PLUS CYANIDE

All values are mg/Kg dry basis unless noted.

Parameter	FB#2 04/24/90+	B7-P 153-160'	W-34 36-38'
Aluminum	85.3B	504E*J	444E*J
Antimony	13.0U	3.0U	2.7U
Arsenic	1.0U	2.7	1.7BW
Barium	4.0U	5.9B	2.1B
Beryllium	1.0U	0.23U	0.21U
Cadmium	2.0U	0.46U	0.42U
Calcium	2,060B	223N	40.8B
Chromium	2.7B	5.7	5.2
Cobalt	2.0U	1.3B	0.65B
Copper	14.0U	5.3B	5.0B
Iron	377	3,550	2,000
Lead	1.0U	2.1	0.79B
Magnesium	2,000B	70.4B	17.2B
Manganese	3.3B	20.9*J	9.4*J
Mercury	0.20U	0.11U	0.08U
Nickel	6.0U	1.4U	1.3U
Potassium	545U	197B	120B
Selenium	1.0U	0.22UW	0.21U
Silver	6.9B	1.1U	1.1U
Sodium	5,260	193B	140B
Thallium	2.0U	0.43U	0.42U
Vanadium	2.0U	5.1B	2.6B
Zinc	33.5	3.9B	3.6B
Cyanide	10.0U	0.56U	0.62U

+ug/L

B, E, U, W, * - See Metals Appendix for definition.

TABLE 7.0
30900-0973
MALCOLM-PIRNIE, INC.
INORGANICS

All values are mg/Kg dry basis unless noted.

Parameter	W-34 36-38'	B7-P 153-160'	FB#2 04/24/90+
Petroleum Hydrocarbons	29.4	<13.8	<1.0

+mg/L

APPENDIX

U - Indicates that the compound was analyzed for but not detected.

J - Indicates that the compound was analyzed for and determined to be present in the sample. The mass spectrum of the compound meets the identification criteria of the method. The concentration listed is an estimated value, which is less than the specified minimum detection limit but is greater than zero.

B - This flag is used when the analyte is found in the blanks as well as the sample. It indicates possible sample contamination and warns the data user to use caution when applying the results of this analyte.

N - Indicates that the compound was analyzed for but not requested as an analyte. Value will not be listed on tabular result sheet.

X - Matrix spike compound.

(1) - Cannot be separated from diphenylamine.

(2) - Decomposes to azobenzene. Measured and calibrated as azobenzene.

A - This flag indicates that a TIC is a suspected aldol condensation product.

E - Indicates that it exceeds calibration curve range.

D - This flag identifies all compounds identified in an analysis at a secondary dilution factor.

APPENDIX/METALS DATA

C - Concentration qualifiers

U - Indicates analyte result less than instrument detection limit (IDL)

B - Indicates analyte result between IDL and contract required detection limit (CRDL)

Q - QC qualifiers

E - Reported value is estimated because of the presence of interference

M - Duplicate injection precision not met

N - Spiked sample recovery not within control limits

S - The reported value was determined by the method of standard additions (MSA)

W - Post-digest spike recovery furnace analysis was out of 85-115 percent control limit, while sample absorbance was less than 50 percent of spike absorbance

* - Duplicate analysis not within control limit

+ - Correlation coefficient for MSA is less than 0.995

M - Method codes

P - ICP

A - Flame AA

F - Furnace AA

CV - Cold vapor AA (manual)

C - Cyanide

NR - Not Required

Soil

TABLE 2.0
30900-1072
MALCOLM-PIRNIE
EPA TCL VOLATILE ORGANICS

All values are ug/Kg.

	Sample Identification				
Dilution Factor	1.00	1.22	1.00	1.26	
Method Blank I.D.	>B9580	>B9580	>B9604	>B9604	
Compound	Method Blank	W-39 55-57'	Method Blank	BP/PH-8 288-290'	Method Detection Limits with no Dilution
Chloromethane	U	U	U	U	10
Bromomethane	U	U	U	U	10
Vinyl Chloride	U	U	U	U	10
Chloroethane	U	U	U	U	10
Methylene Chloride	U	U	5	4JB	5
Acetone	19	U	9J	12JB	10
Carbon Disulfide	U	U	U	U	5
1,1-Dichloroethene	U	U	U	U	5
1,1-Dichloroethane	U	U	U	U	5
1,2-Dichloroethene (total)	U	U	U	U	5
Chloroform	U	U	U	U	5
1,2-Dichloroethane	U	U	U	U	5
2-Butanone	U	U	U	U	10
1,1,1-Trichloroethane	U	U	U	U	5
Carbon Tetrachloride	U	U	U	U	5
Vinyl Acetate	U	U	U	U	10
Bromodichloromethane	U	U	U	U	5
1,2-Dichloropropane	U	U	U	U	5
cis-1,3-Dichloropropene	U	U	U	U	5
Trichloroethene	U	U	U	U	5
Dibromochloromethane	U	U	U	U	5
1,1,2-Trichloroethane	U	U	U	U	5
Benzene	U	U	U	U	5
trans-1,3-Dichloropropene	U	U	U	U	5
Bromoform	U	U	U	U	5
4-Methyl-2-pentanone	U	U	U	U	10
2-Hexanone	U	U	U	U	10
Tetrachloroethene	U	U	U	U	5
1,1,2,2-Tetrachloroethane	U	U	U	U	5
Toluene	U	U	U	U	5
Chlorobenzene	U	U	U	U	5
Ethylbenzene	U	U	U	U	5
Styrene	U	U	U	U	5
Xylene (total)	U	U	U	U	5

U, J, B - See Appendix for definition.
Note: Sample detection limit = MDL x dilution factor.

TABLE 2.1
30900-1072
MALCOLM-PIRNIE
EPA TCL VOLATILE ORGANICS

Soil

All values are ug/Kg.

	Sample Identification				
Dilution Factor	1.00	1.23	1.00	1.88	
Method Blank I.D.	>B9860	>B9860	>B9904	>B9904	
Compound	Method Blank	BP/PH-5 313-315'	Method Blank	BP/PH-4 283-285' 288-290'	Method Detection Limits with no Dilution
Chloromethane	U	U	U	U	10
Bromomethane	U	U	U	U	10
Vinyl Chloride	U	U	U	U	10
Chloroethane	U	U	U	U	10
Methylene Chloride	3J	2JB	U	U	5
Acetone	10	11JB	19	44B	10
Carbon Disulfide	U	U	U	U	5
1,1-Dichloroethene	U	U	U	U	5
1,1-Dichloroethane	U	U	U	U	5
1,2-Dichloroethene (total)	U	U	U	U	5
Chloroform	U	U	U	U	5
1,2-Dichloroethane	U	U	U	U	5
2-Butanone	U	U	U	U	10
1,1,1-Trichloroethane	U	U	U	U	5
Carbon Tetrachloride	U	U	U	U	5
Vinyl Acetate	U	U	U	U	10
Bromodichloromethane	U	U	U	U	5
1,2-Dichloropropane	U	U	U	U	5
cis-1,3-Dichloropropene	U	U	U	U	5
Trichloroethene	U	U	U	U	5
Dibromochloromethane	U	U	U	U	5
1,1,2-Trichloroethane	U	U	U	U	5
Benzene	U	U	U	U	5
trans-1,3-Dichloropropene	U	U	U	U	5
Bromoform	U	U	U	U	5
4-Methyl-2-pentanone	U	U	U	U	10
2-Hexanone	U	U	U	U	10
Tetrachloroethene	U	U	U	U	5
1,1,2,2-Tetrachloroethane	U	U	U	U	5
Toluene	0.8J	U	U	U	5
Chlorobenzene	U	U	U	U	5
Ethylbenzene	U	U	U	U	5
Styrene	U	U	U	U	5
Xylene (total)	U	U	U	U	5

U, J, B - See Appendix for definition.
Note: Sample detection limit = MDL x dilution factor.

TABLE 2.2
30900-1072
MALCOLM-PIRNIE
EPA TCL VOLATILE ORGANICS

Aqueous

All values are ug/L.

	Sample Identification		
Dilution Factor	1.0	1.0	
Method Blank I.D.	>A1151	>A1151	
Compound	Method Blank	DWW-7	Method Detection Limits with no Dilution
Chloromethane	U	U	10
Bromomethane	U	U	10
Vinyl Chloride	U	U	10
Chloroethane	U	U	10
Methylene Chloride	U	U	5
Acetone	U	4J	10
Carbon Disulfide	U	U	5
1,1-Dichloroethene	U	U	5
1,1-Dichloroethane	U	U	5
1,2-Dichloroethene (total)	U	U	5
Chloroform	U	U	5
1,2-Dichloroethane	U	U	5
2-Butanone	U	U	10
1,1,1-Trichloroethane	U	U	5
Carbon Tetrachloride	U	U	5
Vinyl Acetate	U	U	10
Bromodichloromethane	U	U	5
1,2-Dichloropropane	U	U	5
cis-1,3-Dichloropropene	U	U	5
Trichloroethene	U	U	5
Dibromochloromethane	U	U	5
1,1,2-Trichloroethane	U	U	5
Benzene	U	U	5
trans-1,3-Dichloropropene	U	U	5
Bromoform	U	U	5
4-Methyl-2-pentanone	U	U	10
2-Hexanone	U	U	10
Tetrachloroethene	U	U	5
1,1,2,2-Tetrachloroethane	U	U	5
Toluene	U	U	5
Chlorobenzene	U	U	5
Ethylbenzene	U	U	5
Styrene	U	U	5
Xylene (total)	U	U	5

U, J - See Appendix for definition.
Note: Sample detection limit = MDL x dilution factor.

Aqueous

TABLE 2.3
30900-1072
MALCOLM-PIRNIE
EPA TCL VOLATILE ORGANICS

All values are ug/L.

	Sample Identification				
Dilution Factor	1.0	1.0	1.0	1.0	
Method Blank I.D.	>G5518	>G5518	>G5518	>G5518	
Compound	Method Blank	FB 06/05/90	TB 06/05/90	HB REF. 34	Method Detection Limits with no Dilution
Chloromethane	U	U	U	U	10
Bromomethane	U	U	U	U	10
Vinyl Chloride	U	U	U	U	10
Chloroethane	U	U	U	U	10
Methylene Chloride	U	U	U	U	5
Acetone	U	U	8J	U	10
Carbon Disulfide	U	U	U	U	5
1,1-Dichloroethene	U	U	U	U	5
1,1-Dichloroethane	U	U	U	U	5
1,2-Dichloroethene (total)	U	U	U	U	5
Chloroform	U	U	U	U	5
1,2-Dichloroethane	U	U	U	U	5
2-Butanone	U	U	U	U	10
1,1,1-Trichloroethane	U	U	U	U	5
Carbon Tetrachloride	U	U	U	U	5
Vinyl Acetate	U	U	U	U	10
Bromodichloromethane	U	U	U	U	5
1,2-Dichloropropane	U	U	U	U	5
cis-1,3-Dichloropropene	U	U	U	U	5
Trichloroethene	U	U	U	U	5
Dibromochloromethane	U	U	U	U	5
1,1,2-Trichloroethane	U	U	U	U	5
Benzene	U	U	U	U	5
trans-1,3-Dichloropropene	U	U	U	U	5
Bromoform	U	U	U	U	5
4-Methyl-2-pentanone	U	U	U	U	10
2-Hexanone	U	U	U	U	10
Tetrachloroethene	U	U	U	U	5
1,1,2,2-Tetrachloroethane	U	U	U	U	5
Toluene	U	U	U	U	5
Chlorobenzene	U	U	U	U	5
Ethylbenzene	U	U	U	U	5
Styrene	U	U	U	U	5
Xylene (total)	U	U	U	U	5

U, J - See Appendix for definition.
Note: Sample detection limit = MDL x dilution factor.

TABLE 3.0
30900-1072
MALCOLM-PIRNIE
VOLATILE TENTATIVELY IDENTIFIED COMPOUNDS

Sample Identification: Method Blank >B9580

CAS#	Compound	RT	Estimated Concentration, ug/Kg
	Unknown alcohol	8.06	8J
	Unknown	10.17	8J
	Unknown	10.30	5J

Sample Identification: W-39 55-57'

CAS#	Compound	RT	Estimated Concentration, ug/Kg
	None detected		

Sample Identification: Method Blank >B9604

CAS#	Compound	RT	Estimated Concentration, ug/Kg
	Unknown	10.11	7J

Sample Identification: BP-PH-8 288-290'

CAS#	Compound	RT	Estimated Concentration, ug/Kg
	Unknown	10.13	8JB

Sample Identification: Method Blank >B9860

CAS#	Compound	RT	Estimated Concentration, ug/Kg
	None detected		

J, B - See Appendix for definition.

TABLE 3.1
30900-1072
MALCOLM-PIRNIE
VOLATILE TENTATIVELY IDENTIFIED COMPOUNDS

Sample Identification: BP/PH-5 313-315'

CAS#	Compound	RT	Estimated Concentration, ug/Kg
	None detected		

Sample Identification: Method Blank >B9904

CAS#	Compound	RT	Estimated Concentration, ug/Kg
	None detected		

Sample Identification: BP/PH-4 283-285' 288-290'

CAS#	Compound	RT	Estimated Concentration, ug/Kg
	None detected		

Sample Identification: Method Blank >A1151

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown C_6 alkane	7.83	7J

Sample Identification: DWW-7

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown C_6 alkane	7.77	6JB

J, B - See Appendix for definition.

TABLE 3.2
30900-1072
MALCOLM-PIRNIE
VOLATILE TENTATIVELY IDENTIFIED COMPOUNDS

Sample Identification: Method Blank >G5518

CAS#	Compound	RT	Estimated Concentration, ug/L
122394	N-phenylbenzenamine	26.44	34J

Sample Identification: FB 06/05/90

CAS#	Compound	RT	Estimated Concentration, ug/L
	None detected		

Sample Identification: TB 06/05/90

CAS#	Compound	RT	Estimated Concentration, ug/L
	None detected		

Sample Identification: HB REF. 34

CAS#	Compound	RT	Estimated Concentration, ug/L
	None detected		

J - See Appendix for definition.

TABLE 4.0
30900-1072
MALCOLM-PIRNIE
EPA TCL SEMI-VOLATILE ORGANICS

All values are ug/Kg.

	Sample Identification				
Dilution Factor	1.00	1.18	1.00	1.23	
Method Blank I.D.	>C6884	>C6884	>C6899	>C6899	
Compound	Method Blank	BP/PH-5 313-315'	Method Blank	BP/PH-4 283-285 288-290'	Method Detection Limits with no Dilution
Phenol	U	U	U	U	330
bis(2-Chloroethyl)ether	U	U	U	U	330
2-Chlorophenol	U	U	U	U	330
1,3-Dichlorobenzene	U	U	U	U	330
1,4-Dichlorobenzene	U	U	U	U	330
Benzyl alcohol	U	U	U	U	330
1,2-Dichlorobenzene	U	U	U	U	330
2-Methylphenol	U	U	U	U	330
bis(2-Chloroisopropyl)ether	U	U	U	U	330
4-Methylphenol	U	U	U	U	330
N-Nitroso-di-n-propylamine	U	U	U	U	330
Hexachloroethane	U	U	U	U	330
Nitrobenzene	U	U	U	U	330
Isophorone	U	U	U	U	330
2-Nitrophenol	U	U	U	U	330
2,4-Dimethylphenol	U	U	U	U	330
Benzoic acid	U	U	U	U	1,600
bis(2-Chloroethoxy)methane	U	U	U	U	330
2,4-Dichlorophenol	U	U	U	U	330
1,2,4-Trichlorobenzene	U	U	U	U	330
Naphthalene	U	U	U	U	330
4-Chloroaniline	U	U	U	U	330
Hexachlorobutadiene	U	U	U	U	330
4-Chloro-3-methylphenol	U	U	U	U	330
2-Methylnaphthalene	U	U	U	U	330
Hexachlorocyclopentadiene	U	U	U	U	330
2,4,6-Trichlorophenol	U	U	U	U	330
2,4,5-Trichlorophenol	U	U	U	U	1,600
2-Chloronaphthalene	U	U	U	U	330
2-Nitroaniline	U	U	U	U	1,600
Dimethylphthalate	U	U	U	U	330
Acenaphthylene	U	U	U	U	330
2,6-Dinitrotoluene	U	U	U	U	330

U, J, B - See Appendix for definition.
Note: Sample detection limit = MDL x dilution factor.

TABLE 4.0
30900-1072
MALCOLM-PIRNIE
EPA TCL SEMI-VOLATILE ORGANICS

All values are ug/Kg.

	Sample Identification				
Dilution Factor	1.00	1.18	1.00	1.23	
Method Blank I.D.	>C6884	>C6884	>C6899	>C6899	
Compound	Method Blank	BP/PH-5 313-315'	Method Blank	BP/PH-4 283-285 288-290'	Method Detection Limits with no Dilution
3-Nitroaniline	U	U	U	U	1,600
Acenaphthene	U	U	U	U	330
2,4-Dinitrophenol	U	U	U	U	1,600
4-Nitrophenol	U	U	U	U	1,600
Dibenzofuran	U	U	U	U	330
2,4-Dinitrotoluene	U	U	U	U	330
Diethylphthalate	U	U	U	U	330
4-Chlorophenyl-phenylether	U	U	U	U	330
Fluorene	U	U	U	U	330
4-Nitroaniline	U	U	U	U	1,600
4,6-Dinitro-2-methylphenol	U	U	U	U	1,600
N-Nitrosodiphenylamine (1)	U	U	U	U	330
4-Bromophenyl-phenylether	U	U	U	U	330
Hexachlorobenzene	U	U	U	U	330
Pentachlorophenol	U	U	U	U	1,600
Phenanthrene	U	U	U	U	330
Anthracene	U	U	U	U	330
Di-n-butylphthalate	U	U	32J	32JB	330
Fluoranthene	U	U	U	U	330
Pyrene	U	U	41J	U	330
Butylbenzylphthalate	U	U	U	U	330
3,3'-Dichlorobenzidine	U	U	U	U	660
Benzo(a)anthracene	U	U	U	U	330
Chrysene	U	U	U	U	330
bis(2-Ethylhexyl)phthalate	72J	410B	410	860B	330
Di-n-octylphthalate	U	27J	14J	U	330
Benzo(b)fluoranthene	U	U	U	U	330
Benzo(k)fluoranthene	U	U	U	U	330
Benzo(a)pyrene	U	U	U	U	330
Indeno(1,2,3-cd)pyrene	U	U	U	U	330
Dibenzo(a,h)anthracene	U	U	U	U	330
Benzo(g,h,i)perylene	U	U	U	U	330

U, J, B, (1) - See Appendix for definition.
Note: Sample detection limit = MDL x dilution factor.

TABLE 4.1
30900-1072
MALCOLM-PIRNIE
EPA TCL SEMI-VOLATILE ORGANICS

All values are ug/Kg.

	Sample Identification				
Dilution Factor	1.00	1.26	1.00	1.23	
Method Blank I.D.	>H8705	>H8705	>H8706	>H8706	
Compound	Method Blank	W-39 55-57'	Method Blank	BP/PH-8 288-290'	Method Detection Limits with no Dilution
Phenol	U	U	U	U	330
bis(2-Chloroethyl)ether	U	U	U	U	330
2-Chlorophenol	U	U	U	U	330
1,3-Dichlorobenzene	U	U	U	U	330
1,4-Dichlorobenzene	U	U	U	U	330
Benzyl alcohol	U	U	U	U	330
1,2-Dichlorobenzene	U	U	U	U	330
2-Methylphenol	U	U	U	U	330
bis(2-Chloroisopropyl)ether	U	U	U	U	330
4-Methylphenol	U	U	U	U	330
N-Nitroso-di-n-propylamine	U	U	U	U	330
Hexachloroethane	U	U	U	U	330
Nitrobenzene	U	U	U	U	330
Isophorone	U	U	U	U	330
2-Nitrophenol	U	U	U	U	330
2,4-Dimethylphenol	U	U	U	U	330
Benzoic acid	U	U	U	U	1,600
bis(2-Chloroethoxy)methane	U	U	U	U	330
2,4-Dichlorophenol	U	U	U	U	330
1,2,4-Trichlorobenzene	U	U	U	U	330
Naphthalene	U	U	U	U	330
4-Chloroaniline	U	U	U	U	330
Hexachlorobutadiene	U	U	U	U	330
4-Chloro-3-methylphenol	U	U	U	U	330
2-Methylnaphthalene	U	U	U	U	330
Hexachlorocyclopentadiene	U	U	U	U	330
2,4,6-Trichlorophenol	U	U	U	U	330
2,4,5-Trichlorophenol	U	U	U	U	1,600
2-Chloronaphthalene	U	U	U	U	330
2-Nitroaniline	U	U	U	U	1,600
Dimethylphthalate	U	U	U	U	330
Acenaphthylene	U	U	U	U	330
2,6-Dinitrotoluene	U	U	U	U	330

U - See Appendix for definition.
Note: Sample detection limit = MDL x dilution factor.

TABLE 4.1
30900-1072
MALCOLM-PIRNIE
EPA TCL SEMI-VOLATILE ORGANICS

All values are ug/Kg.

	Sample Identification				
Dilution Factor	1.00	1.26	1.00	1.23	
Method Blank I.D.	>H8705	>H8705	>H8706	>H8706	
Compound	Method Blank	W-39 55-57'	Method Blank	BP/PH-8 288-290'	Method Detection Limits with no Dilution
3-Nitroaniline	U	U	U	U	1,600
Acenaphthene	U	U	U	U	330
2,4-Dinitrophenol	U	U	U	U	1,600
4-Nitrophenol	U	U	56J	U	1,600
Dibenzofuran	U	U	U	U	330
2,4-Dinitrotoluene	U	U	U	U	330
Diethylphthalate	U	770	18J	U	330
4-Chlorophenyl-phenylether	U	U	U	U	330
Fluorene	U	U	U	U	330
4-Nitroaniline	U	U	U	U	1,600
4,6-Dinitro-2-methylphenol	U	U	U	U	1,600
N-Nitrosodiphenylamine (1)	U	U	15J	U	330
4-Bromophenyl-phenylether	U	U	U	U	330
Hexachlorobenzene	U	U	U	U	330
Pentachlorophenol	U	U	U	U	1,600
Phenanthrene	U	21J R	33J R	U	330
Anthracene	U	U R	16J R	U	330
Di-n-butylphthalate	51J	79JB	86J	U	330
Fluoranthene	19J	40JB	61J	U	330
Pyrene	25J	47JB	72J	U	330
Butylbenzylphthalate	37J	61JB	110J	U	330
3,3'-Dichlorobenzidine	U	U	U	U	660
Benzo(a)anthracene	25J	44JB	63J	U	330
Chrysene	17J	34JB	50J	U	330
bis(2-Ethylhexyl)phthalate	160J	910B	260J	200JB	330
Di-n-octylphthalate	34J	75JB	100J	U	330
Benzo(b)fluoranthene	U	27J	45J	U	330
Benzo(k)fluoranthene	U	39J	42J	U	330
Benzo(a)pyrene	U	U	40J	U	330
Indeno(1,2,3-cd)pyrene	U	U	U	U	330
Dibenzo(a,h)anthracene	U	U	U	U	330
Benzo(g,h,i)perylene	U	U	U	U	330

U, J, B, (1) - See Appendix for definition.
Note: Sample detection limit = MDL x dilution factor.

TABLE 4.2
30900-1072
MALCOLM-PIRNIE
EPA TCL SEMI-VOLATILE ORGANICS

All values are ug/L.

	Sample Identification		
Dilution Factor	1.0	1.0	
Method Blank I.D.	>C6900	>C6900	
Compound	Method Blank	FB 06/05/90	Method Detection Limits with no Dilution
Phenol	U	U	10
bis(2-Chloroethyl)ether	U	U	10
2-Chlorophenol	U	U	10
1,3-Dichlorobenzene	U	U	10
1,4-Dichlorobenzene	U	U	10
Benzyl alcohol	U	U	10
1,2-Dichlorobenzene	U	U	10
2-Methylphenol	U	U	10
bis(2-Chloroisopropyl)ether	U	U	10
4-Methylphenol	U	U	10
N-Nitroso-di-n-propylamine	U	U	10
Hexachloroethane	U	U	10
Nitrobenzene	U	U	10
Isophorone	U	U	10
2-Nitrophenol	U	U	10
2,4-Dimethylphenol	U	U	10
Benzoic acid	U	U	50
bis(2-Chloroethoxy)methane	U	U	10
2,4-Dichlorophenol	U	U	10
1,2,4-Trichlorobenzene	U	U	10
Naphthalene	U	U	10
4-Chloroaniline	U	U	10
Hexachlorobutadiene	U	U	10
4-Chloro-3-methylphenol	U	U	10
2-Methylnaphthalene	U	U	10
Hexachlorocyclopentadiene	U	U	10
2,4,6-Trichlorophenol	U	U	10
2,4,5-Trichlorophenol	U	U	50
2-Chloronaphthalene	U	U	10
2-Nitroaniline	U	U	50
Dimethylphthalate	U	U	10
Acenaphthylene	U	U	10
2,6-Dinitrotoluene	U	U	10

U - See Appendix for definition.
Note: Sample detection limit = MDL x dilution factor.

TABLE 4.2
30900-1072
MALCOLM-PIRNIE
EPA TCL SEMI-VOLATILE ORGANICS

All values are ug/L.

	Sample Identification		
Dilution Factor	1.0	1.0	
Method Blank I.D.	>C6900	>C6900	
Compound	Method Blank	FB 06/05/90	Method Detection Limits with no Dilution
3-Nitroaniline	U	U	50
Acenaphthene	U	U	10
2,4-Dinitrophenol	U	U	50
4-Nitrophenol	U	U	50
Dibenzofuran	U	U	10
2,4-Dinitrotoluene	U	U	10
Diethylphthalate	U	U	10
4-Chlorophenyl-phenylether	U	U	10
Fluorene	U	U	10
4-Nitroaniline	U	U	50
4,6-Dinitro-2-methylphenol	U	U	50
N-Nitrosodiphenylamine (1)	U	U	10
4-Bromophenyl-phenylether	U	U	10
Hexachlorobenzene	U	U	10
Pentachlorophenol	U	U	50
Phenanthrene	U	U	10
Anthracene	U	U	10
Di-n-butylphthalate	U	U	10
Fluoranthene	U	U	10
Pyrene	U	U	10
Butylbenzylphthalate	U	U	10
3,3'-Dichlorobenzidine	U	U	20
Benzo(a)anthracene	U	U	10
Chrysene	U	U	10
bis(2-Ethylhexyl)phthalate	6J	11JB	10
Di-n-octylphthalate	U	U	10
Benzo(b)fluoranthene	U	U	10
Benzo(k)fluoranthene	U	U	10
Benzo(a)pyrene	U	U	10
Indeno(1,2,3-cd)pyrene	U	U	10
Dibenzo(a,h)anthracene	U	U	10
Benzo(g,h,i)perylene	U	U	10

U, J, B, (1) - See Appendix for definition.
Note: Sample detection limit = MDL x dilution factor.

TABLE 5.0
30900-1072
MALCOLM-PIRNIE
SEMI-VOLATILE TENTATIVELY IDENTIFIED COMPOUNDS

Sample Identification: Method Blank >C6884

CAS#	Compound	RT	Estimated Concentration, ug/Kg
	Aldol condensation product	7.18	70,000JA
	Unknown acid ester	6.47	3,400J
	Unknown	8.69	1,900J
	Unknown acid ester	6.32	1,400J
141797	4-methyl-3-pentene-2-one	5.77	1,100J
	Unknown	10.22	790J
	Unknown alkane	5.61	380J
	Unknown	4.69	160J
625332	3-Pentene-2-one	4.34	150J

Sample Identification: BP/PH-5 313-315'

CAS#	Compound	RT	Estimated Concentration, ug/Kg
	Aldol condensation product	7.19	72,000JA
	Unknown acid ester	6.48	3,600J
	Unknown	8.70	2,000J
	Unknown acid ester	6.34	1,900J
	Unknown	10.23	940J
	Unknown C_7 alkene	5.76	760J
	Unknown acid ester	27.94	400J

Sample Identification: Method Blank >C6899

CAS#	Compound	RT	Estimated Concentration, ug/Kg
	Aldol condensation product	7.04	66,000JA
	Unknown acid ester	6.33	3,500J
	Unknown	8.55	1,800J
	Unknown acid ester	6.17	1,300J
	Unknown	10.09	880J
	Unknown acid ester	27.77	530J
141797	4-Methyl-3-pentene-2-one	5.59	250J
	Unknown	31.12	210J

J, A - See Appendix for definition.

TABLE 5.1
30900-1072
MALCOLM-PIRNIE
SEMI-VOLATILE TENTATIVELY IDENTIFIED COMPOUNDS

Sample Identification: Method Blank >C6899 (Continued)

CAS#	Compound	RT	Estimated Concentration, ug/Kg
	Unknown	5.47	180J
	Unknown	10.58	180J
	Unknown alkane	8.88	170J
	Unknown	9.58	140J

Sample Identification: BP/PH-4 283-285' 288-290'

CAS#	Compound	RT	Estimated Concentration, ug/Kg
	Aldol condensation product	7.00	60,000JA
	Aldol condensation product	7.08	11,000JA
	Unknown acid ester	6.39	4,200J
	Unknown	8.57	2,200J
	Unknown	6.18	2,000J
	Unknown acid ester	27.77	1,000J
	Unknown	10.08	950J
	Unknown	5.59	720J
	Unknown alkane	8.88	260J
	Unknown	4.55	220J
	Unknown	10.59	180J
	Unknown alkane	4.78	180J

Sample Identification: Method Blank >C6900

CAS#	Compound	RT	Estimated Concentration, ug/L
	None detected		

Sample Identification: FB 06/05/90

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown	27.76	15J

J, A - See Appendix for definition.

TABLE 5.2
30900-1072
MALCOLM-PIRNIE
SEMI-VOLATILE TENTATIVELY IDENTIFIED COMPOUNDS

Sample Identification: Method Blank >H8705

CAS#	Compound	RT	Estimated Concentration, ug/Kg
	Aldol condensation product	8.65	43,000JA
	Unknown acid ester	10.11	1,200J
	Unknown acid ester	11.60	640J
	Unknown acid ester	7.75	460J
	Unknown acid ester	7.10	200J
	Unknown acid ester	10.42	170J
123795	Hexanedioic acid, dioctyl ester	29.46	160J

Sample Identification: W-39 55-57'

CAS#	Compound	RT	Estimated Concentration, ug/Kg
	Aldol condensation product	8.64	60,000JA
	Unknown acid ester	7.97	2,000J
	Unknown acid ester	10.09	1,500J
	Unknown acid ester	11.57	720J
	Unknown acid ester	7.75	700J
	Unknown acid ester	10.37	330J
123795	Hexanedioic acid, dioctyl ester	29.43	290JB
	Unknown	21.13	270J

Sample Identification: Method Blank >H8706

CAS#	Compound	RT	Estimated Concentration, ug/Kg
	Aldol condensation product	8.62	42,000JA
	Unknown acid ester	7.93	1,400J
	Unknown acid ester	10.11	1,100J
	Unknown acid ester	7.77	1,000J
	Unknown acid ester	11.59	510J
	Unknown acid ester	10.41	300J
	Unknown acid ester	7.10	220J
123795	Hexanedioic acid, dioctyl ester	29.47	140JB

J, A, B - See Appendix for definition.

TABLE 5.3
30900-1072
MALCOLM-PIRNIE
SEMI-VOLATILE TENTATIVELY IDENTIFIED COMPOUNDS

Sample Identification: BP/PH-8 288-290'

CAS#	Compound	RT	Estimated Concentration, ug/Kg
	Aldol condensation product	8.65	65,000JA
	Unknown acid ester	7.97	2,000J
	Unknown acid ester	10.09	1,600J
	Unknown acid ester	7.73	810J
	Unknown acid ester	11.58	750J
	Unknown acid ester	10.37	240J

J, A, B - See Appendix for definition.

Soil

TABLE 6.0
30900-1072
MALCOLM-PIRNIE
EPA TCL PESTICIDES/PCB's

All values are ug/Kg.

	Sample Identification				
Dilution Factor	1.00	1.26	1.00	1.23	
Method Blank I.D.	0511 -B01	0511 -B01	0517 -B04	0517 -B04	
Compound	Method Blank	W-39 55-57'	Method Blank	BP/PH-8 288-290'	Method Detection Limits with no Dilution
alpha-BHC	U	U	U	U	8.0
beta-BHC	U	U	U	U	8.0
delta-BHC	U	U	U	U	8.0
gamma-BHC	U	U	U	U	8.0
Heptachlor	U	U	U	U	8.0
Aldrin	U	U	U	U	8.0
Heptachlor Epoxide	U	U	U	U	8.0
Endosulfan I	U	U	U	U	8.0
Dieldrin	U	U	U	U	16
4,4'-DDE	U	U	U	U	16
Endrin	U	U	U	U	16
Endosulfan II	U	U	U	U	16
4,4'-DDD	U	U	U	U	16
Endosulfan Sulfate	U	U	U	U	16
4,4'-DDT	U	U	U	U	16
Methoxychlor	U	U	U	U	80
Endrin-Ketone	U	U	U	U	16
alpha-Chlordane	U	U	U	U	80
gamma-Chlordane	U	U	U	U	80
Toxaphene	U	U	U	U	160
PCB - 1016	U	U	U	U	80
PCB - 1221	U	U	U	U	80
PCB - 1232	U	U	U	U	80
PCB - 1242	U	U	U	U	80
PCB - 1248	U	U	U	U	80
PCB - 1254	U	U	U	U	160
PCB - 1260	U	U	U	U	160

U - See Appendix for definition.
Note: Sample detection limit = MDL x dilution factor.

TABLE 6.1
30900-1072
MALCOLM-PIRNIE
EPA TCL PESTICIDES/PCB's

All values are ug/Kg.

Sample Identification

Dilution Factor	1.00	1.76	1.00	1.23	
Method Blank I.D.	0601 -B04	0601 -B04	0607 -B02	0607 -B02	
Compound	Method Blank	BP/PH-5 313-315'	Method Blank	BP/PH-4 283-285' 288-290'	Method Detection Limits with no Dilution
alpha-BHC	U	U	U	U	8.0
beta-BHC	U	U	U	U	8.0
delta-BHC	U	U	U	U	8.0
gamma-BHC	U	U	U	U	8.0
Heptachlor	U	1.5J	U	U	8.0
Aldrin	U	U	U	U	8.0
Heptachlor Epoxide	U	U	U	U	8.0
Endosulfan I	U	U	U	U	8.0
Dieldrin	U	U	U	U	16
4,4'-DDE	U	U	U	U	16
Endrin	U	U	U	U	16
Endosulfan II	U	U	U	U	16
4,4'-DDD	U	U	U	U	16
Endosulfan Sulfate	U	U	U	U	16
4,4'-DDT	U	U	U	U	16
Methoxychlor	U	U	U	U	80
Endrin-Ketone	U	U	U	U	16
alpha-Chlordane	U	U	U	U	80
gamma-Chlordane	U	U	U	U	80
Toxaphene	U	U	U	U	160
PCB - 1016	U	U	U	U	80
PCB - 1221	U	U	U	U	80
PCB - 1232	U	U	U	U	80
PCB - 1242	U	U	U	U	80
PCB - 1248	U	U	U	U	80
PCB - 1254	U	U	U	U	160
PCB - 1260	U	U	U	130	160

U, J - See Appendix for definition.
Note: Sample detection limit = MDL x dilution factor.

Aqueous

TABLE 6.2
30900-1072
MALCOLM-PIRNIE
EPA TCL PESTICIDES/PCB's

All values are ug/L.

	Sample Identification		
Dilution Factor	1.0	1.0	
Method Blank I.D.	0607 -B03	0607 -B03	
Compound	Method Blank	FB 06/05/90	Method Detection Limits with no Dilution
alpha-BHC	U	U	0.05
beta-BHC	U	U	0.05
delta-BHC	U	U	0.05
gamma-BHC	U	U	0.05
Heptachlor	U	U	0.05
Aldrin	U	U	0.05
Heptachlor Epoxide	U	U	0.05
Endosulfan I	U	U	0.05
Dieldrin	U	U	0.10
4,4'-DDE	U	U	0.10
Endrin	U	U	0.10
Endosulfan II	U	U	0.10
4,4'-DDD	U	U	0.10
Endosulfan Sulfate	U	U	0.10
4,4'-DDT	U	U	0.10
Methoxychlor	U	U	0.50
Endrin-Ketone	U	U	0.10
alpha-Chlordane	U	U	0.50
gamma-Chlordane	U	U	0.50
Toxaphene	U	U	1.0
PCB - 1016	U	U	0.5
PCB - 1221	U	U	0.5
PCB - 1232	U	U	0.5
PCB - 1242	U	U	0.5
PCB - 1248	U	U	0.5
PCB - 1254	U	U	1.0
PCB - 1260	U	U	1.0

U - See Appendix for definition.
Note: Sample detection limit = MDL x dilution factor.

TABLE 7.0
30900-1072
MALCOLM-PIRNIE
TAL METALS PLUS CYANIDE

All values are mg/Kg dry basis.

Parameter	W-39 55-57'	BP/PH-8 288-290'	BP/PH-5 313-315'	BP/PH-4 283-285' 288-290'
Aluminum	735E*	576E*	806E*	532E*
Antimony	3.1U	2.7U	2.4U	2.9B
Arsenic	3.0N	2.8N	3.2N	1.1BN
Barium	2.9B	4.0B	6.4B	4.7B
Beryllium	0.24U	0.20U	0.18U	0.16U
Cadmium	0.48U	0.41U	0.37U	0.32U
Calcium	36.9BE	40.9BE	277BE	164BE
Chromium	18.1*	5.2*	10.1*	4.0*
Cobalt	0.55B	0.90B	0.94B	0.32U
Copper	4.3B	8.7	6.1	3.6B
Iron	5,400	15,500	10,900	3,900
Lead	2.5S	2.9	5.3S	3.8
Magnesium	9.2B	15.9B	53.1B	49.7B
Manganese	6.3	1.6B	18.1	11.1
Mercury	0.11U	0.12U	0.09U	0.11U
Nickel	1.4U	1.2U	1.2B	2.0B
Potassium	217B	117B	137B	86.2U
Selenium	0.24UN	0.21UNW	0.23BNW	0.34BN
Silver	1.2U	1.0U	0.92U	0.79U
Sodium	213B	163B	208B	92.7B
Thallium	0.48U	0.43U	0.42UW	0.45U
Vanadium	5.6B	6.0B	12.9	4.0B
Zinc	4.0B	3.3U	5.3	9.8
Cyanide	0.65U	0.62U	0.60U	0.63U

B, E, N, S, U, W, * - See Metals Appendix for definition.

TABLE 7.1
30900-1072
MALCOLM-PIRNIE
TAL METALS PLUS CYANIDE

All values are ug/L.

Parameter	FB 06/05/90
Aluminum	45.9B
Antimony	14.6B
Arsenic	1.0U
Barium	4.0U
Beryllium	1.0U
Cadmium	2.0U
Calcium	88.3B
Chromium	2.0U
Cobalt	2.0U
Copper	14.0U
Iron	47.0U
Lead	1.0U
Magnesium	35.9B
Manganese	1.0U
Mercury	0.20U
Nickel	6.0U
Potassium	545U
Selenium	1.0U
Silver	5.0U
Sodium	260B
Thallium	2.0U
Vanadium	2.0U
Zinc	16.0U
Cyanide	10.0U

B, U - See Metals Appendix for definition.

TABLE 8.0
30900-1072
MALCOLM-PIRNIE
CLASSICAL CHEMISTRY

All values are mg/Kg dry basis unless noted.

Sample Identification	Petroleum Hydrocarbons
W-39 55-57'	25.2
BP/PH-8 288-290'	27.4
BP/PH-5 313-315'	60.3
BP/PH-4 283-285' 288-290'	46.2
FB 06/05/90	2.5*

*mg/L

APPENDIX

U - Indicates that the compound was analyzed for but not detected.

J - Indicates that the compound was analyzed for and determined to be present in the sample. The mass spectrum of the compound meets the identification criteria of the method. The concentration listed is an estimated value, which is less than the specified minimum detection limit but is greater than zero.

B - This flag is used when the analyte is found in the blanks as well as the sample. It indicates possible sample contamination and warns the data user to use caution when applying the results of this analyte.

N - Indicates that the compound was analyzed for but not requested as an analyte. Value will not be listed on tabular result sheet.

X - Matrix spike compound.

(1) - Cannot be separated from diphenylamine.

(2) - Decomposes to azobenzene. Measured and calibrated as azobenzene.

A - This flag indicates that a TIC is a suspected aldol condensation product.

E - Indicates that it exceeds calibration curve range.

D - This flag identifies all compounds identified in an analysis at a secondary dilution factor.

APPENDIX/METALS DATA

C - Concentration qualifiers

U - Indicates analyte result less than instrument detection limit (IDL)

B - Indicates analyte result between IDL and contract required detection limit (CRDL)

Q - QC qualifiers

E - Reported value is estimated because of the presence of interference

M - Duplicate injection precision not met

N - Spiked sample recovery not within control limits

S - The reported value was determined by the method of standard additions (MSA)

W - Post-digest spike recovery furnace analysis was out of 85-115 percent control limit, while sample absorbance was less than 50 percent of spike absorbance

* - Duplicate analysis not within control limit

+ - Correlation coefficient for MSA is less than 0.995

M - Method codes

P - ICP

A - Flame AA

F - Furnace AA

CV - Cold vapor AA (manual)

C - Cyanide

NR - Not Required

TABLE 1.0
30900-1119
MALCOLM-PIRNIE
EPA TCL VOLATILE ORGANICS

Aqueous

All values are ug/L.

	Sample Identification			
Dilution Factor	1.0	1.0	1.0	
Method Blank I.D.	>A1276	>A1276	>A1276	
Compound	Method Blank	W-32	TB-SDG# 6/5-14	Method Detection Limits with no Dilution
Chloromethane	U	U	U	10
Bromomethane	U	U	U	10
Vinyl Chloride	U	U	U	10
Chloroethane	U	U	U	10
Methylene Chloride	1J	1JB	2JB	5
Acetone	U	7J	4J	10
Carbon Disulfide	U	U	U	5
1,1-Dichloroethene	U	U	U	5
1,1-Dichloroethane	U	U	U	5
1,2-Dichloroethene (total)	U	U	U	5
Chloroform	U	U	U	5
1,2-Dichloroethane	U	U	U	5
2-Butanone	U	U	U	10
1,1,1-Trichloroethane	U	2J	3J	5
Carbon Tetrachloride	U	U	U	5
Vinyl Acetate	U	U	U	10
Bromodichloromethane	U	U	U	5
1,2-Dichloropropane	U	U	U	5
cis-1,3-Dichloropropene	U	U	U	5
Trichloroethene	U	U	U	5
Dibromochloromethane	U	U	U	5
1,1,2-Trichloroethane	U	U	U	5
Benzene	U	U	U	5
trans-1,3-Dichloropropene	U	U	U	5
Bromoform	U	U	U	5
4-Methyl-2-pentanone	U	U	U	10
2-Hexanone	U	U	U	10
Tetrachloroethene	U	U	U	5
1,1,2,2-Tetrachloroethane	U	U	U	5
Toluene	U	U	U	5
Chlorobenzene	U	U	U	5
Ethylbenzene	U	U	U	5
Styrene	U	U	U	5
Xylene (total)	U	U	U	5

U, J, B - See Appendix for definition.
Note: Sample detection limit = MDL x dilution factor.

TABLE 1.1
30900-1119
MALCOLM-PIRNIE
EPA TCL VOLATILE ORGANICS

Aqueous

All values are ug/L.

	Sample Identification					
Dilution Factor	1.0	100.0	50.0	100.0	100.0	
Method Blank I.D.	>A1292	>A1292	>A1292	>A1292	>A1292	
Compound	Method Blank	W-35	W-36	W-35 MS	W-35 MSD	Method Detection Limits with no Dilution
Chloromethane	U	U	U	U	U	10
Bromomethane	U	U	U	U	U	10
Vinyl Chloride	U	U	U	U	U	10
Chloroethane	U	U	U	U	U	10
Methylene Chloride	2J	150JB	110JB	240JB	400JB	5
Acetone	5J	590JB	430JB	870JB	1,500B	10
Carbon Disulfide	U	U	U	U	U	5
1,1-Dichloroethene	U	U	U	5,100X	5,200X	5
1,1-Dichloroethane	U	U	U	U	U	5
1,2-Dichloroethene (total)	U	U	U	U	U	5
Chloroform	U	U	U	U	U	5
1,2-Dichloroethane	U	U	U	U	U	5
2-Butanone	U	U	U	U	U	10
1,1,1-Trichloroethane	U	220J	85J	U	U	5
Carbon Tetrachloride	U	U	U	U	U	5
Vinyl Acetate	U	U	U	U	U	10
Bromodichloromethane	U	U	U	U	U	5
1,2-Dichloropropane	U	U	U	U	U	5
cis-1,3-Dichloropropene	U	U	U	U	U	5
Trichloroethene	U	U	U	5,100X	5,000X	5
Dibromochloromethane	U	U	U	U	U	5
1,1,2-Trichloroethane	U	U	U	U	U	5
Benzene	U	680	530	5,900X	5,800X	5
trans-1,3-Dichloropropene	U	U	U	U	U	5
Bromoform	U	U	U	U	U	5
4-Methyl-2-pentanone	U	U	U	U	U	10
2-Hexanone	U	U	U	U	U	10
Tetrachloroethene	U	U	U	U	U	5
1,1,2,2-Tetrachloroethane	U	U	U	U	U	5
Toluene	U	11,000	6,800	16,000X	15,000X	5
Chlorobenzene	U	U	U	5,200X	4,600X	5
Ethylbenzene	U	2,100	1,500	2,200	2,100	5
Styrene	U	U	U	U	U	5
Xylene (total)	U	12,000	8,900	13,000	12,000	5

U, J, B, X - See Appendix for definition.
Note: Sample detection limit = MDL x dilution factor.

Aqueous

TABLE 1.2
30900-1119
MALCOLM-PIRNIE
EPA TCL VOLATILE ORGANICS

All values are ug/L.

	Sample Identification				
Dilution Factor	1.0	100.0	1.0	100.0	
Method Blank I.D.	>A1310	>A1310	>A1310	>A1310	
Compound	Method Blank	W-31	W-29	W-28	Method Detection Limits with no Dilution
Chloromethane	U	U	U	U	10
Bromomethane	U	U	U	U	10
Vinyl Chloride	U	U	U	U	10
Chloroethane	U	U	U	U	10
Methylene Chloride	2J	370JB	U	U	5
Acetone	17	1,500B	8JB	1,600B	10
Carbon Disulfide	U	U	U	U	5
1,1-Dichloroethene	U	U	U	U	5
1,1-Dichloroethane	U	U	U	U	5
1,2-Dichloroethene (total)	U	U	U	U	5
Chloroform	U	U	U	U	5
1,2-Dichloroethane	U	U	U	U	5
2-Butanone	7J	290JB	U	U	10
1,1,1-Trichloroethane	U	U	U	U	5
Carbon Tetrachloride	U	U	U	U	5
Vinyl Acetate	U	U	U	U	10
Bromodichloromethane	U	U	U	U	5
1,2-Dichloropropane	U	U	U	U	5
cis-1,3-Dichloropropene	U	U	U	U	5
Trichloroethene	U	U	U	U	5
Dibromochloromethane	U	U	U	U	5
1,1,2-Trichloroethane	U	U	U	U	5
Benzene	U	1,500	U	450J	5
trans-1,3-Dichloropropene	U	U	U	U	5
Bromoform	U	U	U	U	5
4-Methyl-2-pentanone	U	U	U	U	10
2-Hexanone	3J	210JB	U	U	10
Tetrachloroethene	U	U	3J	U	5
1,1,2,2-Tetrachloroethane	U	U	U	U	5
Toluene	U	12,000	U	8,400	5
Chlorobenzene	U	U	U	U	5
Ethylbenzene	U	2,400	U	3,000	5
Styrene	U	U	U	U	5
Xylene (total)	U	11,000	U	16,000	5

U, J, B - See Appendix for definition.
Note: Sample detection limit = MDL x dilution factor.

Aqueous

TABLE 1.3
30900-1119
MALCOLM-PIRNIE
EPA TCL VOLATILE ORGANICS

All values are ug/L.

	Sample Identification		
Dilution Factor	1.0	1.0	
Method Blank I.D.	>G5138	>G5138	
Compound	Method Blank	FB-SDG# 6/5-14	Method Detection Limits with no Dilution
Chloromethane	U	U	10
Bromomethane	U	U	10
Vinyl Chloride	U	U	10
Chloroethane	U	U	10
Methylene Chloride	3J	8B	5
Acetone	6J	4JB	10
Carbon Disulfide	U	U	5
1,1-Dichloroethene	U	U	5
1,1-Dichloroethane	U	U	5
1,2-Dichloroethene (total)	U	U	5
Chloroform	U	U	5
1,2-Dichloroethane	U	U	5
2-Butanone	U	U	10
1,1,1-Trichloroethane	U	U	5
Carbon Tetrachloride	U	U	5
Vinyl Acetate	U	U	10
Bromodichloromethane	U	U	5
1,2-Dichloropropane	U	U	5
cis-1,3-Dichloropropene	U	U	5
Trichloroethene	U	U	5
Dibromochloromethane	U	U	5
1,1,2-Trichloroethane	U	U	5
Benzene	U	U	5
trans-1,3-Dichloropropene	U	U	5
Bromoform	U	U	5
4-Methyl-2-pentanone	U	U	10
2-Hexanone	U	U	10
Tetrachloroethene	U	U	5
1,1,2,2-Tetrachloroethane	U	U	5
Toluene	U	U	5
Chlorobenzene	U	U	5
Ethylbenzene	U	U	5
Styrene	U	U	5
Xylene (total)	U	U	5

U, J, B - See Appendix for definition.
Note: Sample detection limit = MDL x dilution factor.

TABLE 2.0
30900-1119
MALCOLM-PIRNIE
VOLATILE TENTATIVELY IDENTIFIED COMPOUNDS

Sample Identification: Method Blank >A1276

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown alkane	7.79	6J

Sample Identification: W-32

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown alkane	7.80	6JB

Sample Identification: TB-SDG#6/5-14

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown alkane	7.80	6JB

Sample Identification: Method Blank >A1292

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown alkane	7.80	6J

Sample Identification: W-35

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown C_2 alkyl benzene	19.86	110J
	Unknown C_2 alkyl benzene	20.73	53J
	Unknown C_3 alkyl benzene	23.19	34J
	Unknown C_3 alkyl benzene	22.43	29J
	Unknown C_3 alkyl benzene	24.38	16J
	Unknown cycloalkane	9.21	11J
	Unknown C_3 alkyl benzene	23.92	10J
	Unknown alkane	7.84	9JB

J, B - See Appendix for definition.

TABLE 2.1
30900-1119
MALCOLM-PIRNIE
VOLATILE TENTATIVELY IDENTIFIED COMPOUNDS

Sample Identification: W-36

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown C_3 alkyl benzene	22.41	2,900J
	Unknown C_3 alkyl benzene	24.40	1,200J
	Unknown C_5 alkane	5.29	1,100J
	Unknown cycloalkane	9.19	1,100J
	Unknown C_3 alkyl benzene	22.54	1,000J
	Unknown C_3 alkyl benzene	23.94	990J
	Unknown C_3 alkyl benzene	22.93	920J
	Unknown alkane	6.85	880J
	Unknown alkane	7.83	750JB
	Unknown C_6 alkene	10.66	630J

Sample Identification: Method Blank >A1310

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown alkane	7.87	6J

Sample Identification: W-31

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown C_2 alkyl benzene	19.87	11,000J
	Unknown C_2 alkyl benzene	20.75	5,100J
	Unknown C_3 alkyl benzene	23.22	3,500J
	Unknown C_3 alkyl benzene	22.44	3,100J
	Unknown cycloalkane	9.19	1,300J
	Unknown C_3 alkyl benzene	24.43	1,200J
	Unknown alkane	7.86	1,100JB
	Unknown C_3 alkyl benzene	23.97	1,100J
	Unknown C_3 alkyl benzene	22.54	1,100J

J, B - See Appendix for definition.

TABLE 2.2
30900-1119
MALCOLM-PIRNIE
VOLATILE TENTATIVELY IDENTIFIED COMPOUNDS

Sample Identification: W-29

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown alkane	7.78	6JB

Sample Identification: W-28

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown C_2 alkyl benzene	19.81	15,000J
	Unknown C_2 alkyl benzene	20.69	7,100J
	Unknown C_3 alkyl benzene	23.16	6,800J
	Unknown C_3 alkyl benzene	22.38	6,300J
	Unknown C_3 alkyl benzene	24.36	2,800J
	Unknown C_3 alkyl benzene	22.51	2,200J
	Unknown C_3 alkyl benzene	23.91	1,900J
	Unknown C_3 alkyl benzene	22.90	1,800J
	Unknown alkane	10.63	1,500J
	Unknown cycloalkane	10.24	1,200J

Sample Identification: Method Blank >G5138

CAS#	Compound	RT	Estimated Concentration, ug/L
	None detected		

Sample Identification: FB-SDG#6/5-14

CAS#	Compound	RT	Estimated Concentration, ug/L
	None detected		

J, B - See Appendix for definition.

TABLE 3.0
30900-1119
MALCOLM-PIRNIE
EPA TCL SEMI-VOLATILE ORGANICS

All values are ug/L.

	Sample Identification						
Dilution Factor	1.0	1.0	2.0	2.0	2.0	2.0	
Method Blank I.D.	>C6763	>C6763	>C6763	>C6763	>C6763	>C6763	
Compound	Method Blank	FB-SDG# 6/5-14	W-36	W-35	W-35 MS	W-35 MSD	Method Detection Limits with no Dilution
Phenol	U	U	U	U	UX	UX	10
bis(2-Chloroethyl)ether	U	U	U	U	U	U	10
2-Chlorophenol	U	U	U	U	UX	UX	10
1,3-Dichlorobenzene	U	U	U	U	U	U	10
1,4-Dichlorobenzene	U	U	U	U	59X	70X	10
Benzyl alcohol	U	U	U	U	U	U	10
1,2-Dichlorobenzene	U	U	U	U	U	U	10
2-Methylphenol	U	U	U	U	U	U	10
bis(2-Chloroisopropyl)ether	U	U	U	U	U	U	10
4-Methylphenol	U	U	U	U	U	U	10
N-Nitroso-di-n-propylamine	U	U	U	U	92X	94X	10
Hexachloroethane	U	U	U	U	U	U	10
Nitrobenzene	U	U	U	U	U	U	10
Isophorone	U	U	U	U	U	U	10
2-Nitrophenol	U	U	U	U	U	U	10
2,4-Dimethylphenol	U	U	U	U	U	U	10
Benzoic acid	U	U	150	U	95J	97J	50
bis(2-Chloroethoxy)methane	U	U	U	U	U	U	10
2,4-Dichlorophenol	U	U	U	U	U	U	10
1,2,4-Trichlorobenzene	U	U	U	U	66X	72X	10
Naphthalene	U	U	430	550	470	450	10
4-Chloroaniline	U	U	U	U	U	U	10
Hexachlorobutadiene	U	U	U	U	U	U	10
4-Chloro-3-methylphenol	U	U	U	U	UX	UX	10
2-Methylnaphthalene	U	U	170	200	190	190	10
Hexachlorocyclopentadiene	U	U	U	U	U	U	10
2,4,6-Trichlorophenol	U	U	U	U	U	U	10
2,4,5-Trichlorophenol	U	U	U	U	U	U	50
2-Chloronaphthalene	U	U	U	U	U	U	10
2-Nitroaniline	U	U	U	U	U	U	50
Dimethylphthalate	U	U	U	U	U	U	10
Acenaphthylene	U	U	U	U	U	U	10
2,6-Dinitrotoluene	U	U	U	U	U	U	10

U, J, B, X - See Appendix for definition.
Note: Sample detection limit = MDL x dilution factor.

TABLE 3.0
30900-1119
MALCOLM-PIRNIE
EPA TCL SEMI-VOLATILE ORGANICS

All values are ug/L.

	Sample Identification						
Dilution Factor	1.0	1.0	2.0	2.0	2.0	2.0	
Method Blank I.D.	>C6763	>C6763	>C6763	>C6763	>C6763	>C6763	
Compound	Method Blank	FB-SDG# 6/5-14	W-36	W-35	W-35 MS	W-35 MSD	Method Detection Limits with no Dilution
3-Nitroaniline	U	U	U	U	U	U	50
Acenaphthene	U	U	U	U	86X	87X	10
2,4-Dinitrophenol	U	U	U	U	U	U	50
4-Nitrophenol	U	U	U	U	82JX	140X	50
Dibenzofuran	U	U	U	U	U	U	10
2,4-Dinitrotoluene	U	U	U	U	60X	62X	10
Diethylphthalate	U	U	U	U	U	U	10
4-Chlorophenyl-phenylether	U	U	U	U	U	U	10
Fluorene	U	U	U	U	U	U	10
4-Nitroaniline	U	U	U	U	U	U	50
4,6-Dinitro-2-methylphenol	U	U	U	U	U	U	50
N-Nitrosodiphenylamine (1)	U	U	U	U	U	U	10
4-Bromophenyl-phenylether	U	U	U	U	U	U	10
Hexachlorobenzene	U	U	U	U	U	U	10
Pentachlorophenol	U	U	U	U	100X	110X	50
Phenanthrene	U	U	U	U	U	U	10
Anthracene	U	U	U	U	U	U	10
Di-n-butylphthalate	U	U	U	U	U	U	10
Fluoranthene	U	U	U	U	U	U	10
Pyrene	U	U	U	U	150X	130X	10
Butylbenzylphthalate	U	U	36	U	U	U	10
3,3'-Dichlorobenzidine	U	U	U	U	U	U	20
Benzo(a)anthracene	U	U	U	U	U	U	10
Chrysene	U	U	U	U	U	U	10
bis(2-Ethylhexyl)phthalate	19	11B	62B	23B	21B	15JB	10
Di-n-octylphthalate	U	U	U	U	U	U	10
Benzo(b)fluoranthene	U	U	U	U	U	U	10
Benzo(k)fluoranthene	U	U	U	U	U	U	10
Benzo(a)pyrene	U	U	U	U	U	U	10
Indeno(1,2,3-cd)pyrene	U	U	U	U	U	U	10
Dibenzo(a,h)anthracene	U	U	U	U	U	U	10
Benzo(g,h,i)perylene	U	U	U	U	U	U	10

U, J, B, (1) - See Appendix for definition.
Note: Sample detection limit = MDL x dilution factor.

TABLE 3.1
30900-1119
MALCOLM-PIRNIE
EPA TCL SEMI-VOLATILE ORGANICS

All values are ug/L.

	Sample Identification				
Dilution Factor	1.0	1.1	1.0	4.0	
Method Blank I.D.	>C6770	>C6770	>C6770	>C6770	
Compound	Method Blank	W-29	W-28	W-31	Method Detection Limits with no Dilution
Phenol	U	U	U	U	10
bis(2-Chloroethyl)ether	U	U	U	U	10
2-Chlorophenol	U	U	U	U	10
1,3-Dichlorobenzene	U	U	U	U	10
1,4-Dichlorobenzene	U	U	U	U	10
Benzyl alcohol	U	U	U	U	10
1,2-Dichlorobenzene	U	U	U	U	10
2-Methylphenol	U	U	U	U	10
bis(2-Chloroisopropyl)ether	U	U	U	U	10
4-Methylphenol	U	U	U	U	10
N-Nitroso-di-n-propylamine	U	U	U	U	10
Hexachloroethane	U	U	U	U	10
Nitrobenzene	U	U	U	U	10
Isophorone	U	U	U	U	10
2-Nitrophenol	U	U	U	U	10
2,4-Dimethylphenol	U	U	U	U	10
Benzoic acid	U	U	U	U	50
bis(2-Chloroethoxy)methane	U	U	U	U	10
2,4-Dichlorophenol	U	U	U	U	10
1,2,4-Trichlorobenzene	U	U	U	U	10
Naphthalene	U	U	U	840	10
4-Chloroaniline	U	U	U	U	10
Hexachlorobutadiene	U	U	U	U	10
4-Chloro-3-methylphenol	U	U	U	U	10
2-Methylnaphthalene	U	U	U	540	10
Hexachlorocyclopentadiene	U	U	U	U	10
2,4,6-Trichlorophenol	U	U	U	U	10
2,4,5-Trichlorophenol	U	U	U	U	50
2-Chloronaphthalene	U	U	U	U	10
2-Nitroaniline	U	U	U	U	50
Dimethylphthalate	U	U	U	U	10
Acenaphthylene	U	U	U	U	10
2,6-Dinitrotoluene	U	U	U	U	10

U - See Appendix for definition.
Note: Sample detection limit = MDL x dilution factor.

TABLE 3.1
30900-1119
MALCOLM-PIRNIE
EPA TCL SEMI-VOLATILE ORGANICS

All values are ug/L.

	Sample Identification				
Dilution Factor	1.0	1.1	1.0	4.0	
Method Blank I.D.	>C6770	>C6770	>C6770	>C6770	
Compound	Method Blank	W-29	W-28	W-31	Method Detection Limits with no Dilution
3-Nitroaniline	U	U	U	U	50
Acenaphthene	U	U	4J	U	10
2,4-Dinitrophenol	U	U	U	U	50
4-Nitrophenol	U	U	U	U	50
Dibenzofuran	U	U	2J	U	10
2,4-Dinitrotoluene	U	U	U	U	10
Diethylphthalate	U	U	U	U	10
4-Chlorophenyl-phenylether	U	U	U	U	10
Fluorene	U	U	5J	U	10
4-Nitroaniline	U	U	U	U	50
4,6-Dinitro-2-methylphenol	U	U	U	U	50
N-Nitrosodiphenylamine (1)	U	U	U	U	10
4-Bromophenyl-phenylether	U	U	U	U	10
Hexachlorobenzene	U	U	U	U	10
Pentachlorophenol	U	U	U	U	50
Phenanthrene	U	U	8J	U	10
Anthracene	U	U	U	U	10
Di-n-butylphthalate	U	U	U	U	10
Fluoranthene	U	U	U	U	10
Pyrene	U	U	U	U	10
Butylbenzylphthalate	U	U	U	U	10
3,3'-Dichlorobenzidine	U	U	U	U	20
Benzo(a)anthracene	U	U	U	U	10
Chrysene	U	U	U	U	10
bis(2-Ethylhexyl)phthalate	5J	8JB	21B	20JB	10
Di-n-octylphthalate	U	U	10	U	10
Benzo(b)fluoranthene	U	U	U	U	10
Benzo(k)fluoranthene	U	U	U	U	10
Benzo(a)pyrene	U	U	U	U	10
Indeno(1,2,3-cd)pyrene	U	U	U	U	10
Dibenzo(a,h)anthracene	U	U	U	U	10
Benzo(g,h,i)perylene	U	U	U	U	10

U, J, B, (1) - See Appendix for definition.
Note: Sample detection limit = MDL x dilution factor.

TABLE 3.2
30900-1119
MALCOLM-PIRNIE
EPA TCL SEMI-VOLATILE ORGANICS

All values are ug/L.

	Sample Identification			
Dilution Factor	1.0	1.1	1.1	
Method Blank I.D.	>C6823	>C6823	>C6823	
Compound	Method Blank	W-29RE	W-28RE	Method Detection Limits with no Dilution
Phenol	U	U	U	10
bis(2-Chloroethyl)ether	U	U	U	10
2-Chlorophenol	U	U	U	10
1,3-Dichlorobenzene	U	U	U	10
1,4-Dichlorobenzene	U	U	U	10
Benzyl alcohol	U	U	U	10
1,2-Dichlorobenzene	U	U	U	10
2-Methylphenol	U	U	U	10
bis(2-Chloroisopropyl)ether	U	U	U	10
4-Methylphenol	U	U	U	10
N-Nitroso-di-n-propylamine	U	U	U	10
Hexachloroethane	U	U	U	10
Nitrobenzene	U	U	U	10
Isophorone	U	U	U	10
2-Nitrophenol	U	U	U	10
2,4-Dimethylphenol	U	U	U	10
Benzoic acid	U	U	U	50
bis(2-Chloroethoxy)methane	U	U	U	10
2,4-Dichlorophenol	U	U	U	10
1,2,4-Trichlorobenzene	U	U	U	10
Naphthalene	U	U	U	10
4-Chloroaniline	U	U	U	10
Hexachlorobutadiene	U	U	U	10
4-Chloro-3-methylphenol	U	U	U	10
2-Methylnaphthalene	U	U	U	10
Hexachlorocyclopentadiene	U	U	U	10
2,4,6-Trichlorophenol	U	U	U	10
2,4,5-Trichlorophenol	U	U	U	50
2-Chloronaphthalene	U	U	U	10
2-Nitroaniline	U	U	U	50
Dimethylphthalate	U	U	U	10
Acenaphthylene	U	U	U	10
2,6-Dinitrotoluene	U	U	U	10

U - See Appendix for definition.
Note: Sample detection limit = MDL x dilution factor.

TABLE 3.2
30900-1119
MALCOLM-PIRNIE
EPA TCL SEMI-VOLATILE ORGANICS

All values are ug/L.

	Sample Identification			
Dilution Factor	1.0	1.1	1.1	
Method Blank I.D.	>C6823	>C6823	>C6823	
Compound	Method Blank	W-29RE	W-28RE	Method Detection Limits with no Dilution
3-Nitroaniline	U	U	U	50
Acenaphthene	U	U	3J	10
2,4-Dinitrophenol	U	U	U	50
4-Nitrophenol	U	U	U	50
Dibenzofuran	U	U	U	10
2,4-Dinitrotoluene	U	U	U	10
Diethylphthalate	U	U	U	10
4-Chlorophenyl-phenylether	U	U	U	10
Fluorene	U	U	5J	10
4-Nitroaniline	U	U	U	50
4,6-Dinitro-2-methylphenol	U	U	U	50
N-Nitrosodiphenylamine (1)	U	U	U	10
4-Bromophenyl-phenylether	U	U	U	10
Hexachlorobenzene	U	U	U	10
Pentachlorophenol	U	U	U	50
Phenanthrene	U	U	6J	10
Anthracene	U	U	U	10
Di-n-butylphthalate	U	U	U	10
Fluoranthene	U	U	U	10
Pyrene	U	U	U	10
Butylbenzylphthalate	U	U	U	10
3,3'-Dichlorobenzidine	U	U	U	20
Benzo(a)anthracene	U	U	U	10
Chrysene	U	U	U	10
bis(2-Ethylhexyl)phthalate	3J	19B	20B	10
Di-n-octylphthalate	U	U	9J	10
Benzo(b)fluoranthene	U	U	U	10
Benzo(k)fluoranthene	U	U	U	10
Benzo(a)pyrene	U	U	U	10
Indeno(1,2,3-cd)pyrene	U	U	U	10
Dibenzo(a,h)anthracene	U	U	U	10
Benzo(g,h,i)perylene	U	U	U	10

U, J, B, (1) - See Appendix for definition.
Note: Sample detection limit = MDL x dilution factor.

TABLE 4.0
30900-1119
MALCOLM-PIRNIE
SEMI-VOLATILE TENTATIVELY IDENTIFIED COMPOUNDS

Sample Identification: Method Blank >C6763

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown carboxylic acid	28.77	28J

Sample Identification: FB-SDG#6/5-14

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown carboxylic acid	28.77	16JB

Sample Identification: W-36

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown methyl ethyl benzene	11.05	1,400J
	Unknown methyl ethyl benzene	10.36	1,300J
	Unknown methyl ethyl benzene	11.63	530J
	Unknown dimethyl benzoic acid	17.23	480J
	Unknown aromatic	11.89	450J
	Unknown ethyl methyl benzene	10.75	450J
	Unknown C_3 alkyl benzene	10.50	440J
	Unknown aromatic	16.17	270J
	Unknown aromatic	10.17	200J
	Unknown methyl propyl benzene	12.18	190J
	Unknown phenyl propanedione	12.44	190J
	Unknown dimethyl ethyl benzene	12.67	180J
	Unknown	15.70	170J
	Unknown dimethyl benzoic acid	17.31	170J
	Unknown trimethyl benzoic acid	18.19	160J
	Unknown	16.97	140J
	Unknown ethyl dimethyl benzene	12.30	130J
	Unknown dihydromethyl indene	14.02	120J
	Unknown	16.72	120J
	Unknown methyl benzoic acid	16.04	120J

J, B - See Appendix for definition.

TABLE 4.1
30900-1119
MALCOLM-PIRNIE
SEMI-VOLATILE TENTATIVELY IDENTIFIED COMPOUNDS

Sample Identification: W-35

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown methyl ethyl benzene	10.58	1,300J
	Unknown methyl ethyl benzene	9.88	1,200J
	Unknown dimethyl benzoic acid	16.82	820J
	Unknown C_3 alkyl benzene	11.15	500J
	Unknown aromatic	11.41	480J
	Unknown C_3 alkyl benzene	10.27	430J
	Unknown C_3 alkyl benzene	10.02	410J
	Unknown	17.53	370J
	Unknown	16.45	320J
	Unknown aromatic	15.67	290J
	Unknown	11.97	270J
	Unknown	15.26	260J
	Unknown C_4 alkyl benzene	11.82	250J
	Unknown aromatic	16.22	210J
	Unknown aromatic	9.70	190J
	Unknown methyl benzoic acid	15.55	180J
	Unknown dimethyl benzoic acid	17.10	160J
	Unknown propyl methyl benzene	11.70	150J
	Unknown dimethyl ethyl benzene	12.19	150J
	Unknown	27.75	140J

Sample Identification: Method Blank >C6770

CAS#	Compound	RT	Estimated Concentration, ug/L
	None detected		

Sample Identification: W-29

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown carboxylic acid	28.75	13J

J - See Appendix for definition.

TABLE 4.2
30900-1119
MALCOLM-PIRNIE
SEMI-VOLATILE TENTATIVELY IDENTIFIED COMPOUNDS

Sample Identification: W-28

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown ethyl methyl benzene	10.69	1,100J
	Unknown C_3 alkyl benzene	11.32	1,000J
	Unknown methyl ethyl benzene	11.94	850J
	Unknown dimethyl ethyl benzene	12.57	700J
	Unknown C_3 alkyl benzene	10.81	670J
	Unknown ethyl methyl benzene	11.04	650J
	Unknown propyl methyl benzene	12.45	640J
	Unknown aromatic	10.46	630J
	Unknown dimethyl ethyl benzene	12.96	600J
	Unknown alkane	13.21	470J
	Unknown dimethyl ethyl benzene	13.13	450J
	Unknown aromatic	12.20	430J
	Unknown C_4 alkyl benzene	13.68	420J
	Unknown alkane	6.64	280J
	Unknown aromatic	12.84	270J
	Unknown dimethyl ethyl benzene	13.49	260J
	Unknown aromatic	14.36	230J
	Unknown aromatic	14.13	210J
	Unknown alkane	19.32	190J
	Unknown	16.80	170J

Sample Identification: W-31

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown C_3 alkyl benzene	11.29	2,900J
	Unknown ethyl methyl benzene	10.61	2,800J
	Unknown C_3 alkyl benzene	11.90	1,200J
	Unknown dimethyl ethyl benzene	12.55	1,100J
	Unknown methyl propyl benzene	12.41	1,000J
	Unknown ethyl methyl benzene	10.75	1,000J
	Unknown ethyl methyl benzene	11.00	850J
	Unknown aromatic	10.43	740J
	Unknown dimethyl ethyl benzene	12.92	700J
	Unknown dimethyl ethyl benzene	13.06	700J
	Unknown aromatic	12.19	590J
	Unknown	17.26	460J

J - See Appendix for definition.

TABLE 4.3
30900-1119
MALCOLM-PIRNIE
SEMI-VOLATILE TENTATIVELY IDENTIFIED COMPOUNDS

Sample Identification: W-31 (Continued)

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown	17.36	460J
	Unknown PAH	18.61	450J
	Unknown	18.76	420J
	Unknown	18.43	330J
	Unknown	17.49	320J
	Unknown aromatic	18.53	320J
	Unknown dihydro methyl indene	14.31	300J
	Unknown dihydro methyl indene	14.09	280J

Sample Identification: Method Blank >C6823

CAS#	Compound	RT	Estimated Concentration, ug/L
	None detected		

Sample Identification: W-29RE

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown carboxylic acid	29.03	19J

Sample Identification: W-28RE

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown dihydro methyl indene	14.35	2,800J
	Unknown dihydro methyl indene	14.12	2,300J
	Unknown ethyl methyl benzene	10.68	2,200J
	Unknown branched alkane	16.50	2,000J
	Unknown aromatic	16.62	2,000J
	Unknown	16.79	1,800J
	Unknown trimethyl benzene	11.31	1,600J
	Unknown	15.78	1,500J

J - See Appendix for definition.

TABLE 4.4
30900-1119
MALCOLM-PIRNIE
SEMI-VOLATILE TENTATIVELY IDENTIFIED COMPOUNDS

Sample Identification: W-28RE (Continued)

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown ethyl methyl benzene	11.93	1,300J
	Unknown	17.05	1,300J
	Unknown dimethyl ethyl naphthalene	12.58	1,200J
	Unknown	17.30	1,200J
	Unknown propyl methyl benzene	12.44	1,100J
	Unknown aromatic	14.43	1,000J
	Unknown ethyl methyl benzene	10.80	960J
	Unknown dimethyl dihydro indene	15.13	940J
	Unknown	17.63	880J
	Unknown dimethyl ethyl benzene	12.97	870J
	Unknown aromatic	17.14	860J
	Unknown ethyl methyl benzene	11.03	850J

J - See Appendix for definition.

Aqueous

TABLE 5.0
30900-1119
MALCOLM-PIRNIE
EPA TCL PESTICIDES/PCB's

All values are ug/L.

Sample Identification

Dilution Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Method Blank I.D.	0517 -B07	0517 -B07	0517 -B07	0517 -B07	0517 -B07	0517 -B07	0517 -B07	
Compound	Method Blank	FB-SDG# 6/5-14	W-32	W-36	W-35	W-35 MS	W-35 MSD	Method Detection Limits with no Dilution
alpha-BHC	U	U	U	U	U	U	U	0.05
beta-BHC	U	U	U	U	U	U	U	0.05
delta-BHC	U	U	U	U	U	U	U	0.05
gamma-BHC	U	U	U	U	U	0.23X	0.25X	0.05
Heptachlor	U	U	U	U	U	0.14X	0.12X	0.05
Aldrin	U	U	U	U	U	0.13X	0.14X	0.05
Heptachlor Epoxide	U	U	U	U	U	U	U	0.05
Endosulfan I	U	U	U	U	U	U	U	0.05
Dieldrin	U	U	U	U	U	0.41X	0.41X	0.10
4,4'-DDE	U	U	U	U	U	U	U	0.10
Endrin	U	U	U	U	U	0.49X	0.52X	0.10
Endosulfan II	U	U	U	U	U	U	U	0.10
4,4'-DDD	U	U	U	U	U	U	U	0.10
Endosulfan Sulfate	U	U	U	U	U	U	U	0.10
4,4'-DDT	U	U	U	U	U	0.41X	0.35X	0.10
Methoxychlor	U	U	U	U	U	U	U	0.50
Endrin-Ketone	U	U	U	U	U	U	U	0.10
alpha-Chlordane	U	U	U	U	U	U	U	0.50
gamma-Chlordane	U	U	U	U	U	U	U	0.50
Toxaphene	U	U	U	U	U	U	U	1.0
PCB - 1016	U	U	U	U	U	U	U	0.5
PCB - 1221	U	U	U	U	U	U	U	0.5
PCB - 1232	U	U	U	U	U	U	U	0.5
PCB - 1242	U	U	U	U	U	U	U	0.5
PCB - 1248	U	U	U	U	U	U	U	0.5
PCB - 1254	U	U	U	U	U	U	U	1.0
PCB - 1260	U	U	U	U	U	U	U	1.0

U, X - See Appendix for definition.
Note: Sample detection limit = MDL x dilution factor.

Aqueous

TABLE 5.1
30900-1119
MALCOLM-PIRNIE
EPA TCL PESTICIDES/PCB's

All values are ug/L.

	Sample Identification				
Dilution Factor	1.0	1.0	1.3	1.0	
Method Blank I.D.	0521 -B07	0521 -B07	0521 -B07	0521 -B07	
Compound	Method Blank	W-29	W-28	W-31	Method Detection Limits with no Dilution
alpha-BHC	U	U	U	U	0.05
beta-BHC	U	U	U	U	0.05
delta-BHC	U	U	U	U	0.05
gamma-BHC	U	U	U	U	0.05
Heptachlor	U	U	U	U	0.05
Aldrin	U	U	U	U	0.05
Heptachlor Epoxide	U	U	U	U	0.05
Endosulfan I	U	U	U	U	0.05
Dieldrin	U	U	U	U	0.10
4,4'-DDE	U	U	U	U	0.10
Endrin	U	U	U	U	0.10
Endosulfan II	U	U	U	U	0.10
4,4'-DDD	U	U	U	U	0.10
Endosulfan Sulfate	U	U	U	U	0.10
4,4'-DDT	U	U	U	U	0.10
Methoxychlor	U	U	U	U	0.50
Endrin-Ketone	U	U	U	U	0.10
alpha-Chlordane	U	U	U	U	0.50
gamma-Chlordane	U	U	U	U	0.50
Toxaphene	U	U	U	U	1.0
PCB - 1016	U	U	U	U	0.5
PCB - 1221	U	U	U	U	0.5
PCB - 1232	U	U	U	U	0.5
PCB - 1242	U	U	U	U	0.5
PCB - 1248	U	U	U	U	0.5
PCB - 1254	U	U	U	U	1.0
PCB - 1260	U	U	U	U	1.0

U - See Appendix for definition.
Note: Sample detection limit = MDL x dilution factor.

TABLE 6.0
30900-1119
MALCOLM-PIRNIE
TAL METALS PLUS CYANIDE

All values are ug/L.

Parameter	FB-SDG#6/5-14	W-32	W-36
Aluminum	193B	815	15,600
Antimony	13.0U	13.0U	13.0U
Arsenic	1.0UN	13.6N	138N
Barium	13.6B	68.0B	72.7B
Beryllium	1.0U	1.0U	1.0U
Cadmium	2.0U	2.0U	2.0U
Calcium	9,900	21,600	9,630
Chromium	2.1B	41.1	42.7
Cobalt	2.0U	425	207
Copper	91.5	51.0	50.4
Iron	141	90,600	46,000
Lead	1.0U	155S	256
Magnesium	1,690B	6,400	1,520B
Manganese	35.9	24,200	10,700
Mercury	0.20U	0.20U	0.34
Nickel	6.0U	54.7	28.7B
Potassium	1,840B	11,800	4,390B
Selenium	1.0U	1.0U	1.0U
Silver	5.0U	5.0U	5.0U
Sodium	8,070	25,200	8,430
Thallium	2.0U	2.0U	2.0U
Vanadium	2.0UE	8.0BE	50.4E
Zinc	16.7B	265	202
Cyanide	10.0U	10.0U	10.0U

B, E, N, U - See Metals Appendix for definition.

TABLE 6.1
30900-1119
MALCOLM-PIRNIE
TAL METALS PLUS CYANIDE

All values are ug/L.

Parameter	W-35	W-29	W-28	W-31
Aluminum	41,500	9,370	615	98,900
Antimony	13.0U	15.5B	13.0U	13.0U
Arsenic	15.5N	2.3BN	2.1BN	16.2N
Barium	150B	37.2B	30.6B	321
Beryllium	1.0U	1.2B	1.0U	5.1
Cadmium	2.0U	2.0U	2.0U	2.0U
Calcium	18,100	19,400	12,200	6,420
Chromium	96.9	88.9	55.6	164
Cobalt	207	19.3B	86.8	400
Copper	78.0	75.4	33.3	199
Iron	112,000	102,000	81,500	215,000
Lead	336	26.6	491	481
Magnesium	2,700B	2,840B	1,080B	3,430B
Manganese	12,800	884	5,760	6,890
Mercury	0.72	0.20U	0.24	0.51
Nickel	52.9	50.2	38.1B	106
Potassium	7,080	6,930	5,150	11,000
Selenium	1.0U	1.0U	1.0U	1.0U
Silver	5.0U	5.0U	5.0U	5.0U
Sodium	10,100	10,200	10,700	9,520
Thallium	2.0U	2.0U	2.0U	2.0U
Vanadium	131E	18.0BE	2.0UE	351E
Zinc	114	202	155	233
Cyanide	10.0U	10.0U	10.0U	10.0U

B, E, N, U - See Metals Appendix for definition.

TABLE 7.0
30900-1119
MALCOLM-PIRNIE
MISCELLANEOUS INORGANICS

All values are mg/L unless noted.

Parameter	FB-SDG#6/5-14	W-32	W-36
Alkalinity, as $CaCO_3$	14.2	161	52.7
Ammonia-Nitrogen	0.20	1.10	0.65
Biochemical Oxygen Demand (5 day)	2	14	28
Chloride	20.9	44.4	15.4
Chemical Oxygen Demand	<10.0	50.7	54.5
Color, Pt-Co Units	<5	625	380
Hexavalent Chromium	<0.01	<0.01	<0.01
Hardness, as $CaCO_3$	30.8	120	44.0
Petroleum Hydrocarbons	2.8	2.2	11.7
MBAS	<0.04	<0.04	<0.04
Nitrate/Nitrite-Nitrogen	0.35	0.16	0.71
Odor, Threshold #	1	1	1
pH, S.U.	7.41	6.49	6.19
Phenols	<0.005	0.104	0.212
Sulfate	<10.0	51.8	20.8
Total Dissolved Solids	90.2	267	278
Total Kjeldahl Nitrogen	0.10	2.08	1.78
Total Organic Carbon	0.53	21.6	18.4

TABLE 7.1
30900-1119
MALCOLM-PIRNIE
MISCELLANEOUS INORGANICS

All values are mg/L unless noted.

Parameter	W-35	W-29	W-28	W-31
Alkalinity, as $CaCO_3$	76.8	53.6	64.0	36.0
Ammonia-Nitrogen	0.96	0.07	2.19	0.79
Biochemical Oxygen Demand (5 day)	30	6	47	94
Chloride	22.3	9.0	12.6	18.3
Chemical Oxygen Demand	59.4	18.6	81.6	131
Color, Pt-Co Units	400	550	560	700
Hexavalent Chromium	<0.01	<0.01	<0.01	<0.01
Hardness, as $CaCO_3$	69.8	48.2	50.0	26.8
Petroleum Hydrocarbons	13.3	3.60	87.0	24.8
MBAS	<0.04	0.05	0.07	<0.04
Nitrate/Nitrite-Nitrogen	0.23	1.30	1.48	3.56
Odor, Threshold #	1	1	1	1
pH, S.U.	6.17	6.36	6.15	5.96
Phenols	0.111	0.016	0.127	0.110
Sulfate	18.0	<10.0	12.5	13.1
Total Dissolved Solids	364	255	345	95.9
Total Kjeldahl Nitrogen	1.78	0.91	3.37	2.89
Total Organic Carbon	29.6	5.90	23.2	30.8

APPENDIX

U - Indicates that the compound was analyzed for but not detected.

J - Indicates that the compound was analyzed for and determined to be present in the sample. The mass spectrum of the compound meets the identification criteria of the method. The concentration listed is an estimated value, which is less than the specified minimum detection limit but is greater than zero.

B - This flag is used when the analyte is found in the blanks as well as the sample. It indicates possible sample contamination and warns the data user to use caution when applying the results of this analyte.

N - Indicates that the compound was analyzed for but not requested as an analyte. Value will not be listed on tabular result sheet.

X - Matrix spike compound.

(1) - Cannot be separated from diphenylamine.

(2) - Decomposes to azobenzene. Measured and calibrated as azobenzene.

A - This flag indicates that a TIC is a suspected aldol condensation product.

E - Indicates that it exceeds calibration curve range.

D - This flag identifies all compounds identified in an analysis at a secondary dilution factor.

APPENDIX/METALS DATA

C - Concentration qualifiers

U - Indicates analyte result less than instrument detection limit (IDL)

B - Indicates analyte result between IDL and contract required detection limit (CRDL)

Q - QC qualifiers

E - Reported value is estimated because of the presence of interference

M - Duplicate injection precision not met

N - Spiked sample recovery not within control limits

S - The reported value was determined by the method of standard additions (MSA)

W - Post-digest spike recovery furnace analysis was out of 85-115 percent control limit, while sample absorbance was less than 50 percent of spike absorbance

* - Duplicate analysis not within control limit

+ - Correlation coefficient for MSA is less than 0.995

M - Method codes

P - ICP

A - Flame AA

F - Furnace AA

CV - Cold vapor AA (manual)

C - Cyanide

NR - Not Required

TABLE 1.0
30900-1142
MALCOLM-PIRNIE
EPA TCL VOLATILE ORGANICS

Aqueous

All values are ug/L.

	Sample Identification			
Dilution Factor	1.0	1.0	1.0	
Method Blank I.D.	>A1310	>A1310	>A1310	
Compound	Method Blank	FB-SDG# 5/5-18	TB-SDG# 5/5-18	Method Detection Limits with no Dilution
Chloromethane	U	U	U	10
Bromomethane	U	U	U	10
Vinyl Chloride	U	U	U	10
Chloroethane	U	U	U	10
Methylene Chloride	2J	U	U	5
Acetone	17	6JB	6JB	10
Carbon Disulfide	U	U	U	5
1,1-Dichloroethene	U	U	U	5
1,1-Dichloroethane	U	U	U	5
1,2-Dichloroethene (total)	U	U	8	5
Chloroform	U	U	U	5
1,2-Dichloroethane	U	U	U	5
2-Butanone	7J	1JB	U	10
1,1,1-Trichloroethane	U	U	U	5
Carbon Tetrachloride	U	U	U	5
Vinyl Acetate	U	U	U	10
Bromodichloromethane	U	U	U	5
1,2-Dichloropropane	U	U	U	5
cis-1,3-Dichloropropene	U	U	U	5
Trichloroethene	U	U	U	5
Dibromochloromethane	U	U	U	5
1,1,2-Trichloroethane	U	U	U	5
Benzene	U	U	U	5
trans-1,3-Dichloropropene	U	U	U	5
Bromoform	U	U	U	5
4-Methyl-2-pentanone	U	U	U	10
2-Hexanone	3J	U	U	10
Tetrachloroethene	U	U	U	5
1,1,2,2-Tetrachloroethane	U	U	U	5
Toluene	U	U	U	5
Chlorobenzene	U	U	U	5
Ethylbenzene	U	U	U	5
Styrene	U	U	U	5
Xylene (total)	U	0.9J	4J	5

U, J, B - See Appendix for definition.
Note: Sample detection limit = MDL x dilution factor.

TABLE 1.1
30900-1142
MALCOLM-PIRNIE
EPA TCL VOLATILE ORGANICS

Aqueous

All values are ug/L.

	Sample Identification		
Dilution Factor	1.0	1.0	
Method Blank I.D.	>A1346	>A1346	
Compound	Method Blank	W-23	Method Detection Limits with no Dilution
Chloromethane	U	U	10
Bromomethane	U	U	10
Vinyl Chloride	U	U	10
Chloroethane	U	U	10
Methylene Chloride	U	2J	5
Acetone	U	6J	10
Carbon Disulfide	U	U	5
1,1-Dichloroethene	U	U	5
1,1-Dichloroethane	U	2J	5
1,2-Dichloroethene (total)	U	9	5
Chloroform	U	U	5
1,2-Dichloroethane	U	U	5
2-Butanone	U	U	10
1,1,1-Trichloroethane	U	U	5
Carbon Tetrachloride	U	U	5
Vinyl Acetate	U	U	10
Bromodichloromethane	U	U	5
1,2-Dichloropropane	U	U	5
cis-1,3-Dichloropropene	U	U	5
Trichloroethene	U	U	5
Dibromochloromethane	U	U	5
1,1,2-Trichloroethane	U	U	5
Benzene	U	1J	5
trans-1,3-Dichloropropene	U	U	5
Bromoform	U	U	5
4-Methyl-2-pentanone	U	U	10
2-Hexanone	U	U	10
Tetrachloroethene	U	1J	5
1,1,2,2-Tetrachloroethane	4J	6B	5
Toluene	U	U	5
Chlorobenzene	U	3J	5
Ethylbenzene	U	U	5
Styrene	U	U	5
Xylene (total)	U	2J	5

U, J, B - See Appendix for definition.
Note: Sample detection limit = MDL x dilution factor.

Aqueous

TABLE 1.2
30900-1142
MALCOLM-PIRNIE
EPA TCL VOLATILE ORGANICS

All values are ug/L.

	Sample Identification					
Dilution Factor	1.0	5.0	5.0	1.0	2.0	
Method Blank I.D.	>A1357	>A1357	>A1357	>A1357	>A1357	
Compound	Method Blank	W-30	W-37	W-38	W-22	Method Detection Limits with no Dilution
Chloromethane	U	U	U	U	U	10
Bromomethane	U	U	U	U	U	10
Vinyl Chloride	U	7J	U	U	4J	10
Chloroethane	U	U	U	U	U	10
Methylene Chloride	2J	13JB	U	1JB	2JB	5
Acetone	2J	36JB	U	4JB	7JB	10
Carbon Disulfide	U	U	U	U	U	5
1,1-Dichloroethene	U	U	U	U	U	5
1,1-Dichloroethane	U	U	U	U	U	5
1,2-Dichloroethene (total)	U	15J	10J	U	11	5
Chloroform	U	U	U	U	U	5
1,2-Dichloroethane	U	U	U	U	U	5
2-Butanone	U	4J	U	U	U	10
1,1,1-Trichloroethane	U	U	U	U	U	5
Carbon Tetrachloride	U	U	U	U	U	5
Vinyl Acetate	U	U	U	U	U	10
Bromodichloromethane	U	U	U	U	U	5
1,2-Dichloropropane	U	U	U	U	U	5
cis-1,3-Dichloropropene	U	U	U	U	U	5
Trichloroethene	U	U	U	U	U	5
Dibromochloromethane	U	U	U	U	U	5
1,1,2-Trichloroethane	U	U	U	U	U	5
Benzene	U	12J	7J	U	5J	5
trans-1,3-Dichloropropene	U	U	U	U	U	5
Bromoform	U	U	U	U	U	5
4-Methyl-2-pentanone	U	U	U	U	U	10
2-Hexanone	U	U	U	U	U	10
Tetrachloroethene	U	U	U	3J	U	5
1,1,2,2-Tetrachloroethane	U	U	U	U	U	5
Toluene	U	25	57	U	13	5
Chlorobenzene	U	U	U	U	U	5
Ethylbenzene	U	5J	27	U	U	5
Styrene	U	U	U	U	U	5
Xylene (total)	U	52	170	U	9J	5

U, J, B - See Appendix for definition.
Note: Sample detection limit = MDL x dilution factor.

TABLE 2.0
30900-1142
MALCOLM-PIRNIE
VOLATILE TENTATIVELY IDENTIFIED COMPOUNDS

Sample Identification: Method Blank >A1310

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown alkane	7.87	6J

Sample Identification: FB SDG#5/5-18

CAS#	Compound	RT	Estimated Concentration, ug/L
	None detected		

Sample Identification: TB SDG#5/5-18

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown alkane	7.82	6J

Sample Identification: Method Blank >A1346

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown alkane	8.38	6J

Sample Identification: W-23

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown alkane	5.29	6J
	Unknown alkane	7.80	6JB

J, B - See Appendix for definition.

TABLE 2.1
30900-1142
MALCOLM-PIRNIE
VOLATILE TENTATIVELY IDENTIFIED COMPOUNDS

Sample Identification: Method Blank >A1357

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown alkane	7.83	11J

Sample Identification: W-30

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown C_4 alkyl benzene	24.33	190J
	Unknown branched alkane	25.93	170J
	Unknown C_4 alkyl benzene	26.09	140J
	Unknown alkane	22.35	110J
	Unknown alkane	5.32	85J
	Unknown alkane	7.86	69JB
	Unknown C_4 alkyl benzene	26.22	67J
	Unknown isomer of trimethyl benzene	23.91	63J
	Unknown cycloalkane	9.23	61J
	Unknown C_4 alkyl benzene	25.60	56J

Sample Identification: W-37

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown C_4 alkyl benzene	24.33	390J
	Unknown alkane	25.90	280J
	Unknown indene	25.21	250J
	Unknown isomer of 1H-indene-2,3	26.09	240J
	Unknown alkane	22.35	210J
	Unknown C_4 alkyl benzene	26.32	150J
	Unknown C_4 alkyl benzene	26.22	120J
	Unknown isomer of benzene,1-ethyl	23.91	110J
	Unknown alkene	10.66	100J
	Unknown C_4 alkyl benzene	25.60	100J

J, B - See Appendix for definition.

TABLE 2.2
30900-1142
MALCOLM-PIRNIE
VOLATILE TENTATIVELY IDENTIFIED COMPOUNDS

Sample Identification: W-38

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown alkane	7.86	10JB

Sample Identification: W-22

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown C_4 alkyl benzene	26.10	130J
	Unknown C_4 alkyl benzene	24.34	120J
	Unknown alkane	25.91	120J
	Unknown C_4 alkyl benzene	26.33	83J
	Unknown C_4 alkyl benzene	26.23	63J
	Unknown C_4 alkyl benzene	25.22	55J
	Unknown C_4 alkyl benzene	25.61	52J
	Unknown isomer of trimethyl benzene	23.92	43J
	Unknown C_4 alkyl benzene	25.48	38J
	Unknown alkane	22.36	30J
	Unknown branched alkane	23.53	29J

J, B - See Appendix for definition.

TABLE 3.0
30900-1142
MALCOLM-PIRNIE
EPA TCL SEMI-VOLATILE ORGANICS

All values are ug/L.

	Sample Identification				
Dilution Factor	1.0	1.0	1.0	4.0	
Method Blank I.D.	>H8836	>H8836	>H8836	>H8836	
Compound	Method Blank	W-23	W-30	W-37	Method Detection Limits with no Dilution
Phenol	U	U	U	U	10
bis(2-Chloroethyl)ether	U	U	U	U	10
2-Chlorophenol	U	U	U	U	10
1,3-Dichlorobenzene	U	U	U	U	10
1,4-Dichlorobenzene	U	U	U	U	10
Benzyl alcohol	U	U	U	U	10
1,2-Dichlorobenzene	U	U	U	U	10
2-Methylphenol	U	U	U	U	10
bis(2-Chloroisopropyl)ether	U	U	U	U	10
4-Methylphenol	U	U	U	U	10
N-Nitroso-di-n-propylamine	U	U	U	U	10
Hexachloroethane	U	U	U	U	10
Nitrobenzene	U	U	U	U	10
Isophorone	U	U	U	U	10
2-Nitrophenol	U	U	U	U	10
2,4-Dimethylphenol	U	U	U	U	10
Benzoic acid	U	U	U	U	50
bis(2-Chloroethoxy)methane	U	U	U	U	10
2,4-Dichlorophenol	U	U	U	U	10
1,2,4-Trichlorobenzene	U	U	U	U	10
Naphthalene	U	U	120	150	10
4-Chloroaniline	U	U	U	U	10
Hexachlorobutadiene	U	U	U	U	10
4-Chloro-3-methylphenol	U	U	U	U	10
2-Methylnaphthalene	U	0.5J	180	910	10
Hexachlorocyclopentadiene	U	U	U	U	10
2,4,6-Trichlorophenol	U	U	U	U	10
2,4,5-Trichlorophenol	U	U	U	U	50
2-Chloronaphthalene	U	U	U	U	10
2-Nitroaniline	U	U	U	U	50
Dimethylphthalate	U	U	U	U	10
Acenaphthylene	U	U	U	U	10
2,6-Dinitrotoluene	U	U	U	U	10

U, J, B - See Appendix for definition.
Note: Sample detection limit = MDL x dilution factor.

TABLE 3.0
30900-1142
MALCOLM-PIRNIE
EPA TCL SEMI-VOLATILE ORGANICS

All values are ug/L.

	Sample Identification				
Dilution Factor	1.0	1.0	1.0	4.0	
Method Blank I.D.	>H8836	>H8836	>H8836	>H8836	
Compound	Method Blank	W-23	W-30	W-37	Method Detection Limits with no Dilution
3-Nitroaniline	U	U	U	U	50
Acenaphthene	U	U	U	U	10
2,4-Dinitrophenol	U	U	U	U	50
4-Nitrophenol	U	U	U	U	50
Dibenzofuran	U	U	U	66	10
2,4-Dinitrotoluene	U	U	U	U	10
Diethylphthalate	U	U	U	U	10
4-Chlorophenyl-phenylether	U	U	U	U	10
Fluorene	U	U	55	140	10
4-Nitroaniline	U	U	U	U	50
4,6-Dinitro-2-methylphenol	U	U	U	U	50
N-Nitrosodiphenylamine (1)	U	U	U	U	10
4-Bromophenyl-phenylether	U	U	U	U	10
Hexachlorobenzene	U	U	U	U	10
Pentachlorophenol	U	U	U	U	50
Phenanthrene	U	U	80	260	10
Anthracene	U	U	U	U	10
Di-n-butylphthalate	0.9J	0.9JB	U	U	10
Fluoranthene	0.9J	U	U	13JB	10
Pyrene	1J	U	10JB	28JB	10
Butylbenzylphthalate	U	U	U	U	10
3,3'-Dichlorobenzidine	U	U	U	U	20
Benzo(a)anthracene	U	U	U	U	10
Chrysene	U	U	U	U	10
bis(2-Ethylhexyl)phthalate	3J	9JB	U	29JB	10
Di-n-octylphthalate	U	2J	29	17J	10
Benzo(b)fluoranthene	U	U	U	U	10
Benzo(k)fluoranthene	U	U	U	U	10
Benzo(a)pyrene	U	U	U	U	10
Indeno(1,2,3-cd)pyrene	U	U	U	U	10
Dibenzo(a,h)anthracene	U	U	U	U	10
Benzo(g,h,i)perylene	U	U	U	U	10

U, J, B, (1) - See Appendix for definition.
Note: Sample detection limit = MDL x dilution factor.

TABLE 3.1
30900-1142
MALCOLM-PIRNIE
EPA TCL SEMI-VOLATILE ORGANICS

All values are ug/L.

	Sample Identification				
Dilution Factor	1.0	1.0	1.0	1.0	
Method Blank I.D.	>H8836	>H8836	>H8836	>H8836	
Compound	Method Blank	W-22	W-38	FB SDG# 5/5-18	Method Detection Limits with no Dilution
Phenol	U	U	U	U	10
bis(2-Chloroethyl)ether	U	U	U	U	10
2-Chlorophenol	U	U	U	U	10
1,3-Dichlorobenzene	U	U	U	U	10
1,4-Dichlorobenzene	U	U	U	U	10
Benzyl alcohol	U	U	U	U	10
1,2-Dichlorobenzene	U	U	U	U	10
2-Methylphenol	U	U	U	U	10
bis(2-Chloroisopropyl)ether	U	U	U	U	10
4-Methylphenol	U	U	U	U	10
N-Nitroso-di-n-propylamine	U	U	U	U	10
Hexachloroethane	U	U	U	U	10
Nitrobenzene	U	U	U	U	10
Isophorone	U	U	U	U	10
2-Nitrophenol	U	U	U	U	10
2,4-Dimethylphenol	U	U	U	U	10
Benzoic acid	U	U	U	U	50
bis(2-Chloroethoxy)methane	U	U	U	U	10
2,4-Dichlorophenol	U	U	U	U	10
1,2,4-Trichlorobenzene	U	U	U	U	10
Naphthalene	U	130	U	U	10
4-Chloroaniline	U	U	U	U	10
Hexachlorobutadiene	U	U	U	U	10
4-Chloro-3-methylphenol	U	U	U	U	10
2-Methylnaphthalene	U	200	U	U	10
Hexachlorocyclopentadiene	U	U	U	U	10
2,4,6-Trichlorophenol	U	U	U	U	10
2,4,5-Trichlorophenol	U	U	U	U	50
2-Chloronaphthalene	U	U	U	U	10
2-Nitroaniline	U	U	U	U	50
Dimethylphthalate	U	U	U	U	10
Acenaphthylene	U	U	U	U	10
2,6-Dinitrotoluene	U	U	U	U	10

U, J, B - See Appendix for definition.
Note: Sample detection limit = MDL x dilution factor.

TABLE 3.1
30900-1142
MALCOLM-PIRNIE
EPA TCL SEMI-VOLATILE ORGANICS

All values are ug/L.

	Sample Identification				
Dilution Factor	1.0	1.0	1.0	1.0	
Method Blank I.D.	>H8836	>H8836	>H8836	>H8836	
Compound	Method Blank	W-22	W-38	FB SDG# 5/5-18	Method Detection Limits with no Dilution
3-Nitroaniline	U	U	U	U	50
Acenaphthene	U	U	U	U	10
2,4-Dinitrophenol	U	U	U	U	50
4-Nitrophenol	U	U	U	U	50
Dibenzofuran	U	U	U	U	10
2,4-Dinitrotoluene	U	U	U	U	10
Diethylphthalate	U	U	U	U	10
4-Chlorophenyl-phenylether	U	U	U	U	10
Fluorene	U	53	U	U	10
4-Nitroaniline	U	U	U	U	50
4,6-Dinitro-2-methylphenol	U	U	U	U	50
N-Nitrosodiphenylamine (1)	U	U	U	U	10
4-Bromophenyl-phenylether	U	U	U	U	10
Hexachlorobenzene	U	U	U	U	10
Pentachlorophenol	U	U	U	U	50
Phenanthrene	U	86	U	U	10
Anthracene	U	U	U	U	10
Di-n-butylphthalate	0.9J	U	U	U	10
Fluoranthene	0.9J	U	U	U	10
Pyrene	1J	10JB	U	U	10
Butylbenzylphthalate	U	U	U	U	10
3,3'-Dichlorobenzidine	U	U	U	U	20
Benzo(a)anthracene	U	U	U	U	10
Chrysene	U	U	U	U	10
bis(2-Ethylhexyl)phthalate	3J	18B	2JB	4JB	10
Di-n-octylphthalate	U	36	U	U	10
Benzo(b)fluoranthene	U	U	U	U	10
Benzo(k)fluoranthene	U	U	U	U	10
Benzo(a)pyrene	U	U	U	U	10
Indeno(1,2,3-cd)pyrene	U	U	U	U	10
Dibenzo(a,h)anthracene	U	U	U	U	10
Benzo(g,h,i)perylene	U	U	U	U	10

U, J, B, (1) - See Appendix for definition.
Note: Sample detection limit = MDL x dilution factor.

TABLE 3.2
30900-1142
MALCOLM-PIRNIE
EPA TCL SEMI-VOLATILE ORGANICS

All values are ug/L.

	Sample Identification				
Dilution Factor	1.0	1.0	1.0	1.0	
Method Blank I.D.	>H8884	>H8884	>H8884	>H8884	
Compound	Method Blank	W-23RE	W-30RE	W-38RE	Method Detection Limits with no Dilution
Phenol	U	U	U	U	10
bis(2-Chloroethyl)ether	U	U	U	U	10
2-Chlorophenol	U	U	U	U	10
1,3-Dichlorobenzene	U	U	U	U	10
1,4-Dichlorobenzene	U	3J	U	U	10
Benzyl alcohol	U	U	U	U	10
1,2-Dichlorobenzene	U	1J	U	U	10
2-Methylphenol	U	U	U	U	10
bis(2-Chloroisopropyl)ether	U	U	U	U	10
4-Methylphenol	U	U	U	U	10
N-Nitroso-di-n-propylamine	U	U	U	U	10
Hexachloroethane	U	U	U	U	10
Nitrobenzene	U	U	U	U	10
Isophorone	U	U	U	U	10
2-Nitrophenol	U	U	U	U	10
2,4-Dimethylphenol	U	U	U	U	10
Benzoic acid	U	1J	U	0.8J	50
bis(2-Chloroethoxy)methane	U	U	U	U	10
2,4-Dichlorophenol	U	U	U	U	10
1,2,4-Trichlorobenzene	U	U	U	U	10
Naphthalene	U	0.3J	39	U	10
4-Chloroaniline	U	U	U	U	10
Hexachlorobutadiene	U	U	U	U	10
4-Chloro-3-methylphenol	U	U	U	U	10
2-Methylnaphthalene	U	0.2J	52	U	10
Hexachlorocyclopentadiene	U	U	U	U	10
2,4,6-Trichlorophenol	U	U	U	U	10
2,4,5-Trichlorophenol	U	U	U	U	50
2-Chloronaphthalene	U	U	U	U	10
2-Nitroaniline	U	U	U	U	50
Dimethylphthalate	U	U	U	U	10
Acenaphthylene	U	U	U	U	10
2,6-Dinitrotoluene	U	U	U	U	10

U, J, B - See Appendix for definition.
Note: Sample detection limit = MDL x dilution factor.

TABLE 3.2
30900-1142
MALCOLM-PIRNIE
EPA TCL SEMI-VOLATILE ORGANICS

All values are ug/L.

	Sample Identification				
Dilution Factor	1.0	1.0	1.0	1.0	
Method Blank I.D.	>H8884	>H8884	>H8884	>H8884	
Compound	Method Blank	W-23RE	W-30RE	W-38RE	Method Detection Limits with no Dilution
3-Nitroaniline	U	U	U	U	50
Acenaphthene	U	U	U	U	10
2,4-Dinitrophenol	U	U	U	U	50
4-Nitrophenol	U	3J	U	U	50
Dibenzofuran	U	U	U	U	10
2,4-Dinitrotoluene	U	U	U	0.4J	10
Diethylphthalate	1J	1JB	U	0.9JB	10
4-Chlorophenyl-phenylether	U	U	U	U	10
Fluorene	U	0.2J	32	0.1J	10
4-Nitroaniline	U	0.4J	U	U	50
4,6-Dinitro-2-methylphenol	U	U	U	U	50
N-Nitrosodiphenylamine (1)	U	2J	U	2J	10
4-Bromophenyl-phenylether	U	U	U	U	10
Hexachlorobenzene	U	0.5J	U	U	10
Pentachlorophenol	U	1J	U	2J	50
Phenanthrene	U	1J	57	0.7J	10
Anthracene	U	0.9J	U	0.6J	10
Di-n-butylphthalate	1J	5JB	U	2JB	10
Fluoranthene	U	2J	11	1J	10
Pyrene	U	2J	12	1J	10
Butylbenzylphthalate	0.3J	3JB	5JB	2JB	10
3,3'-Dichlorobenzidine	U	U	U	U	20
Benzo(a)anthracene	U	2J	4J	U	10
Chrysene	U	1J	3J	0.8J	10
bis(2-Ethylhexyl)phthalate	13	15B	27B	19B	10
Di-n-octylphthalate	U	3J	45	2J	10
Benzo(b)fluoranthene	U	1J	5J	1J	10
Benzo(k)fluoranthene	U	2J	5J	1J	10
Benzo(a)pyrene	U	1J	3J	1J	10
Indeno(1,2,3-cd)pyrene	U	2J	U	2J	10
Dibenzo(a,h)anthracene	U	U	U	0.9J	10
Benzo(g,h,i)perylene	U	3J	U	2J	10

U, J, B, (1) - See Appendix for definition.
Note: Sample detection limit = MDL x dilution factor.

TABLE 4.0
30900-1142
MALCOLM-PIRNIE
VOLATILE TENTATIVELY IDENTIFIED COMPOUNDS

Sample Identification: Method Blank >H8836

CAS#	Compound	RT	Estimated Concentration, ug/L
	None detected		

Sample Identification: W-23

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown acid/ester	11.59	150J
	Unknown alkane	50.82	50J
	Unknown alkane	46.63	19J
	Unknown alkane	34.81	9J

Sample Identification: W-30

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown branched alkane	18.56	2,600J
	Unknown branched alkane	19.96	1,200J
	Unknown branched alkane	21.27	720J
	Unknown branched alkane	18.22	690J
	Unknown branched alkane	19.45	600J
	Unknown cycloalkane	17.85	570J
	Unknown isomer of dimethyl naphthalene	19.22	560J
	Unknown branched alkane	18.01	450J
	Unknown	19.84	430J
	Unknown branched alkane	20.55	420J
	Unknown branched alkane	18.77	390J
	Unknown branched alkane	13.76	360J
	Unknown isomer of dimethyl naphthalene	18.97	350J
	Unknown branched alkane	17.93	310J
	Unknown branched alkane	18.11	280J
	Unknown branched alkane	18.69	250J

J - See Appendix for definition.

TABLE 4.1
30900-1142
MALCOLM-PIRNIE
VOLATILE TENTATIVELY IDENTIFIED COMPOUNDS

Sample Identification: W-30 (Continued)

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown branched alkane	22.50	250J
	Unknown branched alkane	11.86	180J
	Unknown branched alkane	26.78	180J
	Unknown branched alkane	24.74	170J

Sample Identification: W-37

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown branched alkane	18.60	4,300J
	Unknown branched alkane	19.99	2,600J
	Unknown branched alkane	21.28	2,200J
	Unknown branched alkane	21.88	1,600J
	Unknown isomer of trimethyl naphthalene	20.69	1,500J
	Unknown isomer of dimethyl naphthalene	19.25	1,400J
	Unknown isomer of trimethyl naphthalene	20.79	1,400J
	Unknown alkane	19.46	1,200J
	Unknown cycloalkane	17.86	1,200J
	Unknown branched alkane	18.25	1,200J
	Unknown branched alkane	22.52	1,200J
	Unknown alkane	13.79	1,100J
	Unknown isomer of dimethyl naphthalene	19.01	1,100J
	Unknown isomer of trimethyl naphthalene	21.00	1,000J
	Unknown branched alkane	23.69	900J
	Unknown isomer of trimethyl naphthalene	20.38	890J
	Unknown alkane	24.78	860J
	Unknown indene	18.78	850J
	Unknown branched alkane	18.02	840J
	Unknown branched alkane	25.83	800J

J - See Appendix for definition.

TABLE 4.2
30900-1142
MALCOLM-PIRNIE
VOLATILE TENTATIVELY IDENTIFIED COMPOUNDS

Sample Identification: W-22

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown branched alkane	18.60	1,500J
	Unknown branched alkane	19.99	760J
	Unknown branched alkane	21.31	430J
	Unknown branched alkane	18.25	410J
	Unknown isomer of dimethyl naphthalene	19.25	410J
	Unknown branched alkane	19.46	380J
	Unknown branched alkane	21.90	380J
	Unknown cycloalkane	17.86	330J
	Unknown alkane	22.54	320J
	Unknown isomer of dimethyl naphthalene	19.01	300J
	Unknown	19.87	290J
	Unknown branched alkane	18.04	270J
	Unknown branched alkane	20.59	260J
	Unknown isomer of trimethyl naphthalene	21.02	230J
	Unknown branched alkane	18.80	230J
	Unknown branched alkane	13.77	220J
	Unknown branched alkane	22.64	180J
	Unknown branched alkane	23.69	180J
	Unknown branched alkane	24.80	170J
	Unknown branched alkane	25.83	160J

Sample Identification: W-38

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown acid/ester	11.56	29J

Sample Identification: FB SDG#5/5-18

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown alkane	30.96	21J

J - See Appendix for definition.

TABLE 4.3
30900-1142
MALCOLM-PIRNIE
VOLATILE TENTATIVELY IDENTIFIED COMPOUNDS

Sample Identification: Method Blank >H8884

CAS#	Compound	RT	Estimated Concentration, ug/L
123795	Hexanedioic acid,dioctyl ester	30.51	9J

Sample Identification: W-23RE

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown acid	12.33	120J
	Unknown alkane	55.59	22J
	Unknown	6.07	12J
123795	Hexanedioic acid,dioctyl ester	30.52	10JB
	Unknown alcohol	10.07	10J

Sample Identification: W-30RE

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown branched alkane	19.28	690J
	Unknown branched alkane	18.91	490J
	Unknown branched alkane	21.97	310J
	Unknown branched alkane	18.71	290J
	Unknown branched alkane	18.81	260J
	Unknown branched alkane	26.56	230J
	Unknown branched alkane	28.52	230J
	Unknown branched alkane	14.41	210J
	Unknown branched alkane	17.77	190J
	Unknown branched alkane	27.55	190J
	Unknown branched alkane	16.15	190J
	Unknown cycloalkane	16.97	160J
	Unknown branched alkane	17.32	150J
	Unknown branched alkane	20.16	120J
	Unknown alkyl benzene	16.76	91J
	Unknown cycloalkene	15.21	88J
	Unknown branched alkane	15.37	85J
	Unknown branched alkane	16.37	84J
	Unknown C_4 alkyl benzene	14.25	84J
	Unknown branched alkane	17.17	71J

J, B - See Appendix for definition.

TABLE 4.4
30900-1142
MALCOLM-PIRNIE
VOLATILE TENTATIVELY IDENTIFIED COMPOUNDS

Sample Identification: W-38RE

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown acid/ester	12.34	46J
	Unknown acid	30.55	12J
	Unknown alkene	11.00	11J
	Unknown alcohol	6.16	9J
	Unknown	24.27	8J

J - See Appendix for definition.

Aqueous

TABLE 5.0
30900-1142
MALCOLM-PIRNIE
EPA TCL PESTICIDES/PCB's

All values are ug/L.

	Sample Identification							
Dilution Factor	1.0	1.0	1.2	1.0	1.0	1.0	1.1	
Method Blank I.D.	0521 -B07	0521 -B07	0521 -B07	0521 -B07	0521 -B07	0521 -B07	0521 -B07	
Compound	Method Blank	FB SDG# 5/5-18	W-22	W-23	W-30	W-37	W-38	Method Detection Limits with no Dilution
alpha-BHC	U	U	U	U	U	U	U	0.05
beta-BHC	U	U	U	U	U	U	U	0.05
delta-BHC	U	U	U	U	U	U	U	0.05
gamma-BHC	U	U	U	U	U	U	U	0.05
Heptachlor	U	U	U	U	U	U	U	0.05
Aldrin	U	U	U	U	U	U	U	0.05
Heptachlor Epoxide	U	U	U	U	U	U	U	0.05
Endosulfan I	U	U	U	U	U	U	U	0.05
Dieldrin	U	U	U	U	U	U	U	0.10
4,4'-DDE	U	U	U	U	U	U	U	0.10
Endrin	U	U	U	U	U	U	U	0.10
Endosulfan II	U	U	U	U	U	U	U	0.10
4,4'-DDD	U	U	U	U	U	U	U	0.10
Endosulfan Sulfate	U	U	U	U	U	U	U	0.10
4,4'-DDT	U	U	U	U	U	U	U	0.10
Methoxychlor	U	U	U	U	U	U	U	0.50
Endrin-Ketone	U	U	U	U	U	U	U	0.10
alpha-Chlordane	U	U	U	0.020J	U	U	U	0.50
gamma-Chlordane	U	U	U	0.069J	U	U	U	0.50
Toxaphene	U	U	U	U	U	U	U	1.0
PCB - 1016	U	U	U	U	U	U	U	0.5
PCB - 1221	U	U	U	U	U	U	U	0.5
PCB - 1232	U	U	U	U	U	U	U	0.5
PCB - 1242	U	U	U	U	U	U	U	0.5
PCB - 1248	U	U	U	U	U	U	U	0.5
PCB - 1254	U	U	U	U	U	U	U	1.0
PCB - 1260	U	U	U	U	U	U	U	1.0

U, J - See Appendix for definition.
Note: Sample detection limit = MDL x dilution factor.

TABLE 6.0
30900-1142
MALCOLM-PIRNIE
TAL METALS PLUS CYANIDE

All values are ug/L.

Parameter	W-23	W-30	W-37
Aluminum	884	235	30,600
Antimony	16.8B	13.0U	15.5B
Arsenic	2.5B	74.2	18.2
Barium	142B	974	200B
Beryllium	1.7B	1.0U	2.8B
Cadmium	4.1B	2.0U	2.0U
Calcium	16,600	14,400	14,600
Chromium	15.3	10.3	75.4
Cobalt	29.7B	19.2B	60.6
Copper	16.0B	17.8B	59.3
Iron	26,500	93,000	152,000
Lead	11.1	5.4W	26.0
Magnesium	11,100	10,300	11,500
Manganese	5,750	2,790	4,190
Mercury	0.20U	0.20U	0.20U
Nickel	18.8B	7.7B	62.2
Potassium	15,400	7,020	6,730
Selenium	1.0U	1.0U	1.0U
Silver	5.0U	5.0U	5.0U
Sodium	40,600	36,000	24,200
Thallium	2.0UNW	2.0UN	2.0UN
Vanadium	2.0U	4.2B	159
Zinc	321	192	156
Cyanide	10.0U	10.0U	10.0U

B, N, U, W - See Metals Appendix for definition.

TABLE 6.1
30900-1142
MALCOLM-PIRNIE
TAL METALS PLUS CYANIDE

All values are ug/L.

Parameter	W-22	W-38	FB SDG#5/5-18
Aluminum	307	13,000	186B
Antimony	13.0U	18.7B	13.4B
Arsenic	37.3	15.1	1.0U
Barium	166B	191B	4.0U
Beryllium	1.0U	1.8B	1.0U
Cadmium	2.0U	2.0U	2.0U
Calcium	20,200	20,600	1,990B
Chromium	2.5B	56.3	2.2B
Cobalt	10.8B	48.3B	2.0U
Copper	14.0U	33.6	14.0U
Iron	53,000	58,900	50.0U
Lead	1.9B	18.2	1.0U
Magnesium	12,500	17,200	1,980B
Manganese	5,010	3,570	2.0B
Mercury	0.20U	0.24	0.20U
Nickel	7.7B	70.7	6.0U
Potassium	8,110	6,310	545U
Selenium	1.0U	1.0U	1.0U
Silver	5.0U	5.0U	5.0U
Sodium	43,300	30,100	4,830B
Thallium	2.0UNW	2.0UNW	2.0UN
Vanadium	2.9B	75.5	2.0U
Zinc	79.4	244	17.4B
Cyanide	10.0U	10.0U	10.0U

B, N, U, W - See Metals Appendix for definition.

TABLE 7.0
30900-1142
MALCOLM-PIRNIE
MISCELLANEOUS INORGANICS

All values are mg/L unless noted.

Parameter	W-23	W-30	W-37
Alkalinity, as $CaCO_3$	107	117	43.6
Ammonia-Nitrogen	13.5	4.44	0.71
Biochemical Oxygen Demand (5 day)	3	76	140
Chloride	66.1	56.3	54.5
Chemical Oxygen Demand	18.6	92.8	309
Color, Pt-Co Units	110	800	900
Hexavalent Chromium	<0.01	0.02	<0.01
Hardness, as $CaCO_3$	99.4	82.8	79.8
Petroleum Hydrocarbons	2.1	83.1	177
MBAS	<0.04	<0.04	<0.04
Nitrate/Nitrite-Nitrogen	1.86	0.17	0.09
Odor, Threshold #	1	4	4
pH, S.U.	6.30	6.46	6.13
Phenols	0.021	0.091	0.044
Sulfate	42.5	12.1	35.8
Total Dissolved Solids	280	301	221
Total Kjeldahl Nitrogen	15.6	6.08	2.76
Total Organic Carbon	7.91	28.0	20.6

TABLE 7.1
30900-1142
MALCOLM-PIRNIE
MISCELLANEOUS INORGANICS

All values are mg/L unless noted.

Parameter	W-22	W-38	FB SDG#5/5-18
Alkalinity, as $CaCO_3$	127	35.4	3.4
Ammonia-Nitrogen	4.90	0.28	0.07
Biochemical Oxygen Demand (5 day)	34	30	3
Chloride	82.6	59.0	<3.0
Chemical Oxygen Demand	60.6	17.4	<10.0
Color, Pt-Co Units	720	260	<5
Hexavalent Chromium	<0.01	<0.01	<0.01
Hardness, as $CaCO_3$	116	95.8	<1.0
Petroleum Hydrocarbons	19.9	1.88	2.22
MBAS	0.08	<0.04	<0.04
Nitrate/Nitrite-Nitrogen	0.11	0.76	0.20
Odor, Threshold #	1	1	1
pH, S.U.	6.39	5.96	6.45
Phenols	0.061	0.012	<0.005
Sulfate	17.1	24.8	<10.0
Total Dissolved Solids	303	258	18.0
Total Kjeldahl Nitrogen	7.56	0.79	<0.04
Total Organic Carbon	22.0	2.8	0.51

APPENDIX

U - Indicates that the compound was analyzed for but not detected.

J - Indicates that the compound was analyzed for and determined to be present in the sample. The mass spectrum of the compound meets the identification criteria of the method. The concentration listed is an estimated value, which is less than the specified minimum detection limit but is greater than zero.

B - This flag is used when the analyte is found in the blanks as well as the sample. It indicates possible sample contamination and warns the data user to use caution when applying the results of this analyte.

N - Indicates that the compound was analyzed for but not requested as an analyte. Value will not be listed on tabular result sheet.

X - Matrix spike compound.

(1) - Cannot be separated from diphenylamine.

(2) - Decomposes to azobenzene. Measured and calibrated as azobenzene.

A - This flag indicates that a TIC is a suspected aldol condensation product.

E - Indicates that it exceeds calibration curve range.

D - This flag identifies all compounds identified in an analysis at a secondary dilution factor.

APPENDIX/METALS DATA

C - Concentration qualifiers

U - Indicates analyte result less than instrument detection limit (IDL)

B - Indicates analyte result between IDL and contract required detection limit (CRDL)

Q - QC qualifiers

E - Reported value is estimated because of the presence of interference

M - Duplicate injection precision not met

N - Spiked sample recovery not within control limits

S - The reported value was determined by the method of standard additions (MSA)

W - Post-digest spike recovery furnace analysis was out of 85-115 percent control limit, while sample absorbance was less than 50 percent of spike absorbance

* - Duplicate analysis not within control limit

+ - Correlation coefficient for MSA is less than 0.995

M - Method codes

P - ICP

A - Flame AA

F - Furnace AA

CV - Cold vapor AA (manual)

C - Cyanide

NR - Not Required

Aqueous

TABLE 1.0
30900-1151
MALCOLM-PIRNIE
EPA TCL VOLATILE ORGANICS

All values are ug/L.

	Sample Identification				
Dilution Factor	1.0	1.0	1.0	1.0	
Method Blank I.D.	>A1424	>A1424	>A1424	>A1424	
Compound	Method Blank	FB SDG# 7/5-22	TB SDG# 7/5-22	W-27	Method Detection Limits with no Dilution
Chloromethane	U	U	U	U	10
Bromomethane	U	U	U	U	10
Vinyl Chloride	U	U	U	U	10
Chloroethane	U	U	U	U	10
Methylene Chloride	3J	2JB	1JB	U	5
Acetone	13	3JB	3JB	4JB	10
Carbon Disulfide	U	U	U	U	5
1,1-Dichloroethene	U	U	U	U	5
1,1-Dichloroethane	U	U	U	U	5
1,2-Dichloroethene (total)	U	U	U	U	5
Chloroform	U	U	U	U	5
1,2-Dichloroethane	U	U	U	U	5
2-Butanone	9J	U	U	U	10
1,1,1-Trichloroethane	U	U	U	U	5
Carbon Tetrachloride	U	U	U	U	5
Vinyl Acetate	U	U	U	U	10
Bromodichloromethane	U	U	U	U	5
1,2-Dichloropropane	U	U	U	U	5
cis-1,3-Dichloropropene	U	U	U	U	5
Trichloroethene	U	U	U	U	5
Dibromochloromethane	U	U	U	U	5
1,1,2-Trichloroethane	U	U	U	U	5
Benzene	U	U	U	2J	5
trans-1,3-Dichloropropene	U	U	U	U	5
Bromoform	U	U	U	U	5
4-Methyl-2-pentanone	U	U	U	U	10
2-Hexanone	5J	U	U	U	10
Tetrachloroethene	U	U	U	U	5
1,1,2,2-Tetrachloroethane	U	U	U	U	5
Toluene	U	U	U	U	5
Chlorobenzene	U	U	U	U	5
Ethylbenzene	U	U	U	2J	5
Styrene	U	U	U	U	5
Xylene (total)	U	U	U	15	5

U, J, B - See Appendix for definition.
Note: Sample detection limit = MDL x dilution factor.

TABLE 1.1
30900-1151
MALCOLM-PIRNIE
EPA TCL VOLATILE ORGANICS

Aqueous

All values are ug/L.

	Sample Identification			
Dilution Factor	1.0	1.0	1.0	
Method Blank I.D.	>G5287	>G5287	>G5287	
Compound	Method Blank	W-26	W-33	Method Detection Limits with no Dilution
Chloromethane	U	U	U	10
Bromomethane	U	U	U	10
Vinyl Chloride	U	U	U	10
Chloroethane	U	U	U	10
Methylene Chloride	2J	U	U	5
Acetone	U	U	U	10
Carbon Disulfide	0.4J	U	U	5
1,1-Dichloroethene	U	U	U	5
1,1-Dichloroethane	U	U	U	5
1,2-Dichloroethene (total)	U	4J	7	5
Chloroform	U	U	U	5
1,2-Dichloroethane	U	U	U	5
2-Butanone	U	U	U	10
1,1,1-Trichloroethane	U	U	U	5
Carbon Tetrachloride	U	U	U	5
Vinyl Acetate	U	U	U	10
Bromodichloromethane	U	U	U	5
1,2-Dichloropropane	U	U	U	5
cis-1,3-Dichloropropene	U	U	U	5
Trichloroethene	U	U	U	5
Dibromochloromethane	U	U	U	5
1,1,2-Trichloroethane	U	U	U	5
Benzene	U	8	5	5
trans-1,3-Dichloropropene	U	U	U	5
Bromoform	U	U	U	5
4-Methyl-2-pentanone	U	U	U	10
2-Hexanone	U	U	U	10
Tetrachloroethene	U	U	U	5
1,1,2,2-Tetrachloroethane	U	U	U	5
Toluene	0.6J	U	2JB	5
Chlorobenzene	U	U	U	5
Ethylbenzene	U	2J	1J	5
Styrene	U	U	U	5
Xylene (total)	0.9J	3JB	9B	5

U, J, B - See Appendix for definition.
Note: Sample detection limit = MDL x dilution factor.

TABLE 2.0
30900-1151
MALCOLM-PIRNIE
VOLATILE TENTATIVELY IDENTIFIED COMPOUNDS

Sample Identification: Method Blank >A1424

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown alkane	7.80	8J

Sample Identification: FB SDG#7/5-22

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown alkane	7.81	7JB

Sample Identification: TB SDG#7/5-22

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown alkane	7.80	9JB

Sample Identification: W-27

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown aromatic	26.34	45J
	Unknown aromatic	25.20	41J
	Unknown aromatic	24.36	33J
	Unknown aromatic	25.50	30J
	Unknown aromatic	26.11	30J
	Unknown aromatic	24.81	30J
	Unknown aromatic	26.24	28J
	Unknown aromatic	22.40	26J
	Unknown aromatic	25.59	23J
	Unknown aromatic	24.23	22J

J, B - See Appendix for definition.

TABLE 2.1
30900-1151
MALCOLM-PIRNIE
VOLATILE TENTATIVELY IDENTIFIED COMPOUNDS

Sample Identification: Method Blank >G5287

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown alkane	7.61	7J

Sample Identification: W-26

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown aromatic	24.10	17J
	Unknown aromatic	26.09	17J
	Unknown aromatic	24.98	12J
	Unknown aromatic	26.74	11J
	Unknown aromatic	25.86	9J
	Unknown aromatic	26.51	7J
	Unknown alkane	7.66	6JB
	Unknown aromatic	24.79	5J
	Unknown aromatic	26.32	5J

Sample Identification: W-33

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown alkane	26.03	96J
	Unknown alkane	27.46	53J
	Unknown alkane	24.47	42J
	Unknown branched alkane	27.04	36J
	Unknown aromatic	26.78	31J
	Unknown aromatic	26.62	26J
	Unknown aromatic	25.02	26J
	Unknown aromatic	24.73	23J
	Unknown aromatic	26.36	23J
	Unknown aromatic	24.14	23J

J, B - See Appendix for definition.

TABLE 3.0
30900-1151
MALCOLM-PIRNIE
EPA TCL SEMI-VOLATILE ORGANICS

All values are ug/L.

	Sample Identification						
Dilution Factor	1.0	1.25	1.25	1.11	1.11	1.11	
Method Blank I.D.	>H8745	>H8745	>H8745	>H8745	>H8745	>H8745	
Compound	Method Blank	W-26	W-24	W-27	W-40	FB SDG# 7/5-22	Method Detection Limits with no Dilution
Phenol	U	U	U	U	U	U	10
bis(2-Chloroethyl)ether	U	U	U	U	U	U	10
2-Chlorophenol	U	U	U	U	U	U	10
1,3-Dichlorobenzene	U	U	U	U	U	U	10
1,4-Dichlorobenzene	U	U	U	U	U	U	10
Benzyl alcohol	U	U	U	U	U	U	10
1,2-Dichlorobenzene	U	U	U	U	U	U	10
2-Methylphenol	U	U	U	U	U	U	10
bis(2-Chloroisopropyl)ether	U	U	U	U	U	U	10
4-Methylphenol	U	U	U	U	U	U	10
N-Nitroso-di-n-propylamine	U	U	U	U	U	U	10
Hexachloroethane	U	U	U	U	U	U	10
Nitrobenzene	U	U	U	U	U	U	10
Isophorone	U	U	U	U	U	U	10
2-Nitrophenol	U	U	U	U	U	U	10
2,4-Dimethylphenol	U	U	U	U	U	U	10
Benzoic acid	U	U	U	U	U	U	50
bis(2-Chloroethoxy)methane	U	U	U	U	U	U	10
2,4-Dichlorophenol	U	U	U	U	U	U	10
1,2,4-Trichlorobenzene	U	U	U	U	U	U	10
Naphthalene	U	4J	41	76	U	U	10
4-Chloroaniline	U	U	U	U	U	U	10
Hexachlorobutadiene	U	U	U	U	U	U	10
4-Chloro-3-methylphenol	U	U	U	U	U	U	10
2-Methylnaphthalene	U	1J	170	230	U	U	10
Hexachlorocyclopentadiene	U	U	U	U	U	U	10
2,4,6-Trichlorophenol	U	U	U	U	U	U	10
2,4,5-Trichlorophenol	U	U	U	U	U	U	50
2-Chloronaphthalene	U	U	U	U	U	U	10
2-Nitroaniline	U	U	U	U	U	U	50
Dimethylphthalate	U	U	U	U	U	U	10
Acenaphthylene	U	U	U	U	U	U	10
2,6-Dinitrotoluene	U	U	U	U	U	U	10

U, J - See Appendix for definition.
Note: Sample detection limit = MDL x dilution factor.

TABLE 3.0
30900-1151
MALCOLM-PIRNIE
EPA TCL SEMI-VOLATILE ORGANICS

All values are ug/L.

	Sample Identification						
Dilution Factor	1.0	1.25	1.25	1.11	1.11	1.11	
Method Blank I.D.	>H8745	>H8745	>H8745	>H8745	>H8745	>H8745	
Compound	Method Blank	W-26	W-24	W-27	W-40	FB SDG# 7/5-22	Method Detection Limits with no Dilution
3-Nitroaniline	U	U	U	U	U	U	50
Acenaphthene	U	2J	U	U	U	U	10
2,4-Dinitrophenol	U	U	U	U	U	U	50
4-Nitrophenol	U	U	U	U	U	U	50
Dibenzofuran	U	2J	U	U	U	U	10
2,4-Dinitrotoluene	U	U	U	U	U	U	10
Diethylphthalate	U	U	U	U	U	U	10
4-Chlorophenyl-phenylether	U	U	U	U	U	U	10
Fluorene	U	U	21	18	U	U	10
4-Nitroaniline	U	U	U	U	U	U	50
4,6-Dinitro-2-methylphenol	U	U	U	U	U	U	50
N-Nitrosodiphenylamine (1)	U	U	U	U	U	U	10
4-Bromophenyl-phenylether	U	U	U	U	U	U	10
Hexachlorobenzene	U	U	U	U	U	U	10
Pentachlorophenol	U	U	U	U	U	U	50
Phenanthrene	U	U	38	33	U	U	10
Anthracene	U	U	U	U	U	U	10
Di-n-butylphthalate	U	U	U	1J	U	U	10
Fluoranthene	U	U	1J	0.8J	U	U	10
Pyrene	U	U	10J	3J	U	U	10
Butylbenzylphthalate	U	U	U	U	U	U	10
3,3'-Dichlorobenzidine	U	U	U	U	U	U	20
Benzo(a)anthracene	U	U	U	U	U	U	10
Chrysene	U	U	U	U	U	U	10
bis(2-Ethylhexyl)phthalate	1J	6JB	7JB	6JB	11B	U	10
Di-n-octylphthalate	U	U	U	U	U	U	10
Benzo(b)fluoranthene	U	U	U	U	U	U	10
Benzo(k)fluoranthene	U	U	U	U	U	U	10
Benzo(a)pyrene	U	U	U	U	U	U	10
Indeno(1,2,3-cd)pyrene	U	U	U	U	U	U	10
Dibenzo(a,h)anthracene	U	U	U	U	U	U	10
Benzo(g,h,i)perylene	U	U	U	U	U	U	10

U, J, B, (1) - See Appendix for definition.
Note: Sample detection limit = MDL x dilution factor.

TABLE 3.1
30900-1151
MALCOLM-PIRNIE
EPA TCL SEMI-VOLATILE ORGANICS

All values are ug/L.

	Sample Identification		
Dilution Factor	1.0	1.0	
Method Blank I.D.	>C6786	>C6786	
Compound	Method Blank	W-26RE	Method Detection Limits with no Dilution
Phenol	U	U	10
bis(2-Chloroethyl)ether	U	U	10
2-Chlorophenol	U	U	10
1,3-Dichlorobenzene	U	U	10
1,4-Dichlorobenzene	U	U	10
Benzyl alcohol	U	U	10
1,2-Dichlorobenzene	U	U	10
2-Methylphenol	U	U	10
bis(2-Chloroisopropyl)ether	U	U	10
4-Methylphenol	U	U	10
N-Nitroso-di-n-propylamine	U	U	10
Hexachloroethane	U	U	10
Nitrobenzene	U	U	10
Isophorone	U	U	10
2-Nitrophenol	U	U	10
2,4-Dimethylphenol	U	U	10
Benzoic acid	U	U	50
bis(2-Chloroethoxy)methane	U	U	10
2,4-Dichlorophenol	U	U	10
1,2,4-Trichlorobenzene	U	U	10
Naphthalene	U	3J	10
4-Chloroaniline	U	U	10
Hexachlorobutadiene	U	U	10
4-Chloro-3-methylphenol	U	U	10
2-Methylnaphthalene	U	U	10
Hexachlorocyclopentadiene	U	U	10
2,4,6-Trichlorophenol	U	U	10
2,4,5-Trichlorophenol	U	U	50
2-Chloronaphthalene	U	U	10
2-Nitroaniline	U	U	50
Dimethylphthalate	U	U	10
Acenaphthylene	U	U	10
2,6-Dinitrotoluene	U	U	10

U, J - See Appendix for definition.
Note: Sample detection limit = MDL x dilution factor.

TABLE 3.1
30900-1151
MALCOLM-PIRNIE
EPA TCL SEMI-VOLATILE ORGANICS

All values are ug/L.

	Sample Identification		
Dilution Factor	1.0	1.0	
Method Blank I.D.	>C6786	>C6786	
Compound	Method Blank	W-26RE	Method Detection Limits with no Dilution
3-Nitroaniline	U	U	50
Acenaphthene	U	U	10
2,4-Dinitrophenol	U	U	50
4-Nitrophenol	U	U	50
Dibenzofuran	U	U	10
2,4-Dinitrotoluene	U	U	10
Diethylphthalate	U	U	10
4-Chlorophenyl-phenylether	U	U	10
Fluorene	U	U	10
4-Nitroaniline	U	U	50
4,6-Dinitro-2-methylphenol	U	U	50
N-Nitrosodiphenylamine (1)	U	U	10
4-Bromophenyl-phenylether	U	U	10
Hexachlorobenzene	U	U	10
Pentachlorophenol	U	U	50
Phenanthrene	U	U	10
Anthracene	U	U	10
Di-n-butylphthalate	U	U	10
Fluoranthene	U	U	10
Pyrene	U	U	10
Butylbenzylphthalate	U	U	10
3,3'-Dichlorobenzidine	U	U	20
Benzo(a)anthracene	U	U	10
Chrysene	U	U	10
bis(2-Ethylhexyl)phthalate	U	8J	10
Di-n-octylphthalate	U	U	10
Benzo(b)fluoranthene	U	U	10
Benzo(k)fluoranthene	U	U	10
Benzo(a)pyrene	U	U	10
Indeno(1,2,3-cd)pyrene	U	U	10
Dibenzo(a,h)anthracene	U	U	10
Benzo(g,h,i)perylene	U	U	10

U, J, (1) - See Appendix for definition.
Note: Sample detection limit = MDL x dilution factor.

TABLE 4.0
30900-1151
MALCOLM-PIRNIE
SEMI-VOLATILE TENTATIVELY IDENTIFIED COMPOUNDS

Sample Identification: Method Blank >H8745

CAS#	Compound	RT	Estimated Concentration, ug/L
	None detected		

Sample Identification: W-26

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown	31.94	160J
	Unknown acid ester	12.37	130J
	Unknown	15.32	28J
	Unknown	15.62	20J
	Unknown	10.97	13J

Sample Identification: W-24

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown alkane	21.98	660J
	Unknown alkane	20.67	650J
	Unknown branched alkane	19.28	530J
	Unknown branched alkane	22.60	520J
	Unknown trimethyl naphthalene	21.53	380J
	Unknown dimethyl naphthalene	20.02	340J
	Unknown branched alkane	20.16	290J
	Unknown branched alkane	14.48	260J
	Unknown branched alkane	20.10	250J
	Unknown branched alkane	23.23	210J
	Unknown dimethyl naphthalene	19.77	200J
	Unknown trimethyl naphthalene	21.78	190J
	Unknown branched alkane	18.95	190J
	Unknown branched alkane	23.32	170J
	Unknown naphthalene	19.54	160J
	Unknown branched alkane	25.51	150J
	Unknown alkane	24.40	140J
	Unknown branched alkane	20.28	120J
	Unknown branched alkane	22.76	120J
	Unknown branched alkane	26.56	110J

J - See Appendix for definition.

TABLE 4.1
30900-1151
MALCOLM-PIRNIE
SEMI-VOLATILE TENTATIVELY IDENTIFIED COMPOUNDS

Sample Identification: W-27

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown alkane	21.99	460J
	Unknown alkane	20.68	440J
	Unknown branched alkane	19.29	350J
	Unknown branched alkane	22.59	300J
	Unknown dimethyl naphthalene	20.01	290J
	Unknown branched alkane	14.47	180J
	Unknown trimethyl naphthalene	21.79	180J
	Unknown dimethyl naphthalene	19.76	170J
	Unknown branched alkane	17.80	150J
	Unknown alkane	23.22	150J
	Unknown branched alkane	23.30	120J
	Unknown alkane	24.39	120J
	Unknown alkane	20.15	110J
	Unknown trimethyl naphthalene	21.46	110J
	Unknown trimethyl naphthalene	21.54	110J
	Unknown alkane	25.50	110J
	Unknown alkane	26.57	89J
	Unknown methyl naphthalene	18.39	88J
	Unknown	31.88	81J
	Unknown branched alkane	18.94	80J

Sample Identification: W-40

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown	31.93	130J

Sample Identification: FB SDG#7/5-22

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown	31.14	47J
	Unknown	7.89	11J

J - See Appendix for definition.

TABLE 4.2
30900-1151
MALCOLM-PIRNIE
SEMI-VOLATILE TENTATIVELY IDENTIFIED COMPOUNDS

Sample Identification: Method Blank >C6786

CAS#	Compound	RT	Estimated Concentration, ug/L
	None detected		

Sample Identification: W-26RE

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown	27.78	220J
	Unknown acid ester	10.18	110J
	Unknown aromatic	16.53	31J
	Unknown	13.14	29J
	Unknown	13.47	21J
	Unknown	16.33	14J
	Unknown	32.05	13J
	Unknown	28.21	11J
	Unknown naphthalene	16.16	11J
	Unknown aromatic	11.39	10J
	Unknown	19.11	9J

J - See Appendix for definition.

TABLE 5.0
30900-1151
MALCOLM-PIRNIE
EPA TCL PESTICIDES/PCB's

Aqueous

All values are ug/L.

Sample Identification

Dilution Factor	1.0	1.11	1.11	1.11	1.25	
Method Blank I.D.	0524 -B01	0524 -B01	0524 -B01	0524 -B01	0524 -B01	
Compound	Method Blank	W-33	W-26	W-24	W-25	Method Detection Limits with no Dilution
alpha-BHC	U	U	U	U	U	0.05
beta-BHC	U	U	U	U	U	0.05
delta-BHC	U	U	U	U	U	0.05
gamma-BHC	U	U	U	U	U	0.05
Heptachlor	U	U	U	U	U	0.05
Aldrin	U	U	U	U	U	0.05
Heptachlor Epoxide	U	U	U	U	U	0.05
Endosulfan I	U	U	U	U	U	0.05
Dieldrin	U	U	U	U	U	0.10
4,4'-DDE	U	U	U	U	U	0.10
Endrin	U	U	U	U	U	0.10
Endosulfan II	U	U	U	U	U	0.10
4,4'-DDD	U	U	U	U	U	0.10
Endosulfan Sulfate	U	U	U	U	U	0.10
4,4'-DDT	U	U	U	U	U	0.10
Methoxychlor	U	U	U	U	U	0.50
Endrin-Ketone	U	U	U	U	U	0.10
alpha-Chlordane	U	U	U	U	U	0.50
gamma-Chlordane	U	U	U	U	U	0.50
Toxaphene	U	U	U	U	U	1.0
PCB - 1016	U	U	U	U	U	0.5
PCB - 1221	U	U	U	U	U	0.5
PCB - 1232	U	U	U	U	U	0.5
PCB - 1242	U	U	U	U	U	0.5
PCB - 1248	U	U	U	U	U	0.5
PCB - 1254	U	U	U	U	U	1.0
PCB - 1260	U	U	U	U	U	1.0

U - See Appendix for definition.
Note: Sample detection limit = MDL x dilution factor.

Aqueous

TABLE 5.1
30900-1151
MALCOLM-PIRNIE
EPA TCL PESTICIDES/PCB's

All values are ug/L.

	Sample Identification				
Dilution Factor	1.0	1.11	1.11	1.0	
Method Blank I.D.	0524 -B01	0524 -B01	0524 -B01	0524 -B01	
Compound	Method Blank	W-27	W-40	FB SDG# 7/5-22	Method Detection Limits with no Dilution
alpha-BHC	U	U	U	U	0.05
beta-BHC	U	U	U	U	0.05
delta-BHC	U	U	U	U	0.05
gamma-BHC	U	U	U	U	0.05
Heptachlor	U	U	U	U	0.05
Aldrin	U	U	U	U	0.05
Heptachlor Epoxide	U	U	U	U	0.05
Endosulfan I	U	U	U	U	0.05
Dieldrin	U	U	U	U	0.10
4,4'-DDE	U	U	U	U	0.10
Endrin	U	U	U	U	0.10
Endosulfan II	U	U	U	U	0.10
4,4'-DDD	U	U	U	U	0.10
Endosulfan Sulfate	U	U	U	U	0.10
4,4'-DDT	U	U	U	U	0.10
Methoxychlor	U	U	U	U	0.50
Endrin-Ketone	U	U	U	U	0.10
alpha-Chlordane	U	U	U	U	0.50
gamma-Chlordane	U	U	U	U	0.50
Toxaphene	U	U	U	U	1.0
PCB - 1016	U	U	U	U	0.5
PCB - 1221	U	U	U	U	0.5
PCB - 1232	U	U	U	U	0.5
PCB - 1242	U	U	U	U	0.5
PCB - 1248	U	U	U	U	0.5
PCB - 1254	U	U	U	U	1.0
PCB - 1260	U	U	U	U	1.0

U - See Appendix for definition.
Note: Sample detection limit = MDL x dilution factor.

TABLE 6.0
30900-1151
MALCOLM-PIRNIE
TAL METALS PLUS CYANIDE

All values are ug/L.

Parameter	W-33	W-26	W-24	W-25
Aluminum	378	463	6,710	568
Antimony	13.0U	13.0U	13.0U	13.0U
Arsenic	18.9N	1.0UN	2.6BN	17.5N
Barium	25.4B	35.4B	36.2B	25.7B
Beryllium	1.0U	1.0U	1.0U	1.0U
Cadmium	2.0U	2.0U	2.0U	2.0U
Calcium	15,200	17,800	16,900	22,400
Chromium	10.5	13.5	25.0	9.2B
Cobalt	16.6B	49.1B	13.9B	13.9B
Copper	32.0	38.8	33.8	24.3B
Iron	41,400	57,100	31,800	67,100
Lead	1.7B	3.0B	4.6BW	1.2B
Magnesium	2,660B	3,090B	2,540B	3,600B
Manganese	9,640	6,940	1,500	6,560
Mercury	0.20U	0.20U	0.20U	0.20U
Nickel	10.1B	12.9B	24.3B	9.6B
Potassium	3,650B	8,910	3,400B	4,070B
Selenium	1.0UN	1.0UN	1.0UN	1.0UN
Silver	5.0U	5.0U	5.0U	5.0U
Sodium	13,300	24,200	14,400	12,600
Thallium	2.0U	2.0UW	2.0U	2.0U
Vanadium	2.0U	2.0U	17.5B	2.0U
Zinc	137	92.3	60.3	32.0
Cyanide	10.0U	10.0U	15.5	10.0U

B, N, U - See Metals Appendix for definition.

TABLE 6.1
30900-1151
MALCOLM-PIRNIE
TAL METALS PLUS CYANIDE

All values are ug/L.

Parameter	W-27	W-40	FB SDG#7/5-22
Aluminum	754	15,600	150B
Antimony	13.0U	13.0U	13.0U
Arsenic	1.0UN	6.7BN	1.0UN
Barium	26.0B	68.9B	6.5B
Beryllium	1.0U	1.0U	1.0U
Cadmium	2.0U	2.0U	2.0U
Calcium	15,700	14,500	1,930B
Chromium	9.0B	52.4	2.0U
Cobalt	33.4B	33.1B	2.0U
Copper	33.9	52.3	25.2
Iron	34,300	40,900	61.1B
Lead	1.2B	22.0	1.0UW
Magnesium	2,930B	3,970B	1,930B
Manganese	2,730	1,260	2.6B
Mercury	0.20U	0.20U	0.20U
Nickel	19.4B	28.7B	6.0U
Potassium	4,110B	4,030B	545U
Selenium	1.0UN	1.0UN	1.0UN
Silver	5.0U	5.0U	5.0U
Sodium	11,200	14,200	4,580B
Thallium	2.0U	2.0U	2.0U
Vanadium	2.0U	58.9	2.0U
Zinc	32.8	84.2	33.6
Cyanide	10.0U	10.0U	10.0U

B, N, U - See Metals Appendix for definition.

TABLE 7.0
30900-1151
MALCOLM-PIRNIE
MISCELLANEOUS INORGANICS

All values are mg/L unless noted.

Parameter	W-33	W-26	W-24	W-25
Alkalinity, as $CaCO_3$	88.9	86.3	27.5	120
Ammonia-Nitrogen	0.43	0.18	0.15	0.48
Biochemical Oxygen Demand (5 day)	47	23	34	29
Chloride	10.3	42.4	32.4	19.8
Chemical Oxygen Demand	71.8	18.6	45.8	40.9
Color, Pt-Co Units	80	25	<5	70
Hexavalent Chromium	<0.01	<0.01	<0.01	<0.01
Hardness, as $CaCO_3$	94.0	78.4	55.4	79.4
Petroleum Hydrocarbons	19.2	1.9	23.6	28.2
MBAS	<0.04	<0.04	<0.04	<0.04
Nitrate/Nitrite-Nitrogen	3.40	6.53	6.80	0.90
Odor, Threshold #	2	1	1	2
pH, S.U.	6.30	6.20	6.12	6.22
Phenols	0.025	<0.005	0.026	0.083
Sulfate	17.3	12.3	<10.0	10.2
Total Dissolved Solids	163	132	170	180
Total Kjeldahl Nitrogen	1.40	0.81	0.99	1.15
Total Organic Carbon	15.0	4.92	4.31	12.0

TABLE 7.1
30900-1151
MALCOLM-PIRNIE
MISCELLANEOUS INORGANICS

All values are mg/L unless noted.

Parameter	W-27	W-40	FB SDG#7/5022
Alkalinity, as $CaCO_3$	26.1	25.3	3.0
Ammonia-Nitrogen	0.10	<0.04	<0.04
Biochemical Oxygen Demand (5 day)	16	11	5
Chloride	24.2	46.8	<3.0
Chemical Oxygen Demand	12.4	37.1	<10.0
Color, Pt-Co Units	10	5	<5
Hexavalent Chromium	<0.01	0.03	<0.01
Hardness, as $CaCO_3$	57.2	49.6	<1.0
Petroleum Hydrocarbons	20.8	1.6	1.5
MBAS	<0.04	<0.04	<0.04
Nitrate/Nitrite-Nitrogen	3.34	1.46	<0.10
Odor, Threshold #	1	1	1
pH, S.U.	6.05	6.27	6.46
Phenols	0.009	<0.005	<0.005
Sulfate	11.3	<10.0	<10.0
Total Dissolved Solids	142	125	5.2
Total Kjeldahl Nitrogen	0.58	0.78	<0.10
Total Organic Carbon	7.73	1.89	<0.50

APPENDIX

U - Indicates that the compound was analyzed for but not detected.

J - Indicates that the compound was analyzed for and determined to be present in the sample. The mass spectrum of the compound meets the identification criteria of the method. The concentration listed is an estimated value, which is less than the specified minimum detection limit but is greater than zero.

B - This flag is used when the analyte is found in the blanks as well as the sample. It indicates possible sample contamination and warns the data user to use caution when applying the results of this analyte.

N - Indicates that the compound was analyzed for but not requested as an analyte. Value will not be listed on tabular result sheet.

X - Matrix spike compound.

(1) - Cannot be separated from diphenylamine.

(2) - Decomposes to azobenzene. Measured and calibrated as azobenzene.

A - This flag indicates that a TIC is a suspected aldol condensation product.

E - Indicates that it exceeds calibration curve range.

D - This flag identifies all compounds identified in an analysis at a secondary dilution factor.

APPENDIX/METALS DATA

C - Concentration qualifiers

U - Indicates analyte result less than instrument detection limit (IDL)

B - Indicates analyte result between IDL and contract required detection limit (CRDL)

Q - QC qualifiers

E - Reported value is estimated because of the presence of interference

M - Duplicate injection precision not met

N - Spiked sample recovery not within control limits

S - The reported value was determined by the method of standard additions (MSA)

W - Post-digest spike recovery furnace analysis was out of 85-115 percent control limit, while sample absorbance was less than 50 percent of spike absorbance

* - Duplicate analysis not within control limit

+ - Correlation coefficient for MSA is less than 0.995

M - Method codes

P - ICP

A - Flame AA

F - Furnace AA

CV - Cold vapor AA (manual)

C - Cyanide

NR - Not Required

Aqueous

TABLE 1.0
30900-1170
MALCOLM-PIRNIE
EPA TCL VOLATILE ORGANICS

All values are ug/L.

	Sample Identification		
Dilution Factor	1.0	1.0	
Method Blank I.D.	>A1424	>A1424	
Compound	Method Blank	FB SDG# 8/5-23	Method Detection Limits with no Dilution
Chloromethane	U	U	10
Bromomethane	U	U	10
Vinyl Chloride	U	U	10
Chloroethane	U	U	10
Methylene Chloride	3J	1JB	5
Acetone	13	5JB	10
Carbon Disulfide	U	U	5
1,1-Dichloroethene	U	U	5
1,1-Dichloroethane	U	U	5
1,2-Dichloroethene (total)	U	U	5
Chloroform	U	U	5
1,2-Dichloroethane	U	U	5
2-Butanone	9J	U	10
1,1,1-Trichloroethane	U	U	5
Carbon Tetrachloride	U	U	5
Vinyl Acetate	U	U	10
Bromodichloromethane	U	U	5
1,2-Dichloropropane	U	U	5
cis-1,3-Dichloropropene	U	U	5
Trichloroethene	U	U	5
Dibromochloromethane	U	U	5
1,1,2-Trichloroethane	U	U	5
Benzene	U	U	5
trans-1,3-Dichloropropene	U	U	5
Bromoform	U	U	5
4-Methyl-2-pentanone	U	U	10
2-Hexanone	5J	U	10
Tetrachloroethene	U	U	5
1,1,2,2-Tetrachloroethane	U	U	5
Toluene	U	U	5
Chlorobenzene	U	U	5
Ethylbenzene	U	U	5
Styrene	U	U	5
Xylene (total)	U	U	5

U, J, B - See Appendix for definition.
Note: Sample detection limit = MDL x dilution factor.

TABLE 1.1
30900-1170
MALCOLM-PIRNIE
EPA TCL VOLATILE ORGANICS

Aqueous

All values are ug/L.

	Sample Identification			
Dilution Factor	1.0	1.0	1.0	
Method Blank I.D.	>G5298	>G5298	>G5298	
Compound	Method Blank	TB SDG# 8/5-23	W-7C	Method Detection Limits with no Dilution
Chloromethane	U	U	U	10
Bromomethane	U	U	U	10
Vinyl Chloride	U	U	U	10
Chloroethane	U	U	U	10
Methylene Chloride	U	U	U	5
Acetone	U	U	U	10
Carbon Disulfide	U	U	U	5
1,1-Dichloroethene	U	U	U	5
1,1-Dichloroethane	U	U	U	5
1,2-Dichloroethene (total)	U	U	13	5
Chloroform	U	U	U	5
1,2-Dichloroethane	U	U	U	5
2-Butanone	U	U	U	10
1,1,1-Trichloroethane	U	U	U	5
Carbon Tetrachloride	U	U	U	5
Vinyl Acetate	U	U	U	10
Bromodichloromethane	U	U	U	5
1,2-Dichloropropane	U	U	U	5
cis-1,3-Dichloropropene	U	U	U	5
Trichloroethene	U	U	1J	5
Dibromochloromethane	U	U	U	5
1,1,2-Trichloroethane	U	U	U	5
Benzene	U	U	U	5
trans-1,3-Dichloropropene	U	U	U	5
Bromoform	U	U	U	5
4-Methyl-2-pentanone	U	U	U	10
2-Hexanone	U	U	U	10
Tetrachloroethene	U	U	4J	5
1,1,2,2-Tetrachloroethane	U	U	U	5
Toluene	U	U	U	5
Chlorobenzene	U	U	U	5
Ethylbenzene	U	U	U	5
Styrene	U	U	U	5
Xylene (total)	U	U	U	5

U, J - See Appendix for definition.
Note: Sample detection limit = MDL x dilution factor.

TABLE 2.0
30900-1170
MALCOLM-PIRNIE
VOLATILE TENTATIVELY IDENTIFIED COMPOUNDS

Sample Identification: Method Blank >A1424

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown alkane	7.80	8J

Sample Identification: FB SDG#8/5-23

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown alkane	7.80	7JB

Sample Identification: Method Blank >G5298

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown alkane	7.66	8J

Sample Identification: TB SDG#8/5-23

CAS#	Compound	RT	Estimated Concentration, ug/L
	None detected		

Sample Identification: W-7C

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown alkane	7.79	7JB

J, B - See Appendix for definition.

TABLE 3.0
30900-1170
MALCOLM-PIRNIE
TAL METALS PLUS CYANIDE

All values are ug/L.

Parameter	W-7D	W-7C	W-34	FB SDG#8/5-23
Aluminum	1,170E	980E	3,610E	197BE
Antimony	13.0U	13.0U	13.0U	13.0U
Arsenic	2.3BN	1.9BN	3.6BN	1.0UN
Barium	47.2B	30.8B	50.4B	4.0U
Beryllium	1.0U	1.0U	1.0U	1.0U
Cadmium	2.0U	2.0U	2.0U	2.0U
Calcium	20,200	5,680	14,800	187B
Chromium	18.4	116	15.9	2.0U
Cobalt	22.0B	4.2B	13.6B	2.0U
Coper	28.8	33.9	25.7	14.0U
Iron	3,060	3,210	8,560	89.7B
Lead	5.2N*	21.4N*	5.2N*	1.0UN*
Magnesium	6,440	1,580B	3,050B	122B
Manganese	1,030	84.4	1,670	2.1B
Mercury	0.20U	0.20U	0.20U	0.20U
Nickel	75.2	76.4	7.3B	6.0U
Potassium	16,100	30,100	5,550	545U
Selenium	1.0U	1.0U	1.0U	1.0U
Silver	5.0U	5.0U	5.0U	5.0U
Sodium	39,500E	30,300E	20,500E	6,700E
Thallium	1.0UNW	1.0UNW	1.0UNW	1.0UN
Vanadium	6.5B	9.6B	12.8B	6.8B
Zinc	365	68.8	72.5	16.0U
Cyanide	10.0U	10.0U	10.0U	10.0U

B, E, N, U, W, * - See Metals Appendix for definition.

TABLE 4.0
30900-1170
MALCOLM-PIRNIE
MISCELLANEOUS INORGANICS

All values are mg/L unless noted.

Parameter	W-7D	W-7C	W-34	FB SDG#8/5-23
Alkalinity, as $CaCO_3$	105	76.4	26.7	4.0
Ammonia-Nitrogen	<0.04	1.19	0.17	<0.04
Biochemical Oxygen Demand (5 day)	11	11	11	5
Chloride	16.8	41.2	34.7	<3.0
Color, Pt-Co Units	50	<5	15	<5
Hexavalent Chromium	<0.01	<0.01	<0.01	<0.01
Hardness, as $CaCO_3$	19.2	85.0	53.8	<1.0
Petroleum Hydrocarbons	5.0	1.9	1.7	1.7
Chemical Oxygen Demand	<10.0	<10.0	13.7	<10.0
MBAS	<0.04	<0.04	<0.04	<0.04
Nitrate/Nitrite-Nitrogen	3.13	5.24	5.65	<0.10
Odor, Threshold #	1	1	1	1
pH, S.U.	9.85	6.58	6.10	6.70
Phenols	0.015	0.007	<0.005	<0.005
Sulfate	12.1	31.4	10.9	<10.0
Total Dissolved Solids	186	275	154	13.2
Total Kjeldahl Nitrogen	0.34	0.89	0.82	<0.10
Total Organic Carbon	1.86	2.16	2.24	<0.50

*ug/L

APPENDIX

U - Indicates that the compound was analyzed for but not detected.

J - Indicates that the compound was analyzed for and determined to be present in the sample. The mass spectrum of the compound meets the identification criteria of the method. The concentration listed is an estimated value, which is less than the specified minimum detection limit but is greater than zero.

B - This flag is used when the analyte is found in the blanks as well as the sample. It indicates possible sample contamination and warns the data user to use caution when applying the results of this analyte.

N - Indicates that the compound was analyzed for but not requested as an analyte. Value will not be listed on tabular result sheet.

X - Matrix spike compound.

(1) - Cannot be separated from diphenylamine.

(2) - Decomposes to azobenzene. Measured and calibrated as azobenzene.

A - This flag indicates that a TIC is a suspected aldol condensation product.

E - Indicates that it exceeds calibration curve range.

D - This flag identifies all compounds identified in an analysis at a secondary dilution factor.

APPENDIX/METALS DATA

C - Concentration qualifiers

U - Indicates analyte result less than instrument detection limit (IDL)

B - Indicates analyte result between IDL and contract required detection limit (CRDL)

Q - QC qualifiers

E - Reported value is estimated because of the presence of interference

M - Duplicate injection precision not met

N - Spiked sample recovery not within control limits

S - The reported value was determined by the method of standard additions (MSA)

W - Post-digest spike recovery furnace analysis was out of 85-115 percent control limit, while sample absorbance was less than 50 percent of spike absorbance

* - Duplicate analysis not within control limit

+ - Correlation coefficient for MSA is less than 0.995

M - Method codes

P - ICP

A - Flame AA

F - Furnace AA

CV - Cold vapor AA (manual)

C - Cyanide

NR - Not Required

TABLE 2.0
30900-1297
MALCOLM-PIRNIE
EPA TCL VOLATILE ORGANICS

Aqueous

All values are ug/L.

	Sample Identification				
Dilution Factor	1.0	1.0	1.0	1.0	
Method Blank I.D.	>A1658	>A1658	>A1658	>A1658	
Compound	Method Blank	FB SDG #4	TB SDG #4	HB REF 35 06/14/90	Method Detection Limits with no Dilution
Chloromethane	U	U	U	U	10
Bromomethane	U	U	U	U	10
Vinyl Chloride	U	6J	U	U	10
Chloroethane	U	U	U	U	10
Methylene Chloride	U	1J	1J	1J	5
Acetone	U	4J	3J	3J	10
Carbon Disulfide	U	U	U	U	5
1,1-Dichloroethene	U	U	U	U	5
1,1-Dichloroethane	U	U	U	U	5
1,2-Dichloroethene (total)	U	U	U	U	5
Chloroform	0.7J	U	U	U	5
1,2-Dichloroethane	U	U	U	U	5
2-Butanone	U	U	U	U	10
1,1,1-Trichloroethane	U	U	U	U	5
Carbon Tetrachloride	U	U	U	U	5
Vinyl Acetate	U	U	U	U	10
Bromodichloromethane	U	U	U	U	5
1,2-Dichloropropane	U	U	U	U	5
cis-1,3-Dichloropropene	U	U	U	U	5
Trichloroethene	U	U	U	U	5
Dibromochloromethane	U	U	U	U	5
1,1,2-Trichloroethane	U	U	U	U	5
Benzene	U	U	U	U	5
trans-1,3-Dichloropropene	U	U	U	U	5
Bromoform	U	U	U	U	5
4-Methyl-2-pentanone	U	U	U	U	10
2-Hexanone	1J	U	U	U	10
Tetrachloroethene	U	U	U	U	5
1,1,2,2-Tetrachloroethane	U	U	U	U	5
Toluene	U	U	U	U	5
Chlorobenzene	U	U	U	U	5
Ethylbenzene	U	U	U	U	5
Styrene	U	U	U	U	5
Xylene (total)	U	U	U	U	5

J - See Appendix for definition.
Note: Sample detection limit = MDL x dilution factor.

TABLE 2.1
30900-1297
MALCOLM-PIRNIE
EPA TCL VOLATILE ORGANICS

Aqueous

All values are ug/L.

	Sample Identification		
Dilution Factor	1.0	1.0	
Method Blank I.D.	>G5828	>G5828	
Compound	Method Blank	HB REF 35 06/21/90	Method Detection Limits with no Dilution
Chloromethane	U	U	10
Bromomethane	U	U	10
Vinyl Chloride	U	U	10
Chloroethane	U	U	10
Methylene Chloride	U	U	5
Acetone	U	U	10
Carbon Disulfide	U	U	5
1,1-Dichloroethene	U	U	5
1,1-Dichloroethane	U	U	5
1,2-Dichloroethene (total)	U	U	5
Chloroform	U	U	5
1,2-Dichloroethane	U	U	5
2-Butanone	U	U	10
1,1,1-Trichloroethane	U	U	5
Carbon Tetrachloride	U	U	5
Vinyl Acetate	U	U	10
Bromodichloromethane	U	U	5
1,2-Dichloropropane	U	U	5
cis-1,3-Dichloropropene	U	U	5
Trichloroethene	U	U	5
Dibromochloromethane	U	U	5
1,1,2-Trichloroethane	U	U	5
Benzene	U	U	5
trans-1,3-Dichloropropene	U	U	5
Bromoform	U	U	5
4-Methyl-2-pentanone	U	U	10
2-Hexanone	U	U	10
Tetrachloroethene	U	U	5
1,1,2,2-Tetrachloroethane	U	U	5
Toluene	U	U	5
Chlorobenzene	U	U	5
Ethylbenzene	U	U	5
Styrene	U	U	5
Xylene (total)	U	U	5

U See Appendix for definition.
Note: Sample detection limit = MDL x dilution factor.

Aqueous

TABLE 2.2
30900-1297
MALCOLM-PIRNIE
EPA TCL VOLATILE ORGANICS

All values are ug/L.

	Sample Identification		
Dilution Factor	1.0	1.0	
Method Blank I.D.	>G5996	>G5996	
Compound	Method Blank	HB REF 34 06/29/90	Method Detection Limits with no Dilution
hloromethane	U	U	10
Bromomethane	U	U	10
Vinyl Chloride	U	U	10
hloroethane	U	U	10
ethylene Chloride	U	U	5
Acetone	U	U	10
arbon Disulfide	U	U	5
,1-Dichloroethene	U	U	5
1,1-Dichloroethane	U	U	5
-Dichloroethene (total)	U	U	5
oroform	U	U	5
,2-Dichloroethane	U	U	5
2-Butanone	U	U	10
,1,1-Trichloroethane	U	U	5
arbon Tetrachloride	U	U	5
Vinyl Acetate	U	U	10
romodichloromethane	U	U	5
,2-Dichloropropane	U	U	5
cis-1,3-Dichloropropene	U	U	5
Trichloroethene	U	U	5
ibromochloromethane	U	U	5
,1,2-Trichloroethane	U	U	5
Benzene	U	U	5
rans-1,3-Dichloropropene	U	U	5
romoform	U	U	5
4-Methyl-2-pentanone	U	U	10
-Hexanone	U	U	10
etrachloroethene	U	U	5
,1,2,2-Tetrachloroethane	U	U	5
Toluene	U	U	5
hlorobenzene	U	U	5
thylbenzene	U	U	5
Styrene	U	U	5
ylene (total)	U	U	5

See Appendix for definition.
Note: Sample detection limit = MDL x dilution factor.

Soil

TABLE 2.3
30900-1297
MALCOLM-PIRNIE
EPA TCL VOLATILE ORGANICS

All values are ug/Kg.

	Sample Identification		
ilution Factor	1.00	1.22	
Method Blank I.D.	>B0066	>B0066	
Compound	Method Blank	BP/PH-3 Comp	Method Detection Limits with no Dilution
hloromethane	U	U	10
Bromomethane	U	U	10
Vinyl Chloride	U	U	10
hloroethane	U	U	10
ethylene Chloride	U	U	5
Acetone	19	9JB	10
arbon Disulfide	U	U	5
,1-Dichloroethene	U	U	5
1,1-Dichloroethane	U	U	5
?-Dichloroethene (total)	U	U	5
oroform	U	U	5
,2-Dichloroethane	U	U	5
2-Butanone	U	U	10
,1,1-Trichloroethane	U	U	5
arbon Tetrachloride	U	U	5
Vinyl Acetate	U	U	10
romodichloromethane	U	U	5
,2-Dichloropropane	U	U	5
cis-1,3-Dichloropropene	U	U	5
Trichloroethene	U	U	5
ibromochloromethane	U	U	5
,1,2-Trichloroethane	U	U	5
Benzene	U	U	5
rans-1,3-Dichloropropene	U	U	5
romoform	U	U	5
4-Methyl-2-pentanone	U	U	10
?-Hexanone	U	U	10
etrachloroethene	U	U	5
,1,2,2-Tetrachloroethane	U	U	5
Toluene	U	2J	5
hlorobenzene	U	U	5
thylbenzene	U	U	5
Styrene	U	U	5
ylene (total)	U	U	5

J, B - See Appendix for definition.
ote: Sample detection limit = MDL x dilution factor.

TABLE 2.4
30900-1297
MALCOLM-PIRNIE
EPA TCL VOLATILE ORGANICS

Soil

All values are ug/Kg.

	Sample Identification				
Dilution Factor	1.00	1.75	1.75	1.75	
Method Blank I.D.	>A1807	>A1807	>A1807	>A1807	
Compound	Method Blank	BP/PH-6 Comp	BP/PH-6 Comp MS	BP/PH-6 Comp MSD	Method Detection Limits with no Dilution
hloromethane	U	U	U	U	10
Bromomethane	U	U	U	U	10
Vinyl Chloride	U	U	U	U	10
hloroethane	U	U	U	U	10
ethylene Chloride	1J	U	4JB	4JB	5
Acetone	8J	12JB	22B	21B	10
arbon Disulfide	U	U	U	U	5
,1-Dichloroethene	U	U	110X	99X	5
1,1-Dichloroethane	U	U	U	U	5
?-Dichloroethene (total)	U	U	U	U	5
oroform	U	U	U	U	5
,2-Dichloroethane	U	U	U	U	5
2-Butanone	U	U	U	U	10
,1,1-Trichloroethane	U	U	U	U	5
arbon Tetrachloride	U	U	U	U	5
Vinyl Acetate	U	U	U	U	10
romodichloromethane	U	U	U	U	5
,2-Dichloropropane	U	U	U	U	5
cis-1,3-Dichloropropene	U	U	U	U	5
Trichloroethene	U	U	91X	90X	5
ibromochloromethane	U	U	U	U	5
,1,2-Trichloroethane	U	U	U	U	5
Benzene	U	U	93X	90X	5
rans-1,3-Dichloropropene	U	U	U	U	5
romoform	U	U	U	U	5
4-Methyl-2-pentanone	U	U	U	U	10
?-Hexanone	U	U	U	U	10
etrachloroethene	U	U	U	U	5
,1,2,2-Tetrachloroethane	U	U	U	U	5
Toluene	U	U	91X	86X	5
hlorobenzene	U	U	94X	92X	5
thylbenzene	U	U	U	U	5
Styrene	U	U	U	U	5
ylene (total)	U	U	U	U	5

J, B, X - See Appendix for definition.
Note: Sample detection limit = MDL x dilution factor.

Soil

TABLE 2.5
30900-1297
MALCOLM-PIRNIE
EPA TCL VOLATILE ORGANICS

All values are ug/Kg.

	Sample Identification		
Dilution Factor	1.00	1.00	
Method Blank I.D.	>A1821	>A1821	
Compound	Method Blank	MSB-BP/PH-6 Comp	Method Detection Limits with no Dilution
Chloromethane	U	U	10
Bromomethane	U	U	10
Vinyl Chloride	U	U	10
Chloroethane	U	U	10
Methylene Chloride	2J	2JB	5
Acetone	22	22B	10
Carbon Disulfide	U	U	5
1,1-Dichloroethene	U	56X	5
1,1-Dichloroethane	U	U	5
1,2-Dichloroethene (total)	U	U	5
Chloroform	1J	U	5
1,2-Dichloroethane	U	U	5
2-Butanone	3J	3JB	10
1,1,1-Trichloroethane	U	U	5
Carbon Tetrachloride	U	U	5
Vinyl Acetate	U	U	10
Bromodichloromethane	U	U	5
1,2-Dichloropropane	U	U	5
cis-1,3-Dichloropropene	U	U	5
Trichloroethene	U	52X	5
Dibromochloromethane	U	U	5
1,1,2-Trichloroethane	U	U	5
Benzene	1J	53BX	5
trans-1,3-Dichloropropene	U	U	5
Bromoform	0.9J	U	5
4-Methyl-2-pentanone	U	U	10
2-Hexanone	U	U	10
Tetrachloroethene	U	U	5
1,1,2,2-Tetrachloroethane	U	U	5
Toluene	U	53X	5
Chlorobenzene	U	51X	5
Ethylbenzene	U	U	5
Styrene	0.9J	U	5
Xylene (total)	3J	U	5

J, B, X - See Appendix for definition.
Note: Sample detection limit = MDL x dilution factor.

Soil

TABLE 2.6
30900-1297
MALCOLM-PIRNIE
EPA TCL VOLATILE ORGANICS

All values are ug/Kg.

	Sample Identification		
Dilution Factor	1.00	1.69	
Method Blank I.D.	>A1935	>A1935	
Compound	Method Blank	BP/PH-7 Comp	Method Detection Limits with no Dilution
hloromethane	U	U	10
Bromomethane	U	U	10
Vinyl Chloride	U	U	10
hloroethane	U	U	10
ethylene Chloride	U	U	5
Acetone	6J	34B	10
arbon Disulfide	U	U	5
,1-Dichloroethene	U	U	5
1,1-Dichloroethane	U	U	5
-Dichloroethene (total)	U	U	5
oroform	U	U	5
1,2-Dichloroethane	U	U	5
2-Butanone	U	6J	10
,1,1-Trichloroethane	U	U	5
arbon Tetrachloride	U	U	5
Vinyl Acetate	U	U	10
romodichloromethane	U	U	5
,2-Dichloropropane	U	U	5
cis-1,3-Dichloropropene	U	U	5
Trichloroethene	U	U	5
ibromochloromethane	U	U	5
1,1,2-Trichloroethane	U	U	5
Benzene	U	U	5
rans-1,3-Dichloropropene	U	U	5
romoform	U	U	5
4-Methyl-2-pentanone	U	U	10
-Hexanone	U	U	10
etrachloroethene	U	U	5
1,1,2,2-Tetrachloroethane	U	U	5
Toluene	U	U	5
hlorobenzene	U	U	5
thylbenzene	U	U	5
Styrene	U	U	5
ylene (total)	U	U	5

J, B - See Appendix for definition.
Note: Sample detection limit = MDL x dilution factor.

TABLE 3.0
30900-1297
MALCOLM-PIRNIE
VOLATILE TENTATIVELY IDENTIFIED COMPOUNDS

Sample Identification: Method Blank >A1658

CAS#	Compound	RT	Estimated Concentration, ug/L
None detected			

Sample Identification: FB SDG#4

CAS#	Compound	RT	Estimated Concentration, ug/L
None detected			

Sample Identification: TB SDG#4

CAS#	Compound	RT	Estimated Concentration, ug/L
None detected			

Sample Identification: HB REF 35 06/14/90

CAS#	Compound	RT	Estimated Concentration, ug/L
None detected			

Sample Identification: Method Blank >G5996

CAS#	Compound	RT	Estimated Concentration, ug/L
None detected			

TABLE 3.1
30900-1297
MALCOLM-PIRNIE
VOLATILE TENTATIVELY IDENTIFIED COMPOUNDS

Sample Identification: HB REF 34 06/29/90

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown alkane	27.08	11J
	Unknown alkane	26.04	8J
	Unknown alkane	23.77	7J

Sample Identification: Method Blank >G5828

CAS#	Compound	RT	Estimated Concentration, ug/L
	None detected		

Sample Identification: HB REF 35 06/21/90

CAS#	Compound	RT	Estimated Concentration, ug/L
	None detected		

Sample Identification: Method Blank >B0066

CAS#	Compound	RT	Estimated Concentration, ug/Kg
	None detected		

Sample Identification: BP/PH-3 Comp

CAS#	Compound	RT	Estimated Concentration, ug/Kg
	None detected		

J - See Appendix for definition.

TABLE 3.2
30900-1297
MALCOLM-PIRNIE
VOLATILE TENTATIVELY IDENTIFIED COMPOUNDS

Sample Identification: Method Blank >A1807

CAS#	Compound	RT	Estimated Concentration, ug/Kg
	None detected		

Sample Identification: BP/PH-6 Comp

CAS#	Compound	RT	Estimated Concentration, ug/Kg
	None detected		

Sample Identification: Method Blank >A1821

CAS#	Compound	RT	Estimated Concentration, ug/Kg
	Unknown	7.65	10J

Sample Identification: Method Blank >A1935

CAS#	Compound	RT	Estimated Concentration, ug/Kg
	None detected		

Sample Identification: BP/PH-7 Comp

CAS#	Compound	RT	Estimated Concentration, ug/Kg
	None detected		

J - See Appendix for definition.

TABLE 4.0
30900-1297
MALCOLM-PIRNIE
EPA TCL SEMI-VOLATILE ORGANICS

All values are ug/L.

	Sample Identification		
ilution Factor	1.0	1.0	
Method Blank I.D.	>C6973	>C6973	
Compound	Method Blank	FB SDG#4	Method Detection Limits with no Dilution
henol	U	U	10
bis(2-Chloroethyl)ether	U	U	10
2-Chlorophenol	U	U	10
,3-Dichlorobenzene	U	U	10
,4-Dichlorobenzene	U	U	10
Benzyl alcohol	U	U	10
,2-Dichlorobenzene	U	U	10
-Methylphenol	U	U	10
bis(2-Chloroisopropyl)ether	U	U	10
Methylphenol	U	U	10
itroso-di-n-propylamine	U	U	10
Hexachloroethane	U	U	10
Nitrobenzene	U	U	10
sophorone	U	U	10
-Nitrophenol	U	U	10
2,4-Dimethylphenol	U	U	10
enzoic acid	U	U	50
is(2-Chloroethoxy)methane	U	U	10
2,4-Dichlorophenol	U	U	10
1,2,4-Trichlorobenzene	U	U	10
aphthalene	U	U	10
-Chloroaniline	U	U	10
Hexachlorobutadiene	U	U	10
-Chloro-3-methylphenol	U	U	10
-Methylnaphthalene	U	U	10
Hexachlorocyclopentadiene	U	U	10
2,4,6-Trichlorophenol	U	U	10
,4,5-Trichlorophenol	U	U	50
2-Chloronaphthalene	U	U	10
2-Nitroaniline	U	U	50
imethylphthalate	U	U	10
cenaphthylene	U	U	10
2,6-Dinitrotoluene	U	U	10

- See Appendix for definition.
e: Sample detection limit = MDL x dilution factor.

TABLE 4.0
30900-1297
MALCOLM-PIRNIE
EPA TCL SEMI-VOLATILE ORGANICS

All values are ug/L.

	Sample Identification		
Dilution Factor	1.0	1.0	
Method Blank I.D.	>C6973	>C6973	
Compound	Method Blank	FB SDG#4	Method Detection Limits with no Dilution
-Nitroaniline	U	U	50
Acenaphthene	U	U	10
?,4-Dinitrophenol	U	U	50
-Nitrophenol	U	U	50
ɔibenzofuran	U	U	10
2,4-Dinitrotoluene	U	U	10
iethylphthalate	U	U	10
-Chlorophenyl-phenylether	U	U	10
Fluorene	U	U	10
'itroaniline	U	U	50
›-Dinitro-2-methylphenol	U	U	50
N-Nitrosodiphenylamine (1)	U	U	10
4-Bromophenyl-phenylether	U	U	10
exachlorobenzene	U	U	10
entachlorophenol	U	U	50
Phenanthrene	U	U	10
ıthracene	U	U	10
i-n-butylphthalate	U	U	10
Fluoranthene	U	U	10
Pyrene	U	U	10
ıtylbenzylphthalate	U	U	10
ɔ,3'-Dichlorobenzidine	U	U	20
Benzo(a)anthracene	U	U	10
ırysene	U	U	10
is(2-Ethylhexyl)phthalate	1J	2JB	10
Di-n-octylphthalate	U	U	10
enzo(b)fluoranthene	U	U	10
enzo(k)fluoranthene	U	U	10
Benzo(a)pyrene	U	U	10
Indeno(1,2,3-cd)pyrene	U	U	10
ibenzo(a,h)anthracene	U	U	10
enzo(g,h,i)perylene	U	U	10

', J, B, (1) - See Appendix for definition.
ote: Sample detection limit = MDL x dilution factor.

TABLE 4.1
30900-1297
MALCOLM-PIRNIE
EPA TCL SEMI-VOLATILE ORGANICS

All values are ug/Kg.

	Sample Identification					
ilution Factor	1.0	1.19	1.19	1.19	1.00	
Method Blank I.D.	>C6975	>C6975	>C6975	>C6975	>C6975	
Compound	Method Blank	BP/PH-3 Comp	BP/PH-3 Comp MS	BP/PH-3 Comp MSD	MSB-BP/PH-3 Comp	Method Detection Limits with no Dilution
henol	U	U	5,800X	5,800X	6,100EX	330
bis(2-Chloroethyl)ether	U	U	U	U	U	330
2-Chlorophenol	U	U	5,200X	5,500X	5,500EX	330
,3-Dichlorobenzene	U	U	U	U	U	330
,4-Dichlorobenzene	U	U	2,200X	2,400X	2,700X	330
Benzyl alcohol	U	U	U	U	U	330
',2-Dichlorobenzene	U	U	U	U	U	330
-Methylphenol	U	U	U	U	U	330
bis(2-Chloroisopropyl)ether	U	U	U	U	U	330
' Methylphenol	U	U	U	U	U	330
itroso-di-n-propylamine	U	U	2,900X	2,800X	3,200X	330
.exachloroethane	U	U	U	U	U	330
Nitrobenzene	U	U	U	U	U	330
sophorone	U	U	U	U	U	330
-Nitrophenol	U	U	U	U	U	330
2,4-Dimethylphenol	U	U	U	U	U	330
Benzoic acid	47J	U	28JB	U	53JB	1,600
is(2-Chloroethoxy)methane	U	U	U	U	U	330
2,4-Dichlorophenol	U	U	U	U	U	330
1,2,4-Trichlorobenzene	U	U	2,400X	2,600X	2,600X	330
aphthalene	U	U	U	U	U	330
-Chloroaniline	U	U	U	U	U	330
Hexachlorobutadiene	U	U	U	U	U	330
'-Chloro-3-methylphenol	U	U	6,300X	5,700X	5,500EX	330
-Methylnaphthalene	U	U	U	U	U	330
Hexachlorocyclopentadiene	U	U	U	U	U	330
2,4,6-Trichlorophenol	U	U	U	U	U	330
,4,5-Trichlorophenol	U	U	U	U	U	1,600
-Chloronaphthalene	U	U	U	U	U	330
2-Nitroaniline	U	U	U	U	U	1,600
imethylphthalate	U	U	U	U	U	330
cenaphthylene	U	U	U	U	U	330
2,6-Dinitrotoluene	U	U	U	U	U	330

, J, B, E, X - See Appendix for definition.
e: Sample detection limit = MDL x dilution factor.

TABLE 4.1
30900-1297
MALCOLM-PIRNIE
EPA TCL SEMI-VOLATILE ORGANICS

All values are ug/Kg.

	Sample Identification					
Dilution Factor	1.0	1.19	1.19	1.19	1.00	
Method Blank I.D.	>C6975	>C6975	>C6975	>C6975	>C6975	
Compound	Method Blank	BP/PH-3 Comp	BP/PH-3 Comp MS	BP/PH-3 Comp MSD	MSB-BP/PH-3 Comp	Method Detection Limits with no Dilution
-Nitroaniline	U	U	U	U	U	1,600
Acenaphthene	U	U	3,000X	3,100X	2,700X	330
?,4-Dinitrophenol	U	U	U	U	U	1,600
-Nitrophenol	U	U	8,500EX	8,400EX	7,300EX	1,600
ibenzofuran	U	U	U	U	U	330
2,4-Dinitrotoluene	U	U	4,200X	4,000X	3,300X	330
iethylphthalate	U	U	U	U	U	330
-Chlorophenyl-phenylether	U	U	U	U	U	330
Fluorene	U	U	U	U	U	330
Nitroaniline	U	U	U	U	U	1,600
-Dinitro-2-methylphenol	U	U	U	U	U	1,600
N-Nitrosodiphenylamine (1)	U	U	U	U	U	330
4-Bromophenyl-phenylether	U	U	U	U	U	330
exachlorobenzene	U	U	U	U	U	330
entachlorophenol	U	U	6,900X	7,200X	7,200EX	1,600
Phenanthrene	U	U	U	U	U	330
nthracene	U	U	U	U	U	330
i-n-butylphthalate	20J	U	U	U	19JB	330
luoranthene	U	U	U	U	U	330
Pyrene	U	U	3,200X	6,900X	3,000X	330
utylbenzylphthalate	U	U	U	U	U	330
,3'-Dichlorobenzidine	U	U	U	U	U	660
Benzo(a)anthracene	U	U	U	U	U	330
hrysene	U	U	U	U	U	330
is(2-Ethylhexyl)phthalate	120J	310JB	360JB	740B	140JB	330
Di-n-octylphthalate	U	U	U	U	U	330
Benzo(b)fluoranthene	U	U	U	U	U	330
enzo(k)fluoranthene	U	U	U	U	U	330
enzo(a)pyrene	U	U	U	U	U	330
Indeno(1,2,3-cd)pyrene	U	U	U	U	U	330
ibenzo(a,h)anthracene	U	U	U	U	U	330
enzo(g,h,i)perylene	U	U	U	U	U	330

", J, B, E, X, (1) - See Appendix for definition.
ote: Sample detection limit = MDL x dilution factor.

TABLE 4.2
30900-1297
MALCOLM-PIRNIE
EPA TCL SEMI-VOLATILE ORGANICS

All values are ug/Kg.

	Sample Identification		
ilution Factor	1.00	1.22	
Method Blank I.D.	>C6976	>C6976	
Compound	Method Blank	BP/PH-6 Comp	Method Detection Limits with no Dilution
ıenol	U	U	330
bis(2-Chloroethyl)ether	U	U	330
?-Chlorophenol	U	U	330
,3-Dichlorobenzene	U	U	330
ı,4-Dichlorobenzene	U	U	330
Benzyl alcohol	U	U	330
,2-Dichlorobenzene	U	U	330
-Methylphenol	U	U	330
bis(2-Chloroisopropyl)ether	U	U	330
‘ethylphenol	U	U	330
.itroso-di-n-propylamine	U	U	330
nexachloroethane	U	U	330
Nitrobenzene	U	U	330
sophorone	U	U	330
-Nitrophenol	U	U	330
2,4-Dimethylphenol	U	U	330
enzoic acid	U	U	1,600
is(2-Chloroethoxy)methane	U	U	330
2,4-Dichlorophenol	U	U	330
1,2,4-Trichlorobenzene	U	U	330
aphthalene	U	U	330
-Chloroaniline	U	U	330
Hexachlorobutadiene	U	U	330
-Chloro-3-methylphenol	U	U	330
-Methylnaphthalene	U	U	330
Hexachlorocyclopentadiene	U	U	330
?,4,6-Trichlorophenol	U	U	330
,4,5-Trichlorophenol	U	U	1,600
?-Chloronaphthalene	U	U	330
2-Nitroaniline	U	U	1,600
imethylphthalate	U	U	330
.cenaphthylene	U	U	330
2,6-Dinitrotoluene	U	U	330

- See Appendix for definition.
e: Sample detection limit = MDL x dilution factor.

TABLE 4.2
30900-1297
MALCOLM-PIRNIE
EPA TCL SEMI-VOLATILE ORGANICS

All values are ug/Kg.

	Sample Identification		
ilution Factor	1.00	1.22	
Method Blank I.D.	>C6976	>C6976	
Compound	Method Blank	BP/PH-6 Comp	Method Detection Limits with no Dilution
-Nitroaniline	U	U	1,600
Acenaphthene	U	U	330
?,4-Dinitrophenol	U	U	1,600
-Nitrophenol	U	U	1,600
ɒibenzofuran	U	U	330
2,4-Dinitrotoluene	U	U	330
iethylphthalate	U	U	330
-Chlorophenyl-phenylether	U	U	330
Fluorene	U	U	330
itroaniline	U	U	1,600
-Dinitro-2-methylphenol	U	U	1,600
N-Nitrosodiphenylamine (1)	U	U	330
4-Bromophenyl-phenylether	U	U	330
exachlorobenzene	U	U	330
entachlorophenol	U	U	1,600
Phenanthrene	U	U	330
ıthracene	U	U	330
i-n-butylphthalate	19J	U	330
Fluoranthene	U	U	330
Pyrene	U	U	330
ıtylbenzylphthalate	U	U	330
ɔ,3'-Dichlorobenzidine	U	U	660
Benzo(a)anthracene	U	U	330
ırysene	U	U	330
is(2-Ethylhexyl)phthalate	390	750B	330
Di-n-octylphthalate	U	U	330
enzo(b)fluoranthene	U	U	330
enzo(k)fluoranthene	U	U	330
Benzo(a)pyrene	U	U	330
Indeno(1,2,3-cd)pyrene	U	U	330
ibenzo(a,h)anthracene	U	U	330
enzo(g,h,i)perylene	U	U	330

, J, B, (1) - See Appendix for definition.
ote: Sample detection limit = MDL x dilution factor.

TABLE 4.3
30900-1297
MALCOLM-PIRNIE
EPA TCL SEMI-VOLATILE ORGANICS

All values are ug/Kg.

	Sample Identification		
ilution Factor	1.00	1.23	
Method Blank I.D.	>C7127	>C7127	
Compound	Method Blank	BP/PH-7 Comp	Method Detection Limits with no Dilution
henol	U	U	330
bis(2-Chloroethyl)ether	U	U	330
?-Chlorophenol	U	U	330
,3-Dichlorobenzene	U	U	330
,4-Dichlorobenzene	U	U	330
Benzyl alcohol	U	U	330
,2-Dichlorobenzene	U	U	330
-Methylphenol	U	U	330
bis(2-Chloroisopropyl)ether	U	U	330
ethylphenol	U	U	330
Nitroso-di-n-propylamine	U	U	330
Hexachloroethane	U	U	330
Nitrobenzene	U	U	330
sophorone	U	U	330
-Nitrophenol	U	U	330
2,4-Dimethylphenol	U	U	330
enzoic acid	140J	49JB	1,600
is(2-Chloroethoxy)methane	U	U	330
2,4-Dichlorophenol	U	U	330
,2,4-Trichlorobenzene	U	U	330
aphthalene	U	U	330
4-Chloroaniline	U	U	330
Hexachlorobutadiene	U	U	330
-Chloro-3-methylphenol	88J	U	330
-Methylnaphthalene	U	U	330
Hexachlorocyclopentadiene	U	U	330
,4,6-Trichlorophenol	U	U	330
,4,5-Trichlorophenol	U	U	1,600
2-Chloronaphthalene	U	U	330
2-Nitroaniline	63J	U	1,600
imethylphthalate	63J	U	330
cenaphthylene	16J	U	330
2,6-Dinitrotoluene	U	U	330

J, B - See Appendix for definition.
e: Sample detection limit = MDL x dilution factor.

TABLE 4.3
30900-1297
MALCOLM-PIRNIE
EPA TCL SEMI-VOLATILE ORGANICS

All values are ug/Kg.

	Sample Identification		
ilution Factor	1.00	1.23	
Method Blank I.D.	>C7127	>C7127	
Compound	Method Blank	BP/PH-7 Comp	Method Detection Limits with no Dilution
-Nitroaniline	U	U	1,600
Acenaphthene	U	U	330
?,4-Dinitrophenol	U	U	1,600
-Nitrophenol	U	U	1,600
ɒibenzofuran	21J	U	330
2,4-Dinitrotoluene	62J	U	330
iethylphthalate	130J	U	330
-Chlorophenyl-phenylether	45J	U	330
Fluorene	35J	U	330
' Nitroaniline	U	U	1,600
-Dinitro-2-methylphenol	U	U	1,600
N-Nitrosodiphenylamine (1)	270J	U	330
4-Bromophenyl-phenylether	84J	U	330
exachlorobenzene	74J	U	330
entachlorophenol	U	U	1,600
Phenanthrene	100J	U	330
nthracene	98J	U	330
i-n-butylphthalate	240J	48JB	330
Fluoranthene	160J	U	330
Pyrene	140J	U	330
utylbenzylphthalate	U	U	330
ɔ,3'-Dichlorobenzidine	U	U	660
Benzo(a)anthracene	130J	U	330
hrysene	54J	U	330
is(2-Ethylhexyl)phthalate	400	640B	330
Di-n-octylphthalate	160J	U	330
enzo(b)fluoranthene	140J	U	330
enzo(k)fluoranthene	U	U	330
Benzo(a)pyrene	110J	U	330
Indeno(1,2,3-cd)pyrene	110J	U	330
ibenzo(a,h)anthracene	23J	U	330
enzo(g,h,i)perylene	90J	U	330

, J, B, (1) - See Appendix for definition.
ote: Sample detection limit = MDL x dilution factor.

TABLE 5.0
30900-1297
MALCOLM-PIRNIE
SEMI-VOLATILE TENTATIVELY IDENTIFIED COMPOUNDS

Sample Identification: Method Blank >C6973

CAS#	Compound	RT	Estimated Concentration, ug/L
	None detected		

Sample Identification: FB SDG#4

CAS#	Compound	RT	Estimated Concentration, ug/L
	None detected		

Sample Identification: Method Blank >C6975

CAS#	Compound	RT	Estimated Concentration, ug/Kg
	Aldol condensation product	9.39	38,000JA
	Unknown acid ester	8.70	3,800J
	Unknown acid ester	10.98	1,400J
141786	Acetic acid ethyl ester	7.94	610J
	Unknown acid ester	12.49	560J
	Unknown	12.94	270J
	Unknown alkane	11.31	220J
	Unknown acid ester	30.69	150J

Sample Identification: BP/PH-3 Comp

CAS#	Compound	RT	Estimated Concentration, ug/Kg
	Aldol condensation product	9.42	52,000JAB
	Unknown acid ester	8.71	5,200JB
	Unknown acid ester	10.99	1,900JB
	Acetic acid ethyl ester	7.93	790JB
	Unknown acid ester	12.48	570JB
	Unknown	12.95	240JB
	Unknown alkane	11.30	210JB
	Unknown acid ester	30.68	190JB

J, A, B - See Appendix for definition.

TABLE 5.1
30900-1297
MALCOLM-PIRNIE
SEMI-VOLATILE TENTATIVELY IDENTIFIED COMPOUNDS

Sample Identification: Method Blank >C6976

CAS#	Compound	RT	Estimated Concentration, ug/Kg
	Aldol condensation product	9.42	48,000JA
	Unknown acid ester	8.71	5,200J
	Unknown acid ester	10.99	1,800J
	Unknown acid ester	12.48	700J
141786	Acetic acid ethyl ester	7.93	670J
	Unknown	8.32	430J
541026	Decamethyl cyclopentasiloxane	15.20	330J
	Unknown	12.95	250J
	Unknown acid ester	30.68	180J
	Unknown alkane	11.30	150J

Sample Identification: BP/PH-6 Comp

CAS#	Compound	RT	Estimated Concentration, ug/Kg
	Aldol condensation product	9.39	54,000JAB
	Unknown acid ester	8.71	5,800JB
	Unknown acid ester	10.96	1,700JB
141786	Acetic acid ethyl ester	7.94	710JB
	Unknown acid ester	12.45	700JB
	Unknown acid ester	30.62	260JB
	Unknown	12.90	250JB
541026	Decamethyl cyclopentasiloxane	15.16	200JB

Sample Identification: Method Blank >C7127

CAS#	Compound	RT	Estimated Concentration, ug/Kg
	Aldol condensation product	10.12	40,000JA
	Unknown acid ester	9.49	1,300J
	Unknown ketone	11.61	1,000J
	Unknown	9.32	930J
	Unknown	13.08	400J
	Unknown	22.83	280J
	Unknown	13.53	270J
	Unknown alkane	8.67	180J

J, A, B - See Appendix for definition.

TABLE 5.2
30900-1297
MALCOLM-PIRNIE
SEMI-VOLATILE TENTATIVELY IDENTIFIED COMPOUNDS

Sample Identification: BP/PH-7 Comp

CAS#	Compound	RT	Estimated Concentration, ug/Kg
	Aldol condensation product	10.09	59,000JAB
	Aldol condensation product	10.15	11,000JAB
	Unknown acid ester	9.50	2,500JB
	Unknown ketone	11.60	1,900JB
	Unknown	9.31	1,700JB
	Unknown carboxylic acid	31.54	1,200J
	Unknown	13.09	710J
	Unknown alkane	8.66	670JB
	Unknown	22.83	510JB
	Unknown	13.54	480JB
	Unknown	11.91	300J
	Aldol condensation product	8.76	290JAB
	Unknown	8.60	290J
	Unknown	8.48	200J

J, A, B - See Appendix for definition.

TABLE 6.0
30900-1297
MALCOLM-PIRNIE
EPA TCL PESTICIDES/PCB's

Aqueous

All values are ug/L.

	Sample Identification		
Dilution Factor	1.0	1.0	
Method Blank I.D.	0618 -B01	0618 -B01	
Compound	Method Blank	FB SDG#4	Method Detection Limits with no Dilution
Alpha-BHC	U	U	0.05
beta-BHC	U	U	0.05
Delta-BHC	U	U	0.05
Gamma-BHC	U	U	0.05
Heptachlor	U	U	0.05
Aldrin	U	U	0.05
Heptachlor Epoxide	U	U	0.05
Endosulfan I	U	U	0.05
Dieldrin	U	U	0.10
4,4'-DDE	U	U	0.10
Endrin	U	U	0.10
Endosulfan II	U	U	0.10
4,4'-DDD	U	U	0.10
Endosulfan Sulfate	U	U	0.10
4,4'-DDT	U	U	0.10
Methoxychlor	U	U	0.50
Endrin-Ketone	U	U	0.10
Alpha-Chlordane	U	U	0.50
gamma-Chlordane	U	U	0.50
Toxaphene	U	U	1.0
PCB - 1016	U	U	0.5
PCB - 1221	U	U	0.5
PCB - 1232	U	U	0.5
PCB - 1242	U	U	0.5
PCB - 1248	U	U	0.5
PCB - 1254	U	U	1.0
PCB - 1260	U	U	1.0

U - See Appendix for definition.
Note: Sample detection limit = MDL x dilution factor.

TABLE 6.1
30900-1297
MALCOLM-PIRNIE
EPA TCL PESTICIDES/PCB's

Soil

All values are ug/Kg.

	Sample Identification					
Dilution Factor	1.00	1.19	1.19	1.19	1.00	
Method Blank I.D.	0615 -B07	0615 -B07	0615 -B07	0615 -B07	0615 -B07	
Compound	Method Blank	BP/PH-3 Comp	BP/PH-3 Comp MS	BP/PH-3 Comp MSD	MSB-BP/PH-3 Comp	Method Detection Limits with no Dilution
Alpha-BHC	U	U	U	U	U	8.0
beta-BHC	U	U	U	U	U	8.0
Delta-BHC	U	U	U	U	U	8.0
Gamma-BHC	U	U	23X	21X	35X	8.0
Heptachlor	U	U	23X	22X	24X	8.0
Aldrin	U	U	27X	25X	28X	8.0
Heptachlor Epoxide	U	U	U	U	U	8.0
Endosulfan I	U	U	U	U	U	8.0
Dieldrin	U	U	74X	80X	72X	16
4,4'-DDE	U	U	U	U	U	16
Endrin	U	U	80X	87X	78X	16
Endosulfan II	U	U	U	U	U	16
4,4'-DDD	U	U	U	U	U	16
Endosulfan Sulfate	U	U	U	U	U	16
4,4'-DDT	U	U	76X	87X	73X	16
Methoxychlor	U	U	U	U	U	80
Endrin-Ketone	U	U	U	U	U	16
Alpha-Chlordane	U	U	U	U	U	80
gamma-Chlordane	U	U	U	U	U	80
Toxaphene	U	U	U	U	U	160
PCB - 1016	U	U	U	U	U	80
PCB - 1221	U	U	U	U	U	80
PCB - 1232	U	U	U	U	U	80
PCB - 1242	U	U	U	U	U	80
PCB - 1248	U	U	U	U	U	80
PCB - 1254	U	U	U	U	U	160
PCB - 1260	U	U	U	U	U	160

U, X - See Appendix for definition.
Note: Sample detection limit = MDL x dilution factor.

TABLE 6.2
30900-1297
MALCOLM-PIRNIE
EPA TCL PESTICIDES/PCB's

Soil

All values are ug/Kg.

	Sample Identification		
Dilution Factor	1.00	1.22	
Method Blank I.D.	0622 -B02	0622 -B02	
Compound	Method Blank	BP/PH-6 Comp	Method Detection Limits with no Dilution
lpha-BHC	U	U	8.0
beta-BHC	U	U	8.0
elta-BHC	U	U	8.0
amma-BHC	U	U	8.0
eptachlor	U	U	8.0
Aldrin	U	U	8.0
eptachlor Epoxide	U	U	8.0
ndosulfan I	U	U	8.0
Dieldrin	U	U	16
1'-DDE	U	U	16
drin	U	U	16
Endosulfan II	U	U	16
4,4'-DDD	U	U	16
ndosulfan Sulfate	U	U	16
,4'-DDT	U	U	16
Methoxychlor	U	U	80
ndrin-Ketone	U	U	16
lpha-Chlordane	U	U	80
gamma-Chlordane	U	U	80
oxaphene	U	U	160
CB - 1016	U	U	80
CB - 1221	U	U	80
PCB - 1232	U	U	80
CB - 1242	U	U	80
CB - 1248	U	U	80
PCB - 1254	U	U	160
CB - 1260	U	U	160

U - See Appendix for definition.
Note: Sample detection limit = MDL x dilution factor.

TABLE 6.3
30900-1297
MALCOLM-PIRNIE
EPA TCL PESTICIDES/PCB's

Soil

All values are ug/Kg.

	Sample Identification		
Dilution Factor	1.00	1.23	
Method Blank I.D.	0703 -B02	0703 -B02	
Compound	Method Blank	BP/PH-7 Comp	Method Detection Limits with no Dilution
Alpha-BHC	U	U	8.0
beta-BHC	U	U	8.0
Delta-BHC	U	U	8.0
Gamma-BHC	U	U	8.0
Heptachlor	U	U	8.0
Aldrin	U	U	8.0
Heptachlor Epoxide	U	U	8.0
Endosulfan I	U	U	8.0
Dieldrin	U	U	16
4,4'-DDE	U	U	16
Endrin	U	U	16
Endosulfan II	U	U	16
4,4'-DDD	U	U	16
Endosulfan Sulfate	U	U	16
4,4'-DDT	U	U	16
Methoxychlor	U	U	80
Endrin-Ketone	U	U	16
Alpha-Chlordane	U	U	80
gamma-Chlordane	U	U	80
Toxaphene	U	U	160
PCB - 1016	U	U	80
PCB - 1221	U	U	80
PCB - 1232	U	U	80
PCB - 1242	U	U	80
PCB - 1248	U	U	80
PCB - 1254	U	U	160
PCB - 1260	U	U	160

U - See Appendix for definition.
Note: Sample detection limit = MDL x dilution factor.

TABLE 7.0
30900-1297
MALCOLM-PIRNIE
TAL METALS

All values are mg/Kg dry basis.

Parameter	BP/PH-3 Comp	BP/PH-6 Comp	BP/PH-7 Comp
Aluminum	659E* -	1,010E*	588E*
Antimony	2.9UN	2.6UN	2.2UN
Arsenic	1.7B	0.64B	1.6B
Barium	5.4B	7.2B	5.7B
Beryllium	0.22U	0.20U	0.17U
Cadmium	0.45U	0.40U	0.34U
Calcium	102B	77.1B	111B
Chromium	4.9*	4.6*	5.8*
Cobalt	0.45U	3.2B	0.44B
Copper	3.1U	5.8	4.7
Iron	5,880*	4,130*	5,930*
Lead	3.3	3.7	2.6
Magnesium	41.5B	31.2B	44.3B
Manganese	8.8*	11.7*	9.1*
Mercury	0.09U	0.12U	0.09U
Nickel	1.3U	4.2B	1.0U
Potassium	124B	321B	153B
Selenium	0.24B	0.19U	0.22B
Silver	1.1U	1.0U	0.86U
Sodium	98.8B	210B	220B
Thallium	0.21U	0.25B	0.20U
Vanadium	5.7B	7.7B	6.0B
Zinc	5.3	13.2	5.5

B, E, N, U, * - See Metals Appendix for definition.

TABLE 7.1
30900-1297
MALCOLM-PIRNIE
TAL METALS

All values are ug/L.

Parameter	FB SDG#4
Aluminum	131B
Antimony	13.0U
Arsenic	1.0U
Barium	4.0U
Beryllium	1.0U
Cadmium	2.0U
Calcium	154B
Chromium	2.0U
Cobalt	2.0U
Copper	14.0U
Iron	139
Lead	1.0U
Magnesium	27.7B
Manganese	1.0B
Mercury	0.20U
Nickel	6.0U
Potassium	545U
Selenium	1.0U
Silver	5.0U
Sodium	1,190B
Thallium	1.0U
Vanadium	2.0U
Zinc	16.0U

B, U - See Metals Appendix for definition.

TABLE 8.0
30900-1297
MALCOLM-PIRNIE
MISCELLANEOUS INORGANICS

All values are mg/Kg dry basis unless noted.

Sample Identification	Total Cyanide	Petroleum Hydrocarbons
BP/PH-3 Comp	<0.62	50.9
BP/PH-3 Comp Dup	<0.62	59.3
BP/PH-3 Comp Spike	11.2	295
FB SDG#4	<10.0*	1.8*
BP/PH-6 Comp	<0.61	47.5
BP/PH-7 Comp	<0.61	47.6

*mg/L

APPENDIX

U - Indicates that the compound was analyzed for but not detected.

J - Indicates that the compound was analyzed for and determined to be present in the sample. The mass spectrum of the compound meets the identification criteria of the method. The concentration listed is an estimated value, which is less than the specified minimum detection limit but is greater than zero.

B - This flag is used when the analyte is found in the blanks as well as the sample. It indicates possible sample contamination and warns the data user to use caution when applying the results of this analyte.

N - Indicates that the compound was analyzed for but not requested as an analyte. Value will not be listed on tabular result sheet.

X - Matrix spike compound.

(1) - Cannot be separated from diphenylamine.

(2) - Decomposes to azobenzene. Measured and calibrated as azobenzene.

A - This flag indicates that a TIC is a suspected aldol condensation product.

E - Indicates that it exceeds calibration curve range.

D - This flag identifies all compounds identified in an analysis at a secondary dilution factor.

APPENDIX/METALS DATA

C - Concentration qualifiers

U - Indicates analyte result less than instrument detection limit (IDL)

B - Indicates analyte result between IDL and contract required detection limit (CRDL)

Q - QC qualifiers

E - Reported value is estimated because of the presence of interference

M - Duplicate injection precision not met

N - Spiked sample recovery not within control limits

S - The reported value was determined by the method of standard additions (MSA)

W - Post-digest spike recovery furnace analysis was out of 85-115 percent control limit, while sample absorbance was less than 50 percent of spike absorbance

* - Duplicate analysis not within control limit

+ - Correlation coefficient for MSA is less than 0.995

M - Method codes

P - ICP

A - Flame AA

F - Furnace AA

CV - Cold vapor AA (manual)

C - Cyanide

NR - Not Required

TABLE 1.0
30900-1504
MALCOLM-PIRNIE
EPA TCL VOLATILE ORGANICS

Aqueous

All values are ug/L.

	Sample Identification			
Dilution Factor	1.0	1.0	1.0	
Method Blank I.D.	>A2458	>A2458	>A2458	
Compound	Method Blank	HB REF 35 07/25/90	DWBP-3	Quantitation Limits with no Dilution
Chloromethane	U	U UJ	U UJ	10
Bromomethane	U	U	U	10
Vinyl Chloride	U	U	U	10
Chloroethane	U	U	U	10
Methylene Chloride	2J	U	U	5
Acetone	15	15B	12B UJ	10
Carbon Disulfide	U	U	U UJ	5
1,1-Dichloroethene	U	U	U	5
1,1-Dichloroethane	U	U	U	5
1,2-Dichloroethene (total)	U	U	U	5
Chloroform	U	U	1J	5
1,2-Dichloroethane	U	U	U UJ	5
2-Butanone	U	U	U	10
1,1,1-Trichloroethane	U	U	U	5
Carbon Tetrachloride	U	U	U	5
Vinyl Acetate	U	U	U	10
Bromodichloromethane	U	U	2J	5
1,2-Dichloropropane	U	U	U UJ	5
cis-1,3-Dichloropropene	U	U	U	5
Trichloroethene	U	U	U	5
Dibromochloromethane	U	U	U	5
1,1,2-Trichloroethane	U	U	U	5
Benzene	U	U	U	5
trans-1,3-Dichloropropene	U	U	U	5
Bromoform	U	U	U	5
4-Methyl-2-pentanone	U	U	U	10
2-Hexanone	U	U	U	10
Tetrachloroethene	U	U	U	5
1,1,2,2-Tetrachloroethane	U	U	U	5
Toluene	U	U	U	5
Chlorobenzene	U	U	U	5
Ethylbenzene	U	U	U	5
Styrene	U	U	U	5
Xylene (total)	U	U	U	5

U, J, B - See Appendix for definition.
Note: Sample detection limit = quantitation limit x dilution factor.

TABLE 1.1
30900-1504
MALCOLM-PIRNIE
EPA TCL VOLATILE ORGANICS

Aqueous

All values are ug/L.

	Sample Identification		
Dilution Factor	1.0	1.0	
Method Blank I.D.	>A2695	>A2695	
Compound	Method Blank	HB REF 34 08/08/90	Quantitation Limits with no Dilution
Chloromethane	U	U J	10
Bromomethane	U	U	10
Vinyl Chloride	U	U	10
Chloroethane	U	U	10
Methylene Chloride	2J	2JB	5
Acetone	10	5JB	10
Carbon Disulfide	U	U	5
1,1-Dichloroethene	U	U	5
1,1-Dichloroethane	U	U	5
1,2-Dichloroethene (total)	U	U	5
Chloroform	U	U	5
1,2-Dichloroethane	U	U	5
2-Butanone	U	U J	10
1,1,1-Trichloroethane	U	U	5
Carbon Tetrachloride	U	U	5
Vinyl Acetate	U	U	10
Bromodichloromethane	U	U	5
1,2-Dichloropropane	U	U	5
cis-1,3-Dichloropropene	U	U	5
Trichloroethene	U	U	5
Dibromochloromethane	U	U	5
1,1,2-Trichloroethane	U	U	5
Benzene	U	U	5
trans-1,3-Dichloropropene	U	U	5
Bromoform	U	U	5
4-Methyl-2-pentanone	U	U	10
2-Hexanone	U	U J	10
Tetrachloroethene	U	U	5
1,1,2,2-Tetrachloroethane	U	U	5
Toluene	U	U	5
Chlorobenzene	U	U	5
Ethylbenzene	U	U	5
Styrene	U	U	5
Xylene (total)	U	U	5

U, J, B - See Appendix for definition.
Note: Sample detection limit = quantitation limit x dilution factor.

Aqueous

TABLE 1.2
30900-1504
MALCOLM-PIRNIE
EPA TCL VOLATILE ORGANICS

All values are ug/L.

	Sample Identification		
Dilution Factor	1.0	1.0	
Method Blank I.D.	>A2713	>A2713	
Compound	Method Blank	DWBP-8	Quantitation Limits with no Dilution
Chloromethane	U	U	10
Bromomethane	U	U	10
Vinyl Chloride	U	U	10
Chloroethane	U	U	10
Methylene Chloride	3J	~~2JB~~ 5U	5
Acetone	11	~~8JB~~ 10U	10
Carbon Disulfide	U	U	5
1,1-Dichloroethene	U	U	5
1,1-Dichloroethane	U	U	5
1,2-Dichloroethene (total)	U	U	5
Chloroform	U	U	5
1,2-Dichloroethane	U	U	5
2-Butanone	0.9J	~~1JB~~ 10UJ	10
1,1,1-Trichloroethane	U	U	5
Carbon Tetrachloride	U	U	5
Vinyl Acetate	U	U	10
Bromodichloromethane	U	U	5
1,2-Dichloropropane	U	U	5
cis-1,3-Dichloropropene	U	U	5
Trichloroethene	U	U	5
Dibromochloromethane	U	3J	5
1,1,2-Trichloroethane	U	U	5
Benzene	U	U	5
trans-1,3-Dichloropropene	U	U	5
Bromoform	U	U	5
4-Methyl-2-pentanone	U	U	10
2-Hexanone	U	U	10
Tetrachloroethene	U	U	5
1,1,2,2-Tetrachloroethane	U	U	5
Toluene	U	U	5
Chlorobenzene	U	U	5
Ethylbenzene	U	U	5
Styrene	U	U	5
Xylene (total)	U	U	5

U, J, B - See Appendix for definition.
Note: Sample detection limit = quantitation limit x dilution factor.

TABLE 1.3
30900-1504
MALCOLM-PIRNIE
EPA TCL VOLATILE ORGANICS

Aqueous

All values are ug/L.

	Sample Identification				
Dilution Factor	1.0	1.0	1.0	1.0	
Method Blank I.D.	>A2875	>A2875	>A2875	>A2875	
Compound	Method Blank	TB SDG 12	HB REF 35 08/20/90	DWBP-6	Quantitation Limits with no Dilution
Chloromethane	U	U	U	U	10
Bromomethane	U	U	U	U	10
Vinyl Chloride	U	U	U	U	10
Chloroethane	U	U	U	U	10
Methylene Chloride	2J	2JB	2JB	~~1JB~~ 5U	5
Acetone	4J	U	3JB	U	10
Carbon Disulfide	U	U	U	U	5
1,1-Dichloroethene	U	U	U	U	5
1,1-Dichloroethane	U	U	U	U	5
1,2-Dichloroethene (total)	U	U	U	U	5
Chloroform	U	U	1J	U	5
1,2-Dichloroethane	U	U	U	U	5
2-Butanone	U	UJ	UJ	UJ	10
1,1,1-Trichloroethane	U	U	U	U	5
Carbon Tetrachloride	U	U	U	U	5
Vinyl Acetate	U	U	U	U	10
Bromodichloromethane	U	U	U	U	5
1,2-Dichloropropane	U	U	U	U	5
cis-1,3-Dichloropropene	U	U	U	U	5
Trichloroethene	U	U	U	U	5
Dibromochloromethane	U	U	U	2J	5
1,1,2-Trichloroethane	U	U	U	U	5
Benzene	U	U	U	U	5
trans-1,3-Dichloropropene	U	U	U	U	5
Bromoform	U	UJ	UJ	UJ	5
4-Methyl-2-pentanone	U	U	U	U	10
2-Hexanone	U	U	U	U	10
Tetrachloroethene	U	U	U	U	5
1,1,2,2-Tetrachloroethane	U	U	U	U	5
Toluene	U	U	U	U	5
Chlorobenzene	U	U	U	U	5
Ethylbenzene	U	U	U	U	5
Styrene	U	U	U	U	5
Xylene (total)	U	U	U	U	5

U, J, B - See Appendix for definition.
Note: Sample detection limit = quantitation limit x dilution factor.

Aqueous

TABLE 1.4
30900-1504
MALCOLM-PIRNIE
EPA TCL VOLATILE ORGANICS

All values are ug/L.

	Sample Identification			
Dilution Factor	1.0	1.0	1.0	
Method Blank I.D.	>A3003	>A3003	>A3003	
Compound	Method Blank	HB REF 35 08/29/90	DWBP-4	Quantitation Limits with no Dilution
Chloromethane	U	U	U	10
Bromomethane	U	U	U	10
Vinyl Chloride	U	U	U	10
Chloroethane	U	U	U	10
Methylene Chloride	3J	2JB	~~2JB~~ 5U	5
Acetone	10	6JB	U J	10
Carbon Disulfide	U	U	U	5
1,1-Dichloroethene	U	U	U	5
1,1-Dichloroethane	U	U	U	5
1,2-Dichloroethene (total)	U	U	U	5
Chloroform	U	1J	~~1J~~ 5U	5
1,2-Dichloroethane	U	U	U	5
2-Butanone	U	U J	U J	10
1,1,1-Trichloroethane	U	U	U	5
Carbon Tetrachloride	U	U	U	5
Vinyl Acetate	U	U	U	10
Bromodichloromethane	U	U	2J	5
1,2-Dichloropropane	U	U	U	5
cis-1,3-Dichloropropene	U	U	U	5
Trichloroethene	U	U	U	5
Dibromochloromethane	U	U	3J	5
1,1,2-Trichloroethane	U	U	U	5
Benzene	U	U	U	5
trans-1,3-Dichloropropene	U	U	U	5
Bromoform	U	U	2J	5
4-Methyl-2-pentanone	U	U	U	10
2-Hexanone	U	U J	U J	10
Tetrachloroethene	U	U J	U J	5
1,1,2,2-Tetrachloroethane	U	U	U	5
Toluene	U	U	U	5
Chlorobenzene	U	U	U	5
Ethylbenzene	U	U	U	5
Styrene	U	U	U	5
Xylene (total)	U	U	U	5

U, J, B - See Appendix for definition.
Note: Sample detection limit = quantitation limit x dilution factor.

Aqueous

TABLE 1.5
30900-1504
MALCOLM-PIRNIE
EPA TCL VOLATILE ORGANICS

All values are ug/L.

	Sample Identification				
Dilution Factor	1.0	1.0	1.0	1.0	
Method Blank I.D.	>A3003	>A3003	>A3003	>A3003	
Compound	Method Blank	DWBP-4 MS	DWBP-4 MSD	MSB-DWBP-4	Quantitation Limits with no Dilution
Chloromethane	U	U	U	U	10
Bromomethane	U	U	U	U	10
Vinyl Chloride	U	U	U	U	10
Chloroethane	U	U	U	U	10
Methylene Chloride	3J	1JB	U	2JB	5
Acetone	10	7JB	U	U	10
Carbon Disulfide	U	U	U	U	5
1,1-Dichloroethene	U	44X	46X	53X	5
1,1-Dichloroethane	U	U	U	U	5
1,2-Dichloroethene (total)	U	U	U	U	5
Chloroform	U	1J	0.8J	U	5
1,2-Dichloroethane	U	U	U	U	5
2-Butanone	U	2J	U	U	10
1,1,1-Trichloroethane	U	U	U	U	5
Carbon Tetrachloride	U	U	U	U	5
Vinyl Acetate	U	U	U	U	10
Bromodichloromethane	U	2J	U	U	5
1,2-Dichloropropane	U	U	U	U	5
cis-1,3-Dichloropropene	U	U	U	U	5
Trichloroethene	U	52X	53X	55X	5
Dibromochloromethane	U	U	U	U	5
1,1,2-Trichloroethane	U	U	U	U	5
Benzene	U	48X	48X	50X	5
trans-1,3-Dichloropropene	U	U	U	U	5
Bromoform	U	U	U	U	5
4-Methyl-2-pentanone	U	U	U	U	10
2-Hexanone	U	U	U	U	10
Tetrachloroethene	U	U	U	U	5
1,1,2,2-Tetrachloroethane	U	U	U	U	5
Toluene	U	46X	48X	49X	5
Chlorobenzene	U	51X	56X	53X	5
Ethylbenzene	U	U	U	U	5
Styrene	U	U	U	U	5
Xylene (total)	U	U	U	U	5

U, J, B, X - See Appendix for definition.
Note: Sample detection limit = quantitation limit x dilution factor.

Aqueous

TABLE 1.6
30900-1504
MALCOLM-PIRNIE
EPA TCL VOLATILE ORGANICS

All values are ug/L.

	Sample Identification			
Dilution Factor	1.0	1.0	1.0	
Method Blank I.D.	>B1244	>B1244	>B1244	
Compound	Method Blank	DWBP-7	HB REF 35 09/12/90	Quantitation Limits with no Dilution
Chloromethane	U	U	U	10
Bromomethane	U	U	U	10
Vinyl Chloride	U	U	U	10
Chloroethane	U	U	U	10
Methylene Chloride	U	U	U	5
Acetone	U	U	U	10
Carbon Disulfide	U	U	U	5
1,1-Dichloroethene	U	U	U	5
1,1-Dichloroethane	U	U	U	5
1,2-Dichloroethene (total)	U	U	U	5
Chloroform	U	U	U	5
1,2-Dichloroethane	U	U	U	5
2-Butanone	U	U J	U J	10
1,1,1-Trichloroethane	U	U	U	5
Carbon Tetrachloride	U	U	U	5
Vinyl Acetate	U	U J	U J	10
Bromodichloromethane	U	3J	U	5
1,2-Dichloropropane	U	U	U	5
cis-1,3-Dichloropropene	U	U	U	5
Trichloroethene	U	U	U	5
Dibromochloromethane	U	3J	U	5
1,1,2-Trichloroethane	U	U	U	5
Benzene	U	U	U	5
trans-1,3-Dichloropropene	U	U	U	5
Bromoform	U	U	U	5
4-Methyl-2-pentanone	U	U	U	10
2-Hexanone	U	U	U	10
Tetrachloroethene	U	U	U	5
1,1,2,2-Tetrachloroethane	U	U	U	5
Toluene	U	U	U	5
Chlorobenzene	U	U	U	5
Ethylbenzene	U	U	U	5
Styrene	U	U	U	5
Xylene (total)	U	U	U	5

U, J - See Appendix for definition.
Note: Sample detection limit = quantitation limit x dilution factor.

TABLE 1.7
30900-1504
MALCOLM-PIRNIE
EPA TCL VOLATILE ORGANICS

Aqueous

All values are ug/L.

	Sample Identification			
Dilution Factor	1.0	1.0	1.0	
Method Blank I.D.	>B1462	>B1462 HB	>B1462	
Compound	Method Blank	REF 34 09/25/90	DWBP-5	Quantitation Limits with no Dilution
Chloromethane	U	U J	U J	10
Bromomethane	U	U	U	10
Vinyl Chloride	U	U	U	10
Chloroethane	U	U	U	10
Methylene Chloride	U	2J	U	5
Acetone	23	10B	~~9JB~~ 10U	10
Carbon Disulfide	U	U J	U J	5
1,1-Dichloroethene	U	U	U	5
1,1-Dichloroethane	U	U	U	5
1,2-Dichloroethene (total)	U	U	U	5
Chloroform	U	U	U	5
1,2-Dichloroethane	U	U	U	5
2-Butanone	U	U	U	10
1,1,1-Trichloroethane	U	U	U	5
Carbon Tetrachloride	U	U	U	5
Vinyl Acetate	U	U	U	10
Bromodichloromethane	U	U	U	5
1,2-Dichloropropane	U	U	U	5
cis-1,3-Dichloropropene	U	U	U	5
Trichloroethene	U	U	U	5
Dibromochloromethane	U	U	2J	5
1,1,2-Trichloroethane	U	U	U J	5
Benzene	U	U	U	5
trans-1,3-Dichloropropene	U	U	U	5
Bromoform	U	U	2J	5
4-Methyl-2-pentanone	U	U	U J	10
2-Hexanone	U	U	U	10
Tetrachloroethene	U	U	U	5
1,1,2,2-Tetrachloroethane	U	U	U	5
Toluene	U	U	U	5
Chlorobenzene	U	U	U	5
Ethylbenzene	U	U	U	5
Styrene	U	U	U	5
Xylene (total)	U	U	U	5

U, J, B - See Appendix for definition.
Note: Sample detection limit = quantitation limit x dilution factor.

TABLE 2.0
30900-1504
MALCOLM-PIRNIE
VOLATILE TENTATIVELY IDENTIFIED COMPOUNDS

Sample Identification: Method Blank >A2458

CAS#	Compound	RT	Estimated Concentration, ug/L
None detected			

Sample Identification: HB REF 35 07/25/90

CAS#	Compound	RT	Estimated Concentration, ug/L
None detected			

Sample Identification: DWBP-3

CAS#	Compound	RT	Estimated Concentration, ug/L
None detected			

Sample Identification: Method Blank >A2695

CAS#	Compound	RT	Estimated Concentration, ug/L
None detected			

Sample Identification: HB REF 34 08/08/90

CAS#	Compound	RT	Estimated Concentration, ug/L
None detected			

Sample Identification: Method Blank >A2713

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown	7.80	5J

TABLE 2.1
30900-1504
MALCOLM-PIRNIE
VOLATILE TENTATIVELY IDENTIFIED COMPOUNDS

Sample Identification: DWBP-8

CAS#	Compound	RT	Estimated Concentration, ug/L
None detected			

Sample Identification: Method Blank >A2875

CAS#	Compound	RT	Estimated Concentration, ug/L
None detected			

Sample Identification: TB SDG 12

CAS#	Compound	RT	Estimated Concentration, ug/L
None detected			

Sample Identification: HB REF 35 08/20/90

CAS#	Compound	RT	Estimated Concentration, ug/L
None detected			

Sample Identification: DWBP-6

CAS#	Compound	RT	Estimated Concentration, ug/L
None detected			

Sample Identification: Method Blank >A3003

CAS#	Compound	RT	Estimated Concentration, ug/L
None detected			

J - See Appendix for definition.

TABLE 2.2
30900-1504
MALCOLM-PIRNIE
VOLATILE TENTATIVELY IDENTIFIED COMPOUNDS

Sample Identification: HB REF 35 08/29/90

CAS#	Compound	RT	Estimated Concentration, ug/L

None detected

Sample Identification: DWBP-4

CAS#	Compound	RT	Estimated Concentration, ug/L

None detected

Sample Identification: Method Blank >B1244

CAS#	Compound	RT	Estimated Concentration, ug/L

None detected

Sample Identification: DWBP-7

CAS#	Compound	RT	Estimated Concentration, ug/L

None detected

Sample Identification: HB REF 35 09/12/90

CAS#	Compound	RT	Estimated Concentration, ug/L

None detected

Sample Identification: Method Blank >B1462

CAS#	Compound	RT	Estimated Concentration, ug/L

None detected

TABLE 2.3
30900-1504
MALCOLM-PIRNIE
VOLATILE TENTATIVELY IDENTIFIED COMPOUNDS

Sample Identification: HB REF 34 09/25/90

CAS#	Compound	RT	Estimated Concentration, ug/L
None detected			

Sample Identification: DWBP-5

CAS#	Compound	RT	Estimated Concentration, ug/L
None detected			

APPENDIX

U - Indicates that the compound was analyzed for but not detected.

J - Indicates that the compound was analyzed for and determined to be present in the sample. The mass spectrum of the compound meets the identification criteria of the method. The concentration listed is an estimated value, which is less than the specified minimum detection limit but is greater than zero.

B - This flag is used when the analyte is found in the blanks as well as the sample. It indicates possible sample contamination and warns the data user to use caution when applying the results of this analyte.

N - Indicates that the compound was analyzed for but not requested as an analyte. Value will not be listed on tabular result sheet.

X - Matrix spike compound.

(1) - Cannot be separated from diphenylamine.

(2) - Decomposes to azobenzene. Measured and calibrated as azobenzene.

A - This flag indicates that a TIC is a suspected aldol condensation product.

E - Indicates that it exceeds calibration curve range.

D - This flag identifies all compounds identified in an analysis at a secondary dilution factor.

TABLE 1.0
30900-1773
MALCOLM-PIRNIE
EPA TCL SEMI-VOLATILE ORGANICS

All values are ug/L.

	Sample Identification					
Dilution Factor	1.0	1.0	1.0	1.0	1.0	
Method Blank I.D.	>H0422	>H0422	>H0422	>H0422	>H0422	
Compound	Method Blank	W-33	W-33 RE	W-25	W-25 RE	Quantitation Limits with no Dilution
Phenol	U	U R	U R	U R	U R	10
bis(2-Chloroethyl)ether	U	U	U	U	U	10
2-Chlorophenol	U	U	U	U	U	10
1,3-Dichlorobenzene	U	U	U	U	U	10
1,4-Dichlorobenzene	U	U	U	U	U	10
Benzyl alcohol	U	U	U	U	U	10
1,2-Dichlorobenzene	U	3J	3J	U	U	10
2-Methylphenol	U	U R	U R	U	U	10
bis(2-Chloroisopropyl)ether	U	U	U	U	U	10
4-Methylphenol	U	U	U	U	U	10
N-Nitroso-di-n-propylamine	U	U	U	U	U	10
Hexachloroethane	U	U	U	U	U	10
Nitrobenzene	U	U	U	U	U	10
Isophorone	U	U	U	U	U	10
2-Nitrophenol	U	U	U	U	U	10
2,4-Dimethylphenol	U	U	U	U	U	10
Benzoic acid	U	U	U	U	U	50
bis(2-Chloroethoxy)methane	U	U	U	U	U	10
2,4-Dichlorophenol	U	U	U	U	U	10
1,2,4-Trichlorobenzene	U	U	U	U	U	10
Naphthalene	U	12J	13J	96J	100J	10
4-Chloroaniline	U	U R	U R	U R	U R	10
Hexachlorobutadiene	U	U R	U	U R	U R	10
4-Chloro-3-methylphenol	U	U R	U	U R	U R	10
2-Methylnaphthalene	U	39J	46J	160J	180J	10
Hexachlorocyclopentadiene	U	U R	U R	U R	U R	10
2,4,6-Trichlorophenol	U	U	U	U	U	10
2,4,5-Trichlorophenol	U	U	U	U	U	50
2-Chloronaphthalene	U	U	U	U	U	10
2-Nitroaniline	U	U	U	U	U	50
Dimethylphthalate	U	U	U	U	U	10
Acenaphthylene	U	U	U	U	U	10
2,6-Dinitrotoluene	U	U	U	U	U	10

U, J - See Appendix for definition.
Note: Sample detection limit = quantitation limit x dilution factor.

TABLE 1.0
30900-1773
MALCOLM-PIRNIE
EPA TCL SEMI-VOLATILE ORGANICS

All values are ug/L.

	Sample Identification					
Dilution Factor	1.0	1.0	1.0	1.0	1.0	
Method Blank I.D.	>H0422	>H0422	>H0422	>H0422	>H0422	
Compound	Method Blank	W-33	W-33 RE	W-25	W-25 RE	Quantitation Limits with no Dilution
3-Nitroaniline	U	UR	UR	UR	UR	50
Acenaphthene	U	UR	U	UR	U	10
2,4-Dinitrophenol	U	UR	U	UR	U	50
4-Nitrophenol	U	UR	U	UR	U	50
Dibenzofuran	U	6J	6J	22J	23J	10
2,4-Dinitrotoluene	U	UR	UR	UR	UR	10
Diethylphthalate	1J	U	U	U	U	10
4-Chlorophenyl-phenylether	U	U	U	U	U	10
Fluorene	U	U	U	U	U	10
4-Nitroaniline	U	U	U	U	U	50
4,6-Dinitro-2-methylphenol	U	U	U	U	UJR	50
N-Nitrosodiphenylamine (1)	U	U	U	U	UJR	10
4-Bromophenyl-phenylether	U	U	U	U	UJR	10
Hexachlorobenzene	U	U	U	U	UJR	10
Pentachlorophenol	U	U	U	U	UJR	50
Phenanthrene	U	16J	19J	90J	100J	10
Anthracene	U	2J	2J	9J	9J	10
Di-n-butylphthalate	0.6J	~~0.8JB~~ UR	~~2JB~~ UR	UR	UJR	10
Fluoranthene	U	UR	UR	UR	UJR	10
Pyrene	U	2J	3J	8J	8J	10
Butylbenzylphthalate	U	UR	0.4J	UR	UR	10
3,3'-Dichlorobenzidine	U	U	UR	U	UR	20
Benzo(a)anthracene	U	U	UR	U	UR	10
Chrysene	U	U	UR	U	UR	10
bis(2-Ethylhexyl)phthalate	4J	64BJ	83BJ	77BJ	80BJ	10
Di-n-octylphthalate	U	0.6J	0.7J	0.5J	0.6J	10
Benzo(b)fluoranthene	U	UR	UR	UR	UR	10
Benzo(k)fluoranthene	U	U	U	U	U	10
Benzo(a)pyrene	U	U	U	U	U	10
Indeno(1,2,3-cd)pyrene	U	U	U	U	U	10
Dibenzo(a,h)anthracene	U	U	U	U	U	10
Benzo(g,h,i)perylene	U	UJR	UJR	UJR	UJR	10

U, J, B, (1) - See Appendix for definition.
Note: Sample detection limit = quantitation limit x dilution factor.

TABLE 2.0
30900-1773
MALCOLM-PIRNIE
SEMI-VOLATILE TENTATIVELY IDENTIFIED COMPOUNDS

Sample Identification: Method Blank >H0422

CAS#	Compound	RT	Estimated Concentration, ug/L
	None detected		

Sample Identification: W-33

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown alkane	19.68	90J
	Unknown alkane	17.02	89J
112403	Dodecane	13.99	57J
	Unknown alkane	20.90	55J
	Unknown dimethyl naphthalene isomer	17.45	43J
	Unknown dimethyl naphthalene isomer	17.74	41J
	Unknown alkane	20.98	40J
	Unknown alkane	17.88	39J
	Unknown alkane	23.14	38J
	Unknown trimethyl napthalene isomer	19.19	37J
	Unknown alkane	15.14	36J
	Unknown dimethyl naphthalene isomer	17.24	31J
112958	Eicosane	24.16	30J
	Unknown trimethyl naphthalene isomer	19.44	28J
1120214	Undecane	12.28	27J
	Unknown trimethyl naphthalene isomer	18.97	24J
	Unknown cycloalkane	19.13	23J
	Unknown alkane	26.12	23J
	Unknown alkane	16.49	22J
	Unknown cycloalkane	16.24	21J

Sample Identification: W-33 RE

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown alkane	19.67	140J
	Unknown alkane	18.37	130J
	Unknown alkane	17.02	130J
	Unknown alkane	15.55	120J
	Unknown dimethyl naphthalene isomer	17.45	96J
112403	Dodecane	13.97	71J

J - See Appendix for definition.

TABLE 2.1
30900-1773
MALCOLM-PIRNIE
SEMI-VOLATILE TENTATIVELY IDENTIFIED COMPOUNDS

Sample Identification: W-33 RE (Continued)

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown trimethyl naphthalene isomer	19.17	68J
	Unknown dimethyl naphthalene isomer	17.72	65J
	Unknown alkane	20.88	63J
	Unknown alkane	17.86	56J
	Unknown alkane	15.14	49J
	Unknown dimethyl naphthalene isomer	17.23	45J
	Unknown alkane	20.96	44J
	Unknown alkane	23.12	42J
1120214	Undecane	12.26	36J
112958	Eicosane	24.15	34J
	Unknown trimethyl naphthalene isomer	18.97	33J
	Unknown cycloalkane	19.11	33J
	Unknown alkane	16.49	32J
	Unknown alkane	16.67	32J

Sample Identification: W-25

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown alkane	24.25	120J
	Unknown alkane	23.22	110J
	Unknown alkane	15.62	100J
	Unknown alkane	22.25	85J
	Unknown alkyl benzene (MW=120)	10.83	84J
	Unknown alkane	25.21	81J
	Unknown alkane	20.97	79J
	Unknown alkane	11.51	77J
124185	Decane	10.38	76J
1120214	Undecane	12.32	71J
	Unknown ethyl dimethyl benzene isomer	11.89	67J
	Unknown alkane	18.51	61J
	Unknown alkane	15.21	61J
629970	Docosane	26.14	61J
	Unknown trimethyl benzene isomer	10.24	57J

J - See Appendix for definition.

TABLE 2.2
30900-1773
MALCOLM-PIRNIE
SEMI-VOLATILE TENTATIVELY IDENTIFIED COMPOUNDS

Sample Identification: W-25 (Continued)

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown alkane	22.56	56J
	Unknown alkane	11.65	53J
	Unknown alkane	14.27	47J
	Unknown alkane	21.08	47J
	Unknown dimethyl phenanthrene isomer	24.62	46J

Sample Identification: W-25 RE

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown alkane	20.98	120J
	Unknown alkane	14.03	110J
	Unknown alkyl benzene	10.80	94J
	Unknown alkane	10.35	86J
	Unknown alkane	17.08	84J
	Unknown alkane	24.21	80J
1120214	Undecane	12.29	79J
	Unknown alkane	21.04	71J
	Unknown alkane	23.14	70J
	Unknown	11.47	70J
	Unknown ethyl dimethyl benzene isomer	11.90	65J
	Unknown trimethyl benzene isomer	10.21	64J
	Unknown alkane	15.17	62J
629970	Docosane	26.11	56J
	Unknown ethyl methyl benzene isomer	9.53	54J
	Unknown alkane	22.21	51J
	Unknown alkane	14.23	50J
	Unknown alkyl benzene	13.23	45J
	Unknown methyl propyl isomer	11.37	43J
	Unknown alkane	19.75	43J

J - See Appendix for definition.

APPENDIX

U - Indicates that the compound was analyzed for but not detected.

J - Indicates that the compound was analyzed for and determined to be present in the sample. The mass spectrum of the compound meets the identification criteria of the method. The concentration listed is an estimated value, which is less than the specified minimum detection limit but is greater than zero.

B - This flag is used when the analyte is found in the blanks as well as the sample. It indicates possible sample contamination and warns the data user to use caution when applying the results of this analyte.

N - Indicates that the compound was analyzed for but not requested as an analyte. Value will not be listed on tabular result sheet.

X - Matrix spike compound.

(1) - Cannot be separated from diphenylamine.

(2) - Decomposes to azobenzene. Measured and calibrated as azobenzene.

A - This flag indicates that a TIC is a suspected aldol condensation product.

E - Indicates that it exceeds calibration curve range.

D - This flag identifies all compounds identified in an analysis at a secondary dilution factor.

TABLE 3.3
30910-0112
MALCOLM-PIRNIE
EPA TCL SEMI-VOLATILE ORGANICS

All values are ug/L.

	Sample Identification					
Dilution Factor	1.0	1.0	1.1	1.1	1.2	
Method Blank I.D.	>C8470	>C8470	>C8470	>C8470	>C8470	
Compound	Method Blank	BP-8B	W-39	BP-8C	BP-8A	Quantitation Limits with no Dilution
3-Nitroaniline	U	UJ	UJ	UJ	UR	50
Acenaphthene	U	U	U	U	U	10
2,4-Dinitrophenol	U	U	U	U	U	50
4-Nitrophenol	U	U	U	U	U	50
Dibenzofuran	U	U	U	U	U	10
2,4-Dinitrotoluene	U	U	U	U	U	10
Diethylphthalate	U	U	U	U	U	10
4-Chlorophenyl-phenylether	U	U	U	U	U	10
Fluorene	U	U	U	U	U	10
4-Nitroaniline	U	U	U	U	U	50
4,6-Dinitro-2-methylphenol	U	U	U	U	U	50
N-Nitrosodiphenylamine (1)	U	U	U	U	U	10
4-Bromophenyl-phenylether	U	U	U	U	U	10
Hexachlorobenzene	U	U	U	U	U	10
Pentachlorophenol	U	U	U	U	U	50
Phenanthrene	U	U	U	U	U	10
Anthracene	U	U	U	U	U	10
Di-n-butylphthalate	U	U	U	U	U	10
Fluoranthene	U	U	U	U	U	10
Pyrene	U	U	U	U	U	10
Butylbenzylphthalate	U	10	U	U	U	10
3,3'-Dichlorobenzidine	U	U	U	U	U	20
Benzo(a)anthracene	U	U	U	U	U	10
Chrysene	U	U	U	U	U	10
bis(2-Ethylhexyl)phthalate	U	U	U	U	U	10
Di-n-octylphthalate	U	U	U	U	U	10
Benzo(b)fluoranthene	U	U	U	U	U	10
Benzo(k)fluoranthene	U	U	U	U	U	10
Benzo(a)pyrene	U	U	U	U	U	10
Indeno(1,2,3-cd)pyrene	U	U	U	U	U	10
Dibenzo(a,h)anthracene	U	U	U	U	U	10
Benzo(g,h,i)perylene	U	U	U	U	U	10

U, (1) - See Appendix for definition.
Note: Sample detection limit = quantitation limit x dilution factor.

TABLE 3.4
30910-0112
MALCOLM-PIRNIE
EPA TCL SEMI-VOLATILE ORGANICS

All values are ug/L.

	Sample Identification				
Dilution Factor	1.0	1.1	1.0	1.2	
Method Blank I.D.	>C8470	>C8470	>C8470	>C8470	
Compound	Method Blank	BP-5A	BP-5C	BP-5B	Quantitation Limits with no Dilution
Phenol	U	U	U	U	10
bis(2-Chloroethyl)ether	U	U	U	U	10
2-Chlorophenol	U	U	U	U	10
1,3-Dichlorobenzene	U	U	U	U	10
1,4-Dichlorobenzene	U	U	U	U	10
Benzyl alcohol	U	U	U	U	10
1,2-Dichlorobenzene	U	U	U	U	10
2-Methylphenol	U	U	U	U	10
bis(2-Chloroisopropyl)ether	U	U	U	U	10
4-Methylphenol	U	U	U	U	10
N-Nitroso-di-n-propylamine	U	U	U	U	10
Hexachloroethane	U	U	U	U	10
Nitrobenzene	U	U	U	U	10
Isophorone	U	U	U	U	10
2-Nitrophenol	U	U	U	U	10
2,4-Dimethylphenol	U	U	U	U	10
Benzoic acid	U	U	U	U	50
bis(2-Chloroethoxy)methane	U	U	U	U	10
2,4-Dichlorophenol	U	U	U	U	10
1,2,4-Trichlorobenzene	U	U	U	U	10
Naphthalene	U	U	U	U	10
4-Chloroaniline	U	U	U	U	10
Hexachlorobutadiene	U	U	U	U	10
4-Chloro-3-methylphenol	U	U	U	U	10
2-Methylnaphthalene	U	U	U	U	10
Hexachlorocyclopentadiene	U	U	U	U	10
2,4,6-Trichlorophenol	U	U	U	U	10
2,4,5-Trichlorophenol	U	U	U	U	50
2-Chloronaphthalene	U	U	U	U	10
2-Nitroaniline	U	U	U	U	50
Dimethylphthalate	U	U	U	U	10
Acenaphthylene	U	U	U	U	10
2,6-Dinitrotoluene	U	U	U	U	10

U - See Appendix for definition.
Note: Sample detection limit = quantitation limit x dilution factor.

TABLE 3.4
30910-0112
MALCOLM-PIRNIE
EPA TCL SEMI-VOLATILE ORGANICS

All values are ug/L.

	Sample Identification				
Dilution Factor	1.0	1.1	1.0	1.2	
Method Blank I.D.	>C8470	>C8470	>C8470	>C8470	
Compound	Method Blank	BP-5A	BP-5C	BP-5B	Quantitation Limits with no Dilution
3-Nitroaniline	U	UJ	UJ	UJ	50
Acenaphthene	U	U	U	U	10
2,4-Dinitrophenol	U	U	U	U	50
4-Nitrophenol	U	U	U	U	50
Dibenzofuran	U	U	U	U	10
2,4-Dinitrotoluene	U	U	U	U	10
Diethylphthalate	U	U	U	U	10
4-Chlorophenyl-phenylether	U	U	U	U	10
Fluorene	U	U	U	U	10
4-Nitroaniline	U	U	U	U	50
4,6-Dinitro-2-methylphenol	U	U	U	U	50
N-Nitrosodiphenylamine (1)	U	U	U	U	10
4-Bromophenyl-phenylether	U	U	U	U	10
Hexachlorobenzene	U	U	U	U	10
Pentachlorophenol	U	U	U	U	50
Phenanthrene	U	U	U	U	10
Anthracene	U	U	U	U	10
Di-n-butylphthalate	U	9J	U	U	10
Fluoranthene	U	U	U	U	10
Pyrene	U	U	U	U	10
Butylbenzylphthalate	U	U	U	U	10
3,3'-Dichlorobenzidine	U	U	U	U	20
Benzo(a)anthracene	U	U	U	U	10
Chrysene	U	U	U	U	10
bis(2-Ethylhexyl)phthalate	U	7J	U	5J	10
Di-n-octylphthalate	U	U	U	U	10
Benzo(b)fluoranthene	U	U	U	U	10
Benzo(k)fluoranthene	U	U	U	U	10
Benzo(a)pyrene	U	U	U	U	10
Indeno(1,2,3-cd)pyrene	U	U	U	U	10
Dibenzo(a,h)anthracene	U	U	U	U	10
Benzo(g,h,i)perylene	U	U	U	U	10

U, J, (1) - See Appendix for definition.
Note: Sample detection limit = quantitation limit x dilution factor.

TABLE 3.5
30910-0112
MALCOLM-PIRNIE
EPA TCL SEMI-VOLATILE ORGANICS

All values are ug/L.

	Sample Identification				
Dilution Factor	1.0	1.3	1.1	1.1	
Method Blank I.D.	>C8518	>C8518	>C8518	>C8518	
Compound	Method Blank	BP-4A	BP-4C	BP-4B	Quantitation Limits with no Dilution
Phenol	U	U	U	U	10
bis(2-Chloroethyl)ether	U	U	U	U	10
2-Chlorophenol	U	U	U	U	10
1,3-Dichlorobenzene	U	U	U	U	10
1,4-Dichlorobenzene	U	U	U	U	10
Benzyl alcohol	U	U	U	U	10
1,2-Dichlorobenzene	U	U	U	U	10
2-Methylphenol	U	U	U	U	10
bis(2-Chloroisopropyl)ether	U	U	U	U	10
4-Methylphenol	U	U	U	U	10
N-Nitroso-di-n-propylamine	U	U	U	U	10
Hexachloroethane	U	U	U	U	10
Nitrobenzene	U	U	U	U	10
Isophorone	U	U	U	U	10
2-Nitrophenol	U	U	U	U	10
2,4-Dimethylphenol	U	U	U	U	10
Benzoic acid	U	U	U	U	50
bis(2-Chloroethoxy)methane	U	U	U	U	10
2,4-Dichlorophenol	U	U	U	U	10
1,2,4-Trichlorobenzene	U	U	U	U	10
Naphthalene	U	U	U	U	10
4-Chloroaniline	U	UJ	UJ	UJ	10
Hexachlorobutadiene	U	U	U	U	10
4-Chloro-3-methylphenol	U	U	U	U	10
2-Methylnaphthalene	U	U	U	U	10
Hexachlorocyclopentadiene	U	U	U	U	10
2,4,6-Trichlorophenol	U	U	U	U	10
2,4,5-Trichlorophenol	U	U	U	U	50
2-Chloronaphthalene	U	U	U	U	10
2-Nitroaniline	U	U	U	U	50
Dimethylphthalate	U	U	U	U	10
Acenaphthylene	U	U	U	U	10
2,6-Dinitrotoluene	U	U	U	U	10

U - See Appendix for definition.
Note: Sample detection limit = quantitation limit x dilution factor.

TABLE 3.5
30910-0112
MALCOLM-PIRNIE
EPA TCL SEMI-VOLATILE ORGANICS

All values are ug/L.

	Sample Identification				
Dilution Factor	1.0	1.3	1.1	1.1	
Method Blank I.D.	>C8518	>C8518	>C8518	>C8518	
Compound	Method Blank	BP-4A	BP-4C	BP-4B	Quantitation Limits with no Dilution
3-Nitroaniline	U	UJ	UJ	UJ	50
Acenaphthene	U	U	U	U	10
2,4-Dinitrophenol	U	U	U	U	50
4-Nitrophenol	U	U	U	U	50
Dibenzofuran	U	U	U	U	10
2,4-Dinitrotoluene	U	U	U	U	10
Diethylphthalate	U	U	U	U	10
4-Chlorophenyl-phenylether	U	U	U	U	10
Fluorene	U	U	U	U	10
4-Nitroaniline	U	U	U	U	50
4,6-Dinitro-2-methylphenol	U	U	U	U	50
N-Nitrosodiphenylamine (1)	U	U	U	U	10
4-Bromophenyl-phenylether	U	U	U	U	10
Hexachlorobenzene	U	U	U	U	10
Pentachlorophenol	U	U	U	U	50
Phenanthrene	U	U	U	U	10
Anthracene	U	U	U	U	10
Di-n-butylphthalate	U	U	U	U	10
Fluoranthene	U	U	U	U	10
Pyrene	U	U	U	U	10
Butylbenzylphthalate	U	U	U	U	10
3,3'-Dichlorobenzidine	U	U	U	U	20
Benzo(a)anthracene	U	U	U	U	10
Chrysene	U	U	U	U	10
bis(2-Ethylhexyl)phthalate	U	5J	4J	3J	10
Di-n-octylphthalate	U	U	U	U	10
Benzo(b)fluoranthene	U	U	U	U	10
Benzo(k)fluoranthene	U	U	U	U	10
Benzo(a)pyrene	U	U	U	U	10
Indeno(1,2,3-cd)pyrene	U	U	U	U	10
Dibenzo(a,h)anthracene	U	U	U	U	10
Benzo(g,h,i)perylene	U	U	U	U	10

U, J, (1) - See Appendix for definition.
Note: Sample detection limit = quantitation limit x dilution factor.

TABLE 3.6
30910-0112
MALCOLM-PIRNIE
EPA TCL SEMI-VOLATILE ORGANICS

All values are ug/L.

	Sample Identification				
Dilution Factor	1.0	1.1	1.1	1.0	
Method Blank I.D.	>C8518	>C8518	>C8518	>C8518	
Compound	Method Blank	BP-4B MS	BP-4B MSD	MSB BP-4B	Quantitation Limits with no Dilution
Phenol	U	70X	71X	59X	10
bis(2-Chloroethyl)ether	U	U	U	U	10
2-Chlorophenol	U	150X	150X	140X	10
1,3-Dichlorobenzene	U	U	U	U	10
1,4-Dichlorobenzene	U	68X	73X	63X	10
Benzyl alcohol	U	U	U	U	10
1,2-Dichlorobenzene	U	U	U	U	10
2-Methylphenol	U	U	U	U	10
bis(2-Chloroisopropyl)ether	U	U	U	U	10
4-Methylphenol	U	U	U	U	10
N-Nitroso-di-n-propylamine	U	72X	69X	66X	10
Hexachloroethane	U	U	U	U	10
Nitrobenzene	U	U	U	U	10
Isophorone	U	U	U	U	10
2-Nitrophenol	U	U	U	U	10
2,4-Dimethylphenol	U	U	U	U	10
Benzoic acid	U	U	U	U	50
bis(2-Chloroethoxy)methane	U	U	U	U	10
2,4-Dichlorophenol	U	U	U	U	10
1,2,4-Trichlorobenzene	U	72X	77X	65X	10
Naphthalene	U	U	U	U	10
4-Chloroaniline	U	U	U	U	10
Hexachlorobutadiene	U	U	U	U	10
4-Chloro-3-methylphenol	U	190X	190X	160X	10
2-Methylnaphthalene	U	U	U	U	10
Hexachlorocyclopentadiene	U	U	U	U	10
2,4,6-Trichlorophenol	U	U	U	U	10
2,4,5-Trichlorophenol	U	U	U	U	50
2-Chloronaphthalene	U	U	U	U	10
2-Nitroaniline	U	U	U	U	50
Dimethylphthalate	U	U	U	U	10
Acenaphthylene	U	U	U	U	10
2,6-Dinitrotoluene	U	U	U	U	10

U, X - See Appendix for definition.
Note: Sample detection limit = quantitation limit x dilution factor.

TABLE 3.6
30910-0112
MALCOLM-PIRNIE
EPA TCL SEMI-VOLATILE ORGANICS

All values are ug/L.

	Sample Identification				
Dilution Factor	1.0	1.1	1.1	1.0	
Method Blank I.D.	>C8518	>C8518	>C8518	>C8518	
Compound	Method Blank	BP-4B MS	BP-4B MSD	MSB BP-4B	Quantitation Limits with no Dilution
3-Nitroaniline	U	U	U	U	50
Acenaphthene	U	83X	71X	69X	10
2,4-Dinitrophenol	U	U	U	U	50
4-Nitrophenol	U	120X	120X	82X	50
Dibenzofuran	U	U	U	U	10
2,4-Dinitrotoluene	U	97X	97X	84X	10
Diethylphthalate	U	U	U	U	10
4-Chlorophenyl-phenylether	U	U	U	U	10
Fluorene	U	U	U	U	10
4-Nitroaniline	U	U	U	U	50
4,6-Dinitro-2-methylphenol	U	U	U	U	50
N-Nitrosodiphenylamine (1)	U	U	U	U	10
4-Bromophenyl-phenylether	U	U	U	U	10
Hexachlorobenzene	U	U	U	U	10
Pentachlorophenol	U	160X	190X	85X	50
Phenanthrene	U	U	U	U	10
Anthracene	U	U	U	U	10
Di-n-butylphthalate	U	U	U	U	10
Fluoranthene	U	U	U	U	10
Pyrene	U	92X	79X	88X	10
Butylbenzylphthalate	U	U	U	U	10
3,3'-Dichlorobenzidine	U	U	U	U	20
Benzo(a)anthracene	U	U	U	U	10
Chrysene	U	U	U	U	10
bis(2-Ethylhexyl)phthalate	U	8J	U	6J	10
Di-n-octylphthalate	U	U	U	U	10
Benzo(b)fluoranthene	U	U	U	U	10
Benzo(k)fluoranthene	U	U	U	U	10
Benzo(a)pyrene	U	U	U	U	10
Indeno(1,2,3-cd)pyrene	U	U	U	U	10
Dibenzo(a,h)anthracene	U	U	U	U	10
Benzo(g,h,i)perylene	U	U	U	U	10

U, J, X, (1) - See Appendix for definition.
Note: Sample detection limit = quantitation limit x dilution factor.

TABLE 3.7
30910-0112
MALCOLM-PIRNIE
EPA TCL SEMI-VOLATILE ORGANICS

All values are ug/L.

	Sample Identification		
Dilution Factor	1.0	1.2	
Method Blank I.D.	>C8527	>C8527	
Compound	Method Blank	BP-8A RE	Quantitation Limits with no Dilution
Phenol	U	U	10
bis(2-Chloroethyl)ether	U	U	10
2-Chlorophenol	U	U	10
1,3-Dichlorobenzene	U	U	10
1,4-Dichlorobenzene	U	U	10
Benzyl alcohol	U	U	10
1,2-Dichlorobenzene	U	U	10
2-Methylphenol	U	U	10
bis(2-Chloroisopropyl)ether	U	U	10
4-Methylphenol	U	U	10
N-Nitroso-di-n-propylamine	U	U	10
Hexachloroethane	U	U	10
Nitrobenzene	U	U	10
Isophorone	U	U	10
2-Nitrophenol	U	U	10
2,4-Dimethylphenol	U	U	10
Benzoic acid	U	U	50
bis(2-Chloroethoxy)methane	U	U	10
2,4-Dichlorophenol	U	U	10
1,2,4-Trichlorobenzene	U	U	10
Naphthalene	U	U	10
4-Chloroaniline	U	U	10
Hexachlorobutadiene	U	U	10
4-Chloro-3-methylphenol	U	U	10
2-Methylnaphthalene	U	U	10
Hexachlorocyclopentadiene	U	U	10
2,4,6-Trichlorophenol	U	U	10
2,4,5-Trichlorophenol	U	U	50
2-Chloronaphthalene	U	U	10
2-Nitroaniline	U	U	50
Dimethylphthalate	U	U	10
Acenaphthylene	U	U	10
2,6-Dinitrotoluene	U	U	10

U - See Appendix for definition.
Note: Sample detection limit = quantitation limit x dilution factor.

TABLE 3.7
30910-0112
MALCOLM-PIRNIE
EPA TCL SEMI-VOLATILE ORGANICS

All values are ug/L.

	Sample Identification		
Dilution Factor	1.0	1.2	
Method Blank I.D.	>C8527	>C8527	
Compound	Method Blank	BP-8A RE	Quantitation Limits with no Dilution
3-Nitroaniline	U	U	50
Acenaphthene	U	U	10
2,4-Dinitrophenol	U	U	50
4-Nitrophenol	U	U	50
Dibenzofuran	U	U	10
2,4-Dinitrotoluene	U	U	10
Diethylphthalate	U	U	10
4-Chlorophenyl-phenylether	U	U	10
Fluorene	U	U	10
4-Nitroaniline	U	U	50
4,6-Dinitro-2-methylphenol	U	U	50
N-Nitrosodiphenylamine (1)	U	U	10
4-Bromophenyl-phenylether	U	U	10
Hexachlorobenzene	U	U	10
Pentachlorophenol	U	U	50
Phenanthrene	U	U	10
Anthracene	U	U	10
Di-n-butylphthalate	U	U	10
Fluoranthene	U	U	10
Pyrene	U	U	10
Butylbenzylphthalate	U	U	10
3,3'-Dichlorobenzidine	U	U	20
Benzo(a)anthracene	U	U	10
Chrysene	U	U	10
bis(2-Ethylhexyl)phthalate	U	U	10
Di-n-octylphthalate	U	U	10
Benzo(b)fluoranthene	U	U	10
Benzo(k)fluoranthene	U	U	10
Benzo(a)pyrene	U	U	10
Indeno(1,2,3-cd)pyrene	U	U	10
Dibenzo(a,h)anthracene	U	U	10
Benzo(g,h,i)perylene	U	U	10

U, (1) - See Appendix for definition.
Note: Sample detection limit = quantitation limit x dilution factor.

TABLE 4.0
30910-0112
MALCOLM-PIRNIE
SEMI-VOLATILE TENTATIVELY IDENTIFIED COMPOUNDS

Sample Identification: Method Blank >C8426

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown acid ester	25.80	11J

Sample Identification: BP-3C

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown	36.69	20J
	Unknown acid ester	25.79	11JB
	Unknown	31.95	9J

Sample Identification: BP-3B

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown	36.69	6J
	Unknown acid ester	25.79	5JB

Sample Identification: BP-3A

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown	36.68	6J
	Unknown acid ester	25.79	5JB

Sample Identification: BP-7A

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown	36.68	35J
	Unknown acid ester	25.80	11JB
	Unknown	16.11	8J

J, B - See Appendix for definition.

TABLE 4.1
30910-0112
MALCOLM-PIRNIE
SEMI-VOLATILE TENTATIVELY IDENTIFIED COMPOUNDS

Sample Identification: BP-7B

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown	36.68	50J
	Unknown	16.11	25J
	Unknown	16.52	15J
	Unknown acid ester	25.80	13JB
	Unknown ketone	15.52	8J

Sample Identification: BP-7C

CAS#	Compound	RT	Estimated Concentration, ug/L
	None detected		

Sample Identification: Method Blank >C8427

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown acid ester	25.81	10J

Sample Identification: BP-6C

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown	26.83	150J
	Unknown acid ester	25.52	15JB

Sample Identification: BP-6A

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown	26.82	73J
	Unknown	25.35	15J
	Unknown acid ester	25.52	13J

J, B - See Appendix for definition.

TABLE 4.2
30910-0112
MALCOLM-PIRNIE
SEMI-VOLATILE TENTATIVELY IDENTIFIED COMPOUNDS

Sample Identification: BP-6B

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown	26.81	31J
	Unknown acid ester	25.52	14JB

Sample Identification: FB 10/24/90

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown acid ester	25.52	44JB

Sample Identification: Method Blank >C8470

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown acid ester	25.52	15J

Sample Identification: BP-8B

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown	26.80	46J
	Unknown acid ester	25.51	18JB
	Unknown phthalate	25.12	12J

Sample Identification: W-39

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown	26.79	39J
	Unknown acid ester	25.51	26JB
	Unknown	25.34	25J

J, B - See Appendix for definition.

TABLE 4.3
30910-0112
MALCOLM-PIRNIE
SEMI-VOLATILE TENTATIVELY IDENTIFIED COMPOUNDS

Sample Identification: BP-8C

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown	26.81	140J
	Unknown	25.36	47J
	Unknown acid	8.30	42J
	Unknown acid ester	25.52	41JB
	Unknown acid (MW=256)	21.46	20J
	Unknown	34.24	16J
	Unknown acid	11.59	13J
	Unknown acid	13.00	11J
	Unkwown	16.95	9J

Sample Identification: BP-8A

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown	26.80	28J
	Unknown acid ester	25.51	23JB

Sample Identification: BP-5A

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown	26.81	130J
	Unknown acid ester	25.52	25JB

Sample Identification: BP-5C

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown	26.81	44J
	Unknown acid ester	25.52	23JB
	Unknown	25.30	11
	Unknown	34.23	9J

J, B - See Appendix for definition.

TABLE 4.4
30910-0112
MALCOLM-PIRNIE
SEMI-VOLATILE TENTATIVELY IDENTIFIED COMPOUNDS

Sample Identification: BP-5B

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown	26.82	150J
	Unknown acid ester	25.52	30J
	Unknown	34.25	20J
	Unknown	25.27	11J

Sample Identification: Method Blank >C8518

CAS#	Compound	RT	Estimated Concentration, ug/L
	None detected		

Sample Identification: BP-4A

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown	26.60	43J

Sample Identification: BP-4C

CAS#	Compound	RT	Estimated Concentration, ug/L
	None detected		

Sample Identification: BP-4B

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown	26.60	61J

J - See Appendix for definition.

TABLE 4.5
30910-0112
MALCOLM-PIRNIE
SEMI-VOLATILE TENTATIVELY IDENTIFIED COMPOUNDS

Sample Identification: Method Blank >C8527

CAS#	Compound	RT	Estimated Concentration, ug/L
	None detected		

Sample Identification: BP-8A RE

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown	26.58	25J

J - See Appendix for definition.

TABLE 5.0
30910-0112
MALCOLM-PIRNIE
EPA TCL PESTICIDES/PCB's

Aqueous

All values are ug/L.

Sample Identification

Dilution Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Method Blank I.D.	1025 -B03	1025 -B03	1025 -B03	1025 -B03	1025 -B03	1025 -B03	1025 -B03	
Compound	Method Blank	BP-3A	BP-3B	BP-3C	BP-7A	BP-7B	BP-7C	Quantitation Limits with no Dilution
alpha-BHC	U	U	U	U	U	U	U	0.05
beta-BHC	U	U	U	U	U	U	U	0.05
delta-BHC	U	U	U	U	U	U	U	0.05
gamma-BHC	U	U	U	U	U	U	U	0.05
Heptachlor	U	U	U	U	U	U	0.12	0.05
Aldrin	U	U	U	U	U	U	U	0.05
Heptachlor Epoxide	U	U	U	U	U	U	U	0.05
Endosulfan I	U	U	U	U	U	U	U	0.05
Dieldrin	U	U	U	U	U	U	U	0.10
4,4'-DDE	U	U	U	U	U	U	U	0.10
Endrin	U	U	U	U	U	U	U	0.10
Endosulfan II	U	U	U	U	U	U	U	0.10
4,4'-DDD	U	U	U	U	U	U	U	0.10
Endosulfan Sulfate	U	U	U	U	U	U	U	0.10
4,4'-DDT	U	U	U	U	U	U	U	0.10
Methoxychlor	U	U	U	U	U	U	U	0.50
Endrin-Ketone	U	U	U	U	U	U	U	0.10
alpha-Chlordane	U	U	U	U	U	U	U	0.50
gamma-Chlordane	U	U	U	U	U	U	U	0.50
Toxaphene	U	U	U	U	U	U	U	1.0
PCB - 1016	U	U	U	U	U	U	U	0.5
PCB - 1221	U	U	U	U	U	U	U	0.5
PCB - 1232	U	U	U	U	U	U	U	0.5
PCB - 1242	U	U	U	U	U	U	U	0.5
PCB - 1248	U	U	U	U	U	U	U	0.5
PCB - 1254	U	U	U	U	U	U	U	1.0
PCB - 1260	U	U	U	U	U	U	U	1.0

U - See Appendix for definition.
Note: Sample detection limit = quantitation limit x dilution factor.

Aqueous

TABLE 5.1
30910-0112
MALCOLM-PIRNIE
EPA TCL PESTICIDES/PCB's

All values are ug/L.

	Sample Identification					
Dilution Factor	1.0	1.0	1.0	1.0	1.0	
Method Blank I.D.	1026 -B03	1026 -B03	1026 -B03	1026 -B03	1026 -B03	
Compound	Method Blank	BP-6A	BP-6B	BP-6C	FB 10/24/90	Quantitation Limits with no Dilution
alpha-BHC	U	U	U	U	U	0.05
beta-BHC	U	U	U	U	U	0.05
delta-BHC	U	0.095	U	0.098	U	0.05
gamma-BHC	U	U	U	U	U	0.05
Heptachlor	U	U	U	U	U	0.05
Aldrin	U	U	U	U	U	0.05
Heptachlor Epoxide	U	U	U	U	U	0.05
Endosulfan I	U	U	U	U	U	0.05
Dieldrin	U	U	U	U	U	0.10
4,4'-DDE	U	U	U	U	U	0.10
Endrin	U	U	U	U	U	0.10
Endosulfan II	U	U	U	U	U	0.10
4,4'-DDD	U	U	U	U	U	0.10
Endosulfan Sulfate	U	U	U	U	U	0.10
4,4'-DDT	U	U	U	U	U	0.10
Methoxychlor	U	U	U	U	U	0.50
Endrin-Ketone	U	U	U	U	U	0.10
alpha-Chlordane	U	U	U	U	U	0.50
gamma-Chlordane	U	U	U	U	U	0.50
Toxaphene	U	U	U	U	U	1.0
PCB - 1016	U	U	U	U	U	0.5
PCB - 1221	U	U	U	U	U	0.5
PCB - 1232	U	U	U	U	U	0.5
PCB - 1242	U	U	U	U	U	0.5
PCB - 1248	U	U	U	U	U	0.5
PCB - 1254	U	U	U	U	U	1.0
PCB - 1260	U	U	U	U	U	1.0

U, J, B - See Appendix for definition.
Note: Sample detection limit = quantitation limit x dilution factor.

Aqueous

TABLE 5.2
30910-0112
MALCOLM-PIRNIE
EPA TCL PESTICIDES/PCB's

All values are ug/L.

	Sample Identification						
Dilution Factor	1.0	1.0	1.0	1.0	1.0	1.0	
Method Blank I.D.	1030 -B01	1030 -B01	1030 -B01	1030 -B01	1030 -B01	1030 -B01	
Compound	Method Blank	BP-4A	BP-4B	MSB BP-4B	BP-4B MS	BP-4B MSD	Quantitation Limits with no Dilution
alpha-BHC	U	U	U	U	U	U	0.05
beta-BHC	U	U	U	U	U	U	0.05
delta-BHC	U	U	U	U	U	U	0.05
gamma-BHC	U	U	U	0.18X	0.20X	0.22X	0.05
Heptachlor	U	U	U	0.15X	0.14X	0.13X	0.05
Aldrin	U	U	U	0.16X	0.19X	0.19X	0.05
Heptachlor Epoxide	U	U	U	U	U	U	0.05
Endosulfan I	U	U	U	U	U	U	0.05
Dieldrin	U	U	U	0.43X	0.45X	0.45X	0.10
4,4'-DDE	U	U	U	U	U	U	0.10
Endrin	U	U	U	0.43X	0.52X	0.56X	0.10
Endosulfan II	U	U	U	U	U	U	0.10
4,4'-DDD	U	U	U	U	U	U	0.10
Endosulfan Sulfate	U	U	U	U	U	U	0.10
4,4'-DDT	U	U	U	0.43X	0.43X	0.40X	0.10
Methoxychlor	U	U	U	U	U	U	0.50
Endrin-Ketone	U	U	U	U	U	U	0.10
alpha-Chlordane	U	U	U	U	U	U	0.50
gamma-Chlordane	U	U	U	U	U	U	0.50
Toxaphene	U	U	U	U	U	U	1.0
PCB - 1016	U	U	U	U	U	U	0.5
PCB - 1221	U	U	U	U	U	U	0.5
PCB - 1232	U	U	U	U	U	U	0.5
PCB - 1242	U	U	U	U	U	U	0.5
PCB - 1248	U	U	U	U	U	U	0.5
PCB - 1254	U	U	U	U	U	U	1.0
PCB - 1260	U	U	U	U	U	U	1.0

U, X - See Appendix for definition.
Note: Sample detection limit = quantitation limit x dilution factor.

Aqueous

TABLE 5.3
30910-0112
MALCOLM-PIRNIE
EPA TCL PESTICIDES/PCB's

All values are ug/L.

	Sample Identification					
Dilution Factor	1.0	1.0	1.0	1.0	1.0	
Method Blank I.D.	1030 -B01	1030 -B01	1030 -B01	1030 -B01	1030 -B01	
Compound	Method Blank	BP-4C	BP-5A	BP-5B	BP-5C	Quantitation Limits with no Dilution
alpha-BHC	U	U	U	U	U	0.05
beta-BHC	U	U	U	U	U	0.05
delta-BHC	U	U	U	U	U	0.05
gamma-BHC	U	U	U	U	U	0.05
Heptachlor	U	U	U	U	U	0.05
Aldrin	U	U	U	U	U	0.05
Heptachlor Epoxide	U	U	U	U	U	0.05
Endosulfan I	U	U	U	U	U	0.05
Dieldrin	U	U	U	U	U	0.10
4,4'-DDE	U	U	U	U	U	0.10
Endrin	U	U	U	U	U	0.10
Endosulfan II	U	U	U	U	U	0.10
4,4'-DDD	U	U	U	U	U	0.10
Endosulfan Sulfate	U	U	U	U	U	0.10
4,4'-DDT	U	U	U	U	U	0.10
Methoxychlor	U	U	U	U	U	0.50
Endrin-Ketone	U	U	U	U	U	0.10
alpha-Chlordane	U	U	U	U	U	0.50
gamma-Chlordane	U	U	U	U	U	0.50
Toxaphene	U	U	U	U	U	1.0
PCB - 1016	U	U	U	U	U	0.5
PCB - 1221	U	U	U	U	U	0.5
PCB - 1232	U	U	U	U	U	0.5
PCB - 1242	U	U	U	U	U	0.5
PCB - 1248	U	U	U	U	U	0.5
PCB - 1254	U	U	U	U	U	1.0
PCB - 1260	U	U	U	U	U	1.0

U - See Appendix for definition.
Note: Sample detection limit = quantitation limit x dilution factor.

Aqueous

TABLE 5.4
30910-0112
MALCOLM-PIRNIE
EPA TCL PESTICIDES/PCB's

All values are ug/L.

	Sample Identification					
Dilution Factor	1.0	1.0	1.0	1.0	1.0	
Method Blank I.D.	1030 -B01	1030 -B01	1030 -B01	1030 -B01	1030 -B01	
Compound	Method Blank	BP-8A	BP-8B	BP-8C	W-39	Quantitation Limits with no Dilution
alpha-BHC	U	U	U	U	U	0.05
beta-BHC	U	U	U	U	U	0.05
delta-BHC	U	U	U	U	U	0.05
gamma-BHC	U	U	U	U	U	0.05
Heptachlor	U	U	U	U	U	0.05
Aldrin	U	U	U	0.035J	U	0.05
Heptachlor Epoxide	U	U	U	U	U	0.05
Endosulfan I	U	U	U	U	U	0.05
Dieldrin	U	U	U	U	U	0.10
4,4'-DDE	U	U	U	U	U	0.10
Endrin	U	U	U	U	U	0.10
Endosulfan II	U	U	U	U	U	0.10
4,4'-DDD	U	U	U	U	U	0.10
Endosulfan Sulfate	U	U	U	U	U	0.10
4,4'-DDT	U	U	U	U	U	0.10
Methoxychlor	U	U	U	U	U	0.50
Endrin-Ketone	U	U	U	U	U	0.10
alpha-Chlordane	U	U	U	U	U	0.50
gamma-Chlordane	U	U	U	U	U	0.50
Toxaphene	U	U	U	U	U	1.0
PCB - 1016	U	U	U	U	U	0.5
PCB - 1221	U	U	U	U	U	0.5
PCB - 1232	U	U	U	U	U	0.5
PCB - 1242	U	U	U	U	U	0.5
PCB - 1248	U	U	U	U	U	0.5
PCB - 1254	U	U	U	U	U	1.0
PCB - 1260	U	U	U	U	U	1.0

U, J - See Appendix for definition.
Note: Sample detection limit = quantitation limit x dilution factor.

TABLE 6.0
30910-0112
MALCOLM-PIRNIE
TAL METALS PLUS CYANIDE

All values are ug/L.

Parameter	BP-3C	BP-3B	BP-3A	BP-7A	BP-7B
Aluminum	1,450	2,030	4,980	18,600	207 U
Antimony	18.0U	18.0U	18.0U	18.0U	18.0U
Arsenic	2.1B	2.3B	4.8B	3.2B	1.0U
Barium	15.0U	40.8B	35.7B	134B	26.0B
Beryllium	1.0U	1.0U	1.0U	2.4B	1.0U
Cadmium	2.0U	2.0U	2.0U	3.4B	2.0U
Calcium	8,530J	6,690J	1,030BJ	48,400	9,820J
Chromium	24.5	11.3	11.9	48.6	4.0U
Cobalt	3.0U	4.0B	3.0U	11.4B	3.0U
Copper	32.1	18.9B	8.0U	68.4	8.0U
Iron	14,800	13,300	12,300	113,000	2,480
Lead	5.1	4.7B	4.7B	22.7	2.1BWJ
Magnesium	1,150BJ	2,870B	2,330BJ	4,130BJ	2,930BJ
Manganese	111	144J	75.3	443	37.6
Mercury	0.20UJ	0.20UJ	0.20UJ	0.20UJ	0.20UJ
Nickel	24.0B	13.0B	12.6B	51.7	10.4B
Potassium	8,540J	11,700J	1,520BJ	4,760BJ	5,220J
Selenium	1.0U	1.0U	1.0U	1.0U	1.0U
Silver	3.0U	3.0U	3.0U	3.0U	3.0U
Sodium	10,100J	17,400	2,930BUJ	4,160BJ	13,500J
Thallium	1.0UJ	1.0UWJ	1.0UJ	1.0UJ	1.0UWJ
Vanadium	10.2B	17.2B	22.9B	139	9.8B
Zinc	264	195	19.5BU	194	152
Cyanide	10.0U	10.0U	10.0U	10.0U	14.5

B, U, W - See Metals Appendix for definition.

TABLE 6.1
30910-0112
MALCOLM-PIRNIE
TAL METALS PLUS CYANIDE

All values are ug/L.

Parameter	BP-7C	BP-6C	BP-6A	BP-6B	FB 10/24/90
Aluminum	965	579	2,590	92.9BU	110B
Antimony	18.0U	18.0U	18.0U	18.0U	18.0U
Arsenic	1.2B	1.0U	3.0B	1.0U	1.0U
Barium	15.0U	15.0U	60.9B	17.8B	15.0U
Beryllium	1.0U	1.0U	1.0U	1.0U	1.0U
Cadmium	2.7B	2.0U	2.0U	2.0U	2.0U
Calcium	9,170J	3,070BJ	8,460J	5,230J	109BJ
Chromium	43.2	25.0	14.5	4.0U	4.0U
Cobalt	7.2B	3.0U	3.0U	3.0U	3.0U
Copper	35.4	20.6B	16.9B	8.0U	8.0U
Iron	39,500	9,520	19,400	461	62.0U
Lead	5.9J	3.0B	6.6	1.0U	1.0U
Magnesium	436BJ	319BUJ	2,320BJ	1,740BJ	30.0UJ
Manganese	285	99.4	181	14.1B	1.0U
Mercury	0.20UJ	0.20UJ	0.20UJ	0.20UJ	0.20UJ
Nickel	60.0	30.8BU	18.2BU	9.6BU	8.0U
Potassium	1,820BJ	1,290BJ	1,810BJ	1,410BJ	554UJ
Selenium	1.0U	1.0U	1.0U	1.0U	1.0U
Silver	3.0U	3.0U	3.0U	3.0U	3.0U
Sodium	2,860BUJ	2,310BUJ	3,670BJ	8,340J	693BJ
Thallium	1.0UJ	1.0UJ	1.0UJ	1.0UJ	1.0UJ
Vanadium	9.0U	9.0U	22.6B	9.0U	9.0U
Zinc	536	110	41.0U	81.1	11.0B
Cyanide	10.0U	10.0U	10.0U	10.0U	10.0U

B, U - See Metals Appendix for definition.

TABLE 6.2
30910-0112
MALCOLM-PIRNIE
TAL METALS PLUS CYANIDE

All values are ug/L.

Parameter	BP-8B	W-39	BP-8C	BP-8A	BP-5A
Aluminum	187B U	5,050	560	337 U	2,260
Antimony	18.0U	18.0U	18.0U	18.0U	18.0U
Arsenic	1.0U	5.4B	1.0U	1.0B	5.3B
Barium	61.1B	103B	15.0U	35.0B	53.2B
Beryllium	1.0U	1.0U	1.0U	1.0U	1.0U
Cadmium	2.0U	2.0U	2.0U	2.0U	2.0U
Calcium	7,800 J	6,920 J	7,180 J	18,900	17,700
Chromium	11.7	32.0	4.4B	4.0U	19.0
Cobalt	3.0U	5.1B	3.0U	3.0B	3.2B
Copper	12.9B	18.1B	10.8B	10.5B	13.3B
Iron	4,510	20,200	3,240	2,570	25,800
Lead	1.2B	8.2	1.8B	2.0B J	8.6
Magnesium	3.820B J	3,240B J	479B U J	1,480B J	1,850B
Manganese	122	327	23.4	883	338
Mercury	0.20U J	0.21 J	0.20U J	0.20U J	0.20U
Nickel	21.8B U	19.1B U	12.1B U	18.3B U	24.4B U
Potassium	6,020 J	3,250B J	2,770B J	7,200 J	2,960B
Selenium	1.0U	1.0U	1.0U	1.5B	1.0U
Silver	3.0U	3.0U	3.0U	3.0U	3.0U
Sodium	17,300	30,100	5,300 J	13,800 J	15,000
Thallium	1.0U J	1.0U J	1.0U	1.0U	1.0U
Vanadium	11.8B	40.1B	9.0U	9.4B	20.4B
Zinc	129	98.3	98.8	21.4 U	60.6
Cyanide	10.0U	10.0U	10.0U	10.0U	10.0U

B, U - See Metals Appendix for definition.

TABLE 6.3
30910-0112
MALCOLM-PIRNIE
TAL METALS PLUS CYANIDE

All values are ug/L.

Parameter	BP-5C	BP-5B	BP-4A	BP-4C	BP-4B
Aluminum	224 U	1,090	902	484 U	369 U
Antimony	18.0U	18.0U	18.0U	18.0U	18.0U
Arsenic	1.0U	1.0U	2.9B	1.0U	1.4B
Barium	15.0U	45.7B	125B	22.4B	47.5B
Beryllium	1.0U	1.0U	1.0U	1.0U	1.0U
Cadmium	2.0U	2.0U	2.0UJ	2.0UJ	2.0UJ
Calcium	3,150BJ	15,900	10,600J	4,130BJ	6,970J
Chromium	4.0U	19.1	14.8	4.0U	8.2B
Cobalt	3.0U	3.0U	4.6B	3.0U	3.0U
Copper	8.0U	47.0	15.6BU	9.8BU	20.6BU
Iron	1,700	10,400	8,950	1,310	7,380
Lead	5.5 J	4.0B	2.1BJ	1.5B	1.1B
Magnesium	659BUJ	1,990BJ	5,330J	1,380BJ	3,710BJ
Manganese	44.8	106	149	38.9	120
Mercury	0.20U	0.20U	0.20U	0.20U	0.26
Nickel	11.1BU	30.4BU	9.8B	9.4B	22.8B
Potassium	2,160BJ	5,980J	1,980BJ	1,210BJ	2,950BJ
Selenium	1.0U	1.0U	1.0UJ	1.0UJ	1.0UJ
Silver	3.0U	3.0U	3.0U	3.0U	3.0U
Sodium	5,040J	8,710J	5,300J	5,440J	8,270J
Thallium	1.0U	1.0U	1.0U	1.0U	1.0U
Vanadium	9.0U	9.0U	9.0U	9.0U	9.0U
Zinc	78.6	203	25.9 U	123	101
Cyanide	10.0U	10.0U	10.0U	10.0U	10.0U

B, U - See Metals Appendix for definition.

TABLE 7.0
30910-0112
MALCOLM-PIRNIE
MISCELLANEOUS INORGANICS

All values are mg/L unless noted.

Parameter	BP-3C	BP-3B	BP-3A	BP-7A
Color, Pt-Co Units	150	15	30	200
Odor, Threshold #	1 J	1 J	1 J	1
pH, S.U.	7.65 J	6.43 J	5.29 J	7.17 J
Cyanide, ug/L	<10.0	<10.0	<10.0	<10.0
Petroleum Hydrocarbons, mg/Kg	<1.0	<1.0	<1.0	<1.0
Total Organic Carbon	0.69	1.12	0.75	1.74
Hardness, as $CaCO_3$	30.0	<1.0	12.0	68.2
Alkalinity, as $CaCO_3$	51.5	35.6	2.80	64.5
Total Dissolved Solids	105 J	86.4 J	35.8 J	133 J
Chemical Oxygen Demand	23.6 U	23.6 U	29.6 U	98.4
Hexavalent Chromium	NR	NR	NR	<0.01
MBAS	<0.04	<0.10	<0.10	<0.10
Sulfate	<10.0	18.2	12.0	13.4
Chloride	13.8	32.1	8.10	42.1
Ammonia-Nitrogen	<0.04 U	0.07 U	<0.04	0.09 U
Nitrate/Nitrite-Nitrogen	0.87	0.87	<0.02	0.91
Phenols	<0.005	<0.005	<0.005	<0.005
Total Kjeldahl Nitrogen	0.31	0.33	0.36	0.42
Biochemical Oxygen Demand (5 day)	2.1 U	NR	1.4 U	2.2 U

NR - Not Requested

TABLE 7.1
30910-0112
MALCOLM-PIRNIE
MISCELLANEOUS INORGANICS

All values are mg/L unless noted.

Parameter	BP-7B	BP-7C	BP-6C
Color, Pt-Co Units	5	75	25
Odor, Threshold #	1	1	1
pH, S.U.	6.74 J	6.89 J	6.25 J
Cyanide	14.5	<10.0	<10.0
Petroleum Hydrocarbons, mg/Kg	<1.0	<1.0	<1.0
Total Organic Carbon	1.10	0.63	1.24
Hardness, as $CaCO_3$	44.0	18.8	5.40
Alkalinity, as $CaCO_3$	28.1	22.6	7.10
Total Dissolved Solids	150 J	34.2 J	3.70 U
Chemical Oxygen Demand	23.6 U	29.6 U	32.6 U
Hexavalent Chromium	<0.01	<0.01	<0.01
MBAS	0.17	<0.10	<0.04
Sulfate	<10.0	<10.0	<10.0
Chloride	17.2	3.13	3.13
Ammonia-Nitrogen	<0.04	<0.04	<0.04
Nitrate/Nitrite-Nitrogen	11.2	<0.02	0.16
Phenols	<0.005	<0.005	<0.005
Total Kjeldahl Nitrogen	0.58	0.15	<0.10
Biochemical Oxygen Demand (5 day)	4.6 U	2.5 U	5.0 U

TABLE 7.2
30910-0112
MALCOLM-PIRNIE
MISCELLANEOUS INORGANICS

All values are mg/L unless noted.

Parameter	BP-6A	BP-6B	FB 10/24/90
Color, Pt-Co Units	45	<5	<5
Odor, Threshold #	1	1	1
pH, S.U.	6.01 J	5.85 J	6.90 J
Cyanide	<10.0	<10.0	<10.0
Petroleum Hydrocarbons, mg/Kg	<1.0	<1.0	<1.0
Total Organic Carbon	0.52	0.40 U	0.18 U
Hardness, as $CaCO_3$	34.2	22.2	12.2
Alkalinity, as $CaCO_3$	19.0	6.10	14.4
Total Dissolved Solids	56.3	37.6	1.8
Chemical Oxygen Demand	29.6 U	23.6 U	17.6
Hexavalent Chromium	<0.01	<0.01	<0.01
MBAS	<0.04	<0.04	0.04
Sulfate	<10.0	<10.0	<10.0
Chloride	7.47	13.7	<3.0
Ammonia-Nitrogen	<0.04	<0.04	<0.04
Nitrate/Nitrite-Nitrogen	4.32	6.96	<0.02
Phenols	<0.005	<0.005	<0.005
Total Kjeldahl Nitrogen	<0.10	<0.10	<0.10
Biochemical Oxygen Demand (5 day)	5 U	5 U	4

TABLE 7.3
30910-0112
MALCOLM-PIRNIE
MISCELLANEOUS INORGANICS

All values are mg/L unless noted.

Parameter	BP-8B	W-39	BP-8C
Color, Pt-Co Units	20	750 J	15 J
Odor, Threshold #	1 J	2 J	1 J
pH, S.U.	5.75 J	5.61 J	6.92 J
Cyanide	<10.0	<10.0	<10.0
Petroleum Hydrocarbons, mg/Kg	<1.0	<1.0	<1.0
Total Organic Carbon	1.06	1.46	2.36
Hardness, as $CaCO_3$	39.2	34.6	18.4
Alkalinity, as $CaCO_3$	19.8	21.0	18.6
Total Dissolved Solids	123	161	41.9
Chemical Oxygen Demand	29.6 U	38.6 U	20.6 U
Hexavalent Chromium	<0.01	<0.01	<0.01
MBAS	<0.04	<0.04	<0.04
Sulfate	10.7	18.8	<10.0
Chloride	31.6	75.3	5.46
Ammonia-Nitrogen	<0.04	<0.04	<0.04
Nitrate/Nitrite-Nitrogen	6.96	0.78	1.55
Phenols	<0.005	<0.005	<0.005
Total Kjeldahl Nitrogen	<0.10	<0.10	<0.10
Biochemical Oxygen Demand (5 day)	6 U	3 U	5 U

TABLE 7.4
30910-0112
MALCOLM-PIRNIE
MISCELLANEOUS INORGANICS

All values are mg/L unless noted.

Parameter	BP-8A	BP-5A	BP-5C
Color, Pt-Co Units	15 J	8	5
Odor, Threshold #	1 J	1	1
pH, S.U.	6.46 J	6.48 J	7.11 J
Cyanide	<10.0	<10.0	<10.0
Petroleum Hydrocarbons, mg/Kg	<1.0	<1.0	<1.0
Total Organic Carbon	1.24	2.06	0.82
Hardness, as $CaCO_3$	82.2	56.0	18.2
Alkalinity, as $CaCO_3$	57.4	27.5	13.9
Total Dissolved Solids	158	154	37.8
Chemical Oxygen Demand	14.6 U	56.5 U	<10.0 J
Hexavalent Chromium	<0.01	<0.01	<0.01
MBAS	<0.04	<0.04	<0.04
Sulfate	50.5	25.2	<10.0
Chloride	13.6	39.1	13.4
Ammonia-Nitrogen	0.28	0.29	<0.04
Nitrate/Nitrite-Nitrogen	0.56	1.51	2.65
Phenols	<0.005	<0.005	<0.005
Total Kjeldahl Nitrogen	<0.10	0.32	<0.10
Biochemical Oxygen Demand (5 day)	2 U	2 U	4 U

TABLE 7.5
30910-0112
MALCOLM-PIRNIE
MISCELLANEOUS INORGANICS

All values are mg/L unless noted.

Parameter	BP-5B	BP-4A	BP-4C
Color, Pt-Co Units	<5	100 J	<5
Odor, Threshold #	1	1 J	1 J
pH, S.U.	7.65 J	6.50 J	6.43 J
Cyanide	<10.0	<10.0	<10.0
Petroleum Hydrocarbons, mg/Kg	<1.0	<1.0	<1.0
Total Organic Carbon	0.94	1.36	0.98
Hardness, as $CaCO_3$	41.4	50.8	24.0
Alkalinity, as $CaCO_3$	47.5	13.1	12.7
Total Dissolved Solids	97.5	116 J	52.6 J
Chemical Oxygen Demand	<10.0 J	<10.0 J	31.2 UJ
Hexavalent Chromium	<0.01	<0.01	<0.01
MBAS	<0.04	<0.04	<0.04
Sulfate	<10.0	25.9	<10.0
Chloride	20.1	13.8	8.31
Ammonia-Nitrogen	<0.04	0.07	0.20
Nitrate/Nitrite-Nitrogen	5.44	3.84	3.02
Phenols	<0.005	<0.005	<0.005
Total Kjeldahl Nitrogen	<0.10	0.20	0.21
Biochemical Oxygen Demand (5 day)	2 U	5 U	9 U

TABLE 7.6
30910-0112
MALCOLM-PIRNIE
MISCELLANEOUS INORGANICS

All values are mg/L unless noted.

Parameter	BP-4B	BP-4B DUP	BP-4B SPK
Color, Pt-Co Units	<5 J	<5	NR
Odor, Threshold #	1 J	1	NR
pH, S.U.	6.17 J	6.18	NR
Cyanide	<10.0	<10.0	102
Petroleum Hydrocarbons, mg/Kg	<1.0	<1.0	13.1
Total Organic Carbon	1.86	1.76	11.4
Hardness, as $CaCO_3$	37.2	36.2	54.6
Alkalinity, as $CaCO_3$	25.3	26.1	NR
Total Dissolved Solids	83.7 J	84.4	NR
Chemical Oxygen Demand	10.3 UJ	13.3	133
Hexavalent Chromium	<0.01	<0.01	0.50
MBAS	0.05	0.05	0.42
Sulfate	16.4	12.8	65.3
Chloride	16.8	17.1	73.7
Ammonia-Nitrogen	0.05	<0.04	1.96
Nitrate/Nitrite-Nitrogen	2.80	2.66	4.59
Phenols	<0.005	<0.005	0.368
Total Kjeldahl Nitrogen	0.21	0.20	1.07
Biochemical Oxygen Demand (5 day)	6 U	6	72

NR - Not Requested

APPENDIX

U - Indicates that the compound was analyzed for but not detected.

J - Indicates that the compound was analyzed for and determined to be present in the sample. The mass spectrum of the compound meets the identification criteria of the method. The concentration listed is an estimated value, which is less than the specified minimum detection limit but is greater than zero.

B - This flag is used when the analyte is found in the blanks as well as the sample. It indicates possible sample contamination and warns the data user to use caution when applying the results of this analyte.

N - Indicates that the compound was analyzed for but not requested as an analyte. Value will not be listed on tabular result sheet.

X - Matrix spike compound.

(1) - Cannot be separated from diphenylamine.

(2) - Decomposes to azobenzene. Measured and calibrated as azobenzene.

A - This flag indicates that a TIC is a suspected aldol condensation product.

E - Indicates that it exceeds calibration curve range.

D - This flag identifies all compounds identified in an analysis at a secondary dilution factor.

APPENDIX/METALS DATA

C - Concentration qualifiers

U - Indicates analyte result less than instrument detection limit (IDL)

B - Indicates analyte result between IDL and contract required detection limit (CRDL)

Q - QC qualifiers

E - Reported value is estimated because of the presence of interference

M - Duplicate injection precision not met

N - Spiked sample recovery not within control limits

S - The reported value was determined by the method of standard additions (MSA)

W - Post-digest spike recovery furnace analysis was out of 85-115 percent control limit, while sample absorbance was less than 50 percent of spike absorbance

* - Duplicate analysis not within control limit

+ - Correlation coefficient for MSA is less than 0.995

M - Method codes

P - ICP

A - Flame AA

F - Furnace AA

CV - Cold vapor AA (manual)

C - Cyanide

NR - Not Required

TABLE 1.0
30910-0112
MALCOLM-PIRNIE
EPA TCL VOLATILE ORGANICS

Aqueous

All values are ug/L.

	Sample Identification			
Dilution Factor	1.0	1.0	1.0	
Method Blank I.D.	>G8053	>G8053	>G8053	
Compound	Method Blank	BP-3C	BP-3B	Quantitation Limits with no Dilution
Chloromethane	U	U	U	10
Bromomethane	U	U	U	10
Vinyl Chloride	U	U	U	10
Chloroethane	U	U	U	10
Methylene Chloride	2J	U	~~3JB~~ 5U	5
Acetone	U	U	U	10
Carbon Disulfide	U	U	U	5
1,1-Dichloroethene	U	U	U	5
1,1-Dichloroethane	U	U	0.9J	5
1,2-Dichloroethene (total)	U	U	11	5
Chloroform	U	U	U	5
1,2-Dichloroethane	U	U	U	5
2-Butanone	U	U J	U J	10
1,1,1-Trichloroethane	U	U	2J	5
Carbon Tetrachloride	U	U	U	5
Vinyl Acetate	U	U	U	10
Bromodichloromethane	U	U	U	5
1,2-Dichloropropane	U	U	U	5
cis-1,3-Dichloropropene	U	U	U	5
Trichloroethene	U	U	3J	5
Dibromochloromethane	U	U	U	5
1,1,2-Trichloroethane	U	U	U	5
Benzene	U	U	U	5
trans-1,3-Dichloropropene	U	U	U	5
Bromoform	U	U	U	5
4-Methyl-2-pentanone	U	U	U	10
2-Hexanone	U	U	U	10
Tetrachloroethene	U	U	12	5
1,1,2,2-Tetrachloroethane	U	U	U	5
Toluene	U	U	U	5
Chlorobenzene	U	U	U	5
Ethylbenzene	U	U	U	5
Styrene	U	U	U	5
Xylene (total)	U	2J	U	5

U, J, B - See Appendix for definition.
Note: Sample detection limit = quantitation limit x dilution factor.

Aqueous

TABLE 1.1
30910-0112
MALCOLM-PIRNIE
EPA TCL VOLATILE ORGANICS

All values are ug/L.

	Sample Identification			
Dilution Factor	1.0	1.0	1.0	
Method Blank I.D.	>G8072	>G8072	>G8072	
Compound	Method Blank	TB 10/24/90	FB 10/24/90	Quantitation Limits with no Dilution
Chloromethane	U	U	U	10
Bromomethane	U	U	U	10
Vinyl Chloride	U	U	U	10
Chloroethane	U	U	U	10
Methylene Chloride	3J	2JB	11B	5
Acetone	6J	3JB	U	10
Carbon Disulfide	U	U	U	5
1,1-Dichloroethene	U	U	U	5
1,1-Dichloroethane	U	U	U	5
1,2-Dichloroethene (total)	U	U	U	5
Chloroform	U	U	U	5
1,2-Dichloroethane	U	U	U	5
2-Butanone	U	UJ	UJ	10
1,1,1-Trichloroethane	U	U	U	5
Carbon Tetrachloride	U	U	U	5
Vinyl Acetate	U	U	U	10
Bromodichloromethane	U	U	U	5
1,2-Dichloropropane	U	U	U	5
cis-1,3-Dichloropropene	U	U	U	5
Trichloroethene	U	U	U	5
Dibromochloromethane	U	U	U	5
1,1,2-Trichloroethane	U	U	U	5
Benzene	U	U	U	5
trans-1,3-Dichloropropene	U	U	U	5
Bromoform	U	U	U	5
4-Methyl-2-pentanone	U	U	U	10
2-Hexanone	U	U	U	10
Tetrachloroethene	U	U	U	5
1,1,2,2-Tetrachloroethane	U	U	U	5
Toluene	U	U	U	5
Chlorobenzene	U	U	U	5
Ethylbenzene	U	U	U	5
Styrene	U	U	U	5
Xylene (total)	U	U	U	5

U, J, B - See Appendix for definition.
Note: Sample detection limit = quantitation limit x dilution factor.

Aqueous

TABLE 1.2
30910-0112
MALCOLM-PIRNIE
EPA TCL VOLATILE ORGANICS

All values are ug/L.

	Sample Identification				
Dilution Factor	1.0	1.0	1.0	1.0	
Method Blank I.D.	>G8093	>G8093	>G8093	>G8093	
Compound	Method Blank	BP-3A	BP-7A	BP-7B	Quantitation Limits with no Dilution
Chloromethane	U	U	U	U	10
Bromomethane	U	U	U	U	10
Vinyl Chloride	U	U	U	U	10
Chloroethane	U	U	U	U	10
Methylene Chloride	2J	U	5U ~~2B~~	~~2B~~ 5U	5
Acetone	9J	U	U	~~7B~~ 10U	10
Carbon Disulfide	U	U	U	2J	5
1,1-Dichloroethene	U	U	U	U	5
1,1-Dichloroethane	U	U	U	2J	5
1,2-Dichloroethene (total)	U	U	U	U	5
Chloroform	U	U	U	U	5
1,2-Dichloroethane	U	U	U	U	5
2-Butanone	U	UJ	UJ	UJ	10
1,1,1-Trichloroethane	U	U	U	1J	5
Carbon Tetrachloride	U	U	U	U	5
Vinyl Acetate	U	U	U	U	10
Bromodichloromethane	U	U	U	U	5
1,2-Dichloropropane	U	U	U	U	5
cis-1,3-Dichloropropene	U	U	U	U	5
Trichloroethene	U	U	U	U	5
Dibromochloromethane	U	U	U	U	5
1,1,2-Trichloroethane	U	U	U	U	5
Benzene	U	U	U	U	5
trans-1,3-Dichloropropene	U	U	U	U	5
Bromoform	U	U	U	U	5
4-Methyl-2-pentanone	U	U	U	U	10
2-Hexanone	U	U	U	U	10
Tetrachloroethene	U	U	U	U	5
1,1,2,2-Tetrachloroethane	U	U	U	U	5
Toluene	0.6J	U	U	U	5
Chlorobenzene	U	U	U	U	5
Ethylbenzene	U	U	U	U	5
Styrene	U	U	U	U	5
Xylene (total)	U	U	U	U	5

U, J, B - See Appendix for definition.
Note: Sample detection limit = quantitation limit x dilution factor.

Aqueous

TABLE 1.3
30910-0112
MALCOLM-PIRNIE
EPA TCL VOLATILE ORGANICS

All values are ug/L.

	Sample Identification				
Dilution Factor	1.0	1.0	1.0	1.0	
Method Blank I.D.	>G8093	>G8093	>G8093	>G8093	
Compound	Method Blank	BP-7C	BP-6A	BP-6B	Quantitation Limits with no Dilution
Chloromethane	U	U	U	U	10
Bromomethane	U	U	U	U	10
Vinyl Chloride	U	U	U	U	10
Chloroethane	U	U	U	U	10
Methylene Chloride	2J	U	5U ~~3JB~~	U	5
Acetone	9J	10U ~~8JB~~	U	~~5JB~~ 10U	10
Carbon Disulfide	U	U	U	U	5
1,1-Dichloroethene	U	U	U	U	5
1,1-Dichloroethane	U	U	U	U	5
1,2-Dichloroethene (total)	U	U	U	U	5
Chloroform	U	U	U	U	5
1,2-Dichloroethane	U	U	U	U	5
2-Butanone	U	UJ	UJ	UJ	10
1,1,1-Trichloroethane	U	U	U	U	5
Carbon Tetrachloride	U	U	U	U	5
Vinyl Acetate	U	U	U	U	10
Bromodichloromethane	U	U	U	U	5
1,2-Dichloropropane	U	U	U	U	5
cis-1,3-Dichloropropene	U	U	U	U	5
Trichloroethene	U	U	U	U	5
Dibromochloromethane	U	U	U	U	5
1,1,2-Trichloroethane	U	U	U	U	5
Benzene	U	U	U	U	5
trans-1,3-Dichloropropene	U	U	U	U	5
Bromoform	U	U	U	U	5
4-Methyl-2-pentanone	U	U	U	U	10
2-Hexanone	U	U	U	U	10
Tetrachloroethene	U	U	U	U	5
1,1,2,2-Tetrachloroethane	U	U	U	U	5
Toluene	0.6J	U	U	U	5
Chlorobenzene	U	U	U	U	5
Ethylbenzene	U	U	U	U	5
Styrene	U	U	U	U	5
Xylene (total)	U	U	U	U	5

U, J, B - See Appendix for definition.
Note: Sample detection limit = quantitation limit x dilution factor.

Aqueous

TABLE 1.4
30910-0112
MALCOLM-PIRNIE
EPA TCL VOLATILE ORGANICS

All values are ug/L.

	Sample Identification			
Dilution Factor	1.0	1.0	1.0	
Method Blank I.D.	>G8110	>G8110	>G8110	
Compound	Method Blank	HB1-34	BP-6C	Quantitation Limits with no Dilution
Chloromethane	U	U	U	10
Bromomethane	U	U	U	10
Vinyl Chloride	U	U	U	10
Chloroethane	U	U	U	10
Methylene Chloride	5	5 U ~~10B~~	U	5
Acetone	15	U	U	10
Carbon Disulfide	U	U	U	5
1,1-Dichloroethene	U	U	U	5
1,1-Dichloroethane	U	U	U	5
1,2-Dichloroethene (total)	U	U	U	5
Chloroform	U	U	U	5
1,2-Dichloroethane	U	U	U	5
2-Butanone	U	U J	U J	10
1,1,1-Trichloroethane	U	U	U	5
Carbon Tetrachloride	U	U	U	5
Vinyl Acetate	U	U	U	10
Bromodichloromethane	U	U	U	5
1,2-Dichloropropane	U	U	U	5
cis-1,3-Dichloropropene	U	U	U	5
Trichloroethene	U	U	U	5
Dibromochloromethane	U	U	U	5
1,1,2-Trichloroethane	U	U	U	5
Benzene	U	U	U	5
trans-1,3-Dichloropropene	U	U	U	5
Bromoform	U	U	U	5
4-Methyl-2-pentanone	U	U	U	10
2-Hexanone	U	U	U	10
Tetrachloroethene	U	U	U	5
1,1,2,2-Tetrachloroethane	U	U	U	5
Toluene	U	U	U	5
Chlorobenzene	U	U	U	5
Ethylbenzene	U	U	U	5
Styrene	U	U	U	5
Xylene (total)	U	U	U	5

U, J, B - See Appendix for definition.
Note: Sample detection limit = quantitation limit x dilution factor.

Aqueous

TABLE 1.5
30910-0112
MALCOLM-PIRNIE
EPA TCL VOLATILE ORGANICS

All values are ug/L.

	Sample Identification					
Dilution Factor	1.0	1.0	1.0	1.0	1.0	
Method Blank I.D.	>G8123	>G8123	>G8123	>G8123	>G8123	
Compound	Method Blank	BP-8B	W-39	BP-8C	BP-8A	Quantitation Limits with no Dilution
Chloromethane	U	U	U	U	U	10
Bromomethane	U	U	U	U	U	10
Vinyl Chloride	U	U	U	U	U	10
Chloroethane	U	U	U	U	U	10
Methylene Chloride	2J	U	U	U	U	5
Acetone	16	U	U	U	U	10
Carbon Disulfide	U	U	U	U	U	5
1,1-Dichloroethene	U	U	U	U	U	5
1,1-Dichloroethane	U	6	U	U	U	5
1,2-Dichloroethene (total)	U	U	U	U	U	5
Chloroform	U	U	U	U	U	5
1,2-Dichloroethane	U	U	U	U	U	5
2-Butanone	U	UJ	UJ	UJ	UJ	10
1,1,1-Trichloroethane	U	5	U	U	U	5
Carbon Tetrachloride	U	U	U	U	U	5
Vinyl Acetate	U	U	U	U	U	10
Bromodichloromethane	U	U	U	U	U	5
1,2-Dichloropropane	U	U	U	U	U	5
cis-1,3-Dichloropropene	U	U	U	U	U	5
Trichloroethene	U	U	U	U	U	5
Dibromochloromethane	U	U	U	U	U	5
1,1,2-Trichloroethane	U	U	U	U	U	5
Benzene	U	U	U	U	U	5
trans-1,3-Dichloropropene	U	U	U	U	U	5
Bromoform	U	U	U	U	U	5
4-Methyl-2-pentanone	U	U	U	U	U	10
2-Hexanone	U	U	U	U	U	10
Tetrachloroethene	U	U	U	U	U	5
1,1,2,2-Tetrachloroethane	U	U	U	U	U	5
Toluene	U	U	U	U	U	5
Chlorobenzene	U	U	U	U	U	5
Ethylbenzene	U	U	U	U	U	5
Styrene	U	U	U	U	U	5
Xylene (total)	U	U	U	U	U	5

U, J - See Appendix for definition.
Note: Sample detection limit = quantitation limit x dilution factor.

TABLE 1.6
30910-0112
MALCOLM-PIRNIE
EPA TCL VOLATILE ORGANICS

Aqueous

All values are ug/L.

	Sample Identification				
Dilution Factor	1.0	1.0	1.0	1.0	
Method Blank I.D.	>G8186	>G8186	>G8186	>G8186	
Compound	Method Blank	BP-5A	BP-5C	BP-5B	Quantitation Limits with no Dilution
Chloromethane	U	U	U	U	10
Bromomethane	U	U	U	U	10
Vinyl Chloride	U	U	U	U	10
Chloroethane	U	U	U	U	10
Methylene Chloride	2J	U	U	U	5
Acetone	U	U	U	U	10
Carbon Disulfide	U	0.6J	U	U	5
1,1-Dichloroethene	U	U	U	U	5
1,1-Dichloroethane	U	U	U	U	5
1,2-Dichloroethene (total)	U	U	U	U	5
Chloroform	U	U	U	U	5
1,2-Dichloroethane	U	U	U	U	5
2-Butanone	U	UJ	UJ	UJ	10
1,1,1-Trichloroethane	U	U	U	U	5
Carbon Tetrachloride	U	U	U	U	5
Vinyl Acetate	U	U	U	U	10
Bromodichloromethane	U	U	U	U	5
1,2-Dichloropropane	U	U	U	U	5
cis-1,3-Dichloropropene	U	U	U	U	5
Trichloroethene	U	U	U	U	5
Dibromochloromethane	U	U	U	U	5
1,1,2-Trichloroethane	U	U	U	U	5
Benzene	U	U	U	U	5
trans-1,3-Dichloropropene	U	U	U	U	5
Bromoform	U	U	U	U	5
4-Methyl-2-pentanone	U	U	U	U	10
2-Hexanone	U	U	U	U	10
Tetrachloroethene	U	U	U	U	5
1,1,2,2-Tetrachloroethane	U	U	U	U	5
Toluene	U	U	U	U	5
Chlorobenzene	U	U	U	U	5
Ethylbenzene	U	U	U	U	5
Styrene	U	U	U	U	5
Xylene (total)	U	U	U	U	5

U, J - See Appendix for definition.
Note: Sample detection limit = quantitation limit x dilution factor.

Aqueous

TABLE 1.7
30910-0112
MALCOLM-PIRNIE
EPA TCL VOLATILE ORGANICS

All values are ug/L.

	Sample Identification				
Dilution Factor	1.0	1.0	1.0	1.0	
Method Blank I.D.	>G8229	>G8229	>G8229	>G8229	
Compound	Method Blank	BP-4A	BP-4C	MSB BP-4B	Quantitation Limits with no Dilution
Chloromethane	U	U	U	U	10
Bromomethane	U	U	U	U	10
Vinyl Chloride	U	U	U	U	10
Chloroethane	U	U	U	U	10
Methylene Chloride	U	U	U	U	5
Acetone	6J	U	10U ~~43B~~	U	10
Carbon Disulfide	U	U	U	U	5
1,1-Dichloroethene	U	U	U	57X	5
1,1-Dichloroethane	U	U	U	U	5
1,2-Dichloroethene (total)	U	U	U	U	5
Chloroform	U	U	U	U	5
1,2-Dichloroethane	U	U	U	U	5
2-Butanone	U	UJ	UJ	U	10
1,1,1-Trichloroethane	U	U	4J	U	5
Carbon Tetrachloride	U	U	U	U	5
Vinyl Acetate	U	U	U	U	10
Bromodichloromethane	U	U	U	U	5
1,2-Dichloropropane	U	U	U	U	5
cis-1,3-Dichloropropene	U	U	U	U	5
Trichloroethene	U	U	U	54X	5
Dibromochloromethane	U	U	U	U	5
1,1,2-Trichloroethane	U	U	U	U	5
Benzene	U	U	U	55X	5
trans-1,3-Dichloropropene	U	U	U	U	5
Bromoform	U	U	U	U	5
4-Methyl-2-pentanone	U	U	U	U	10
2-Hexanone	U	U	U	U	10
Tetrachloroethene	U	U	8	U	5
1,1,2,2-Tetrachloroethane	U	U	U	U	5
Toluene	U	U	U	53X	5
Chlorobenzene	U	U	U	55X	5
Ethylbenzene	U	U	U	U	5
Styrene	U	U	U	U	5
Xylene (total)	U	U	U	U	5

U, J, B, X - See Appendix for definition.
Note: Sample detection limit = quantitation limit x dilution factor.

Aqueous

TABLE 1.8
30910-0112
MALCOLM-PIRNIE
EPA TCL VOLATILE ORGANICS

All values are ug/L.

	Sample Identification				
Dilution Factor	1.0	2.0	2.0	4.0	
Method Blank I.D.	>G8250	>G8250	>G8250	>G8250	
Compound	Method Blank	BP-4B MS	BP-4B MSD	BP-4B	Quantitation Limits with no Dilution
Chloromethane	U	U	U	U	10
Bromomethane	U	U	U	U	10
Vinyl Chloride	U	U	U	U	10
Chloroethane	U	U	U	U	10
Methylene Chloride	U	U	U	50 U	5
Acetone	U	U	U	31J	10
Carbon Disulfide	U	U	U	U	5
1,1-Dichloroethene	U	99X	110X	10J	5
1,1-Dichloroethane	U	U	2J	2J	5
1,2-Dichloroethene (total)	U	210	220	200	5
Chloroform	U	U	U	U	5
1,2-Dichloroethane	U	U	U	U	5
2-Butanone	U	U	U	U J	10
1,1,1-Trichloroethane	U	54	54	48	5
Carbon Tetrachloride	U	U	U	U	5
Vinyl Acetate	U	U	U	U	10
Bromodichloromethane	U	U	U	U	5
1,2-Dichloropropane	U	U	U	U	5
cis-1,3-Dichloropropene	U	U	U	U	5
Trichloroethene	U	130X	140X	30	5
Dibromochloromethane	U	U	U	U	5
1,1,2-Trichloroethane	U	4J	5J	U	5
Benzene	U	110X	110X	9J	5
trans-1,3-Dichloropropene	U	U	U	U	5
Bromoform	U	U	U	U	5
4-Methyl-2-pentanone	U	U	U	U	10
2-Hexanone	U	U	U	U	10
Tetrachloroethene	U	400	410E	370	5
1,1,2,2-Tetrachloroethane	U	U	U	U	5
Toluene	U	99X	100X	U	5
Chlorobenzene	U	110X	110X	U	5
Ethylbenzene	U	U	U	U	5
Styrene	U	U	U	U	5
Xylene (total)	U	U	U	U	5

U, J, X, E - See Appendix for definition.
Note: Sample detection limit = quantitation limit x dilution factor.

TABLE 2.0
30910-0112
MALCOLM-PIRNIE
VOLATILE TENTATIVELY IDENTIFIED COMPOUNDS

Sample Identification: Method Blank >G8053

CAS#	Compound	RT	Estimated Concentration, ug/L
None detected			

Sample Identification: BP-3C

CAS#	Compound	RT	Estimated Concentration, ug/L
None detected			

Sample Identification: BP-3B

CAS#	Compound	RT	Estimated Concentration, ug/L
None detected			

Sample Identification: Method Blank >G8072

CAS#	Compound	RT	Estimated Concentration, ug/L
None detected			

Sample Identification: TB 10/24/90

CAS#	Compound	RT	Estimated Concentration, ug/L
None detected			

Sample Identification: FB 10/24/90

CAS#	Compound	RT	Estimated Concentration, ug/L
None detected			

TABLE 2.1
30910-0112
MALCOLM-PIRNIE
VOLATILE TENTATIVELY IDENTIFIED COMPOUNDS

Sample Identification: Method Blank >G8093

CAS#	Compound	RT	Estimated Concentration, ug/L
	None detected		

Sample Identification: BP-3A

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown siloxane	22.84	16J
	Unknown siloxane	25.67	12J

Sample Identification: BP-7A

CAS#	Compound	RT	Estimated Concentration, ug/L
	None detected		

Sample Identification: BP-7B

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown siloxane	25.68	6J

Sample Identification: BP-7C

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown siloxane	18.00	65J
	Unknown siloxane	22.82	14J
	Unknown acid ester	6.99	9J

J - See Appendix for definition.

TABLE 2.2
30910-0112
MALCOLM-PIRNIE
VOLATILE TENTATIVELY IDENTIFIED COMPOUNDS

Sample Identification: BP-6A

CAS#	Compound	RT	Estimated Concentration, ug/L
	None detected		

Sample Identification: BP-6B

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown alkane	27.47	17J
	Unknown alkane	25.65	8J

Sample Identification: Method Blank >G8110

CAS#	Compound	RT	Estimated Concentration, ug/L
	None detected		

Sample Identification: HB1-34

CAS#	Compound	RT	Estimated Concentration, ug/L
	None detected		

Sample Identification: BP-6C

CAS#	Compound	RT	Estimated Concentration, ug/L
	None detected		

J - See Appendix for definition.

TABLE 2.3
30910-0112
MALCOLM-PIRNIE
VOLATILE TENTATIVELY IDENTIFIED COMPOUNDS

Sample Identification: Method Blank >G8123

CAS#	Compound	RT	Estimated Concentration, ug/L
	None detected		

Sample Identification: BP-8B

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown siloxane	22.96	8J
	Unknown siloxane	25.79	7J

Sample Identification: W-39

CAS#	Compound	RT	Estimated Concentration, ug/L
	None detected		

Sample Identification: BP-8C

CAS#	Compound	RT	Estimated Concentration, ug/L
	None detected		

Sample Identification: BP-8A

CAS#	Compound	RT	Estimated Concentration, ug/L
	None detected		

J - See Appendix for definition.

TABLE 2.4
30910-0112
MALCOLM-PIRNIE
VOLATILE TENTATIVELY IDENTIFIED COMPOUNDS

Sample Identification: Method Blank >G8186

CAS#	Compound	RT	Estimated Concentration, ug/L
	None detected		

Sample Identification: BP-5A

CAS#	Compound	RT	Estimated Concentration, ug/L
	Unknown siloxane	22.85	9J

Sample Identification: BP-5C

CAS#	Compound	RT	Estimated Concentration, ug/L
	None detected		

Sample Identification: BP-5B

CAS#	Compound	RT	Estimated Concentration, ug/L
	None detected		

Sample Identification: Method Blank >G8229

CAS#	Compound	RT	Estimated Concentration, ug/L
	None detected		

J - See Appendix for definition.

TABLE 2.5
30910-0112
MALCOLM-PIRNIE
VOLATILE TENTATIVELY IDENTIFIED COMPOUNDS

Sample Identification: BP-4A

CAS#	Compound	RT	Estimated Concentration, ug/L
	None detected		

Sample Identification: BP-4C

CAS#	Compound	RT	Estimated Concentration, ug/L
	None detected		

Sample Identification: Method Blank >G8250

CAS#	Compound	RT	Estimated Concentration, ug/L
	None detected		

Sample Identification: BP-4B

CAS#	Compound	RT	Estimated Concentration, ug/L
	None detected		

TABLE 3.0
30910-0112
MALCOLM-PIRNIE
EPA TCL SEMI-VOLATILE ORGANICS

All values are ug/L.

	Sample Identification				
Dilution Factor	1.0	1.0	1.0	1.0	
Method Blank I.D.	>C8426	>C8426	>C8426	>C8426	
Compound	Method Blank	BP-3C	BP-3B	BP-3A	Quantitation Limits with no Dilution
Phenol	U	U	U	U	10
bis(2-Chloroethyl)ether	U	U	U	U	10
2-Chlorophenol	U	U	U	U	10
1,3-Dichlorobenzene	U	U	U	U	10
1,4-Dichlorobenzene	U	U	U	U	10
Benzyl alcohol	U	U	U	U	10
1,2-Dichlorobenzene	U	U	U	U	10
2-Methylphenol	U	U	U	U	10
bis(2-Chloroisopropyl)ether	U	U	U	U	10
4-Methylphenol	U	U	U	U	10
N-Nitroso-di-n-propylamine	U	U	U	U	10
Hexachloroethane	U	U	U	U	10
Nitrobenzene	U	U	U	U	10
Isophorone	U	U	U	U	10
2-Nitrophenol	U	U	U	U	10
2,4-Dimethylphenol	U	U	U	U	10
Benzoic acid	U	U	U	U	50
bis(2-Chloroethoxy)methane	U	U	U	U	10
2,4-Dichlorophenol	U	U	U	U	10
1,2,4-Trichlorobenzene	U	U	U	U	10
Naphthalene	U	U	U	U	10
4-Chloroaniline	U	U	U	U	10
Hexachlorobutadiene	U	U	U	U	10
4-Chloro-3-methylphenol	U	U	U	U	10
2-Methylnaphthalene	U	U	U	U	10
Hexachlorocyclopentadiene	U	U	U	U	10
2,4,6-Trichlorophenol	U	U	U	U	10
2,4,5-Trichlorophenol	U	U	U	U	50
2-Chloronaphthalene	U	U	U	U	10
2-Nitroaniline	U	U	U	U	50
Dimethylphthalate	U	U	U	U	10
Acenaphthylene	U	U	U	U	10
2,6-Dinitrotoluene	U	U	U	U	10

U - See Appendix for definition.
Note: Sample detection limit = quantitation limit x dilution factor.

TABLE 3.0
30910-0112
MALCOLM-PIRNIE
EPA TCL SEMI-VOLATILE ORGANICS

All values are ug/L.

	Sample Identification				
Dilution Factor	1.0	1.0	1.0	1.0	
Method Blank I.D.	>C8426	>C8426	>C8426	>C8426	
Compound	Method Blank	BP-3C	BP-3B	BP-3A	Quantitation Limits with no Dilution
3-Nitroaniline	U	UJ	UJ	UJ	50
Acenaphthene	U	U	U	U	10
2,4-Dinitrophenol	U	U	U	U	50
4-Nitrophenol	U	U	U	U	50
Dibenzofuran	U	U	U	U	10
2,4-Dinitrotoluene	U	U	U	U	10
Diethylphthalate	U	U	U	U	10
4-Chlorophenyl-phenylether	U	U	U	U	10
Fluorene	U	U	U	U	10
4-Nitroaniline	U	UJ	UJ	UJ	50
4,6-Dinitro-2-methylphenol	U	U	U	U	50
N-Nitrosodiphenylamine (1)	U	U	U	U	10
4-Bromophenyl-phenylether	U	U	U	U	10
Hexachlorobenzene	U	U	U	U	10
Pentachlorophenol	U	U	U	U	50
Phenanthrene	U	U	U	U	10
Anthracene	U	U	U	U	10
Di-n-butylphthalate	U	U	U	U	10
Fluoranthene	U	U	U	U	10
Pyrene	U	U	U	U	10
Butylbenzylphthalate	U	U	U	U	10
3,3'-Dichlorobenzidine	U	U	U	U	20
Benzo(a)anthracene	U	U	U	U	10
Chrysene	U	U	U	U	10
bis(2-Ethylhexyl)phthalate	22	23BU	16BU	14BU	10
Di-n-octylphthalate	U	U	U	U	10
Benzo(b)fluoranthene	U	U	U	U	10
Benzo(k)fluoranthene	U	U	U	U	10
Benzo(a)pyrene	U	U	U	U	10
Indeno(1,2,3-cd)pyrene	U	U	U	U	10
Dibenzo(a,h)anthracene	U	U	U	U	10
Benzo(g,h,i)perylene	U	U	U	U	10

U, B, (1) - See Appendix for definition.
Note: Sample detection limit = quantitation limit x dilution factor.

TABLE 3.1
30910-0112
MALCOLM-PIRNIE
EPA TCL SEMI-VOLATILE ORGANICS

All values are ug/L.

	Sample Identification				
Dilution Factor	1.0	1.0	1.0	1.0	
Method Blank I.D.	>C8435	>C8435	>C8435	>C8435	
Compound	Method Blank	BP-7A	BP-7B	BP-7C	Quantitation Limits with no Dilution
Phenol	U	U	U	U	10
bis(2-Chloroethyl)ether	U	U	U	U	10
2-Chlorophenol	U	U	U	U	10
1,3-Dichlorobenzene	U	U	U	U	10
1,4-Dichlorobenzene	U	U	U	U	10
Benzyl alcohol	U	U	U	U	10
1,2-Dichlorobenzene	U	U	U	U	10
2-Methylphenol	U	U	U	U	10
bis(2-Chloroisopropyl)ether	U	U	U	U	10
4-Methylphenol	U	U	U	U	10
N-Nitroso-di-n-propylamine	U	U	U	U	10
Hexachloroethane	U	U	U	U	10
Nitrobenzene	U	U	U	U	10
Isophorone	U	U	U	U	10
2-Nitrophenol	U	U	U	U	10
2,4-Dimethylphenol	U	U	U	U	10
Benzoic acid	U	U	U	U	50
bis(2-Chloroethoxy)methane	U	U	U	U	10
2,4-Dichlorophenol	U	U	U	U	10
1,2,4-Trichlorobenzene	U	U	U	U	10
Naphthalene	U	U	U	U	10
4-Chloroaniline	U	U	U	U J	10
Hexachlorobutadiene	U	U	U	U	10
4-Chloro-3-methylphenol	U	U	U	U	10
2-Methylnaphthalene	U	U	U	U	10
Hexachlorocyclopentadiene	U	U	U	U	10
2,4,6-Trichlorophenol	U	U	U	U	10
2,4,5-Trichlorophenol	U	U	U	U	50
2-Chloronaphthalene	U	U	U	U	10
2-Nitroaniline	U	U	U	U	50
Dimethylphthalate	U	U	U	U	10
Acenaphthylene	U	U	U	U	10
2,6-Dinitrotoluene	U	U	U	U	10

U - See Appendix for definition.
Note: Sample detection limit = quantitation limit x dilution factor.

TABLE 3.1
30910-0112
MALCOLM-PIRNIE
EPA TCL SEMI-VOLATILE ORGANICS

All values are ug/L.

	Sample Identification				
Dilution Factor	1.0	1.0	1.0	1.0	
Method Blank I.D.	>C8435	>C8435	>C8435	>C8435	
Compound	Method Blank	BP-7A	BP-7B	BP-7C	Quantitation Limits with no Dilution
3-Nitroaniline	U	UJ	UJ	UJ	50
Acenaphthene	U	U	U	U	10
2,4-Dinitrophenol	U	U	U	U	50
4-Nitrophenol	U	U	U	U	50
Dibenzofuran	U	U	U	U	10
2,4-Dinitrotoluene	U	U	U	U	10
Diethylphthalate	U	U	U	U	10
4-Chlorophenyl-phenylether	U	U	U	U	10
Fluorene	U	U	U	U	10
4-Nitroaniline	U	UJ	UJ	U	50
4,6-Dinitro-2-methylphenol	U	U	U	U	50
N-Nitrosodiphenylamine (1)	U	U	U	U	10
4-Bromophenyl-phenylether	U	U	U	U	10
Hexachlorobenzene	U	U	U	U	10
Pentachlorophenol	U	U	U	U	50
Phenanthrene	U	U	U	U	10
Anthracene	U	U	U	U	10
Di-n-butylphthalate	U	U	U	U	10
Fluoranthene	U	U	U	U	10
Pyrene	U	U	U	U	10
Butylbenzylphthalate	U	U	U	U	10
3,3'-Dichlorobenzidine	U	U	U	U	20
Benzo(a)anthracene	U	U	U	U	10
Chrysene	U	U	U	U	10
bis(2-Ethylhexyl)phthalate	22	25BU	14BU	16BU	10
Di-n-octylphthalate	U	U	2J	2J	10
Benzo(b)fluoranthene	U	U	U	U	10
Benzo(k)fluoranthene	U	U	U	U	10
Benzo(a)pyrene	U	U	U	U	10
Indeno(1,2,3-cd)pyrene	U	U	U	U	10
Dibenzo(a,h)anthracene	U	U	U	U	10
Benzo(g,h,i)perylene	U	U	U	U	10

U, J, B, (1) - See Appendix for definition.
Note: Sample detection limit = quantitation limit x dilution factor.

TABLE 3.2
30910-0112
MALCOLM-PIRNIE
EPA TCL SEMI-VOLATILE ORGANICS

All values are ug/L.

	Sample Identification					
Dilution Factor	1.0	1.1	1.1	1.1	1.1	
Method Blank I.D.	>C8427	>C8427	>C8427	>C8427	>C8427	
Compound	Method Blank	BP-6C	BP-6A	BP-6B	FB 10/24/90	Quantitation Limits with no Dilution
Phenol	U	U	U	U	U	10
bis(2-Chloroethyl)ether	U	U	U	U	U	10
2-Chlorophenol	U	U	U	U	U	10
1,3-Dichlorobenzene	U	U	U	U	U	10
1,4-Dichlorobenzene	U	U	U	U	U	10
Benzyl alcohol	U	U	U	U	U	10
1,2-Dichlorobenzene	U	U	U	U	U	10
2-Methylphenol	U	U	U	U	U	10
bis(2-Chloroisopropyl)ether	U	U	U	U	U	10
4-Methylphenol	U	U	U	U	U	10
N-Nitroso-di-n-propylamine	U	U	U	U	U	10
Hexachloroethane	U	U	U	U	U	10
Nitrobenzene	U	U	U	U	U	10
Isophorone	U	U	U	U	U	10
2-Nitrophenol	U	U	U	U	U	10
2,4-Dimethylphenol	U	U	U	U	U	10
Benzoic acid	U	19J	U	U	U	50
bis(2-Chloroethoxy)methane	U	U	U	U	U	10
2,4-Dichlorophenol	U	U	U	U	U	10
1,2,4-Trichlorobenzene	U	U	U	U	U	10
Naphthalene	U	U	U	U	U	10
4-Chloroaniline	U	U	U	U	U	10
Hexachlorobutadiene	U	U	U	U	U	10
4-Chloro-3-methylphenol	U	U	U	U	U	10
2-Methylnaphthalene	U	U	U	U	U	10
Hexachlorocyclopentadiene	U	U	U	U	U	10
2,4,6-Trichlorophenol	U	U	U	U	U	10
2,4,5-Trichlorophenol	U	U	U	U	U	50
2-Chloronaphthalene	U	U	U	U	U	10
2-Nitroaniline	U	U	U	U	U	50
Dimethylphthalate	U	U	U	U	U	10
Acenaphthylene	U	U	U	U	U	10
2,6-Dinitrotoluene	U	U	U	U	U	10

U, J - See Appendix for definition.
Note: Sample detection limit = quantitation limit x dilution factor.

TABLE 3.2
30910-0112
MALCOLM-PIRNIE
EPA TCL SEMI-VOLATILE ORGANICS

All values are ug/L.

	Sample Identification					
Dilution Factor	1.0	1.1	1.1	1.1	1.1	
Method Blank I.D.	>C8427	>C8427	>C8427	>C8427	>C8427	
Compound	Method Blank	BP-6C	BP-6A	BP-6B	FB 10/24/90	Quantitation Limits with no Dilution
3-Nitroaniline	U	UJ	UJ	UJ	UJ	50
Acenaphthene	U	U	U	U	U	10
2,4-Dinitrophenol	U	U	U	U	U	50
4-Nitrophenol	U	U	U	U	U	50
Dibenzofuran	U	U	U	U	U	10
2,4-Dinitrotoluene	U	U	U	U	U	10
Diethylphthalate	U	U	U	U	U	10
4-Chlorophenyl-phenylether	U	U	U	U	U	10
Fluorene	U	U	U	U	U	10
4-Nitroaniline	U	U	U	U	U	50
4,6-Dinitro-2-methylphenol	U	U	U	U	U	50
N-Nitrosodiphenylamine (1)	U	U	U	U	U	10
4-Bromophenyl-phenylether	U	U	U	U	U	10
Hexachlorobenzene	U	U	U	U	U	10
Pentachlorophenol	U	U	U	U	U	50
Phenanthrene	U	U	U	U	U	10
Anthracene	U	U	U	U	U	10
Di-n-butylphthalate	U	U	U	U	U	10
Fluoranthene	U	U	U	U	U	10
Pyrene	U	U	U	U	U	10
Butylbenzylphthalate	U	U	U	U	U	10
3,3'-Dichlorobenzidine	U	U	U	U	U	20
Benzo(a)anthracene	U	U	U	U	U	10
Chrysene	U	U	U	U	U	10
bis(2-Ethylhexyl)phthalate	U	4J	U	U	U	10
Di-n-octylphthalate	U	4J	U	U	U	10
Benzo(b)fluoranthene	U	U	U	U	U	10
Benzo(k)fluoranthene	U	U	U	U	U	10
Benzo(a)pyrene	U	U	U	U	U	10
Indeno(1,2,3-cd)pyrene	U	U	U	U	U	10
Dibenzo(a,h)anthracene	U	U	U	U	U	10
Benzo(g,h,i)perylene	U	U	U	U	U	10

U, J, (1) - See Appendix for definition.
Note: Sample detection limit = quantitation limit x dilution factor.

TABLE 3.3
30910-0112
MALCOLM-PIRNIE
EPA TCL SEMI-VOLATILE ORGANICS

All values are ug/L.

	Sample Identification					
Dilution Factor	1.0	1.0	1.1	1.1	1.2	
Method Blank I.D.	>C8470	>C8470	>C8470	>C8470	>C8470	
Compound	Method Blank	BP-8B	W-39	BP-8C	BP-8A	Quantitation Limits with no Dilution
Phenol	U	U	U	U	U R	10
bis(2-Chloroethyl)ether	U	U	U	U	U	10
2-Chlorophenol	U	U	U	U	U	10
1,3-Dichlorobenzene	U	U	U	U	U	10
1,4-Dichlorobenzene	U	U	U	U	U	10
Benzyl alcohol	U	U	U	U	U	10
1,2-Dichlorobenzene	U	U	U	U	U	10
2-Methylphenol	U	U	U	U	U	10
bis(2-Chloroisopropyl)ether	U	U	U	U	U	10
4-Methylphenol	U	U	U	U	U	10
N-Nitroso-di-n-propylamine	U	U	U	U	U	10
Hexachloroethane	U	U	U	U	U	10
Nitrobenzene	U	U	U	U	U	10
Isophorone	U	U	U	U	U	10
2-Nitrophenol	U	U	U	U	U	10
2,4-Dimethylphenol	U	U	U	U	U	10
Benzoic acid	U	U	U	U	U	50
bis(2-Chloroethoxy)methane	U	U	U	U	U	10
2,4-Dichlorophenol	U	U	U	U	U	10
1,2,4-Trichlorobenzene	U	U	U	U	U	10
Naphthalene	U	U	U	U	U	10
4-Chloroaniline	U	U	U	U	U	10
Hexachlorobutadiene	U	U	U	U	U	10
4-Chloro-3-methylphenol	U	U	U	U	U	10
2-Methylnaphthalene	U	U	U	U	U	10
Hexachlorocyclopentadiene	U	U	U	U	U	10
2,4,6-Trichlorophenol	U	U	U	U	U	10
2,4,5-Trichlorophenol	U	U	U	U	U	50
2-Chloronaphthalene	U	U	U	U	U	10
2-Nitroaniline	U	U	U	U	U	50
Dimethylphthalate	U	U	U	U	U	10
Acenaphthylene	U	U	U	U	U	10
2,6-Dinitrotoluene	U	U	U	U	U	10

U, J, B - See Appendix for definition.
Note: Sample detection limit = quantitation limit x dilution factor.