Sediment QA/QC Samples

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

RPER100902	

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: A1489

Matrix: (soil/water) WATER

Lab Sample ID: A1489-11A

Sample wt/vol:

5.000 (q/mL) ML

Lab File ID: V2F3250

Level: (low/med)

LOW

Date Received: 10/11/02

% Moisture: not dec.

Date Analyzed: 10/13/02

GC Column: DB-624 ID: 0.25 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L

0

CAB NO.	COMPOUND	ug/II OI	ug/ Ng/	0 0 / L	Q
75-71-8	Dichlorodifluorome	thane			5 U
	Chloromethane				5 U
	Vinyl Chloride	 -			รโบ
	Bromomethane			·	5 U
75-00-3	Chloroethane				รโบ
	Trichlorofluoromet	hane	 -	ì	5 U 5 U 5 U 5 U
	1,1-Dichloroethene			i	5 l ü
67-64-1		· · · · · · · · · · · · · · · · · · ·		3	
	Iodomethane	·			
	Carbon Disulfide			į	
75-09-2	Methylene Chloride			170	
156-60-5	trans-1,2-Dichloro	ethene			
	Methyl tert-butyl				5 U
75-34-3	1,1-Dichloroethane				δĺŬ
	Vinyl acetate		<u> </u>	Č	Ū
	2-Butanone				Ū
	cis-1,2-Dichloroet	hene	- -1	5	ίŪ
	2,2-Dichloropropan				Ū
	Bromochloromethane			5	Ū
	Chloroform		-	5	Ū
	1,1,1-Trichloroeth	ane	- -	5	บั
563-58-6	1,1-Dichloropropen	=		5	Ū
56-23-5	Carbon Tetrachloric	de		5	Ū
107-06-2	1,2-Dichloroethane		 -	5	Ū
71-43-2				5	Ūΰ
79-01-6	Trichloroethene		_	5	Ū
78-87-5	1,2-Dichloropropane	?		5	U
	Dibromomethane		_	5	U
75-27-4	Bromodichloromethan	ne		5 5	U
10061-01-5	cis-1,3-Dichloropro	репе	-	5	lu l
108-10-1	4-Methyl-2-pentano:	ie —		5	U
108-88-3			_	5	U
10061-02-6	trans-1,3-Dichloror	propene		5	ן ט
79-00-5	1,1,2-Trichloroetha	ane —		5	U

FORM I VOA

OLMO3.0

1A VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

RPER100902

Contract: Lab Name: MITKEM CORPORATION

Lab Code: MITKEM Case No.:

SAS No.:

SDG No.: A1489

Matrix: (soil/water) WATER

Lab Sample ID: A1489-11A

Sample wt/vol:

5.000 (g/mL) ML

Lab File ID: V2F3250

Level: (low/med) LOW

Date Received: 10/11/02

% Moisture: not dec.

Date Analyzed: 10/13/02

GC Column: DB-624 ID: 0.25 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: ____(uL)

CONCENTRATION UNITS:

VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

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RPER100902	

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM Case No.: SAS No.:

SDG No.: A1489

Matrix: (soil/water) WATER

Lab Sample ID: A1489-11A

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: V2F3250

Level: (low/med) LOW

Date Received: 10/11/02

% Moisture: not dec. _____

Date Analyzed: 10/13/02

GC Column: DB-624 ID: 0.25 (mm)

Dilution Factor: 1.0

Soil Extract Volume: ____(uL)

Soil Aliquot Volume: ____(uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q =====
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27. 28.				
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RPER100902

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: A1489

Matrix: (soil/water) WATER Lab Sample ID: A1489-11E

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S3B9840

Level: (low/med) LOW Date Received: 10/11/02

% Moisture: decanted: (Y/N) Date Extracted:10/16/02

Concentrated Extract Volume: 1000(uL) Date Analyzed: 10/16/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

		1
108-95-2Phenol	10	טו
111-44-4bis(2-Chloroethyl)Ether	10	Ū
95-57-82-Chlorophenol	10	U
541-73-11,3-Dichlorobenzene	10	ט
106-46-71,4-Dichlorobenzene	10	U
95-50-11,2-Dichlorobenzene	10	U
95-48-72-Methylphenol	10	שׁ
108-60-12,2'-oxybis(1-Chloropropane)	10	1 -
106-44-54-Methylphenol	10	, -
621-64-7N-Nitroso-di-n-propylamine	10	
67-72-1Hexachloroethane	10	1
98-95-3Nitrobenzene	10	1 -
78-59-1Isophorone	10	
88-75-52-Nitrophenol	10	1
105-67-92,4-Dimethylphenol	10	B .
120-83-22,4-Dichlorophenol	10	
120-82-11,2,4-Trichlorobenzene	10	
91-20-3Naphthalene	10	1
106-47-84-Chloroaniline	10	
111-91-1bis(2-Chloroethoxy) methane	10	
87-68-3Hexachlorobutadiene	10	
59-50-74-Chloro-3-Methylphenol	10	
91-57-62-Methylnaphthalene	10	l 1
77-47-4Hexachlorocyclopentadiene	10	
88-06-22,4,6-Trichlorophenol	10	
95-95-42,4,5-Trichlorophenol	20	- 1
91-58-72-Chloronaphthalene	10	- 1
88-74-42-Nitroaniline		_
	20	- 1
131-11-3Dimethylphthalate	10 10	- ,
208-96-8Acenaphthylene	1	- 1
606-20-22,6-Dinitrotoluene	10	
99-09-23-Nitroaniline	20	_
83-32-9Acenaphthene	10	U

FORM I SV-1

OLM03.0

RPER100902

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: A1489

Matrix: (soil/water) WATER Lab Sample ID: A1489-11E

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S3B9840

Level: (low/med) LOW Date Received: 10/11/02

% Moisture: ____ decanted: (Y/N)___ Date Extracted:10/16/02

Concentrated Extract Volume: 1000(uL) Date Analyzed: 10/16/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

		
51-28-52,4-Dinitrophenol	20	U
100-02-74-Nitrophenol	20	j =
132-64-9Dibenzofuran	10	1
121-14-22,4-Dinitrotoluene	10	1 -
84-66-2Diethylphthalate	10	
7005-72-34-Chlorophenyl-phenylether	10	
86-73-7Fluorene	10	
100-01-64-Nitroaniline	20	1 -
534-52-14,6-Dinitro-2-methylphenol	20	1
86-30-6N-Nitrosodiphenylamine (1)	10	1
101-55-34-Bromophenyl-phenylether	10	
118-74-1Hexachlorobenzene	10	
87-86-5Pentachlorophenol	20	
85-01-8Phenanthrene	10	1
120-12-7Anthracene	10	
86-74-8Carbazole	10	,
84-74-2Di-n-butylphthalate	10	I -
206-44-0Fluoranthene	10	1
	10	
129-00-0Pyrene 85-68-7Butylbenzylphthalate	10	
91-94-13,3'-Dichlorobenzidine	10	
56-55-3Benzo(a)anthracene	10	-
· · · · · · · · · · · · · · · · · · ·	10	
218-01-9Chrysene	10 5	
117-81-7bis(2-Ethylhexyl)phthalate	10	
117-84-0Di-n-octylphthalate		- 1
205-99-2Benzo (b) fluoranthene	10	- 1
207-08-9Benzo (k) fluoranthene	10	,
50-32-8Benzo (a) pyrene	10	- 1
193-39-5Indeno(1,2,3-cd)pyrene	10	i
53-70-3Dibenzo(a,h)anthracene	10	- 1
191-24-2Benzo(g,h,i)perylene	10	u
<u></u>		1

(1) - Cannot be separated from Diphenylamine

1FSEMIVOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

RPER100902

Lab Name:	MITKEM	CORPORATION
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Contract:

Lab Code: MITKEM Case No.:

SAS No.: SDG No.: A1489

Matrix: (soil/water) WATER

Lab Sample ID: A1489-11E

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: S3B9840

Level: (low/med) LOW

Date Received: 10/11/02

% Moisture: _____ decanted: (Y/N)___

Date Extracted: 10/16/02

Concentrated Extract Volume: 1000(uL)

Date Analyzed: 10/16/02

Injection Volume: 1.0(uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Number TICs found: 2

CONCENTRATION UNITS: (uq/L or ug/Kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	
1. 80-05-7 2. 791-28-6 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25.	COMPOUND NAME PHENOL, 4,4'-(1-METHYLETHYLI PHOSPHINE OXIDE, TRIPHENYL-	======	======================================	
26. 27. 28. 29.				

U.S. EPA - CLP

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

RP	ER1009	02	

Lab Name:	MITKEM C	ORPORATION	Cont	ract:			RPER10	0902
	_						CDC N-	A 1 400 4
.ab Code:	MITKEM	Case No.:		SAS No.:			SDG No.:	A1489A
Matrix (soil/water):		WATER_		I	ab Samp	ole ID:	A1489-	11D
evel (low/me	ed):	MED		Ι	Date Reco	eived:	10/11/02	2
6 Solids:								
	Concentration	Units (ug/L or mg	/kg dry weight):				UG/L	
	CAS No.	Analyte	Concentration	С	Q	М		
	7420.00.5	A 1 !	<u> </u>			NR		
	_7429-90-5	Aluminum			· · · · · · · · · · · · · · · · · · ·	NR		
	_7440-36-0	Antimony				NR		
	_7440-38-2	Arsenic				NR		
	7440-39-3	Barium				NR		
	7440-41-7	Beryllium Cadmium				NR		
	_7440-43-9 _7440-70-2	Calcium	<u> </u>			NR		
	7440-47-3	Chromium				NR		
	7440-48-4	Cobalt				NR		
	_7440-50-8	Copper				NR		
	_7439-89-6	Iron				NR		
	7439-92-1	Lead				NR		
	7439-95-4	Magnesium				NR		
	7439-96-5	Manganese				NR		
	7439-97-6	Mercury				NR		
	7440-02-0	Nickel				NR		
	_7440-09-7	Potassium				NR		
	7782-49-2	Selenium				NR		
	7440-22-4	Silver				NR		
	7440-23-5	Sodium				NR		
	_7440-28-0	Thallium				NR		
	_7440-62-2	Vanadium				NR		
	_7440-66-6	Zinc				NR		
		Cyanide	3.0	U_T	.N	CA		
	<u> </u>	i		<u> </u>				
Color Before:	·	Clar	ity Before:	<u></u>			Texture:	
Color After:		Clar	ity After:				Artifacts:	_
Comments:								

Mitkem Corporation

CLIENT:

GEI Consultants, Inc.

Client Sample ID: RPER100902

Lab ID:

A1489-11

Date: 08-Nov-02

Project: Keyspan

Collection Date: 10/09/02 9:30

Analyses	Result	Qual	Limit	Units	DF	Date Analyzed
HARDNESS BY CALCULATION Hardness, Calcium/Magnesium (As CaCO3)	ND	SM234	0_W 4.0	mg/L CaCO3	1	10/16/02 12:17
PH VALUE pH	4.0	SM450	D_H+ 1.0	pH Units	1	10/11/02 0:00

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitiation limits

B - Analyte detected in the associated Method Blank

DF - Dilution Factor

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Limit - Reporting Limit

RTB100902

Lab Name: MITKEM CORPORATION Contract:

SDG No.: A1489

Matrix: (soil/water) WATER

Lab Sample ID: A1489-31A

Sample wt/vol:

5.000 (q/mL) ML

Lab File ID: V2F3251

Level: (low/med) LOW

Lab Code: MITKEM Case No.:

Date Received: 10/11/02

% Moisture: not dec.

Date Analyzed: 10/13/02

GC Column: DB-624 ID: 0.25 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: ____(uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

SAS No.:

CAS NO.

COMPOUND

Q

· · · · · · · · · · · · · · · · · · ·	
142-28-91,3-Dichloropropa	une 5 U
127-18-4Tetrachloroethene	5 0
591-78-62-Hexanone	5 V
124-48-1Dibromochlorometh	
106-93-41,2-Dibromoethane	
108-90-7Chlorobenzene	5 U
630-20-61,1,1,2-Tetrachlo	roethane 5 U
100-41-4Ethylbenzene	5 U
1330-20-7Xylene (Total)	5 0
100-42-5Styrene	5 U
75-25-2Bromoform	5 Ü
98-82-8Isopropylbenzene	5 U
79-34-51,1,2,2-Tetrachlo	
108-86-1Bromobenzene	5 0
96-18-41,2,3-Trichloropro	
103-65-1n-Propylbenzene	5 U
95-49-82-Chlorotoluene	5 U
108-67-81,3,5-Trimethylber	nzene 5 U
106-43-44-Chlorotoluene	5 U
98-06-6tert-Butylbenzene	5 [[
95-63-61,2,4-Trimethylbe	
135-98-8sec-Butylbenzene	5 U
99-87-64-Isopropyltoluene	e 5 U
541-73-11,3-Dichlorobenzer	
106-46-71,4-Dichlorobenzer	ne 5 ป
104-51-8n-Butylbenzene	5 U
95-50-11,2-Dichlorobenzer	ne 5 U
96-12-81,2-Dibromo-3-chlo	oropropane 5 U
120-82-11,2,4-Trichlorober	nzene 5 U
87-68-3Hexachlorobutadier	
91-20-3Naphthalene	5 U
87-61-61,2,3-Trichlorober	nzene5 U

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS RTB100902 Contract: Lab Name: MITKEM CORPORATION

SDG No.: A1489 SAS No.: Lab Code: MITKEM Case No.:

Lab Sample ID: A1489-31A Matrix: (soil/water) WATER

Lab File ID: V2F3251 Sample wt/vol: 5.000 (g/mL) ML

Date Received: 10/11/02 Level: (low/med) LOW

Date Analyzed: 10/13/02 % Moisture: not dec. _____

Dilution Factor: 1.0 GC Column: DB-624 ID: 0.25 (mm)

Soil Aliquot Volume: ____(uL) Soil Extract Volume: ____(uL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) ug/L Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q =====
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FORM I VOA-TIC

OLM03.0

Sediment Validated Form I Analytical Data

SED0210003

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: A1489

Matrix: (soil/water) SOIL Lab Sample ID: A1489-20C

Sample wt/vol: 5.5 (g/mL) G Lab File ID: V1F0412

Level: (low/med) LOW Date Received: 10/11/02

% Moisture: not dec. 18 Date Analyzed: 10/15/02

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(mL) Soil Aliquot Volume: _____(uL)

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

CAB NO.	COMPOUND (ag/ ii or ag/ ii		×
74-87-3	Chloromethane		TU 3
75-01-4	Vinyl Chloride		รโบ
74-83-9	Bromomethane		SUJ
75-00-3	Chloroethane		SUJ
75-35-4	1,1-Dichloroethene		בּוֹט
67-64-1			S U
	Carbon Disulfide	6	
	Methylene Chloride		з Јъв
156-60-5	trans-1,2-Dichloroethene	6	
75-34-3	1,1-Dichloroethane	ϵ	บ
78-93-3	2-Butanone	ϵ	
	cis-1,2-Dichloroethene	ϵ	
	Chloroform	ϵ	ט ו
	1,1,1-Trichloroethane	ϵ	
56-23-5	Carbon Tetrachloride	ϵ	
	1,2-Dichloroethane	ϵ	
71-43-2		ϵ	
	Trichloroethene	6	ប
	1,2-Dichloropropane	6	U
	Bromodichloromethane	6	
	cis-1,3-Dichloropropene		Ū
	4-Methyl-2-pentanone	6	
108-88-3			ប
	trans-1,3-Dichloropropene	6	U
79-00-5	1,1,2-Trichloroethane		U
	Tetrachloroethene	6	U
	2-Hexanone	6	U
	Dibromochloromethane	6	U
	Chlorobenzene		U
	Ethylbenzene		U
1330-20-7	Xylene (Total)		U
100-42-5	Styrene		U
75-25-2		6	
	1,1,2,2-Tetrachloroethane	6	_
		_] _

1E VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SED0210003

Lab	Name:	MITKEM	CORPORATION	Contract:	

Lab Code: MITKEM Case No.: SAS No.: SDG No.: A1489

Matrix: (soil/water) SOIL Lab Sample ID: A1489-20C

Sample wt/vol: 5.5 (g/mL) G Lab File ID: V1F0412

Level: (low/med) LOW Date Received: 10/11/02

% Moisture: not dec. 18 Date Analyzed: 10/15/02

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (mL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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SED0210003

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM Case No.:

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-20A

Sample wt/vol: 30.6 (g/mL) G

Lab File ID: S3B9955

Level: (low/med) LOW

Date Received: 10/11/02

% Moisture: 18

decanted: (Y/N) N

Date Extracted: 10/18/02

Concentrated Extract Volume:

5000(uL) Date Analyzed: 10/24/02

Injection Volume:

1.0(uL)

Dilution Factor: 1.0

CONCENTRATION UNITS:

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	(ug/L or ug/Kg	3) UG/KG	Q
108-95-2 111-44-4	-Phenol -bis(2-Chloroethy))Ether	2000 2000	U

		1	1	-1
	108-95-2Phenol_	2000	י ט	
	111-44-4bis(2-Chloroethyl)Ether	2000	· U	Ŧ
	95-57-82-Chlorophenol	2000) U	
	541-73-11,3-Dichlorobenzene	2000	U	Ì
	106-46-71,4-Dichlorobenzene	2000	υ	Ì
	95-50-11,2-Dichlorobenzene	2000	U	
	95-48-72-Methylphenol	2000	U	
	108-60-12,2'-oxybis(1-Chloropropane)	2000	U	ł
	106-44-54-Methylphenol	2000	[ט	L
	621-64-7N-Nitroso-di-n-propylamine	2000	U	
	67-72-1Hexachloroethane	2000	U	İ
	98-95-3Nitrobenzene	2000	טו	
	78-59-1Isophorone	2000	U	
	88-75-52-Nitrophenol	2000	บ	
	105-67-92,4-Dimethylphenol	2000	U	
i	120-83-22,4-Dichlorophenol	2000	U	
	120-82-11,2,4-Trichlorobenzene	2000	U	-
	91-20-3Naphthalene	2000	U	
	106-47-84-Chloroaniline	2000	UJ	
	111-91-1bis(2-Chloroethoxy)methane	2000	U	ļ
	87-68-3Hexachlorobutadiene	2000	U	
	59-50-74-Chloro-3-Methylphenol	2000	U	
	91-57-62-Methylnaphthalene	2000	U	
ĺ	77-47-4Hexachlorocyclopentadiene	2000	ប្រ	
	88-06-22,4,6-Trichlorophenol	2000	ប	İ
	95-95-42,4,5-Trichlorophenol	4000	Ū	
- [91-58-72-Chloronaphthalene	2000	U	
1	88-74-42-Nitroaniline	4000	U	
١	131-11-3Dimethylphthalate	2000	U	ı
	208-96-8Acenaphthylene	420	J	
	606-20-22,6-Dinitrotoluene	2000	υ	
	99-09-23-Nitroaniline	4000	UT	
Ì	83-32-9Acenaphthene	2000	ָ ט	
-1	*		ŀ	

SED0210003

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: A1489

Matrix: (soil/water) SOIL Lab Sample ID: A1489-20A

Sample wt/vol: 30.6 (g/mL) G Lab File ID: S3B9955

Level: (low/med) LOW Date Received: 10/11/02

% Moisture: 18 decanted: (Y/N) N Date Extracted: 10/18/02

Concentrated Extract Volume: 5000(uL) Date Analyzed: 10/24/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

51-28-52,4-Dinitrophenol	4000 U
100-02-74-Nitrophenol	4000 ប្រ
132-64-9Dibenzofuran	2000 ປ
121-14-22,4-Dinitrotoluene	2000 U
84~66-2Diethylphthalate	2000 ປ
7005-72-34-Chlorophenyl-phenylether	2000 (ປ
86-73-7Fluorene	2000 U
100-01-64-Nitroaniline	4000 U J
534-52-14,6-Dinitro-2-methylphenol	4000 U
86-30-6Nitrosodiphenylamine (1)	2000 ປັ
101-55-34-Bromophenyl-phenylether	2000 ປັ
118-74-1Hexachlorobenzene	2000 (ປ
87-86-5Pentachlorophenol	4000 U
85-01-8Phenanthrene	910 J
120-12-7Anthracene	440 J
86-74-8Carbazole	2000 UJ
84-74-2Di-n-butylphthalate	2000 U
206-44-0Fluoranthene	1700 J
129-00-0Pyrene	4000
85-68-7Butvlbenzylphthalate	2000 \ U
91-94-13,31-Dichlorobenzidine	2000 U
56-55-3Benzo(a)anthracene	1600 J
218-01-9Chrysene	1600 J
117-81-7bis(2-Ethylhexyl)phthalate	2000 ປ
117-84-0Di-n-octylphthalate	2000∫ປ
205-99-2Benzo (b) fluoranthene	960 J
207-08-9Benzo(k)fluoranthene	260 J
50-32-8Benzo (a) pyrene	1200 J
193-39-5Indeno (1, 2, 3-cd) pyrene	450∫J
53-70-3Dibenzo(a,h)anthracene	2000 ບ
191-24-2Benzo(g,h,i)perylene	540 J

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SED0210003

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-20A

Sample wt/vol:

30.6 (g/mL) G

Lab File ID:

S3B9955

Level:

(low/med)

LOW

Date Received: 10/11/02

% Moisture: 18

decanted: (Y/N) N

Date Extracted: 10/18/02

Concentrated Extract Volume: 5000(uL)

Date Analyzed: 10/24/02

Injection Volume:

1.0 (uL)

Dilution Factor: 1.0

GPC Cleanup:

(V/N)

pH: ____

Number TICs found: 10

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT ======	EST. CONC.	
1. 613-12-7	ANTHRACENE, 2-METHYL-	15.74		
1	UNKNOWN	15.94		J
2. 3. 613-12-7	ANTHRACENE, 2-METHYL-	15.99	1100	NJ
4. 3674-65-5	PHENANTHRENE, 2,3-DIMETHYL-		1300	NJ
5. 5951-61-1	NAPHTHALENE, 1,2,4A,5,8,8A-H	16.90	1000	CM
6.	UNKNOWN PAH	17.31	1000	J
7. 80-05-7	PHENOL, 4,4'-(1-METHYLETHYLI	17.87	830	NJ
8. 238-84-6	11H-BENZO [A] FLUORENE	18.25	930	NJ
9. 3351-32-4	2-METHYLCHRYSENE	20.78	910	ŊĴ
10. 192-97-2	BENZO[E] PYRENE	22.42	820	NJ
11				
12				
13				
14. 15.		<u></u>		
16				
1 1/.				<u>-</u>
18				
19				
20.				
21.				
ZZ.				
1 43.				
<u> </u>				
25				
26.				
27				
28.				—— <u> </u>
29				
30				
		l		

		l INORGANIC ANALYSIS DATA SHEET						EPA SAMPLE NO.	
						SED0210003			
Lab Name:	MITKEM_C	ORPORATION	Cor	itract:					
Lab Code:	MITKEM	Case No.:		SAS No.:			SDG No.:	A1489B_	
Matrix (soil/wa	ater):	SOIL		L	ab Samp	ole ID:	A1489-2	20A	
Level (low/me	d):	MED		D	ate Rece	eived:	10/11/02	2	
% Solids:		82.0							
	Concentration	Units (ug/L or mg	/kg dry weight):				MG/KG		
	CAS No.	Analyte	Concentration	С	Q	М			
		Aluminum		\ \ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\		NR			
						NR			
	7440-38-2					NR			
						NR			
	7440-41-7					NR			
	7440-43-9					NR			
	7440-70-2					NR			
	7440-47-3					NR			
	7440-48-4					NR			
	7440-50-8	· 1				NR			
	_7439-89-6	Iron				NR			
	7439-92-1	Lead				NR			
	_7439-95-4	Magnesium			_	NR			
	_7439-96-5			1 (NR			
	_7439-97-6	Mercury				NR			
	_7440-02-0	Nickel				NR			
	_7440-09-7	Potassium				NR			
	_7782-49-2	Selenium		-		NR			
	_7440-22-4	Silver				NR			
	_7440-23-5	Sodium				NR			
	_7440-28-0	Thallium				NR			
	_7440-62-2	Vanadium				NR			
	_7440-66-6	Zinc				NR			
		Cyanide	0.17	U_		CA			
0.1			. D.C.				Texture:		
Color Before:		Clar	ity Before:				i extuic,		
Color After:		Clar	ity After:				Artifacts:		
Comments:									

FORM I - IN

ILM04.1

Mitkem Corporation

CLIENT:

GEI Consultants, Inc.

Client Sample ID: SED0210003

Lab ID:

A1489-20

Date: 08-Nov-02

Project: Keyspan

Collection Date: 10/09/02 16:30

Analyses	Result	Qual	Limit	Units	DF	Date Analyzed
HARDNESS BY CALCULATION		SM234	0_S		_	
Hardness, Calcium/Magnesium (As CaCO3)	18000		230	mg/Kg CaCO3	1	10/24/02 15:38
SOIL AND WASTE PH		SW904	5C_S			
ρH	9.8		1.0	pH Units	1	10/21/02 0:00

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

DF - Dilution Factor

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Limit - Reporting Limit

1A VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SED0210330

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: A1489

Matrix: (soil/water) SOIL Lab Sample ID: A1489-21C

Sample wt/vol: 5.2 (g/mL) G Lab File ID: V1F0441

Level: (low/med) LOW Date Received: 10/11/02

% Moisture: not dec. 17
Date Analyzed: 10/15/02

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(mL) Soil Aliquot Volume: _____(uL)

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

CAS NO.	COMPOUND ((ig/ь or	ug/kg)	UG/ KG	Q
74-87-3	Chloromethane				6 U
	Vinyl Chloride	,			6 U
	Bromomethane				6 U
	Chloroethane				6 l Ū
	1,1-Dichloroethene			1	6 U
67-64-1					6 U
75-15-0	Carbon Disulfide				6 U
75-09-2	Methylene Chlori de				2 JB
	trans-1,2-Dichloroe	thene	i	(6 U
75-34-3	1,1-Dichloroethane				5 U
78-93-3	2 - Butanone				s U
156-59-2	cis-1,2-Dichloroeth	ene		(5 U
	Chloroform				5 U
71-55-6	1,1,1-Trichloroetha	ne			5 U
56-23-5	Carbon Tetrachlorid	e	 1	6	5 U
107-06-2	1,2-Dichloroethane			6	5 U
71-43-2				6	5 U
	Trichloroethene			ϵ	5 U
	1,2-Dichloropropane			ϵ	5 U
	Bromodichloromethan				5 U
	cis-1,3-Dichloropro				5 U
	4-Methyl-2-pentanon	e			U
108-88-3					5 U
	trans-1,3-Dichlorop				5 U
	1,1,2-Trichloroetha	ne			U
	Tetrachloroethene				ប
	2-Hexanone			6	
	Dibromochloromethan	e			U
	Chlorobenzene				U
	Ethylbenzene			6	
	Xylene (Total)				ט
100-42-5				6	U
75 - 25-2				6	
79-34-5	1,1,2,2-Tetrachloro	ethane_		6	ט
					.

VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SED0210330

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM Case No.:

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-21C

Sample wt/vol: 5.2 (g/mL) G

Lab File ID: V1F0441

Level: (low/med) LOW

Date Received: 10/11/02

% Moisture: not dec. 17

Date Analyzed: 10/15/02

GC Column: DB-624 ID: 0.25 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (mL)

Soil Aliquot Volume: ____(uL)

CONCENTRATION UNITS:

Number TICs found: 2

(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	
1. 90-12-0 2. 83-32-9 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30.	NAPHTHALENE, 1-METHYL-ACENAPHTHENE	16.58 18.32		NJ NJ

SED0210330

Lab Name: MITKEM CORPORATION

Contract:

Case No.:

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-21A

Sample wt/vol: 30.7 (g/mL) G

Lab Code: MITKEM

Lab File ID: S3B9859

Level: (low/med) LOW

Date Received: 10/11/02

% Moisture: 17 decanted: (Y/N) N

Date Extracted: 10/15/02

Concentrated Extract Volume: 1000(uL)

Date Analyzed: 10/17/02

Injection Volume: 1.0(uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRA (ug/L or			Q
108-95-2	Dhonol		,	390	υ
108-95-2	bis(2-Chloroe	hvl)Ether		390	-
111-44-4	2-Chloropheno			390	,
95-57-8	1,3-Dichlorob	20200		390	_
541-/3-1	1,3-Dichlorob	2072010		390	
106-46-7	1,4-Dichlorob	202000		390	_
	1,2-Dichlorob			390	-
95-48-7	2-Methylpheno	Chlompropar	<u> </u>	390	1
108-60-1	2,2'-oxybis(1	i Cumorobrobar	·C/	390	L -
106-44-5	4-Methylpheno	r propyel amine	, —	390	T .
621-64-7	N-Nitroso-di-	1-brobligumie	-	390	
67-72-1	Hexachloroeth	me	}	390	1
	Nitrobenzene_			390	J -
78-59-1	Isophorone		<u> </u>	390	
88-75-5	2-Nitrophenol			390 390	
105-67-9	2,4-Dimethylp	ienoi			
120-83-2	2,4-Dichloropl	<i>Jei</i> 107		390	_
120-82-1	1,2,4-Trichlo	cobenzene	<u> </u>	390	
91-20-3	Naphthalene			390	1
106-47-8	4-Chloroanili	ne		390	
111-91-1	bis(2-Chloroe	hoxy)methane		390	_
87-68-3	Hexachlorobut	adiene	\	390	4 -
59-50-7	4-Chloro-3-Met	hylphenol		390	
1 91-57-6	2-Methy].naphtl	nalene		390	1
77-47-4	Hexachlorocyc	Lopentadiene		390	Ł
88-06-2	2,4,6-Trichlo	cophenol		390	_
95-95-4	2,4,5-Trichlo	cophenol		790	
91-58-7	2-Chloronaphtl	nalene		390	
88-74-4	2-Nitroaniline	<u> </u>		790	1 -
131-11-3	Dimethylphtha	ate		390	_
208-96-8	Acenaphthylene	<u> </u>		390	1
606-20-2	2,6-Dinitroto	uene		390	
99-09-2	3-Nitroanilin	2		790	U
83-32-9	Acenaphthene_			390	U
05-52-5	1100124p1101101-0	, , , , , , , , , , , , , , , , , , , 			1

OLM03.0

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SED0210330

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-21A

Sample wt/vol:

30.7 (g/mL) G

Lab File ID: S3B9859

Level: (low/med) LOW

Date Received: 10/11/02

% Moisture: 17

decanted: (Y/N) N

Date Extracted:10/15/02

Concentrated Extract Volume: 1000(uL)

Date Analyzed: 10/17/02

Injection Volume: 1.0(uL)

Dilution Factor: 1.0

GPC Cleanup:

(Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRA (ug/L or			Q
E1 -20 - 5	2,4-Dinitroph	nenol		790	ប
100-02-7	4-Nitropheno			790	U
132-64-9	Dibenzofuran			390	ប
101-14-9	2,4-Dinitroto	luene		390	
84-66-2	Diethylphthal	ate		390	1
7005-72-3	4-Chloropheny	l-phenylether		390	
86-73-7	Fluorene		_	390	
100-01-6	4-Nitroanilin	ne		790	1
534-52-1	4.6-Dinitro-2	?-methylphenol		790	
86-30-6	N-Nitrosodipl	enylamine (1)		390	
101-55-3	4-Bromophenyl	-phenylether		390	1 -
118-74-1	Hexachlorober	nzene		390	
87-86-5	Pentachloroph	nenol		790	,
85-01-8	Phenanthrene		<u> </u>	390	
120-12-7	Anthracene			390	ľ
86-74-8	Carbazole			390	
84-74-2	Di-n-butylpht	halate	}	390	š
206-44-0	Fluoranthene			390	
129-00-0				390	
85-68-7	Butylbenzylph	nthalate		390	_
91-94-1	$3,3^{\dagger}$ -Dichlore	benzidi ne	_	390	\$
56-55-3	Benzo(a)anthi	cacene		390	U
239-01-9	Chrysene		_	390	IJ
117-81-7	bis(2-Ethylhe	xvl)phthalate	-	390	_
117-84-0	Di-n-octylpht	halate		390	U
205-99-2	Benzo(b) fluor	anthene	_	390	U
203-33-2	Benzo(k) fluor	anthene		390	U
E0 32-0	Benzo(a) pyrer	ie		390	U
102-20-5	Indeno $(1,2,3)$	cd) pyrene		390	U
T33-33-3	Dibenzo (a, h) a	nthracene		390	ប
101 24 2	Benzo(g,h,i)	pervlene		390	U
TAT-54-5	Beilzo (g, 11, 1/)				

(1) - Cannot be separated from Diphenylamine

Lab Name: MITKEM CORPORATION

Contract:

SED0210330

Lab Code: MITKEM

Case No.:

LOW

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-21A

Sample wt/vol:

30.7 (g/mL) G

Lab File ID: S3B9859

Level:

(low/med)

Date Received: 10/11/02

% Moisture: 17

decanted: (Y/N) N

Date Extracted:10/15/02

Concentrated Extract Volume:

1000 (uL)

Date Analyzed: 10/17/02

Injection Volume:

1.0(uL)

Dilution Factor: 1.0

GPC Cleanup:

(Y/N) N

pH: ____

Number TICs found: 4

CONCENTRATION UNITS: (uq/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q =====
CAS NUMBER 1. 2. 80-05-7 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23.	UNKNOWN PHENOL, 4,4'-(1-METHYLETHYLI UNKNOWN UNKNOWN	6.34	EST. CONC. ====================================	JB NJ J
24. 25. 26. 27. 28. 29.				
30				

OLM03.0

U.S. EPA - CLP

1 INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

	MITKEM_C	ORPORATION	Cont	ract:			SED0210330
ab Code:	MITKEM	Case No.:		SAS No.:			SDG No.: A1489B_
latrix (soil/wa	ater):	SOIL		1	Lab Samp	ole ID:	A1489-21A
evel (low/med	d):	MED		I	Date Rece	eived:	10/11/02
Solids:		83.0					
	Concentration	Units (ug/L or mg	/kg dry weight):				MG/KG
	CAS No.	Analyte	Concentration	С	Q	M	
	7429-90-5	Aluminum				NR	
İ	_7440-36-0	Antimony				NR	
		Arsenic				NR	
	7440-39-3	Barium	1			NR	
Ì	7440-41-7	Beryllium	1			NR	
I	7440-43-9	Cadmium				NR	
Ī	_7440-70-2	Calcium	· ·			NR	
Ī	7440-47-3	Chromium				NR	
Ţ	_7440-48-4 <u></u>					NR	
	7440-50-8	4				NR	
Ţ	_7439-89-6					NR	
	_7439-92-1	Lead	1			_NR	
	7439-95-4	1				_NR	
	7439-96-5	1 -				NR	
	7439-97-6					NR	
	7440-02-0	Nickel				NR	
	_7440-09-7	Potassium				_NR	
	_7782-49-2	Selenium				_NR	
	7440-22-4	Silver				NR	
	7440-23-5	Sodium				NR	
	7440-28-0	Thallium				_NR	
		Vanadium		_ _		_NR	
	_7440-62-2		1			NR	
	7440-62-2 7440-66-6	Zinc	0.16	U		_CA	

FORM I - IN

ILM04.1

Mitkem Corporation

CLIENT:

GEI Consultants, Inc.

Client Sample ID: SED0210330

Lab ID:

AI489-21

Date: 08-Nov-02

Project: Keyspan

Collection Date: 10/09/02 16:35

Analyses	Result	Qual	Limit	Units	DF	Date Analyzed
HARDNESS BY CALCULATION		SM234	0_ S			
Hardness, Calclum/Magnesium (As CaCO3)	2600		240	mg/Kg CaCO3	1	10/24/02 12:26
SOIL AND WASTE PH		SW904	5C_S			
рН	7.9		1.0	pH Units	1	10/21/02 0:00

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

DF - Dilution Factor

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Limit - Reporting Limit

SEDXX100902 SEDOZ10330(PUP)

0

Lab Name: MITKEM CORPORATION

Contract:

SDG No.: A1489

Lab Code: MITKEM Case No.: SAS No.:

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-22C

Sample wt/vol:

5.0 (g/mL) G

Lab File ID: V1F0442

Level: (low/med) LOW

74-87-3-----Chloromethane

74-83-9-----Bromomethane

75-00-3------Chloroethane

67-64-1-----Acetone

78-93-3----2-Butanone

67-66-3-----Chloroform

71-43-2-----Benzene

75-01-4-----Vinyl Chloride

75-15-0-----Carbon Disulfide

75-09-2-----Methylene Chloride

75-34-3-----1,1-Dichloroethane

156-59-2----cis-1,2-Dichloroethene

71-55-6-----1,1,1-Trichloroethane 56-23-5-----Carbon Tetrachloride

108-88-3-----Toluene 10061-02-6----trans-1,3-Dichloropropene

79-00-5 -----1,1,2-Trichloroethane

79-34-5-----1,1,2,2-Tetrachloroethane

107-06-2-----1,2-Dichloroethane

79-01-6----Trichloroethene 78-87-5----1,2-Dichloropropane 75-27-4-----Bromodichloromethane 10061-01-5----cis-1,3-Dichloropropene 108-10-1----4-Methyl-2-pentanone

127-18-4-----Tetrachloroethene

108-90-7------Chlorobenzene

124-48-1-----Dibromochloromethane

591-78-6----2-Hexanone

100-42-5-----Styrene

75-25-2-----Bromoform

100-41-4-----Ethylbenzene

1330-20-7-----Xylene (Total)

156-60-5----trans-1,2-Dichloroethene

75-35-4----1,1-Dichloroethene

Date Received: 10/11/02

% Moisture: not dec. 17

Date Analyzed: 10/15/02

GC Column: DB-624 ID: 0.25 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (mL)

Soil Aliquot Volume: ____(uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NO.

COMPOUND

6 U 6 U

6 U 6 U 6 U 6 U 6 U 4 JΒ 6 U 6 U 6 U 6 U 6 U 6 U 6 U 6 U 6 U 6 U

> 6 U

> 6 U

6 U

6 U

6 U

6 U

U 6

U 6

FORM I VOA

OLM03.0

VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: MITKEM CORPORATION

Contract:

SEDXX100902 SEDOZIO330 (DUP)

Lab Code: MITKEM Case No.: SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-22C

Sample wt/vol:

5.0 (g/mL) G

Lab File ID: V1F0442

Level: (low/med) LOW

Date Received: 10/11/02

% Moisture: not dec. 17

Date Analyzed: 10/15/02

GC Column: DB-624 ID: 0.25 (mm)

Dilution Factor: 1.0

Soil Extract Volume: ____(mL)

Soil Aliquot Volume: ____(uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q =====
		= ======		
1				
Z.				
J]]		
¥• 1				
	<u> </u>			
·				
7				
8.		_		
9.				
10				
44.		_		
12				
13.				
14				
15				
15				
16.				·
17				
18		_		
19.				
ZU _				
21				
22.		_		
23.				
24		— :		
ZQ.		-)		
26.		_		
47.				!
20.				
29		[[
30.				
			i	

SEDXX100902 SEDOZIO330 (DUP

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

LOW

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-22A

Sample wt/vol:

30.7 (g/mL) G

Lab File ID: S3B9860

Level:

(low/med)

Date Received: 10/11/02

% Moisture: 17

decanted: (Y/N) N

Date Extracted: 10/15/02

Concentrated Extract Volume:

CAS NO.

1000 (uL)

Date Analyzed: 10/17/02

Injection Volume:

1.0 (uL)

Dilution Factor: 1.0

GPC Cleanup:

(Y/N) N

pH: _

	CONCENTRATION UNITS:	
COMPOUND	(ug/L or ug/Kg) UG/KG	Q

		Т
108-95-2Phenol	470	ŀ
111-44-4bis(2-Chloroethyl)Ether	390	Ū
95-57-82-Chlorophenol	390	lσ
541-73-11,3-Dichlorobenzene	390	U
106-46-71,4-Dichlorobenzene	390	
95-50-11,2-Dichlorobenzene	390	L .
95-48-72-Methylphenol	390	lυ
108-60-12,2'-oxybis (1-Chloropropane)	390	Ū
106-44-54-Methylphenol	390	1 -
621-64-7N-Nitroso-di-n-propylamine	390	Ū
67-72-1Hexachloroethane	390	
98-95-3Nitrobenzene	390	1 -
78-59-1Isophorone	390	Ū
88-75-52-Nitrophenol	390	1
105-67-92,4-Dimethylphenol	390	
120-83-22,4-Dichlorophenol	390	
120-82-11,2,4-Trichlorobenzene	390	
91-20-3Naphthalene	390	_
106-47-84-Chloroaniline	390	1
111-91-1bis (2-Chloroethoxy) methane	390	_
87-68-3Hexachlorobutadiene	390	
59-50-74-Chloro-3-Methylphenol	390	_
91-57-62-Methylnaphthalene	390	_
77-47-4Hexachlorocyclopentadiene	390	
88-06-22,4,6-Trichlorophenol	390	
95-95-42,4,5-Trichlorophenol	790	
91-58-72-Chloronaphthalene	390	
88-74-4~2-Nitroaniline	790	+
131-11-3Dimethylphthalate	390	-
208-96-8Acenaphthylene	390	
606-20-22,6-Dinitrotoluene	390	
99-09-23-Nitroaniline	790	- 1
83-32-9Acenaphthene	390	1

SEDXX100902 SEDOZ10330 (DUP)

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-22A

Sample wt/vol:

30.7 (q/mL) G

Lab File ID: S3B9860

Level: (low/med) LOW

Date Received: 10/11/02

% Moisture: 17

decanted: (Y/N) N

Date Extracted:10/15/02

Concentrated Extract Volume: 1000(uL)

Date Analyzed: 10/17/02

Injection Volume: 1.0(uL)

COMPOUND

Dilution Factor: 1.0

CONCENTRATION UNITS:

GPC Cleanup:

(Y/N) N

pH: ____

CAS NO.	COMPOUND	(ug/L or	ug/kg)	UG/ KG	Q
51-28-5	2,4-Dinitrophen	ol		790	U
	4-Nitrophenol		 !	790	
	Dibenzofuran			390	
	2,4-Dinitrotolu	ene		390	
84-66-2	Diethylphthalat	e		390	
7005-72-3	4-Chlorophenyl-	ohenvlether	 	390	
	Fluorene			390	
	4-Nitroaniline		 ∤	790	1 -
	4,6-Dinitro-2-me	et hyl phenol		790	1
	N-itrosodiphen			390	
101-55-3	4-Bromophenyl-pl	envlether		390	1
118-74-1	Hexachlorobenzer	reny reduct		390	
	Pentachlorophen			790	
85-01-8	Phenanthrene	л <u></u>		390	
	Anthracene			390	
	Carbazole			390	
	Di-n-butylphthal	2±0		390	
	Fluoranthene	.a.c.e		390	
129-00-0				390	
	Butylbenzylphtha	lato	i	390	
01 04 1	3,3'-Dichlorober	race		390	
	Benzo(a)anthrace			390	
218-01-9		iie	—l	390	
	bis(2-Ethylhexyl	\nhthalato	1	390	_
	Dis(2-Ediyinexyi Di-n-octylphthal			390	
11/-04-0	Benzo(b)fluorant	hono	—	390	
				390	_
20/-08-9	Benzo(k)fluorant	nene		390	
	Benzo (a) pyrene				
	Indeno (1, 2, 3 - cd)			390	
	Dibenzo (a,h) anth			390	
191-24-2	Benzo(g,h,i)pery	Tene	ľ	390	U

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: MITKEM CORPORATION

Contract:

SEDXX100902 SE00210330 (DUP)

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-22A

sample wt/vol:

30.7 (g/mL) G

Lab File ID: S3B9860

Level: (

(low/med) LOW

Date Received: 10/11/02

% Moisture: 17

decanted: (Y/N) N

Date Extracted: 10/15/02

Concentrated Extract Volume:

1000 (址)

Date Analyzed: 10/17/02

Injection Volume:

1.0(uL)

Dilution Factor: 1.0

GPC Cleanup:

(Y/N) N

pH: ____

Number TICs found: 5

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	
1. 2. 872-05-9 3. 80-05-7 4. 301-02-0 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24.	UNKNOWN 1-DECENE PHENOL, 4,4'-(1-METHYLETHYLI 9-OCTADECENAMIDE, (Z)~ UNKNOWN	6.33 12.46		===== JB NJ NJ NJ
25. 26. 27. 28. 29. 30.				

		INO	RGANIC ANALYSI	S DATA SI	HEET		EPA SAN	APLE NO.
Lab Name:	MITKEM_CO	ORPORATION	Con	tract:			SEDXXI SEOOZIO	00902 0330 (DUP)
Lab Code:	— МІТКЕМ	Case No.:		SAS No.:	_		SDG No.:	A1489B_
Matrix (soil/wa	ıter):	SOIL		L	ab Samp	ole ID:	A1489-2	22A
Level (low/me	d):	MED		D	ate Rece	eived:	10/11/02	2
% Solids:		83.0						
	Concentration	Units (ug/L or mg	/kg dry weight):				MG/KG	
	CAS No.	Analyte	Concentration	С	Q	M		
	_7429-90-5	Aluminum				NR		
	_7440-36-0	Antimony				NR		
	_7440-38-2	Arsenic				NR		
İ	_7440-39-3	Barium				NR		
	7440-41-7	Beryllium				NR		
	_7440-43-9	Cadmium				NR		
	_7440-70-2	Calcium				NR		
	7440-47-3	Chromium				NR		
	_7440-48-4	Cobalt				NR		
	7440-50-8	Copper				NR.		
	_7439-89-6	lron				_NR		
	7439-92-1	Lead				NR		
	7439-95-4	Magnesium				NR		
	7439-96-5	Manganese				NR		
	_7439-97-6	Mercury				NR		
	7440-02-0	Nickel				NR NR		
	_7440-09-7	Potassium				NR		
	_7782-49-2	Selenium				NR		
	_7440-22-4	Silver				_NR		
	_7440-23-5	Sodium				NR.		
	_7440-28-0	Thallium		_		NR		
	_7440-62-2	Vanadium				NR		
	7440-66-6	Zinc				NR		
		Cyanide	0.15	U		CA		
			1					
Color Before:		Clar	ity Before:				Texture:	
Color After:		Clar	ity After:				Artifacts:	
Comments:								

FORM I - IN

1LM04.1 2136

Mitkem Corporation

Date: 08-Nov-02

CLIENT:

GEI Consultants, Inc.

Project: Keyspan

Client Sample ID:

SEDXX100902 /SEDOZ10330 (DVP) Collection Date: 10/09/02 15:35

Lab ID:

Analyses	Result	Qual	Limit	Units	DF	Date Analyzed
HARDNESS BY CALCULATION		SM234	0_S			
Hardness, Calcium/Magnesium (As CaCO3)	2500		220	mg/Kg CaCO3	1	10/24/02 12:26
SOIL AND WASTE PH		SW904	SC_S			
рН	7.9		1.0	pH Units	1	10/21/02 0:00

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

DF - Dilution Factor

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Limit - Reporting Limit

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SED022003

Lab Name: MITKEM CORPORATION

Contract:

0

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-09C

Sample wt/vol:

5.4 (g/mL) G

Lab File ID: V1F0401

Level: (low/med) LOW

Date Received: 10/11/02

% Moisture: not dec. 33

Date Analyzed: 10/14/02

GC Column: DB-624 ID: 0.25 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (mL)

Soil Aliquot Volume: ____(uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NO.

COMPOUND

74-87-3Chloromethane		ער עו
75-01-4Vinyl Chloride		, U ~
74-83-9Bromomethane		7 0 1
75-00-3Chloroethane		JUJ
75-35-41,1-Dichloroethene		υ
67-64-1Acetone		-
75-15-0Carbon Disulfide		$\left \frac{1}{J} \right $
75-09-2Methylene Chloride		ป็บ
156-60-5trans-1,2-Dichloroethene	 l	l II
75-34-31,1-Dichloroethane	<u> </u>	1 9
78-93-32-Butanone		1 ~
156-59-2cis-1,2-Dichloroethene		_
67-66-3		1 ~
71-55-61,1,1-Trichloroethane		
56-23-5Carbon Tetrachloride	—	1 -
107-06-21,2-Dichloroethane	 '7	1 -
71-43-2Benzene	 ' '7	1 - 1
79-01-6Trichloroethene	'7	1 ~ 1
78-87-51,2-Dichloropropane	 '7	1 1
75-27-4Bromodichloromethane		1 1
10061-01-5cis-1,3-Dichloropropene	—	1 - 1
108-10-14-Methyl-2-pentanone	— ′ ₇	, ~
108-88-3Toluene	 '7	1
10061-02-6trans-1,3-Dichloropropene	—	, - I
79-00-51,1,2-Trichloroethane	<u> </u>	1 - 1
127-18-4Tetrachloroethene	─	υ
591-78-62-Hexanone	I	Ü
124-48-1Dibromochloromethane	1	Ü
108-90-7Chlorobenzene	— ź	
100-41-4Ethylbenzene	<u>— i</u>	Ü
1330-20-7Xylene (Total)	 '7	
100-42-5Styrene	I	Ü
75-25-2Bromoform	—	
79-34-51,1,2,2-Tetrachloroethane	<u> </u>	U
1,1,2,2 Tectachiolocchane_	 ′	
	1	ll

FORM I VOA

1E VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

SED022003

EPA SAMPLE NO.

Lab	Name:	MITKEM	CORPORATION

Lab Code: MITKEM Case No.:

Contract:

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-09C

Sample wt/vol:

5.4 (g/mL) G

Lab File ID: V1F0401

Level: (low/med) LOW

Date Received: 10/11/02

% Moisture: not dec. 33

Date Analyzed: 10/14/02

GC Column: DB-624 ID: 0.25 (mm)

Dilution Factor: 1.0

Soil Extract Volume: ____(mL)

Soil Aliquot Volume: ____(uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg

Number TICs found: 2

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 2. 83-32-9 3. 4. 5. 6. 7. 8. 9. 10. 11. 12.	UNKNOWN ACENAPHTHENE	1	======================================	=====
14. 15. 16. 17. 18. 19. 20. 21.				
23. 24. 25. 26. 27. 28. 29. 30.				

SED022003

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.:

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-09A

Sample wt/vol: 30.1 (g/mL) G

Lab File ID: S3B9956

Level: (low/med) LOW

Date Received: 10/11/02

% Moisture: 33 decanted: (Y/N) N

Date Extracted:10/18/02

Concentrated Extract Volume: 1000(uL) Date Analyzed: 10/24/02

Injection Volume: 1.0(uL)

Dilution Factor: 1.0

CONCENTRATION UNITS:

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND (ug/L or ug/	/Kg) UG/KG	Q
108-95-2	Phenol	98	
111-44-4	bis(2-Chloroethyl)Ether	490	1
25-57-8	2-Chlorophenol	490	U
541-73-1	1,3-Dichlorobenzene	490	U
106-46-7	1,4-Dichlorobenzene	490	1 -
95-50-1	1,2-Dichlorobenzene	490	U
95-48-7	2-Methylphenol	490	U
100-60-1	2,2'-oxybis(1-Chloropropane)	490	U
106 44 5	4-Methylphenol	490	ט
£01-64-7	N-Nitroso-di-n-propylamine	490	[บ
621-04-7	Hexachloroethane	490	U
6/-/Z-1	Nitrobenzene	490	U
	Isophorone	490	ט
78-39-1	2-Nitrophenol	490	υ
105 67 0	2,4-Dimethylphenol	490	ט
100-67-3	2,4-Dichlorophenol	490	U
120-83-2	1,2,4-Trichlorobenzene	490	υ
120-82-1	Naphthalene	81	IJ
91-20-3	4-Chloroaniline	490	UJ
106-47-8	bis (2-Chloroethoxy) methane	490	υ ¯
111-91-1	Hexachlorobutadiene	490	lσ
87-68-3	4-Chloro-3-Methylphenol	490	U
59-50-/	2 Mothylpaphthalene	59	JJ
91-57-6	2-Methylnaphthalene	490	,
77-47-4	Hexachlorocyclopentadiene	490	t
88-06-2	2,4,6-Trichlorophenol	1000	ľ
95-95-4	2,4,5-Trichlorophenol	490	
91-58-7	2-Chloronaphthalene	1000	Ū
88-74-4	2-Nitroaniline	490	
131-11-3	Dimethylphthalate	360	
208-96-8	Acenaphthylene	490	
606-20-2	2,6-Dinitrotoluene	1000	
99-09-2	3-Nitroaniline	490	
83-32-9	Acenaphthene	170	1

SED022003

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM Case No.: SAS No.:

SDG No.: A1489

2100

920

1000

750

610

410 IJ

490 U

490 U

250 J

430 J

240 J

370 J

80 J

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-09A

Sample wt/vol:

30.1 (q/mL) G

Lab File ID: S3B9956

Level: (low/med)

LOW

Date Received: 10/11/02

% Moisture: 33

decanted: (Y/N) N

Date Extracted: 10/18/02

Concentrated Extract Volume:

1000 (uL)

Date Analyzed: 10/24/02

Injection Volume:

1.0(uL)

Dilution Factor: 1.0

CONCENTRATION UNITS:

GPC Cleanup:

(Y/N) N

129-00-0-----Pyrene

218-01-9-----Chrysene

pH:

	CAS NO.	COMPOUND	(ug/L or	ug/Kg)	UG/KG	Q	
			-]	1
		2,4-Dinitropl			1000		l
		4-Nitrophenol			1000	1	ı
		Dibenzofuran			490	U	I
	121-14-2	2,4-Dinitrot	oluene		490	U	l
	84-66-2	Diethylphthal	Late		490	U	1
	7005-72-3	4-Chloropheny	/l-phenylether	·	490	U	l
	86-73-7	Fluorene		_	78	J	I
	100-01-6	4-Nitroanilir	ne		1000	UJ	Ì
	534-52-1	4,6-Dinitro-2	-methylphenol	_	1000	1	l
		N-Nitrosodiph			490	שו	
		4-Bromophenyl			490	U	ı
i		Hexachloroben			490	U	
		Pentachloroph		<u> </u>	1000		
		Phenanthrene			730	1	
		Anthracene			280	J	ı
		Carbazole			490		ĺ
- 1		Di-n-butylpht	halate	-	490	_	
ŀ		Fluoranthene		-	1300	,	ĺ
- 1	200 11 0	1 LUVLUIGIGIG		!	1300		

(1) - Cannot be separated from Diphenylamine

193-39-5----Indeno (1, 2, 3-cd) pyrene

53-70-3-----Dibenzo (a, h) anthracene

191-24-2----Benzo(q,h,i)perylene

85-68-7-----Butylbenzylphthalate

56-55-3-----Benzo (a) anthracene

117-84-0-----Di-n-octylphthalate

205-99-2----Benzo (b) fluoranthene

207-08-9-----Benzo(k) fluoranthene

50-32-8-----Benzo (a) pyrene

91-94-1-----3,31-Dichlorobenzidine

117-81-7-----bis(2-Ethylhexyl)phthalate

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

SED022003

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-09A

Sample wt/vol:

30.1 (q/mL) G

Lab File ID: S3B9956

Level:

(low/med) LOW Date Received: 10/11/02

% Moisture: 33

decanted: (Y/N) N

Date Extracted: 10/18/02

Concentrated Extract Volume:

1000 (uL)

Date Analyzed: 10/24/02

Injection Volume:

1.0 (uL)

Dilution Factor: 1.0

GPC Cleanup:

(Y/N) N

pH:

CONCENTRATION UNITS:

Number TICs found	d: 18 (ug/L d	or ug/Kg)	ug/Kg
CAS NUMBER	COMPOUND NAME	RT	EST. CONC.
1. 872-05-9 2.	1-DECENE UNKNOWN	11.66 15.95	630 500
3. 613-12-7 4	ANTHRACENE, 2-METHYL-	16.00 16.18	900 580

				l
1. 872-05-9	1-DECENE	11.66		
2.	UNKNOWN	15.95		
3. 613-12-7	ANTHRACENE, 2-METHYL-	16.00		
4.	UNKNOWN	16.18		-
5.	UNKNOWN	17.25		
6. 80-05-7	PHENOL, 4,4'-(1-METHYLETHYLI			
7.	UNKNOWN	20.39		
8.	UNKNOWN	20.49		
9.	UNKNOWN	21.77		J
10. 28553-12-0	1,2-BENZENEDICARBOXYLIC ACID			ŊJ
11.	LINKNOWN	22.11	3100	J
12.	UNKNOWN	22.27	2600	J
] 13.	UNKNOWN	22.43	2600	J
14.	UNKNOWN	22.59	810	J
15.	UNKNOWN	23.27	1200	J
16. 57-88-5	CHOLESTEROL	23.96	1300	NJ
17. 22100-66-9	4,4'-DINITRODIPHENYLSULPHIDE	24.25	450	NJ
18.	UNKNOWN	29.05	600	J
19	1		}	
1 20.				
į či.	!			
	I I			
	i i			
L 4J.	1			
40.	1			
, — · ·	1			
40.	<u> </u>			
29				
30				

U.S. EPA - CLP

1 INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SED022003

ab Name:	MITKEM CO	ORPORATION	Cont	ract:		· · · · · · · · · · · · · · · · · · ·	SED02	2003
ab Code:	MITKEM	Case No.:		SAS No.:			SDG No.:	A1489A
Matrix (soil/wa	nter):	SOIL		I	ab Samp	ole ID:	A 1489-0)9A
evel (low/mea	d):	MED		Γ	Date Reco	eived:	10/11/02	2
% Solids:		67.0						
	Concentration	Units (ug/L or mg	/kg dry weight):				MG/KG	
	CAS No.	Analyte	Concentration	С	Q	М		
	7429-90-5	Aluminum_		-		NR		
	_7440-36-0	Antimony				NR		
İ	_7440-38-2	Arsenic				NR		
1	7440-39-3	Barium				NR		
	7440-41-7	Beryllium				NR		
	_7440-43-9	Cadmium				NR		
	7440-70-2	Calcium				NR		
	_7440-47-3	Chromium				NR		
	7440-48-4	Cobalt				NR		
	7440-50-8	Соррег				NR		
	_7439-89-6	Iron				NR		
	7439-92-1	Lead				NR		
	7439-95-4	Magnesium				NR		
	7439-96-5	Manganese				NR		
	_7439-97-6	Mercury				NR		
	_7440-02-0	Nickel				NR		
	_7440-09-7	Potassium				NR		
	_7782-49-2	Selenium			•	NR		
	_7440-22-4	Silver				NR		
	_7440-23-5	Sodium				NR		
1	_7440-28-0	Thallium				NR		
1	_7440-62-2	Vanadium				NR		
	_7440-66-6	Zinc				NR		
		Cyanide	0.22	U <u></u> T	*N	CA		
; !								
Color Before:		Clari	ty Before:		 		Texture:	
Color After:		Clari	ty After:				Artifacts:	
Comments:								
vamichts.								

Mitkem Corporation

CLIENT:

Lab ID:

GEI Consultants, Inc.

Client Sample ID: SED022003

A1489-09

Date: 08-Nov-02

Project: Keyspan

Collection Date: 10/09/02 10:25

Analyses	Result	Qual	Limit	Units	DF	Date Analyzed
HARDNESS BY CALCULATION		SM234	0_S			
Hardness, Calcium/Magnesium (As CaCO3)	290000		280	mg/Kg CaCQ3	1	10/24/02 15:38
SOIL AND WASTE PH		SW904	5C_S			
ρH	8.2		1.0	pH Units	1	10/16/02 0:00

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

DF - Dilution Factor

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Limit - Reporting Limit

SED022033

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No

SAS No.: SDG No.: A1489

Matrix: (soil/water) SOIL Lab Sample ID: A1489-10C

Sample wt/vol: 5.3 (g/mL) G Lab File ID: V1F0402

Level: (low/med) LOW Date Received: 10/11/02

% Moisture: not dec. 22 Date Analyzed: 10/14/02

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: ____(mL) Soil Aliquot Volume: ____(uL)

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

CAD NO.	(49/1 01 49	,,5,0, 1.0	×
74-87-3	Chloromethane		্য ব
	Vinyl Chloride		5 U V
74-83-9	Bromomethane		u T
75-00-3	Chloroethane		UJ
	1,1-Dichloroethene	-	
67-64-1		15	
	Carbon Disulfide		
	Methylene Chloride	- 3	
156-60-5	trans-1,2-Dichloroethene	ϵ	
	1,1-Dichloroethane	ϵ	
	2-Butanone	ϵ	
	cis-1,2-Dichloroethene	ϵ	
	Chloroform	- 6	
	1,1,1-Trichloroethane	6	
	Carbon Tetrachloride	- 6	
	1,2-Dichloroethane	6	
71-43-2		6	
	Trichloroethene	· 6	
	1,2-Dichloropropane	6	
	Bromodichloromethane	6	
	cis-1,3-Dichloropropene	6	
	4-Methyl-2-pentanone	6	
108-88-3		· 6	1
	trans-1,3-Dichloropropene		Ū
79-00-5	1,1,2-Trichloroethane		Ū
	Tetrachloroethene		Ū
591-78-6 - -			U
	Dibromochloromethane		U
108-90-7	Chlorobenzene		บ
	Ethylbenzene		Ū
1330-20-7	Xylene (Total)		บ
100-42-5	Stvrene		U
75-25-2	Bromoform		U .
79-34-5	1,1,2,2-Tetrachloroethane	6	•
		1 	· ——

FORM I VOA

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

- 1	
1	SED022033

Lab Name: MITKEM CORPOR	MOITA
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Contract:

EPA SAMPLE NO.

Lab Code: MITKEM Case No.:

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-10C

Sample wt/vol: 5.3 (g/mL) G

Lab File ID: V1F0402

Level: (low/med) LOW

Date Received: 10/11/02

% Moisture: not dec. 22

Date Analyzed: 10/14/02

GC Column: DB-624 ID: 0.25 (mm)

Dilution Factor: 1.0

Soil Extract Volume: ____(mL)

Soil Aliquot Volume: ____(uL)

Number TICs found: 0

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1	======================================			
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29. 30.				
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EPA SAMPLE NO.

SED022033

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.:

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-10A

Sample wt/vol: 30.9 (g/mL) G

Lab File ID: S3C0243

Level: (low/med) LOW

Date Received: 10/11/02

% Moisture: 22 decanted: (Y/N) N

Date Extracted:10/18/02

Concentrated Extract Volume: 1000(uL) Date Analyzed: 11/13/02

Injection Volume: 1.0(uL)

Dilution Factor: 1.0

CONCENTRATION UNITS:

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/	KG Q
108-95-2	Phenol		64 J
111-44-4	bis(2-Chloroethyl)	Ether	410 U
95-57-8	2-Chlorophenol _		410 U
541-73-1	1,3-Dichlorobenzer	ne	410 U
106-46-7	1.4-Dichlorobenzer	ne	410 U
95-50-1	1,2-Dichlorobenzer	ne	410 U
95-48-7	2-Methylphenol	i	410 U
108-60-1	2,2'-oxybis(1-Chlo	propropane)	410 U
106-44-5	4-Methylphenol		410 U
621-64-7	N-Nitroso-di-n-pro	opylamine	410 U
67-72-1	Hexachloroethane _		410 U
98-95-3	Nitrobenzene		410 U
78-59-1	Isophorone		410 U
88-75-5	2-Nitrophenol		410 U
105-67-9	2,4-Dimethylphenol	(410 U
120-83-2	2,4-Dichlorophenol	L	410 U
120-82-1	1,2,4-Trichlorober	nzene	410 U
91-20-3	Naphthalene		410 U
106-47-8	4-Chloroaniline		410 U
111-91-1	bis(2-Chloroethox)	y) methane	410 U
87-68-3	Hexachlorobutadie	ne	410 U
59-50-7	4-Chloro-3-Methyl	oh <u>enol</u>	410 U
91-57-6	2-Methylnaphthale	ne	410 U
77-47-4	Hexachlorocycloper	ntadiene	410 U
98-06-2	2,4,6-Trichlorophe	enol	410 U
05-05-4	2,4,5-Trichlorophe	enol	830 JU
91-58-7	2-Chloronaphthaler	ne	410 U
91-30-7	2-Nitroaniline		830 U
121-11-3	Dimethylphthalate		410 U
131-11-3	Acenaphthylene		180 J
606-20-2	2,6-Dinitrotoluene	2	410 U
000-20-2	3-Nitroaniline		830 U
99-09-4	Acenaphthene		410 U
03-34-9	Accumplication		_

EPA SAMPLE NO.

SED022033

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-10A

Sample wt/vol:

30.9 (g/mL) G

Lab File ID: \$3C0243

Level: (low/med) LOW

Date Received: 10/11/02

% Moisture: 22

decanted: (Y/N) N

Date Extracted: 10/18/02

Concentrated Extract Volume: 1000(uL) Date Analyzed: 11/13/02

Injection Volume: 1.0(uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRAT	TION U 1g/Kg)	NITS: UG/KG	Q
51.00.5	a 4 Dinitropho	nol		830	ប
51-28-5	2,4-Dinitrophe	-11O1		830	
100-02-7	4-Nitrophenol		-1	410	
	Dibenzofuran	11000	-	410	1 3
121-14-2	2,4-Dinitrotol	to		410	
84-66-2	Diethylphthala	-phonul ether		410	
7005-72-3	4-Chlorophenyl	-buenyrecher_	-	52	T I
86-73-7	Fluorene		-	830	
100-01-6	4-Nitroaniline	mothyrlahonol		830	1 - 1
534-52-1	4,6-Dinitro-2-	Mechaniae (1)	- ∤	410	
86-30-6	N-Nitrosodiphe	aramine (1)		410	, - ,
101-55-3	4-Bromophenyl-	buenAremer		410	1 - ,
118-74-1	Hexachlorobenz	ene		830	1 - 1
87-86-5	Pentachlorophe	31OT		370	
85-01-8	Phenanthrene_			160	
120-12-7	Anthracene			410	, ,
86-74-8	Carbazole			410	
84-74-2	Di-n-butylphth	malate)	680	
	Fluoranthene			1500	
129-00-0	Pyrene			410	
85-68-7	Butylbenzylpht	halate	. _		
91-94-1	3,3'-Dichlorok	enziaine		410	U
56-55-3	Benzo(a)anthra	cene	<u></u> l	520	
218-01-9	Chrysene		l	530	
117-81-7	bis(2-Ethylhes	$y1)phthalate_$!	76	· · ·
117-84-0	Di-n-octylphth	alate		410	1
205-99-2	Benzo(b)fluora	inthene		390	_
207-08-9	Benzo(k)fluora	inthene	_1	150	J
	Benzo(a)pyrene		_	430	
193-39-5	Indeno(1,2,3-c	d)pyrene		190	
53-70-3	Dibenzo(a,h)ar	thracene		1	J
191-24-2	Benzo(g,h,i)pe	rylene		220	J
171 2 2	20120 (3,1=1=1F		_		
1) - Cannot be	separated from Di	phenylamine			

1F SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SED022033

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-10A

Sample wt/vol:

Lab File ID:

S3C0243

30.9 (g/mL) G

Level: (low/med)

LOW

Date Received: 10/11/02

% Moisture: 22

decanted: (Y/N) N

Date Extracted: 10/18/02

Concentrated Extract Volume:

Date Analyzed: 11/13/02

Injection Volume: 1.0(uL)

Dilution Factor: 1.0

GPC Cleanup:

(Y/N) N

pH: ____

1000 (uL)

Number TICs found: 12

CONCENTRATION UNITS: (uq/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q =====
	TINKNOWN	7.70	840	J
1. 2. 872-05-9	1-DECENE	13.88		
3.	UNKNOWN	14.86	420	
4. 2437-56- 1	1-TRIDECENE	16.08	260	
5. 779-02-2	ANTHRACENE, 9-METHYL-	18.30	290	
6.	UNKNOWN	18.52	580	
7. 3674-66-6	PHENANTHRENE, 2,5-DIMETHYL-	19.45	290	
8. 80-05-7	PHENOL, 4,4'-(1-METHYLETHYLI	20.35	860	, ,
9. 238-84-6	11H-BENZO [A] FLUORENE	20.91	260	_
10. 3353-12-6	PYRENE, 4-METHYL-	21.12	200	
11. 3442-78-2	PYRENE, 2-METHYL-	21.36	190	1 1
12. 192-97-2	BENZO[E] PYRENE	25.36	310	NJ
13				
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16				
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U.S. EPA - CLP

1 INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SED022033

Lab Name:	MITKEM CO	ORPORATION	Contract:		SED022033			
	_	Case No.:		SAS No.:			SDG No.:	A1489A_
Lab Code:	MITKEM	Case No.:						
Matrix (soil/wa	ater):	SOIL		L	ab Sam	ple ID:	A1489-	10A
Level (low/me	d):	MED		D	ate Rec	eived:	10/11/02	2
% Solids:		78.0						
	Concentration	Units (ug/L or mg	/kg dry weight):				MG/KG	
! !	CAS No.	Analyte	Concentration	С	Q.	М		
	_7429-90-5	Aluminum				NR.		
	7440-36-0	Antimony				NR		
	7440-38-2	Arsenic				NR		
	7440-39-3	Barium				NR		
	7440-41-7	Beryllium	i			NR		
	_7440-43-9	Cadmium				NR		
	7440-70-2	Calcium				NR		
	_7440-47-3	Chromium				NR		
	_7440-48-4	Cobalt				NR		
	_7440-50-8	Copper		 - -		NR		
	_7439-89-6	Iron				NR		
	_7439-92-1	Lead				NR		
	_7439-95-4	Magnesium			 	NR		
	_7439-96-5	Manganese				NR		
	_7439-97-6	Mercury				NR		
	_7440-02-0	Nickel				NR		
	_7440-09-7	Potassium				NR		
	_7782-49-2	Selenium	· - 1			NR		
	_7440-22-4	Silver				NR		
	_7440-23-5	Sodium				NR		
	_7440-28-0	Thallium			<u> </u>	NR		
	_7440-62-2	Vanadium				NR NR		
	_7440-66-6	Zinc		 - -		NR		
		Cyanide	0.18	U.1	.*N	CA		
Color Before:		Clar	ity Before:				Texture:	
Color After:		Clar	ity After:				Artifacts:	
Comments:								

FORM I - IN

1LM04.1

2060

Mitkem Corporation

CLIENT:

GEI Consultants, Inc.

Client Sample ID: SED022033

Lab ID:

A1489-10

Date: 08-Nov-02

Project: Keyspan

Collection Date: 10/09/02 10:35

Analyses	Result	Qual	Limit	Units	DF	Date Analyzed
HARDNESS BY CALCULATION		SM234	0_S			
Hardness, Calcium/Magnesium (As CaCO3)	19000		220	mg/Kg CaCO3	1	10/24/02 15:38
SOIL AND WASTE PH		SW904	5C_S			
pH	8.4		1.0	pH Units	1	10/16/02 0:00

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

DF - Dilution Factor

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Limit - Reporting Limit

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SED023003

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM

Case No.:

SAS No.: SDG No.: A1489

Matrix: (soil/water) SOIL Lab Sample ID: A1489-07C

Sample wt/vol: 5.2 (g/mL) G Lab File ID: V1F0318

Level: (low/med) LOW Date Received: 10/11/02

% Moisture: not dec. 19 Date Analyzed: 10/12/02

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: ____(mL) Soil Aliquot Volume: ____(uL)

CONCENTRATION UNITS:
COMPOUND (ug/L or ug/Kg) UG/KG Q

CAS NO. 6 U 74-87-3-----Chloromethane 6 U 75-01-4-----Vinyl Chloride 6 U 74-83-9-----Bromomethane 6 U 75-00-3-----Chloroethane 6 U 75-35-4-----1,1-Dichloroethene_ 50 67-64-1-----Acetone 6 | U 75-15-0-----Carbon Disulfide 75-09-2----Methylene Chloride 5 JВ 6 156-60-5-----trans-1,2-Dichloroethene ľU 6 U 75-34-3-----1,1-Dichloroethane_ 6 U 78-93-3----2-Butanone 6 U 156-59-2----cis-1,2-Dichloroethene 6 U 67-66-3-----Chloroform U 6 71-55-6-----1,1,1-Trichloroethane 6 U 56-23-5----Carbon Tetrachloride 6 U 107-06-2----1,2-Dichloroethane___ lυ 6 71-43-2----Benzene 6 U 79-01-6----Trichloroethene U 6 78-87-5-----1,2-Dichloropropane U 6 75-27-4----Bromodichloromethane U 6 10061-01-5----cis-1,3-Dichloropropene 6 UJ 108-10-1-----4-Methyl-2-pentanone 2 J 108-88-3-----Toluene 10061-02-6----trans-1,3-Dichloropropene 6 U 6 U 79-00-5----1,1,2-Trichloroethane_ 6 U 127-18-4-----Tetrachloroethene___ 6 U 591-78-6----2-Hexanone 124-48-1-----Dibromochloromethane 6 lυ 4 J 108-90-7-----Chlorobenzene___ 6 U 100-41-4-----Ethylbenzene 6 U 1330-20-7-----Xylene (Total) 6 U 100-42-5----Styrene 6 U 75-25-2-----Bromoform 6 U 79-34-5----1,1,2,2-Tetrachloroethane

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA	SAMPLE	NO
DEM	OWAL THE	IVO

SED023003

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM Case No.:

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-07C

Sample wt/vol:

5.2 (g/mL) G

Lab File ID: V1F0318

Level: (low/med) LOW

Date Received: 10/11/02

% Moisture: not dec. 19

Date Analyzed: 10/12/02

GC Column: DB-624 ID: 0.25 (mm)

Dilution Factor: 1.0

Soil Extract Volume: ____(mL)

Soil Aliquot Volume: ____(uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q =====
1				
3. 4. 5.				
6:————————————————————————————————————			-	
9.				
11. 12. 13.				
14				
17.				
20.				
23.				
25. 26.				
27. 28. 29.				
30				

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SED023003

EPA SAMPLE NO.

Lab Name: MITKEM CORPORATION

Contract:

Case No.: Lab Code: MITKEM

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-07A

Sample wt/vol:

30.6 (g/mL) G

Lab File ID: S3B9961

Level:

(low/med) LOW

Date Received: 10/11/02

% Moisture: 19

decanted: (Y/N) N

Date Extracted:10/18/02

Concentrated Extract Volume:

5000 (uL)

Date Analyzed: 10/24/02

Injection Volume:

1.0(uL)

Dilution Factor: 1.0

CONCENTRATION UNITS:

GPC Cleanup:

(Y/N) N

pH: ____

CAS NO.		or ug/Kg) UG/KG	Q
108-95-2	Phenol	2000	
111-44-4	bis(2-Chloroethyl)Ether	2000	
95-57-8	2-Chlorophenol	2000	1
541-73-1	1.3-Dichlorobenzene	2000	
106-46-7	1,4-Dichlorobenzene	2000	
95-50-1	1,2-Dichlorobenzene	2000	ſ
95-48-7	2-Methylphenol	2000	L
108-60-1	2,2'-oxybis(1-Chloropror	pane) 2000	
106-44-5	4-Methylphenol	2000	
621-64-7	N-Nitroso-di-n-propylam	ine	1
67-72-1 <i>-</i>	Hexachloroethane	2000	
98-95-3	Nitrobenzene	2000	
78-59-1	Isophorone	2000	_
88-75-5	2-Nitrophenol	2000	
105-67-9	2,4-Dimethylphenol	2000	
120-83-2	2,4-Dichlorophenol	2000	
120-82-1	1,2,4-Trichlorobenzene_	2000	
91-20-3	Naphthalene	2000	1
106-47-8	4-Chloroaniline		UJ
111-91-1	bis (2-Chloroethoxy) metha	ane	
87-68-3	Hexachlorobutadiene	2000	
59-50-7	4-Chloro-3-Methylphenol	2000	
91-57-6	2-Methylnaphthalene		
77-47-4	Hexachlorocyclopentadie	ne 2000	
88-06-2	2,4,6-Trichlorophenol	2000	_
95-95-4	2,4,5-Trichlorophenol	4000	l I
91-58-7	2-Chloronaphthalene	2000	1 1
88-74-4	2-Nitroaniline	4000	1 1
131-11-3	Dimethylphthalate	2000	
208-96-8	Acenaphthylene	250	
606-20-2	2,6-Dinitrotoluene	2000	1 1
99-09-2	3-Nitroaniline	1 4000	01
83-32-9	Acenaphthene	2000	ט
			.

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EPA SAMPLE NO.

SED023003

Lab Name: MITKEM CORPORATION

Contract:

Case No.:

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-07A

Sample wt/vol:

Lab Code: MITKEM

30.6 (g/mL) G

Lab File ID: S3B9961

Date Received: 10/11/02

Level: (low/med) LOW

% Moisture: 19

decanted: (Y/N) N Date Extracted: 10/18/02

Concentrated Extract Volume: 5000(uL) Date Analyzed: 10/24/02

Injection Volume: 1.0(uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRA (ug/L or	ation U ug/Kg)	NITS: UG/KG	Q
	2 4 Dinitroph	onol		4000	U U
51-28-5	2,4-Dinitroph	E1101	- -	4000	
100-02-7	4-Nitrophenol			2000	
132-64-9	Dibenzoluran_	luone		2000	
121-14-2	2,4-Dinitroto	Trerie		2000	
84-66-2	Diethylphthal	ace 1 phonylether		2000	ı
7005-72-3	4-Chloropheny	T-buentarecires	·	2000	
86-73-7	Fluorene			4000	
100-01-6	4-Nitroanilin	mot by l phonol		4000	_
534-52-1	4,6-Dinitro-2	onvlamine (1)	<u>-</u>	2000	
86-30-6	N-Nitrosodiph	-phonulether	- -	2000	5
101-55-3	4-Bromophenyl Hexachloroben	-buenarcarer_	-	2000	lυ
118-74-1	neception of the court	onol		4000	lΰ
87-86-5	Pentachloroph	eno1		340	1
85-01-8	Phenanthrene_			2000	
120-12-7	Anthracene			2000	
86-74-8	Carbazole	halato		2000	-
84-74-2	Di-n-butylpht	liatace		620	
	Fluoranthene_			1100	•
129-00-0	pyrene	the lete		2000	
85-68-7	Butylbenzylph	tnarate		2000	_
91-94-1	3,3 -Dichloro	penziorne		490	
56-5 5- 3- <i></i>	Benzo(a)anthr	acene		570	
218-01-9	Chrysene		_ -	2000	•
117-81-7	bis(2-Ethylhe	xyl) phichalace	'	2000	
117-84-0	Di-n-octylpht	natace		440	_
205-99-2	Benzo(b) fluor	anthene		2000	-
207-08-9	Benzo(k)fluor	anthene		370	
50-32-8	Benzo (a) pyren	e		230	
193-39-5	Indeno (1, 2, 3-	ca) pyrene		2000	
53-70-3	Dibenzo(a,h)a	nunracene	 1	260	-
191-24-2	Benzo(g,h,i)p	erArene		200	
- A	separated from D	inhonulamino	1	·	

SED023003

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name:	MITKEM	CORPORATION	Contract:	

Lab Code: MITKEM Case No.: SAS No.:

SAS No.: SDG No.: A1489

Matrix: (soil/water) SOIL Lab Sample ID: A1489-07A

Sample wt/vol: 30.6 (g/mL) G Lab File ID: S3B9961

Level: (low/med) LOW Date Received: 10/11/02

% Moisture: 19 decanted: (Y/N) N Date Extracted: 10/18/02

Concentrated Extract Volume: 5000(uL) Date Analyzed: 10/24/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CONCENTRATION UNITS:
Number TICs found: 2 (ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q =====
1. 10544-50-0 2. 80-05-7 3.	SULFUR, MOL. (S8) PHENOL, 4,4'-(1-METHYLETHYLI	17.17 17.87	25000 4900	
5 6				
7. 8. 9.				
12. 13.				
14. 15. 16. 17.				
19. 20.				
21. 22. 23. 24.				
26. 27.				
28. 29. 30.				

FORM I SV-TIC

U.S. EPA - CLP

1 INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SED023003	

Lab Name:	MITKEM CORPORATION Contract:						SED023003	
Lab Code:	MITKEM	Case No.:		SAS No.:			SDG No.: A1489A	
Matrix (soil/water):		SOIL		L	ab Samı	ole ID:	A1489-07A	
-				-		•	10/11/00	
Level (low/me	d):	MED		L	ate Rec	eived:	10/11/02	
% Solids:		81.0						
	Concentration	Units (ug/L or mg	kg dry weight):				MG/KG	
	CAS No.	Analyte	Concentration	С	Q	М		
	7429-90-5	Aluminum				NR		
	7440-36-0	Antimony				NR		
	7440-38-2	Arsenic				NR		
:	_7440-39-3	Barium				NR		
	7440-41-7	Beryllium				NR		
:	7440-43-9	Cadmium				NR		
İ	_7440-70-2	Calcium				NR		
!	7440-47-3	Chromium				NR		
	_7440-48-4	Cobalt				NR		
	_7440-50-8	Copper				NR		
	7439-89-6	lron				NR		
	_7439-92-1	Lead				NR		
	_7439-95-4	Magnesium				NR		
	_7439-96-5	Manganese				NR		
	_7439-97-6	Mercury				NR		
	_7440-02-0	Nickel				_NR		
	_7440-09-7	Potassium		<u> </u>		_NR		
	_7782-49-2	Selenium				NR		
	_7440-22-4	Silver		- -		NR.		
	_7440-23-5	Sodium				_NR		
	_7440-28-0	Thallium	 			_NR		
	_7440-62-2	Vanadium	 		-	NR		
	7440-66-6	Zinc	- -	U I	+>T	NR		
		Cyanide	0.17		-N	CA		
G-1 P. S		CI	tr Bofom				Texture:	
Color Before:		Clar	ty Before:				. CAMIC	
Color After:		Clari	ty After:				Artifacts:	
Comments:								

FORM I - IN

Mitkem Corporation

CLIENT:

GEI Consultants, Inc.

Project: Keyspan

Date: 08-Nov-02

Client Sample ID: SED023003

Collection Date: 10/09/02 11:00

Lab ID:

A1489-07

Analyses	Result	Qual	Limit	Units	DF	Date Analyzed
HARDNESS BY CALCULATION Hardness, Calcium/Magnesium (As	130000	SM234	0_S 250	mg/Kg CaCO3	1	10/24/02 15:38
CaCO3) SOIL AND WASTE PH		SW904	5C S			
рН	8.0	2.100	1.0	pH Units	1	10/16/02 0:00

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

DF - Dilution Factor

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Limit - Reporting Limit

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SED023033

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-08C

Sample wt/vol:

5.1 (g/mL) G

Lab File ID: V1F0400

Level: (low/med)

LOW

Date Received: 10/11/02

% Moisture: not dec. 26

CAS NO.

Date Analyzed: 10/14/02

GC Column: DB-624 ID: 0.25 (mm)

COMPOUND

Dilution Factor: 1.0

Soil Extract Volume: (mL)

Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

Q

74-87-3Chlo	romethane	-	บบ
75-01-4Viny			ָּיל על די
74-83-9Brom			บัง
75-00-3Chlo			リロナ
75-35-41,1-1		-	
67-64-1Acet		_ ₂₁	_ ~
75-15-0Carb	on Disulfide		2 J
75-09-2Methy			з лв
156-60-5trans			י ט וי
75-34-31,1-I		⁻ 7	י ט י
78-93-32-But		- 7	' U
156-59-2cis-:	,2-Dichloroethene	- 7	יוי
67-66-3Chlor	oform	- 7	י ט י
71-55-61,1,2	-Trichloroethane	_ 7	יוֹט
56-23-5Carbo	n Tetrachloride	7	บ
107-06-21,2-	ichloroethane	⁻ 7	Ū
71-43-2Benze		⁻ 7	ַ ען
79-01-6Trich	loroethene	7	U
78-87-51,2-1	ichloropropane	7	ี บ
75-27-4Bromo		7	U
10061-01-5cis-1	,3-Dichloropropene	⁻ 7	U
108-10-14-Met	hyl-2-pentanone	7	Ų
108-88-3Tolue		7	U
10061-02-6trans	-1,3-Dichloropropene	7	Ų
79-00-51,1,2	-Trichloroethane	⁻ 7	U
127-18-4Tetra	chloroethene	7	U
591-78-62-Hex	anone	7	U
124-48-1Dibro	mochloromethane	7	U
108-90-7Chlor	obenzene	7	U
100-41-4Ethyl	benzene	7	U
1330-20-7Xyler	e (Total)	⁻ 7	U
100-42-5Styre		7	U .
75-25-2Bromo	form	7	U
79-34-51,1,2	,2-Tetrachloroethane	⁻ 7	U

FORM I VOA

OLM03.0

VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SED023033

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM Case No.:

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-08C

Sample wt/vol:

5.1 (g/mL) G

Lab File ID: V1F0400

Level: (low/med) LOW

Date Received: 10/11/02

% Moisture: not dec. 26

Date Analyzed: 10/14/02

GC Column: DB-624 ID: 0.25 (mm)

Dilution Factor: 1.0

Soil Aliquot Volume: ____(uL)

Soil Extract Volume: ____(mL)

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg

Number TICs found: 5

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q =====
1. 2. 90-12-0 3. 581-40-8 4. 581-40-8 5. 83-32-9 6. 7. 8.	UNKNOWN NAPHTHALENE, 1-METHYL- NAPHTHALENE, 2,3-DIMETHYL- NAPHTHALENE, 2,3-DIMETHYL- ACENAPHTHENE	15.32 16.58 17.61 17.84 18.32	15 7	
11. 12. 13. 14. 15. 16.				
20. 21. 22. 23. 24.				
26. 27. 28. 29. 30.				

SED023033

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM Case No.: SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-08A

Sample wt/vol:

30.4 (g/mL) G

Lab File ID: S3B9962

Level: (low/med) LOW

Date Received: 10/11/02

% Moisture: 26

decanted: (Y/N) N

Date Extracted: 10/18/02

Concentrated Extract Volume: 5000(uL)

Date Analyzed: 10/24/02

Injection Volume: 1.0(uL)

Dilution Factor: 1.0

CONCENTRATION UNITS:

GPC Cleanup: (Y/N) N

pH: ____

CAS NO.	COMPOUND	(ug/L or	ug/Kg)	UG/KG	Q
108-95-2				2200	U
111-44-4	bis(2-Chloroethyl)	Ether_	[2200	
95-57-8	2-Chlorophenol			2200	U
	1,3-Dichlorobenzer			2200	U
	1,4-Dichlorobenzer		[2200	-
	1,2-Dichlorobenzer	ıe		2200	
	2-Methylphenol			2200	ប
	2,2'-oxybis(1- Chl c	ropropar	ie)	2200	ט ו
106-44-5	4-Methylphenol		[2200	U
621-64-7	N-Nitroso-di-n-pro	pylamine	<u> </u>	2200	U
67-72-1	Hexachloroethane			2200	U
98-95-3	Nitrobenzene			2200	U
78-59-1	Isophorone			2200	U
88-75-5	2-Nitrophenol		i	2200	U
105-67-9	2,4-Dimethylphenol			2200	ן ט
120-83-2	2,4-Dichlorophenol			2200	ן ען
120-82-1	1,2,4-Trichloroben	zene		2200	U
91-20-3	Naphthalene			280	J
	4-Chloroaniline			2200	UT
	bis(2-Chloroethoxy			2200	ט
87-68-3	Hexachlorobutadien	e `		2200	U
59-50-7	4-Chloro-3-Methylp	henol		2200	U
91-57-6	2-Methylnaphthalen	e		2200	ט
77-47-4	Hexachlorocyclopen	tadiene		2200	υ
88-06-2	2,4,6-Trichlorophe	nol		2200	ט
95-95-4	2,4,5-Trichlorophe	nol		4500	ט
91-58-7	2-Chloronaphthalen	e		2200	ט
88-74-4	2-Nitroaniline			4500	ט [
	Dimethylphthalate_			2200	U
208-96-8	Acenaphthylene			800	J
	2,6-Dinitrotoluene			2200	ט ו
99-09-2	3-Nitroaniline		_	4500	UT
	Acenaphthene			2200	י די
	<u> </u>		_		

SED023033

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-08A

30.4 (q/mL) G Lab File ID: S3B9962

Level: (low/med) LOW

Date Received: 10/11/02

% Moisture: 26

Sample wt/vol:

decanted: (Y/N) N

Date Extracted: 10/18/02

Concentrated Extract Volume:

/olume: 5000(uL)

Date Analyzed: 10/24/02

Injection Volume:

CAS NO.

1.0 (uL)

COMPOUND

Dilution Factor: 1.0

GPC Cleanup:

(Y/N) N

рН: __

CONCENTRATION UNITS: (ug/L or uq/Kq) UG/KG

Q

51-28-52,4-Dinitrophenol	4500	1 -
100-02-74-Nitrophenol	4500	ប្រ
132-64-9Dibenzofuran	2200	U
121-14-22,4-Dinitrotoluene	2200	U
84-66-2Diethylphthalate	2200	ט
7005-72-34-Chlorophenyl-phenylether_	2200	U
86-73-7Fluorene	260	
100-01-64-Nitroaniline	4500	UJ
534-52-14,6-Dinitro-2-methylphenol_	4500	U
86-30-6Nitrosodiphenylamine (1)	2200	U
101-55-34-Bromophenyl-phenylether	2200	บ
118-74-1Hexachlorobenzene	2200	บ
87-86-5Pentachlorophenol	4500	U
85-01-8Phenanthrene	1800	J
120-12-7Anthracene	650	J
86-74-8Carbazole	2200	UJ
84-74-2Di-n-butylphthalate	2200	υŪ
206-44-0Fluoranthene	3200	
129-00-0Pyrene	5200	
85-68-7Butylbenzylphthalate	2200	Ū
91-94-13,3'-Dichlorobenzidine	2200	U
56-55-3Benzo(a)anthracene	2100	J
218-01-9Chrysene	2200	J
117-81-7bis(2-Ethylhexyl)phthalate	2200	U
117-84-0Di-n-octylphthalate	2200	U
205-99-2Benzo(b) fluoranthene	1700	J
207-08-9Benzo(k)fluoranthene	660	J
50-32-8Benzo (a) pyrene	1700	J
193-39-5Indeno(1,2,3-cd)pyrene	780	J
53-70-3Dibenzo (a, h) anthracene	2200	U
191-24-2Benzo(g,h,i)perylene	860	J

1**F** SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SED023033

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-08A

Sample wt/vol:

30.4 (g/mL) G

Lab File ID: S3B9962

Level: (low/med)

LOW

Date Received: 10/11/02

% Moisture: 26

decanted: (Y/N) N

Date Extracted: 10/18/02

Concentrated Extract Volume:

5000 (யு.)

Date Analyzed: 10/24/02

Injection Volume:

1.0 (uL)

Dilution Factor: 1.0

GPC Cleanup:

(Y/N) N

pH:

Number TICs found: 4

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg

U.S. EPA - CLP

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SED02303	3

Lab Name:	міткем со	ORPORATION	_ Cont	ract:			SED02	3033
Lab Code:	MITKEM_C	Case No.:		SAS No.:			SDG No.:	A1489A
								
Matrix (soil/wa	ter):	SOIL		I	ab Samp	ole ID:	A1489-0	08A
Level (low/med	l):	MED		I	Date Reco	eived:	10/11/02	2
% Solids:		74.0						
	Concentration	Units (ug/L or mg/	kg dry weight):				MG/KG	
	CAS No.	Analyte	Concentration	С	Q	М		
L		Aluminum				NR		
	_7440-36-0	Antimony				NR		
		Arsenic				NR		
	_7440-39-3	Barium				NR		
	_7440-41-7	Beryllium				NR		
Ī	7440-43-9	Cadmium				NR		
	7440-70-2	Calcium				NR		
		Chromium	<u> </u>			NR		
ļ.	_7440-48-4	Cobalt				NR		
_	_7440-50-8	Copper				NR		
	_7439-89-6	Iron				NR		
	_7439-92-1	Lead				NR		
	_7439-95-4	Magnesium				NR.		
<u> </u>	_7439-96-5	Manganese		- - 		NR.		
	_7439-97-6	Mercury				NR.		
	_7440-02 - 0	Nickel		- -		NR		
}	_7440-09-7	Potassium	<u> </u>	- - -		NR		
	_7782 - 49-2	Selenium	<u>- </u>			NR		
-	_7440-22-4	Silver				NR NR		
	_7440-23-5	Sodium	_	- - -		NR NR		
ļ	_7440-28-0	Thallium	 			NR.		
	_7440-62-2	Vanadium				NR NR		
-	_7440-66-6	Zinc	0.10	- , -		NR		
		Cyanide	0.18	UJ		CA		
Color Before:		Clari	ity Before:				Texture:	
COIOI DEIOIE:		Cian	ny Botote.					
Color After:	<u></u>	Clarity After:						
Comments:								

FORM I - IN

ILM04.1

Mitkem Corporation

CLIENT:

GEI Consultants, Inc.

Client Sample ID: SED023033

Lab ID:

A1489-08

Date: 08-Nov-02

Project: Keyspan

Collection Date: 10/09/02 11:10

Analyses	Result	Qual	Limit	Units	DF	Date Analyzed
HARDNESS BY CALCULATION		SM234	0_S			
Hardness, Calcium/Magnesium (As CaCO3)	42000		260	mg/Kg CaCO3	1	10/24/02 15:38
SOIL AND WASTE PH		SW904	5C_S			
рΗ	8.8		1.0	pH Units	1	10/16/02 0:00

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

DF - Dilution Factor

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Limit - Reporting Limit

SED024003

Q

SDG No.: A1489

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.:

Lab Sample ID: A1489-18C

Matrix: (soil/water) SOIL

5.2 (g/mL) G Lab File ID: V1F0410

Level: (low/med) LOW

Sample wt/vol:

Date Received: 10/11/02

% Moisture: not dec. 15

Date Analyzed: 10/15/02

GC Column: DB-624 ID: 0.25 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (mL)

Soil Aliquot Volume: ____(uL)

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG

74-87-3Chloromethane		2 n2
75-01-4Vinyl Chloride	· L	U
74-83-9Bromomethane		รีบัง
75-00-3Chloroethane		UJ
75-35-41,1-Dichloroethene	i a	֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓
67-64-1Acetone	Ì	
75-15-0Carbon Disulfide	e	
75-09-2Methylene Chloride	2	
156-60-5trans-1,2-Dichloroethene	6	
75-34-31,1-Dichloroethane	1	
78-93-32-Butanone	1 6	1 -
156-59-2cis-1,2-Dichloroethene	6	
67-66-3Chloroform	6	
71-55-61,1,1-Trichloroethane	6	
56-23-5Carbon Tetrachloride	6	
107-06-21,2-Dichloroethane		ן ט
71-43-2Benzene	6	1 1
79-01-6Trichloroethene	6	U
78-87-51,2-Dichloropropane		U
75-27-4Bromodichloromethane		U I
10061-01-5cis-1,3-Dichloropropene	6	lu l
108-10-14-Methyl-2-pentanone	6	U
108-88-3Toluene		U
10061-02-6trans-1,3-Dichloropropene	6	
79-00-51,1,2-Trichloroethane		U
127-18-4Tetrachloroethene		U
591-78-62-Hexanone	6	
124-48-1Dibromochloromethane	6	
108-90-7Chlorobenzene	V	U
100-41-4Ethylbenzene	6	U
1330-20-7Xylene (Total)	6	U
100-42-5Styrene	6	U
75-25-2Bromoform	6	U
79-34-51,1,2,2-Tetrachloroethane	6	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

ELM OWNERD IN	EPA	SAMPLE	NO
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SED024003

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM Case No.:

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-18C

Sample wt/vol:

5.2 (g/mL) G

Lab File ID: V1F0410

Level: (low/med) LOW Date Received: 10/11/02

% Moisture: not dec. 15

Date Analyzed: 10/15/02

GC Column: DB-624 ID: 0.25 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (mL)

Soil Aliquot Volume: ____(uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=======================================	=======================================	== =====	=======================================	====
1				
2				
2				
· · · · · · · · · · · · · · · · · · ·				
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EPA SAMPLE NO.

SED024003

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-18A

Sample wt/vol:

30.1 (q/mL) G

Lab File ID:

S1D1527

Level: (low/med)

Date Received: 10/11/02

% Moisture: 15

LOW

decanted: (Y/N) N

Date Extracted: 10/18/02

Concentrated Extract Volume: 1000(uL) Date Analyzed: 10/21/02

Injection Volume: 1.0(uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q

95-57-8 541-73-1 106-46-7 95-50-1 95-48-7 108-60-1 106-44-5 621-64-7 98-95-3 78-59-1 105-67-9 120-83-2 120-82-1 91-20-3 111-91-1 87-68-3	Phenolbis(2-Chloroethyl)Ether2-Chlorophenol1,3-Dichlorobenzene1,4-Dichlorobenzene1,2-Dichlorobenzene2-Methylphenol2,2'-oxybis(1-Chloropropane)4-MethylphenolN-Nitroso-di-n-propylamineHexachloroethaneNitrobenzeneIsophorone2,4-Dimethylphenol2,4-Dichlorophenol2,4-TrichlorobenzeneNaphthalene4-Chloroanilinebis(2-Chloroethoxy)methaneHexachlorobutadiene	390 390 390 390 390 390 390 390 390 390	ממממממממממממממממממממממממממממממממממממממ
621-64-7 67-72-1	N-Nitroso-di-n-propylamine	390 390	บร
78-59-1 88-75-5 105-67-9	Isophorone 2-Nitrophenol 2,4-Dimethylphenol	390 390	U U
120-83-2 120-82-1 91-20-3	2,4-Dichlorophenol_ 1,2,4-Trichlorobenzene Naphthalene	390 390	01
111-91-1	bis(2-Chloroethoxy)methane Hexachlorobutadiene	390 390	Ω <u>1</u>
91-57-6 77-47-4 88-06-2	2-Methylnaphthalene Hexachlorocyclopentadiene 2,4,6-Trichlorophenol	390 390	
95-95-4 91-58-7 88-74-4	2,4,5-Trichlorophenol 2-Chloronaphthalene 2-Nitroaniline	780	7 7 7 0 7 7 0 7 7 0 0 7 7 0 0 0 0 0 0 0
208-96-8	DimethylphthalateAcenaphthylene2,6-Dinitrotoluene3-Nitroaniline	390 390	0 7 7 7 7 7 7 7
83-32-9	Acenaphthene	390	ע ק

SED024003

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: A1489

Matrix: (soil/water) SOIL Lab Sample ID: A1489-18A

Sample wt/vol: 30.1 (g/mL) G Lab File ID: S1D1527

Level: (low/med) LOW Date Received: 10/11/02

% Moisture: 15 decanted: (Y/N) N Date Extracted: 10/18/02

Concentrated Extract Volume: 1000(uL) Date Analyzed: 10/21/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

		
51-28-52,4-Dinitrophenol	780	U
100-02-74-Nitrophenol	780	
100-02-74-NICTOPHENOI		UJ
132-64-9Dibenzofuran		UT
121-14-22,4-Dinitrotoluene		UJ
84-66-2Diethylphthalate		บัง
7005-72-34-Chlorophenyl-phenylether_		しず
86-73-7Fluorene		[U]
100-01-64-Nitroaniline		
534-52-14,6-Dinitro-2-methylphenol	780	4
86-30-6N-Nitrosodiphenylamine_(1)		UJ
101-55-34-Bromophenyl-phenylether		01
118-74-1Hexachlorobenzene	I I	UJ
87-86-5Pentachlorophenol	780	
85-01-8Phenanthrene		UJ
120-12-7Anthracene		UJ
86-74-8Carbazole		UJ
84-74-2Di-n-butylphthalate	390	UJ
206-44-0Fluoranthene	43	
129-00-0Pyrene	100	J
85-68-7Butylbenzylphthalate	390	U.J
91-94-13,3'-Dichlorobenzidine	390	01
56-55-3Benzo (a) anthracene	43	J
218-01-9Chrysene	390	UJ
117-81-7bis(2-Ethylhexyl)phthalate	390	บร
117-01-7DIS(2-EdityTileAy1) picticated	240	
117-84-0Di-n-octylphthalate	-	UJ
205-99-2Benzo (b) fluoranthene		UJ
207-08-9Benzo(k) fluoranthene		UJ
50-32-8Benzo (a) pyrene		UJ
193-39-5Indeno(1,2,3-cd)pyrene		01
53-70-3Dibenzo(a,h)anthracene		_
191-24-2Benzo(g,h,i)perylene	390	UJ
		l
Cannot be separated from Diphenylamine		

(1) - Cannot be separated from Diphenylamine

OLM03.0

1F SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SED024003

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-18A

Sample wt/vol:

30.1 (g/mL) G

Lab File ID: S1D1527

Level:

(low/med)

MOL

Date Received: 10/11/02

% Moisture: 15

decanted: (Y/N) N

Date Extracted: 10/18/02

Concentrated Extract Volume:

Date Analyzed: 10/21/02

Injection Volume:

1.0(址)

Dilution Factor: 1.0

GPC Cleanup:

(Y/N) N

pH: ____

1000 (uL)

Number TICs found: 12

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	
		8.34	940	JB
1.	UNKNOWN	24.51	·	
2.	UNKNOWN		530	i 1
1	1,2-BENZENEDICARBOXYLIC ACID	24.99	480	
4.	UNKNOWN		1600	1 4
5. 28553-12-0	1,2-BENZENEDICARBOXYLIC ACID	25.21	570	
6. 28553-12-0	1,2-BENZENEDICARBOXYLIC ACID	25.34	1500	
7.	UNKNOWN	25.41	740	
8.	UNKNOWN	25.55	1400	
9.	UNKNOWN	25.64	630	
10.	UNKNOWN	25.77	950	
11.	UNKNOWN	26.01	630	
12.	UNKNOWN	20.01	• • • • • • • • • • • • • • • • • • • •	
13				
14.				
10.				
1 17.				
1 10.				
<u> </u>				
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1 4.5.				
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25.				
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27				
28.				
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30.				
			<u></u>	

EPA SAMPLE NO.

SED024003RE

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: A1489

Matrix: (soil/water) SOIL Lab Sample ID: A1489-18ARE

Sample wt/vol: 30.5 (g/mL) G Lab File ID: S2D0083

Level: (low/med) LOW Date Received: 10/11/02

% Moisture: 15 decanted: (Y/N) N Date Extracted:10/28/02

Concentrated Extract Volume: 1000(uL) Date Analyzed: 11/01/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

CAD NO.	(49/1 01)	ug/kg/ og/kg	¥
108-95-2	Phenol	380	บร
	bis(2-Chloroethyl)Ether		UJ
95-57-8	2-Chlorophenol		UJ
541-73-1	1,3-Dichlorobenzene		UJ
106-46-7	1,4-Dichlorobenzene		υζ
95-50-1	1,2-Dichlorobenzene	380	UJ
	2-Methylphenol		ロナ
108-60-1	2,2'-oxybis(1-Chloropropane	380	UJ
106-44-5	4-Methylphenol		UJ
621-64-7	N-Nitroso-di-n-propylamine		UJ
67-72-1	Hexachloroethane		UJ
98-95-3	Nitrobenzene	380	UJ
	Isophorone		UJ
88-75-5	2-Nitrophenol	_ 380	U子
105-67-9	2,4-Dimethylphenol		UĴ
120-83-2	2,4-Dichlorophenol		UT
120-82-1	1,2,4-Trichlorobenzene	_ 380	UJ
91-20-3	Naphthalene	380	บป
106-47-8	4-Chloroaniline	380	បែវិ
111-91-1	bis(2-Chloroethoxy)methane	.380	ן לַּט
87-68-3	Hexachlorobutadiene		ロナ
59-50-7	4-Chloro-3-Methylphenol	380	
91-57-6	2-Methylnaphthalene	380	ロナ
77-47-4	Hexachlorocyclopentadiene	380	
88-06-2	2,4,6-Trichlorophenol	_ 380	
95-95-4	2,4,5-Trichlorophenol	780	
91-58-7	2-Chloronaphthalene	_ 380	U 1
	2-Nitroaniline	780	UJ
131-11-3	Dimethylphthalate	<u> </u>	
	Acenaphthylene	45	
	2,6-Dinitrotoluene	380	
	3-Nitroaniline	780	
83-32-9	Acenaphthene	380	UJ

FORM I SV-1

OLM03.0

SED024003RE

Lab Name: MITKEM CORPORATION

Contract:

Case No.:

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-18ARE

Sample wt/vol:

Lab Code: MITKEM

30.5 (g/mL) G

Lab File ID: S2D0083

Level:

(low/med) LOW Date Received: 10/11/02

% Moisture: 15

decanted: (Y/N) N

Date Extracted: 10/28/02

Concentrated Extract Volume:

Date Analyzed: 11/01/02

Injection Volume: 1.0(uL)

Dilution Factor: 1.0

GPC Cleanup:

(Y/N) N

pH:

CAS NO.	COMPOUND	CONCENTRATI (ug/L or ug		Q
	2,4-Dinitroph			UJ UJ
132-64-9	Dibenzofuran		380	740

1000 (uL)

	1 31-28-32,4-Diffictophenor	/00/03 /
	100-02-74-Nitrophenol	780 [0]
	132-64-9Dibenzofuran	380 U T
	121-14-22,4-Dinitrotoluene	380 U J
	84-66-2Diethylphthalate	380 0 1
	7005-72-34-Chlorophenyl-phenylether	380 U√
	86-73-7Fluorene	380 UJ
	100-01-64-Nitroaniline	780 U J
	534-52-14,6-Dinitro-2-methylphenol	780 U T
	86-30-6N-Nitrosodiphenylamine_(1)	380 U.T
	101-55-34-Bromophenyl-phenylether	380 0 1
	118-74-1Hexachlorobenzene	380 U 🗸 📗
	87-86-5Pentachlorophenol	780 ひ式
	85-01-8Phenanthrene	140 J
	120-12-7Anthracene	59 J
	86-74-8Carbazole	380 U.J
	84-74-2Di-n-butylphthalate	380 リナ
	206-44-0Fluoranthene	200 J
	129-00-0Pyrene	670 1
	85-68-7Butylbenzylphthalate	380 U J
	91-94-13,3'-Dichlorobenzidine	380 0 丁
i	56-55-3Benzo(a)anthracene	180 J
į	218-01-9Chrysene	l80 J
	117-81-7bis(2-Ethylhexyl)phthalate_	81 J
	117-84-0Di-n-octylphthalate	1200
	205-99-2Benzo(b)fluoranthene	140 J
ľ	207-08-9Benzo(k)fluoranthene	75 J
	50-32-8Benzo(a)pyrene	180 J
Ì	193-39-5Indeno(1,2,3-cd)pyrene	380 U J
	53-70-3Dibenzo(a,h)anthracene	380 U J
ł	191-24-2Benzo(g,h,i)perylene	380 U 🛨

- Cannot be separated from Diphenylamine

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SED024003RE

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-18ARE

sample wt/vol:

30.5 (g/mL) G

S2D0083 Lab File ID:

Level: (low/med)

Date Received: 10/11/02

LOW

% Moisture: 15

decanted: (Y/N) N

Date Extracted:10/28/02

Concentrated Extract Volume:

1000 (uL)

Date Analyzed: 11/01/02

Injection Volume:

1.0 (uL)

Dilution Factor: 1.0

GPC Cleanup:

(Y/N) N

pH: ____

Number TICs found: 16

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	
19	UNKNOWN PHENOL, 4,4'-(1-METHYLETHYLI OCTADECANOIC ACID, BUTYL EST UNKNOWN UNKNOWN 1,2-BENZENEDICARBOXYLIC ACID UNKNOWN UNKNOWN UNKNOWN UNKNOWN UNKNOWN UNKNOWN UNKNOWN UNKNOWN UNKNOWN UNKNOWN UNKNOWN UNKNOWN	7.40 19.86 19.91 21.31 23.39 23.67	850 1200	05 00 00 00 00 00 00 00 00 00 00 00 00 0

U.S. EPA - CLP

1 INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

		INO	RGANIC ANALY	SIS DATA	SHEET		EPA SAMPLE		
b Name:	MITKEM_CO	ORPORATION	C	ontract:			SED02	24003	
ıb Code:	MITKEM	Case No.:		SAS No.:	:		SDG No.:	A1489B_	
atrix (soil/wa	ater):	SOIL			Lab Samp	ole ID:	A 1489-	18A	
evel (low/me	d):	MED			Date Rece	eived:	10/11/02	2	
Solids:		85.0							
	Concentration	Units (ug/L or mg.	kg dry weight):				MG/KG		
	CAS No.	Analyte	Concentration	С	Q	М			
						-			
	_7429-90-5	Aluminum				_NR			
	_7440-36-0	Antimony	i e			NR.			
	_7440-38-2	Arsenic				NR			
	_7440-39-3	Barium				NR			
	_7440-41-7	Beryllium				NR			
	_7440-43-9	Cadmium				NR.			
	_7440-70-2	Calcium				NR NB			
	_7440-47-3	Chromium				NR			
	_7440-48-4	Cobalt				NR			
	_7440-50-8	Copper				NR			
	_7439-89-6	Iron				_NR			
	_7439-92-1	Lead		 -		NR			
	_7439-95-4	Magnesium		 -		NR			
	_7439-96-5	Manganese		 - -		NR			
	_7439-97-6	Mercury	 			NR NR			
	_7440-02-0	Nickel	- 		<u> </u>	NR.			
	_7440-09-7	Potassium				NR NR			
	_7782-49-2	Selenium	 			NR NR			
	7440-22-4	Silver	- 	- - -		t 1			
	7440-23-5	Sodium				NR NR			
	_7440-28-0	Thallium				NR NR			
	_7440-62-2	Vanadium				NR NR			
	7440-66-6	Zinc	0.17	Ū		CA			
		Cyanide	0.1/_			-CA			
lor Before:		Clari	ty Before:				Texture:		
olor After:			ty After:				Artifacts:		
			.,						
mments:									

FORM I - IN

ILM04.1

Mitkem Corporation

CLIENT:

GEI Consultants, Inc.

Client Sample ID: SED024003

Lab DD:

A1489-18

Date: 08-Nov-02

Project: Keyspan

Collection Date: 10/09/02 16:05

Analyses	Result	Qual	Limit	Units	DF	Date Analyzed
HARDNESS BY CALCULATION		SM234	0_S			
Hardness, Calcium/Magnesium (As CaCO3)	36000		230	mg/Kg CaCO3	1	10/24/02 15:38
SOIL AND WASTE PH		SW904	SC_S			
pH	7.7		1.0	pH Units	1	10/21/02 0:00

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

DF - Dilution Factor

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Limit - Reporting Limit

1A VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SED0240330

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-19C

Sample wt/vol:

5.1 (g/mL) G

Lab File ID: V1F0411

Level: (low/

(low/med) LOW

Date Received: 10/11/02

% Moisture: not dec. 19

Date Analyzed: 10/15/02

GC Column: DB-624

ID: 0.25 (mm)

Dilution Factor: 1.0

CONCENTRATION UNITS:

Soil Extract Volume: (mL)

Soil Aliquot Volume: (uL)

Soft Affquot Volume: _____(u

(ug/L or ug/Kg) UG/KG 0 CAS NO. COMPOUND 74-87-3------Chloromethane 6 U T 6 U 75-01-4-----Vinyl Chloride 6 U T 74-83-9-----Bromomethane 6 UJ 75-00-3-----Chloroethane 6 U 75-35-4----1,1-Dichloroethene 6 J 67-64-1----**A**cetone 6 U 75-15-0-----Carbon Disulfide 2 JB 75-09-2-----Methylene Chloride 6 U 156-60-5----trans-1,2-Dichloroethene 6 U 75-34-3-----1,1-Dichloroethane_ 6 U 78-93-3-----2-Butanone_ 156-59-2----cis-1,2-Dichloroethene 6 U 6 U 67-66-3-----Chloroform 71-55-6----1,1,1-Trichloroethane 6 U 56-23-5-----Carbon Tetrachloride_ 6 U 6 U 107-06-2-----1,2-Dichloroethane 6 U 71-43-2----Benzene 6 U 79-01-6-----Trichloroethene 6 U 78-87-5-----1,2-Dichloropropane_ 6 U 75-27-4----Bromodichloromethane 6 U 10061-01-5----cis-1,3-Dichloropropene_ 6 U 108-10-1-----4-Methyl-2-pentanone_ 6 U 108-88-3-----Toluene 6 Ū 10061-02-6----trans-1,3-Dichloropropene_ 6 Ū 79-00-5-----1,1,2-Trichloroethane_ 6 U 127-18-4-----Tetrachloroethene_ 6 U 591-78-6----2-Hexanone 6 U 124-48-1-----Dibromochloromethane 6 U 108-90-7-----Chlorobenzene 6 U 100-41-4-----Ethylbenzene_ U 1330-20-7------Xylene (Tota $\overline{1}$) 6 6 U 100-42-5-----Styrene 6 U 75-25-2-----Bromoform 6 U 79-34-5-----1,1,2,2-Tetrachloroethane

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

40330
40330

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM Case No.: SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-19C

Sample wt/vol:

5.1 (g/mL) G

Lab File ID: V1F0411

Level: (low/med) LOW

Date Received: 10/11/02

% Moisture: not dec. 19

Date Analyzed: 10/15/02

GC Column: DB-624 ID: 0.25 (mm)

Dilution Factor: 1.0

Soil Extract Volume: ____(mL)

Soil Aliquot Volume: ____(uL)

CONCENTRATION UNITS: (uq/L or ug/Kg) ug/Kg

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	
=======================================	=======================================			
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2				
4.				
5				
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26.				
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30				

SED0240330

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.:

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-19A

Sample wt/vol: 30.2 (g/mL) G

Lab File ID: S1D1528

Level: (low/med) LOW

Date Received: 10/11/02

% Moisture: 19 decanted: (Y/N) N Date Extracted:10/18/02

Concentrated Extract Volume: 1000(uL) Date Analyzed: 10/21/02

Injection Volume: 1.0(uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

		CONCENTRA			
CAS NO.	COMPOUND	(ug/L or	ug/Kg)	UG/KG	Q
108-95-2	Phenol			400	U
111-44-4	bis(2-Chloroetl	nyl)Ether		400	ַ ען
	2-Chlorophenol			400	יוֹט
541-73-1	1,3-Dichlorober	izene		400	ַּט
106-46-7	1,4-Dichlorober	nzene		400	ט
95-50-1	1,2-Dichlorober	nzene		400	U
95-48-7	2-Methylphenol	<u> </u>		400	U
108-60-1	2,2'-oxybis(1-0	hloropropar	ie)	400	ļυ
106-44-5	4-Methylphenol			400	U
	N-Nitroso-di-n-	propylamine	=	400	טן
67-72-1	Hexachloroethar	ie .	_	400	U
98-95-3	Nitrobenzene			400	U
78-59-1	Isophorone			400	υ
	2-Nitrophenol			400	U
	2,4-Dimethylphe	enol	_	400	U
	2,4-Dichlorophe			400	שׁ
120-82-1	1,2,4-Trichlore	benzene		400	שו
	Naphthalene	-	- -	400	U
	4-Chloroani lin e	<u> </u>		400	ט
	bis(2-Chloroeth			400	1
	Hexachlorobutad			400	U
	4-Chloro-3-Meth			400	U
	2-Methylnaphtha		_	400	U
77-47-4	Hexachlorocyclo	pentadiene	— j	400	U
	2,4,6-Trichloro			400	Ū
	2,4,5-Trichloro			820	U
	2-Chloronaphtha			400	U
88-74-4	2-Nitroaniline			820	U
131-11-3	Dimethylphthalā	te		400	U
	Acenaphthylene			400	U
	2,6-Dinitrotolu	ene		400	U
	3-Nitroaniline	· · · · · · · · · · · · · · · · · · ·		820	U
	Acenaphthene			400	Ū

SED0240330

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM Case No.:

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-19A

Sample wt/vol: 30.2 (g/mL) G Lab File ID: S1D1528

Level: (low/med) LOW

Date Received: 10/11/02

% Moisture: 19 decanted: (Y/N) N Date Extracted:10/18/02

Concentrated Extract Volume: 1000(uL)

Date Analyzed: 10/21/02

Injection Volume: 1.0(uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	(ug/L or	ug/Kg)	UG/KG	Q
51-28-5	2,4-Dinitropheno	 ol		820	บ
	4-Nitrophenol		- -	820	
	Dibenzofuran			400	,
121-14-2	2,4-Dinitrotolue	ene		400	ប
84-66-2	Diethylphthalate	<u> </u>	 }	400	שו
7005-72-3	4-Chlorophenyl-p	henylether	·	400	U
86-73-7	Fluorene	_		400	U
100-01-6	4-Nitroaniline			820	ប
534-52-1	4,6-Dinitro-2-me	thylphenol	- 	820	ប
86-30-6	N-Nitrosodipheny	rlamine (1)	_	400	Įυ
101-55-3	4-Bromophenyl-ph	enylet h er		400	U
	Hexachlorobenzen			400	U
87-86-5	Pentachloropheno	1	_	820	ซ
	Phenanthrene			400	บ
	Anthracene			400	Įυ
	Carbazole			400	Ū
	Di-n-butylphthal	ate		400	
	Fluoranthene			42	
129-00-0			1	110	
85-68-7	Butylbenzylphtha	late		400	U
91-94-1	3,3'-Dichloroben	zidine	1	400	U
	Benzo(a)anthrace	ne	}	44	J
218-01-9				400	U
	bis(2-Ethylhexyl		_	400	U
117-84-0	Di-n-octylphthal	ate		180	J
	Benzo (b) fluorant		_	400	U
207-08-9	Benzo(k) fluoranti	hene	_	400	U
50-32-8	Benzo(a)pyrene_			400	Ū
	Indeno(1, 2, 3-cd)	pyrene		400	U
	Dibenzo(a,h)anth			400	Ū
191-24-2	Benzo(g,h,i)pery	lene		400	U

FORM I SV-2

OLM03.0

1F SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SED0240330

Contract: Lab Name: MITKEM CORPORATION

SAS No.:

SDG No.: A1489

Case No.: Lab Code: MITKEM

Lab Sample ID: A1489-19A

Matrix: (soil/water) SOIL

Sample wt/vol:

30.2 (g/mL) G

S1D1528 Lab File ID:

Level: (low/med)

LOW

Date Received: 10/11/02

% Moisture: 19

decanted: (Y/N) N

Date Extracted: 10/18/02

Concentrated Extract Volume: 1000(uL)

Date Analyzed: 10/21/02

Injection Volume:

1.0(uL)

Dilution Factor: 1.0

GPC Cleanup:

(A/N)

pH: ___

Number TICs found: 12

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	
=======================================		8.34	1200	JB 1
1.	UNKNOWN	11.22	180	
2.	UNKNOWN UNKNOWN	24.55	700	J
3.	_	24.91	460	J
4.	UNKNOWN	25.12	1000	J
5.	UNKNOWN 1,2-BENZENEDICARBOXYLIC ACID		450	
6. 28553-12-0		25.34	1200	
7.	UNKNOWN	25.41	520	
8.	UNKNOWN	25.54	1000	
9.	UNKNOWN	25.64	490	
10.	UNKNOWN	25.77	710	
11.	UNKNOWN	25.99	520	J
12.	UNKNOWN	23.33		
13		- 		
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10.				
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20				
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24.				
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U.S. EPA - CLP

1 INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SED	024	033	0	

Lab Name:	MITKEM CO	ORPORATION	Con	tract:			SED024	0330
Lab Code:	MITKEM	Case No.:		SAS No.:			SDG No.:	A1489B_
Matrix (soil/wa	ater):	SOIL		L	ab Samp	ole ID:	A1489-1	9A
evel (low/me	d):	MED		E	Date Rece	eived:	10/11/02	<u></u>
% Solids:		81.0						
	Concentration	Units (ug/L or mg	/kg dry weight):				MG/KG	
	CAS No.	Analyte	Concentration	С	Q	М		
	_7429-90-5	Aluminum	-			_NR		
	7440-36-0	Antimony				NR		
	7440-38-2		l l			_NR		
	_7440-39-3	Barium				NR		
	_7440-41-7	Beryllium				NR		
	_7440-43-9	Cadmium		_	-	NR		
	7440-70-2	Calcium				NR		
	_7440-47-3	Chromium				NR		
	_7440-48-4	Cobalt				NR		
	_7440-50-8	Соррег	_			NR		
	_7439-89-6	Iron		-		NR		
	_7439-92-1	Lead				NR		
	_7439-95-4	Magnesium				NR		
	_7439-96-5	Manganese		_		NR		
	_7439-97-6	Mercury	l l		_	NR		
	_7440-02-0	Nickel				NR		
	_7440-09-7	Potassium				NR		
	_7782-49-2	Selenium				NR		
	_7440-22-4	Silver				_NR		
	_7440-23-5	Sodium				NR		
	_7440-28-0	Thallium				_NR		
	_7440-62-2	Vanadium				_NR		
	_7440-66-6	Zinc				NR		
	<u> </u>	Cyanide	0.17	U		CA		
			. D. C				Texture:	
Color Before:		Clan	ity Before:					
Color After:	-	Clar	ity After:				Artifacts:	
Comments:								

Mitkem Corporation

CLIENT:

Lab ID:

GEI Consultants, Inc.

Client Sample ID: SED0240330

A1489-19

Date: 08-Nov-02

Project: Keyspan

Collection Date: 10/09/02 16:10

Analyses	Result	Qual	Limit	Units	DF	Date Analyzed
HARDNESS BY CALCULATION		SM234	0_S			
Hardness, Calcium/Magnesium (As CaCO3)	5900		240	mg/Kg CaCO3	1	10/24/02 15:38
SOIL AND WASTE PH		SW904	5C_S			
Нα	7.8		1.0	pH Units	1	10/21/02 0:00

Qualifiers:

ND - Not Detected at the Reporting Limit

I - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

DF - Dilution Factor

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Limit - Reporting Limit

SED0250003

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.:

: SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-16C

Sample wt/vol:

5.0 (g/mL) G Lab File ID: V1F0319

Level: (low/med) LOW Date Received: 10/11/02

% Moisture: not dec. 21
Date Analyzed: 10/12/02

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (mL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

CAS NO.	COMBOOND (no	3/L OI	ug/kg)	UG/KG	Q
74-87-3	Chloromethane	•			6 U
	Vinyl Chloride				6 U
	Bromomethane				6 U
	Chloroethane				6 U
	1,1-Dichloroethene				6 U
67-64-1					5 J
	Carbon Disulfide				6 U
	Methylene Chloride		 [3 JB
156-60-5	trans-1,2-Dichloroet	hene			6 U
	1,1-Dichloroethane				6 U
	2-Butanone				6 U
	cis-1,2-Dichloroethe	ne			6 U
	Chloroform				6 U
71-55-6	1,1,1-Trichloroethar	ie			6 U
56-23-5	Carbon Tetrachloride	<u></u>			6 U
107-06-2	1,2-Dichloroethane				6 U
71-43-2					6 U
79-01-6	Trichloroethene				6 U
78-87-5 	1,2-Dichloropropane				6 U
	Bromodichloromethane				6 U
10061-01-5	cis-1,3-Dichloroprop	ene			6 U
	4-Methyl-2-pentanone			1	6 ប ា
108-88-3					6 U
10061-02-6	trans-1,3-Dichloropr	opene		(5 (U
79-00-5	1,1,2-Trichloroethan	ie			5 บ
127-18-4	Tetrachloroethene				5 U
591-78-6	2-Hexanone			(5 U
124-48-1	Dibromochloromethane		i		5 U
108-90-7	Chlorobenzene				5 U
	Ethylbenzene				5 U
	Xylene (Total)				5 U
100-42-5	Styrene				5 U
75-25-2	Bromoform			(5 U
79-34-5	1,1,2,2-Tetrachloroe	thane		(5 U
					_

VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

SED0250003	
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Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM Case No.: SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-16C

Sample wt/vol: 5.0 (g/mL) G

Lab File ID: V1F0319

Level: (low/med) LOW

Date Received: 10/11/02

% Moisture: not dec. 21

Date Analyzed: 10/12/02

GC Column: DB-624 ID: 0.25 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (mL)

Soil Aliquot Volume: ____(uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q =====
1				
4:				
5				
9.				
11				
14.				
15. 16. 17.				
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20.				
24.				
25. 26. 27.				
29.				
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SED0250003

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM Case No.: SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-16A

Sample wt/vol: 30.6 (g/mL) G

Lab File ID: S3B9963

Level: (low/med) LOW Date Received: 10/11/02

% Moisture: 21

decanted: (Y/N) N Date Extracted:10/18/02

Concentrated Extract Volume:

1000 (uL) Date Analyzed: 10/24/02

Injection Volume: 1.0(uL)

Dilution Factor: 1.0

CONCENTRATION UNITS:

GPC Cleanup: (Y/N) N pH: ___

CAS NO.		ig/L or ug/Kg)		Q
108-95-2			410	ט
111-44-4	bis(2-Chloroethyl)	Ether	410	υ
95-57-8	2-Chlorophenol		410	U
541-73-1	1.3-Dichlorobenzene	<u> </u>	410	U
106-46-7	1,4-Dichlorobenzene		410	ט
95-50-1	1,2-Dichlorobenzene		410	U
95-48-7	2-Methylphenol		410	U
108-60-1	2,2' <i>-oxy</i> bis(1- Chlo r	opropane)	410	U
106-44-5	4-Methylphenol	- '	410	υ
621-64-7	N-Nitroso-di-n-prop	ylamine	410	U
67-72-1	Hexachloroethane		410	υ
98-95-3	Nitrobenzene		410	Ū
78-59-1	Isophorone		410	ប
88-75-5	2-Nitrophenol		410	υ
105-67-9	2,4-Dimethylphenol		410	U
120-83-2	2,4-Dichlorophenol		410	U
120-82-1	1,2,4-Trichlorobenz	ene	410	U
91-20-3	Naphthalene		410	U
106-47-8	4-Chloroaniline		410	UJ
111-91-1	bis(2-Chloroethoxy)	methane	410	
87-68-3	Hexachlorobutadiene	-	410	Ū
59-50-7	4-Chloro-3-Methylph	enol	410	υ
91-57-6	2-Methylnaphthalene		410	υ
77-47-4	Hexachlorocyclopent	adiene	410	U
88-06-2	2,4,6-Trichlorophene	ol	410	U
95-95-4	2,4,5-Trichlorophen	01	830	U
91-58-7	2-Chloronaphthalene		410	Ū
88-74-4	2-Nitroaniline		830	U
131-11-3	Dimethylphthalate	······································	410	Ū
208-96-8	Acenaphthylene		110	
606-20-2	2,6-Dinitrotoluene		410	
99-09-2	3-Nitroaniline		830	_
83-32-9	Acenaphthene			Ū
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1C SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SED0250003

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.: SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-16A

Sample wt/vol:

30.6 (g/mL) G

Lab File ID: S3B9963

Level: (low/med)

LOW

Date Received: 10/11/02

% Moisture: 21

decanted: (Y/N) N

Date Extracted:10/18/02

Concentrated Extract Volume: 1000(uL)

Date Analyzed: 10/24/02

Injection Volume:

1.0(uL)

Dilution Factor: 1.0

CONCENTRATION UNITS:

GPC Cleanup: (Y/N) N

pH: ____

nylether ylphenol mine (1) ylether	_	830 410 410 410 410 830 830 410 410	0 0 0 0 0 0 0 0
nylether	_	410 410 410 410 830 830 410 410	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
nylether	_	410 410 410 830 830 410 410	0 0 0 0 0 0 0 0
nylether	_	410 410 410 830 830 410 410	0 0 0 0 0
nylether	_	410 410 830 830 410 410	0 0 0 0 0 0
/lphenol	_	410 830 830 410 410	0 0 0 0 0 0
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

Lab Name: MITKEM CORPORATION

Contract:

SED0250003

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-16A

Sample wt/vol:

30.6 (g/mL) G

Lab File ID: S3B9963

Level:

(low/med) LOW Date Received: 10/11/02

% Moisture: 21

decanted: (Y/N) N

Date Extracted: 10/18/02

Concentrated Extract Volume: 1000(uL)

Date Analyzed: 10/24/02

Injection Volume: 1.0(uL)

Dilution Factor: 1.0

GPC Cleanup:

(Y/N) N

pH: ____

Number TICs found: 17

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	~~
1.	UNKNOWN	5.61	i	
2. 872-05-9	1-DECENE	11.67	1800	NJ
3. 2245-38-7	NAPHTHALENE, 1,6,7-TRIMETHYL	12.26	240	CN
4.	UNKNOWN	13.82	510	Į J ∣
5.	UNKNOWN	15.94	300	J
6. 2531-84-2	PHENANTHRENE, 2-METHYL-	16.00	600	NJ
7. 57-10-3	HEXADECANOIC ACID	16.18	320	NJ
8.	UNKNOWN PAH	17.33	250	IJ [
9. 80-05-7	PHENOL, 4,4'-(1-METHYLETHYLI)	17.88	1000	NJ [
10. 243-17-4	11H-BENZO[B] FLUORENE	18.27	170	NJ
11.	UNKNOWN	19.20	220	J
12. ·	UNKNOWN	20.48	210	
13. 3878-45-3	PHOSPHINE SULFIDE, TRIPHENYL	20.96	200	
14.	UNKNOWN	21.90	360	
15.	UNKNOWN	23.27	270	
16.	UNKNOWN	23.96	230	J
17.	UNKNOWN	29.08	3200	J
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1 INORGANIC ANALYSIS DATA SHEET

	EPA SAMPLE NO.	
Γ		
	SED0250003	

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Lab Name:	мпкем со	ORPORATION	Cont	ract:			SED0250003
Lab Code:	мпкем	Case No.:		SAS No.:			SDG No.: A1489A
		SOR		T	ab Sam	ole ID:	A1489-16A
Matrix (soil/wa	iter):	SOIL			au Sam	pic ID.	71407-1071
Level (low/med	d):	MED		D	ate Rec	eived:	10/11/02
% Solids:		79.0					
	Concentration	Units (ug/L or mg	/kg dry weight):				MG/KG
	CAS No.	Analyte	Concentration	С	Q	М	
ţ							
	_7429-90-5	Aluminum	-			NR	
	7440-36-0	Antimony				NR	
Ì	7440-38-2	Arsenic				NR	
ļ	_7440-39-3	Barium				NR	
	7440-41-7	Beryllium				NR	
	_7440-43-9	Cadmium				NR	
	7440-70-2	Calcium				NR	
	_7440-47-3	Chromium				NR	
	_7440-48-4	Cobalt				NR	
	_7440-50-8	Copper				NR	
	_7439-89-6	Iron				NR	
ļ	7439-92-1	Lead				NR	
ļ	_7439-95-4	Magnesium				NR	
	_7439-96-5	Manganese				NR	
	_7439-97-6	Mercury				NR	
	_7440-02-0	Nickel				NR	
	_7440-09-7	Potassium				NR.	
	_7782-49-2	Selenium				NR	
	_7440-22-4	Silver				NR	
	_7440-23-5	Sodium				NR	
	_7440-28-0	Thallium				NR	
	_7440-62-2	Vanadium				NR	
	_7440-66-6	Zinc		 		NR	
İ		Cyanide	0.18	UJ	*N	CA	
							Texture:
Color Before:		Clar	ity Before:				
Color After:	21, 22 - 27 - 1	Clar	ity After:				Artifacts:
Comments:							

Mitkem Corporation

CLIENT:

GEI Consultants, Inc.

Client Sample ID: SED0250003

Lab ID:

A1489-16

Date: 08-Nov-02

Project: Keyspan

Collection Date: 10/09/02 15:40

Analyses	Result	Qual	Limit	Units	DF	Date Analyzed
HARDNESS BY CALCULATION Hardness, Calcium/Magnesium (As CaCO3)	94000	SM234	0_S 230	mg/Kg CaCO3	1	10/24/02 15:38
SOIL AND WASTE PH	7.9	SW904	5C_S	pH Units	1	10/21/02 0:00

Qualifiers:

ND - Not Detected at the Reporting Limit

I - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

DF - Dilution Factor

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Limit - Reporting Limit

1A VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SED0250330

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: A1489

Matrix: (soil/water) SOIL Lab Sample ID: A1489-17C

Sample wt/vol: 5.3 (g/mL) G Lab File ID: V1F0409

Level: (low/med) LOW Date Received: 10/11/02

% Moisture: not dec. 14 Date Analyzed: 10/15/02

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (mL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG

CAS NO.	COMPOUND	(ug/L or	ug/Kg)	UG/KG	Q
75-01-4	Chloromethane Vinyl Chloride Bromomethane				5 U J 5 U 5 U J
75-00-3 75-35-4 67-64-1	Chloroethane 1,1-Dichloroethe Acetone				5 U T 5 U 9
75-09-2 156-60-5 75-34-3	Carbon Disulfide Methylene Chlori trans-1,2-Dichlo 1,1-Dichloroetha	de roethene_			4 JB
156-59-2 67-66-3 71-55-6	2-Butanone cis-1,2-Dichloro Chloroform 1,1,1-Trichloroe	thane			55555555555555555555555555555555555555
107-06-2 71-43-2 79-01-6	Trichloroethene	ne			5 U 5 U 5 U
75-27-4 10061-01-5 108-10-1	1,2-Dichloroprop Bromodichloromet cis-1,3-Dichloro 4-Methyl-2-penta	hane_ propene_			5 U 5 U 5 U
79-00-5 127-18-4	trans-1,3-Dichlo 1,1,2-Trichloroe Tetrachloroethen	thane			5 U 5 U
124-48-1 108-90-7	2-Hexanone Dibromochloromet Chlorobenzene Ethylbenzene	hane			5 U 5 U 5 U 5 U 5 U
1330-20-7 100-42-5 75-25-2	Xylene (Total) Styrene	oroethane			5 U 5 U 5 U 5 U
79-34-5	1,1,2,2-1ectaciii	Oroechane_			

FORM I VOA

OLM03.0

EPA SAMPLE NO.

SDG No.: A1489

Lab File ID: V1F0409

VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

SED0250330 Lab Name: MITKEM CORPORATION Contract:

SAS No.:

Lab Code: MITKEM Case No.:

Lab Sample ID: A1489-17C Matrix: (soil/water) SOIL

5.3 (g/mL) G Sample wt/vol: Date Received: 10/11/02

Level: (low/med) LOW Date Analyzed: 10/15/02

% Moisture: not dec. 14

Dilution Factor: 1.0 GC Column: DB-624 ID: 0.25 (mm)

Soil Aliquot Volume: ____(uL) Soil Extract Volume: ____(mL)

> CONCENTRATION UNITS: (uq/L or ug/Kg) ug/Kg

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
======================================	======================================			
1				
2				
3				
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8				
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SED0250330

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM Case No.: SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-17A

Sample wt/vol:

30.4 (g/mL) G

Lab File ID: S1D1529

Level: (low/med) LOW Date Received: 10/11/02

% Moisture: 14

decanted: (Y/N) N

Date Extracted: 10/18/02

Concentrated Extract Volume:

1000 (uL)

Date Analyzed: 10/22/02

Injection Volume:

1.0(uL)

COMPATRI

Dilution Factor: 1.0

CONCENTRATION UNITS:

GPC Cleanup: (Y/N) N

pH:

CAS NO.	COMPOUND (ug/L or	ug/Kg)	UG/KG	Q
108-95-2	Phenol			380	ט ט
111-44-4	bis(2-Chloroethyl)	Ether			บับ
95-57-8	2-Chlorophenol				υ
541-73-1	1,3-Dichlorobenzen	e			บร
106-46-7	1,4-Dichlorobenzen	e		380	บร
	1,2-Dichlorobenzen				UJ
	2-Methylphenol			380	
	2,2'-oxybis(1-Chlor	ropropane	e)	380	UJ
106-44-5	4-Methylphenol		1	380	ָ ט
621-64-7	N-Nitroso-di-n-prop	ylamine	_	380	UJ
	Hexachloroethane	-		380	UJ
98-95-3	Nitrobenzene			380	UJ
78-59-1	Isophorone			380	UJ
88-75-5	2-Nitrophenol			380	U
105-67-9	2,4-Dimethylphenol		1	380	ľυ
120-83-2	2,4-Dichlorophenol			380	ប
120-82-1	1,2,4-Trichlorobenz	ene	_	380	ប្រ
	Naphthalene			380	UJ
	4-Chloroaniline		~		UJ
111-91-1	bis(2-Chloroethoxy)	methane		380	UJ
	Hexachlorobutadiene		-		UJ
	4-Chloro-3-Methylph			380	
91-57-6	2-Methylnaphthalene	·	_	380	UJ
	Hexachlorocyclopent		i	380	UJ
88-06-2	2,4,6-Trichlorophen	ol	_	380	U
95-95-4	2,4,5-Trichlorophen	ol		770	Ū
	2-Chloronaphthalene			380	UJ
88-74-4	2-Nitroaniline	· · · · · ·	~	770	UJ
131-11-3	Dimethylphthalate		_	380	UJ
	Acenaphthylene		_1	380	UJ
	2,6-Dinitrotoluene		_	380	ひ丁
	3-Nitroaniline		~		UT
	Acenaphthene	·	~!	380	

SED0250330

Lab Name: MITKEM CORPORATION

Contract:

Case No.:

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-17A

Sample wt/vol:

Lab Code: MITKEM

30.4 (g/mL) G

Lab File ID: S1D1529

Level:

(low/med) TOM Date Received: 10/11/02

% Moisture: 14

decanted: (Y/N) N

Date Extracted: 10/18/02

Concentrated Extract Volume:

Injection Volume: 1.0(uL)

1000 (uL)

Date Analyzed: 10/22/02

Dilution Factor: 1.0

CONCENTRATION UNITS:

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	(ug/L or ug		G	Q
	2,4-Dinitroph	enol		770	ט
	4-Nitrophenol		_}	770	U
132-64-9	Dibenzofuran		_	380	UJ
121-14-2	2,4-Dinitroto	luene	-	380	UJ
	Diethylphthala		-		UJ
	4-Chloropheny		-		UJ
86-73-7	Fluorene 1	• -	-		UJ
100-01-6	4-Nitroanilin	9	-1		UJ
534-52-1	4,6-Dinitro-2	methylphenol	-}	770	
	N-Nitrosodiphe		<u>-</u>	380	UJ
101-55-3	4-Bromophenyl	phenylether	-		UJ
118-74-1	Hexachloroben	zene	=		U T
87-86-5	Pentachlorophe	enol	- [770	ט י
85-01-8	Phenanthrene		-]	66	
	Anthracene	<u> </u>	-	380	_
	Carbazole		- [380	
	Di-n-butylphth	alate	-1	380	
206-44-0	Fluoranthene		-}	160	
129-00-0			·}	370	
	Butylbenzylpht	halate	·}	380	
91-94-1	3,3'-Dichlorok	enzidine	·1	380	
56-55-3	Benzo(a)anthra	cene	· [140	
218-01-9	Chrysene			130	
117-81-7	bis(2-Ethylhex	vllphthalate	•]	380	
117-94-0	Di-n-octylphth	y1/phαπαταcc		380	υ -
205-99-2	Benzo(b) fluora	nthene		76	্ব
207-02-2	Benzo(k) fluora	nthene		380	
50-22-8	Benzo(k) Huora	IICHEHE	1	100	_
103_20_5	Indeno(1,2,3-c	d) pyrene	1	380	
53-70-3	Dibenzo(a,h)an	thracene	1	380	
	Benzo(q,h,i)pe		1	380	
TJT-74-7	beizo(g, n, 1) pe	г. Х.тепе		300	U
- Cannot be	separated from Di	ohenvlamine	1	1_	

1F SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

Lab Name: MITKEM CORPORATION

Contract:

SED0250330

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-17A

Sample wt/vol:

Lab File ID:

S1D1529

30.4 (g/mL) G

Date Received: 10/11/02

Level: (low/med)

LOW

% Moisture: 14

decanted: (Y/N) N

Date Extracted: 10/18/02

Concentrated Extract Volume: 1000(uL)

Date Analyzed: 10/22/02

Injection Volume: 1.0(uL)

Dilution Factor: 1.0

GPC Cleanup:

(Y/N) N

pH: ___

Number TICs found: 4

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q =====
1. 2. 3. 80-05-7	UNKNOWN PHENOL, 4,4'-(1-METHYLETHYLI UNKNOWN	8.33 19.22	960 160 160 170	J UJ
5. 6. 7.				
10				
12. 13. 14. 15.				
17. 18. 19.				
21.				
23. 24. 25. 26.				
27. 28. 29. 30.				
l	l	l l		

SED0250330RE

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM Case No.: SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-17ARE

Sample wt/vol:

30.6 (g/ml) G

Lab File ID: S2D0082

Level:

(low/med) LOW

Date Received: 10/11/02

% Moisture: 14

decanted: (Y/N) N

Date Extracted: 10/28/02

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/01/02

Injection Volume: 1.0(uL)

Dilution Factor: 1.0

CONCENTRATION UNITS:

GPC Cleanup: (Y/N) N

рН: ____

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
108-95-2		-1\T4b		UJ
	bis(2-Chloroethy	T) RCUEL		UJ
	2-Chlorophenol			UJ
541-/3-1	1,3-Dichlorobenz	ene		0.5
106-46-7	1,4-Dichlorobenz	ene		UJ
	1,2-Dichlorobenz	ene		UJ
	2-Methylphenol		380	
	2,2'-oxybis(1-Ch	noropropane)	380	
	4-Methylphenol_		380	
	N-Nitroso-di-n-p			<u>n</u> 1
	Hexachloroethane	!	380	
	Nitrobenzene		380	
78-59-1	Isophorone		380	
	2-Nitrophenol		380	
	2,4-Dimethylphen		380	
	2,4-Dichlorophen		380	
	1,2,4-Trichlorob	enzene	380	
	Naphthalene		380	-
	4-Chloroaniline_		380	
111-91-1	bis(2-Chloroetho	xy)methane	380	
	Hexachlorobutadi		380	
	4-Chloro-3-Methy		380	<u>u</u> 4-
	2-Methylnaphthal		380	
	Hexachlorocyclop		380	
	2,4,6-Trichlorop		380	
	2,4,5-Trichloropl		760	
	2-Chloronaphthale	ene	380	UT
	2-Nitroaniline		760	US
	Dimethylphthalate	2	380	72
	Acenaphthylene		45	. L
	2,6-Dinitrotoluer	ne	380 1	ュナー
	3-Nitroaniline		760 [1	7 17 1
83-32-9	Acenaphthene		380 1	J 🔝 📗

1C SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SED0250330RE

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM Case No.:

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-17ARE

Sample wt/vol: 30.6 (g/mL) G

Lab File ID: S2D0082

Level: (low/med) LOW

Date Received: 10/11/02

% Moisture: 14 decanted: (Y/N) N Date Extracted:10/28/02

Concentrated Extract Volume: 1000(uL) Date Analyzed: 11/01/02

Injection Volume: 1.0(uL)

Dilution Factor: 1.0

CONCENTRATION UNITS:

GPC Cleanup: (Y/N) N pH:

CAS NO.	COMPOUND	(ug/L or	ug/kg)	OG/ KG	Q
51-28-5	2,4-Dinitroph	enol		760	UJ
	4-Nitrophenol		—— <u> </u>		UJ
	Dibenzofuran		i	380	UJ
	2,4-Dinitroto	luene		380	UJ
	Diethylphthal			380	UJ
	4-Chloropheny		_		UF
	Fluorene	- F1		380	υ'n
	4-Nitroanilin	<u> </u>		760	U.T.
	4,6-Dinitro-2			760	U子
	N-Nitrosodiph				UJ
	4-Bromophenyl				U J
	Hexachloroben				UJ
	Pentachlorophe				UJ
	Phenanthrene			56	
	Anthracene		{		ŭ 4
	Carbazole				n 2
	Di-n-butylpht	nalate			UJ
	Fluoranthene		- -1	110	
129-00-0		 		340	
	Butylbenzylpht	halate			บัฐ
	3,3'-Dichlorol				UJ
	Benzo (a) anthra		1	100	
	Chrysene		 J	110	
117-81-7	bis(2-Ethylhex	vl)phthalate			ŪΤ
117-84-0	Di-n-octylphth	alate	- -	380	
	Benzo(b) fluora			100	T
	Benzo(k)fluora			40	
	Benzo (a) pyrene			110	
	Indeno(1,2,3-c				Ŭſ
	Dibenzo (a, h) an			380	
	Benzo(q,h,i)pe			380	
T 7 T - 6 T C	DC1120 (9, 11, 17 pc		 }	5301	-

1F SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SED0250330RE

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-17ARE

Sample wt/vol:

30.6 (g/mL) G

Lab File ID:

S2D0082

Level: (low/med) LOW

Date Received: 10/11/02

% Moisture: 14 decanted: (Y/N) N

Date Extracted: 10/28/02

Concentrated Extract Volume: 1000(uL)

Date Analyzed: 11/01/02

Injection Volume: 1.0(uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

pH: ___

Number TICs found: 7

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	
1. 2. 3. 80-05-7 4. 123-95-5 5. 6. 301-02-0 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21.	UNKNOWN UNKNOWN PHENOL, 4,4'-(1-METHYLETHYLI OCTADECANOIC ACID, BUTYL EST UNKNOWN 9-OCTADECENAMIDE, (Z)- UNKNOWN	7.40 10.23 19.91	=======================================	JB NJ NJ NJ NJ NJ
23. 24. 25. 26.				
28. 29. 30.				

U.S. EPA - CLP

1 INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ab Name:	MITKEM C	ORPORATION	ORATION Contract:					
ib Code:	MITKEM	Case No.:		SAS No.:			SDG No.:	A1489A_
atrix (soil/wa	ater):	SOIL		L	ab Samj	ple ID:	A1489-1	17A
vel (low/me	d):	MED		D	ate Rec	eived:	10/11/02	<u></u>
Solids:		86.0						
•	Concentration	Units (ug/L or mg	/kg dry weight):				MG/KG	
	CAS No.	Analyte	Concentration	С	Q	M		
	7420 00 5					NR		
		Aluminum	l e			NR		
		Antimony Arsenic	•			NR		
		Arsenic Barium	1			NR		
		Barium Beryllium	· ·			NR		
		Cadmium				NR		
		Calcium				NR		
		Chromium				NR		
		Cobalt				NR		
		Copper				NR		
		Iron				NR		
	_7439-92-1					NR		
		Magnesium				NR		
		Manganese				NR		
		Mercury	ı			NR		
		Nickel				NR		
	_7440-09-7					NR		
	_7782-49-2	Selenium				NR		
	_7440-22-4	Silver				NR		
	_7440-23-5	Sodium				NR		
	_7440-28-0	Thallium				NR		
,	_7440-62-2	Vanadium			_	NR		
	_7440-66-6					NR		
		Cyanide	0.20	B \$	*N	CA		
,	<u> </u>							
lor Before:	<u>=v_+</u>	Clan	ity Before:	-			Texture:	
olor After:		Clari	ity After.				Artifacts:	
omments:								
	 							
-								

Mitkem Corporation

CLIENT:

Lab ID:

GEI Consultants, Inc.

Client Sample ID: SED0250330

A1489-17

Date: 08-Nov-02

Project: Keyspan

Collection Date: 10/09/02 15:45

Analyses	Result	Qual	Limit	Units	DF	Date Analyzed
HARDNESS BY CALCULATION		SM234	0_S			
Hardness, Calcium/Magnesium (As CaCO3)	15000		220	mg/Kg CaCO3	1	10/24/02 15:38
SOIL AND WASTE PH		SW904	5C_S			
pH	7.8		1.0	pH Units	1	10/21/02 0:00

Qualiflers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quanititation limits

B - Analyte detected in the associated Method Blank

DF - Dilution Factor

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Limit - Reporting Limit

1A VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SED026003

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM

Case No.:

SAS No.: SDG No.: A1489

Matrix: (soil/water) SOIL Lab Sample ID: A1489-03C

Sample wt/vol: 5.0 (g/mL) G Lab File ID: V1F0396

Level: (low/med) LOW Date Received: 10/11/02

% Moisture: not dec. 28 Date Analyzed: 10/14/02

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: ____(mL) Soil Aliquot Volume: ____(uL)

CONCENTRATION UNITS:
CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

7/07 74-87-3-----Chloromethane 75-01-4-----Vinyl Chloride 7 U J 74-83-9-----Bromomethane 7 U 🖝 7/11/ 75-00-3-----Chloroethane 7 0 3 75-35-4-----1,1-Dichloroethene 44 67-64-1-----Acetone 7 0 5 75-15-0------Carbon Disulfide 3 JB 75-09-2-----Methylene Chloride 7 UJ 156-60-5-----trans-1,2-Dichloroethene 7 U J 75-34-3-----1,1-Dichloroethane 7 U J 78-93-3----2-Butanone 156-59-2----cis-1,2-Dichloroethene 67-66-3------Chloroform 71-55-6-----1,1,1-Trichloroethane_ 56-23-5-----Carbon Tetrachloride 107-06-2----1,2-Dichloroethane 71-43-2-----Benzene 0 7 T 7 7 79-01-6-----Trichloroethene 78-87-5----1,2-Dichloropropane 7 UJ 75-27-4----Bromodichloromethane 7 UJ 10061-01-5----cis-1,3-Dichloropropene 7 UJ 108-10-1----4-Methyl-2-pentanone υŢ 7 7 108-88-3-----Toluene Uj 10061-02-6----trans-1,3-Dichloropropene U Z 77777 79-00-5-----1,1,2-Trichloroethane_ n 1 127-18-4-----Tetrachloroethene UJ 591-78-6-----2-Hexanone UI 124-48-1-----Dibromochloromethane UI 108-90-7-----Chlorobenzene 100-41-4----Ethylbenzene 11 र ग 7 1330-20-7-----Xylene (Total)_ UJ 7 100-42-5----Styrene UJ 75-25-2-----Bromoform 7 7 0 1 79-34-5----1,1,2,2-Tetrachloroethane

VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

SED026003

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM Case No.:

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-03C

Sample wt/vol:

5.0 (g/mL) G

Lab File ID: V1F0396

Level: (low/med) LOW

Date Received: 10/11/02

Date Analyzed: 10/14/02

% Moisture: not dec. 28

GC Column: DB-624 ID: 0.25 (mm)

Dilution Factor: 1.0

Soil Extract Volume: ____(mL)

Soil Aliquot Volume: ____(uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg Number TICs found: 11

CAS NUMBER					
1. UNKNOWN 3.75 8 J 2. UNKNOWN 3.97 8 J 3. UNKNOWN 4.48 8 J 4. 98-82-8 BENZENE, (1-METHYLETHYL) - 11.08 38 NJ 5. 95-13-6 INDENE 13.24 9 NJ 6. 27133-93-3 2, 3-DIHYDRO-1-METHYLINDENE 13.65 54 NJ 7. 65051-83-4 BENZENE, (1-METHYL-2-CYCLOPR 14.59 17 NJ 8. 65051-83-4 BENZENE, (1-METHYL-2-CYCLOPR 14.70 19 NJ 9. 6682-71-9 H-INDENE, 2,3-DIHYDRO-4,7-D 15.00 11 NJ 10. UNKNOWN 15.96 13 J 11. 90-12-0 NAPHTHALENE, 1-METHYL- 16.58 14 NJ 12. 13. 14. 15. 16. 17. 18. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19	CAS NUMBER				
\ 30	1. 2. 3. 4. 98-82-8 5. 95-13-6 6. 27133-93-3 7. 65051-83-4 8. 65051-83-4 9. 6682-71-9 10. 11. 90-12-0 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28.	UNKNOWN UNKNOWN BENZENE, (1-METHYLETHYL)- INDENE 2,3-DIHYDRO-1-METHYLINDENE BENZENE, (1-METHYL-2-CYCLOPR BENZENE, (1-METHYL-2-CYCLOPR 1H-INDENE, 2,3-DIHYDRO-4,7-D UNKNOWN NAPHTHALENE, 1-METHYL-	3.75 3.97 4.48 11.08 13.24 13.65 14.59 14.70 15.00	8 8 38 9 54 17 19 11	J J J NJ NJ NJ NJ NJ NJ NJ

1B SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SED026003

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.: SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-03A

Sample wt/vol:

30.0 (g/mL) G

Lab File ID: S3B9958

Level: (low/med)

LOW

Date Received: 10/11/02

% Moisture: 28

decanted: (Y/N) N

Date Extracted: 10/18/02

Concentrated Extract Volume:

5000 (uL)

Date Analyzed: 10/24/02

Injection Volume:

1.0 (uL)

Dilution Factor: 1.0

CONCENTRATION UNITS:

GPC Cleanup:

(Y/N) N

pH: _

CAS NO.		g/L or ug/Kg)		Q
108-95-2			2300	U
111-44-4	bis(2-Chloroethyl)Et	her	2300	U
95-57-8	2-Chlorophenol		2300	U
541-73-1	1,3-Dichlorobenzene		2300	U
106-46-7	1,4-Dichlorobenzene		2300	U
95-50-1	1,2-Dichlorobenzene		2300	U
95-48-7	2-Methylphenol		2300	O'
108-60-1	2,2'-oxybis(1-Chlore	propane)	2300	Ū
106-44-5	4-Methylphenol		2300	U
621-64-7	N-Nitroso-di-n-propy	lamine	2300	U
67-72-1	Hexachloroethane		2300	Ū
98-95-3	Nitrobenzene	<u> </u>	2300	U
78-59-1	Isophorone_		2300	Ū
88-75-5	2-Nitrophenol		2300	U .
105-67-9	2,4-Dimethylphenol		2300	U
120-83-2	2,4-Dichlorophenol		2300	ן ס
120-82-1	1,2,4-Trichlorobenze	ne	2300	
91-20-3	Naphthalene		2300 1	
106-47-8	4-Chloroaniline		2300 1	I I
111-91-1	bis (2-Chloroethoxy) m	ethane	2300 1	
87-68-3	Hexachlorobutadiene		2300 1	
59-50-7	4-Chloro-3-Methylpher	nol	2300	
91-57-6	2-Methylnaphthalene_		2300 1	i i
77-47-4	Hexachlorocyclopentac	liene	2300 1	j
	2,4,6-Trichlorophenol		2300 T	
	2,4,5-Trichlorophenol		4600 t	
	2-Chloronaphthalene		2300 t	
	2-Nitroaniline		4600 t	
	Dimethylphthalate		2300 L	
208-96-8	Acenaphthylene		630 3	1
606-20-2	2,6-Dinitrotoluene		2300 [
	3-Nitroaniline		4600 U	
	Acenaphthene		1600 J	

EPA SAMPLE NO.

SED026003

Lab Name: MITKEM CORPORATION

Contract:

Case No.:

SDG No.: A1489 SAS No.:

CONCENTRATION UNITS:

Lab Sample ID: A1489-03A

Matrix: (soil/water) SOIL

30.0 (g/mL) G Lab File ID: S3B9958

Sample wt/vol: Level: (low/med) LOW

Lab Code: MITKEM

Date Received: 10/11/02

% Moisture: 28

decanted: (Y/N) N

Date Extracted: 10/18/02

Concentrated Extract Volume: 5000(uL)

Date Analyzed: 10/24/02

Injection Volume:

1.0(uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

pH: ____

CAS NO.	COMPOUND	(ug/L or ug/I	(g) UG/KG 	Q
51-28-5	2,4-Dinitroph	enol	4600	
100-02-7	4-Nitrophenol		4600	บป
132-64-9	Dibenzofuran		2300	
121-14-2	2,4-Dinitroto	luene	2300	
84-66-2	piethylphthala	ate I	2300	
7005-72-3	4-Chloropheny	1-phenylether	2300	
86-73-7	Fluorene		2300	
100-01-6	4-Nitroanilin	e	4600	
534-52-1	4.6-Dinitro-2	-methylphenol	4600	
86-30-6	N-Nitrosodiph	enylamine (1)	2300	U
101-55-3	4-Bromophenyl	-phenylether	2300	ប
118-74-1	Hexachloroben	zene	2300	
27-26-5	Pentachloroph	enol	4600	U
85-01-8	Phenanthrene_		1200	J
120-12-7	Anthracene		600	
86-74-8	Carbazole		2300	
84-74-2	Di-n-butylpht	halate	2300	
206-44-0	Fluoranthene_		2300	
129-00-0	Pyrene		4200	
85-68-7	Butylbenzylph	thalate	2300	
91-94-1	3,3'-Dichloro	benzidine	2300	
27-24-7	Benzo(a)anthr	acene	1800	J
210 01 0	Chrysene		1800	J
410 - U1 - J	bis(2-Ethylhe	xvl)phthalate	420	J
117 01-1	Di-n-octylpht	halate	330	J.
TT/-04-0	Benzo(b)fluor	anthene	1200	J
203-33-2	Benzo(k)fluor	enthene	440	J
207-08-9	Benzo(a)pyren	2	1100	J
30-32-8	Indeno(1,2,3-	d) pyrene	610	J
TA3-32-2	Dibenzo(a,h)a	nthracene	2300	
33-70-3	Benzo(g,h,i)p	ervlene	630	J
191-24-2	BEIIZO (A'II'I\ b			

1F SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

BPA SAMPLE NO.

SED026003

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-03A

Sample wt/vol:

S3B9958 Lab File ID:

30.0 (g/mL) G

Level: (low/med)

LOW

Date Received: 10/11/02

% Moisture: 28

decanted: (Y/N) N

Date Extracted: 10/18/02

Concentrated Extract Volume: 5000(uL)

Date Analyzed: 10/24/02

Injection Volume: 1.0(uL)

Dilution Factor: 1.0

GPC Cleanup:

(Y/N) N

pH: ___

Number TICs found: 8

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	
1. 2. 779-02-2 3. 4. 80-05-7 5. 6. 7. 8. 192-97-2	UNKNOWN ANTHRACENE, 9-METHYL- UNKNOWN PHENOL, 4,4'-(1-METHYLETHYLI UNKNOWN UNKNOWN UNKNOWN UNKNOWN BENZO[E] PYRENE	12.25 15.74 15.94		J NJ J NT J J J
9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24.				
25. 26. 27. 28. 29. 30.				

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1

	INORGANIC ANALYSIS D				HEET		EPA SAI	MPLE NO.
Lab Name: MITKEM_C		ORPORATION_	Co:	ntract:			SED02	26003
Lab Code:	MITKEM	Case No.:		SAS No.:	_		SDG No.:	A1489A_
Matrix (soil/v	water):	SOIL		I	ab Samı	ole ID:	A1489-	03A
Level (low/m	ed):	MED		Γ	Date Reco	eived:	10/11/0	2
% Solids:		72.0						
	Concentration	u Units (ug/L or mg	/kg dry weight):				MG/KG	
	CAS No.	Analyte	Concentration	С	Q	М		
	_7429-90-5	Aluminum				NR		
	_7440-36-0	Antimony				NR		
	_7440-38-2	Arsenic		<u> </u>	 	NR		
	_7440-39-3	Barium				NR		
	_7440-41-7	Beryllium				NR		
	_7440-43-9	Cadmium	<u> </u>			NR		
	_7440-70-2	Calcium				NR		
	_7440-47-3	Chromium		<u>-</u>	.,	NR		
	_7440-48-4	Cobalt		<u>-</u>		NR		
	_7440-50-8	Copper	_			NR		
	_7439-89-6	Iron				NR		
	_7439-92-1	Lead				NR		
	_7439-95-4	Magnesium			 	NR		
	_7439-96-5	Manganese				NR		
	_7439-97-6	Mercury				NR		
	_7440-02-0	Nickel	1			NR		
	_7440-09-7	Potassium	- " '			NR		
	_7782-49-2	Selenium				_NR		
	_7440-22-4	Silver				NR		
	_7440-23-5	Sodium				NR		
	_7440-28-0	Thallium				NR		
	_7440-62-2	Vanadium				NR		
	7440 // /	177'	1	1 1		INIDI		

Color Bef	ore:	 Clarity Before:	 Texture:	
Color Afte	er:	 Clarity After:	 Artifacts:	
Comment	s:			
_				
_				

0.21

Cyanide_

U 5 *N

Mitkem Corporation

CLIENT:

GEI Consultants, Inc.

Client Sample ID: SED026003

Lab ID:

A1489-03

Date: 08-Nov-02

Project: Keyspan

Collection Date: 10/09/02 11:30

Units	ult Qual	Result	Analyses
mg/Kg CaCO3		140000	HARDNESS BY CALCULATION Hardness, Calcium/Magnesium (As
	CMD04		CaCO3)
-1111-8-		0.0	SOIL AND WASTE PH
pH Units	8.3	8.3	pH
g/Kg CaCO3	0_S 240 m 5C_S	SM2340_S 240 m SW9045C_S	SM2340_S 140000 240 m SW9045C_S

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quanititation limits

B - Analyte detected in the associated Method Blank

DF - Dilution Factor

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Limit - Reporting Limit

1A VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SED0260319

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: A1489

Matrix: (soil/water) SOIL Lab Sample ID: A1489-04C

Sample wt/vol: 5.0 (g/mL) G Lab File ID: V1F0470

Level: (low/med) LOW Date Received: 10/11/02

% Moisture: not dec. 23
Date Analyzed: 10/16/02

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: ____(mL) Soil Aliquot Volume: ____(uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG 0 CAS NO. COMPOUND 6 U 74-87-3-----Chloromethane 6 U 75-01-4-----Vinyl Chloride 6 U 74-83-9-----Bromomethane 6 U 75-00-3-----Chloroethane 6 U 75-35-4----1,1-Dichloroethene_ 15 67-64-1-----Acetone 2 J 75-15-0-----Carbon Disulfide 4 J 75-09-2----Methylene Chloride 6 U 156-60-5-----trans-1,2-Dichloroethene 6 U 75-34-3----1,1-Dichloroethane 6 U 78-93-3----2-Butanone 6 U 156-59-2----cis-1,2-Dichloroethene 67-66-3-----Chloroform 6 U 71-55-6-----1,1,1-Trichloroethane_ 6 U 56-23-5-----Carbon Tetrachloride_ 6 U 107-06-2-----1,2-Dichloroethane___ 2 J 6 U 71-43-2-----Benzene 79-01-6-----Trichloroethene 6 U 78-87-5-----1,2-Dichloropropane_ 6 U 75-27-4-----Bromodichloromethane 6 U 10061-01-5----cis-1,3-Dichloropropene_ 6 U 108-10-1-----4-Methyl-2-pentanone 6 U 108-88-3-----Toluene 10061-02-6----trans-1,3-Dichloropropene 6 U 6 U 79-00-5-----1,1,2-Trichloroethane_ 6 U 127-18-4-----Tetrachloroethene 6 U 591-78-6-----2-Hexanone 124-48-1------Dibromochloromethane 6 U 6 U 108-90-7-----Chlorobenzene 160 100-41-4-----Ethylbenzene 2 | J 1330-20-7-----Xylene (Total) 6 | U 100-42-5------Styrene 6 U 75-25-2-----Bromoform 6 U 79-34-5-----1,1,2,2-Tetrachloroethane

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

SED0260319 Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: A1489

Matrix: (soil/water) SOIL Lab Sample ID: A1489-04C

Lab File ID: V1F0470 Sample wt/vol: 5.0 (g/mL) G

Level: (low/med) LOW Date Received: 10/11/02

% Moisture: not dec. 23 Date Analyzed: 10/16/02

Dilution Factor: 1.0 GC Column: DB-624 ID: 0.25 (mm)

Soil Extract Volume: ___(mL) Soil Aliquot Volume: ____(uL)

CONCENTRATION UNITS:

Nι

Number TICs found	1: 30		(ug/L	or ug/Kg)	ug/Kg
CAS NUMBER		COMPOUND NAME		RT	EST.

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 98-82-8	BENZENE, (1-METHYLETHYL)-	11.12	120	NJ
2. 103-65-1	BENZENE, PROPYL-	11.64		NJ
3. 611-14-3	BENZENE, 1-ETHYL-2-METHYL-	12.10	42	NJ
4. 526-73-8	BENZENE, 1,2,3-TRIMETHYL-	12.80	8	NJ
5. 496-11-7	INDANE	13.03	37	NJ
6. 673-32-5	BENZENE, 1-PROPYNYL-	13.27	320	NJ
7.	UNKNOWN	13.36	11	J
8. 1195-32-0	BENZENE, 1-METHYL-4-(1-METHY	13.48	8	NJ
9. 27133-93-3	2,3-DIHYDRO-1-METHYLINDENE	13.69	49	NJ
10. 933-98-2	BENZENE, 1-ETHYL-2,3-DIMETHY	14.02	22	NJ
11.	UNKNOWN	14.09	9	J
12. 4706-89-2	BENZENE, 2,4-DIMETHYL-1-(1-M	14.27	10	NJ
13. 65051-83-4	BENZENE, (1-METHYL-2-CYCLOPR)	14.61	100	NJ
14. 65051-83-4	BENZENE, (1-METHYL-2-CYCLOPR	14.73	160	NJ
15. 17059-48-2	1H-INDENE, 2,3-DIHYDRO-1,6-D		10	NJ
16. 270-82-6	BENZO [C] THIOPHENE	15.34	140	NJ
17.	UNKNOWN	15.44	14	
18.	UNKNOWN	15.68	9	
19.	UNKNOWN	15.75	12	
20.	UNKNOWN	15.98	25	J
21. 16587-47-6	BENZO[B]THIOPHENE, 6-METHYL-	16.36	41	
22. 1195-14-8	BENZO [B] THIOPHENE, 2-METHYL-	16.45	17	
23. 1195-14-8	BENZO[B]THIOPHENE, 2-METHYL-	16.62	72	
24.	UNKNOWN	17.41	14	
25. 575-37-1	NAPHTHALENE, 1,7-DIMETHYL-	17.48	21	-
26. 581-40-8	NAPHTHALENE, 2,3-DIMETHYL-	17.63	54	
27. 575-41-7	NAPHTHALENE, 1,3-DIMETHYL-	17.85	32	
28. 571-58-4	NAPHTHALENE, 1,4-DIMETHYL-	18.03	13	
29.	UNKNOWN	18.12	•	J
30. 83-32-9	ACENAPHTHENE	18.34	110	NJ

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SED0260319

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM Case No.:

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-04A

Sample wt/vol:

30.6 (q/mL) G

Lab File ID: S3B9959

Level: (low/med) LOW

Date Received: 10/11/02

% Moisture: 23

decanted: (Y/N) N

Date Extracted: 10/18/02

Concentrated Extract Volume: 5000(uL) Date Analyzed: 10/24/02

Injection Volume: 1.0(uL)

Dilution Factor: 1.0

CONCENTRATION UNITS:

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND (ug/1	or ug/Kg)	UG/KG	Q
108-95-2			210	υ
111-44-4	bis(2-Chloroethyl)Ethe	er	210	_
95-57-8	2-Chlorophenol		2100	
541-73-1	1.3-Dichlorobenzene		2100	
106-46-7	1,4-Dichlorobenzene		2100	
95-50-1	1,2-Dichlorobenzene		2100	
95-48-7	2-Methylphenol		2100	
108-60-1	2,2'-oxybis(1-Chloropr	opane)	2100	
106-44-5	4-Methylphenol	1	2100	
621-64-7	N-Nitroso-di-n-propyla	mine	2100	
67-72-1	Hexachloroethane		2100	
98-95-3	Nitrobenzene		2100	
78-59-1	Isophorone		2100	1 ,
88-75-5	2-Nitrophenol		2100	
105-67-9	2.4-Dimethylphenol		2100	
120-83-2	2,4-Dichlorophenol		2100	
120-82-1	1,2,4-Trichlorobenzene	 i	2100	1 1
91-20-3	Naphthalene		1700	
106-47-8	4-Chloroaniline		2100	, ,
111-91-1	bis(2-Chloroethoxy)met	hane	2100	
87-68-3	Hexachlorobutadiene		2100	
59-50-7	4-Chloro-3-Methylpheno		2100	
91-57-6	2-Methylnaphthalene		440	
77-47-4	Hexachlorocyclopentadie	ene	2100	
88-06-2	2,4,6-Trichlorophenol		2100	
95-95-4	2,4,5-Trichlorophenol_		4300]
91-58-7	2-Chloronaphthalene		2100	
88-74-4	2-Nitroaniline		4300	
	Dimethylphthalate		2100	
208-96-8	Acenaphthylene		3400	_
606-20-2	2,6-Dinitrotoluene		2100	Ū I
99-09-2	3-Nitroaniline		4300	
83-32-9	Acenaphthene		8800	- •
· · · · · · · · · · · · · · · · · · ·				

SED0260319

Lab Name: MITKEM CORPORATION Contract:

GPC Cleanup: (Y/N) N pH: ___

SDG No.: A1489 SAS No.: Case No.: Lab Code: MITKEM

Lab Sample ID: A1489-04A Matrix: (soil/water) SOIL

Lab File ID: S3B9959 Sample wt/vol: 30.6 (g/mL) G

Date Received: 10/11/02 Level: (low/med) LOW

% Moisture: 23 decanted: (Y/N) N Date Extracted: 10/18/02

Concentrated Extract Volume: 5000(uL) Date Analyzed: 10/24/02

Dilution Factor: 1.0

Injection Volume: 1.0(uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or	ug/Kg)	UG/KG	Q
51-28-5	2,4-Dinitrophenol			4300	
100-02-7	4-Nitrophenol		i	4300	
132-64-9	Dibenzofuran	<u></u>		2100	U
121-14-2	2,4-Dinitrotoluer	ne		2100	U
84-66-2	Diethylphthalate			2100	Ū
7005-72-3	4-Chlorophenyl-pl	enylether	==	2100	
96-73-7	Fluorene	•	_	810	
100-01-6	4-Nitroaniline			4300	UJ
524-52-1	4,6-Dinitro-2-met	hylphenol		4300	U
354.35 1	N-Nitrosodipheny	amine (1)	_	2100	U
101-55-3	4-Bromophenyl-phe	envlether		2100	U
110-74-1	Hexachlorobenzene	_		2100	U
07-06-5	Pentachlorophenol		i	4300	ט
85-01-8	Phenanthrene			4100	
120-12-7	Anthracene			3100	
96-74-8	Carbazole			550	J
84-74-2	Di-n-butylphthala	ite		2100	U
206-44-0	Fluoranthene			12000	
129-00-0	Pyrene			23000	
95-68-7	Butylbenzylphthal	ate			-
01-04-1	3,3'-Dichlorobenz	zidi <u>ne</u>		2100	υ
56-55-3	Benzo (a) anthracer	ie		9200	
210-01-0	Chrysene			8900	
117-81-7	bis(2-Ethylhexyl)	phthalate	2	2100	
117-84-0	Di-n-octylphthala	ite		2100	U
205-09-2	Benzo (b) fluoranth	iene		5800	
203-33-2	Benzo(k)fluoranth	ene			Ĵ
50 22-9	Benzo (a) pyrene			7300	
102-34-5	Indeno $(1,2,3-cd)$	yrene		2700	
133-33-3	Dibenzo(a,h)anthr	acene		650	Ĵ
101-24-2	Benzo(g,h,i)peryl	ene		3000	
131-24-2	DC120 (3/11/1/P021-				
(1) - Cannot be	e separated from Diphe	nylamine			

1F SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SED0260319

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No :

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-04A

Sample wt/vol:

Lab File ID:

S3B9959

30.6 (g/mL) G

Date Received: 10/11/02

Level: (low/med) LOW

decanted: (Y/N) N

% Moisture: 23

Date Extracted:10/18/02

Concentrated Extract Volume: 5000(uL)

Date Analyzed: 10/24/02

Injection Volume:

1.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

pH: ___

Number TICs found: 19

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	
1. 90-12-0 2. 613-12-7 3. 4. 613-12-7 5. 35465-71-5 6. 1576-67-6 7. 8. 9. 80-05-7 10. 11. 243-17-4 12. 243-17-4 13. 2381-21-7 14. 3442-78-2 15. 2381-21-7 16. 17. 2381-31-9 18. 1705-85-7 19. 192-97-2 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30.	NAPHTHALENE, 1-METHYL- ANTHRACENE, 2-METHYL- UNKNOWN ANTHRACENE, 2-METHYL- 2-PHENYLNAPHTHALENE PHENANTHRENE, 3,6-DIMETHYL- UNKNOWN UNKNOWN PAH PHENOL, 4,4'-(1-METHYLETHYLI UNKNOWN 11H-BENZO[B] FLUORENE 11H-BENZO[B] FLUORENE PYRENE, 1-METHYL- PYRENE, 2-METHYL- PYRENE, 1-METHYL- UNKNOWN BENZ[A] ANTHRACENE, 8-METHYL- CHRYSENE, 6-METHYL- BENZO[E] PYRENE	9.93 15.75 15.95 16.00 16.38 16.88 16.93 17.32 17.88 18.24 18.27 18.41 18.46 18.69 19.56	12000 6300 5000	

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1 INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: MITKEM CO		ORPORATION	Con	tract:	<u> </u>		SED026	60319
ab Code:	- MITKEM	Case No.:		SAS No.	:		SDG No.:	A1489A
Matrix (soil/water):		SOIL			Lab Samp	ole ID:	A1489-0)4A
evel (low/me	d):	MED			Date Rec	eived:	10/11/02	2
% Solids:		77.0						
	Concentration	Units (ug/L or mg/	/kg dry weight):				MG/KG	
	CAS No.	Analyte	Concentration	С	Q	М		
	_7429-90-5	Aluminum				NR		
	_7440-36-0	Antimony				NR		
	_7440-38-2	Arsenic	i			NR		
	_7440-39-3	Barium	1			NR		
	_7440-41-7	Beryllium				NR		
	_7440-43-9	Cadmium				NR		
	_7440-70-2	Calcium				NR		
	_7440-47-3	Chromium				NR		
	_7440-48-4	Cobalt				NR		
	_7440-50-8	Copper				NR		
	_7439-89-6	Iron				NR		
	_7439-92-1	Lead				NR		
	_7439-95-4	Magnesium				NR		
	_7439-96-5	Manganese			· · · · ·	NR		
	_7439-97-6	Mercury				NR		
	_7440-02-0	Nickel				NR		
	7440-09-7	Potassium				NR		
	_7782-49-2	Selenium				NR		
	_7440-22-4	Silver				NR		
	_7440-23-5	Sodium				NR		
	_7440-28-0	Thallium				NR		
	_7440-62-2	Vanadium				NR		
	_7440-66-6	Zinc				NR		
		Cyanide	0.19	U_	[*N	CA		
						_],]		
color Before:		Clari	ty Before:				Texture:	
olor After:		Clari	ty After:				Artifacts:	
Comments:								

Mitkem Corporation

CLIENT:

GEI Consultants, Inc.

Client Sample ID: SED0260319

Lab ID:

A1489-04

Date: 08-Nov-02

Project: Keyspan

Collection Date: 10/09/02 11:35

Analyses	Result	Qual	Limit	Units	DF	Date Analyzed
HARDNESS BY CALCULATION		SM234	o_s			-
Hardness, Calcium/Magnesium (As CaCO3)	17000		230	mg/Kg CaCO3	1	10/24/02 15:38
SOIL AND WASTE PH		SW904	5C_\$			
nΗ	8.2		1.0	nH Units	1	10/16/02 0:00

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

DF - Dilution Factor

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Limit - Reporting Limit

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SED0261924

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM Case No.: SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-05C

Sample wt/vol: 0.6 (g/mL) G

Lab File ID: V1F0465

Level: (low/med) LOW

Date Received: 10/11/02

% Moisture: not dec. 20

Date Analyzed: 10/16/02

GC Column: DB-624 ID: 0.25 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (mL)

Soil Aliquot Volume: ____(uL)

Q

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS	NO.	

COMPOUND

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SED0261924

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM Case No.: SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-05C

Sample wt/vol: 0.6 (g/mL) G

Lab File ID: V1F0465

Level: (low/med) LOW

Date Received: 10/11/02

% Moisture: not dec. 20

Date Analyzed: 10/16/02

GC Column: DB-624 ID: 0.25 (mm)

Dilution Factor: 1.0

Soil Aliquot Volume: ____(uL)

Soil Extract Volume: (mL)

Number TICs found: 28

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 98-82-8	BENZENE, (1-METHYLETHYL)-	11.11	1	_
2.	UNKNOWN	11.63	110	J
3. 611-14-3	BENZENE, 1-ETHYL-2-METHYL-	12.09	290	NJ
4. 95-36-3	1,2,4-TRIMETHYLBENZENE	12.79	410	NJ
5. 496-11-7	INDANE	13.02		NJ
6. 95-13-6	INDENE	13.26		NJ
7. 1758-88-9	BENZENE, 2-ETHYL-1,4-DIMETHY	13.46	110	NJ
8. 27133-93-3	2,3-DIHYDRO-1-METHYLINDENE	13.68		NJ
9. 527-53-7	BENZENE, 1,2,3,5-TETRAMETHYL		180	NJ
10. 488-23-3	BENZENE, 1,2,3,4-TETRAMETHYL			
11. 527-53-7	BENZENE, 1,2,3,5-TETRAMETHYL		240	
12. 65051-83-4	BENZENE, (1-METHYL-2-CYCLOPR			
13. 65051-83-4	BENZENE, (1-METHYL-2-CYCLOPR		1400	
14. 4489-84-3	BENZENE, (3-METHYL-2-BUTENYL			
15. 95-15-8	BENZO[B]THIOPHENE	15.33		
16.	UNKNOWN	15.43	260	
17. 2717-44-4	NAPHTHALENE, 1,2-DIHYDRO-3-M		290	
18. 18636-55-0	1H-INDENE, 1,1-DIMETHYL-	15.84	260	
19.	UNKNOWN	15.97	200	
20.	UNKNOWN	16.04	100	
21. 1455-18-1	3-METHYLBENZOTHIOPHENE	16.35	310	
22. 1195-14-8	BENZO (B) THIOPHENE, 2-METHYL-		150	
1	NAPHTHALENE, 1-ETHYL-	17.40	180	- 1
24. 582-16-1	NAPHTHALENE, 2,7-DIMETHYL-	17.47	610	
25. 571-58-4	NAPHTHALENE, 1,4-DIMETHYL-	17.62	1200	
26. 573-98-8	NAPHTHALENE, 1,2-DIMETHYL-	17.86	470	
27. 575-41-7	NAPHTHALENE, 1,3-DIMETHYL-	18.02	190	
28.	UNKNOWN	18.34	1800	J
29				
30.				
<u></u>				

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SED0261924

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: A1489

Matrix: (soil/water) SOIL Lab Sample ID: A1489-05A

Sample wt/vol: 30.3 (g/mL) G Lab File ID: S3C0107

Level: (low/med) LOW Date Received: 10/30/02

% Moisture: 20 decanted: (Y/N) N Date Extracted:10/31/02

Concentrated Extract Volume: 5000(uL) Date Analyzed: 11/05/02

Injection Volume: 1.0(uL) Dilution Factor: 3.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND		ration (or ug/Kg)		Q
51-28-5	2,4-Dinitroph	enol		12000	U
100-02-7	4-Nitrophenol			12000	υ
132-64-9	Dibenzofuran 🏻			980	J
121-14-2	2,4-Dinitroto	luene		6100	U
84-66-2	·Diethylphthal	ate		6100	U
7005-72-3	4-Chloropheny	l-phenyleth	ier	6100	U
86-73-7	Fluorene			2700	-
	4-Nitroanilin			12000	ប្រ
	4,6-Dinitro-2			12000	U
	N-Nitrosodiphe			6100	U
	4-Bromophenyl		er	6100	U
	Hexachloroben:			6100	Ū
	Pentachlorophe	enol		12000	U
	Phenanthrene			14000	
	Anthracene			13000	
	Carbazole			2600	J
84-74-2	Di-n-butylphtl	nalate		6100	U
206-44-0	Fluoranthene			36000	
129-00-0	Pyrene			54000	
85-68-7	Butylbenzylpht	halate		6100	-
	3,3 -Dichlorok			6100	UJ
	Benzo(a)anthra	cene		29000	
218-01-9			l	30000	
117-81-7	bis(2-Ethylhex	yl)phthala	te	6100	
117-84-0	Di-n-octylphth	alate		6100	U
	Benzo(b)fluora			18000	
	Benzo(k)fluora			8500	
	Benzo(a)pyrene			24000	
	Indeno (1, 2, 3-c			8300	
	Dibenzo(a,h)an				J
191-24-2	Benzo(g,h,i)pe	rylene		8600	
(1) - Cannot be	separated from Di	phenylamin	! e	I_	!

SED0261924

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: A1489

Matrix: (soil/water) SOIL Lab Sample ID: A1489-05A

Sample wt/vol: 30.3 (g/mL) G Lab File ID: S3C0107

Level: (low/med) LOW Date Received: 10/30/02

% Moisture: 20 decanted: (Y/N) N Date Extracted:10/31/02

Concentrated Extract Volume: 5000(uL) Date Analyzed: 11/05/02

Injection Volume: 1.0(uL) Dilution Factor: 3.0

GPC Cleanup: (Y/N) N pH:

		CONCENTRATION UNITS:	
CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/KG	Q

CAS NO.	COMPOUND (u	g/L or ug/Kg)	UG/KG	Q
108-95-2	Phenol		6100	U
111-44-4	bis(2-Chloroethyl)E	ther	6100	
95-57-8	2-Chlorophenol	 -	6100	
541-73-1	1,3-Dichlorobenzene		6100	_
106-46-7	1.4-Dichlorobenzene		6100	U
95-50-1	1,2-Dichlorobenzene		6100	U
95-48-7	2-Methylphenol		6100	
108-60-1	2,2'-oxybis(1-Chlore	opropane)	6100	
106-44-5	4-Methylphenol	· ·	6100	
621-64-7	N-Nitroso-di-n-prop	ylamine	6100	
67-72-1	Hexachloroethane		6100	
98-95-3	Nitrobenzene		6100	
78-59-1	Isophorone		6100	ט
	2-Nitrophenol		6100	
105-67-9	2,4-Dimethylphenol_		6100	
120-83-2	2,4-Dichlorophenol_		6100	
120-82-1	1,2,4-Trichlorobenze	ene	6100	U
91-20-3	Naphthalene		7100	
	4-Chloroaniline		6100	0.1
111-91-1	bis(2-Chloroethoxy)n	ethane	6100	U
	Hexachlorobutadiene_		6100	U
59-50-7	4-Chloro-3-Methylphe	nol	6100	U
91-57-6	2-Methylnaphthalene		1800	J
77-47-4	Hexachlorocyclopenta	diene	6100	U Ì
88-06-2	2,4,6-Trichĺoropheno	1	6100	U
95-95-4	2,4,5-Trichloropheno	1	12000	
	2-Chloronaphthalene_		6100	
	2-Nitroaniline		12000	บ
131-11-3	Dimethylphthalate		6100	ן ט
	Acenaphthylene		11000	
	2,6-Dinitrotoluene_		6100 i	
	3-Nitroaniline		12000 1	07
83-32-9	Acenaphthene		53000	
<u></u>				
				-

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

SED0261924

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-05A

Sample wt/vol: 30.3 (g/mL) G

Lab File ID: S3C0107

Level: (low/med) LOW

Date Received: 10/30/02

% Moisture: 20

decanted: (Y/N) N

Date Extracted: 10/31/02

Concentrated Extract Volume: 5000(uL)

Date Analyzed: 11/05/02

Injection Volume: 1.0(uL)

Dilution Factor: 3.0

GPC Cleanup: (Y/N) N pH: ___

Number TICs found: 19

CONCENTRATION UNITS: (uq/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT =======	EST. CONC.	
1. 2471-83-2 2. 571-58-4 3. 610-48-0 4. 613-12-7 5. 6. 613-12-7 7. 3674-66-6 8. 9. 206-44-0 10. 243-17-4 11. 12. 238-84-6 13. 243-17-4 14. 3442-78-2 15. 3353-12-6 16. 2381-21-7 17. 239-35-0 18. 3351-32-4 19. 198-55-0 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30.	1H-INDENB, 1-ETHYLIDENE- NAPHTHALENE, 1,4-DIMETHYL- ANTHRACENB, 1-METHYL- ANTHRACENB, 2-METHYL- UNKNOWN ANTHRACENE, 2-METHYL- PHENANTHRENE, 2,5-DIMETHYL- UNKNOWN FLUORANTHENB 11H-BENZO[B] FLUORENB UNKNOWN 11H-BENZO[B] FLUORENB 11H-BENZO[B] FLUORENB PYRENE, 2-METHYL- PYRENE, 4-METHYL- PYRENE, 4-METHYL- PYRENE, 1-METHYL- BENZO[B] NAPHTHO[2,1-D] THIOPH 2-METHYLCHRYSENE PERYLENB	12.83 14.07 18.89 19.04 19.12 19.17 20.03 20.11 20.55 21.28 21.46 21.52 21.65 21.73 21.92 21.98	61000 14000 20000 14000 42000 16000 24000 16000	NJ NJ NJ NJ NJ NJ NJ NJ NJ NJ NJ NJ NJ N

U.S. EPA - CLP

1 INORGANIC ANALYSIS DATA SHEET

EPA	SAMP	LE NO
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Lab Name: Lab Code: Matrix (soil/wa	MITKEM	ORPORATION Case No.:	Cont					
				SAS No.:			SDG No.:	A1489A_
Matrix (soil/wa		Case 110		oas no			3DG 110	AITOM
	ater):	SOIL		L	ab Samp	le ID:	A1489-0	5A
Level (low/mea	d):	MED		D	ate Rece	ived:	10/11/02	
% Solids:		80.0						
	Concentration	Units (ug/L or mg/	kg dry weight):				MG/KG	
	CAS No.	Analyte	Concentration	С	Q	M		
	5400.00.5					NR		
-	_7429-90-5	•			•	NR		
}	_7440-36-0					NR		
ŀ	7440-38-2 7440-39-3					NR		
}	7 44 0-3 9- 3 _7440-41-7	1		1 1		NR		
ļ						NR		
	7440-70-2	·- 1				NR		
						NR		
	_7440-48-4			F T		NR		
	_7440-50-8			1 1		NR		
Ì	_7439-89-6	,		1 1		NR		
	7439-92-1	1				NR		
	_7439-95-4					NR		
						NR		
	7439-97-6	_		1 1		NR		
	7440-02-0					NR		
	_7440-09-7					NR		
	7782-49-2					NR		
	7440-22-4					NR		
	7440-23-5	Sodium				NR		
ĺ	_7440-28-0	Thallium				_NR		
	7440-62-2	Vanadium				NR		
	_7440-66-6	Zinc			_	NR		
		Cyanide	0.16	U T	*N	CA		
Ĺ								
Color Before:		Clari	ty Before:				Texture:	
Color After:	 -	Clari	ty After:	<u></u>			Artifacts:	
Comments:								
						_		

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SED0262444

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM Case No.: SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-06B

Sample wt/vol:

5.0 (q/mL) G

Lab File ID: V1F0399

Level: (low/med)

LOW

Date Received: 10/11/02

% Moisture: not dec. 17

Date Analyzed: 10/14/02

GC Column: DB-624 ID: 0.25 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (mL)

Soil Aliquot Volume: ____(uL)

Q

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NO.

COMPOUND

74-87-3-----Chloromethane 6 U T 75-01-4-----Vinyl Chloride 6 U 74-83-9-----Bromomethane 6 U 1 75-00-3-----Chloroethane 6 U T 75-35-4-----1,1-Dichloroethene 6 U 67-64-1-----Acetone 6 J 75-15-0-----Carbon Disulfide 6 J U 75-09-2----Methylene Chloride 3 JΒ 156-60-5----trans-1,2-Dichloroethene 6 U 75-34-3-----1,1-Dichloroethane 6 U 6 U 78-93-3----2-Butanone 156-59-2----cis-1,2-Dichloroethene 6 U 67-66-3-----Chloroform 6 U 71-55-6-----1,1,1-Trichloroethane 6 U 6 56-23-5-----Carbon Tetrachloride U 6 107-06-2----1, 2-Dichloroethane U 6 71-43-2----Benzene U 6 79-01-6-----Trichloroethene U 6 78-87-5-----1,2-Dichloropropane U 6 6 75-27-4-----Bromodichloromethane U 10061-01-5----cis-1,3-Dichloropropene U 108-10-1-----4-Methyl-2-pentanone 108-88-3-----Toluene 10061-02-6----trans-1,3-Dichloropropene 79-00-5-----1,1,2-Trichloroethane 127-18-4-----Tetrachloroethene 591-78-6----2-Hexanone 6 U 124-48-1-----Dibromochloromethane 6 U 108-90-7-----Chlorobenzene 3 6 100-41-4----Ethylbenzene J 1330-20-7-----Xylene (Total) U 6 100-42-5-----Styrene U 75-25-2-----Bromoform 6 | U 79-34-5----1,1,2,2-Tetrachloroethane 6 | U

VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

SED0262444 Contract:

Lab Name: MITKEM CORPORATION

Lab Code: MITKEM Case No.: SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-06B

5.0 (g/mL) G

Lab File ID: V1F0399

Sample wt/vol: Level: (low/med) LOW

Date Received: 10/11/02

% Moisture: not dec. 17

Date Analyzed: 10/14/02

GC Column: DB-624 ID: 0.25 (mm)

Dilution Factor: 1.0

Soil Extract Volume:____(mL)

Soil Aliquot Volume: ____(uL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) ug/Kg Number TICs found: 12

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 2. 496-11-7 3. 95-13-6 4. 65051-83-4 5. 270-82-6 6. 1455-18-1 7. 571-61-9 8. 581-40-8 9. 571-58-4 10. 575-41-7 11. 12. 2131-42-2 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30.	UNKNOWN INDANE INDENE BENZENE, (1-METHYL-2-CYCLOPR BENZO[C]THIOPHENE 3-METHYLBENZOTHIOPHENE NAPHTHALENE, 1,5-DIMETHYL- NAPHTHALENE, 2,3-DIMETHYL- NAPHTHALENE, 1,4-DIMETHYL- NAPHTHALENE, 1,3-DIMETHYL- UNKNOWN NAPHTHALENE, 1,4,6-TRIMETHYL	15.32 16.33 17.45 17.61 17.84 17.99 18.32	6 75 13 33 6 22 58 25 10	J NJ NJ NJ NJ NJ NJ NJ NJ

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SED0262444

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-06A

Sample wt/vol: 30.9 (g/mL) G

Lab File ID:

S1D1523

Level: (low/med) LOW

Date Received: 10/11/02

% Moisture: 17 decanted: (Y/N) N

Date Extracted:10/18/02

Concentrated Extr. : Volume: 1000(uL)

Date Analyzed: 10/21/02

Injection Volume: 1.0(uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/d) N pH: ____

		CONCENTRATION UNITS:		
CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/KG	Q	

I		-
108-95-2Phenol	390	U
111-44-4bis(2-Chloroethyl)Ether	390	_
95-57-82-Chlorophenol	390] _
541-73-11,3-Dichlorobenzene	390	_
106-46-71,4-Dichlorobenzene	390	ַט
95-50-11,2-Dichlorobenzene	390	lσ
95-48-72-Methylphenol	390	שׁ
108-60-12,2'-oxybis(1-Chloropropane)	390	U
106-44-54-Methylphenol	390	υ
621-64-7N-Nitroso-di-n-propylamine	390	U
67-72-1Hexachloroethane	390	ט
98-95-3Nitrobenzene	390	U
78-59-1Isophorone	390	U
88-75-52-Nitrophenol	390	_
105-67-92,4-Dimethylphenol	390	U
120-83-22,4-Dichlorophenol	390	U
120-82-11,2,4-Trichlorobenzene	390	U
91-20-3Naphthalene	390	U
106-47-84-Chloroaniline	390	ַ
111-91-1bis(2-Chloroethoxy)methane	390	ט
87-68-3Hexachlorobutadiene	390	U
59-50-74-Chloro-3-Methylphenol	390	ן ט
91-57-62-Methylnaphthalene	390	U
77-47-4Hexachlorocyclopentadiene	390	υ
88-06-22,4,6-Trichlorophenol	390	υ
95-95-42,4,5-Trichlorophenol	780	U
91-58-72-Chloronaphthalene	390	U
88-74-42-Nitroaniline	780	_
131-11-3Dimethylphthalate	390	
208-96-8Acenaphthylene	45	- 1
606-20-22,6-Dinitrotoluene		
99-09-23-Nitroaniline	780	ַ ע
83-32-9Acenaphthene	330	J
	·	

SED0262444

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-06A

Sample wt/vol: 30.9 (g/mL) G

Lab File ID: S1D1523

Level: (low/med) LOW

Date Received: 10/11/02

% Moisture: 17

decanted: (Y/N) N

Date Extracted:10/18/02

Concentrated Extrac: Volume: 1000(uL)

Date Analyzed: 10/21/02

Injection Volume: 1.0(uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

	CAS NO.	COMPOUND	CONCENTR (ug/L or				<u>.</u>	Q
	51-28-5	-2,4-Dinitrophenol				780	ט	
	100-02-7	-4-Nitrophenol				780		
- 1	132-64-9	-Dibenzofuran				390	שו	
-	121-14-2	-2,4-Dinitrotoluen	.e			390		- }
-	84-66-2	-Diethylphthalate_				390	บ	
1	7005-72-3	-4-Chlorophenyl-ph	enylethe	r		390	U	ŀ
İ	86-73-7	-Fluorene	•			390	บ	Ì
Į	100-01-6	-4-Nitroaniline		— J	•	780	Įυ	ļ
Ų	534-52-1	-4,6-Dinitro-2- met	hylpheno	1		780		
1		N-Nitrosodiphenyl			:	3 90	U	
	101-55-3	-4-Bromophenyl-phe	nylether	`—		390	U	
-		Hexachlorobenzene				390	U	
- [87-86-5	Pentachlorophenol	· · · · · · · · · · · · · · · · · · ·		•	780	U	- 1
	85-01-8				4	100		
	120-12-7	Anthracene				93	J	
	86-74-8	Carbazole			3	390	U	j
1	84-74-2	Di-n-butylphthala	te		3	390	U	- }
	206-44-0]	L50	J	1
1	129-00-0				2	260	J	1
1	85-68-7~	Butylbenzylphthala	ate	_	3	90	U	1
ı	91-94-1	3,3 ⁻ -Dichlorobenz:	idine		3	90		i
l		Benzo(a)anthracene	≘			80	J	ì
ı	218-01-9					69	J	
ı		bis(2-Ethylhexyl);		3		90		ŀ
	117-84-0	Di-n-octylphthalai	ce	_	3	90	U	-
	205-99-2	Benzo(b)fluoranthe	ene		3	90	U	1
ı	207-08-9	Benzo(k)fluoranthe	ene	_	3	90	U	
	50-32-8	Benzo (a) pyrene				41	J	j
1	193-39-5	Indeno $(1,2,3-cd)$ py	rene		3	90	U	1
1	53-70-3	Dibenzo (a, h) anthra	cene		3	90	U	
		Benzo(g,h,i)peryle			3	90	U	
 1)	- Cannot be sep	arated from Dipher	ylamine	-	 			!

SED0262444

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM Case No.: SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-06A

Sample wt/vol:

30.9 (g/mL) G

S1D1523 Lab File ID:

Level:

(low/med)

LOW

Date Received: 10/11/02

% Moisture: 17

decanted: (Y/N) N

Date Extracted: 10/18/02

Concentrated Extract Volume: 1000(uL)

Date Analyzed: 10/21/02

Injection Volume: 1.0(uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

рн: ___

Number TICs found: 1

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg

Cas number	COMPOUND NAME	RT	EST.	CONC.	Q ====
	UNKNOWN	8.33		360	JВ
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SED0270003

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-14C

Sample wt/vol: 5.3 (g/mL) G

Lab File ID: V1F0407

Level: (low/med) LOW

Date Received: 10/11/02

% Moisture: not dec. 19

Date Analyzed: 10/14/02

GC Column: DB-624 ID: 0.25 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (mL)

CAS NO.

Soil Aliquot Volume: ____(uL)

COMPOUND

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

Q

74-87-3	Chloromethane	6 UJ
	Vinyl Chloride	6 U
	Bromomethane	6 UJ
	Chloroethane	6/07
	1,1-Dichloroethene	6 U
67-64-1	Acetone	6 U
75-15-0	Carbon Disulfide	6 U
	Methylene Chloride	2 JB
156-60-5	trans-1,2-Dichloroethene	6 l U
	1,1-Dichloroethane	6 U
	2-Butanone	6 U
	cis-1,2-Dichloroethene	6 U
67-66-3	Chloroform	6 U
	1,1,1-Trichloroethane	6 U
	Carbon Tetrachloride	6 U
	1,2-Dichloroethane	6 U
71-43-2		6 U
79-01-6	Trichloroethene	6 U
	1,2-Dichloropropane	6 U
75-27-4	Bromodichloromethane	6 U
	cis-1,3-Dichloropropene	6 U
	4-Methyl-2-pentanone	6 U
108-88-3		6 U
	trans-1,3-Dichloropropene	6 U
79-00-5	1,1,2-Trichloroethane	6 Ū
	Tetrachloroethene	6 U
	2-Hexanone	6 U
	Dibromochloromethane	6 U
	Chlorobenzene	6 U
	Ethylbenzene	6 U
1330-20-7	Xylene (Total)	6 Ū
100-42-5	Styrene	6 U
75-25-2	Bromoform	6 U
	1,1,2,2-Tetrachloroethane	6 U

VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

		_			SED0270003
Lab	Name:	MITKEM	CORPORATION	Contract:	

Lab Code: MITKEM Case No.: SAS No.: SDG No.: A1489

Lab Sample ID: A1489-14C Matrix: (soil/water) SOIL

Lab File ID: V1F0407 Sample wt/vol: 5.3 (g/mL) G

Date Received: 10/11/02 Level: (low/med) LOW

Date Analyzed: 10/14/02 % Moisture: not dec. 19

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Aliquot Volume: _____(uL) Soil Extract Volume: ____(mL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) ug/Kg Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q =====
	=======================================			
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SED0270003

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM Case No.:

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-14A

Sample wt/vol: 30.5 (g/mL) G

Lab File ID: S3B9944

Level: (low/med)

LOW

Date Received: 10/11/02

% Moisture: 19 decanted: (Y/N) N

Date Extracted: 10/18/02

Concentrated Extract Volume: 1000(uL) Date Analyzed: 10/23/02

Injection Volume:

1.0(uL)

Dilution Factor: 1.0

CONCENTRATION UNITS:

GPC Cleanup: (Y/N) N

рH: ___

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG Q
108-95-2			400 U
	bis(2-Chloroethy	l)Ether	400 UT
	2-Chlorophenol		400 U
541-73-1	1,3-Dichlorobenz	ene	400 UJ
106-46-7	1,4-Dichlorobenze	ene	400 U T
95-50-1	1,2-Dichlorobenze	ene	400 UJ
	2-Methylphenol		400 U
108-60-1	2,2'-oxybis(1- Ch	loropropane)	400 UJ
	4-Methylphenol		400 U
621-64-7	N-Nitroso-di-n-pi	ropylamine	400 U T
67-72-1	Hexachloroethane		400 UJ
98-95-3	Nitrobenzene		400 U ₹
	Isophorone		400 UJ
	2-Nitrophenol		400 U
	2,4-Dimethylpheno		400 U
	2,4-Dichloropheno		400 U
	1,2,4-Trichlorobe	enzene	400 UJ
91-20-3	Naphthalene		400 UJ
106-47-8	4-Chloroaniline		400 U J
111-91-1	bis(2-Chloroethox	y)methane	400 U J
87-68-3	Hexachlorobutadie	ene –	400 UJ
	4-Chloro-3-Methyl		400 U
91-57-6	2-Methylnaphthale	ene l	400 U J
77-47-4	Hexachlorocyclope	ntadiene	400 U J
88-06-2	2,4,6-Trichloroph	enol	400 U
95-95-4	2,4,5-Trichloroph	enol	810 U
	2-Chloronaphthale		400 U J │
	2-Nitroaniline		810 U J
	Dimethylphthalate		400 U J
	Acenaphthylene		400 U 7
	2,6-Dinitrotoluen	e	400 U J
	3-Nitroaniline		810 U J
	Acenaphthene		400 U J

FORM I SV-1

OIM03.0

SED0270003

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-14A

Sample wt/vol: 30.5 (g/mL) G

Lab File ID: S3B9944

Level: (low/med) LOW

Date Received: 10/11/02

% Moisture: 19

decanted: (Y/N) N

Date Extracted: 10/18/02

Concentrated Extract Volume: 1000(uL) Date Analyzed: 10/23/02

Injection Volume: 1.0(uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

1FSEMIVOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

BPA SAMPLE NO.

SED0270003

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No :

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-14A

Sample wt/vol:

30.5 (g/mL) G

S3B9944 Lab File ID:

Level:

(low/med)

decanted: (Y/N) N

Date Received: 10/11/02

LOW

Date Extracted: 10/18/02

% Moisture: 19

Concentrated Extract Volume:

1000 (uL)

Date Analyzed: 10/23/02

Injection Volume:

1.0(uL)

Dilution Factor: 1.0

GPC Cleanup:

(Y/N) N

pH: ____

Number TICs found: 4

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT =======	EST. CONC.	Q =====
1. 2. 10544-50-0 3. 80-05-7 4. 5.	UNKNOWN SULFUR, MOL. (S8) PHENOL, 4,4'-(1-METHYLETHYLI UNKNOWN	5.78 17.37	990 2600 430 1600	J NJ NJ
7. 8. 9.				
11. 12. 13. 14.				
16. 17. 18. 19.				
22. 23. 24. 25.				
26. 27. 28. 29.				

FORM I SV-TIC

OLMO3.0

SED0270003RE

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-14ARE

Sample wt/vol:

30.2 (g/mL) G

S2D0080 Lab File ID:

Level: (low/med)

Date Received: 10/11/02

% Moisture: 19

decanted: (Y/N) N

LOW

Date Extracted: 10/28/02

Concentrated Extract Volume: 1000 (uL)

Injection Volume:

1.0 (uL)

Date Analyzed: 11/01/02 Dilution Factor: 1.0

GPC Cleanup:

(Y/N) N

pH: ____

CAS NO.

COMPOUND

CONCENTRATION UNITS: (uq/L or ug/Kg) UG/KG

Q

		····
The of a Phonel	78	J
108-95-2Phenol 111-44-4bis(2-Chloroethyl)Ether	400	UJ
111-44-4DIS(2-CHOTOGERY) Button	400	
95-57-82-Chlorophenol	400	
541-73-11,3-Dichlorobenzene	_ -	UJ
106-46-71,4-Dichlorobenzene		UJ
95-50-11,2-Dichlorobenzene	400	-
95-48-72-Methylphenol		DJ.
108-60-12,2'-oxybis(1-Chloropropane)		עם ל
106-44-54-Methylphenol		U 7
621-64-7N-Nitroso-di-n-propylamine		
67-72-1Hexachloroethane		UJ
98-95-3Nitrobenzene		n 1
78-59-1Isophorone		UJ
88-75-52-Nitrophenol		In 7
105-67-92,4-Dimethylphenol		ΩĮ
120-83-22,4-Dichlorophenol		U T
120-82-11,2,4-Trichlorobenzene	400	-
91-20-3Naphthalene		υŢ
106-47-84-Chloroaniline		UJ
111-91-1bis(2-Chloroethoxy)methane	400	ΠŢ
87-68-3Hexachlorobutadiene	400	υŢ
59-50-74-Chloro-3-Methylphenol	400	UJ
91-57-62-Methylnaphthalene	400	υŢ
77-47-4Hexachlorocyclopentadiene	400	UÍ
88-06-22,4,6-Trichlorophenol	400	UT
95-95-42,4,5-Trichlorophenol	820	ע אָד
95-95-42,4,5-TITCHIOTOPHOLO	400	
91-58-72-Chloronaphthalene	820	-
88-74-42-Nitroaniline	400	UJ
131-11-3Dimethylphthalate	400	
208-96-8Acenaphthylene	400	•
606-20-22,6-Dinitrotoluene		UT
99-09-23-Nitroaniline		U
83-32-9Acenaphthene	400	~ 1
		· ——

1C SEMIVOLATILE ORGANICS ANALYSIS DATA SHRET

SED0270003RE

Lab Name: MITKEM CORPORATION

Contract:

Case No.: SAS No.:

SDG No.: A1489

S2D0080

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-14ARE

Sample wt/vol:

Lab Code: MITKEM

Lab File ID:

Level: (low/med) LOW

Date Received: 10/11/02

% Moisture: 19

decanted: (Y/N) N

30.2 (g/mL) G

Date Extracted: 10/28/02

Concentrated Extract Volume: 1000(uL)

Date Analyzed: 11/01/02

Injection Volume: 1.0(uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

pH: ___

CAS NO.	COMPOUND	CONCENTRATION (ug/L or ug/			Q
51-28-5 100-02-7	2,4-Dinitroph	nenol	1	820 820	บุฬ

	51-28-52,4-Dinitrophenol	820 U J	1
	100-02-74-Nitrophenol	820 U J	ļ
	132-64-9Dibenzofuran	400 U.T	
	121-14-22,4-Dinitrotoluene	400 U T	Ţ
	84-66-2Diethylphthalate	400 UJ	Ì
	7005-72-34-Chlorophenyl-phenylether	400 U J	
	86-73-7Fluorene	400 U J	
	100-01-64-Nitroaniline	820 U J	1
	534-52-14,6-Dinitro-2-methylphenol	820 U J	Ţ
	86-30-6N-Nitrosodiphenylamine (1)	400 U J	
	101-55-34-Bromophenyl-phenylether	400 U J	
	118-74-1Hexachlorobenzene	400 U J	1
	87-86-5Pentachlorophenol	820 U J	
	85-01-8Phenanthrene	400 U ∫	1
	120-12-7Anthracene	400 U J	
i	86-74-8Carbazole	400 U J	
	84-74-2Di-n-butylphthalate	400 U J	
	206-44-0Fluoranthene	400 U √	
	129-00-0Pyrene	58 J	
	85-68-7Butylbenzylphthalate	400 U J	1
	91-94-13,3'-Dichlorobenzidine	400 U J	1
1	56-55-3Benzo (a) anthracene	400 U J	
j	218-01-9Chrysene	400 U J	
	117-81-7bis(2-Ethylhexyl)phthalate	57 J	
	117-84-0Di-n-octylphthalate	400 U 🖵	
	205-99-2Benzo (b) fluoranthene	400 U 🆵	
	207-08-9Benzo(k)fluoranthene	400 U J	1
-	50-32-8Benzo (a) pyrene	400 U J	
-	193-39-5Indeno(1,2,3-cd)pyrene	400 U T	
	53-70-3Dibenzo(a,h)anthracene	400 U J	
	191-24-2Benzo(g,h,i)perylene	400 U J	ļ
١			

(1) - Cannot be separated from Diphenylamine

1FSEMIVOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SED0270003RE

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-14ARE

Sample wt/vol:

30.2 (g/mL) G

LOW

\$2D0080 Lab File ID:

Level: (low/med)

Date Received: 10/11/02

% Moisture: 19

decanted: (Y/N) N

Date Extracted: 10/28/02

Concentrated Extract Volume: 1000(uL)

Date Analyzed: 11/01/02

Injection Volume:

1.0(uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

pH: ____

Number TICs found: 9

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q =====
1. 2. 3. 872-05-9 4. 5. 80-05-7 6. 123-95-5	UNKNOWN UNKNOWN 1-DECENE UNKNOWN PHENOL, 4,4'-(1-METHYLETHYLI OCTADECANOIC ACID, BUTYL EST	7.40 10.23 13.52 19.87 19.90	1000 210 790 430 1300 250 210	JB NJ J NJ NJ
7. 791-28-6 8. 9. 10	PHOSPHINE OXIDE, TRIPHENYL- UNKNOWN UNKNOWN	25.58 26.33	550 640	J
12				
14. 15. 16.				
18. 19. 20.				
23				
25. 26. 27.				
30				

U.S. EPA - CLP

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

CEL	1027	ስስስ	2	

Lab Name:	MITKEM C	ORPORATION	Cont	ract:		· · · · · · · · · · · · · · · · · · ·	SED027	0003
Lab Code:	MITKEM	Case No.:		SAS No.:			SDG No.:	A1489A
Matrix (soil/wa	ater):	SOIL		ı	ab Samj	ole ID:	A1489-	14 A
Level (low/me	d):	MED		Γ	ate Rec	eived:	10/11/02	<u></u>
% Solids:		81.0						
	Concentration	Units (ug/L or mg	/kg dry weight):				MG/KG	
	CAS No.	Analyte	Concentration	С	Q	М		
	_7429-90-5	Aluminum				NR		
	_7440-36-0					NR		
	_7440-38-2					NR		
						NR		
	7440-41-7					NR		
	7440-43-9	-				NR		
	7440-70-2					NR		
İ	_7440-47-3					NR		
	7440-48-4				·-	NR		
	7440-50-8					NR		
	7439-89-6	• •				NR	•	
	7439-92-1					NR		
	_7439-95-4	Magnesium				NR		
	_7439-96-5	-				NR		
	_7439-97-6	Mercury				NR		
	_7440-02-0	Nickel			_	NR		
	_7440-09-7	Potassium				NR		
·	_7782-49-2	Selenium				NR		
	_7440-22-4	Silver				NR		
	_7440-23-5	Sodium				NR		
	_7440-28-0	Thallium				NR		
	_7440-62-2	Vanadium	 			NR		
	7440-66-6	Zinc		- 		NR		
		Cyanide	0.16	U I	*N	CA		
!								
Color Before:		Clari	ty Before:				Texture:	
Color After:		Clari	ty After:				Artifacts:	-articolaris
Comments:								

Mitkem Corporation

CLIENT:

Lab ID:

GEI Consultants, Inc.

Client Sample ID: SED0270003

A1489-14

Date: 08-Nov-02

Project: Keyspan

Collection Date: 10/09/02 15:15

Analyses	Result	Qual	Limit	Units	DF	Date Analyzed
HARDNESS BY CALCULATION Hardness, Calcium/Magnesium (As CaCO3)	29000	SM234	0_S 240	mg/Kg CaCO3	1	10/24/02 15:38
SOIL AND WASTE PH		SW904	5C_S			
pΗ	7.7		1.0	pH Units	1	10/21/02 0:00

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

DF - Dilution Factor

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Limit - Reporting Limit

1A VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SED0270330

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: A1489

Matrix: (soil/water) SOIL Lab Sample ID: A1489-15C

Sample wt/vol: 5.1 (g/mL) G Lab File ID: V1F0408

Level: (low/med) LOW Date Received: 10/11/02

% Moisture: not dec. 17
Date Analyzed: 10/15/02

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(mL) Soil Aliquot Volume: _____(uL)

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

CAS NO.	COMPOUND (ag/ L Of a	9/109/ 00/100	Q
74-87-3	Chloromethane		6 U J
	Vinyl Chloride	-	6 U
74-83-9	Bromomethane	-	6 U T
75-00-3	Chloroethane		6 U ±
75-35-4	1,1-Dichloroethene	-	6 U
67-64-1	Acetone	-	8
	Carbon Disulfide	-	1 5
75-09-2	Methylene Chloride	=	3 JB
156-60-5	trans-1,2-Dichloroethene	-	6 U
75-34-3	1,1-Dichloroethane	_	6 U
78-93-3	2-Butanone	-	6 U
	cis-1,2-Dichloroethene	-	6 U
	Chloroform	-	6 U
	1,1,1-Trichloroethane	-	6 U
56-23-5	Carbon Tetrachloride	-	6 U
107-06-2	1,2-Dichloroethane	-	6 U
71-43-2		=	6 U
	Trichloroethene	-	6 U
	1,2-Dichloropropane	-	6 U
75-27-4	Bromodichloromethane	-	6 U
10061-01-5	cis-1,3-Dichloropropene	-	6 U
	4-Methyl-2-pentanone	-	6 U
108-88-3		-	6 U
10061-02-6	trans-1,3-Dichloropropene	-	6 U
79-00-5	1,1,2-Trichloroethane	-	G U
	Tetrachloroethene	-	6 U
	2-Hexanone	-	6 U
	Dibromochloromethane	-	6 U
	Chlorobenzene	-	6 U
	Ethylbenzene	_	6 U
	Xylene (Total)	-	6 U
100-42-5	Styrene	-	6 U
	Bromoform	-	6 U
	1,1,2,2-Tetrachloroethane	-	6 U

OLM03.0

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SED	02	70	3	3	0

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM Case No.: SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-15C

Sample wt/vol:

5.1 (g/mL) G

Lab File ID: V1F0408

Level: (low/med) LOW

Date Received: 10/11/02

% Moisture: not dec. 17

Date Analyzed: 10/15/02

GC Column: DB-624 ID: 0.25 (mm)

Dilution Factor: 1.0

Soil Extract Volume: ____(mL)

CONCENTRATION UNITS:

Soil Aliquot Volume: ____(uL)

Number TICs found: 0

(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
	=======================================	== 		
1				\
2		-		
3.				
4				
5				
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30		1		l ———

EPA SAMPLE NO.

SED0270330

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-15A

Sample wt/vol:

30.6 (g/mL) G

Lab File ID: S1D1530

Level:

(low/med) LOW

Date Received: 10/11/02

% Moisture: 17

decanted: (Y/N) N

Date Extracted: 10/18/02

Concentrated Extract Volume: 1000(uL)

Date Analyzed: 10/22/02

Injection Volume: 1.0(uL)

Dilution Factor: 1.0

CONCENTRATION UNITS:

GPC Cleanup: (Y/N) N

рH: ____

CAS NO.		ug/L or ug/Kg))
108-95-2			390 U	
111-44-4	bis(2-Chloroethyl)	Ether	390 0丁	-
	2-Chlorophenol_		390 U	
	1,3-Dichlorobenzene		390 U J	-
	1,4-Dichlorobenzene		390 U J	-
	1,2-Dichlorobenzene	-	390 じ丁	-
95-48-7	2-Methylphenol_		390 U	
108-60-1	2,2'-oxybis(1-Chlor	opropane)	390 ロブ	
106-44-5	4-Methylphenol		390 U	
621-64-7	N-Nitroso-di-n-prop	ylamine	390 U J	-
67-72-1	Hexachloroethane		390 U J	
	Nitrobenzene		390 U J	_
78-59-1	Isophorone		390 U J	
	2-Nitrophenol		390 U	
	2,4-Dimethylphenol		390 U	- 1
	2,4-Dichlorophenol		390 U	- 1
	1,2,4-Trichlorobenz	ene	390 U J	ŀ
	Naphthalene		48 J	ļ
106-47-8	4-Chloroaniline		390 U J	-
	bis(2-Chloroethoxy)	methane	390 U J	- 1
	Hexachlorobutadiene		390 U.T	- 1
	4-Chloro-3-Methylph		390 U	- 1
	2-Methylnaphthalene		390 U J	ļ
	Hexachlorocyclopent		390 U J	
	2,4,6-Trichlorophen		390 U	
	2,4,5-Trichlorophen		790 U	1
	2-Chloronaphthalene		390 U J	
	2-Nitroaniline		790 0	
	Dimethylphthalate		390 U J	1
	Acenaphthylene		65 J	i
	2,6-Dinitrotoluene		390 U T	
	3-Nitroaniline		790 0 5	. [
	Acenaphthene		390 U J	
			-30 3	
				

1C SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SED0270330

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-15A

Sample wt/vol:

30.6 (g/mL) G

Lab File ID: S1D1530

Level:

(low/med)

Date Received: 10/11/02

% Moisture: 17

decanted: (Y/N) N

LOW

Date Extracted:10/18/02

Concentrated Extract Volume:

1000(址)

Date Analyzed: 10/22/02

Injection Volume:

1.0(吐)

Dilution Factor: 1.0

GPC Cleanup:

(Y/N) N

pH: ____

CAS NO.	COMPOUND	CONCENTRATIO (ug/L or ug/	N UNITS: Kg) UG/KG	Q
	2 4 Dinitroph	nenol	790	U
51-28-5	2,4-Dinitroph		790	
100-02-7	4-Nitrophenol		390	UJ
132-64-9	Dibenzofuran	Juana		UJ
121-14-2	2,4-Dinitroto	Date.		UJ
84-66-2	Diethylphthal	rl phonylether		UJ
7005-72-3	4-Chloropheny	1.buenArecuer	60	_
86-73-7	Fluorene		=	UJ
100-01-6	4-Nitroanilin	le	790	
534-52-1	4,6-Dinitro-2	2-metry phenor		UJ
86-30-6	N-Nitrosodiph	renyranurie_(1)		UJ
101-55-3	4-Bromopheny	r-buenArecher		7.0
118-74-1	Hexachlorober	1zene		切于
87-86-5	Pentachloroph	renor	730 E00	٧٠٠
85-01-8	Phenanthrene_		580 210	\ \\
120-12-7	Anthracene			
96-74-8	Carbazole			UJ
84-74-2	Di-n-butylpht	halate		UJ
206-44-0	Fluoranthene		840 2000	[J
129-00-0	Pyrene		2000	<u> </u>
25-62-7	Butvlbenzvlph	nthalate		Ū I
91-94-1	3,3'-Dichlor	obenziaine	390	07
56-55-3	Benzo (a) anthi	racene	640	7
216 01 0	Chrysene	ì	640	13
117-81-7	bis(2-Ethylhe	exyl)phthalate		U Ţ
117-84-0	Di-n-octylpht	halate		n1
117-04-0-	Benzo(b) fluo	ranthene	360	
203-33-2-	D (Ir) fluor	canthone	160	IJ

(1) - Cannot be separated from Diphenylamine

207-08-9-----Benzo(k)fluoranthene

193-39-5-----Indeno(1, 2, 3-cd) pyrene

191-24-2----Benzo(g,h,i)perylene_

53-70-3-----Dibenzo(a,h)anthracene

50-32-8-----Benzo (a) pyrene

160 J

45 J 140 J

470

140

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SED0270330

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab File ID:

Lab Sample ID: A1489-15A

sample wt/vol:

30.6 (g/mL) G

S1D1530

Level:

(low/med)

LOW

Date Received: 10/11/02

% Moisture: 17

decanted: (Y/N) N

Date Extracted:10/18/02

Concentrated Extract Volume:

1000(址)

Injection Volume:

1.0 (uL)

Date Analyzed: 10/22/02 Dilution Factor: 1.0

GPC Cleanup:

(Y/N) N

pH: ____

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg

Number TICs found: 13

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q =====
1.	UNKNOWN	8.33 19.00	1100	
2. 613 - 12-7	ANTHRACENE, 2-METHYL-	19.06		
3. 6 1 3-12-7	ANTHRACENE, 2-METHYL-	19.00	810	
4	UNKNOWN	19.27	410	
5. 613-12-7	ANTHRACENE, 2-METHYL-	20.14	430	
6. 3674-66-6	PHENANTHRENE, 2,5-DIMETHYL-	20.21	350	
7.	UNKNOWN	20.66	290	
8. 206-44-0	FLUORANTHENE 11H-BENZO[B] FLUORENE	21.61	390	
9. 243-17-4	11H-BENZO[B] FLUORENE	21.75	220	
10. 243-17-4	PYRENE, 2-METHYL-	21.82	290	NJ.
11. 3442-78-2	PYRENE, 2-METHYL-	22.01	240	NJ
12. 3442-78-2	PYRENE, 1-METHYL-	22.07	260	NJ
13. 2381-21-7	PIRCHE, I-MEIIIIE			
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SED0270330RE

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-15ARE

Sample wt/vol:

30.1 (g/mL) G

Lab File ID: S2D0081

Level:

(low/med) LOW

Date Received: 10/11/02

% Moisture: 17

decanted: (Y/N) N

Date Extracted: 10/28/02

Concentrated Extract Volume:

1000 (uL)

Date Analyzed: 11/01/02

Injection Volume: 1.0(uL)

Dilution Factor: 1.0

CONCENTRATION UNITS:

GPC Cleanup: (Y/N) N

pH: ____

CAS NO.	COMPOUND	(ug/L or ug/Kg	
108-95-2 111-44-4 95-57-8 541-73-1 106-46-7 95-50-1 95-48-7 106-44-5 621-64-7 98-95-3 98-95-3 105-67-9 120-83-2 120-82-1 91-20-3 111-91-1 87-68-3 111-91-1 87-68-3 91-57-6 91-57-6 91-58-7		/l) Ether	400 400 400 400 400 400 400 400 400 400

SED0270330RE

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: A1489

Matrix: (soil/water) SOIL Lab Sample ID: A1489-15ARE

Sample wt/vol: 30.1 (g/mL) G Lab File ID: S2D0081

Level: (low/med) LOW Date Received: 10/11/02

% Moisture: 17 decanted: (Y/N) N Date Extracted: 10/28/02

Concentrated Extract Volume: 1000(uL) Date Analyzed: 11/01/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/kg) UG/kG Q

51-28-52,4-Dinitrophenol	800 UJ
100-02-74-Nitrophenol	800 U J
132-64-9Dibenzofuran	400 U J
121-14-22,4-Dinitrotoluene	400 U J
84-66-2Diethylphthalate	400 U 🕏
7005-72-34-Chlorophenyl-phenylether	400 U J
86-73-7Fluorene	110/3
100-01-64-Nitroaniline	008 U J
534-52-14,6-Dinitro-2-methylphenol	800 U
86-30-6N-Nitrosodiphenylamine (1)	400 U
101-55-34-Bromophenyl-phenylether	1 400 U J
118-74-1Hexachlorobenzene	400 0 3
87-86-5Pentachlorophenol	800 0 5
85-01-8Phenanthrene	820
120-12-7Anthracene	500
86-74-8Carbazole	400 UJ
84-74-2Di-n-butylphthalate	400 U J
206-44-0Fluoranthene	1800
129-00-0Pyrene	6500 E
85-68-7Butylbenzylphthalate	400 UJ
91-94-13,3'-Dichlorobenzidine	400 U J
56-55-3Benzo (a) anthracene	2000
218-01-9Chrysene	2000 🔻
117-81-7bis(2-Ethylhexyl)phthalate	45 5
117-84-0Di-n-octylphthalate	400 U =
205-99-2Benzo (b) fluoranthene	1600 1
207-08-9Benzo (k) fluoranthene	680 1
50-32-8Benzo (a) pyrene	1900 3
193-39-5Indeno(1,2,3-cd)pyrene	460 1
53-70-3Dibenzo(a,h)anthracene	170 J
191-24-2Benzo(g,h,i)perylene	540 1
- Cannot be separated from Diphenylamine	

(1) - Cannot be separated from Diphenylamine

OIM03.0

1FSEMIVOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SED0270330RE

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-15ARE

Sample wt/vol:

30.1 (g/mL) G

S2D0081 Lab File ID:

Level: (low/med)

LOW

Date Received: 10/11/02

% Moisture: 17

decanted: (Y/N) N

Date Extracted: 10/28/02

Concentrated Extract Volume:

1000 (uL)

Date Analyzed: 11/01/02

Injection Volume:

1.0 (uL)

Dilution Factor: 1.0

GPC Cleanup:

(Y/N) N

pH: ____

Number TICs found: 16

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg

	COMPOUND NAME	RT	EST. CONC.	o
CAS NUMBER	COMPOUND NAME			
=======================================	INKNOWN	7.41	1100	DR
1.	ANTHRACENE, 2-METHYL-	17.87	1200	NJ
2. 613-12-7	LINKNOWN	18.08	2200	
3. 4. 613-12-7	ANITHRACENE, 2-METHYL-	18.14	910	
4. 613-12-7 5. 35465-71-5	2-PHENYLNAPHTHALENE	18.48	1000	
	PHENANTHRENE, 2,5-DIMETHYL-	18.99	1300	
6. 3674-66-6	UNKNOWN	19.05	1200	
7. 8. 27765-96-4	1,4-ETHENOANTHRACENE, 1,4-DI	19.17	740	
9. 80-05-7	PHENOL, 4,4'-(1-METHYLETHYLI	19.93	4300	. ,
	LINKNOWN	20.40	500	
10. 11. 238-84-6	11H-BENZO[A] FLUORENE	20.45	940	
12. 243-17-4	11H-BENZO [B] FLUORENE	20.58	540	
13. 3442-78-2	PYRENE, 2-METHYL-	20.65	550	
14. 2381-21-7	PYRENE, 1-METHYL-	20.82	580	
15. 3442-78-2	PYRENE, 2-METHYL-	20.89	660	
16. 64401-21-4	PYRENE, 1,3-DIMETHYL-	21.44	560	NJ
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1 INORGANIC ANALYSIS DATA SHEET

EPA	SAMPI	E NO.
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ıb Name:	MITKEM C	ORPORATION	Cont	ract:			SED027	70330
b Code:	MITKEM	Case No.:		SAS No.	.:		SDG No.:	A1489A
atrix (soil/w	rater):	SOIL			Lab Samp	le ID:	A1489-	15A
vel (low/me	ed):	MED			Date Rece	eived:	10/11/0:	2
Solids:		83.0						
	Concentration	Units (ug/L or mg	/kg dry weight):				MG/KG	
	CAS No.	Analyte	Concentration	C	Q	М		
	_7429-90-5	Aluminum				NR		
	7440-36-0	Antimony	=-:			NR		
	7440-38-2					NR		
	7440-39-3	Barium	— r · · ·			NR		
	7440-41-7	Beryllium				NR		
	_7440-43-9	Cadmium				NR		
	7440-70-2	Calcium				NR		
	7440-47-3	Chromium				NR		
	7440-48-4	Cobalt				NR		
	7440-50-8	Copper	1			NR		
	_7439-89-6	Iron				NR		
	_7439-92-1	Lead				NR		
	7439-95-4	Magnesium				NR		
	_7439-96-5	Manganese				NR		
	_7439-97-6	Мегсигу				NR		
	_7440-02-0	Nickel				NR		
	_7440-09-7	Potassium				NR		
	_7782-49-2	Selenium				_NR		
	_7440-22-4	Silver	<u> </u>			NR		
	_7440-23-5	Sodium		_		NR		
	_7440-28-0	Thallium	<u> </u>			NR		
	_7440-62-2					NR		
	_7440-66-6	•				NR		
		Cyanide	0.23	B_	J*N	CA		
olor Before:		Clari	ty Before:		<u>.</u>		Texture:	
olor After:		Clari	ty After:		iero Monografia		Artifacts:	
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mments:								

Mitkem Corporation

CLIENT:

GEI Consultants, Inc.

Client Sample ID: SED0270330

Lab ID:

A1489-15

Date: 08-Nov-02

Project: Keyspan

Collection Date: 10/09/02 15:20

Analyses	Result	Qual	Limit	Units	DF	Date Analyzed
HARDNESS BY CALCULATION		SM234	0_S			
Hardness, Caldum/Magnesium (As CaCO3)	12000		230	mg/Kg CaCO3	1	10/24/02 15:38
SOIL AND WASTE PH		SW904	5C_S			
рH	7.5		1.0	pH Units	1	10/21/02 0:00

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

DF - Dilution Factor

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Limit - Reporting Limit

SED028003

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-12C

Sample wt/vol:

Lab File ID: V1F0403

5.3 (g/mL) G

Level: (low/med)

Date Received: 10/11/02

% Moisture: not dec. 17

Date Analyzed: 10/14/02

GC Column: DB-624 ID: 0.25 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (mL)

Soil Aliquot Volume: ____(uL)

CAS NO.

COMPOUND

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

0

74-87-3				- ₁
75-01-4Vinyl Chloride 6 U 74-83-9	74-87-3	Chloromethane	6	บฮ
74-83-9			→ 1	1 -
75-00-3				
75-35-41,1-Dichloroethene 6 U 67-64-1Acetone 6 U 75-15-0				
67-64-1				
75-15-0Carbon Disulfide 6 U 75-09-2Methylene Chloride 3 JB 156-60-5				
75-09-2Methylene Chloride 3 JB 156-60-5trans-1,2-Dichloroethene 6 U 75-34-31,1-Dichloroethane 6 U 78-93-32-Butanone 6 U 156-59-2cis-1,2-Dichloroethene 6 U 67-66-3Chloroform 6 U 71-55-61,1,1-Trichloroethane 6 U 56-23-5Carbon Tetrachloride 6 U 107-06-21,2-Dichloroethane 6 U 71-43-2Benzene 6 U 79-01-6Trichloroethene 6 U 78-87-51,2-Dichloropropane 6 U 75-27-4Bromodichloromethane 6 U 108-10-14-Methyl-2-pentanone 6 U 108-88-3Toluene 6 U 10061-02-6trans-1,3-Dichloropropene 6 U 79-00-51,1,2-Trichloroethane 6 U 127-18-4Tetrachloroethene 6 U 591-78-62-Hexanone 6 U 124-48-1Dibromochloromethane 6 U 100-41-4Ethylbenzene 6 U				
156-60-5				
75-34-31,1-Dichloroethane 6 U 78-93-32-Butanone 6 U 156-59-2cis-1,2-Dichloroethene 6 U 67-66-3Chloroform 6 U 71-55-61,1,1-Trichloroethane 6 U 56-23-5Carbon Tetrachloride 6 U 107-06-21,2-Dichloroethane 6 U 71-43-2Benzene 6 U 79-01-6Trichloroethene 6 U 78-87-51,2-Dichloropropane 6 U 75-27-4Bromodichloromethane 6 U 108-10-14-Methyl-2-pentanone 6 U 108-88-3Toluene 6 U 10061-02-6trans-1,3-Dichloropropene 6 U 79-00-51,1,2-Trichloroethane 6 U 127-18-4Tetrachloroethene 6 U 591-78-62-Hexanone 6 U 124-48-1Dibromochloromethane 6 U 108-90-7Chlorobenzene 6 U 100-41-4Ethylbenzene 6 U			_ 1	
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				U
100-42-5Styrene 6 U			-	
75-25-2Bromoform 6 U	75-25-2	Bromoform	- 1	
79-34-51,1,2,2-Tetrachloroethane6 U			[] 6	-
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VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

		TENTATIVELY	IDENTIFIED COMPOUNDS	SED028003
Lab	Name:	MITKEM CORPORATION	Contract:	

Lab Code: MITKEM Case No.: SAS No.: SDG No.: A1489

Matrix: (soil/water) SOIL Lab Sample ID: A1489-12C

Sample wt/vol: 5.3 (g/mL) G Lab File ID: V1F0403

Level: (low/med) LOW Date Received: 10/11/02

% Moisture: not dec. 17 Date Analyzed: 10/14/02

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: ____(mL) Soil Aliquot Volume: ____(uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q =====
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SED028003

Lab Name: MITKEM CORPORATION

Contract:

Q

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-12A

Sample wt/vol:

30.5 (g/mL) G

Lab File ID: S3C0244

Level: (low/med)

LOW

Date Received: 10/11/02

% Moisture: 17

decanted: (Y/N) N

Date Extracted: 10/18/02

Concentrated Extract Volume: 1000(uL)

Date Analyzed: 11/13/02

Injection Volume: 1.0(uL)

CAS NO.

COMPOUND

Dilution Factor: 1.0

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/KG

GPC Cleanup: (Y/N) N pH:

1		
108-95-2Phenol	75	J
111-44-4bis(2-Chloroethyl)Ether	390	
95-57-82-Chlorophenol	390	
541-73-11,3-Dichlorobenzene	390	
106-46-71,4-Dichlorobenzene	390	
95-50-11,2-Dichlorobenzene	390	
95-48-72-Methylphenol	390	
108-60-12,2'-oxybis(1-Chloropropane)	390	
106-44-54-Methylphenol	390	ប
621-64-7N-Nitroso-di-n-propylamine	390	U
67-72-1Hexachloroethane	390	U
98-95-3Nitrobenzene	390	U
78-59-1Isophorone	390	
88-75-52-Nitrophenol	390	
105-67-92,4-Dimethylphenol	390	
120-83-22,4-Dichlorophenol	390	
120-82-11,2,4-Trichlorobenzene	390	
91-20-3Naphthalene	390	υ
106-47-84-Chloroaniline	390	ט ו
111-91-1bis (2-Chloroethoxy) methane	390	
87-68-3Hexachlorobutadiene	390	
59-50-74-Chloro-3-Methylphenol	390	ו ט
91-57-62-Methylnaphthalene	390	v
77-47-4Hexachlorocyclopentadiene	390	ט ו
88-06-22,4,6-Trichlorophenol	390 1	ט {
95-95-42,4,5-Trichlorophenol	790 1	ן ט
91-58-72-Chloronaphthalene	390 1	ו ע
88-74-42-Nitroaniline	790 1	ן נ
131-11-3Dimethylphthalate	390 t	ן נ
208-96-8Acenaphthylene	390 t	
606-20-22,6-Dinitrotoluene	390 t	
99-09-23-Nitroaniline	790 t	J
83-32-9Acenaphthene	390 t	J

SED028003

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM Case No.: SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-12A

Sample wt/vol:

30.5 (g/mL) G

Lab File ID: S3C0244

Level: (low/med)

LOW

Date Received: 10/11/02

% Moisture: 17

decanted: (Y/N) N

Date Extracted:10/18/02

Concentrated Extract Volume: 1000(uL)

Date Analyzed: 11/13/02

Injection Volume:

1.0(uL)

Dilution Factor: 1.0

CONCENTRATION UNITS:

GPC Cleanup:

(Y/N) N

pH: ____

enolluene	-	790 790	
	-		T.T.
luene	i		1
luene	_ i	390	U
	_	390	U
ate		390	U
l-phenylether	_{}	390	U
	-	390	U
e	-	790	U
-methylphenol	-}	790	שׁ
enylamine (1)	-	390	U
-phenylether 🗔	-[390	บ
zene	-	390	U
enol	-	790	ប
	-	48	J
	-	390	U
	-1	390	ט
nalate	-	390	Ū
	1	87	J
	1	200	J
chalate	•	390	U
penzidine	•]	390	U
	1	90	
	•	77	
cvl)phthalate	1	390	U
alate	1	180	J
inthene	1	65	J
	ĺ	390	U
	1.	73	J
	1	390	
	1		-
	ate 1-phenylether e -methylphenol enylamine (1) -phenylether zene enol halate thalate benzidine acene exyl)phthalate halate anthene enthene ethracene erylene phenylamine	e-methylphenol enylamine_(1) -phenylether zene enol halate thalate benzidine acene kyl)phthalate anthene anthene enthracene erylene	1-phenylether 390 e 790 -methylphenol 790 enylamine (1) 390 -phenylether 390 zene 390 enol 790 halate 390 thalate 390 thalate 390 control phthalate 390 enthene 390 enthene 390 cd) pyrene 390 erylene 390

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SED028003

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-12A

Sample wt/vol:

30.5 (g/mL) G

S3C0244 Lab File ID:

Level:

(low/med)

Date Received: 10/11/02

% Moisture: 17

decanted: (Y/N) N

LOW

Date Extracted: 10/18/02

Concentrated Extract Volume:

Date Analyzed: 11/13/02

Injection Volume: 1.0(uL)

Dilution Factor: 1.0

GPC Cleanup:

(Y/N) N

pH: ____

1000 (uL)

Number TICs found: 12

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg

U.S. EPA - CLP

1 INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SE	חח	20	ስበ	12	

Lab Name:	MITKEM CO	ORPORATION	SED028003					
Lab Code:	MITKEM	Case No.:		SAS No.:			SDG No.: A148	9A.
Matrix (soil/w	at er):	SOIL		L	ab Samp	ole ID:	A1489-12A	_
Level (low/me	d):	MED		D	ate Rece	eived:	10/11/02	
% Solids:		83.0						
	Concentration	Units (ug/L or mg	/kg dry weight):				MG/KG	
	CAS No.	Analyte	Concentration	С	Q	М		
		<u> </u>		_		NR		
	_7429-90-5	Aluminum				NR NR		
	_7440-36-0	Antimony				NR NR		
	_7440-38-2	Arsenic		- -		NR		
	_7440-39-3	Barium	- 			NR NR		
	7440-41-7	Beryllium	-			NR		
	_7440-43-9	Cadmium				NR		
	_7440-70-2	Calcium				NR		
	_7440-47-3	Chromium Cobalt				NR		
	7440-48-4 _7440-50-8	· ·				NR		
	7439-89-6	Copper				NR		
		Lead				NR		
		Magnesium_				NR		
	_7439-96-5	Manganese				\square NR		
	_7439-97-6	Mercury				□NR		
	7440-02-0	Nickel				□NR		
	7440-09-7	Potassium				NR		
	7782-49-2	Selenium				NR		
		Silver_				NR		
	7440-23-5	Sodium				NR		
	7440-28-0	Thallium				NR.		
		Vanadium				NR.		
	7440-66-6	Zinc				NR		
			0.43	B	N	CA.		
	7440-66-6	Cyanide	0.43	В	N			
Color Before:		Clan	ity Before:				Texture:	
Color After:		Clar	ity After:				Artifacts:	

Mitkem Corporation

CLIENT:

GEI Consultants, Inc.

Client Sample ID:

SED028003

Lab ID:

A1489-12

Date: 08-Nov-02

Project: Keyspan

Collection Date: 10/09/02 14:50

Analyses	Result	Qual	Limit	Units	DF	Date Analyzed
HARDNESS BY CALCULATION		SM234	0. S	. <u></u>		
Hardness, Calcium/Magnesium (As CaCO3)	58000		230	mg/Kg CaCO3	1	10/24/02 15:38
SOIL AND WASTE PH		SW904	5C_S			
pH	7.9		1.0	pH Units	1	10/21/02 0:00

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

DF - Dilution Factor

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Limit - Reporting Limit

SED0280330

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.:

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-13C

Sample wt/vol:

Lab File ID: V1F0440

5.1 (g/mL) G

Level: (low/med) LOW

Date Received: 10/11/02

% Moisture: not dec. 19

Date Analyzed: 10/15/02

GC Column: DB-624 ID: 0.25 (mm)

Dilution Factor: 1.0

Soil Extract Volume:____(mL)

Soil Aliquot Volume: ____(uL)

CAS NO.

COMPOUND

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

Q

74-87-3	<u></u>		
, , , , ,	Chloromethane	1	ร บ
75-01-4	Vinyl Chloride		Š Ū
74-83-9	Bromomethane		Ū
75-00-3	Chloroethane	$\dot{\epsilon}$	
75-35-4	1,1-Dichloroethene	il	· ·
67-64-1	Acetone	il è	
75-15-0 	Carbon Disulfide	· ē	
75-09-2	Methylene Chloride	3	
156-60-5	trans-1,2-Dichloroethene	1 6	
75-34-3	1,1-Dichloroethane	ϵ	
78-93-3	2-Butanone	6	
156 - 59-2 	cis-1,2-Dichloroethene	1 6	
67-66-3- 	Chloroform	6	ט ו
71-55-6	1,1,1-Trichloroethane	[] 6	U
56-23-5 	Carbon Tetrachloride	6	i U
107-06-2	1,2-Dichloroethane	· 6	U
71-43-2	Benzene	6	U
79-01-6	Trichloroethene	1 6	U
78-87-5	1,2-Dichloropropane	6	U
75-27-4 	Bromodichloromethane	6	U
10061-01-5	cis-1,3-Dichloropropene	1 6	U
108-10-1	4-Methyl-2-pentanone	6	U
108-88-3		6	U
10061-02-6	trans-1,3-Dichloropropene	6	U
79-00-5	1,1,2-Trichloroethane		U
127-18-4	Tetrachloroethene		U
591-78-6			U
	Dibromochloromethane	6	U
	Chlorobenzene		U
100-41-4	Ethylbenzene		U
1330-20-7	Xylene (Total)		U
100-42-5	Styrene		U
75-25-2 -		6	U
79-34 - 5 -	1,1,2,2-Tetrachloroethane	6	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SED0280330

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM Case No.:

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-13C

Sample wt/vol:

5.1 (g/mL) G

Lab File ID: V1F0440

Level: (low/med) LOW

Date Received: 10/11/02

% Moisture: not dec. 19

Date Analyzed: 10/15/02

GC Column: DB-624 ID: 0.25 (mm)

Dilution Factor: 1.0

Soil Extract Volume: ____(mL)

Soil Aliquot Volume: ____(uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg

Number TICs found: 6

CAS NUMBER COMPOUND NAME RT EST. CONC. Q 1. 90-12-0 NAPHTHALENE, 1-METHYL- 16.57 65 NJ 2. 581-42-0 NAPHTHALENE, 2,6-DIMETHYL- 17.45 11 NJ 3. 581-40-8 NAPHTHALENE, 2,3-DIMETHYL- 17.60 26 NJ 4. 581-40-8 NAPHTHALENE, 2,3-DIMETHYL- 17.85 12 NJ 5. 83-32-9 ACENAPHTHENE 18.31 67 NJ 6. 829-26-5 NAPHTHALENE, 2,3,6-TRIMETHYL 18.57 6 NJ 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19.<	Number TICS Tour	d: 6 (ug/2 (or ug/11g/	~=, ~= 	
1. 90-12-0 NAPHTHALENE, 1-METHYL- 16.57 65 NJ 2. 581-42-0 NAPHTHALENE, 2,6-DIMETHYL- 17.45 11 NJ 3. 581-40-8 NAPHTHALENE, 2,3-DIMETHYL- 17.60 26 NJ 4. 581-40-8 NAPHTHALENE, 2,3-DIMETHYL- 17.85 12 NJ 5. 83-32-9 ACENAPHTHENE 18.31 67 NJ 6. 829-26-5 NAPHTHALENE, 2,3,6-TRIMETHYL 18.57 6 NJ 7. 8. 9		- ·			
27. 28. 29. 30.	1. 90-12-0 2. 581-42-0 3. 581-40-8 4. 581-40-8 5. 83-32-9 6. 829-26-5 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29.	NAPHTHALENE, 1-METHYL- NAPHTHALENE, 2,6-DIMETHYL- NAPHTHALENE, 2,3-DIMETHYL- ACENAPHTHENE NAPHTHALENE, 2,3,6-TRIMETHYL NAPHTHALENE, 2,3,6-TRIMETHYL	16.57 17.45 17.60 17.85 18.31	65 11 26 12 67	NJ NJ NJ NJ NJ

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SED0280330

Lab Name: MITKEM CORPORATION

Contract:

Case No.:

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-13A

Sample wt/vol:

Lab Code: MITKEM

30.6 (g/mL) G

Lab File ID: S1D1522

Level:

(low/med) LOW Date Received: 10/11/02

% Moisture: 19

decanted: (Y/N) N

Date Extracted: 10/18/02

Concentrated Extract Volume: 1000(uL)

Date Analyzed: 10/21/02

Injection Volume:

1.0(uL)

Dilution Factor: 1.0

CONCENTRATION UNITS:

GPC Cleanup: (Y/N) N

pH: ____

100.05.0				
	Phenol_		400	U
	bis(2-Chloroethyl)	Ether	400	$U\mathcal{T}$
	2-Chlorophenol		400	_
	1,3-Dichlorobenzene		i i	ប្រ
	1,4-Dichlorobenzene		400	
	1,2-Dichlorobenzene	<u> </u>	400	
95-48-7	2-Methylphenol		[U
108-60-1	2,2'-oxybis(1-Chlor	ropropane)	400	
106-44-5	4-Methylphenol		400	
	N-Nitroso-di-n-prop	oylamine	400	UΙ
	Hexachloroethane		400	
	Nitrobenzene		400	
	Isophorone		400	
	2-Nitrophenol		400	
105-67-9	2,4-Dimethylphenol		400	U
120-83-2	2,4-Dichlorophenol		400	U
	1,2,4-Trichlorobenz	zene	400	UJ
91-20-3	Naphthalene		400	UJ
	4-Chloroaniline		400	UI
111-91-1	bis(2-Chloroethoxy)	methane	400	បេរិ
87-68-3	Hexachlorobutadiene	-	400 1	UĮ
59-50-7	4-Chloro-3-Methylph	enol	400 1	U
	2-Methylnaphthalene		400 t	J J
77-47-4	Hexachlorocyclopent	adiene	400 T	J
	2,4,6-Trichlorophen		400 τ	J T
95-95-4	2,4,5-Trichlorophen	ol	810 T	J
91-58-7	2-Chloronaphthalene		400 T	JJ
	2-Nitroaniline		810 T	
	Dimethylphthalate		400 t	
	Acenaphthylene		400 t	J 🗍 .
	2,6-Dinitrotoluene_		400 t	J 🕽
99-09-2	3-Nitroaniline		810 t	ιš
	Acenaphthene		400 t	

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SED0280330

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM Case No.: SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-13A

Sample wt/vol:

30.6 (g/mL) G

Lab File ID: S1D1522

Level: (low/med)

LOW

Date Received: 10/11/02

% Moisture: 19

decanted: (Y/N) N

Date Extracted: 10/18/02

Concentrated Extract Volume:

1000 (uL)

Date Analyzed: 10/21/02

Injection Volume: 1.0(uL)

Dilution Factor: 1.0

CONCENTRATION UNITS:

GPC Cleanup:

(Y/N) N

pH:

CAS NO.	COMPOUND	(ug/L or	ug/Kg)	UG/KG 	Ç
51-28-5	2,4-Dinitrophe	enol		810	
	4-Nitrophenol			810	
	Dibenzofuran_				$ U\mathcal{J} $
	$2,4$ -Dinitrot $\overline{0}$				UJ
84-66-2	Diethylphthala	ite			ប្រស
7005-72-3	4-Chlorophenyl	-phenylether	<u></u>]	400	UJ
86-73-7	Fluorene		_	400	UJ
100-01-6	4-Nitroaniline			810	UJ
534-52-1	4,6-Dinitro-2-	methylphenol		810	U
	N-Nitrosodiphe			400	Ud
101-55-3	4-Bromophenyl-	phenylether		400	n 4
	Hexachlorobenz		i	400	UJ
87-86-5	Pentachlorophe	nol	—!	810	ט ַ
85-01-8	Phenanthrene	· · · · · · · · · · · · · · · · · · ·		400	UJ
120-12-7	Anthracene		 }	400	n 1
86-74-8	Carbazole			400	UJ
84-74-2	·Di-n-butylphth	alate		400	U
206-44-0	Fluoranthene			400	UJ
129-00-0	Pyrene —		<u> </u>	400	U
85-68-7	Butylbenzylpht	halate		400	D4
91-94-1	3,3 [†] -Dichlorob	enzidine			レシ
56-55-3	Benzo(a)anthra	cene	i	400	UJ
218-01-9	Chrysene	·		400	UJ
117-81-7	bis(2-Ethylhex	yl)phthalate	 [400	UJ
117-84-0	Di-n-octylphth	alate		400	UJ
	Benzo (b) fluora			400	UJ
207-08-9	Benzo(k) fluora	nthene	_1	400	n L
50-32-8	Benzo (a) pyrene			400	υŢ
	Indeno(1,2,3-c	i) pyrene		400	UJ
53-70-3	Dibenzo (a, h) and	hracene		400	ŪΔ
191-24-2	Benzo(q,h,i)pe:	ylene		400	U

TENTATIVELY IDENTIFIED COMPOUNDS

SED0280330

Lab	Name:	MITKEM	CORPORATION

Contract:

Lab Code: MITKEM Case No.:

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-13A

Sample wt/vol:

30.6 (g/mL) G

Lab File ID:

S1D1522

Level: (low/med)

LOW

Date Received: 10/11/02

% Moisture: 19

decanted: (Y/N) N

Date Extracted: 10/18/02

Concentrated Extract Volume: 1000(uL)

Date Analyzed: 10/21/02

Injection Volume:

1.0(uL)

Dilution Factor: 1.0

GPC Cleanup:

(Y/N) N

pH: ____

Number TICs found: 1

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q ====
	INKNOWN	8.34	880	JВ
2				
3. 4.				
5			 i	
b _				
7. 8.				
9			<u> </u>	
±0				
11.				<u></u>
T2_				
15.				
<u></u>				
10 _				
20				
حاد				
22				
23.				
251_			ii	
26				
27.			<u> </u>	
~ ⁹ ·		<u> </u>		
30				

U.S. EPA - CLP

I INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ab Name:	MITKEM C	ORPORATION	Cont	ract:			SED028	80330
	-			SAS No.:			SDG No.:	A1489A
ib Code:	MITKEM	Case No.:		SAS NU			SDG No	AITOM.
atrix (soil/wa	ater):	SOIL		1	Lab Samı	ole ID:	A1489-	13A
vel (low/me	d):	MED]	Date Reco	eived:	10/11/02	2
Solids:		81.0						
	Concentration	Units (ug/L or mg/	kg dry weight):				MG/KG	
	CAS No.	Analyte	Concentration	С	Q	M		
				_		- ND		
	_7429-90-5	Aluminum	 			NR		
	7440-36-0	Antimony				NR NR		
	_7440-38-2	Arsenic				NR.		
	_7440-39-3	Barium			-	NR NR		
	_7440-41-7	Beryllium				NR NR		
	_7440-43-9	Cadmium				NR		
	_7440-70-2	Calcium	 		-	NR		
	_7440-47-3	Chromium				NR		
	_7440-48-4	Cobalt	<u> </u>			NR		
	_7440-50-8	Соррет				NR		
	7439-89-6	IronLead	1			NR		
	7439-92-1 _7439-95-4	Magnesium				NR		
	7439-95-4 7439-96-5	Manganese				NR		
	7439-96-3 _7439-97-6	1 -				NR		
	7440-02-0	Nickel				NR		
	7440-02-0 7440-09-7	Potassium_				NR		
	7782-49-2	Selenium				NR		
	7440-22-4	Silver				\square NR		
	7440-23-5	Sodium				NR		
	7440-28-0	Thallium				NR		
	7440-62-2	Vanadium_				NR		
	_7440-66-6	Zinc				NR		
		Cyanide		U_1	*N	CA		
						!		
lor Before:		Clari	ty Before:				Texture:	
lor After:		Clari	ty After:				Artifacts:	
omments:								

Mitkem Corporation

CLIENT:

GEI Consultants, Inc.

Client Sample ID: SED0280330

Lab ID:

A1489-13

Date: 08-Nov-02

Project: Keyspan

Collection Date: 10/09/02 15:00

Analyses	Result	Qual	Limit	Units	DF	Date Analyzed
HARDNESS BY CALCULATION		SM234	0_S			
Hardness, Calcium/Magnesium (As CaCO3)	3600		240	mg/Kg CaCO3	1	10/24/02 15:38
SOIL AND WASTE PH		SW904	5C_S			
рН	7.8		1.0	pH Units	1	10/21/02 0:00

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

DF - Dilution Factor

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Limit - Reporting Limit

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SED029003

Lab Name: MITKEM CORPORATION

Contract:

Case No.: SAS No.: SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-01C

5.0 (g/mL) G

Lab File ID: V1F0394

Sample wt/vol:

Lab Code: MITKEM

Date Received: 10/11/02

% Moisture: not dec. 30

Level: (low/med) LOW

Date Analyzed: 10/14/02

GC Column: DB-624 ID: 0.25 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (mL)

Soil Aliquot Volume: ____(uL)

CONCENTRATION UNITS:

CAS NO.

COMPOUND

(ug/L or ug/Kg) UG/KG

Q

74-83-9 75-00-3 75-35-4 67-64-1 75-15-0 75-09-2 156-60-5	-Vinyl Chloride -Bromomethane -Chloroethane -1,1-Dichloroethene -Acetone -Carbon Disulfide -Methylene Chloride -trans-1,2-Dichloroethene -1,1-Dichloroethane	22	2 J 3 JB
75-01-4 74-83-9 75-00-3 75-35-4 67-64-1 75-15-0 75-09-2 156-60-5	-Vinyl Chloride -Bromomethane -Chloroethane -1,1-Dichloroethene -Acetone -Carbon Disulfide -Methylene Chloride -trans-1,2-Dichloroethene -1,1-Dichloroethane	22	7 U J 7 U J 7 U J 7 U J 2 J 3 JB
74-83-9 75-00-3 75-35-4 67-64-1 75-15-0 75-09-2 156-60-5	-Bromomethane -Chloroethane -1,1-Dichloroethene -Acetone -Carbon Disulfide -Methylene Chloride -trans-1,2-Dichloroethene -1,1-Dichloroethane	22	7 U J 7 U J 7 U 2 J 3 JB
75-00-3 75-35-4 67-64-1 75-15-0 75-09-2 156-60-5	Chloroethane1,1-DichloroetheneAcetoneCarbon DisulfideMethylene Chloridetrans-1,2-Dichloroethene1,1-Dichloroethane	22	7 U J 7 U 2 J 3 JB
75-35-4 67-64-1 75-15-0 75-09-2 156-60-5	-1,1-Dichloroethene -Acetone -Carbon Disulfide -Methylene Chloride -trans-1,2-Dichloroethene -1,1-Dichloroethane	2:	7 U 2 J 3 JB
67-64-1	-Acetone -Carbon Disulfide -Methylene Chloride -trans-1,2-Dichloroethene -1,1-Dichloroethane	22	2 J 3 JB
75-15-0 75-09-2 156-60-5	-Carbon Disulfide -Methylene Chloride -trans-1,2-Dichloroethene -1,1-Dichloroethane		2 J 3 JB
75-09-2 156-60-5	-Methylene Chloride -trans-1,2-Dichloroethene -1,1-Dichloroethane		3 JB
156-60-5	-trans-1,2-Dichloroethene -1,1-Dichloroethane	-	
	-1,1-Dichloroethane		7 i U
/5-34-3		1	7 U
78-93-3	-2-Butanone		7 U
	-cis-1,2-Dichloroethene		νŪ
67-66-3		1	νŪ
	-1,1,1-Trichloroethane	1	υ
	-Carbon Tetrachloride	1	1 .
	-1,2-Dichloroethane	1	Ű
71-43-2			ΰ
	-Trichloroethene		υŪ
	-1,2-Dichloropropane	7	-
	-Bromodichloromethane	7	
	-cis-1,3-Dichloropropene	l '7	-
108-10-1	-4-Methyl-2-pentanone	•	Ŭ
108-88-3	-Toluene	, 7	
	-trans-1,3-Dichloropropene	7	
79-00-5	-1,1,2-Trichloroethane	7	
	-Tetrachloroethene	7	
591-78-6		Ż	
	-Dibromochloromethane	7	
108-90-7		7	
100-41-4		7	-
1330-20-7		7	1 ~
100-42-5	-Styrene	7	_
75-25-2		7	_
	-1,1,2,2-Tetrachloroethane	7	1 ~ 1
., , , ,	1,2,2,2 1001001101000110110	,	

SDG No.: A1489

Lab File ID: V1F0394

VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

Lab Code: MITKEM Case No.: SAS No.:

Sample wt/vol: 5.0 (g/ π L) G

Lab Name: MITKEM CORPORATION Contract:

Matrix: (soil/water) SOIL Lab Sample ID: A1489-01C

Matrix: (soil/water) SOIL Lab Sample ID: A1489-01C

Level: (low/med) LOW Date Received: 10/11/02

% Moisture: not dec. 30 Date Analyzed: 10/14/02

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (mL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg

Number TICs found: 0

CAS NUMBER	COMPOUND NAME		EST. CONC.	Q ====
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26. 27.				
20.				
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30.				

OLM03.0

1B SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SED029003

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-01A

Sample wt/vol: 30.2 (g/mL) G

Lab File ID:

S3B9957

Level: (low/med) LOW

Date Received: 10/11/02

decanted: (Y/N) N

Date Extracted: 10/18/02

% Moisture: 30

Concentrated Extract Volume: 5000(uL)

Date Analyzed: 10/24/02

Injection Volume:

1.0(uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

pH: ____

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/KG	Q
			

	r	T
108-95-2Phenol	2300	U
111-44-4bis(2-Chloroethyl)Ether	2300	ប
95-57-82-Chlorophenol	2300	U
541-73-11,3-Dichlorobenzene	2300	U
541-/3-11,3-Dichlorobenzene	2300	U
106-46-71,4-Dichlorobenzene	2300	ប
95-50-11,2-Dichlorobenzene	2300	U
95-48-72-Methylphenol	2300	U
108-60-12,2'-oxybis(1-Chloropropane)	2300	U
106-44-54-Methylphenol	2300	•
621-64-7N-Nitroso-di-n-propylamine_	2300	I -
67-72-1Hexachloroethane	2300	ſ
98-95-3Nitrobenzene	2300	1 -
78-59-1Isophorone	2300	1 -
88-75-52-Nitrophenol	2300	1 -
105-67-92,4-Dimethylphenol	2300	1
120-83-22.4-Dichlorophenol	2300	;
120-82-11,2,4-Trichlorobenzene	2300	1
91-20-3Naphthalene		
106_47_84-Chloroaniline	2300	
111-91-1bis(2-Chloroethoxy)methane	2300	•
or colling the same of the sam	2300	
59-50-74-Chloro-3-Methylphenol	2300	
91_57_62_MethyInaphthalene	2300	
77-47-4Hexachlorocyclopentadiene	2300	
88-06-22,4,6-Trichlorophenol	2300	_
95-95-42,4,5-Trichlorophenol	4800	1
91-58-72-Chloronaphthalene	2300	_
88-74-42-Nitroaniline	4800	
131-11-3Dimethylphthalate	2300	_
208-96-8Acenaphthylene	390	
606-20-22,6-Dinitrotoluene	2300	Ŭ
99-09-23-Nitroaniline	4800	UJ
99-U9-Z	2300	ប
83-32-9Acenaphthene		

EPA SAMPLE NO.

SED029003

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-01A

Sample wt/vol: 30.2 (g/mL) G

Lab File ID: S3B9957

Level: (low/med) LOW

Date Received: 10/11/02

% Moisture: 30 decanted: (Y/N) N

Date Extracted:10/18/02

Concentrated Extract Volume: 5000(uL) Date Analyzed: 10/24/02

Injection Volume: 1.0(uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

рН: ____

CAS NO.	COMPOUND	CONCENTRATIO	N UNITS: Kg) UG/KG	Q
	2 4 Dinitropl	nemol	48	00 U
51-28-5	2,4-Dinitropl		48	00 UT
100-02-7	4-Nitrophenol Dibenzofuran	· 	23	00 U
132-64-9	a 4 Dinitmt	oluene		ססט
121-14-2	2,4-Dinitroto	late	23	00 U
84-66-2	Diethylphthal	rl-phenylether	230	00 U
7005-72-3	4-Chloropheny	YI-bucilizeric-	230	oolu
86-73-7	Fluorene	70		00 U J
100-01-6	4-Nitroanilin	2_methylphenol		០០២
534-52-1	4,6-Dinitro-	penylamine (1)	230	00 U
86-30-6	Nitrosodipl	l-phonylether	230	00 U
101-55-3		rzone	_	วด บ
118-74-1	Hexachlorober	izerie		טוסס
87-86-5	Pentachloroph			30 J
85-01-8	Phenanthrene			70 J
120-12-7	Anthracene			OUT
86-74-8	Carbazole	-halato		บัง
84-74-2	Di-n-butylphi	LIMIALE		00 J
206-44-0	Fluoranthene		320	I
129-00-0	Pyrene		-	סס ס
85-68-7	Butylbenzylpl	handle	-	บื้อใช้
91-94-1	3,3'-DICUTOIG	opensioning		oolj
56-55-3	Benzo (a) anth	racere		00 J
218-01-9	Chrysene			10 J
117-81-7	bis(2-Ethylhe	exyl/pilcilarace	-	00 J
117-84-0	Di-n-octy1pn	liarace	-	00 J
205-99-2	Benzo (b) f1uo	ranthene		50 3
207-08-9	Benzo(k)fluo	ranulene		00 J
50-32-8	Benzo (a) pyrei	ne		70 3
193-39-5	Indeno(1,2,3	-ca) pyrene	_	00 0
53-70-3	Dibenzo(a,n)	antimacene		70 3
191-24-2	Benzo(g,h,i)]	perytene	7	
	e separated from 1	Dinhenvlamine		1

1F SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SED029003

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-01A

Sample wt/vol:

30.2 (g/mL) G

Lab File ID:

S3B9957

Date Received: 10/11/02

Level: (low/med)

LOW

Date Extracted: 10/18/02

% Moisture: 30

decanted: (Y/N) N

Date Analyzed: 10/24/02

Concentrated Extract Volume: 5000(uL)

Injection Volume: 1.0(uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

pH: ____

Number TICs found: 8

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	
1. 2. 10544-50-0 3. 80-05-7 4. 5. 6. 7.	UNKNOWN SULFUR, MOL. (S8) PHENOL, 4,4'-(1-METHYLETHYLI UNKNOWN UNKNOWN UNKNOWN UNKNOWN UNKNOWN UNKNOWN UNKNOWN	15.94 17.16	1100	J NJ NJ J J J
9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24.				
25. 26. 27. 28. 29. 30.				

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1 INORGANIC ANALYSIS DATA SHEET

Name:	MITKEM CO	ORPORATION	Cont	ract:			SED02900	3
Code:	MITKEM	Case No.:		SAS No.:			SDG No.: A	1489A
atrix (soil/w	vater):	SOIL		I	Lab Samı	ple ID:	A1489-01A	
vel (low/me	ed):	MED		I	Date Reco	eived:	10/11/02	_
Solids:	•	70.0						
oonas.	Concentration	Units (ug/L or mg	/kg dry weight):				MG/KG	
				- 1 1		- , 1		
	CAS No.	Analyte	Concentration	С	Q	М		
	7429-90-5	Aluminum				NR		
	7440-36-0	Antimony				NR		
	7440-38-2	Arsenic				NR		
	7440-39-3	Barium				NR		
	7440-41-7	Beryllium				NR		
	7440-43-9	Cadmium				NR		
	7440-70-2	Calcium	<u>.</u>			NR		
	7440-47-3	Chromium				NR		
	_7440-48-4	Cobalt				NR		
	_7440-50-8	Copper				NR		
	_7439-89-6	Iron				NR		
	_7439-92-1	Lead				NR		
	_7439-95-4	Magnesium				NR		
	_7439-96-5	Manganese		-		NR		
	_7439-97-6	Mercury				NR		
	_7440-02-0	Nickel				NR		
	_7440-09-7	Potassium				NR		
	_7782-49-2	Selenium				NR		
	_7440-22-4	Silver				NR		
	_7440-23-5	Sodium				NR		
	_7440-28-0	Thallium	· 			_NR		
	_7440-62-2	Vanadium				NR		
	_7440-66-6	Zinc Cyanide	0.35	BJ	#21	NR		
	(1 11 7 4	1 H. [.]	₹N	CA		

Mitkem Corporation

CLIENT:

GEI Consultants, Inc.

Client Sample ID: SED029003

Lab ID:

A1489-01

Date: 08-Nov-02

Project: Keyspan

Collection Date: 10/09/02 12:00

Analyses	Result	Qual	Limit	Units	DF	Date Analyzed
HARDNESS BY CALCULATION Hardness, Calcium/Magnesium (As CaCO3)	85000	SM234	0_S 260	mg/Kg CaCO3	1	10/24/02 15:38
SOIL AND WASTE PH	8.4	SW904	5 C_S	pH Units	4	10/16/02 0:00

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantititation limits

B - Analyte detected in the associated Method Blank

DF - Dilution Factor

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Limit - Reporting Limit

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SED029033

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-02C

Sample wt/vol:

5.2 (q/mL) G

Lab File ID: V1F0395

Level: (low/med) LOW

Date Received: 10/11/02

% Moisture: not dec. 22

Date Analyzed: 10/14/02

GC Column: DB-624 ID: 0.25 (mm)

Dilution Factor: 1.0

Soil Extract Volume: ____(mL)

Soil Aliquot Volume: ____(uL)

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG

0

·				
74-87-3Chloro	methane		6 U J	
75-01-4Vinyl			6 U	,
74-83-9Bromom		- 	6 บัง	_
75-00-3 - Chloro			6 U 5	
75-35-41,1-Di			6 U	
67-64-1Aceton			25	
75-15-0Carbon			2 J	
75-09-2Methyl			3 JB	
156-60-5trans-			6 U	
75-34-31,1-Di			6 U	
78-93-32-Buta			6 U	
156-59-2cis-1,	2-Dichloroethene		6 U	
67-66-3Chloro			6 U	
71-55-61,1,1-	Trichloroethane		6 U	
56-23-5Carbon			6 U	
107-06-21,2-Di			6 U	
71-43-2Benzen			6 U	
79-01-6Trichl	proethene		6 U	
78-87-51,2-Di	chloropropane		6 U	
75-27-4Bromod			6 U	
10061-01-5cis-1,	3-Dichloropropene		6 U	
108-10-14-Meth	/1-2-pentanone		6 U	
108-88-3Toluen			6 U	
10061-02-6trans-	,3-Dichloropropene	-	6 U	
79-00-51,1,2-	Frichlorcethane		6 U	
127-18-4Tetrac			6 U	
591-78-62-Hexa	none		6 U	
124-48-1Dibrom			6 U	
108-90-7Chloro	enzene		6 U	
100-41-4Ethylb	enzene		6 U	
1330-20-7Xylene			6 U	
100-42-5Styren			6 U	
75-25-2Bromof			6 U	
79-34-51,1,2,	-Tetrachloroethane		6 U	
			_	

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SEL	ノひこ	90	コス	

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM Case No.: SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-02C

Sample wt/vol: 5.2 (g/mL) G

Lab File ID: V1F0395

Level: (low/med) LOW

Date Received: 10/11/02

% Moisture: not dec. 22

Date Analyzed: 10/14/02

GC Column: DB-624 ID: 0.25 (mm)

Dilution Factor: 1.0

Soil Extract Volume: ____(mL)

Soil Aliquot Volume: ____(uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q =====
i	======================================			\
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41.		_		
28				
29			\	\
30		_		
		_	1	

SED029033

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-02A

Sample wt/vol:

30.1 (g/mL) G

Lab File ID: S3C0242

Level: (low/med) LOW

Date Received: 10/11/02

% Moisture: 22

decanted: (Y/N) N

Date Extracted: 10/18/02

Concentrated Extract Volume: 5000(uL)

Date Analyzed: 11/13/02

Injection Volume: 1.0(uL)

Dilution Factor: 1.0

CONCENTRATION UNITS:

GPC Cleanup: (Y/N) N

pH: ___

CAS NO.	COMPOUND (ug/	L or ug/kg) UG/kG	Q
108-95-2	Phenol	2100	
111-44-4	bis(2-Chloroethyl)Eth	er 2100	
95-57-8	2-Chlorophenol	2100	
541-73-1	1,3-Dichlorobenzene	2100	
106-46-7	1.4-Dichlorobenzene	2100	
95-50-1	1,2-Dichlorobenzene	2100	1
95-48-7	2-Methylphenol	2100	
108-60-1	2,2'-oxybis(1-Chlorop	ropane) 2100	
705-14-5	4-Methylphenol	1 2100	
621-64-7	N-Nitroso-di-n-propyl	amine 2100	
67-72-1	Hexachloroethane	2100	
07-72-1	Nitrobenzene	2100	
79-59-1	Isophorone	2100	
09-75-5	2-Nitrophenol	2100	U
10E E7-9	2,4-Dimethylphenol	2100	U
100-07-2	2,4-Dichlorophenol		U
120-03-2	1,2,4-Trichlorobenzen	2100	ט
120-82-1	Naphthalene	2100	U
200 47 9	4-Chloroaniline		Ū
106-4/-0	bis(2-Chloroethoxy)me	thane 2100	U
TTT-3T-T	Hexachlorobutadiene	2100	ט
8/-68-3	4-Chloro-3-Methylphen	2100	[ט
59-50-7	2-Methylnaphthalene	2100	U
91-5/-6	Hexachlorocyclopentad	1	
7/-4/-4	2,4,6-Trichlorophenol	2100	U
88-06-2	2,4,5-Trichlorophenol	4300	ប
95-95-4	2 Chloropaphthalene		U
91-58-7	2-Chloronaphthalene	4300	ט
88-74-4	2-Nitroaniline	2100	U
131-11-3	Dimethylphthalate	430	1
208-96-8	Acenaphthylene		1
606-20-2	2,6-Dinitrotoluene		
99-09-2	3-Nitroaniline	 2100	
83-32-9	Acenaphthene	———	1

SED029033

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM Case No.: SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-02A

Sample wt/vol:

30.1 (q/mL) G

Lab File ID: S3C0242

Level:

(low/med) LOW

Date Received: 10/11/02

% Moisture: 22

decanted: (Y/N) N

Date Extracted:10/18/02

Concentrated Extract Volume:

5000 (uL)

Date Analyzed: 11/13/02

Injection Volume:

1.0 (uL)

Dilution Factor: 1.0

CONCENTIVATION INTEG.

GPC Cleanup:

(Y/N) N

pH:

CAS NO.	COMPOUND	(ug/L or ug/K		Q
51-28-5	2,4-Dinitroph	enol	4300	ט
	4-Nitrophenol		4300	
	Dibenzofuran		2100	
	2,4-Dinitrot $\overline{0}$		2100	
84-66-2	Diethylphthal	ate	2100	U

84-66-2-----Diethylphthalate 7005-72-3----4-Chlorophenyl-phenylether 86-73-7-----Fluorene 100-01-6-----4-Nitroaniline 534-52-1-----4,6-Dinitro-2-methylphenol 86-30-6-----N-Nitrosodiphenylamine (1) 101-55-3-----4-Bromophenyl-phenylether 118-74-1------Hexachlorobenzene 87-86-5----Pentachlorophenol_ 85-01-8-----Phenanthrene 120-12-7-----Anthracene 86-74-8-----Carbazole 84-74-2-----Di-n-butylphthalate 206-44-0----Fluoranthene

4300 U 2100 U 2100 U 2100 U 4300 U 1700 J 590 J 2100 U 2100 U 2800 5000 2100 T

2100 U

240 J 4300 U

91-94-1-----3,3'-Dichlorobenzidine_ 56-55-3-----Benzo (a) anthracene 218-01-9-----Chrysene 117-81-7-----bis(2-Ethylhexyl)phthalate 117-84-0-----Di-n-octylphthalate

129-00-0-----Pyrene

205-99-2----Benzo(b) fluoranthene

207-08-9-----Benzo(k) fluoranthene 50-32-8-----Benzo (a) pyrene 193-39-5-----Indeno(1,2,3-cd)pyrene_

85-68-7-----Butylbenzylphthalate

53-70-3-----Dibenzo(a,h)anthracene 191-24-2----Benzo(g,h,i)perylene

2100 U 1900 J 1800 J 2100 U 2100 U 1400|J 610|J 1500 J 690 J 2100 U 740 J

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SED029033

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-02A S3C0242

Sample wt/vol:

30.1 (g/mL) G

Lab File ID:

Level:

(low/med)

LOW

Date Received: 10/11/02

% Moisture: 22

Date Extracted: 10/18/02

Concentrated Extract Volume:

decanted: (Y/N) N

5000 (uL)

Date Analyzed: 11/13/02

Injection Volume:

1.0 (uL)

Dilution Factor: 1.0

GPC Cleanup:

(Y/N) N

pH: ___

Number TICs found: 7

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT ======	EST. CONC.	
1. 100-80-1 2. 613-12-7 3. 4. 35465-71-5 5. 781-43-1 6. 238-84-6 7. 205-82-3 8.	BENZENE, 1-ETHENYL-3-METHYL- ANTHRACENE, 2-METHYL- UNKNOWN 2-PHENYLNAPHTHALENE 9,10-DIMETHYLANTHRACENE 11H-BENZO[A] FLUORENE BENZO[J] FLUORANTHENE	7.90 18.30 18.51 18.92 19.44 20.90 25.36	1300 1100 1900 1000 1100 880 1000	NJ J NJ NJ NJ NJ
10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20.				
22. 23. 24. 25. 26. 27. 28. 29. 30.				

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1 INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SED029033	

b Name:	MITKEM_C	ORPORATION	Co	ontract:			SED02	
b Code:	MITKEM	Case No.:		SAS No.	:		SDG No.:	A1489A_
atrix (soil/v	vater):	SOIL			Lab Samp	ple ID:	A1489-	02A
vel (low/m	ed):	MED			Date Rec	eived:	10/11/0	2
Solids:		78.0						
	Concentration	Units (ug/L or mg	/kg dry weight):				MG/KG	
	CAS No.	Analyte	Concentration	С	Q	М		
	7429-90-5	Aluminum_				NR		
	7440-36-0	Antimony	-1			NR		
	7440-38-2	Arsenic				NR		
	_7440-39-3	Barium	I			NR		
	_7440-41-7	Beryllium				NR		
	7440-43-9	Cadmium				NR		
	7440-70-2	Calcium				NR		
	_7440-47-3	Chromium				NR		
	_7440-48-4	Cobalt				NR		
	_7440-50-8	Copper				NR		
	_7439-89-6	Iron				NR		
	_7439-92-1	Lead				NR		
	_7439-95-4	Magnesium				NR		
	_7439-96-5	Manganese			-	NR		
	_7439-97-6	Mercury				NR		
	_7440-02-0	Nickel				NR		
	_7440-09-7	Potassium			. <u> </u>	NR		
	_7782-49-2	Selenium				NR		
	_7440-22-4	Silver	-			NR		
	7440-23-5	Sodium				NR		
	_7440-28-0	Thallium				NR		
	_7440-62-2	Vanadium				NR		
	_7440-66-6	Zinc			_	NR		
		Cyanide	0.18_	U_ T	_*N	CA		
				1		[]		

Color Before:	 Clarity Before:		rexture:	
Color After:	 Clarity After:		Artifacts:	
Comments:				
-				

Mitkem Corporation

CLIENT:

GEI Consultants, Inc.

Client Sample ID: SED029033

Lab ID:

A1489-02

Date: 08-Nov-02

Project: Keyspan

Collection Date: 10/09/02 12:10

Analyses	Result	Qual	Limit	Units	DF	Date Analyzed
HARDNESS BY CALCULATION		SM234	0_S			
Hardness, Calcium/Magnesium (As CaCO3)	82000		240	mg/Kg CaCO3	1	10/24/02 15:38
SOIL AND WASTE PH		SW904	5C_S			
pH	8.3		1.0	pH Units	1	10/16/02 0:00

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

DF - Dilution Factor

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Limit - Reporting Limit

RPSEDBG-A

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-30C

Sample wt/vol: 5.2 (g/mL) G

Lab File ID: V1F0450

Level: (low/med) LOW

Date Received: 10/11/02

% Moisture: not dec. 71

Date Analyzed: 10/16/02

GC Column: DB-624 ID: 0.25 (mm)

Dilution Factor: 1.0

Soil Extract Volume: ____(mL)

Soil Aliquot Volume: ____(uL)

CONCENTRATION UNITS: CAS NO. COMPOUND

(ug/L or ug/Kg) UG/KG O

74-87-3	Chloromethane	16 U J
75-01-4	Vinyl Chloride	16 U J
74-83-9	Bromomethane	16 U J
	Chloroethane	16 U J
	1,1-Dichloroethene	16 U J
67-64-1	Acetone	84 丁
75-15-0	Carbon Disulfide	16 U J
75-09-2	Methylene Chloride	11 ЈВ
156-60 - 5	trans-1,2-Dichloroethene	16 U J
75-34-3	1,1-Dichloroethane	16 U J
78-93-3	2-Butanone	16 U 🕇
156-59 - 2	cis-1,2-Dichloroethene	16 U J
67-66 - 3 -	Chloroform	16 U J
	1,1,1-Trichloroethane	16 ປັ ປ
	Carbon Tetrachloride	16 U 😙
107-06-2	1,2-Dichloroethane	16 U J
71-43-2	Benzene	16 U J
79-01-6	Trichloroethene	16 U J
78 - 87-5	1,2-Dichloropropane	16 U 🕏
75-27-4	Bromodichloromethane	16 U J
10061-01-5	cis-1,3-Dichloropropene	. 16 UJ
108-10-1	4-Methyl-2-pentanone	16 U 🕏
108-88-3	Toluene	16 U 🕇
10061-02-6	trans-1,3-Dichloropropene	16 U J
79-00-5	1,1,2-Trichloroethane	16 U J
127-18-4	Tetrachloroethene	16 UJ
591-78-6	2-Hexanone	16 U J
124-48-1	Dibromochloromethane	16 U J
108-90 - 7	Chlorobenzene	16 U 🛨
100-41-4	Ethylbenzene	16 ប្រ
	Xylene (Total)	16 U J
100-42-5		16 U J
75-25-2 		16 U 🕏
	1,1,2,2-Tetrachloroethane	16 U J

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

RPSEDBG-A	
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Lab Name: MITKEM CORPORATION

Contract:

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-30C

Sample wt/vol:

Lab Code: MITKEM

5.2 (g/mL) G

Lab File ID:

V1F0450

Case No.:

Level: (low/med) LOW

Date Received: 10/11/02

% Moisture: not dec. 71

Date Analyzed: 10/16/02

GC Column: DB-624

ID: 0.25 (mm)

Dilution Factor: 1.0

Soil Aliquot Volume: ____(uL)

Soil Extract Volume: ____(mL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) ug/Kg

Number TICs found: 3

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	1
1. 2. 3. 75-18-3 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18.	UNKNOWN UNKNOWN DIMETHYL SULFIDE	1	33 69	===== J
19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29.				

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

RPSEDBG-ARE

Q

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM Case No.:

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-30CRE

Sample wt/vol:

5.3 (g/mL) G

Lab File ID: V1F0451

Level: (low/med) LOW

74-87-3-----Chloromethane

74-83-9-----Bromomethane

75-00-3-----Chloroethane

67-64-1-----Acetone

78-93-3----2-Butanone

67-66-3-----Chloroform

71-43-2----Benzene

108-88-3-----Toluene

591-78-6-----2-Hexanone

100-42-5-----Styrene 75-25-2-----Bromoform

108-90-7-----Chlorobenzene 100-41-4----Ethylbenzene

75-01-4-----Vinyl Chloride

75-15-0-----Carbon Disulfide

75-09-2-----Methylene Chloride

75-34-3----1,1-Dichloroethane

107-06-2----1,2-Dichloroethane

78-87-5-----1,2-Dichloropropane

75-27-4-----Bromodichloromethane

127-18-4-----Tetrachloroethene

1330-20-7-----Xylene (Total)_____

124-48-1-----Dibromochloromethane

10061-01-5----cis-1,3-Dichloropropene 108-10-1----4-Methyl-2-pentanone

10061-02-6----trans-1,3-Dichloropropene 79-00-5-----1,1,2-Trichloroethane

79-34-5-----1,1,2,2-Tetrachloroethane

79-01-6-----Trichloroethene

156-60-5-----trans-1,2-Dichloroethene

156-59-2----cis-1,2-Dichloroethene

71-55-6-----1,1,1-Trichloroethane

56-23-5-----Carbon Tetrachloride

75-35-4-----1,1-Dichloroethene

Date Received: 10/11/02

% Moisture: not dec. 71

Date Analyzed: 10/16/02

GC Column: DB-624 ID: 0.25 (mm)

Dilution Factor: 1.0

Soil Extract Volume: ____(mL)

Soil Aliquot Volume: ____(uL)

CONCENTRATION UNITS: (uq/L or uq/Kq) UG/KG

CAS NO.

COMPOUND

16 UT 16 UJ

16 U J 16 U J 16 UJ 76 J 8]<u>J</u> 7 JB 16 U J 16 U J 16 U J 16 以丁 16 UJ 16 UJ 16 UJ 16 U J 16 U T 16 UJ 16 UJ 16 U J 16 UJ 16 UJ 16 UJ 16 UJ 16 UJ 16 UJ 16 UJ 16 U J 16 UJ 16 UJ 16 UT 16 U T 16 U T 16 UJ

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VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: MITKEM CORPORATION Contract: _____

Lab Code: MITKEM Case No.: SAS No.: SDG No.: A1489

Matrix: (soil/water) SOIL Lab Sample ID: A1489-30CRE

Sample wt/vol: 5.3 (g/mL) G Lab File ID: V1F0451

Level: (low/med) LOW Date Received: 10/11/02

% Moisture: not dec. 71 Date Analyzed: 10/16/02

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (mL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg

Number TICs found: 3

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	
1. 74-93-1 2. 75-18-3 3. 624-92-0	METHANETHIOL DIMETHYL SULFIDE DISULFIDE, DIMETHYL	1.99 3.05 7.64	710 140	NJ
6. 7. 8.				
9. 10. 11. 12.				
14. 15. 16. 17.				
20	_			
24. 25.				
27. 28. 29.				

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

RPSEDBG-A

Lab Name: MITKEM CORPORATION Contract:

GPC Cleanup: (Y/N) N pH: ___

SDG No.: A1489 Lab Code: MITKEM Case No.: SAS No.:

Lab Sample ID: A1489-30A

Matrix: (soil/water) SOIL Lab File ID: S3B9965 Sample wt/vol: 30.3 (g/mL) G

Date Received: 10/11/02 Level: (low/med) LOW

Date Extracted:10/15/02 decanted: (Y/N) N % Moisture: 71

Concentrated Extract Volume: 1000(uL) Date Analyzed: 10/24/02

Dilution Factor: 1.0

Injection Volume: 1.0(uL)

CONCENTRATION UNITS: (lig/L or lig/kg) lig/kg 07.0 NTO

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
108-95-2	Phenol		1100	U
111-44-4	bis(2-Chloroethyl	Ether	1100	U :
95-57-8	2-Chlorophenol		1100	U
541-73-1	1,3-Dichlorobenze	ne	1100	1 -
106-46-7	1,4-Dichlorobenze	ne	1100	1 -
	1,2-Dichlorobenze		1100	1
95-48-7	2-Methylphenol		1100	1 -
108-60-1	2,2'-oxybis(1- Chl	oropropane)	1100	1 -
106-44-5	4-Methylphenol	1	1100	
621-64-7	N-Nitroso-di-n-pr	opylamine	1100	_
67-72-1	Hexachloroethane		1100	I =
98-95-3	Nitrobenzene		1100	
	Isophorone		1100	
	2-Nitrophenol		1100	U
105-67-9	2,4-Dimethylpheno	1		
120-83-2	2,4-Dichloropheno	1	1100	U
120 03 2	1,2,4-Trichlorobe	nzene	1100	U
91-20-3	Naphthalene		1100	. –
106-47-8	4-Chloroaniline_		1100	UJ
111-91-1	bis(2-Chloroethox	v)methane	1100	U
27-68-3	Hexachlorobutadie	ne —	1100	U
59-50-7	4-Chloro-3-Methyl	phenol	1100	U
01-57-6	2-Methylnaphthale	ne	1100	U
フサースフーローーー	Hexachlorocyclope	ntadiene	1100	U
00 06 2	2,4,6-Trichloroph	enol	1100	U
05-05-4	2,4,5-Trichloroph	enol	2300	U
01 50 7	2-Chloronaphthale	ne	1100	U
91-30-/	2-Nitroaniline		2300	U
121_11_3	Dimethylphthalate		1100	U
T2T-TT-2	Acenaphthylene		140	J
£06-30-0	2,6-Dinitrotoluen	e	1100	
000-20-2	3-Nitroaniline		2300	ប្រា
	Acenaphthene		1100	U
03-34-3	Acermpiterion			

1C SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

RPSEDBG-A

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-30A

CONCENTRATION UNITS:

Sample wt/vol:

Lab File ID: S3B9965

30.3 (g/mL) G

Date Received: 10/11/02

Level: (low/med) LOW

decanted: (Y/N) N

Date Extracted: 10/15/02

% Moisture: 71

Concentrated Extract Volume: 1000(uL) Date Analyzed: 10/24/02

Injection Volume: 1.0(uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	(ug/L or ug/K	g) UG/KG	Q
51-28-5	2,4-Dinitrophe	enol	2300 2300	U
100-02-7	4-Nitrophenol		1100	
132-64-9	Dibenzofuran_		1100	
121-14-2	2,4-Dinitroto	Luene	1100	1
84-66-2	Diethylphthala	ate	1100	1
7005-72-3	4-Chloropheny	L-phenyletner		,
86-73-7	Fluorene		240	
100-01-6	4-Nitroaniline	9	2300	
534-52-1	4,6-Dinitro-2	-methylphenol	2300	
86-30-6	N-Nitrosodiphe	enylamine (1)	1100	I
101-55-3	4-Bromophenyl·	-phenyletner	1100	ł
118-74-1	Hexachloroben:	zene	1100	1
87-86-5	Pentachlorophe	enol	2300	ı
85-01-8	Phenanthrene_		690	
120-12-7	Anthracene _		830	
86-74-8	Carbazole		190	
84-74-2	Di-n-butylphtl	nalate	1100	
206-44-0	Fluoranthene_		770	,
129-00-0	Pvrene		1000	
85-68-7	Butvlbenzylpht	halate	1100	ı
91-94-1	3,3'-Dichlorol	penzidine	1100	
56-55-3	Benzo(a)anthra	acene	510	t
218-01-9	Chrysene	_1	520	
117-81-7	bis(2-Ethylhe	(yl)phthalate	710	
117-84-0	Di-n-octylphtl	nalate	1100	
205-99-2	Benzo(b)fluora	anthene	450	_
207-08-9	Benzo(k)fluora	anthene	170	
E0-32-8	Benzo(a)pyrene		410	
102.20-6	Indeno(1,2,3-0	rd) pyrene	190	J
133-33-3	Dibenzo (a, h) ar	thracene	1100	ប
33-70-3	Benzo(g,h,i)pe	ervlene	210	J
191-24-2	Beizo(g,11,1)p			
(1) - Cannot b	e separated from D	phenylamine		

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

RPSEDBG-A

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-30A

Sample wt/vol:

30.3 (g/mL) G

Lab File ID: S3B9965

Level:

LOW (low/med)

Date Received: 10/11/02

% Moisture: 71

decanted: (Y/N) N

Date Extracted: 10/15/02

Concentrated Extract Volume:

1000(uL)

Date Analyzed: 10/24/02

Injection Volume:

1.0(uL)

Dilution Factor: 1.0

GPC Cleanup:

(Y/N) N

pH: ___

Number TICs found: 18

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	
1. 2. 3. 4. 5. 544-63-8 6. 7. 8. 9. 57-10-3 10. 10544-50-0 11. 12. 13. 112-80-1 14. 80-05-7 15. 16. 57-88-5 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30.	UNKNOWN UNKNOWN TETRADECANOIC ACID UNKNOWN UNKNOWN UNKNOWN HEXADECANOIC ACID SULFUR, MOL. (S8) UNKNOWN UNKNOWN OLEIC ACID PHENOL, 4,4'-(1-METHYLETHYLI UNKNOWN CHOLESTEROL UNKNOWN UNKNOWN UNKNOWN	5.93 9.96 11.04 14.33 14.45 15.02 15.10 16.07 16.24 17.20 17.25 17.40	2600 1100 1000 2200 1800 2200 2300 8900 8800 28000 12000 1000 3700 5100 2600 6700	J J J J J J J J J J J J J J J J J J J

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U.S. EPA - CLP

		INO	RGANIC ANALYSIS	S DATA S	HEET		EPA SAMPLE NO.	
							RPSEDE	3G-A
Lab Name:	MITKEM_C	ORPORATION	Contract:					
Lab Code:	MITKEM	Case No.:		SAS No.:			SDG No.:	A1489B_
Matrix (soil/wa	ater):	SOIL		L	ab Samp	ole ID:	A1489-3	30A
Level (low/med	d):	MED		D	ate Rece	eived:	10/11/02	2
% Solids:		29.0						
	Concentration	Units (ug/L or mg	/kg dry weight):				MG/KG	
	CAS No.	Analyte	Concentration	С	Q	М		
	7429-90-5	Aluminum				NR		
		Antimony				NR		
	7440-38-2	Arsenic				NR		
	_7440-39-3	Barium				NR		
	_7440-41-7	Beryllium				NR		
	7440-43-9	Cadmium				NR		
	7440-70-2	Calcium				NR		
	_7440-47-3	Chromium		_ _		NR		
	_7440-48-4	Cobalt				NR		
	_7440-50-8	Copper				NR		
	_7439-89-6	Iron				NR		
	_7439-92-1	Lead				_NR		
	_7439-95-4	Magnesium				NR		
	_7439-96-5	Manganese				NR		
	_7439-97-6	Mercury		-		NR		
	_7440-02-0	Nickel				NR		
	_7440-09-7	Potassium				NR		
	_7782-49-2	Selenium				NR		
	_7440-22-4	Silver				NR		
	_7440-23-5	Sodium				NR		
	_7440-28-0	Thallium				_NR		
	7440-62-2	Vanadium				NR		
	_7440-66-6	Zinc				NR		
		Cyanide	0.49	U		CA		
					- -			
a		CI.	. D. C				Texture:	
Color Before:		Clan	ty Before:					
Color After:	<u> </u>	Clari	ty After:				Artifacts:	
Comments:								

FORM I - IN

1LM04.1 2124

Mitkem Corporation

CLIENT:

GEI Consultants, Inc.

Client Sample ID: RPSEDBG-A

Lab ID:

A1489-30

Date: 08-Nov-02

Project: Keyspan

Collection Date: 10/09/02 18:45

Analyses	Result	Qual	Limit	Units	DF	Date Analyzed
HARDNESS BY CALCULATION		SM234	0_S			
Hardness, Calcium/Magnesium (As CaCO3)	72000		660	mg/Kg CaCO3	1	10/24/02 12:26
SOIL AND WASTE PH		SW904	5C_S			
рH	7.9		1.0	pH Units	1	10/21/02 0:00

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

DF - Dilution Factor

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Limit - Reporting Limit

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

RPSEDBG-B

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM Case No.: SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-29C

Sample wt/vol: 5.0 (g/mL) G

Lab File ID: V1F0449

Level: (low/med) LOW

Date Received: 10/11/02

% Moisture: not dec. 23

Date Analyzed: 10/15/02

GC Column: DB-624 ID: 0.25 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (mL)

Soil Aliquot Volume: ____(uL)

CONCENTRATION UNITS:

CAS NO. COMPOUND

(ug/L or ug/Kg) UG/KG

Q

	CONTOONS (ag/ 1 of ag	, <u>,</u>	*
74-87-3	Chloromethane		5 U
75-01-4	Vinyl Chloride	-	ร์ บ
74-83-9	Bromomethane		ร์ บั
75 - 00-3			5 U
	1,1-Dichloroethene	• }	5 U
67-64-1		1	5 U
75-15-0	Carbon Disulfide		5 U
75-09-2	Methylene Chloride		2 JB
156-60-5	trans-1,2-Dichloroethene	6	5 U
75-34-3	1,1-Dichloroethane		5 U
78-93-3	2-Butanone	1	5 U
156-59-2	cis-1,2-Dichloroethene	6	5 U
67-66-3		\mid ϵ	5 U
	1,1,1-Trichloroethane	ϵ	
56-23-5	Carbon Tetrachloride	ϵ	
	1,2-Dichloroethane	ϵ	
71-43-2]	
	Trichloroethene	6	U
78-87-5	1,2-Dichloropropane	6	Ū
	Bromodichloromethane	6	
	cis-1,3-Dichloropropene	6	
	4-Methyl-2-pentanone	6	
108-88-3		6	
10061-02-6	trans-1,3-Dichloropropene	6	
	1,1,2-Trichloroethane	6	
	Tetrachloroethene_	6	
591-78-6		6	
	Dibromochloromethane	6	
	Chlorobenzene	6	
100-41-4	Ethylbenzene	6	
1330-20-7	Xylene (Total)		U
100-42-5			Ū
75-25-2		6	1
79-34-5	1,1,2,2-Tetrachloroethane	6	Ŭ
			1

1EVOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

RPSEDBG-B

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM Case No.:

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-29C

Sample wt/vol:

5.0 (g/mL) G

Lab File ID: V1F0449

Level: (low/med) LOW

Date Received: 10/11/02

% Moisture: not dec. 23

Date Analyzed: 10/15/02

GC Column: DB-624 ID: 0.25 (mm)

Dilution Factor: 1.0

Soil Extract Volume: ____(mL)

Soil Aliquot Volume: ____(uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	ł	Q ======
1				
1				
٠٠٠				l
⁴. \				
ے ۔ا_				
0.		-		
7				
8.				
10				
11.		_		
1 4 .				
TJ.		_	<u> </u>	
14.				
10.				
16. 17.				
18.				
19.		_		
20.				
41.		_		
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FORM I VOA-TIC

RPSEDBG-B

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM Case No.: SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-29A

Sample wt/vol:

30.6 (g/mL) G

Lab File ID: S3B9964

Level:

(low/med) LOW

Date Received: 10/11/02

% Moisture: 23

decanted: (Y/N) N

Date Extracted:10/15/02

Concentrated Extract Volume:

1000 (uL)

Date Analyzed: 10/24/02

Injection Volume:

1.0(uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

pH: ___

CAS NO.	COMPOUND	CONCENTRA (ug/L or			Q
108-95-2	Phenol		ļ	420	U
	bis(2-Chloroethy	1)Ether		420	1
	2-Chlorophenol			420	-
	1,3-Dichlorobenz	ene		420	
106-46-7	1,4-Dichlorobenz	ene		420	_
	1,2-Dichlorobenz			420	
95-48-7	2-Methylphenol			420	1
108-60-1	$2,2'-$ oxybis $(1-\overline{Ch})$	loropropar	ie)	420	
	4-Methylphenol	r r		420	1 - 1
621-64-7	·N-Nitroso-di-n-p	ropylamine		420	
67-72-1	Hexachloroethane	1 1		420	ן ט
	·Nitrobenzene			420	U
78-59-1	Isophorone		_	420	U
88-75-5	2-Nitrophenol			420	ן ט
105-67-9	2,4-Dimethylpheno	<u>)</u>		420	ן ט
120-83-2	2,4-Dichloropheno)1	— <u> </u>	420	ן טן
120-82-1	1,2,4-Trichlorobe	enzene		420	U [
91-20-3	Naphthalene		_	420	U
	4-Chloroaniline		_	420	UJ
111-91-1	bis(2-Chloroethox	y) methane		420	ט
87-68-3	Hexachlorobutadie	ene	-	420	ט
59-50-7	4-Chloro-3-Methyl	phenol		420	U
91-57-6	2-Methylnaphthale	ne		420	U
77-47-4	Hexachlorocyclope	ntadiene		420	ט
88-06-2	2,4,6-Trichloroph	enol –		420	U
	2,4,5-Trichloroph			850	υ (
	2-Chloronaphthale	ne		420	U
	2-Nitroaniline			850	U
	Dimethylphthalate				U
208-96-8	Acenaphthylene		[420	- !
	2,6-Dinitrotoluen	e	_	420	
	3-Nitroaniline		1	850	บป
83-32-9	Acenaphthene			420	U

FORM I SV-1

OLM03.0

EPA SAMPLE NO.

RPSEDBG-B

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM Case No.: SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-29A

Sample wt/vol:

30.6 (g/mL) G

Lab File ID: S3B9964

Level: (low/med) LOW

Date Received: 10/11/02

% Moisture: 23

decanted: (Y/N) N

Date Extracted: 10/15/02

Concentrated Extract Volume: 1000(uL) Date Analyzed: 10/24/02

Injection Volume: 1.0(uL)

Dilution Factor: 1.0

CONCENTRATION UNITS:

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	(ug/L or	ug/Kg)	UG/KG	Q
51-28-5	2,4-Dinitroph	nenol		850	
100-02-7	4-Nitrophenol			850	UJ
132-64-9	Dibenzofuran_			420	U
121-14-2	2,4-Dinitroto	luene		420	Ū
84-66-2	Diethylphthal	ate		420	U
7005-72-3	4-Chloropheny	l-phenylether		420	Įΰ
96.73-7	Fluorene	_ <u>_</u>		420	U
100 01-6	4-Nitroanilir	ie	_	850	UJ
F24 F2-1	4,6-Dinitro-2	-methylphenol		850	U
05 20 6	N-Nitrosodiph	envlamine (1)	⁻	420	U
101 EE 3	4-Bromopheny	-nbenylether)	420	บ
101-55-3	Hexachlorober	phonyrous-	<u></u>	420	Ū
118-14-1	Pentachloroph	enol		850	U
87-86-5	Phenanthrene	ICIOI		420	U
85-01-8	Anthracene		<u> </u>	420	lυ
120-12-7	Carbazole			420	UT
86-74-8	Di-n-butylpht	halate		420	
84-74-2	DI-M-Ducyipiic	.IIA.IA.CE		420	
	Fluoranthene_			420	
129-00-0	Pyrene	thalate		420	
85-68-7	Butylbenzylph	bongidine		420	
91-94-1	3,31-Dichlor	Delizionie		420	
	Benzo(a)anthr	acene		420	ſ
218-01-9	Chrysene	va-1\phthalato	. 	47	
117-81-7	bis(2-Ethylhe	XXI) burnarare	- -	420	
117-84-0	Di-n-octylpht	narace		420	
205-99-2	Benzo(b) fluor	anthene		420	
207-08-9	Benzo (k) fluor	anthene	{	420	
50-32-8	Benzo(a)pyrer	re		420	i
193-39-5	Indeno(1,2,3-	ca) pyrene		420	
53-70-3	Dibenzo(a,h)a	inthracene	<u></u>		
191-24-2	Benzo(g,h,i)p	erylene		420	U
1) - Cannot b	e separated from I	iphenylamine	1		

1FSEMIVOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

RPSEDBG-B

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-29A

Sample wt/vol:

30.6 (g/mL) G

Lab File ID:

S3B9964

Level: (low/med) LOW

Date Received: 10/11/02

% Moisture: 23

decanted: (Y/N) N

Date Extracted: 10/15/02

Concentrated Extract Volume: 1000(uL)

Date Analyzed: 10/24/02

Injection Volume: 1.0(uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

Number TICs found: 11

CONCENTRATION UNITS: (uq/L or ug/Kg) ug/Kg

I INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

		INO	RGANIC ANALY	SIS DATA S	SHEET			
Lab Name:	MITKEM_C	ORPORATION	Co	ontract:	-8781		RPSEDI	BG-B
Lab Code:	MITKEM	Case No.:		SAS No.:			SDG No.:	A1489B_
Matrix (soil/v	water):	SOIL		I	Lab Samp	ole ID:	A1489-2	29A
Level (low/m	ed):	MED		I	Date Reco	eived:	10/11/02)
% Solids:		77.0						
	Concentration	Units (ug/L or mg	/kg dry weight):				MG/KG	
	CAS No.	Analyte	Concentration	c	Q	М		
	7429-90-5	Aluminum				NR		
	_7440-36-0	Antimony				NR		
	_7440-38-2	Arsenic				NR		
	7440-39-3	Barium				NR		
	7440-41-7	Beryllium				NR		
	7440-43-9	Cadmium				NR		
	_7440-70-2	Calcium				NR.		
	_7440-47-3	Chromium				NR		
	7440-48-4	Cobalt				NR		
	_7440-50-8	Copper				NR		
	_7439-89-6	Iron	1			NR		
	_7439-92-1	Lead				NR		
	_7439-95-4	Magnesium	_			NR		
	_7439-96-5	Manganese				NR		
	_7439-97-6	Mercury				NR		
	_7440-02-0	Nickel	-			NR		
	_7440-09-7	Potassium				NR		
	_7782-49-2	Selenium				NR		
	_7440-22-4	Silver				NR		
	_7440-23-5	Sodium				NR		
	_7440-28-0	Thallium				NR		

Color Before:		Clarity Before:	 Texture:	
Color After:	· · · · · · · · · · · · · · · · · · ·	Clarity After:	 Artifacts:	
Comments:				
				

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U

Vanadium_

Zinc_

Cyanide_

7440-62-2_

7440-66-6

NR

NR

CA.

Mitkem Corporation

CLIENT:

GEI Consultants, Inc.

Client Sample ID: RPSEDBG-B

Lab ID:

A1489-29

Date: 08-Nov-02

Project: Keyspan

Collection Date: 10/09/02 18:35

Analyses	Result	Qual	Limit	Units	DF	Date Analyzed
HARDNESS BY CALCULATION Hardness, Calcium/Magnesium (As CaCO3)	31000	SM234	0_S 260	mg/Kg CaCO3	1	10/24/02 12:26
SOIL AND WASTE PH	8.1	SW904	5C_S 1.0	pH Units	1	10/21/02 0:00

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

DF - Dilution Factor

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Limit - Reporting Limit

RPSEDBG-C

Lab Name: MITKEM CORPORATION

Contract:

SDG No.: A1489

Matrix: (soil/water) SOIL

Case No.: SAS No.:

Lab Sample ID: A1489-28C

5.1 (g/mL) G

Lab File ID: V1F0448

Sample wt/vol:

Lab Code: MITKEM

Level: (low/med) LOW

Date Received: 10/11/02

% Moisture: not dec. 29

Date Analyzed: 10/15/02

GC Column: DB-624 ID: 0.25 (mm)

Dilution Factor: 1.0

Soil Extract Volume: ____(mL)

Soil Aliquot Volume: ____(uL)

CONCENTRATION UNITS:

CAS NO.

COMPOUND

(ug/L or ug/Kg) UG/KG

Q

74-87-3	Chloromethane	7 U
75-01-4	Vinyl Chloride	7 U
74-83-9	Bromomethane	7 0
75-00 - 3	Chloroethane	ז l ט
75-35-4	1,1-Dichloroethene	7 U
67-64-1	Acetone	יט לי
75-15 - 0	Carbon Disulfide	7 U
75-09-2	Methylene Chloride	4 JB
156-60-5	trans-1,2-Dichloroethene	7 U
75-34-3	1,1-Dichloroethane	7 U
78-93-3	2-Butanone	7 U
156-59-2	cis-1,2-Dichloroethene	7 U
67-66-3	Chloroform	7 U
71-55-6	1,1,1-Trichloroethane	7 U
56-23-5	Carbon Tetrachloride	7 U
107-06-2	1,2-Dichloroethane	7 U
71-43-2		7 ប
	Trichloroethene	7 U
78-87-5	1,2-Dichloropropane	7 U
	Bromodichloromethane	7 U
10061-01-5	cis-1,3-Dichloropropene	7 U
108-10-1	4-Methyl-2-pentanone	7 U
108-88-3		7 U
10061-02-6	trans-1,3-Dichloropropene	7 U
	1,1,2-Trichloroethane	7 U
	Tetrachloroethene	7 U
	2-Hexanone	7 U
	Dibromochloromethane	7 U
	Chlorobenzene_	7 U
	Ethylbenzene	7 U
1330-20-7	Xylene (Total)	7 U
100-42-5		7 U
75-25-2		7 U
79-34-5 <i>-</i>	1,1,2,2-Tetrachloroethane	7 U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

RPSEDBG-C

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM Case No.: SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-28C

Sample wt/vol:

5.1 (g/mL) G

Lab File ID:

V1F0448

Level: (low/med) LOW

Date Received: 10/11/02

% Moisture: not dec. 29

Date Analyzed: 10/15/02

GC Column: DB-624 ID: 0.25 (mm)

Dilution Factor: 1.0

Soil Aliquot Volume: ____(uL)

Soil Extract Volume: ____(mL)

CONCENTRATION UNITS:

Number TICs found: 0

(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1				
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RPSEDBG-C

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM Case No.:

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-28A

Sample wt/vol: 30.6 (g/mL) G

Lab File ID: S3B9866

Level: (low/med) LOW

Date Received: 10/11/02

% Moisture: 29

decanted: (Y/N) N

Date Extracted: 10/15/02

Concentrated Extract Volume:

1000 (uL)

Date Analyzed: 10/17/02

Injection Volume: 1.0(uL)

Dilution Factor: 1.0

CONCENTRATION UNITS:

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND (ug/L o	or ug/Kg)	UG/KG	Q
108-95-2	Phenol		460	U
111-44-4	bis(2-Chloroethyl)Ether		460	,
95-57-8	2-Chlorophenol		460	3
541-73-1	1,3-Dichlorobenzene		460	
106-46-7	1,4-Dichlorobenzene		460	שׁ
	1,2-Dichlorobenzene		460	1
95-48-7	2-Methylphenol		460	lυ
	2,2'-oxybis(1-Chloroprop	pane)	460	បៃ
	4-Methylphenol	- 1	460	ט
621-64-7	N-Nitroso-di-n-propylami	ne	460	ט
67-72-1	Hexachloroethane	-	460	Ū
98-95-3	Nitrobenzene		460	lσ
78-59-1	Isophorone		460	U
88-75-5	2-Nitrophenol		460	U
105-67-9	2,4-Dimethylphenol	<u> </u>	460	U
120-83-2	2,4-Dichlorophenol		460	Ū
120-82-1	1,2,4-Trichlorobenzene		460	U
91-20-3	Naphthalene		460	U
106-47-8	4-Chloroaniline		460	U
	bis(2-Chloroethoxy)metha	ne	460	
87-68-3	Hexachlorobutadiene		460	U
59-50-7	4-Chloro-3-Methylphenol		460	U
91-57-6	2-Methylnaphthaiene		460	
77-47-4	Hexachlorocyclopentadien	e	460	Ū
88-06-2	2,4,6-Trichlorophenol		460	
	2,4,5-Trichlorophenol		920	
	2-Chloronaphthalene		1	U
	2-Nitroaniline		920	Ū
	Dimethylphthalate			Ū
208-96-8	Acenaphthylene		460	U
606-20-2	2,6-Dinitrotoluene		460	
99-09-2	3-Nitroaniline			Ū
	Acenaphthene			Ū
			130	_

EPA SAMPLE NO.

RPSEDBG-C

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-28A

Sample wt/vol: 30.6 (g/mL) G

Lab File ID: S3B9866

Level: (low/med) LOW

Date Received: 10/11/02

% Moisture: 29 decanted: (Y/N) N Date Extracted:10/15/02

Concentrated Extract Volume: 1000(uL) Date Analyzed: 10/17/02

Injection Volume: 1.0(uL)

Dilution Factor: 1.0

CONCENTRATION UNITS:

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	(ug/L o	r ug/Kg)	UG/KG	Q
51-28-5	2,4-Dinitrophe	enol		920	U
100-02-7	4-Nitrophenol			920	U
	Dibenzofuran			460	Įυ
121-14-2	2,4-Dinitroto	luene		460	U
84-66-2	Diethylphthala	ate		460	U
7005-72-3	4-Chlorophenyl	-phenyleth	er	460	U
	Fluorene		<u> </u>	460	טן
100-01-6	4-Nitroaniline	<u> </u>		920	ט
534-52-1	4,6-Dinitro-2-	methylpheno	51	920	ע
	N-Nitrosodiphe			460	U
	4-Bromophenyl-			460	lυ
	Hexachlorobenz			460	U
	Pentachlorophe		<u> </u>	920	Ū
	Phenanthrene	·		460	lυ
	Anthracene		—	460	lυ
	Carbazole			460	lŪ
	Di-n-butylphth	alate		460	ĺŪ
	Fluoranthene		 [100	
129-00-0				230	J
	Butylbenzylpht	halate		460	lυ
	3,3'-Dichlorob			460	Ū
	Benzo(a)anthra			100	J
218-01-9				100	
117-81-7	bis(2-Ethylhex	vl)phthalat	<u>e</u>	54	
117-84-0	Di-n-octylphth	alate	~ - -	460	
	Benzo(b) fluora		<u> </u>	65	
	Benzo(k)fluora			460	
	Benzo(a)pyrene			84	
193-39-5	Indeno(1,2,3-c	d) pyrene		460	
53-70-3	Dibenzo(a,h)an	thracene		460	
	Benzo(g,h,i)pe			460	
	separated from Di				

1F SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

RPSEDBG-C

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-28A

Sample wt/vol:

30.6 (g/mL) G

Lab File ID: S3B9866

Level: (low/med)

decanted: (Y/N) N

Date Received: 10/11/02

% Moisture: 29

LOW

Date Extracted:10/15/02

Concentrated Extract Volume: 1000(uL)

Date Analyzed: 10/17/02

Injection Volume: 1.0(uL)

Dilution Factor: 1.0

GPC Cleanup:

(Y/N) N

pH: ____

Number TICs found: 8

CONCENTRATION UNITS: (uq/L or ug/Kg) ug/Kg

	COMPOUND NAME	RT	EST. CONC.	0
CAS NUMBER	I		==========	
=======================================	UNKNOWN	6.34	700	JB
1.	PHTHALIC ANHYDRIDE	10.69	200	ŊĴ
2. 85-44-9 3. 2091-29-4	9-HEXADECENOIC ACID	16.82	800	NU UN
4. 57-10-3	HEXADECANOIC ACID	16.98	500	NJ
5. 10544-50-0	SULFUR, MOL. (S8)	18.15	3900	NO]
6. 301-02-0	9-OCTADECENAMIDE, (Z)-	20.04	360	
7.	UNKNOWN	22.76	240	
8.	UNKNOWN	25.55	480	J
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U.S. EPA - CLP

		INO	rganic analysis	S DATA S	HEET		EPA SAMPLE NO.		
1 N. AMERICA		ODDOD A TION	Cont	ract:			RPSEDBG-C		
b Name:	MITKEM_C	ORPORATION	Cont	ract					
b Code:	MITKEM	Case No.:		SAS No.:		·	SDG No.: A14891		
ıtrix (soil/w	ater);	SOIL		L	ab Samp	ole ID:	A1489-28A		
/el (low/me	d):	MED		D	ate Rec	eived:	10/11/02		
Solids:		71.0							
	Concentration	Units (ug/L or mg/	kg dry weight):				MG/KG		
	CAS No.	Analyte	Concentration	С	Q	M			
	_7429-90-5	Aluminum			<u> </u>	NR			
	_7440-36-0	· 1				NR			
	_7440-38-2				_	NR			
	_7440-39-3					NR			
	_7440-41-7	Beryllium	1			NR			
	_7440-43-9	Cadmium				NR			
	_7440-70-2	Calcium				_NR			
	_7440-47-3	Chromium				NR			
	_7440-48-4	Cobalt		_		NR			
	_7440-50-8	Copper				NR			
	_7439-89-6	Iron				NR			
	_7439-92-1	Lead				NR			
	_7439-95-4	Magnesium				NR			
	_7439-96-5	Manganese				NR			
	_7439-97-6	Mercury				NR			
	_7440-02-0	Nickel	_			NR			
	7440-09-7	Potassium	<u> </u>			_NR			
ŀ	_7782-49-2	Selenium		-		_NR			
	_7440-22-4	Silver				_NR			
	_7440-23-5	Sodium				NR			
	_7440-28-0	Thallium				_NR			
	_7440-62-2	Vanadium	<u> </u>			_NR			
	7440-66-6 <u></u>	Zinc				_NR			
		Cyanide	0.17	U		CA			
or Before:		Clarit	ry Before:				Texture:		
			•	-					
or After:		Clarit	y After:				Artifacts:		
nments:									

FORM I - IN

Mitkem Corporation

Date: 08-Nov-02

CLIENT:

GEI Consultants, Inc.

Client Sample ID: RPSEDBG-C

Project: Keyspan Collection Date: 10/09/02 18:20

Lab ID:

A1489-28

Analyses	Result	Qual	Limit	Units	DF	Date Analyzed
HARDNESS BY CALCULATION		SM234)_S			
Hardness, Calcium/Magnesium (As CaCO3)	44000		260	mg/Kg CaCO3	1	10/24/02 12:26
SOIL AND WASTE PH		SW904	SC_S			
pН	8.0		1.0	pH Units	1	10/21/02 0:00

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

DF - Dilution Factor

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Limit - Reporting Limit

1A VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

RPSEDBG-D

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM Case No.:

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-27C

Sample wt/vol: 5.0 (g/mL) G

Lab File ID: V1F0447

Level:

(low/med) LOW

Date Received: 10/11/02

% Moisture: not dec. 32

Date Analyzed: 10/15/02

GC Column: DB-624 ID: 0.25 (mm)

Dilution Factor: 1.0

Soil Extract Volume: ____(mL)

Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/	
	Chloromethane		7 U
	Vinyl Chloride		7 0
	Bromomethane		7 U
	Chloroethane		7 0
	1,1-Dichloroether	1e	7 U
67-64-1			52
	Carbon Disulfide		3 J
	Methylene Chlorid		3 JB
	trans-1,2-Dichlor		7 U
	1,1-Dichloroethan	ne	7 0
	2-Butanone		7 U
	cis-1,2-Dichloroe	ethene	7 U
	Chloroform		7 U
	1,1,1-Trichloroet		7 U
	Carbon Tetrachlor		7 U
	1,2 - Dichloroethan	ue	7 U
71-43-2			7 U
	Trichloroethene_		7 U
	1,2-Dichloropro pa		7 U
	Bromodichlorometh		7 U
	cis-1,3-Dichlorop		7 U
108-10-1	4-Methyl-2-pentan	one	7 U
108-88-3			7 U
10061-02-6	trans-1,3-Dichlor	opropene	7 U
79-00-5	1,1,2-Trichloroet	hane	7 U
127-18-4	Tetrachloroethene		7 U
591-78-6	2-Hexanone		7 U
	Dibromochlorometh	ane	7 U
	Chlorobenzene		7 U
	Ethylbenzene		7 U
1330-20-7	Xylene (Total)		7 U
100-42-5	Styrene		7 U
75-25-2	Bromoform		7 U
	1,1,2,2-Tetrachlo	roethane	7 Ū

FORM I VOA

OLM03.0

VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

RPSEDBG-D	,
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Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-27C

Sample wt/vol:

5.0 (q/mL) G

Lab File ID: V1F0447

Level:

(low/med) LOW Date Received: 10/11/02

% Moisture: not dec. 32

Date Analyzed: 10/15/02

GC Column: DB-624 ID: 0.25 (mm)

Dilution Factor: 1.0

Soil Extract Volume: ____(mL)

Soil Aliquot Volume: ____(uL)

CONCENTRATION UNITS: (uq/L or ug/Kg) ug/Kg

Number TICs found: 1

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	1
1. 526-73-8 2. 3. 4. 55. 6. 7. 88. 9. 10. 11. 12. 13. 14. 15. 16. 17. 188. 19. 20. 21. 22. 23. 24. 25. 26.	BENZENE, 1,2,3-TRIMETHYL-		=========	Q ===== NJ -====================================
27				

RPSEDBG-D

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: A1489

Matrix: (soil/water) SOIL Lab Sample ID: A1489-27A

Sample wt/vol: 30.5 (g/mL) G Lab File ID: S3B9865

Level: (low/med) LOW Date Received: 10/11/02

% Moisture: 32 decanted: (Y/N) N Date Extracted:10/15/02

Concentrated Extract Volume: 1000(uL) Date Analyzed: 10/17/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

CAS NO.	COMPOUND (Ug.	/L OI ug/kg)		Q
108-95-2			480	U
111-44-4	bis(2-Chloroethyl)Etl	her	480	U
95-57-8	2-Chlorophenol		480	U
541-73-1	1,3-Dichlorobenzene		480	U
106-46-7	1,4-Dichlorobenzene		480	ַּט
95-50-1	1,2-Dichlorobenzene		480	U
95-48-7	2-Methylphenol		480	ប
108-60-1	2,2'-oxybis(1-Chloro	propane)	480	υ
106-44-5	4-Methylphenol	` ~	480	U
621-64-7	N-Nitroso-di-n-propy	lamine	480	U
67-72-1	Hexachloroethane		480	U
98-95-3	Nitrobenzene		480	υ
78-59-1	Isophorone		480	שׁוֹ
88-75-5	2-Nitrophenol		480	ប
105-67-9	2,4-Dimethylphenol		480	U
120-83-2	2,4-Dichlorophenol		480	U
120-82-1	1,2,4-Trichlorobenzer	ie	480	ប
91-20-3	Naphthalene	·	78	J
106-47-8	4-Chloroaniline		480	U
111-91-1	bis(2-Chloroethoxy)me	thane	480	U
87-68-3	Hexachlorobutadiene		480	U
	4-Chloro-3-Methylph $\overline{\text{er}}$	iol	480	U
91-57-6	2-Methylnaphthalene		480	U
77-47-4	Hexachlorocyclopentad	liene	480	Ü
88-06-2	2,4,6-Trichlorophenol		480	U
95-95-4	2,4,5-Trichlorophenol		970	U
91-58-7	2-Chloronaphthalene		480	U
88-74-4	2-Nitroaniline		970	U
131-11-3	Dimethylphthalate		480	U
208-96-8	Acenaphthylene		160	Ĵ
606-20-2	2,6-Dinitrotoluene		480	U
99-09-2	3-Nitroaniline		970	U
	Acenaphthene		480	IJ

RPSEDBG-D

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM Case No.:

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-27A

Sample wt/vol: 30.5 (g/mL) G

Lab File ID: S3B9865

CONCENTRATION UNITS:

Level: (low/med) LOW

Date Received: 10/11/02

% Moisture: 32 decanted: (Y/N) N Date Extracted:10/15/02

Concentrated Extract Volume: 1000(uL) Date Analyzed: 10/17/02

Injection Volume: 1.0(uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	(ug/L or	ug/Kg)	UG/KG	Q
51-28-5	2,4-Dinitrophe	enol		970	
100-02-7	4-Nitrophenol			970	I
132-64-9	Dibenzofuran			480	
121-14-2	2,4-Dinitroto	luene		480	
84-66-2	Diethylphthala	ate		480	
7005-72-3	4-Chloropheny	L-phenylether	<u></u>	480	
86-73-7	Fluorene		<u> </u>	120	
100-01-6	4-Nitroaniline	3	1	970	1
534-52-1	4,6-Dinitro-2	-methylphenol	<u> </u>	970	1
86-30-6	N-Nitrosodiphe	enylamine (1)		480	U
101-55-3	4-Bromophenyl	-phenylether		480	
118-74-1	Hexachloroben	zene		480	
87-86-5	Pentachlorophe	enol		970	U
85-01-8	Phenanthrene			560	Ì
120-12-7	Anthracene			660	
86-74-8	Carbazole			88	J
84-74-2	Di-n-butylphtl	alate		480	Ū
206-44-0	Fluoranthene_			770	
	Pyrene			1400	
85-68-7	Butylbenzylph	halate	i	150	
91-94-1	3,3'-Dichlorol	penzidi <u>ne</u>	\	480	U
56-55-3	Benzo(a)anthra	acene		630	
	Chrysene			650	
117-81-7	bis(2-Ethylhe	(v1) phthalate	<u> </u>	240	J
117-84-0	Di-n-octylphtl	ialate		480	
205-99-2	Benzo(b)fluora	inthene		450	J
203-33 2	Benzo(k)fluora	anthene		190	J
50-22-8	Benzo (a) pyrene	,	}	520	
102 20 E	Indeno(1,2,3-c	rd) pyrene	_	280	J .
1 23 20 3	Dibenzo (a, h) ar	thracene		71	J
101 04 0	Benzo(g,h,i)pe	ervlene		290	J
191-24-2	Beiizu(g,ii,i/p				
(1) - Cannot b	e separated from D	phenylamine	1		

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

RPSEDBG-D

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-27A

Sample wt/vol:

30.5 (g/mL) G

S3B9865 Lab File ID:

Level: (low/med)

Date Received: 10/11/02

% Moisture: 32

decanted: (Y/N) N

LOW

Date Extracted: 10/15/02

Concentrated Extract Volume:

Date Analyzed: 10/17/02

Injection Volume: 1.0(uL)

Dilution Factor: 1.0

GPC Cleanup:

(Y/N) N

pH: ___

1000 (uL)

Number TICs found: 16

CONCENTRATION UNITS: (uq/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	
1. 2. 3. 4. 5. 6. 2531-84-2 7. 613-12-7 8. 9. 57-10-3 10. 238-84-6 11. 12. 3442-78-2 13. 301-02-0 14. 198-55-0 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30.	UNKNOWN UNKNOWN UNKNOWN UNKNOWN PHENANTHRENE, 2-METHYL- ANTHRACENE, 2-METHYL- UNKNOWN HEXADECANOIC ACID 11H-BENZO [A] FLUORENE UNKNOWN PYRENE, 2-METHYL- 9-OCTADECENAMIDE, (Z)- PERYLENE UNKNOWN UNKNOWN	6.34 6.66 11.83 15.24 15.85 16.64 16.69 16.82 16.98 19.33 19.39 20.05 23.41 25.26 25.36		JB J J J NJ NJ NJ NJ NJ NJ NJ N

U.S. EPA - CLP

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		INO	DRGANIC ANALYSIS DATA SHEET Contract:			RPSEDBG-D		
Lab Name:	MITKEM_C	ORPORATION_						
Lab Code:	MITKEM	Case No.:		SAS No.:		<u>.</u>	SDG No.:	A1489B_
Matrix (soil/s	water):	SOIL		I	ab Samp	le ID:	A 1489-	27A
Level (low/m	ned):	MED		Γ	Date Rece	ived:	10/11/0	2
% Solids:		68.0						
	Concentration	u Units (ug/L or mg	/kg dry weight):				MG/KG	
	CAS No.	Analyte	Concentration	С	Q	М		
	_7429-90-5	Aluminum				NR		
	_7440-36-0	Antimony				NR		
	7440-38-2	Arsenic				NR		
	_7440-39-3	Barium				NR		
	_7440-41-7	Beryllium				NR		
	7440-43-9	Cadmium	I			NR		
	_7440-70-2	Calcium				NR		
	7440-47-3	Chromium		_		NR		
	_7440-48-4	Cobalt				_NR		
	_7440-50-8	Copper				NR		
	_7439-89-6	Iron				NR		
	_7439-92-1	Lead				NR		
	_7439-95-4	Magnesium				NR		
	_7439-96-5	Manganese				_NR		
	_7439-97-6	Mercury				_NR		
	_7440-02-0	Nickel	<u> </u>			NR		
	_7440-09-7	Potassium				NR		
	_7782-49-2	Selenium				↓NR ↓		
	7440-22-4	Silver				_NR		
	_7440-23-5	Sodium				NR		
	_7440-28-0	Thallium				NR		
	_7440-62-2	Vanadium				NR		
	_7440-66-6	Zinc	 			_NR		
		Cyanide	0.21	U		LCA.		

Color Before:	 Clarity Before:	 Texture:	
Color After:	 Clarity After:	 Artifacts:	
Comments:			
			

FORM I - IN

ILM04.1

Mitkem Corporation

CLIENT:

GEI Consultants, Inc.

Client Sample ID: RPSEDBG-D

Lab ID:

A1489-27

Date: 08-Nov-02

Project: Keyspan

Collection Date: 10/09/02 18:10

Analyses	Result	Qual	Limit	Units	DF	Date Analyzed
HARDNESS BY CALCULATION Hardness, Calcium/Magnesium (As CaCO3)	150000	SM2340)_S 280	mg/Kg CaCO3	1	10/24/02 12:26
SOIL AND WASTE PH	8.0	SW904	5C_S 1.0	pH Units	1	10/21/02 0:00

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

DF - Dilution Factor

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Limit - Reporting Limit

RPSEDBG-E

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL Lab Sample ID: A1489-26C

Sample wt/vol: 5.2 (q/mL) GLab File ID: V1F0467

Level: (low/med) LOW Date Received: 10/11/02

% Moisture: not dec. 22 Date Analyzed: 10/16/02

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (mL) Soil Aliquot Volume: ____ (uL)

CONCENTRATION UNITS: CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG

Q 74-87-3-----Chloromethane 6 U 75-01-4------Vinyl Chloride 6 U 74-83-9-----Bromomethane 6 U 75-00-3-----Chloroethane 6 U 75-35-4----1,1-Dichloroethene 6 U 6 U 67-64-1-----Acetone U 75-15-0-----Carbon Disulfide 6 75-09-2-----Methylene Chloride 4 J 156-60-5----trans-1,2-Dichloroethene 6 U 75-34-3----1,1-Dichloroethane 6 U 78-93-3----2-Butanone 6 U 6 156-59-2----cis-1,2-Dichloroethene U 67-66-3-----Chloroform 6 U 6 U 71-55-6----1,1,1-Trichloroethane 6 U 56-23-5-----Carbon Tetrachloride 6 U 107-06-2----1, 2-Dichloroethane U 71-43-2----Benzene 6 79-01-6----Trichloroethene U 6 78-87-5----1,2-Dichloropropane U 6 U 6 U 6 U 75-27-4-----Bromodichloromethane 10061-01-5-----cis-1,3-Dichloropropene 108-10-1----4-Methyl-2-pentanone 6 U 108-88-3----Toluene 10061-02-6----trans-1,3-Dichloropropene 6 U 6 79-00-5----1,1,2-Trichloroethane U 6 U 127-18-4----Tetrachloroethene 591-78-6----2-Hexanone 6 U 124-48-1-----Dibromochloromethane 6 U 108-90-7------Chlorobenzene 6 U 6 U 100-41-4-----Ethylbenzene 6 U 1330-20-7-----Xylene (Total) 6 U 100-42-5----Styrene 6 75-25-2-----Bromoform U 6 U 79-34-5----1,1,2,2-Tetrachloroethane

VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

TENTATIVELY IDENTIFIED COMPOUNDS

RPSEDBG-E

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: A1489

Matrix: (soil/water) SOIL Lab Sample ID: A1489-26C

Sample wt/vol: 5.2 (g/mL) G Lab File ID: V1F0467

Level: (low/med) LOW Date Received: 10/11/02

% Moisture: not dec. 22 Date Analyzed: 10/16/02

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: ____(mL) Soil Aliquot Volume: ____(uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg

Number TICs found: 1

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	1
1. 83-32-9	ACENAPHTHENE	18.35	10	NJ
2. 3. 4.				
6.				
8.				
11.				
l2. L3.				
14. 15.				
L7. L8.				
19. 20.				
21.				
25.				
26. 27.				
28. 29. 30.				

RPSEDBG-E

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: Al489

Matrix: (soil/water) SOIL Lab Sample ID: A1489-26A

Sample wt/vol: 30.8 (g/mL) G Lab File ID: S3B9864

Level: (low/med) LOW Date Received: 10/11/02

% Moisture: 22 decanted: (Y/N) N Date Extracted:10/15/02

Concentrated Extract Volume: 1000(uL) Date Analyzed: 10/17/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

		CONCENTRATION UNITS:		
CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/KG	Q	

CAS 110.	(49)	/ L OL ug/kg/	00, 100	*2
108-95-2			410	U
111-44-4	bis(2-Chloroethyl)Et	her	410	
95-57-8	2-Chlorophenol		410	υ
	1,3-Dichlorobenzene		410	U
	1,4-Dichlorobenzene		410	U
95-50-1	1,2-Dichlorobenzene		410	U
95-48-7	2-Methylphenol		410	U
108-60-1	2,2'-oxybis(1- Chloro r	propane)	410	U
106-44-5	4-Methylphenol		410	U
621-64-7	N-Nitroso-di-n-propy	lamine	410	U
67-72-1	Hexachloroethane		410	U
	Nitrobenzene		410	U
78-59-1- 	Isophorone		410	
88-75-5	2-Nitrophenol		410	ប
105-67-9	2,4-Dimethylphenol		410	U
	2,4-Dichlorophenol		410	U
120-82-1	1,2,4-Trichlorobenzer	ie	410	U
	Naphthalene		410	U
	4-Chloroaniline		410	U
111-91-1	bis(2-Chloroethoxy)me	thane	410	U
87-68-3	Hexachlorobutadiene	— i	410	U
59-50-7	4-Chloro-3-Methylphen	iol	410	U
91-57-6	2-Methylnaphthalene		410	U
77-47-4	Hexachlorocyclopentad	iene	410	IJ
88-06-2	·2,4,6~Trichlorophenol		410	υ
95-95-4 	·2,4,5-Trichlorophenol		840	ט
91-58-7	2-Chloronaphthalene		410	ט
	2-Nitroaniline		840	U
131-11-3	Dimethylphthalate		410	υ
	Acenaphthylene		410	บ
606-20-2	2,6-Dinitrotoluene		410	
	3-Nitroaniline		840	U
	Acenaphthene		410	บ

FORM I SV-1

OLM03.0

RPSEDBG-E

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: MITKEM CORPORATION Contract:

Case No.:

SAS No.: SDG No.: A1489

Matrix: (soil/water) SOIL Lab Sample ID: A1489-26A

Sample wt/vol: 30.8 (q/mL) GLab File ID: S3B9864

Level: (low/med) Date Received: 10/11/02 LOW

% Moisture: 22 decanted: (Y/N) N Date Extracted: 10/15/02

Concentrated Extract Volume: Date Analyzed: 10/17/02 1000 (uL)

Injection Volume: Dilution Factor: 1.0 1.0 (uL)

(Y/N) N GPC Cleanup: pH:

Lab Code: MITKEM

CONCENTRATION UNITS: (uq/L or uq/Kq) UG/KG CAS NO. COMPOUND 0

	COMPOSID (Ug/ L) OI		
51-28-5	2,4-Dinitrophenol	840	U
100-02-7	4-Nitrophenol	840	U
	Dibenzofuran	410	U
121-14-2	2,4-Dinitrotoluene	410	U
84-66-2	Diethylphthalate	410	U
7005-72-3	4-Chlorophenyl-phenylether	410	U
86-73-7		410	ט
100-01-6	4-Nitroaniline	840	ט
	4,6-Dinitro-2-methylphenol	840	បៃ
	N-Nitrosodiphenylamine (1)		บ
101-55-3	4-Bromophenyl-phenylether	410	U
118-74-1	Hexachlorobenzene	410	ט
87-86-5	Pentachlorophenol	840	ט
85-01-8	Phenanthrene	410	lυ
120-12-7	Anthracene	410	טו
	Carbazole	410	U
84-74-2	Di-n-butylphthalate	410	υ
206-44-0	Fluoranthene	410	U
129-00-0	Pyrene	410	υ
85-68-7	Butylbenzylphthalate	410	U
91-94-1	3,3'-Dichlorobenzidine	410	U
56- 55-3	Benzo(a)anthracene	410	U
218-01-9	Chrysene	410	U
117-81-7	bis(2-Ethylhexyl)phthalate	410	T)
117-84-0	Di-n-octylphthalate	410	U
205-99-2	Benzo(b)fluoranthene	410	U
207-08-9	Benzo(k)fluoranthene	410	U
50-32-8	Benzo(a)pyrene	410	U
193-39-5	Indeno(1,2,3-cd)pyrene	410	U
53-70-3	Dibenzo(a,h)anthracene	410	
	Benzo(g,h,i)perylene	410	

(1) - Cannot be separated from Diphenylamine

1F SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

RPA SAMPLE NO.

RPSEDBG-E

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-26A

Sample wt/vol:

30.8 (g/mL) G

Lab File ID:

S3B9864

Date Received: 10/11/02

Level:

(low/med)

LOW

% Moisture: 22

decanted: (Y/N) N

Date Extracted: 10/15/02

Concentrated Extract Volume:

1000 (uL)

Date Analyzed: 10/17/02

Injection Volume: 1.0(uL)

Dilution Factor: 1.0

GPC Cleanup:

(Y/N) N

pH: ____

Number TICs found: 4

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	
1. 2. 10544-50-0 3. 301-02-0 4.	UNKNOWN SULFUR, MOL. (S8) 9-OCTADECENAMIDE, (Z)- UNKNOWN	6.33 18.10 20.04 22.76	450 1600 340 270	JB NJ NJ
5. 6. 7. 8.				
11. 12. 13.				
14. 15. 16. 17. 18.				
20.				
23. 24. 25. 26. 27.				
28. 29. 30.				

U.S. EPA - CLP

1 INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ab Name:	міткем с	ORPORATION	Cont	ract:			RPSEDB	G-E
ab Code:	MITKEM	Case No.:		SAS No.:			SDG No.:	A1489B_
latrix (soil/wa	ater):	SOIL		L	ab Samp	le ID:	A1489-26	6A
evel (low/med	d):	MED		D	ate Rece	eived:	10/11/02_	
Solids:		78.0						
	Concentration	Units (ug/L or mg	/kg dry weight):				MG/KG	
į	CAS No.	Analyte	Concentration	С	Q	M		
								
	_7429-90-5	Aluminum				NR NR		
	_7440-36-0	Antimony		- -		NR NR		
	_7440-38-2	<i>}</i>				NR		
	7440-39-3	Barium	i			NR		
	7440-41-7	Beryllium				NR		
	_7440-43-9	Cadmium	i	- - -		NR		
	_7440-70-2	Calcium	Į.			NR		
	_7440-47-3	Chromium	•			NR		
	_7440-48-4	Cobalt	1			NR		
	_7440-50-8	Copper				NR		
	_7439-89-6	Iron Lead				NR		
	_7439-92-1					NR		
	_7439-95-4 _7439-96-5	Magnesium Manganese				NR		
i	7439-96-3 _7439-97-6	Mercury	<u> </u>			NR		
İ	_7440-02-0	Nickel				NR		
	_7440-02-0	Potassium	*			NR		
	_7782-49-2	Selenium				NR		
	_7440-22-4	Silver				NR		
	_7440-23-5	Sodium				NR		
	7440-28-0	Thallium				NR		
1	_7440-62-2	•				NR		
	_7440-66-6	Zinc				NR		
		Cyanide	0.16	U_		CA		
				_				
olor Before:		Clari	ty Before:				Texture:	
olor After:		Clari	ty After:				Artifacts:	
omments:								

Mitkem Corporation

CLIENT:

GEI Consultants, Inc.

Client Sample ID: RPSEDBG-E

Lab ID:

A1489-26

Date: 08-Nov-02

Project: Keyspan

Collection Date: 10/09/02 18:20

Analyses	Result	Qual	Limit	Units	DF	Date Analyzed
HARDNESS BY CALCULATION		SM234)_S			
Hardness, Calcium/Magnesium (As CaCO3)	6400		220	mg/Kg CaCO3	1	10/24/02 12:26
SOIL AND WASTE PH		SW904	5C_S			
На	7.8		1.0	pH Units	1	10/21/02 0:00

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quanititation limits

B - Analyte detected in the associated Method Blank

DF - Dilution Factor

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Limit - Reporting Limit

1A VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

RPSEDBG-F

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.: SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-25C

Sample wt/vol:

5.3 (g/mL) G

Lab File ID: V1F0445

Level: (low/med) LOW

Date Received: 10/11/02

% Moisture: not dec. 21

Date Analyzed: 10/15/02

GC Column: DB-624 ID: 0.25 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (mL)

Soil Aliquot Volume: ____(uL)

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

0

	(ug/ 1 of ug/		π.
74-87-3	Chloromethane		5 U
	Vinyl Chloride		Ū
74-83-9	Bromomethane		U
75-00-3	Chloroethane		บ
75-35-4	1,1-Dichloroethene		บ่
67-64-1	Acetone		Ū
75-15-0	Carbon Disulfide		บี
75-09-2	Methylene Chloride	2	JВ
156-60-5 <i>-</i>	trans-1,2-Dichloroethene	ϵ	เป็น
75-34-3 	1,1-Dichloroethane		ט ו
78-93-3 	2-Butanone	6	U
156-59-2	cis-1,2-Dichloroethene	6	ט :
67-66-3	Chloroform	6	Ū
71-55-6	1,1,1-Trichloroethane	6	U
56 - 23-5	Carbon Tetrachloride	6	U
	1,2-Dichloroethane	6	Ū
71-43-2		6	U
79-01-6	Trichloroethene	6	U
78-87-5 	1,2-Dichloropropane	6	U
75-27-4	Bromodichloromethane	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
108-10-1	4-Methyl-2-pentanone	6	U
108-88-3	~-Toluene	6	U
10061-02-6	trans-1,3-Dichloropropene	6	U
79-00-5	1,1,2-Trichloroethane	ઈ	ט
	Tetrachloroethene	6	\U
591-78-6	2-Hexanone	6	U
124-48-1	Dibromochloromethane	6	U
	Chlorobenzene	6	U
100-41-4	Ethylbenzene	8	
1330-20-7	Xylene (Total)	6	Ū
100-42-5	Styrene	6	U
75-25-2- 	Bromoform	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
			l!

VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

TENTATIVELY IDENTIFIED COMPOUNDS

RPSEDBG-F

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: A1489

Matrix: (soil/water) SOIL Lab Sample ID: A1489-25C

Sample wt/vol: 5.3 (g/mL) G Lab File ID: V1F0445

Level: (low/med) LOW Date Received: 10/11/02

% Moisture: not dec. 21 Date Analyzed: 10/15/02

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(mL) Soil Aliquot Volume: _____(uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg

Number TICs found: 1 (ug/

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	
1. 75-18-3 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21.	DIMETHYL SULFIDE	RT	EST. CONC.	=====
22. 23. 24.				
26				

EPA SAMPLE NO.

RPSEDBG-F

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: A1489

Matrix: (soil/water) SOIL Lab Sample ID: A1489-25A

Sample wt/vol: 30.9 (g/mL) G Lab File ID: S3B9863

Level: (low/med) IOW Date Received: 10/11/02

% Moisture: 21 decanted: (Y/N) N Date Extracted:10/15/02

Concentrated Extract Volume: 1000(uL) Date Analyzed: 10/17/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

		CONCENTRATION UNITS:	
CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/KG	Q

	(49/1 01 49		
108-95-2		400	U
111-44-4	bis(2-Chloroethyl)Ether_	400	υ
95-57-8	2-Chlorophenol	400	U
541-73-1	1,3-Dichlorobenzene	400	U
106-46-7	1,4-Dichlorobenzene	400	ט
95-50-1	1,2-Dichlorobenzene	400	ט
95-48-7	2-Methylphenol	400	Ū
108-60-1	2,2'-oxybis(1-Chloropropane)	400	ט
106-44-5	4-Methylphenol	400	υ
621-64-7	N-Nitroso-di-n-propylamine_	400	U
67-72-1	Hexachloroethane	400	U
98-95-3	Nitrobenzene	400	U
78-59-1	Isophorone	400	U
	2-Nitrophenol	400	U
	2,4-Dimethylphenol	400	Ū
120-83-2	2,4-Dichlorophenol	400	Ū
	1,2,4-Trichlorobenzene	400	U
	Naphthalene	400	Ū
	4-Chloroaniline	400	U
	bis(2-Chloroethoxy)methane	400	Ū
	Hexachlorobutadiene	400	U
	4-Chloro-3-Methylphenol	400	U
	2-Methylnaphthalene	400	U
	Hexachlorocyclopentadiene	400	U
88-06-2	2,4,6-Trichlorophenol	400	U
	2,4,5-Trichlorophenol	820	U
	2-Chloronaphthalene	400	U
88-74-4	2-Nitroaniline	820	Ū
	Dimethylphthalate	400	Ū
	Acenaphthylene	400	
	2,6-Dinitrotoluene	400	
	3-Nitroaniline	820	
	Acenaphthene	1	Ū

OLM03.0

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

RPSEDBG-F

Q

Lab Name: MITKEM CORPORATION Contract:

SDG No.: A1489 Case No.: SAS No.: Lab Code: MITKEM

Lab Sample ID: A1489-25A Matrix: (soil/water) SOIL

Lab File ID: S3B9863 30.9 (g/mL) G Sample wt/vol:

Date Received: 10/11/02 (low/med) TOM Level:

Date Extracted: 10/15/02 decanted: (Y/N) N % Moisture: 21

Date Analyzed: 10/17/02 Concentrated Extract Volume: 1000 (uL)

Dilution Factor: 1.0 Injection Volume: 1.0 (uL)

COMPOUND

GPC Cleanup: (Y/N) N pH: ____

50-32-8-----Benzo (a) pyrene

193-39-5----Indeno(1,2,3-cd)pyrene_

53-70-3-----Dibenzo(a,h)anthracene

(1) - Cannot be separated from Diphenylamine

191-24-2----Benzo(g,h,i)perylene_

CAS NO.

		·
51-28-52,4-Dinitrophenol	820	U
100-02-74-Nitrophenol	820	υ
132-64-9Dibenzofuran	400	U
132-64-9-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-	400	U
84-66-2Diethylphthalate	400	
7005-72-34-Chlorophenyl-phenylether	400	
7005-72-34-CHIOTOPHENYI-MENYICCHCI	400	
86-73-7Fluorene	820	_
100-01-64-Nitroaniline	820	
534-52-14,6-Dinitro-2-methylphenol	400	
86-30-6N-Nitrosodiphenylamine (1)	400	
101-55-34-Bromophenyl-phenylether	400	
118-74-1Hexachlorobenzene	820	
87-86-5Pentachlorophenol	400	-
85-01-8Phenanthrene	400	
120-12-7Anthracene	400	-
86-74-8Carbazole	400	
84-74-2Di-n-butylphthalate	400	
206-44-0Fluoranthene		-
129-00-0Pyrene	400	
85-68-7Butylbenzylphthalate	400	
91-94-13,3'-Dichlorobenzidine	400	
56-55-3Benzo(a)anthracene	400	
218-01-9Chrysene	400	
117-81-7bis(2-Ethylhexyl)phthalate	44	
117-84-0Di-n-octylphthalate	400	
205-99-2Benzo (b) fluoranthene	400	U
207-08-9Benzo(k)fluoranthene	400	-
50-32-8Benzo (a) pyrene	400	U

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

400 U

400 U

400 U

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

RPSEDBG~F

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-25A

Sample wt/vol:

30.9 (g/mL) G

Lab File ID: S3B9863

Level: (low/med) LOW Date Received: 10/11/02

% Moisture: 21

decanted: (Y/N) N

Date Extracted: 10/15/02

Concentrated Extract Volume:

1000 (址)

Date Analyzed: 10/17/02

Injection Volume: 1.0(uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

pH: _

Number TICs found: 6

CONCENTRATION UNITS: (uq/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	
1. 2. 3. 57-10-3 4. 10544-50-0 5. 6.	UNKNOWN UNKNOWN HEXADECANOIC ACID SULFUR, MOL. (S8) UNKNOWN UNKNOWN	6.34 16.81 16.97 18.11 20.04 22.76	830 330 340 2000 710 360	J NJ NJ
7. 8. 9. 10. 11. 12. 13. 14.				
16. 17. 18. 19. 20. 21. 22.				
24. 25. 26. 27. 28. 29.				

U.S. EPA - CLP

1 INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

b Name:	MITKEM_C	ORPORATION	Cont	ract:			RPSEDBG-F
b Code:	MITKEM	Case No.:		SAS No.:			SDG No.: A1489B_
atrix (soil/w	rater):	SOIL		I	ab Samp	ole ID:	A1489-25A
vel (low/me	ed):	MED		Ι	Date Rece	eived:	10/11/02
Solids:		79.0					
	Concentration	Units (ug/L or mg	/kg dry weight):				MG/KG
	CAS No.	Analyte	Concentration	С	Q	М	
		1 3					
	_7429-90-5	Aluminum				NR	
	7429-90-3 _7440-36-0	Antimony				NR	
						NR	
	7440-39-3	Barium	l e	 -		NR	
	7440-41-7	Beryllium				NR	
	7440-43-9	Cadmium				NR	
	_7440-70-2	Calcium			•	NR	
	7440-47-3	Chromium				NR	
	7440-48-4	Cobalt				NR	
	_7440-50-8	Copper				NR	
	7439-89-6	Iron				NR	
	_7439-92-1	Lead				NR	
	7439-95-4	Magnesium_				NR	
	_7439-96-5	Manganese				NR	
	_7439-97-6	Mercury				NR	
	_7440-02-0	Nickel				NR	
	7440-09-7	Potassium				NR	
	7782-49-2	Selenium				NR	
	7440-22-4	Silver				_NR	
	_7440-23-5	Sodium				NR	
	7440-28-0	Thallium				NR	
	7440-62-2	Vanadium				NR	
	7440-66-6	Zinc				NR	
		Cyanide	0.18	บ		CA	
or Before:		Clari	ty Before:				Texture:
or After:		Clari	ity After:				Artifacts:
mments:							

Mitkem Corporation

CLIENT:

GEI Consultants, Inc.

Client Sample ID: RPSEDBG-F

Lab ID:

A1489-25

Date: 08-Nov-02

Project: Keyspan

Collection Date: 10/09/02 17:45

Analyses	Result	Qual	Limit	Units	DF	Date Analyzed
HARDNESS BY CALCULATION		SM234	s			
Hardness, Calcium/Magnesium (As CaCO3)	11000		230	mg/Kg CaCO3	1	10/24/02 12:26
SOIL AND WASTE PH		SW904	5C_S			
pH	7.8		1.0	pH Units	1	10/21/02 0:00

Qualifiers:

ND - Not Detected at the Reporting Limit

I - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

DF - Dilution Factor

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Limit - Reporting Limit

RPSEDBG-G

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: A1489

Matrix: (soil/water) SOIL Lab Sample ID: A1489-24C

Sample wt/vol: 5.3 (g/mL) G Lab File ID: V1F0466

Level: (low/med) LOW Date Received: 10/11/02

% Moisture: not dec. 24 Date Analyzed: 10/16/02

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(mL) Soil Aliquot Volume: _____(uL)

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG

CAS NO.	COMPOUND (U	g/h Or ug/ng) UG/ NG	Q
74-87-3	Chloromethane			5 U
	Vinyl Chloride			5 U
74-83-9	Bromomethane			บ
	Chloroethane			บ
	1,1-Dichloroethene			บี
67-64-1				3
	Carbon Disulfide			
	Methylene Chloride			
		thono		_
	trans-1,2-Dichloroe	chene		
	1,1-Dichloroethane_			
	2-Butanone			1 1
	cis-1,2-Dichloroeth	ene		U
	Chloroform		ϵ	
	1,1,1-Trichloroetha			U
	Carbon Tetrachlorid	e	6	
	1,2-Dichloroethane_			U
71-43-2				U
	Trichloroethene			U
	1,2-Dichloropropane			U
	Bromodichloromethan			U
10061-01-5	cis-1,3-Dichloropro	pene		U
	4-Methyl-2-pentanon	e		U
108-88-3				U
10061 - 02-6	trans-1,3-Dichlorop	ropene		U
	1,1,2-Trichloroetha	ne		ע
	Tetrachloroethene		6	
	2-Hexanone		6	
	Dibromochloromethan	e	6	
108-90-7	Chlorobenzene		6	
	Ethylbenzene		6	
1330-20-7	Xylene (Total)		6	
100-42-5			6	
75-25-2	Bromoform		6	ן די ן
79-34 -5	1,1,2,2-Tetrachloro	ethane	6	U
				.

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

RPSEDBG-G

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM Case No.:

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-24C

Sample wt/vol:

5.3 (g/mL) G

Lab File ID: V1F0466

Level: (low/med) LOW

Date Received: 10/11/02

% Moisture: not dec. 24

Date Analyzed: 10/16/02

GC Column: DB-624 ID: 0.25 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (mL)

Soil Aliquot Volume: ____(uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg

Number TICs found: 5

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q =====
1. 90-12-0 2. 581-42-0 3. 575-37-1 4. 573-98-8 5. 83-32-9 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22.	NAPHTHALENE, 1-METHYL- NAPHTHALENE, 2,6-DIMETHYL- NAPHTHALENE, 1,7-DIMETHYL- NAPHTHALENE, 1,2-DIMETHYL- ACENAPHTHENE]	55 10 27 12	
24. 25. 26.				
27. 28. 29. 30.				

EPA SAMPLE NO.

RPSEDBG-G

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: A1489

Matrix: (soil/water) SOIL Lab Sample ID: A1489-24A

Sample wt/vol: 30.7 (g/mL) G Lab File ID: S3B9862

Level: (low/med) LOW Date Received: 10/11/02

% Moisture: 24 decanted: (Y/N) N Date Extracted:10/15/02

Concentrated Extract Volume: 1000(uL) Date Analyzed: 10/17/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

	CONCENTRATION UNITS:				
CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/KG	Q		

CAS NO.	COMPOUND (dg/L)	or ug/kg) og/kg	Q
108-95-2	Phenol	420	U
111-44-4	bis(2-Chloroethyl)Ether		
95-57-8	2-Chlorophenol	420	U
541-73-1	1,3-Dichlorobenzene	420	U
106-46-7	1,4-Dichlorobenzene	420	U
95-50-1	1,2-Dichlorobenzene	420	U
95-48-7	2-Methylphenol	420	Ü
108-60-1	2,2'-oxybis(1-Chloropro	oane) 420	U
106-44-5	4-Methylphenol	420	U
621-64-7	N-Nitroso-di-n-propylam	ine 420	U
67-72-1	Hexachloroethane	420	U
98-95-3	Nitrobenzene	420	U į
78-59-1	Isophorone	420	U
	2-Nitrophenol	420	บ (
105-67-9	2,4-Dimethylphenol	420	U
120-83-2	2,4-Dichlorophenol	420	υ
120-82-1	1,2,4-Trichlorobenzene	420	ן ט
91-20-3	Naphthalene	420	U
	4-Chloroaniline	420	U
111-91-1	bis(2-Chloroethoxy)metha	ne 420	σ
87-68-3	Hexachlorobutadiene	420	ט
59-50-7	4-Chloro-3-Methylphenol	420	ן ט
9157-6	2-Methylnaphthalene	420	y
77-47-4	Hexachlorocyclopentadien	ie 420	ן כ
88-06-2	2,4,6-Trichlorophenol	420	J
95-95-4	2,4,5-Trichlorophenol	860 1	J
91-58-7	2-Chloronaphthalene	420 1	J
88-74-4	2-Nitroaniline	860 1	ן נ
131-11-3	Dimethylphthalate	420 1	y
208-96-8	Acenaphthylene	86	j
606-20-2	2,6-Dinitrotoluene	420 [J
99-09-2	3-Nitroaniline	860 t	J
	Acenaphthene	420 0	J

OI M03.0

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

RPSEDBG-G

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-24A

Sample wt/vol:

30.7 (g/mL) G

Lab File ID: S3B9862

Level: (low/med) LOW

Date Received: 10/11/02

% Moisture: 24 decanted: (Y/N) N Date Extracted:10/15/02

CONCENTRATION UNITS:

Concentrated Extract Volume: 1000(uL)

Date Analyzed: 10/17/02

Injection Volume: 1.0(uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	(ug/L or ug/K		Q
51-28-5	2,4-Dinitropheno	01	860	
100-02-7	4-Nitrophenol		860	1
132-64-9	Dibenzofuran		420	
121-14-2	2,4-Dinitrotolue	ene	420	
84-66-2	Diethylphthalate	≘}	420	
7005-72-3	4-Chlorophenyl-p	phenylether	420	
86-73-7	Fluorene		420	
100-01-6	4-Nitroaniline		860	1
534-52-1	4.6-Dinitro-2-me	ethylphenol	860	1
86-30-6	N-Nitrosodipheny	lamine (1)	420	
101-55-3	4-Bromophenyl-pl	nenylether	420	
110-74-1	Hexachlorobenze	ne	420	U
07-06-5	Pentachloropheno	01	860	
07-00-3	Phenanthrene		270	J
120 12-7	Anthracene		80	J
06-74-8	Carbazole		420	Ū
04-74-2	Di-n-butylphtha	late	420	Ū
206-44-0	Fluoranthene		420	J
129-00-0	Pyrene		760	
05 60 7	Butylbenzylphth	alate	420	Ū
01 04 1.	3,3'-Dichlorober	nzidine	420	U
91-94-1	Benzo(a)anthrace	ene	300	J
50-55-5	Chrysene		360	J
218-01-3	bis(2-Ethylhexy) phthalate	330	J
TT/-8T-/	Dis(2-Ediylicky	late	420	
TT1-R4-0	Pongo (b) fluorant	hene	220	
205-99-2	Benzo (b) fluorant	-hone	86	
207-08-9	Benzo (k) fluorant		270	
50-32-8	Benzo (a) pyrene	nurene	130	
193-39-5	Indeno(1, 2, 3-cd)	byrene	420	
53-70-3	Dibenzo (a, h) antl	Tacerie	140	
191-24-2	Benzo(g,h,i)per	Terre	110	
) - Cannot b	e separated from Dipl	nenylamine		

SEMIVOLATILE ORGANICS ANALYSIS DATA SHERT TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

RPSEDBG-G

Lab Name: MITKEM CORPORATION

Contract:

0

Lab Code: MITKEM Case No.: SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-24A

Sample wt/vol: 30.7 (g/mL) G Lab File ID: S3B9862

Level: (low/med) LOW

Date Received: 10/11/02

% Moisture: 24 decanted: (Y/N) N Date Extracted:10/15/02

Concentrated Extract Volume: 1000(uL) Date Analyzed: 10/17/02

Injection Volume: 1.0(uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

28.____ 29._ 30.

CONCENTRATION UNITS:

Number TICs found: 10 (ug/L or ug/Kg) ug/Kg				ug/Kg	
	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Ò
	1. 2. 2531-84-2 3. 4.	UNKNOWN PHENANTHRENE, 2-METHYL- UNKNOWN UNKNOWN	6.34 16.64 16.81 16.84	710 190 250 210	N.T J

UNKNOWN 16.97 220 ປ 6. 80-05-7 PHENOL, 4,4'-(1-METHYLETHYLI) 18.74 470 NJ UNKNOWN 330 J 7. 20.04 180 J UNKNOWN 21.74 8. 9. 192-97-2 BENZO[E] PYRENE 23.41 250 NJ 10. 57-88-5 CHOLESTEROL 25.30 560 NJ 11.____ 12.____ 13.____ 14. 15. 16. 17. 18. 19. 20. 21. ____ 25.___ 26.____ 27.

U.S. EPA - CLP

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

NR

NR.

NR

NR

NR

NR

NR.

NR

NR

NR

NR

NR

NR

CA.

RPSEDBG-G

Lab Name:	міткем со	PRPORATION	C	ontract:			RPSEDI	3G-G
200 1 (41110)		, a 01011101						
Lab Code:	MITKEM	Case No.:		SAS No.	:		SDG No.:	A1489B_
Matrix (soil/wa	ater):	SOIL			Lab Samp	le ID:	A 1489-2	24A
Level (low/med	d):	MED			Date Rece	eived:	10/11/02	2
% Solids:		76.0						
	Concentration	Units (ug/L or mg/	kg dry weight):				MG/KG	
	CAS No.	Analyte	Concentration	С	Q	M		
		Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt Copper				NR NR NR NR NR NR NR NR NR		

7439-89-6

7439-92-1

7439-95-4

7439-96-5

7439-97-6

7440-02-0

7440-09-7

_7782-49-2

7440-22-4

7440-23-5

7440-28-0

7440-62-2

7440-66-6

Iron_

Lead_

Magnesium_

Manganese_

Mercury_

Potassium_

Selenium_

Nickel_

Silver_

Zinc_

Sodium_

Thallium_

Vanadium

Cyanide

Color Before	:	Clarity Bo	efore:	Texture	
Color After:		Clarity A	fter:	Artifact	s:
Comments:					
					
	-				

0.20_

U.

FORM I - IN

ILM04.1

Mitkem Corporation

CLIENT:

GEI Consultants, Inc.

Client Sample ID: RPSEDBG-G

Lab ID:

A1489-24

Date: 08-Nov-02

Project: Keyspan

Collection Date: 10/09/02 17:20

Analyses	Result	Qual	Limit	Units	DF	Date Analyzed
HARDNESS BY CALCULATION		SM234	0_S			
Hardness, Calcium/Magnesium (As CaCO3)	210000		220	mg/Kg CaCO3	1	10/24/02 12:26
SOIL AND WASTE PH		SW904	5C_S			
рН	8.0		1.0	pH Units	1	10/21/02 0:00

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

DF - Dilution Factor

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Limit - Reporting Limit

RPSEDBG-H

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-23C

Sample wt/vol:

5.1 (g/mL) G

Lab File ID: V1F0443

Level: (low/med) LOW

Date Received: 10/11/02

% Moisture: not dec. 19

Date Analyzed: 10/15/02

GC Column: DB-624 ID: 0.25 (mm)

Dilution Factor: 1.0

Soil Extract Volume: ____(mL)

Soil Aliquot Volume: ____(uL)

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG

O

74-87-3	-1.7		
	Chloromethane	l 6	s l u
75-01-4	Vinyl Chloride		Ū
74-83-9	Bromomethane	ě	
75-00-3	Chloroethane	ě	1
75-35-4	1,1-Dichloroethene	l	
67-64-1	Acetone	ϵ	
75-15-0	Carbon Disulfide	ϵ	
	Methylene Chloride	3	
156-60-5	trans-1,2-Dichloroethene	6	
	1,1-Dichloroethane	6	
	2-Butanone	6	T .
	cis-1,2-Dichloroethene	6	
67-66-3	Chloroform		Ū
	1,1,1-Trichloroethane	6	U
56-23-5	Carbon Tetrachloride		U
107-06-2	1,2-Dichloroethane		lυ
71-43-2			U
	Trichloroethene		Ū
	1,2-Dichloropropane		Ū
75-27-4	Bromodichloromethane		Ū
	cis-1,3-Dichloropropene		Ū
108-10-1	4-Methyl-2-pentanone	6	
108-88-3			Ū
10061-02-6	trans-1,3-Dichloropropene	6	
79-00-5	1,1,2-Trichloroethane	6	
	Tetrachloroethene	6	U
591-78-6	2-Hexanone	6	U
124-48-1	Dibromochloromethane	6	U .
108-90-7	Chlorobenzene	6	ו עו
	Ethylbenzene	6	Ū
1330-20-7	Xylene (Total)	6	U
100-42-5	Styrene	6	Ū
75-25-2	Bromoform	6	Ū
	1,1,2,2-Tetrachloroethane	6	Ū

VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

RPSEDBG-H Contract:

Lab Name: MITKEM CORPORATION

SAS No.: Lab Code: MITKEM Case No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-23C

Lab File ID: V1F0443 Sample wt/vol: 5.1 (g/mL) G

Level: (low/med) LOW

Date Received: 10/11/02

% Moisture: not dec. 19

Date Analyzed: 10/15/02

GC Column: DB-624 ID: 0.25 (mm)

Dilution Factor: 1.0

Soil Extract Volume: ____(mL)

Soil Aliquot Volume: ____(uL)

CONCENTRATION UNITS: (uq/L or ug/Kg) ug/Kg

Number TICs found: 1

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	1
1. 75-18-3 23.	DIMETHYL SULFIDE	3.05		NJ
5.				
7. 8. 9. 10.				
12. 13. 14.				
16. 17. 18.				
20. 21.				
24 25.				
26. 27. 28.				
30				

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

RPSEDBG-H

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-23A

Sample wt/vol:

30.6 (g/mL) G

S3B9861 Lab File ID:

Level: (low/med) LOW

Date Received: 10/11/02

% Moisture: 19

decanted: (Y/N) N

Date Extracted: 10/15/02

Concentrated Extract Volume: 1000(uL) Date Analyzed: 10/17/02

Injection Volume: 1.0(uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRA (ug/L or	ATION U ug/Kg)	NITS: UG/KG	Q
108-95-2	_Phonol			400	U
108-95-2	bis(2-Chloroe	thyllEther		400	U
111-44-4	2-Chloropheno	il		400	U
95-57-6	1,3-Dichlorob	enzene		400	υ
106-46-7	1,4-Dichlorob	enzene		400	U
05-50-1	1,2-Dichlorob	enzene		400	U
05 49-7	2-Methylpheno	1		400	U
100 -60 -1	2,2'-oxybis(1	-Chloropropar	ie)	400	U
106-00 1	4-Methylpheno	1		400	U
621-64-7	N-Nitroso-di-	n-propylamine	<u>-</u>	400	ប
67-72-1	Hexachloroeth	ane		400	U
	Nitrobenzene			400	U
	Isophorone			400	l -
88-75-5	2-Nitrophenol			400	i .
105-67-9	2,4-Dimethylp	henol		400	
120-83-2	2,4-Dichlorop	henol		400	
120-82-1	1,2,4-Trichlo	robenzene		400	
91-20-3	Naphthalene_			400	l
106-47-8	4-Chloroanili	ne		400	
111-91-1	bis(2-Chloroe	thoxy) methane	•	400	
87-68-3	Hexachlorobut	adiene		400	
59-50-7	4-Chloro-3-Me	thylphenol		400	
91-57-6	2-Methylnapht	halene		400	•
77-47-4	Hexachlorocyc	lopentadiene_		400	
88-06-2	2,4,6-Trichlo	rophenol		400	
95-95-4	2,4,5-Trichlo	rophenol		810	
91-58-7	2-Chloronapht	halene	!	400	
88-74-4	2-Nitroanilin	e		810	
131-11-3	Dimethylphtha	late		400	
208-96-8	Acenaphthyler	.e	l	48	
606-20-2	2,6 - Dinitroto	luene		400	
99-09-2	3-Nitroanilin	.e		810	
83-32-9	Acenaphthene_			400	U

OLM03.0

EPA SAMPLE NO.

RPSEDBG-H

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: A1489

Matrix: (soil/water) SOIL Lab Sample ID: A1489-23A

Sample wt/vol: 30.6 (g/mL) G Lab File ID: S3B9861

Level: (low/med) LOW Date Received: 10/11/02

% Moisture: 19 decanted: (Y/N) N Date Extracted: 10/15/02

Concentrated Extract Volume: 1000(uL) Date Analyzed: 10/17/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/kg) UG/kG Q

		ſ <u></u>
51-28-52,4-Dinitrophenol	810	ប
100-02-74-Nitrophenol	810	U
132-64-9Dibenzofuran	400	ש
121-14-22,4-Dinitrotoluene	400	ប
84-66-2Diethylphthalate	400	ט
7005-72-34-Chlorophenyl-phenylether	400	U
86-73-7Fluorene	400	U
100-01-64-Nitroaniline	810	U
534-52-14,6-Dinitro-2-methylphenol	810	υ
86-30-6N-Nitrosodiphenylamine (1)	400	บ
101-55-34-Bromophenyl-phenylether	400	U
118-74-1Hexachlorobenzene	400	υ
87-86-5Pentachlorophenol	810	U
87-86-5Pelitacinorophenor	160	J
85-01-8Phenanthrene	59	
120-12-7Anthracene	400	
86-74-8Carbazole	400	
84-74-2Di-n-butylphthalate	310	
206-44-0Fluoranthene	430	J
129-00-0Pyrene	400	ŦŦ
85-68-7Butylbenzylphthalate	400	i -
91-94-13,31-Dichlorobenzidine	220	
56-55-3Benzo(a)anthracene	220	
218-01-9Chrysene		1 -
117-81-7bis(2-Ethylhexyl)phthalate	400	
117-84-0Di-n-octylphthalate	400	
205-99-2Benzo (b) fluoranthene	200	
207-08-9Benzo(k)fluoranthene	78	
50-32-8Benzo (a) pyrene	190	_
193-39-5Indeno(1,2,3-cd)pyrene	110	
53-70-3Dibenzo (a, h) anthracene	400	U
191-24-2Benzo(g,h,i)perylene	120	J
n n n n n n n n n n n n n n n n n n n		

(1) - Cannot be separated from Diphenylamine

1F

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

Contract:

RPSEDBG-H

Lab Code: MITKEM

Lab Name: MITKEM CORPORATION

Case No.:

LOW

SAS No.:

SDG No.: A1489

Matrix: (soil/water) SOIL

Lab Sample ID: A1489-23A

Sample wt/vol:

30.6 (g/mL) G

Lab File ID:

S3B9861

Level:

(low/med)

Date Received: 10/11/02

% Moisture: 19

decanted: (Y/N) N

Date Extracted: 10/15/02

Concentrated Extract Volume:

1000 (uL)

Date Analyzed: 10/17/02

Injection Volume:

1.0(吐)

Dilution Factor: 1.0

GPC Cleanup:

(Y/N) N

pH: ____

Number TICs found: 8

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg

				<u> </u>
CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	
=======================================		6.34		JВ
1.	UNKNOWN	16.81	170	
2.	UNKNOWN	16.97	230	
3.	UNKNOWN		2200	
4. 80-05-7	PHENOL, 4,4'-(1-METHYLETHYLI	20.05	340	
5.	UNKNOWN	22.76	200	
6.	UNKNOWN	25.28	820	
7. 57-88-5	CHOLESTEROL	25.26	170	
8.	UNKNOWN	25.69	170	
9.				
9. 10.			<u></u>	
11.				
14.				
13.				
14				
10.				
16				
17				
18.				
19				
20				
20				
21.				
22.				
43.				
47,				
<i>4</i> 5.				
40.				
<i></i>				
28	-			
29				
30				
		I :		

U.S. EPA - CLP

		INORGANIC ANALYSIS DATA SHEET						
ab Name:	MITKEM CO	ORPORATION	Co	ontract:	•	··	RPSEDI	BG-H
ab Code;	MITKEM	Case No.:		SAS No.			SDG No.:	A1489B_
latrix (soil/wa	iter):	SOIL			Lab Samp	le ID:	A1489-	23A
evel (low/med		MED			Date Rece	ived:	10/11/02	2
	. <i>,</i> ,							
Solids:		81.0						
	Concentration	Units (ug/L or mg	/kg dry weight):		_		MG/KG	
	CAS No.	Analyte	Concentration	С	Q	М		
 -	7420.00.6	Aluminum				NR		
' h	_7429-90-5 _7440-36-0					NR		
	_7440-38-2					NR		
	_7440-39-2 <u></u> _7440-39-3					NR		
Ì	_7440-41-7			1 1		NR		
Ţ	_7440-43-9					NR		
Ĭ	_7440-70-2					NR		
	_7440-47-3	Chromium				NR		
Ţ	_7440-48-4					NR		
Ţ	_7440-50-8	Copper				NR		
Ţ	_7439-89-6	Iron				NR		
<u> </u>	_7439-92-1	Lead		1 1		NR		
	_7439-95-4	Magnesium		_		NR		
Ī	_7439-96-5	Manganese				NR		
	_7439-97-6	Mercury	I			NR		
ſ	7440-02-0	Nickel		ļ		NR		
	_7440-09-7	Potassium		1		NR		
	_7782-49-2	Selenium				NR		
ļ	_7440-22-4	Silver				NR		
ļ	_7440-23-5	Sodium				NR		
ľ	_7440-28-0	Thallium				NR		
Ţ	_7440-62-2	Vanadium				NR		
Ī	_7440-66-6	Zinc				NR		
		Cyanide	0.17_	U_		CA		
ì.		<u> </u>	<u> </u>			_ii		
olor Before:		Clari	ty Before:				Texture:	
olor After:	<u></u>	Clari	ty After:				Artifacts:	Annual Providence construction

Color After: Clarity After: Artifacts:

Comments:

FORM I - IN

ILM04.1

Mitkem Corporation

CLIENT:

GEI Consultants, Inc.

Client Sample ID: RPSEDBG-H

Lab ID:

A1489-23

Date: 08-Nov-02

Project: Keyspan

Collection Date: 10/09/02 17:05

Analyses	Result	Qual	Limit	Units	DF	Date Analyzed
HARDNESS BY CALCULATION		SM234	_			
Hardness, Calcium/Magnesium (As CaCO3)	39000		210	mg/Kg CaCO3	1	10/24/02 12:26
SOIL AND WASTE PH		SW904	5C_S			
рН	8.0		1.0	pH Units	1	10/21/02 0:00

DF - Dilution Factor

- R RPD outside accepted recovery limits
- E Value above quantitation range
- Limit Reporting Limit

Page 2 of 10

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Mitkem Corporation

Date Received:

10/17/02

Work Order #

0210-13710

Approved by:

R.I. Analytical

Sample #:

001

SAMPLE DESCRIPTION: A1489-01B GRAB 10/09/02 @1200

RPSEDOZ-9 (0-0.3)

SAMPLE DET. **ANALYZED PARAMETER** RESULTS LIMIT UNITS METHOD DATE/TIME **ANALYST** ORGANIC CONTENT 10/18/02 15:30 EC 0.1 ASTM D-2974-87 1.6 SIEVE ANALYSIS **ASTM** 10/21/02 9:30 EC

Sieve - * See Attached

Sample #:

002

SAMPLE DESCRIPTION: A1489-02B GRAB 10/09/02 @1210

RPSEDOZ-9 (0.3-3)

SAMPLE DET. **ANALYZED PARAMETER** RESULTS LIMIT UNITS **METHOD** DATE/TIME **ANALYST** ORGANIC CONTENT 1.4 0.1 ASTM D-2974-87 10/18/02 15:30 EC EC SIEVE ANALYSIS **ASTM** 10/21/02 10:05

Sieve - * See Attached

Sample #:

003

SAMPLE DESCRIPTION: A1489-03B GRAB 10/09/02 @1130

RPSEDOZ-6 (0-0.3)

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	-	ANALYZED DATE/TIME	ANALYST
ORGANIC CONTENT	3.4	0.1	%	ASTM D-2974-87	10/18/02 15:30	EC
SIEVE ANALYSIS	*			ASTM	10/21/02 11:00	EC

Page 3 of 10

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Mitkem Corporation

Date Received:

10/17/02

Work Order #

0210-13710

Approved by:

R.I. Analytical

Sample #:

004

SAMPLE DESCRIPTION: A1489-04B GRAB 10/09/02 @1135

RPSEDOZ-6 (0.3-1A)

	MPLE DET. SULTS LIMIT		METHOD	ANALYZED DATE/TIME	ANALYST
ORGANIC CONTENT	1.5 0.	1 %	ASTM D-2974-87	7 10/18/02 15:30	EC
SIEVE ANALYSIS	*		ASTM	10/21/02 12:05	EC

Sieve - * See Attached

Sample #:

005

SAMPLE DESCRIPTION: A1489-05B GRAB 10/09/02 @1140

RPSEDOZ-6 (1.9-2.4)

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
ORGANIC CONTENT	0.2	0.1	%	ASTM D-2974-8	7 10/18/02 15:30	EC

Sample #:

006

SAMPLE DESCRIPTION: A1489-07B GRAB 10/09/02 @1100

RPSEDOZ-3 (0-0.3)

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
ORGANIC CONTENT	1.2	0.1	%	ASTM D-2974-87	10/18/02 15:30	EC
SIEVE ANALYSIS	•			ASTM	10/21/02 15:15	EC
Sieve - * See Attached						

Sample #:

007

SAMPLE DESCRIPTION: A1489-08B GRAB 10/09/02 @1110

RPSEDOZ (0.3-3)

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS		ANALYZED DATE/TIME	ANALYST
ORGANIC CONTENT SIEVE ANALYSIS	3.5 *	0.1	%	ASTM D-2974-87 ASTM	10/18/02 15:30 10/21/02 18:50	EC KLL

Page 4 of 10

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Mitkem Corporation

Date Received:

10/17/02

Work Order #

0210-13710

Approved by:

R.I. Analytical

Sample #:

008

SAMPLE DESCRIPTION: A1489-09B GRAB 10/09/02 @1025

RPSEDOZ - 2 (0-0.3)

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
ORGANIC CONTENT	2.6	0.1	%	ASTM D-2974-87	10/18/02 15:30	EC
SIEVE ANALYSIS	•			ASTM	10/22/02 15:15	KLL

Sieve - * See Attached

Sample #:

009

SAMPLE DESCRIPTION: A1489-10B GRAB 10/09/02 @1035

RPSEDOZ-Z (0.3-3)

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS		ANALYZED DATE/TIME	ANALYST
ORGANIC CONTENT	3.3	0.1	%	ASTM D-2974-87		EC
SIEVE ANALYSIS	•			ASTM	10/22/02 16:00	KLL

Sieve - * See Attached

Sample #:

010

SAMPLE DESCRIPTION: A1489-12B GRAB 10/09/02 @1450

RPSED 02-8 (0-0.3)

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS		ANALYZED DATE/TIME	ANALYST
ORGANIC CONTENT SIEVE ANALYSIS	0.3	0.1	%	ASTM D-2974-87 ASTM	10/18/02 15:30 10/22/02 17:00	EC KLL

5 of 10 Page

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Mitkem Corporation

Date Received: 10/17/02

Work Order #

0210-13710

Approved by:

R.I. Analytical

Sample #:

011

SAMPLE DESCRIPTION: A1489-13B GRAB 10/09/02 @1500

RPSEDOZ-8 (0.3-3)

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS		ANALYZED DATE/TIME	ANALYST
ORGANIC CONTENT SIEVE ANALYSIS	0.1	0.1	%	ASTM D-2974-87 ASTM	10/18/02 15:30 10/22/02 20:45	EC KLL

Sieve - * See Attached

Sample #:

012

SAMPLE DESCRIPTION: A1489-14B GRAB 10/09/02 @1515

RPSEPOZ-7 (0.0.3)

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
ORGANIC CONTENT SIEVE ANALYSIS	0.3	0.1	%	ASTM D-2974-87 ASTM	10/21/02 17:40 10/22/02 18:25	KLL KLL

Sieve - * See Attached

Sample #:

013

SAMPLE DESCRIPTION: A1489-15B GRAB 10/09/02 @1520

RPSEDOZ-7(0.3-3)

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
ORGANIC CONTENT SIEVE ANALYSIS	0.3 *	0.1	%	ASTM D-2974-87 ASTM	7 10/21/02 17:40 10/22/02 21:30	KLL KLL

Page 6 of 10

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Mitkem Corporation

Date Received: 10/17/02

Work Order #

0210-13710

Approved by:

R.I. Analytical

Sample #:

014

SAMPLE DESCRIPTION: A1489-16B GRAB 10/09/02 @1540

RPSEDOZ-5 (0-0.3)

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS		ANALYZED DATE/TIME	ANALYST
ORGANIC CONTENT	0.6	0.1	%	ASTM D-2974-87	10/21/02 17:40	KLL
SIEVE ANALYSIS	•			ASTM	10/22/02 22:10	KLL

Sieve - * See Attached

Sample #:

015

SAMPLE DESCRIPTION: A1489-17B GRAB 10/09/02 @1545

RPSEPOZ-5(0.3-3)

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS		ANALYZED DATE/TIME	ANALYST
ORGANIC CONTENT	0.1	0.1	%	ASTM D-2974-87	10/21/02 17:40	KLL
SIEVE ANALYSIS	•			ASTM	10/22/02 22:40	KLL

Sieve - * See Attached

Sample #:

016

SAMPLE DESCRIPTION: A1489-18B GRAB 10/09/02 @1605

RPSED 02 -4 (0-0:3)

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
ORGANIC CONTENT SIEVE ANALYSIS	0.3	0.1	%	ASTM D-2974-87 ASTM	10/21/02 17:40 10/23/02 9:00	KLL CCP

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R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Mitkem Corporation

Date Received:

10/17/02

Work Order # 0210-13710

Approved by:

R.I. Analytical

Sample #:

017

SAMPLE DESCRIPTION: A1489-19B GRAB 10/09/02 @1610

RPSEDOZ - 4 (0.3-3)

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS		ANALYZED DATE/TIME	ANALYST
ORGANIC CONTENT SIEVE ANALYSIS	0.2 *	0.1	%	ASTM D-2974-87 ASTM	10/21/02 17:40 10/23/02 10:30	KLL CCP

Sieve - * See Attached

Sample #:

018

SAMPLE DESCRIPTION: A1489-20B GRAB 10/09/02 @1630

RPSEPOZ-1 (0.-0.3)

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS		ANALYZED DATE/TIME	ANALYST
ORGANIC CONTENT SIEVE ANALYSIS	0.3	0.1	%	ASTM D-2974-87 ASTM	10/21/02 17:40 10/23/02 12:30	KLL CCP

Sieve - * See Attached

Sample #:

019

SAMPLE DESCRIPTION: A1489-21B GRAB 10/09/02 @1635

RPSEDOZ-1 (0.3-3)

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	метнор	ANALYZED DATE/TIME	ANALYST
ORGANIC CONTENT SIEVE ANALYSIS	0.1 *	0.1	%	ASTM D-2974-8 ASTM	7 10/21/02 17:40 10/23/02 13:15	KLL CCP

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CERTIFICATE OF ANALYSIS

Mitkem Corporation

Date Received: 10/17/02

Work Order # 0210-13710

Approved by:

R.I. Analytical

Sample #:

020

SAMPLE DESCRIPTION: A1489-22B GRAB 10/09/02 @1535

RPSEDXX 100902 (OUP) RPSEDOZ-1 (0.3-3)

SAMPLE DET. **ANALYZED PARAMETER RESULTS** LIMIT **UNITS METHOD** DATE/TIME **ANALYST** ORGANIC CONTENT ASTM D-2974-87 0.2 0.1% 10/21/02 17:40 KLL SIEVE ANALYSIS **ASTM** 10/23/02 13:30 CCP

Sieve - * See Attached

Sample #:

021

SAMPLE DESCRIPTION: A1489-23B GRAB 10/09/02 @1705

· RPSED BG - H

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
ORGANIC CONTENT SIEVE ANALYSIS	0.5	0.1	%	ASTM D-2974-81 ASTM	7 10/21/02 17:40 10/23/02 16:50	KLL KLL

Sieve - * See Attached

Sample #:

022

SAMPLE DESCRIPTION: A1489-24B GRAB 10/09/02 @1720

RPSED BG - G

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
ORGANIC CONTENT SIEVE ANALYSIS	1.3	0.1	%	ASTM D-2974-87 ASTM	7 10/21/02 17:40 10/23/02 17:30	KLL KLL

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R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Mitkem Corporation

Date Received: 10/17/02

Work Order #

0210-13710

Approved by:

R.I. Analytical

Sample #:

023

SAMPLE DESCRIPTION: A1489-25B GRAB 10/09/02 @1745

RPSED BG-F

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
ORGANIC CONTENT SIEVE ANALYSIS	0.6	0.1	%	ASTM D-2974-87 ASTM	10/21/02 17:40 10/23/02 18:15	KLL KLL

Sieve - * See Attached

Sample #:

024

SAMPLE DESCRIPTION: A1489-26B GRAB 10/09/02 @1820

RPSEPBG-E

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
ORGANIC CONTENT SIEVE ANALYSIS	< 0.1 *	0.1	%	ASTM D-2974-87 ASTM	10/21/02 17:40 10/23/02 18:50	KLL KLL

Sieve - * See Attached

Sample #:

025

SAMPLE DESCRIPTION: A1489-27B GRAB 10/09/02 @1810

RPSEP BG - D

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
ORGANIC CONTENT SIEVE ANALYSIS	5.3 *	0.1	%	ASTM D-2974-8 ASTM	7 10/21/02 17:40 10/23/02 20:20	KLL KLL

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R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Mitkem Corporation

Date Received: 10/17/02 Work Order #

0210-13710

Approved by:

R.I. Analytical

Sample #:

026

SAMPLE DESCRIPTION: A1489-28B GRAB 10/09/02 @1820

RPSEDBG -C

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS		ANALYZED DATE/TIME	ANALYST
ORGANIC CONTENT SIEVE ANALYSIS	0.9 *	0.1	%	ASTM D-2974-87 ASTM	10/21/02 17:40 10/23/02 20:55	KLL KLL

Sieve - * See Attached

Sample #:

027

SAMPLE DESCRIPTION: A1489-29B GRAB 10/09/02 @1835

RPSEOBG-B

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS		ANALYZED DATE/TIME	ANALYST
ORGANIC CONTENT	0.8	0.1	%	ASTM D-2974-87	10/21/02 17:40	KLL
SIEVE ANALYSIS	*			ASTM	10/23/02 21:35	KLL

Sieve - * See Attached

Sample #:

028

SAMPLE DESCRIPTION: A1489-30B GRAB 10/09/02 @1845

RPSEDBG-A

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	метнор	ANALYZED DATE/TIME	ANALYST
ORGANIC CONTENT SIEVE ANALYSIS	18 *	0.1	%	ASTM D-2974-8 ASTM	7 10/21/02 17:40 10/23/02 21:50	KLL KLL

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Mitkem Corporation Work Order No. 0210-13710

Date Received: 10/17/02

Approved by:

R.I. Analytical

Sample #: A1489-20B GRAB 10/09/02 @16:30 018

Sieve Size	% Retained	% Passing
No. 4	10.00	90.00
No. 10	8.37	81.63
No. 20	9.45	72.18
No. 40	14.91	57.27
No. 60	35.56	21.71
No. 140	20.07	1.64
No. 200	1.02	0.62

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Mitkem Corporation Work Order No. 0210-13710

Date Received: 10/17/02

Approved by: R.I. Analytical

Sample #: 019 A1489-21B GRAB 10/09/02 @16:35

Sieve Size	% Retained	% Passing
No. 4	1.22	98.78
No. 10	1.18	97.60
No. 20	1.86	95.74
No. 40	6.44	89.30
No. 60	49.05	40.25
No. 140	39.14	1.11
No. 200	0.92	0.19

RPSEDXX 10090Z (DUP) RPSEDOZ-1 (0.3-3)

R.I. Analytical Laboratories, Inc.

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Mitkem Corporation

Work Order No. 0210-13710

Date Received: 10/17/02

Approved by:

R.I. Analytical

Sample #: 020 A1489-22B GRAB 10/09/02 @15:35

Sieve Size	% Retained	% Passing
No. 4	0.65	99.35
No. 10	1.10	98.25
No. 20	2.18	96.07
No. 40	6.46	89.61
No. 60	52.85	36.76
No. 140	35.54	1.22
No. 200	1.05	0.17

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Mitkem Corporation

Work Order No. 0210-13710

Date Received: 10/17/02

Approved by:_

R.I. Analytical

Sample #: 008 A1489-09B GRAB 10/09/02 @10:25

Sieve Size	% Retained	% Passing
No. 4	21.59	78.41
No. 10	15.34	63.07
No. 20	12.93	50.14
No. 40	9.12	41.02
No. 60	14.76	26.26
No. 140	20.38	5.88
No. 200	2.79	3.09

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Mitkem Corporation

Work Order No. 0210-13710

Date Received: 10/17/02

Approved by:/

R.I. Analytical

Sample #: 009 A1489-10B GRAB 10/09/02 @10:35

Sieve Size	% Retained	% Passing
No. 4	3.55	96,45
No. 10	3.63	92.82
No. 20	4.94	87.88
No. 40	12.85	75.03
No. 60	38.65	36.38
No. 140	33.76	2.62
No. 200	1.42	1.20

CERTIFICATE OF ANALYSIS

Mitkem Corporation

Work Order No. 0210-13710

Date Received: 10/17/02

Approved by:

R.I. Analytical

Sample #: 006 A1489-07B GRAB 10/09/02 @11:00

Sieve Size	% Retained	% Passing
No. 4	10.23	89.77
No. 10	12.86	76.91
No. 20	13.01	63.90
No. 40	11.79	52.11
No. 60	19.98	32.13
No. 140	29.60	2.53
No. 200	1.30	1.23

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Mitkem Corporation

Work Order No. 0210-13710

Date Received: 10/17/02

Approved by:_

R.I. Analytical

Sample #: 007 A1489-08B GRAB 10/09/02 @11:10

Sieve Size	% Retained	% Passing
No. 4	5.62	94.38
No. 10	11.13	83.25
No. 20	11.36	71.89
No. 40	18.74	53.15
No. 60	28.73	24.42
No. 140	20.88	3.54
No. 200	1.64	1.90

CERTIFICATE OF ANALYSIS

Mitkem Corporation

Work Order No. 0210-13710

Date Received: 10/17/02

Approved by:_

R.I. Analytical

Sample #: 016 A1489-18B GRAB 10/09/02 @16:05

Sieve Size	% Retained	% Passing
No. 4	8.62	91.38
No. 10	11.90	79.48
No. 20	8.58	70.90
No. 40	13.14	57.76
No. 60	40.50	17.26
No. 140	14.01	3.25
No. 200	0.50	2.75

CERTIFICATE OF ANALYSIS,

Mitkem Corporation Work Order No. 0210-13710

Date Received: 10/17/02

Approved by:

R.I. Analytical

017 A1489-19B GRAB 10/09/02 @16:10 Sample #:

Sieve Size	% Retained	% Passing
No. 4	0.51	99.49
No. 10	2.60	96.89
No. 20	3.41	93.48
No. 40	11.42	82.06
No. 60	47.77	34.29
No. 140	33.65	0.64
No. 200	0.44	0.20

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Mitkem Corporation Work Order No. 0210-13710

Date Received: 10/17/02

Approved by:

R.I. Analytical

014 A1489-16B GRAB 10/09/02 @15:40 Sample #:

Sieve Size	% Retained	% Passing
No. 4	1.08	98.92
No. 10	5.08	93.84
No. 20	10.73	83.11
No. 40	15.79	67.32
No. 60	34.93	32.39
No. 140	29.64	2.75
No. 200	1,47	1.28

CERTIFICATE OF ANALYSIS

Mitkem Corporation

Work Order No. 0210-13710

Date Received: 10/17/02

Approved by:

R.I. Analytical

Sample #: 015 A1489-17B GRAB 10/09/02 @15:45

Sieve Size	% Retained	% Passing
No. 4	9.96	90.04
No. 10	3.69	86.35
No. 20	9.08	77.27
No. 40	18.85	58.42
No. 60	32.29	26.13
No. 140	25.14	0.99
No. 200	0.72	0.27

CERTIFICATE OF ANALYSIS

Mitkem Corporation

Work Order No. 0210-13710

Date Received: 10/17/02

Approved by:_

R.I. Analytical

Sample #: 003 A1489-03B GRAB 10/09/02 @11:30

Sieve Size	% Retained	% Passing
No. 4	7.53	92.47
No. 10	9.04	83.43
No. 20	11.32	72.11
No. 40	9.96	62.15
No. 60	21.92	40.23
No. 140	32.64	7.59
Nö. 200	3.60	3.99

CERTIFICATE OF ANALYSIS

Mitkem Corporation

Work Order No. 0210-13710

Date Received: 10/17/02

Approved by:

R.I. Analytical

Sample #: 004 A1489-04B GRAB 10/09/02 @11:35

Sieve Size	% Retained	% Passing
No. 4	0.38	99.62
No. 10	2.60	97.02
No. 20	5.35	91.67
No. 40	8.95	82.72
No. 60	33.80	48.92
No. 140	45.34	3.58
No. 200	1.76	1.82

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Mitkem Corporation

Work Order No. 0210-13710

Date Received: 10/17/02

Approved by:

R.I. Analytical

Sample #: 012 A1489-14B GRAB 10/09/02 @15:15

Sieve Size	% Retained	% Passing
No. 4	7.32	92.68
No. 10	1.59	91.09
No. 20	9.35	81.74
No. 40	46.63	35.11
No. 60	26.66	8.45
No. 140	7.21	1.24
No. 200	0.67	0.57

CERTIFICATE OF ANALYSIS

Mitkem Corporation

Work Order No. 0210-13710

Date Received: 10/17/02

Approved by:_

R.I. Analytical

Sample #: 013 A1489-15B GRAB 10/09/02 @15:20

Sieve Size	% Retained	% Passing
No. 4	1.27	98.73
No. 10	1.43	97.30
No. 20	3.42	93.88
No. 40	21.59	72.29
No. 60	50.46	21.83
No. 140	20.71	1.12
No. 200	0.72	0.40

CERTIFICATE OF ANALYSIS

Mitkem Corporation

Work Order No. 0210-13710

Date Received: 10/17/02

Approved by:

R.I. Analytical

Sample #: 010 A1489-12B GRAB 10/09/02 @14:50

Sieve Size	% Retained	% Passing
No. 4	13.72	86.28
No. 10	18.46	67.82
No. 20	11.27	56.55
No. 40	12.09	44.46
No. 60	25.45	19.01
No. 140	18.19	0.82
No. 200	0.55	0.27

CERTIFICATE OF ANALYSIS

Mitkem Corporation

Work Order No. 0210-13710

Date Received: 10/17/02

Approved by:_R.I. Analytical

Sample #: 011 A1489-13B GRAB 10/09/02 @15:00

Sieve Size	% Retained	% Passing
No. 4	0.00	100
No. 10	0.33	99.67
No. 20	0.84	98.83
No. 40	2.51	96.32
No. 60	15.96	80.36
No. 140	78.60	1.76
No. 200	1.58	0.18

CERTIFICATE OF ANALYSIS

Mitkem Corporation

Work Order No. 0210-13710

Date Received: 10/17/02

Approved by:

R.I. Analytical

Sample #: 011 (Duplicate) A1489-13B GRAB 10/09/02 @15:00

Sieve Size	% Retained	% Passing
No. 4	0.00	100
No. 10	0.87	99.13
No. 20	1.03	98.10
No. 40	2.44	95.66
No. 60	16.02	79.64
No. 140	77.81	1.83
No. 200	1.71	0.12

CERTIFICATE OF ANALYSIS

Mitkem Corporation Work Order No. 0210-13710

Date Received: 10/17/02

Approved by:

R.I. Analytical

Sample #: 001 A1489-01B GRAB 10/09/02 @12:00

Sieve Size	% Retained	% Passing
No. 4	10.05	89.95
No. 10	5.86	84.09
No. 20	9.03	75.06
No. 40	12.66	62.40
No. 60	24.24	38.16
No. 140	31.72	6.44
No. 200	2.90	3.54

CERTIFICATE OF ANALYSIS,

Mitkem Corporation Work Order No. 0210-13710

Date Received: 10/17/02

Approved by: R.I. Analytical

002 A1489-02B GRAB 10/09/02 @12:10 Sample #:

Sieve Size	% Retained	% Passing
No. 4	19.95	80.05
No. 10	9.95	70.90
No. 20	8.69	62.21
No. 40	12.14	50.07
No. 60	20.82	29.25
No. 140	23.96	5.29
No. 200	2.21	3.08

CERTIFICATE OF ANALYSIS

Mitkem Corporation

Work Order No. 0210-13710 Date Received: 10/17/02

Approved by:

R.I. Analytical

3 Sample #: 028 A1489-20B GRAB 10/09/02 @18.45

Sieve Size	% Retained	% Passing
No. 4	0.00	100.0
No. 10	10.92	89.08
No. 20	21.30	67.78
No. 40	15.71	52.07
No. 60	16.36	35.71
No. 140	26.18	9.53
No. 200	6.14	3.39

CERTIFICATE OF ANALYSIS

Mitkem Corporation

Work Order No. 0210-13710

Date Received: 10/17/02

Approved by:_

R.I. Analytical

Sample #: 027 A1489-29B GRAB 10/09/02 @18:35

Sieve Size	% Retained	% Passing
No. 4	10.22	89.78
No. 10	6.18	83.60
No. 20	7.10	76.50
No. 40	20.98	55.52
No. 60	38.78	16.74
No. 140	14.99	1.75
No. 200	0.88	0.87

CERTIFICATE OF ANALYSIS

Mitkem Corporation

Work Order No. 0210-13710

Date Received: 10/17/02

Approved by:

R.I. Analytical

Sample #: 026 A1489-28B GRAB 10/09/02 @18:20

Sieve Size	% Retained	% Passing
No. 4	20.38	79.62
No. 10	2.41	77.21
No. 20	6.01	71.20
No. 40	11.40	59.80
No. 60	29.26	30.54
No. 140	26.84	3.70
No. 200	2.56	1.14

CERTIFICATE OF ANALYSIS

Mitkem Corporation Work Order No. 0210-13710

Date Received: 10/17/02

Approved by: R.I. Analytical

Sample #: 025 A1489-27B GRAB 10/09/02 @18:10

Sieve Size	% Retained	% Passing
No. 4	2.55	97.45
No. 10	4.44	93.01
No. 20	7.69	85.32
No. 40	15.50	69.82
No. 60	33.12	36.70
No. 140	29.15	7.55
No. 200	4.14	3.41

CERTIFICATE OF ANALYSIS

Mitkem Corporation Work Order No. 0210-13710

Date Received: 10/17/02

Approved by:

R.I. Analytical

024 A1489-26B GRAB 10/09/02 @18:20 Sample #:

Sieve Size	% Retained	% Passing
No. 4	0.00	100.0
No. 10	0.39	99.61
No. 20	1.92	97.69
No. 40	16.83	80.86
No. 60	68.17	12.69
No. 140	11.84	0.85
No. 200	0.78	0.07

CERTIFICATE OF ANALYSIS

Mitkem Corporation

Work Order No. 0210-13710

Date Received: 10/17/02

Approved by:

R.I. Analytical

Sample #: 023 A1489-25B GRAB 10/09/02 @17:45

Sieve Size	% Retained	% Passing
No. 4	2.76	97.24
No. 10	1.94	95.30
No. 20	2.51	92.79
No. 40	4.42	88.37
No. 60	62.86	25.51
No. 140	24.92	0.59
No. 200	0.39	0.20

CERTIFICATE OF ANALYSIS

Mitkem Corporation Work Order No. 0210-13710

Date Received: 10/17/02

Approved by:

R.I. Analytical

Sample #: A1489-24B GRAB 10/09/02 @17:20 022

Sieve Size	% Retained	% Passing
No. 4	19.39	80.61
No. 10	7.82	72.79
No. 20	9.99	62.80
No. 40	13.20	49.60
No. 60	19.49	30.11
No. 140	26.99	3.12
No. 200	1.75	1.37

CERTIFICATE OF ANALYSIS

Mitkem Corporation

Work Order No. 0210-13710

Date Received: 10/17/02

Approved by:_

R.I. Analytical

Sample #: 021 A1489-23B GRAB 10/09/02 @17:05

Sieve Size	% Retained	% Passing
No. 4	23.84	76.16
No. 10	8.01	68.15
No. 20	8.13	60.02
No. 40	11.99	48.03
No. 60	26.39	21.64
No. 140	20.28	1.36
No. 200	0.92	0.44