APPENDIX C

RFI GROUNDWATER MONITORING EVENT SAMPLING REPORTS – FEBRUARY 2003

CUMMINGS RITER

360/toc-c-ban

Earth Sciences Consultants, Inc.
Well Evacuation/Water Sampling Report
(If monitoring point is dry, complete applicable portions of form)

Client I.D.: GENERAL CHEMICAL
Project No.: 5455B-03
Project Location: CLAYMONT, DE
Sample Location/I.D.: MW-101

EVACUATION DATA

General Data

Date: 2/7/03
Evacuation Time: 1100 - 1140
Evacuated by: JJO/RJK
Evacuation method: Pump
Time pumping began: 1102
Time Pumping ended: 1130
Total pumping time (min): 28
Pumping Rate (GPM): —

Initial Water Level: 9.25
Measurement ref. point: TOC ____ TIC ✓ ground ____
Reference point stickup (ft): 2.22
Total well depth (D) (from ref. Point): ~~12.37~~ 18.12
Radius of well (r) (ft): 0.0833
Gallons per foot (G=πr²x7.48): 0.163
Well Volume (gal): 1.4
Total gallons removed: 2.0
Well volumes removed: 1.4
Evacuated to dryness: Y (N)

Stabilization Data
(measure for each well volume evacuated)

Time (min)	Volume Removed (gal)	pH (SU)	Sp. Cond. ~~(umho/cm)~~ mS/cm	Temp. (°C)	ORP (mv)	DO (mg/l)	Turbidity (NTU)	~~Other~~ FLOW mL/MIN	Other
1103 / 1108	0.0 / <0.5	5.22 / 5.54	0.572 / 0.521	12.14 / 13.48	137 / 135	2.60 / 1.27	7999.0 / 7999.0	350 / 350	
1113 / 1118	~0.5 / ~1.0	5.61 / 5.63	0.510 / 0.508	14.45 / 14.19	138 / 142	1.44 / 1.39	7999.0 / 753.0	425 / 400	
1123 / 1128	~1.5 / ~2.6	5.63 / 5.62	0.507 / 0.509	14.35 / 14.36	139 / 137	1.25 / 1.05	272.0 / 200.0	400 / 400	

Field Observations

Odor: None X Weak ____ Moderate ____ Strong ____ / Type: ____
Immiscible Layers: Y (N) LNAPL ____; DNAPL ____ /Thickness ____ /
Description: ____
Color: CLEAR
Well condition (describe any damage): N/A

Comments: N/A
Weather Conditions: CLOUDY, COLD, 32°F
Visitors: N/A

By (Signature): [signature]
Print Name: Joe Gray Jr.
Title: Assistant Project Scientist
Date: 2/7/03

SAMPLING DATA

General Data

Sample Location/I.D.: MW-101
Sample Date: 2/7/03
Time Collected: _____
Collected by: JJO/RJK
Location description: Well X Pond____ Seep ____ Stream____ Spring____
Other____
Sample Method: PVC bailer____
Polyethylene disposable bailer____
Teflon disposable bailer____
Bladder pump____
Submersible pump X
Inertial Pump____
Other DEDICATED TUBING
Dedicated: Y N

Field Observations

Water level prior to sample collection (Ft. from specified ref. Point): 9.30
Depth Sampled (Ft. from specified ref. Point): ~16.0
Sample Types: VOA, SVOA, ORGANICS, CYANIDE, T&D METALS, & pH
Turbidity: None X Low____ Moderate____ High____
Odor: None X Weak____ Moderate____ Strong____ / Type: _____
Immiscible Layers: Y N/LNAPL____; DNAPL____ /Thickness____ /
Description: _____
Color: CLEAR

Field Measurements

(Perform replicate measurements if required)

pH (SU)	Sp. Cond. (µmho/cm)	Temp. (°C)	ORP (mv)	DO (mg/l)	Turbidity (NTU)	~~Other~~ FLOW ML/MW	Other
5.62	5,110	14.49	134	1.03	175	460	
5.61	5,110	14.53	133	1.02	170	400	
5.62	5,130	14.61	131	0.97	162	460	

Instrument Calibration (describe instruments calibrated (including brand/model), time, and method See field notes
Comments: N/A
Weather Conditions: CLOUDY, COLD, 33°F
Visitors: N/A

By (Signature): RJK Kiss
Print Name: Robert J. Koenigsberg
Title: Enviro tech 2
Date: 2-7-3

Earth Sciences Consultants, Inc.
Well Evacuation/Water Sampling Report
(If monitoring point is dry, complete applicable portions of form)

Client I.D.: Gen Chem
Project No.: 5455B-03
Project Location: North Site
Sample Location/I.D.: MW-102

EVACUATION DATA

General Data

Date: 2-4-3
Evacuation Time: 1250
Evacuated by: RJK
Evacuation method: Grundfos Pump
Time pumping began: 1250
Time Pumping ended: 1340
Total pumping time (min): ____
Pumping Rate (GPM): ____

Initial Water Level: 11.52
Measurement ref. point: TOC ____ TIC ✓ ground ____
Reference point stickup (ft): ____
Total well depth (D) (from ref. Point): 21.22
Radius of well (r) (ft): 1"
Gallons per foot ($G=\pi r^2 x 7.48$): .164
Well Volume (gal): 1.59
Total gallons removed: 5
Well volumes removed: ____
Evacuated to dryness: Y N

Stabilization Data

(measure for each well volume evacuated)

Time (min)	Volume Removed (gal)	pH (SU)	Sp. Cond. ~~(umho/cm)~~ ~~mS~~ mS/cm	Temp. (°C) 13.57 RJK	ORP (mv)	DO (mg/l)	Turbidity (____)	Other ____	Other ____
1250 / 1255	0 / 1.5	6.25 / 6.61	1.53 / 1.60	999 / 15.08	85 / 82	1.08 / 0.00	999 / 999		
1300 / 1305	1.0 / 1.5	6.00 / 5.99	1.60 / 1.60	15.11 / 15.32	82 / 81	0.00 / 0.00	999 / 772.0		
1310 / 1315	2.0 / 2.5	5.99 / 5.99	1.57 / 1.55	15.42 / 15.34	81 / 80	0.00 / 0.00	417.0 / 265.0		
1320 / 1325	3.0 / 3.5	6.00 / 5.99	1.53 / 1.52	15.48 / 15.49	79 / 78	0.00 / 0.00	159.0 / 116.0		
1330 / 1335	~~4.00~~ 4.0 / 4.5	6.00 / 6.00	1.49 / 1.48	15.77 / 15.74	77 / 77	0.00 / 0.00	69.4 / 69.1		

Field Observations

Odor: None ✓ Weak ____ Moderate ____ Strong ____ / Type: ____
Immiscible Layers: Y (N) LNAPL ____; DNAPL ____ /Thickness ____ /
Description: ____
Color: Grey to Clear
Well condition (describe any damage): Excellent

Comments: Drp taken here
Weather Conditions: 42° Overcast
Visitors: ____

By (Signature): RJK
Print Name: Robert J. Koenigsberg
Title: Enviro tech 2
Date: 2-4-3

SAMPLING DATA

General Data

Sample Location/I.D.: MW-102 + MW-102D
Sample Date: 2-4-3
Time Collected: 1340
Collected by: RJK
Location description: Well ✓ Pond____ Seep ____ Stream____ Spring____
Other____
Sample Method: PVC bailer____
Polyethylene disposable bailer____
Teflon disposable bailer____
Bladder pump____
Submersible pump ✓
Inertial Pump____
Other ____
Dedicated: Y (N)

Field Observations

Water level prior to sample collection (Ft. from specified ref. Point): ____
Depth Sampled (Ft. from specified ref. Point): Bottom of Bailer
Sample Types: VOA, ORGANICS, SVOA, T. + D. metals, Gen Chem

Turbidity: None____ Low ✓ Moderate____ High____
Odor: None ✓ Weak____ Moderate____ Strong____ / Type: ____
Immiscible Layers: Y (N) /LNAPL____; DNAPL____ /Thickness____ /
Description: ____
Color: Clear

Field Measurements

(Perform replicate measurements if required)

pH (SU)	Sp. Cond. ~~(µmho/cm)~~ mS/cm	Temp. (°C)	ORP (mv)	DO (mg/l)	Turbidity (____)	Other ____	Other ____
6.00	1.48	15.74	77	0.00	54.2		
6.00	1.48	15.74	77	0.00	54.5		
6.00	1.47	15.78	77	0.00	54.6		

Instrument Calibration (describe instruments calibrated (including brand/model), time, and method ~~Horiba Leal Solution~~ RK see field notes
Comments: ____
Weather Conditions: Cold 42°, wind overcast
Visitors: ____

By (Signature): [signature] Title: Enviro tech 2
Print Name: Robert J. Koenigsberg Date: 2-4-3

Earth Sciences Consultants, Inc.
Well Evacuation/Water Sampling Report
(If monitoring point is dry, complete applicable portions of form)

Client I.D.: Gen Chem
Project No.: 5455B-03
Project Location: South Plant
Sample Location/I.D.: MW-103

EVACUATION DATA

General Data

Date: 2-5-3
Evacuation Time: 1530
Evacuated by: RJK
Evacuation method: Grundfos Pump
Time pumping began: 1530
Time Pumping ended: _____
Total pumping time (min): _____
Pumping Rate (GPM): _____

Initial Water Level: 7.05
Measurement ref. point: TOC _____ TIC ✓ ground _____
Reference point stickup (ft): _____
Total well depth (D) (from ref. Point): 14.82
Radius of well (r) (ft): 1"
Gallons per foot ($G=\pi r^2 \times 7.48$): .164
Well Volume (gal): 1.2
Total gallons removed: _____
Well volumes removed: _____
Evacuated to dryness: Y N

Stabilization Data
(measure for each well volume evacuated)

Time (min)	Volume Removed (gal)	pH (SU)	Sp. Cond. (~~µmho/cm~~ mS/cm)	Temp. (°C)	ORP (mv)	DO (mg/l)	Turbidity (_____)	Other _____	Other _____
1530 / 1534	0 / .5	6.87 / 6.58	0.720 / 0.727	12.41 / 12.59	47 / 74	5.32 / 1.15	999 / 500		
1540 / 1545	1.0 / 1.5	6.59 / 6.56	0.722 / 0.722	13.78 / 14.19	80 / 86	1.42 / 1.17	85 / 32		
1550 / 1555	2.0 / 2.5	6.55 / 6.53	0.724 / 0.743	14.39 / 14.24	90 / 95	1.16 / 1.14	18 / 8.9		
1600 / 1605	3.0 / 3.5	6.53 / 6.52	0.746 / 0.745	14.64 / 14.64	96 / 98	1.19 / 1.15	5.8 / 4.0		

Field Observations

Odor: None ✓ Weak _____ Moderate _____ Strong _____ / Type: _____
Immiscible Layers: Y (N) LNAPL _____; DNAPL _____ /Thickness _____ /
Description: _____
Color: Brown
Well condition (describe any damage): Good

Comments: _____
Weather Conditions: Cold 32° wind clear
Visitors: _____

By (Signature): RJKoenigsberg
Print Name: Robert J. Koenigsberg
Title: Enviro tech 2
Date: 2-5-3

SAMPLING DATA

General Data

Sample Location/I.D.: MW-103
Sample Date: 2-5-3
Time Collected: 1610
Collected by: RJK
Location description: Well ✓ Pond____ Seep ____ Stream____ Spring____
Other____
Sample Method: PVC bailer____
Polyethylene disposable bailer____
Teflon disposable bailer____
Bladder pump____
Submersible pump ✓
Inertial Pump____
Other ____
Dedicated: Y (N)

Field Observations

Water level prior to sample collection (Ft. from specified ref. Point): ____
Depth Sampled (Ft. from specified ref. Point): Pump Inlet
Sample Types: VOA, SVOA, ORGANICS, Cyanide, Herbicide, ph, T+D metals

Turbidity: None____ Low ✓ Moderate____ High____
Odor: None ✓ Weak____ Moderate____ Strong____ / Type: ____
Immiscible Layers: Y (N) /LNAPL____; DNAPL____ /Thickness____ /
Description: ____
Color: Clear

Field Measurements

(Perform replicate measurements if required)

pH (SU)	Sp. Cond. ~~(µmho/cm)~~ mS/cm	Temp. (°C)	ORP (mv)	DO (mg/l)	Turbidity (____)	Other ____	Other ____
6.51	0.752	14.63	98	1.16	5.2		
6.51	0.758	14.68	98	1.15	5.1		
6.51	0.752	14.65	98	1.18	4.9		

Instrument Calibration (describe instruments calibrated (including brand/model), time, and method myron ph 4.0=4.0 7.0=7.0 cond 995=995 LAMOTTE 20/20 10NTU=10NTU
Comments: ____
Weather Conditions: Cold 32° wind clear
Visitors: ____

By (Signature): RJK
Print Name: Robert J. Koenigsberg
Title: Enviro tech 2
Date: 2-5-3

Earth Sciences Consultants, Inc.
Well Evacuation/Water Sampling Report
(If monitoring point is dry, complete applicable portions of form)

Client I.D.: Gas Chrom
Project No.: 5455B-03
Project Location: NORTH SITE
Sample Location/I.D.: MW-104

EVACUATION DATA

General Data

Date: 2-5-3
Evacuation Time: 1125
Evacuated by: RJK
Evacuation method: Grundfos Pump
Time pumping began: 1125
Time Pumping ended:
Total pumping time (min):
Pumping Rate (GPM):

Initial Water Level: 6.01
Measurement ref. point: TOC ___ TIC ✓ ground ___
Reference point stickup (ft):
Total well depth (D) (from ref. Point): 18.48
Radius of well (r) (ft): 1"
Gallons per foot ($G=\pi r^2 x 7.48$): .164
Well Volume (gal): 2.04
Total gallons removed:
Well volumes removed:
Evacuated to dryness: Y N

Stabilization Data
(measure for each well volume evacuated)

Time (min)	Volume Removed (gal)	pH (SU)	Sp. Cond. ~~(µmho/cm)~~ mS/cm	Temp. (°C)	ORP (mv)	DO (mg/l)	Turbidity (____)	Other ____	Other ____
1125 / 1130	0 / .5	5.73 / 6.05	1.83 / 1.87	14.22 / 14.04	-19 / -46	9.09 / 7.23	78.0 / 891		
1135 / 1140	1.0 / 1.5	6.16 / 6.21	1.95 / 2.10	14.58 / 14.59	-60 / -62	5.41 / 4.83	150 / 55		
1145 / 1150	2.0 / 2.5	6.22 / 6.23	2.15 / 2.18	14.70 / 14.54	-64 / -63	4.06 / 3.49	24 / 14		
1155 / 1200	3.0 / 3.5	6.22 / 6.22	2.20 / 2.22	14.53 / 14.59	-62 / -61	2.93 / 2.42	8.3 / 6.8		
1205 / 1210	4.0 / 4.5	6.22 / 6.22	2.22 / 2.23	14.48 / 14.64	-60 / -60	2.08 / 1.87	5.8 / 4.8		

Field Observations

Odor: None ✓ Weak ___ Moderate ___ Strong ___ / Type:
Immiscible Layers: Y (N) LNAPL ___; DNAPL ___ /Thickness ___ /
Description:
Color: tan
Well condition (describe any damage): Excellent

Comments:
Weather Conditions: Cold 36° windy
Visitors:

By (Signature): [signature]
Print Name: Robert J. Koenigsberg
Title: Enviro tech 2
Date: 2-5-3

SAMPLING DATA

General Data

Sample Location/I.D.: MW-104
Sample Date: 2-5-3
Time Collected: 1215
Collected by: RJK
Location description: Well ✓ Pond ____ Seep ____ Stream ____ Spring ____
Other ____
Sample Method: PVC bailer ____
Polyethylene disposable bailer ____
Teflon disposable bailer ____
Bladder pump ____
Submersible pump ✓
Inertial Pump ____
Other ____
Dedicated: Y (N)

Field Observations

Water level prior to sample collection (Ft. from specified ref. Point): ____
Depth Sampled (Ft. from specified ref. Point): Pump Inlet
Sample Types: VOA, organics, Cyanide, T+D metals, Gen Chem

Turbidity: None ____ Low ✓ Moderate ____ High ____
Odor: None ✓ Weak ____ Moderate ____ Strong ____ / Type: ____
Immiscible Layers: Y (N)/LNAPL ____; DNAPL ____ /Thickness ____ /
Description: ____
Color: Clear

Field Measurements

(Perform replicate measurements if required)

pH (SU)	Sp. Cond. ~~(µmho/cm)~~ mS/cm	Temp. (°C)	ORP (mv)	DO (mg/l)	Turbidity (____)	Other ____	Other ____
6.22	2.24	14.61	-60	1.83	4.3		
6.22	2.22	14.60	-58	1.81	4.3		
✓ 6.22	2.23	14.61	-56	1.81	4.2		

Instrument Calibration (describe instruments calibrated (including brand/model), time, and method Myron pH 4.0=4.0, 7.0=7.0, Cond 995=995
Comments: ____
Weather Conditions: Cold 32° wind
Visitors: ____

By (Signature): [signature] Title: Enviro tech 2
Print Name: Robert J. Koenigsberg Date: 2-5-3

Earth Sciences Consultants, Inc.
Well Evacuation/Water Sampling Report
(If monitoring point is dry, complete applicable portions of form)

Client I.D.: Gen Chem
Project No.: 5455B-03
Project Location: South Plant
Sample Location/I.D.: MW-~~9~~ 105

EVACUATION DATA

General Data

Date: 2-6-3
Evacuation Time: 1450
Evacuated by: RSK
Evacuation method: Grundfos Pump
Time pumping began: 1450
Time Pumping ended:
Total pumping time (min):
Pumping Rate (GPM):

Initial Water Level: 9.47
Measurement ref. point: TOC ____ TIC ✓ ground ____
Reference point stickup (ft):
Total well depth (D) (from ref. Point): 17.73
Radius of well (r) (ft): 1"
Gallons per foot ($G=\pi r^2 x 7.48$): .164
Well Volume (gal): 1.35
Total gallons removed:
Well volumes removed:
Evacuated to dryness: Y N

Stabilization Data
(measure for each well volume evacuated)

Time (min)	Volume Removed (gal)	pH (SU)	Sp. Cond. ~~(µmho/cm)~~ mS/cm	Temp. (°C)	ORP (mv)	DO (mg/l)	Turbidity (____)	Other ____	Other ____
1450 / 1455	0 / .5	5.22 / 5.08	3.74 / 3.77	14.94 / 15.73	111 / 132	3.37 / 4.23	995 / 999		
1500 / 1505	1.5 / 2.0	4.79 / 4.75	4.02 / 4.11	16.32 / 16.57	140 / 136	8.14 / 9.66	999 / 999		
1510 / 1515	2.5 / 3.0	4.57 / 4.55	4.25 / 4.26	16.72 / 16.42	139 / 139	10.15 / 9.83	280 / 250		
1520 / 1525	3.5 / 4.0	4.58 / 4.51	4.29 / 4.32	16.66 / 16.56	141 / 141	9.19 / 8.52	270 / 230		

Field Observations

Odor: None ✓ Weak ____ Moderate ____ Strong ____ / Type: ____
Immiscible Layers: Y (N) LNAPL ____; DNAPL ____ /Thickness ____ /
Description: ____
Color: Brown
Well condition (describe any damage): Excellent

Comments:
Weather Conditions: Cold 30° overcast
Visitors:

By (Signature): [signature]
Print Name: Robert S. Koenigsberg
Title: Enviro tech 2
Date: 2-6-3

SAMPLING DATA

General Data

Sample Location/I.D.: MW-105
Sample Date: 2-6-3
Time Collected: 1530
Collected by: RJK
Location description: Well ✓ Pond____ Seep ____ Stream____ Spring____
Other____

Sample Method: PVC bailer____
Polyethylene disposable bailer____
Teflon disposable bailer____
Bladder pump____
Submersible pump ✓
Inertial Pump____
Other ____
Dedicated: Y (N)

Field Observations

Water level prior to sample collection (Ft. from specified ref. Point): ____
Depth Sampled (Ft. from specified ref. Point): Pump Inlet
Sample Types: VOA, SVOA, ORGANICS, Cyanide, Herbicide, ph, T+D. metals

Turbidity: None____ Low____ Moderate ✓ High____
Odor: None ✓ Weak____ Moderate____ Strong____ / Type: ____
Immiscible Layers: Y (N) /LNAPL____; DNAPL____ /Thickness____ /
Description: ____
Color: ____

Field Measurements

(Perform replicate measurements if required)

pH (SU)	Sp. Cond. ~~(µmho/cm)~~ mS/cm	Temp. (°C)	ORP (mv)	DO (mg/l)	Turbidity (____)	Other ____	Other ____
4.58	4.31	16.64	141	8.54	230		
4.58	4.32	16.64	141	8.54	230		
4.56	4.31	16.65	141	8.54	230		

Instrument Calibration (describe instruments calibrated (including brand/model), time, and method See field notes
Comments: ____
Weather Conditions: Cold 32° Overcast
Visitors: ____

By (Signature): RJK
Print Name: Robert J. Kornigsbury
Title: Enviro tech 2
Date: 2-6-3

Earth Sciences Consultants, Inc.
Well Evacuation/Water Sampling Report
(If monitoring point is dry, complete applicable portions of form)

Client I.D.: GENERAL CHEMICAL
Project No.: 54558-03
Project Location: CLAYMONT, DE
Sample Location/I.D.: MW-106

EVACUATION DATA

General Data

Date: 2/6/03
Evacuation Time: 1800-1845
Evacuated by: JJO/RJK
Evacuation method: PUMP
Time pumping began: 1800
Time Pumping ended: 1840
Total pumping time (min): 40
Pumping Rate (GPM): —

Initial Water Level: 5.48
Measurement ref. point: TOC ____ TIC ✓ ground ____
Reference point stickup (ft): 0.0
Total well depth (D) (from ref. Point): 15.41
Radius of well (r) (ft): 0.0833
Gallons per foot (G=πr²x7.48): 0.163
Well Volume (gal): 1.6
Total gallons removed: 3.0
Well volumes removed: 1.9
Evacuated to dryness: Y (N)

Stabilization Data

(measure for each well volume evacuated)

Time (min)	Volume Removed (gal)	pH (SU)	Sp. Cond. ~~(µmho/cm)~~ mS/cm	Temp. (°C)	ORP (mv)	DO (mg/l)	Turbidity (NTU)	~~Other~~ FLOW ML/MIN	Other
1800	0.0	4.42	2.09	13.60	293	9.65	999.0	450	
1805	0.5	4.44	2.46	14.70	275	2.75	999.0	450	
1810	1.0	4.44	2.40	14.70	259	1.87	999.0	450	
1815	1.5	4.44	2.57	14.83	255	1.63	711.0	450	
1820	2.0	4.44	2.72	14.89	252	1.60	549.0	450	
1825	2.5	4.45	2.82	15.07	248	1.49	286.0	450	
1830	3.0	4.46	2.85	14.93	245	1.40	243.0	450	

Field Observations

Odor: None ____ Weak X Moderate ____ Strong ____ / Type: SOLVENTS
Immiscible Layers: Y (N) LNAPL ____; DNAPL ____ /Thickness ____ /
Description: ____
Color: CLEAR
Well condition (describe any damage): N/A

Comments: N/A
Weather Conditions: CLOUDY, COLD, 32°F
Visitors: N/A

By (Signature): [signature]
Print Name: Joe Ozog, Jr.
Title: Assistant Project Scientist
Date: 2/6/03

SAMPLING DATA

General Data

Sample Location/I.D.: MW-106
Sample Date: 2-6-3
Time Collected: 1835
Collected by: JJO/RJK
Location description: Well ✓ Pond____ Seep ____ Stream____ Spring____
Other____
Sample Method: PVC bailer____
Polyethylene disposable bailer____
Teflon disposable bailer____
Bladder pump____
Submersible pump ✓
Inertial Pump____
Other ____
Dedicated: Y (N)

Field Observations

Water level prior to sample collection (Ft. from specified ref. Point): 5.52
Depth Sampled (Ft. from specified ref. Point): Pump Inlet
Sample Types: VOA, SVOA, ORGANICS, Cyanide, Tmetals, Dmetals
ph
Turbidity: None____ Low ✓ Moderate____ High____
Odor: None ✓ Weak____ Moderate____ Strong____ / Type: ____
Immiscible Layers: Y (N) /LNAPL____; DNAPL____ /Thickness____ /
Description: ____
Color: Cloudy

Field Measurements

(Perform replicate measurements if required)

pH (SU)	Sp. Cond. (µmho/cm)	Temp. (°C)	ORP (mv)	DO (mg/l)	Turbidity (NTU)	Other Flow (mL/min)	Other ____
4.44	2820	14.95	230	0.47	143	450	
4.43	2830	14.93	228	0.42	151	450	
4.44	2820	14.9	226	0.38	152	450	

Instrument Calibration (describe instruments calibrated (including brand/model), time, and method See fieldnotes
Comments: N/A
Weather Conditions: Cloudy, Cold, 32°F
Visitors: N/A

By (Signature): [signature] Title: Enviro tech 2
Print Name: Robert J. Koenigsberg Date: 2-6-3

Earth Sciences Consultants, Inc.
Well Evacuation/Water Sampling Report
(If monitoring point is dry, complete applicable portions of form)

Client I.D.: GENERAL CHEMICAL
Project Location: CLAYMONT, DE
Project No.: 54537B-03
Sample Location/I.D.: MW-107

EVACUATION DATA

General Data

Date: 2/7/03
Evacuation Time: 0730-1010
Evacuated by: JJO
Evacuation method: PUMP
Time pumping began: 0807
Time Pumping ended: 0920
Total pumping time (min): 73
Pumping Rate (GPM): —

Initial Water Level: 9.47'
Measurement ref. point: TOC ____ TIC X ground ____
Reference point stickup (ft): 2.31
Total well depth (D) (from ref. Point): 18.30
Radius of well (r) (ft): 0.0833
Gallons per foot (G=πr²x7.48): 0.163
Well Volume (gal): 1.4
Total gallons removed: 5.0
Well volumes removed: 3.6
Evacuated to dryness: Y (N)

Stabilization Data
(measure for each well volume evacuated)

Time (min)	Volume Removed (gal)	pH (SU)	Sp. Cond. ~~(µmho/cm)~~ mS/cm	Temp. (C)	ORP (mv)	DO (mg/l)	Turbidity (NTU)	~~Other~~ FLOW ML/MIN	Other WL (FT, TOP OF PIPE)
0812 0817	0.0 56.5	3.52 3.37	2.82 2.46	6.2 10.6	287 263	0.61 0.00	988.0 999.0	200 375	
0822 0827	46.5 51.5	3.46 3.50	2.36 2.91	12.3 12.7	250 230	0.00 0.00	999.0 999.0	400 400	
0832 0837	62.0 62.5	3.56 3.58	3.45 3.55	12.9 11.9	225 226	0.00 0.00	999.0 999.0	425 275	10.95
0842 0847	73.0 73.5	3.60 3.67	3.80 6.68	11.5 15.2	189 195	0.00 0.00	852.0 551.0	300 275	
0852	4.0	3.65	6.7[illegible]	15.3	192	0.00	845.0	450	

Field Observations

Odor: None ____ Weak ____ Moderate ____ Strong X / Type: SOLVENT
Immiscible Layers: (Y) N /LNAPL____; DNAPL____/Thickness____/
Description: SHEEN
Color: LT. BROWN
Well condition (describe any damage): N/A

Comments: DIFFICULT TO KEEP CONSISTENT FLOW.
Weather Conditions: SNOW SHOWERS, COLD, 32°F
Visitors: N/A

By (Signature): [signature]
Print Name: Joseph J. Ozog, Jr.
Title: Assistant Project Scientist
Date: 2/7/03

SAMPLING DATA

General Data

Sample Location/I.D.: MW-107
Sample Date: 2/7/03
Time Collected: 0905
Collected by: JJO
Location description: Well X Pond____ Seep ____ Stream____ Spring____
Other____
Sample Method: PVC bailer____
Polyethylene disposable bailer____
Teflon disposable bailer____
Bladder pump____
Submersible pump X
Inertial Pump____
Other DEDICATED TUBING
Dedicated: Y N

Field Observations

Water level prior to sample collection (Ft. from specified ref. Point): 11.45
Depth Sampled (Ft. from specified ref. Point): 17.0
Sample Types: VOC'S, ORGANICS, TOTAL & DISS. METALS, CYANIDE, & GEN. CHEM.
Turbidity: None____ Low____ Moderate____ High X
Odor: None____ Weak____ Moderate____ Strong____ / Type: SOLVENT
Immiscible Layers: (Y) N /LNAPL____; DNAPL____ /Thickness____ /
Description: SHEEN
Color: BROWN

Field Measurements

(Perform replicate measurements if required)

pH (SU)	Sp. Cond. (µmho/cm)	Temp. (C)	ORP (mv)	DO (mg/l)	Turbidity (NTU)	~~Other~~ FLOW mL/min	Other
3.66	6,684	14.8	197	~~>999~~ 0.95	>999	400	
3.71	6,567	15.9	195	~~>999~~ 0.89	>999	400	
3.67	6,744	15.4	195	~~>999~~ 0.86	>999	375	

Instrument Calibration (describe instruments calibrated (including brand/model), time, and method SEE ~~CALIBRATION FORMS~~ FIELD NOTES
Comments: DIFFICULT TO KEEP CONSISTENT FLOW, W.L. DRAWDOWN.
Weather Conditions: CLOUDY, SNOW SHOWERS, 32°F
Visitors: N/A

By (Signature): [signature] Title: Assistant Project Scientist
Print Name: Joseph J. Ozog, Jr. Date: 2/7/03

Earth Sciences Consultants, Inc.
Well Evacuation/Water Sampling Report
(If monitoring point is dry, complete applicable portions of form)

Client I.D.: GENTEX CHEMICAL
Project Location: CLAYMONT, DE
Project No.: 5455B-03
Sample Location/I.D.: MW-108

EVACUATION DATA

General Data

Date: 2/6/03
Evacuation Time: 1855-1940
Evacuated by: JJB/RJK
Evacuation method: PUMP
Time pumping began: 1859
Time Pumping ended: 1940
Total pumping time (min): 41
Pumping Rate (GPM): —

Initial Water Level: 7.30'
Measurement ref. point: TOC ____ TIC ✓ ground ____
Reference point stickup (ft): 2.29
Total well depth (D) (from ref. Point): 17.2
Radius of well (r) (ft): 0.0833
Gallons per foot ($G=\pi r^2 \times 7.48$): 0.163
Well Volume (gal): 1.6
Total gallons removed: 3.0
Well volumes removed: 1.9
Evacuated to dryness: Y (N)

Stabilization Data
(measure for each well volume evacuated)

Time (min)	Volume Removed (gal)	pH (SU)	Sp. Cond. ~~(µmho/cm)~~ mS/cm	Temp. (°C)	ORP (mv)	DO (mg/l)	Turbidity (NTU)	~~Other~~ Flow mL/min	Other
1900 / 1905	0.0 / ~0.5	4.94 / 4.98	3.89 / 3.87	13.17 / 13.45	-6 / -10	2.32 / 1.39	7990.0 / 7990.0	400 / 400	
1910 / 1915	~1.0 / ~1.5	5.09 / 4.99	3.76 / 3.70	14.2 / 14.33	-13 / -13	1.29 / 1.02	7999.0 / 7999.0	400 / 400	
1920 / 1925	~2.0 / ~2.5	4.97 / 4.97	3.63 / 3.59	14.30 / 14.24	-11 / -10	0.97 / 0.98	7999.0 / 7999.0	400 / 400	

Field Observations

Odor: None ____ Weak ____ Moderate X Strong ____ / Type: OIL/ACID
Immiscible Layers: Y (N) LNAPL ____; DNAPL ____ /Thickness ____ /
Description: ____
Color: CLOUDY
Well condition (describe any damage): N/A

Comments: N/A
Weather Conditions: CLOUDY, COLD, 30°F
Visitors: N/A

By (Signature): [signature]
Print Name: Joe Bizzy, Jr.
Title: Assistant Project Scientist
Date: 2/6/03

SAMPLING DATA

General Data

Sample Location/I.D.: MW-108
Sample Date: 2/6/03
Time Collected: 1930
Collected by: JJO/RJK
Location description: Well X Pond____ Seep ____ Stream____ Spring____
Other____
Sample Method: PVC bailer____
Polyethylene disposable bailer____
Teflon disposable bailer____
Bladder pump____
Submersible pump X
Inertial Pump____
Other DEDICATED TUBING
Dedicated: Y N

Field Observations

Water level prior to sample collection (Ft. from specified ref. Point): 7.35
Depth Sampled (Ft. from specified ref. Point): ~ 15.0
Sample Types: VOC's, ORGANICS, T+D METALS, CYANIDE, & GEN. CHEM.
Turbidity: None ✓ Low____ Moderate____ High ✓
Odor: None ✓ Weak____ Moderate____ Strong____ / Type: ____
Immiscible Layers: Y/(N)/LNAPL____; DNAPL____ /Thickness____ /
Description: ____
Color: Cloudy

Field Measurements

(Perform replicate measurements if required)

pH (SU)	Sp. Cond. ~~(µmho/cm)~~ mS/cm	Temp. (°C)	ORP (mv)	DO (mg/l)	Turbidity (NTU)	~~Other~~ Flow mL/min	Other
4.96	3.57	14.21	-9	0.95	>999.0	400	
4.96	3.56	14.21	-9	0.95	>999.0	400	
✓ 4.96	3.55	14.19	-8	0.98	>999.0	400	

Instrument Calibration (describe instruments calibrated (including brand/model), time, and method See field notes
Comments: N/A
Weather Conditions: CLOUDY, COLD, 30°F
Visitors: N/A

By (Signature): [signature] Title: Enviro tech 2
Print Name: Robert J. Koenigsberg Date: 2-6-3

Earth Sciences Consultants, Inc.
Well Evacuation/Water Sampling Report
(If monitoring point is dry, complete applicable portions of form)

Client I.D.: GENERAL CHEMICAL
Project No.: 5455B-03
Project Location: CLAYMONT, DE
Sample Location/I.D.: MW-109

EVACUATION DATA

General Data

Date: 2/6/03
Evacuation Time: 1448-1600
Evacuated by: JJO
Evacuation method: Pump
Time pumping began: 1455
Time Pumping ended: 1542
Total pumping time (min): 47
Pumping Rate (GPM): ——

Initial Water Level: 7.48
Measurement ref. point: TOC ____ TIC ____ ground X
Reference point stickup (ft): 0.00
Total well depth (D) (from ref. Point): 17.4
Radius of well (r) (ft): 0.0833
Gallons per foot ($G=\pi r^2 \times 7.48$): 0.163
Well Volume (gal): 1.6
Total gallons removed: ~5.0
Well volumes removed: 3.0
Evacuated to dryness: Y (N)

Stabilization Data
(measure for each well volume evacuated)

Time (min)	Volume Removed (gal)	pH (SU)	Sp. Cond. ~~(µmho/cm)~~ mS/cm	Temp. (C)	ORP (mv)	DO (mg/l)	Turbidity (NTU)	~~Other~~ Flow mL/MW	Other
455 / 1500	0.0 / 0.5	5.38 / 4.96	2.56 / 2.46	9.1 / 15.0	125 / 96	2.03 / 0.95	816.0 / 105.0	275 / 400	
505 / 1510	~1.0 / ~1.5	4.96 / 4.98	2.46 / 2.45	15.0 / 15.0	91 / 83	0.00 / 0.00	95.8 / 82.7	450 / 450	
515 / 1520	~2.0 / ~2.5	5.00 / 4.98	2.50 / 2.47	15.3 / 15.5	75 / 73	0.00 / 0.00	41.7 / 37.3	475 / 475	
525	~3.0	4.98	2.46	15.3	73	0.00	36.2	475	

Field Observations

Odor: None ____ Weak ____ Moderate X Strong ____ / Type: OILY
Immiscible Layers: (Y) N /LNAPL____; DNAPL____/Thickness____/
Description: SHEEN w/ OIL DROPLETS
Color: CLEAR
Well condition (describe any damage): N/A

Comments: N/A
Weather Conditions: P. SUNNY, COLD, 34°F
Visitors: N/A

By (Signature): [signature]
Print Name: Joseph J. Ozog, Jr.
Title: Assistant Project Scientist
Date: 2/6/03

SAMPLING DATA

General Data

Sample Location/I.D.: MW 109
Sample Date: 2/6/03
Time Collected: 1530
Collected by: JJO
Location description: Well X Pond ____ Seep ____ Stream ____ Spring ____
Other ____
Sample Method: PVC bailer ____
Polyethylene disposable bailer ____
Teflon disposable bailer ____
Bladder pump ____
Submersible pump X
Inertial Pump ____
Other DEDICATED TUBING
Dedicated: Y N

Field Observations

Water level prior to sample collection (Ft. from specified ref. Point): 7.45
Depth Sampled (Ft. from specified ref. Point): 14.0
Sample Types: VOC's, ORGANICS, TOTAL & DISS. METALS, CYANIDE, & GEN. CHEM.
Turbidity: None X Low ____ Moderate ____ High ____
Odor: None ____ Weak ____ Moderate X Strong ____ / Type: OILY
Immiscible Layers: (Y) N /LNAPL ____; DNAPL ____ /Thickness ____ /
Description: SHEEN
Color: CLEAR

Field Measurements

(Perform replicate measurements if required)

pH (SU)	Sp. Cond. (µmho/cm)	Temp. (C)	ORP (mv)	DO (mg/l)	Turbidity (NTU)	~~Other~~ FLOW mL/min	Other ____
5.02	2,489	15.3	68	0.52	50.7	425	
5.01	2,475	15.2	62	0.46	54.8	450	
5.03	2,476	15.2	62	0.48	51.6	450	

Instrument Calibration (describe instruments calibrated (including brand/model), time, and method SEE CALIBRATION FORMS FIELD NOTES
Comments: N/A
Weather Conditions: SUNNY, COLD, 34°F
Visitors: N/A

By (Signature): [signature] Title: Assistant Project Scientist
Print Name: Joseph J. Ozog, Jr. Date: 2/6/03

Earth Sciences Consultants, Inc.
Well Evacuation/Water Sampling Report
(If monitoring point is dry, complete applicable portions of form)

Client I.D.: GENERAL CHEMICAL
Project Location: CLAYMONT, DE
Project No.: 54558-03
Sample Location/I.D.: MW-110

EVACUATION DATA

General Data

Date: 2/6/03
Evacuation Time: 1300-1428
Evacuated by: JJO
Evacuation method: Pump
Time pumping began: 1307
Time Pumping ended: 1405
Total pumping time (min): 58
Pumping Rate (GPM): —

Initial Water Level: 6.64'
Measurement ref. point: TOC ____ TIC ____ ground X
Reference point stickup (ft): 0.00
Total well depth (D) (from ref. Point): 15.3
Radius of well (r) (ft): 0.0833
Gallons per foot ($G=\pi r^2 \times 7.48$): 0.163
Well Volume (gal): 1.4
Total gallons removed: ~4.0
Well volumes removed: 2.9
Evacuated to dryness: Y (N)

Stabilization Data
(measure for each well volume evacuated)

Time (min)	Volume Removed (gal)	pH (SU)	Sp. Cond. ~~(umho/cm)~~ mS/cm	Temp. (C)	ORP (mv)	DO (mg/l)	Turbidity (NTU)	~~Other~~ Flow mL/min	Other
1310 / 1315	0.0 / ~0.5	4.94 / 5.76	2.91 / 2.84	8.9 / 11.4	162 / 118	6.32 / 0.00	999.0 / 421.0	550 / 500	
1320 / 1325	~1.0 / ~1.5	5.96 / 6.04	2.81 / 2.81	12.1 / 12.3	87 / 66	0.00 / 0.00	119.0 / 42.1	500 / 450	
1330 / 1335	~2.0 / ~2.5	6.08 / 6.09	2.80 / 2.80	12.4 / 12.1	49 / 47	0.00 / 0.00	24.0 / 22.0	450 / 450	
1340	~3.0	6.10	2.80	12.1	45	0.00	16.7	450	

Field Observations

Odor: None X Weak ____ Moderate ____ Strong ____ / Type: ____
Immiscible Layers: Y (N) LNAPL ____; DNAPL ____ /Thickness ____ /
Description: ____
Color: CLEAR
Well condition (describe any damage): N/A

Comments: N/A
Weather Conditions: CLOUDY, COLD, 34°F
Visitors: N/A

By (Signature): [signature]
Print Name: Joe Ozay, Jr.
Title: Assistant Project Scientist
Date: 2/6/03

SAMPLING DATA

General Data

Sample Location/I.D.: MW-110 & MW-110 DUP.
Sample Date: 2/6/03
Time Collected: 1345
Collected by: JJO
Location description: Well X Pond____ Seep ____ Stream____ Spring____
Other____
Sample Method: PVC bailer____
Polyethylene disposable bailer____
Teflon disposable bailer____
Bladder pump____
Submersible pump X
Inertial Pump____
Other DEDICATED TUBING
Dedicated: Y N

Field Observations

Water level prior to sample collection (Ft. from specified ref. Point): 6.65
Depth Sampled (Ft. from specified ref. Point): 11.5
Sample Types: VOC'S, ORGANICS, T. & D. METALS, CYANIDE, & GEN. CHEM.
Turbidity: None X Low____ Moderate____ High____
Odor: None X Weak____ Moderate____ Strong____ / Type: ____
Immiscible Layers: Y (N)/LNAPL____; DNAPL____ /Thickness____ /
Description: ____
Color: CLEAR

Field Measurements

(Perform replicate measurements if required)

pH (SU)	Sp. Cond. (µmho/cm)	Temp. (C)	ORP (mv)	DO (mg/l)	Turbidity (NTU)	~~Other~~ FLOW ml/min	Other ____
5.89	2,815	10.7	5	0.79	0.58	450	
6.01	2,810	11.4	4	0.62	0.59	450	
6.02	2,818	11.8	4	0.58	0.74	450	

Instrument Calibration (describe instruments calibrated (including brand/model), time, and method SEE FIELD BOOK
Comments: N/A
Weather Conditions: P. SUNNY, COLD, 34°F
Visitors: N/A

By (Signature): [signature] Title: Assistant Project Scientist
Print Name: Joe Gray, Jr. Date: 2/6/03

Earth Sciences Consultants, Inc.
Well Evacuation/Water Sampling Report
(If monitoring point is dry, complete applicable portions of form)

Client I.D.: GENERAL CHEMICAL
Project No.: 5455B-03
Project Location: CLAYMONT, DE
Sample Location/I.D.: MW-111

EVACUATION DATA

General Data

Date: 2/4/03
Evacuation Time: 1000-1100
Evacuated by: JJO
Evacuation method: Pump
Time pumping began: 1006
Time Pumping ended: 1115 ~~1045~~
Total pumping time (min): 69
Pumping Rate (GPM): —

Initial Water Level: 7.36'
Measurement ref. point: TOC ____ TIC X ground ____
Reference point stickup (ft): 1.7
Total well depth (D) (from ref. Point): 17.4
Radius of well (r) (ft): 0.0833
Gallons per foot ($G=\pi r^2 x 7.48$): ____
Well Volume (gal): 1.6
Total gallons removed: 4.5
Well volumes removed: 2.8
Evacuated to dryness: Y (N)

Stabilization Data
(measure for each well volume evacuated)

Time (min)	Volume Removed (gal)	pH (SU)	Sp. Cond. ~~(µmho/cm)~~ mS/cm	Temp. (C)	ORP (mv)	DO (mg/l) g/L	Turbidity (____)	Other ____	Other ____
1010	0.0	6.43	3.34	9.9	-25	0.00	>999.0	~~500~~	
1015	<1.0	5.95	3.13	12.6	-43	0.00	259.0	500 mL/min	
1020	<2.0	5.98	3.11	12.9	-53	0.00	168	400	
1025	<2.5	6.06	3.06	13.0	-63	0.00	48.2	500	
1030	<3.5	6.09	3.07	13.8	-67	0.00	38.9	400	
1035	<4.0	6.11	3.06	13.1	-69	0.00	28.1	400	
1040	<4.5	6.14	3.06	13.0	-72	0.00	14.9	400	
1045	~4.5	6.13	3.06	13.0	-73	0.00	13.0	400	

Field Observations

Odor: None ____ Weak ____ Moderate X Strong ____ / Type: PETROLEUM/OIL
Immiscible Layers: (Y) N /LNAPL X ; DNAPL ____ /Thickness ____ /
Description: SLIGHT SHEEN
Color: CLEAR
Well condition (describe any damage): N/A

Comments:
Weather Conditions: RAIN, COLD,
Visitors: N/A

By (Signature): [signature]
Print Name: Joseph J. Ozaj, Jr.
Title: Assistant Project Scientist
Date: 2/4/03

SAMPLING DATA

General Data

Sample Location/I.D.: MW-111
Sample Date: 2/4/03
Time Collected: 1100
Collected by: JJO
Location description: Well X Pond____ Seep ____ Stream____ Spring____
Other____
Sample Method: PVC bailer____
Polyethylene disposable bailer____
Teflon disposable bailer____
Bladder pump____
Submersible pump X
Inertial Pump____
Other DEDICATED TUBING
Dedicated: Y N

Field Observations

Water level prior to sample collection (Ft. from specified ref. Point): 7.39
Depth Sampled (Ft. from specified ref. Point): ~ 15.0
Sample Types: VOC's, GEN. CHEM., CYANIDE, TOTAL & DISS. METALS, & ORGANICS
Turbidity: None X Low____ Moderate____ High____
Odor: None____ Weak____ Moderate X Strong____ / Type: PETROLEUM/OIL
Immiscible Layers: (Y) N /LNAPL X ; DNAPL____ /Thickness____ /
Description: SLIGHT SHEEN
Color: CLEAR

Field Measurements

(Perform replicate measurements if required)

pH (SU)	Sp. Cond. (µmho/cm)	Temp. (C)	ORP (mv)	DO (mg/l)	Turbidity (NTU)	Other mL/m	Other
6.12	3,006	11.6	-43	0.00	23.7	450 mL/m	
6.11	2,971	12.8	-40	0.00	3.99	400	
6.11	2,978	13.0	-37	0.00	1.08	450	

Instrument Calibration (describe instruments calibrated (including brand/model), time, and method SEE FIELD NOTES
Comments: N/A
Weather Conditions: RAIN, COLD,
Visitors: N/A

By (Signature): [signature] Title: Assistant Project Scientist
Print Name: Joseph J. Ozog, Jr. Date: 2/4/03

Earth Sciences Consultants, Inc.
Well Evacuation/Water Sampling Report
(If monitoring point is dry, complete applicable portions of form)

Client I.D.: Gen Chem
Project No.: 5455B-03
Project Location: South Plant
Sample Location/I.D.: mw-12

EVACUATION DATA

General Data

Date: 2-7-3
Evacuation Time: 1220
Evacuated by: RJK
Evacuation method: Grundfos Pump
Time pumping began: 1220
Time Pumping ended:
Total pumping time (min):
Pumping Rate (GPM):

Initial Water Level: 5.78
Measurement ref. point: TOC ____ TIC ✓ ground ____
Reference point stickup (ft):
Total well depth (D) (from ref. Point): 15.4
Radius of well (r) (ft):
Gallons per foot ($G=\pi r^2 x 7.48$):
Well Volume (gal):
Total gallons removed:
Well volumes removed:
Evacuated to dryness: Y N

Stabilization Data
(measure for each well volume evacuated)

Time (min)	Volume Removed (gal)	pH (SU)	Sp. Cond. ~~(µmho/cm)~~ mS/cm	Temp. (°C)	ORP (mv)	DO (mg/l)	Turbidity (____)	Other ____	Other ____
1220 / 1225	0 / .5	5.52 / 5.91	0.606 / 0.643	16.20 / 16.96	-17 / -43	332 / 0.79	<999.0 / <999.0		
1230 / 1235	1.0 / 1.5	5.93 / 6.00	0.755 / 0.925	17.59 / 18.89	-64 / -86	0.85 / 1.39	<999.0 / <999		
1240 / 1245	2.0 / 2.5	6.05 / 6.08	1.28 / 1.35	18.74 / 18.06	-97 / -102	1.17 / .95	704 / 610		
1250 / 1255	3.0 / 3.5	6.09 / 6.10	1.39 / 1.40	18.07 / 18.02	-104 / -105	.96 / .96	540 / 530		

Field Observations

Odor: None ✓ Weak ____ Moderate ____ Strong ____ / Type: ____
Immiscible Layers: Y (N) /LNAPL____; DNAPL____/Thickness____/
Description: ____
Color: Grey
Well condition (describe any damage): Excellent

Comments:
Weather Conditions: 32° Snow
Visitors:

By (Signature): [signature]
Print Name: Robert J. Koenigsberg
Title: Enviro tech 2
Date: 2-7-3

SAMPLING DATA

General Data

Sample Location/I.D.: MW-112
Sample Date: 2-7-3
Time Collected: 1300
Collected by: RJK
Location description: Well ✓ Pond____ Seep ____ Stream____ Spring____
Other____
Sample Method: PVC bailer____
Polyethylene disposable bailer____
Teflon disposable bailer____
Bladder pump____
Submersible pump ✓
Inertial Pump____
Other ____
Dedicated: Y (N)

Field Observations

Water level prior to sample collection (Ft. from specified ref. Point): ____
Depth Sampled (Ft. from specified ref. Point): Pump Inlet
Sample Types: VOA, SVOA, ORGANICS, Cyanide, Herbicide, ph, T&D metals
Turbidity: None____ Low____ Moderate ✓ High____
Odor: None ✓ Weak____ Moderate____ Strong____ / Type: ____
Immiscible Layers: Y (N) /LNAPL____; DNAPL____ /Thickness____ /
Description: ____
Color: cloudy

Field Measurements

(Perform replicate measurements if required)

pH (SU)	Sp. Cond. (~~µ~~mho/cm) m	Temp. (°C)	ORP (mv)	DO (mg/l)	Turbidity (____)	Other ____	Other ____
6.10	1.43	18.00	~~18.00~~ -107 RK	1.44	509		
6.10	1.43	18.01	-107	1.53	505		
6.10	1.44	18.01	-107	1.60	470		

Instrument Calibration (describe instruments calibrated (including brand/model), time, and method SEE field notes for CALIBRATION Data
Comments: ____
Weather Conditions: 32° SNOW
Visitors: ____

By (Signature): [signature]
Print Name: Robert J. Koenigsberg
Title: Enviro tech 2
Date: 2-7-3

Earth Sciences Consultants, Inc.
Well Evacuation/Water Sampling Report
(If monitoring point is dry, complete applicable portions of form)

Client I.D.: GENERAL CHEMICAL
Project Location: CLAYMONT, DE
Project No.: 5455B-03
Sample Location/I.D.: MW-113

EVACUATION DATA

General Data

Date: 2/5/03
Initial Water Level: 11.45'
Evacuation Time: 0855-1005
Measurement ref. point: TOC ____ TIC X ground ____
Evacuated by: JJO/RJK
Reference point stickup (ft): 2.42
Evacuation method: Pump
Total well depth (D) (from ref. Point): 22.80
Time pumping began: 0855
Radius of well (r) (ft): 0.0833
Time Pumping ended: 1005
Gallons per foot ($G=\pi r^2 \times 7.48$): 0.163
Total pumping time (min): 70
Well Volume (gal): 1.9
Pumping Rate (GPM): —
Total gallons removed: ~5.0
Well volumes removed: 2.6
Evacuated to dryness: Y (N)

Stabilization Data
(measure for each well volume evacuated)

Time (min)	Volume Removed (gal)	pH (SU)	Sp. Cond. ~~(µmho/cm)~~ mS/cm	Temp. (C)	ORP (mv)	DO (mg/l)	Turbidity (NTU)	~~Other~~ FLOW mL/MIN	Other ____
3856 0901	0.0 ~0.5	5.41 5.83	16.5 6.26	13.2 13.6	43 -6	0.00 0.00	7999.0 7990.0	450 450	
3906 0911	~0.5 ~0.5	5.83 5.84	5.89 6.10	14.2 14.4	-20 -28	0.00 0.00	240 191	450 500	
3916 0921	~0.5 ~0.5	5.85 5.88	6.28 5.69	14.3 14.5	-34 -37	0.00 0.00	168 379	500 500	
3926 0931	~0.5 ~0.5	5.87 5.88	5.78 5.74	14.5 14.6	-38 -41	0.00 0.00	162 79.4	500 500	
3936	~0.5	5.88	5.74	14.6	-42	0.00	645	500	

Field Observations

Odor: None ____ Weak ____ Moderate ____ Strong X / Type: OILY
Immiscible Layers: (Y) N /LNAPL X ; DNAPL ____ /Thickness ____ /
Description: SLIGHT SHEEN
Color: CLEAR
Well condition (describe any damage): N/A

Comments: N/A
Weather Conditions: SUNNY, WINDY, COLD,
Visitors: N/A

By (Signature): [signature]
Title: Assistant Project Scientist
Print Name: Joseph J. Ozbey, Jr.
Date: 2/5/03

SAMPLING DATA

General Data

Sample Location/I.D.: MW-113, MW-113 MS, MW-113 MSD
Sample Date: 2/5/03
Time Collected: 0945
Collected by: JJO / RJK
Location description: Well X Pond____ Seep ____ Stream____ Spring____
Other____
Sample Method: PVC bailer____
Polyethylene disposable bailer____
Teflon disposable bailer____
Bladder pump____
Submersible pump X
Inertial Pump____
Other DEDICATED TUBING
Dedicated: Y N

Field Observations

Water level prior to sample collection (Ft. from specified ref. Point): ~~N/A~~ 12.02' ~~20.5~~ 9.70
Depth Sampled (Ft. from specified ref. Point): 20.5
Sample Types: VOC'S, CYANIDE, ORGANICS, TOTAL + DISS. METALS, + GEN. CHEM.
Turbidity: None____ Low X Moderate____ High____
Odor: None____ Weak____ Moderate____ Strong X / Type: OILY
Immiscible Layers: (Y) N /LNAPL X ; DNAPL____ /Thickness____ /
Description: SLIGHT SHEEN
Color: CLEAR

Field Measurements

(Perform replicate measurements if required)

pH (SU)	Sp. Cond. (µmho/cm)	Temp. (C)	ORP (mv)	DO (mg/l)	Turbidity (NTU)	~~Other~~ FLOW mL/MIN	Other
5.89	5830	13.0	-15	0.00	15.0	450	
5.91	5850	13.1	-15	0.00	8.0	450	
5.91	5760	13.4	-16	0.00	7.9	450	

Instrument Calibration (describe instruments calibrated (including brand/model), time, and method SEE ~~CALIBRATION FORM~~ FIELD NOTES
Comments: N/A
Weather Conditions: SUNNY, WINDY, COLD,
Visitors: N/A

By (Signature): [signature] Title: Assistant Project Scientist
Print Name: Joseph J. Ozog, Jr. Date: 2/5/03

Earth Sciences Consultants, Inc.
Well Evacuation/Water Sampling Report
(If monitoring point is dry, complete applicable portions of form)

Client I.D.: Gru Chem
Project No.: 54553B-03
Project Location: South Plant
Sample Location/I.D.: MW-114

EVACUATION DATA

General Data

Date: 2-7-3
Evacuation Time: 0935
Evacuated by: RJK
Evacuation method: Grundfos Pump
Time pumping began: 0935
Time Pumping ended: _____
Total pumping time (min): _____
Pumping Rate (GPM): _____

Initial Water Level: 7.33
Measurement ref. point: TOC_____ TIC ✓ ground_____
Reference point stickup (ft): _____
Total well depth (D) (from ref. Point): 22.20
Radius of well (r) (ft): _____
Gallons per foot ($G=\pi r^2 x 7.48$): _____
Well Volume (gal): _____
Total gallons removed: _____
Well volumes removed: _____
Evacuated to dryness: Y N

Stabilization Data

(measure for each well volume evacuated)

Time (min)	Volume Removed (gal)	pH (SU)	Sp. Cond. ~~(µmho/cm)~~ mS/cm	Temp. (°C)	ORP (mv)	DO (mg/l)	Turbidity (_____)	Other _____	Other _____
0935 / 0940	0 / .5	5.22 / 3.93	5.17 / 5.94	13.24 / 14.58	193 / 200	2.65 / 1.68	>999.0 / >999.0		
0945 / 0950	1.5 / 2.0	3.87 / 3.84	5.98 / 6.02	14.33 / 14.82	202 / 202	1.25 / 0.93	>999.0 / >999.0		
0955 / 1000	2.5 / 3.0	3.82 / 3.80	6.13 / 6.12	15.16 / 15.14	204 / 206	0.82 / 0.81	>999.0 / 719		
1005 / 1010	3.5	3.79 / 3.78	6.13 / 6.14	15.18 / 15.16	208 / 211	0.79 / 1.79	559 / 384		

Field Observations

Odor: None ✓ Weak _____ Moderate _____ Strong _____ / Type: _____
Immiscible Layers: Y (N) /LNAPL_____; DNAPL_____/Thickness_____/
Description: _____
Color: Brown
Well condition (describe any damage): Good

Comments: _____
Weather Conditions: 32° SNOW
Visitors: _____

By (Signature): [signature]
Print Name: Robert J. Koenigsberg
Title: Enviro tech 2
Date: 2-7-3

SAMPLING DATA

General Data

Sample Location/I.D.: MW-115
Sample Date: 2/7/03
Time Collected: 1315
Collected by: JJO
Location description: Well X Pond____ Seep ____ Stream____ Spring____
Other____
Sample Method: PVC bailer____
Polyethylene disposable bailer____
Teflon disposable bailer____
Bladder pump____
Submersible pump X
Inertial Pump____
Other DEDICATED TUBING
Dedicated: Y N

Field Observations

Water level prior to sample collection (Ft. from specified ref. Point): 11.25
Depth Sampled (Ft. from specified ref. Point): ~16.0
Sample Types: VOCs, CYANIDE, ORGANICS, TOD, METALS, & GEN. CHEM.
Turbidity: None____ Low____ Moderate____ High X
Odor: None____ Weak____ Moderate____ Strong X / Type: ____
Immiscible Layers: (Y) N /LNAPL____; DNAPL____ /Thickness____ /
Description: HEAVY SHEEN
Color: LT. BROWN

Field Measurements

(Perform replicate measurements if required)

pH (SU)	Sp. Cond. (µmho/cm)	Temp. (C)	ORP (mv)	DO (mg/l)	Turbidity (NTU)	Other FLOW mL/MIN	Other
5.04	14,230	12.7	46	0.00	>999.0	400	
5.29	14,220	12.1	38	0.00	>999	425	
5.38	15,580	12.0	32	0.00	>999	400	

Instrument Calibration (describe instruments calibrated (including brand/model), time, and method SEE FIELD BOOK
Comments: N/A
Weather Conditions: SUNNY, COLD, 34°F
Visitors: N/A

By (Signature): [signature] Title: Assistant Project Scientist
Print Name: Joe Ozy, Jr. Date: 2/7/03

Earth Sciences Consultants, Inc.
Well Evacuation/Water Sampling Report
(If monitoring point is dry, complete applicable portions of form)

Client I.D.: GENERAL CHEMICAL
Project Location: CLAYMONT, DE
Project No.: 5455B-03
Sample Location/I.D.: MW-115

EVACUATION DATA

General Data

Date: 2/7/03
Evacuation Time: 1200-1400
Evacuated by: JSB
Evacuation method: PUMP
Time pumping began: 1244
Time Pumping ended: 1330
Total pumping time (min): 46
Pumping Rate (GPM): —

Initial Water Level: 8.19' (PRODUCT) 11.75' (WATER)
Measurement ref. point: TOC ____ TIC X ground ____
Reference point stickup (ft): 2.29
Total well depth (D) (from ref. Point): 18.09
Radius of well (r) (ft): 0.0833
Gallons per foot ($G=\pi r^2 \times 7.48$): 0.163
Well Volume (gal): 1.0
Total gallons removed: ~6.0
Well volumes removed: 6.0
Evacuated to dryness: Y (N)

Stabilization Data
(measure for each well volume evacuated)

Time (min)	Volume Removed (gal)	pH (SU)	Sp. Cond. (µmho/cm)	Temp. (C)	ORP (mv)	DO (mg/l)	Turbidity (NTU)	~~Other~~ FLOW mL/MW	Other
46 / 1251	0.0 / <1.0	4.67 / 5.43	16,800 / 17,300	9.7 / 11.0	227 / 178	4.90 / 2.01	>999.0 / >999.0	500 / 450	
56 / 1301	~1.5 / ~2.0	5.53 / 5.56	16,300 / 16,400	11.4 / 11.7	152 / 127	1.20 / 0.46	>999.0 / >999.0	450 / 500	
306 / 1311	~2.5 / ~3.0	5.58 / 5.59	16,600 / 16,400	11.8 / 11.8	115 / 114	0.00 / 0.00	>999.0 / >999.0	450 / 450	

Field Observations

Odor: None ____ Weak ____ Moderate ____ Strong X / Type: PETROLEUM (FUEL)
Immiscible Layers: (Y) N /LNAPL X ; DNAPL ____ /Thickness ____ /
Description: HEAVY SHEEN
Color: LT. BROWN
Well condition (describe any damage): N/A

Comments: BAILED APPX. PRODUCT FROM WELL BEFORE PURGE.
Weather Conditions: P. SUNNY, COLD,
Visitors: N/A

By (Signature): [signature]
Print Name: Joseph J. Ozog, Jr.
Title: Assistant Project Scientist
Date: 2/7/03

SAMPLING DATA

General Data

Sample Location/I.D.: MW-115
Sample Date: 2/7/03
Time Collected: 1315
Collected by: JJO
Location description: Well X Pond ____ Seep ____ Stream ____ Spring ____
Other ____
Sample Method: PVC bailer ____
Polyethylene disposable bailer ____
Teflon disposable bailer ____
Bladder pump ____
Submersible pump X
Inertial Pump ____
Other DEDICATED TUBING
Dedicated: Y N

Field Observations

Water level prior to sample collection (Ft. from specified ref. Point): 11.25
Depth Sampled (Ft. from specified ref. Point): ~16.0
Sample Types: VOCs, CYANIDE, ORGANICS, T&D METALS, & GEN. CHEM.
Turbidity: None ____ Low ____ Moderate ____ High X
Odor: None ____ Weak ____ Moderate ____ Strong X / Type: ____
Immiscible Layers: (Y) N /LNAPL ____; DNAPL ____ /Thickness ____ /
Description: HEAVY SHEEN
Color: LT. BROWN

Field Measurements

(Perform replicate measurements if required)

pH (SU)	Sp. Cond. (µmho/cm)	Temp. (C)	ORP (mv)	DO (mg/l)	Turbidity (NTU)	~~Other~~ FLOW ML/MIN	Other
5.04	14,230	12.7	46	0.00	>999.0	400	
5.29	14,220	12.1	38	0.00	>999	425	
5.38	15,580	12.0	32	0.00	>999	400	

Instrument Calibration (describe instruments calibrated (including brand/model), time, and method SEE FIELD BOOK
Comments: N/A
Weather Conditions: SUNNY, COLD, 34°F
Visitors: N/A

By (Signature): [signature] Title: Assistant Project Scientist
Print Name: Joe Ozy, Jr. Date: 2/7/03

Earth Sciences Consultants, Inc.
Well Evacuation/Water Sampling Report
(If monitoring point is dry, complete applicable portions of form)

Client I.D.: Gen Chem
Project No.: 5455B--
Project Location: north site
Sample Location/I.D.: mw-116

EVACUATION DATA

General Data

Date: ~~Gen Chem~~ 2-4-3
Evacuation Time: 0855
Evacuated by: RJK
Evacuation method: 0855
Time pumping began: _____
Time Pumping ended: _____
Total pumping time (min): _____
Pumping Rate (GPM): _____

Initial Water Level: 10.12
Measurement ref. point: TOC _____ TIC ✓ ground _____
Reference point stickup (ft): _____
Total well depth (D) (from ref. Point): 18.14
Radius of well (r) (ft): 1"
Gallons per foot ($G=\pi r^2 x 7.48$): .164
Well Volume (gal): 1.31
Total gallons removed: _____
Well volumes removed: _____
Evacuated to dryness: Y N

Stabilization Data
(measure for each well volume evacuated)

Time (min)	Volume Removed (gal)	pH (SU)	Sp. Cond. (~~µmho/cm~~ mS/cm)	Temp. (°C)	ORP (mv)	DO (mg/l)	Turbidity (____)	Other ____	Other ____
0855 / 0900	ø / .5	6.27 / 6.28	1.59 / 1.61	13.12 / 13.19	85 / 85	1.55 / 1.02	999 / 999		
0905 / 0910	1 / 1.5	6.31 / 6.33	1.59 / 1.55	13.84 / 14.34	89 / 91	0.00 / 0.00	999 / 999		
0915 / 0920	1.75 / 2.0	6.34 / 6.34	1.53 / 1.51	13.53 / 13.95	92 / 91	0.00 / 0.12	999 / 999		
0925 / 0930	2.25 / 2.0	6.34 / 6.34	1.50 / 1.48	14.40 / 14.57	91 / 90	0.37 / 0.25	411 / 999		
0935 / 0940	3.5 / 4.0	6.35 / 6.35	1.48 / 1.46	14.39 / 14.42	89 / 88	0.08 / 0.24	999 / 999		
0945 / 0950	4.5 / 5.0	6.35 / 6.35	1.44 / 1.41	14.57 / 14.46	87 / 85	.73 / 1.10	400 / 149		
0955	5.5	6.35	1.41	14.45	85	1.07	127		

Field Observations

Odor: None ✓ Weak _____ Moderate _____ Strong _____ / Type: _____
Immiscible Layers: Y (N) LNAPL _____; DNAPL _____ /Thickness _____ /
Description: _____
Color: Lt. TAN
Well condition (describe any damage): Excellent

Comments: _____
Weather Conditions: Cool 42° overcast Drizzle
Visitors: _____

By (Signature): [signature]
Print Name: Robert J. Koenigsberg
Title: Envirotech 2
Date: 2-4-3

SAMPLING DATA

General Data

Sample Location/I.D.: MW-116
Sample Date: 2-4-3
Time Collected: 1105
Collected by: RJK
Location description: Well ✓ Pond____ Seep____ Stream____ Spring____
Other____

Sample Method: PVC bailer____
Polyethylene disposable bailer____
Teflon disposable bailer____
Bladder pump____
Submersible pump ✓
Inertial Pump____
Other____
Dedicated: Y (N)

Field Observations

Water level prior to sample collection (Ft. from specified ref. Point): ____
Depth Sampled (Ft. from specified ref. Point): Pump Inlet
Sample Types: VOA, SVOC, OCP, OPP, Herb, T metals + mercury, D. metals + mercury, Cyanide, pH
Turbidity: None____ Low____ Moderate ✓ High____
Odor: None ✓ Weak____ Moderate____ Strong____ / Type: ____
Immiscible Layers: Y (N) /LNAPL____; DNAPL____ /Thickness____ /
Description: ____
Color: Cloudy

Field Measurements

(Perform replicate measurements if required)

pH (SU)	Sp. Cond. ~~(µmho/cm)~~ mS/cm	Temp. (°C)	ORP (mv)	DO (mg/l)	Turbidity (____)	Other ____	Other ____
6.33	1.28	15.14	73	4.70	72		
6.33	1.28	15.18	72	4.71	78		
6.33	1.28	15.17	73	4.73	78		

Instrument Calibration (describe instruments calibrated (including brand/model), time, and method ~~Horiba test solution~~ See field notes
Comments: ____
Weather Conditions: Cold 42° Rain
Visitors: EPA

By (Signature): RJKoenigsberg
Print Name: Robert J. Koenigsberg
Title: Enviro Tech 2
Date: 2-4-3

Earth Sciences Consultants, Inc.
Well Evacuation/Water Sampling Report
(If monitoring point is dry, complete applicable portions of form)

Client I.D.: _____ Project Location: _____
Project No.: _____ Sample Location/I.D.: MW-116

EVACUATION DATA

General Data

Date: _____ Initial Water Level: _____
Evacuation Time: _____ Measurement ref. point: TOC_____ TIC_____ ground_____
Evacuated by: _____ Reference point stickup (ft): _____
Evacuation method: _____ Total well depth (D) (from ref. Point): _____
Time pumping began: _____ Radius of well (r) (ft): _____
Time Pumping ended: _____ Gallons per foot ($G=\pi r^2 x 7.48$): _____
Total pumping time (min): _____ Well Volume (gal): _____
Pumping Rate (GPM): _____ Total gallons removed: _____
Well volumes removed: _____
Evacuated to dryness: Y N

Stabilization Data

(measure for each well volume evacuated)

Time (min)	Volume Removed (gal)	pH (SU)	Sp. Cond. (µmho/cm)	Temp. (°C)	ORP (mv)	DO (mg/l)	Turbidity (_____)	Other _____	Other _____
1000 / ~~1018~~ 1005	6.0 / 6.5	6.35 / 6.35	1.35 / 1.35	14.44 / 14.43	~~84~~ 84 / 80	1.43 / 2.0	140 / 100		
1010 / 1015	7.0 / 7.5	6.35 / 6.35	1.34 / 1.34	14.41 / 14.40	~~80~~ / 78	2.30 / 2.32	96 / 78		
1020 / 1025	8.0 / 8.5	6.35 / 6.39	1.34 / 1.34	14.21 / 14.52	75 / 77	2.33 / 2.19	38.6 / 32		
1030	9.0	6.34	1.32	14.65	75	2.25	27.5		

Field Observations

Odor: None _____ Weak _____ Moderate _____ Strong _____ / Type: _____
Immiscible Layers: Y N /LNAPL_____; DNAPL_____/Thickness_____/
Description: _____
Color: _____
Well condition (describe any damage): _____

Comments: _____
Weather Conditions: _____
Visitors: _____

By (Signature): _____ Title: _____
Print Name: _____ Date: _____

SAMPLING DATA

General Data

Sample Location/I.D.: _____
Sample Date: _____
Time Collected: _____
Collected by: _____
Location description: Well_____ Pond_____ Seep _____ Stream_____ Spring_____
Other_____
Sample Method: PVC bailer_____
Polyethylene disposable bailer_____
Teflon disposable bailer_____
Bladder pump_____
Submersible pump_____
Inertial Pump_____
Other _____
Dedicated: Y N

Field Observations

Water level prior to sample collection (Ft. from specified ref. Point): _____
Depth Sampled (Ft. from specified ref. Point): _____
Sample Types: _____
_____
Turbidity: None_____ Low_____ Moderate_____ High_____
Odor: None_____ Weak_____ Moderate_____ Strong_____ / Type: _____
Immiscible Layers: Y N /LNAPL_____; DNAPL_____ /Thickness_____ /
Description: _____
Color: _____

Field Measurements

(Perform replicate measurements if required)

pH (SU)	Sp. Cond. (µmho/cm)	Temp. (°C)	ORP (mv)	DO (mg/l)	Turbidity (_____)	Other _____	Other _____

Instrument Calibration (describe instruments calibrated (including brand/model), time, and method _____
Comments: _____
Weather Conditions: _____
Visitors: _____

By (Signature): _____ Title: _____
Print Name: _____ Date: _____

Earth Sciences Consultants, Inc.
Well Evacuation/Water Sampling Report
(If monitoring point is dry, complete applicable portions of form)

Client I.D.: Gen Chem
Project No.: 5455
Project Location: North S.t C
Sample Location/I.D.: MW-117

EVACUATION DATA

General Data

Date: 2-5-3
Evacuation Time: 1415
Evacuated by: RJK
Evacuation method: Gravities Pump
Time pumping began: 1415
Time Pumping ended: _____
Total pumping time (min): _____
Pumping Rate (GPM): _____

Initial Water Level: 4.67
Measurement ref. point: TOC_____ TIC ✓
ground_____
Reference point stickup (ft): _____
Total well depth (D) (from ref. Point): 15.42
Radius of well (r) (ft): 1"
Gallons per foot ($G=\pi r^2 x 7.48$): .164
Well Volume (gal): 1.7
Total gallons removed: _____
Well volumes removed: _____
Evacuated to dryness: Y N

Stabilization Data

(measure for each well volume evacuated)

Time (min)	Volume Removed (gal)	pH (SU)	Sp. Cond. ~~(µmho/cm)~~ mS/cm	Temp. (°C)	ORP (mv)	DO (mg/l)	Turbidity (_____)	Other _____	Other _____
1415 / 1420	0 / 1.5	6.19 / 6.23	0.991 / 0.972	13.00 / 12.88	16 / 2	2.71 / 0.79	999 / 999		
1425 / 1430	1.0 / 1.5	6.25 / 6.28	0.963 / 0.98	13.40 / 1315	-6 / -9	0.63 / 0.61	999 / 999		
1435 / 1440	2.0 / 2.5	6.28 / 6.30	0.946 / 0.943	13.97 / 14.24	-14 / -19	0.57 / 0.55	999 / 999		
1445 / 1450	3.0 / 3.5	6.30 / 6.31	0.942 / 0.940	14.15 / 14.01	-20 / -21	0.55 / 0.57	750 / 500		
1455 / 1500	4.0 / 4.5	6.31 / 6.31	0.939 / 0.938	13.88 / 13.88	-23 / -22	0.58 / 0.57	500 / 500		

Field Observations

Odor: None ✓ Weak _____ Moderate _____ Strong _____ / Type: _____
Immiscible Layers: Y (N)/LNAPL_____; DNAPL_____/Thickness_____/
Description: _____
Color: Brown
Well condition (describe any damage): Excellent

Comments: _____
Weather Conditions: Cold 32° wind Clear
Visitors: _____

By (Signature): [signature]
Print Name: Robert J. Koenigsberg
Title: Enviro tech 2
Date: 2-5-3

SAMPLING DATA

General Data

Sample Location/I.D.: MW-117
Sample Date: 2-5-3
Time Collected: 1505
Collected by: RJK
Location description: Well ___ ✓ Pond ___ Seep ___ Stream ___ Spring ___
Other ___
Sample Method: PVC bailer ___
Polyethylene disposable bailer ___
Teflon disposable bailer ___
Bladder pump ___
Submersible pump ✓
Inertial Pump ___
Other ___
Dedicated: Y (N)

Field Observations

Water level prior to sample collection (Ft. from specified ref. Point): ___
Depth Sampled (Ft. from specified ref. Point): Pump Inlet
Sample Types: VOA, SVOA, ORGANICS, Cyanide, Herbicide, T+D metals, pH

Turbidity: None ___ Low ___ Moderate ✓ High ___
Odor: None ✓ Weak ___ Moderate ___ Strong ___ / Type: ___
Immiscible Layers: Y (N) / LNAPL ___ ; DNAPL ___ / Thickness ___ /
Description: ___
Color: cloudy

Field Measurements

(Perform replicate measurements if required)

pH (SU)	Sp. Cond. ~~(µmho/cm)~~ mS/cm	Temp. (°C)	ORP (mv)	DO (mg/l)	Turbidity (___)	Other ___	Other ___
6.31	0.932	14.10	-23	0.57	500		
6.31	0.932	14.13	-25	0.55	500		
6.31	0.932	14.11	-25	0.56	500		

Instrument Calibration (describe instruments calibrated (including brand/model), time, and method Myron ph 4.0=4.0, 7.0=7.0 Cond 995=995 YSI DO= Zobell solution
Comments: Lamotte 20/20 Turbidity 10 NTU = 10 NTU
Weather Conditions: Cold 32° wind clear
Visitors: ___

By (Signature): RJK
Print Name: Robert J. Koenigsberg
Title: Enviro tech 2
Date: 2-5-3

Earth Sciences Consultants, Inc.
Well Evacuation/Water Sampling Report
(If monitoring point is dry, complete applicable portions of form)

Client I.D.: GENERAL CHEMICAL
Project No.: 5485B-03
Project Location: CLAYMONT, DE
Sample Location/I.D.: B-1

EVACUATION DATA

General Data

Date: 2/6/03
Evacuation Time: 1100 ~ 1222
Evacuated by: JJO
Evacuation method: PUMP
Time pumping began: 1115
Time Pumping ended: 1204
Total pumping time (min): 49
Pumping Rate (GPM): —

Initial Water Level: 8.21'
Measurement ref. point: TOC ____ TIC X ground ____
Reference point stickup (ft): 2.43
Total well depth (D) (from ref. Point): 16.5
Radius of well (r) (ft): 0.0833
Gallons per foot ($G=\pi r^2 \times 7.48$): 0.163
Well Volume (gal): 1.4
Total gallons removed: ~5.0
Well volumes removed: 3.5
Evacuated to dryness: Y (N)

Stabilization Data
(measure for each well volume evacuated)

Time (min)	Volume Removed (gal)	pH (SU)	Sp. Cond. ~~(µmho/cm)~~ mS/cm	Temp. (C)	ORP (mv)	DO (mg/l)	Turbidity (NTU)	Other FLOW ~~Other~~ mL/MIN	Other
119 / 1124	0.0 / ~0.5	3.08 / 3.35	2.49 / 2.64	11.4 / 13.9	249 / 222	0.95 / 0.00	893.0 / 212.0	450 / 450	
129 / 1134	~1.0 / ~1.5	3.48 / 3.49	2.71 / 2.74	13.9 / 14.3	211 / 204	0.00 / 0.00	121.0 / 115.0	425 / 500	
139 / 1144	~2.5 / ~3.0	3.57 / 3.60	2.76 / 2.76	14.1 / 13.9	196 / 192	0.00 / 0.00	57.4 / 58.3	500 / 450	
149	~3.5	3.61	2.77	14.0	191	0.00	54.3	450	

Field Observations

Odor: None ____ Weak X Moderate ____ Strong ____ / Type: ACID
Immiscible Layers: Y (N)/LNAPL____; DNAPL____/Thickness____/
Description: ____
Color: CLEAR
Well condition (describe any damage): STEEL CASING (STICKUP) & LID DAMAGE. CANNOT INSTALL LOCK.

Comments: N/A
Weather Conditions: CLOUDY, COLD,
Visitors: N/A

By (Signature): [signature]
Print Name: Joseph J. Clay, Jr.
Title: Assistant Project Scientist
Date: 2/6/03

SAMPLING DATA

General Data

Sample Location/I.D.: B-1
Sample Date: 2/6/03
Time Collected: 1155
Collected by: JJO
Location description: Well X Pond ____ Seep ____ Stream ____ Spring ____
Other ____
Sample Method: PVC bailer ____
Polyethylene disposable bailer ____
Teflon disposable bailer ____
Bladder pump ____
Submersible pump X
Inertial Pump ____
Other TUBING (DEDICATED)
Dedicated: (Y) N

Field Observations

Water level prior to sample collection (Ft. from specified ref. Point): 8.25
Depth Sampled (Ft. from specified ref. Point): ~13.0
Sample Types: TOTAL & DISS. METALS & GEN. CHEM.

Turbidity: None X Low ____ Moderate ____ High ____
Odor: None ____ Weak X Moderate ____ Strong ____ / Type: ACID
Immiscible Layers: Y (N) LNAPL ____; DNAPL ____ /Thickness ____ /
Description: ____
Color: CLEAR

Field Measurements

(Perform replicate measurements if required)

pH (SU)	Sp. Cond. (µmho/cm)	Temp. (C)	ORP (mv)	DO (mg/l)	Turbidity (NTU)	~~Other~~ FLOW ML/MIN	Other ____
3.76	2,777	12.6	132	0.70	4.23	450	
3.72	2,752	13.4	120	0.60	4.37	450	
3.64	2,739	13.6	118	0.56	4.17	450	

Instrument Calibration (describe instruments calibrated (including brand/model), time, and method SEE ~~CALIBRATION FORMS~~ FIELD NOTES
Comments: N/A
Weather Conditions: CLOUDY, COLD, 34°F
Visitors: N/A

By (Signature): [signature] Title: Assistant Project Scientist
Print Name: Joseph J. Ozog, Jr. Date: 2/6/03

Earth Sciences Consultants, Inc.
Well Evacuation/Water Sampling Report
(If monitoring point is dry, complete applicable portions of form)

Client I.D.: GENERAL CHEMICAL
Project No.: 5455B-03
Project Location: CLAYMONT, DE
Sample Location/I.D.: B-2

EVACUATION DATA

General Data

Date: 2/5/03
Evacuation Time: 1330 – 1440
Evacuated by: JJO
Evacuation method: Pump
Time pumping began: 1330
Time Pumping ended: 1427
Total pumping time (min): 57
Pumping Rate (GPM): ——

Initial Water Level: 4.29'
Measurement ref. point: TOC ____ TIC X ground ____
Reference point stickup (ft): 1.35
Total well depth (D) (from ref. Point): 14.3
Radius of well (r) (ft): 0.833
Gallons per foot ($G=\pi r^2 \times 7.48$): 0.163
Well Volume (gal): 1.6
Total gallons removed: 7.0
Well volumes removed: 4.4
Evacuated to dryness: Y (N)

Stabilization Data
(measure for each well volume evacuated)

Time (min)	Volume Removed (gal)	pH (SU)	Sp. Cond. ~~(umho/cm)~~ mS/cm	Temp. (C)	ORP (mv)	DO (mg/l)	Turbidity (NTU)	~~Other~~ Flow mL/MIN	Other
1337	0.0 / 0.5	4.24 / 3.93	2.84 / 2.66	10.7 / 13.1	158 / 157	0.45 / 0.00	7990.0 / 999.0	300 / 500	
1347	1.0 / ~2.0	3.92 / 3.91	2.63 / 2.62	13.2 / 13.2	155 / 153	0.00 / 0.00	7990.0 / 920.0	500 / 300	
1357	~2.5 / ~3.0	3.90 / 3.89	2.62 / 2.60	13.4 / 13.5	151 / 151	0.00 / 0.00	503.0 / 323.0	400 / 400	
1407	~4.0 / ~5.6	3.88 / 3.86	2.59 / 2.59	13.4 / 13.4	151 / 151	0.00 / 0.0	163.0 / 101.0	400 / 400	
	4.5	3.86	2.57	13.4	151	0.00	77.1	400	

Field Observations

Odor: None ____ Weak X Moderate ____ Strong ____ / Type: PETROLEUM
Immiscible Layers: (Y) N /LNAPL ____; DNAPL ____ /Thickness ____ /
Description: SLIGHT SHEEN
Color: CLOUDY
Well condition (describe any damage): N/A

Comments: N/A
Weather Conditions: SUNNY, WINDY, COLD, 36°F
Visitors: N/A

By (Signature): [signature]
Print Name: Joseph J. Ozog, Jr.
Title: Assistant Project Scientist
Date: 2/5/03

SAMPLING DATA

General Data

Sample Location/I.D.: B-2
Sample Date: 2/5/03
Time Collected: 1415
Collected by: JJO
Location description: Well X Pond ____ Seep ____ Stream ____ Spring ____
Other ____
Sample Method: PVC bailer ____
Polyethylene disposable bailer ____
Teflon disposable bailer ____
Bladder pump ____
Submersible pump X
Inertial Pump ____
Other DEDICATED TUBING
Dedicated: Y N

Field Observations

Water level prior to sample collection (Ft. from specified ref. Point): 4.46
Depth Sampled (Ft. from specified ref. Point): ~11.5
Sample Types: VOC's, CYANIDE, TOTAL & DISS. METALS, GEN. CHEM., & ORGANICS
Turbidity: None ____ Low X Moderate ____ High ____
Odor: None ____ Weak X Moderate ____ Strong ____ / Type: PETROLEUM
Immiscible Layers: (Y) N /LNAPL ____; DNAPL ____ /Thickness ____ /
Description: SLIGHT SHEEN
Color: CLEAR - CLOUDY

Field Measurements

(Perform replicate measurements if required)

pH (SU)	Sp. Cond. (µmho/cm)	Temp. (C)	ORP (mv)	DO (mg/l)	Turbidity (NTU)	~~Other~~ FLOW ML/MIN	Other ____
3.92	2620	13.8	161	1.24	31.0	400	
3.89	2570	13.5	159	1.21	31.8	400	
3.86	2570	13.5	159	0.59	24.7	400	

Instrument Calibration (describe instruments calibrated (including brand/model), time, and method SEE ~~CALIBRATION FORMS~~ FIELD NOTES
Comments: N/A
Weather Conditions: SUNNY, COLD, WINDY, 36°F
Visitors: N/A

By (Signature): [signature] Title: Assistant Project Scientist
Print Name: Joseph J. Ozay, Jr. Date: 2/5/03

Earth Sciences Consultants, Inc.
Well Evacuation/Water Sampling Report
(If monitoring point is dry, complete applicable portions of form)

Client I.D.: GENERAL CHEMICAL
Project No.: 54558-03
Project Location: CLAYMONT DE
Sample Location/I.D.: B'-2D

EVACUATION DATA

General Data

Date: 2/6/03
Evacuation Time: 0900-1040
Evacuated by: JJD
Evacuation method: Pump
Time pumping began: 0917
Time Pumping ended: 1018
Total pumping time (min): 61
Pumping Rate (GPM): —

Initial Water Level: 3.56'
Measurement ref. point: TOC ____ TIC ~~X~~ 990
ground X
Reference point stickup (ft): 0.00 990
Total well depth (D) (from ref. Point): ~~20.3~~ 20.6
Radius of well (r) (ft): 0.0833
Gallons per foot ($G=\pi r^2 \times 7.48$): 0.163
Well Volume (gal): 2.7
Total gallons removed: ~6.0
Well volumes removed: ~2.2
Evacuated to dryness: Y (N)

Stabilization Data
(measure for each well volume evacuated)

Time (min)	Volume Removed (gal)	pH (SU)	Sp. Cond. ~~(µmho/cm)~~ mS/cm	Temp. (C)	ORP (mv)	DO (mg/l)	Turbidity (NTU)	~~Other~~ Flow mL/min	Other
921 / 0926	0.0 / ~0.5	3.11 / 3.47	2.85 / 3.30	7.9 / 14.0	320 / 272	10.66 / 0.00	7999.0 / 749	600 / 425	
931 / 0936	~1.0 / ~1.5	3.95 / 4.01	3.30 / 3.38	14.8 / 14.9	236 / 220	0.00 / 0.00	453 / 354.0	425 / 425	
941 / 0946	~2.0 / ~2.5	4.03 / 4.04	3.47 / 3.48	15.1 / 15.1	208 / 201	0.00 / 0.00	283.0 / 215.0	425 / 425	
946	~3.0	4.04	3.49	15.2	196	0.00	193.0	425	

Field Observations

Odor: None ____ Weak ____ Moderate X Strong ____ / Type: ACID
Immiscible Layers: Y (N)/LNAPL____; DNAPL____/Thickness____/
Description: ____
Color: CLOUDY
Well condition (describe any damage): MANHOLE COVER BROKEN.

Comments: N/A
Weather Conditions: SUNNY, COLD,
Visitors: N/A

By (Signature): [signature]
Print Name: Joseph J. Ozog, Jr.
Title: Assistant Project Scientist
Date: 2/6/03

SAMPLING DATA

General Data

Sample Location/I.D.: B-2D
Sample Date: 2/6/03
Time Collected: 1000
Collected by: JJO
Location description: Well X Pond____ Seep ____ Stream____ Spring____
Other____
Sample Method: PVC bailer____
Polyethylene disposable bailer____
Teflon disposable bailer____
Bladder pump____
Submersible pump X
Inertial Pump____
Other DEDICATED TUBING
Dedicated: Y N

Field Observations

Water level prior to sample collection (Ft. from specified ref. Point): 5.15
Depth Sampled (Ft. from specified ref. Point): ~17.0
Sample Types: VOCs, ORGANICS, TOTAL & DISS METALS, CYANIDE, & GEN. CHEM.
Turbidity: None____ Low X Moderate____ High____
Odor: None____ Weak____ Moderate X Strong____ / Type: ACID
Immiscible Layers: Y (N)/LNAPL____; DNAPL____ /Thickness____ /
Description: ____
Color: CLOUDY

Field Measurements

(Perform replicate measurements if required)

pH (SU)	Sp. Cond. (µmho/cm)	Temp. (C)	ORP (mv)	DO (mg/l)	Turbidity (NTU)	~~Other~~ FLOW mL/min	Other ____
4.11	3,857	15.3	110	0.00	51.7	425	
4.06	3,729	15.4	99	0.00	51.5	425	
4.09	3,776	15.4	99	0.00	51.5	425	

Instrument Calibration (describe instruments calibrated (including brand/model), time, and method SEE CALIBRATION FORMS FIELD NOTES
Comments: N/A
Weather Conditions: SUNNY, COLD, 32°F
Visitors: N/A

By (Signature): [signature] Title: Assistant Project Scientist
Print Name: Joseph J. Ozoglio Date: 2/6/03

Earth Sciences Consultants, Inc.
Well Evacuation/Water Sampling Report
(If monitoring point is dry, complete applicable portions of form)

Client I.D.: GEN. CHEM. Project Location: CLAYMONT, DE
Project No.: 5455B-03 Sample Location/I.D.: B-3

EVACUATION DATA

General Data

Date: 2/5/03 Initial Water Level: 5.69'
Evacuation Time: 1520 – 1605 Measurement ref. point: TOC ____ TIC X ground ____
Evacuated by: JJO Reference point stickup (ft): 2.37
Evacuation method: PUMP Total well depth (D) (from ref. Point): 20.7
Time pumping began: 1514 Radius of well (r) (ft): 0.1667
Time Pumping ended: 1605 Gallons per foot ($G=\pi r^2 x 7.48$): 0.653
Total pumping time (min): 51 Well Volume (gal): 9.8
Pumping Rate (GPM): — Total gallons removed: 5.0
Well volumes removed: 0.5
Evacuated to dryness: Y (N)

Stabilization Data
(measure for each well volume evacuated)

Time (min)	Volume Removed (gal)	pH (SU)	Sp. Cond. ~~(umho/cm)~~ mS/cm	Temp. (C)	ORP (mv)	DO (mg/l)	Turbidity (NTU)	~~Other~~ Flow ML/MIN	Other
520 / 1525	0.0 / ~1.0	3.93 / 3.95	2.86 / 2.85	14.8 / 14.8	144 / 142	0.00 / 0.00	7999.0 / 7999.0	600 / 500	
530 / 1535	~2.0 / ~3.0	3.99 / 4.01	2.84 / 2.87	14.7 / 13.6	138 / 137	0.00 / 0.00	7999.0 / 7999.0	400 / 400	
540 / 1545	~3.5 / ~4.0	4.02 / 4.02	2.85 / 2.85	13.9 / 13.9	134 / 133	0.00 / 0.00	7999.0 / 7999.0	400 / 400	
550	~4.5	4.02	2.86	14.0	133	0.00	7999.0	400	

Field Observations

Odor: None ____ Weak X Moderate ____ Strong ____ / Type: PETROLEUM/ACID
Immiscible Layers: (Y) N /LNAPL ____; DNAPL ____/Thickness ____/
Description: SLIGHT SHEEN
Color: CLOUDY
Well condition (describe any damage): N/A

Comments: N/A
Weather Conditions: SUNNY, COLD, WINDY, 33°F
Visitors: N/A

By (Signature): [signature] Title: Assistant Project Scientist
Print Name: Joseph J. Ozay, Jr. Date: 2/5/03

SAMPLING DATA

General Data

Sample Location/I.D.: B-3
Sample Date: 2/5/03
Time Collected: 1550
Collected by: JJO
Location description: Well X Pond____ Seep ____ Stream____ Spring____
Other____
Sample Method: PVC bailer____
Polyethylene disposable bailer____
Teflon disposable bailer____
Bladder pump____
Submersible pump X
Inertial Pump____
Other DEDICATED TUBING
Dedicated: Y N

Field Observations

Water level prior to sample collection (Ft. from specified ref. Point): 5.74
Depth Sampled (Ft. from specified ref. Point): ~17.0
Sample Types: TOTAL & DISS. METALS & GEN. CHEM.

Turbidity: None____ Low X Moderate____ High____
Odor: None____ Weak X Moderate____ Strong____ / Type: PETROLEUM/Acid
Immiscible Layers: Y N /LNAPL____; DNAPL____ /Thickness____ /
Description: ____
Color: CLOUDY

Field Measurements

(Perform replicate measurements if required)

pH (SU)	Sp. Cond. (µmho/cm)	Temp. (C)	ORP (mv)	DO (mg/l)	Turbidity (NTU)	~~Other~~ FLOW mL/MIN	Other
4.04	2540	14.8	137	6.69	294	400	
4.05	2860	14.5	132	0.52	298	400	
4.05	2860	14.5	130	0.48	289	400	

Instrument Calibration (describe instruments calibrated (including brand/model), time, and method SEE ~~CALIBRATION FORMS~~ FIELD NOTES
Comments: N/A
Weather Conditions: SUNNY, COLD, WINDY, 33°F
Visitors: N/A

By (Signature): [signature] Title: Assistant Project Scientist
Print Name: Joseph J. Ozog, Jr. Date: 2/5/03

Earth Sciences Consultants, Inc.
Well Evacuation/Water Sampling Report
(If monitoring point is dry, complete applicable portions of form)

Client I.D.: GENERAL CHEMICAL
Project Location: CLAYMONT, DE
Project No.: 5455B-03
Sample Location/I.D.: B-4

EVACUATION DATA

General Data

Date: 2/5/03
Evacuation Time: 1150 – 1255
Evacuated by: JJO
Evacuation method: Pump
Time pumping began: 1155
Time Pumping ended: 1255
Total pumping time (min): 60
Pumping Rate (GPM): —

Initial Water Level: 5.32'
Measurement ref. point: TOC ____ TIC X ground ____
Reference point stickup (ft): 2.43
Total well depth (D) (from ref. Point): 21.0
Radius of well (r) (ft): 0.1667
Gallons per foot ($G=\pi r^2 \times 7.48$): 0.653
Well Volume (gal): ~~21.0~~ 10.2
Total gallons removed: ~8.0
Well volumes removed: 0.8
Evacuated to dryness: Y (N)

Stabilization Data
(measure for each well volume evacuated)

Time (min)	Volume Removed (gal)	pH (SU)	Sp. Cond. ~~(umho/cm)~~ mS/cm	Temp. (C)	ORP (mv)	DO (mg/l)	Turbidity (NTU)	~~Other~~ FLOW mL/min	Other
1156 / 1201	0.0 / 1.0	5.82 / 5.78	0.604 / 0.586	9.9 / 9.6	44 / 44	12.01 / 11.29	420 / 353	600 / 500	
1206 / 1211	3.0 / 3.5	5.61 / 5.63	0.657 / 0.627	9.9 / 10.1	54 / 53	9.90 / 10.97	280 / 223	300 / 500	
1216 / 1221	4.0 / 5.0	5.70 / 5.66	0.588 / 0.572	9.9 / 9.7	54 / 61	11.16 / 10.81	171 / 149	500 / 500	
1226 / 1231	5.5 / 6.0	5.68 / 5.65	0.582 / 0.592	9.7 / 9.8	65 / 68	10.35 / 9.92	124 / 107	500 / 500	
1236	6.5	5.69	0.661	9.8	69	9.59	117	500	

Field Observations

Odor: None X Weak ____ Moderate ____ Strong ____ / Type: ____
Immiscible Layers: Y (N)/LNAPL ____; DNAPL ____/Thickness ____/
Description: ____
Color: CLEAR-CLOUDY
Well condition (describe any damage): N/A

Comments: N/A
Weather Conditions: SUNNY, WINDY, COLD, 35°F
Visitors: N/A

By (Signature): [signature]
Title: Assistant Project Scientist
Print Name: Joseph J. Ozag Jr.
Date: 2/5/03

SAMPLING DATA

General Data

Sample Location/I.D.: B-4
Sample Date: 2/5/03
Time Collected: 1245
Collected by: JJO
Location description: Well X Pond____ Seep ____ Stream____ Spring____
Other____
Sample Method: PVC bailer____
Polyethylene disposable bailer____
Teflon disposable bailer____
Bladder pump____
Submersible pump X
Inertial Pump____
Other DEDICATED TUBING
Dedicated: Y N

Field Observations

Water level prior to sample collection (Ft. from specified ref. Point): ~~N/A~~ 5.35
Depth Sampled (Ft. from specified ref. Point): ~ 18.0
Sample Types: TOTAL & DISS. METALS & GEN. CHEM.

Turbidity: None____ Low X Moderate____ High____
Odor: None X Weak____ Moderate____ Strong____ / Type: ____
Immiscible Layers: Y (N)/LNAPL____; DNAPL____ /Thickness____ /
Description: ____
Color: CLEAR - CLOUDY

Field Measurements

(Perform replicate measurements if required)

pH (SU)	Sp. Cond. (µmho/cm)	Temp. (C)	ORP (mv)	DO (mg/l)	Turbidity (NTU)	~~Other~~ FLOW ~~mg~~ mL/min	Other ____
5.86	767.4	11.3	78	9.16	17.5	500	
5.64	775.9	10.5	74	9.08	18.0	500	
5.58	780.3	10.1	74	8.78	16.7	500	

Instrument Calibration (describe instruments calibrated (including brand/model), time, and method SEE ~~CALIBRATION FORMS~~ FIELD NOTES
Comments: N/A 990
Weather Conditions: SUNNY, WINDY, COLD, 35°F
Visitors: N/A

By (Signature): [signature] Title: Assistant Project Scientist
Print Name: Joseph J. Ozaj, Jr. Date: 2/5/03

Earth Sciences Consultants, Inc.
Well Evacuation/Water Sampling Report
(If monitoring point is dry, complete applicable portions of form)

Client I.D.: GEN. CHEM. Project Location: CLAYMONT, DE
Project No.: 52550-03 Sample Location/I.D.: B-5

EVACUATION DATA

General Data

Date: 2/4/03
Evacuation Time: 1555 - 1710
Evacuated by: JSO
Evacuation method: pump
Time pumping began: 1602
Time Pumping ended: 1710
Total pumping time (min): 68
Pumping Rate (GPM): —

Initial Water Level: 8.72
Measurement ref. point: TOC ____ TIC X ground ____
Reference point stickup (ft): 2.62
Total well depth (D) (from ref. Point): 16.82
Radius of well (r) (ft): 0.0532
Gallons per foot ($G=\pi r^2 \times 7.48$): 0.163
Well Volume (gal): 1.3
Total gallons removed: 6.5
Well volumes removed: 5.0
Evacuated to dryness: Y (N)

Stabilization Data
(measure for each well volume evacuated)

Time (min)	Volume Removed (gal)	pH (SU)	Sp. Cond. ~~(umho/cm)~~ mS/cm	Temp. (C)	ORP (mv)	DO (mg/l)	Turbidity (NTU)	Flow ~~Other~~ mL/mn	Other ____
1612	0.0	6.25	5.54	14.1	15	0.00	7999.0	400	
1617	~0.5	4.87	4.28	13.8	173	0.00	7999.0	500	
1622	~1.0	4.07	4.17	13.8	148	0.00	528.0	300	
1627	~2.0	4.02	4.16	13.7	158	0.00	466.0	400	
1632	~3.0	3.79	4.12	14.5	177	0.00	375.0	500	
1637	~4.0	3.62	4.09	14.5	200	0.00	243.0	300	

Field Observations

Odor: None X Weak ____ Moderate ____ Strong ____ / Type: ____
Immiscible Layers: Y (N) LNAPL ____; DNAPL ____ /Thickness ____ /
Description: ____
Color: CLEAR
Well condition (describe any damage): N/A

Comments: N/A
Weather Conditions: P. SUNNY, COLD, WINDY, 33°F
Visitors: N/A

By (Signature): [signature] Title: Assistant Project Scientist
Print Name: Joe Gray, Jr. Date: 2/4/03

SAMPLING DATA

General Data

Sample Location/I.D.: _____
Sample Date: _____
Time Collected: _____
Collected by: _____
Location description: Well_____ Pond_____Seep _____ Stream_____ Spring_____
Other_____
Sample Method: PVC bailer_____
Polyethylene disposable bailer_____
Teflon disposable bailer_____
Bladder pump_____
Submersible pump_____
Inertial Pump_____
Other _____
Dedicated: Y N

Field Observations

Water level prior to sample collection (Ft. from specified ref. Point): _____
Depth Sampled (Ft. from specified ref. Point): _____
Sample Types: _____
_____
Turbidity: None_____ Low_____ Moderate_____ High_____
Odor: None_____ Weak_____ Moderate_____ Strong_____ / Type: _____
Immiscible Layers: Y N /LNAPL_____; DNAPL_____ /Thickness_____ /
Description: _____
Color: _____

Field Measurements

(Perform replicate measurements if required)

pH (SU)	Sp. Cond. (µmho/cm)	Temp. (C)	ORP (mv)	DO (mg/l)	Turbidity (_____)	Other _____	Other _____

Instrument Calibration (describe instruments calibrated (including brand/model), time, and method _____
Comments: _____
Weather Conditions: _____
Visitors: _____

By (Signature): _____ Title: _____
Print Name: _____ Date: _____

Earth Sciences Consultants, Inc.
Well Evacuation/Water Sampling Report
(If monitoring point is dry, complete applicable portions of form)

Client I.D.: _____ Project Location: _____
Project No.: _____ Sample Location/I.D.: _____

EVACUATION DATA

General Data

Date: _____ Initial Water Level: _____
Evacuation Time: _____ Measurement ref. point: TOC_____ TIC_____ ground_____
Evacuated by: _____ Reference point stickup (ft): _____
Evacuation method: _____ Total well depth (D) (from ref. Point): _____
Time pumping began: _____ Radius of well (r) (ft): _____
Time Pumping ended: _____ Gallons per foot ($G=\pi r^2 x 7.48$): _____
Total pumping time (min): _____ Well Volume (gal): _____
Pumping Rate (GPM): _____ Total gallons removed: _____
Well volumes removed: _____
Evacuated to dryness: Y N

Stabilization Data
(measure for each well volume evacuated)

Time (min)	Volume Removed (gal)	pH (SU)	Sp. Cond. (~~µmho/cm~~) mS/cm	Temp. (C)	ORP (mv)	DO (mg/l)	Turbidity (NTU)	Other ~~Flow~~ mL/min	Other
1642	~5.0	3.61	4.09	15.2	212	0.00	234.0	350	
1647	~5.5	3.56	4.10	14.8	226	0.00	222.0	350	
1652	~6.0	3.55	4.12	14.8	234	0.00	215.0	400	
1657	~6.5	3.54	4.12	14.8	239	0.00	207.0	400	

Field Observations

Odor: None _____ Weak _____ Moderate _____ Strong _____ / Type: _____
Immiscible Layers: Y N /LNAPL_____; DNAPL_____/Thickness_____/
Description: _____
Color: _____
Well condition (describe any damage): _____

Comments: _____
Weather Conditions: _____
Visitors: _____

By (Signature): _____ Title: _____
Print Name: _____ Date: _____

SAMPLING DATA

General Data

Sample Location/I.D.: B-5
Sample Date: 2/4/03
Time Collected: 1700
Collected by: JJO
Location description: Well X Pond____ Seep ____ Stream____ Spring____
Other____
Sample Method: PVC bailer____
Polyethylene disposable bailer____
Teflon disposable bailer____
Bladder pump____
Submersible pump X
Inertial Pump____
Other DEDICATED TUBING
Dedicated: Y N

Field Observations

Water level prior to sample collection (Ft. from specified ref. Point): 8.76
Depth Sampled (Ft. from specified ref. Point): ~ 14.0
Sample Types:

Turbidity: None X Low____ Moderate____ High____
Odor: None X Weak____ Moderate____ Strong____ / Type:
Immiscible Layers: Y (N) LNAPL____; DNAPL____ /Thickness____ /
Description:
Color: CLEAR

Field Measurements

(Perform replicate measurements if required)

pH (SU)	Sp. Cond. (µmho/cm)	Temp. (C)	ORP (mv)	DO (mg/l)	Turbidity (NTU)	~~Other~~ FLOW mL/MIN	Other
3.79	4,059	13.4	273	0.00	12.0	350	
3.78	4,040	13.8	271	0.00	5.65	350	
3.78	4,042	13.7	269	0.00	5.25	400	

Instrument Calibration (describe instruments calibrated (including brand/model), time, and method SEE FIELD BOOK
Comments: N/A
Weather Conditions: P. SUNNY, COLD, WINDY, 32°F
Visitors: N/A

By (Signature): [signature] Title: Assistant Project Scientist
Print Name: Joseph J. Odoy, Jr. Date: 2/4/03

Earth Sciences Consultants, Inc.
Well Evacuation/Water Sampling Report
(If monitoring point is dry, complete applicable portions of form)

Client I.D.: GENERAL CHEMICAL
Project No.: 5455B-03
Project Location: CLAYMONT, DE
Sample Location/I.D.: B-5D

EVACUATION DATA

General Data

Date: 2/4/03
Evacuation Time: 1415 – 1530
Evacuated by: JJO
Evacuation method: Pump
Time pumping began: 1417
Time Pumping ended: ~~1511~~ 1515
Total pumping time (min): 58
Pumping Rate (GPM): —

Initial Water Level: 12.12'
Measurement ref. point: TOC ____ TIC X ground ____
Reference point stickup (ft): 3.01
Total well depth (D) (from ref. Point): 56.31
Radius of well (r) (ft): 0.0833
Gallons per foot ($G=\pi r^2 \times 7.48$): 0.163
Well Volume (gal): 7.2
Total gallons removed: 5.0
Well volumes removed: 0.7
Evacuated to dryness: Y (N)

Stabilization Data
(measure for each well volume evacuated)

Time (min)	Volume Removed (gal)	pH (SU)	Sp. Cond. ~~(umho/cm)~~ mS/cm	Temp. (C)	ORP (mv)	DO (mg/l)	Turbidity (NTU)	~~Other~~ Flow mL/MIN	Other ____
1431	0.00	6.70	1.92	13.9	-39	1.73	512	350	
1436	0.5	6.64	2.40	15.8	-74	0.00	>999.0	550	
1441	1.0	6.67	2.41	16.1	-93	0.00	>999.0	500	
1446	~2.0	6.71	2.44	15.8	-104	0.00	990.0	400	
1451	~2.5	6.73	2.46	15.6	-110	0.00	550.0	425	
1456	~3.0	6.75	2.49	15.8	-113	0.00	310.0	425	

Field Observations

Odor: None X Weak ____ Moderate ____ Strong ____ / Type: ____
Immiscible Layers: Y (N) LNAPL ____; DNAPL ____ /Thickness ____ /
Description: ____
Color: CLEAR
Well condition (describe any damage): N/A

Comments: N/A
Weather Conditions: SUNNY, V. WINDY, COLD, 32°F
Visitors: N/A

By (Signature): [signature]
Print Name: Joseph J. Ozog, Jr.
Title: Assistant Project Scientist
Date: 2/4/03

SAMPLING DATA

General Data

Sample Location/I.D.: _____
Sample Date: _____
Time Collected: _____
Collected by: _____
Location description: Well_____ Pond_____Seep _____ Stream_____ Spring_____
Other_____
Sample Method: PVC bailer_____
Polyethylene disposable bailer_____
Teflon disposable bailer_____
Bladder pump_____
Submersible pump_____
Inertial Pump_____
Other _____
Dedicated: Y N

Field Observations

Water level prior to sample collection (Ft. from specified ref. Point): _____
Depth Sampled (Ft. from specified ref. Point): _____
Sample Types: _____
_____
Turbidity: None_____ Low_____ Moderate_____ High_____
Odor: None_____ Weak_____ Moderate_____ Strong_____ / Type: _____
Immiscible Layers: Y N /LNAPL_____; DNAPL_____ /Thickness_____ /
Description: _____
Color: _____

Field Measurements

(Perform replicate measurements if required)

pH (SU)	Sp. Cond. (µmho/cm)	Temp. (C)	ORP (mv)	DO (mg/l)	Turbidity (_____)	Other _____	Other _____

Instrument Calibration (describe instruments calibrated (including brand/model), time, and method _____
Comments: _____
Weather Conditions: _____
Visitors: _____

By (Signature): _____ Title: _____
Print Name: _____ Date: _____

Earth Sciences Consultants, Inc.
Well Evacuation/Water Sampling Report
(If monitoring point is dry, complete applicable portions of form)

Client I.D.: _____ Project Location: _____
Project No.: _____ Sample Location/I.D.: _____

EVACUATION DATA

General Data

Date: _____ Initial Water Level: _____
Evacuation Time: _____ Measurement ref. point: TOC_____ TIC_____ ground_____
Evacuated by: _____ Reference point stickup (ft): _____
Evacuation method: _____ Total well depth (D) (from ref. Point): _____
Time pumping began: _____ Radius of well (r) (ft): _____
Time Pumping ended: _____ Gallons per foot ($G=\pi r^2 x 7.48$): _____
Total pumping time (min): _____ Well Volume (gal): _____
Pumping Rate (GPM): _____ Total gallons removed: _____
Well volumes removed: _____
Evacuated to dryness: Y N

Stabilization Data
(measure for each well volume evacuated)

Time (min)	Volume Removed (gal)	pH (SU)	Sp. Cond. ~~(µmho/cm)~~ mS/cm	Temp. (C)	ORP (mv)	DO (mg/l)	Turbidity (NTU)	~~Other~~ Flow ml/min	Other _____
1501	~3.5	6.76	2.49	15.9	-117	0.00	264.0	425	
1506	~4.0	6.76	2.50	15.9	-118	0.00	244.0	400	
1511	~5.0	6.77	2.51	15.8	-119	0.00	231.0	400	

Field Observations

Odor: None _____ Weak _____ Moderate _____ Strong _____ / Type: _____
Immiscible Layers: Y N /LNAPL_____; DNAPL_____/Thickness_____/
Description: _____
Color: _____
Well condition (describe any damage): _____

Comments: _____
Weather Conditions: _____
Visitors: _____

By (Signature): _____ Title: _____
Print Name: _____ Date: _____

SAMPLING DATA

General Data

Sample Location/I.D.: B-5D
Sample Date: 2/4/03
Time Collected: 1515
Collected by: JJD
Location description: Well X Pond____ Seep ____ Stream____ Spring____
Other____
Sample Method: PVC bailer____
Polyethylene disposable bailer____
Teflon disposable bailer____
Bladder pump____
Submersible pump X
Inertial Pump____
Other DEDICATED TUBING
Dedicated: Y N

Field Observations

Water level prior to sample collection (Ft. from specified ref. Point): 12.14'
Depth Sampled (Ft. from specified ref. Point): ~50.0
Sample Types:

Turbidity: None X Low____ Moderate____ High____
Odor: None X Weak____ Moderate____ Strong____ / Type:
Immiscible Layers: Y N/LNAPL____; DNAPL____ /Thickness____ /
Description:
Color: CLEAR

Field Measurements

(Perform replicate measurements if required)

pH (SU)	Sp. Cond. (µmho/cm)	Temp. (C)	ORP (mv)	DO (mg/l)	Turbidity (NTU)	~~Other~~ FLOW	Other
6.22	2,600	14.8	-71	0.00	346	500	
6.44	2,586	15.3	-84	0.00	129	500	
6.49	2,593	14.9	-86	0.00	44.4	450	

Instrument Calibration (describe instruments calibrated (including brand/model), time, and method SEE FIELD BOOK
Comments: N/A
Weather Conditions: SUNNY, V. WINDY, COLD, 32°F
Visitors: N/A

By (Signature): [signature] Title: Assistant Project Scientist
Print Name: Joseph J. Gray, Jr. Date: 2/4/03

Earth Sciences Consultants, Inc.
Well Evacuation/Water Sampling Report
(If monitoring point is dry, complete applicable portions of form)

Client I.D.: Gen Chem
Project No.: 5455B-03
Project Location: North Plant
Sample Location/I.D.: CWL-5

EVACUATION DATA

General Data

Date: 2-7-3
Evacuation Time: 0725
Evacuated by: RJK
Evacuation method: Grundfos Pump
Time pumping began: 0725
Time Pumping ended: _____
Total pumping time (min): _____
Pumping Rate (GPM): _____

Initial Water Level: 10.23
Measurement ref. point: TOC_____ TIC_____ ground_____
Reference point stickup (ft): _____
Total well depth (D) (from ref. Point): 18.95
Radius of well (r) (ft): 2"
Gallons per foot ($G=\pi r^2 x 7.48$): .653
Well Volume (gal): 5.6
Total gallons removed: _____
Well volumes removed: _____
Evacuated to dryness: Y N

Stabilization Data
(measure for each well volume evacuated)

Time (min)	Volume Removed (gal)	pH (SU)	Sp. Cond. ~~(µmho/cm)~~ mS/cm	Temp. (°C)	ORP (mv)	DO (mg/l)	Turbidity (_____)	Other _____	Other _____
0725 / 0730	0 / .5	5.60 / 5.64	0.727 / 0.708	12.86 / 14.42	53 / 47	4.02 / 1.70	373 / 155		
0735 / 0740	1.0 / 1.5	5.74 / 5.75	0.715 / 0.721	16.19 / 16.10	39 / 36	1.00 / 0.88	64.1 / 52		
0745 / 0750	2.0 / 2.5	5.77 / 5.77	0.722 / 0.723	16.23 / 16.21	32 / 30	0.83 / 0.81	49.4 / 37.4		
0755 / 0800	3.0 / 3.5	5.78 / 5.78	0.726 / 0.728	16.24 / 16.76	28 / 25	0.81 / 0.83	28.7 / 22.2		

Field Observations

Odor: None ✓ Weak _____ Moderate _____ Strong _____ / Type: _____
Immiscible Layers: Y (N) /LNAPL_____; DNAPL_____/Thickness_____/
Description: _____
Color: Clear
Well condition (describe any damage): Good

Comments: _____
Weather Conditions: 32° snow 3'-6"
Visitors: _____

By (Signature): RJK
Print Name: Robert J. Kornigsberg
Title: Enviro tech 2
Date: 2-7-3

SAMPLING DATA

General Data

Sample Location/I.D.: EWL-5
Sample Date: 2-7-3
Time Collected: 0805
Collected by: RJK
Location description: Well ✓ Pond____ Seep ____ Stream____ Spring____
Other____
Sample Method: PVC bailer____
Polyethylene disposable bailer____
Teflon disposable bailer____
Bladder pump____
Submersible pump ✓
Inertial Pump____
Other ____
Dedicated: Y (N)

Field Observations

Water level prior to sample collection (Ft. from specified ref. Point): ____
Depth Sampled (Ft. from specified ref. Point): Pump Inlet
Sample Types: VOA, SVOA, Organics, Cyanide, Herbicide, ph, T+D metals
Turbidity: None____ Low ✓ Moderate____ High____
Odor: None ✓ Weak____ Moderate____ Strong____ / Type: ____
Immiscible Layers: Y (N) /LNAPL____; DNAPL____ /Thickness____ /
Description: ____
Color: Clear

Field Measurements

(Perform replicate measurements if required)

pH (SU)	Sp. Cond. (µmho/cm) µ	Temp. (°C)	ORP (mv)	DO (mg/l)	Turbidity (____)	Other ____	Other ____
5.78	0.730	16.63	25	.72	25.3		
5.78	0.731	16.58	25	.72	25.1		
5.78	0.731	16.51	25	.72	24.3		

Instrument Calibration (describe instruments calibrated (including brand/model), time, and method See field notes
Comments: ____
Weather Conditions: 32° SNOW
Visitors: ____

By (Signature): [signature] Title: Enviro tech 2
Print Name: Robert J. Koenigsberg Date: 2-7-3

Earth Sciences Consultants, Inc.
Well Evacuation/Water Sampling Report
(If monitoring point is dry, complete applicable portions of form)

Client I.D.: General Chemical
Project No.: 5455B-03
Project Location: North Plant
Sample Location/I.D.: EWL-6

EVACUATION DATA

General Data

Date: 2-6-03
Evacuation Time: 0850
Evacuated by: RJK
Evacuation method: Grund-fos Pump
Time pumping began: 0850
Time Pumping ended: _____
Total pumping time (min): _____
Pumping Rate (GPM): _____

Initial Water Level: 7.40
Measurement ref. point: TOC _____ TIC ✓ ground _____
Reference point stickup (ft): _____
Total well depth (D) (from ref. Point): 15.35
Radius of well (r) (ft): 2"
Gallons per foot ($G=\pi r^2 x 7.48$): .653
Well Volume (gal): 5.19
Total gallons removed: _____
Well volumes removed: _____
Evacuated to dryness: Y N

Stabilization Data

(measure for each well volume evacuated)

Time (min)	Volume Removed (gal)	pH (SU)	Sp. Cond. ~~(µmho/cm)~~ mS/cm	Temp. (°C)	ORP (mv)	DO (mg/l)	Turbidity (_____)	Other _____	Other _____
0850 / 0855	0 / .5	6.30 / 6.08	0.78 / 0.816	13.87 / 13.52	-36 / -38	9.41 / 8.31	55 / 50		
0900 / 0905	1.0 / 1.5	6.07 / 6.07	0.812 / 0.809	13.74 / 14.07	-45 / -49	7.56 / 7.17	45 / 40		
0910 / 0915	2.0 / 2.5	6.07 / 6.05	0.816 / 0.811	13.99 / 14.75	-50 / -53	6.73 / 6.04	38 / 40 38		
0920 / 0925	3.0 / 3.5	6.06 / 6.06	0.822 / 0.822	14.50 / 14.38	-53 / -56	5.66 / 5.22	39 / 30		
0930 / 0935	4.0 / 4.5	6.07 / 6.06	0.823 / 0.821	14.37 / 14.48	-58 / -59	4.83 / 4.48	25 / 23		
0940 / 0945	5.0 / 5.5	6.06 / 6.06	0.823 / 0.825	14.74 / 14.64	-60 / -60	4.14 / 3.92	20 / 19		

Field Observations

Odor: None ✓ Weak _____ Moderate _____ Strong _____ / Type: _____
Immiscible Layers: Y (N) LNAPL _____; DNAPL _____ /Thickness _____ /
Description: _____
Color: Clear
Well condition (describe any damage): Good

Comments: _____
Weather Conditions: Cold 30° clear Sunny
Visitors: _____

By (Signature): Robert J. Koenigsberg
Print Name: Robert J. Koenigsberg
Title: Enviro tech 2
Date: 2-6-3

SAMPLING DATA

General Data

Sample Location/I.D.: EWL-6
Sample Date: 2-6-3
Time Collected: 0950
Collected by: RJK
Location description: Well ___ ✓ Pond ___ Seep ___ Stream ___ Spring ___
Other ___
Sample Method: PVC bailer ___
Polyethylene disposable bailer ___
Teflon disposable bailer ___
Bladder pump ___
Submersible pump ✓
Inertial Pump ___
Other ___
Dedicated: Y (N)

Field Observations

Water level prior to sample collection (Ft. from specified ref. Point): ___
Depth Sampled (Ft. from specified ref. Point): Pump Inlet
Sample Types: VOA, SVOA, ORGANICS, T+D metals, Cyanide, Herbicide ph, Dioxin
Turbidity: None ___ Low ✓ Moderate ___ High ___
Odor: None ✓ Weak ___ Moderate ___ Strong ___ / Type: ___
Immiscible Layers: Y (N) / LNAPL ___; DNAPL ___ / Thickness ___ /
Description: ___
Color: Clear

Field Measurements

(Perform replicate measurements if required)

pH (SU)	Sp. Cond. ~~(µmho/cm)~~ mS/cm	Temp. (°C)	ORP (mv)	DO (mg/l)	Turbidity (___)	Other ___	Other ___
6.06	.824	14.71	-61	3.73	18		
6.06	.823	14.95	-63	3.65	15		
6.06	.822	15.00	-64	3.60	12		

Instrument Calibration (describe instruments calibrated (including brand/model), time, and method See field notes
Comments: ___
Weather Conditions: Cold 32° sunny clear
Visitors: ___

By (Signature): Robert Kiss
Print Name: Robert J. Koenigsberg
Title: Enviro tech 2
Date: 2-6-3

Earth Sciences Consultants, Inc.
Well Evacuation/Water Sampling Report
(If monitoring point is dry, complete applicable portions of form)

Client I.D.: Gen Chem
Project No.: 5455B-03
Project Location: North - Site
Sample Location/I.D.: EWL-7

EVACUATION DATA

General Data

Date: 2-4-3
Evacuation Time: 1520
Evacuated by: RJK
Evacuation method: Grundfos Pump
Time pumping began: 1520
Time Pumping ended: _____
Total pumping time (min): _____
Pumping Rate (GPM): _____

Initial Water Level: 6.85
Measurement ref. point: TOC_____ TIC_____ ground_____
Reference point stickup (ft): _____
Total well depth (D) (from ref. Point): 13.10
Radius of well (r) (ft): 2
Gallons per foot ($G=\pi r^2 x 7.48$): .653
Well Volume (gal): 4.08
Total gallons removed: _____
Well volumes removed: _____
Evacuated to dryness: Y N

Stabilization Data
(measure for each well volume evacuated)

Time (min)	Volume Removed (gal)	pH (SU)	Sp. Cond. ~~(µmho/cm)~~ mS/cm	Temp. (°C)	ORP (mv)	DO (mg/l)	Turbidity (_____)	Other _____	Other _____
1520 / 1525	0 / .5	6.38 / 6.45	0.978 / 0.977	12.07 / 12.43	-40 / -46	2.35 / 0.00	278 / 234		
1530 / 1535	1.0 / 1.5	6.51 / 6.55	0.974 / 0.969	12.92 / 13.32	-53 / -60	0.00 / 0.00	180.0 / 189.0		
1540 / 1545	2.0 / 2.5	6.56 / 6.57	0.962 / 0.949	13.47 / 13.70	-67 / -76	0.00 / 0.00	181.0 / 143.0		
1550 / 1555	3.0 / 3.5	6.57 / 6.56	0.941 / 0.936	13.69 / 13.80	-82 / -84	0.00 / 0.00	110.0 / 113.0		
1600 / 1605	4.0 / 4.5	6.57 / 6.56	0.923 / 0.923	14.10 / 14.14	-93 / -96	0.00 / 0.00	94.8 / 87.9		

Field Observations

Odor: None ✓ Weak _____ Moderate _____ Strong _____ / Type: _____
Immiscible Layers: Y (N) /LNAPL_____; DNAPL_____/Thickness_____/
Description: _____
Color: Clear
Well condition (describe any damage): Good

Comments: _____
Weather Conditions: WIND 45° Sunny
Visitors: _____

By (Signature): RJKoenigsberg
Print Name: Robert J. Koenigsberg
Title: Enviro tech 2
Date: 2-4-3

SAMPLING DATA

General Data

Sample Location/I.D.: EWL-7
Sample Date: 2-4-3
Time Collected: 1610
Collected by: RJK
Location description: Well ✓ Pond____ Seep____ Stream____ Spring____
Other____

Sample Method: PVC bailer____
Polyethylene disposable bailer____
Teflon disposable bailer____
Bladder pump____
Submersible pump ✓
Inertial Pump____
Other____
Dedicated: Y (N)

Field Observations

Water level prior to sample collection (Ft. from specified ref. Point): ____
Depth Sampled (Ft. from specified ref. Point): Pump Inlet
Sample Types: VOA, Organics, Herbicide, Cyanide, T+D metals

Turbidity: None____ Low ✓ Moderate____ High____
Odor: None ✓ Weak____ Moderate____ Strong____ / Type: ____
Immiscible Layers: Y (N) /LNAPL____; DNAPL____ /Thickness____ /
Description: ____
Color: clear

Field Measurements

(Perform replicate measurements if required)

pH (SU)	Sp. Cond. ~~(umho/cm)~~ mS/cm	Temp. (°C)	ORP (mv)	DO (mg/l)	Turbidity (____)	Other ____	Other ____
6.56	.919	14.15	-98	0.00	84.3		
6.57	.916	14.15	-100	0.00	83.9		
6.56	.918	14.15	-102	0.00	83.7		

Instrument Calibration (describe instruments calibrated (including brand/model), time, and method ~~Horiba 1-Cal solution~~ myron ph 4.0=4.0, 7.0=7.0 cond 995=995
Comments: ____
Weather Conditions: Clear Sunny 46°
Visitors: ____

By (Signature): [signature] Title: Enviro tech 1
Print Name: Robert J. Koenigsberg Date: 2-4-3

Earth Sciences Consultants, Inc.
Well Evacuation/Water Sampling Report
(If monitoring point is dry, complete applicable portions of form)

Client I.D.: General Chemical
Project No.: 5455B-03
Project Location: North Site
Sample Location/I.D.: EWL-8

EVACUATION DATA

General Data

Date: 2-5-3
Evacuation Time: 1250
Evacuated by: RJK
Evacuation method: Grunfos Pump
Time pumping began: 1250
Time Pumping ended:
Total pumping time (min):
Pumping Rate (GPM):

Initial Water Level: 7.06
Measurement ref. point: TOC ___ TIC ✓ ground ___
Reference point stickup (ft):
Total well depth (D) (from ref. Point): 15.00
Radius of well (r) (ft): 2"
Gallons per foot ($G=\pi r^2 \times 7.48$): .659
Well Volume (gal): 5.18
Total gallons removed:
Well volumes removed:
Evacuated to dryness: Y N

Stabilization Data

(measure for each well volume evacuated)

Time (min)	Volume Removed (gal)	pH (SU)	Sp. Cond. ~~(umho/cm)~~ mS/cm	Temp. (°C)	ORP (mv)	DO (mg/l)	Turbidity (____)	Other ____	Other ____
1250 / 1255	0 / .5	6.11 / 6.02	0.546 / 0.532	12.86 / 13.08	72 / 75	9.22 / 1.80	50 / 50		
1300 / 1305	1.0 / 1.5	5.84 / 5.73	0.674 / 0.876	13.97 / 13.98	75 / 75	6.15 / 4.91	110 / 65		
1310 / 1315	2.0 / 2.5	5.68 / 5.68	0.904 / 0.969	14.28 / 14.35	75 / 74	4.41 / 4.24	40 / 35		
1320 / 1325	3.0 / 3.5	5.65 / 5.64	1.20 / 1.26	14.51 / 14.48	71 / 71	3.66 / 3.52	28 / 27		
1330 / 1335	4.0 / 4.5	5.63 / 5.64	1.34 / 1.36	14.26 / 14.42	70 / 68	3.20 / 3.42	26 / 26		

Field Observations

Odor: None ✓ Weak ___ Moderate ___ Strong ___ / Type: ___
Immiscible Layers: Y (N)/LNAPL___; DNAPL___/Thickness___/
Description: ___
Color: clear
Well condition (describe any damage): Good

Comments:
Weather Conditions: Cold 32 wind clear
Visitors:

By (Signature): [signature]
Print Name: Robert J. Kornigsberg
Title: Enviro tech 2
Date: 2-5-3

SAMPLING DATA

General Data

Sample Location/I.D.: EWL-8
Sample Date: 2-3-3
Time Collected: 1340
Collected by: RJK
Location description: Well ✓ Pond____ Seep ____ Stream____ Spring____
Other____

Sample Method: PVC bailer____
Polyethylene disposable bailer____
Teflon disposable bailer____
Bladder pump____
Submersible pump ✓
Inertial Pump____
Other ____
Dedicated: (Y) N

Field Observations

Water level prior to sample collection (Ft. from specified ref. Point): ____
Depth Sampled (Ft. from specified ref. Point): ~~Bot~~ Pump Inlet
Sample Types: VOA, SVOA, organics, Herbicide, Cyanide, ph, T+D metals

Turbidity: None____ Low ✓ Moderate____ High____
Odor: None ✓ Weak____ Moderate____ Strong____ / Type: ____
Immiscible Layers: Y (N) /LNAPL____; DNAPL____ /Thickness____ /
Description: ____
Color: Cloudy

Field Measurements

(Perform replicate measurements if required)

pH (SU)	Sp. Cond. ~~(µmho/cm)~~ mS/cm	Temp. (°C)	ORP (mv)	DO (mg/l)	Turbidity (____)	Other ____	Other ____
5.62	1.36	14.22	68	3.26	26		
5.62	1.36	14.22	68	3.25	26		
5.63	1.36	14.22	68	3.23	26		

Instrument Calibration (describe instruments calibrated (including brand/model), time, and method Myron 4.0=4.0, 7.0=7.0 Cond 885=885, DO Zobell solution
Comments: ____
Weather Conditions: Cold 32° wind clear
Visitors: ____

By (Signature): Robert Kiss
Print Name: Robert J. Koenigsberg
Title: Enviro tech 2
Date: 2-5-3

Earth Sciences Consultants, Inc.
Well Evacuation/Water Sampling Report
(If monitoring point is dry, complete applicable portions of form)

Client I.D.: Gen Chem
Project No.: 5455B-03
Project Location: South Plant
Sample Location/I.D.: SAL-1

EVACUATION DATA

General Data

Date: 2-6-3
Evacuation Time: 1550
Evacuated by: RJK
Evacuation method: Grundfos Pump
Time pumping began: 1550
Time Pumping ended:
Total pumping time (min):
Pumping Rate (GPM):

Initial Water Level: 8.28
Measurement ref. point: TOC ____ TIC ✓ ground ____
Reference point stickup (ft):
Total well depth (D) (from ref. Point): 23.20
Radius of well (r) (ft): 2"
Gallons per foot ($G=\pi r^2 x 7.48$): .653
Well Volume (gal): 9.74
Total gallons removed:
Well volumes removed:
Evacuated to dryness: Y N

Stabilization Data
(measure for each well volume evacuated)

Time (min)	Volume Removed (gal)	pH (SU)	Sp. Cond. ~~(µmho/cm)~~ mS/cm	Temp. (°C)	ORP (mv)	DO (mg/l)	Turbidity ( )	Other	Other
1550 / 1555	0 / .5	2.76 / 2.75	4.23 / 4.20	16.26 / 16.64	383 / 383	4.14 / 3.18	15 / 90		
1600 / 1605	1.5 / 2.0	2.76 / 2.76	4.17 / 4.23	17.21 / 16.85	384 / 384	3.17 / 2.98	33 / 14		
1610 / 1615	2.5 / 3.0	2.76 / 2.76	4.23 / 4.23	16.71 / 16.84	383 / 383	2.74 / 2.64	11 / 10		

Field Observations

Odor: None ✓ Weak ____ Moderate ____ Strong ____ / Type: ____
Immiscible Layers: Y (N)/LNAPL____; DNAPL____/Thickness____/
Description:
Color: Cloudy
Well condition (describe any damage): Good

Comments:
Weather Conditions: Cold 32 OVERCAST
Visitors:

By (Signature): [signature]
Print Name: Robert J. Koenigsberg
Title: Enviro tech 2
Date: 2-6-3

SAMPLING DATA

General Data

Sample Location/I.D.: SAL-1
Sample Date: 2-6-3
Time Collected: _____
Collected by: RJK
Location description: Well ✓ Pond ____ Seep ____ Stream ____ Spring ____
Other ____
Sample Method: PVC bailer ____
Polyethylene disposable bailer ____
Teflon disposable bailer ____
Bladder pump ____
Submersible pump ✓
Inertial Pump ____
Other ____
Dedicated: Y (N)

Field Observations

Water level prior to sample collection (Ft. from specified ref. Point): _____
Depth Sampled (Ft. from specified ref. Point): Pump Inlet
Sample Types: VOA, SVOA, ORGANIC, Cyanide, Herbacide, T+D. metals
ph
Turbidity: None ____ Low ✓ Moderate ____ High ____
Odor: None ✓ Weak ____ Moderate ____ Strong ____ / Type: _____
Immiscible Layers: Y (N) /LNAPL ____; DNAPL ____ /Thickness ____ /
Description: _____
Color: Cloudy

Field Measurements

(Perform replicate measurements if required)

pH (SU)	Sp. Cond. ~~(umho/cm)~~ mS/cm	Temp. (°C)	ORP (mv)	DO (mg/l)	Turbidity (____)	Other ____	Other ____
2.76	4.23	16.64	383	260	9		
2.76	4.23	16.70	383	264	10		
2.76	4.23	16.68	383	262	10		

Instrument Calibration (describe instruments calibrated (including brand/model), time, and method See field notes
Comments: _____
Weather Conditions: Cold 32° overcast
Visitors: _____

By (Signature): [signature] Title: Enviro tech 2
Print Name: Robert J. Koenigsberg Date: 2-6-3

Earth Sciences Consultants, Inc.
Well Evacuation/Water Sampling Report
(If monitoring point is dry, complete applicable portions of form)

Client I.D.: General Chemical
Project No.: 5455B-03
Project Location: South Plants
Sample Location/I.D.: SAL-3

EVACUATION DATA

General Data

Date: 2-6-3
Evacuation Time: 1205
Evacuated by: RJK
Evacuation method: Grundfos Pump
Time pumping began: 1205
Time Pumping ended: 1245
Total pumping time (min): ____
Pumping Rate (GPM): ____

Initial Water Level: 6.95
Measurement ref. point: TOC ____ TIC ✓ ground ____
Reference point stickup (ft): ____
Total well depth (D) (from ref. Point): 18.12
Radius of well (r) (ft): 2" ~~.653~~ RK
Gallons per foot ($G=\pi r^2 x 7.48$): .653
Well Volume (gal): 7.29
Total gallons removed: ____
Well volumes removed: ____
Evacuated to dryness: Y N

Stabilization Data

(measure for each well volume evacuated)

Time (min)	Volume Removed (gal)	pH (SU)	Sp. Cond. ~~(umhe/cm)~~ mS/cm	Temp. (°C)	ORP (mv)	DO (mg/l)	Turbidity (____)	Other ____	Other ____
1205 / 1210	0 / .5	3.85 / 3.88	14.6 / 14.8	14.99 / 14.30	232 / 328	5.77 / 3.89	16 / 14		
1215 / 1220	1.0 / 1.5	3.88 / 3.90	14.6 / 14.8	15.57 / 14.61	226 / 225	3.39 / 3.32	14 / 13		
1225 / 1230	2.0 / 2.5	3.90 / 3.92	14.6 / 14.0	14.65 / 15.93	225 / 220	3.20 / 17.52	15 / 12		
1235 / 1240	3.0 / 3.5	3.87 / 3.94	13.8 / 13.8	16.80 / 15.81	219 / 215	18.86 / 19.26	12		

Field Observations

Odor: None ✓ Weak ____ Moderate ____ Strong ____ / Type: ____
Immiscible Layers: ⊘ N /LNAPL ✓ ; DNAPL ____ /Thickness ____ /
Description: Slight Sheen
Color: Clear
Well condition (describe any damage): Good

Comments: Slight Sheen
Weather Conditions: Cold 30°
Visitors: Corps of engineers

By (Signature): RJK
Print Name: Robert J. Koenigsberg
Title: Enviro tech 2
Date: 2-6-3

SAMPLING DATA

General Data

Sample Location/I.D.: SAL-3
Sample Date: 2-6-3
Time Collected: 1245
Collected by: RJK
Location description: Well ✓ Pond____ Seep ____ Stream____ Spring____
Other____
Sample Method: PVC bailer____
Polyethylene disposable bailer____
Teflon disposable bailer____
Bladder pump____
Submersible pump ✓
Inertial Pump____
Other ____
Dedicated: Y (N)

Field Observations

Water level prior to sample collection (Ft. from specified ref. Point): ____
Depth Sampled (Ft. from specified ref. Point): Pump Inlet
Sample Types: VOA, SVOA, ORGANICS, Cyanide, Herbicide, Pb, T + D Metals
Turbidity: None ✓ Low ✓ Moderate____ High____
Odor: None ✓ Weak____ Moderate____ Strong____ / Type: ____
Immiscible Layers: (Y) N /LNAPL ✓; DNAPL____ /Thickness____ /
Description: Slight sheen
Color: Clear

Field Measurements

(Perform replicate measurements if required)

pH (SU)	Sp. Cond. ~~(µmho/cm)~~ mS/cm	Temp. (°C)	ORP (mv)	DO (mg/l)	Turbidity (____)	Other ____	Other ____
3.94	13.9	15.43	214	19.12	12		
3.94	13.9	15.43	214	19.12	12		
3.94	13.9	15.43	214		12		

Instrument Calibration (describe instruments calibrated (including brand/model), time, and method See field notes
Comments: ____
Weather Conditions: Cold 32° Clear
Visitors: ____

By (Signature): [signature] Title: Enviro tech 2
Print Name: Robert J. Koenigsberg Date: 2-6-3

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Page: 1 of

Section A — Required Client Information:

Company: EARTH SCIENCES CONSULTANTS
Address: ONE TRIANGLE LANE
Kittanning, PA 15632
Phone: 724-733-3000
Fax: 724-325-3352

Section B — Required Client Information:

Report To: Robert D. Brackwell
Copy To:
Invoice To: Robert D. Brackwell
P.O.
Project Name: General Chemical
Project Number: 5455B-03

Client Information (Check quote/contract):
Requested Due Date: STANDARD
*TAT: STANDARD

* Turn around times less than 14 days subject to laboratory and contractual obligations and may result in a Rush Turnaround Surcharge.
Turn Around Time (TAT) in calendar days.

Section C — To Be Completed by Pace Analytical and Client

Quote Reference:
Project Manager:
Project #:
Profile #:

Section D — Required Client Information:

SAMPLE ID
One character per box.
(A–Z, 0–9 / .–)
Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
WATER	WT
SOIL	SL
OIL	OL
WIPE	WP
AIR	AR
TISSUE	TS
OTHER	OT

Requested Analysis: 8260 APPIX B Vol, Gen Chem (pH), SVOA APPIX B, ORGANICS COPP, Total Metals + mercury, Dissolved metals, Herbicides, Cyanide, pH

SAMPLE ID	MATRIX CODE	DATE COLLECTED (mm / dd / yy)	TIME COLLECTED (hh:mm a/p)	# Containers	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	8260	APPIX B Vol	Gen Chem (pH)	SVOA	APPIX B	ORGANICS COPP	Total Metals + mercury	Dissolved metals	Herbicides	Cyanide	pH	Remarks / Lab ID
MW-116	WT	2/4/3	1105	11	5		2	3	1				X	X	X	X	X	X	X	X	X			
MW-102	WT	2/4/3	1340	11	5		2	3	1				X	X	X	X	X	X	X	X	X			
MW-102DUP	WT	2/4/3	1340	11	5		2	3	1				X	X	X	X	X	X	X	X	X			
EWL-7	WT	2/4/3		11	5		2	3	1				X	X	X	X	X	X	X	X	X			
MW-111	WT		1100	10	4		2	3	1				X	X	X	X	X	X	X	X	X			
B-5D	WT		1515														X	X			X			
B-5	WT		1700														X	X			X			
TRIP BLANK	WT		—										X											
RINSATE BLANK	WT		1300										X	X	X	X	X	X	X	X	X			

SHIPMENT METHOD	AIRBILL NO.	SHIPPING DATE	NO. OF COOLERS
FED EX		2-4-03	

ITEM NUMBER	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
	[signature]	2-4-3	1800			

SAMPLE CONDITION

Temp in °C	
Received on Ice	Y/N
Sealed Cooler	Y/N
Samples Intact	Y/N

SAMPLE NOTES

Additional Comments:

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: ROBERT J. KOENIGSBERG
SIGNATURE of SAMPLER: [signature]
DATE Signed: (MM / DD / YY) 2-4-3

SEE REVERSE SIDE FOR INSTRUCTIONS

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Page: 1 of 2

Section A — Required Client Information:

Company: EARTH SCIENCES CONSULTANTS
Address: 1E TRIANGLE LANE
PITTSBURGH, PA 15632
Phone: 724-733-3000
Fax: 724-325-3352

Section B — Required Client Information:

Report To: Robert D. Breakwell
Copy To:
Invoice To: Robert D. Breakwell
P.O.
Project Name: General Chemical
Project Number: 5455B-03

Client Information (Check quote/contract):
Requested Due Date: STANDARD
*TAT: STANDARD

* Turn around times less than 14 days subject to laboratory and contractual obligations and may result in a Rush Turnaround Surcharge.
Turn Around Time (TAT) in calendar days.

Section C — To Be Completed by Pace Analytical and Client

Quote Reference: GENERAL CHEMICAL
Project Manager: KATHY STOUDNOUR
Project #:
Profile #:

Section D — Required Client Information:

SAMPLE ID
One character per box.
(A–Z, 0–9 / .–)
Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
WATER	WT
SOIL	SL
OIL	OL
WIPE	WP
AIR	AR
TISSUE	TS
OTHER	OT

Requested Analysis: APP. IX VOCs; APPENDIX IX METALS; Dissolved Metals; Cyanide; Organics Compounds; Herbicides; SVOC App. IX; APPENDIX IX Resp.

Sample ID	MATRIX CODE	DATE COLLECTED (mm / dd / yy)	TIME COLLECTED (hh:mm a/p)	# Containers	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	App. IX VOCs	Metals	Dissolved Metals	Cyanide	Organics Compounds	Herbicides	SVOC App. IX	App. IX Resp.	Remarks / Lab ID
MW-113	WT	2-5-3	0945	10	4		2	3	1				X	X	X	X	X	X	X	X	
MW-113MS	WT	2-5-3	0945	10	4		2	3	1				X	X	X	X	X	X	X	X	
MW-113MSD	WT	2-5-3	0945	10	4		2	3	1				X	X	X	X	X	X	X	X	
MW-104	WT	2-5-3	1245	10	4		2	3	1				X	X	X	X	X	X	X	X	
MW-104DUP	WT	2-5-3	1245	10	4		2	3	1				X	X	X	X	X	X	X	X	
EWL-8	WT	2-5-3	1340	10	4		2	3	1				X	X	X	X	X	X	X	X	
MW-117	WT	2-5-3	1505	10	4		2	3	1				X	X	X	X	X	X	X	X	
MW-103	WT	2-5-3		10	4		2	3	1				X	X	X	X	X	X	X	X	
B-4	WT	2/5/03	1245	3	1		2							X	X	X					
B-2	WT	2/5/03	1415	10	4		2	3	1				X	X	X	X	X	X	X	X	
B-3	WT	2/5/03	1550	3	1		2							X	X	X					

SHIPMENT METHOD	AIRBILL NO.	SHIPPING DATE	NO. OF COOLERS
Fed ex		2-5-3	4

ITEM NUMBER	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
	[signature] /SSC					

SAMPLE CONDITION

Temp in °C	
Received on Ice	Y/N
Sealed Cooler	Y/N
Samples Intact	Y/N

SAMPLE NOTES

Additional Comments:

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Robert L. Koenigsberg
SIGNATURE of SAMPLER: [signature]
DATE Signed: (MM / DD / YY) 2-5-3

SEE REVERSE SIDE FOR INSTRUCTIONS

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716689

...uired Client Inform... **Section A**

...pany: ...ARTH SCIENCES CONSULTANTS

...ress: ...NE TRIANGLE LANE

...XPORT, PA 15632

...e: ...24-733-3000 | Fax: 724-325-3352

Required Client Information: **Section B**

Report To: Robert D. Breakwell

Copy To:

Invoice To: Robert D. Breakwell

P.O.

Project Name: GEN. CHEM.

Project Number: 5455B-03

...: 2 of 2

Client Information (Check quote/contract):

Requested Due Date: STANDARD | *TAT: STANDARD

* Turn around times less than 14 days subject to laboratory and contractual obligations and may result in a Rush Turnaround Surcharge.

Turn Around Time (TAT) in calendar days.

To Be Completed by Pace Analytical and Client Se... C

Quote Reference: GENERAL CHEMICAL

Project Manager: KATHY STOUDNOUR

Project #:

Profile #:

Section D Required Client Information:

SAMPLE ID

One character per box. (A–Z, 0–9 / .–)
Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
WATER	WT
SOIL	SL
OIL	OL
WIPE	WP
AIR	AR
TISSUE	TS
OTHER	OT

Requested Analysis:

SAMPLE ID	MATRIX CODE	DATE COLLECTED (mm / dd / yy)	TIME COLLECTED (hh:mm a/p)	# Containers	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	VOA APPX IX	SVOA APPX IX	ORGANICS (Cu+OPD)	Cyanide	Herbicide APPX IX	T. metals + Mercury	Dimetals + Mercury	pH		Remarks / Lab ID
RINSATE BLANK	WT	2/5/03	1445	10	4		2	3	1				X	X	X	X	X	X	X	X		
TRIP BLANK	WT	—	—	3				3					X									

SHIPMENT METHOD	AIRBILL NO.	SHIPPING DATE	NO. OF COOLERS	ITEM NUMBER	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
...dex		2-5-3	4		Kelly K[illegible] / ESC	2-5-4	1800			

...IPLE CONDITION

...p in °C	
...eived on Ice	Y/N
...led Cooler	Y/N
...nples Intact	Y/N

...tional Comments:

SAMPLE NOTES

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: JOE OZOG

SIGNATURE of SAMPLER: [signature]

DATE Signed: (MM / DD / YY) 2/5/03

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Required Client Information: Section A

Company: ARTH SCIENCES CONSULTANTS
Address: ONE TRIANGLE LANE
Export, PA 15632
Phone: 724-733-3000
Fax: 724-325-3352

Required Client Information: Section B

Report To: Robert D. Breakwell
Copy To:
Invoice To: Robert D. Breakwell
P.O.
Project Name: General Chemical
Project Number: 5455B-03

Page: 1 of 2

Client Information (Check quote/contract):
Requested Due Date: STANDARD
*TAT: STANDARD

* Turn around times less than 14 days subject to laboratory and contractual obligations and may result in a Rush Turnaround Surcharge.
Turn Around Time (TAT) in calendar days.

716690

To Be Completed by Pace Analytical and Client **Section C**

Quote Reference: GENERAL CHEMICAL
Project Manager: KATHY STOUDNOUR
Project #:
Profile #:

Section D Required Client Information:

SAMPLE ID
One character per box.
(A–Z, 0–9 / .–)
Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
WATER	WT
SOIL	SL
OIL	OL
WIPE	WP
AIR	AR
TISSUE	TS
OTHER	OT

Requested Analysis: ← APPX IX

ITEM #	SAMPLE ID	MATRIX CODE	DATE COLLECTED (mm / dd / yy)	TIME COLLECTED (hh: mm a/p)	# Containers	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	VOA APPX IX	SVOA APPX IX	ORGANICS (cuc+opp)	Cyanide	Herbicide APPX IX	Ph	T. metals + mercury	D. metals + mercury	Dioxins	Remarks / Lab ID
1	EWL-6	~~WT~~	~~2-6-3~~	~~0950~~	~~3~~	~~3~~		~~2~~	~~3~~	~~1~~				~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	
2	~~EWL-6 dup~~	~~WT~~	~~2-6-3~~	~~0950~~	~~3~~	~~3~~		~~2~~	~~3~~	~~1~~												~~X~~	
3	~~EWL-6 ms~~	~~WT~~	~~2-6-3~~	~~0950~~	~~3~~	~~3~~		~~2~~	~~3~~	~~1~~												~~X~~	
4	~~EWL-6 msd~~	~~WT~~	~~2-6-3~~	~~0950~~	~~3~~	~~3~~		~~2~~	~~3~~	~~1~~												~~X~~	
5	SAL-3	WT	2-6-3	1245	10	4		2	3	1				X	X	X	X	X	X	X	X	X	
6	MW-105	WT	2-6-3	1530	10	4		2	3	1				X	X	X	X	X	X	X	X	X	
7	SAL-1	WT	2-6-3	1620	10	4		2	3	1				X	X	X	X	X	X	X	X		
8	MW-110	WT	2/6/03	1345	10	4		2	3	1				X	X	X	X	X	X	X	X		
9	MW-110 DUP.	WT	2/6/03	1345	10	4		2	3	1				X	X	X	X	X	X	X	X		
10	B-1	WT	2/6/03	1155	3	1		2											X	X	X		
11	B-2D	WT	2/6/03	1000	10	4		2	3	1				X	X	X	X	X	X	X	X		
12	EWL-6	WT	2/6/03	0950	10	4		2	3	1				X	X	X	X	X	X	X	X		

SHIPMENT METHOD	AIRBILL NO.	SHIPPING DATE	NO. OF COOLERS	ITEM NUMBER	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Fed ex		2-6-3	4		[signature] / ESC	2-6-3	1800			

SAMPLE CONDITION

Temp in °C	
Received on Ice	Y/N
Sealed Cooler	Y/N
Samples Intact	Y/N

SAMPLE NOTES

Additional Comments:

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Robert D. Koenigsberg
SIGNATURE of SAMPLER: [signature]
DATE Signed: (MM / DD / YY) 2-6-3

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Page: 2 of 2

Required Client Information: Section A

Company: EARTH SCIENCES CONSULT.
Address: ONE TRIANGLE LANE
EXPORT, PA 15632
Phone: 724-733-3000 Fax: 724-325-3352

Required Client Information: Section B

Report To: ROBERT BRINKWELL
Copy To:
Invoice To: SAME
P.O.
Project Name: GENERAL CHEMICAL
Project Number: 5755B-03

Client Information (Check quote/contract):
Requested Due Date:
*TAT: STANDARD

* Turn around times less than 14 days subject to laboratory and contractual obligations and may result in a Rush Turnaround Surcharge.
Turn Around Time (TAT) in calendar days.

To Be Completed by Pace Analytical and Client: Section C

Quote Reference: GENERAL CHEMICAL
Project Manager: KATHY SIBUDNOCK
Project #:
Profile #:

Section D Required Client Information:

SAMPLE ID
One character per box.
(A–Z, 0–9 / .–)
Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
WATER	WT
SOIL	SL
OIL	OL
WIPE	WP
AIR	AR
TISSUE	TS
OTHER	OT

Remarks / Lab ID	MATRIX CODE	DATE COLLECTED mm / dd / yy	TIME COLLECTED hh: mm a/p	# Containers	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Requested Analysis: APPIX VOCS	APPIX SVOCS	APPIX B organics (pesticides)	APPIX Total metals + mercury	APPIX Dissolved metals + mercury	APPIX Herbicide	pH	Cyanide	~~Diesel/gas~~
RINSEATE BLANK		2-6-3	1600	10	4		2	3	1				X	X	X	X	X	X	X	X	
~~RINSEATE BLANK~~		~~2-6-3~~	~~0950~~	~~3~~	~~3~~															~~X~~	

SHIPMENT METHOD	AIRBILL NO.	SHIPPING DATE	NO. OF COOLERS	ITEM NUMBER	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
ex		2-6-3	4		KLB/K ESC	2-6-3	1600			

SAMPLE CONDITION

Temp in °C	
Received on Ice	Y/N
Sealed Cooler	Y/N
Samples Intact	Y/N

SAMPLE NOTES

Additional Comments:

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: JOE OZOG
SIGNATURE of SAMPLER:
DATE Signed: (MM / DD / YY) 2/6/03

SEE REVERSE SIDE FOR INSTRUCTIONS

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Required Client Information: **Section A**

mpany: EARTH SCIENCES CONSULT.
dress: ONE TRIANGLE LANE
EXPORT, PA 15632
one: 724-733-3000 Fax: 724-325-3352

Required Client Information: **Section B**

Report To: BOB BREAKWELL
Copy To:
Invoice To: SAME
P.O.
Project Name: GENERAL CHEMICAL
Project Number: 5455B-03

Page: 1 of 1

Client Information (Check quote/contract):
Requested Due Date:
*TAT: STANDARD

* Turn around times less than 14 days subject to laboratory and contractual obligations and may result in a Rush Turnaround Surcharge.
Turn Around Time (TAT) in calendar days.

716582

To Be Completed by Pace Analytical and Client **Section C**

Quote Reference: GENERAL CHEMICAL
Project Manager: KATHY STOUDNOUR
Project #:
Profile #:

Section D **Required Client Information:**

SAMPLE ID
One character per box.
(A–Z, 0–9 / .–)
Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
WATER	WT
SOIL	SL
OIL	OL
WIPE	WP
AIR	AR
TISSUE	TS
OTHER	OT

Requested Analysis: DIOXINS & FURAN

SAMPLE ID	MATRIX CODE	DATE COLLECTED (mm / dd / yy)	TIME COLLECTED (hh:mm a/p)	# Containers	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	DIOXINS & FURAN	Remarks / Lab ID
EWL-6	WT	2/6/03	0950	3	3								X	
EWL-6 DUP.	↓	↓	↓	3	3								↓	
EWL-6 MS	↓	↓	↓	3	3								↓	
EWL-6 MSD	↓	↓	↓	3	3								↓	
RINSATE BLANK	↓	↓	↓	3	3								↓	

SHIPMENT METHOD	AIRBILL NO.	SHIPPING DATE	NO. OF COOLERS	ITEM NUMBER	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
FED EX		2/6/03	1		[signature] / ESC	2/6/03	1718			

MPLE CONDITION

mp in °C	
ceived on Ice	Y/N
aled Cooler	Y/N
mples Intact	Y/N

SAMPLE NOTES

itional Comments:

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Robert J. Koenigsberg
SIGNATURE of SAMPLER: [signature]
DATE Signed: (MM / DD / YY) 2-6-3

SEE REVERSE SIDE FOR INSTRUCTIONS

Form COC01 Rev 0402

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Required Client Information: **Section A**

ompany: EARTH SCIENCES CONSULTANTS

ddress: ONE TRIANGLE LANE
EXPORT, PA 15632

one: 724-733-3000 Fax: 724-325-3352

Required Client Information: **Section B**

Report To: Robert D. Brackwell

Copy To:

Invoice To: Robert D. Brackwell

P.O.

Project Name: General Chemical

Project Number: 5455B-03

Page: 1 of 2

Client Information (Check quote/contract):

Requested Due Date: STANDARD *TAT: STANDARD

* Turn around times less than 14 days subject to laboratory and contractual obligations and may result in a Rush Turnaround Surcharge.

Turn Around Time (TAT) in calendar days.

716691

To Be Completed by Pace Analytical and Client **Section C**

Quote Reference: GENERAL CHEMICAL

Project Manager: KATHY STOUDNOUR

Project #:

Profile #:

Section D **Required Client Information:**

SAMPLE ID

One character per box.
(A–Z, 0–9 / .–)
Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
WATER	WT
SOIL	SL
OIL	OL
WIPE	WP
AIR	AR
TISSUE	TS
OTHER	OT

Requested Analysis: VOA APPX IX, SVOA APPX IX, Organics (Dup + opp), Cyanide, Herbicide APPX IX, Ph, Tetrahydrofuran, Dioxane, Dioxane APPX IX

Item #	Sample ID	Matrix Code	Date Collected (mm / dd / yy)	Time Collected (hh:mm a/p)	# Containers	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	VOA	SVOA	Organics	Cyanide	Herbicide	Ph	Tetrahydrofuran	Dioxane	Remarks / Lab ID
	EWL-5	WT	2-7-3	0805	10	4		2	3	1				X	X	X	X	X	X	X	X	
	EWL-5MS	WT	2-7-3	0805	10	4		2	3	1				X	X	X	X	X	X	X	X	
	EWL-5MSD	WT	2-7-3	0805	10	4		2	3	1				X	X	X	X	X	X	X	X	
	RINSEATEBLANK	WT	2-7-3	0900	10	4		2	3	1				X	X	X	X	X	X	X	X	
	MW-108	WT	2-6-3	1930	10	4		2	3	1				X	X	X	X	X	X	X	X	
	MW-106	WT	2-6-3	1835	10	4		2	3	1				X	X	X	X	X	X	X	X	
	MW-114	WT	2-7-3	1015	10	4		2	3	1				X	X	X	X	X	X	X	X	
	MW-114dup	WT	2-7-3	1015	10	4		2	3	1				X	X	X	X	X	X	X	X	
	MW-101	WT	2-7-3	1130	10	4		2	3	1				X	X	X	X	X	X	X	X	
	MW-107	WT	2-7-3	0905	10	4		2	3	1				X	X	X	X	X	X	X	X	
	MW-115	WT	2-7-3	1315	10	4		2	3	1				X	X	X	X	X	X	X	X	
	MW-112	WT	2-7-3	1300	10	4		2	3	1				X	X	X	X	X	X	X	X	

SHIPMENT METHOD	AIRBILL NO.	SHIPPING DATE	NO. OF COOLERS	ITEM NUMBER	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Fedex		2-7-3	5		RMK[illegible]/ESC	2-7-3	1800			

MPLE CONDITION

mp in °C	
ceived on Ice	Y/N
aled Cooler	Y/N
mples Intact	Y/N

SAMPLE NOTES

itional Comments:

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Robert J. Koenigsberg

SIGNATURE of SAMPLER: [signature]

DATE Signed: (MM / DD / YY) 2-7-3

SEE REVERSE SIDE FOR INSTRUCTIONS

Form COC01 Rev 0402

...celabs.com

716692

...quired Client Information: **Section A**

...mpany: ...ARTH SCIENCES CONSULTANTS

...dress: ONE TRIANGLE LANE

...EXPORT, PA 15632

...ne: ...-733-3000 | Fax: 724-325-3552

Required Client Information: **Section B**

Report To: Robert D. Breakwell

Copy To:

Invoice To: Robert D. Breakwell

P.O.

Project Name: General Chemical

Project Number: 5455B-03

...e: 2 of 2

Client Information (Check quote/contract):

Requested Due Date: Standard | *TAT: STANDARD

* Turn around times less than 14 days subject to laboratory and contractual obligations and may result in a Rush Turnaround Surcharge.

Turn Around Time (TAT) in calendar days.

To Be Completed by Pace Analytical and Client **Se... C**

Quote Reference: GENERAL CHEMICAL

Project Manager: KATHY STOUDNEUR

Project #:

Profile #:

Section D **Required Client Information:**

SAMPLE ID

One character per box. (A–Z, 0–9 / .–)
Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
WATER	WT
SOIL	SL
OIL	OL
WIPE	WP
AIR	AR
TISSUE	TS
OTHER	OT

Requested Analysis:

SAMPLE ID	MATRIX CODE	DATE COLLECTED (mm / dd / yy)	TIME COLLECTED (hh:mm a/p)	# Containers	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	VOA APPX IX	SVOA	ORGANIC (acetone)	Cyanide	Herbicide	Ph	Timetals + mercury	Diarrhoea + mercury	Remarks / Lab ID
TRIP BLANK	WT	—	—	3				3					X								

SHIPMENT METHOD	AIRBILL NO.	SHIPPING DATE	NO. OF COOLERS	ITEM NUMBER	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
...d ex		2-7-3	5		[signature]/ESC					

...PLE CONDITION

...p in °C	
...eived on Ice	Y/N
...led Cooler	Y/N
...nples Intact	Y/N

...ional Comments:

SAMPLE NOTES

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Robert J. Koenigsberg

SIGNATURE of SAMPLER: [signature]

DATE Signed: (MM / DD / YY) 2-7-3

SEE REVERSE SIDE FOR INSTRUCTIONS

Form COC01 Rev 0402