APPENDIX D

RFI GROUNDWATER MONITORING EVENT SAMPLING REPORTS – JULY 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 Location: CLAYMONT, DE
Project No.: 5455B-03
Sample Location/I.D.: MW-101

EVACUATION DATA

General Data

Date: 7/8/03
Evacuation Time: 0855 – 1100
Evacuated by: JJO
Evacuation method: Pump
Time pumping began: 0933
Time Pumping ended: 1025
Total pumping time (min): 52
Pumping Rate (GPM): —
(SEE LOW FLOW FORM)

Initial Water Level: 9.39'
Measurement ref. point: TOC ____ TIC X ground ____
Reference point stickup (ft): ~~18.12~~ 2.22
Total well depth (D) (from ref. Point): 18.12
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: 2.8
Evacuated to dryness: Y (N)

Stabilization Data
(measure for each well volume evacuated)

Time (min)	Volume Removed (gal)	pH (SU)	Sp. Cond. (µmho/cm)	Temp. (C)	ORP (mv)	DO (mg/l)	Turbidity (____)	Other ____	Other ____

SEE LOW FLOW FORM

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, HOT, HUMID, BREEZY, 90°F
Visitors: N/A

By (Signature): [signature]
Print Name: Joseph J. Ozaj, Jr.
Title: Project Scientist
Date: 7/8/03

SAMPLING DATA

General Data

Sample Location/I.D.: MW-101
Sample Date: 7/8/03
Time Collected: 1003
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 TEFLON-LINED TUBING
Dedicated: (Y) N TUBING ONLY

Field Observations

Water level prior to sample collection (Ft. from specified ref. Point): 10.14'
Depth Sampled (Ft. from specified ref. Point): ~16.0
Sample Types: VOC's, SVOC's, HERB., PEST., T&D METALS, CYANIDE, & 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 ____	Other ____
5.34	523.7	19.7	52	1.92 ~~10.9~~	14		
5.24	519.6	19.6	51	~~9.1~~ 1.86	17		
5.19	518.9	19.5	48	1.78	17		

Instrument Calibration (describe instruments calibrated (including brand/model), time, and method SEE FIELD BOOK
Comments: N/A
Weather Conditions: SUNNY, BREEZY, HOT, HUMID, 90°F
Visitors: N/A

By (Signature): [signature] Title: Project Scientist
Print Name: Joseph J. Ozog, Jr. Date: 7/8/03

Low Flow Parameters

Client GENERAL CHEM.
Site CLAYMONT, DE
Well ID MW-101
Date 7/8/03

Time (min)	Temp (C)	DO (mg/L)	ORP (mV)	Cond uohms/cm	pH (su)	Turbidity (visual)	W.Level (ft btic)	Flow (ml/min)	Time (hr:min)
0	16.77	2.52	-8	473	7.81	7999.0	9.98	500	0933
5	17.91	3.53	-21	464	6.23	742.0	10.04	400	0938
10	18.57	2.83	-25	465	5.70	289.0	10.09	425	0943
15	18.53	2.62	-28	468	5.59	139.0	10.09	400	0948
20	18.51	2.55	-28	468	5.57	98.1	10.09	400	0953
25	18.39	2.48	-29	464	5.55	68.4	10.13	400	0958
30	18.45	2.38	-29	466	5.55	57.3	10.14	375	1003
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Earth Sciences Consultants, Inc.
Well Evacuation/Water Sampling Report
(If monitoring point is dry, complete applicable portions of form)

Client I.D.: GENERAL CHEM. Project Location: CLAYMONT, DE
Project No.: 5455B-03 Sample Location/I.D.: MW-102

EVACUATION DATA

General Data

Date: 7/9/03 Initial Water Level: 11.02'
Evacuation Time: 1042-1244 Measurement ref. point: TOC ____ TIC X ground ____
Evacuated by: JJO Reference point stickup (ft): 2.31
Evacuation method: PUMP Total well depth (D) (from ref. Point): 21.54
Time pumping began: 1058 Radius of well (r) (ft): 0.0833
Time Pumping ended: 1211 Gallons per foot ($G=\pi r^2 x 7.48$): 0.163
Total pumping time (min): 73 Well Volume (gal): 1.7
Pumping Rate (GPM): — Total gallons removed: 5.0
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. (µmho/cm)	Temp. (C)	ORP (mv)	DO (mg/l)	Turbidity (____)	Other ____	Other ____
	SEE LOW-FLOW FORM								

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. CLOUDY, HOT, HUMID, 82°F
Visitors: N/A

By (Signature): [signature] Title: Project Scientist
Print Name: Joseph J. Ody Jr Date: 7/9/03

SAMPLING DATA

General Data

Sample Location/I.D.: MW-102 & MW-102 MS, MSD, & LAB. DUP. (DIOXIN/FURAN ONLY)
Sample Date: 7/9/03
Time Collected: 1132
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 TEFLON-LINED TUBING
Dedicated: (Y) N TUBING ONLY

Field Observations

Water level prior to sample collection (Ft. from specified ref. Point): 11.44
Depth Sampled (Ft. from specified ref. Point): ~18.0
Sample Types: VOC's, SVOC's, PEST., HERB, T&D METALS, CYANIDE, pH, DIOXIN/FURAN
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 ____	Other ____
6.15	1476	19.2	61	0.73	296		
5.85	1482	16.5	69	0.62	293		
5.80	1479	16.8	89	0.57	282		

Instrument Calibration (describe instruments calibrated (including brand/model), time, and method SEE FIELD BOOK
Comments: N/A
Weather Conditions: SUNNY, HOT, HUMID, 90°F
Visitors: N/A

By (Signature): [signature] Title: Project Scientist
Print Name: Joseph J. Olag, Jr. Date: 7/9/03

Low Flow Parameters

Client GEN. CHEM.
Site CLAYMONT, DE
Well ID MW-102
Date 7/9/03

Time (min)	Temp (C)	DO (mg/L)	ORP (mV)	Cond uohms/cm	pH (su)	Turbidity (visual)	W.Level (ft btic)	Flow (ml/min)	Time (hr:min)
0	19.58	3.09	-11	1490	6.93	>999.0	11.39	300	1102
5	17.64	0.59	-16	1520	6.08	>999.0	11.35	300	1107
10	18.36	0.08	-17	1520	5.84	969.0	11.40	300	1112
15	18.32	0.00	-17	1520	5.82	498.0	11.42	300	1117
20	18.11	0.00	-18	1530	5.81	297.0	11.43	300	1122
25	18.01	0.00	-17	1530	5.81	223.0	11.43	300	1127
30	18.24	0.00	-16	1530	5.80	121.0	11.44	300	1132
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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: CLAYMONT, DE
Sample Location/I.D.: MW-103

EVACUATION DATA

General Data

Date: 7/10/03
Evacuation Time: 1305-1444
Evacuated by: JJO
Evacuation method: PUMP
Time pumping began: 1327
Time Pumping ended: 1424
Total pumping time (min): 57
Pumping Rate (GPM): —
(SEE LOW-FLOW FORM)

Initial Water Level: 6.89'
Measurement ref. point: TOC ____ TIC X ground ____
Reference point stickup (ft): 0.00
Total well depth (D) (from ref. Point): 15.14
Radius of well (r) (ft): 0.0833
Gallons per foot ($G=\pi r^2 x 7.48$): 0.163
Well Volume (gal): 1.3
Total gallons removed: ~2.5
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)	Temp. (C)	ORP (mv)	DO (mg/l)	Turbidity (____)	Other ____	Other ____
SEE LOW-FLOW FORM									

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, MISTY, 78°F
Visitors: N/A

By (Signature): [signature]
Print Name: Joseph J. Ozog, Jr.
Title: Project Scientist
Date: 7/10/03

SAMPLING DATA

General Data

Sample Location/I.D.: MW-103
Sample Date: 7/10/03
Time Collected: 1405
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 TEFLON-LINED TUBING
Dedicated: (Y) N TUBING ONLY

Field Observations

Water level prior to sample collection (Ft. from specified ref. Point): 7.33
Depth Sampled (Ft. from specified ref. Point): ~13.0
Sample Types: VOC's, SVOC's, PEST., HERB., TOTAL METALS, CYANIDE, 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 ____	Other ____
7.26	567.0	18.4	21	1.71	~~6.44~~ 14.2		
7.21	560.7	17.4	-11	1.95	13.9		
7.18	569.1	17.3	9	1.89	13.1		

Instrument Calibration (describe instruments calibrated (including brand/model), time, and method SEE FIELD BOOK
Comments: N/A
Weather Conditions: CLOUDY, MISTY, 78°F
Visitors: N/A

By (Signature): [signature] Title: Project Scientist
Print Name: Joseph J. Ozog, Jr. Date: 7/10/03

Low Flow Parameters

Client GEN. CHEM.
Site CLAYMONT, DE
Well ID MW-103
Date 7/10/03

Time (min)	Temp (C)	DO (mg/L)	ORP (mV)	Cond uohms/cm	pH (su)	Turbidity (~~visual~~ NTU)	W.Level (ft btic)	Flow (ml/min)	Time (hr:min)
0	16.01	2.91	-19	517	6.86	409.0	7.07	325	1330
5	16.64	1.48	-25	522	6.99	259.0	7.25	325	1335
10	17.51	1.35	-25	521	7.09	181.0	7.29	225	1340
15	18.08	0.93	-27	525	7.17	79.3	7.35	225	1345
20	18.24	0.60	-27	528	7.19	67.5	7.30	200	1350
25	18.46	0.49	-28	531	7.22	61.1	7.30	200	1355
30	18.57	0.43	-28	535	7.25	56.3	7.32	200	1400
35	18.53	0.41	-28	534	7.26	51.5	7.33	200	1405
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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.: MW-104

EVACUATION DATA

General Data

Date: 7/11/03 Initial Water Level: 6.33'
Evacuation Time: 0845-1023 Measurement ref. point: TOC ____ TIC X ground ____
Evacuated by: JJO Reference point stickup (ft): 2.01
Evacuation method: PUMP Total well depth (D) (from ref. Point): 18.69
Time pumping began: 0907 Radius of well (r) (ft): 0.0833
Time Pumping ended: 0957 Gallons per foot ($G=\pi r^2 \times 7.48$): 0.163
Total pumping time (min): 50 Well Volume (gal): 2.0
Pumping Rate (GPM): — Total gallons removed: ~ 3.5
(SEE LOW-FLOW FORM) Well volumes removed: 1.8
Evacuated to dryness: Y (N)

Stabilization Data
(measure for each well volume evacuated)

Time (min)	Volume Removed (gal)	pH (SU)	Sp. Cond. (µmho/cm)	Temp. (C)	ORP (mv)	DO (mg/l)	Turbidity (____)	Other ____	Other ____
SEE LOW-FLOW FORM									

Field Observations

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

Comments: N/A
Weather Conditions: CLOUDY, HUMID, 85°F
Visitors: N/A

By (Signature): [signature] Title: Project Scientist
Print Name: Joe Ottog, JR Date: 7/11/03

SAMPLING DATA

General Data

Sample Location/I.D.: MW-104
Sample Date: 7/11/03
Time Collected: 0943
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 TEFLON-LINED TUBING
Dedicated: (Y) N TUBING ONLY

Field Observations

Water level prior to sample collection (Ft. from specified ref. Point): 6.49
Depth Sampled (Ft. from specified ref. Point): ~~~15.0~~ ~15.0
Sample Types: VOC's, SVOC's, PEST., HERB., T&D METALS, CYANIDE, 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 ____	Other ____
7.01	1795	19.6	-50	0.94	43.1		
7.08	1787	18.3	-37	0.62	68.6		
6.94	1844	18.2	-28	0.46	49.1		
6.84	1884	18.2	-26	0.45	45.1		

Instrument Calibration (describe instruments calibrated (including brand/model), time, and method SEE FIELD BOOK
Comments: N/A
Weather Conditions: CLOUDY, HUMID, 85°F
Visitors: N/A

By (Signature): [signature] Title: Project Scientist
Print Name: Joe Ozog, Jr. Date: 7/11/03

Low Flow Parameters

Client GEN. CHEM.

Site CLAYMONT, DE

Well ID MW-104

Date 7/11/03

Time (min)	Temp (C)	DO (mg/L)	ORP (mV)	Cond uohms/cm	pH (su)	Turbidity NTU ~~(visual)~~	W.Level (ft btic)	Flow (ml/min)	Time (hr:min)
0	18.84	3.02	-23	1500	6.22	>999.0	6.39	175	0908
5	19.10	1.60	-31	1470	6.34	>999.0	6.43	350	0913
10	19.27	0.60	-43	1550	6.47	566.0	6.47	350	0918
15	19.22	0.23	-48	1660	6.53	383.0	6.48	350	0923
20	19.22	0.02	-51	1790	6.59	260.0	6.49	350	0928
25	19.29	0.00	-51	1880	6.62	180.0	6.49	350	0933
30	19.32	0.00	-51	1900	6.62	160.0	6.49	350	0938
35	19.34	0.00	-51	1930	6.63	117.0	6.49	350	0943
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Earth Sciences Consultants, Inc.
Well Evacuation/Water Sampling Report
(If monitoring point is dry, complete applicable portions of form)

Client I.D.: GENERAL CHEM. Project Location: CLAYMONT, DE
Project No.: 5455B-03 Sample Location/I.D.: MW-1'05

EVACUATION DATA

General Data

Date: 7/8/03 Initial Water Level: 8.09'
Evacuation Time: 1137-1345 Measurement ref. point: TOC ____ TIC X ground ____

Evacuated by: JJO Reference point stickup (ft): 0.00
Evacuation method: PUMP Total well depth (D) (from ref. Point): 17.9
Time pumping began: 1152 Radius of well (r) (ft): 0.0833
Time Pumping ended: 1317 Gallons per foot ($G=\pi r^2 \times 7.48$): 0.163
Total pumping time (min): 85 Well Volume (gal): 1.6
Pumping Rate (GPM): — Total gallons removed: 5.0
Well volumes removed: 3.1
(SEE Low-Flow Form) 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 ____
	SEE		LOW		FLOW		FORM		

Field Observations

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

Comments: N/A
Weather Conditions: SUNNY, BREEZY, HOT, HUMID, 92°F
Visitors: N/A

By (Signature): [signature] Title: Project Scientist
Print Name: Joseph J. Ozog, Jr. Date: 7/8/03

SAMPLING DATA

General Data

Sample Location/I.D.: MW-105 & MW-105 FIELD DUP
Sample Date: 7/8/03
Time Collected: 1232
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 TEFLON-LINED TUBING
Dedicated: (Y) N TUBING ONLY

Field Observations

Water level prior to sample collection (Ft. from specified ref. Point): 8.26
Depth Sampled (Ft. from specified ref. Point): ~16.0
Sample Types: VOC's, SVOC's, HERB., PEST., T&D. METALS, CYANIDE, & PH
Turbidity: None X Low____ Moderate____ High____
Odor: None____ Weak X Moderate____ Strong____ / Type: PETROLEUM
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)	Temp. (C)	ORP (mv)	DO (mg/l)	Turbidity (NTU)	Other ____	Other ____
5.26	3472	20.8	32	1.28	25.9		
5.18	3489	19.2	38	0.95	28.5		
5.15	3492	19.2	42	1.07	19.5		

Instrument Calibration (describe instruments calibrated (including brand/model), time, and method SEE FIELD BOOK
Comments: N/A
Weather Conditions: SUNNY, HOT, HUMID, 94°F
Visitors: N/A

By (Signature): [signature] Title: Project Scientist
Print Name: Joseph J. Ozog, Jr. Date: 7/8/03

Low Flow Parameters

Client GEN. CHEM.

Site CLAYMONT, DE

Well ID MW-105

Date 7/8/03

Time (min)	Temp (C)	DO (mg/L)	ORP (mV)	Cond uohms/cm	pH (su)	Turbidity (visual)	W.Level (ft btic)	Flow (ml/min)	Time (hr:min)
0	18.36	4.96	-27	2810	5.88	>999.0	8.31	500	1152
5	18.49	4.03	-28	3310	5.34	>999.0	8.31	425	1157
10	18.79	3.51	-25	3440	5.27	585.0	8.30	450	1202
15	18.90	3.57	-15	3530	5.17	371.0	~~8.30~~ 8.27	~~425~~ 350	1207
20	19.50	3.29	-5	3570	5.07	275.0	8.25	350	1212
25	19.41	3.35	9	3580	5.07	216.0	8.25	350	1217
30	19.07	2.91	22	3570	5.07	157.0	8.24	350	1222
35	19.13	2.73	25	3580	5.05	128.0	8.24	350	1227
40	19.08	2.53	26	3580	5.04	152.0	8.23	350	1232
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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.: MW-106

EVACUATION DATA

General Data

Date: 7/17/03
Evacuation Time: ~~1035~~ 0925 – 1110
Evacuated by: JJO
Evacuation method: PUMP
Time pumping began: 0936
Time Pumping ended: 1107
Total pumping time (min): ____
Pumping Rate (GPM): —
(SEE LOW-FLOW FORM)

Initial Water Level: ~~5.11'~~ 5.37'
Measurement ref. point: TOC ____ TIC X ground ____
Reference point stickup (ft): ____
Total well depth (D) (from ref. Point): ____
Radius of well (r) (ft): 0.0833
Gallons per foot ($G=\pi r^2 x 7.48$): 0.163
Well Volume (gal): ____
Total gallons removed: 4.0
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 ____
SEE LOW-FLOW FORM									

Field Observations

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

Comments: N/A
Weather Conditions: ~~CLOUDY, HUMID,~~ SUNNY, WARM, LESS HUMID, 80°F
Visitors: N/A

By (Signature): [signature] Title: Project Scientist
Print Name: Joe Ozog, Jr. Date: 7/17/03

SAMPLING DATA

General Data

Sample Location/I.D.: MW-106, MW-106 MS, MW-106 MSD, & MW-106 LAB. DUP.
Sample Date: 7/17/03
Time Collected: 1028
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 TEFLON-LINED TUBING
Dedicated: (Y) N TUBING ONLY

Field Observations

Water level prior to sample collection (Ft. from specified ref. Point): 5.53
Depth Sampled (Ft. from specified ref. Point): ____
Sample Types: VOC's, SVOC's, PEST., HERB., T&D METALS, CYANIDE, pH
Turbidity: None____ Low X Moderate____ High____
Odor: None____ Weak____ Moderate X Strong____ / Type: ACID / SOLVENT
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 ____	Other ____
5.02	2194	20.4	129	1.12	401		
5.08	2372	19.9	118	1.14	361		
5.06	2375	20.2	113	1.26	377		
5.04	2382	20.1	112	1.29	352		

Instrument Calibration (describe instruments calibrated (including brand/model), time, and method SEE FIELD BOOK
Comments: N/A
Weather Conditions: SUNNY, WARM, LESS HUMID, 80°F
Visitors: N/A

By (Signature): [signature] Title: Project Scientist
Print Name: Joe Ozog, Jr. Date: 7/17/03

Low Flow Parameters

Client GEN. CHEM.

Site CLAYMONT, DE

Well ID MW-106

Date 7/11/03

Time (min)	Temp (C)	DO (mg/L)	ORP (mV)	Cond uohms/cm	pH (su)	Turbidity NTU ~~(visual)~~	W.Level (ft btic)	Flow (ml/min)	Time (hr:min)
0	19.96	3.42	66	1780	5.53	7999.0	5.47	300	0938
5	19.55	0.23	67	1840	5.05	7999.0	5.51	300	0943
10	19.87	0.00	66	1890	5.04	904.0	5.53	400	0948
15	19.93	0.47	55	2210	5.12	7999.0	5.50	325	0953
20	20.01	1.54	53	2290	5.15	7999.0	5.50	300	0958
25	20.15	2.48	53	2360	5.19	7999.0	5.51	300	1003
30	20.19	3.11	51	2410	5.22	7999.0	5.51	300	1008
35	20.32	3.56	50	2480	5.26	915.0	5.52	300	1013
40	20.36	3.70	49	2530	5.29	707.0	5.53	300	1018
45	20.36	3.73	49	2540	5.30	598.0	5.53	300	1023
50	20.41	3.71	48	2580	5.32	476.0	5.53	300	1028
55									
60									
65									
70									
75									
80									

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: CLAYMONT, DE
Sample Location/I.D.: MW-10'7

EVACUATION DATA

General Data

Date: 7/16/03
Evacuation Time: 1508-1626
Evacuated by: JJO/CMT
Evacuation method: pump
Time pumping began: 1529
Time Pumping ended: 1626
Total pumping time (min): 57
Pumping Rate (GPM): —
(SEE LOW-FLOW FORM)

Initial Water Level: 8.95'
Measurement ref. point: TOC ____ TIC X ground ____
Reference point stickup (ft): 2.27
Total well depth (D) (from ref. Point): 18.27
Radius of well (r) (ft): 0.0833
Gallons per foot ($G=\pi r^2 \times 7.48$): 0.163
Well Volume (gal): 1.5
Total gallons removed: 2.5
Well volumes removed: 1.7
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 ____
	SEE LOW-FLOW FORM								

Field Observations

Odor: None ____ Weak ____ Moderate ____ Strong X / Type: PAINT/SOLVENT/OIL
Immiscible Layers: (Y) N /LNAPL____; DNAPL____/Thickness____/
Description: HEAVY SHEEN (OIL) ~0.01' THICK TO 0.02' THICK
Color: CLOUDY
Well condition (describe any damage): N/A

Comments: N/A
Weather Conditions: SUNNY, WINDY, HOT, HUMID, 88°F
Visitors: N/A

By (Signature): [signature]
Print Name: Joe Ozog, Jr.
Title: Project Scientist
Date: 7/16/03

SAMPLING DATA

General Data

Sample Location/I.D.: MW-107
Sample Date: 7/16/03
Time Collected: 1557
Collected by: JJO/CMJ
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 TEFLON-LINED TUBING
Dedicated: (Y) N TUBING ONLY

Field Observations

Water level prior to sample collection (Ft. from specified ref. Point): 10.21
Depth Sampled (Ft. from specified ref. Point): ~15.0
Sample Types: VOC's, SVOC's, PEST., HERB., TOTAL METALS, CYANIDE, & pH
Turbidity: None____ Low X Moderate____ High____
Odor: None____ Weak____ Moderate____ Strong X / Type: PAINT/SOLVENT/OIL
Immiscible Layers: (Y) N /LNAPL____; DNAPL____ /Thickness____ /
Description: HEAVY SHEEN
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 ____	Other ____
3.54	6136	20.4	163	0.82	79.7		
3.52	6178	20.1	158	0.78	88.4		
3.56	6314	19.9	154	0.70	94.6		

Instrument Calibration (describe instruments calibrated (including brand/model), time, and method SEE FIELD BOOK
Comments: N/A
Weather Conditions: SUNNY, WINDY, HOT, HUMID, 85°F
Visitors: N/A

By (Signature): [signature] Title: Project Scientist
Print Name: Joe Ozog, Jr. Date: 7/16/03

Low Flow Parameters

Client GEN. CHEM.

Site CLAYMONT, DE

Well ID MW-107

Date 7/16/03

Time (min)	Temp (C)	DO (mg/L)	ORP (mV)	Cond uohms/cm	pH (su)	Turbidity NTU ~~(visual)~~	W.Level (ft btic)	Flow (ml/min)	Time (hr:min)
0	18.93	0.95	60	6650	3.40	>999.0	10.05	300	1532
5	18.97	0.27	66	6630	3.35	911.0	10.17	300	1537
10	20.20	0.03	69	6530	3.35	443.0	10.28	275	1542
15	20.38	0.00	70	6540	3.37	262.0	10.24	275	1547
20	20.37	0.00	71	6570	3.38	216.0	10.22	275	1552
25	20.38	0.00	71	6650	3.39	181.0	10.21	275	1557
30									
35									
40									
45									
50									
55									
60									
65									
70									
75									
80									

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.: MW-108

EVACUATION DATA

General Data

Date: 7/14/03 Initial Water Level: 7.05
Evacuation Time: 1120 – 1255 Measurement ref. point: TOC ____ TIC X ground ____

Evacuated by: JJO Reference point stickup (ft): 2.31
Evacuation method: PUMP Total well depth (D) (from ref. Point): 17.17
Time pumping began: 1216 Radius of well (r) (ft): 0.0833
Time Pumping ended: 1220 Gallons per foot ($G=\pi r^2 x 7.48$): 0.163
Total pumping time (min): 54 Well Volume (gal): 1.6
Pumping Rate (GPM): — Total gallons removed: ~3.5
(SEE LOW-FLOW FORM) 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)	Temp. (C)	ORP (mv)	DO (mg/l)	Turbidity (____)	Other ____	Other ____
SEE LOW FLOW FORM									

Field Observations

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

Comments: N/A
Weather Conditions: CLOUDY, SLIGHT HUMID, 82°F
Visitors: N/A

By (Signature): [signature] Title: Project Scientist
Print Name: Joseph A. Ozog, Jr. Date: 7/14/03

SAMPLING DATA

General Data

Sample Location/I.D.: MW-108 & MW-108 DUP.
Sample Date: 7/11/03
Time Collected: 1158
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 TEFLON-LINED TUBING
Dedicated: (Y) N TUBING ONLY

Field Observations

Water level prior to sample collection (Ft. from specified ref. Point): 7.12
Depth Sampled (Ft. from specified ref. Point): ~14.0
Sample Types: VOC's, SVOC's, PEST., HERB., T&D METALS, CYANIDE, pH
Turbidity: None X Low____ Moderate____ High____
Odor: None____ Weak____ Moderate X Strong____ / Type: PETROLEUM
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)	Temp. (C)	ORP (mv)	DO (mg/l)	Turbidity (NTU)	Other	Other
5.72	3072	18.1	6	0.89	34.4		
5.58	3068	17.4	10	0.64	34.0		
5.57	2969	17.1	24	0.72	12.9		

Instrument Calibration (describe instruments calibrated (including brand/model), time, and method SEE FIELD BOOK
Comments: N/A
Weather Conditions: CLOUDY, HUMID (SLIGHT), 82°F
Visitors: N/A

By (Signature): [signature] Title: Project Scientist
Print Name: Joe Ozog, Jr. Date: 7/14/03

Low Flow Parameters

Client GEN. CHEM.

Site CLAYMONT, DE

Well ID MW-108

Date 7/14/03

Time (min)	Temp (C)	DO (mg/L)	ORP (mV)	Cond uohms/cm	pH (su)	Turbidity (visual)	W.Level (ft btic)	Flow (ml/min)	Time (hr:min)
0	17.43	2.21	-43	3880	5.75	7999.0	7.10	425	1128
5	18.01	0.28	-40	3810	5.79	7999.0	7.13	425	1133
10	16.08	0.00	-26	3580	5.64	719.0	7.10	400	1138
15	18.48	0.00	-26	3540	5.65	614.0	7.11	400	1143
20	18.39	0.00	-24	3480	5.63	503.0	7.11	400	1148
25	18.10	0.00	-23	3500	5.63	246.0	7.11	400	1153
30	17.96	0.00	-22	3470	5.61	189.0	7.12	400	1158
35									
40									
45									
50									
55									
60									
65									
70									
75									
80									

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.: MW-109

EVACUATION DATA

General Data

Date: 7/14/03 1440 Initial Water Level: 7.21
Evacuation Time: 1255 - ~~1405~~ Measurement ref. point: TOC ____ TIC X ground ____

Evacuated by: JJO Reference point stickup (ft): 0.00
Evacuation method: PUMP Total well depth (D) (from ref. Point): 16.83
Time pumping began: 1323 Radius of well (r) (ft): 0.0833
Time Pumping ended: 1403 Gallons per foot ($G=\pi r^2 x 7.48$): 0.163
Total pumping time (min): 40 Well Volume (gal): 1.6
Pumping Rate (GPM): — Total gallons removed: ~4.0
(SEE LOW-FLOW FORM) Well volumes removed: 2.5
Evacuated to dryness: Y (N)

Stabilization Data
(measure for each well volume evacuated)

Time (min)	Volume Removed (gal)	pH (SU)	Sp. Cond. (µmho/cm)	Temp. (C)	ORP (mv)	DO (mg/l)	Turbidity (____)	Other ____	Other ____
SEE LOW-FLOW FORM									

Field Observations

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

Comments: N/A
Weather Conditions: SUNNY, HUMID (SLIGHT), 84°F
Visitors: N/A

By (Signature): [signature] Title: Project Scientist
Print Name: Joe Ozog, Jr. Date: 7/14/03

SAMPLING DATA

General Data

Sample Location/I.D.: MW-109
Sample Date: 7/11/03
Time Collected: 1349
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 TEFLON-LINED TUBING
Dedicated: (Y) N TUBING ONLY

Field Observations

Water level prior to sample collection (Ft. from specified ref. Point): 7.23
Depth Sampled (Ft. from specified ref. Point): ~14.0
Sample Types: VOC's, SVOC's, PEST., HERB., T&D. METALS, CYANIDE, pH
Turbidity: None X Low____ Moderate____ High____
Odor: None____ Weak____ Moderate X Strong____ / Type: PETROLEUM
Immiscible Layers: (Y) N /LNAPL____; DNAPL____ /Thickness____ /
Description: SLIGHT SHEEN W/ OIL DROPLETS
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 ____	Other ____
5.29	2260	18.9	55	0.67	32.1		
5.19	2275	17.6	56	0.59	37.4		
5.16	2273	17.8	51	0.51	28.6		
4.99	2276	17.4	48	0.48	15.4		

Instrument Calibration (describe instruments calibrated (including brand/model), time, and method SEE FIELD BOOK
Comments: N/A
Weather Conditions: SUNNY, SLIGHTLY WARM, 84°F
Visitors: N/A

By (Signature): [signature] Title: Project Scientist
Print Name: Jod Ozol, Jr. Date: 7/14/03

Low Flow Parameters

Client GEN. CHEM

Site CLAYMONT, DE

Well ID MW-109

Date 7/14/03

Time (min)	Temp (C)	DO (mg/L)	ORP (mV)	Cond uohms/cm	pH (su)	Turbidity NTU ~~(visual)~~	W.Level (ft btic)	Flow (ml/min)	Time (hr:min)
0	18.38	1.96	-0	2550	5.44	994.0	7.21	300	1324
5	18.12	0.24	-4	2520	5.38	317.0	7.22	400	1329
10	17.87	0.00	-5	2520	5.40	137.0	7.22	450	1334
15	17.94	0.00	-6	2510	5.42	110.0	7.22	450	1339
20	17.86	0.00	-7	2510	5.45	91.6	7.23	450	1344
25	17.79	0.00	-7	2500	5.46	71.9	7.23	450	1349
30									
35									
40									
45									
50									
55									
60									
65									
70									
75									
80									

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: CLAYMONT, DE
Sample Location/I.D.: MW-110

EVACUATION DATA

General Data

Date: 7/14/03
Evacuation Time: 1508-1645
Evacuated by: JJO
Evacuation method: Pump
Time pumping began: 1536
Time Pumping ended: 1618
Total pumping time (min): 42
Pumping Rate (GPM): —
(SEE LOW-FLOW FORM)

Initial Water Level: 5.68'
Measurement ref. point: TOC ____ TIC X ground ____
Reference point stickup (ft): 0.00
Total well depth (D) (from ref. Point): 14.88
Radius of well (r) (ft): 0.0833
Gallons per foot ($G=\pi r^2 x 7.48$): 0.163
Well Volume (gal): 1.5
Total gallons removed: ~4.0
Well volumes removed: 2.7
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 ____
	SEE		LOW-		FLOW		FORM		

Field Observations

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

Comments: N/A
Weather Conditions: SUNNY, WINDY, SLIGHT HUMIDITY, 83°F
Visitors: N/A

By (Signature): [signature]
Print Name: JOE OZOG, JR
Title: Project Scientist
Date: 7/14/03

SAMPLING DATA

General Data

Sample Location/I.D.: MW-110
Sample Date: 7/14/03
Time Collected: 1603
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 TEFLON-LINED TUBING
Dedicated: (Y) N TUBING ONLY

Field Observations

Water level prior to sample collection (Ft. from specified ref. Point): 5.69
Depth Sampled (Ft. from specified ref. Point): ~13.0
Sample Types: VOC's, SVOC's, PEST., HERB., T&D METALS, CYANIDE, & pH
Turbidity: None X Low____ Moderate____ High____
Odor: None____ Weak X Moderate____ Strong____ / Type: PETROLEUM
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 ____	Other ____
5.71	2598	18.6	48	0.64	4.68		
5.75	2612	17.5	34	0.83	9.29		
5.82	2607	17.5	25	0.58	3.70		
5.98	2610	17.4	21	0.59	3.22		

Instrument Calibration (describe instruments calibrated (including brand/model), time, and method SEE FIELD BOOK
Comments: N/A
Weather Conditions: P. SUNNY, WARM, SLIGHT HUMIDITY, WINDY, 83°F
Visitors: N/A

By (Signature): [signature] Title: Project Scientist
Print Name: Joseph J. Ozaytt Date: 7/14/03

Low Flow Parameters

Client GEN. CHEM.
Site CLAYMONT, DE
Well ID MW-110
Date 7/14/03

Time (min)	Temp (C)	DO (mg/L)	ORP (mV)	Cond uohms/cm	pH (su)	Turbidity NTU ~~(visual)~~	W.Level (ft btic)	Flow (ml/min)	Time (hr:min)
0	17.53	1.60	-13	3040	6.26	>999.0	5.69	400	1538
5	17.16	0.14	-13	2920	6.40	535.0	5.69	425	1543
10	17.22	0.00	-12	2880	6.39	152.0	5.69	450	1548
15	17.14	0.00	-12	2860	6.39	66.2	5.69	450	1553
20	17.18	0.00	-12	2840	6.40	40.6	5.69	450	1558
25	17.20	0.00	-12	2840	6.40	36.6	5.69	450	1603
30									
35									
40									
45									
50									
55									
60									
65									
70									
75									
80									

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.: MW-111

EVACUATION DATA

General Data

Date: 7/16/03 Initial Water Level: 6.86'
Evacuation Time: 1015-1155 Measurement ref. point: TOC ____ TIC X ground ____

Evacuated by: JJO/CMJ Reference point stickup (ft): 1.68
Evacuation method: Pump Total well depth (D) (from ref. Point): 17.40
Time pumping began: 1027 Radius of well (r) (ft): 0.0833
Time Pumping ended: 1139 Gallons per foot ($G=\pi r^2 x 7.48$): 0.163
Total pumping time (min): 72 Well Volume (gal): 1.7
Pumping Rate (GPM): — Total gallons removed: ~4.5
Well volumes removed: 2.6
(SEE LOW-FLOW FORM) 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 ____
SEE LOW-FLOW FORM									

Field Observations

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

Comments: N/A
Weather Conditions: CLOUDY, HUMID, 82°F
Visitors: N/A

By (Signature): [signature] Title: Project Scientist
Print Name: Joe Ozog, Jr. Date: 7/16/03

SAMPLING DATA

General Data

Sample Location/I.D.: MW-111 & MW-111 FIELD DUP.
Sample Date: 7/16/03
Time Collected: 1104
Collected by: JJO / CMJ
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 TEFLON-LINED TUBING
Dedicated: (Y) N TUBING ONLY

Field Observations

Water level prior to sample collection (Ft. from specified ref. Point): 7.01
Depth Sampled (Ft. from specified ref. Point): ~15.0
Sample Types: VOC's, SVOC's, PEST., HERB., T&D. METALS, CYANIDE, pH
Turbidity: None X Low____ Moderate____ High____
Odor: None____ Weak____ Moderate X Strong____ / Type: PETROLEUM
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 ____	Other ____
6.13	2881	18.9	-24	0.93	37.8		
6.14	2896	17.6	-28	0.78	15.9		
6.05	2901	17.5	-24	0.98	13.2		
6.04	2892	18.2	-19	0.99	9.6		

Instrument Calibration (describe instruments calibrated (including brand/model), time, and method SEE FIELD BOOK
Comments: N/A
Weather Conditions: CLOUDY, HUMID, BREEZY, 85°F
Visitors: N/A

By (Signature): [signature] Title: Project Scientist
Print Name: Joe Ozog, Jr. Date: 7/16/03

Low Flow Parameters

Client GEN. CHEM.

Site CLAYMONT, DE

Well ID MW-111

Date 7/16/03

Time (min)	Temp (C)	DO (mg/L)	ORP (mV)	Cond uohms/cm	pH (su)	Turbidity NTU (~~visual~~)	W.Level (ft btic)	Flow (ml/min)	Time (hr:min)
0	19.46	1.47	-63	3280	6.72	>999.0	6.98	450	1029
5	18.04	0.45	-68	3290	6.18	705.0	7.00	450	1034
10	18.06	1.40	-65	3280	6.15	342.0	7.01	400	1039
15	17.89	3.48	-59	3290	6.14	80.8	7.03	475	1044
20	18.00	4.30	-58	3290	6.19	47.2	7.01	450	1049
25	18.00	5.02	-57	3280	6.13	36.3	7.01	450	1054
30	18.10	5.50	-57	3280	6.14	19.7	7.01	450	1059
35	18.12	5.80	-56	3280	6.14	14.4	7.01	450	1104
40									
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80									

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: CLAYMONT, DE
Sample Location/I.D.: MW-112

EVACUATION DATA

General Data

Date: 7/17/03
Evacuation Time: 0745-0911
Evacuated by: JJO/CMJ
Evacuation method: Pump
Time pumping began: 0757
Time Pumping ended: 0855
Total pumping time (min): 58
Pumping Rate (GPM): —
(SEE LOW-FLOW FORM)

Initial Water Level: 5.63
Measurement ref. point: TOC ____ TIC X ground ____
Reference point stickup (ft): 0.00
Total well depth (D) (from ref. Point): 15.91
Radius of well (r) (ft): 0.0833
Gallons per foot ($G=\pi r^2 x 7.48$): 0.163
Well Volume (gal): 1.7
Total gallons removed: 3.0
Well volumes removed: 1.8
Evacuated to dryness: Y (N)

Stabilization Data
(measure for each well volume evacuated)

Time (min)	Volume Removed (gal)	pH (SU)	Sp. Cond. (µmho/cm)	Temp. (C)	ORP (mv)	DO (mg/l)	Turbidity (____)	Other ____	Other ____
SEE LOW-FLOW FORM									

Field Observations

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

Comments: N/A
Weather Conditions: SUNNY, WARM, LESS HUMID, 72°F
Visitors: N/A

By (Signature): [signature]
Print Name: Joe Orag, Jr.
Title: Project Scientist
Date: 7/17/03

SAMPLING DATA

General Data

Sample Location/I.D.: MW-112 & MW-112 FIELD DUP.
Sample Date: 7/17/03
Time Collected: 0834
Collected by: JJO / CMJ
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 TEFLON-LINED TUBING
Dedicated: (Y) N TUBING ONLY

Field Observations

Water level prior to sample collection (Ft. from specified ref. Point): 6.32
Depth Sampled (Ft. from specified ref. Point): ____
Sample Types: VOC's, SVOC's, PEST., HERB., T & D METALS, CYANIDE, pH
Turbidity: None ____ Low X Moderate ____ High ____
Odor: None ____ Weak ____ Moderate ____ Strong X / Type: PETROLEUM
Immiscible Layers: (Y) N /LNAPL ____; DNAPL ____ /Thickness ____ /
Description: SHEEN
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 ____	Other ____
6.41	1447	21.7	-76	1.39	70.8		
6.39	1291	21.2	-72	0.73	48.1		
6.36	1325	21.2	-73	0.76	42.0		

Instrument Calibration (describe instruments calibrated (including brand/model), time, and method SEE FIELD BOOK
Comments: N/A
Weather Conditions: SUNNY, WARM, LESS HUMID, 72°F
Visitors: N/A

By (Signature): [signature] Title: Project Scientist
Print Name: Joe Ozog, Jr. Date: 7/17/03

Low Flow Parameters

Client: GEN. CHEM.

Site: CLAYMONT, DE

Well ID: MW-112

Date: 7/17/03

Time (min)	Temp (C)	DO (mg/L)	ORP (mV)	Cond uohms/cm	pH (su)	Turbidity NTU ~~(visual)~~	W.Level (ft btic)	Flow (ml/min)	Time (hr:min)
0	21.11	1.78	-156	1060	7.04	>999.0	6.06	250	0759
5	21.15	0.00	-147	1120	6.39	>999.0	6.19	375	0804
10	21.75	0.00	-144	1330	6.36	>999.0	6.27	375	0809
15	21.62	0.00	-141	1440	6.41	554.0	6.34	375	0814
20	21.71	0.00	-137	1510	6.47	276.0	6.35	375	0819
25	21.69	0.00	-136	1570	6.54	428.0	6.32	325	0824
30	21.62	0.00	-134	1580	6.55	160.0	6.33	325	0829
35	21.74	0.00	-133	1590	6.56	88.9	6.32	325	0834
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75									
80									

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: 7/15/03
Initial Water Level: 11.35'
Evacuation Time: 0755-1000
Measurement ref. point: TOC ____ TIC X ground ____
Evacuated by: JJO
Reference point stickup (ft): 2.45
Evacuation method: pump
Total well depth (D) (from ref. Point): 22.77
Time pumping began: 0816
Radius of well (r) (ft): 0.0833
Time Pumping ended: 0929
Gallons per foot ($G=\pi r^2 \times 7.48$): 0.163
Total pumping time (min): 73
Well Volume (gal): 1.9
Pumping Rate (GPM): —
Total gallons removed: 5.0
Well volumes removed: 2.6
(SEE LOW-FLOW FORM)
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 ____
	SEE LOW-FLOW FORM								

Field Observations

Odor: None ____ Weak ____ Moderate ____ Strong X / Type: PETROLEUM (OIL)
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, WARM, HUMID, 86°F
Visitors: N/A

By (Signature): [signature]
Title: Project Scientist
Print Name: Joe Ozog, Jr.
Date: 7/15/03

SAMPLING DATA

General Data

Sample Location/I.D.: MW-113 & MW-113 FIELD DUP.
Sample Date: 7/15/03
Time Collected: 0849
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 TEFLON-LINED TUBING
Dedicated: (Y) N TUBING ONLY

Field Observations

Water level prior to sample collection (Ft. from specified ref. Point): 11.39
Depth Sampled (Ft. from specified ref. Point): ~19.0
Sample Types: VOC's, SVOC's, PEST., HERBS, T+D METALS, CYANIDE, & pH
Turbidity: None____ Low____ Moderate____ High____
Odor: None____ Weak____ Moderate____ Strong X / Type: PETROLEUM
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)	Temp. (C)	ORP (mv)	DO (mg/l)	Turbidity (NTU)	Other ____	Other ____
5.63	6814	17.1	-52	1.84	36.5		
5.68	6867	15.9	-69	0.87	40.6		
5.65	6874	15.6	-70	0.96	23.9		

Instrument Calibration (describe instruments calibrated (including brand/model), time, and method SEE FIELD BOOK
Comments: N/A
Weather Conditions: SUNNY, HUMID, 86°F
Visitors: N/A

By (Signature): [signature] Title: Project Scientist
Print Name: Joe Ozog, Jr. Date: 7/15/03

Low Flow Parameters

Client GEN. CHEM.

Site CLAYMONT, DE

Well ID MW-113

Date 7/15/03

Time (min)	Temp (C)	DO (mg/L)	ORP (mV)	Cond uohms/cm	pH (su)	Turbidity NTU ~~(visual)~~	W.Level (ft btic)	Flow (ml/min)	Time (hr:min)
0	17.36	2.64	-40	12500	5.20	>999.0	11.36	325	0819
5	16.93	0.84	-52	13000	5.37	>999.0	11.37	350	0824
10	15.60	0.00	-62	7550	5.48	530.0	11.38	350	0829
15	15.68	0.00	-60	7470	5.47	302.0	11.38	375	0834
20	15.67	0.06	-58	7430	5.47	167.0	11.38	375	0839
25	15.82	0.04	-57	7420	5.47	136.0	11.38	375	0844
30	15.88	0.03	-57	7420	5.48	98.1	11.39	375	0849
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70									
75									
80									

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.: MW-114

EVACUATION DATA

General Data

Date: 7/10/03 Initial Water Level: 6.87'
Evacuation Time: 1455-1630 Measurement ref. point: TOC ____ TIC X ground ____

Evacuated by: JJO Reference point stickup (ft): 2.29
Evacuation method: Pump Total well depth (D) (from ref. Point): 22.46
Time pumping began: 1514 Radius of well (r) (ft): 0.0833
Time Pumping ended: 1601 Gallons per foot ($G=\pi r^2 \times 7.48$): 0.163
Total pumping time (min): 47 Well Volume (gal): 2.5
Pumping Rate (GPM): — Total gallons removed: ~4.0
(SEE LOW-FLOW FORM) Well volumes removed: 1.6
Evacuated to dryness: Y (N)

Stabilization Data
(measure for each well volume evacuated)

Time (min)	Volume Removed (gal)	pH (SU)	Sp. Cond. (µmho/cm)	Temp. (C)	ORP (mv)	DO (mg/l)	Turbidity (____)	Other ____	Other ____
SEE LOW-FLOW FORM									

Field Observations

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

Comments: N/A
Weather Conditions: CLOUDY, WARM, 80°F
Visitors: N/A

By (Signature): [signature] Title: Project Scientist
Print Name: Joseph J. Ozog, Jr. Date: 7/10/03

SAMPLING DATA

General Data

Sample Location/I.D.: MW-114
Sample Date: 7/10/03
Time Collected: 1545
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 TEFLON-LINED TUBING
Dedicated: (Y) N TUBING ONLY

Field Observations

Water level prior to sample collection (Ft. from specified ref. Point): 6.90
Depth Sampled (Ft. from specified ref. Point): ~18.0
Sample Types: VOC's, SVOC's, PEST., HERB., T&D METALS, CYANIDE, pH
Turbidity: None____ Low X Moderate____ High____
Odor: None____ Weak X Moderate____ Strong____ / Type: ACID/CHEMICAL
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 ____	Other ____
4.25	5346	17.5	209	1.76	244		
4.23	5431	17.2	209	0.74	253		
4.01	5382	18.0	221	0.56	136		

Instrument Calibration (describe instruments calibrated (including brand/model), time, and method SEE FIELD BOOK
Comments: N/A
Weather Conditions: CLOUDY, BREEZY, WARM, 79°F
Visitors: N/A

By (Signature): [signature] Title: Project Scientist
Print Name: Joseph J. Orag, Jr Date: 7/10/03

Low Flow Parameters

Client GEN. CHEM.

Site CLAYMONT, DE

Well ID MW-114

Date 7/10/03

Time (min)	Temp (C)	DO (mg/L)	ORP (mV)	Cond uohms/cm	pH (su)	Turbidity NTU ~~(visual)~~	W.Level (ft btic)	Flow (ml/min)	Time (hr:min)
0	17.79	1.44	112	5370	5.25	>999.0	6.92	400	1515
5	18.19	0.00	107	5500	4.82	>999.0	6.90	400	1520
10	18.21	0.00	102	5610	4.68	>999.0	6.91	400	1525
15	18.35	0.00	97	5720	4.59	823.0	6.90	400	1530
20	18.60	0.00	93	5740	4.56	629.0	6.90	400	1535
25	18.64	0.00	92	5770	4.55	518.0	6.90	400	1540
30	18.69	0.00	91	5780	4.52	450.0	6.90	400	1545
35									
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80									

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.: MW-115

EVACUATION DATA

General Data

Date: 7/17/03
Evacuation Time: 1150 – 1337
Evacuated by: JJO/CMJ
Evacuation method: Pump
Time pumping began: 1214
Time Pumping ended: 1305
Total pumping time (min): 51
Pumping Rate (GPM): —

Initial Water Level: 7.12' PROD. 8.88' H_2O
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 ($G=\pi r^2 x 7.48$): 0.163
Well Volume (gal): 1.5
Total gallons removed: 3.5
Well volumes removed: 2.3
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 ____
SEE LOW FLOW FORM									

Field Observations

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

Comments: N/A
Weather Conditions: SUNNY, WARM, LESS HUMID, 84°F
Visitors: N/A

By (Signature): [signature] Title: Project Scientist
Print Name: Joe Ocog, Jr. Date: 7/17/03

SAMPLING DATA

General Data

Sample Location/I.D.: MW-115
Sample Date: 7/17/03
Time Collected: 1251
Collected by: JJO/CMJ
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 TEFLON-LINED TUBING
Dedicated: (Y) N TUBING ONLY

Field Observations

Water level prior to sample collection (Ft. from specified ref. Point): 9.18
Depth Sampled (Ft. from specified ref. Point): ____
Sample Types: VOC's, SVOC's, PEST., HERB., T+D METALS, CYANIDE, pH
Turbidity: None____ Low____ Moderate X High____
Odor: None____ Weak____ Moderate____ Strong X / Type: PETROLEUM
Immiscible Layers: (Y) N /LNAPL____; DNAPL____ /Thickness____ /
Description: KEROSENE SHEEN
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 ____	Other ____
5.87	12440	20.7	66	0.89	538		
5.89	12230	20.4	51	0.76	492		
5.88	12370	20.3	48	0.92	490		

Instrument Calibration (describe instruments calibrated (including brand/model), time, and method SEE FIELD BOOK
Comments: N/A
Weather Conditions: SUNNY, WARM, LESS HUMID, 85°F
Visitors: N/A

By (Signature): [signature] Title: Project Scientist
Print Name: Joe Orag, Jr. Date: 7/17/03

Low Flow Parameters

Client: GEN. CHEM.

Site: CLAYMONT, DE

Well ID: MW-115

Date: 7/17/03

Time (min)	Temp (C)	DO (mg/L)	ORP (mV)	Cond uohms/cm	pH (su)	Turbidity NTU ~~(visual)~~	W.Level (ft btic)	Flow (ml/min)	Time (hr:min)
0	23.39	7.50	85	14300	5.77	>999.0	8.67	200	1216
5	23.90	2.05	60	14800	5.99	385.0	8.87	250	1221
10	24.17	1.22	46	14100	6.02	149.0	9.07	300	1226
15	24.17	0.89	37	13,100	6.05	116.0	9.09	300	1231
20	23.67	0.79	32	12,700	6.05	135.0	9.15	400	1236
25	22.64	0.85	26	12600	6.06	102.0	9.16	400	1241
30	22.48	0.92	24	12400	6.06	337.0	9.17	400	1246
35	22.29	0.95	23	12200	6.05	358.0	9.18	400	1251
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80									

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

Client I.D.: GENERAL CHEM. Project Location: CLAYMONT, DE
Project No.: 5455B-03 Sample Location/I.D.: MW-116

EVACUATION DATA

General Data

Date: 7/9/03 Initial Water Level: 9.45'
Evacuation Time: 1251 – 1500 Measurement ref. point: TOC ____ TIC X ground ____
Evacuated by: JJO Reference point stickup (ft): 1.86
Evacuation method: Pump Total well depth (D) (from ref. Point): 18.75
Time pumping began: 1316 Radius of well (r) (ft): 0.0833
Time Pumping ended: 1439 Gallons per foot ($G=\pi r^2 x 7.48$): 0.163
Total pumping time (min): 83 Well Volume (gal): 1.5
Pumping Rate (GPM): — Total gallons removed: ~4.0
Well volumes removed: 2.7
(SEE Low-Flow Form) 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 ____
SEE LOW-FLOW FORM									

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: P. CLOUDY, HOT, HUMID, BREEZY, 85°F
Visitors: N/A

By (Signature): [signature] Title: Project Scientist
Print Name: Joseph J. Ozay, Jr. Date: 7/9/03

SAMPLING DATA

General Data

Sample Location/I.D.: MW-116 & MW-116 FIELD DUP.
Sample Date: 7/9/03
Time Collected: 1354
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 TEFLON-LINED TUBING
Dedicated: (Y) N TUBING ONLY

Field Observations

Water level prior to sample collection (Ft. from specified ref. Point): 10.01'
Depth Sampled (Ft. from specified ref. Point): ~~N/70~~ 16.0
Sample Types: VOC'S, SVOC'S, PEST., HERB., T&D METALS, CYANIDE, pH, DIOXIN/FURAN
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 ____	Other ____
6.06	1385	19.1	53	0.69	116		
5.94	1408	18.5	47	0.81	131		
5.96	1410	19.2	32	0.89	130		

Instrument Calibration (describe instruments calibrated (including brand/model), time, and method SEE FIELD BOOK
Comments: N/A
Weather Conditions: P. CLOUDY, HOT, HUMID, 89°F
Visitors: N/A

By (Signature): [signature] Title: Project Scientist
Print Name: Joseph J. Ozog, Jr. Date: 7/9/03

Low Flow Parameters

Client GEN. CHEM.
Site CLAYMONT, DE
Well ID MW-116
Date 7/9/03

Time (min)	Temp (C)	DO (mg/L)	ORP (mV)	Cond uohms/cm	pH (su)	Turbidity (visual)	W.Level (ft btic)	Flow (ml/min)	Time (hr:min)
0	19.04	7.87	-20	1540	6.00	7999.0	9.81	200	1319
5	19.27	5.95	-22	1570	5.96	7999.0	9.91	250	1324
10	18.70	5.05	-24	1570	5.98	7990.0	10.00	250	1329
15	19.56	4.25	-24	1560	6.00	715.0	9.95	200	1334
20	19.58	3.47	-24	1530	5.97	576.0	9.98	250	1339
25	19.50	2.95	-24	1530	5.96	493.0	9.99	250	1344
30	20.01	2.85	-24	1550	5.98	448.0	10.00	250	1349
35	20.05	2.69	-25	1560	5.99	337.0	10.01	250	1354
40									
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60									
65									
70									
75									
80									

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.: MW-117

EVACUATION DATA

General Data

Date: 7/10/03 Initial Water Level: 4.93'
Evacuation Time: 1050-1250 Measurement ref. point: TOC ____ TIC X ground ____

Evacuated by: JJO Reference point stickup (ft): 0.00
Evacuation method: PUMP Total well depth (D) (from ref. Point): 15.83
Time pumping began: 1107 Radius of well (r) (ft): 0.0833
Time Pumping ended: 1208 Gallons per foot ($G=\pi r^2 \times 7.48$): 0.163
Total pumping time (min): 61 Well Volume (gal): 1.8
Pumping Rate (GPM): — Total gallons removed: ~3.0
Well volumes removed: 1.7
(SEE LOW-FLOW FORM) 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 ____
SEE LOW-FLOW FORM									

Field Observations

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

Comments: N/A
Weather Conditions: CLOUDY, WARM, HUMID, RAIN, 78°F
Visitors: N/A

By (Signature): [signature] Title: Project Scientist
Print Name: Joseph J. Orogi Jr. Date: 7/10/03

SAMPLING DATA

General Data

Sample Location/I.D.: ~~MW~~ MW-117 & MW-117 FIELD DUP
Sample Date: 7/10/03
Time Collected: 1135
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 TEFLON-LINED TUBING
Dedicated: (Y) N TUBING ONLY

Field Observations

Water level prior to sample collection (Ft. from specified ref. Point): 5.20
Depth Sampled (Ft. from specified ref. Point): ~13.0
Sample Types: VOCS, SVOCS, PEST., HERB., T&D METALS, CYANIDE, pH
Turbidity: None____ Low____ Moderate____ High____
Odor: None X Weak____ Moderate____ Strong____ / Type: ____
Immiscible Layers: Y (N)/LNAPL____; DNAPL____ /Thickness____ /
Description: ____
Color: LT. BROWN / CLOUDY

Field Measurements

(Perform replicate measurements if required)

pH (SU)	Sp. Cond. (µmho/cm)	Temp. (C)	ORP (mv)	DO (mg/l)	Turbidity (NTU)	Other ____	Other ____
5.98	1012	17.2	14	1.09	>999		
5.89	1016	17.1	18	1.00	>999		
5.87	1026	16.9	22	0.89	789		
5.99	995.2	17.2	-14	0.82	752		

Instrument Calibration (describe instruments calibrated (including brand/model), time, and method SEE FIELD BOOK
Comments: N/A
Weather Conditions: RAW, WARM, 78°F
Visitors: N/A

By (Signature): [signature] Title: Project Scientist
Print Name: Joseph J. Ozog, Jr. Date: 7/10/03

Low Flow Parameters

Client GEN. CHEM.

Site CLAYMONT, DE

Well ID MW-117

Date 7/10/03

Time (min)	Temp (C)	DO (mg/L)	ORP (mV)	Cond uohms/cm	pH (su)	Turbidity (visual)	W.Level (ft btic)	Flow (ml/min)	Time (hr:min)
0	16.53	1.64	-21	942	5.43	>999.0	5.11	200	1110
5	16.90	0.00	-25	960	5.43	>999.0	5.16	300	1115
10	17.34	0.00	-27	969	5.51	>999.0	5.19	300	1120
15	17.23	0.00	-29	973	5.55	>999.0	5.20	300	1125
20	17.23	0.00	-29	971	5.58	>999.0	5.20	300	1130
25	17.26	0.00	-29	969	5.60	>999.0	5.20	300	1135
30									
35									
40									
45									
50									
55									
60									
65									
70									
75									
80									

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.: SAL-1

EVACUATION DATA

General Data

Date: 7/16/03 Initial Water Level: 7.31'
Evacuation Time: 0745-0935 Measurement ref. point: TOC ____ TIC X ground ____

Evacuated by: JJO/CMJ Reference point stickup (ft): 0.00
Evacuation method: pump Total well depth (D) (from ref. Point): 23.46
Time pumping began: 0803 Radius of well (r) (ft): 0.1667
Time Pumping ended: 0935 Gallons per foot ($G=\pi r^2 x 7.48$): 0.653
Total pumping time (min): 92 Well Volume (gal): 10.5
Pumping Rate (GPM): — Total gallons removed: 2.5
Well volumes removed: 0.2
(SEE LOW-FLOW FORM) 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 ____
SEE LOW-FLOW FORM									

Field Observations

Odor: None X Weak ____ Moderate ____ Strong ____ / Type: ____
Immiscible Layers: Y (N)/LNAPL____; DNAPL____/Thickness____/
Description: ____
Color: CLOUDY
Well condition (describe any damage): WELL NEEDS NEW CAP ON PVC CASING. EXISTING CAP IN POOR CONDITION, DOES NOT SEAL PROPERLY.

Comments: CANNOT KEEP A CONSISTENT FLOW.
Weather Conditions: CLOUDY, HUMID, 80°F
Visitors: N/A

By (Signature): [signature] Title: Project Scientist
Print Name: Joe Ozog, Jr. Date: 7/16/03

SAMPLING DATA

General Data

Sample Location/I.D.: SAL-1
Sample Date: 7/16/03
Time Collected: 0916
Collected by: JJO / CMJ
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 TEFLON-LINED TUBING
Dedicated: (Y) N TUBING ONLY

Field Observations

Water level prior to sample collection (Ft. from specified ref. Point): 9.46
Depth Sampled (Ft. from specified ref. Point): ~18.0
Sample Types: VOC's, SVOC's, PEST., HERB., T & D. METALS, CYANIDE, & pH
Turbidity: None ____ Low X Moderate ____ High ____
Odor: None X 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 ____	Other ____
4.89	1310	21.1	49	1.15	59.7		
4.92	1309	20.9	48	1.10	63.1		
4.96	1292	21.1	56	0.99	70.1		
5.36	1268	21.1	58	0.72	62.2		
5.46	1250	21.1	60	1.25	60.1		

Instrument Calibration (describe instruments calibrated (including brand/model), time, and method SEE FIELD BOOK
Comments: N/A
Weather Conditions: CLOUDY, HUMID, BREEZY,
Visitors: N/A

By (Signature): [signature] Title: Project Scientist
Print Name: Joe Otog, Jr. Date: 7/16/03

Low Flow Parameters

Client GEN. CHEM.

Site CLAYMONT, DE

Well ID SAL-1

Date 7/16/03

Time (min)	Temp (C)	DO (mg/L)	ORP (mV)	Cond uohms/cm	pH (su)	Turbidity NTU ~~(visual)~~	W.Level (ft btic)	Flow (ml/min)	Time (hr:min)
0	19.40	3.56	34	2160	4.64	212.0	7.24	150	0806
5	19.27	0.59	27	4240	4.03	144.0	7.74	150	0811
10	19.82	0.37	23	4280	4.01	129.0	7.93	125	0816
15	20.37	0.53	22	4230	4.02	124.0	8.11	100	0821
20	20.69	2.68	20	4130	4.04	125.0	8.31	100	0826
25	21.07	3.86	20	4010	4.06	120.0	8.39	<100	0831
30	20.89	4.91	19	3880	4.07	111.0	8.55	125	0836
35	20.90	5.26	18	3650	4.09	106.0	8.71	100	0841
40	21.21	5.24	17	3420	4.11	104.0	8.83	100	0846
45	21.38	5.19	16	3150	4.13	93.0	8.89	125	0851
50	21.45	5.02	15	2910	4.18	82.0	9.12	100	0856
55	21.34	4.64	12	2350	4.33	86.6	9.27	100	0901
60	21.70	4.11	10	1890	4.49	64.7	9.35	125	0906
65	21.69	3.81	10	1820	4.47	63.3	9.41	100	0911
70	21.62	3.65	10	1770	4.52	65.2	9.46	125	0916
75									
80									

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

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

EVACUATION DATA

General Data

Date: 7/8/03 Initial Water Level: 6.32'
Evacuation Time: 1345-~~1520~~ 1550 Measurement ref. point: TOC ____ TIC X ground ____
Evacuated by: JJO Reference point stickup (ft): 0.00
Evacuation method: PUMP Total well depth (D) (from ref. Point): 18.2
Time pumping began: 1418 Radius of well (r) (ft): 0.1667
Time Pumping ended: 1520 Gallons per foot ($G=\pi r^2 x 7.48$): 0.653
Total pumping time (min): 62 Well Volume (gal): 7.8
Pumping Rate (GPM): — Total gallons removed: ~3.0
(SEE LOW-FLOW FORM) Well volumes removed: 0.4
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 ____
	SEE		LOW-		FLOW		FORM		

Field Observations

Odor: None ____ Weak ____ Moderate ____ Strong X / Type: ACID/GASEOUS
Immiscible Layers: Y (N)/LNAPL____; DNAPL____/Thickness____/
Description: ____
Color: CLOUDY- CLEAR
Well condition (describe any damage): CONC. PAD & FLUSH-MOUNTED CASING (& LID) NEEDS REPLACED

Comments: WL DROPPING. CANNOT KEEP CONSISTENT FLOW.
Weather Conditions: SUNNY, - P. CLOUDY, HOT, HUMID, 90°F
Visitors: N/A

By (Signature): [signature] Title: Project Scientist
Print Name: Joseph J. Ozog, Jr. Date: 7/8/03

SAMPLING DATA

General Data

Sample Location/I.D.: SAL-3
Sample Date: 7/8/03
Time Collected: 1456
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 TEFLON-LINED TUBING
Dedicated: (Y) N TUBING ONLY

Field Observations

Water level prior to sample collection (Ft. from specified ref. Point): ~~9.12~~ 7.90
Depth Sampled (Ft. from specified ref. Point): ~17.0
Sample Types: VOC'S, SVOC'S, PEST., HERB., T&D METALS, CYANIDE, & pH
Turbidity: None X Low____ Moderate____ High____
Odor: None____ Weak____ Moderate____ Strong X / Type: ACID/GASEOUS
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 ____	Other ____
4.17	12470	22.7	-75	2.23	11.8		
4.10	12680	21.6	-35	2.19	11.4		
4.15	12740	21.8	-45	2.10	10.9		

Instrument Calibration (describe instruments calibrated (including brand/model), time, and method SEE FIELD BOOK
Comments: N/A
Weather Conditions: SUNNY-P. CLOUDY, HOT, HUMID, 93°F
Visitors: N/A

By (Signature): [signature] Title: Project Scientist
Print Name: Joseph J. Ozag, Jr. Date: 7/8/03

Low Flow Parameters

Client GEN. CHEM.

Site CLAYMONT, DE

Well ID BAL-3

Date 7/8/03

Time (min)	Temp (C)	DO (mg/L)	ORP (mV)	Cond uohms/cm	pH (su)	Turbidity NTU ~~(visual)~~	W.Level (ft btic)	Flow (ml/min)	Time (hr:min)
0	18.26	3.30	-17	13600	4.43	81.0	6.55	250	1421
5	17.67	2.59	-26	13900	4.36	53.4	6.89	200	1426
10	18.48	3.40	-25	13900	4.39	39.8	7.15	175	1431
15	18.90	4.09	-24	13800	4.40	36.8	7.27	175	1436
20	19.54	5.08	-23	13800	4.39	38.9	7.45	200	1441
25	19.78	5.24	-22	13800	4.39	40.9	7.49	200	1446
30	19.98	5.30	-22	13500	4.39	32.8	7.61	200	1451
35	20.13	5.29	-25	13500	4.38	35.3	7.72	200	1456
40									
45									
50									
55									
60									
65									
70									
75									
80									

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.: FWL-5

EVACUATION DATA

General Data

Date: 7/10/03 Initial Water Level: 9.94'
Evacuation Time: 0845-1035 Measurement ref. point: TOC ____ TIC X ground ____

Evacuated by: JJO Reference point stickup (ft): ~~0.10~~ ~~2.10~~ 1.71 990
Evacuation method: PUMP Total well depth (D) (from ref. Point): ~~19.27~~ 18.31
Time pumping began: 0900 Radius of well (r) (ft): 0.1667
Time Pumping ended: 1000 Gallons per foot ($G=\pi r^2 \times 7.48$): 0.653
Total pumping time (min): 60 Well Volume (gal): ~~0.10~~ ~~15.19~~ 5.5
Pumping Rate (GPM): — Total gallons removed: ~3.0
Well volumes removed: ~~0.10~~ ~~2.7~~ 0.5
(SEE LOW-FLOW FORM) 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 ____
SEE LOW FLOW FORM									

Field Observations

Odor: None ____ Weak X Moderate ____ Strong ____ / Type: CHEMICAL (PEST./HYDR.)
Immiscible Layers: Y (N) LNAPL ____; DNAPL ____ /Thickness ____ /
Description: ____
Color: LT. BROWN/RUSTY
Well condition (describe any damage): N/A

Comments: N/A
Weather Conditions: CLOUDY, LT. RAIN, WARM, HUMID,
Visitors: N/A

By (Signature): [signature] Title: Project Scientist
Print Name: Joseph J. Ozog, Jr. Date: 7/10/03

SAMPLING DATA

General Data

Sample Location/I.D.: EWL-5
Sample Date: 7/10/03
Time Collected: 0931
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 TEFLON-LINED TUBING
Dedicated: (Y) N TUBING ONLY

Field Observations

Water level prior to sample collection (Ft. from specified ref. Point): 10.18
Depth Sampled (Ft. from specified ref. Point): ~16.0
Sample Types: VOC's, SVOC's, PEST., HERB., T+D. METALS CYANIDE, pH
Turbidity: None____ Low X Moderate____ High____
Odor: None____ Weak X Moderate____ Strong____ / Type: CHEMICAL (PEST./HI
Immiscible Layers: Y (N)/LNAPL____; DNAPL____ /Thickness____ /
Description: ____
Color: RUST (LT. BR.)

Field Measurements

(Perform replicate measurements if required)

pH (SU)	Sp. Cond. (µmho/cm)	Temp. (C)	ORP (mv)	DO (mg/l)	Turbidity (NTU)	Other ____	Other ____
6.31	388.0	21.1	-34	2.39	287		
5.62	387.9	21.1	-29	1.89	289		
5.68	387.8	21.1	-29	1.82	278		

Instrument Calibration (describe instruments calibrated (including brand/model), time, and method SEE FIELD BOOK
Comments: N/A
Weather Conditions: CLOUDY, LT. RAIN, HUMID,
Visitors: N/A

By (Signature): [signature] Title: Project Scientist
Print Name: Joseph J. Ozog, Jr. Date: 7/10/03

Low Flow Parameters

Client GEN. CHEM.

Site BLAYMONT, DE

Well ID EWL-5

Date 7/10/03

Time (min)	Temp (C)	DO (mg/L)	ORP (mV)	Cond uohms/cm	pH (su)	Turbidity NTU (~~visual~~)	W.Level (ft btic)	Flow (ml/min)	Time (hr:min)
0	19.44	2.95	-33	353	5.03	878.0	10.20	200	0901
5	20.27	0.63	-38	364	5.18	701.0	10.17	200	0906
10	20.73	0.00	-39	364	5.25	670.0	10.18	250	0911
15	20.89	0.00	-39	364	5.30	621.0	10.18	250	0916
20	21.06	0.00	-38	366	5.32	599.0	10.16	250	0921
25	21.15	0.00	-38	367	5.34	535.0	10.18	250	0926
30	21.04	0.00	-37	368	5.36	462.0	10.18	250	0931
35									
40									
45									
50									
55									
60									
65									
70									
75									
80									

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

Client I.D.: GENERAL CHEM. Project Location: CLAYMONT, DE
Project No.: 5455B-03 Sample Location/I.D.: FWL-6

EVACUATION DATA

General Data

Date: 7/8/03
Evacuation Time: 0820-1038
Evacuated by: JJO
Evacuation method: PUMP
Time pumping began: 0839
Time Pumping ended: 0951
Total pumping time (min): 72
Pumping Rate (GPM): —
(SEE LOW FLOW FORM)

Initial Water Level: 6.56'
Measurement ref. point: TOC ____ TIC X ground ____
Reference point stickup (ft): 0.00
Total well depth (D) (from ref. Point): 15.48
Radius of well (r) (ft): 0.1667
Gallons per foot ($G=\pi r^2 x 7.48$): 0.653
Well Volume (gal): 5.8
Total gallons removed: ~3.5
Well volumes removed: 0.6
Evacuated to dryness: Y (N)

Stabilization Data
(measure for each well volume evacuated)

Time (min)	Volume Removed (gal)	pH (SU)	Sp. Cond. (µmho/cm)	Temp. (C)	ORP (mv)	DO (mg/l)	Turbidity (____)	Other ____	Other ____
	SEE LOW-FLOW FORM								

Field Observations

Odor: None ____ Weak ____ Moderate X Strong ____ / Type: CHEMICAL (PEST./HERB.)
Immiscible Layers: Y (N) LNAPL ____; DNAPL ____ /Thickness ____ /
Description: ____
Color: CLEAR
Well condition (describe any damage): WATER IS PRONE TO POND AT WELL HEAD, WELL PAD & CAST IRON COVER NEEDS RAISED.

Comments: N/A
Weather Conditions: SUNNY, HOT, HUMID, 80°F
Visitors: N/A

By (Signature): [signature] Title: Project Scientist
Print Name: Joseph J. Ozog, Jr. Date: 7/8/03

SAMPLING DATA

General Data

Sample Location/I.D.: EWL-6 & EWL-6 FIELD DUP (DIOXIN/FURAN)
Sample Date: 7/8/03
Time Collected: 0911
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 TEFLON-LINED TUBING
Dedicated: Y N TUBING ONLY

Field Observations

Water level prior to sample collection (Ft. from specified ref. Point): 7.04
Depth Sampled (Ft. from specified ref. Point): ~14.0
Sample Types: VOC'S, SVOC'S, PEST., HERB., T+D METALS, CYANIDE, + pH, DIOXIN/FURAN
Turbidity: None X Low____ Moderate____ High____
Odor: None____ Weak____ Moderate X Strong____ / Type: CHEMICAL (PEST/HERB)
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 ____	Other ____
5.76	810.2	19.4	-89	0.99	38.1		
5.78	809.4	17.8	-90	0.72	39.9		
5.75	805.2	18.2	-88	0.75	38.9		

Instrument Calibration (describe instruments calibrated (including brand/model), time, and method SEE FIELD BOOK
Comments: N/A
Weather Conditions: P. CLOUDY, HOT, HUMID, BREEZY, 80°F
Visitors: N/A

By (Signature): [signature] Title: Project Scientist
Print Name: Joseph J. Ozog, Jr. Date: 7/8/03

Low Flow Parameters

Client GEN. CHEM.

Site CLAYMONT, DE

Well ID EWL-6

Date 7/9/03

Time (min)	Temp (C)	DO (mg/L)	ORP (mV)	Cond uohms/cm	pH (su)	Turbidity NTU ~~(visual)~~	W.Level (ft btic)	Flow (ml/min)	Time (hr:min)
0	18.29	1.42	-21	780	5.32	179.0	6.63	300	0841
5	16.91	0.04	-33	785	5.39	144.0	6.88	325	0846
10	17.41	0.00	-40	782	5.45	117.0	6.97	300	0851
15	17.63	0.00	-41	784	5.47	113.0	6.98	300	0856
20	18.08	0.00	-45	781	5.48	103.0	7.01	300	0901
25	18.23	0.00	-47	777	5.50	97.7	7.02	300	0906
30	18.34	0.00	-47	776	5.51	86.8	7.04	300	0911
35									
40									
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75									
80									

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

Client I.D.: GENERAL CHEM. Project Location: CLAYMONT, DE
Project No.: 5455B-03 Sample Location/I.D.: EWL-8

EVACUATION DATA

General Data

Date: 7/9/03
Evacuation Time: 1530 – 1650
Evacuated by: JJO
Evacuation method: Pump
Time pumping began: 1552
Time Pumping ended: 1635
Total pumping time (min): 43
Pumping Rate (GPM): —
(SEE LOW-FLOW FORM)

Initial Water Level: 2.37'
Measurement ref. point: TOC ____ TIC X ground ____
Reference point stickup (ft): 0.00
Total well depth (D) (from ref. Point): 12.75
Radius of well (r) (ft): 0.1667
Gallons per foot ($G=\pi r^2 x 7.48$): 0.653
Well Volume (gal): 6.8
Total gallons removed: ~4.0
Well volumes removed: 0.6
Evacuated to dryness: Y N

Stabilization Data
(measure for each well volume evacuated)

Time (min)	Volume Removed (gal)	pH (SU)	Sp. Cond. (µmho/cm)	Temp. (C)	ORP (mv)	DO (mg/l)	Turbidity (____)	Other ____	Other ____
SEE LOW FLOW FORM									

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. CLOUDY, HOT, HUMID, 88°F
Visitors: N/A

By (Signature): [signature] Title: Project Scientist
Print Name: Joseph J. Ozog, Jr. Date: 7/9/03

SAMPLING DATA

General Data

Sample Location/I.D.: EWL-8
Sample Date: 7/9/03
Time Collected: 1619
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 TEFLON-LINED TUBING
Dedicated: (Y) N TUBING ONLY

Field Observations

Water level prior to sample collection (Ft. from specified ref. Point): 2.42
Depth Sampled (Ft. from specified ref. Point): ~12.0
Sample Types: VOCs, SVOCs, PEST, HERB, T+D METALS, CYANIDE, 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 ____	Other ____
6.67	1043	21.6	-78	0.78	4.69		
6.61	1045	21.2	-79	0.75	6.31		
6.58	1044	20.8	-79	0.82	7.41		

Instrument Calibration (describe instruments calibrated (including brand/model), time, and method SEE FIELD BOOK
Comments: N/A
Weather Conditions: P. CLOUDY- SUNNY, HOT, HUMID, 88°F
Visitors: N/A

By (Signature): [signature] Title: Project Scientist
Print Name: Joseph J. Ozog, Jr. Date: 7/9/03

Low Flow Parameters

Client GEN. CHEM.
Site CLAYMONT, DE
Well ID EWL-8
Date 7/9/03

Time (min)	Temp (C)	DO (mg/L)	ORP (mV)	Cond uohms/cm	pH (su)	Turbidity (~~visual~~ NTU)	W.Level (ft btic)	Flow (ml/min)	Time (hr:min)
0	19.39	3.27	-32	1320	6.45	299.0	2.40	400	1554
5	19.41	0.49	-49	1340	6.49	248.0	2.40	400	1559
10	19.92	0.00	-44	1290	6.61	76.0	2.40	400	1604
15	20.28	0.00	-41	1240	6.66	32.5	2.42	400	1609
20	20.74	0.00	-40	1220	6.68	24.0	2.42	400	1614
25	20.88	0.00	-40	1220	6.69	21.2	2.42	400	1619
30									
35									
40									
45									
50									
55									
60									
65									
70									
75									
80									

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-1

EVACUATION DATA

General Data

Date: 7/15/03
Evacuation Time: 1649-1758
Evacuated by: JJO/CMJ
Evacuation method: Pump
Time pumping began: 1659
Time Pumping ended: 1731
Total pumping time (min): 32
Pumping Rate (GPM): —
(SEE LOW-FLOW FORM)

Initial Water Level: 8.41'
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 ($G=\pi r^2 x 7.48$): 0.163
Well Volume (gal): 1.3
Total gallons removed: ~3.5
Well volumes removed: 2.7
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 ____
SEE LOW FLOW FORM									

Field Observations

Odor: None X Weak ____ Moderate ____ Strong ____ / Type: ____
Immiscible Layers: Y (N) LNAPL ____; DNAPL ____ /Thickness ____ /
Description: ____
Color: CLEAR
Well condition (describe any damage): CAP ON STEEL PROTECTIVE COVER DAMAGED. UNABLE TO LOCK, NEEDS NEW CAP (STEEL).

Comments: N/A
Weather Conditions: SUNNY, HOT, HUMID, 88°F
Visitors: N/A

By (Signature): [signature] Title: Project Scientist
Print Name: Joe Ozog, Jr. Date: 7/15/03

SAMPLING DATA

General Data

Sample Location/I.D.: B-1
Sample Date: 7/15/03
Time Collected: 1726
Collected by: JJO/CMJ
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 TEFLON-LINED TUBING
Dedicated: (Y) N TUBING ONLY

Field Observations

Water level prior to sample collection (Ft. from specified ref. Point): 8.44
Depth Sampled (Ft. from specified ref. Point): ~13.0
Sample Types: T&D METALS & 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 ____	Other ____
3.48	2631	20.0	107	1.18	40.2		
3.49	2645	19.8	101	1.08	32.8		
3.50	2642	19.7	108	1.10	34.6		

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

By (Signature): [signature] Title: Project Scientist
Print Name: Joe Ozog, Jr. Date: 7/15/03

Low Flow Parameters

Client GEN. CHEM.

Site CLAYMONT, DE

Well ID B-1

Date 7/15/03

Time (min)	Temp (C)	DO (mg/L)	ORP (mV)	Cond uohms/cm	pH (su)	Turbidity NTU ~~(visual)~~	W.Level (ft btic)	Flow (ml/min)	Time (hr:min)
0	20.31	1.52	64	2780	3.24	990.0	8.44	400	1701
5	20.26	0.50	69	2820	3.25	195.0	8.44	425	1706
10	20.54	1.82	65	2860	3.28	82.3	8.44	425	1711
15	20.54	2.86	63	2880	3.35	64.6	8.44	425	1716
20	20.49	2.88	64	2880	3.36	51.6	8.44	425	~~1726~~ 1721
25	20.40	2.92	64	2890	3.38	53.1	8.44	425	1726
30									
35									
40									
45									
50									
55									
60									
65									
70									
75									
80									

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-2

EVACUATION DATA

General Data

Date: 7/16/03 Initial Water Level: 4.95'
Evacuation Time: 1340-1500 Measurement ref. point: TOC ____ TIC X ground ____
Evacuated by: JJO/CMJ Reference point stickup (ft): 1.02
Evacuation method: PUMP Total well depth (D) (from ref. Point): 14.32
Time pumping began: 1357 Radius of well (r) (ft): 0.0833
Time Pumping ended: 1437 Gallons per foot ($G=\pi r^2 x 7.48$): 0.163
Total pumping time (min): 40 Well Volume (gal): 1.5
Pumping Rate (GPM): — Total gallons removed: ~3.0
(SEE LOW-FLOW FORM) Well volumes removed: 2.0
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 (____)	Other ____	Other ____
SEE LOW-FLOW FORM									

Field Observations

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

Comments: N/A
Weather Conditions: SUNNY, HOT, HUMID, 90°F
Visitors: N/A

By (Signature): [signature] Title: Project Scientist
Print Name: Joe Ozog, Jr. Date: 7/16/03

SAMPLING DATA

General Data

Sample Location/I.D.: B-2
Sample Date: 7/16/03
Time Collected: 1424
Collected by: JJO / CMJ
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 TEFLON-LINED TUBING
Dedicated: (Y) N TUBING ONLY

Field Observations

Water level prior to sample collection (Ft. from specified ref. Point): 5.15
Depth Sampled (Ft. from specified ref. Point): ~13.0
Sample Types: VOC'S, SVOC'S, PEST., HERB., T&D METALS, CYANIDE, pH
Turbidity: None X Low____ Moderate____ High____
Odor: None____ Weak X Moderate____ Strong____ / Type: PETROLEUM/ACID
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)	Temp. (C)	ORP (mv)	DO (mg/l)	Turbidity (NTU)	Other ____	Other ____
3.63	2114	16.8	137	0.98	75.3		
3.62	2165	16.0	131	0.89	87.4		
3.65	2200	16.8	127	0.79	72.4		

Instrument Calibration (describe instruments calibrated (including brand/model), time, and method SEE FIELD BOOK
Comments: N/A
Weather Conditions: SUNNY, HOT, HUMID, 90°F
Visitors: N/A

By (Signature): [signature] Title: Project Scientist
Print Name: Joe Ozag, Jr. Date: 7/16/03

Low Flow Parameters

Client GEN. CHEM.

Site CLAYMONT, DE

Well ID B-2

Date 7/16/03

Time (min)	Temp (C)	DO (mg/L)	ORP (mV)	Cond uohms/cm	pH (su)	Turbidity NTU (~~visual~~)	W.Level (ft btic)	Flow (ml/min)	Time (hr:min)
0	17.07	2.42	13	2420	3.50	568.0	5.11	500	1359
5	16.86	0.95	17	2470	3.47	437.0	5.17	500	1404
10	17.01	0.19	19	2490	3.46	234.0	5.15	450	1409
15	16.90	0.00	22	2490	3.44	132.0	5.15	450	1414
20	16.90	0.00	24	2490	3.43	84.6	5.15	450	1419
25	16.89	0.00	26	2500	3.43	59.6	5.15	450	1424
30									
35									
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50									
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65									
70									
75									
80									

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: CLAYMONT, DE
Sample Location/I.D.: B-2D

EVACUATION DATA

General Data

Date: 7/16/03
Evacuation Time: 1200-1346
Evacuated by: JJO/CMJ
Evacuation method: Pump
Time pumping began: 1223
Time Pumping ended: 1330
Total pumping time (min): 67
Pumping Rate (GPM): —

(SEE LOW-FLOW FORM)

Initial Water Level: 3.62'
Measurement ref. point: TOC ____ TIC X ground ____
Reference point stickup (ft): 0.00
Total well depth (D) (from ref. Point): 20.31
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: 4.0
Well volumes removed: 1.5
Evacuated to dryness: Y (N)

Stabilization Data
(measure for each well volume evacuated)

Time (min)	Volume Removed (gal)	pH (SU)	Sp. Cond. (µmho/cm)	Temp. (C)	ORP (mv)	DO (mg/l)	Turbidity (____)	Other ____	Other ____
SEE LOW FLOW FORM									

Field Observations

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

Comments: N/A
Weather Conditions: SUNNY, HOT, HUMID, 88°F
Visitors: N/A

By (Signature): [signature]
Print Name: Joe Ozog, Jr.
Title: Project Scientist
Date: 7/16/03

SAMPLING DATA

General Data

Sample Location/I.D.: B-2D
Sample Date: 7/16/03
Time Collected: 1310
Collected by: JJO / CMJ.
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 TEFLON-LINED TUBING
Dedicated: (Y) N TUBING ONLY

Field Observations

Water level prior to sample collection (Ft. from specified ref. Point): 5.19
Depth Sampled (Ft. from specified ref. Point): ~16.0
Sample Types: VOC's, SVOC's, PEST., HERB., T&D METALS, CYANIDE, pH
Turbidity: None ____ Low X Moderate ____ High ____
Odor: None X 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 ____	Other ____
4.15	3069	17.6	38	0.78	70.8		
4.18	3198	16.2	36	0.96	74.0		
4.16	3153	16.4	29	1.06	68.2		
4.20	3150	16.4	27	1.12	88.4		

Instrument Calibration (describe instruments calibrated (including brand/model), time, and method SEE FIELD BOOK
Comments: N/A
Weather Conditions: SUNNY, HOT, HUMID, 88°F
Visitors: N/A

By (Signature): [signature] Title: Project Scientist
Print Name: Joe Ozog, Jr. Date: 7/16/03

Low Flow Parameters

Client GEN. CHEM.
Site CLAYMONT, DE
Well ID B-2D
Date 7/16/03

Time (min)	Temp (C)	DO (mg/L)	ORP (mV)	Cond uohms/cm	pH (su)	Turbidity NTU ~~(visual)~~	W.Level (ft btic)	Flow (ml/min)	Time (hr:min)
0	16.83	3.09	9	3350	4.31	>999.0	4.30	200	1225
5	17.38	0.69	11	3460	4.01	932.0	4.30	200	1230
10	17.46	3.47	6	3360	4.18	467.0	451	250	1235
15	17.35	6.49	6	3310	4.24	257.0	4.61	300	1240
20	17.08	8.09	6	3320	3.94	169.0	4.70	300	1245
25	16.92	8.55	7	3320	3.90	171.0	4.82	350	1250
30	16.28	8.98	9	3340	3.88	234.0	5.17	450	1255
35	16.33	8.99	10	3380	3.83	209.0	5.17	425	1300
40	16.18	8.95	12	3420	3.82	199.0	5.18	425	1305
45	16.19	8.72	15	3450	3.79	179.0	5.19	450	1310
50									
55									
60									
65									
70									
75									
80									

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.: 52455B-03 Sample Location/I.D.: B-3

EVACUATION DATA

General Data

Date: 7/15/03
Evacuation Time: 1523-1649
Evacuated by: JSB
Evacuation method: Pump
Time pumping began: 1541
Time Pumping ended: 1625
Total pumping time (min): 44
Pumping Rate (GPM): —
(SEE LOW-FLOW FORM)

Initial Water Level: 6.15'
Measurement ref. point: TOC ____ TIC X ground ____
Reference point stickup (ft): 2.39
Total well depth (D) (from ref. Point): 20.7
Radius of well (r) (ft): ~~2 inch~~ 0.1667
Gallons per foot ($G=\pi r^2 \times 7.48$): 0.653
Well Volume (gal): 9.5
Total gallons removed: ~4.5
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. (µmho/cm)	Temp. (C)	ORP (mv)	DO (mg/l)	Turbidity (____)	Other ____	Other ____
SEE LOW-FLOW FORM									

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): N/A

Comments: N/A
Weather Conditions: SUNNY, HOT, HUMID, 90°F
Visitors: N/A

By (Signature): [signature] Title: Project Scientist
Print Name: Joe Ozog, Jr. Date: 7/15/03

SAMPLING DATA

General Data

Sample Location/I.D.: B-3
Sample Date: 7/15/03
Time Collected: 1622
Collected by: JJO / CMJ
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 TEFLON-LINED TUBING
Dedicated: (Y) N TUBING ONLY

Field Observations

Water level prior to sample collection (Ft. from specified ref. Point): 6.22
Depth Sampled (Ft. from specified ref. Point): ~17.0
Sample Types: T & D. 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 ____	Other ____
4.10	2704	18.6	94	1.15	19.2		
4.04	2710	18.7	103	1.04	20.2		
4.09	2722	17.8	96	1.14	21.4		
4.10	2719	17.9	88	1.09	20.1		

Instrument Calibration (describe instruments calibrated (including brand/model), time, and method SEE FIELD BOOK
Comments: N/A
Weather Conditions: SUNNY, HOT, HUMID, 90°F
Visitors: N/A

By (Signature): [signature] Title: Project Scientist
Print Name: Joe Ozog, Jr. Date: 7/15/03

Low Flow Parameters

Client GEN. CHEM.

Site CLAYMONT, DE

Well ID B-3

Date 7/15/03

Time (min)	Temp (C)	DO (mg/L)	ORP (mV)	Cond uohms/cm	pH (su)	Turbidity NTU (~~visual~~)	W.Level (ft btic)	Flow (ml/min)	Time (hr:min)
0	16.75	1.09	36	3360	3.74	349.0	6.23	500	1542
5	16.85	0.02	29	3370	3.72	267.0	6.21	450	1547
10	17.11	0.06	25	3340	3.74	182.0	6.21	450	1552
15	17.09	1.22	23	3320	3.77	149.0	6.21	450	1557
20	17.28	3.57	19	3230	3.80	106.0	6.21	450	1602
25	17.30	4.45	25	3170	3.92	98.9	6.21	450	1607
30	17.28	5.54	24	3130	3.99	86.3	6.21	450	1612
35	17.27	5.58	25	3120	4.00	82.4	6.22	450	1617
40	17.23	5.60	24	3120	4.01	81.6	6.22	450	1622
45									
50									
55									
60									
65									
70									
75									
80									

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-4

EVACUATION DATA

General Data

Date: 7/15/03
Evacuation Time: 1410-1523
Evacuated by: JJB
Evacuation method: PUMP
Time pumping began: 1424
Time Pumping ended: 1508
Total pumping time (min): 44
Pumping Rate (GPM): —
(SEE LOW-FLOW FORM)

Initial Water Level: 5.88'
Measurement ref. point: TOC ____ TIC X ground ____
Reference point stickup (ft): 2.24
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): 9.9
Total gallons removed: ~4.0
Well volumes removed: 0.4
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 ____
SEE LOW-FLOW FORM									

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): N/A

Comments: N/A
Weather Conditions: SUNNY, HUMID, HOT, 90°F
Visitors: N/A

By (Signature): [signature] Title: Project Scientist
Print Name: Joe Ozog, Jr. Date: 7/15/03

SAMPLING DATA

General Data

Sample Location/I.D.: B-4
Sample Date: 7/15/03
Time Collected: 1506
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 TEFLON-LINED TUBING
Dedicated: (Y) N TUBING ONLY

Field Observations

Water level prior to sample collection (Ft. from specified ref. Point): 5.90
Depth Sampled (Ft. from specified ref. Point): ~17.0
Sample Types: T&D METALS, & pH

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 ____	Other ____
5.15	1904	18.4	106	1.70	23.2		
4.92	1984	16.8	81	0.94	19.8		
4.89	1989	16.5	60	0.79	16.2		
4.78	2010	16.2	57	0.94	16.8		

Instrument Calibration (describe instruments calibrated (including brand/model), time, and method SEE FIELD BOOK
Comments: N/A
Weather Conditions: SUNNY, HOT, HUMID, 90°F
Visitors: N/A

By (Signature): [signature] Title: Project Scientist
Print Name: Joe Ozog, Jr. Date: 7/15/03

Low Flow Parameters

Client GEN. CHEM.

Site CLAYMONT, DE

Well ID B-4

Date 7/15/03

Time (min)	Temp (C)	DO (mg/L)	ORP (mV)	Cond uohms/cm	pH (su)	Turbidity NTU ~~(visual)~~	W.Level (ft btic)	Flow (ml/min)	Time (hr:min)
0	18.11	4.59	38	2370	4.54	7999.0	5.89	450	1426
5	16.69	6.26	54	2530	3.88	715.0	5.89	450	1431
10	16.07	4.83	46	2540	3.86	511.0	5.89	450	1436
15	15.92	4.65	36	2520	3.88	290.0	5.90	450	1441
20	15.89	4.63	30	2500	3.93	191.0	5.90	450	1446
25	16.00	4.20	25	2470	4.01	129.0	5.90	450	1451
30	16.05	0.27	24	2450	4.10	94.6	5.90	450	~~1601~~ 1456
35	16.24	1.54	22	2420	4.26	73.1	5.90	450	1501
40	16.32	1.64	21	2410	4.28	66.6	5.90	450	1506
45									
50									
55									
60									
65									
70									
75									
80									

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: CLAYMONT, DE
Sample Location/I.D.: B-5

EVACUATION DATA

General Data

Date: 7/15/03
Evacuation Time: 1000 - 1127
Evacuated by: JJO
Evacuation method: PUMP
Time pumping began: 1028
Time Pumping ended: 1110
Total pumping time (min): 42
Pumping Rate (GPM): —
(SEE LOW-FLOW FORM)

Initial Water Level: 8.65'
Measurement ref. point: TOC ____ TIC X ground ____
Reference point stickup (ft): 2.62
Total well depth (D) (from ref. Point): 16.79
Radius of well (r) (ft): 0.0833
Gallons per foot ($G=\pi r^2 \times 7.48$): 0.163
Well Volume (gal): 1.3
Total gallons removed: 5.0
Well volumes removed: 3.8
Evacuated to dryness: Y (N)

Stabilization Data
(measure for each well volume evacuated)

Time (min)	Volume Removed (gal)	pH (SU)	Sp. Cond. (µmho/cm)	Temp. (C)	ORP (mv)	DO (mg/l)	Turbidity (____)	Other ____	Other ____
SEE LOW-FLOW FORM									

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, HUMID, 88°F
Visitors: N/A

By (Signature): [signature]
Print Name: Jod Ozog, Jr.
Title: Project Scientist
Date: 7/15/03

SAMPLING DATA

General Data

Sample Location/I.D.: B-5
Sample Date: 7/15/03
Time Collected: 1105
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 TEFLON-LINED TUBING
Dedicated: (Y) N TUBING ONLY

Field Observations

Water level prior to sample collection (Ft. from specified ref. Point): 8.70
Depth Sampled (Ft. from specified ref. Point): ~13.0
Sample Types: VOC's, SVOC's, PEST., HERB., T+D METALS, CYANIDE, & 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 ____	Other ____
3.39	3908	20.6	221	0.84	11.1		
3.29	3981	18.3	234	0.70	9.8		
3.26	3990	18.5	226	0.72	6.2		

Instrument Calibration (describe instruments calibrated (including brand/model), time, and method SEE FIELD BOOK
Comments: N/A
Weather Conditions: SUNNY, HUMID, 88°F
Visitors: N/A

By (Signature): [signature] Title: Project Scientist
Print Name: Joe Ozog, Jr. Date: 7/15/03

Low Flow Parameters

Client GEN. CHEM.

Site CLAYMONT, DE

Well ID B-5

Date 7/15/03

Time (min)	Temp (C)	DO (mg/L)	ORP (mV)	Cond uohms/cm	pH (su)	Turbidity NTU ~~(visual)~~	W.Level (ft btic)	Flow (ml/min)	Time (hr:min)
0	20.48	1.41	101	4780	4.24	7999.0	8.69	400	1030
5	19.78	0.48	118	4540	3.57	594.0	8.70	400	1035
10	18.88	0.04	119	4450	3.25	155.0	8.71	400	1040
15	18.70	0.00	117	4460	3.24	96.3	8.70	400	1045
20	18.68	0.44	117	4450	3.23	74.0	8.70	400	1050
25	18.73	1.37	117	4440	3.19	46.0	8.70	400	1055
30	18.76	1.45	118	4440	3.18	40.6	8.70	400	1100
35	18.77	1.46	118	4440	3.17	37.4	8.70	400	1105
40									
45									
50									
55									
60									
65									
70									
75									
80									

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: CLAYMONT, DE
Sample Location/I.D.: B-5D

EVACUATION DATA

General Data

Date: 7/15/03
Evacuation Time: 1140-1345
Evacuated by: JJO
Evacuation method: Pump
Time pumping began: 1205
Time Pumping ended: 1340
Total pumping time (min): 95
Pumping Rate (GPM): —
(SEE LOW-FLOW FORM)

Initial Water Level: 12.11'
Measurement ref. point: TOC ____ TIC X ground ____
Reference point stickup (ft): 3.00
Total well depth (D) (from ref. Point): 56.3
Radius of well (r) (ft): 0.0833
Gallons per foot ($G=\pi r^2 x 7.48$): 0.163
Well Volume (gal): 7.2
Total gallons removed: 4.0
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. (µmho/cm)	Temp. (C)	ORP (mv)	DO (mg/l)	Turbidity (____)	Other ____	Other ____
SEE LOW-FLOW FORM									

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: ____
Visitors: N/A

By (Signature): [signature]
Print Name: Joe Ozog, Jr.
Title: Project Scientist
Date: 7/15/03

SAMPLING DATA

General Data

Sample Location/I.D.: B-5D, B-5DMS, B-5DMSD, 5-5D LAB. DUP.
Sample Date: 7/15/03
Time Collected: 1242
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 TEFLON-LINED TUBING
Dedicated: Y N TUBING ONLY

Field Observations

Water level prior to sample collection (Ft. from specified ref. Point): 12.23
Depth Sampled (Ft. from specified ref. Point): ~52.0
Sample Types: T & D METALS, & pH, VOC's, SVOC's, CYANIDE, PEST., HERB.
Turbidity: None X 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 ____	Other ____
6.42	2412	19.1	-82	0.90	537		
6.48	2422	18.1	-94	0.88	523		
6.52	2440	18.5	-92	0.74	547		

Instrument Calibration (describe instruments calibrated (including brand/model), time, and method SEE FIELD BOOK
Comments: N/A
Weather Conditions: SUNNY, HUMID, 89°F
Visitors: N/A

By (Signature): [signature] Title: Project Scientist
Print Name: Joe Ozog, Jr. Date: 7/15/03

Low Flow Parameters

Client GEN. CHEM

Site CLAYMONT, DE

Well ID B-5D

Date 7/15/03

Time (min)	Temp (C)	DO (mg/L)	ORP (mV)	Cond uohms/cm	pH (su)	Turbidity NTU ~~(visual)~~	W.Level (ft btic)	Flow (ml/min)	Time (hr:min)
0	17.86	3.54	~~2010~~ -79	2010	5.78	709.0	12.19	400	1207
5	17.70	0.32	-95	2350	5.84	504.0	12.24	400	1212
10	17.72	0.13	-98	2410	5.88	374.0	12.24	400	1217
15	17.64	0.00	-97	2480	6.14	289.0	12.25	400	1222
20	17.66	0.00	-100	2540	6.24	244.0	12.24	400	1227
25	17.58	0.00	-99	2560	6.32	275.0	12.24	400	1232
30	17.60	0.00	-99	2580	6.34	360.0	12.23	400	1237
35	17.61	0.00	-98	2580	6.35	501.0	12.23	400	1242
40									
45									
50									
55									
60									
65									
70									
75									
80									

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To Be Completed by Pace Analytical and Client

Section A — Required Client Information:

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

Section B — Required Client Information:

Report To: ROBERT BREAKWELL
Copy To:
Invoice To: ROBERT 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

Quote Reference: GENERAL CHEMICAL
Project Manager: KATHY STOLDNOUR
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 VOCS, APPX IX SVOCS, APPX IX OCPS, APPX IX HPAS, APPX IX HH-RB, APPX IX TOTAL METALS & HARDNESS, APPX IX DAILY DIS. METALS, 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	APPX IX VOCS	APPX IX SVOCS	APPX IX OCPS	APPX IX HPAS	APPX IX HH-RB	APPX IX TOTAL METALS & HARDNESS	APPX IX DAILY DIS. METALS	pH	Remarks / Lab ID
MW-101	WT	7/8/03	1003	11	5		2	3	1				X	X	X	X	X	X	X	X	
MW-105			1232	11	5		2	3	1												
MW-105 FIELD DUP.			1232	11	5		2	3	1												
SAL-3			1456	11	5		2	3	1												
RINSATE BLANK			1600	11	5		2	3	1												
TRIP BLANK			—	3				3					X								

SHIPMENT METHOD	AIRBILL NO.	SHIPPING DATE	NO. OF COOLERS
FED EX		7/8/03	2

ITEM NUMBER	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
	[signature] / FSC	7/8/03	1700			

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: [signature]
DATE Signed: (MM / DD / YY) 7/8/03

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Section A — Required Client Information:

Company: EARTH SCIENCES CONSULT.
Address: ONE TRIANGLE LANE
EXPORT, PA 15632
Phone: 724-733-3000
Fax: 724-325-3252

Section B — Required Client Information:

Report To: ROBERT BREAKWELL
Copy To:
Invoice To: SAME
P.O.:
Project Name: GENERAL CHEM.
Project Number: 54558-03

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 SIZUDAUR
Project #:
Profile #:

Section D — Required Client Information:

Valid Matrix Codes

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

Requested Analysis: APPX IX VOC's, APPX IX SVOC's, APPX IX OCP's, APPX IX OPP's, APPX IX HERB's, APPX IX T. METALS + ARSC, APPX IX D. METALS + ARSC, CYANIDE, PH

SAMPLE ID (One character per box. (A–Z, 0–9 / .–) Sample IDs MUST BE UNIQUE)	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	APPX IX VOC's	APPX IX SVOC's	APPX IX OCP's	APPX IX OPP's	APPX IX HERB's	APPX IX T. METALS + ARSC	APPX IX D. METALS + ARSC	CYANIDE	PH	Remarks / Lab ID
EWL-8	WT	7/9/03	1619	11	5		2	3	1				X	X	X	X	X	X	X	X	X	
MW-116			1354	11	5		2	3	1													
MW-116 FIELD DUP			1354	11	5		2	3	1													
MW-102			1132	11	5		2	3	1													
EWL-6			0911	11	5		2	3	1													
RINSATE BLANK			1515	11	5		2	3	1													
TRIP BLANK		—	—	3				3					X									

SHIPMENT METHOD	AIRBILL NO.	SHIPPING DATE	NO. OF COOLERS
FED EX		7/9/03	3

ITEM NUMBER	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
	[signature] / FSC	7/9/03	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: JOSEPH J. OZOG, JR.
SIGNATURE of SAMPLER: [signature]
DATE Signed: (MM / DD / YY) 7/9/03

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To Be Completed by Pace Analytical and Client

Section A — Required Client Information:

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

Section B — Required Client Information:

Report To: ROBERT BRIAKWELL
Copy To:
Invoice To: SAME
P.O.
Project Name: GENERAL CHEM.
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

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: DIOXIN/FURAN

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	DIOXIN/FURAN	Remarks / Lab ID
1	EWL-6	WT	7/9/03	0911	3	3								X	
2	EWL-6 FIELD DUP			0911	3	3									
3	MW-116			1354	3	3									
4	MW-102			1132	3	3									
5	MW-102 MS			1132	3	3									
6	MW-102 MSD			1132	3	3									
7	MW-102 LAB. DUP.			1132	3	3									
8	RINSATE BLANK			155	3	3								X	
9															
10															
11															
12															

SHIPMENT METHOD	AIRBILL NO.	SHIPPING DATE	NO. OF COOLERS
FED EX		7/9/03	2

ITEM NUMBER	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
	JGE / ESC	7/9/03	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: JGE 0206
SIGNATURE of SAMPLER:
DATE Signed: (MM / DD / YY) 7/9/03

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Section A — Required Client Information:

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

Section B — Required Client Information:

Report To: ROBERT BRAKWELL
Copy To:
Invoice To: SAME
P.O.
Project Name: GENERAL CHEMICAL
Project Number: 5-155B-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: KEITH CLUNGER
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 VOC'S, APPX IX SVOC'S, APPX IX OCP'S, APPX IX OPP'S, APPX IX HERB, APPX IX 7 METALS, CYANIDE, 214

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	APPX IX VOC'S	APPX IX SVOC'S	APPX IX OCP'S	APPX IX OPP'S	APPX IX HERB	APPX IX 7 METALS	CYANIDE	214	Remarks / Lab ID
1	MW-114	WT	7/10/03	1545	11	5		2	3	1				X	X	X	X	X	X	X	X	
2	MW-103	WT		1405	11	5		2	3	1												
3	MW-117			1135	11	5		2	3	1												
4	MW-117 FIELD DUP.			1135	11	5		2	3	1												
5	EWL-5			0931	11	5		2	3	1												
6	RINSATE BLANK			1630	11	5		2	3	1												
7																						
8																						
9																						
10																						
11																						
12																						

SHIPMENT METHOD	AIRBILL NO.	SHIPPING DATE	NO. OF COOLERS
FED EX		7/10/03	3

ITEM NUMBER	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
	[signature] / ESC	7/10/03	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: JOE OZOG
SIGNATURE of SAMPLER: [signature]
DATE Signed: (MM / DD / YY) 7/10/03

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Section A — Required Client Information:

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

Section B — Required Client Information:

Report To: ROBERT BRIAKNELL
Copy To:
Invoice To: SAME
P.O.
Project Name: GENERAL CHEMICAL
Project Number: 5155B-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: APPX IX VOCS, APPX IX SVOCS, APPX IX OCPS, APPX IX OPPS, APPX IX HERB, APPX IX TOTAL METALS & METAL, APPX IX DISSOLVED METAL, 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	APPX IX VOCS	APPX IX SVOCS	APPX IX OCPS	APPX IX OPPS	APPX IX HERB	APPX IX TOTAL METALS & METAL	APPX IX DISSOLVED METAL	CYANIDE	pH	Remarks / Lab ID
MW-104	WT	7/11/03	0943	11	5		2	3	1				X	X	X	X	X	X	X	X	X	

SHIPMENT METHOD	AIRBILL NO.	SHIPPING DATE	NO. OF COOLERS
~~FED EX~~ HAND DELIVERY		7/11/03	1

ITEM NUMBER	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
	[illegible] / ESC	7/11/03	1200	Kaelyn Schroth	7-11-03	6:05

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) 7/11/03

SEE REVERSE SIDE FOR INSTRUCTIONS

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Page: 1 of 1

To Be Completed by Pace Analytical and Client

Section A — Required Client Information:

Company: EARTH SCIENCES CONSULT.
Address: ONE TRIANGLE LANE
EXPORT, PA 15632
Phone: 724-733-3000
Fax: 724-325-5352

Section B — Required Client Information:

Report To: ROBERT BRINKWELL
Copy To:
Invoice To: SAME
P.O.
Project Name: GENERAL CHEMICAL
Project Number: 54155B-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

Quote Reference: GENERAL CHEMICAL
Project Manager: KATHY [illegible]
Project #:
Profile #:

Requested Analysis:

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

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	APPX IX VOCs	APPX IX SVOCs	APPX IX OCPs	APPX IX OPPs	APPX IX HERB	APPX IX TOTAL PHENOLS 4 AMINO	CYANIDE	pH	Remarks / Lab ID
1	MW-108	WT	7/14/03	1158	11	5		2	3	1				X	X	X	X	X	X	X	X	
2	MW-108 FIELD DUP			1158	11	5		2	3	1												
3	MW-109			1349	11	5		2	3	1												
4	MW-110			1603	11	5		2	3	1												
5	RINSATE BLANK			1500	11	5		2	3	1												
6	TRIP BLANK		—		3				3													
7																						
8																						
9																						
10																						
11																						
12																						

SHIPMENT METHOD	AIRBILL NO.	SHIPPING DATE	NO. OF COOLERS
FED EX		7/14/03	2

ITEM NUMBER	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
	[signature] / ESC	7/14/03	1500			

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: [signature]

DATE Signed: (MM / DD / YY) 7/14/03

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Section A — Required Client Information:

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

Section B — Required Client Information:

Report To: ROBERT BREAKWELL
Copy To:
Invoice To: SAME
P.O.
Project Name: GENERAL CHEMICAL
Project Number: 54558-03

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 SHOUDNOUR
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

Preservatives: Unpreserved, H_2SO_4, HNO_3, HCl, NaOH, $Na_2S_2O_3$, Methanol, Other

Requested Analysis: APPX IX VOC's, APPX IX SVOC's, APPX IX OCP's, APPX IX OPP's, APPX IX HERB, APPX IX TAL (METALS + HG), APPX IX [illegible], CYANIDE, pH

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	APPX IX VOC's	APPX IX SVOC's	APPX IX OCP's	APPX IX OPP's	APPX IX HERB	APPX IX TAL (METALS + HG)	APPX IX [illegible]	CYANIDE	pH	Remarks / Lab ID
1	B-1	WT	7-15-03	17:26	3	1		2											X	X	X		
2	B-3			16:22	3	1		2											X	X	X		
3	B-4			15:01	3	1		2											X	X	X		
4	B-5D			12:42	11	5		2	3	1				X	X	X	X	X	X	X	X	X	
5	B-5D MS			12:42	11	5		2	3	1				X	X	X	X	X	X	X	X	X	
6	B-5D MSD			12:42	11	5		2	3	1				X	X	X	X	X	X	X	X	X	
7	B-5D LAB DUP			12:42	11	5		2	3	1				X	X	X	X	X	X	X	X	X	
8	B-5			11:05	3	1		2											X	X		X	
9	MW-11 3			08:49	11	5		2	3	1				X	X	X	X	X	X	X	X	X	
10	MW-11 3 FIELD DUP			08:49	11	5		2	3	1				X	X	X	X	X	X	X	X	X	
11	TRIP BLANK			—	3				3					X	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	
12	RINSATE BLANK			13:50	11	5		2	3	1				X	X	X	X	X	X	X	X	X	

SHIPMENT METHOD	AIRBILL NO.	SHIPPING DATE	NO. OF COOLERS
FED EX		7/15/03	3

ITEM NUMBER	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
	[signature] / ESC	7/15/03	1858			

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: [signature]
DATE Signed: (MM / DD / YY) 7/15/03

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To Be Completed by Pace Analytical and Client

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 BREAKWELL
Copy To:
Invoice To: SAME
P.O.
Project Name: GENERAL CHEMICAL
Project Number: 54558-03

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

Quote Reference: GENERAL CHEMICAL
Project Manager: KATHY STRUDNOUR
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 VOC'S; APPX IX SVOC'S; APPX IX OCP'S; APPX IX OPP'S; APPX IX HERB.; APPX IX T. METALS & METAL; APPX IX D. METALS & METAL; CYANIDE; PH

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	APPX IX VOC'S	APPX IX SVOC'S	APPX IX OCP'S	APPX IX OPP'S	APPX IX HERB.	APPX IX T. METALS & METAL	APPX IX D. METALS & METAL	CYANIDE	PH	Remarks / Lab ID
1	MW-107		7/16/03	15:57	11	5		2	3	1				X	X	X	X	X	X	X	X	X	
2	B-2			14:24	11	5		2	3	1													
3	B-2D			13:10	11	5		2	3	1													
4	MW-111			11:04	11	5		2	3	1													
5	MW-111 FIELD DUP			11:04	11	5		2	3	1													
6	SAL-1			09:16	11	5		2	3	1													
7	RINSATE BLANK			14:45	11	5		2	3	1													
8	TRIP BLANK				3				3					X									
9																							
10																							
11																							
12																							

SHIPMENT METHOD	AIRBILL NO.	SHIPPING DATE	NO. OF COOLERS
FED EX		7/16/03	3

ITEM NUMBER	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
	[signature] / ESC	7/16/03	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: JOE OZOG
SIGNATURE of SAMPLER: [signature]
DATE Signed: (MM / DD / YY)

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Section A — Required Client Information:

Company: ORIN SCIENCES CONSULTANTS
Address: 1 INDUSTRY LANE
EXPORT PA 15632
Phone: 724-733-3000 Fax: 724-325-3352

Section B — Required Client Information:

Report To: ROBERT MECHWELL
Copy To:
Invoice To: SAME
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 STAUDMAR
Project #:
Profile #:

Section D — Required Client Information:

Valid Matrix Codes

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

Requested Analysis:

SAMPLE ID (One character per box. (A–Z, 0–9 / .–) Sample IDs MUST BE UNIQUE)	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	ANALYSIS 1 VOCS	ANALYSIS 2 SVOCS	ANALYSIS 3 OCPS	ANALYSIS 4 OPPS	ANALYSIS 5 HERB	ANALYSIS 6 METALS	ANALYSIS 7 CHROME	ANALYSIS 8 PH	Remarks / Lab ID
MW-115		7.17.03	12:51	11	5		2	3	1				X	X	X	X	X	X	X	X	
MW-106			10.28	11	5		2	3	1												
MW-112			08:34	11	5		2	3	1												
MW-112 FIELD DUP			08.34	11	5		2	3	1												
MW-106 MS			10.28	11	5		2	3	1												
MW-106 MSD			10.28	11	5		2	3	1												
MW-106 LAB DUP			10.28	11	5		2	3	1												
RINSATE BLANK			11.15	11	5		2	3	1												
TRIP BLANK				3				3													

SHIPMENT METHOD	AIRBILL NO.	SHIPPING DATE	NO. OF COOLERS	ITEM NUMBER	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
HAND DELIVER		7/18/03	3		[illegible] / ESC	7/17/03	1500	[illegible]	7/18	1500

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 GOG

SIGNATURE of SAMPLER: [signature]

DATE Signed: (MM / DD / YY) 7/17/03

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