Ground Water Sampling Log

Well ID: MW-101S

Date:	5/21/06	Personnel:	KLM	Weather:	Cool, overcast
Site Name:	Primoshield	Evacuation Method:	HAND BAILING	Well #	MW-101 Shallow
Site Location:	Utica, Oneida Co.	Sampling Method:	↓	Project #	633027

Well information:

Depth of Well *	18.34	ft.
Depth to Water *	17.41	ft.
Length of Water Column (L)	.93	ft.
2-Inch (gal/ft)	0.17	gal/ft
1 Well Volume (L x 0.34) =	.1581	gal
3 Well Volumes =	.4743	gal

* Measurements taken from

- ✓ Top of Well Casing
- Top of Protective Casing
- (Other, Specify)

Start Purge Time: 10:29 AM

Elapsed Time (hr/min)	Depth To Water (feet)	Temperature (°C)	pH	Conductivity (mS/cm)	Oxidation Reduction Potential	Dissolved Oxygen (mg/l)	Turbidity (NTU)	Flow Rate (ml/min).
10:35		11.09	7.02	0.002	-156	8.75	-5.0	N/A

End Purge Time: 10:35

Water sample:

Time collected: N/A

Total volume of purged water removed: .5 gal

Physical appearance at start

Color: Brown

Odor: No

Sheen/Free Product: No

Physical appearance at sampling

Color: N/A

Odor: ↓

Sheen/Free Product: ↓

Field Test Results:

Dissolved ferrous iron:

Dissolved total iron:

Dissolved total manganese:

Analytical Parameters: VOCs by 8260

TAL Metals (& cyanide)

Container Size	Container Type	# Collected	Field Filtered	Preservative	Container pH

Notes: UNABLE TO SAMPLE - DRY/INSUFFICIENT WATER

Ground Water Sampling Log

Well ID: MW-101D

Date:	5/21/08	Personnel:	KLM	Weather:	cool, overcast
Site Name:	Primoshield	Evacuation Method:	HAND BAILING	Well #	MW-101 Deep
Site Location:	Utica, Oneida Co.	Sampling Method:	↓ ↓	Project #	633027

Well information:

Depth of Well *	(88.1) 87.92	ft.
Depth to Water *	27.96	ft.
Length of Water Column (L)	59.96	ft.
2-Inch (gal/ft)	0.17	gal/ft
1 Well Volume (L x 0.34) =	10.19	gal
3 Well Volumes =	30.58	gal

* Measurements taken from

- [✓] Top of Well Casing
- [ ] Top of Protective Casing
- [ ] (Other, Specify)

Start Purge Time: 10:42 AM

Elapsed Time (hrs/min)	Depth To Water (feet)	Temperature (°C)	pH	Conductivity (mS/cm)	Oxidation Reduction Potential	Dissolved Oxygen (mg/l)	Turbidity (NTU)	Flow Rate (ml/min).
10:54		10.85	7.94	0.651	-91	2.73	398.0	N/A
11:08		10.31	8.21	0.603	-106	1.01	424.0	
11:23		10.15	8.37	0.628	-113	1.51	668.0	
11:36		10.38	8.33	0.623	-124	1.90	-5.0	
11:50		10.32	8.27	0.540	-121	1.39	-5.0	
12:06		10.22	8.18	0.642	-115	0.23	-5.0	

End Purge Time: 12:06 PM

Water sample:

Time collected: 12:11 pm

Total volume of purged water removed: 30.75 gal

Physical appearance at start		Physical appearance at sampling	
Color	Cloudy	Color	Grey
Odor	No	Odor	No
Sheen/Free Product	No	Sheen/Free Product	No

Field Test Results:

Dissolved ferrous iron: _____

Dissolved total iron: _____

Dissolved total manganese: _____

Analytical Parameters: VOCs by 8260

TAL Metals (& cyanide)

Container Size	Container Type	# Collected	Field Filtered	Preservative	Container pH

Notes:

Ground Water Sampling Log

Well ID: MW-103

Date:	5/20/05	Personnel:	TD/KH	Weather:	cloudy, 60's
Site Name:	Primoshield	Evacuation Method:	Disposable bailer	Well #	
Site Location:	Utica, Oneida Co.	Sampling Method:	" "	Project #	633027

Well information:

Depth of Well *	(17.9) 18.08	ft.
Depth to Water *	7.48	ft.
Length of Water Column (L)		ft.
2-Inch (gal/ft)	0.17	gal/ft
1 Well Volume (L x 0.34) =		gal
3 Well Volumes =	5.41	gal

* Measurements taken from

X	Top of Well Casing
	Top of Protective Casing
	(Other, Specify)

Start Purge Time: 3:19

Elapsed Time ( )	Depth To Water ( )	Temperature ( )	pH	Conductivity ( )	Oxidation Reduction Potential	Dissolved Oxygen (mg/l)	Turbidity (NTU)	Flow Rate (ml/min).
3:24 p		11.41	7.83	0.555	-99	2.33	355.0	
3:27 p		10.76	7.37	0.547	-82	3.60	289.0	
3:31 p		10.52	7.17	0.523	-101	6.61	271.0	
3:35 p		10.42	7.13	0.552	-44	2.75	524.0	
3:38 p		10.20	7.12	0.551	-102	2.51	478.0	
3:43 p		10.02	7.27	0.535	-127	2.22	348.0	

End Purge Time: 3:43 p

Water sample:

Time collected: 3:49 p

Total volume of purged water removed: 6 gal.

Physical appearance at start

Color: light grey/black

Odor: not petroleum

Sheen/Free Product: no

Physical appearance at sampling

Color: clear

Odor: non-petroleum

Sheen/Free Product: none

Field Test Results:

Dissolved ferrous iron:

Dissolved total iron:

Dissolved total manganese:

Analytical Parameters: VOCs by 8260

TAL Metals (& cyanide)

Container Size	Container Type	# Collected	Field Filtered	Preservative	Container pH

Notes:

Ground Water Sampling Log

Well ID: MW-104

Date:	5/21/08	Personnel:	KLM/TD	Weather:	Overcast, cool
Site Name:	Primoshield	Evacuation Method:	HAND BAILING	Well #	104
Site Location:	Utica, Oneida Co.	Sampling Method:	↓ ↓	Project #	633027

Well information:

Depth of Well *	(18.0) 17.93	ft.
Depth to Water *	6.41	ft.
Length of Water Column (L)	11.52	ft.
2-Inch (gal/ft)	0.17	gal/ft
1 Well Volume (L x 0.34) =	1.9584	gal
3 Well Volumes =	5.88	gal

* Measurements taken from

- [✓] Top of Well Casing
- [ ] Top of Protective Casing
- [ ] (Other, Specify)

Start Purge Time: 9:09 AM

Elapsed Time (hrs, min)	Depth To Water (feet)	Temperature (°C)	pH	Conductivity (mS/CM)	Oxidation Reduction Potential	Dissolved Oxygen (mg/l)	Turbidity (NTU)	Flow Rate (ml/min).
9:12		11.35	8.20	0.483	75	5.39	-5.0	N/A
9:15		10.59	7.97	0.473	91	5.07	-5.0	↓
9:19		[illegible]	7.72	0.473	106	4.21	-5.0	
9:22		10.61	7.61	0.471	112	5.57	-5.0	
9:25		9.97	7.40	0.477	115	5.54	-5.0	
9:27		9.81	7.56	0.452	120	7.21	-5.0	

End Purge Time: 9:27

Water sample:

Time collected: 9:29

Total volume of purged water removed: 6 gal

Physical appearance at start

- Color: Lt. Br.
- Odor: No
- Sheen/Free Product: No

Physical appearance at sampling

- Color: Brown
- Odor: No
- Sheen/Free Product: No

Field Test Results:

- Dissolved ferrous iron:
- Dissolved total iron:
- Dissolved total manganese:

Analytical Parameters: VOCs by 8260; TAL Metals (& cyanide)

Container Size	Container Type	# Collected	Field Filtered	Preservative	Container pH

Notes: Took Dupe Samples of this well at 9:33

Ground Water Sampling Log

Well ID: MW-105

Date:	5/26/28	Personnel:	TL / KH	Weather:	Cloudy, 60's
Site Name:	Primoshield	Evacuation Method:	Disposable Bailer	Well #	
Site Location:	Utica, Oneida Co.	Sampling Method:		Project #	633027

Well information:

Depth of Well *	(18.0) 18.2	ft.	
Depth to Water *	4.96	ft.	
Length of Water Column (L)	13.24	ft.	
2-Inch (gal/ft)	0.17	gal/ft	
1 Well Volume (L x 0.34) =		gal	
3 Well Volumes =	6.75	gal	

* Measurements taken from

- ✓ Top of Well Casing
- ☐ Top of Protective Casing
- ☐ (Other, Specify)

Start Purge Time: 4:01p

Elapsed Time ( )	Depth To Water ( )	Temperature ( )	pH	Conductivity ( )	Oxidation Reduction Potential	Dissolved Oxygen (mg/l)	Turbidity (NTU)	Flow Rate (ml/min).
4:05 p		10.95	7.63	0.733	-24	2.72	715.0	
4:08 p		10.74	7.54	0.681	-11	5.86	830.0	
4:10 p		9.89	7.52	0.694	-9	4.69	633.0	
4:12 p		9.54	7.47	0.677	-1	8.27	994.0	
4:14p		9.11	7.48	0.678	5	9.40	-5.0	
4:16p		9.10	7.50	0.697	12	5.25	-5.0	
4:18p		8.98	7.48	0.691	16	8.55	-5.0	

End Purge Time: 4:20P

Water sample:

Time collected: 4:30P

Total volume of purged water removed: 7 gal

Physical appearance at start

Color: very light brown

Odor: none

Sheen/Free Product: no

Physical appearance at sampling

Color: lt. brn

Odor: none

Sheen/Free Product: no

Field Test Results:

Dissolved ferrous iron:

Dissolved total iron:

Dissolved total manganese:

Analytical Parameters: VOCs by 8260

TAL Metals (& cyanide)

Container Size	Container Type	# Collected	Field Filtered	Preservative	Container pH

Notes:

Ground Water Sampling Log

Well ID: MW-106S

Date:	5/20/08	Personnel:	TD/KH	Weather:	Clear, 60's
Site Name:	Primoshield	Evacuation Method:	Disposable bailer	Well #	
Site Location:	Utica, Oneida Co.	Sampling Method:	" "	Project #	633027

Well information:

Depth of Well *	~~(42.2)~~ 18.47	ft.
Depth to Water *	7.71	ft.
Length of Water Column (L)	10.76	ft.
2-Inch (gal/ft)	0.17	gal/ft
1 Well Volume (L x 0.34) =		gal
3 Well Volumes =	5.5	gal

* Measurements taken from

- ✓ Top of Well Casing
- Top of Protective Casing
- (Other, Specify)

Start Purge Time: 1:49p

Elapsed Time ( )	Depth To Water ( )	Temperature (°C)	pH	Conductivity ( )	Oxidation Reduction Potential	Dissolved Oxygen (mg/l)	Turbidity (NTU)	Flow Rate (ml/min).
1:53p		12.60	7.88	0.438	~~-8~~ 29	2.54	-5.0	
2:00p		10.96	7.63	0.423	62	2.81	-5.0	
2:05p		10.15	7.47	0.005	82	10.15	723	
2:08p		10.27	7.40	0.415	89	3.87	902	
2:11p		9.79	7.41	0.420	99	3.04	411	
2:15p		9.77	7.36	0.421	99	1.99	520	

End Purge Time: 2:15p

Water sample:

Time collected: 2:28p

Total volume of purged water removed: 6.0gal

Physical appearance at start

- Color: clear
- Odor: none
- Sheen/Free Product: no

Physical appearance at sampling

- Color: cloudy
- Odor: none
- Sheen/Free Product: no

Field Test Results:

- Dissolved ferrous iron:
- Dissolved total iron:
- Dissolved total manganese:

Analytical Parameters: VOCs by 8260

TAL Metals (& cyanide)

Container Size	Container Type	# Collected	Field Filtered	Preservative	Container pH

Notes:

Ground Water Sampling Log

Well ID: MW-106D

Date:	5/20/08	Personnel:	TD/KH	Weather:	Cloudy, 60's
Site Name:	Primoshield	Evacuation Method:	Whale pump	Well #	
Site Location:	Utica, Oneida Co.	Sampling Method:		Project #	633027

Well information:

Depth of Well *	(77.1) 79.25	ft.
Depth to Water *	29.10	ft.
Length of Water Column (L)	50.10	ft.
2-Inch (gal/ft)	0.17	gal/ft
1 Well Volume (L x 0.34) =		gal
3 Well Volumes =	25.6	gal

* Measurements taken from

- ✓ Top of Well Casing
- Top of Protective Casing
- (Other, Specify)

Start Purge Time: 12 10P

Elapsed Time ( )	Depth To Water ( )	Temperature (°C)	pH	Conductivity (mS/cm)	Oxidation Reduction Potential	Dissolved Oxygen (mg/l)	Turbidity (NTU)	Flow Rate (ml/min).
12:15P	50.97	15.31	10.25	0.407	-59	4.35	172	1.0 gpm
1 50P	—	17.27	10.25	0.310	-170	9.99	955	
~~12:45P~~		~~15.24~~	~~9.66~~	~~0.371~~	~~-155~~	~~3.55~~	~~-5.0~~	
~~Rose~~								
1:45P		15.24	9.66	0.311	-155	3.55	-5.0	
2.25P		11.24	8.52	0.405	-126	3.50	-5.0	
3:30P		16.39	7.73	~~0.452~~	-148	3.55	-5.0	
				0.452				

End Purge Time: 3 30P

Water sample:

Time collected: 3:33P

Total volume of purged water removed: 26 gal

Physical appearance at start		Physical appearance at sampling	
Color	clear	Color	clear to lt grey
Odor	none	Odor	none
Sheen/Free Product	NC	Sheen/Free Product	NC

Field Test Results:

Dissolved ferrous iron:

Dissolved total iron:

Dissolved total manganese:

Analytical Parameters: VOCs by 8260

TAL Metals (& cyanide)

Container Size	Container Type	# Collected	Field Filtered	Preservative	Container pH

Notes: 12 1pm well pump set at ~50' below TOC

12:15-12:45P - pumped 2.5 gal, switched to bailer

12:45-1:00P bailed 2.5 gal

Ground Water Sampling Log

Well ID: MW-107S

Date:	5/20/08	Personnel:	TDJ KH	Weather:	Sunny 60's
Site Name:	Primoshield	Evacuation Method:	Disp. Grade water	Well #	
Site Location:	Utica, Oneida Co.	Sampling Method:	Disp. Sable bailer	Project #	633027

Well information:

Depth of Well *	(16.9) 17.14	ft.	* Measurements taken from
Depth to Water *	6.48	ft.	✓ Top of Well Casing
Length of Water Column (L)	10.66	ft.	Top of Protective Casing
2-Inch (gal/ft)	0.17	gal/ft	(Other, Specify)
1 Well Volume (L x 0.34) =		gal	
3 Well Volumes =	5.54	gal	

Start Purge Time: 8:55A

Elapsed Time ( )	Depth To Water ( )	Temperature (°C)	pH	Conductivity (mS/cm)	Oxidation Reduction Potential	Dissolved Oxygen (mg/l)	Turbidity (NTU)	Flow Rate (ml/min).
8:59A		10.38	6.97	0.912	164	3.38	-5.0	
9:04		9.37	6.93	0.842	167	3.25	-5.0	
9:09A		9.27	6.96	0.859	177	3.02	-5.0	
9:09		9.08	6.80	0.867	175	2.93	-5.0	
9:12A		9.31	7.01	0.828	166	2.87	-5.0	
							576.0	
9:25A								

End Purge Time: 9:12A

Water sample:

Time collected: 9:25A

Total volume of purged water removed: 5 gal

Physical appearance at start		Physical appearance at sampling	
Color	clear	Color	tt clear (at end of recharge)
Odor	none	Odor	none
Sheen/Free Product	no	Sheen/Free Product	no

Field Test Results:

Dissolved ferrous iron:

Dissolved total iron:

Dissolved total manganese:

Analytical Parameters: VOCs by 8260

TAL Metals (& cyanide)

Container Size	Container Type	# Collected	Field Filtered	Preservative	Container pH
40 ml	VOA	2			

Notes:

no odors
no sheen
9:12A Well bailed dry at 5 gal purged, allowed well to recharge
9:15A DTW - 14.99'
9:13A DTW - 14.50'
9:26A DTW - 14.28'
9:25A Collected sample - water clear

Ground Water Sampling Log

Well ID: MW-107D

Date:	5/20/08	Personnel:	TL/KH	Weather:	cloudy ; 60's
Site Name:	Primoshield	Evacuation Method:	whale pump	Well #	
Site Location:	Utica, Oneida Co.	Sampling Method:	" "	Project #	633027

Well information:

Depth of Well *	(77.5) 78.85	ft.
Depth to Water *	29.00	ft.
Length of Water Column (L)	49.85	ft.
2-Inch (gal/ft)	0.17	gal/ft
1 Well Volume (L x 0.34) =		gal
3 Well Volumes =	25.4	gal

* Measurements taken from

✓	Top of Well Casing
	Top of Protective Casing
	(Other, Specify)

Start Purge Time: 10:10A

Elapsed Time ( )	Depth To Water ( )	Temperature (°C)	pH	Conductivity (mS/cm)	Oxidation Reduction Potential	Dissolved Oxygen (mg/l)	Turbidity (NTU)	Flow Rate (ml/min).
10:25A	--	12.87	8.23	0.472	-30	2.31	559	0.33 gal/min
10:35A	39.73'	12.46	8.94	0.426	-64	1.55	732	0.5 gal/min
10:58A	35.13'	13.97	9.21	0.396	-125	1.43	678	0.22 gal/min
11:20A	36.07'	13.84	9.16	0.426	-89	9.27	269	0.25 gal/min
11:31A	36.48'	14.03	9.12	0.429	-119	1.64	152	0.29 gal/min

End Purge Time: 11:45A

Water sample:

Time collected: 11:45A

Total volume of purged water removed: 27gal

Physical appearance at start

Color: clear

Odor: none

Sheen/Free Product: no

Physical appearance at sampling

Color: clear

Odor: none

Sheen/Free Product: no

Field Test Results:

Dissolved ferrous iron:

Dissolved total iron:

Dissolved total manganese:

Analytical Parameters: VOCs by 8260

TAL Metals (& cyanide)

Container Size	Container Type	# Collected	Field Filtered	Preservative	Container pH

Notes: 10:27A water turning dk gray.

10:35A water clearing up

Ground Water Sampling Log

Well ID: MW-108

Date:	5/21/08	Personnel:	KCM / BR	Weather:	cool, overcast
Site Name:	Primoshield	Evacuation Method:	HAND BAILING	Well #	MW-108
Site Location:	Utica, Oneida Co.	Sampling Method:	↓ ↓	Project #	633027

Well information:

Depth of Well *	18.61	ft.
Depth to Water *	6.43	ft.
Length of Water Column (L)	12.18	ft.
2-Inch (gal/ft)	0.17	gal/ft
1 Well Volume (L x 0.34) =	2.0706	gal
3 Well Volumes =	6.21	gal

* Measurements taken from

- ✓ Top of Well Casing
- ☐ Top of Protective Casing
- ☐ (Other, Specify)

Start Purge Time: 12 39 pm

Elapsed Time (hr/min)	Depth To Water (Feet)	Temperature (°C)	pH	Conductivity (mS/cm)	Oxidation Reduction Potential	Dissolved Oxygen (mg/l)	Turbidity (NTU)	Flow Rate (ml/min).
12:42		9.61	7.65	0.617	51	6.43	~5.0	N/A
12:45		9.55	7.43	0.637	61	5.98	~5.0	↓
12:48		9.43	7.32	0.703	76	5.64	923.0	↓
12:51		6.26	7.28	0.715	65	4.17	562.0	↓
12:53		8.14	7.26	0.709	47	3.94	530.0	↓
12:56		9.54	7.27	0.700	4	1.57	351.6	↓

End Purge Time: 12:56

Water sample:

Time collected: 1.02

Total volume of purged water removed: 6.75 gal

Physical appearance at start		Physical appearance at sampling	
Color	Cloudy	Color	Lt. Br.
Odor	No	Odor	No
Sheen/Free Product	No	Sheen/Free Product	No

Field Test Results:

Dissolved ferrous iron: _____

Dissolved total iron: _____

Dissolved total manganese: _____

Analytical Parameters: VOCs by 8260

TAL Metals (& cyanide)

Container Size	Container Type	# Collected	Field Filtered	Preservative	Container pH

Notes: