

10 October 2007

Mr. Michael J. Hinton, P.E.  
Environmental Engineer 2  
New York State Department of Environmental Conservation  
Division of Environmental Remediation - Region 9  
270 Michigan Avenue  
Buffalo, New York 14203

RE: Monthly Progress Report – September 2007  
Greif, Inc. Facility – Tonawanda, New York  
NYSDEC VCP Number V00334-9



***Key Actions  
This Period:***

- Collected and recorded dense, non-aqueous phase liquid (DNAPL) and ground water levels in recovery wells, selected nearby monitoring wells, and vapor monitoring points in the Varnish Pit Area as part of the New York State Department of Environmental Conservation (NYSDEC)-approved Interim Remedial Measure (IRM).
- As of 3 October 2007, a total of 1,326 gallons of DNAPL and 6,183 gallon of aqueous phase liquid have been recovered during DNAPL recovery IRM activities. DNAPL recovery data are summarized in Tables 1 and 2 and Figures 1 and 2.
- Approximately 915 gallons of DNAPL and 4,443 gallons of aqueous liquid have been recovered by pumping from DNAPL recovery wells since 25 August 2005 (25 months of pumping).
- Approximately 411 gallons of DNAPL and 1,740 gallons of aqueous liquid have been recovered as condensate from extracted vapors since initiation of low vacuum-enhanced DNAPL recovery on 28 March 2007.
- Collected and recorded light, non-aqueous phase liquid (LNAPL) and ground water level measurements from monitoring well MW-23. These data are summarized in Table 3.

***Problems/  
Resolutions:***

- The DNAPL recovery system was temporarily shut

down on 31 August 2007 in order to avoid damage to the skids due to a broken air flow gauge on the influent pipe to the off gas treatment system. ERM contacted NYSDEC's project manager to notify him of the situation and request approval. ERM obtained NYSDEC approval for the temporary shut down on 31 August 2007. The broken air flow meter was replaced and the system was re-started on 5 September 2007.

- The low vacuum skids and off gas treatment were shut down by regeneration system alarms on four separate occasions between 5 September and 25 September 2007. The alarms were apparently tripped due to excessive back-blast pressure. Adjustment have been made to the system which apparently have resolved the issue.

***Analytical Data*** • None.

***Received:***

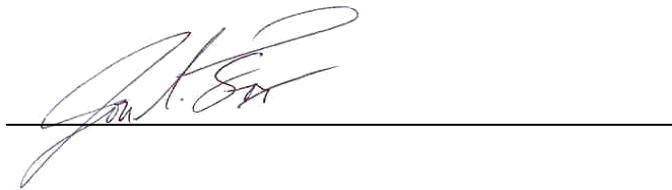
- Documents Submitted:*** • Monthly Progress Report for August 2007 dated 10 September 2007.

- Anticipated Actions - October 2007:***
- Continuation of DNAPL recovery system O&M and associated waste handling and management operations.
  - Measurement of LNAPL and ground water level measurements in monitoring well MW-23 on a monthly basis.
  - Complete and submit the Quarterly Ground Water Monitoring Report for the July 2007 quarterly ground water monitoring event.
  - Conduct the a Quarterly Ground Water Monitoring Event for October 2007.

***NYSDEC-Approved Field Decisions:***

- None.

*Prepared By:*



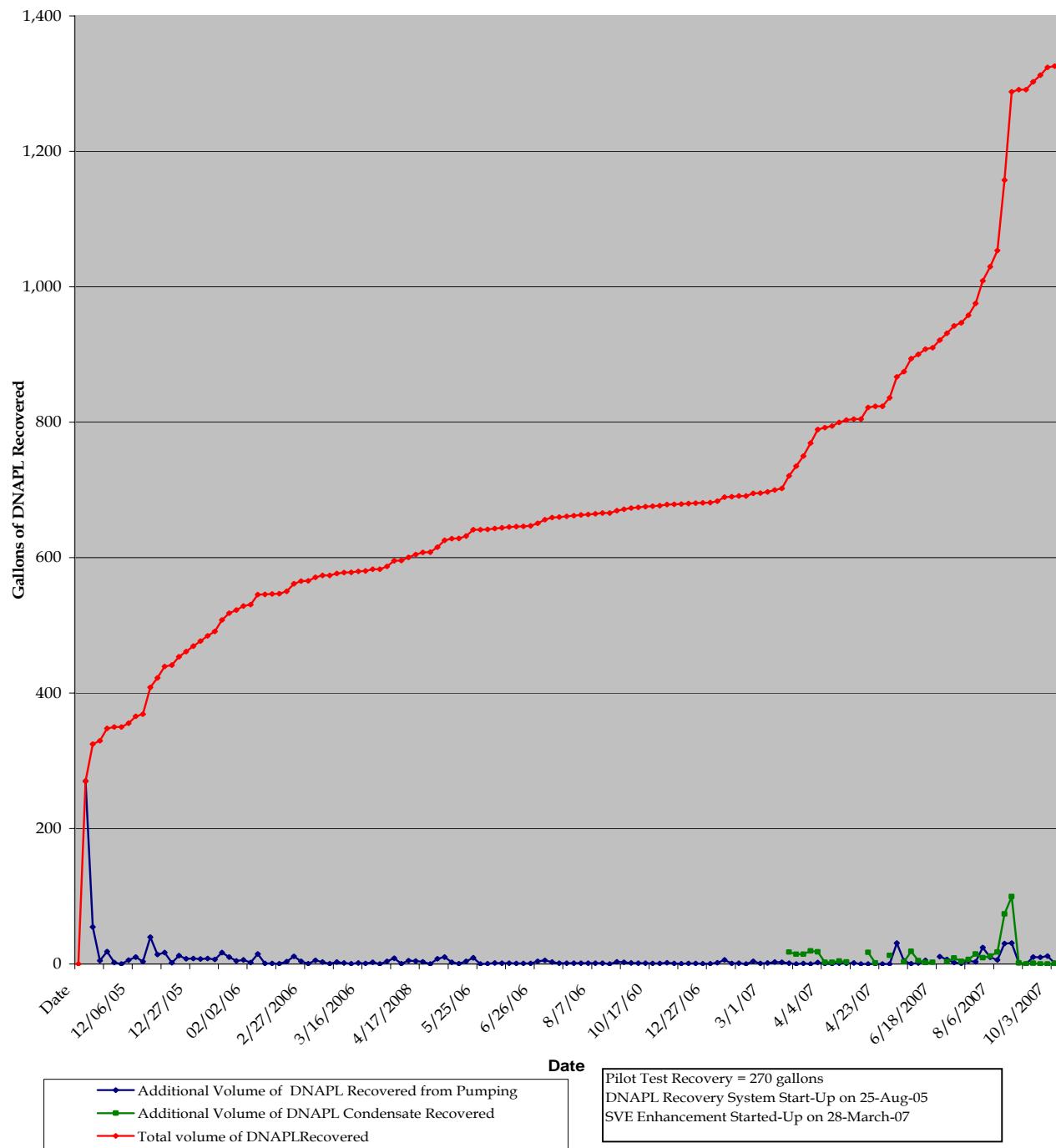
Jon S. Fox, P.G.  
Senior Consultant

*Date:* 10 October 2007

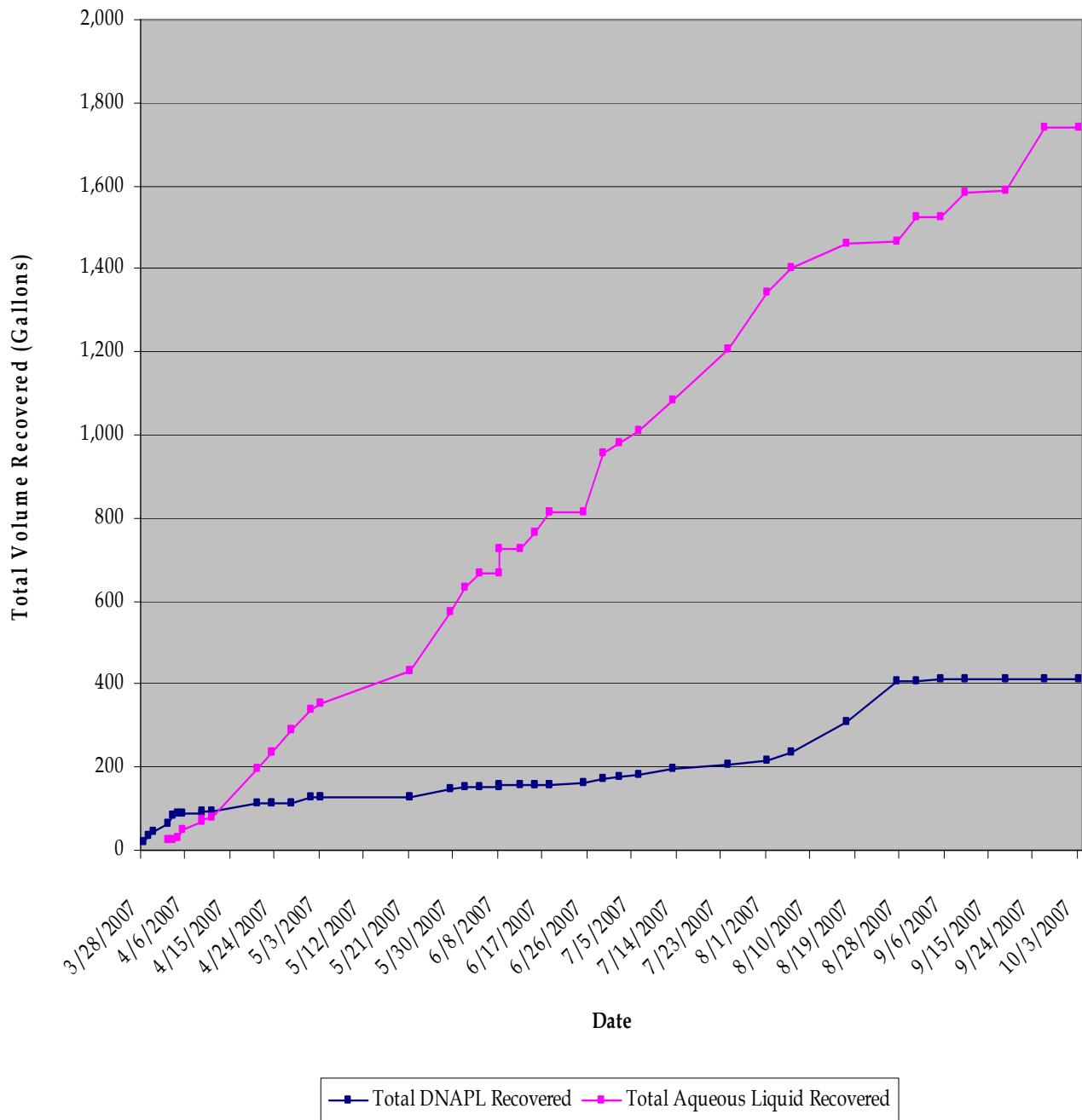
Cc: Mr. Robert Powell, C.S.P., A.R.M. (Sonoco)  
Mr. Pete Gruene (Palmetto Env. Mgmt. Solutions)  
Mr. Patrick Wolfe (Greif)  
Mr. James Charles, Esq. (NYSDEC)  
Mr. Matt Forcucci (NYSDOH)  
Mr. Gregory Sutton, P.E. (NYSDEC)  
Mr. A. Joseph White (NYSDEC)  
Mr. Edward Hinckey, P.G. (ERM)  
Mr. Dennis Roote, P.E. (ERM)

## **Figures**

**Figure 1 - Summary of Fluid Recovery**  
**DNAPL Recovery IRM**  
**Greif Facility – Tonawanda, New York**



**Figure 2 - Summary of Fluid Recovery from Vapor Condensation  
DNAPL Recovery IRM  
Greif Facility – Tonawanda, New York**



## **Tables**

**TABLE 1**  
**SUMMARY OF FLUID RECOVERY FROM PUMPING**  
**DNAPL RECOVERY IRM**  
**GREIF FACILITY - TONAWANDA, NEW YORK**  
**NYSDEC VCP NUMBER V00334-9**

	Volume Recovered (gallons)		RW-1 Thickness (feet)		RW-2 Thickness (feet)		RW-4 Thickness (feet)	
Date	DNAPL	Water	DNAPL	Water	DNAPL	Water	DNAPL	Water
Pilot Test	270.0	0.0	5.62	3.56	0.88	3.90	NI	NI
12-Sept-05	54.9	1.9	1.79	7.75	1.56	7.94	1.47	7.42
1-Nov-05	4.8	296.2	2.57	6.66	3.39	5.81	2.17	6.32
11-Nov-05	3.6	38.8	1.77	6.17	3.42	5.68	1.30	7.18
14-Nov-05	0.6	97.2	1.74	6.49	3.14	5.68	1.28	7.11
15-Nov-05	14.1	49.0	1.73	5.79	2.27	6.53	1.30	7.00
16-Nov-05	0.0	120.3	1.86	4.64	2.32	6.29	1.28	6.89
17-Nov-05	2.0	77.6	1.75	5.54	2.27	6.02	1.28	6.77
18-Nov-05	0.0	52.9	1.79	6.88	2.37	6.33	1.28	6.81
21-Nov-05	0.0	338.8	1.98	1.07	2.67	5.27	1.32	6.29
22-Nov-05	0.0	50.3	2.04	2.63	2.69	5.40	1.31	6.29
23-Nov-05	0.0	74.0	2.06	6.08	2.72	5.51	1.33	6.28
28-Nov-05	5.6	362.4	2.13	5.63	2.78	4.86	1.56	5.54
1-Dec-05	0.0	8.7	2.11	5.77	2.80	5.05	1.76	5.44
2-Dec-05	0.0	52.0	2.08	5.39	2.69	4.58	1.59	5.45
6-Dec-05	10.4	163.2	2.24	3.06	2.76	4.69	1.58	5.04
7-Dec-05	3.4	48.0	2.02	0.02	2.77	4.66	1.63	4.96
8-Dec-05	1.8	48.5	2.02	0.16	2.62	0.42	1.58	4.90
9-Dec-05	7.4	24.6	1.99	0.18	2.60	0.26	1.58	4.81
12-Dec-05	30.3	72.8	2.01	0.15	2.81	4.34	1.56	2.74
13-Dec-05	6.3	14.6	2.03	0.02	3.62	0.94	2.96	3.08
14-Dec-05	7.6	0.6	2.00	0.08	2.68	1.15	3.04	3.14
15-Dec-05	17.0	29.8	2.03	0.01	2.63	1.18	1.61	0.25
19-Dec-05	1.9	5.7	2.00	0.07	2.81	4.17	2.63	3.55
21-Dec-05	12.3	38.7	2.00	0.10	2.66	1.68	1.78	1.04
22-Dec-05	7.6	6.5	1.99	0.07	2.66	2.95	1.41	0.22
27-Dec-05	8.0	18.5	2.03	0.03	2.49	0.17	2.20	3.95
28-Dec-05	7.4	18.6	2.00	0.10	2.56	0.05	1.37	0.03
29-Dec-05	5.3	2.9	2.00	0.10	2.57	0.05	1.37	0.03
3-Jan-06	2.6	38.7	2.01	0.02	2.49	0.03	1.38	0.10
6-Jan-06	6.6	10.2	1.97	0.08	2.46	0.05	1.37	0.11
10-Jan-06	16.8	2.5	1.96	1.04	2.48	0.11	1.47	0.02
12-Jan-06	10.0	0.0	2.00	0.08	2.52	0.07	1.37	0.03
19-Jan-06	4.7	34.8	1.97	0.05	2.48	0.13	1.37	0.02
23-Jan-06	6.0	14.3	1.98	0.11	2.47	0.12	1.37	0.03
26-Jan-06	6.5	11.3	1.96	0.07	2.49	0.12	1.37	0.05
30-Jan-06	4.3	14.8	1.93	0.15	2.49	0.09	1.49	0.33
2-Feb-06	3.2	0.1	1.96	0.07	2.49	0.14	1.36	0.06
3-Feb-06	0.5	5.6	1.96	0.07	2.49	0.13	1.35	0.07
6-Feb-06	0.5	24.0	1.95	0.25	2.47	0.13	1.58	1.74

**TABLE 1 (Continued)**  
**SUMMARY OF DNAPL RECOVERY FROM PUMPING**  
**DNAPL RECOVERY IRM**  
**GREIF FACILITY - TONAWANDA, NEW YORK**  
**NYSDEC VCP NUMBER V00334-9**

	Volume Recovered (gallons)		RW-1 Thickness (feet)		RW-2 Thickness (feet)		RW-4 Thickness (feet)	
Date	DNAPL	Water	DNAPL	Water	DNAPL	Water	DNAPL	Water
9-Feb-06	3.5	18.9	1.94	0.07	2.47	0.12	1.34	0.06
13-Feb-06	7.2	9.8	1.95	0.08	2.53	0.08	1.36	0.04
16-Feb-06	3.9	8.6	1.96	0.07	2.50	0.42	1.35	0.07
20-Feb-06	4.0	12.8	1.92	0.11	2.49	1.62	1.34	0.14
27-Feb-06	5.3	13.2	1.93	0.10	2.51	4.41	1.35	0.05
3-Mar-06	2.6	32.0	1.93	0.17	2.42	0.16	1.35	0.03
7-Mar-06	2.6	21.6	1.94	0.09	2.42	0.08	1.35	0.10
10-Mar-06	0.0	5.8	1.94	0.01	2.43	0.05	1.36	0.11
13-Mar-06	1.4	12.2	1.93	0.17	2.38	0.18	1.35	0.04
16-Mar-06	0.7	12.3	1.94	0.08	2.39	0.19	1.35	0.05
20-Mar-06	2.4	11.7	1.48	0.06	2.02	0.20	1.05	2.33
23-Mar-06	4.0	16.2	1.46	0.14	1.99	0.17	0.82	0.03
30-Mar-06	4.9	15.7	1.46	0.07	1.96	0.23	0.80	0.07
3-April-06	3.5	31.3	1.46	0.12	1.96	0.18	0.80	0.04
7-Apr-06	4.8	15.5	1.46	0.07	1.96	0.20	0.81	0.04
11-Apr-06	4.0	6.9	1.46	0.13	1.96	0.20	0.80	0.04
13-Apr-06	2.2	7.9	1.47	0.12	1.96	0.18	0.80	0.02
17-Apr-06	1.1	21.4	1.45	0.08	1.96	0.23	0.80	0.08
21-Apr-06	3.2	13.7	1.44	0.14	1.96	0.16	0.80	0.02
28-Apr-06	4.3	21.9	1.46	0.07	2.01	0.07	0.80	0.10
09-May-06	10.2	32.8	1.46	0.04	1.99	0.19	0.80	0.05
11-May-06	2.4	9.4	1.46	0.13	2.04	0.12	0.80	0.05
16-May-06	3.7	13.1	1.44	0.10	2.00	0.20	0.80	0.08
19-May-06	2.6	11.2	1.46	0.07	2.01	0.19	0.80	0.08
23-May-06	2.6	13.1	1.45	0.13	1.97	0.15	0.80	0.05
25-May-06	4.0	4.4	NM	NM	NM	NM	NM	NM
1-June-06	0.5	19.5	1.46	0.09	2.04	0.04	0.80	0.03
6-June-06	1.4	1.8	1.46	0.08	2.06	0.10	0.79	0.03
8-June-06	1.0	16.8	1.46	0.09	2.05	0.10	0.78	0.07
12-June-06	1.0	13.0	1.45	0.10	2.00	0.19	0.80	0.05
15-June-06	0.6	12.6	1.43	0.10	2.10	0.08	0.79	0.05
19-June-06	0.6	12.4	1.43	0.15	2.06	0.12	0.80	0.02
23-June-06	0.6	11.0	1.46	0.07	0.96	0.12	0.80	0.04
26-June-06	3.9	5.4	0.10	0.03	1.96	1.6	0.31	1.23
30-June-06	5.9	16.0	0.00	0.08	0.36	2.3	0.00	0.00
3-Jul-06	2.9	9.6	0.06	0.10	0.24	1.74	0.28	1.38
17-Jul-06	1.0	8.5	0.06	2.18	0.30	6.64	0.55	5.55
25-Jul-06	1.0	18.6	0.06	1.68	0.34	6.64	0.58	5.52
27-Jul-06	1.0	28.8	0.00	0.08	0.36	6.62	0.58	0.00
31-Jul-06	1.0	40.4	0.00	0.08	0.23	3.63	0.65	2.63
3-Aug-06	1.0	20.2	NM	NM	NM	NM	NM	NM
7-Aug-06	1.0	19.1	0.00	0.10	0.23	0.52	0.00	0.20
11-Aug-06	1.1	12.4	0.00	0.16	0.24	1.50	0.00	0.09
14-Aug-06	0.0	5.0	0.00	0.30	0.25	3.72	0.00	0.12
25-Aug-06	3.2	32.2	NM	NM	NM	NM	NM	NM

**TABLE 1 (Continued)**  
**SUMMARY OF DNAPL RECOVERY FROM PUMPING**  
**DNAPL RECOVERY IRM**  
**GREIF FACILITY - TONAWANDA, NEW YORK**  
**NYSDEC VCP NUMBER V00334-9**

	Volume Recovered (gallons)		RW-1 Thickness (feet)		RW-2 Thickness (feet)		RW-4 Thickness (feet)	
Date	DNAPL	Water	DNAPL	Water	DNAPL	Water	DNAPL	Water
6-Sept-06	2.4	71.4	0.00	4.29	0.31	0.37	0.03	0.15
15-Sept-06	1.4	29.1	0.00	5.50	0.35	0.30	0.00	0.31
22-Sept-06	1.2	12.9	0.00	6.32	0.34	0.31	0.00	0.26
28-Sept-06	1.2	38.8	0.00	0.07	0.35	0.35	0.00	2.01
4-Oct-06	0.0	21.6	0.06	0.01	0.32	0.31	0.28	3.90
10-Oct-06	0.0	24.6	0.05	0.04	0.34	0.16	0.00	0.19
17-Oct-06	0.6	26.3	0.07	0.09	0.35	0.22	0.00	0.08
24-Oct-06	0.6	25.6	0.00	0.14	0.38	0.22	0.00	1.98
2-Nov-06	1.7	28.5	0.00	0.78	0.37	2.49	0.00	1.45
7-Nov-06	0.6	18.9	0.08	0.89	0.10	3.80	0.00	0.19
17-Nov-06	0.4	38.9	0.08	2.38	0.00	0.25	0.00	0.10
20-Nov-06	0.7	18.9	NM	NM	NM	NM	NM	NM
28-Nov-06	0.6	26.0	0.00	0.08	0.00	0.88	0.00	0.18
15-Dec-06	0.4	25.9	NM	NM	NM	NM	NM	NM
27-Dec-06	0.4	12.5	0.00	2.59	0.00	6.98	0.00	6.11
9-Jan-07	1.9	111.8	0.00	0.40	0.00	0.14	0.00	0.14
19-Jan-07	6.0	45.9	0.07	0.00	0.00	0.32	0.00	0.09
23-Jan-07	0.6	2.52	0.07	0.03	0.00	0.10	0.09	0.05
31-Jan-07	1.0	30.7	0.00	0.10	0.00	4.04	0.00	0.87
6-Feb-07	0.0	12.48	NM	NM	NM	NM	NM	NM
16-Feb-07	3.8	42.76	0.00	0.08	0.00	4.66	0.00	0.28
23-Feb-07	0.6	7.60	0.00	1.72	0.00	4.33	0.00	0.94
1-Mar-07	1.5	37.7	0.00	0.19	0.00	1.87	0.00	0.54
8-Mar-07	2.9	62.1	NM	NM	NM	NM	NM	NM
16-Mar-07	2.4	40.6	NM	NM	NM	NM	NM	NM
28-Mar-07	1.0	27.7	0.00	0.10	0.00	0.58	0.00	0.48
29-Mar-07	0.0	29.6	NM	NM	NM	NM	NM	NM
30-Mar-07	0.6	18.0	NM	NM	NM	NM	NM	NM
2-Apr-07	0.0	0.00	NM	NM	NM	NM	NM	NM
3-Apr-07	2.2	35.9	NM	NM	NM	NM	NM	NM
4-Apr-07	0.2	11.3	NM	NM	NM	NM	NM	NM
5-Apr-07	0.0	8.4	NM	NM	NM	NM	NM	NM
9-Apr-07	1.2	27.6	NM	NM	NM	NM	NM	NM
11-Apr-07	0.6	10.1	NM	NM	NM	NM	NM	NM
17-Apr-07	1.5	24.5	NM	NM	NM	NM	NM	NM
18-Apr-07	0.0	16.8	0.00	0.09	0.00	0.15	0.00	0.00
9-May-07	30.8	62.6	NM	NM	NM	NM	NM	NM
21-May-07	4.7	50.4	NM	NM	NM	NM	NM	NM
23-May-07	0.4	4.7	NM	NM	NM	NM	NM	NM
1-Jun-07	1.4	26.9	0.00	0.08	0.00	0.60	0.20	0.00
4-Jun-07	5.36	5.68	NM	NM	NM	NM	NM	NM

**TABLE 1 (Continued)**  
**SUMMARY OF DNAPL RECOVERY FROM PUMPING**  
**DNAPL RECOVERY IRM**  
**GREIF FACILITY - TONAWANDA, NEW YORK**  
**NYSDEC VCP NUMBER V00334-9**

**NOTES:**

<b>Date</b>	<b>Volume Recovered (gallons)</b>		<b>RW-1 Thickness (feet)</b>		<b>RW-2 Thickness (feet)</b>		<b>RW-4 Thickness (feet)</b>	
	<b>DNAPL</b>	<b>Water</b>	<b>DNAPL</b>	<b>Water</b>	<b>DNAPL</b>	<b>Water</b>	<b>DNAPL</b>	<b>Water</b>
14-Jun-07	NM	NM	0.00	0.12	0.28	0.08	0.00	0.88
18-Jun-07	10.16	41.04	NM	NM	NM	NM	NM	NM
25-Jun-07	6.72	13.36	NM	NM	NM	NM	NM	NM
29-Jun-07	2.12	1.00	NM	NM	NM	NM	NM	NM
10-Jul-07	8.28	50.48	0.00	0.07	0.17	0.51	0.00	0.09
24-Jul-07	24.08	13.56	0.00	0.13	0.18	6.80	0.00	0.05
6-Aug	15.84	16.96	NM	NM	NM	NM	NM	NM
17-Aug-07	30.24	38.24	0.00	0.24	0.00	0.34	0.00	1.17
27-Aug-07	30.76	18.40	NM	NM	NM	NM	NM	NM
31-Aug-07	1.92	10.32	0.00	0.11	0.00	0.35	0.00	1.09
10- Sept-07	4.40	14.48	0.00	0.79	0.00	2.10	0.00	1.99
25-Sept-07	27.12	38.96	0.00	0.07	0.00	0.39	0.00	0.72
3-Oct-07	1.08	46.68	NM	NM	NM	NM	NM	NM
<b>TOTALS</b>	<b>915.54</b>	<b>4,443.36</b>						

**NOTES:**

- DNAPL and water recovery volumes are the volume of liquids recovered by pumping since the previous reading.
- Pilot test data reported at the end of the pilot test on 16 November 2004.
- Low vacuum enhancement was initiated on 28 March 2007.
- NI = well not installed yet.
- NM = not measured on this date.
- Volume readings represent the volume recovered since the previous reading.

**TABLE 2**  
**SUMMARY OF FLUID RECOVERY FROM CONDENSED VAPORS**  
**GREIF FACILITY - TONAWANDA, NEW YORK**  
**NYSDEC VCP NUMBER V00334-9**

Date	Additional Volume of DNAPL Recovered (gallons)	Additional Volume of Aqueous Fluids Recovered (gallons)
28-Mar-07	17.65	NM
29-Mar-07	14.35	NM
30-Mar-07	14.30	NM
2-Apr-07	19.10	25.0
3-Apr-07	17.76	1.5
4-Apr-07	2.62	3.5
5-Apr-07	2.32	19.0
11-Apr-07	4.12	21.0
17-Apr-07	2.88	10.5
20-Apr-07	17.31	114.5
23-Apr-07	1.56	40.0
27-Apr-07	0.00	53.0
1-May-07	12.61	52.0
3-May-07	0.00	15.0
21-May-07	3.12	77.00
29-May-07	18.72	143.0
1-Jun-07	4.92	57.00
8-Jun-07	2.24	92.00
15-Jun-07	2.94	40.00
18-Jun-07	NM	50.00
25-Jun-07	3.50	NM
29-Jun-07	8.72	140.00
2-Jul-07	3.90	25.0
6-Jul-07	6.54	30.0
13-Jul-07	14.84	75.0
24-Jul-07	8.96	120.0
1-Aug-07	11.40	97
6-Aug-07	17.60	60.7
17-Aug-07	73.90	103
27-Aug-07	99.44	60
31-Aug-07	1.44	0.0
10-Sept-07	1.20	60.0
18-Sept-07	0.00	5.0
25-Sept-07	0.00	150
3-Oct-07	0.60	NM
<b>TOTAL</b>	<b>410.56</b>	<b>1,739.7</b>

**NOTES:**

- NM = not measured on this date.

**TABLE 3**  
**SUMMARY OF LNAPL RECOVERY FROM MW-23**  
**GREIF FACILITY - TONAWANDA, NEW YORK**  
**NYSDEC VCP NUMBER V00334-9**

Date	Volume of LNAPL Recovered (gallons)	LNAPL Thickness in MW-23 (feet)	Water Thickness in MW-23 (feet)
9-Sept-05	0.00	0.40	3.38
12-Sept-05	0.00	0.41	3.23
20-Sept-05	0.00	0.52	2.98
11-Oct-05	0.00	0.56	2.67
21-Oct-05	0.00	0.57	2.78
26-Oct-05	0.00	0.60	2.78
2-Nov-05	0.00	0.68	2.67
11-Nov-05	0.04	0.27	2.53
15-Nov-05	0.10	0.61	2.10
16-Nov-05	0.04	0.25	1.55
17-Nov-05	0.03	0.18	1.22
18-Nov-05	0.00	0.08	0.97
21-Nov-05	0.02	0.15	1.09
22-Nov-05	0.04	0.27	0.68
23-Nov-05	0.04	0.26	0.49
29-Nov-05	0.04	0.23	0.54
2-Dec-05	0.00	0.20	0.42
6-Dec-05	0.03	0.20	0.51
7-Dec-05	0.00	0.16	0.36
8-Dec-05	0.03	0.16	0.40
9-Dec-05	0.00	0.07	0.35
12-Dec-05	0.00	0.07	0.41
19-Dec-05	0.00	0.17	0.39
22-Dec-05	0.03	0.17	0.54
27-Dec-05	0.00	0.14	0.45
29-Dec-05	0.03	0.17	0.48
3-Jan-06	0.02	0.15	0.37
6-Jan-06	0.00	0.12	0.30
10-Jan-06	0.00	0.08	0.42
12-Jan-06	0.00	0.13	0.35
19-Jan-06	0.02	0.12	0.48
26-Jan-06	0.03	0.18	0.50
30-Jan-06	0.00	0.18	0.57
2-Feb-06	0.03	0.17	0.61
3-Feb-06	0.00	0.17	0.40
6-Feb-06	0.00	0.20	0.40
9-Feb-06	0.00	0.20	0.45
13-Feb-06	0.00	0.20	0.54
16-Feb-06	0.00	0.14	0.66
20-Feb-06	0.00	0.07	0.75
27-Feb-06	0.02	0.15	0.75
3-Mar-06	0.03	0.17	0.48
7-Mar-06	0.03	0.17	0.38

**TABLE 3 (Continued)**  
**SUMMARY OF LNAPL RECOVERY FROM MW-23**  
**DNAPL RECOVERY IRM**  
**GREIF FACILITY - TONAWANDA, NEW YORK**  
**NYSDEC VCP NUMBER V00334-9**

Date	Volume of LNAPL Recovered (gallons)	LNAPL Thickness in MW-23 (feet)	Water Thickness in MW-23 (feet)
10-Mar-06	0.01	0.08	0.38
13-Mar-06	0.04	0.28	0.0
16-Mar-06	0.00	0.27	0.0
23-Mar-06	0.02	0.10	0.39
30-Mar-06	0.02	0.14	0.30
3-Apr-06	0.02	0.10	0.20
7-Apr-06	0.01	0.07	0.23
11-Apr-06	0.01	0.06	0.26
13-Apr-06	0.02	0.11	0.26
18-Apr-06	0.03	0.16	0.16
16-May-06	0.00	0.21	0.25
1-June-06	0.00	0.00	0.42
6-June-06	0.02	0.10	0.66
12-June-06	0.03	0.21	0.46
15-June-06	0.10	0.60	0.08
23-June-06	0.02	0.12	0.46
26-June-06	0.02	0.11	0.35
30-June-06	0.01	0.09	0.33
14-Aug-06	0.01	0.07	1.4
6-Sept-06	0.02	0.11	2.22
28-Sept-06	0.01	0.04	2.86
4-Oct-06	0.02	0.09	1.36
10-Oct-06	0.01	0.09	0.98
20-Nov-06	0.03	0.20	2.40
27-Dec-06	0.04	0.26	2.80
9-Jan-07	0.05	0.28	2.76
12-Jan-07	0.04	0.22	2.78
23-Jan-07	0.03	0.17	1.62
31-Jan-07	0.03	0.16	0.66
12-Feb-07	0.02	0.14	1.63
16-Feb-07	0.02	0.11	0.83
23-Feb-07	0.01	0.04	0.59
1-Mar-07	0.01	0.05	1.06
8-Mar-07	0.01	0.04	1.16
16-Mar-07	0.01	0.05	1.37
30-Mar-07	0.00	0.03	1.11
2-Apr-07	0.01	0.03	1.17
18-Apr-07	0.01	0.03	1.36
9-May-07	0.01	0.07	1.65
14-Jun-07	0.02	0.10	2.36
10-Jul-07	0.01	0.08	1.64
24-Jul-07	0.01	0.09	2.27
17-Aug-07	0.01	0.06	2.61

**TABLE 3 (Continued)**  
**SUMMARY OF LNAPL RECOVERY FROM MW-23**  
**DNAPL RECOVERY IRM**  
**GREF FACILITY - TONAWANDA, NEW YORK**  
**NYSDEC VCP NUMBER V00334-9**

Date	Volume of LNAPL Recovered (gallons)	LNAPL Thickness in MW-23 (feet)	Water Thickness in MW-23 (feet)
5-Sept-07	0.01	0.08	2.79
25-Sept-07	0.01	0.03	3.35
TOTAL	1.45		

**NOTES:**

- Data refers to light, non-aqueous phase liquid (LNAPL) measured and recovered from monitoring well MW-23 (the only well observed with LNAPL to date).
- LNAPL volumes are estimated based on the measured thickness of LNAPL in the well prior to removal and the cross-sectional volume of the well screen and are thought to be conservatively low (additional LNAPL migration into the well during bailing is not accounted for).
- Volume readings represent the volume recovered since the previous reading.
- LNAPL and ground water thickness data were collected as static level measurements prior to bailing of the well.