EFW01-0314

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Occurrence of Oil at East Street Area 2 / USEPA Area 4 - Spring 1999

REPORT

General Electric Company Pittsfield, Massachusetts

August 1999





RFW01-0314

Corporate Environmental Programs General Electric Company 100 Woodlawn Ave - Pittsfield: MA 01201

Transmitted via Federal Express

August 23, 1999

Ms. J. Lyn Cutler Section Chief, Special Projects Bureau of Waste Site Cleanup Department of Environmental Protection 436 Dwight Street Springfield, Massachusetts 01103 Mr. Bryan Olson Acting Section Chief Office of Remediation and Restoration U.S. EPA, New England Region One Congress Street Boston, Massachusetts 02203-2211

Re: General Electric Pittsfield Facility: East Street Area 2 Site (Mass DEP File No. 1-0146), USEPA Area 4

Dear Ms. Cutler and Mr. Olson:

Please find enclosed the report entitled Occurrence of Oil at East Street Area 2/USEPA Area 4 - Spring 1999, prepared by Blasland, Bouck & Lee, Inc., on behalf of the General Electric Company.

This document presents the results of the Spring 1999 Semi-annual Oil Monitoring Program for this site.

Should you have any questions, please do not hesitate to call me at (413) 494-3952.

Sincerely,

John D Ciampa / MA for

John D. Ciampa Remediation Project Manger

DCK/plh Encl. U:PLH99/97391543.WPD

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*w/enclosures

Occurrence of Oil at East Street Area 2 / USEPA Area 4 - Spring 1999

General Electric Company Pittsfield, Massachusetts

August 1999



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1. Introduction

This document summarizes the activities and results of recent oil and groundwater monitoring conducted within a portion of the General Electric Company's (GE's) Pittsfield, Massachusetts facility. Specifically, between April 19, 1999 and May 6, 1999, Blasland, Bouck & Lee, Inc. (BBL) conducted the spring semi-annual monitoring event which is performed each year for the area designated as East Street Area 2/USEPA Area 4. Field activities associated with the "Spring 1999" event involved the measurement of the water table elevation at numerous wells in this area, as well as the thickness of any floating oils (if present) in these wells. Subsequent evaluations following each monitoring round include an assessment of groundwater flow patterns and subsurface oil accumulations.

This monitoring program, when first implemented in 1980, consisted of quarterly monitoring of groundwater levels and oil thickness present in various wells positioned across the site. Since 1981, the frequency of monitoring was reduced to a semi-annual basis, but the same monitoring components were maintained. This semi-annual monitoring program has continued to date and is currently being performed as part of Short-Term Measure (STM) activities (now referred to as Immediate Response Actions) pursuant to the Massachusetts Contingency Plan (MCP), and as part of Interim Measure activities pursuant to the Resource Conservation and Recovery Act (RCRA), as amended by the Hazardous and Solid Waste Amendments of 1984 (HSWA).

This document also summarizes several other related activities performed between January and June 1999 dealing with oil recovery and containment, including riverbank inspections, weekly well monitoring, and manual oil removal at select well locations.

2. Methods and Protocols

The majority of the Spring 1999 monitoring activities were performed between April 19, 1999 and May 6, 1999, and consisted of the monitoring of 133 discrete wells in East Street Area 2/USEPA Area 4. In addition, several wells from the north bank of the Housatonic River were routinely monitored on a weekly or monthly basis from January 1999 through June 1999. The scope of monitoring for this "Spring 1999" event was generally consistent with the protocols established during prior monitoring events, and was performed consistent with the methods documented in the *Sampling and Analysis Plan/Data Collection and Analysis Quality Assurance Plan* (SAP/DCAQAP), dated May 1994. However, 14 wells previously included in this program were taken out of service prior to the Spring 1999 event in conjunction with Merrill Road reconstruction activities, and therefore not monitored. Those wells have not yet been replaced because road construction activities in the area are ongoing. Ten additional wells which were previously damaged, inaccessible, or could not be located were also not monitored during this event.

The Spring 1999 monitoring was generally conducted in two rounds: a bailing round and a monitoring round. Initially, each well identified as containing oil during either the Spring 1998 or Fall 1998 monitoring events was bailed to remove any stagnant oils which may have accumulated since the last monitoring effort, and to allow a more representative measurement of the current oil thickness (following recovery of the well). This bailing round was performed on April 19 and 20, 1999. Once the bailing was complete and the wells had sufficient time to recover, the groundwater elevation and the thickness of floating oils were measured within each well using an oil/water interface probe. The monitoring round measurements were taken on April 26 and 27, 1999. A supplemental bailing/monitoring round was conducted in well 11 (located north of the railroad tracks). A measurable oil thickness was found in this well during the monitoring round, and therefore it was bailed on April 27, 1999 and re-measured on May 6, 1999 (following recovery) to provide more representative and comparable data.

3. Results of the Spring 1999 Monitoring Event

3.1 Groundwater Conditions

When collected in reference to a standard datum, well-specific measurements of the water table can be used to assess the overall elevation and flow direction of the groundwater. Table 1 presents the well-specific water table measurements (corrected for the presence of oil) associated with the Spring 1999 monitoring event, while Figure 1 presents the overall elevation and flow direction of the groundwater. Additionally, Table 1 shows which wells exhibited the presence of oil and provides the corrected groundwater elevation data from the Spring 1998 monitoring event for comparison to Spring 1999 data. On average, the Spring 1999 corrected water table elevations were approximately seven inches below those measured in Spring 1998. However, the overall configuration of the groundwater flow patterns are generally consistent with past monitoring events.

A slight (approximately 0.5 feet) groundwater mounding condition is apparently present along the riverbank in the vicinity of Building 68. This minor increase in groundwater elevation may be associated with sheetpiling which was installed behind Building 68 to provide structural stability for bank soil excavation activities conducted during remediation of that area. Five distinct groundwater depression areas are shown on Figure 1, corresponding to the locations of active recovery wells/caissons 64V, 64S, RW-1(X), RW-2(X), and RW-1(S). The groundwater depression zones around pumping wells RW-1(X) and RW-2(X) in the riverbank area are displayed in greater detail on Figures 4 through 9. In addition to the five primary recovery systems, two other caissons [64R and 64X(W)] are also pumped at low rates to facilitate additional oil recovery. Each of these seven systems contain groundwater depression pumps used to facilitate active oil recovery. Groundwater from these systems is pumped to the Building 64G groundwater treatment facility for processing. After treatment, the majority of the water is discharged to the Housatonic River through NPDES permitted Outfall 005. However, as part of GE's overall efforts to contain oil within the site and to optimize oil recovery operations, a portion of the treated water discharged from the 64G facility is routed to GE's on-site recharge pond (located west of recovery well 64V). Discharge to this pond results in a higher groundwater elevation relative to the surrounding area, which serves as a hydraulic barrier to oil migration. Since April 1988, the elevation of the recharge pond has been controlled via an "Electrogauge" level controller. Between April 1988 and October 1990, the elevation of the recharge pond was held at approximately 985 feet above mean sea level (MSL). In October 1990, the elevation of the recharge pond was reduced to 984 feet above MSL. In September 1994, the elevation of the pond was reduced again to 983 feet above MSL to decrease the size of the groundwater "mound", while still maintaining the necessary hydraulic barrier.

Of the 133 total wells/caissons included in the Spring 1999 monitoring and supplemental activities, floating oil was detected in 20 wells and 7 recovery wells/caissons. Table 1 identifies those wells where oil was observed, and the apparent thickness of the associated oil layer. The results of this component of the monitoring program were used to assess the overall presence and extent of oil within East Area 2/USEPA Area 4. Figure 2 presents the results of this assessment. For the purposes of discussion, the East Street Area 2/USEPA Area 4 Site is divided into three areas designated as follows: (1) the area north of the railroad tracks and north of East Street; (2) the former tank farm area, located between the railroad tracks and East Street; and (3) the area south of East Street. A summary of Spring 1999 oil occurrence at each of these areas is provided below.

3.2.1 North of the Railroad Tracks

The extent of oil found to be present during the Spring 1999 monitoring event north of the railroad tracks is similar to the Spring 1998 results, but appears to be slightly enlarged. Changes noted in this monitoring event include:

- oil being observed in well 11 (0.04 feet) for the first time since Fall 1997; and
- an increase in oil thickness at wells 23 and 24 since Spring 1998 (although the measured thicknesses are less than observed during the Fall 1998 event).

Although the apparent horizontal extent of oil as measured in Spring 1999 is slightly larger than that measured in Spring 1998, the average oil thickness in all wells in this area which contained oil in Spring 1998 decreased by approximately five inches. This decrease is primarily due to a decrease in oil thickness of over three feet in well 14. Oil thicknesses in this well have been steadily decreasing since Fall 1997.

3.2.2 Former Tank Farm Area

The extent of oil observed during the Spring 1999 monitoring event in this area is slightly different when corresponding data are compared to that of the Spring 1998 monitoring event. Trace amounts of oil were observed in three wells (U, Y, and CC), resulting in a slightly increased lateral extent of oil as compared to that observed in Spring 1998. Oil was not observed in any of these wells in Spring 1998, but has been detected at these locations during prior monitoring events. It should be noted that the collection of data from the Former Tank Farm area was

somewhat limited during this event due to the abandonment of several monitoring wells in conjunction with Merrill Road reconstruction activities.

3.2.3 South of East Street

The extent of oil found to be present in wells during the Spring 1999 monitoring event is generally similar to that observed during the Spring 1998 event. Upon comparison of the oil thickness data for this area between Spring 1998 and Spring 1999, several observations were made:

- oil was not observed in the Spring 1999 event in wells 9R, 10, 14, 50, 66, P3, or ES2-14, while it was observed in these wells in Spring 1998;
- the apparent oil thickness increased in wells 13, 15R, 48, and 55 in the Spring 1999 event as compared to the Spring 1998 measurements; and
- on average, observed oil thicknesses south of East Street decreased by approximately 3.2 inches. Historically, the apparent oil thickness in monitoring wells typically decreases when the water table elevation increases. However, in this case, groundwater elevations were slightly lower in Spring 1999 as compared to Spring 1998 (by approximately 7 inches).

3.2.4 Overall Summary

The lateral extent of oil observed in the Spring 1999 event is generally similar to that observed in recent monitoring events, although data from the Former Tank Farm area was somewhat limited due to the elimination of several wells as part of Merrill Road reconstruction activities. Overall, the changes in oil thickness and extent indicated in the various areas above may be attributable to the differences in water table elevations observed between the monitoring events, small differences in oil occurrence at the fringes of the plume, and/or the ongoing oil recovery operations.

3.3 Oil Recovery

A summary of oil and groundwater recovery volumes associated with the oil recovery systems operating in East Street Area 2/USEPA Area 4 between January and June 1999 is presented in Table 2. The recovery systems most important in preventing migration of the oil plume are 64S, RW-1(S), 64V, RW-1(X) and RW-2(X). Two other recovery caissons (64X and 64R) are pumped at a lower capacity to facilitate increased oil recovery. Additionally, an automated oil removal system is installed in monitoring well 40R, which is located next to the 64R caisson. As

shown in Table 2, a total of approximately 11,786 gallons of oil were collected during the first six months of 1999. Additionally, a total of approximately 25.4 million gallons of groundwater were pumped from this area and treated at the 64G groundwater treatment facility during this same period. Oil recovery for the same time period last year was approximately 16,745 gallons. This decrease in recovery is attributable to the 64R/40R recovery systems where the decreased groundwater elevations observed this spring also resulted in a reduced quantity of groundwater being removed from the 64R caisson. Each of the other recovery systems showed an increase in the quantity of oil recovered in Spring 1999 as compared to Spring 1998. Table 3 presents a summary of downtime associated with the active oil recovery operations for January through June 1999. The overall average downtime recorded for these systems was approximately 0.3 percent.

Two modifications to the oil recovery network were implemented last year along the western boundary of the oil plume. The 64S caisson was deepened in order to facilitate increased pumping capacity. Additionally, a new recovery well [RW-1(S)] located south of East Street, approximately 350 feet southwest of the 64S caisson, was put into operation during March 1998. This current monitoring period provides the first data set over an entire spring monitoring period with which to compare previous recovery data (prior to installation of RW-1(S)) from the area. From January through June 1998, 2,878 gallons of oil were recovered from this area via caisson 64S (and well RW-1(S) for a portion of the time period). The oil recovery from these systems from January through June 1999 was 4,651 gallons.

Pumping from well RW-1(S) has resulted in a localized groundwater depression which extends approximately 150 feet long and 100 feet wide, as illustrated on Figure 1. The lateral extent of the oil pocket in this area (as shown on Figure 2) is slightly reduced when compared to past results, as oil was not detected this spring in wells 9R, 10, or ES2-14. Oil has been observed in these wells during prior monitoring events. Future monitoring events will be utilized to further track this trend in order to verify the influence of RW-1(S) in reducing the volume and remediating the oil in this portion of the site.

In addition to oil recovery associated with the active recovery systems, a number of wells south of East Street are monitored weekly and are subject to manual oil removal if sufficient quantities of oil are observed. The results of these oil recovery efforts for the first six months of 1999 are: 3.5 gallons at well 13; 2 gallons at well 14; and 1 gallon at well 15R. A summary of the weekly monitoring and oil removal data from these wells is presented in Appendix A.

4. Riverbank STM Evaluation

4.1 General

This section presents an overview of the Short-Term Measure (STM) that is being implemented along the north bank of the Housatonic River in East Street Area 2/USEPA Area 4 and a discussion of the effectiveness of the oil-recovery and bank-seep prevention efforts conducted between January and June 1999.

The riverbank STM area, depicted on Figure 3, encompasses the area southeast of the recharge pond in the vicinity of the 64-X oil/water separator. A number of wells and piezometers present in the riverbank area are monitored on a weekly basis, along with visual observations of the riverbank and absorbent booms adjacent to the riverbank. Additionally, maintenance inspections and repairs (if needed) are made on the absorbent boom system between three and five times per week (depending on the severity of the weather).

Groundwater elevations and oil thickness data (where oil was present) were obtained from the riverbank wells and piezometers on a weekly basis between January and June 1999. A summary table of these data is presented in Appendix B. The weekly monitoring of these wells and well points also includes the bailing of oil when its observed thickness is greater than 0.25 feet. During the subject time period, a small amount of oil (approximately 0.4 gallons) was removed from piezometer PZ-2S. No oil was bailed from any of the other river bank piezometers or well points during this time frame. Several of these well points have recently been removed in conjunction with the installation of the containment barrier in this area.

Recovery wells RW-1(X) and RW-2(X) are the focus of the groundwater depression and hydraulic control activities in the riverbank STM area. Well RW-1(X) was pumped at an average rate of approximately 20 gallons per minute (gpm) during this monitoring period. It has separate groundwater-depression and oil-removal pumps. Well RW-2(X) is located approximately 80 feet southwest of RW-1(X) and had an average pumping rate during this time period of approximately 10 gpm. An oil-removal pump has not been installed in RW-2(X), since oil has not yet accumulated in the well. In addition to these recovery wells, the 64X(W) caisson is also pumped at a low rate to remove any oil which migrates into the subsurface collection trench located between the 64X(W) and 64X(S) caissons. A total of 478 gallons of oil were removed from RW-1(X) and the 64X systems between January and June 1999. This compares to a recovery of 156 gallons for the same time period in 1998. The increase in recovery is primarily due to oil which was manually removed in April 1999 (220 gallons) from the 64X(N) caisson. Oil recovery volumes over the remaining months during Spring 1998 and Spring 1999 were more comparable. Figures 4 through 9 illustrate the groundwater contours in the vicinity of the RW-1(X) and RW-2(X) pumping wells for the months of January through June 1999. As illustrated in the figures, the cones of depression created by the removal of groundwater from wells RW-1(X) and RW-2(X) are typically about 4 to 7 feet in depth, and the combined hydraulic influence of these two recovery wells extends for approximately 200 feet along the riverbank.

4.2 Summary of Riverbank Inspections

The boomed area along the riverbank is divided into two general zones as illustrated on Figure 3 to facilitate interpretation of spatial observations. Zone 1 is generally under the pumping influence of RW-1(X), while Zone 2 is under the influence of RW-2(X). Twenty-six riverbank inspections were performed by GE personnel between January and June 1999 in the riverbank STM area. No seeps from the riverbank were observed during any of these inspections. Sheens were periodically noted within the boomed area, but were not associated with an observed bank seep. In all cases, the observed sheens were contained by the existing boom system.

4.3 STM Assessment

Since the commencement of pumping at wells RW-1(X) and RW-2(X), a significant decrease in riverbank seep occurrences has been observed. During the first six months of 1999, no bankseeps were observed during the weekly riverbank inspections.

As depicted on Figures 4 through 9, pumping of RW-1(X) and RW-2(X) has been successful in consistently developing overlapping cones of influence which extend 175 to 200 feet along the riverbank. The pumping has also locally reversed the groundwater flow direction along the riverbank so that flow is primarily toward the recovery wells. The appearance of occasional seeps along the riverbank (although not observed during this evaluation period) may be attributable to the physical contact of river water and riverbank soil, regardless of groundwater gradient. Alternatively, occasional seeps may be caused by short-term instances of groundwater flow towards the river resulting from relatively rapid decreases in river stage in comparison to ground water level. The frequency of occasional seeps has significantly diminished since the onset of pumping and the amount of oil being detected in the riverbank well points has decreased. In an effort to provide further assurances of oil containment, GE installed approximately 450 linear feet of sheetpiling at the base of the riverbank in this area. The sheetpile installation, which was completed in June 1999 as part of supplemental source control measures, is discussed in more detail in the January 1999 *Proposal for Supplemental Control/Containment/Recovery Measures*, prepared by Blasland, Bouck & Lee, Inc.

5. Summary

- 1. The direction of groundwater flow is consistent with prior monitoring events. The overall average Spring 1999 corrected water table elevations were approximately 7 inches lower than those recorded in Spring 1998.
- Relatively minor variations have been noted in the extent of oil observed in Spring 1999. These variations
 are attributable to fluctuations typically observed in the apparent oil thickness and/or to the success of ongoing
 recovery operations.
- 3. Groundwater pumping from recovery wells RW-1(X) and RW-2(X) produces two overlapping cones of influence that provide hydraulic control near the riverbank and locally reverse the natural groundwater elevation gradients. These riverbank STM activities have been effective in controlling and reducing bankseeps, and were supplemented by the installation of a sheetpile containment barrier along the base of the riverbank.
- 4. Monitoring, maintenance, and trouble-shooting activities at the various oil recovery systems and the booms were routinely performed by GE to ensure that the systems were operating properly. Repairs, if needed, were completed as soon as it was possible to do so.
- 5. A total of approximately 11,800 gallons of oil were recovered at the site and approximately 25.4 million gallons of groundwater were treated at the 64G groundwater treatment facility between January and June 1999. The volume of oil recovered is approximately 5,000 gallons less than the amount recovered between January and June 1998. This decrease in oil recovery is due primarily to lower recovery volumes at the 64R/40R systems. Elsewhere, oil recovery volumes have increased, due at least in part to improvements made to the systems (i.e., adding recovery well RW-1(S) and deepening Caisson 64S).

References

- Blasland, Bouck & Lee, Inc., Sampling and Analysis Plan/Data Collection and Analysis Quality Assurance Plan (Syracuse, NY: May 1994).
- Blasland, Bouck & Lee, Inc., Occurrence of Oil at East Street Area 2 / USEPA Area 4 Fall 1997 (Syracuse, NY: February 1998).

Blasland, Bouck & Lee, Inc., Occurrence of Oil at East Street Area 2 / USEPA Area 4 - Spring 1998 (Syracuse, NY: August 1998).

Blasland, Bouck & Lee, Inc., Proposal for Supplemental Control/Containment/Recovery Measures (Syracuse, NY: January 1999).

Blasland, Bouck & Lee, Inc., Occurrence of Oil at East Street Area 2 / USEPA Area 4 - Fall 1998 (Syracuse, NY: February 1999).

Tables

BLASLAND, BOUCK & LEE, INC. engineers & scientists

GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS EAST STREET AREA 2/USEPA AREA 4

SUMMARY OF WATER TABLE AND OIL THICKNESS DATA - SPRING 1999

	1	1			SPR DIG 1000	00000101000	
					SPRING 1999	SPRING 1998	
	MEASURDIG				CORRECTED	CORRECTED	
	MEASURING				WATER	WATER	CHANGE
	POINT	DEDTU	DEDTU	01	TABLE	TABLE	IN WATER
	ELEVATION	DEPTH	DEPTH	OIL	ELEVATION	ELEVATION	TABLE
WELL ID	(feet above mean	TO WATER	TOOIL	THICKNESS	(feet above mean	(feet above mean	ELEVATION
	sea level)	(feet)	(feet)	(feet)	sea level)	sea level)	(feet)
	AILROAD TRACKS		· · · · · · · · · · · · · · · · · · ·		100110	r	•
2	1015.56	11.37			1004.19	1004.85	-0.66
5	1009.23	24.41			984.82	984.88	-0.06
6	1010.83	30.64			980.19	981.24	-1.05
9	1011.01	27.37			983.64	983.82	-0.18
11	1010.85	30.85	30.81	0.04	980.04	981.34	-1.30
13*	1019.50	14.52			1004.98	1006.19	-1.21
14*	1010.53	23.82	23.54	0.28	986.97	986.85	0.12
16	1010.65	30.95			979.70	980.96	-1.26
17	1010.49	30.96	30.65	0.31	979.82	981.09	-1.27
17A	1024.30	9.19	*****		1015.11	1015.34	-0.23
17C*	1024.31	2.48			1021.83	1021.88	-0.05
19	1010.68	30.55			980.13	981.48	-1.35
20*	1010.66	29.65	*****		981.01	982.03	-1.02
21	1010.81	30.37	*****		980.44	981.32	-0.88
22	1010.64	31.09			979.55	980.75	-1.20
23	1011.13	32.11	31.00	1.11	980.05	981.34	-1.29
24	1010.50	30.26	30.15	0.11	980.34	981.58	-1.24
27*	1010.40	24.99			985.41	985.34	0.07
31	1012.08	13.74			998.34	998.64	-0.30
95-12	1010.20	31.48	30.58	0.9 [0.13 E]	979.56	980.97	-1.42
95-20	1010.67	13.95			996.72	996.85	-0.13
A7	1024.07	7.89			1016.18	1016.85	-0.67
C1	1023.67	10.35			1013.32	1011.62	1.70
FORMER TAN	IK FARM AREA						
U	998.89	20.45	20.44	0.01	978.45	979.79	-1.34
Y	1002.86	24.10	24.09	0.01	978.77	980.09	-1.32
CC	998.84	19.46	19.45	0.01	979.39	980.56	-1.17
EE	1004.27	24.67			979.60	980.59	-0.99
FF	1005.70	25.20		****	980.50	981.21	-0.71
GG	1007.40	25.50		****	981.90	982.32	-0.42
JJ	1006.38	26.99			979.39	980.96	-1.57
KK	1006.61	27.34			979.27	980.76	-1.49
UU-R	997.70	18.80			978.90	980.44	-1.54
N-R	1008.24	29.10			979.14	980.69	-1.55
O-R	1000.42	16.61			983.81	985.11	-1.30
SOUTH OF EA						L	
IR	992.72	12.38			980.34	980.48	-0.14
2	995.64	18.23	17.98	0.25	977.64	978.56	-0.92
6	991.18	16.13		ar 46 46 10	975.05	978.08	-3.03
8	985.35	12.73	11.23	1.50	974.02	974.70	-0.68

(See notes on Page 4)

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GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS EAST STREET AREA 2/USEPA AREA 4

SUMMARY OF WATER TABLE AND OIL THICKNESS DATA - SPRING 1999

[1	1	T	T		00000	
					SPRING 1999	SPRING 1998	
					CORRECTED	CORRECTED	
	MEASURING				WATER	WATER	CHANGE
	POINT				TABLE	TABLE	IN WATER
	ELEVATION	DEPTH	DEPTH	OIL	ELEVATION	ELEVATION	TABLE
WELL ID	(feet above mean	TO WATER	TO OIL	THICKNESS	(feet above mean	(feet above mean	ELEVATION
	sea level)	(feet)	(feet)	(feet)	sea level)	sea level)	(feet)
SOUTH OF EA				-			1
<u>9R</u>	986.88	13.63			973.25	973.84	-0.59
10	987.95	15.90			972.05	972.92	-0.87
11R	988.86	15.84			973.02	975.51	-2.49
13	990.88	18.45	17.78	0.67	973.05	973.56	-0.51
14	991.61	18.18			973.43	973.57	-0.14
15R	989.23	16.06	16.04	0.02	973.19	973.64	-0.45
16R	987.10	12.25	*****		974.85	975.36	-0.51
17R	984.89	11.34			973.55	973.87	-0.32
18	983.33	10.14			973.19	973.35	-0.16
19	983.59	11.28	*****		972.31	972.74	-0.43
21	983.82	10.96			972.86	973.33	-0.47
22	994.69	18.76	16.86	1.90	977.70	978.69	-0.99
28*	991.86	13.39			978.47	979.31	-0.84
29	991.59	18.52	18.51	0.01	973.08	973.54	-0.46
31*	990.60	13.89			976.71	977.07	-0.36
32	990.81	13.24			977.57	977.87	-0.30
34	982.54	8.20			974.34	975.20	-0.86
35	982.81	9.26			973.55	974.97	-1.42
36	983.02	9.17			973.85	974.47	-0.62
37	980.37	6.34			974.03	974.62	-0.59
38	98 0.77	5.19			975.58	976.05	-0.47
39	983.89	7.74		*****	976.15	976.76	-0.61
42	988.33	13.46			974.87	975.63	-0.76
43	989.67	14.95			974.72	975.05	-0.33
44	988.33	12.96		*****	975.37	975.80	-0.43
48	992.39	22.00	19.50	2.50	972.72	973.13	-0.42
49R	988.71	15.80		*****	972.91	973.39	-0.48
49RR	989.80	16.89		*	972.91	973.36	-0.45
50	985.79	10.36			975.43	975.99	-0.56
51	985.38	12.18			973.20	973.68	-0.48
52	985.18	12.16			973.02	973.31	-0.29
53	986.90	14.36			972.54	972.86	-0.32
54	985.78	13.63			972.15	972.47	-0.32
55	989.45	18.35	16.73	1.62	972.61	972.91	-0.31
56	987.28	16.48			970.80	971.17	-0.37
57	989.80	12.81			976.99	977.76	-0.77
58	985.79	13.39			972.40	972.70	-0.30
59	986.32	15.18			971.14	971.19	-0.05

(See notes on Page 4)

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GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS EAST STREET AREA 2/USEPA AREA 4

SUMMARY OF WATER TABLE AND OIL THICKNESS DATA - SPRING 1999

			T	1	SPRING 1999	SPRING 1998	T The second
					CORRECTED	CORRECTED	
	MEASURING				WATER	WATER	CHANGE
	POINT				TABLE	TABLE	IN WATER
	ELEVATION	DEPTH	DEPTH	OIL	ELEVATION	ELEVATION	TABLE
WELL ID	(feet above mean	TO WATER	TO OIL	THICKNESS	(feet above mean	(feet above mean	ELEVATION
	sea level)	(feet)	(feet)	(feet)	sea level)	sea level)	(feet)
SOUTH OF E	AST STREET		*			<u> </u>	(icci)
61	992.31	18.65			973.66	974.36	-0.70
62	979.11	6.77			972.34	972.68	-0.34
63	986.48	14.60			971.88	972.07	-0.19
64	985.00	12.72	*****		972.28	972.55	-0.27
65	992.50	16.52			975.98	976.94	-0.96
66	990.70	17.50			973.20	973.72	-0.51
95-1	983.77	10.82			972.95	973.46	-0.51
95-2	985.53	12.84	**	+	972.69	973.04	-0.35
95-4	988.70	16.70	14.81	1.89 [0.27 E]	973.76	974.19	-0.44
95-5	989.45	17.34	15.94	1.40	973.41	973.94	-0.53
95-6*	989.07	17.16			971.91	972.15	-0.24
95-7*	994.91	24.70	19.10	5.6[0.79 E]	975.42	974.32	1.09
95-9	998.28	21.05			977.23	978.03	-0.80
95-19	989.91	16.78	*****		973.13	973.64	-0.51
95-25	988.20	14.42	*****		973.78	974.27	-0.49
P1	988.75	11.95			976.80	976.93	-0.13
P2	988.22	11.90			976.32	976.75	-0.43
P3*	989.25	5.17		*****	984.08	983.82	0.26
P3D*	988.54	10.69			977.85	979.75	-1.90
P4	987.16	4.15			983.01	982.88	0.13
P5	985.64	7.92			977.72	978.13	-0.41
P6	985.71	9.45			976.26	975.83	0.43
P7	989.10	13.18			975.92	976.43	-0.51
ES2-2A	979.54	7.32			972.22	972.52	-0.30
ES2-4	983.84	10.78			973.06	973.54	-0.48
ES2-5	990.65	17.23			973.42	973.89	-0.47
ES2-6*	986.00	13.66			972.34	972.68	-0.34
ES2-8	994.87	20.72			974.15	974.62	-0.47
ES2-9	991.25	15.20			976.05	978.95	-2.90
ES2-10	991.55	15.03			976.52	978.28	-1.76
ES2-11	985.05	11.46			973.59	974.18	-0.59
ES2-12	984.41	11.77			972.64	973.03	-0.39
ES2-14	985.93	12.93			973.00	973.49	-0.49
ES2-15	986.55	13.27		****	973.28	973.79	-0.51
ES2-16	986.88	13.99			972.89	975.90	-3.01
ES2-17	986.55	13.48			973.07	973.53	-0.46
ES2-18	986.86	13.99		*****	972.87	973.36	-0.49
RF-1	984.42	11.58			972.84	973.18	-0.34

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Statement Statements

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GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS EAST STREET AREA 2/USEPA AREA 4

SUMMARY OF WATER TABLE AND OIL THICKNESS DATA - SPRING 1999

P	Ϋ́.										
		Rich Children and Anna and Ann			SPRING 1999	SPRING 1998					
					CORRECTED	CORRECTED					
	MEASURING				WATER	WATER	CHANGE				
	POINT				TABLE	TABLE	IN WATER				
	ELEVATION	DEPTH	DEPTH	OIL	ELEVATION	ELEVATION	TABLE				
WELL ID	(feet above mean	TO WATER	TOOIL	THICKNESS	(feet above mean	(feet above mean	ELEVATION				
	sea level)	(feet)	(feet)	(feet)	sea level)	sea level)	(feet)				
REMAINDER OF EAST STREET AREA 2											
95-15	986.38	8.88			977.50	977.87	-0.37				
95-16	1007.65	15.54			992.11	992.27	-0.16				
95-17	1007.67	24.21			983.46	983.62	-0.16				
95-23	1002.22	14.05	*****		988.17	988.36	-0.19				
ES2-19	1007.22	13.48			993.74	994.47	-0.73				
RF-2	982.35	6.17	*****		976.18	976.59	-0.41				
RF-3	985.29	9.48			975.81	975.98	-0.17				
RF-4	1011.99	15.05			996.94	996.98	-0.04				
RF-16	987.91	9.60			978.31	978.67	-0.36				
RECOVERY C	AISSONS										
64R	993.37	16.96	16.94	0.02	976.43	976.47	-0.04				
<u>64S</u>	984.48	11.76	11.72	0.04	972.76	973.08	-0.32				
64S2		7.28				*****					
64V	987.29	22.70	22.55	0.15	964.73	964.37	0.36				
64X (N)	984.83	12.80	12.73	0.07	972.10	972.38	-0.29				
64X (S)	981.56	9.97	9.91	0.06	971.65	971.96	-0.31				
64X (W)	984.87	13.27	13.25	0.02	971.62	971.93	-0.31				
C60	979.62	6.15			973.47	974.06	-0.59				
EASTERN	*****	20.13	*****			****					
RW-1(S)	987.23	17.50	17.45	0.05	969.78	969.37					

NOTES:

1. Measuring point elevations were developed by Blasland, Bouck & Lee, Inc., Syracuse, NY, Golder Associates, Mt. Laurel NJ, or Geraghty & Miller, Inc., Albany, NY.

2. Water table and oil thickness measurements were obtained by Blasland, Bouck & Lee, Inc., on April 26 and 27, 1998. Wells monitored during this timeframe were bailed by Blasland, Bouck & Lee, Inc., on April 19 and 20, 1998.

3. Spring 1998 corrected water table elevations were measured in April 1998 by Blasland, Bouck & Lee, Inc.

4. Water table elevations for wells containing oil were computed as follows:

Corrected Water Table Elevation = Measuring Point Elevation - Depth to Water + (Oil Thickness x Specific Density of Oil). Specific Density of oil estimated at 0.93.

5. * = Water table elevation was greater than the top of the well screen elevation.

6. [0.20E] - Calculated equivalent oil thickness for a 2-inch well (based on volume of oil present).

 Wells 1, 4, 12, 30, 40R, C2, HH, I II, and M were included in the Semi-Annual Monitoring Program at one time, as previously reported. However, these wells are either inaccessible, damaged, or not found.

 Wells J, K, R, LL, MM, NN, OO, PP, QQ, 5A, 25, 26, 27, and 60 were included in the Semi-Annual Monitoring Program at one time, as previously reported. However, these wells were abandoned prior to the performance of the Spring 1999 monitoring event in association with reconstruction activities at Merrill Road.

GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS EAST STREET AREA 2/USEPA AREA 4

MONTH (1999)		64	R		64	S	64V		64X		
	OIL		WATER	OIL		WATER	OIL	WATER	OIL		WATER
January 1999	461	*	87,600	1,183		244,655	703	886,800	58	***	400,700
February 1999	0	*	198,500	1,188		525,812	1,594	1,019,000	85	***	403,200
March 1999	0	*	317,400	687	**	755,120	1,380	1,326,500	42	***	489,600
April 1999	0	*	319,600	600	**	711,644	320	1,062,400	220	***	475,200
May 1999	0	*	183,400	713	**	550,617	630	1,004,400	47	***	403,200
June 1999	485	*	198,700	280	**	564,813	1,084	1,106,400	26	***	504,000
Subtotals:	946	*	1,305,200	4,651	**	3,352,661	5,711	6,405,500	478	***	2,675,900

SUMMARY OF ACTIVE OIL AND GROUNDWATER RECOVERY VOLUMES (GALLONS) - SPRING 1999

MONTH		RW-	1(S)	RW-1(X)			RW	/-2(X)
(1999)	OIL		WATER	OIL		WATER	OIL	WATER
January 1999	1,183		448,497	58	***	1,007,700	0	403,200
February 1999	1,188		630,853	85	***	789,900	0	478,600
March 1999	687	**	881,773	42	***	892,600	0	559,500
April 1999	600	**	701,478	220	***	755,865	0	289,100
May 1999	713	**	607,851	47	***	743,200	0	417,300
June 1999	280	**	643,808	26	***	894,100	0	527,600
Subtotals:	4,651	**	3,914,260	478	***	5,083,365	0	2,675,300

Totals for Janua	ry 1999 to June 1999:
11,786	Gallons of Oil*
25,412,186	Gallons of Water

NOTES:

1. Data were compiled by GE.

2. * - Total volume of oil collected includes additional oil collected from well 40R as part of additional oil recovery operations.

3. ****** - Oil collection is a combined total from the RW-1(S) and 64S systems.

4. *** - Oil collection is a combined total from the RW-1(X) and 64X systems.

GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS EAST STREET AREA 2/USEPA AREA 4

SUMMARY OF DOWNTIME (PERCENT) FOR ACTIVE OIL RECOVERY SYSTEMS -SPRING 1999

MONTH (1998)	64R	64S	64V	64X
January 1998	0.0%	2.4%	0.0%	0.0%
February 1998	0.0%	0.0%	0.0%	0.0%
March 1998	0.0%	0.7%	0.0%	0.7%
April 1998	0.0%	0.0%	0.0%	0.0%
May 1998	0.0%	0.0%	0.0%	0.0%
June 1998	0.0%	0.0%	0.0%	0.0%
Average Downtime:	0.0%	0.5%	0.0%	0.1%

MONTH (1998)	RW-1(S)	RW-1(X)	RW-2(X)	
January 1998	2.4%	0.0%	3.8%	
February 1998	0.0%	0.0%	0.0%	
March 1998	0.0%	0.0%	0.7%	
April 1998	0.0%	0.0%	1.8%	
May 1998	0.0%	0.0%	0.0%	
June 1998	0.0%	0.0%	0.0%	
Average Downtime:	0.4%	0.0%	1.1%	

Overall Average Downtime: 0.3%

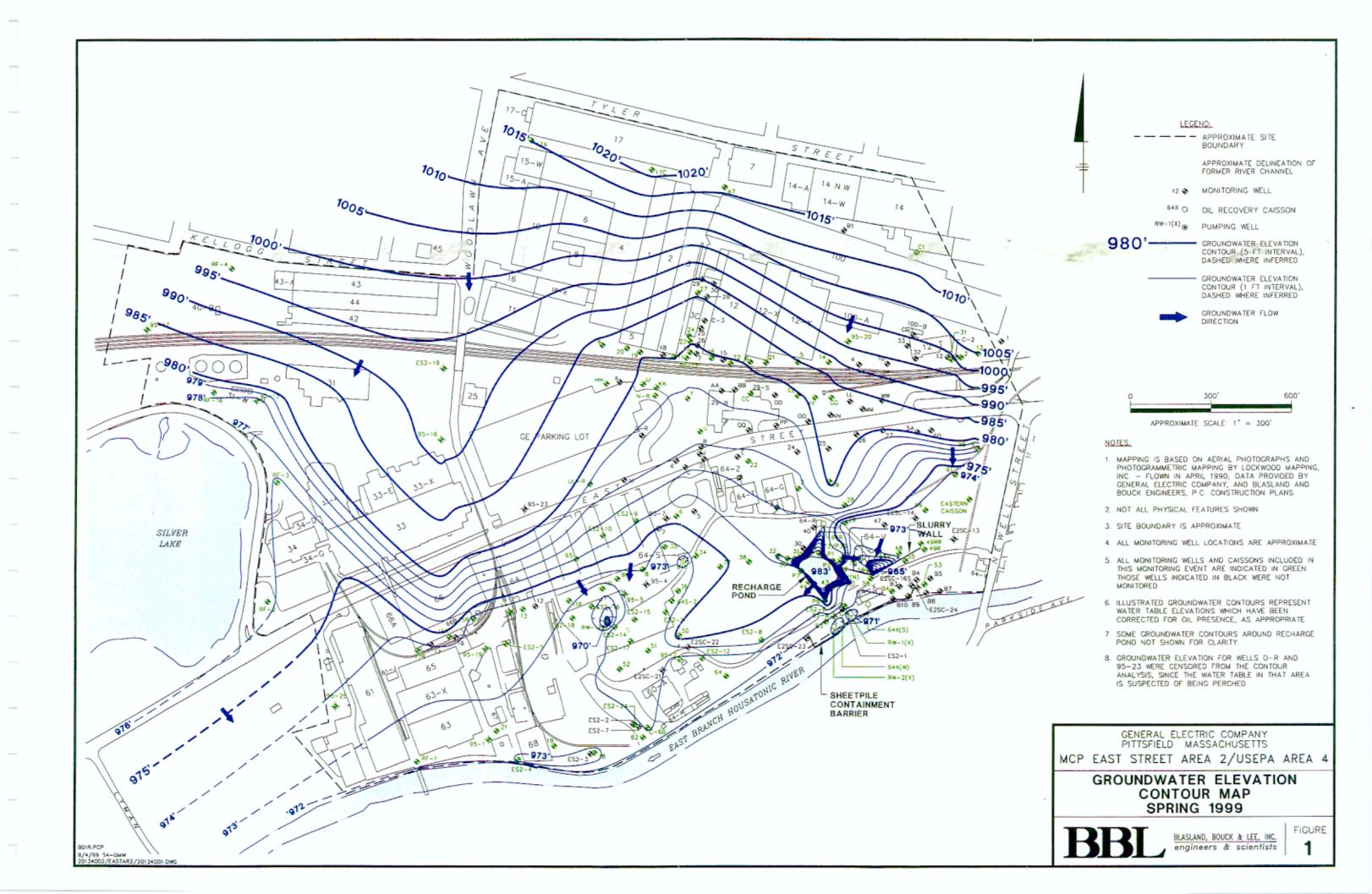
NOTES:

- 1. Data were compiled by GE.
- 2. Downtime defined as time at which system was inoperative due to equipment maintenance/failure, alarm conditions, or power failure.

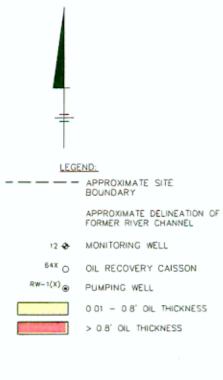
Figures

BLASLAND, BOUCK & LEE, INC.

engineers & scientists



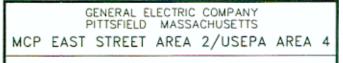






NOTES.

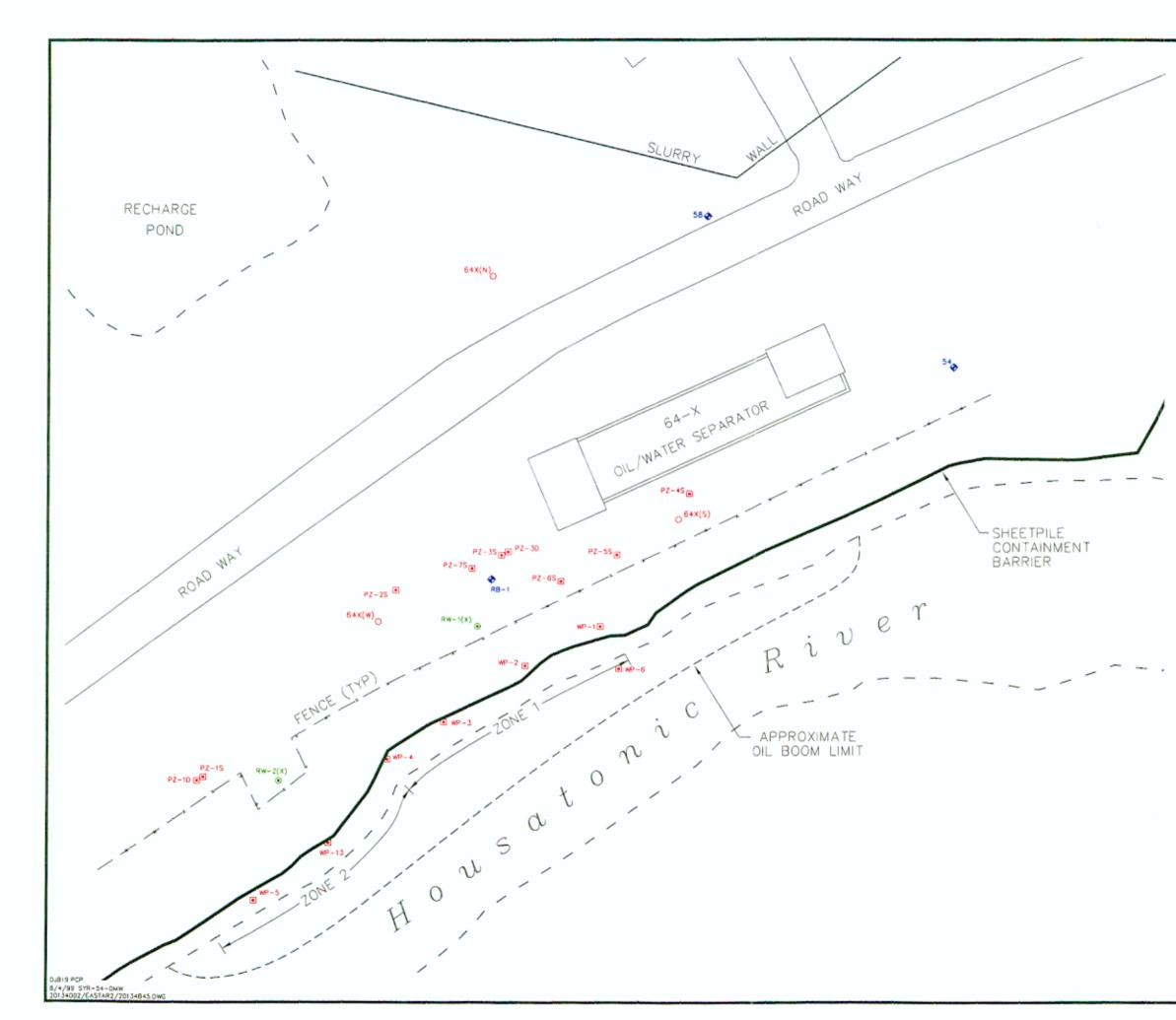
- MAPPING IS BASED ON AERIAL PHOTOGRAPHS AND PHOTOGRAMMETRIC MAPPING BY LOCKWOOD MAPPING, INC. – FLOWN IN APRIL 1990; DATA PROVIDED BY GENERAL ELECTRIC COMPANY, AND BLASLAND AND BOUCK ENGINEERS, P.C. CONSTRUCTION PLANS.
- 2. NOT ALL PHYSICAL FEATURES SHOWN.
- 3. SITE BOUNDARY IS APPROXIMATE.
- 4. ALL MONITORING WELL LOCATIONS ARE APPROXIMATE
- ALL MONITORING WELLS AND CAISSONS INCLUDED IN THIS MONITORING EVENT ARE INDICATED IN GREEN. THOSE WELLS INDICATED IN BLACK WERE NOT MONITORED.
- 6. THE BOUNDARIES OF THE OIL PLUME ARE BASED ON GENERALIZED REVIEW OF THE CURRENT DATA AND PRIOR OIL MONITORING REPORT CONCLUSIONS. ILLUSTRATION OF THE EXTENT OF OIL PRÉSENT BETWEEN MONITORING POINTS IS NECESSARILY APPROXIMATE.
- OIL THICKNESS GREATER THAN 0.8 FEET MEASURED IN 3/4-INCH DIAMETER WELLS WERE CONVERTED TO AN EQUIVALENT OIL THICKNESS FOR A 2~INCH DIAMETER WELL (BASED ON VOLUME OF OIL PRESENT).
- APPARENT OIL THICKNESS CONTOURS ARE DASHED WHERE INFERRED.

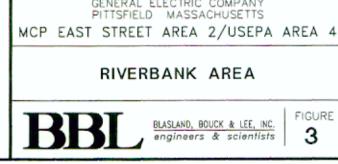


EXTENT OF OIL SPRING 1999

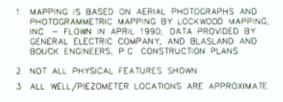


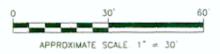




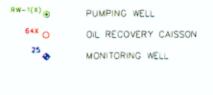




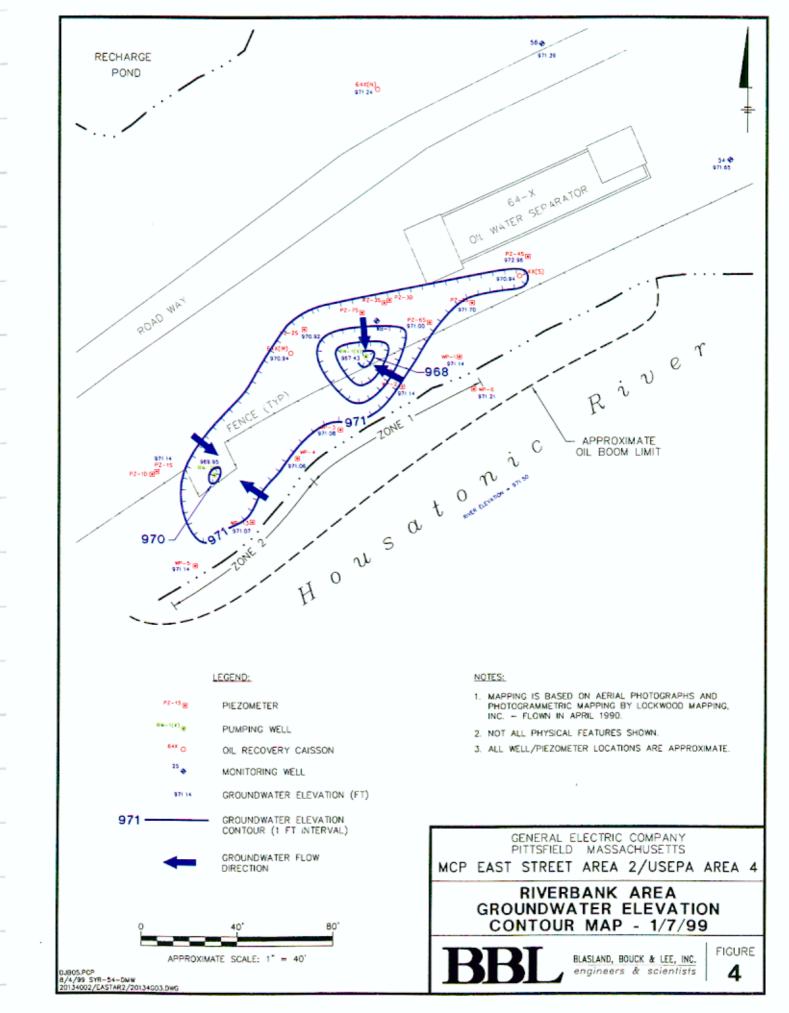


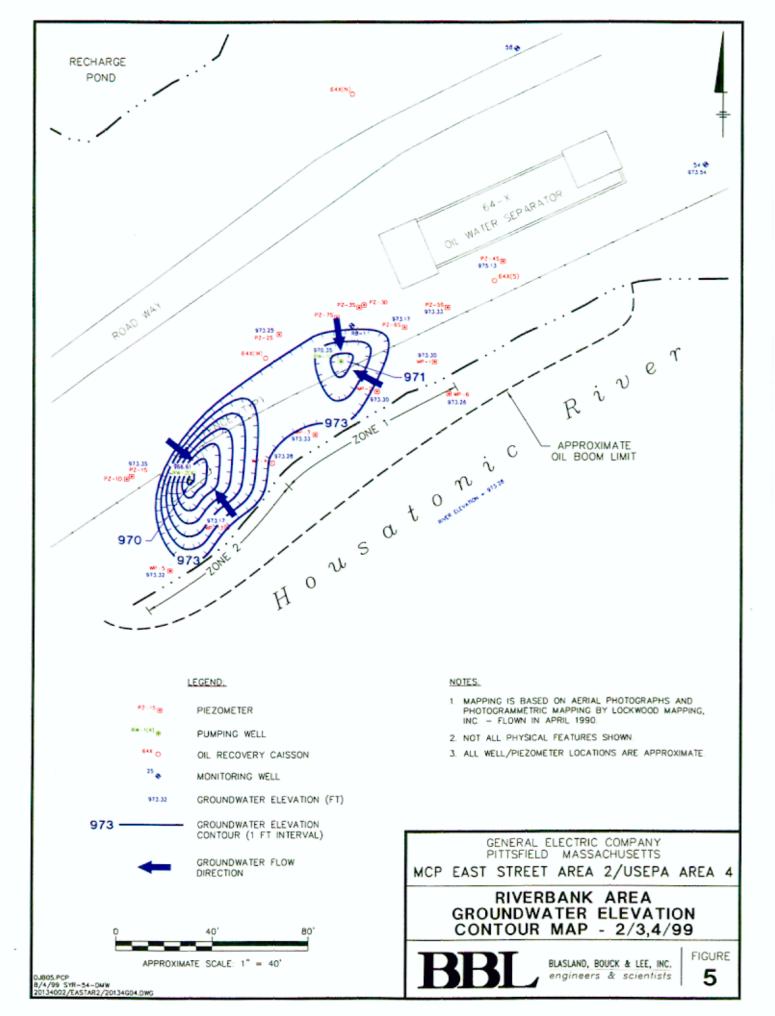


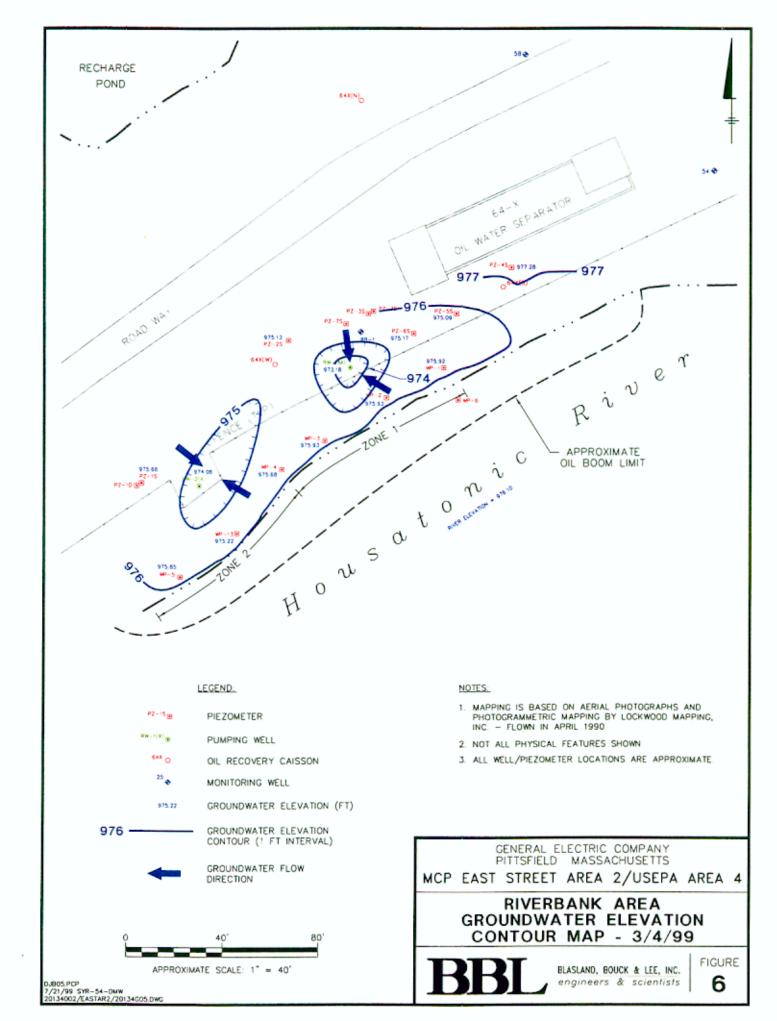
NOTES:

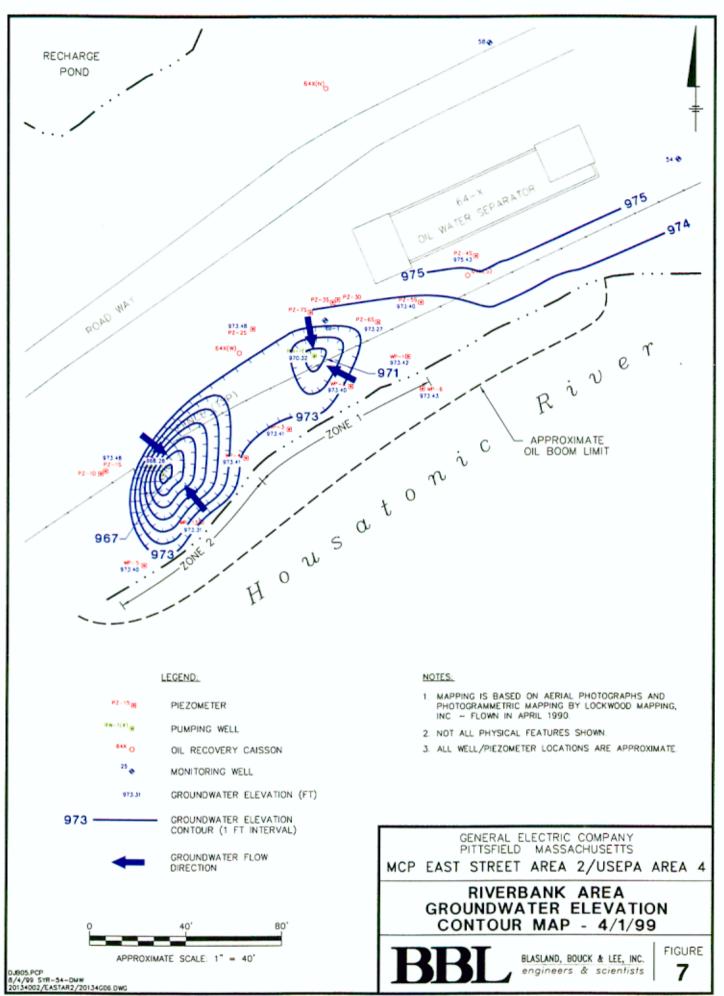


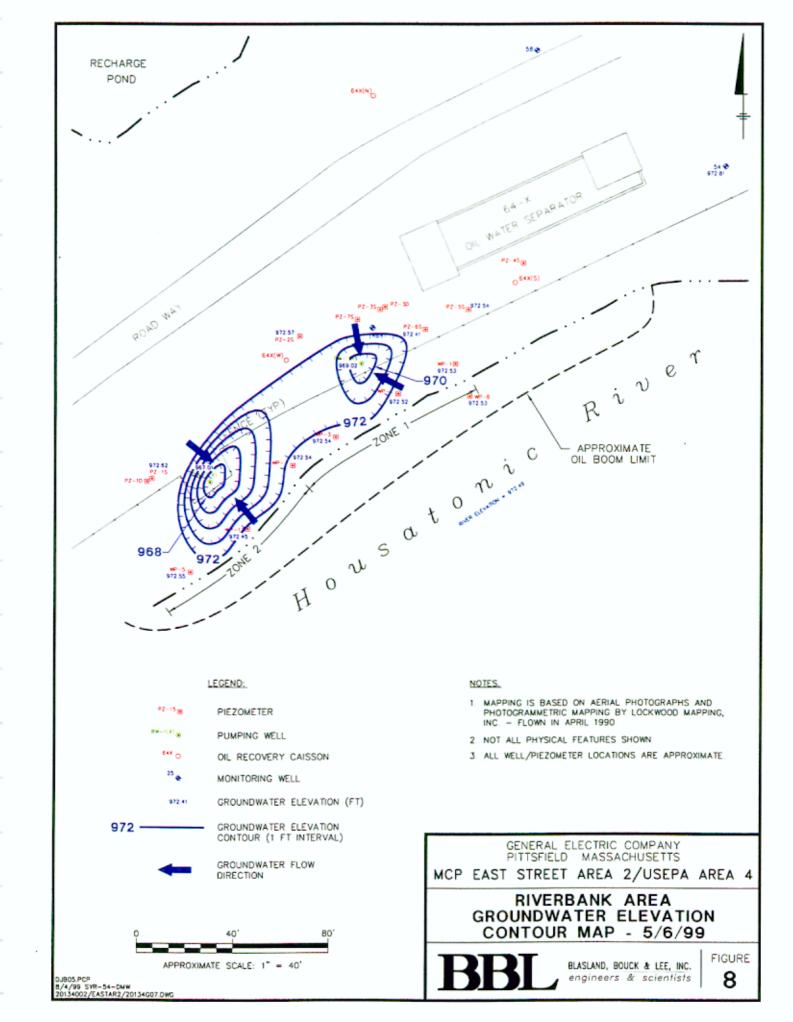


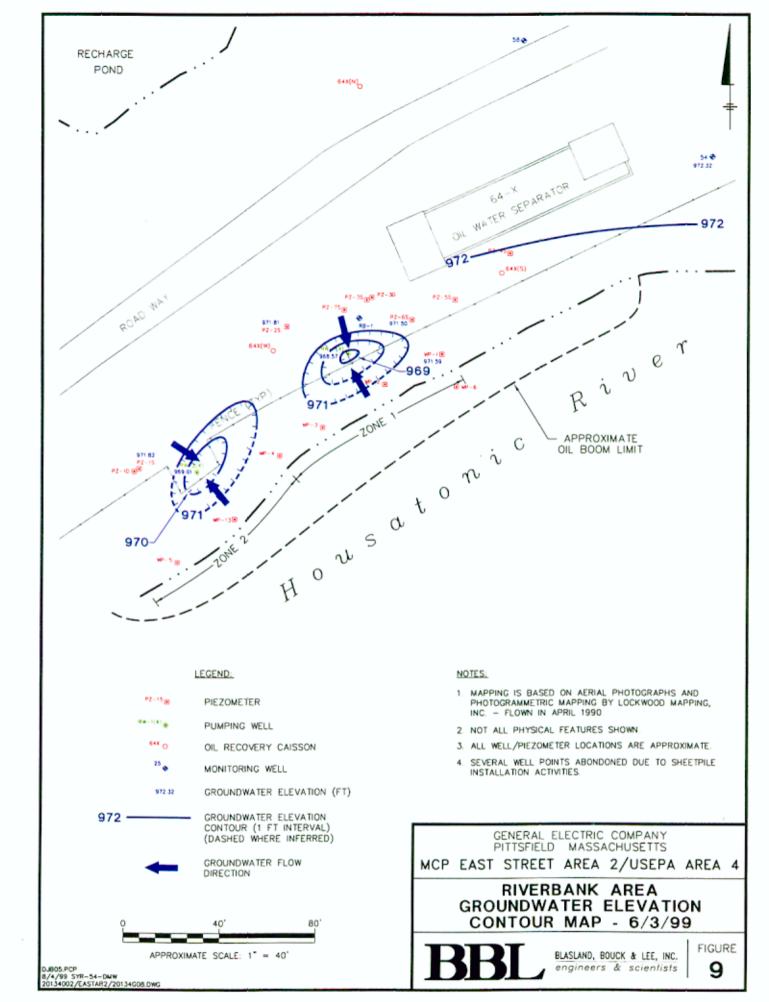












Appendix A

BLASLAND, BOUCK & LEE, INC.

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Summary of Miscellaneous Monitoring/Manual Oil Removal Data

GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS EAST STREET AREA 2/USEPA AREA 4

SUMMARY OF MISCELLANEOUS MONITORING / MANUAL OIL REMOVAL DATA - SPRING 1999

1	T	MEASURING	DEPTH	DEPTH	Γ	MEASURED	CORRECTED	1
SAMPLING	WELL	POINT	TO	ТО	OIL	WATER TABLE	WATER TABLE	LNAPL
DATE	NO.	ELEVATION	OIL	WATER	THICKNESS	ELEVATION	ELEVATION	REMOVED
DATE	1.00	(ft. above MSL)	(feet)	(feet)	(feet)	(ft. above MSL)	(ft. above MSL)	(gallons)
07-Jan-99	13	990.88	18.34	19.39	1.05	971.49	972.47	0.238
07-Jan-99	14	991.61	18.99	20.07	1.08	971.54	972.54	0.258
07-Jan-99	15R	989.23	16.92	17.27	0.35	971.96	972.29	0.132
07-Jan-99	50	985.79		12.13		973.66	973.66	0.000
07-Jan-99	66	990.70		18.75		971.95	971.95	0.000
07-Jan-99	TMP-1	992.74		21.11		971.63	971.63	0.000
							311.00	0.000
14-Jan-99	13	990.88	18.60	19.68	1.08	971.20	972.20	0.264
14-Jan-99	14	991.61	19.05	19.81	0.76	971.80	972.51	0.198
14-Jan-99	15R	989.23	16.71	16.92	0.21	972.31	972.51	0.066
14-Jan-99	50	985.79		11.54		974.25	974.25	0.000
13-Jan-99	66	990.70		18.55		972.15	972.15	0.000
13-Jan-99	TMP-1	992.74		20.78		971.96	971.96	0.000
21-Jan-99	13	990.88	18.05	18.30	0.25	972.58	972.81	0.066
21-Jan-99	14	991.61	18.35	19.03	0.68	972.58	973.21	0.185
21-Jan-99	15R	989.23	16.26	16.27	0.01	972.96	972.97	0.008
21-Jan-99	50	985.79		10.94		974.85	974.85	0.000
20-Jan-99	66	990.70		18.07		972.63	972.63	0.000
20-Jan-99	TMP-1	992.74		20.26		972.48	972.48	0.000
28-Jan-99	13	990.88	17.23	17.86	0.63	973.02	973.61	0.159
28-Jan-99	14	991.61	17.73	17.75	0.02	973.86	973.88	0.013
28-Jan-99	15R	989.23	15.47	15.50	0.03	973.73	973.76	0.013
28-Jan-99	50	985.79		10.36		975.43	975.43	0.000
27-Jan-99	66	990.70		17.31		973.39	973.39	0.000
27-Jan-99	TMP-1	992.74		18.49		974.25	974.25	0.000
04-Feb-99	13	990.88	17.28	18.02	0.74	972.86	973.55	0.264
04-Feb-99	14	991.61	17.58	17.59	0.01	974.02	974.03	0.005
04-Feb-99	15R	989.23	15.27	15.37	0.10	973.86	973.95	0.026
04-Feb-99	50	985.79		9.98		975.81	975.81	0.000
04-Feb-99	66	990.70		17.10		973.60	973.60	0.000
04-Feb-99	TMP-1	992.74		19.32		973.42	973.42	0.000
11-Feb-99	13	990.88	17.50	18.29	0.79	972.59	973.32	0.198
11-Feb-99	14	991.61	18.05	18.06	0.01	973.55	973.56	0.005
11-Feb-99	15R	989.23	15.71	15.72	0.01	973.51	973.52	0.005
11-Feb-99	50	985.79		10.21		975.58	975.58	0.000
11-Feb-99	66	990.70		17.29		973.41	973.41	0.000
11-Feb-99	TMP-1	992.74		19.51		973.23	973.23	0.000
10 Eab 00		000.00	17.72	10.20	0.67	070.00		
18-Feb-99	13	990.88	17.73	18.30	0.57	972.58	973.11	0.159
18-Feb-99	14	991.61		18.10		973.51	973.51	0.000
18-Feb-99	15R	989.23	16.00	16.01	0.01	973.22	973.23	0.005
18-Feb-99	50	985.79	10.31	10.31	0.01	975.48	975.49	0.000
18-Feb-99	66 TMD 1	990.70		17.52		973.18	973.18	0.000
18-Feb-99	TMP-1	992.74		19.73		973.01	973.01	0.000

GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS EAST STREET AREA 2/USEPA AREA 4

SUMMARY OF MISCELLANEOUS MONITORING / MANUAL OIL REMOVAL DATA - SPRING 1999

[1	MEASURING	DEPTH	DEPTH	I	MEASURED	CORRECTED	1
SAMPLING	WELL	POINT	TO	ТО	OIL	WATER TABLE	WATER TABLE	LNIADI
DATE	NO.	ELEVATION	OIL	WATER	THICKNESS	ELEVATION	ELEVATION	LNAPL
		(ft. above MSL)	(feet)	(feet)	(feet)	(ft. above MSL)	(ft. above MSL)	REMOVED
25-Feb-99	13	990.88	17.92	18.29	0.37	972.59	in the second	(gallons)
25-Feb-99	13	991.61	17.92	18.47	0.01	973.14	972.93	0.092
25-Feb-99	15R	989.23	16.14	16.20	0.06	973.03	973.15 973.09	0.000
25-Feb-99	50	985.79		10.20	0.00	975.44	975.44	0.005
25-Feb-99	66	990.70		17.74		972.96	973.44	0.000
25-Feb-99	TMP-1	992.74		19.99		972.75	972.75	0.000
23100337		<i>))</i> 2 .1 4		19.99		512.15	912.13	0.000
04-Mar-99	13	990.88	17.44	17.88	0.44	973.00	973.41	0,159
04-Mar-99	14	991.61	17.55	18.35	0.80	973.26	974.00	0.139
04-Mar-99	15R	989.23		15.47		973.76	973.76	0.000
04-Mar-99	50	985.79		9.54		976.25	976.25	0.000
04-Mar-99	66	990.70		17,04		973.66	973.66	0.000
04-Mar-99	TMP-1	992.74		19.26		973.48	973.48	0.000
								0.000
11-Mar-99	13	990.88	17.09	17.42	0.33	973.46	973.77	0.090
11-Mar-99	14	991.61	17.75	17.76	0.01	973.85	973.86	0.000
11-Mar-99	15R	989.23	15.52	15.55	0.03	973.68	973.71	0.000
11-Mar-99	50	985.79		10.02		975.77	975.77	0.000
11-Mar-99	66	990.70		17.50		973.20	973.20	0.000
11-Mar-99	TMP-1	992.74		19.41		973.33	973.33	0.000
18-Mar-99	13	990.88	17.65	18.32	0.67	972.56	973.18	0.132
18-Mar-99	14	991.61	17.55	17.90	0.35	973.71	974.04	0.000
18-Mar-99	15R	989.23	15.73	15.76	0.03	973.47	973.50	0.000
18-Mar-99	50	985.79	10.09	10.11	0.02	975.68	975.70	0.000
18-Mar-99	66	990.70		17.30		973.40	973.40	0.000
18-Mar-99	TMP-1	992.74		19.55		973.19	973.19	0.000
<u> </u>		222.22						
25-Mar-99	13	990.88	16.48	17.02	0.54	973.86	974.36	0.053
25-Mar-99	14	991.61	17.06	17.07	0.01	974.54	974.55	0.000
25-Mar-99	15R	989.23	15.64	15.65	0.01	973.58	973.59	0.000
25-Mar-99	50	985.79		9.37		976.42	976.42	0.000
25-Mar-99 25-Mar-99	66 TMP-1	990.70 992.74		16.40		974.30	974.30	0.000
23-1111-99	IIVIP-1	992.74		18.67		974.07	974.07	0.000
01-Apr-99	13	990.88	16.59	16.62	0.03	974.26	974.29	0.005
01-Apr-99	13	990.88	10.39	16.89	0.03	974.26		0.005
01-Apr-99	15R	989.23	14.71	14.72	0.01	974.51	<u>974.72</u> 974.52	0.000
01-Apr-99	50	985.79		9.56		976.23	974.52	0.003
01-Apr-99	66	990.70		16.39		974.31		0.000
01-Apr-99	TMP-1	992.74		18.61		974.13	<u>974.31</u> 974.13	0.000
				10.01		//7.10	717.13	0.000
08-Apr-99	13	990.88	17.05	17.15	0.10	973.73	973.82	0.026
08-Apr-99	14	991.61		17.39		974.22	974.22	0.000
08-Apr-99	15R	989.23	15.20	15.21	0.01	974.02	974.03	0.000
08-Apr-99	50	985.79	9.79	9.81	0.02	975.98	976.00	0.000
08-Apr-99	66	990.70		16.79		973.91	973.91	0.000
08-Apr-99	TMP-1	992.74		19.02		973.72	973.72	0.000

GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS EAST STREET AREA 2/USEPA AREA 4

SUMMARY OF MISCELLANEOUS MONITORING / MANUAL OIL REMOVAL DATA - SPRING 1999

	T	MEASURING	DEPTH	DEPTH	T	MEASURED	CORRECTED	
SAMPLING	WELL	POINT	TO	то	OIL	WATER TABLE	WATER TABLE	
DATE	NO.	ELEVATION	OIL	WATER	THICKNESS	ELEVATION	ELEVATION	LNAPL
DAIL	1.0.	(ft. above MSL)	(feet)	(feet)	(feet)	(ft. above MSL)	(ft. above MSL)	REMOVED
15-Apr-99	13	990.88	17.58	18.18	0.60	972.70		(gallons)
15-Apr-99	13	991.61		17.96	0.00	972.70	<u>973.26</u> 973.65	0.132
15-Apr-99	15R	989.23	15.72	15.99	0.27	973.24	973.49	0.000
15-Apr-99	50	985.79	10.20	10.21		975.58	975.58	0.040
15-Apr-99	66	990.70		17.26		973.44	973.44	0.000
15-Apr-99	TMP-1	992.74		19.51		973.23	973.23	0.000
				17.01		J75.40	912.40	0.000
22-Apr-99	13	990.88	17.88	18.15	0.27	972.73	972.98	0.066
22-Apr-99	14	991.61		18.15		973.46	973.46	0.000
22-Apr-99	15R	989.23	16.06	16.07	0.01	973.16	973.17	0.000
22-Apr-99	50	985.79		10.44		975.35	975.35	0.000
22-Apr-99	66	990.70	***	17.51		973.19	973.19	0.000
22-Apr-99	TMP-1	992.74		19.78		972.96	972.96	0.000
28-Apr-99	13	990.88	17.86	17.95	0.09	972.93	973.01	0.024
28-Apr-99	14	991.61		18.24		973.37	973.37	0.000
28-Apr-99	15R	989.23	16.10	16.14	0.04	973.09	973.13	0.011
28-Apr-99	50	985.79	10.50	10.51	0.01	975.28	975.29	0.000
28-Apr-99	66	990.70		17.58	***	973.12	973.12	0.000
28-Apr-99	TMP-1	992.74		19.85		972.89	972.89	0.000
06-May-99	13	990.88	17.95	18.64	0.69	972.24	972.88	0.114
06-May-99	14	991.61	18.27	19.01	0.74	972.60	973.29	0.119
06-May-99	15R	989.23		16.28		972.95	972.95	0.000
06-May-99	50	985.79	10.53	10.54	0.01	975.25	975.26	0.000
06-May-99	66	990.70		17.64		973.06	973.06	0.000
06-May-99	TMP-1	992.74		19.84		972.90	972.90	0.000
13-May-99	13	990.88	18.00	18.65	0.65	972.23	972.83	0.159
13-May-99	14	991.61		18.30		973.31	973.31	0.000
13-May-99	15R	989.23	16.21	16.30	0.09	972.93	973.01	0.021
13-May-99	50	985.79		10.70		975.09	975.09	0.000
13-May-99	66	990.70		17.73		972.97	972.97	0.000
13-May-99	TMP-1	992.74		19.99		972.75	972.75	0.000
20.14 00	12							
20-May-99	13	990.88	17.83	18.50	0.67	972.38	973.00	0.185
20-May-99	14	991.61	18.10	18.90	0.80	972.71	973.45	0.211
20-May-99	15R	989.23	15.95	16.15	0.20	973.08	973.27	0.040
20-May-99	50	985.79		10.53		975.26	975.26	0.000
20-May-99	66	990.70		17.32		973.38	973.38	0.000
20-May-99	TMP-1	992.74		19.52		973.22	973.22	0.000
27-May-99	13	990.88	17.18	17.87	0.69	973.01	973.65	0.11(
27-May-99	13	990.88	17.18	17.51	0.69			0.116
27-May-99	14 15R	989.23	17.49	17.51	0.02	974.10 973.77	974.12	0.001
27-May-99	50	985.79	10.32	10.34	0.08	975.45	<u>973.83</u> 975.47	0.007
27-May-99	66	990.70	10.52	17.10	0.02	973.60		0.000
		man and a state of the state of				and the second	973.60	0.000
27-May-99	TMP-1	992.74	[19.34		973.40	973.40	0.000

GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS EAST STREET AREA 2/USEPA AREA 4

SUMMARY OF MISCELLANEOUS MONITORING / MANUAL OIL REMOVAL DATA - SPRING 1999

		MEASURING	DEPTH	DEPTH		MEASURED	CORRECTED	T
SAMPLING	WELL	POINT	ТО	TO	OIL	WATER TABLE	WATER TABLE	LNAPL
DATE	NO.	ELEVATION	OIL	WATER	THICKNESS	ELEVATION	ELEVATION	REMOVED
		(ft. above MSL)	(feet)	(feet)	(feet)	(ft. above MSL)	(ft. above MSL)	(gallons)
03-Jun-99	13	990.88	17.42	18.45	1.03	972.43	973.39	0.161
03-Jun-99	14	991.61		18.18		973.43	973.43	0.000
03-Jun-99	15R	989.23	16.07	16.10	0.03	973.13	973.16	0.003
03-Jun-99	50	985.79		10.55		975.24	975.24	0.000
03-Jun-99	66	990.70		17.66		973.04	973.04	0.000
03-Jun-99	TMP-1	992.74		19.92		972.82	972.82	0.000
10-Jun-99	13	990.88	18.16	18.99	0.83	971.89	972.66	0.198
10-Jun-99	14	991.61	18.73	19.68	0.95	971.93	972.81	0.264
10-Jun-99	15R	989.23	16.40	16.66	0.26	972.57	972.81	0.100
10-Jun-99	50	985.79	10.81	10.82	0.01	974.97	974.98	0.000
10-Jun-99	66	990.70		17.97		972.73	972.73	0.000
10-Jun-99	TMP-1	992.74		20.19		972.55	972.55	0.000
17-Jun-99	13	990.88	18.37	19.32	0.95	971.56	972.44	0.219
17-Jun-99	14	991.61	18.66	19.70	1.04	971.91	972.88	0.240
17-Jun-99	15R	989.23	16.51	17.74	1.23	971.49	972.63	0.251
17-Jun-99	50	985.79		11.03		974.76	974.76	0.000
17-Jun-99	66	990.70		18.11		972.59	972.59	0.000
17-Jun-99	TMP-1	992.74		20.36		972.38	972.38	0.000
24-Jun-99	13	990.88	18.52	19.57	1.05	971.31	972.29	0.172
24-Jun-99 24-Jun-99	13	990.88	18.32	19.37	1.03	971.73	972.29	0.172
24-Jun-99 24-Jun-99	14 15R	991.61	16.62	19.88	1.12	971.03	972.50	0.177
24-Jun-99 24-Jun-99	<u>15R</u> 50	989.23	10.02	18.20	0.02	974.67	974.69	0.000
	50 66	985.79		11.12		972.46	972.46	0.000
24-Jun-99 24-Jun-99	66 TMP-1	990.70		18.24		972.23	972.23	0.000
24-Juli-79	11111-1	774./**		40.51		714.43	714.43	1 0.000

	WELL 13 TOTAL	3.45
	WELL 14 TOTAL	2.00
	WELL 15R TOTAL	0.94
ΤΟΤΑ	6.39	

NOTES:

1. Water table and oil thickness measurements were obtained by Blasland, Bouck & Lee, Inc.

2. Water table elevations for wells containing oil were computed as follows:

Corrected Water Table Elevation = Measuring Point Elevation - Depth to Water + (Oil Thickness x Specific Density of Oil). Specific Density of oil estimated at 0.93.

Appendix B

BLASLAND, BOUCK & LEE, INC. engineers & scientists

Riverbank Groundwater Elevations and Oil Thickness

GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS EAST STREET AREA 2/USEPA AREA 4

		MEASURING	DEPTH	DEPTH	1	MEASURED	CORRECTED
SAMPLING	WELL	POINT	то	то	OIL	WATER TABLE	WATER TABLE
DATE	NO.	ELEVATION	OIL	WATER	THICKNESS	ELEVATION	ELEVATION
		(ft. above MSL)	(feet)	(feet)	(feet)	(ft. above MSL)	(ft. above MSL)
07-Jan-99	53	986.90		15.13	<u>+</u>	971.77	971.77
07-Jan-99	54	986.13		14.48		971.65	971.65
07-Jan-99	58	985.79	***	14.40		971.39	971.39
07-Jan-99	64X-N	984.83	13.58	13.73	0.15	971.10	971.24
07-Jan-99	64X-S	981.55	10.60	10.70	0.10	970.85	970.94
07-Jan-99	64X-W	984.86	13.91	13.99	0.08	970.87	970.94
07-Jan-99	PZ-1S	989.93	18.78	18.90	0.12	971.03	971.14
07-Jan-99	PZ-2S	985.34	14.39	14.75	0.36	970.59	970.92
07-Jan-99	PZ-4S	982.59	***	9.63		972.96	972.96
07-Jan-99	PZ-5S	983.74	12.03	12.19	0.16	971.55	971.70
07-Jan-99	PZ-6S	984.13	13.13	13.14	0.01	970.99	971.00
07-Jan-99	River	974.85				971.50	971.50
07-Jan-99	RW-1(x)	982.68	15.20	15.90	0.70	966.78	967.43
07-Jan-99	RW-1(x) RW-2(x)	985.96		16.01		969.95	969.95
07-Jan-99	WP-1	979.21	***	8.07		971.14	971.14
07-Jan-99	WP-2	977.61	***	6.47		971.14	971.14
07-Jan-99	WP-3	976.77		5.69		971.08	971.08
07-Jan-99	WP-4	978.12		7.06		971.06	971.06
07-Jan-99	WP-5	977.21		6.07		971.14	971.14
07-Jan-99	WP-6	974.91		3.70		971.21	971.14
07-Jan-99	WP-13	979.20		8.13		971.07	971.07
0, 5 u 1, 5 5		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		0.15	11	771.07	971.07
14-Jan-99	53	986.90	-+-	14.93		971.97	971.97
14-Jan-99	54	986.13		14.20		971.93	971.93
14-Jan-99	58	985.79		13.99		971.80	971.80
14-Jan-99	64X-N	984.83	13.18	13.48	0.30	971.35	971.63
14-Jan-99	64X-S	981.55	10.25	10.38	0.13	971.17	971.29
14-Jan-99	64X-W	984.86	13.59	13.61	0.02	971.25	971.27
14-Jan-99	PZ-1S	989.93	18.53	18.54	0.01	971.39	971.40
14-Jan-99	PZ-6S	984.13	12.99	13.00	0.01	971.13	971.14
14-Jan-99	River	974.85				971.58	971.58
14-Jan-99	RW-1(x)	982.68	15.25	16.30	1.05	966.38	967.36
14-Jan-99	RW-2(x)	985.96		19.50		966.46	966.46
14-Jan-99	WP-1	979.21		7.77		971.44	971.44
14-Jan-99	WP-2	977.61		6.20		971.41	971.41
14-Jan-99	WP-3	976.77		5.40		971.37	971.37
14-Jan-99	WP-4	978.12		6.79		971.33	971.33
14-Jan-99	WP-5	977.21		5.77		971.44	971.44
14-Jan-99	WP-6	974.91	***	Obstructed			
14-Jan-99	WP-13	979.20	***	7.86		971.34	971.34
21-Jan-99	53	986.90		14.26		972.64	972.64
21-Jan-99	54	986.13	***	13.54		972.59	972.59
21-Jan-99	58	985.79	***	13.38		972.41	972.41
21-Jan-99	64X-N	984.83	12.23	12.51	0.28	972.32	972.58
21-Jan-99	64X-S	981.55	9.29	9.31	0.02	972.24	972.26
21-Jan-99	64X-W	984.86	12.65	12.71	0.06	972.15	972.21
21-Jan-99	PZ-1S	989.93	17.62	17.63	0.01	972.30	972.31
21-Jan-99	PZ-6S	984.13	12.07	12.08	0.01	972.05	972.06
21-Jan-99	River	974.85			1	972.30	972.30

GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS EAST STREET AREA 2/USEPA AREA 4

	1	MEASURING	DEPTH	DEPTH	T	MEASURED	CORRECTED
SAMPLING	WELL	POINT	ТО	то	OIL	WATER TABLE	WATER TABLI
DATE	NO.	ELEVATION	OIL	WATER	THICKNESS	ELEVATION	ELEVATION
		(ft. above MSL)	(feet)	(feet)	(feet)	(ft. above MSL)	(ft. above MSL)
21-Jan-99	RW-1(x)	982.68	14.05	15.70	1.65	966.98	968.51
21-Jan-99	RW-2(x)	985.96	***	19.52		966.44	966.44
21-Jan-99	WP-1	979.21		6.93		972.28	972.28
21-Jan-99	WP-2	977.61		5.34		972.27	972.20
21-Jan-99	WP-3	976.77	***	4.51		972.26	972.26
21-Jan-99	WP-4	978.12	***	5.90		972.22	972.22
21-Jan-99	WP-5	977.21	***	4.92		972.29	972.29
21-Jan-99	WP-6	974.91	***	2.50		972.41	972.41
21-Jan-99	WP-13	979.20	***	7.00		972.20	972.20

28-Jan-99	53	986.90		13.83		973.07	973.07
28-Jan-99	54	986.13		13.12		973.01	973.01
28-Jan-99	58	985.79	**=	13.63		972.16	972.16
28-Jan-99	64X-N	984.83	11.67	11.97	0.30	972.86	973.14
28-Jan-99	64X-S	981.55	8.92	8.98	0.06	972.57	972.63
28-Jan-99	64X-W	984.86	12.24	12.33	0.09	972.53	972.61
28-Jan-99	PZ-1S	989.93	***	17.54		972.39	972.39
28-Jan-99	PZ-6S	984.13	11.92	11.93	0.01	972.20	972.21
28-Jan-99	River	974.85				972.32	972.32
28-Jan-99	RW-1(x)	982.68	13.50	13.90	0.40	968.78	969.15
28-Jan-99	RW-2(x)	985.96		19.63		966.33	966.33
28-Jan-99	WP-1	979.21		6.89		972.32	972.32
28-Jan-99	WP-2	977.61		5.28		972.33	972.33
28-Jan-99	WP-3	976.77		4.41		972.36	972.36
28-Jan-99	WP-4	978.12	***	5.81		972.31	972.31
28-Jan-99	WP-5	977.21	+	4.89		972.32	972.32
28-Jan-99	WP-6	974.91	***	2.47		972.44	972.44
28-Jan-99	WP-13	979.20		6.94		972.26	972.26
02 5 1 00 1			12.20		r		
	RW-1(x)	982.68	12.30	12.75	0.45	969.93	970.35
04-Feb-99	53	986.90		13.69		973.21	973.21
04-Feb-99	54	986.13		12.59		973.54	973.54
04-Feb-99	PZ-1S	989.93		16.58		973.35	973.35
04-Feb-99	PZ-2S	985.34	12.03	12.84	0.81	972.50	973.25
04-Feb-99	PZ-4S	982.59	10.41	7.46		975.13	975.13
04-Feb-99	PZ-5S	983.74	10.41	10.42	0.01	973.32	973.33
04-Feb-99 04-Feb-99	PZ-6S	<u>984.13</u> 974.85		10.96		973.17	973.17
04-Feb-99 04-Feb-99	River RW-2(x)			10.25		973.28	973.28
04-Feb-99	RW-2(x) WP-1	985.96		19.35		966.61	966.61
04-Feb-99	WP-1 WP-2			5.91		973.30	973.30
04-Feb-99	WP-2 WP-3	977.61 976.77		4.31		973.30	973.30
04-Feb-99	WP-3 WP-4	978.12		3.44		973.33	973.33
04-Feb-99	WP-4 WP-5	978.12		4.84		973.28	973.28
04-Feb-99	WP-5 WP-6	974.91		3.89		973.32	973.32
04-Feb-99	WP-0 WP-13	979.20		1.65		973.26	973.26
04-1-00-99	WI-13	777.20		6.03		973.17	973.17
10-Feb-99	RW-1(x)	982.68	12.98	13.78	0.80	968.90	969.64
	$\frac{RW-1(x)}{RW-2(x)}$	985.96		19.50		966.46	965.46
11-Feb-99	53	986.90		14.03		972.87	972.87

GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS EAST STREET AREA 2/USEPA AREA 4

<u>[</u>	1	MEASURING	DEPTH	DEPTH	T	MEACHIDED	CODDECTED
SAMPLING	WELL	POINT	TO	TO		MEASURED	CORRECTED
DATE	NO.	ELEVATION	OIL	WATER	OIL	WATER TABLE	WATER TABLE
DATE	NO.	(ft. above MSL)			THICKNESS	ELEVATION	ELEVATION
			(feet)	(feet)	(feet)	(ft. above MSL)	(ft. above MSL)
11-Feb-99	54	986.13		13.30		972.83	972.83
11-Feb-99	PZ-1S	989.93		17.75		972.18	972.18
11-Feb-99	PZ-6S	984.13		12.16		971.97	971.97
11-Feb-99	River	974.85				972.17	972.17
11-Feb-99	WP-1	979.21		7.07		972.14	972.14
11-Feb-99	WP-2	977.61		5.47		972.14	972.14
11-Feb-99	WP-3	976.77		4.65		972.12	972.12
11-Feb-99	WP-4	978.12	***	6.00		972.12	972.12
11-Feb-99	WP-5	977.21	***	5.08		972.13	972.13
11-Feb-99	WP-6	974.91	***	2.74		972.17	972.17
11-Feb-99	WP-13	979.20	***	7.13		972.07	972.07
		r					
17-Feb-99	RW-1(x)	982.68	13.39	13.40	0.01	969.28	969.29
17-Feb-99	RW-2(x)	985.96	***	19.50		966.46	966.46
18-Feb-99	53	986.90		Ice at ~1'		***	
18-Feb-99	54	986.13		13.47		972.66	972.66
18-Feb-99	PZ-1S	989.93	17.80	17.81	0.01	972.12	972.13
18-Feb-99	PZ-6S	984.13	12.33	12.34	0.01	971.79	971.80
18-Feb-99	River	974.85	***			972.14	972.14
18-Feb-99	WP-1	979.21		7.10		972.11	972.11
18-Feb-99	WP-2	977.61		5.52		972.09	972.09
18-Feb-99	WP-3	976.77		4.72		972.05	972.05
18-Feb-99	WP-4	978.12		6.06		972.06	972.06
18-Feb-99	WP-5	977.21		5.10		972.11	972.11
18-Feb-99	WP-6	974.91		2.77		972.14	972.14
18-Feb-99	WP-13	979.20		7.17		972.03	972.03
24-Feb-99	RW-1(x)	982.68	13.77	13.88	0.11	968.80	968.90
24-Feb-99	RW-2(x)	985.96		19.34		966.62	966.62
25-Feb-99	53	986.90	***	Ice at ~1'			
25-Feb-99	54	986.13	***	13.86		972.27	972.27
25-Feb-99	PZ-1S	989.93	***	18.33		971.60	971.60
25-Feb-99	PZ-6S	984.13		13.08		971.05	971.05
25-Feb-99	River	974.85	***			971.44	971.44
25-Feb-99	WP-1	979.21		7.75		971.46	971.46
25-Feb-99	WP-2	977.61		6.16		971.45	971.45
25-Feb-99	WP-3	976.77	***	5.34		971.43	971.43
25-Feb-99	WP-4	978.12	ىسىنى بىلىرىنىنى تىلىرىنى تىل تىلىر ئىلىرىنى	6.69		971.43	971.43
25-Feb-99	WP-5	977.21	***	5.77		971.44	971.44
25-Feb-99	WP-6	974.91	***	3.45		971.46	971.46
25-Feb-99	WP-13	979.20		7.84		971.36	971.36
							~ 1 * 1 & 9
04-Mar-99	RW-1(x)	982.68	9.47	9.90	0.43	972.78	973.18
	RW-2(x)	985.96		11.90		974.06	974.06
04-Mar-99	53	986.90	***	Ice in casing			
04-Mar-99	54	986.13	**=	Ice in casing			*** ****
04-Mar-99	PZ-1S	989.93	14.27	14.28	0.01	975.65	975.66
04-Mar-99	PZ-2S	985.34	10.21	10.23	0.02	975.11	975.13
04-Mar-99	PZ-4S	982.59		5.31		977.28	975.13
Ha Mar w		1114.27				7///0	911.28

GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS EAST STREET AREA 2/USEPA AREA 4

l	T	MEASURING	DEPTH	DEPTH	T	MEASURED	COPPLETED
SAMPLING	WELL	POINT	TO	TO	OIL	WATER TABLE	CORRECTED
DATE	NO.	ELEVATION	OIL	WATER	THICKNESS	ELEVATION	WATER TABLE
DAIL	110.	(ft. above MSL)	(feet)	(feet)	(feet)	(ft. above MSL)	ELEVATION
04-Mar-99	PZ-6S	984.13	<u> </u>	8.96		<u>í ser a s</u>	(ft. above MSL)
04-Mar-99	River	974.85		0.90		<u>975.17</u> 976.10	975.17
04-Mar-99	WP-1	979.21		3.29			976.10
04-Mar-99	WP-2	979.21	****			975.92	975.92
04-Mar-99	WP-2 WP-3	976.77		0.84		975.93	975.93
04-Mar-99	WP-4	978.12		2.44		975.93	975.93
04-Mar-99	WP-5	977.21		1.36		975.68	975.68
04-Mar-99	WP-6	974.91	***			975.85	975.85
04-Mar-99	WP-13	979.20		Under water 3.98			
04-1412-33	wr-15	979.20		3.98		975.22	975.22
17-Mar-99	RW-1(x)	982.68		13.14	1	969.54	969.54
17-Mar-99	RW-2(x)	985.96		19.22		966.74	
18-Mar-99	53	986.90	***	Ice at ~1'			966.74
18-Mar-99	54	986.13		lce at ~1'			***
18-Mar-99	PZ-1S	989.93	17.53	17.54	0.01	972.39	972.40
18-Mar-99	PZ-6S	984.13		12.01	0.01	972.12	972.12
18-Mar-99	River	974.85				976.10	972.12
18-Mar-99	WP-1	979.21		6.85		972.36	972.36
18-Mar-99	WP-2	977.61		5.21		972.40	972.40
18-Mar-99	WP-3	976.77		4.44		972.33	972.33
18-Mar-99	WP-4	978.12		5.76		972.36	
18-Mar-99	WP-5	977.21		4.81		972.30	972.36
18-Mar-99	WP-6	974.91		2.38		972.53	972.40
18-Mar-99	WP-13	979.20		6.88		972.33	972.53
10 114 77		<u>))).20</u>		0.00		972.32	972.32
24-Mar-99	RW-1(x)	982.68	11.48	11.52	0.04	971.16	971.20
24-Mar-99	RW-2(x)	985.96		12.80	0.04	973.16	973.16
25-Mar-99	53	986.90		Ice at ~1'		975.10	975.10
25-Mar-99	54	986.13		$\frac{1}{1}$ lce at $\sim 1'$			
25-Mar-99	PZ-1S	989.93	16.26	16.27	0.01	973.66	973.67
25-Mar-99	PZ-6S	984.13	10.20	10.27		973.47	973.47
25-Mar-99	River	974.85				976.10	976.10
25-Mar-99	WP-1	979.21		5.77		973.44	973.44
25-Mar-99	WP-2	977.61	***	4.15		973.46	973.46
25-Mar-99	WP-3	976.77	****	3.25		973.52	973.52
25-Mar-99	WP-4	978.12		4.60		973.52	973.52
25-Mar-99	WP-5	977.21		3.72		973.49	973.49
25-Mar-99	WP-6	974.91		1.44		973.47	973.49
25-Mar-99	WP-13	979.20		5.81		973.39	973.39
							150.07
31-Mar-99	RW-1(x)	982.68	12.30	13.20	0.90	969.48	970.32
31-Mar-99	RW-2(x)	985.96		19.68		966.28	966.28
01-Apr-99	53	986.90	***	12.93		973.97	973.97
01-Apr-99	54	986.13		Ice at ~1'			***
01-Apr-99	PZ-1S	989.93	16.45	16.47	0.02	973.46	973.48
01-Apr-99	PZ-2S	985.34	11.86	11.87	0.01	973.47	973.48
01-Apr-99	PZ-4S	982.59		7.16		975.43	975.43
01-Apr-99	PZ-5S	983.74	10.34	10.38	0.04	973.36	973.40
01-Apr-99	PZ-6S	984.13		10.86		973.27	973.27
01-Apr-99	River	974.85				971.50	971.50

GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS EAST STREET AREA 2/USEPA AREA 4

[1	MEASURING	DEPTH	DEPTH	T	MEACUDED	CORRECTOR
SAMPLING	WELL	POINT	TO	1	01	MEASURED	CORRECTED
	1		OIL	TO	OIL	WATER TABLE	WATER TABLE
DATE	NO.	ELEVATION		WATER	THICKNESS	ELEVATION	ELEVATION
		(ft. above MSL)	(feet)	(feet)	(feet)	(ft. above MSL)	(ft. above MSL)
01-Apr-99	WP-1	979.21		5.79		973.42	973.42
01-Apr-99	WP-2	977.61	~	4.21		973.40	973.40
01-Apr-99	WP-3	976.77		3.36		973.41	973.41
01-Apr-99	WP-4	978.12		4.71		973.41	973.41
01-Apr-99	WP-5	977.21		3.81		973.40	973.40
01-Apr-99	WP-6	974.91	***	1.48		973.43	973.43
01-Apr-99	WP-13	979.20		5.89		973.31	973.31
07-Apr-99	RW-1(x)	982.68	13.15	13.25	0.10	969.43	969.52
07-Apr-99	RW-2(x)	985.96	13.15	19.35	0.10	966.61	966.61
07-Apr-99	53	985.90		13.73		973.17	973.17
08-Apr-99	55	986.13		13.03		973.10	973.10
08-Apr-99	PZ-1S	989.93	17.66	17.67	0.01	972.26	972.27
08-Apr-99	PZ-6S	989.93		12.01	++	972.12	
08-Apr-99	River	974.85		12.01		971.50	972.12
	WP-1	979.21	***	7.02			971.50
08-Apr-99	WP-1 WP-2	979.21		5.44		972.19	972.19
08-Apr-99						972.17	972.17
08-Apr-99	WP-3	976.77		4.60		972.17	972.17
08-Apr-99	WP-4	978.12		5.94	+	972.18	972.18
08-Apr-99	WP-5	977.21		5.06		972.15	972.15
08-Apr-99	WP-6	974.91		2.74		972.17	972.17
08-Apr-99	WP-13	979.20		7.12		972.08	972.08
14-Apr-99	RW-1(x)	982.68	14.05	14.18	0.13	968.50	968.62
14-Apr-99	RW-2(x)	985.96		19.27		966.69	966.69
15-Apr-99	53	986.90		14.28		972.62	972.62
15-Apr-99	54	986.13		13.60		972.53	972.53
15-Apr-99	PZ-1S	989.93		18.25		971.68	971.68
15-Apr-99	PZ-6S	984.13		12.59		971.54	971.54
15-Apr-99	River	974.85				971.50	971.50
15-Apr-99	WP-1	979.21		7.64		971.57	971.57
15-Apr-99	WP-2	977.61		5.98		971.63	971.63
15-Apr-99	WP-3	976.77		5.15		971.62	971.62
15-Apr-99	WP-4	978.12		6.58		971.52	971.54
15-Apr-99	WP-5	977.21		5.62		971.59	971.59
15-Apr-99	WP-6	974.91		3.52		971.39	971.39
15-Apr-99	WP-13	979.20		7.68		971.59	971.52
10 (101-33	****15	515.40		1.00		111.00	711.32
21-Apr-99	RW-1(x)	982.68	13.58	13.72	0.14	968.96	969.09
21-Apr-99	RW-2(x)	985.96		19.60		966.36	966.36
22-Apr-99	53	986.90		14.45		972.45	972.45
22-Apr-99	54	986.13		13.71		972.42	972.42
22-Apr-99	PZ-1S	989.93		18.32		971.61	971.61
22-Apr-99	PZ-6S	984.13		12.66		971.47	971.47
22-Apr-99	River	974.85				971.50	971.50
22-Apr-99	WP-1	979.21		7.63		971.58	971.58
22-Apr-99	WP-2	977.61		6.03		971.58	971.58
22-Apr-99	WP-3	976.77		5.20		971.57	971.57
22-Apr-99	WP-4	978.12		6.60		971.52	971.52
22-Apr-99	WP-5	977.21		5.65		971.56	971.56
22-Apr-99	WT-3	777.21		2.02	***	7/1.30	9/1.30

GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS EAST STREET AREA 2/USEPA AREA 4

		MEASURING	DEPTH	DEPTH		MEASURED	CORRECTED
SAMPLING	WELL	POINT	ТО	ТО	OIL	WATER TABLE	WATER TABL
DATE	NO.	ELEVATION	OIL	WATER	THICKNESS	ELEVATION	ELEVATION
	L	(ft. above MSL)	(feet)	(feet)	(feet)	(ft. above MSL)	(ft. above MSL
22-Apr-99	WP-6	974.91		3.31		971.60	971.60
22-Apr-99	WP-13	979.20	* **	7.71		971.49	971.49
28-Apr-99	RW-1(x)	982.68	13.55	13.60	0.05	969.08	969.13
28-Apr-99	RW-2(x)	985.96		19.58		966.38	966.38
28-Apr-99	53	986.90		14.44		972.46	972.46
28-Apr-99	54	986.13	***	13.71		972.40	972.40
28-Apr-99	PZ-1S	989.93		18.24		971.69	971.69
28-Apr-99	PZ-6S	984.13	***	12.60		971.53	971.53
28-Apr-99	River	974.85	***			971.50	971.50
28-Apr-99	WP-1	979.21	***	7.59		971.62	971.62
28-Apr-99	WP-2	977.61		5.99		971.62	971.62
28-Apr-99	WP-3	976.77	***	5.15		971.62	971.62
28-Apr-99	WP-4	978.12		6.51		971.61	971.61
28-Apr-99	WP-5	977.21	***	5.60		971.61	971.61
28-Apr-99	WP-6	974.91	***	3.25		971.66	971.66
28-Apr-99	WP-13	979.20		7.72		971.48	971.48
	LL			1			271.10
05-May-99	RW-1(x)	982.68	13.65	13.80	0.15	968.88	969.02
05-May-99	RW-2(x)	985.96		18.95	1	967.01	967.01
06-May-99	53	986.90		14.04		972.86	972.86
06-May-99	54	986.13		13.32		972.81	972.81
06-May-99	PZ-1S	989.93		17.31		972.62	972.62
06-May-99	PZ-2S	985.34	12.77	12.78	0.01	972.56	972.57
06-May-99	PZ-4S	982.59	***	See Note 3			
06-May-99	PZ-5S	983.74		11.20		972.54	972.54
06-May-99	PZ-6S	984.13		11.72		972.41	972.41
06-May-99	River	974.85	***			972.49	972.49
06-May-99	WP-1	979.21		6.68		972.53	972.53
06-May-99	WP-2	977.61	***	5.09		972.52	972.52
06-May-99	WP-3	976.77	***	4.23		972.54	972.54
06-May-99	WP-4	978.12	***	5.58		972.54	972.54
06-May-99	WP-5	977.21		4.66		972.55	972.55
06-May-99	WP-6	974.91		2.38		972.53	972.53
06-May-99	WP-13	979.20	***	6.75		972.45	972.45
12-May-99	RW-1(x)	982.68	13.61	13.95	0.34	968.73	969.05
12-May-99	RW-2(x)	985.96		19.40		966.56	966.56
13-May-99	53	986.90		14.52		972.38	972.38
13-May-99	54	986.13		13.78		972.35	972.35
13-May-99	PZ-1S	989.93	10° 20° 20.	18.27		971.66	971.66
13-May-99	PZ-6S	984.13	***	12.61		971.52	971.52
13-May-99	River	974.85	***	***		971.55	971.55
13-May-99	WP-1	979.21	***	7.61		971.60	971.60
13-May-99	WP-2	977.61	***	See Note 3		***	
13-May-99	WP-3	976.77	***	See Note 3			***
13-May-99	WP-4	978.12	***	See Note 3			***
13-May-99	WP-5	977.21		See Note 3	***		an an an
13-May-99	WP-6	974.91		3.29		971.62	971.62
13-May-99	WP-13	979.20		See Note 3			

GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS EAST STREET AREA 2/USEPA AREA 4

	1	MEASURING	DEPTH	DEPTH	T	MEASURED	CORRECTED
SAMPLING	WELL	POINT	ТО	то	OIL	WATER TABLE	WATER TABLE
	NO.	ELEVATION	OIL	WATER	THICKNESS	ELEVATION	ELEVATION
DATE	NO.	(ft. above MSL)	(feet)	(feet)	(feet)	(ft. above MSL)	(ft. above MSL)
10 14		982.68	13.95	14.30	0.35	968.38	968.71
19-May-99	RW-1(x)	982.08	13.95	18.32	0.35	967.64	967.64
19-May-99	RW-2(x)			12.33		974.57	974.57
20-May-99	53	986.90	***		+	974.70	974.37
20-May-99	54	986.13		11.43		976.65	976.65
20-May-99	PZ-1S	989.93		13.28 8.03		976.10	976.10
20-May-99	PZ-6S	984.13			+	970.10	970.10
20-May-99	River	974.85		See Note 3		976.64	976.64
20-May-99	WP-1	979.21		2.57		970.04	970.04
20-May-99	WP-6	974.91		Under water			
26-May-99	RW-1(x)	982.68	12.65	13.78	1.13	968.90	969.95
26-May-99		985.96		16.35		969.61	969.61
L	RW-2(x)	985.90		13.69		973.21	973.21
27-May-99	53 54	986.90	***	12.98		973.15	973.15
27-May-99	54 PZ-1S	986.13	17.23	17.25	0.02	972.68	972.70
27-May-99		989.93	11.65	11.66	0.02	972.47	972.48
27-May-99	PZ-6S	979.21		6.67		972.54	972.54
27-May-99	WP-1	979.21		2.37		972.54	972.54
27-May-99	WP-6	9/4.91		2.37		972.34	972.34
02-Jun-99	RW-1(x)	982.68	14.11	14.13	0.02	968.55	968.57
02-Jun-99	$\frac{RW-I(x)}{RW-2(x)}$	985.96	17.11	16.95	0.02	969.01	969.01
02-Jun-99	$\frac{KW-2(X)}{53}$	986.90	***	14.55		972.35	972.35
03-Jun-99	55	986.13		13.81		972.32	972.32
03-Jun-99	PZ-1S	989.93	18.11	18.14	0.03	971.79	971.82
03-Jun-99	PZ-2S	985.34	13.52	13.65	0.13	971.69	971.81
03-Jun-99	PZ-5S	983.74	13.32	See Note 3			
03-Jun-99	PZ-6S	984.13	12.63	12.64	0.01	971.49	971.50
03-Jun-99	WP-1	979.21	12.05	7.62		971.59	971.59
03-Jun-99	WP-6	974.91		See Note 4			
05-5011-77	W1-0	<u> </u>					L
09-Jun-99	RW-1(x)	982.68	13.59	13.60	0.01	969.08	969.09
09-Jun-99	RW-2(x)	985.96	17.34	17.35	0.01	968.61	968.62
10-Jun-99	53	986.90		14.77		972.13	972.13
10-Jun-99	54	986.13	***	14.00		972.13	972.13
10-Jun-99	PZ-1S	989.93	18.28	18.32	0.04	971.61	971.65
10-Jun-99	PZ-6S	984.13	12.81	12.82	0.01	971.31	971.32
10-Jun-99	WP-1	979.21		7.72		971.49	971.49
10-Jun-99	WP-6	974.91		See Note 4			
					<u></u>		
16-Jun-99	RW-1(x)	982.68	14.28	14.38	0.10	968.30	968.39
16-Jun-99	RW-2(x)	985.96		17.25		968.71	968.71
17-Jun-99	53	986.90	***	14.93		971.97	971.97
17-Jun-99	54	986.13	***	14.17		971.96	971.96
17-Jun-99	PZ-1S	989.93	18.45	18.57	0.12	971.36	971.47
17-Jun-99	PZ-6S	984.13	12.98	13.08	0.10	971.05	971.14
17-Jun-99	WP-1	979.21		7.90		971.31	971.31
17-Jun-99	WP-6	974.91	***	See Note 4			
	l	1		<u> </u>	<u></u>	<u>ic</u>	L
22-Jun-99	RW-1(x)	982.68	14.38	14.54	0.16	968.14	968.29
22-Jun-99	RW-2(x)	985.96	***	19.35		966.61	966.61

GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS EAST STREET AREA 2/USEPA AREA 4

SUMMARY OF WATER TABLE AND OIL THICKNESS DATA RIVERBANK AREA - SPRING 1999

		MEASURING	DEPTH	DEPTH		MEASURED	CORRECTED
SAMPLING	WELL	POINT	TO	TO	OIL	WATER TABLE	WATER TABLE
DATE	NO.	ELEVATION	OIL	WATER	THICKNESS	ELEVATION	ELEVATION
		(ft. above MSL)	(feet)	(feet)	(feet)	(ft. above MSL)	(ft. above MSL)
24-Jun-99	53	986.90		15.02		971.88	971.88
24-Jun-99	54	986.13		14.26		971.87	971.87
24-Jun-99	PZ-1S	989.93	18.59	18.60	0.01	971.33	971.34
24-Jun-99	PZ-6S	984.13	13.02	13.05	0.03	971.08	971.11
24-Jun-99	WP-1	979.21		See Note 3		***	
24-Jun-99	WP-6	974.91		3.87		971.04	971.04

Notes:

1. Water table and oil thickness measurements were obtained by GE and Blasland, Bouck & Lee, Inc.

2. Water table elevations for wells containing oil were computed as follows:

Corrected Water Table Elevation = Measuring Point Elevation - Depth to Water + (Oil Thickness x Specific Density of Oil). Specific Density of oil estimated at 0.93.

3. Well / River Gauge removed during installation of sheet piling on riverbank

4. Well could not be gauged due to installation of sheetpiling along riverbank