

**MWH**

BUILDING A BETTER WORLD

2265, 26.007
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Kenai Area Office

March 19, 2009

Anne Wilkinson
Retail Environmental Remediation Administrator
Tesoro Refining and Marketing Company
3450 South 344th Way, Suite 100
Auburn, WA 98001-5931

1006033.010103/14.4

RE: **Summary Report and Request for
Clean-up Complete with Institutional Controls**
Tesoro 2 Go Mart #53, 1601 E. Parks Highway, Wasilla, Alaska
ADEC Facility ID #651, ADEC File No. 2265.26.007

*Report Reviewed by
Alyce Hughey 4-28-09 through
4-30-09 for Paul Horvath
and prepared a summary for
his review and oversight
Alyce Hughey*

Dear Ms. Wilkinson:

The purpose of this letter report is to provide documentation for Tesoro Refining and Marketing Company (Tesoro) to request the Alaska Department of Environmental Conservation (ADEC) grant a Clean-up Complete with Institutional Controls (CCIC) determination for Tesoro 2 Go Mart #53 (previously Tesoro Northstore #53). The documentation for requesting the CCIC is presented herein under the following sections:

- Background Information
- Summary of Site Assessments and Release Investigations
- In Situ Soil and Groundwater Remediation
- Summary of Ground Water Monitoring Data
- Justification for CCIC

A location map, site plan, remediation system layout, and supporting documentation are attached to this report.

BACKGROUND INFORMATION

Site Description

Tesoro 2 Go Mart #53 is a retail fuel and convenience store located on the Parks Highway, in Wasilla (Figure 1). Site improvements include a convenience store, fuel dispenser islands, canopies, drive slabs, driveways, parking areas, and landscaping. The adjacent properties are developed with commercial businesses and are served by municipal water and sewer systems.

A site plan showing the current site improvements with respect to property lines and public right-of-ways is provided on Figure 2.

Fuel System Description

This site has been operating as a retail fuel station since 1985, initially under the ownership of QWIK STOP, then by Tesoro from 1998 to the present. The former fueling system at Tesoro 2 Go Mart #53 consisted of two 10,000-gallon capacity gasoline underground storage tanks (USTs), and one dispenser fueling island with canopy and associated piping. The UST system was located to the south of the convenience store (see photo below).

Two environmental investigations completed by third-party consultants at the site between 1994 and 1996, reported soil and ground water contamination above the ADEC clean-up levels in soil borings located adjacent to the USTs. Due to the presence of petroleum contamination, two UST tightness tests were performed in November 1994. The unleaded gasoline UST failed both of these tests and it was determined the UST vent line was damaged. The vent line was subsequently excavated and repaired. In August and October of 1995, seven ground water monitoring wells were installed and sampled by Hart Crowser. Four of these wells, located near the suspected leak, were found to contain ground water contamination.



In August of 1997, the original 10,000-gallon USTs were excavated and removed. Approximately 355 tons of contaminated soil was removed during the excavation and hauled to CleanSoils Alaska for treatment and disposal. A single, multi-compartment, double-walled 26,000-gallon UST was installed. In addition, soil vapor extraction (SVE) piping was installed at the time of the tank excavation to treat the contamination found in the vicinity of the former USTs.

Hydrogeological Conditions

The site is located on level terrain, underlain by former glacier melt-water channels. The subsurface soils are predominantly composed of clean gravel and sand, with some finer grained silt lenses. There is fairly well defined stratification, and a discontinuous, 3-foot thick layer of gravelly silt is found between 15 and 20 feet below ground surface (bgs).

The ground water surface ranges at a depth of 16 to 25 feet bgs. The previous 10 ground water monitoring events have shown some variability in ground water gradient and direction. In general, ground water flows predominantly toward the east, with a gradient ranging from 0.006 to 0.114 feet per foot.

SUMMARY OF SITE ASSESSMENTS AND RELEASE INVESTIGATIONS

A chronological summary of the major site assessments (SAs) and release investigations that have occurred at the site is provided below. A list of supporting documents is provided as an attachment to this report (Appendix A).

We do not have this report. Original
UST Site Assessment, prepared by Shannon & Wilson, Inc., dated March 1994. Soil borings were drilled at two locations in the vicinity of the USTs, as part of a SA to determine whether petroleum contamination of the soil or ground water had occurred. Ground water was encountered between 25 and 26 feet bgs, and the soil samples were collected at or near the ground water interface. Gasoline range organics, benzene, toluene, ethylbenzene, and xylenes were detected in soil and ground water samples collected from both soil boring locations. Shannon & Wilson recommended submitting the report to ADEC for review, as well as immediately notifying ADEC that a release of gasoline at the site had impacted the ground water. Following the SA, two tank tightness tests were performed at the site. One tank failed the tightness tests and was repaired in December 1994.

We do not have this report. Original
Phase II Environmental SA, prepared by HartCrowser Earth and Environmental Technologies, dated January 1996. A SA was completed at this site in the fall of 1995, and the subsequent report provided a summary of previous environmental investigations at this location. In fall 1995, seven ground water monitoring wells (MW-1 through MW-7) were installed to better delineate the extent of petroleum contamination. During the well installations, two soil samples were collected from each well location. The soil samples taken from MW-1, on the southeast side of the USTs, contained petroleum contamination. No other soil samples were found to contain detectable levels of contamination. All seven wells were sampled for ground water contamination, and four were found to contain detectable levels. In the spring of 1996, oxygen releasing compound (ORC) pillows were installed in Monitoring Well MW-1. These slow-releasing pillows were checked during later monitoring events and replaced, as necessary.

UST Closure SA, prepared by Gilfilian Engineering and Environmental Testing (GE²T), dated December 1, 1997. In the fall of 1997, the original USTs were excavated and replaced by a single, multi-compartment, double-walled UST. Soil samples collected near the turbine pumps, fill pipes, bung openings, and product lines of the former USTs showed varying degrees of petroleum contamination. A total of 355.94 tons of contaminated soil removed from the excavation was hauled to CleanSoils Alaska for thermal treatment and disposal. SVE piping was installed in the area of the residual petroleum contaminated soil, and GE²T recommended applications of ORC into the SVE piping to treat the contaminated ground water. ORC treatment in MW-1 continued, but was ultimately not expanded to the SVE wells.

Well Search for Tesoro 2 Go Mart #53, prepared by GE²T, dated May 26, 1998. In the spring of 1998 a well search was performed in the vicinity of Tesoro 2 Go Mart #53. The well search included properties located within a ¼-mile radius of the site. Thirteen domestic drinking water

wells were located, four of which were determined to be no longer in use. No recommendations or qualifications regarding the use of the water wells were made at that time.

1998 Annual Monitoring Report, prepared by GE²T, dated February 17, 1999. The annual report provided a summary of the remediation activity and progress at Tesoro 2 Go Mart #53. The SVE system was activated in September 1998 and was found to be effectively removing hydrocarbons from the soil. The SVE lines were shut off in the winter of 1998 due to frozen lines, but GE²T anticipated the reactivation and continued operation of the system in the spring 1999. GE²T found the contaminant plume to be relatively stable, with strong indicators of intrinsic bioremediation taking place. GE²T recommended the continuation of a quarterly ground water monitoring schedule, and the continuation of SVE and ORC treatment.

May 2002 Monitoring Event and Air Sparge Pilot Testing, prepared by GE²T, dated June 14, 2002. In May 2002, a monitoring event and pilot test to determine the feasibility of using a vapor stripping and circulation (VSC) or air sparge (AS) system at the site was conducted. Moderate levels of contamination were detected in two of the wells sampled. Slug testing indicated that the ground water aquifer was unable to provide sufficient water to make a VSC system feasible. The one AS well drilled during this event, however, showed promising results. GE²T recommended implementing an AS system using the newly drilled well AS-1, and continuing regular monitoring of the site.

November 2002 Monitoring Event and January 2003 AS/SVE System Assessment Report, prepared by MWH (MWH acquired GE²T in 2002), dated April 2003. In January 2003, the SVE and AS systems were evaluated. Initial operation of the AS system resulted in problems with the 1-horsepower air compressor overcoming the hydraulic head pressure of the well. The system was adjusted and eventually achieved breakthrough at 25 pounds per square inch (psi), dropping down to a normal operating pressure of 8 to 12 psi. The SVE system operated concurrently with the AS system, and was found to be removing low levels of hydrocarbons. MWH recommended maintaining the system and continuing regular monitoring of the ground water.

October 2007 Monitoring Event and AS System Expansion Report, prepared by MWH, dated May 2008. In October 2007, two additional AS wells were installed to the east and south of the original well. The addition of two AS wells increased the amount of volatile hydrocarbons removed from the soil by the SVE system and to better remediate any residual contamination in the ground water. No analytes were detected above the ADEC ground water cleanup levels (GCLs) during this monitoring event. MWH recommended operating the newly upgraded remediation system on a full-time basis and continuing the bi-annual monitoring schedule at this site.

IN SITU SOIL AND GROUNDWATER REMEDIATION

In-situ remediation systems have been operating in various configurations at Tesoro 2 Go Mart #53 since 1998. The initial SVE system included two, 4-inch diameter, vertical SVE wells installed in the summer of 1998, following the 1997 UST upgrade. One line was placed at the southern end of the former UST and the other under the dispenser island slab. The SVE lines were initially used as a delivery system for ORC slow releasing pillows, as well as conventional SVE lines. The system was found to be most effective when a single SVE line was operated at time, and removed low amounts of contamination.

In May 2002, a VSC and AS pilot study was conducted at the site. GE²T determined a VSC system would not be effective at this site. However, a single AS well was installed and activated. After initial problems with breakthrough, the AS well was run concurrently with the SVE system and was found to remove moderate amounts of hydrocarbons. In 2007, the system was expanded and two additional AS wells were installed in the vicinity of SVE-1.

in 2007

The current remediation system consists of the two original SVE lines, as well as three AS wells. Since the addition of the two AS wells, dissolved oxygen concentrations have increased in Monitoring Well SVE-1, and the quality of the water sampled from this well has steadily improved. The system is currently running, and the SVE system is removing low amounts of hydrocarbons.

SUMMARY OF GROUND WATER MONITORING DATA

This section presents the results of 35 ground water monitoring events that have been completed at this site by GE²T and MWH. The monitoring events were conducted over a 12-year period starting in November 1996 and ending October 2008. A historical summary of the ground water monitoring analytical results collected over this period of time is attached to this report in Appendix B.

No contaminants of concern have been detected above the GCLs in Monitoring Well MW-1 since April 2004. In Monitoring Well SVE-1, no contaminants of concern have been detected above the practical quantitation limits in the last three monitoring events. The decline in petroleum levels in the ground water at this site can be attributed to the substantial removal of contaminated soil during the closure of the past UST systems, natural attenuation, and the operation of the on-site soil treatment system.

In summary, the ground water monitoring data collected over the past several years indicates a decreasing trend toward levels below the GCLs for the monitoring wells located at this site. Contamination was detected in only one well, SVE-1, in the last 4 years, and samples from SVE-1 were well below the GCLs for the last three monitoring events.

JUSTIFICATION FOR CCIC

Justification for the CCIC of the cleanup work at Tesoro 2 Go Mart #53 is based on the following site conditions:

- Petroleum hydrocarbon contamination associated with ground water at the site has been effectively reduced to below GCLs in the treatment area. Ground water contamination has not been detected, or has been below the GCLs, in all of the monitoring wells for the past 4 years, except for a single well. Samples collected from this well, Monitoring Well SVE-1, were non-detect for the last three monitoring events.
- Operation of the SVE treatment system (activated in 1997) provided low to moderate level treatment of vadose zone contaminants. Continued operation of the SVE system is no longer particularly effective; therefore, continued operation is not recommended. Other treatment systems, such as VSC, have been pilot tested, and shown to be impractical at this site. Air sparging has been an effective treatment option at this site; reducing ground water contamination to levels below the GCLs.
- Excavations in the area of deminimus contamination at this site are unlikely in the near future. The current UST system is only 12 years old and is of double-walled construction.

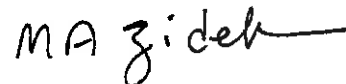
Given the above conditions, it is recommended that ADEC grant a CCIC for this site, subject to the following institutional controls that will ensure protection of human health and the environment:

- A UST fueling system is still present at the site and will continue to be operated by Tesoro into the foreseeable future. A SA will be conducted by a qualified, third party, environmental professional per 18 Alaska Administrative Code 78.090, when Tesoro decides to remove or upgrade the UST system. Any contaminated soil that is encountered will be excavated and treated accordingly.

MWH believes the above justification supports the issuance of a CCIC letter. Subject to the receipt of the CCIC, the monitoring wells and the SVE treatment system will be decommissioned according to the 1992 ADEC guidance document entitled: *Recommended Practices for Monitoring Well Design, Installation, and Decommissioning*.

If you have any questions, please contact me at (907) 266-1126.

Sincerely,



Michael A. Zidek, PMP
Project Manager

MAZ/mrc

Attachments: Figure 1 – Location and Vicinity Map
Figure 2 – Site Plan with Monitoring Well Locations
Figure 3 – Remediation System Layout
Appendix A – Bibliography of Supporting Documents
Appendix B – Tables of Historical Ground Water Monitoring Data

ATTACHMENTS

TESORO COMPANY - 2 GO MART #53
2009 CCIC REPORT

LOCATION AND VICINITY MAP



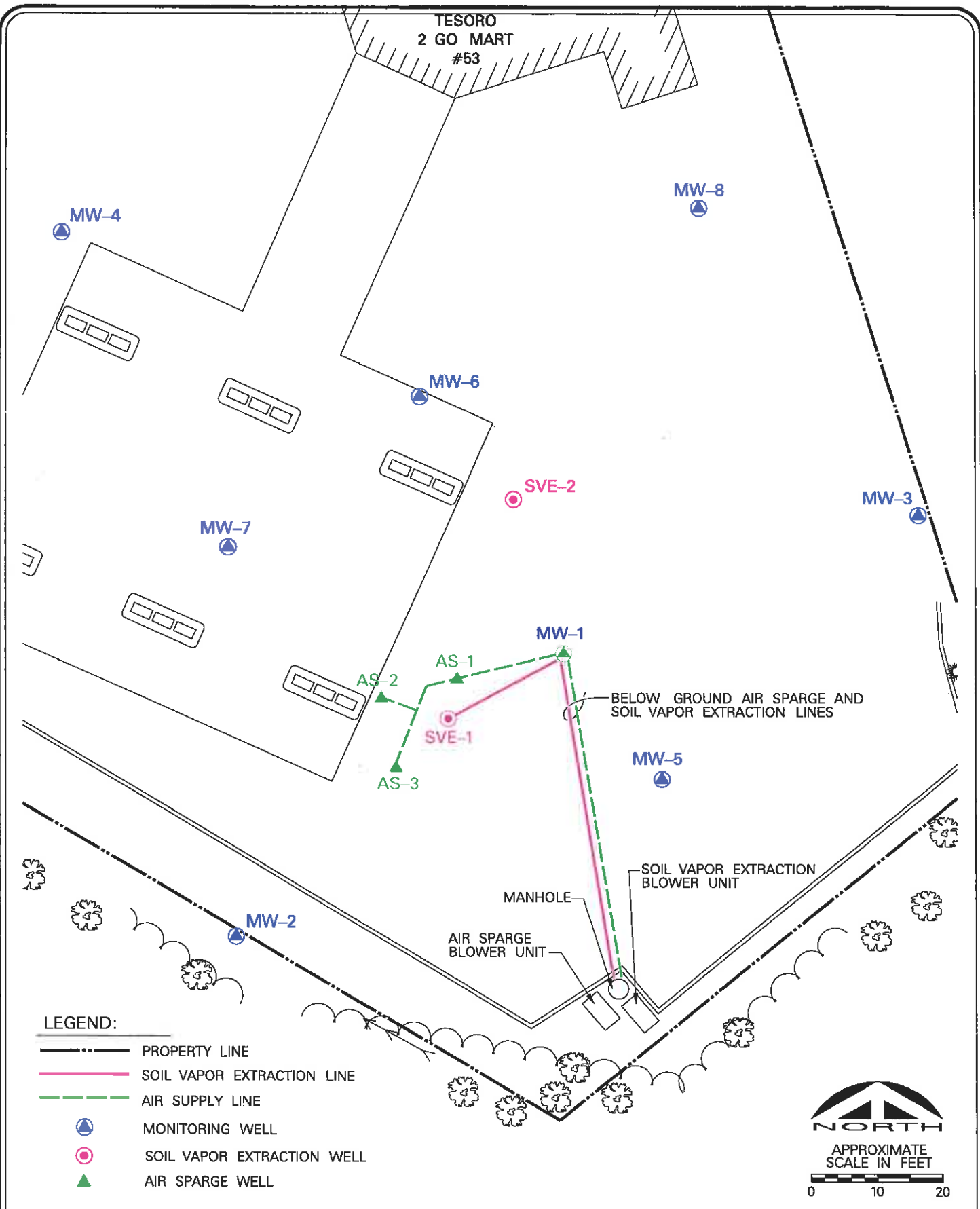


FIGURE 3

TESORO COMPANY - 2 GO MART #53
2009 CCIC REPORT

REMEDIAL SYSTEM LAYOUT



MWH
Anchorage, Alaska

APPENDIX A

Bibliography of Supporting Documents

Information
not in file

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Information
not in file

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GE²T. 1998. December 1997 Quarterly Monitoring Report TNS 53. Prepared for ADEC. February 5.

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GE²T. 1999. May 1999 Monitoring Event TNS 53. Prepared for Tesoro Alaska Company. June 29.

GE²T. 1999. August 1999 Monitoring Event TNS 53. Prepared for Tesoro Alaska Company. October 1.

GE²T. 2000. October 1999 Monitoring Event and Historical Trend Summary TNS 52. Prepared for Tesoro Alaska Company. January 6.

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MWH. 2003. July 2003 Monitoring Event Report. Prepared for Tesoro Alaska Company. October.

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MWH. 2004. July 2004 Monitoring Event Report. Prepared for Tesoro Alaska Company. November.

MWH. 2005. October 2004 Monitoring Event Report. Prepared for Tesoro Alaska Company. January.

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MWH. 2006. October 2005 Monitoring Event Report. Prepared for Tesoro Refining and Marketing Company. January.

MWH. 2006. May 2006 Monitoring Event Report. Prepared for Tesoro Refining and Marketing Company. August.

MWH. 2007. October 2006 Monitoring Event Report. Prepared for Tesoro Refining and Marketing Company. January.

MWH. 2008. April 2007 Monitoring Event Report. Prepared for Tesoro Refining and Marketing Company. May.

MWH. 2008. April 2008 Monitoring Event and Air Sparge System Expansion Report. Prepared for Tesoro Refining and Marketing Company. May.

MWH. 2008. April 2008 Monitoring Event Report. Prepared for Tesoro Refining and Marketing Company. October.

MWH. 2008. October 2008 Monitoring Event Report. Prepared for Tesoro Refining and Marketing Company. December.

Appendix B
Tables of Historical Ground Water Monitoring Data

Monitoring Well MW-1

Date	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylenes (mg/L)	GRO (mg/L)	DRO (mg/L)	GW Elev (feet)
01-Sep-95	25.0	29.0	3.3	15.0	NT	NT	77.28
02-Apr-96	36.1	58.0	3.0	20.6	NT	NT	77.21
30-Apr-96	33.0	17.0	2.0	7.9	NT	NT	76.34
03-Jul-96	37.0	21.0	2.3	7.7	NT	NT	76.65
02-Aug-96	44.0	28.0	2.7	10.0	NT	NT	77.33
19-Nov-96	45.0	32.0	2.9	16.0	NT	NT	NM
21-Mar-97	41.0	30.0	2.3	20.0	250.0	NT	77.99
20-Jun-97	35.0	11.0	0.3	35.0	350.0	NT	NM
23-Dec-97	61.0	39.0	4.0	35.0	370.0	NT	78.41
20-Mar-98	50.0	100.0	11.0	37.0	370.0	NT	77.88
23-Jun-98	38.0	75.0	4.0	28.0	360.0	NT	78.00
01-Sep-98	25.0	12.0	4.0	25.0	320.0	NT	76.19
29-Dec-98	25.0	35.0	4.0	27.0	320.0	NT	76.49
15-Feb-99	25.0	35.0	4.0	29.0	350.0	NT	76.72
12-May-99	25.0	50.0	3.0	29.2	220.0	14.0	76.63
24-Aug-99	37.0	35.0	5.0	28.0	350.0	NT	NM
28-Oct-99	7.0	14.0	0.3	11.0	65.0	NT	NM
09-Feb-00	6.0	25.0	1.3	8.0	95.0	NT	77.92
08-Jun-00	11.0	16.0	3.0	22.0	260.0	NT	78.16
31-Aug-00	17.0	45.0	4.0	23.0	230.0	NT	78.24
03-Nov-00	25.0	13.0	4.0	19.3	229.0	NT	NM
01-Dec-00	4.0	5.0	1.0	11.0	71.0	NT	78.51
14-Dec-00	17.4	50.4	4.2	20.7	179.0	NT	78.40
05-Feb-01	7.8	25.0	3.1	17.0	130.0	NT	NM
11-May-01	2.4	6.7	0.6	4.2	30.0	NT	NM
11-May-01	12.5	42.4	4.1	18.6	30.0	NT	NM
10-Aug-01	0.14	0.42	0.04	0.25	2.0	NT	NM
10-Aug-01	4.7	18.0	1.9	8.3	80.0	NT	NM
07-Nov-01	6.14	0.29	0.03	0.15	1.15	NT	NM
28-May-02	4.0	0.44	0.02	0.09	1.0	NT	77.71
15-Aug-02	U (0.005)	U (0.002)	U (0.002)	U (0.002)	U (0.090)	NT	78.03
14-Nov-02	0.004	0.00836	0.0569	0.111	0.818	NT	78.90
28-Jan-03	0.005	0.336	U (0.04)	0.1437	1.99	NT	77.76
18-Apr-03	0.000588	U (0.0005)	U (0.0005)	U (0.001)	U (0.08)	NT	76.98
17-Jul-03	U (0.0005)	U (0.0005)	U (0.0005)	U (0.001)	U (0.05)	NT	76.65
24-Oct-03	U (0.0002)	U (0.0005)	U (0.0005)	U (0.001)	U (0.05)	NT	75.67
20-Jan-04	U (0.0005)	U (0.0005)	U (0.0005)	U (0.001)	U (0.05)	NT	77.09
13-Apr-04	0.0019	U (0.0005)	U (0.0005)	U (0.001)	U (0.05)	NT	77.36
21-Jul-04	U (0.0005)	U (0.0005)	U (0.0005)	U (0.0015)	U (0.05)	NT	76.11
13-Oct-04	U (0.0005)	U (0.0005)	U (0.0005)	U (0.001)	U (0.08)	NT	77.56
25-Apr-05	U (0.0005)	U (0.0005)	U (0.0005)	U (0.0015)	U (0.05)	NT	77.64
07-Oct-05	0.000725	U (0.0005)	U (0.0005)	U (0.0015)	U (0.05)	U (0.403)	80.02
11-May-06	U (0.0005)	U (0.0005)	0.00412	0.0218	0.0652	NT	77.50
26-Oct-06	U (0.0005)	U (0.0005)	U (0.0005)	U (0.0015)	U (0.05)	NT	80.54
25-Apr-07	U (0.0005)	U (0.0005)	U (0.0005)	U (0.0015)	U (0.05)	NT	77.73
31-Oct-07	U (0.0005)	U (0.0005)	U (0.0005)	U (0.0015)	U (0.05)	NT	78.81
16-Apr-08	U (0.0005)	U (0.0005)	U (0.0005)	U (0.0015)	U (0.05)	NT	76.71
22-Oct-08	U (0.0005)	U (0.0005)	U (0.0005)	U (0.0015)	U (0.05)	NT	79.05
GCLs	0.005	1	0.7	10	2.2	1.5	NA

April 2009 U 0.000760 0.00101 0.00175 U NT

Dec 1994
tank tightness test failed
oxygen releasing compound
1996 ORC
initiated in
mw-1

1997 USL's
replaced
355,94 tons
excavated soil
Sept 1998 vapor
extraction efforts
initiated

2002 Vapor
stripping evaluated
AS-1 installed

Oct 2007
two additional
AS wells installed

Appendix B
Tables of Historical Ground Water Monitoring Data

Monitoring Well MW-2

Date	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylenes (mg/L)	GRO (mg/L)	DRO (mg/L)	GW Elev (feet)
19-Nov-96	U	U	U	U	U	NT	77.13
21-Mar-97	U	U	U	U	U	NT	78.17
06-Aug-98	U	U	U	1.2	U	0.00023	NM
01-Sep-98	U	U	U	U	U	NT	77.83
29-Dec-98	U	U	U	U	U	NT	77.15
12-May-99	U	U	U	U	U	U	77.35
24-Aug-99	U	U	U	U	U	NT	78.98
28-Oct-99	U	U	U	U	U	NT	79.96
31-Aug-00	U	U	U	U	U	NT	79.10
10-Aug-01	U	U	U	U	U	NT	78.79
15-Aug-02	U (0.0005)	U (0.002)	U (0.002)	U (0.002)	U (0.090)	NT	80.13
25-Apr-05	0.00117	0.0012	U (0.0005)	U (0.0015)	U (0.05)	NT	79.38
GCLs	0.005	1	0.7	10	2.2	1.5	NA

Monitoring Well MW-3

Date	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylenes (mg/L)	GRO (mg/L)	DRO (mg/L)	GW Elev (feet)
19-Nov-96	U	U	U	U	U	NT	77.41
24-Aug-99	U	U	U	U	U	NT	NM
28-Oct-99	U	U	U	U	U	NT	NM
31-Aug-00	0.0024	U	U	U	U	NT	78.28
11-May-01	U	U	U	U	U	U	78.13
10-Aug-01	U	U	U	U	U	U	78.33
15-Aug-02	U (0.0005)	U (0.002)	U (0.002)	U (0.002)	U (0.090)	NT	78.06
18-Apr-03	U (0.0005)	U (0.0005)	U (0.0005)	U (0.001)	U (0.08)	NT	77.46
GCLs	0.005	1	0.7	10	2.2	1.5	NA

Monitoring Well MW-4

Date	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylenes (mg/L)	GRO (mg/L)	DRO (mg/L)	GW Elev (feet)
19-Nov-96	U	U	U	U	U	NT	77.34
20-Mar-98	U	0.093	0.11	0.096	0.094	NT	76.01
23-Jun-98	U	0.001	U	U	U	NT	76.39
01-Sep-98	U	U	U	U	U	NT	76.53
29-Dec-98	U	U	U	U	U	NT	76.13
12-May-99	U	U	U	U	U	U	76.07
24-Aug-99	U	U	U	U	U	NT	77.32
28-Oct-99	U	0.22	0.0082	0.022	0.76	NT	79.32
08-Jun-00	U	U	U	U	U	NT	78.17
31-Aug-00	U	U	U	U	U	NT	78.39
01-Dec-00	U	U	U	U	U	NT	78.13
05-Feb-01	U	U	U	U	U	NT	NM
10-Aug-01	U	0.003	U	U	U	NT	78.26
15-Aug-02	U (0.0005)	U (0.002)	U (0.002)	U (0.002)	U (0.090)	NT	78.24
GCLs	0.005	1	0.7	10	2.2	1.5	NA

Appendix B
Tables of Historical Ground Water Monitoring Data

Monitoring Well MW-5

Date	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylenes (mg/L)	GRO (mg/L)	DRO (mg/L)	GW Elev (feet)
19-Nov-96	U	U	U	U	U	NT	77.33
21-Mar-97	U	U	U	U	U	NT	78.02
20-Jun-97	U	U	U	U	U	NT	NM
23-Dec-97	U	U	U	U	U	NT	77.55
20-Mar-98	U	U	U	U	U	NT	78.45
23-Jun-98	U	U	U	U	U	NT	77.12
01-Sep-98	U	U	U	U	U	NT	77.46
29-Dec-98	U	U	U	U	U	NT	77.13
12-May-99	U	U	U	U	U	U	77.09
24-Aug-99	U	U	U	U	U	NT	78.31
28-Oct-99	U	U	U	U	U	NT	79.25
31-Aug-00	U	U	U	U	U	NT	79.89
10-Aug-01	U	0.002	U	U	U	NT	78.30
15-Aug-02	U (0.0005)	U (0.002)	U (0.002)	U (0.002)	U (0.090)	NT	78.05
18-Apr-03	U (0.0005)	U (0.0005)	U (0.0005)	U (0.001)	U (0.08)	NT	77.48
GCLs	0.005	1	0.7	10	2.2	1.5	NA

Monitoring Well MW-6

Date	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylenes (mg/L)	GRO (mg/L)	DRO (mg/L)	GW Elev (feet)
19-Nov-96	U	U	U	U	U	NT	77.36
21-Mar-97	U	U	U	U	U	NT	77.96
20-Jun-97	U	U	U	U	U	NT	NM
23-Dec-97	U	U	U	U	U	NT	77.54
20-Mar-98	U	U	U	U	U	NT	76.96
23-Jun-98	U	U	U	U	U	NT	77.17
01-Sep-98	U	U	U	U	U	NT	77.46
29-Dec-98	U	U	U	U	U	NT	76.12
15-Feb-99	U	U	U	U	U	NT	77.25
12-May-99	U	U	U	U	U	U	77.09
24-Aug-99	U	U	U	U	U	NT	78.34
28-Oct-99	U	U	U	U	U	NT	NM
31-Aug-00	U	U	U	U	U	NT	78.27
10-Aug-01	U	0.001	U	U	U	NT	78.28
15-Aug-02	U (0.0005)	U (0.002)	U (0.002)	U (0.002)	U (0.090)	NT	78.12
18-Apr-03	U (0.0005)	U (0.0005)	U (0.0005)	U (0.001)	U (0.08)	NT	77.48
26-Oct-05	U (0.0005)	U (0.0005)	U (0.0005)	U (0.0015)	U (0.05)	NT	80.09
11-May-06	U (0.0005)	U (0.0005)	U (0.0005)	U (0.0015)	U (0.05)	NT	77.88
25-Apr-07	U (0.0005)	U (0.0005)	U (0.0005)	U (0.0015)	U (0.05)	NT	78.34
16-Apr-08	U (0.0005)	U (0.0005)	U (0.0005)	U (0.0015)	U (0.05)	NT	79.06
GCLs	0.005	1	0.7	10	2.2	1.5	NA

April 2009 U 0.00190 0.00070 0.00180 0.0504 NT

Appendix B
Tables of Historical Ground Water Monitoring Data

Monitoring Well MW-7

Date	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylenes (mg/L)	GRO (mg/L)	DRO (mg/L)	GW Elev (feet)
19-Nov-96	U	U	U	U	U	NT	77.37
23-Dec-97	U	U	U	U	U	NT	76.35
20-Mar-98	U	U	U	U	U	NT	75.68
23-Jun-98	U	U	U	U	U	NT	76.06
01-Sep-98	U	U	U	U	U	NT	77.56
29-Dec-98	U	U	U	U	U	NT	77.12
15-Feb-99	U	U	U	U	U	NT	77.23
12-May-99	U	U	U	U	U	U	77.08
24-Aug-99	U	U	U	U	U	NT	78.39
28-Oct-99	U	U	U	U	U	NT	79.38
31-Aug-00	U	U	U	U	U	NT	78.48
10-Aug-01	U	U	U	U	U	NT	78.32
15-Aug-02	U (0.0005)	U (0.002)	U (0.002)	U (0.002)	U (0.090)	NT	78.37
26-Oct-05	U (0.0005)	U (0.0005)	U (0.0005)	U (0.0015)	U (0.05)	NT	80.11
11-May-06	U (0.0005)	U (0.0005)	U (0.0005)	U (0.0015)	U (0.05)	NT	77.92
25-Apr-07	U (0.0005)	U (0.0005)	U (0.0005)	U (0.0015)	U (0.05)	NT	78.39
16-Apr-08	U (0.0005)	U (0.0005)	U (0.0005)	U (0.0015)	U (0.05)	NT	75.81
GCLs	0.005	1	0.7	10	2.2	1.5	NA

April 2009

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Monitoring Well MW-8

Date	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylenes (mg/L)	GRO (mg/L)	DRO (mg/L)	GW Elev (feet)
10-Aug-01	U	U	U	U	U	NT	NM
15-Feb-02	U	U	U	U	U	NT	77.29
28-May-02	0.0005	U	U	U	U	NT	77.73
15-Aug-02	U (0.0005)	U (0.002)	U (0.002)	U (0.002)	U (0.090)	NT	78.06
14-Nov-02	U (0.0005)	U (0.002)	U (0.002)	U (0.002)	U (0.09)	NT	79.14
18-Apr-03	U (0.0005)	U (0.0005)	U (0.0005)	U (0.001)	U (0.08)	NT	77.48
GCLs	0.005	1	0.7	10	2.2	1.5	NA

Monitoring Well SVE-1 (GW Samples)

Date	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylenes (mg/L)	GRO (mg/L)	DRO (mg/L)	GW Elev (feet)
09-Feb-00	0.11	0.170	U	0.510	2.3	NT	NM
08-Jun-00	0.14	0.61	0.16	1.8	7.2	NT	NM
31-Aug-00	0.10	2.8	0.10	6.60	30.0	NT	NM
01-Dec-00	1.00	0.47	2.00	11.00	38.0	NT	NM
05-Feb-01	1.00	0.62	1.00	3.60	15.0	NT	NM
11-May-01	1.00	1.0	1.00	12.10	33.5	NT	78.77
10-Aug-01	U	U	2.100	16.20	64.0	NT	79.16
07-Nov-01	0.002	1.0	2.000	12.30	36.2	NT	78.39
15-Feb-02	1.00	0.03	1.00	2.53	1.1	NT	77.99
28-May-02	0.001	0.51	0.073	0.94	0.1	NT	80.67
15-Aug-02	0.173	0.11	0.221	0.48	1.1	NT	78.13
14-Nov-02	0.100	0.0219	0.491	1.882	1.0	NT	79.21
28-Jan-03	0.0173	0.314	U (0.04)	0.886	1.0	NT	79.68
18-Apr-03	0.0173	0.406	0.0482	1.46	0.1	NT	77.95
17-Jul-03	0.002	0.354	0.06	1.23	0.0	NT	78.08
24-Oct-03	0.000753	0.011	0.00125	0.0367	0.13	NT	79.79
20-Jan-04	U (0.0005)	U (0.0005)	U (0.0005)	U (0.001)	U (0.05)	NT	76.58
13-Apr-04	0.000666	U (0.0005)	0.000677	0.00151	U (0.05)	NT	77.69
21-Jul-04	0.0003	0.0147	0.00147	0.0316	0.145	NT	78.09
13-Oct-04	U (0.0005)	U (0.0005)	U (0.0005)	U (0.001)	U (0.08)	NT	78.54
25-Apr-05	1.0	1.0	0.063	0.405	0.2	NT	80.94
07-Oct-05	0.001	1.0	0.246	1.85	0.0	NT	82.90
11-May-06	0.11	0.459	U (0.05)	0.244	U (5)	NT	78.99
26-Oct-06	0.0105	0.00542	U (0.005)	U (0.015)	U (0.5)	NT	81.81
25-Apr-07	0.001	0.123	U (0.0005)	0.0142	1.42	NT	78.92
31-Oct-07	U (0.0005)	U (0.0005)	U (0.0005)	0.00204	U (0.05)	NT	78.44
16-Apr-08	U (0.0005)	U (0.0005)	U (0.0005)	U (0.015)	U (0.05)	NT	77.75
22-Oct-08	U (0.0005)	U (0.0005)	U (0.0005)	U (0.015)	U (0.05)	NT	79.86
GCLs	0.005	1	0.7	10	2.2	1.5	NA

April 2009

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U

0.00557

0.0194

0.0632

NT

Appendix B
Tables of Historical Ground Water Monitoring Data

Monitoring Well SVE-2 (GW Samples)

Date	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylenes (mg/L)	GRO (mg/L)	DRO (mg/L)	GW Elev (feet)
31-Aug-00	0.025	0.051	0.022	0.340	1.2	NT	NM
11-May-01	0.121	0.810	0.565	6.080	1.7	NT	78.11
10-Aug-01	0.031	0.031	0.025	0.610	1.7	NT	78.29
04-Dec-03	U (0.0005)	U (0.0005)	U (0.0005)	U (0.001)	U (0.05)	NT	NM
26-Feb-04	0.00162	U (0.0005)	U (0.0005)	U (0.001)	U (0.05)	NT	NM
13-Apr-04	0.00414	0.00414	0.017	0.00691	0.219	NT	NM
21-Jul-04	0.0114	0.0114	0.00426	0.0102	0.101	NT	NM
25-Oct-04	0.00188	0.00251	U (0.0005)	0.00354	U (0.05)	NT	NM
07-Oct-05	U (0.0005)	0.000976	U (0.0005)	U (0.0015)	U (0.05)	1.47	NM
11-May-06	U (0.0005)	U (0.0005)	U (0.0005)	U (0.0015)	U (0.05)	NT	NM
26-Oct-06	U (0.0005)	0.000506	U (0.0005)	U (0.0015)	U (0.05)	NT	81.46
25-Apr-07	U (0.0005)	U (0.0005)	U (0.0005)	U (0.0015)	U (0.05)	NT	78.08
31-Oct-07	0.000587	U (0.0005)	U (0.0005)	U (0.0015)	U (0.05)	NT	80.66
16-Apr-08	U (0.0005)	U (0.0005)	U (0.0005)	U (0.0015)	U (0.05)	NT	79.37
22-Oct-08	0.00156	0.00109	U (0.0005)	U (0.0015)	U (0.05)	NT	79.54
GCLs	0.005	1	0.7	10	2.2	1.5	NA

April 2009 0.0131 0.00106 0.00657 0.00689 0.0626 NT

Key:
DRO - diesel range organics
GCL - ground water cleanup levels
GRO - gasoline range organics
GW - ground water
mg/L - milligrams per liter
NA - not applicable
NM - not measured
NS - not sampled
U - Undetected above practical quantitation limits.

Bold, shaded indicates concentrations greater than the GCL