2008 ANNUAL
OPERATIONS AND MAINTENANCE REPORT

STAUFFER MANAGEMENT COMPANY LLC
LEWISTON, NEW YORK

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Prepared by:
Conestoga-Rovers & Associates

285 Delaware Avenue, Suite 500
Buffalo, New York 14202

Office: 716-856-2142
Fax: 716-856-2160

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1.0 INTRODUCTION

This report summarizes the operation and maintenance (O&M) activities performed at the Stauffer Management Company LLC (SMC) Site (Site) in Lewiston, New York for the reporting period of January 1, 2008 through December 31, 2008. This report also summarizes significant modifications to remedial operations during the reporting period. Finally, this report presents data that can be used to evaluate the effectiveness of the remedial systems in containing and recovering chemicals released during historical plant operations.

The O&M services were provided by Conestoga-Rovers & Associates, Inc. (CRA) under contract to SMC. The O&M activities were performed in accordance with the "Operations and Maintenance Manual, Stauffer Management Company, Town of Lewiston, New York" (O&M Manual), dated April 1998.

1.1 SITE BACKGROUND

The SMC Site is located in the Town of Lewiston, New York, immediately north of the Forebay of the Robert Moses Power Plant. Figure 1.1 presents the location of the Site, and Figure 1.2 presents the layout of the Site.

The Site is a former chemical manufacturing facility owned and operated by Stauffer Chemical Company. All structures associated with the former plant were demolished in the early 1980s. Stauffer Chemical Company was divested in 1987, and Atkemix Thirty Seven, a subsidiary of Stauffer Management Company, became the Site owner. In 2000, Stauffer Management Company and Atkemix Thirty Seven restructured into a limited liability company that is now known as Stauffer Management Company LLC.

In 1995, in accordance with Consent Order #B9-0137-86-04, SMC initiated remedial construction for soil and groundwater. At that time, the Treatment Building was erected to house the Site groundwater treatment system and the soil vapor extraction (SVE) treatment system for Area A. A second SVE treatment system, Area C, was mounted in a trailer located off Site, beyond the southeast corner of the Site property. SVE operations at Area C were discontinued in May 2004, and the Area C treatment system was decommissioned in July 2004. A third SVE system at Area T-4 was also installed in 1995, operated until 2000, and decommissioned in September 2001. Dual phase well T-4 (also known as DPT-261) remains operable as a groundwater extraction well.

The major chemicals of concern in the groundwater at the Site have been identified in the Site-Specific Parameter List (SSPL) as follows:

i) carbon disulfide
ii) carbon tetrachloride
iii) chloroform
iv) methylene chloride
v) tetrachloroethene
vi) benzene
vii) chlorobenzene
viii) toluene
ix) trichloroethene

These chemicals have historically been detected at varying concentrations in the groundwater, subsurface soils, seeps, and surface water run-off in the immediate vicinity of the Site.

1.2 REMEDIAL SYSTEMS DESCRIPTIONS

The remedial systems currently being operated at the Site include:

i) the Area A SVE system
ii) the bedrock groundwater extraction and treatment system, consisting of deep bedrock and shallow bedrock extraction wells

The SVE system located in Area T-4 was decommissioned in 2001, and the SVE system located in Area C was decommissioned in 2004.

The remedial systems are briefly described in the following sections.

1.2.1 AREA A

Area A occupies approximately 136,500 square feet near the center of the property as shown on Figures 1.2 and 1.3. The remedial system at Area A is a combination of soil vapor and groundwater extraction and includes 39 SVE wells; 3 dual-phase

groundwater/SVE wells; and a cover comprised of a polyvinyl chloride (PVC) geomembrane liner, a geotextile cushion, and stone.

Each SVE well is connected to one of four header pipes that each enter the Treatment Building and are connected to the vacuum blower housed in the north side of the building. The SVE piping is mounted on a uni-strut/pipe strap support system. The Area A SVE treatment system is comprised of a skid with a moisture separator tank, an in-line filter, a vacuum blower, a discharge silencer, and a condensate removal pump, all located in the Treatment Building. The heat exchanger and granular activated carbon (GAC) adsorption units are mounted separately on the concrete floor in the building.

1.2.2 AREA C

Area C occupies approximately 19,350 square feet beyond the southeast corner of the Site property, as shown on Figures 1.2 and 1.4. Area C is the location of one of the landfills previously used by Stauffer Chemical Company.

With the approval of New York State Department of Environmental Conservation (NYSDEC), operations at Area C were discontinued in May 2004, and the SVE system was decommissioned in July 2004. The SVE wells were plugged and abandoned in accordance with NYSDEC regulations in December 2004.

1.2.3 AREA T-4

Area T-4 occupies approximately 11,500 square feet and is located southwest of the Treatment Building, as shown on Figure 1.2. The Area T-4 SVE system was decommissioned in September 2001 with the approval of NYSDEC. Shallow groundwater extraction well T-4 remains operable.

1.2.4 GROUNDWATER EXTRACTION AND TREATMENT SYSTEM

The groundwater extraction network consists of five deep bedrock groundwater extraction wells (EW-1, EW-2, EW-3, LR-66, and OW-3), three shallow bedrock extraction wells (EW-4, EW-5, and EW-6), one shallow extraction well in Area T-4, and three shallow dual-phase wells in Area A (DPA-201, DPA-202, and DPA-203). The locations of the extraction wells are shown on Figure 1.5.

Underground forcemains with secondary containment convey recovered groundwater from the extraction wells to the Treatment Building. The groundwater treatment system is currently housed in the south side of the original Treatment Building and in the northwest addition to the building.

All groundwater from each of the extraction wells is pumped into the on-Site treatment system. The major components of the treatment system are listed below:

i) Non-Aqueous Phase Liquid (NAPL) Separator: capable of collecting both light non-aqueous phase liquid (LNAPL) and dense non-aqueous phase liquid (DNAPL). (Note: No NAPL has been observed since beginning system operation).

ii) Carbon Feed Tank: process tank used to accumulate water from the NAPL separator.

iii) Carbon Feed Pump: pumps water from the carbon feed tank through the rest of the treatment system.

iv) Bag Filters: groundwater is pumped through five 10-micron bag filters operated in parallel to prevent solids from plugging the GAC.

v) GAC Beds: after the bag filters, the groundwater passes through two 20,000-pound GAC adsorption vessels operated in series.

The treated water from the GAC units is discharged through the outfall to the New York Power Authority (NYPA) Forebay, located south of the Site. Treated water is discharged in accordance with limits set by NYSDEC.

2.0 AREA A REMEDIAL SYSTEM O&M ACTIVITIES

2.1 SUMMARY OF AREA A OPERATIONS FOR 2008

The Area A SVE system was operated in automatic mode throughout this reporting period with several Site visits per week to perform system monitoring, inspections, and other routine O&M activities. The autodialer has been programmed to notify CRA personnel of any shutdowns or system failures. In addition, the system status is monitored remotely though a computer interface.

The Area A SVE system operated 7,599 hours during 2008 for an operating efficiency of approximately 87 percent. The 2008 operating efficiency is slightly above that of 2007 (85 percent). The Area A vacuum blower has operated reliably since the replacement of critical seals and gaskets in 2007. The only significant upgrade to the Area A treatment system in 2008 was the rebuild of the two diaphragm pumps that remove water from the knockout pot and the Area A "sump" pipe. This has allowed the SVE system to keep up with groundwater entering the treatment area from the Area A well field.

In June 2006, seven new SVE wells were installed adjacent to Area A Headers #1 and #4. In late 2006 and mid-2007, SMC performed air flow testing of the new SVE wells and of each of the four Area A headers. The results of the air flow measurements indicated generally good influent flow across the entire Area A field. A report on the findings was submitted to NYSDEC in October 2007. The report also recommended that measurements of header-by-header influent air flow be repeated on an annual basis to confirm that the extraction wells are functioning as designed, and to provide input for possible future changes in Area A operations. The 2008 air flow measurements were performed in July, and a report including findings and recommendations was submitted to NYSDEC in January 2009 with the Fourth Quarter 2008 activity report. The 2008 measurements once again indicated generally good airflow across most of the Area A field, although there were portions of the Area A filed that indicated very little flow in 2008, and there were decreases in average air flow in each header compared with 2007. The cause of the decreased air flow in Area A is not clear. The decrease is not attributable to lower Area A operating vacuum, as it was generally the same during both sets of measurements. In order to determine the cause of the decreased flow, an examination will be performed of those SVE wells that saw a significant drop in air flow between 2007 and 2008. Once weather conditions allow, the air flows will be measured and the groundwater levels will be recorded. If the results corroborate the 2008 work, these wells will be probed to check for the presence of sediments that might indicate screen failure. If these steps do not provide information on the probable cause of the problem, the wells may have to be pulled to determine if the well screens are damage or

blocked. The 2008 air flow report included other recommendations for optimizing the effectiveness of the Area A system, including possible preferential operation of those individual wells that are capable of achieving greater mass removal over wells that exhibit minimal effectiveness or have lower concentrations in the soil vapor.

2.2 MASS REMOVAL - 2008

The amount of organic compounds removed by the Area A SVE system is presented in Table 2.1.

The mass removal calculation is based upon an average air flow rate of 800 cubic feet per minute (cfm) and an operation time of 7,599 hours. Four operational vapor samples were collected during 2008 from the Area A SVE system and analyzed for use in the mass loading calculations. The samples were collected on a quarterly basis in March, June, September and November 2008, utilizing the sample ports in the influent header pipe system just inside the Treatment Building and before the blower. Results from the four Area A influent samples were used to develop the 2008 quarterly mass loading calculations.

As shown in Table 2.1, the total mass removed in the soil vapors from Area A in 2008 was approximately 507 pounds. Of this mass, approximately 87 percent was carbon tetrachloride. Tetrachloroethene, chloroform, and trichloroethylene accounted for the remaining total mass removed.

The 507 pounds of organic compounds removed from Area A in 2008 represents a 1842 pound decrease (463 percent) compared with that removed in 2007 (2,349 pounds). Although the 2008 operating hours improved slightly compared with that of 2007, the influent concentrations decreased significantly in 2008. The removal efficiency of Area A in 2008 (pound of VOCs recovered/operating hour) was 0.07, compared with 0.32 in 2007.

2.3 ROUTINE INSPECTION AND MAINTENANCE

The Area A SVE system is inspected at least weekly to verify proper operation. The inspected components include the blower, compressor, and heat exchanger. In addition, all aboveground piping associated with the system is inspected for integrity. The operating status and conditions of the Area A SVE system are recorded on the respective operating log and system monitoring sheets in the O&M logbook. Monitoring of the

Area A SVE air influent is also performed periodically and is recorded in the Site analytical database.

2.4 OPERATIONS/MONITORING FOR 2009

The 2009 goal is to continue optimization of VOC mass removal from the Area A vadose zone and shallow groundwater. The system upgrades of the past five years, including the new blower motor (coupled with the blower installed in 2003), the new heat exchanger core in 2006, the header replacements in 2004-2005, the replacement of the blower seals in 2007, and the rebuilding of the transfer pumps in 2008 will continue to reduce system downtime. The revised main header configuration, with an additional length of PVC pipe serving as a sump, allows the treatment system to handle large amounts of groundwater by routing it directly to the liquid phase carbon treatment system instead of through the Area A knockout pot. System progress will be evaluated by sampling the Area A influent on a quarterly basis.

3.0 AREA C REMEDIAL SYSTEM

The former Area C SVE system was decommissioned in July 2004 with the approval of NYSDEC. The SVE wells were plugged and abandoned in accordance with NYSDEC regulations in December 2004.

4.0 AREA T-4 REMEDIAL SYSTEM

The former Area T-4 SVE system was decommissioned in September 2001 with the approval of NYSDEC.

Dual phase well T-4 (also known as DPT-261) was taken out of service as a SVE well in 2001, but remains usable as a groundwater extraction well should groundwater concentrations increase in the T-4 area.

5.0 GROUNDWATER EXTRACTION SYSTEM O&M ACTIVITIES

5.1 2008 EXTRACTION SYSTEM MODIFICATIONS

There were no extraction system modifications in 2008, as the eight bedrock groundwater extraction wells (EW-1 through EW-6, OW-3, and LR-66) generally operated reliably. Routine pump cleaning was performed several times throughout the course of the year.

5.2 SUMMARY OF OPERATIONS – 2008

The bedrock groundwater extraction system operated in automatic mode throughout the reporting period, with visits to the Site two times per week to confirm pump operation, perform piping inspections, and complete other routine O&M activities. The operational status of the groundwater extraction system is also monitored remotely by computer.

The groundwater extraction system generally operated reliably during 2008. Pumping was interrupted on a short-term basis on several occasions to perform routine pump maintenance and to replace deteriorated sections of well riser pipe.

In December 2007, flows from the deep extraction wells EW-1 through EW-3 showed signs of decreased input. Troubleshooting indicated that the wells were all pumping at their established set points, but they were cycling less frequently and the flow was often turbid. A well sediment cleanout was performed in January 2008. The pumps were pulled and accumulated sediment was removed from the wells. Following the sediment removal, the three deep extraction wells returned to historical removal rates.

The pump in OW-3 was replaced in June 2008 after the flow rate from the well had decreased over time. The new pump operated within the OW-3 historical extraction range.

5.3 MASS REMOVAL – 2008

5.3.1 EXTRACTION WELLS EW-1 THROUGH EW-6

Mass removal calculations for extraction wells EW-1 through EW-6 are summarized in Tables 5.1 through 5.6, respectively.

The mass removal of VOCs from groundwater for each extraction well was calculated on a quarterly basis using flow volumes and analytical data for the quarter. The volume of groundwater pumped from the six extraction wells is summarized below.

Extraction Well	*First Quarter*	*Second Quarter*	*Third Quarter*	*Fourth Quarter*	*2008 Total*
EW-1	231,935	308,006	315,552	242,555	1,098,048
EW-2	880,012	1,513,014	1,264,818	1,195,114	4,852,958
EW-3	165,289	174,450	158,263	129,456	627,458
EW-4	109,387	131,978	144,191	110,325	495,881
EW-5	1,222,305	1,474,739	1,611,210	1,232,793	5,541,047
EW-6	798,452	953,021	1,001,559	496,109	3,249,141
Total gallons pumped	3,407,380	4,555,208	4,495,593	3,406,352	15,864,533

The total mass, in pounds, removed by the six extraction wells in 2008 is summarized below.

Extraction Well	*First Quarter*	*Second Quarter*	*Third Quarter*	*Fourth Quarter*	*2008 Total*
EW-1	39	67	63	17	186
EW-2	30	189	108	235	563
EW-3	33	29	31	19	111
EW-4	3.3	19.7	5.1	11.9	40
EW-5	80.9	24.5	34.2	7.7	147
EW-6	138.3	211.0	103.4	868.60	1,321
Total Pounds of VOCs Removed					2,368

The 2,368 pounds of VOCs removed from groundwater by EW-1 through EW-6 in 2008 represents an 18-percent increase compared with 2007 (1,948 pounds of VOCs removed). The volume of groundwater extracted by EW-1 through EW-6 in 2008 was 3 percent higher than in 2007, and the removal efficiency (pound of VOC recovered/1,000 gallons of groundwater extracted) of the six extraction wells as a group increased from 0.13 in 2007 to 0.15 in 2008. This represents a 13-percent increase in removal efficiency, and is directly related to an increase in the average influent concentrations for the three main SSPLs (carbon tetrachloride, carbon disulfide, and chloroform). See Section 9.2 for a summary of mass removal by groundwater extraction on a year-to-year basis.

One extraction well was responsible for most of this increase. The mass of VOCs extracted by EW-6 in 2008 increased by 293 percent compared to 2007, even though EW-6 extracted 11 percent less groundwater than in 2007. The removal efficiency of EW-6 increased from 0.12 pound VOC/1,000 gallons extracted in 2007 to 0.41 pound VOC/1,000 gallons extracted in 2008.

Removal efficiencies decreased between 2007 and 2008 at EW-1 (from 0.35 to 0.17), and at EW-2 (from 0.18 to 0.12 pound VOC/1,000 gallons extracted). In 2006, the removal efficiency of EW-1 was 0.52 pound VOC/1,000 gallons extracted. The decrease is related to decreasing influent VOC concentration in the well. The removal efficiency of EW-2 has remained fairly constant (0.16 pound VOC/1,000 gallons extracted in 2006).

The removal efficiency increased slightly between 2007 and 2008 at EW-5 (from 0.02 to 0.03 pound VOC/1,000 gallons extracted).

The removal efficiency remained the same between 2007 and 2008 at EW-3 at 0.18 pound VOC/1,000 gallons extracted, and at EW-4 at 0.08 pound VOC/1,000 gallons extracted.

Compounds removed by EW-1 through EW-6 in 2008 consisted mainly of carbon tetrachloride (1320 pounds, 56 percent of the total), chloroform (492 pounds, 21 percent of the total), carbon disulfide (480 pounds, 20 percent of the total VOCs removed), tetrachloroethene (38 pounds, 1.6 percent of the total), trichloroethene (19 pounds, 0.8 percent of the total), and methylene chloride (15 pounds, 0.6 percent of the total). Section 9.2 provides historical breakdowns of the compounds removed by groundwater extraction since 1999.

For the group of six extraction wells, the mass of carbon tetrachloride removed in 2008 increased by 547 pounds compared with 2007, and the mass of chloroform removed increased by 201 pounds. The mass of tetrachloroethene, trichloroethene, and methylene chloride removed remained about the same as in 2007. The mass of carbon disulfide decreased by 369 pounds between 2007 and 2008.

5.3.2 AREA A DUAL WELLS DPA-201, DPA-202, AND DPA-203

Mass removal calculations for VOCs removed from shallow groundwater by DPA-201, DPA-202, and DPA-203 are summarized in Tables 5.7 through 5.9, respectively.

The mass removal estimate for the dual wells is based on quarterly flow data and quarterly analytical results. The volume of groundwater pumped from the three Area A dual wells is summarized below.

Total Volume of Groundwater (Gallons) Pumped – 2008					
Well No.	*1st Quarter*	*2nd Quarter*	*3rd Quarter*	*4th Quarter*	*System Total-2008*
DPA-201	36,710	29,978	19,019	15,102	100,809
DPA-202	45,806	34,267	18,212	19,726	118,011
DPA-203	46,529	41,135	29,625	18,259	135,548
				Total Gallons Pumped	354,368

The above represents a 30-percent increase in recovered groundwater by the dual phase wells between 2007 and 2008.

The total mass removed by the three dual wells is summarized below.

Total VOCs Removed (Pounds) – 2008					
Well No.	*1st Quarter*	*2nd Quarter*	*3rd Quarter*	*4th Quarter*	*Total*
DPA-201	0	0.5	0	0	0.5
DPA-202	73.5	64.3	28.3	30.9	197
DPA-203	132.0	77.5	0	69.1	279
				Total VOCs Removed in 2008 (Pounds)	476.5

The 476.5 pounds of total VOCs recovered by DPA-201, DPA-202, and DPA-203 in 2008 represent an 18-percent increase from 2007 (405 pounds recovered), but a 19-percent decrease from 2006 (588 pounds recovered). Despite the increase in mass recovered compared with 2007, the removal efficiency of the three dual phase extraction wells as a group decreased, from 1.49 pounds VOC/1,000 gallons extracted in 2007 to 1.34 pounds VOC/1,000 gallons extracted in 2008. This decrease is due to reduced influent concentrations.

Removal efficiencies for all three dual phase wells decreased between 2007 and 2008. DPA-201 dropped from 0.019 to 0.005 pounds VOC/1,000 gallons extracted, DPA-202 decreased from 1.70 to 1.67 pounds VOC/1,000 gallons extracted, and DPA-203 decreased from 2.46 to 2.06 pounds VOC/1,000 gallons extracted.

The major compounds removed from groundwater by the three dual wells were carbon tetrachloride (393 pounds, 82 percent of the total recovered) and chloroform (71 pounds,

15 percent of total). Approximately 9 pounds of carbon disulfide (2 percent of total) and 3 pounds of tetrachloroethene (<1 percent of total) were also removed.

5.3.3 AREA T-4 EXTRACTION WELL DPT-261 (T-4)

Extraction well DPT-261 (T-4) operated very infrequently during 2007 due to a lack of recoverable water. Although there was sufficient water to sample T-4 during two of the four groundwater sampling events, the automatic air-driven pump did not recover measurable amounts of water for the majority of the year. Well T-4 recovers less than 0.1 gallons per minute (GPM) when it operates. Consistent with previous years, the mass of organic compounds recovered from T-4 in 2008 was negligible, less than 1 pound for the year.

5.3.4 EXTRACTION WELL OW-3

The mass of SSPL compounds removed from groundwater by OW-3 is summarized in Table 5.10. The volume of groundwater pumped from OW-3 in 2008 was 245,890 gallons, an increase of 35 percent from 2007. The extracted volume increased after the replacement of the OW-3 pump in June 2008. A total of 1,936 pounds of VOCs were removed from groundwater by OW-3 in 2008, an increase of 636 pounds compared with 2007 (1,300 pounds). This increase is due both to higher extraction rates and higher influent concentrations.

The 2008 removal efficiency of OW-3 was 7.87 pounds VOC/1,000 gallons extracted, compared with a removal efficiency of 7.12 pounds VOC/1,000 gallons extracted in 2007. The compounds removed were carbon disulfide (1,620 pounds, 84 percent of the total recovered), carbon tetrachloride (276 pounds, 14 percent of total), and chloroform (39 pounds, 2 percent of total).

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5.3.5 EXTRACTION WELL LR-66

Former Lockport-Rochester monitoring well LR-66 was converted into a permanent groundwater extraction well in June 2005 and became operable on July 1, 2005.

The mass removal calculations for organic compound removed from groundwater by LR-66 are summarized in Table 5.11. The volume of groundwater pumped from LR-66 in 2008 was 126,323 gallons, down 40 percent from 2007 (176,843 gallons). A total of 10 pounds of VOCs was removed from groundwater by LR-66 in 2008, compared with 16 pounds removed in 2007. The removal efficiency of LR-66 was 0.08 pound VOC/1,000 gallons extracted, a slight decrease from 0.09 pounds VOC/1,000 gallons extracted in 2007. The compounds removed in 2008 were carbon tetrachloride (8.2 pounds, 82 percent of total recovered), chloroform (0.8 pound, 8 percent of total), and carbon disulfide (0.5 pound, 5 percent of total).

5.3.6 AREA A KNOCKOUT POT AND SUMP

Although not specifically part of the groundwater extraction system, the Area A SVE system air/water separator (i.e., knockout pot) and the 10-foot long PVC "sump" collects groundwater that is present in the SVE air stream (as entrained moisture in the soil gas) and groundwater that is removed by the drop tube assemblies and the blower. The sump is a 12-inch diameter, 10-foot long PVC pipe located at one end of the Area A header assembly, just inside the Treatment Building.

The mass of organic compounds removed from groundwater by the knockout pot and sump is summarized in Table 5.12. The sump is sampled on a quarterly basis, at the time of the groundwater sampling events.

The volume of groundwater recovered by the Area A knockout pot and the pipe sump is also summarized in Table 5.12. The volume recovered in 2008 was 698,199 gallons, a 42-percent increase over 2007. The knockout pot and sump removed a total of <1pound of VOCs in 2008, about the same amount that was removed in 2007.

Although additional groundwater was brought into the SVE treatment system from Area A (likely due to increased precipitation in 2008), it did not adversely affect Area A operations. This is due to the rebuild of the two diaphragm pumps that remove water from the knockout pot and the Area A "sump" pipe, which has allowed the SVE system to keep up with groundwater entering the treatment area from the Area A well field.

5.4 ROUTINE MAINTENANCE

The operational status of the extraction and dual phase wells is monitored during the weekly visits to the Site. The flows from each of the wells are recorded weekly in the

O&M logbook. If the submersible pumps are not maintaining the desired drawdown, or if the dual pumps are not cycling properly, pump maintenance is performed.

All of the extraction wells have been tied into one of two leak detection systems. A leak in the forcemain of any well on either system will shut off all of the pumping associated with the system.

6.0 GROUNDWATER TREATMENT SYSTEM

6.1 SUMMARY OF OPERATIONS - 2008

The groundwater treatment system operated in the automatic mode in 2008 with at least weekly visits to the Site to perform system monitoring, inspections, and other routine O&M activities. The autodialer is programmed to alert CRA personnel if the groundwater treatment system shuts down or if the Treatment Building floor sump goes to high level. In addition, the operating status of the groundwater treatment system can be monitored remotely by computer.

The groundwater treatment system operated continuously and reliably throughout 2008 with no major repairs or component replacements.

In February 2008, effluent flow from the treatment system backed up into the treatment building and caused minor flooding. Troubleshooting indicated that the flow had backed up due to a constriction in the main discharge pipe to the forebay due to accumulated sediment. The effluent line was reamed and water jetted. An inspection of the water lines inside the building indicated that they had also narrowed significantly over time. These lines were also jetted out in February. At the time of the jetting, portions of the interior piping were reconfigured and a number of 90-degree bends were removed. In addition, the impeller on the carbon feed tank was cleaned. The result of the cleaning was that the peak discharge increased from around 50 gpm to 80 gpm.

Besides the above work, the treatment system was shut down only briefly to perform routine maintenance and carbon changes.

6.2 MAINTENANCE, INSPECTION, AND MONITORING ACTIVITIES

6.2.1 ROUTINE TREATMENT SYSTEM MAINTENANCE

Routine inspection and maintenance of the groundwater treatment system is performed weekly during visits to the Site. Routine weekly inspections and maintenance include:

i) general visual inspection of the treatment equipment for leaks, overflows, or malfunctions

ii) inspection of process-indicating instruments, including sight glass on DNAPL separator

iii) inspection of aboveground SVE piping

iv) recording operating conditions in logbook

v) correction of operational problems

vi) replacement of bag filters, as indicated by differential pressure across the filters;

vii) repair or replacement of damaged parts

All inspections are recorded in the O&M logbook.

The treatment system is shut down periodically to perform routine maintenance on the system components. The periodic maintenance shutdowns involved cleaning and inspection of the following:

i) separator tank

ii) carbon feed tank

iii) carbon feed pump

iv) bag filter housings

The carbon vessels are cleaned and inspected during routine carbon changeouts.

6.2.2 TREATMENT SYSTEM MODIFICATIONS

The replacement/change-out of bag filters has historically been a labor-intensive activity due to the frequency that the filters become plugged with solids from the influent streams. In past years, SMC attempted to reduce the amount of solids entering the filter bags through the addition of small amounts of sodium hypochlorite into the treatment system and through changes to the flow of recovered Area A water to allow for more residence time (additional time for settling) in the separator tank. However, neither of these efforts resulted in fewer solids in the filter bags. Therefore, in 2007, SMC decided to install additional filter bag capacity to the treatment system, and specified the addition of an eight-unit Hayward Maxiline Round Filter Vessel constructed of 316 stainless steel. The unit was installed in early January 2008.

The new filter unit has increased the efficiency of solids removal from the groundwater treatment system. For the year, filter bag changes were performed on average every three to four days, compared to every other day before the new unit was installed. The particles that adhere to the filters are a combination of biosolids that form after groundwater extraction, and silty/sandy solids that enter the groundwater treatment system from Area A SVE operations.

6.2.3 GROUNDWATER TREATMENT SYSTEM PROCESS MONITORING

Samples for chemical analysis are collected routinely from the groundwater treatment system. Samples are collected weekly from the carbon interstage. The groundwater influent and system effluent are sampled monthly, at a minimum. Process monitoring sample analytical results are presented in Appendix A. Influent, carbon interstage, and effluent data are summarized in Tables A-1 to A-3, respectively.

The 2008 analytical data for the monthly influent groundwater samples are presented in Table A-1. The data indicate that typically only carbon tetrachloride, carbon disulfide, and chloroform are detected in high concentrations in the influent.

The 2008 analytical data for the weekly carbon interstage groundwater samples are presented in Table A-2. The data indicate that the results are non-detect except when breakthrough occurred. During 2008, carbon changeouts were scheduled when breakthrough of VOCs was detected between the lead carbon bed and the polish carbon bed (interstage).

Three carbon changeouts were performed during the year:

i) March 27, 2008

ii) June 11, 2008

iii) June 25, 2008

In the May and June 11 carbon changes, the carbon in the lead bed was replaced, and the newly changed vessel became the lag bed. The former lag bed then became the lead bed. Due to a very low detectable level of carbon disulfide in the effluent just prior to the June 11 carbon bed change (indicating breakthrough in the former lag bed), SMC decided to replace the lead bed.

All interstage sample results returned to non-detect following the carbon bed changes.

The analytical data for effluent samples collected from the groundwater treatment system are presented in Table A-3. Effluent samples are collected and analyzed

monthly, at a minimum.[1] Aside from the one hit of carbon disulfide discussed above, there were no SSPLs detected in the effluent during 2008.

6.2.4 GROUNDWATER TREATMENT SYSTEM PERFORMANCE MONITORING – 2008

All extraction wells are sampled on a quarterly basis. Sampling of the Site-wide monitoring well network is performed on a semiannual basis. The purpose of the groundwater monitoring is to evaluate progress of the groundwater extraction system in removing the SSPL compounds from the groundwater. The groundwater sampling data is used to determine whether trends indicate that the concentration of chemicals in the Site groundwater are increasing, decreasing, or remaining stable.

Groundwater samples are collected in accordance with established procedures and protocols. The samples are shipped to Columbia Analytical Services for analysis following Chain of Custody procedures. The laboratory sends the analytical results to CRA. The results are reviewed, collated, put into tabular form, sent to SMC for review, and included in the status reports to NYSDEC.

Groundwater sampling events were performed at the Site in 2008 as follows:

i) February 2008 (extraction wells and monitoring wells W-17 and OW-11)

ii) May 2008 (monitoring well network and extraction wells)

iii) August 2008 (extraction wells and monitoring wells W-17 and OW-11)

iv) November 2008 (monitoring well network and extraction wells)

The analytical results for the groundwater samples are presented in Appendix B, Tables B-1 through B-4.

6.2.5 GROUNDWATER TREATMENT SYSTEM PERFORMANCE MONITORING – 2009

The quarterly and semiannual sampling programs will continue through the year 2009 as follows:

[1] Additional samples are collected whenever the data indicate detected concentrations of VOCs in the effluent.

i) Quarterly Sampling: Quarterly sampling rounds will be performed in February, May, August, and November 2009. A total of 12 extraction wells and 2 monitoring wells will be sampled including:

a) Bedrock extraction wells – EW-1 through EW-6, LR-66, and OW-3

b) Dual wells – DPA-201, DPA-202, and DPA-203

c) T-4 (as long as sufficient water is present)

d) Monitoring wells OW-11 and W-17

ii) Semiannual Sampling: During 2009, semiannual sampling will be performed in May and November. Wells to be sampled include the extraction wells plus the following 47 monitoring wells:

Upper Lockport Wells	*Lower Lockport Wells*	*Lockport/ Rochester Wells*	*Rochester Wells*
OW-11	W-18L	W-19B	B-02
W-11	W-19A	LR-2	R-16
W-16	W-23B	LR-16	R-19
W-16L	W-48E	LR-67	R-68
W-17	W-50L	LR-20	R-48
W-18R	W-60L	LR-48	R-50
W-19D	W-65	LR-49	R-51
W-20	W-66L	LR-50	R-60
W-22	W-67L	LR-51	R-61
W-23C	W-70L	LR-61	R-62
W-66		LR-62	R-66
W-67		LR-69	R-67
		OW-5	

6.2.6 FACILITIES, STRUCTURES, AND GROUNDS MAINTENANCE

The facilities, structures, and grounds are inspected and maintained regularly as specified in the O&M Manual. These inspections are carried out during routine Site visits. These routine inspection tasks include checking the appearance of the grass, driveways, walkways, fencing, and lighting and containment areas. Inspections and maintenance tasks inside the Treatment Building and SVE trailers include checking the appearance of walls, floors, ceiling, doors, walkways, emergency equipment, lights, sumps, and equipment support structures. Any problems or deficiencies are noted in the O&M logbook.

6.2.7 UNSCHEDULED MAINTENANCE

Unscheduled maintenance was performed at the Site as required in 2008. Examples of unscheduled maintenance activities performed are:

i) pump maintenance or replacement

ii) extraction well riser pipe replacement

iii) equipment repair or replacement

Section 6.1 discusses maintenance done on the treatment system in 2008 as a result of effluent line constrictions.

6.2.8 MONITORING WELL INVENTORY

An inventory/inspection of the Site monitoring wells was performed in conjunction with the November 2008 groundwater sampling event. A copy of the well inventory is included as Appendix C. The well inventory indicates that the wells are in generally good condition, although three monitoring wells have cracked concrete collars and one requires raising the roadbox due to road resurfacing. This repair work will be performed in Spring 2009.

7.0 GROUNDWATER LEVEL MONITORING AND CHEMISTRY – 2008

Depth-to-groundwater measurements were recorded for all wells during the February, May, August, and November quarterly sampling events in 2008. Table 7.1 presents the measured groundwater levels for the four events. The May 2008 data were used to prepare potentiometric surface contour maps for each of the four water bearing zones (WBZs). The WBZs include the Upper Lockport, the Lower Lockport, the Lockport/Rochester, and the Rochester. In addition to the potentiometric surface contours, chemical isocontour figures were prepared for each WBZ using groundwater data obtained during the May 2008 event.

The potentiometric surface contour maps and chemical isocontour figures are discussed in the following sections.

7.1 GENERAL

7.1.1 GROUNDWATER POTENTIOMETRIC CONTOURS

Potentiometric surface contours were prepared for each WBZ based on the measured depths to groundwater in the May 2008 sampling event. Hydraulic containment was determined by evaluating the potentiometric contours, as well as considering the results of a detailed hydraulic monitoring program performed in 2000. The 2000 hydraulic monitoring program assessed the relationship between groundwater elevations in individual wells and their responses to pumping activity in the various Site WBZs using transducers installed in individual wells. The results of that program, including individual well hydrographs, were presented in the 2000 Annual Operations and Maintenance Report, March 2001.

Table 7.2 presents a summary of the monitoring wells and extraction wells classified by WBZ. The wells are classified under a specific WBZ if they are screened across or have open intervals in the specific WBZ. This classification was used to prepare the potentiometric surface contour maps for the May 2008 event.

During the preparation of potentiometric surface contours for the various WBZs, it was noted that several monitoring wells did not appear to be hydraulically connected to the monitored WBZ. For example, well W-23B in the Lower Lockport formation, well LR-69 in the Lockport/Rochester formation, and well R-66 in the Rochester formation exhibited anomalous water levels and, therefore, were not used to create groundwater contours. Well W-23B showed hydraulic response to Lower Lockport pumping in the

2000 hydraulic monitoring program, while LR-69 and R-66 did not show response to pumping in their respective WBZs. A review of the stratigraphic logs for the latter two wells indicates that the Rochester WBZ at LR-66 and the Lockport-Rochester WBZ at LR-69 are generally less fractured than in other areas of the Site; hence, hydraulic interconnection is lower at these two deep monitoring wells. The wells that are not used for contouring are noted on the various potentiometric contour figures.

In addition, water levels for the deep bedrock extraction wells (EW-1, EW-2, and EW-3, whose open intervals span the Lower Lockport, Lockport/Rochester, and Rochester WBZs) were adjusted to levels representative of the specific WBZ. This was done when the measured water level for the deep extraction well was significantly below the base of the designated WBZ (for the Lower Lockport and Lockport/Rochester WBZs) or significantly below the water level elevations of the surrounding wells in a particular WBZ (for the Rochester WBZ). The groundwater elevations in the immediate vicinity of the deep extraction wells are assumed to be at or near the base of the respective WBZ, since the WBZs at the extraction wells are essentially dewatered. However, for generating groundwater contours, these water levels were conservatively assumed to be 5 to 10 feet lower than the lowest measured water level from the respective WBZs (but not lower than the base of the WBZ). This allows meaningful water level contours to be created for each WBZ in the regions around the deep extraction wells, while accounting for potential influences from extraction well operations and well and fracture efficiencies. These assigned values for EW-1, EW-2, and EW-3 are as follows:

Lower Lockport	545 feet mean sea level (MSL)
Lockport/Rochester	545 feet MSL
Rochester	490 feet MSL

Note that the assigned EW-1, EW-2, and EW-3 water level value for both the Lower Lockport and the Lockport/Rochester WBZs for purposes of plotting potentiometric contours is 545 feet MSL. This value reflects the fact that the lowest measured water level in both Lower Lockport and Lockport/Rochester WBZ hydraulically-connected monitoring wells was approximately 550 feet MSL.

For the Upper Lockport potentiometric contour maps, extraction wells EW-1, EW-2, and EW-3 were not used to generate contours, as these wells are not open in the Upper Lockport. Groundwater elevations for combined Upper and Lower Lockport extraction wells EW-4, EW-5, and EW-6 were adjusted to 570 feet MSL for contouring the Upper Lockport WBZ. The 570 feet MSL is a level very near the lowest measured water level in

the Upper Lockport WBZ on Site. Actual water level elevations for EW-4, EW-5, and EW-6 were used for contouring the Lower Lockport WBZ.

7.1.2 CHEMICAL ISOCONTOURS

Chemical isocontours for each WBZ were prepared using analytical data from the May 2087 semiannual groundwater monitoring event. Two figures were prepared for the May data: one for carbon disulfide concentrations, and a second for the sum of carbon tetrachloride and chloroform concentrations[2]. A logarithmic scale was utilized for the isocontour plots.

Note that the May 2008 groundwater analytical results for carbon disulfide and for the sum of carbon tetrachloride and chloroform are also shown on the Groundwater Potentiometric Surface Contour figures for the four WBZs. The analytical results are listed below each well that is monitored in the specific WBZ.

7.2 UPPER LOCKPORT WATER BEARING ZONE

The Upper Lockport WBZ is the shallowest waterbearing fracture zone at the Site. The Upper Lockport WBZ consists of the base of the overburden and approximately the top 25 feet of the Lockport bedrock. This zone is generally highly fractured. Existing Site information indicates that the Upper Lockport WBZ pinches out and is not present on the western portion of the Site. DPA-201, DPA-202, DPA-203, EW-4, EW-5, and EW-6 extract groundwater from the Upper Lockport WBZ.

7.2.1 GROUNDWATER POTENTIOMETRIC CONTOURS

Figure 7.1 presents the Groundwater Potentiometric Surface Contours for the Upper Lockport WBZ for the May 2008 event. Based upon the groundwater potentiometric surface contours, Upper Lockport groundwater flow is generally east to west through the middle of the Site. There is a slight response to pumping in Area A from the dual phase wells. There is also localized response to pumping from extraction wells EW-4, EW-5, and EW-6, which are completed in both the Upper and Lower Lockport WBZ.

[2] Chemical concentrations of carbon tetrachloride and chloroform are combined (summed) for preparation of isocontour figures because chloroform is a breakdown (daughter) product of carbon tetrachloride.

7.2.2 CHEMICAL ISOCONTOURS

The chemical isocontour plots for the Upper Lockport WBZ for May 2008 are presented on Figures 7.2-7.3. A review of these contours indicates that the only elevated carbon disulfide concentrations exist in the groundwater around DPA-202 (Figure 7.2) in Area A. Elevated levels of carbon tetrachloride and chloroform are present at both DPA-202 and DPA-203 (Figure 7.3). The mass loading calculations indicate that DPA-202 and DPA-203 were responsible for removing approximately 500 pounds of VOCs in 2008, primarily carbon tetrachloride and chloroform.

Note that there were no detectable levels of carbon disulfide in Upper Lockport wells west of Area A.

The chemical isocontour plots for the Upper Lockport WBZ illustrate that DPA-202 and DPA-203 are well placed to address the areas of elevated concentrations of the two main Site contaminants. The mass loading data indicate that these pumping wells are effective in recovering VOCs from the Upper Lockport WBZ.

A comparison of the 2008 Upper Lockport carbon disulfide isocontours (Figure 7.2) with those of 2007 indicates that the area of carbon disulfide-impacted groundwater decreased slightly. A comparison of the 2008 Upper Lockport carbon tetrachloride plus chloroform (CTET+CHL) isocontours (Figure 7.3) with those of 2007 indicates a slight decrease in the concentrations of these two SSPLs at most wells.

7.3 LOWER LOCKPORT WATER BEARING ZONE

The Lower Lockport WBZ is the second bedrock water bearing zone identified at the Site. The Lower Lockport WBZ generally includes groundwater in the fractured bedrock from about 50 to 75 feet below top of rock.

EW-1 through EW-6 extract groundwater from the Lower Lockport WBZ.

7.3.1 POTENTIOMETRIC SURFACE CONTOURS

Potentiometric surface contours for the Lower Lockport WBZ for May 2008 are presented as Figure 7.4.

The groundwater potentiometric contours indicate that the VOCs in the Lower Lockport WBZ are being contained, captured on Site, and recovered by the groundwater extraction system.

7.3.2 CHEMICAL ISOCONTOURS

Chemical isocontours were prepared for the Lower Lockport WBZ for carbon disulfide (Figure 7.5) and carbon tetrachloride and chloroform combined (Figure 7.6). The chemical isocontour maps for carbon disulfide indicate areas of elevated concentrations in the Lower Lockport WBZ around extraction wells EW-6 and EW-5, and monitoring well W-16L. Hydraulic monitoring data indicate that W-16L is within the capture zone of combined Upper and Lower Lockport extraction well EW-5 and deep extraction well EW-3. EW-6 is near the center of the capture zone at the Site.

The chemical isocontour map for carbon tetrachloride and chloroform combined indicates areas of elevated concentrations around EW-6, EW-4, and EW-5. Other nearby wells with elevated concentrations include W-18L, W-67L, and W-23B. Mass loading concentrations for EW-4, EW-5, and EW-6 indicate that approximately 1,500 pounds of carbon tetrachloride and chloroform were recovered from these wells in 2008.

The 2000 hydraulic monitoring data indicate that W-67L, W-18L, and W-23B respond to pumping activity at the Site. The May 2008 surface contours and chemical isocontours illustrate that the existing groundwater extraction system is effective in containing and recovering SSPLs from the Lower Lockport WBZ.

A comparison of the 2008 Lower Lockport carbon disulfide isocontours (Figure 7.5) with that of 2007 indicates no significant changes in carbon disulfide concentrations. However, a comparison of the 2008 Lower Lockport CTET+CHL isocontours (Figure 7.6) with that of 2007 indicates a significant increase in the concentrations of these two SSPLs, especially in the areas of EW-4 and EW-6, and nearby monitoring wells.

7.4 LOCKPORT/ROCHESTER WATER BEARING ZONE

The Lockport/Rochester WBZ is the third waterbearing zone encountered in the bedrock at the Site. The Lockport/Rochester WBZ is a slightly fractured waterbearing zone at the base of the Lockport bedrock, and is at or near the contact with the Rochester shale. EW-1 through EW-3 and LR-66 extract groundwater from the Lockport/Rochester WBZ.

7.4.1 POTENTIOMETRIC SURFACE CONTOURS

Potentiometric surface contours were prepared for the Lockport/Rochester WBZ for May 2008 (Figure 7.7). A review of the contours under pumping conditions indicates that EW-1, EW-2, and EW-3 have a dramatic effect on the groundwater in this WBZ. In addition, the effect of LR-66 on groundwater recovery is evident. The direction of flow is from the Site perimeter inward toward the extraction wells. The pumping contours indicate hydraulic capture across the entire Site.

7.4.2 CHEMICAL ISOCONTOURS

Chemical isocontour maps of the Lockport/Rochester WBZ were prepared from the May 2008 groundwater sampling data. Chemical isocontours for carbon disulfide are presented on Figure 7.8. Chemical isocontours for carbon tetrachloride and chloroform combined are presented on Figure 7.9.

The chemical isocontour plot for carbon disulfide indicates an area of high concentration in groundwater around OW-5 and adjacent well LR-67. Hydraulic monitoring has shown that there is a strong inward gradient toward the middle of the Site. Previous hydraulic monitoring activities indicate that both wells respond to pumping activity.

The chemical isocontour plot for carbon tetrachloride and chloroform indicates that an area of high concentrations exists around monitoring well LR-61 and extraction well LR-66. Nearby wells LR-2 and W-19B also exhibit elevated CTET+CHL concentrations. Previous hydraulic monitoring has shown that LR-61, LR-2, and W-19B all respond to pumping activity, and are situated within the cone of depression of extraction wells EW-2 and EW-3.

The chemical isocontour maps confirm that the existing groundwater treatment system is effective at containing and recovering VOCs from the Lockport/Rochester WBZ.

A comparison of the 2008 Lockport/Rochester carbon disulfide isocontours (Figure 7.8) with that of 2007 indicates no significant changes in carbon disulfide concentrations. A comparison of the 2008 Lockport/Rochester CTET+CHL isocontours (Figure 7.9) with that of 2007 also indicates no significant changes in the concentrations of these two SSPLs.

7.5 ROCHESTER WATER BEARING ZONE

The Rochester WBZ is the fourth and deepest bedrock WBZ being remediated at the Site. EW-1 through EW-3 and OW-3 extract groundwater from the Rochester WBZ.

7.5.1 POTENTIOMETRIC SURFACE CONTOURS

The potentiometric surface contour for the Rochester WBZ is presented on Figure 7.10.

The potentiometric contours show a dramatic response to pumping with a strong inward gradient toward EW-1, EW-2, and EW-3. The pumping contours indicate that there is hydraulic containment within the Rochester WBZ across the Site.

7.5.2 CHEMICAL ISOCONTOURS

Chemical isocontour maps of the Rochester WBZ were prepared from the May 2008 groundwater sampling data.

The carbon disulfide chemical isocontour map (Figure 7.11) shows two distinct areas of elevated carbon disulfide in the Rochester WBZ Zone. The first area is around extraction well OW-3, which removed over 1,600 pounds of carbon disulfide in 2008. Monitoring wells nearby OW-3 with elevated carbon disulfide concentrations are R-68, R-66, and R-50. All of these wells showed a response to pumping during the 2000 hydraulic monitoring program. The second area of elevated carbon disulfide is centered around monitoring wells R-67 and R-62, and, to a lesser extent, R-61. These wells are all located relatively close to extraction well EW-3 and show a strong response to Rochester WBZ pumping.

As shown on Figure 7.12, carbon tetrachloride and chloroform are also found in very high concentrations around OW-3. OW-3 removed in excess of 300 pounds of these two constituents during 2008. Other wells with high concentrations are R-68, R-66, R-50, R-19, and B-02. Each of these wells is in the capture zone, and the existing groundwater extraction has been demonstrated to be effective in removing VOCs from groundwater in the Rochester WBZ.

A comparison of the 2008 Rochester carbon disulfide isocontours (Figure 7.11) with that of 2007 indicates no significant changes in carbon disulfide concentrations. A

comparison of the 2008 Rochester CTET+CHL isocontours (Figure 7.12) with that of 2007 indicates a slight general increase in the concentrations of these two SSPLs at most extraction and monitoring wells.

8.0 NORTH SIDE WELL GAS AND GROUNDWATER SAMPLING

As approved by NYSDEC, the North Side well sampling program was discontinued in June 2004. However, Upper Lockport bedrock monitoring well OW-11 continues to be sampled quarterly as part of the routine groundwater monitoring program. Figure 8.1 presents the locations of the North Side wells.

9.0 SUMMARY OF MASS REMOVAL

Mass removals from groundwater and soil gas have been reported for individual wells and SVE systems in previous sections of this report. This section presents combined mass removal estimates for the groundwater and SVE systems at the Site. It also compares the total estimated mass removed for soil vapor and groundwater extraction in previous years with that for 2008.

9.1 SUMMARY OF MASS REMOVAL BY SOIL VAPOR EXTRACTION

The mass removal of organic compounds from soil vapors for SVE system Area A was discussed in Section 2.2. The total mass removed by the SVE system is summarized in Table 2.1.

As shown in Table 2.1 and discussed in Section 2.2, the total mass removed in the soil vapors from Area A in 2008 was approximately 507 pounds. The 507 pounds of organic compounds removed from Area A in 2008 represents a 78 percent decrease compared with the amount removed in 2007, and a 70 percent decrease compared with the amount removed in 2006. The decrease in removal between 2007 and 2008 is attributed to decreased VOC concentrations in Area A influent. Note that the 2008 operating time was nearly 200 hours greater than that of 2007, and over nearly 1,500 hours greater than 2006. However, the average influent vapor concentration in 2008 decreased by approximately 75 percent compared with 2007.

The removal efficiency of the Area A SVE system (pound of VOCs recovered/operating hour) over the past 10 years is shown below.

Year	*Pounds of VOC Removed*	*Operating Hours*	*Removal Efficiency (pound VOC/operating hour)*
1999	1,130	3,240	0.35
2000	153	3,360	0.05
2001	154	6,264	0.02
2002	1,207	6,307	0.19
2003	937	3,573	0.26
2004	228	4,582	0.05
2005	1,954	6,425	0.30
2006	1,712	6,113	0.28
2007	2,349	7,406	0.32
2008	507	7,599	0.07
Total	**10,331**	**54,869**	-
Annual Average	**1,033**	**5,487**	**0.19**

The removal efficiency of Area A is closely related to the condition of the header system that conveys extracted vapor to the blower for subsequent removal in the carbon beds. The replacement of Headers No. 2 and No. 3 in 2003 greatly improved the effectiveness of those two headers, which had experienced significant corrosion between 2000 and 2002. In 2004, the integrity of the steel header collection system just inside the Treatment Building significantly worsened due to corrosion, and the entire section was replaced late in the year with PVC pipe. The pipe installed as a "sump" during the header upgrade contributed to increased Area A blower run times beginning in 2005, and the improved vacuum provided by the new PVC header contributed to increased VOC removal. Improvements in 2006 included the replacement of the heat exchanger core and the blower motor, and in 2007, the blower seals and gaskets were replaced. In 2008, the diaphragm pumps that route groundwater collected from Area A to the main treatment area were rebuilt.

Table 9.1 compares the compound-specific removal of SSPLs by the Area A SVE system for the past 10 years. Except for 2000 and 2001, the 2 years when VOC removal was the lowest, carbon tetrachloride and chloroform combined have comprised between 87 and 100 percent of the total vapor mass removed Area A. Tetrachloroethene has typically comprised the remainder of the mass removed.

9.2 SUMMARY OF MASS REMOVAL BY GROUNDWATER EXTRACTION

The mass removal of VOCs from groundwater by the eight bedrock groundwater extraction wells (EW-1 through EW-6, LR-66, and OW-3), dual wells (DPA-201, DPA-202, and DPA-203), and the Area A air/water separator (knockout pot) was discussed in Section 5.0 of this report. The total volume of groundwater pumped from the Site in 2008 is summarized in Table 9.2. The total amount of VOCs removed from groundwater at the Site in 2008 is summarized in Table 9.3.

As Table 9.2 indicates, approximately 17.3 million gallons of groundwater were pumped from the Site and treated through the on-Site treatment system. This represents a 5-percent increase from 2007 levels (16.5 million gallons extracted in 2007). Higher groundwater recovery from EW-5, EW-2, and the knockout pot accounted for the majority of the increase.

Of the 17.3 million gallons extracted by the groundwater system in 2008, the bedrock extraction wells accounted for 95 percent of the total, and the overburden dual phase extraction wells (along with the Area A knockout pot/sump) accounted for 5 percent of the total. EW-5 accounted for 32 percent of the recovered groundwater, and EW-2

accounted for about 28 percent. Other significant extraction wells included EW-6 (19 percent of the total recovered), EW-1 (6 percent), EW-3 (4 percent), and EW-4 (3 percent).

As Table 9.3 indicates, the total number of pounds of VOCs recovered through groundwater extraction in 2008 was 4,790 pounds. Of this mass removed, 44 percent was carbon disulfide, 42 percent was carbon tetrachloride, and 13 percent was chloroform. Tetrachloroethene, methylene chloride, trichloroethene, and chlorobenzene combined were approximately 1 percent of the total mass removed from groundwater in 2008.

Extraction well OW-3 accounted for 40 percent of the total VOC mass removed in 2008, and EW-6 accounted for 28 percent. EW-2 accounted for 12 percent of the total VOC mass removed in 2008. Other significant extraction wells for mass removal included DPA-203 (6 percent of the total mass removed from groundwater), DPA-202 (4 percent), EW-1 (4 percent), and EW-5 (3 percent). The remaining four extraction wells accounted for the remaining 3 percent of the total mass recovered from groundwater on Site.

The 4,790 pounds of total mass removed by groundwater extraction in 2008, compared to 3,672 pounds removed in 2007, represents a 30-percent increase in the total mass removed. This increase is due to higher influent concentrations in OW-3, which removed 35 percent more mass in 2008 than it did in 2007, slightly offset by lower mass removal rates by EW-1 through EW-6 (18-percent less mass removed in 2008).

The removal efficiency (pound VOCs recovered/1,000 gallons of groundwater extracted) of the groundwater extraction system at the Site over the past 10 years is shown below:

Year	*Pounds of VOC Recovered*	*Groundwater Extracted (1,000 gallons)*	*Removal Efficiency (pound of VOC recovered/1000 gallons extracted)*
1999	4,250	10,310	0.41
2000	6,197	14,906	0.42
2001	10,270	17,327	0.59
2002	6,374	17,515	0.36
2003	6,710	19,276	0.35
2004	4,953	15,951	0.31
2005	4,898	15,496	0.32
2006	3,517	15,370	0.23
2007	3,672	16,545	0.22
2008	4,790	17,289	0.28
Total	**55,631**	**160,985**	-
Annual Average	**5,563**	**16,100**	**0.35**

The above table illustrates that the removal efficiency of the groundwater extraction system has decreased from a high of 0.59 pound VOC recovered/1,000 gallons extracted in 2001 to its current removal efficiency of 0.28 in 2008. Although the removal efficiency increased between 2007 and 2008, the overall decrease is due to the decline in groundwater concentrations over time, which indicates that the extraction system is remediating Site groundwater.

Table 9.4 compares the compound-specific removal of SSPLs by groundwater extraction for the past 10 years. Between 1999 and 2003, carbon tetrachloride and chloroform combined comprised between 63 and 80 percent of the total mass removed in groundwater. Over the same time period, carbon disulfide comprised between 20 and 33 percent of the total.

However, between 2004 and 2008, the percentage of carbon tetrachloride and chloroform combined dropped to between 45 and 55 percent of the total mass removed by groundwater extraction, and the percentage of carbon disulfide has risen to between 44 and 53 percent. The amount of tetrachloroethene extracted in groundwater has remained constant at 1 percent of the total mass recovered.

9.3 SUMMARY OF MASS REMOVAL FOR THE SITE

The total mass removed by operation of the remedial systems at the Site in 2008 is summarized below:

Compound	*SVE*	*Groundwater Extraction*	*Site Total (pounds/year)*
Benzene	0	0	0
Carbon Disulfide	0	2,109	2,109
Carbon Tetrachloride	442	1,998	2,440
Chlorobenzene	0	2	2
Chloroform	32	605	637
Methylene chloride	0	15	15
Tetrachloroethene	28	42	70
Toluene	0	0	0
Trichloroethene	4	19	23
Total VOC Removal:	**507**	**4,790**	**5,297**

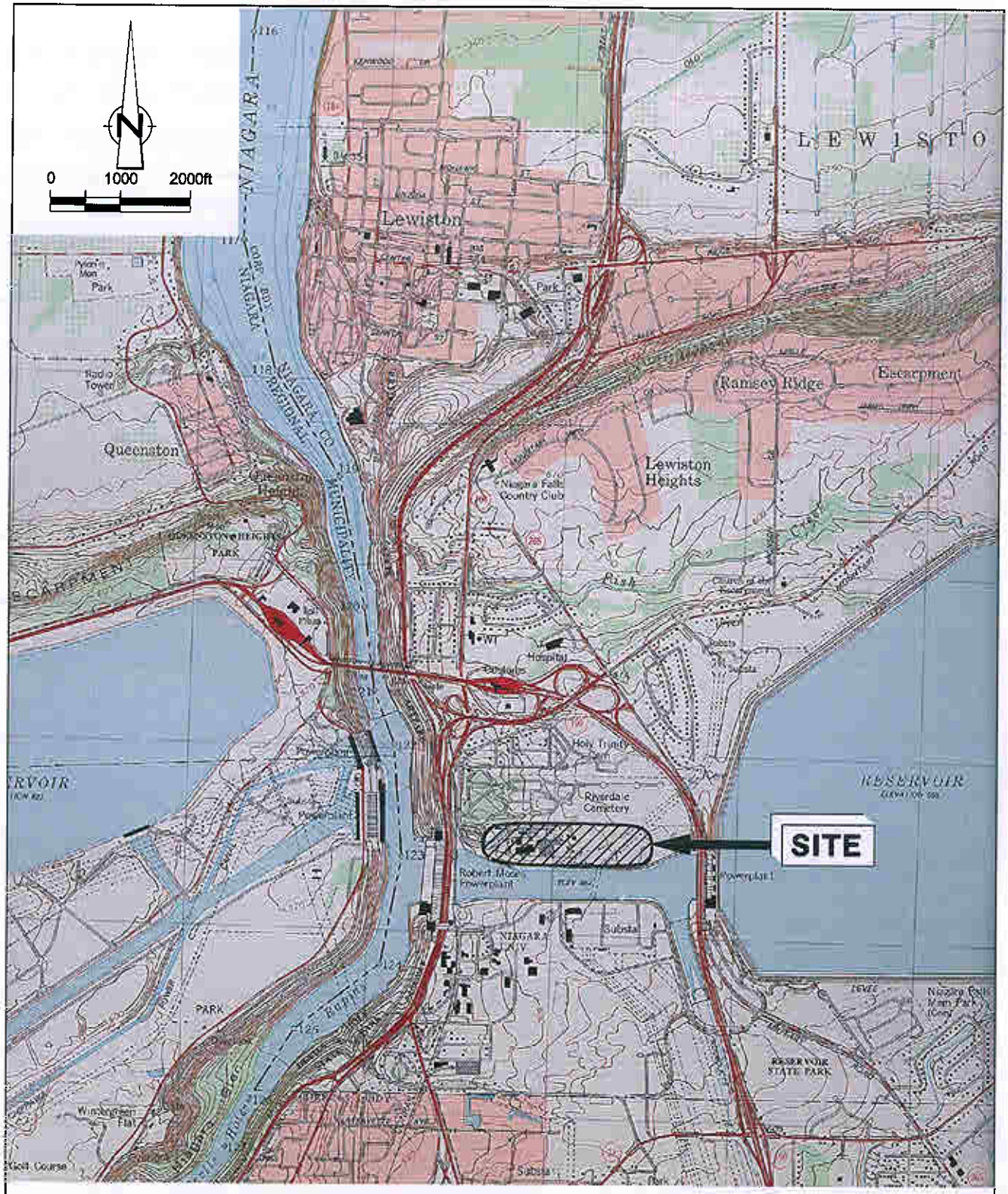
The 5,297pounds of VOCs removed from soil and groundwater at the Site is a 12-percent decrease from 2007, due to a 1,841 pound decrease in the mass of VOCs removed by the SVE system, offset by the 1,118 pound increase in mass removed by the groundwater extraction system.

Of the 5,297 pounds of VOCs removed from soil and groundwater at the Site, 46 percent was carbon tetrachloride, 40 percent was carbon disulfide, and 12 percent was chloroform. These three compounds account for 98 percent of the total mass of VOCs removed from the Site in 2008.

The total mass of VOCs removed by the operation of the remedial systems at the Site over the past 10 years is summarized below:

Year	*Pounds of VOC Removed by SVE*	*Pounds of VOC Removed in Groundwater*	*Total Pounds of VOC Removed per Year*
1999	1,221	4,294	5,515
2000	165	6,197	6,362
2001	154	10,269	10,423
2002	1,207	6,374	7,581
2003	937	6,710	7,647
2004	228	4,954	5,182
2005	1,954	4,899	6,853
2006	1,712	3,517	5,229
2007	2,348	3,672	6,020
2008	507	4,790	5,297
Totals	**10,433**	**55,676**	**66,109**

Table 9.5 presents a breakdown of the compound-specific SSPL removal (in pounds per year) for the combined Site remedial systems (SVE and groundwater extraction). The table indicates that carbon tetrachloride and chloroform combined have accounted for nearly 72 percent of the Site-wide recovered mass between 1999 and 2008, with carbon disulfide comprising another 27 percent.



SOURCE: USGS

figure 1.1

SITE LOCATION
STAUFFER MANAGEMENT COMPANY LLC
Lewiston, New York

06488-20(018)GN-BU017 FEB 16/2009

OW-10

TO OW-8
(350')

GROUNDWATER EXTRACTION WELL EW-1

GROUNDWATER EXTRACTON WELL OW-3

GROUNDWATER EXTRACTION WELL LR-66

TREATMENT BUILDING

GROUNDWATER
EXTRACTION WELL
EW-5

AREA A SVE SYSTEM

FORMER LANDFILL
AREA B

N

0 100 200ft

OW-9

OW-11

OLD LEWISTON ROAD (66' R.O.W.)

APPROX. LOCATION OF 6" DIA. HYDROGEN LINE PERMANENT EASEMENT TO HOOKER CHEMICAL CORP., NEW YORK POWER AUTHORITY 204C, SEC. 1 FILED IN N.C.C.O. L.4468, P.25.

PERMANENT EASEMENT TO
NIAGARA MOHAWK
POWER CORPORATION

PERMANENT EASEMENT TO
NIAGARA MOHAWK
POWER CORPORATION

FOREBAY

APPROXIMATE ALIGNMENT OF
EXISTING GROUT CURTAIN

GROUNDWATER
EXTRACTION WELL
EW-2

OUTFALL

GROUNDWATER
EXTRACTION WELL
EW-3

GROUNDWATER
EXTRACTION WELL
EW-4

GROUNDWATER
EXTRACTION WELL
EW-6

AREA T-4
(DECOMMISSIONED)

FORMER LANDFILL
AREA C
(DECOMMISSIONED)

figure 1.2

SITE LAYOUT
STAUFFER MANAGEMENT COMPANY LLC
Lewiston, New York

06488-20(018)GN-BU013 FEB 16/2009

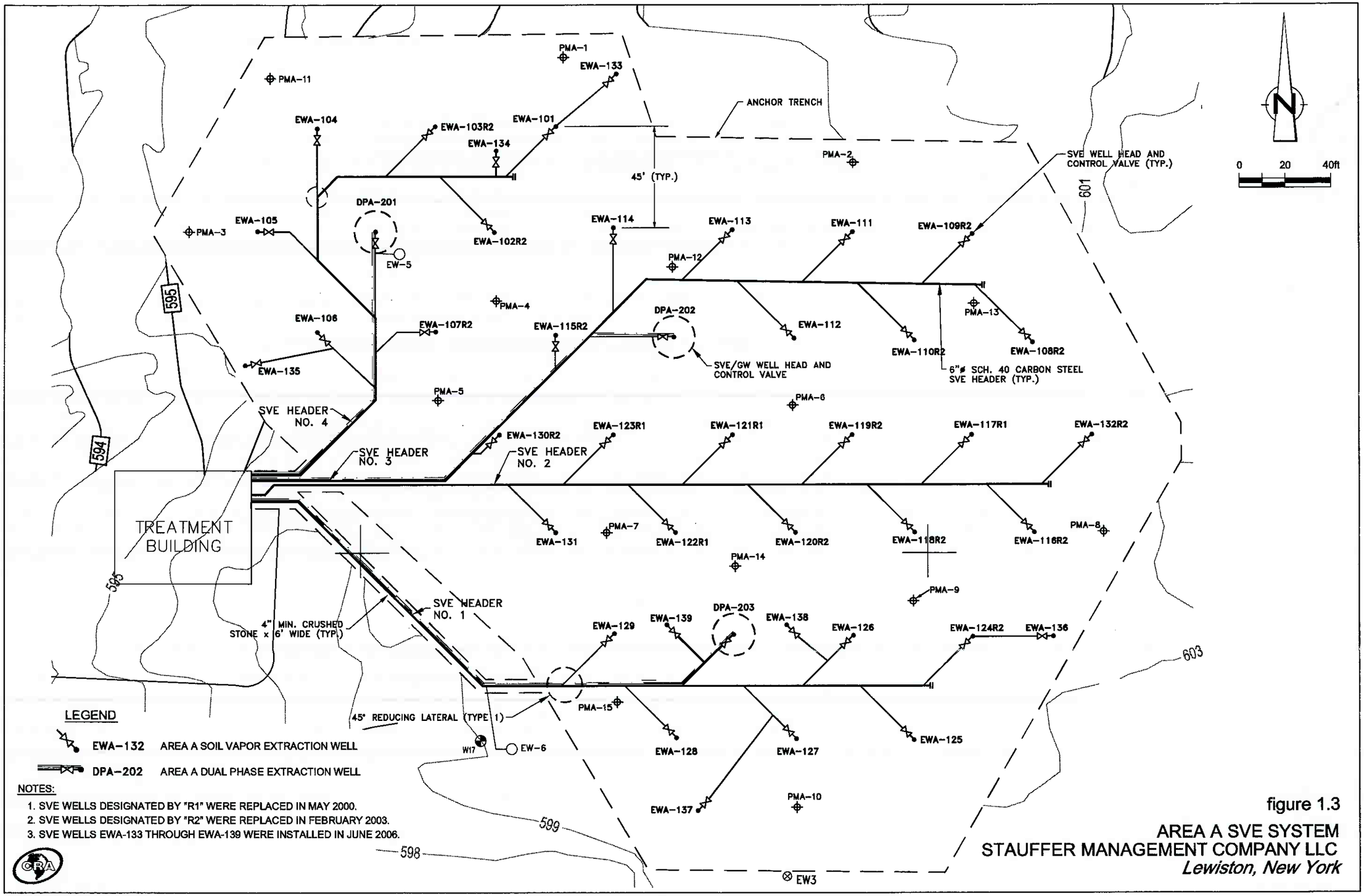


figure 1.3

AREA A SVE SYSTEM
STAUFFER MANAGEMENT COMPANY LLC
Lewiston, New York

06488-20(018)GN-BU014 FEB 16/2009

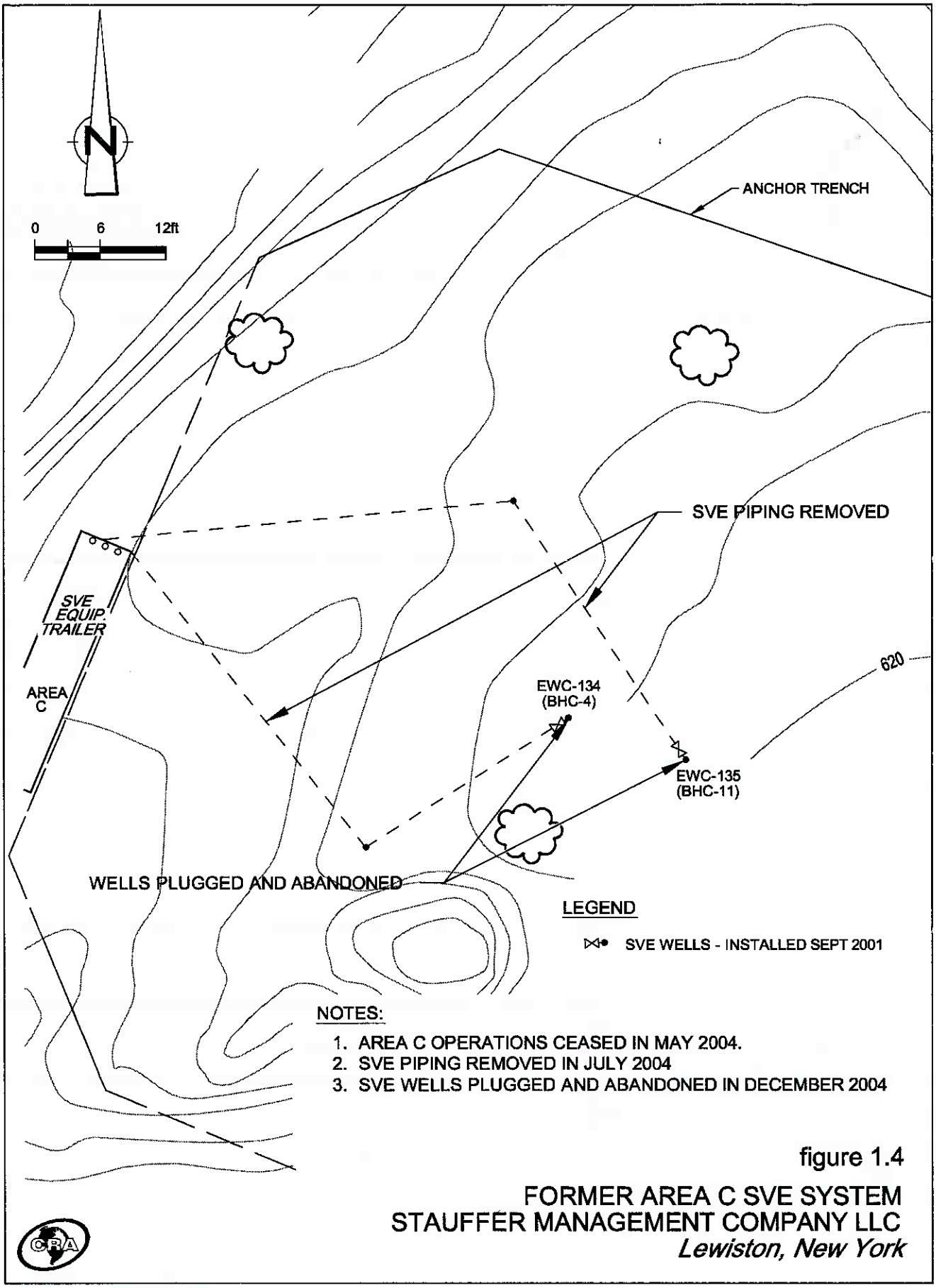
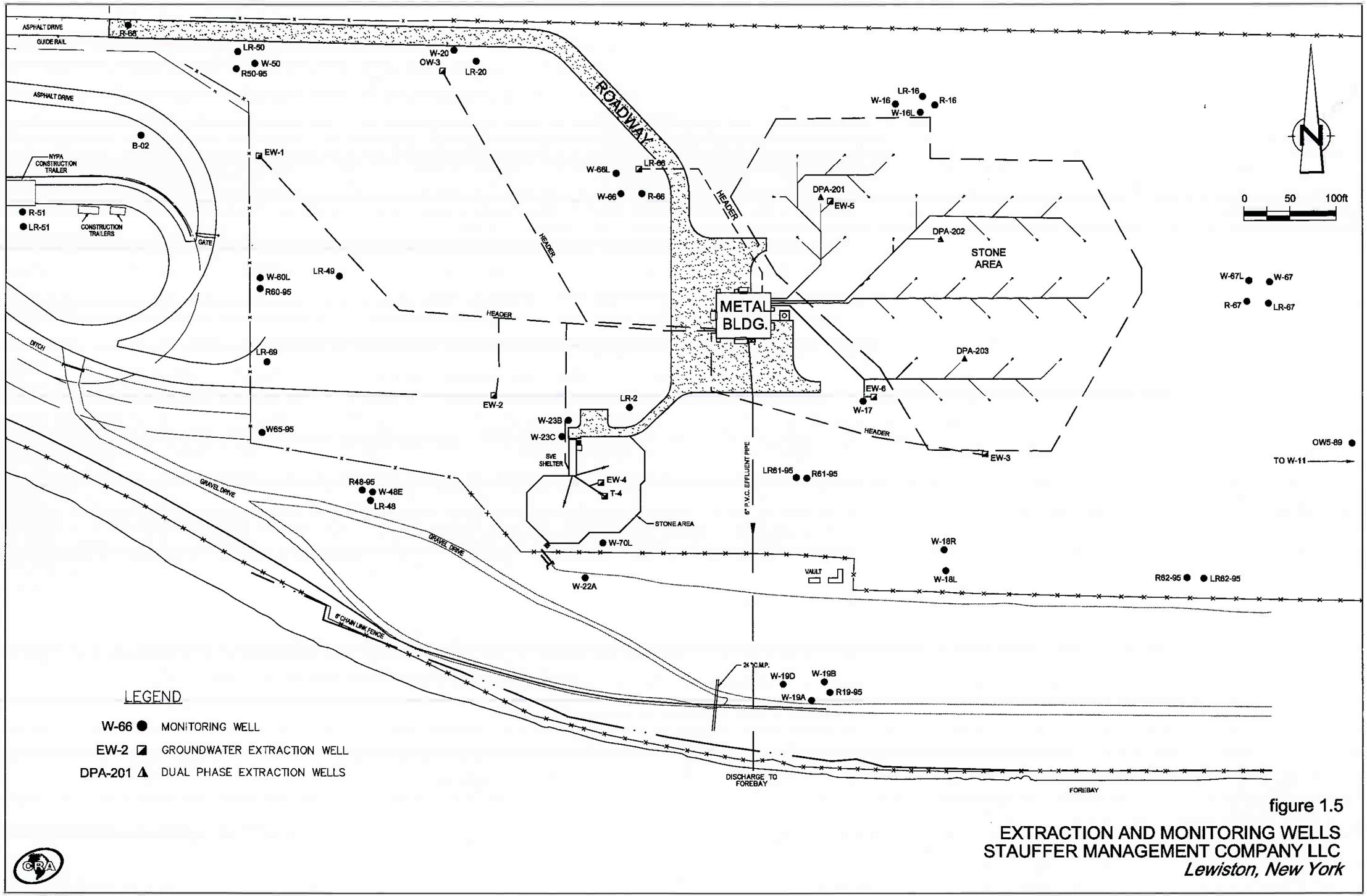


figure 1.4

FORMER AREA C SVE SYSTEM
STAUFFER MANAGEMENT COMPANY LLC
Lewiston, New York

06488-20(018)GN-BU015 FEB 16/2009



LEGEND

W-66 ● MONITORING WELL

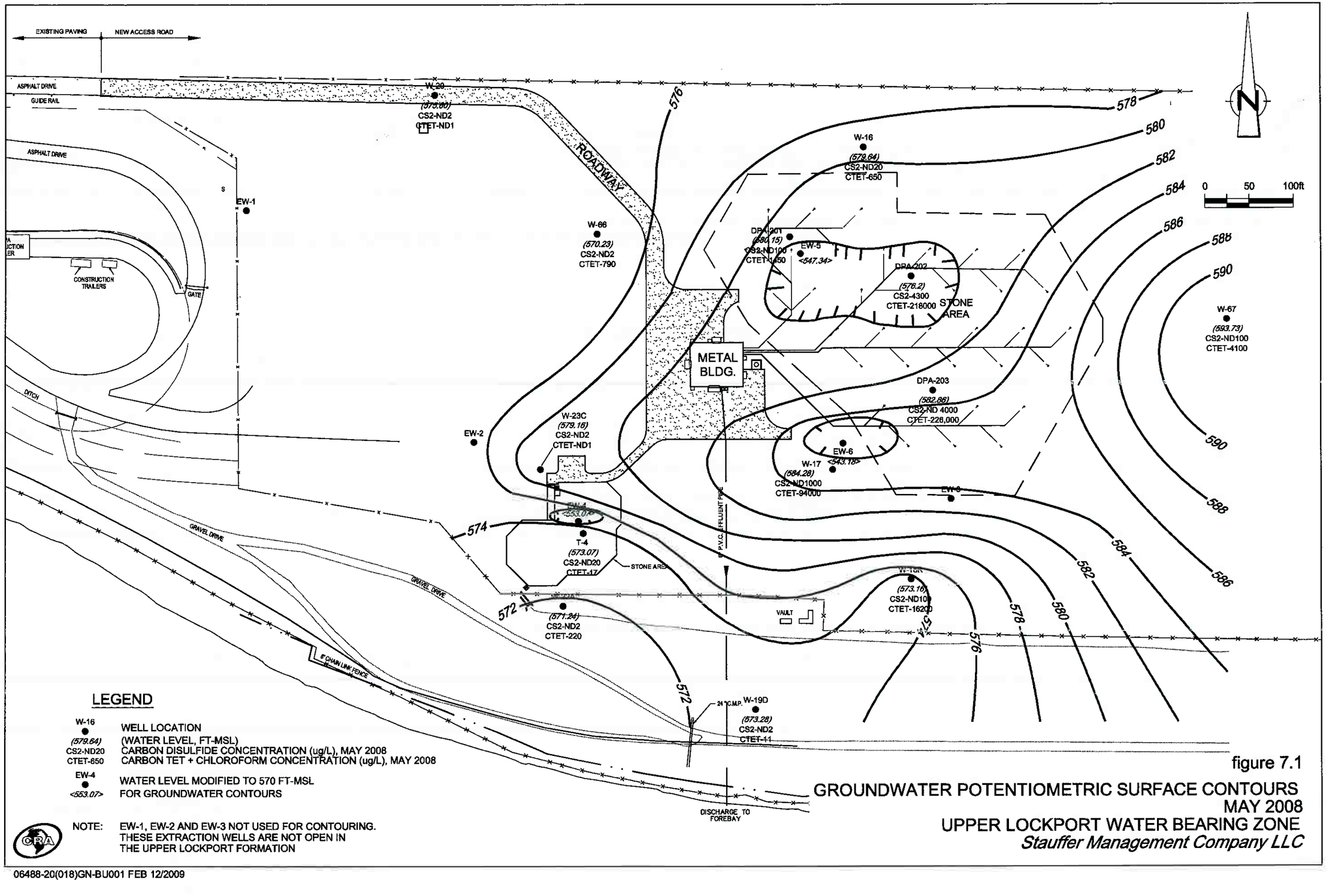
EW-2 ◪ GROUNDWATER EXTRACTION WELL

DPA-201 ▲ DUAL PHASE EXTRACTION WELLS

figure 1.5

EXTRACTION AND MONITORING WELLS
STAUFFER MANAGEMENT COMPANY LLC
Lewiston, New York

06488-20(018)GN-BU016 FEB 16/2009



LEGEND

W-16	WELL LOCATION
(579.64)	(WATER LEVEL, FT-MSL)
CS2-ND20	CARBON DISULFIDE CONCENTRATION (ug/L), MAY 2008
CTET-650	CARBON TET + CHLOROFORM CONCENTRATION (ug/L), MAY 2008
EW-4	WATER LEVEL MODIFIED TO 570 FT-MSL
<553.07>	FOR GROUNDWATER CONTOURS

NOTE: EW-1, EW-2 AND EW-3 NOT USED FOR CONTOURING. THESE EXTRACTION WELLS ARE NOT OPEN IN THE UPPER LOCKPORT FORMATION

figure 7.1

GROUNDWATER POTENTIOMETRIC SURFACE CONTOURS
MAY 2008
UPPER LOCKPORT WATER BEARING ZONE
Stauffer Management Company LLC

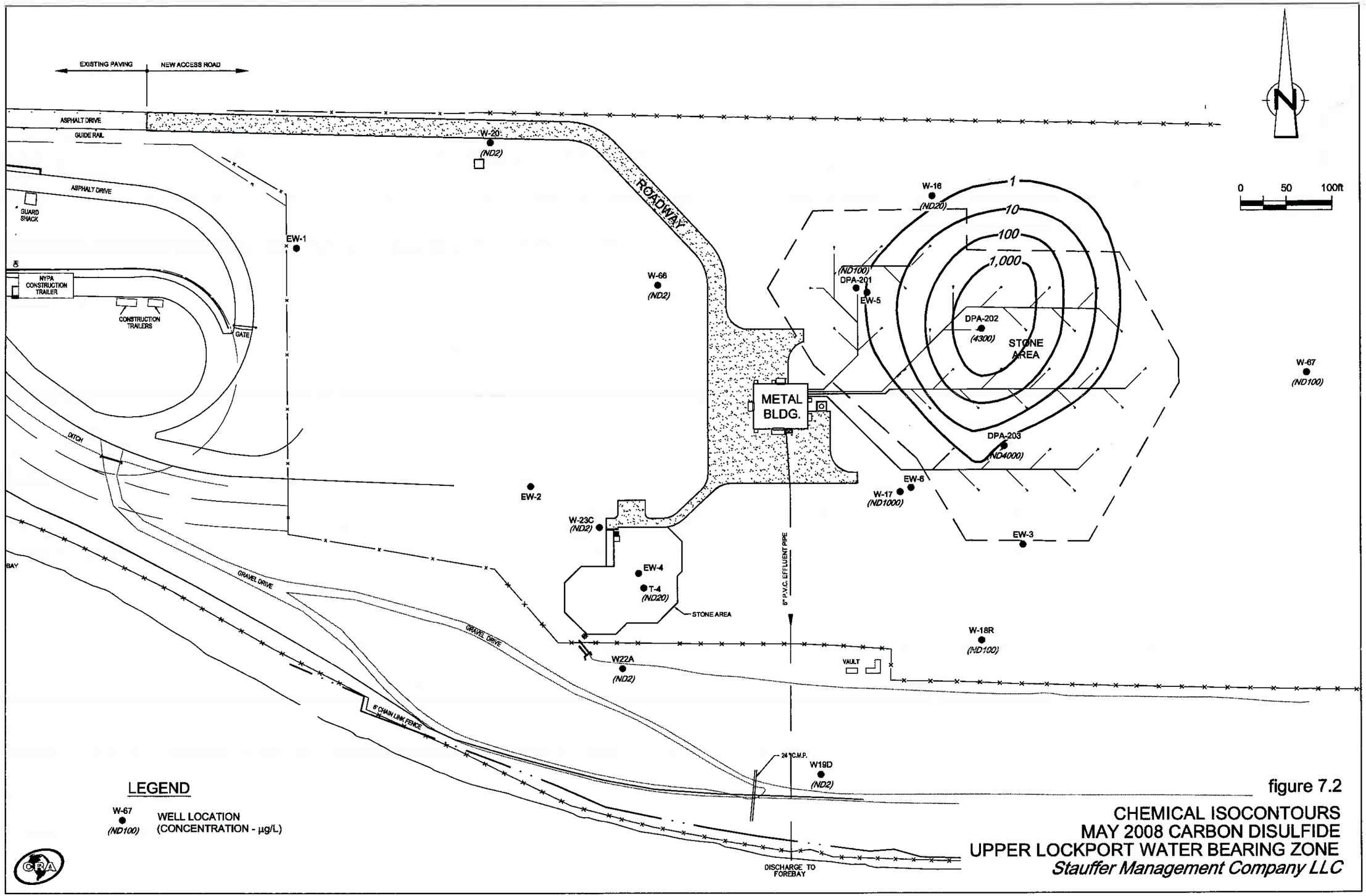


figure 7.2

CHEMICAL ISOCONTOURS
MAY 2008 CARBON DISULFIDE
UPPER LOCKPORT WATER BEARING ZONE
Stauffer Management Company LLC

06488-20(018)GN-BU002 FEB 13/2009

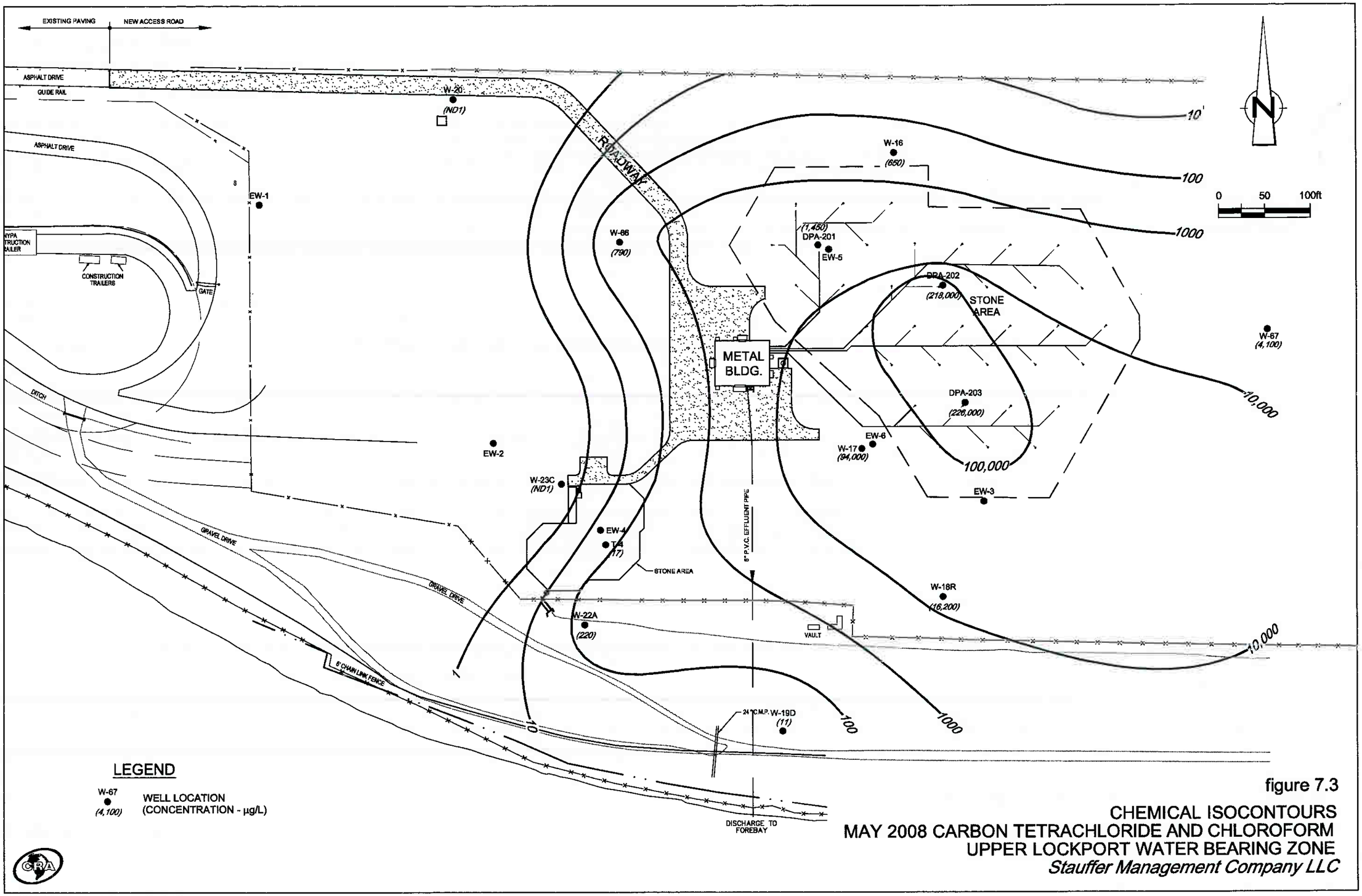
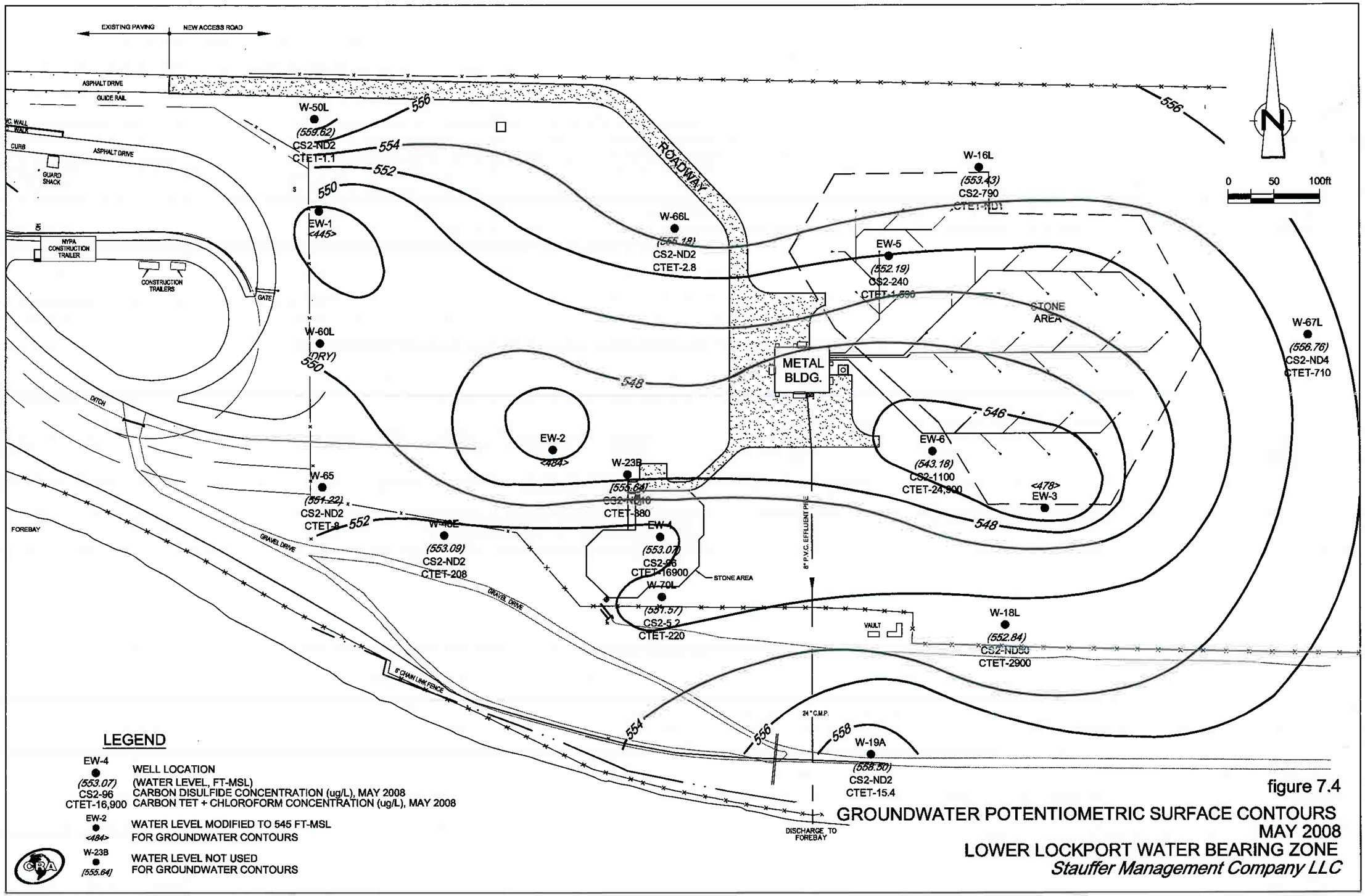


figure 7.3

CHEMICAL ISOCONTOURS
MAY 2008 CARBON TETRACHLORIDE AND CHLOROFORM
UPPER LOCKPORT WATER BEARING ZONE
Stauffer Management Company LLC

06488-20(018)GN-BU003 FEB 13/2009



LEGEND

- EW-4 ● — WELL LOCATION
- (553.07) — (WATER LEVEL, FT-MSL)
- CS2-96 — CARBON DISULFIDE CONCENTRATION (ug/L), MAY 2008
- CTET-16,900 — CARBON TET + CHLOROFORM CONCENTRATION (ug/L), MAY 2008
- EW-2 ● <484> — WATER LEVEL MODIFIED TO 545 FT-MSL FOR GROUNDWATER CONTOURS
- W-23B ● [555.64] — WATER LEVEL NOT USED FOR GROUNDWATER CONTOURS

figure 7.4

GROUNDWATER POTENTIOMETRIC SURFACE CONTOURS
MAY 2008
LOWER LOCKPORT WATER BEARING ZONE
Stauffer Management Company LLC

06488-20(018)GN-BU002 FEB 12/2009

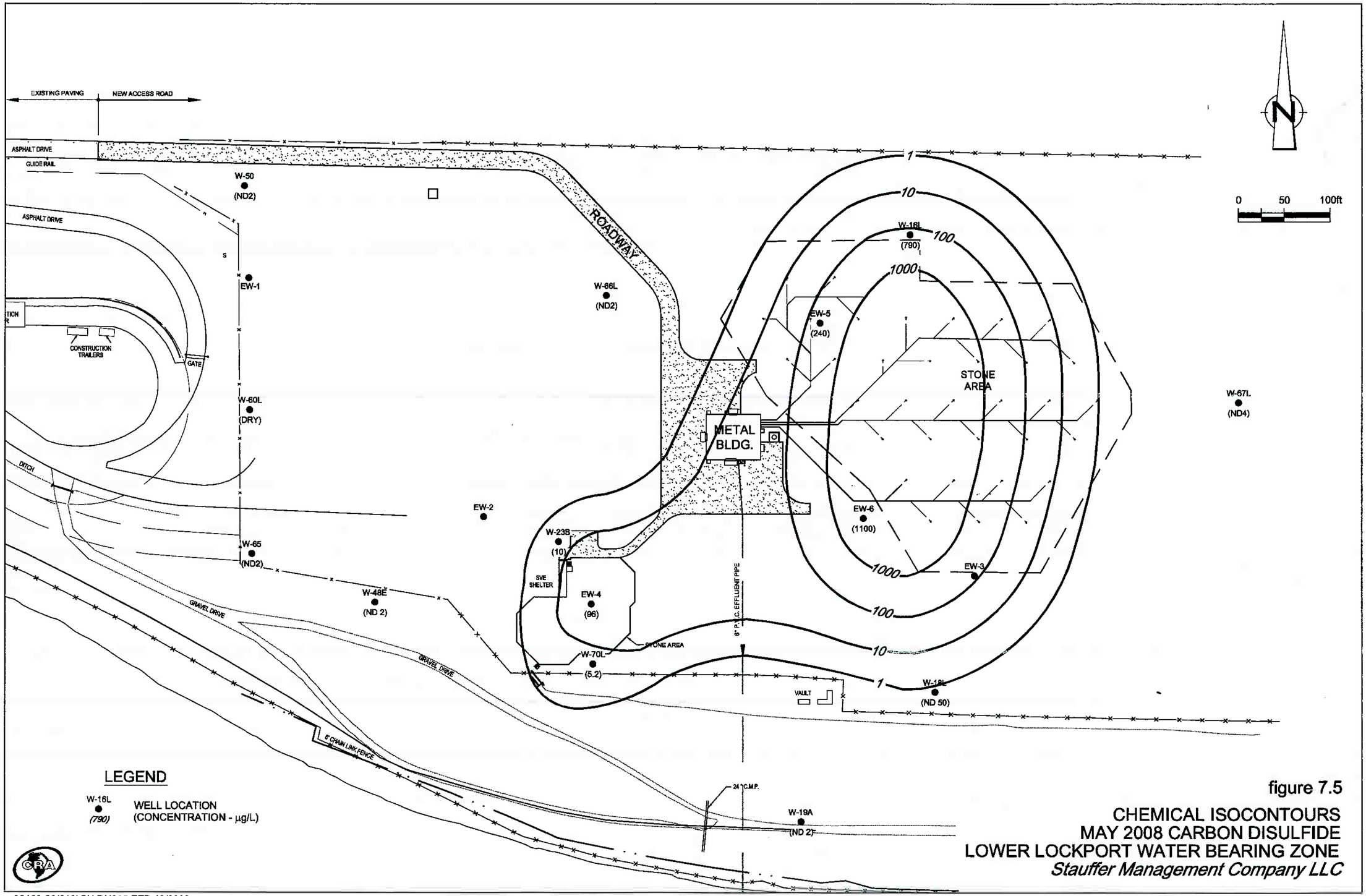


figure 7.5

CHEMICAL ISOCONTOURS
MAY 2008 CARBON DISULFIDE
LOWER LOCKPORT WATER BEARING ZONE
Stauffer Management Company LLC

06488-20(018)GN-BU005 FEB 13/2009

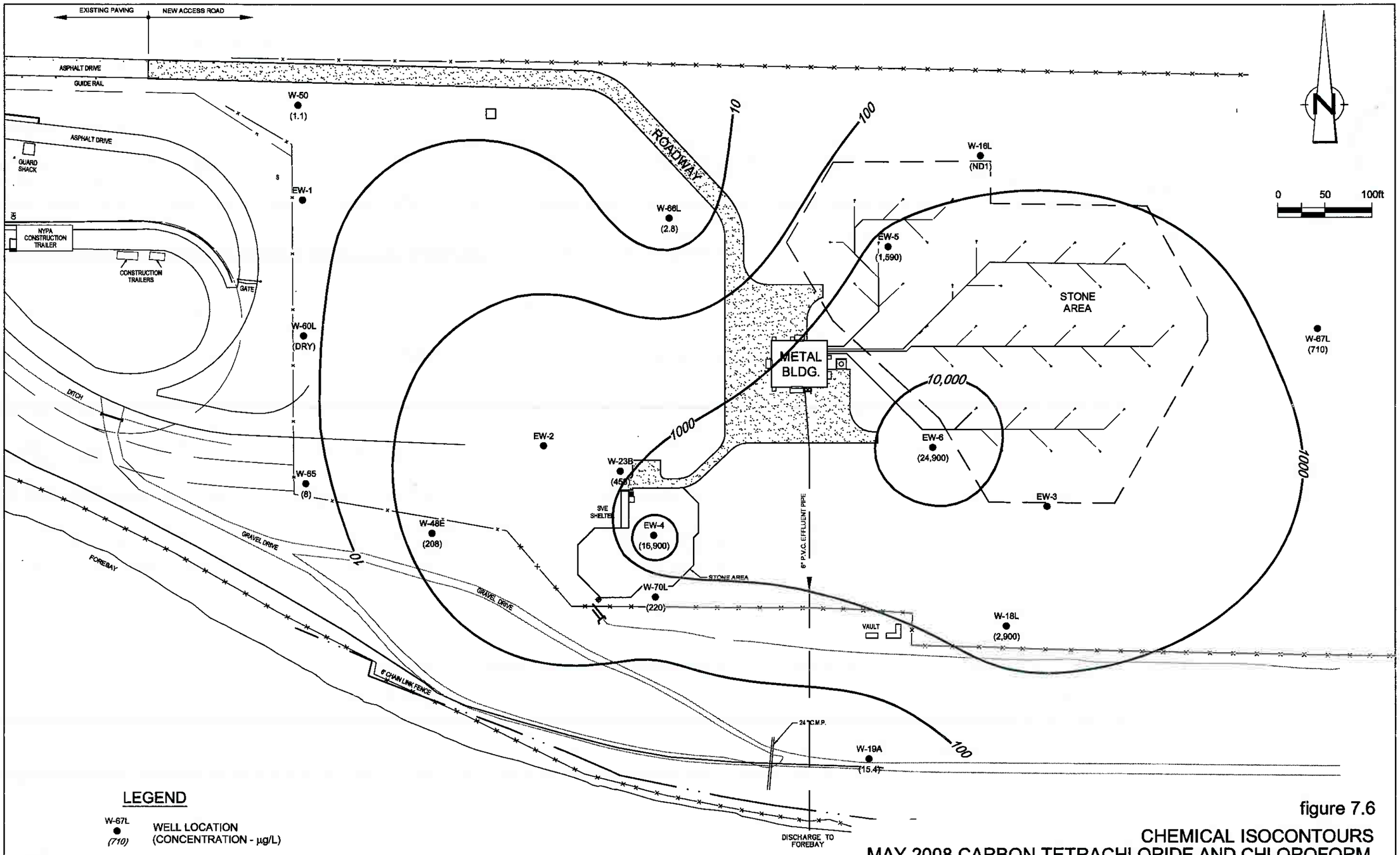


figure 7.6

CHEMICAL ISOCONTOURS
MAY 2008 CARBON TETRACHLORIDE AND CHLOROFORM
LOWER LOCKPORT WATER BEARING ZONE
Stauffer Management Company LLC

06488-20(018)GN-BU006 FEB 13/2009

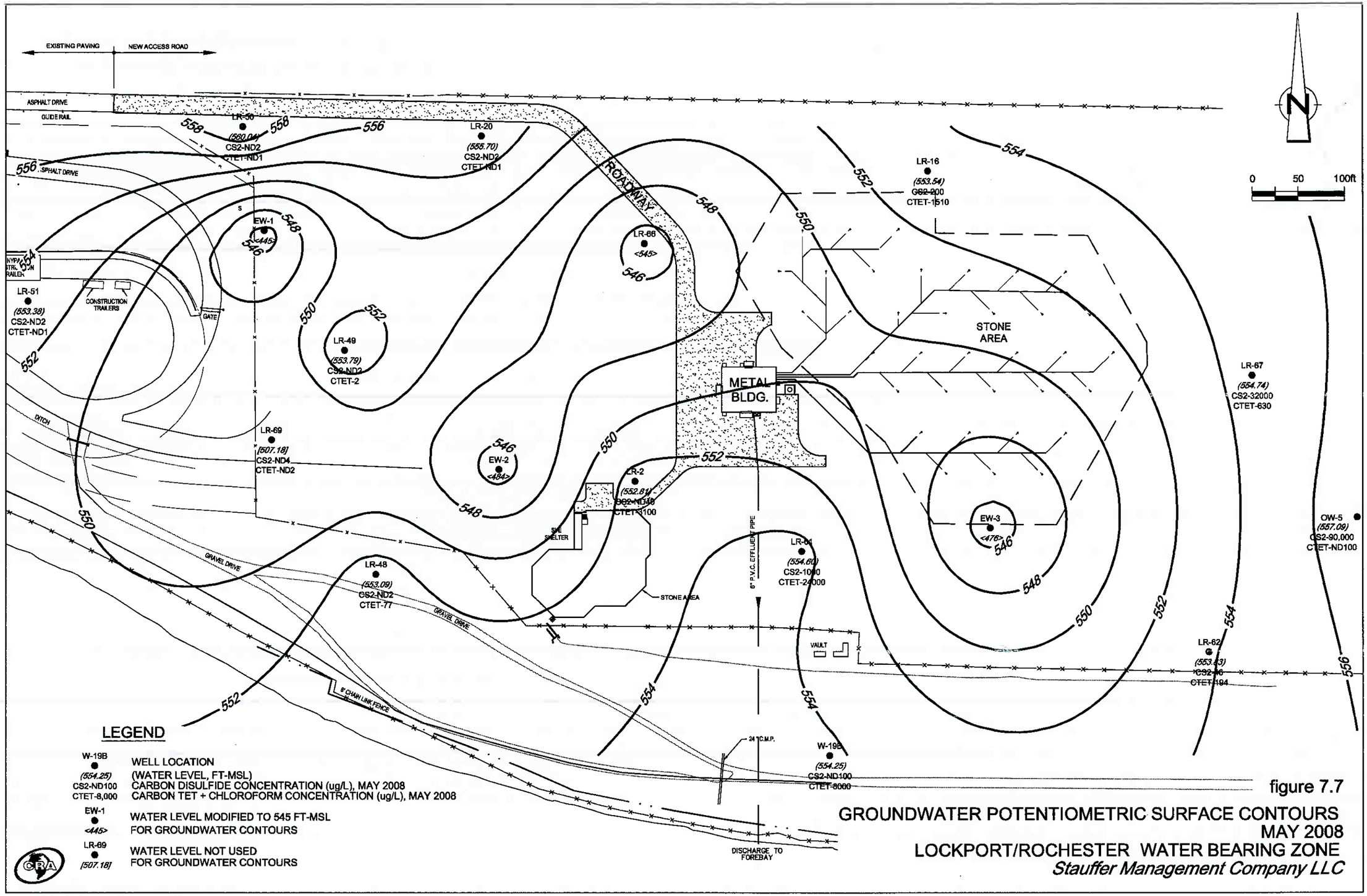


figure 7.7

GROUNDWATER POTENTIOMETRIC SURFACE CONTOURS
MAY 2008
LOCKPORT/ROCHESTER WATER BEARING ZONE
Stauffer Management Company LLC

06488-20(018)GN-BU003 FEB 12/2009

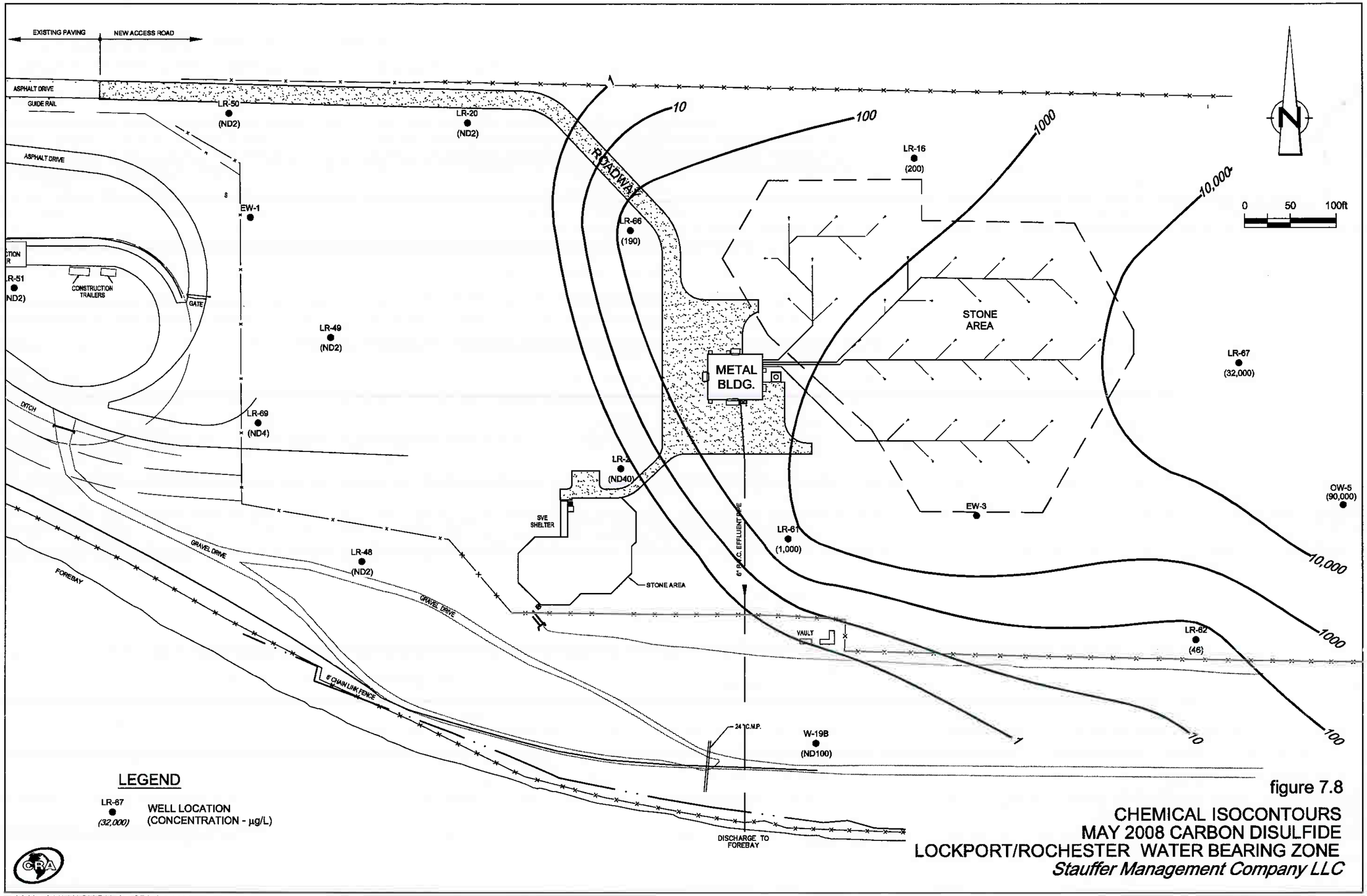


figure 7.8

CHEMICAL ISOCONTOURS
MAY 2008 CARBON DISULFIDE
LOCKPORT/ROCHESTER WATER BEARING ZONE
Stauffer Management Company LLC

06488-20(018)GN-BU008 FEB 13/2009

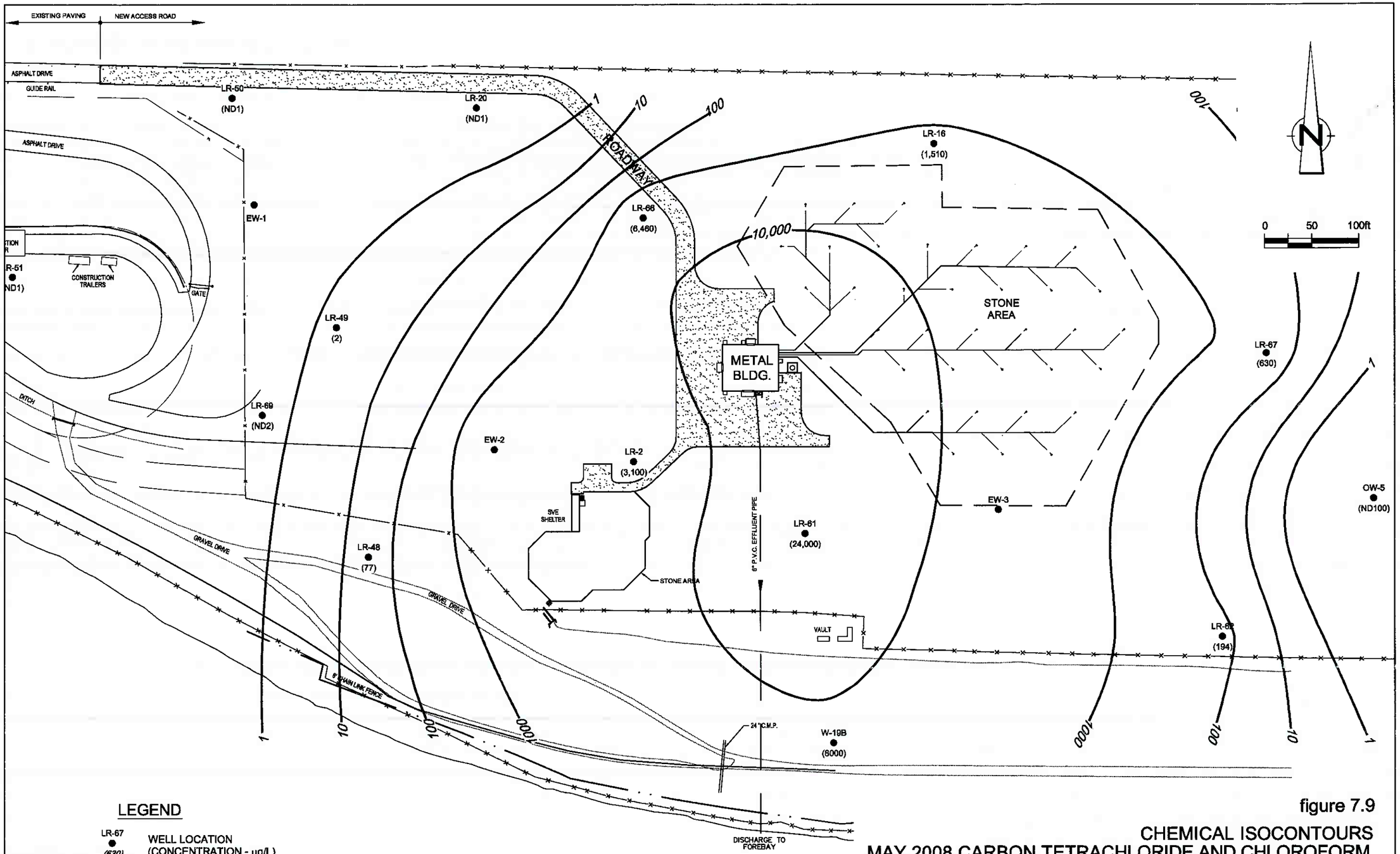
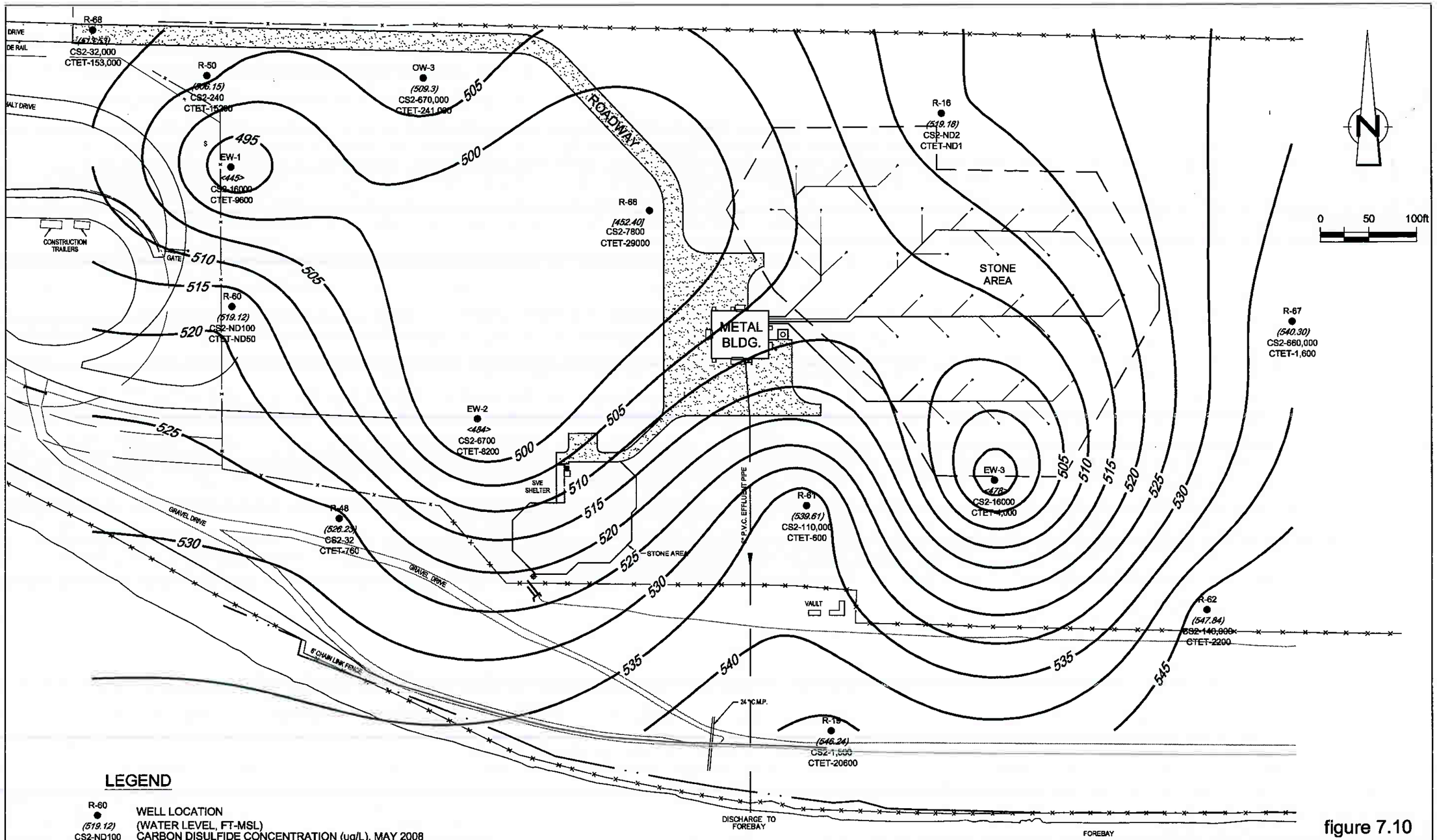


figure 7.9

CHEMICAL ISOCONTOURS
MAY 2008 CARBON TETRACHLORIDE AND CHLOROFORM
LOCKPORT/ROCHESTER WATER BEARING ZONE
Stauffer Management Company LLC

06488-20(018)GN-BU009 FEB 13/2009



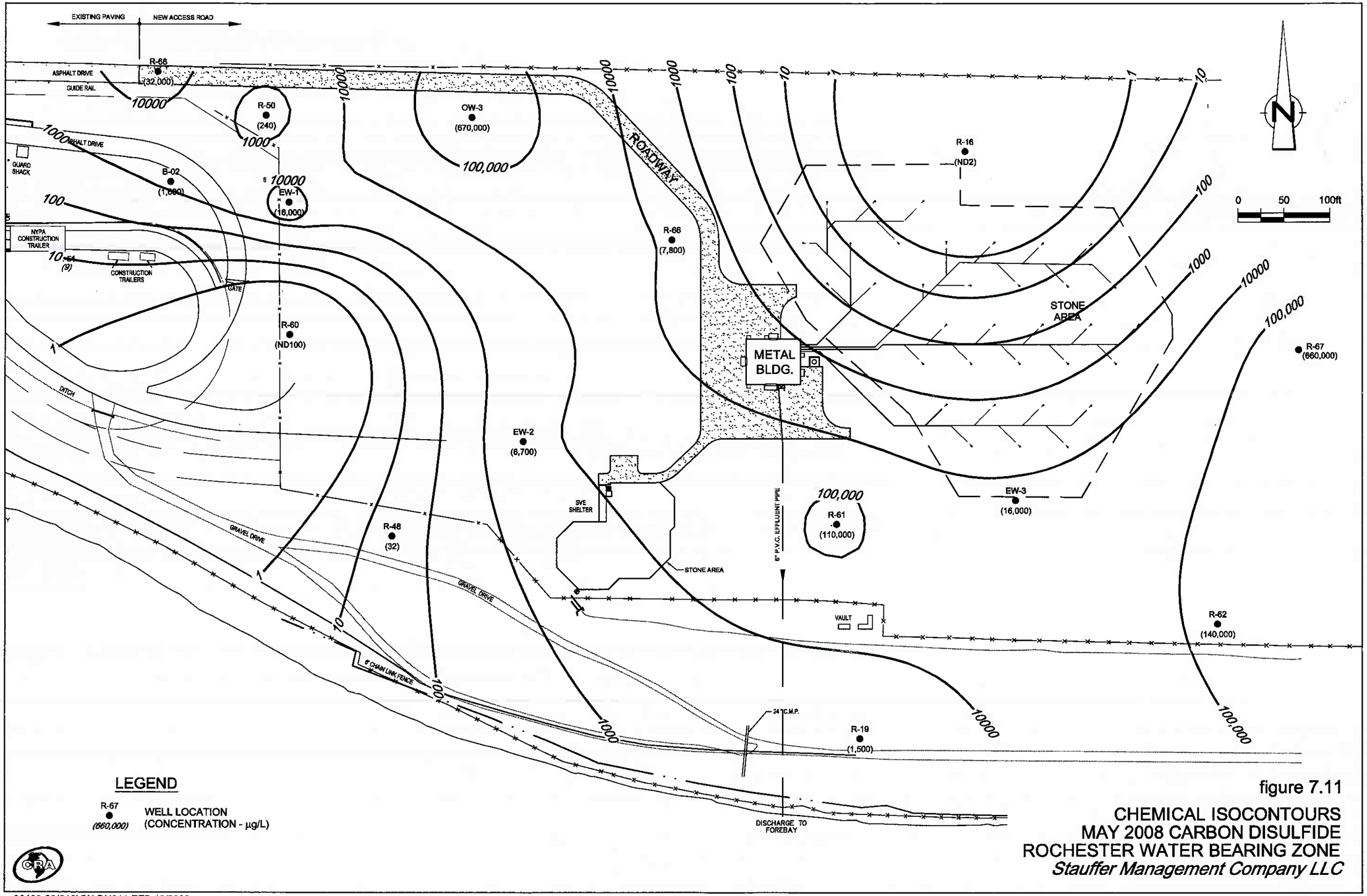
LEGEND

R-60 ●	WELL LOCATION
(519.12)	(WATER LEVEL, FT-MSL)
CS2-ND100	CARBON DISULFIDE CONCENTRATION (ug/L), MAY 2008
CTET-ND50	CARBON TET + CHLOROFORM CONCENTRATION (ug/L), MAY 2008
EW-1 ●	WATER LEVEL MODIFIED TO 490 FT-MSL
<445>	FOR GROUNDWATER CONTOURS
R-66 ●	WATER LEVEL NOT USED
[452.40]	FOR GROUNDWATER CONTOURS

figure 7.10

GROUNDWATER POTENTIOMETRIC SURFACE CONTOURS
MAY 2008
ROCHESTER WATER BEARING ZONE
Stauffer Management Company LLC

06488-20(018)GN-BU004 FEB 12/2009



LEGEND

R-67 (660,000) WELL LOCATION (CONCENTRATION - µg/L)

figure 7.11

CHEMICAL ISOCONTOURS
MAY 2008 CARBON DISULFIDE
ROCHESTER WATER BEARING ZONE
Stauffer Management Company LLC

06488-20(018)GN-BU011 FEB 13/2009

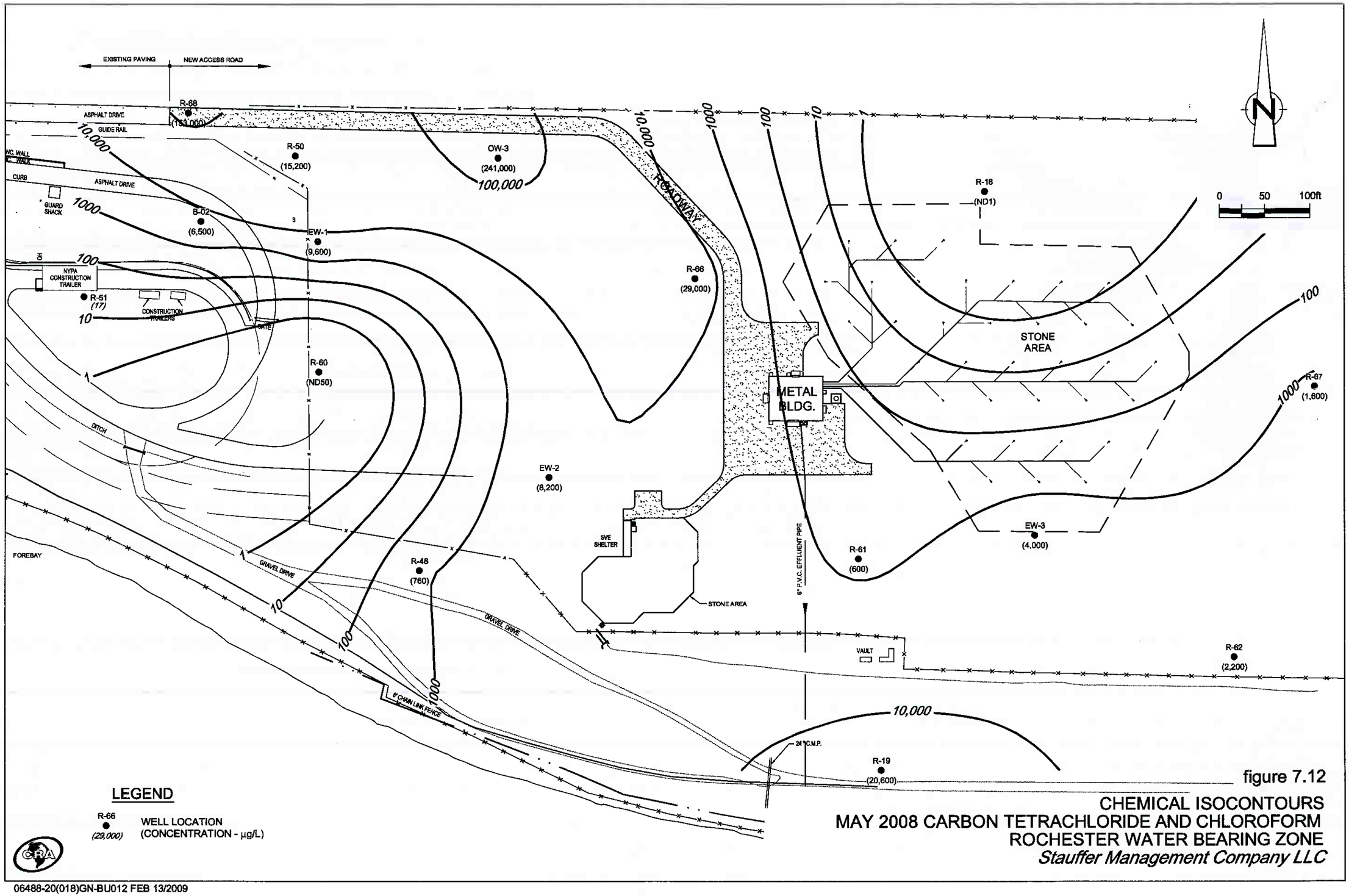
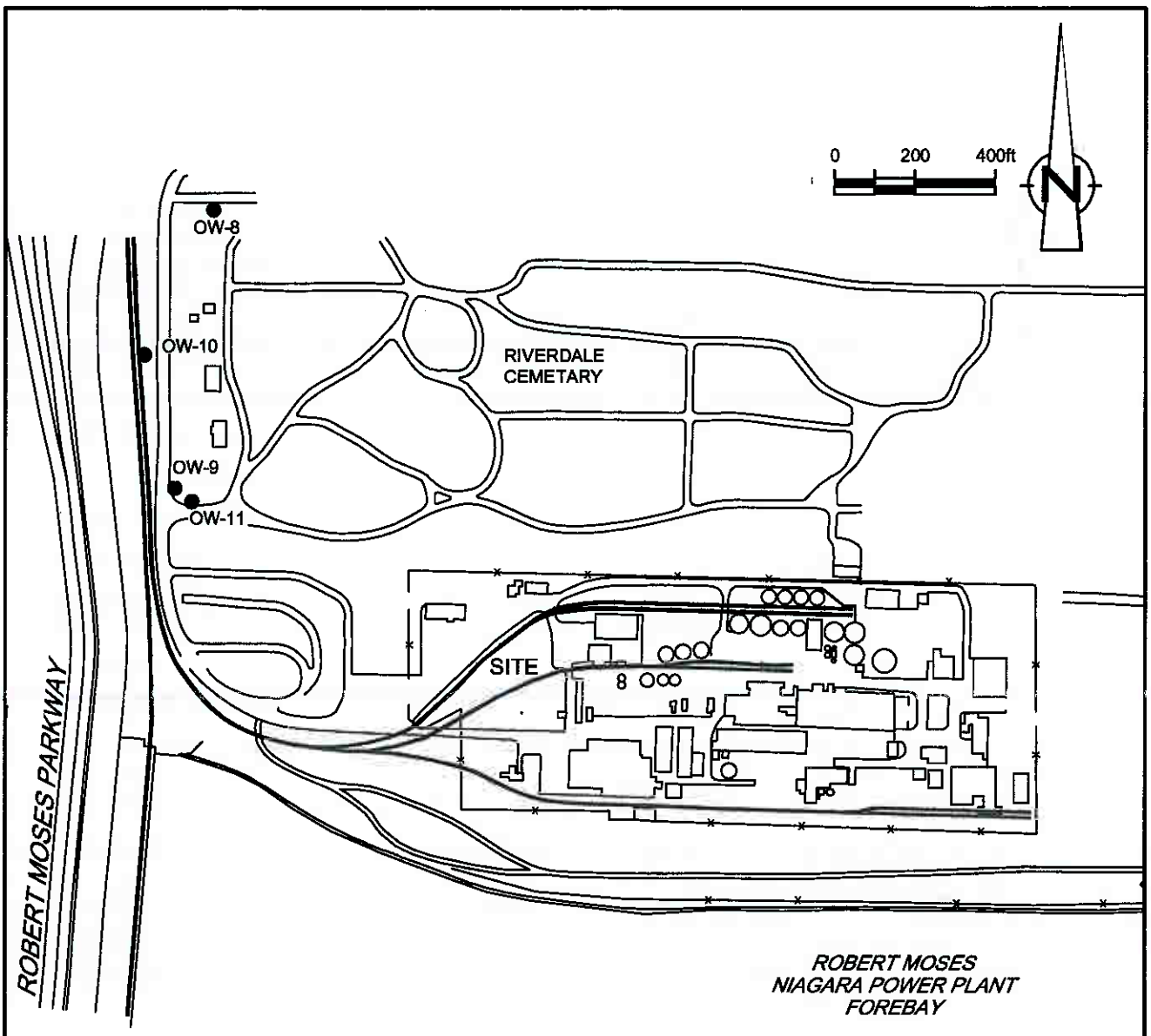


figure 7.12

CHEMICAL ISOCONTOURS
MAY 2008 CARBON TETRACHLORIDE AND CHLOROFORM
ROCHESTER WATER BEARING ZONE
Stauffer Management Company LLC

06488-20(018)GN-BU012 FEB 13/2009



LEGEND

OW-11 ● NORTH SIDE GROUNDWATER MONITORING WELL LOCATIONS

NOTE:
SAMPLING OF OVERBURDEN WELLS OW-8, OW-9 AND OW-10 WAS DISCONTINUED IN MAY 2004. BEDROCK WELL OW-11 CONTINUES TO BE SAMPLED QUARTERLY.

figure 8.1

NORTH SIDE WELL LOCATIONS
STAUFFER MANAGEMENT COMPANY LLC
Lewiston, New York

CRA

06488-20(018)GN-BU018 FEB 20/2009

TABLE 2.1

AREA A SVE MASS LOADINGS - 2008
STAUFFER MANAGEMENT COMPANY LLC
LEWISTON, NEW YORK

Average Air Flow Rate: 800 cfm

Est. Operating Time:

1st Quarter	1,878 hours
2nd Quarter	1,923 hours
3rd Quarter	2,098 hours
4th Quarter	1,700 hours
Total	7,599 hours/year

Compound	*MW*	*1st Quarter*		*2nd Quarter*		*3rd Quarter*		*4th Quarter*		*Total Mass Removal*
		Conc. (ppmv)	*Mass (lbs)*	*Conc. (ppmv)*	*Mass (lbs)*	*Conc. (ppmv)*	*Mass (lbs)*	*Conc. (ppmv)*	*Mass (lbs)*	*(lbs/yr)*
Benzene	78	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
Carbon disulfide	76	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0
Carbon tetrachloride	154	1.7	60.0	3.6	130.0	3.0	118.2	4.2	134.1	442
Chlorobenzene	112	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
Chloroform	119	0.2	4.4	0.4	10.1	0.3	9.2	0.3	8.4	32
Methylene chloride	85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
Tetrachloroethene	166	0.0	1.6	0.3	9.7	0.2	9.8	0.2	6.9	28
Toluene	92	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
Trichloroethene	131	0.0	0.3	0.0	1.3	0.0	1.5	0.0	0.8	4
Total VOC Removal			**67**		**151**		**139**		**150**	**507**

Notes:

cfm	Cubic Feet per Minute
MW	Molecular Weight
ppmv	Part per Million by Volume.
VOC	Volatile Organic Compound.

TABLE 5.1

EXTRACTION WELL EW-1
LIQUID-PHASE MASS LOADINGS - 2008
STAUFFER MANAGEMENT COMPANY LLC
LEWISTON, NEW YORK

Flow Rates:

1st Quarter	231,935	gallons
2nd Quarter	308,006	gallons
3rd Quarter	315,552	gallons
4th Quarter	242,555	gallons
Total	**1,098,048**	**gallons**

Compound	*1st Quarter*		*2nd Quarter*		*3rd Quarter*		*4th Quarter*		*Total Mass Removal*
	Conc. (ug/L)	*Mass (lbs)*	*Conc. (ug/L)*	*Mass (lbs)*	*Conc. (ug/L)*	*Mass (lbs)*	*Conc. (ug/L)*	*Mass (lbs)*	*(lbs/yr)*
Benzene	0	0.0	0	0.0	0	0.0	0	0.0	0
Carbon disulfide	16,000	30.9	16,000	41.1	14,000	36.8	4,100	8.3	117
Carbon tetrachloride	2,200	4.3	6,200	15.9	6,500	17.1	2,700	5.5	43
Chlorobenzene	0	0.0	0	0.0	0	0.0	0	0.0	0
Chloroform	1,800	3.5	3,400	8.7	3,300	8.7	1,400	2.8	24
Methylene chloride	120	0.2	300	0.8	280	0.7	130	0.3	2
Tetrachloroethene	0	0.0	0	0.0	0	0.0	0	0.0	0
Toluene	0	0.0	0	0.0	0	0.0	0	0.0	0
Trichloroethene	0	0.0	0	0.0	0	0.0	0	0.0	0
Total VOC Removal		**39**		**67**		**63**		**17**	**186**

Notes:
VOC Volatile Organic Compound.

TABLE 5.2

EXTRACTION WELL EW-2
LIQUID-PHASE MASS LOADINGS - 2008
STAUFFER MANAGEMENT COMPANY LLC
LEWISTON, NEW YORK

Flow Rates:

1st Quarter	880,012	gallons
2nd Quarter	1,513,014	gallons
3rd Quarter	1,264,818	gallons
4th Quarter	1,195,114	gallons
Total	**4,852,958**	**gallons**

Compound	*1st Quarter*		*2nd Quarter*		*3rd Quarter*		*4th Quarter*		*Total Mass Removal*
	Conc. (ug/L)	*Mass (lbs)*	*Conc. (ug/L)*	*Mass (lbs)*	*Conc. (ug/L)*	*Mass (lbs)*	*Conc. (ug/L)*	*Mass (lbs)*	*(lbs/yr)*
Benzene	0	0.0	0	0.0	0	0.0	0	0.0	0
Carbon disulfide	0	0.0	6,700	84.5	4,000	42.2	13,000	129.6	256
Carbon tetrachloride	2,800	20.6	6,600	83.3	5,200	54.9	9,000	89.7	248
Chlorobenzene	0	0.0	0	0.0	0	0.0	0	0.0	0
Chloroform	1,200	8.8	1,600	20.2	1,000	10.5	1,600	15.9	55
Methylene chloride	0	0.0	100	1.3	0	0.0	0	0.0	1
Tetrachloroethene	150	1.1	0	0.0	0	0.0	0	0.0	1
Toluene	0	0.0	0	0.0	0	0.0	0	0.0	0
Trichloroethene	0	0.0	0	0.0	0	0.0	0	0.0	0
Total VOC Removal		**30**		**189**		**108**		**235**	**563**

Notes:
VOC Volatile Organic Compound.

TABLE 5.3

EXTRACTION WELL EW-3
LIQUID-PHASE MASS LOADINGS - 2008
STAUFFER MANAGEMENT COMPANY LLC
LEWISTON, NEW YORK

Flow Rates:

1st Quarter	165,289	gallons
2nd Quarter	174,450	gallons
3rd Quarter	158,263	gallons
4th Quarter	129,456	gallons
Total	**627,458**	**gallons**

Compound	*1st Quarter*		*2nd Quarter*		*3rd Quarter*		*4th Quarter*		*Total Mass*
	Conc. (ug/L)	*Mass (lbs)*	*Conc. (ug/L)*	*Mass (lbs)*	*Conc. (ug/L)*	*Mass (lbs)*	*Conc. (ug/L)*	*Mass (lbs)*	*Removal (lbs/yr)*
Benzene	0	0.0	0	0.0	0	0.0	0	0.0	0
Carbon disulfide	18,000	24.8	16,000	23.3	18,000	23.8	12,000	13.0	85
Carbon tetrachloride	1,700	2.3	1,600	2.3	1,600	2.1	1,500	1.6	8
Chlorobenzene	0	0.0	0	0.0	0	0.0	0	0.0	0
Chloroform	3,300	4.5	2,400	3.5	3,300	4.4	3,400	3.7	16
Methylene chloride	340	0.5	0	0.0	310	0.4	260	0.3	1
Tetrachloroethene	220	0.3	0	0.0	0	0.0	0	0.0	0
Toluene	0	0.0	0	0.0	0	0.0	0	0.0	0
Trichloroethene	150	0.2	0	0.0	0	0.0	0	0.0	0
Total VOC Removal		**33**		**29**		**31**		**19**	**111**

Notes:
VOC Volatile Organic Compound.

TABLE 5.4

EXTRACTION WELL EW-4
LIQUID-PHASE MASS LOADINGS - 2008
STAUFFER MANAGEMENT COMPANY LLC
LEWISTON, NEW YORK

Flow Rates:

1st Quarter	109,387	gallons
2nd Quarter	131,978	gallons
3rd Quarter	144,191	gallons
4th Quarter	110,325	gallons
Total	**495,881**	**gallons**

Compound	*1st Quarter*		*2nd Quarter*		*3rd Quarter*		*4th Quarter*		*Total Mass Removal*
	Conc. (ug/L)	*Mass (lbs)*	*Conc. (ug/L)*	*Mass (lbs)*	*Conc. (ug/L)*	*Mass (lbs)*	*Conc. (ug/L)*	*Mass (lbs)*	*(lbs/yr)*
Benzene	0	0.0	0	0.0	0	0.0	0	0.0	0
Carbon disulfide	0	0.0	96	0.1	0	0.0	0	0.0	0
Carbon tetrachloride	880	0.8	10,000	11.0	330	0.4	2,000	1.8	14
Chlorobenzene	460	0.4	470	0.5	62	0.1	720	0.7	2
Chloroform	1,700	1.6	6,900	7.6	3,500	4.2	9,300	8.6	22
Methylene chloride	0	0.0	160	0.2	130	0.2	520	0.5	1
Tetrachloroethene	470	0.4	230	0.3	170	0.2	210	0.2	1
Toluene	0	0.0	0	0.0	0	0.0	0	0.0	0
Trichloroethene	92	0.1	59	0.1	35	0.0	150	0.1	0
Total VOC Removal		**3.3**		**19.7**		**5.1**		**11.9**	**40**

Notes:
VOC Volatile Organic Compound.

TABLE 5.5

EXTRACTION WELL EW-5
LIQUID-PHASE MASS LOADINGS - 2008
STAUFFER MANAGEMENT COMPANY LLC
LEWISTON, NEW YORK

Flow Rates:

1st Quarter	1,222,305	gallons
2nd Quarter	1,474,739	gallons
3rd Quarter	1,611,210	gallons
4th Quarter	1,232,793	gallons
Total	**5,541,047**	**gallons**

Compound	*1st Quarter*		*2nd Quarter*		*3rd Quarter*		*4th Quarter*		*Total Mass Removal*
	Conc. (ug/L)	*Mass (lbs)*	*Conc. (ug/L)*	*Mass (lbs)*	*Conc. (ug/L)*	*Mass (lbs)*	*Conc. (ug/L)*	*Mass (lbs)*	*(lbs/yr)*
Benzene	0	0.0	0	0.0	0	0.0	0	0.0	0
Carbon disulfide	0	0.0	240	3.0	150	2.0	150	1.5	7
Carbon tetrachloride	2,400	24.5	1,400	17.2	1,600	21.5	330	3.4	67
Chlorobenzene	0	0.0	0	0.0	0	0.0	0	0.0	0
Chloroform	2,000	20.4	190	2.3	610	8.2	230	2.4	33
Methylene chloride	34	0.3	0	0.0	24	0.3	10	0.1	1
Tetrachloroethene	1,900	19.4	140	1.7	140	1.9	25	0.3	23
Toluene	0	0.0	0	0.0	0	0.0	0	0.0	0
Trichloroethene	1,600	16.3	18	0.2	24	0.3	0	0.0	17
Total VOC Removal		**80.9**		**24.5**		**34.2**		**7.7**	**147**

Notes:
VOC Volatile Organic Compound.

TABLE 5.6

EXTRACTION WELL EW-6
LIQUID-PHASE MASS LOADINGS - 2008
STAUFFER MANAGEMENT COMPANY LLC
LEWISTON, NEW YORK

Flow Rates:

1st Quarter	798,452	gallons
2nd Quarter	953,021	gallons
3rd Quarter	1,001,559	gallons
4th Quarter	496,109	gallons
Total	**3,249,141**	**gallons**

Compound	*1st Quarter*		*2nd Quarter*		*3rd Quarter*		*4th Quarter*		*Total Mass Removal*
	Conc. (ug/L)	*Mass (lbs)*	*Conc. (ug/L)*	*Mass (lbs)*	*Conc. (ug/L)*	*Mass (lbs)*	*Conc. (ug/L)*	*Mass (lbs)*	*(lbs/yr)*
Benzene	0	0.0	0	0.0	0	0.0	0	0.0	0
Carbon disulfide	420	2.8	1,100	8.7	370	3.1	190	0.8	15
Carbon tetrachloride	12,000	79.9	18,000	143.1	6,600	55.1	160,000	662.0	940
Chlorobenzene	0	0.0	0	0.0	0	0.0	0	0.0	0
Chloroform	7,700	51.3	6,900	54.8	5,000	41.8	47,000	194.5	342
Methylene chloride	290	1.9	230	1.8	200	1.7	800	3.3	9
Tetrachloroethene	260	1.7	250	2.0	140	1.2	1,900	7.9	13
Toluene	0	0.0	0	0.0	0	0.0	0	0.0	0
Trichloroethene	100	0.7	67	0.5	71	0.6	48	0.2	2
Total VOC Removal		**138.3**		**211.0**		**103.4**		**868.6**	**1,321**

Notes:
VOC Volatile Organic Compound.

TABLE 5.7

DUAL-PHASE AREA A WELL DPA-201
LIQUID-PHASE MASS LOADINGS - 2008
STAUFFER MANAGEMENT COMPANY LLC
LEWISTON, NEW YORK

Flow Rates:

1st Quarter	36,710	gallons
2nd Quarter	29,978	gallons
3rd Quarter	19,019	gallons
4th Quarter	15,102	gallons
Total	**100,809**	**gallons**

Compound	*1st Quarter*		*2nd Quarter*		*3rd Quarter*		*4th Quarter*		*Total Mass*
	Conc. (ug/L)	*Mass (lbs)*	*Conc. (ug/L)*	*Mass (lbs)*	*Conc. (ug/L)*	*Mass (lbs)*	*Conc. (ug/L)*	*Mass (lbs)*	*Removal (lbs/yr)*
Benzene	Dry	0.0	0	0.0	0	0.0	0	0.0	0.0
Carbon disulfide	Dry	0.0	0	0.0	0	0.0	0	0.0	0.0
Carbon tetrachloride	Dry	0.0	1,000	0.3	1,200	0.0	260	0.0	0.3
Chlorobenzene	Dry	0.0	0	0.0	0	0.0	0	0.0	0.0
Chloroform	Dry	0.0	450	0.1	500	0.0	350	0.0	0.1
Methylene chloride	Dry	0.0	0	0.0	15	0.0	0	0.0	0.0
Tetrachloroethene	Dry	0.0	350	0.1	140	0.0	140	0.0	0.1
Toluene	Dry	0.0	0	0.0	0	0.0	0	0.0	0.0
Trichloroethene	Dry	0.0	120	0.0	35	0.0	200	0.0	0.0
Total VOC Removal		**0.0**		**0.5**		**0.0**		**0.0**	**0.5**

Notes:

VOC Volatile Organic Compound.
Dry Well dry, no sample collected

TABLE 5.8

DUAL-PHASE AREA A WELL DPA-202
LIQUID-PHASE MASS LOADINGS - 2008
STAUFFER MANAGEMENT COMPANY LLC
LEWISTON, NEW YORK

Flow Rates:

1st Quarter	45,806	gallons
2nd Quarter	34,267	gallons
3rd Quarter	18,212	gallons
4th Quarter	19,726	gallons
Total	**118,011**	**gallons**

Compound	*1st Quarter*		*2nd Quarter*		*3rd Quarter*		*4th Quarter*		*Total Mass*
	Conc. (ug/L)	*Mass (lbs)*	*Conc. (ug/L)*	*Mass (lbs)*	*Conc. (ug/L)*	*Mass (lbs)*	*Conc. (ug/L)*	*Mass (lbs)*	*Removal (lbs/yr)*
Benzene	0	0.0	0	0.0	0	0.0	0	0.0	0
Carbon disulfide	3,200	1.2	4,300	1.2	2,100	0.3	1,800	0.3	3
Carbon tetrachloride	160,000	61.1	190,000	54.3	160,000	24.3	160,000	26.3	166
Chlorobenzene	0	0.0	0	0.0	0	0.0	0	0.0	0
Chloroform	26,000	9.9	28,000	8.0	22,000	3.3	24,000	3.9	25
Methylene chloride	0	0.0	0	0.0	0	0.0	0	0.0	0
Tetrachloroethene	3,200	1.2	2,600	0.7	2,000	0.3	2,200	0.4	3
Toluene	0	0.0	0	0.0	0	0.0	0	0.0	0
Trichloroethene	0	0.0	0	0.0	0	0.0	0	0.0	0
Total VOC Removal		**73.5**		**64.3**		**28.3**		**30.9**	**197**

Notes:
VOC Volatile Organic Compound.

TABLE 5.9

DUAL-PHASE AREA A WELL DPA-203
LIQUID-PHASE MASS LOADINGS - 2008
STAUFFER MANAGEMENT COMPANY LLC
LEWISTON, NEW YORK

Flow Rates:

1st Quarter	46,529	gallons
2nd Quarter	41,135	gallons
3rd Quarter	29,625	gallons
4th Quarter	18,259	gallons
Total	**135,548**	**gallons**

Compound	*1st Quarter*		*2nd Quarter*		*3rd Quarter*		*4th Quarter*		*Total Mass*
	Conc. (ug/L)	*Mass (lbs)*	*Conc. (ug/L)*	*Mass (lbs)*	*Conc. (ug/L)*	*Mass (lbs)*	*Conc. (ug/L)*	*Mass (lbs)*	*Removal (lbs/yr)*
Benzene	0	0.0	0	0.0	0	0.0	0	0.0	0
Carbon disulfide	9,100	3.5	0	0.0	9,800	0.0	13,000	2.0	6
Carbon tetrachloride	280,000	108.7	190,000	65.2	260,000	0.0	350,000	53.3	227
Chlorobenzene	0	0.0	0	0.0	0	0.0	0	0.0	0
Chloroform	51,000	19.8	36,000	12.4	59,000	0.0	91,000	13.9	46
Methylene chloride	0	0.0	0	0.0	0	0.0	0	0.0	0
Tetrachloroethene	0	0.0	0	0.0	0	0.0	0	0.0	0
Toluene	0	0.0	0	0.0	0	0.0	0	0.0	0
Trichloroethene	0	0.0	0	0.0	0	0.0	0	0.0	0
Total VOC Removal		**132.0**		**77.5**		**0.0**		**69.1**	**279**

Notes:
VOC Volatile Organic Compound.
Dry Well dry, no sample collected

TABLE 5.10

EXTRACTION WELL OW-3
LIQUID-PHASE MASS LOADINGS - 2008
STAUFFER MANAGEMENT COMPANY LLC
LEWISTON, NEW YORK

Flow Rates:

1st Quarter	43,296	gallons
2nd Quarter	25,120	gallons
3rd Quarter	100,480	gallons
4th Quarter	76,994	gallons
Total	**245,890**	**gallons**

Compound	*1st Quarter*		*2nd Quarter*		*3rd Quarter*		*4th Quarter*		*Total Mass Removal*
	Conc. (ug/L)	*Mass (lbs)*	*Conc. (ug/L)*	*Mass (lbs)*	*Conc. (ug/L)*	*Mass (lbs)*	*Conc.* (ug/L)*	*Mass (lbs)*	*(lbs/yr)*
Benzene	0	0.0	0	0.0	0	0.0	0	0.0	0
Carbon disulfide	1,200,000	433.3	670,000	140.4	750,000	628.5	650,000	417.4	1,620
Carbon tetrachloride	100,000	36.1	200,000	41.9	160,000	134.1	100,000	64.2	276
Chlorobenzene	0	0.0	0	0.0	0	0.0	0	0.0	0
Chloroform	17,000	6.1	41,000	8.6	18,000	15.1	15,000	9.6	39
Methylene chloride	0	0.0	580	0.1	0	0.0	0	0.0	0
Tetrachloroethene	760	0.3	580	0.1	0	0.0	0	0.0	0
Toluene	0	0.0	0	0.0	0	0.0	0	0.0	0
Trichloroethene	0	0.0	0	0.0	0	0.0	0	0.0	0
Total VOC Removal		**475.8**		**191.1**		**777.7**		**491.2**	**1,936**

Notes:
VOC Volatile Organic Compound.

TABLE 5.11

EXTRACTION WELL LR-66
LIQUID-PHASE MASS LOADINGS - 2008
STAUFFER MANAGEMENT COMPANY LLC
LEWISTON, NEW YORK

Flow Rates:

1st Quarter	39,247	gallons
2nd Quarter	25,418	gallons
3rd Quarter	48,746	gallons
4th Quarter	12,912	gallons
Total	**126,323**	**gallons**

Compound	*1st Quarter*		*2nd Quarter*		*3rd Quarter*		*4th Quarter*		*Total Mass Removal*
	Conc. (ug/L)	*Mass (lbs)*	*Conc. (ug/L)*	*Mass (lbs)*	*Conc. (ug/L)*	*Mass (lbs)*	*Conc. (ug/L)*	*Mass (lbs)*	*(lbs/yr)*
Benzene	0	0.0	0	0.0	0	0.0	0	0.0	0
Carbon disulfide	750	0.2	190	0.0	350	0.1	320	0.0	0
Carbon tetrachloride	9,900	3.2	5,800	1.2	7,000	2.8	7,800	0.8	8
Chlorobenzene	0	0.0	0	0.0	0	0.0	0	0.0	0
Chloroform	830	0.3	660	0.1	670	0.3	850	0.1	1
Methylene chloride	75	0.0	68	0.0	74	0.0	110	0.0	0
Tetrachloroethene	66	0.0	57	0.0	0	0.0	92	0.0	0
Toluene	0	0.0	0	0.0	0	0.0	0	0.0	0
Trichloroethene	0	0.0	0	0.0	0	0.0	0	0.0	0
Total VOC Removal		**3.8**		**1.4**		**3.3**		**1.0**	**10**

Notes:
VOC Volatile Organic Compound.

TABLE 5.12

AREA A KNOCKOUT POT AND SUMP
LIQUID-PHASE MASS LOADINGS - 2008
STAUFFER MANAGEMENT COMPANY LLC
LEWISTON, NEW YORK

Flow Rates:

1st Quarter	304,031	gallons
2nd Quarter	233,370	gallons
3rd Quarter	77,196	gallons
4th Quarter	83,602	gallons
Total	**698,199**	**gallons**

Compound	*1st Quarter*		*2nd Quarter*		*3rd Quarter*		*4th Quarter*		*Total Mass Removal*
	Conc. (ug/L)	*Mass (lbs)*	*Conc. (ug/L)*	*Mass (lbs)*	*Conc. (ug/L)*	*Mass (lbs)*	*Conc. (ug/L)*	*Mass (lbs)*	*(lbs/yr)*
Benzene	0	0.0	0	0.0	0	0.0	0	0.0	0.0
Carbon disulfide	0	0.0	0	0.0	0	0.0	0	0.0	0.0
Carbon tetrachloride	75	0.2	9	0.0	7	0.0	14	0.0	0.2
Chlorobenzene	0	0.0	0	0.0	0	0.0	0	0.0	0.0
Chloroform	52	0.1	10	0.0	7	0.0	12	0.0	0.2
Methylene chloride	0	0.0	0	0.0	0	0.0	0	0.0	0.0
Tetrachloroethene	9	0.0	3	0.0	3	0.0	7	0.0	0.0
Toluene	0	0.0	0	0.0	0	0.0	0	0.0	0.0
Trichloroethene	2	0.0	1	0.0	2	0.0	3	0.0	0.0
Total VOC Removal		**0.4**		**0.0**		**0.0**		**0.0**	**0.4**

Notes:

VOC Volatile Organic Compound.

TABLE 7.1

2008 MEASURED GROUNDWATER ELEVATIONS
STAUFFER MANAGEMENT COMPANY LLC
LEWISTON, NEW YORK

Well I.D.	*February 2008*	*May 2008*	*August 2008*	*December 2008*
Extraction Wells				
DPA-201	578.99	580.15	DRY	581.87
DPA-202	576.56	576.2	576.13	576.24
DPA-203	577.04	582.86	576.84	577.03
T-4	574	573.07	569.87	572.42
EW-1	441	445	443	443
EW-2	462	484	457	451
EW-3	462	478	476	465
EW-4	525.12	553.07	524.91	524.92
EW-5	549.38	552.19	538.09	539.59
EW-6	538.53	543.18	539.63	548.33
OW-3	512.6	509.3	481.17	513.84
LR-66	NM	NM	NM	NM
Upper Lockport Wells				
W-16	581.46	579.64	577.78	579.13
W-17	584.98	584.28	582.88	583.89
W-18R	554.14	573.16	573.19	572.95
W-19D	582.34	573.28	DRY	DRY
W-20	576.81	575.6	571.86	566.46
W-22A	DRY	571.24	DRY	DRY
W-23C	579.51	579.16	577.62	579.26
W-66	570.77	570.23	569.4	570.04
W-67	597.79	593.73	587.07	589.16
OW-11	560	560.56	556.61	559.37
Lower Lockport Wells				
W-16L	556.64	553.43	549.76	550.19
W-18L	573.35	552.84	552.63	549.34
W-19A	558.52	558.5	558.23	557.14
W-23B	555.88	555.76	555.76	555.7
W-48E	553.54	553.09	553.89	548.93
W-50	560.77	559.62	556.8	559.27
W-60L	DRY	DRY	DRY	DRY
W-65	557.02	551.22	551.38	538.45
W-66L	556.83	555.18	552.64	551.52
W-67L	558.88	556.76	555.01	552.84
W-70L	551.75	551.57	549.77	531.94

TABLE 7.1

2008 MEASURED GROUNDWATER ELEVATIONS
STAUFFER MANAGEMENT COMPANY LLC
LEWISTON, NEW YORK

Well I.D.	*February 2008*	*May 2008*	*August 2008*	*December 2008*
Lockport/Rochester Wells				
W-19B	551.63	554.25	556.18	550.41
LR-2	554.08	552.81	552.67	549.44
LR-16	556.71	553.54	549.49	550.28
LR-20	557.62	555.7	553.71	553.06
LR-48	553.52	553.09	553.97	548.98
LR-49	554.41	553.79	553.63	549.98
LR-50	561.05	560.04	556.9	558.9
LR-51	553.81	553.38	553.4	549.76
LR-61	556.15	554.6	554.13	551.39
LR-62	556.41	553.83	554.37	548.46
LR-67	557.07	554.74	551.84	551.13
LR-69	505.42	507.18	504.5	501.78
OW-5	558.68	557.09	555.07	551.9
Rochester Wells				
R-16	507.26	519.18	503.35	486.99
R-19	552.29	546.24	548.9	543.22
R-48	525.79	526.23	521.31	524.82
R-50	524.98	506.15	504.36	517.95
R-60	526.12	519.12	508.87	524.04
R-61	539.71	539.61	537.09	536.37
R-62	548.3	547.84	546.55	537.57
R-66	451.06	452.4	451.1	446.75
R-67	542.19	540.3	540.38	532.62
R-68	514.36	513.53	499.21	524.87

Notes:
Ft. msl Feet, Mean Sea Level.
NM Not measured.

TABLE 7.2

MONITORING AND EXTRACTION WELLS BY WATER BEARING ZONE
STAUFFER MANAGEMENT COMPANY LLC
LEWISTON, NEW YORK

Upper Lockport	*Lower Lockport*	*Lockport/Rochester*	*Rochester*
Well ID	*Well ID*	*Well ID*	*Well ID*
OW-11	W-16L	LR-2	B-02
T-4	W-18L	LR-16	R-16
W-16	W-19A	LR-20	R-19
W-17	W-23B	LR-48	R-48
W-18R	W-48E	LR-49	R-50
W-19D	W-50	LR-50	R-60
W-20	W-60L	LR-51	R-61
W-22A	W-65	LR-61	R-62
W-23C	W-66L	LR-62	R-66
W-66	W-67L	LR-67	R-67
W-67	W-70L	LR-69	R-68
DPA-201	EW-1	OW-5	EW-1
DPA-202	EW-2	W-19B	EW-2
DPA-203	EW-3	LR-66	EW-3
EW-4	EW-4	EW-1	OW-3
EW-5	EW-5	EW-2	
EW-6	EW-6	EW-3	

TABLE 9.1

COMPOUND-SPECIFIC SSPL REMOVAL
AREA A SVE SYSTEM 1999 - 2008
STAUFFER MANAGEMENT COMPANY LLC
LEWISTON, NEW YORK

SSPL Compound	*1999*		*2000*		*2001*		*2002*		*2003*	
	Lbs. Removed	*% of Total*	*Lbs. Removed*	*% of Total*	*Lbs. Removed*	*% of Total*	*Lbs. Removed*	*% of Total*	*Lbs. Removed*	*% of Total*
Benzene	0	0	0	0	0	0	0	0	0	0
Carbon disulfide	0	0	0	0	0	0	0	0	0	0
Carbon tetrachloride	1,104	98	43	28	33	21	1,154	96	801	85
Chlorobenzene	0	0	0	0	0	0	0	0	0	0
Chloroform	16	1	11	7	16	10	43	4	68	7
Methylene chloride	0	0	13	8	0	0	0	0	0	0
Tetrachloroethene	10	1	75	49	105	68	10	1	68	7
Toluene	0	0	0	0	0	0	0	0	0	0
Trichloroethene	0	0	11	7	0	0	0	0	0	0
Total:	**1,130**		**153**		**154**		**1,207**		**937**	

SSPL Compound	*2004*		*2005*		*2006*		*2007*		*2008*	
	Lbs. Removed	*% of Total*	*Lbs. Removed*	*% of Total*	*Lbs. Removed*	*% of Total*	*Lbs. Removed*	*% of Total*	*Lbs. Removed*	*% of Total*
Benzene	0	0	0	0	0	0	0	0	0	0
Carbon disulfide	1	0	1	0	3	0	0	0	0	0
Carbon tetrachloride	198	87	1,782	91	1,536	90	2,132	91	442	87
Chlorobenzene	0	0	0	0	0	0	0	0	0	0
Chloroform	18	8	95	5	98	6	93	4	32	6
Methylene chloride	0	0	0	0	2	0	0	0	0	0
Tetrachloroethene	8	4	75	4	62	4	110	5	28	6
Toluene	0	0	0	0	0	0	0	0	0	0
Trichloroethene	3	1	1	0	11	0	13	1	4	1
Total:	**228**		**1,954**		**1,712**		**2,349**		**507**	

TABLE 9.2

EXTRACTION WELL SUMMARY
TOTAL VOLUME OF GROUNDWATER EXTRACTED - 2008
STAUFFER MANAGEMENT COMPANY LLC
LEWISTON, NEW YORK

Volume Pumped by Extraction Wells (Gallons/Year)

Period	*EW-1*	*EW-2*	*EW-3*	*EW-4*	*EW-5*	*EW-6*	*DPA-201*	*DPA-202*	*DPA-203*	*OW-3*	*LR-66*	*KO Pot*	*Site Total*
First Quarter	231,935	880,012	165,289	109,387	1,222,305	798,452	36,710	45,806	46,529	43,296	39,247	304,031	3,922,999
Second Quarter	308,006	1,513,014	174,450	131,978	1,474,739	953,021	29,978	34,267	41,135	25,120	25,418	233,370	4,944,496
Third Quarter	315,552	1,264,818	158,263	144,191	1,611,210	1,001,559	19,019	18,212	29,625	100,480	48,746	77,196	4,788,871
Fourth Quarter	242,555	1,195,114	129,456	110,325	1,232,793	496,109	15,102	19,726	18,259	76,994	12,912	83,602	3,632,947
Total Gallons:	**1,098,048**	**4,852,958**	**627,458**	**495,881**	**5,541,047**	**3,249,141**	**100,809**	**118,011**	**135,548**	**245,890**	**126,323**	**698,199**	**17,289,313**

TABLE 9.3

EXTRACTION WELL SUMMARY
TOTAL MASS REMOVAL BY GROUNDWATER EXTRACTION - 2008
STAUFFER MANAGEMENT COMPANY LLC
LEWISTON, NEW YORK

	Total Mass Removal (Lbs/Year)												
Compound	*EW-1*	*EW-2*	*EW-3*	*EW-4*	*EW-5*	*EW-6*	*DPA-201*	*DPA-202*	*DPA-203*	*OW-3*	*LR-66*	*KO Pot*	*Site Total*
Benzene	0	0	0	0	0	0	0	0	0	0	0	0	0
Carbon disulfide	117	256	85	0	7	15	0	3	6	1620	0	0	2,109
Carbon tetrachloride	43	248	8	14	67	940	0	166	227	276	8	0	1,998
Chlorobenzene	0	0	0	2	0	0	0	0	0	0	0	0	2
Chloroform	24	55	16	22	33	342	0	25	46	39	1	0	605
Methylene chloride	2	1	1	1	1	9	0	0	0	0	0	0	15
Tetrachloroethene	0	1	0	1	23	13	0	3	0	0	0	0	42
Toluene	0	0	0	0	0	0	0	0	0	0	0	0	0
Trichloroethene	0	0	0	0	17	2	0	0	0	0	0	0	19
Total VOC Removal	**186**	**563**	**111**	**40**	**147**	**1321**	**0**	**197**	**279**	**1936**	**10**	**0**	**4,790**

Notes:
VOC Volatile Organic Compound.

TABLE 9.4

COMPOUND-SPECIFIC SSPL REMOVAL
GROUNDWATER EXTRACTION SYSTEM 1999 - 2008
STAUFFER MANAGEMENT COMPANY LLC
LEWISTON, NEW YORK

SSPL Compound	*1999*		*2000*		*2001*		*2002*		*2003*	
	Lbs. Removed	*% of Total*	*Lbs. Removed*	*% of Total*	*Lbs. Removed*	*% of Total*	*Lbs. Removed*	*% of Total*	*Lbs. Removed*	*% of Total*
Benzene	0	0	0	0	0	0	0	0	0	0
Carbon disulfide	843	20	1,815	29	3,741	36	1,481	23	2,185	33
Carbon tetrachloride	2,783	65	3,433	55	4,769	46	3,981	62	3,615	54
Chlorobenzene	1	0	6	0	3	0	1	0	3	0
Chloroform	657	15	903	15	1,707	17	874	14	835	12
Methylene chloride	0	0	0	0	0	0	0	0	8	0
Tetrachloroethene	9	0	39	1	47	0	36	1	57	1
Toluene	0	0	0	0	0	0	0	0	0	0
Trichloroethene	1	0	1	0	2	0	1	0	7	0
Total:	**4,250**		**6,197**		**10,269**		**6,374**		**6,710**	

SSPL Compound	*2004*		*2005*		*2006*		*2007*		*2008*	
	Lbs. Removed	*% of Total*	*Lbs. Removed*	*% of Total*	*Lbs. Removed*	*% of Total*	*Lbs. Removed*	*% of Total*	*Lbs. Removed*	*% of Total*
Benzene	0	0	0	0	0	0	0	0	0	0
Carbon disulfide	2,311	47	2,611	53	1,664	47	1,954	53	2,109	44
Carbon tetrachloride	2,113	43	1,771	36	1,420	40	1,278	35	1,998	42
Chlorobenzene	1	0	2	0	1	0	1	0	2	0
Chloroform	482	10	461	9	401	11	400	11	605	13
Methylene chloride	6	0	14	0	11	0	14	0	15	0
Tetrachloroethene	36	1	33	1	17	1	20	1	42	1
Toluene	0	0	0	0	0	0	0	0	0	0
Trichloroethene	5	0	7	0	3	0	5	0	19	0
Total:	**4,954**		**4,899**		**3,517**		**3,672**		**4,790**	

TABLE 9.5

COMPOUND-SPECIFIC SSPL REMOVAL
SITE REMEDIAL SYSTEMS 1999 - 2008
STAUFFER MANAGEMENT COMPANY LLC
LEWISTON, NEW YORK

Pounds Removed per Year

SSPL Compound	*1999*		*2000*		*2001*		*2002*		*2003*	
	SVE Systems	*GW*	*SVE Systems*	*GW*	*SVE Systems*	*GW*	*SVE Systems*	*GW*	*SVE Systems*	*GW*
Benzene	0	0	0	0	0	0	0	0	0	0
Carbon disulfide	0	843	0	1,815	0	3,741	0	1,481	0	2,185
Carbon tetrachloride	1,141	2,783	23	3,433	33	4,769	1,154	3,981	801	3,615
Chlorobenzene	5	1	0	6	0	3	0	1	0	3
Chloroform	24	657	11	903	16	1,707	43	874	68	835
Methylene chloride	0	0	13	0	0	0	0	0	0	8
Tetrachloroethene	48	9	103	39	105	47	10	36	68	57
Toluene	0	0	0	0	0	0	0	0	0	0
Trichloroethene	3	1	15	1	0	2	0	1	0	7
Total:	**1,221**	**4,294**	**165**	**6,197**	**154**	**10,269**	**1,207**	**6,374**	**937**	**6,710**

SSPL Compound	*2004*		*2005*		*2006*		*2007*		*2008*		*Cumulative Compound Total*	*% of Total*
	SVE Systems	*GW*	*SVE Systems*	*GW*	*SVE Systems*	*GW*	*SVE Systems*	*GW*	*SVE Systems*	*GW*		
Benzene	0	0	0	0	0	0	0	0	0	0	**0**	0
Carbon disulfide	1	2,311	1	2,611	3	1,664	0	1954	0	2109	**10,065**	27
Carbon tetrachloride	198	2,113	1,782	1,771	1,536	1,420	2,132	1278	442	1998	**21,733**	58
Chlorobenzene	0	1	0	2	0	1	0	1	0	2	**19**	0
Chloroform	18	482	95	461	98	401	93	400	32	605	**5,138**	14
Methylene chloride	0	6	0	14	2	11	0	14	0	15	**21**	0
Tetrachloroethene	8	36	75	33	62	17	110	20	28	42	**522**	1
Toluene	0	0	0	0	0	0	0	0	0	0	**0**	0
Trichloroethene	3	5	1	7	11	3	13	5	4	19	**30**	0
Total:	**228**	**4,954**	**1,954**	**4,899**	**1,712**	**3,517**	**2,349**	**3,672**	**507**	**4,790**	**37,528**	

Notes:
GW Groundwater extraction system.

TABLE A-1

GROUNDWATER INFLUENT
ANALYTICAL RESULTS
STAUFFER MANAGEMENT COMPANY LLC
LEWISTON, NEW YORK
2008

	Sample ID:	INF-010708-DT	INF-021008-DT	INF-031008-DT	INF-041408-DT	INF-051208-DT	INF-060808-DJT
	Collection Date:	01/07/08	02/10/08	03/10/08	04/14/08	05/12/08	06/08/08
Parameters	*Units*						
Volatiles							
Benzene	µg/L	ND 500	ND 250	ND 250	ND 500	ND 250	ND 250
Carbon disulfide	µg/L	10000	5100	22000	6500	6600	5000
Carbon tetrachloride	µg/L	10000	6200	14000	12000	9100	6500
Chlorobenzene	µg/L	ND 500	ND 250	ND 250	ND 500	ND 250	ND 250
Chloroform	µg/L	2900	3100	3300	2300	2400	2500
Methylene chloride	µg/L	ND 500	ND 250	ND 250	ND 500	ND 250	ND 250
Tetrachloroethene	µg/L	ND 500	ND 250	ND 250	ND 500	ND 250	ND 250
Toluene	µg/L	ND 500	ND 250	ND 250	ND 500	ND 250	ND 250
Trichloroethene	µg/L	ND 500	ND 250	ND 250	ND 500	ND 250	ND 250

	Sample ID:	INF-071308-DJT	INF-081108-DJT	INF-090708-DJT	INF-101208-DJT	INF-110808-SG	INF-120608-DJT
	Collection Date:	07/13/08	08/11/08	09/07/08	10/12/08	11/08/08	12/06/08
Parameters	*Units*						
Volatiles							
Benzene	µg/L	ND 250	ND 500	ND 500	ND 500	ND 500	ND 250
Carbon disulfide	µg/L	14000	14000	11000	13000	17000	6500
Carbon tetrachloride	µg/L	9900	6700	5100	7400	9300	7300
Chlorobenzene	µg/L	ND 250	ND 500	ND 500	ND 500	ND 500	ND 250
Chloroform	µg/L	1800	1600	1900	2200	1900	1600
Methylene chloride	µg/L	ND 250	ND 500	ND 500	ND 500	ND 500	ND 250
Tetrachloroethene	µg/L	ND 250	ND 500	ND 500	ND 500	ND 500	ND 250
Toluene	µg/L	ND 250	ND 500	ND 500	ND 500	ND 500	ND 250
Trichloroethene	µg/L	ND 250	ND 500	ND 500	ND 500	ND 500	ND 250

Notes:
U Non-detect at the associated value.

TABLE A-2

CARBON BED INTERSTAGE RESULTS
STAUFFER MANAGEMENT COMPANY LLC
LEWISTON, NEW YORK
2008

	Sample ID:	*CBT-010708-DT*	*CBT-011408-DT*	*CBT-012108-DT*	*CBT-012808-RN*	*CBT-020308-DT*	*CBT-021008-DT*
	Collection Date:	*01/07/08*	*01/14/08*	*01/21/08*	*01/28/08*	*02/03/08*	*02/10/08*
Parameters	***Units***						
Volatiles							
Benzene	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Carbon disulfide	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Carbon tetrachloride	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Chlorobenzene	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Chloroform	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Methylene chloride	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Tetrachloroethene	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Toluene	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Trichloroethene	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0

	Sample ID:	*CBT-021808-DT*	*CBT-022508-DT*	*CBT-030308-DT*	*CBT-031008-DT*	*CBT-031808-DT*	*CBT-032508-DT*
	Collection Date:	*02/18/08*	*02/25/08*	*03/03/08*	*03/10/08*	*03/18/08*	*03/25/08*
Parameters	***Units***						
Volatiles							
Benzene	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Carbon disulfide	µg/L	11	6.1	ND 5.0	8.4	12	9.7
Carbon tetrachloride	µg/L	6.0	ND 5.0	ND 5.0	8.5	11	6.0
Chlorobenzene	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Chloroform	µg/L	18	12	10	31	59	46
Methylene chloride	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Tetrachloroethene	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Toluene	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Trichloroethene	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0

Notes:
ND Non-detect at the associated value.

TABLE A-2

CARBON BED INTERSTAGE RESULTS
STAUFFER MANAGEMENT COMPANY LLC
LEWISTON, NEW YORK
2008

	Sample ID:	*CBT-033108-DT*	*CBT-040608-DT*	*CBT-041408-DT*	*CBT-042108-DT*	*CBT-042708-DT*	*CBT-050508-DT*
	Collection Date:	*03/31/08*	*04/06/08*	*04/14/08*	*04/21/08*	*04/27/08*	*05/05/08*
Parameters	***Units***						
Volatiles							
Benzene	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Carbon disulfide	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Carbon tetrachloride	µg/L	ND 5.0	ND 5.0	ND 5.0	7.8	ND 5.0	ND 5.0
Chlorobenzene	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Chloroform	µg/L	ND 5.0	ND 5.0	5.6	15	12	13
Methylene chloride	µg/L	ND 5.0	ND 5.0	ND 5.0	6.0	5.7	5.5
Tetrachloroethene	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Toluene	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Trichloroethene	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0

	Sample ID:	*CBT-051208-DT*	*CBT-051808-DT*	*CBT-052608-DT*	*CBT-060208-DT*	*CBT-060808-DT*	*CBT-061508-DT*
	Collection Date:	*05/12/08*	*05/18/08*	*05/26/08*	*06/02/08*	*06/08/08*	*06/15/08*
Parameters	***Units***						
Volatiles							
Benzene	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Carbon disulfide	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Carbon tetrachloride	µg/L	6.1	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Chlorobenzene	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Chloroform	µg/L	37	29	28	16	16	ND 5.0
Methylene chloride	µg/L	11	8.6	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Tetrachloroethene	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Toluene	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Trichloroethene	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0

Notes:
ND Non-detect at the associated value.

TABLE A-2

CARBON BED INTERSTAGE RESULTS
STAUFFER MANAGEMENT COMPANY LLC
LEWISTON, NEW YORK
2008

	Sample ID:	*CBT-062308-SG*	*CBT-063008-DJT*	*CBT-070708-SG*	*CBT-071308-DT*	*CBT-072108-DT*	*CBT-072808-DT*
	Collection Date:	*06/23/08*	*06/30/08*	*07/07/08*	*07/13/08*	*07/21/08*	*07/28/08*
Parameters	*Units*						
Volatiles							
Benzene	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Carbon disulfide	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Carbon tetrachloride	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Chlorobenzene	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Chloroform	µg/L	ND 5.0	9.4	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Methylene chloride	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Tetrachloroethene	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Toluene	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Trichloroethene	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0

	Sample ID:	*CBT-080408-DT*	*CBT-081108-DT*	*CBT-081708-DT*	*CBT-082508-DT*	*CBT-090208-DT*	*CBT-090708-DT*
	Collection Date:	*08/04/08*	*08/11/08*	*08/17/08*	*08/25/08*	*09/02/08*	*09/07/08*
Parameters	*Units*						
Volatiles							
Benzene	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Carbon disulfide	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Carbon tetrachloride	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Chlorobenzene	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Chloroform	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Methylene chloride	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Tetrachloroethene	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Toluene	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Trichloroethene	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0

Notes:
ND Non-detect at the associated value.

TABLE A-2

CARBON BED INTERSTAGE RESULTS
STAUFFER MANAGEMENT COMPANY LLC
LEWISTON, NEW YORK
2008

	Sample ID:	*CBT-091508-DT*	*CBT-092208-DT*	*CBT-092908-DT*	*CBT-100708-DT*	*CBT-101208-DT*	*CBT-101908-DT*
	Collection Date:	*09/15/08*	*09/22/08*	*09/29/08*	*10/07/08*	*10/12/08*	*10/19/08*
Parameters	*Units*						
Volatiles							
Benzene	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Carbon disulfide	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Carbon tetrachloride	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Chlorobenzene	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Chloroform	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Methylene chloride	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Tetrachloroethene	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Toluene	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Trichloroethene	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0

	Sample ID:	*CBT-102608-DT*	*CBT-110208-DT*	*CBT-110808-SG*	*CBT-111508-DT*	*CBT-112208-DT*	*CBT-120208-DT*
	Collection Date:	*10/26/08*	*11/02/08*	*11/08/08*	*11/15/08*	*11/22/08*	*12/02/08*
Parameters	*Units*						
Volatiles							
Benzene	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Carbon disulfide	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Carbon tetrachloride	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Chlorobenzene	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Chloroform	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Methylene chloride	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Tetrachloroethene	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Toluene	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Trichloroethene	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0

Notes:
ND Non-detect at the associated value.

TABLE A-2

CARBON BED INTERSTAGE RESULTS
STAUFFER MANAGEMENT COMPANY LLC
LEWISTON, NEW YORK
2008

	Sample ID:	*CBT-120608-DT*	*CBT-120608-DT*	*CBT-122108-DT*	*CBT-122808-DT*	*CBT-010509-SG*
	Collection Date:	*12/06/08*	*12/15/08*	*12/21/08*	*12/28/08*	*01/05/09*
Parameters	***Units***					
Volatiles						
Benzene	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Carbon disulfide	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	200
Carbon tetrachloride	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	8.7
Chlorobenzene	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Chloroform	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	290E
Methylene chloride	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	11
Tetrachloroethene	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Toluene	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Trichloroethene	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0

	Sample ID:
	Collection Date:
Parameters	***Units***
Volatiles	
Benzene	µg/L
Carbon disulfide	µg/L
Carbon tetrachloride	µg/L
Chlorobenzene	µg/L
Chloroform	µg/L
Methylene chloride	µg/L
Tetrachloroethene	µg/L
Toluene	µg/L
Trichloroethene	µg/L

Notes:
ND Non-detect at the associated value.

TABLE A-3

EFFLUENT RESULTS
ANALYTICAL DATA
STAUFFER MANAGEMENT COMPANY LLC
LEWISTON, NEW YORK
2008

Sample ID:	*EFF-010708-DT*	*EFF-021008-DT*	*EFF-031008-DT*	*EFF-041408-DT*	*EFF-051208-DT*	*EFF-060508-DT*	*EFF-060808-DJT*
Collection Date:	*01/07/08*	*02/10/08*	*03/10/08*	*04/14/08*	*05/12/08*	*06/05/08*	*06/08/08*
Parameters ***Units***							
Volatiles							
Benzene µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Carbon disulfide µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	5.1	ND 5.0	ND 5.0
Carbon tetrachloride µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Chlorobenzene µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Chloroform µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Methylene chloride µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Tetrachloroethene µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Toluene µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Trichloroethene µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0

Sample ID:	*EFF-071308-DJT*	*EFF-081108-DJT*	*EFF-090708-DJT*	*EFF-101208-DJT*	*EFF-110808-SG*	*EFF-120608-DJT*
Collection Date:	*07/13/08*	*08/11/08*	*09/07/08*	*10/12/08*	*11/08/08*	*12/06/08*
Parameters ***Units***						
Volatiles						
Benzene µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Carbon disulfide µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Carbon tetrachloride µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Chlorobenzene µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Chloroform µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Methylene chloride µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Tetrachloroethene µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Toluene µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Trichloroethene µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0

Non-detect at the associated value.

TABLE B-1

ANALYTICAL RESULTS SUMMARY
QUARTERLY GROUNDWATER PROGRAM
STAUFFER MANAGEMENT COMPANY LLC
LEWISTON, NEW YORK
FEBRUARY 2008

Parameter:		*Benzene*	*Carbon disulfide*	*Carbon tetrachloride*	*Chlorobenzene*	*Chloroform*	*Methylene chloride*	*Tetrachloroethene*	*Toluene*	*Trichloroethene*
Units:		*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*
Sample Location	*Collection Date*									
Extraction Wells										
DPA-201	02/06/08	**DRY**								
DPA-202	02/06/08	ND 500	3200	160000	ND 500	26000	ND 500	3200	ND 500	ND 500
DPA-203	02/06/08	ND 2000	9100	280000	ND 2000	51000	ND 2000	ND 2000	ND 2000	ND 2000
EW-1	02/04/08	ND 50	16000	2200	ND 50	1800	120	ND 50	ND 50	ND 50
EW-2	02/20/08	ND 100	ND 200	2800	ND 100	1200	ND 100	150	ND 100	ND 100
EW-3	02/04/08	ND 100	18000	1700	ND 100	3300	340	220	ND 100	150
EW-4	02/04/08	ND 20	ND 40	880	460	1700	ND 20	470	ND 20	92
EW-5	02/06/08	ND 10	ND 20	2400	ND 10	2000	34	1900	ND 10	1600
EW-6	02/06/08	ND 10	420	12000	ND 10	7700	290	260	ND 10	100
LR-66	02/04/08	ND 50	750	9900	ND 50	830	75	66	ND 50	ND 50
OW-3	02/04/08	ND 500	1200000	100000	ND 500	17000	ND 500	760	ND 500	ND 500
T-4	02/06/08	ND 10	ND 20	ND 10	920	70	ND 10	240	ND 10	42
Upper Lockport Wells										
OW-11	02/04/08	ND 1.0	ND 2.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0
W-16	02/04/08	12	ND 20	410	ND 10	1400	22	300	ND 10	180
W-17	02/04/08	ND 500	ND 1000	17000	ND 500	7700	ND 500	ND 500	ND 500	ND 500
Lockport/Rochester Wells										
LR-16	02/04/08	ND 2.0	380	76	ND 2.0	220	21	32	ND 2.0	2.1
LR-16D (Dup.)	02/04/08	ND 2.0	390	74	ND 2.0	230	21	30	ND 2.0	2.3

Notes:

ND Non-detect at the associated value.

TABLE B-2

ANALYTICAL RESULTS SUMMARY
QUARTERLY GROUNDWATER PROGRAM
STAUFFER MANAGEMENT COMPANY LLC
LEWISTON, NEW YORK
MAY 2008

Parameter:		*Benzene*	*Carbon disulfide*	*Carbon tetrachloride*	*Chlorobenzene*	*Chloroform*	*Methylene chloride*	*Tetrachloroethene*	*Toluene*	*Trichloroethene*
	Units:	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*
Sample Location	*Collection Date*									
Extraction Wells										
DPA-201	05/16/08	ND 50	ND 100	1000	ND 50	450	ND 50	350	ND 50	120
DPA-202	05/09/08	ND 500	4300	190000	ND 500	28000	ND 500	2600	ND 500	ND 500
DPA-203	05/09/08	ND 2000	ND 4000	190000	ND 2000	36000	ND 2000	ND 2000	ND 2000	ND 2000
EW-1	05/09/08	ND 50	16000	6200	ND 50	3400	300	ND 50	ND 50	ND 50
EW-2	05/09/08	ND 100	6700	6600	ND 100	1600	100	ND 100	ND 100	ND 100
EW-3	05/09/08	ND 200	16000	1600	ND 200	2400	ND 200	ND 200	ND 200	ND 200
EW-4	05/13/08	ND 20	96	10000	470	6900	160	230	ND 20	59
EW-5	05/09/08	ND 10	240	1400	ND 10	190	ND 10	140	ND 10	18
EW-6	05/09/08	ND 10	1100	18000	ND 10	6900	230	250	ND 10	67
LR-66	05/09/08	ND 50	190	5800	ND 50	660	68	57	ND 50	ND 50
OW-3	05/16/08	ND 500	670000	200000	ND 500	41000	580	580	ND 500	ND 500
T-4	05/13/08	ND 10	ND 20	ND 10	480	17	ND 10	77	ND 10	17
Upper Lockport Wells										
OW-11	05/13/08	ND 1.0	ND 2.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0
W-11	05/13/08	ND 1.0	ND 2.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	7.9	ND 1.0	8.4
W-16	05/13/08	ND 10	ND 20	250	ND 10	400	ND 10	110	ND 10	140
W-17	05/09/08	ND 500	ND 1000	76000	ND 500	18000	ND 500	ND 500	ND 500	ND 500
W-18R	05/13/08	ND 50	ND 100	4200	ND 50	12000	290	240	ND 50	ND 50
W-19D	05/13/08	ND 1.0	ND 2.0	2.8	ND 1.0	8.5	ND 1.0	6.9	ND 1.0	ND 1.0
W-20	05/13/08	ND 1.0	ND 2.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0
W-22A	05/13/08	ND 1.0	ND 2.0	110	3.0	110	3.1	18	ND 1.0	4.7
W-23C	05/13/08	ND 1.0	ND 2.0	ND 1.0	1.6	ND 1.0	ND 1.0	1.5	ND 1.0	ND 1.0
W-66	05/16/08	ND 1.0	ND 2.0	510	ND 1.0	280	3.4	66	ND 1.0	52
W-67	05/15/08	ND 50	ND 100	2000	ND 50	2100	100	160	ND 50	ND 50

TABLE B-2

ANALYTICAL RESULTS SUMMARY
QUARTERLY GROUNDWATER PROGRAM
STAUFFER MANAGEMENT COMPANY LLC
LEWISTON, NEW YORK
MAY 2008

Parameter:	*Benzene*	*Carbon disulfide*	*Carbon tetrachloride*	*Chlorobenzene*	*Chloroform*	*Methylene chloride*	*Tetrachloroethene*	*Toluene*	*Trichloroethene*
Units:	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*
Sample Location	*Collection Date*								
Lower Lockport Wells									
W-16L	05/13/08	ND 1.0	790	ND 1.0	ND 1.0	ND 1.0	ND 1.0	1.0	ND 1.0	3.6
W-18L	05/16/08	ND 25	ND 50	300	ND 25	2600	32	200	ND 25	ND 25
W-19A	05/13/08	ND 1.0	ND 2.0	2.4	ND 1.0	13	ND 1.0	14	ND 1.0	2.3
W-23B	05/13/08	ND 5.0	10	68	20	390	ND 5.0	220	ND 5.0	99
W-48E	05/12/08	ND 1.0	ND 2.0	120	ND 1.0	88	ND 1.0	32	ND 1.0	7.2
W-50L	05/13/08	ND 1.0	ND 2.0	1.1	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0
W-60L	05/16/08	**DRY**								
W-65	05/13/08	ND 1.0	ND 2.0	3.0	ND 1.0	5.0	ND 1.0	2.2	ND 1.0	1.6
W-66L	05/13/08	ND 1.0	ND 2.0	1.5	ND 1.0	1.3	ND 1.0	ND 1.0	ND 1.0	ND 1.0
W-67L	05/16/08	ND 2.0	ND 4.0	190	ND 2.0	520	ND 2.0	28	ND 2.0	20
W-70L	05/13/08	2.1	5.2	ND 1.0	84	220	3.5	3.6	1.3	23
Lockport/Rochester Wells										
LR-2	05/16/08	ND 20	ND 40	1800	ND 20	1300	89	82	ND 20	60
LR-16	05/16/08	ND 2.0	200	1000	ND 2.0	510	46	60	ND 2.0	ND 2.0
LR-20	05/13/08	ND 1.0	ND 2.0	ND 1.0	3.6	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0
LR-48	05/16/08	ND 1.0	ND 2.0	42	2.7	35	ND 1.0	5.5	ND 1.0	1.1
LR-49	05/13/08	ND 1.0	ND 2.0	2.0	6.2	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0
LR-50	05/13/08	ND 1.0	ND 2.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0
LR-51	05/12/08	ND 1.0	ND 2.0	ND 1.0	5.9	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0
LR-61	05/16/08	ND 100	1000	14000	ND 100	10000	560	380	ND 100	110
LR-61D (Dup.)	05/16/08	ND 100	980	14000	ND 100	10000	560	400	ND 100	ND 100
LR-62	05/13/08	72	46	44	ND 20	150	ND 20	20	ND 20	30
LR-67	05/16/08	ND 50	32000	120	ND 50	510	260	1200	ND 50	ND 50
LR-69	05/09/08	220	ND 4.0	ND 2.0	ND 2.0	ND 2.0	ND 2.0	ND 2.0	40	ND 2.0
LR-69D (Dup.)	05/09/08	240	ND 4.0	ND 2.0	ND 2.0	ND 2.0	ND 2.0	ND 2.0	41	ND 2.0
OW-5	05/16/08	ND 100	90000	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100
W-19B	05/16/08	ND 50	ND 100	1800	170	6200	640	150	ND 50	440

TABLE B-2

ANALYTICAL RESULTS SUMMARY
QUARTERLY GROUNDWATER PROGRAM
STAUFFER MANAGEMENT COMPANY LLC
LEWISTON, NEW YORK
MAY 2008

Sample Location	*Collection Date*	*Parameter:* *Units:*	*Benzene* µg/L	*Carbon disulfide* µg/L	*Carbon tetrachloride* µg/L	*Chlorobenzene* µg/L	*Chloroform* µg/L	*Methylene chloride* µg/L	*Tetrachloroethene* µg/L	*Toluene* µg/L	*Trichloroethene* µg/L
Rochester Wells											
B-02	05/16/08		36	1600	2100	ND 20	4400	510	ND 20	ND 20	ND 20
R-16	05/16/08		81	ND 2.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	39	ND 1.0
R-19	05/16/08		ND 100	1500	12000	ND 100	8600	730	ND 100	ND 100	ND 100
R-48	05/13/08		9.6	32	440	ND 5.0	320	40	8.6	ND 5.0	ND 5.0
R-50	05/16/08		80	240	8200	ND 50	7000	510	130	ND 50	ND 50
R-51	05/16/08		42	9.0	ND 1.0	ND 1.0	17	39	ND 1.0	19	ND 1.0
R-60	05/16/08		66	ND 100	ND 50	ND 50	ND 50	ND 50	ND 50	ND 50	ND 50
R-61	05/16/08		ND 500	110000	ND 500	ND 500	600	ND 500	ND 500	ND 500	ND 500
R-62	05/16/08		ND 1000	140000	ND 1000	ND 1000	2200	ND 1000	ND 1000	ND 1000	ND 1000
R-66	05/16/08		ND 100	7800	10000	ND 100	19000	3600	ND 100	ND 100	ND 100
R-67	05/16/08		ND 1000	660000	ND 1000	ND 1000	1600	ND 1000	ND 1000	ND 1000	ND 1000
R-68	05/16/08		ND 1000	32000	120000	ND 1000	33000	1500	ND 1000	ND 1000	ND 1000
Rinse Blanks											
RB-01	05/13/08		ND 1.0	ND 2.0	2.1	ND 1.0	10	ND 1.0	ND 1.0	ND 1.0	ND 1.0
RB-02	05/16/08		ND 1.0	2.1	3.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0

Notes:
ND: Non-detect at the associated value.
DRY

TABLE B-3

ANALYTICAL RESULTS SUMMARY
QUARTERLY GROUNDWATER SAMPLING
STAUFFER MANAGEMENT COMPANY LLC
LEWISTON, NEW YORK
AUGUST 2008

Parameter:		*Benzene*	*Carbon disulfide*	*Carbon tetrachloride*	*Chlorobenzene*	*Chloroform*	*Methylene chloride*	*Tetrachloroethene*	*Toluene*	*Trichloroethene*
Units:		*ug/L*	*ug/L*	*ug/L*	*ug/L*	*ug/L*	*ug/L*	*ug/L*	*ug/L*	*ug/L*
Sample Location	*Collection Date*									
Extraction Wells										
DPA-201	8/14/2008	ND 10	ND 20	1200	ND 10	500	15	140	ND 10	35
DPA-202	8/14/2008	ND 500	2100	160000	ND 500	22000	ND 500	2000	ND 500	ND 500
DPA-203	8/14/2008	ND 2000	9800	260000	ND 2000	59000	ND 2000	ND 2000	ND 2000	ND 2000
EW-1	8/13/2008	ND 50	14000	6500	ND 50	3300	280	ND 50	ND 50	ND 50
EW-2	8/13/2008	ND 100	4000	5200	ND 100	1000	ND 100	ND 100	ND 100	ND 100
EW-3	8/13/2008	ND 200	18000	1600	ND 200	3300	310	ND 200	ND 200	ND 200
EW-4	8/13/2008	ND 20	ND 40	330	62	3500	130	170	ND 20	35
EW-5	8/13/2008	ND 10	150	1600	ND 10	610	24	140	ND 10	24
EW-6	8/13/2008	ND 10	370	6600	ND 10	5000	200	140	ND 10	71
LR-66	8/13/2008	ND 50	350	7000	ND 50	670	74	ND 50	ND 50	ND 50
OW-3	8/13/2008	ND 500	750000	160000	ND 500	18000	ND 500	ND 500	ND 500	ND 500
T-4	8/13/2008	DRY								
Upper Lockport Wells										
OW-11	8/16/2008	ND 1.0	ND 2.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0
OW-11 (Dup.)	8/16/2008	ND 1.0	ND 2.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0
W-17	8/16/2008	ND 500	4900	190000	ND 500	46000	790	760	ND 500	ND 500

TABLE B-4

ANALYTICAL RESULTS SUMMARY
QUARTERLY GROUNDWATER SAMPLING
STAUFFER MANAGEMENT COMPANY LLC
LEWISTON, NEW YORK
NOVEMBER 2008

Parameter:		*Benzene*	*Carbon disulfide*	*Carbon tetrachloride*	*Chlorobenzene*	*Chloroform*	*Methylene chloride*	*Tetrachloroethene*	*Toluene*	*Trichloroethene*
	Units:	*ug/L*	*ug/L*	*ug/L*	*ug/L*	*ug/L*	*ug/L*	*ug/L*	*ug/L*	*ug/L*
Sample Location	*Collection Date*									
Extraction Wells										
DPA-201	11/14/2008	ND 10	ND 20	260	ND 10	350	ND 10	140	ND 10	200
DPA-202	11/14/2008	ND 500	1800	160000	ND 500	24000	ND 500	2200	ND 500	ND 500
DPA-203	11/14/2008	ND 2000	13000	350000	ND 2000	91000	ND 2000	ND 2000	ND 2000	ND 2000
EW-1	11/13/2008	ND 50	4100	2700	ND 50	1400	130	ND 50	ND 50	ND 50
EW-2	11/13/2008	ND 100	13000	9000	ND 100	1600	ND 100	ND 100	ND 100	ND 100
EW-3	11/13/2008	ND 200	12000	1500	ND 200	3400	260	ND 200	ND 200	ND 200
EW-4	11/8/2008	ND 20	ND 40	2000	720	9300	520	210	ND 20	150
EW-5	11/8/2008	ND 10	150	330	ND 10	230	10	25	ND 10	ND 10
EW-6	11/8/2008	ND 10	190	160000	ND 10	47000	800	1900	ND 10	48
LR-66	11/8/2008	ND 50	320	7800	ND 50	850	110	92	ND 50	ND 50
OW-3	11/13/2008	ND 2000	650000	100000	ND 2000	15000	ND 2000	ND 2000	ND 2000	ND 2000
T-4	11/14/2008	**DRY**								
Upper Lockport Wells										
OW-11	11/14/2008	ND 1.0	ND 2.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0
W-11	11/14/2008	ND 1.0	ND 2.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	3.4	ND 1.0	4.6
W-16	11/14/2008	ND 10	ND 20	450	ND 10	12000	11	260	ND 10	290
W-17	11/14/2008	ND 500	1600	65000	ND 500	30000	620	1000	ND 500	ND 500
W-17 (Dup.)	11/14/2008	ND 500	1700	70000	ND 500	32000	700	1100	ND 500	ND 500
W-18R	11/14/2008	ND 50	ND 100	830	ND 50	7500	93	86	ND 50	ND 50
W-19D	11/14/2008	**DRY**								
W-20	11/14/2008	ND 1.0	ND 2.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0
W-22A	11/14/2008	**DRY**								
W-23C	11/14/2008	ND 1.0	ND 2.0	ND 1.0	1.8	ND 1.0	ND 1.0	1.3	ND 1.0	ND 1.0
W-66	11/15/2008	1.4	2.4	1400	ND 1.0	1100	6.6	130	ND 1.0	94
W-67	11/19/2008	ND 50	3100	13000	ND 50	8800	210	340	ND 50	ND 50

TABLE B-4

ANALYTICAL RESULTS SUMMARY
QUARTERLY GROUNDWATER SAMPLING
STAUFFER MANAGEMENT COMPANY LLC
LEWISTON, NEW YORK
NOVEMBER 2008

Parameter:		*Benzene*	*Carbon disulfide*	*Carbon tetrachloride*	*Chlorobenzene*	*Chloroform*	*Methylene chloride*	*Tetrachloroethene*	*Toluene*	*Trichloroethene*
Units:		*ug/L*	*ug/L*	*ug/L*	*ug/L*	*ug/L*	*ug/L*	*ug/L*	*ug/L*	*ug/L*
Sample Location	*Collection Date*									
Lower Lockport Wells										
W-16L	11/15/2008	ND 1.0	700	13	ND 1.0	120	15	2.4	ND 1.0	6.6
W-18L	11/15/2008	ND 25	ND 50	160	ND 25	1600	26	140	ND 25	25
W-19A	11/15/2008	DRY								
W-23B	11/14/2008	ND 5.0	ND 10	1200	6.5	500	ND 5.0	410	ND 5.0	63
W-48E	11/13/2008	ND 1.0	ND 2.0	84	ND 1.0	62	ND 1.0	26	ND 1.0	5.0
W-50L	11/14/2008	ND 1.0	ND 2.0	2.9	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0
W-60L	11/14/2008	DRY								
W-65	11/14/2008	ND 1.0	ND 2.0	1.3	ND 1.0	1.2	ND 1.0	4.1	ND 1.0	2.4
W-66L	11/15/2008	ND 1.0	ND 2.0	5.2	ND 1.0	1.4	ND 1.0	ND 1.0	ND 1.0	ND 1.0
W-67L	11/15/2008	ND 2.0	ND 4.0	1400	ND 2.0	5300	4.8	74	ND 2.0	31
W-70L	11/18/2008	2.2	3.2	ND 1.0	97	200	1.3	2.4	1.8	24
Lockport/Rochester Wells										
LR-2	11/19/2008	ND 20	ND 40	2200	30	2100	150	120	ND 20	60
LR-2 (Dup.)	11/19/2008	ND 20	ND 40	2200	28	2100	140	110	ND 20	61
LR-16	11/19/2008	ND 2.0	3600	1800	ND 2.0	1400	260	250	ND 2.0	4.2
LR-16 (Dup.)	11/19/2008	ND 2.0	3800	1700	ND 2.0	1400	270	260	ND 2.0	4.4
LR-20	11/15/2008	ND 1.0	ND 2.0	ND 1.0	4.4	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0
LR-48	11/19/2008	ND 1.0	ND 2.0	75	8.2	43	ND 1.0	9.3	ND 1.0	3.0
LR-49	11/15/2008	ND 1.0	ND 2.0	1.2	7.6	1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0
LR-50	11/14/2008	ND 1.0	ND 2.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0
LR-51	11/18/2008	ND 1.0	ND 2.0	ND 1.0	7.4	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0
LR-61	11/19/2008	ND 200	1000	22000	ND 200	12000	380	510	ND 200	ND 200
LR-62	11/18/2008	11	23	93	ND 1.0	85	2.0	6.0	ND 1.0	10
LR-67	11/19/2008	ND 50	18000	270	ND 50	510	160	1100	ND 50	ND 50
LR-69	11/14/2008	180	ND 4.0	ND 2.0	ND 2.0	ND 2.0	ND 2.0	ND 2.0	18	ND 2.0
OW-5	11/15/2008	ND 100	78000	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100
W-19B	11/19/2008	ND 20	40	680	120	2800	540	44	ND 20	360

TABLE B-4

ANALYTICAL RESULTS SUMMARY
QUARTERLY GROUNDWATER SAMPLING
STAUFFER MANAGEMENT COMPANY LLC
LEWISTON, NEW YORK
NOVEMBER 2008

Parameter:		*Benzene*	*Carbon disulfide*	*Carbon tetrachloride*	*Chlorobenzene*	*Chloroform*	*Methylene chloride*	*Tetrachloroethene*	*Toluene*	*Trichloroethene*
Units:		*ug/L*	*ug/L*	*ug/L*	*ug/L*	*ug/L*	*ug/L*	*ug/L*	*ug/L*	*ug/L*
Sample Location	*Collection Date*									
Rochester Wells										
B-02	11/19/2008	ND 50	2400	2200	ND 50	3600	340	ND 50	ND 50	ND 50
R-16	11/14/2008	72	ND 2.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	ND 1.0	36	ND 1.0
R-19	11/18/2008	ND 50	1800	9400	ND 50	6000	520	ND 50	ND 50	ND 50
R-48	11/18/2008	9.1	300	1800	ND 5.0	1600	160	5.5	ND 5.0	ND 5.0
R-50	11/19/2008	ND 50	ND 100	7200	ND 50	6000	320	120	ND 50	ND 50
R-51	11/19/2008	50	7.9	ND 1.0	ND 1.0	12	36	ND 1.0	19	ND 1.0
R-60	11/18/2008	57	180	56	ND 1.0	17	4.8	4.0	2.8	ND 1.0
R-61	11/18/2008	ND 500	100000	ND 500	ND 500	ND 500	ND 500	ND 500	ND 500	ND 500
R-62	11/19/2008	ND 1000	170000	ND 1000	ND 1000	ND 1000	ND 1000	ND 1000	ND 1000	ND 1000
R-66	11/19/2008	ND 100	21000	15000	ND 100	20000	3700	ND 100	ND 100	ND 100
R-67	11/19/2008	ND 1000	570000	ND 1000	ND 1000	ND 1000	ND 1000	ND 1000	ND 1000	ND 1000
R-68	11/19/2008	ND 1000	2800	53000	ND 1000	21000	1300	ND 1000	ND 1000	ND 1000

APPENDIX C

MONITORING WELL INVENTORY
STAUFFER MANAGEMENT COMPANY LLC
LEWISTON, NEW YORK

Date *12/2/2008*

Well No.	*Sounded Depth (Ft. BTOC)*	*Pro-Casing*	*Lock*	*Concrete Collar*
B02	NA	Good	Yes	Good
OW-3	NA	Good	NA	Good
OW-5	102.96	Good	Yes	Good
OW-8	9.86	Good	NA	Good
OW-9	13.96	Good	NA	Good
OW-10	13.18	Good	NA	Good
OW-11	28.81	Good	NA	Cracked
W-11	32.63	Good	Yes	Good
W-16	31.65	Good	Yes	Good
W-16L	67.21	Good	Yes	Good
W-17	29.30	Good	Yes	Good
W-18R	31.79	Good	Yes	Good
W-18L	74.47	Good	Yes	Good
W-19A	40.98	Poor	Yes	Good
W-19B	82.84	Good	Yes	Good
W-19D	24.48	Good	Yes	Good
W-20	28.86	Good	Yes	Good
W-22A	22.68	Good	Yes	Good
W-23B	43.74	Good	Yes	Good
W-23C	23.10	Good	Yes	Cracked
W-48E	40.48	Good	Yes	Good
W-50L	37.88	Good	Yes	Cracked
W-60L	33.94	Good	Yes	Good
W-65	57.70	Good	Yes	Good
W-66	48.17	Good	Yes	Good
W-66L	66.50	Good	Yes	Good
W-67	42.67	Good	Yes	Good
W-67L	72.00	Good	Yes	Good
W-70L	74.30	Good	Yes	Good
LR-2	90.29	Good	Yes	Good
LR-16	93.03	Good	Yes	Good
LR-20	87.11	Good	Yes	Good
LR-48	68.69	Good	Yes	Good
LR-49	75.90	Good	Yes	Good
LR-50	76.36	Good	Yes	Good
LR-51	65.87	Good	Yes	Good
LR-61	99.35	Good	Yes	Good
LR-62	104.83	Good	Yes	Good
LR-66	NA	Good	NA	Good
LR-67	102.59	Good	Yes	Good
LR-69	87.46	Good	Yes	Good
R-16	132.71	Good	Yes	Good
R-19	147.31	Good	Yes	Good
R-48	139.96	Good	Yes	Good
R-50	141.33	Good	Yes	Good
R-51	NA	Good	Yes	Good
R-60	139.19	Good	Yes	Good
R-61	154.83	Good	Yes	Good
R-62	158.78	Good	Yes	Good
R-66	152.58	Good	Yes	Good
R-67	141.90	Good	Yes	Good
R-68	121.97	Good	Yes	Good
DPA-201	24.04	Good	NA	NA
DPA-202	28.82	Good	NA	NA
DPA-203	30.55	Good	NA	NA
EW-1	NA	Good	NA	Good
EW-2	NA	Good	NA	Good
EW-3	NA	Good	NA	Good
EW-4	NA	Good	NA	NA
EW-5	NA	Good	NA	NA
EW-6	NA	Good	NA	NA
T4	27.72	Good	NA	Good

Notes:
Ft. BTOC Feet Below Top of Casing.
NA Not Applicable or Not Available