QUARTERLY MONITORING REPORT
FOURTH QUARTER - 2005

HYDE PARK RRT PROGRAM
NIAGARA FALLS, NEW YORK

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JULY 2006
REF. NO. 1069 (349)

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1.0 INTRODUCTION

Reporting of monitoring data for the Non-Aqueous Phase Liquid (NAPL) Plume Containment System, Aqueous Phase Liquid (APL) Plume Containment System, and Overburden Barrier Collection System (OBCS) began in 1993. Monitoring reports for the NAPL and APL Plume Containment Systems, as well as the OBCS, have been submitted quarterly since 1996. These quarterly monitoring reports have also included data from the Leachate Treatment System, Residential Community Monitoring Program, and NAPL accumulation and recovery.

All monitoring data presented have been collected and presented in accordance with the following documents:

i) "Stipulation on Requisite Remedial Technology Program," dated November 13, 1995; and

ii) "Long-Term Monitoring Manual, Hydraulic (Water Levels), Physical (NAPL Presence-Seeps), Chemical (Groundwater Sampling), Hyde Park Landfill Site," dated October 9, 1998.

Miller Springs Remediation Management, Inc. (MSRMI), an affiliate of Occidental Chemical Corporation, has been assigned the responsibility of managing the Hyde Park Requisite Remedial Technology (RRT) Program.

1.1 REPORT ORGANIZATION

The report has been prepared to present monitoring data collected during the fourth quarter of 2005. The report is organized as follows:

- **Section 1.0 Introduction:** Section 1.0 presents a summary of the project, its administration, and the organization of the report;
- **Section 2.0 NAPL Plume Containment System:** Section 2.0 presents NAPL purge well operating data, performance monitoring data, statistical analyses of analytical data, and descriptions of non-routine investigations and activities performed during this reporting period;
- **Section 3.0 APL Plume Containment System:** Section 3.0 presents APL purge well (APW) operating data, performance monitoring data, APL plume flux calculations where required, and descriptions of non-routine investigations and activities performed during this reporting period;

- **Section 4.0 Overburden Monitoring Data:** Section 4.0 presents performance data from the OBCS and Residential Community Monitoring Well Network, and descriptions of non-routine investigations and activities performed during this reporting period;
- **Section 5.0 Leachate Treatment Facility:** Section 5.0 presents analytical data collected from the Leachate Treatment Facility; and
- **Section 6.0 NAPL Accumulation:** Section 6.0 presents a summary of the volume of NAPL collected from the Bedrock and Overburden Containment Systems and volumes of NAPL shipped off-Site for incineration.

2.0 NAPL PLUME CONTAINMENT SYSTEM

The objective of the NAPL Plume Containment System as stated in the RRT is to design, install, and monitor a system to contain, to the extent practicable, NAPL and APL within the NAPL Plume found in the Lockport Bedrock and to maximize collection of contained NAPL.

Operation of the NAPL Plume Containment System commenced in 1994 and consisted of extraction from a series of six purge wells. The system has been modified over time to better achieve its objectives. The system presently consists of 17 NAPL Plume Containment Purge Wells, as shown on Figure 2.1, and 113 performance monitoring piezometers located in 45 wells. The piezometers are installed at specific depths in flow zones, within the Lockport bedrock formation. The locations of the purge wells, monitoring wells, and piezometers for each flow zone are shown on Figures 2.2 through 2.9.

2.1 PURGE WELL OPERATIONS

The purge well system was operated continuously during the fourth quarter of 2005 with no shutdowns.

Maintenance of the purge well system was performed during the fourth quarter of 2005 as follows:

- November 1 — Replaced pump and motor at PW-6MR;
- November 2 — Replaced pump and motor at PW-2L;
- November 2 — Replaced pump and motor at PW-3L;
- November 8 — Replaced pump and motor at PW-5UR;
- November 18 — Replaced pump and motor at PW-1U;
- December 2 — Replaced pump and motor at PW-1U;
- December 15 — Replaced pump and motor at PW-7U; and
- December 29 — Replaced pump and motor at PW-2UR.

The average operating pumping rates and setpoint elevations at each of the bedrock purge wells during the fourth quarter of 2005 are presented in Table 2.1.

Based on the metered flow from individual wells, the average operating pumping rate of the NAPL Plume Containment System during operation over the fourth quarter of 2005 is as follows:

Quarter	*Average Rate (gallons/minute)*	*Total Pumped (gallons)*
Fourth	67.0	8,883,099

2.2 CONTAINMENT SYSTEM MONITORING

Routine performance monitoring of the NAPL Plume Containment System consists of hydraulic, chemical, and NAPL presence monitoring. The performance monitoring well network for chemical and NAPL monitoring is presented in the "NAPL Plume Assessment and System Design Recommendations" report dated July 1995, and modified most recently during the fourth quarter of 2000. The hydraulic monitoring program for the NAPL Plume Containment System was modified during the second quarter of 2002, with the submission of the report entitled "Work Plan for the Site Characterization Report - Hydrologic Characterization" dated April 5, 2002. With the submission of that Work Plan, MSRMI discontinued the hydraulic monitoring program and began work to install a monitoring network representative of the significant discrete flow zones beneath the Site. This network consists of 113 piezometers to monitor eight of the eleven flow zones. Three flow zones were not monitored due to extremely low transmissivities or close proximity to monitored flow zones.

The monitoring conducted during the fourth quarter of 2005 is described in the following subsections.

2.2.1 HYDRAULIC MONITORING

The hydraulic monitoring of the 113 piezometers began in mid-December 2002 and was continued through November of 2004. This monitoring was accomplished by installing transducers in each piezometer. These transducers were programmed to record water levels at 10-minute intervals. Periodic measurements were also manually taken to verify the accuracy of the recorded data.

The hydraulic monitoring between December 2002 and November 2004 resulted in the completion of the following reports, "Site Characterization Report - Bedrock Groundwater Quality, April 2004" and "Comprehensive Remedial Characterization Report, August 2004", which defined the NAPL plume boundaries for each of the (11) flow zones.

Manual water levels were taken in November 2005 and are presented in Table 2.2.

2.2.2 NAPL MONITORING

NAPL monitoring is performed to provide information to assist in the evaluation of containment system effectiveness. NAPL monitoring consists of:

i) the physical inspection of monitoring wells located both inside and outside the NAPL plumes for the presence of NAPL; and

ii) determination of the volume of NAPL removed by the NAPL Plume Containment System.

2.2.2.1 NAPL PRESENCE CHECKS

During the fourth quarter of 2005, a check for NAPL presence was performed at each well using a weighted tape measure with a length of cotton rope attached. This NAPL presence check methodology was summarized in the memorandum entitled "NAPL Presence Check Method Comparison, Hyde Park RRT Program" dated January 12, 2001. A summary of the findings of the NAPL presence checks performed in the fourth quarter of 2005 is presented in Table 2.3.

2.2.2.2 NAPL ACCUMULATION RATIO

In previous years, in accordance with the "Future Monitoring and Assessment Requirements," Section 4.1.2.2, dated 1996, a determination of the ratio of NAPL/APL extracted through the operation of the bedrock NAPL plume containment system occurred during each quarter.

Based on the data obtained during the re-characterization of the Lockport Bedrock between 2002 and 2004, NAPL plume boundaries were defined for each of the eleven flow zones. The NAPL plumes are not expanding and appear to be shrinking in some areas. Due to these findings of the site, this sampling was not done.

2.2.3 CHEMICAL MONITORING

Traditionally groundwater samples were collected and analyzed each quarter to obtain data for use in the evaluation of the NAPL Plume Containment System. Through the end of 2002, the groundwater monitoring consisted of the collection of samples from the outer well of each of the bedrock performance well pairs.

With the publication of the "Site Characterization Report - Revised Geologic and Hydrogeologic Characterization" and the "Site Characterization Report - Hydrologic Characterization," it was demonstrated that, in the Lockport formation, instead of three dominant water bearing zones, there are actually eleven flow zones. It was also discovered that numerous monitoring wells are open over multiple flow zones allowing groundwater from different flow zones to mix. This "mixing" not only confounded the hydraulics of the flow zones but also prevented the chemical monitoring from showing a true spatial understanding of the three dimensional APL plume distribution.

The comprehensive sampling analysis program between December 2002 and November 2004 resulted in the completion of the following reports, "Site Characterization Report - Bedrock Groundwater Quality, April 2004" and "Comprehensive Remedial Characterization Report, August 2004", which defined the NAPL plume boundaries for each of the eleven flow zones.

Additionally, the sampling analysis program was used to establish the "Performance Monitoring Plan" submitted to the Agencies March 2, 2005. It is MSRMI intent for this Plan, once approved, to supercede all the monitoring requirements spelled-out in the RRT.

2.4 SUMMARY

The hydraulic monitoring of the 113 piezometers concluded in November 2004. Publication of the "Site Characterization Report - Bedrock Groundwater Quality" and "Comprehensive Remedial Characterization", defined the NAPL plume boundaries for each of the eleven flow zones.

The "Performance Monitoring Plan" submitted to the Agencies March 2005 is intended to supercede all the monitoring requirements spelled-out in the RRT, once approved by the agencies.

The water levels in the operating bedrock purge wells were generally at or very close to their setpoint elevations during the fourth quarter of 2005. The average pumping rate for the system during this quarter was approximately 67.0 gpm.

During the fourth quarter of 2005, approximately 8.9 million gallons of groundwater were pumped from the bedrock by the NAPL Plume Containment System purge wells.

NAPL monitoring indicates that NAPL is not present in any monitoring wells or piezometers located outside of the NAPL plume boundary.

3.0 APL PLUME CONTAINMENT SYSTEM

The objective of the APL Plume Containment System is to contain, by pumping, APL in the Lockport Bedrock within the area of the remediated APL plume and to eliminate seepage of chemicals at the gorge face to the extent practicable. The goal is to achieve flow convergence towards the purge wells and eliminate seepage at the gorge face to the extent practicable.

In previous years, the APL Plume Containment System consisted of two purge wells (APW-1 and APW-2) and four monitoring well pairs (ABP-1/ABP-2, ABP-3/ABP-4, ABP-5/ABP-6, and ABP-7/ABP-8). However, during 2002, wells ABP-1 and APB-7 were retrofit for use in the overall NAPL Plume Monitoring Program. The locations of these wells are shown on Figure 3.1.

The APL Plume Containment System also included three clusters of APL Flux Monitoring Wells (AFWs), AFW-1U/M/L, AFW-2U/M/L, and AFW-3U/M/L oriented toward the west of the Site and located south of the remediated APL plume (as shown on Figure 3.2). The performance criteria for the AFWs is to monitor the APL plume flux to the Niagara River through chemical monitoring and to determine whether the flux measured in these wells exceeds the Flux Action Levels specified in the RRT Stipulation.

In 2002, AFW-1U/M/L and AFW-2U/M/L were retrofit with piezometers. As a result, a new sampling method for APL Flux Monitoring was required to properly obtain a composite sample. A new method has been presented to the Agencies in March 2005 as part of the Performance Monitoring Plan. To date this plan has not been approved.

3.1 APL PURGE WELL OPERATIONS

During the fourth quarter of 2005, automated pump operations were uninterrupted and groundwater levels within each purge well were generally maintained within their respective design settings.

No maintenance of the APWs was performed during the fourth quarter of 2005.

During the fourth quarter of 2005, approximately 0.21 MM gallons of groundwater were pumped from the bedrock to the leachate storage tanks by the APL Plume Containment System purge wells.

3.2 PERFORMANCE MONITORING

3.2.1 WATER LEVEL MEASUREMENTS

The hydraulic monitoring program for the APL Plume Containment System was modified during the second quarter of 2002 and continued through the fourth quarter of 2004 with the submission of the Hydrologic Characterization Work Plan. With the submission of this work plan, MSRMI discontinued the hydraulic monitoring plan until a revised monitoring network representative of the significant discrete flow zones beneath the Site is established.

The Publication of the "Site Characterization Report – Bedrock Groundwater Quality", dated April 2004 and "Comprehensive Remedial Characterization", dated August 2004, defined the eleven discrete flow zones. The information obtained in these reports was used to establish the "Performance Monitoring Plan" submitted to the Agencies March 2, 2005. It is MSRMI intent for this Plan, once approved, to supercede all the monitoring requirements spelled-out in the RRT.

3.2.2 GRADIENT EVALUATION

With the discontinuation of the hydraulic monitoring program, evaluations of hydraulic gradient evaluations have also been discontinued. A revised hydraulic gradient monitoring program will be developed following the revised hydrologic characterization of the Site.

3.2.3 SEEP FLOW

The four gorge face seeps (GF-S1, GF-S2, GF-S3, and GF-S4 shown of Figure 3.3) were inspected this quarter and flows were estimated. Results are presented below in gallons per minute (gpm). A cumulative history of the seep flow rate estimations is included on the enclosed CD under the filename HIST.pdf.

Quarter	*GF-S1*	*GF-S2*	*GF-S3*	*GF-S4*
Fourth	0	1	0	1

3.2.4 CHEMICAL MONITORING

Analytical groundwater samples are normally collected each quarter from the APW and AFW wells in order to assist in the evaluation of the APL Plume Containment System, and calculate the APL Plume flux when required. Two of the AFW well clusters (AFW-1 and AFW-2) were retrofit with 1-inch diameter piezometers during the second quarter of 2002. As a result of the retrofitting of AFW-1 and AFW-2, sampling procedures for collecting the APW/AFW composite sample require modification. A draft Work Plan presenting new procedures for collecting the APW/AFW composite sample was presented to the Agencies' field representatives during a project review meeting on September 17, 2002. The proposed sampling procedures have not been approved; therefore, an APW/AFW composite sample was not collected during the fourth quarter of 2005.

Chemical monitoring of the APL Plume Containment system includes semiannual sampling of the APWs in February and August. Samples collected from these wells are analyzed for the Collected Liquids Monitoring Parameters (CLMPs) as described in Section 9.9 of the RRT. This sampling has been discontinued pending approval of the "Performance Monitoring Plan" which was submitted to the Agencies March 2, 2005.

3.2.4.1 APW CLMP/ACIDS SAMPLING AND ANALYSES

In previous years, in accordance with the RRT Stipulation (Section 11.1.3 Collected APL Monitoring and Section 9.9 CLMPs), the APWs were sampled semiannually, generally during the first and third quarters. Samples were analyzed for the CLMPs, as well as benzoic, monochlorobenzoic (sum o, p, and m isomers), and chlorendic acids.

This sampling has been discontinued pending approval of the "Performance Monitoring Plan" which was submitted to the Agencies March 2, 2005.

3.2.4.2 APL PLUME FLUX CALCULATIONS

A performance criteria for the APL Plume Containment System beyond the boundary of the remediated APL Plume is maintaining the mass flux of each compound to the Niagara River Gorge Face below the Mass Flux Action Levels. When a parameter is reported at a concentration which exceeds its respective APL Plume Flux Parameter detection limit in the composite sample, the chemical flux of that parameter to the Niagara River from the Lockport Bedrock must be calculated. The calculated flux in

grams per year (g/year) or pounds per day (lbs/day) is then compared to its Flux Action Level as required under the RRT Stipulation.

Analytical results are provided in Table 3.1 from a one-time sampling event of the APWs and AFWs which took place in November 2004. The composite sample analyses indicated that the concentrations of the APL Plume Flux Parameters were all below their respective Flux Action Levels, with the exception of Perchloropentacyclodecane (Mirex). In the case of Mirex, results were reported as non-detect at a level (9.52 µg /L) above the Target Detection Level (1.0 µg/L). The calculated flux for Mirex was calculated to be 1.28 g/year. This level is far below the Flux Action Level of 0.005 lbs/day (827 g/year). This calculation used a groundwater flow which was based on the cross sectional area of the bedrock flow of the wells along the face of the gorge (AFWs and APWs). The calculation of the flow used historically has been 60 gallons per day as presented in the Third Quarter 1997 Bedrock Monitoring Report, Sections 3.4 and 3.5. However, due to the containment of the groundwater flow, we do not believe that any flux currently exists from any of the flow zones. The Publication of the "Site Characterization Report – Bedrock Groundwater Quality", dated April 2004 and "Comprehensive Remedial Characterization", dated August 2004, discuss the flow zones.

3.3 NON-ROUTINE INVESTIGATIONS AND ACTIVITIES

During the fourth quarter of 2005, no non-routine activities were performed specifically for the APL Plume Containment System.

3.4 SUMMARY

During the fourth quarter of 2005, approximately 0.21 MM gallons of groundwater were pumped from the bedrock by the APL Plume Containment System purge wells and treated at the Hyde Park Treatment System.

4.0 OVERBURDEN MONITORING DATA

The required overburden monitoring reporting includes monitoring data for the following programs:

i) OBCS (Section 4.1); and

ii) Residential Community Monitoring Program (Section 4.2).

4.1 OVERBURDEN BARRIER COLLECTION SYSTEM

The objective of the OBCS is to contain the lateral migration of NAPL in the overburden and, to the extent practicable, contain APL migration in the overburden.

The OBCS consists of an overburden collection trench that extends around the north, west, and south of the Site and is located within the limits of the overburden APL plume. Eight pairs of OBCS monitoring wells (OMWs) are located beyond the OBCS alignment, with one well from each pair installed within the overburden APL plume limits and the second well from each pair installed outside the overburden APL plume limits. The locations of the OMWs are shown on Figure 4.1.

No maintenance of the wet wells was performed during the fourth quarter of 2005.

During the fourth quarter of 2005, approximately 4 MM gallons of groundwater were collected from the overburden by the OBCS System and treated.

4.1.1 PERFORMANCE MONITORING

Hydraulic and NAPL monitoring are performed at the OMWs in order to assess the performance of the OBCS system. Hydraulic data are used to determine whether or not an inward horizontal gradient across the APL plume boundary is being created by the OBCS or if a downward vertical gradient exists between the overburden and upper bedrock. NAPL monitoring is performed as an additional assessment in order to determine whether or not horizontal migration of overburden NAPL is occurring.

4.1.1.1 GRADIENT EVALUATION

Hydraulic monitoring of the OBCS is performed by collecting water level measurements from 16 OMWs installed around the Hyde Park Landfill. Hydraulic monitoring of the 16 OMWs was performed monthly for the fourth quarter of 2005. Table 4.1 summarizes the hydraulic head differential gradients (referred to herein as hydraulic gradients) for the fourth quarter of 2005. The cumulative hydraulic monitoring data for the OBCS from 1992 to present are included on the enclosed CD under the filename HIST.pdf.

The data presented in Table 4.1 demonstrate that an inward horizontal hydraulic gradient within the overburden regime was achieved throughout the fourth quarter of 2005 at monitoring well pair OMW-10R/OMW-9, OMW-15/OMW-16R, OMW-1/OMW-2, and OMW-5R/OMW-6. There was an outward gradient at OMW-3/OMW-4R, OMW-11R/OMW-12R, OMW-13R/OMW-14R, and OMW-8R2/OMW-7 for all of the fourth quarter.

The outward gradients observed at OBCS well pairs do not necessarily indicate a lack of control of the overburden water. The use of well pairs as a determination of the control of overburden water is superceded in the "Performance Monitoring Plan". This plan evaluates containment based on target manhole elevations and an annual evaluation which is a more accurate evaluation of the overburden water flows.

4.1.1.2 OVERBURDEN NAPL PRESENCE CHECKS

In accordance with Section 3.6.2.3 of the RRT Stipulation, a NAPL presence check was conducted at all overburden wells within the overburden APL plume but outside the defined (1996) overburden NAPL plume limit. Table 4.2 summarizes the results of the NAPL presence checks conducted during the fourth quarter of 2005.

4.2 RESIDENTIAL COMMUNITY MONITORING PROGRAM

The objective of the Residential Community Monitoring Program is to supplement other monitoring and remedial programs by monitoring to provide "early warning" of APL plume migration toward residential areas, taking all feasible actions to prevent or remediate such migration to residential areas and taking any additional action required to protect those living in the Hyde Park – Bloody Run area.

In order to meet this objective, 11 pairs of Community Monitoring Wells (CMWs), each consisting of one overburden and one shallow bedrock well, are located in the residential areas around the Hyde Park Landfill Site. These wells provide an early warning for possible APL plume migration towards the residential areas. The overburden (OB) wells are screened to within 1 foot of the bottom of the clay layer overlying the bedrock, while the shallow bedrock (SB) wells extend approximately 15 feet below the top of bedrock. The locations of these wells are shown on Figure 4.2.

4.2.1 PERFORMANCE MONITORING

The performance monitoring activities required for the Residential Community Monitoring Program are as follows:

i) quarterly monitoring of overburden and bedrock groundwater elevations;

ii) analyses of soil air samples where no overburden groundwater is present; and

iii) annual groundwater sampling and analysis of CMW-2OB.

4.2.1.1 HYDRAULIC MONITORING AND GRADIENT EVALUATION

During the fourth quarter of 2005, water levels were measured at the CMWs during the month of November. The water levels are presented in Table 4.3. Table 4.4 summarizes the vertical hydraulic head differential gradients (referred to herein as hydraulic gradients) for the quarter. The cumulative hydraulic monitoring data for the CMWs from 1987 through this reporting period are included on the enclosed CD under the filename HIST.pdf.

The calculation of vertical hydraulic gradients indicates that downward hydraulic gradients were present during the month of November 2005 at all well pairs where water was present in the overburden.

4.2.1.2 SOIL VAPOR SAMPLING

The "Indoor Air Quality Monitoring Plan" was approved and instituted in 2004. This new plan specifies the use of a PID, with a detection level of parts per billion (ppb), for performing the soil vapor monitoring. This testing was not done during the fourth quarter of 2005.

4.2.1.3 ANNUAL GROUNDWATER SAMPLING

Sampling of CMW-2OB is performed annually each year as an early warning of APL migration in the overburden. This sampling event is performed in conjunction with quarterly sampling activities during the third quarter (August through October) of each year. This sampling has been discontinued pending approval of the "Performance Monitoring Plan" which was submitted to the Agencies March 2, 2005.

4.3 NON-ROUTINE INVESTIGATIONS AND ACTIVITIES

During the fourth quarter of 2005, there were no non-routine investigations or field activities conducted with regards to the overburden systems.

4.4 SUMMARY

4.4.1 OVERBURDEN BARRIER COLLECTION SYSTEM

During the fourth quarter of 2005, approximately 4 MM gallons of groundwater were collected from the overburden by the OBCS System and treated at the Hyde Park Treatment System.

A review of the hydraulic monitoring data for the fourth quarter of 2005 indicates that, in general, inward horizontal hydraulic gradients were present at four of the eight monitoring well pairs.

NAPL was not observed in any of the overburden monitoring wells, indicating that the OBCS continues to serve as an effective barrier to off-Site NAPL migration.

4.4.2 RESIDENTIAL COMMUNITY MONITORING PROGRAM

Downward vertical hydraulic gradients were achieved in the fourth quarter of 2005 at all of the monitored well pairs where groundwater was present in the overburden.

5.0 LEACHATE TREATMENT SYSTEM

In accordance with Section 11.1.4 of the RRT and Addendum I of the Settlement Agreement, the midpoint and effluent of the APL treatment system are monitored. Sampling is required at daily, weekly, and monthly intervals for various parameter groups in order to determine whether and when the carbon beds need to be replaced or other maintenance activities need to be undertaken.

5.1 EFFLUENT ANALYSIS

The APL treatment system effluent was sampled daily, weekly, and monthly during the fourth quarter of 2005. The sample data is grouped by frequency of sample collection for discussion in the following subsections. The frequency of sample collection and the analyses performed have been modified in the "Performance Monitoring Plan" based on 15 years of operating experience.

5.1.1 DAILY SAMPLING

Table 5.1 summarizes the results of the daily composite sampling. No exceedances of the treatment levels were reported in the fourth quarter of 2005 for any of the three daily parameters; pH, total organic carbon (TOC), and phenol.

5.1.2 WEEKLY SAMPLING

Table 5.2 summarizes the results of the weekly composite sampling which was done during the fourth quarter of 2005. No exceedances of the treatment levels were reported in the fourth quarter of 2005 for any of the five weekly parameters or their isomers from the collected effluent samples.

5.1.3 MONTHLY SAMPLING

Table 5.3 summarizes the results of the monthly composite sampling which was done during the fourth quarter of 2005. No exceedances of the treatment levels were reported in the fourth quarter of 2005 for any of the eight parameters or their isomers.

6.0 NAPL ACCUMULATION

The well extraction systems and manual NAPL removal collected approximately 439 gallons of NAPL during the fourth quarter of 2005.

6.1 DECANTERS

Manual NAPL level measurements are conducted monthly in the three decanters. The levels are extrapolated to estimate the quantity of NAPL present in each of the decanters. A description of each decanter's source is provided below:

- Decanter No. 1 Bedrock Purge Well System;
- Decanter No. 2 OBCS; and
- Decanter No. 3 Source Control System.

The total NAPL accumulated during the fourth quarter of 2005 was 345 gallons.

NAPL measurements in the decanters are subject to a measurement error of ±6 inches, which equates to ±188 gallons of NAPL.

Decanter No. 3 was taken out of service in August 2005 for inspection and maintenance. The decanter was cleaned, inspected, and placed back into service in October 2005.

6.2 MANUAL RECOVERY

In an effort to enhance NAPL recovery at the Site, MSRMI has voluntarily initiated manual NAPL removal from monitoring wells where sufficient NAPL volumes exist. During the fourth quarter of 2005, approximately 94 gallons of NAPL were manually recovered.

6.3 INCINERATION

During the fourth quarter of 2005, 3,300 gallons of NAPL were shipped from the Hyde Park Site to Clean Harbors in Deer Park for incineration.

FIGURES

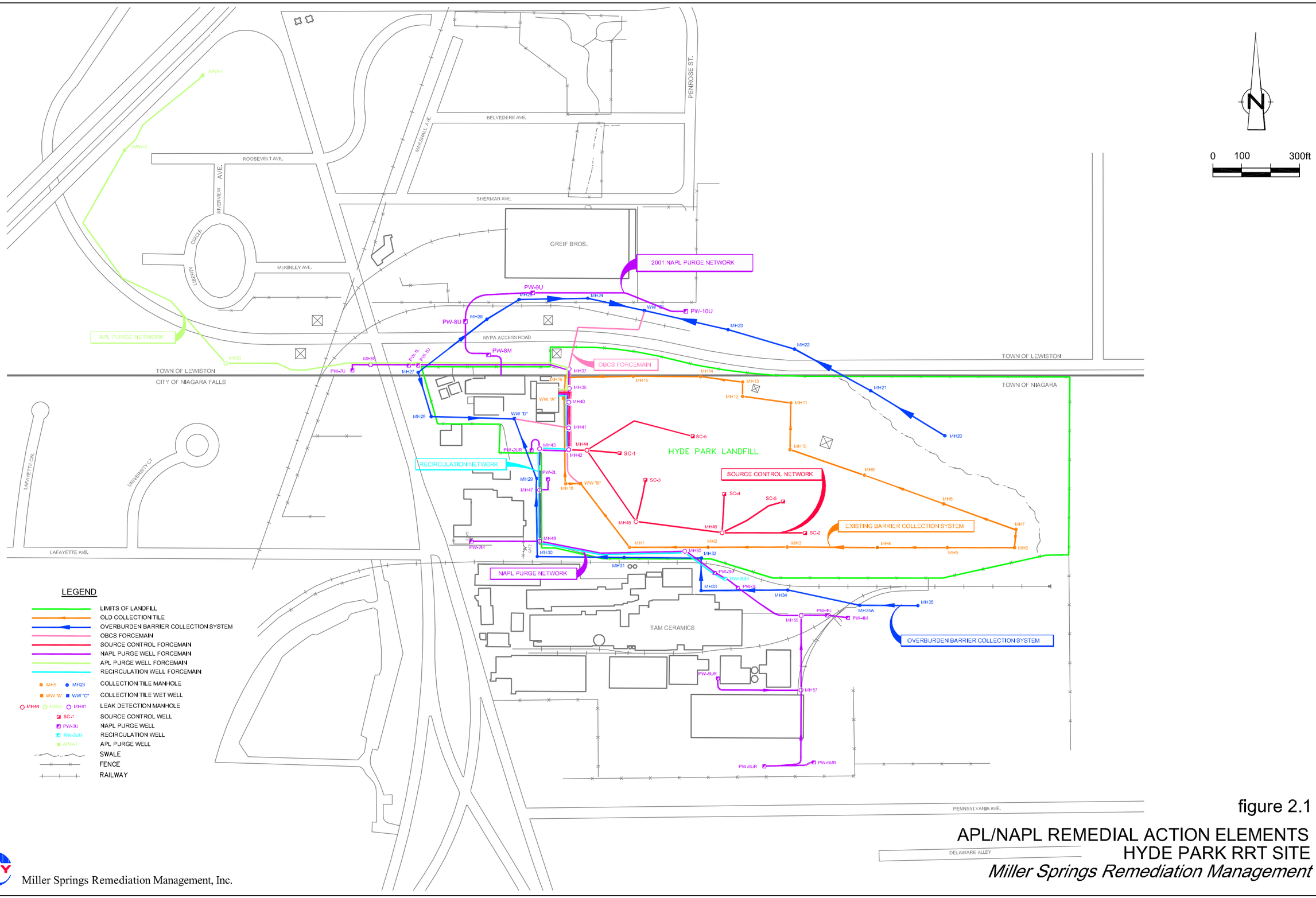


figure 2.1

APL/NAPL REMEDIAL ACTION ELEMENTS
HYDE PARK RRT SITE
Miller Springs Remediation Management

Miller Springs Remediation Management, Inc.

01069-30(349)GN-NF001 JAN 17/2006

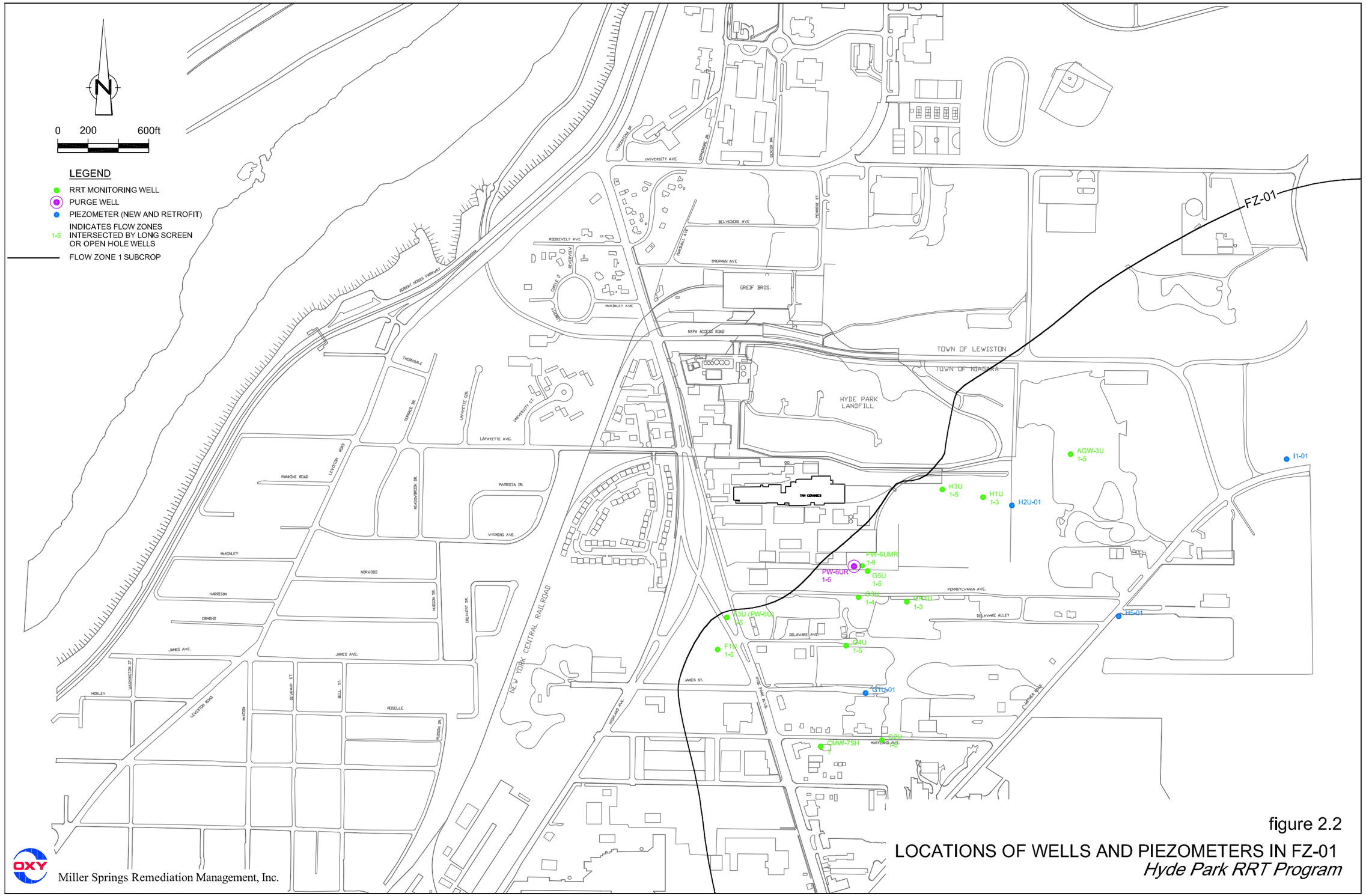


figure 2.2

LOCATIONS OF WELLS AND PIEZOMETERS IN FZ-01
Hyde Park RRT Program

Miller Springs Remediation Management, Inc.

01069-30(349)GN-NF008 MAR 27/2006

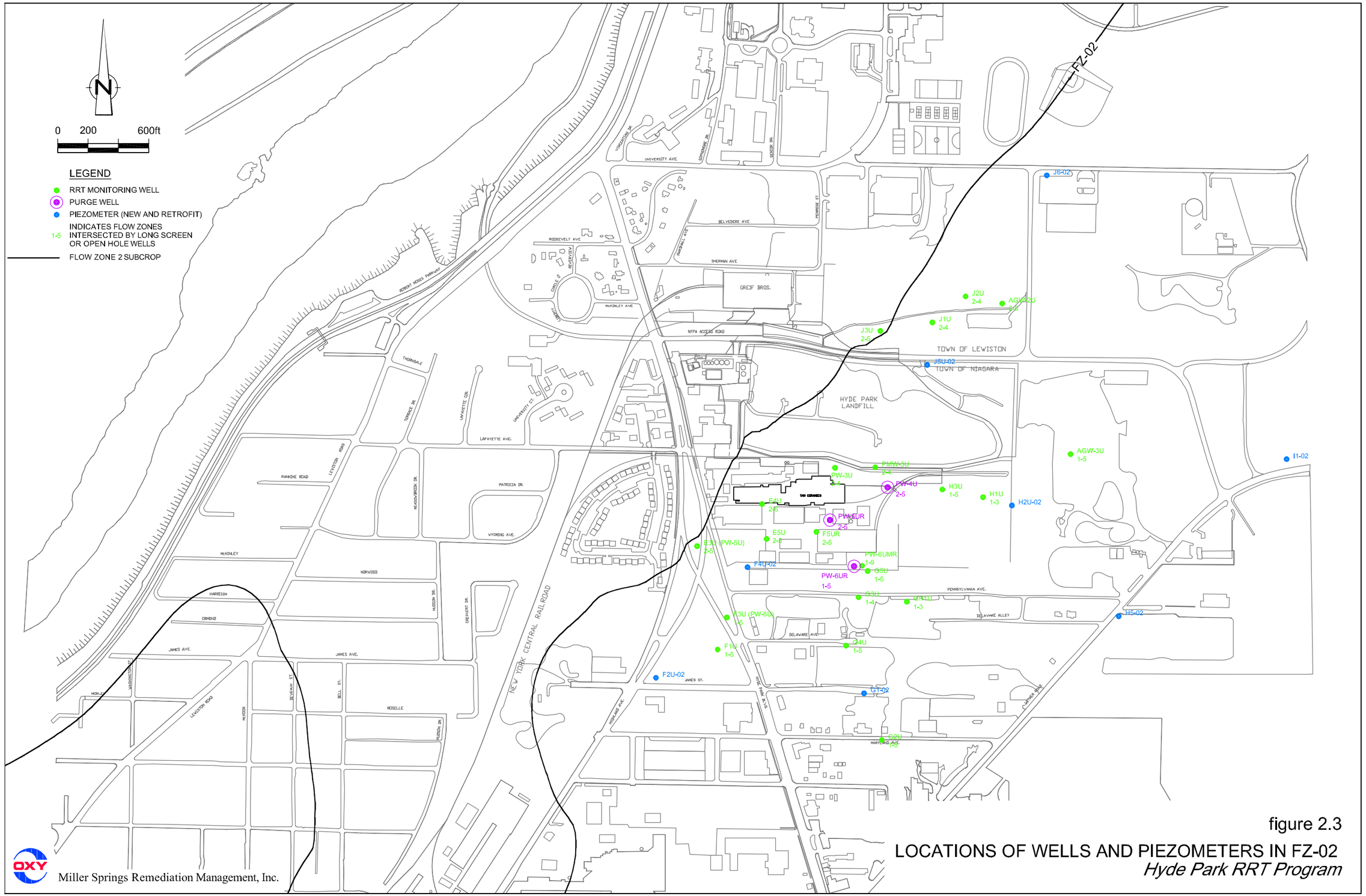
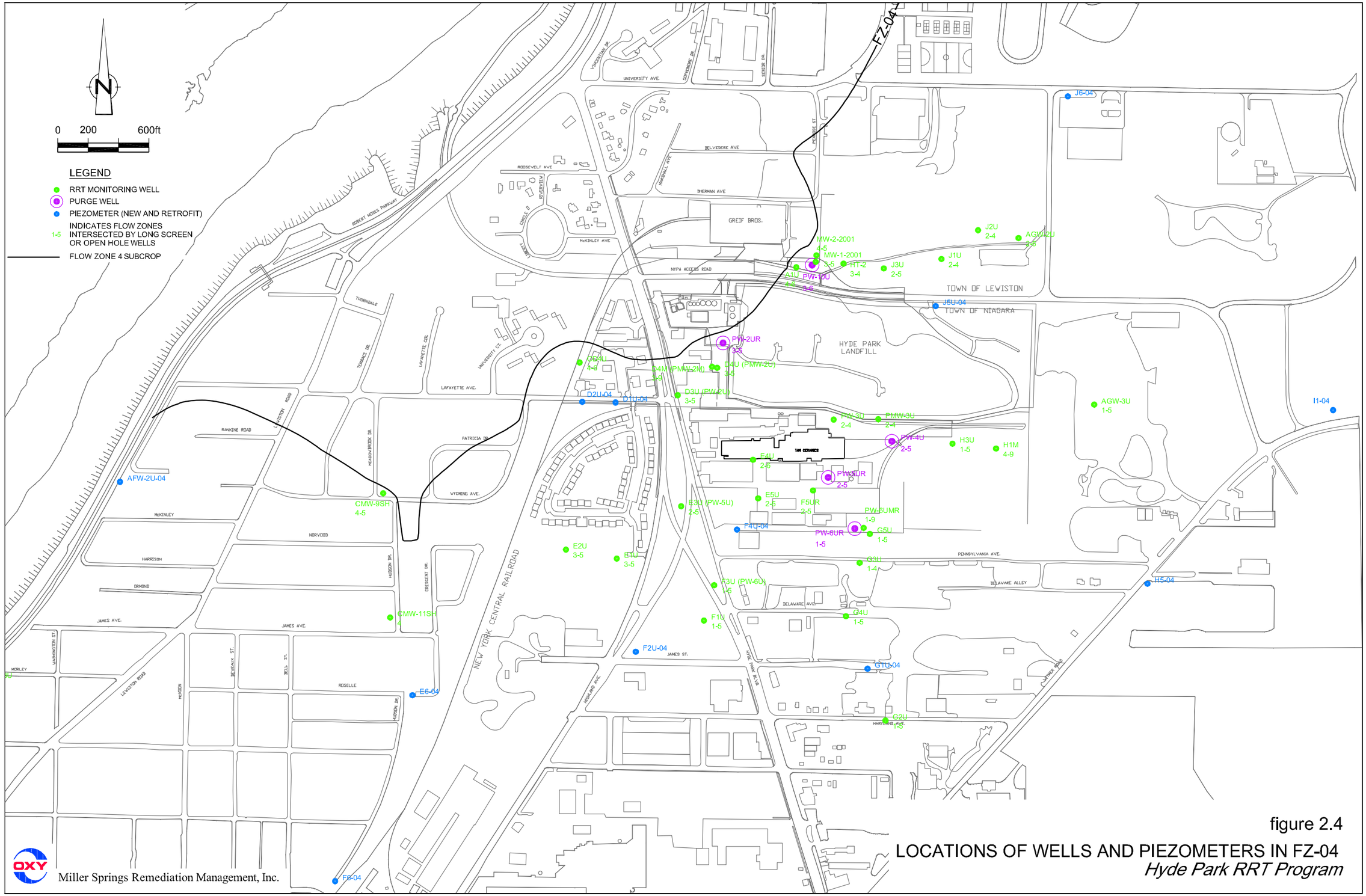


figure 2.3

LOCATIONS OF WELLS AND PIEZOMETERS IN FZ-02
Hyde Park RRT Program

Miller Springs Remediation Management, Inc.

01069-30(349)GN-NF008 MAR 27/2006



Miller Springs Remediation Management, Inc.

figure 2.4

LOCATIONS OF WELLS AND PIEZOMETERS IN FZ-04

Hyde Park RRT Program

01069-30(349)GN-NF008 MAR 27/2006

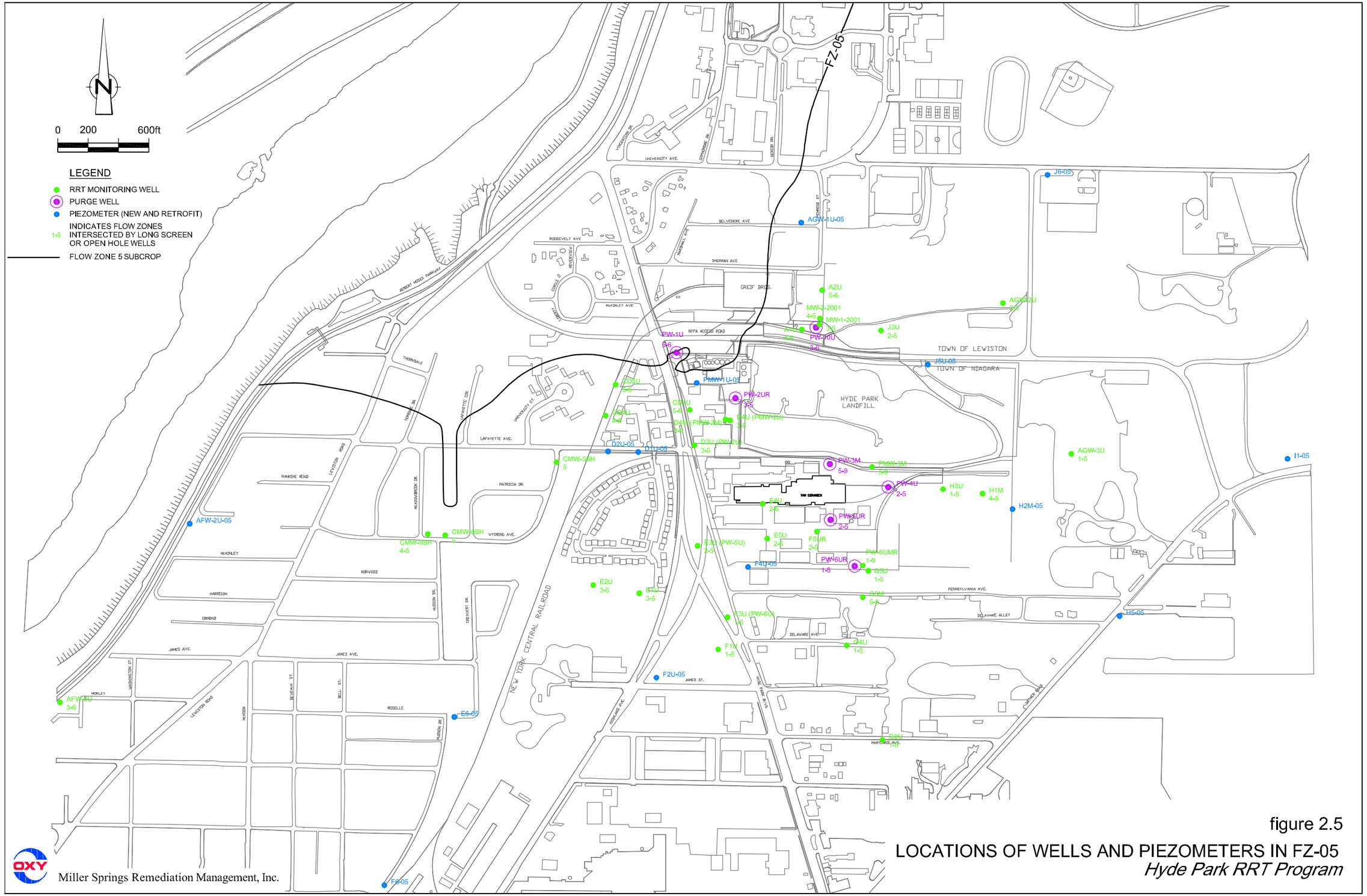


figure 2.5

LOCATIONS OF WELLS AND PIEZOMETERS IN FZ-05

Hyde Park RRT Program

Miller Springs Remediation Management, Inc.

01069-30(349)GN-NF008 MAR 27/2006

0 200 600ft

LEGEND

- RRT MONITORING WELL
- PURGE WELL
- PIEZOMETER (NEW AND RETROFIT)
- 1-5 INDICATES FLOW ZONES INTERSECTED BY LONG SCREEN OR OPEN HOLE WELLS
- FLOW ZONE 6 SUBCROP

FZ-06

figure 2.6

LOCATIONS OF WELLS AND PIEZOMETERS IN FZ-06

Hyde Park RRT Program

Miller Springs Remediation Management, Inc.

01069-30(349)GN-NF008 MAR 27/2006

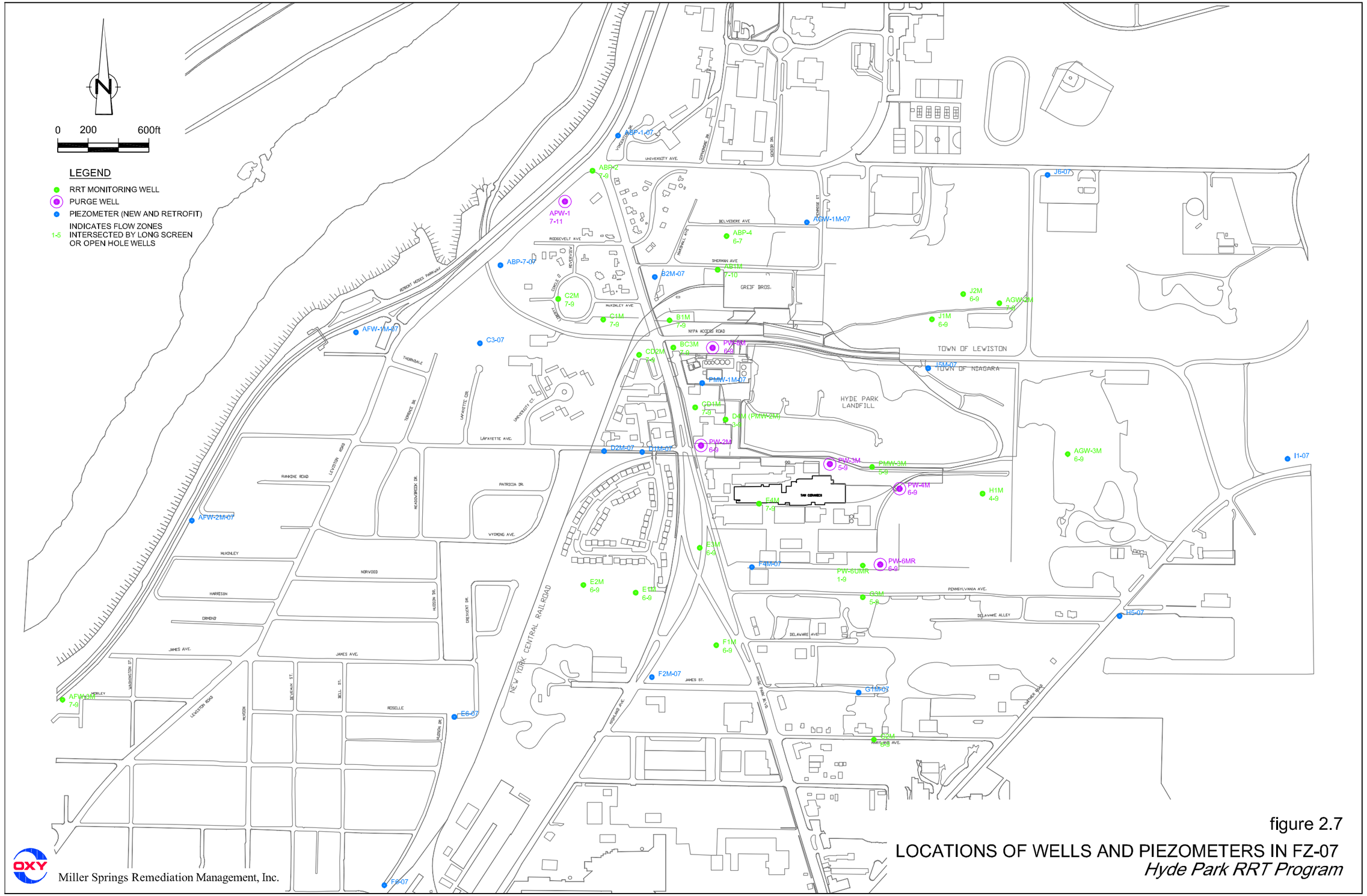


figure 2.7

LOCATIONS OF WELLS AND PIEZOMETERS IN FZ-07

Hyde Park RRT Program

Miller Springs Remediation Management, Inc.

01069-30(349)GN-NF008 MAR 27/2006

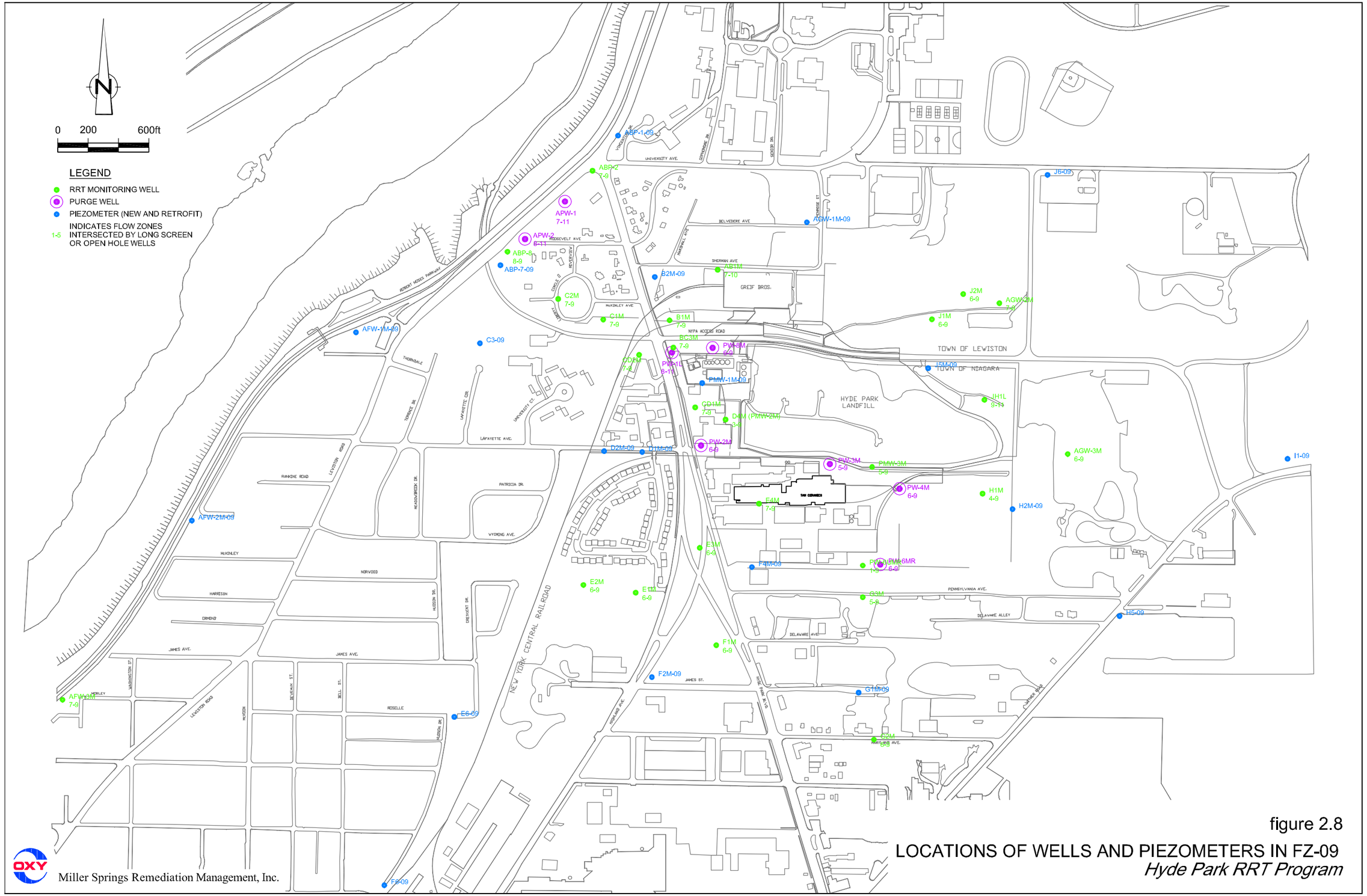


figure 2.8

LOCATIONS OF WELLS AND PIEZOMETERS IN FZ-09

Hyde Park RRT Program

Miller Springs Remediation Management, Inc.

01069-30(349)GN-NF008 MAR 27/2006

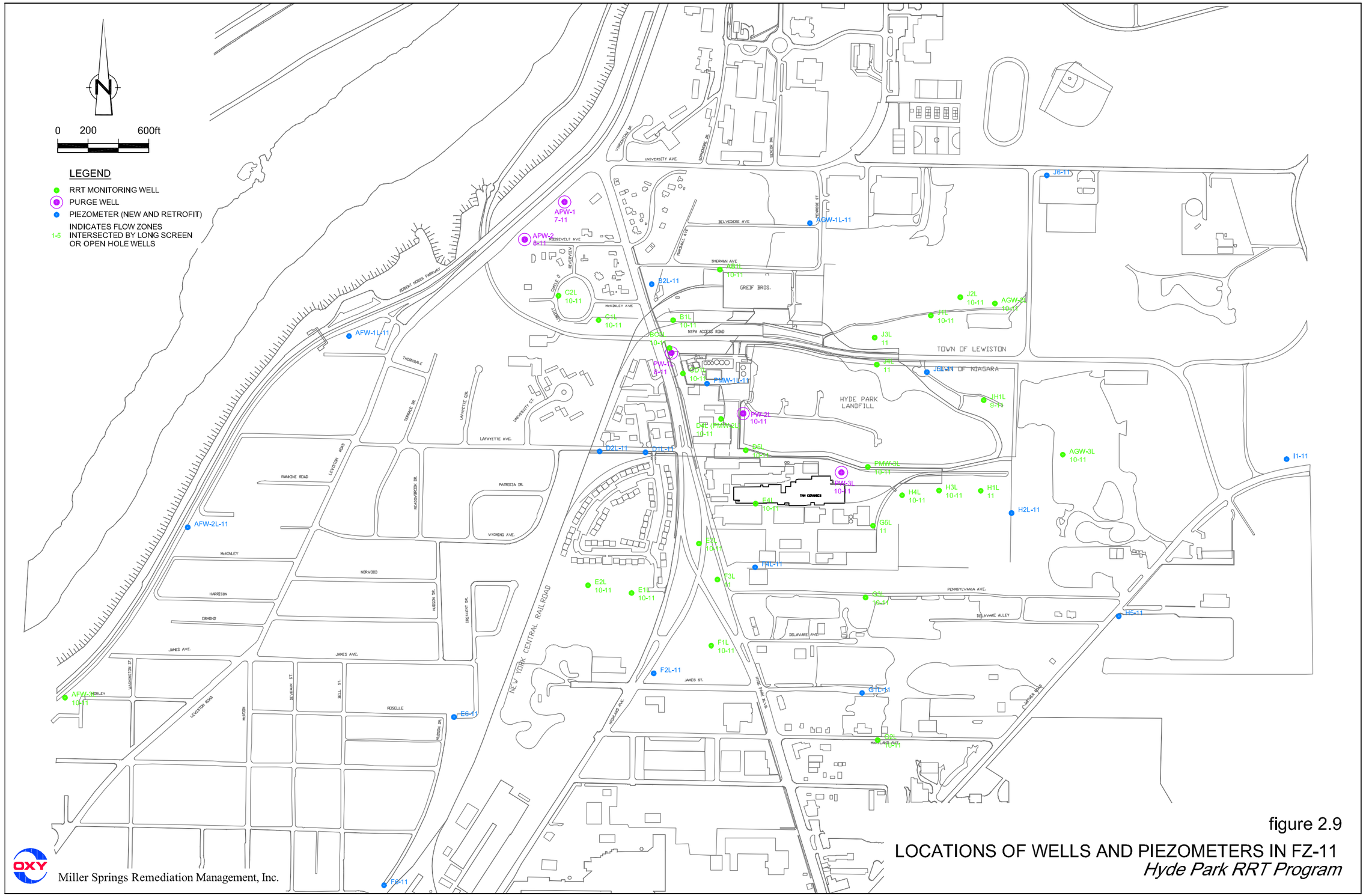


figure 2.9

LOCATIONS OF WELLS AND PIEZOMETERS IN FZ-11
Hyde Park RRT Program

Miller Springs Remediation Management, Inc.

01069-30(349)GN-NF008 MAR 27/2006

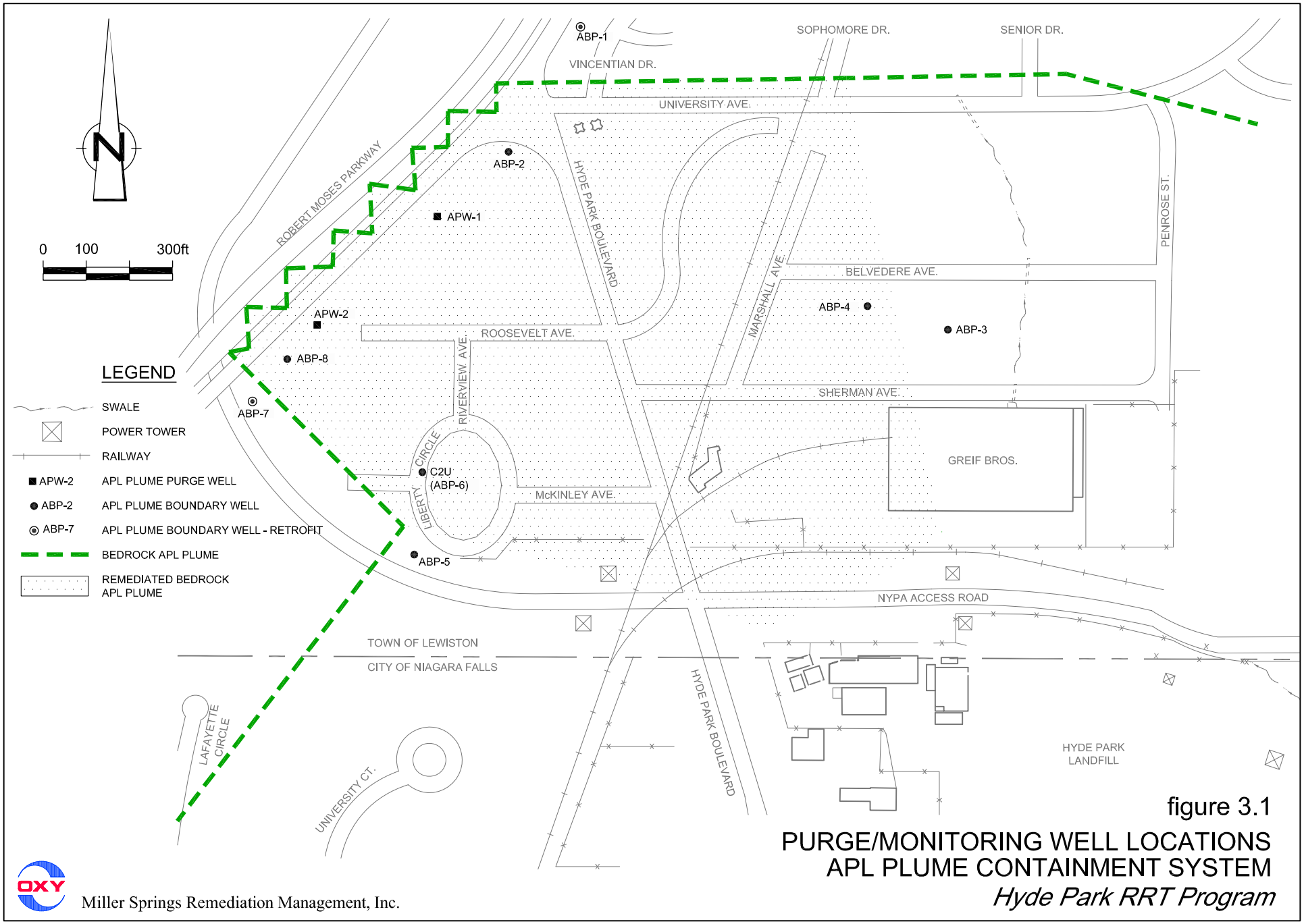


figure 3.1

PURGE/MONITORING WELL LOCATIONS APL PLUME CONTAINMENT SYSTEM

Hyde Park RRT Program

Miller Springs Remediation Management, Inc.

01069-30(349)GN-NF003 JAN 17/2006

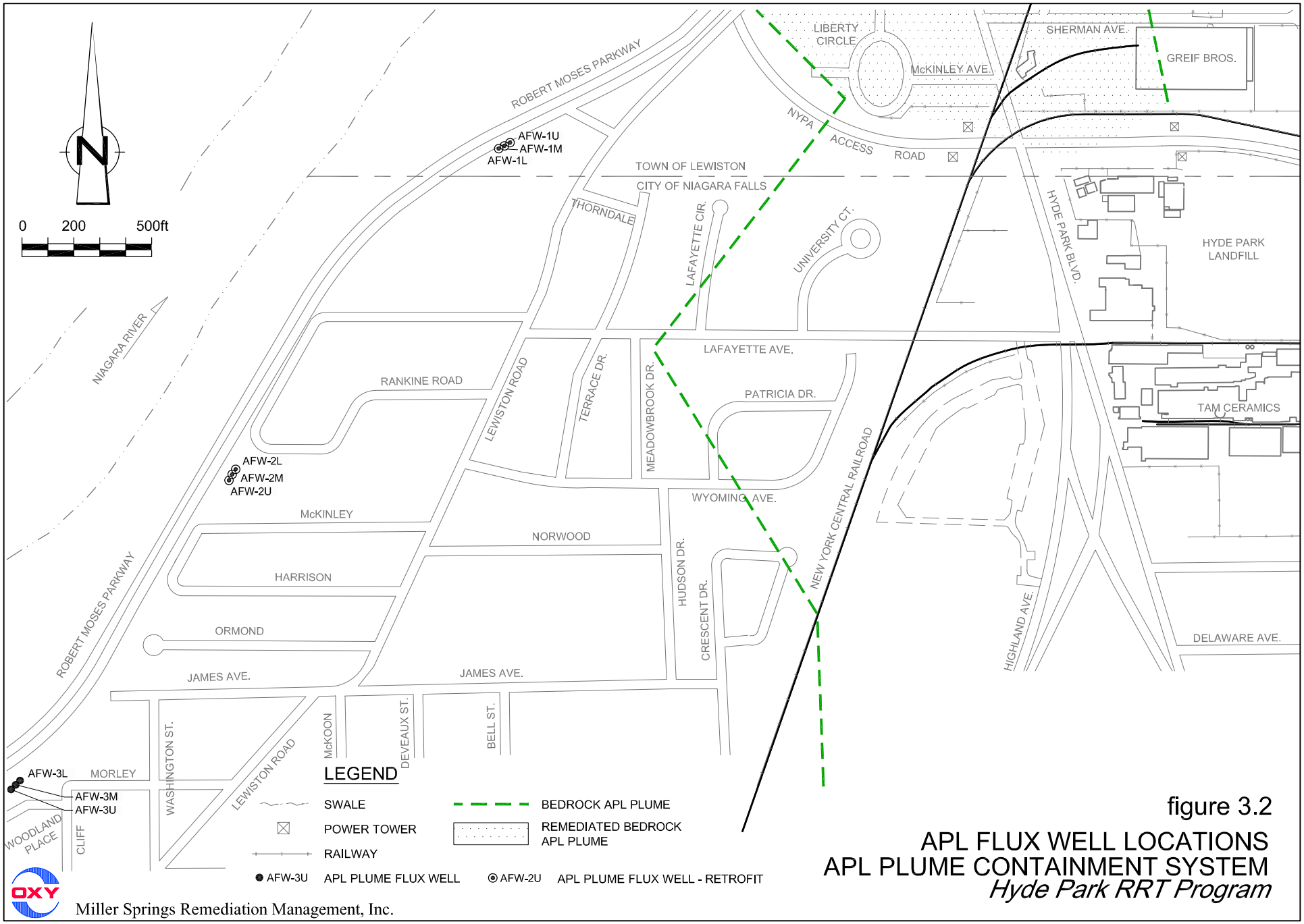


figure 3.2

APL FLUX WELL LOCATIONS
APL PLUME CONTAINMENT SYSTEM
Hyde Park RRT Program

Miller Springs Remediation Management, Inc.

01069-30(349)GN-NF004 JAN 17/2006

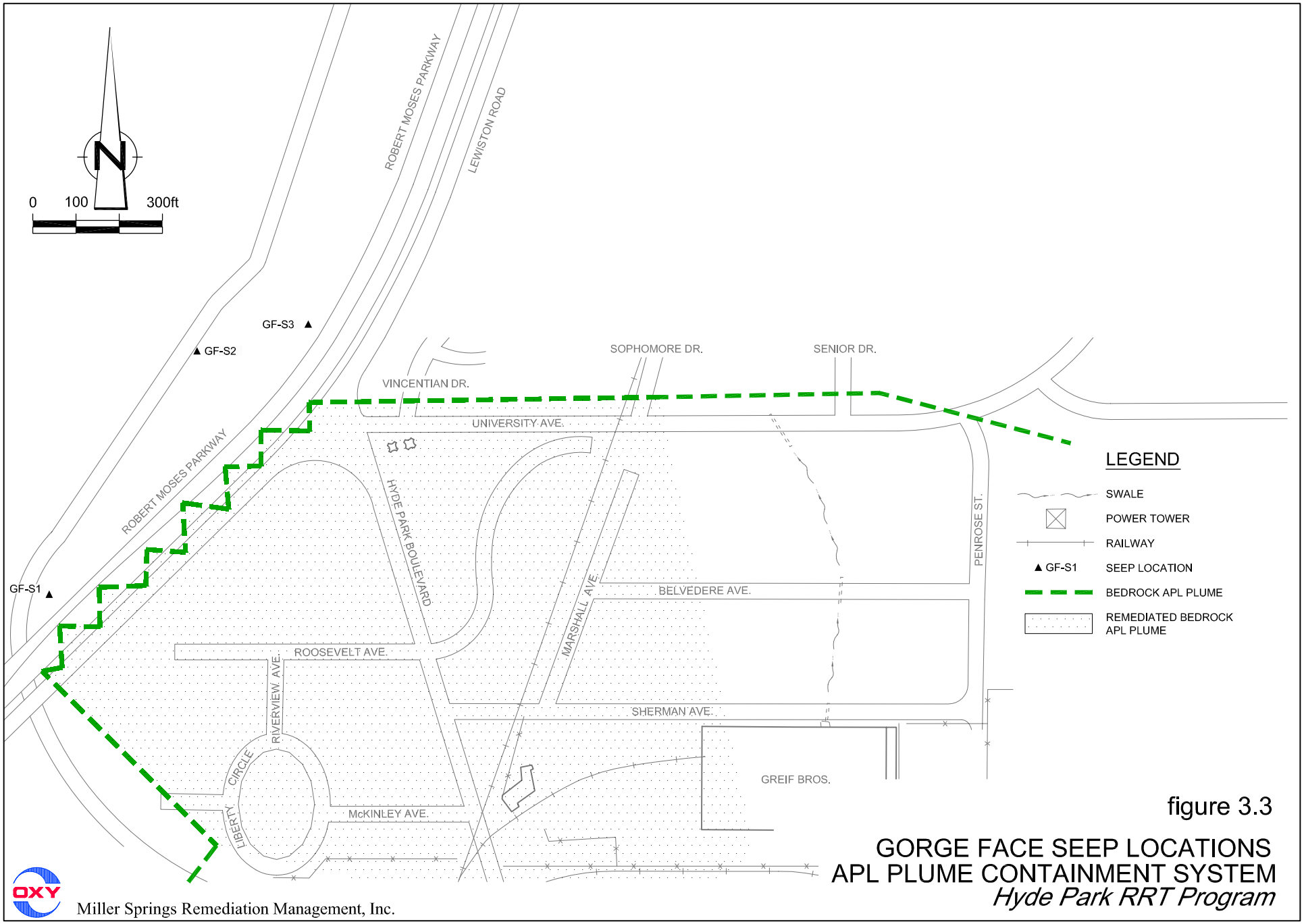


figure 3.3

GORGE FACE SEEP LOCATIONS
APL PLUME CONTAINMENT SYSTEM
Hyde Park RRT Program

Miller Springs Remediation Management, Inc.

01069-30(349)GN-NF005 JAN 17/2006

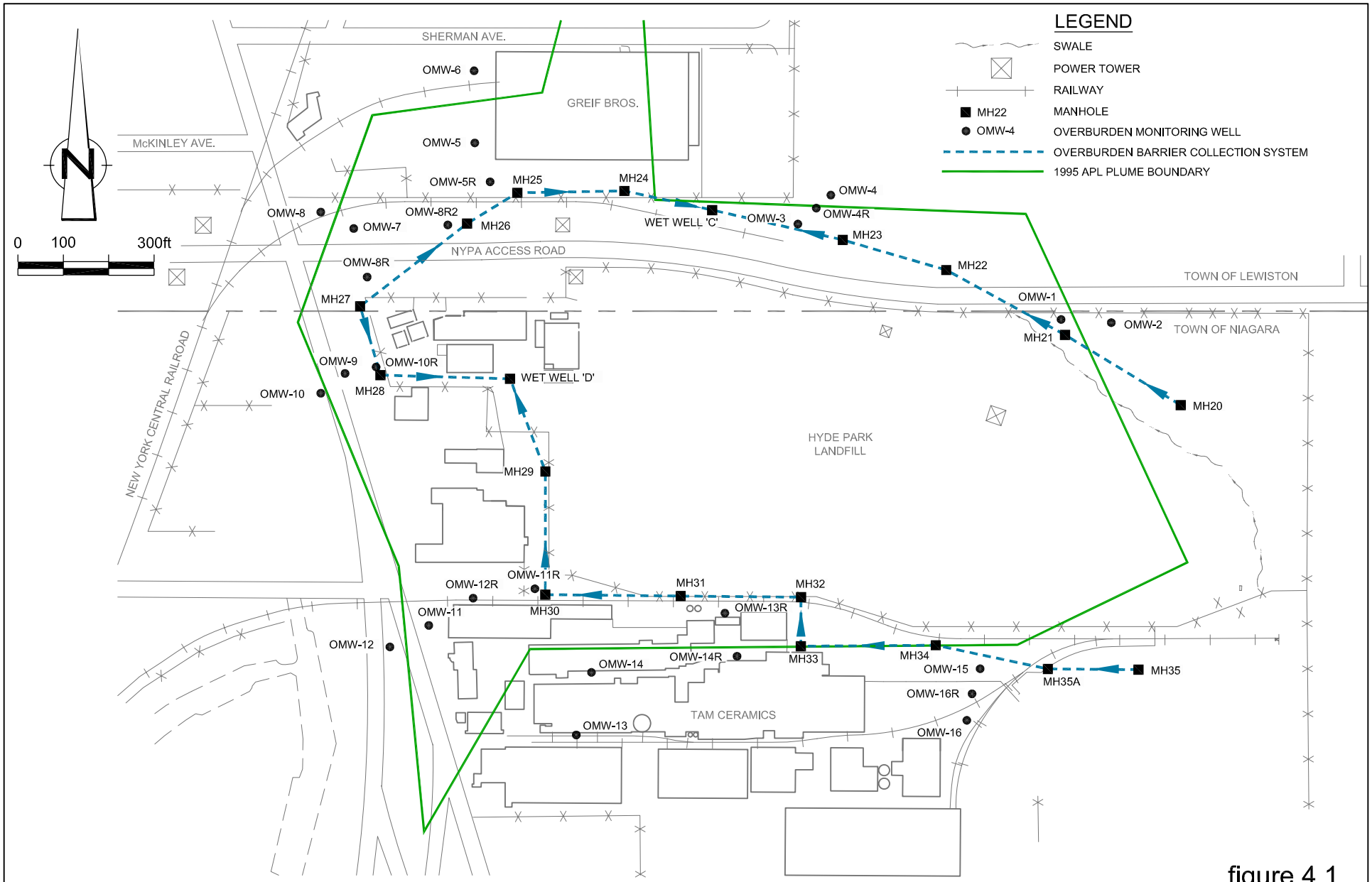


figure 4.1

OBCS MONITORING WELL LOCATIONS

Hyde Park RRT Program

Miller Springs Remediation Management, Inc.

01069-30(349)GN-NF006 JAN 17/2006

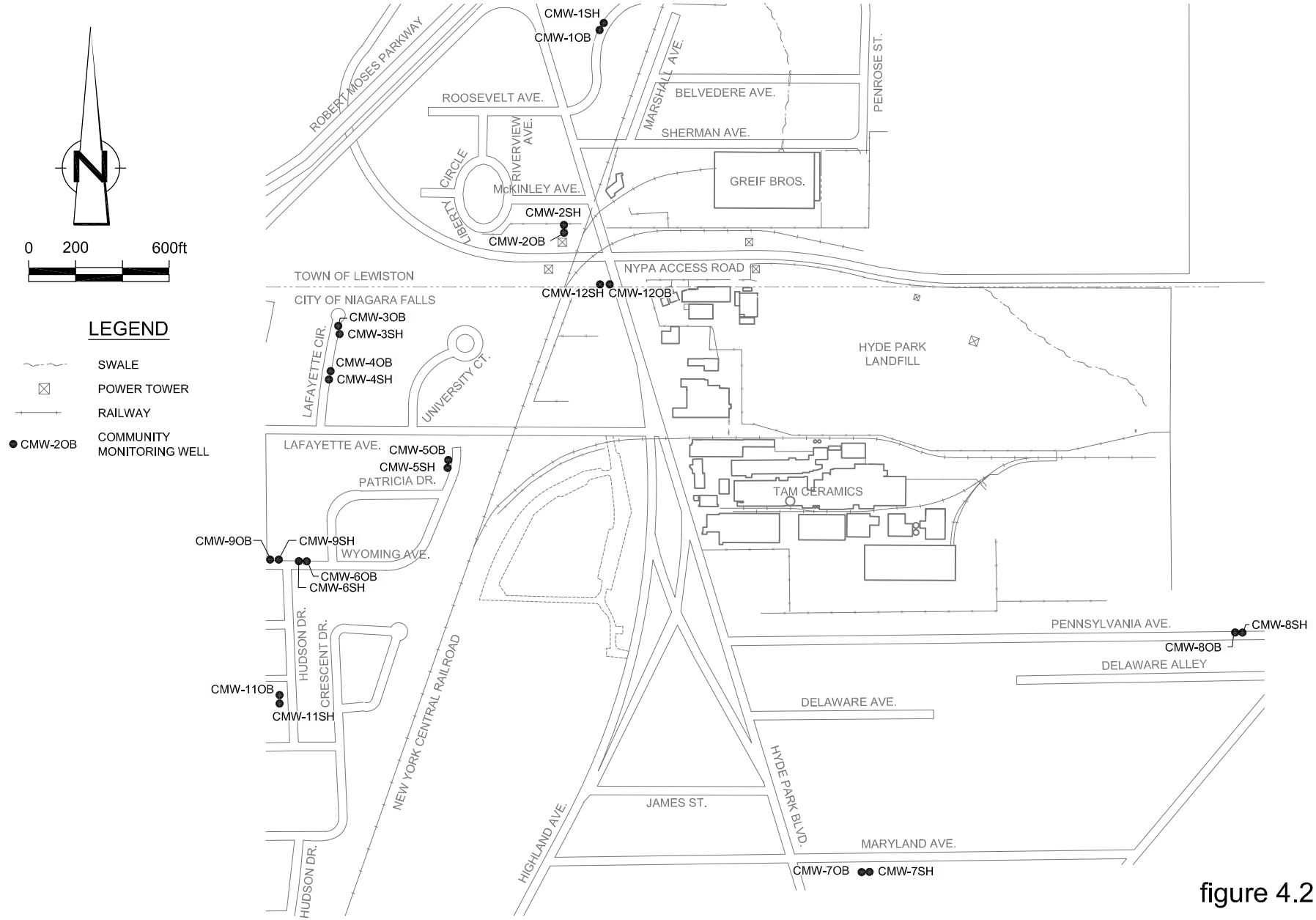


figure 4.2

COMMUNITY MONITORING WELL LOCATIONS

Hyde Park RRT Program

Miller Springs Remediation Management, Inc.

01069-30(349)GN-NF007 JAN 17/2006

TABLES

TABLE 2.1

MONTHLY AVERAGE PURGE WELL PUMPING RATES (GPM)
NAPL PLUME CONTAINMENT SYSTEM
FOURTH QUARTER 2005
HYDE PARK RRT PROGRAM

Bedrock Purge Wells	*Set Points (Ft. AMSL)*	*Oct*	*Nov*	*Dec*	*Monthly Average*
PW-1U	549	2.2	1.1	6.6	3.3
PW-1L	527	12.3	13.3	12.0	12.6
PW-2UR	559	0.9	0.9	1.2	1.0
PW-2M	532	20.6	22.5	21.6	21.6
PW-2L	505	19.3	0.5	0.5	6.8
PW-3M	522	0.1	3.2	0.1	1.1
PW-3L	525	5.4	1.1	1.1	2.5
PW-4U	573	0.3	0.4	0.4	0.4
PW-4M	522	0.0	0.0	0.0	0.0
PW-5UR	555	0.0	2.9	1.4	1.4
PW-6UR	560	0.8	1.0	1.0	1.0
PW-6MR	505	2.1	4.0	4.0	3.4
PW-7U	540	0.6	0.7	0.6	0.6
PW-8M	520	0.2	0.1	0.1	0.1
PW-8U	546	0.3	0.3	0.3	0.3
PW-9U	542	1.2	1.1	1.0	1.1
PW-10U	542	9.0	10.1	10.6	9.9
Individual Total		75.4	63.2	62.4	67.0

Notes:
GPM Gallons per minute.
AMSL Above mean sea level.

TABLE 2.2

HYDRAULIC MONITORING
NAPL PLUME CONTAINMENT SYSTEM
FOURTH QUARTER 2005
HYDE PARK LANDFILL

WELL NAME	TOP OF CASING	DATE	TIME	DEPTH TO GROUNDWATER	ELEVATION	COMMENTS
G1U-01	617.08	11/4/2005	10:40 AM	18.18	598.9	
G6-01	608.11	11/4/2005	9:31 AM	5.23	602.88	
H2U-01	620.92	11/4/2005	10:46 AM	10.4	610.52	
H5-01	617.61	11/4/2005	9:10 AM	14.15	603.46	
I1-01	621.55	11/4/2005	9:26 AM	22.54	599.01	
F2U-02	599.89	11/4/2005	10:15 AM	24.4	575.49	
F4U-02	602.32	11/4/2005	11:00 AM	16.5	585.82	
G1-02	616.86	11/4/2005	10:38 AM	25.7	591.16	
G6-02	608.11	11/4/2005	9:32 AM	17.05	591.06	
H2U-02	620.88	11/4/2005	10:47 AM	27.56	593.32	
H5-02	617.47	11/4/2005	9:11 AM	23.95	593.52	
I1-02	621.42	11/4/2005	9:27 AM	33.62	587.8	
J2U-02	609.66	11/4/2005	9:58 AM	14.67	594.99	
J5U-02	606.21	11/4/2005	10:08 AM	11.44	594.77	
J6-02	609.23	11/4/2005	9:42 AM	15.22	594.01	
AFW-2U-04	593.48	11/4/2005	11:02 AM	18.05	575.43	
D1U-04	593.77	11/4/2005	9:44 AM	13.35	580.42	
D2U-04	590.65	11/4/2005	9:51 AM	11.71	578.94	
E6-04	578.23	11/4/2005	10:55 AM	13.04	565.19	
F2U-04	599.76	11/4/2005	10:16 AM	22	577.76	
F4U-04	602.19	11/4/2005	11:02 AM	15.92	586.27	
F6-04	588.06	11/4/2005	9:57 AM	18.5	569.56	
G1U-04	616.96	11/4/2005	10:41 AM	17.94	599.02	
G6-04	608.11	11/4/2005	9:33 AM	17.2	590.91	
H5-04	617.4	11/4/2005	9:12 AM	24.6	592.8	
I1-04	621.31	11/4/2005	9:28 AM	37.61	583.7	
J2U-04	609.42	11/4/2005	9:59 AM	18.33	591.09	
J5U-04	606.05	11/4/2005	10:09 AM	20.76	585.29	
J6-04	609.12	11/4/2005	9:43 AM	29.76	579.36	
AFW-2U-05	593.33	11/4/2005	11:02 AM	18.4	574.93	
AGW-1U-05	591.8	11/4/2005	10:18 AM	8.42	583.38	
D1U-05	593.51	11/4/2005	9:44 AM	14.42	579.09	
D2U-05	590.56	11/4/2005	9:53 AM	11.02	579.54	
E6-05	578.04	11/4/2005	10:56 AM	11.43	566.61	
F2U-05	599.64	11/4/2005	10:17 AM	21.26	578.38	
F4U-05	602.06	11/4/2005	11:03 AM	17.05	585.01	
F6-05	587.85	11/4/2005	9:58 AM	14.73	573.12	
G6-05	608.11	11/4/2005	9:34 AM	17.16	590.95	
H2M-05	621.59	11/4/2005	10:50 AM	28.2	593.39	
H5-05	617.31	11/4/2005	9:13 AM	25.66	591.65	
I1-05	621.21	11/4/2005	9:29 AM	64.48	556.73	
J2U-05	609.3	11/4/2005	10:00 AM	31.3	578	
J5U-05	605.87	11/4/2005	10:10 AM	28.91	576.96	
J6-05	609.02	11/4/2005	9:44 AM	29.8	579.22	
PMW-1U-05	598	11/4/2005	10:25 AM	20.32	577.68	

TABLE 2.2

HYDRAULIC MONITORING
NAPL PLUME CONTAINMENT SYSTEM
FOURTH QUARTER 2005
HYDE PARK LANDFILL

WELL NAME	TOP OF CASING	DATE	TIME	DEPTH TO GROUNDWATER	ELEVATION	COMMENTS
ABP-7-06	575.78	11/4/2005	11:14 AM	21.9	553.88	Dry
AFW-1U-06	571.83	11/4/2005	10:48 AM	12.52	559.31	
AFW-2U-06	593.22	11/4/2005	11:03 AM	48.14	545.08	
AGW-1U-06	591.66	11/4/2005	10:17 AM	39.35	552.31	
B2U-06	589.29	11/4/2005	10:24 AM	35.62	553.67	
C3-06	585.78	11/4/2005	10:32 AM	37.65	548.13	Dry
D1U-06	593.25	11/4/2005	9:45 AM	50.92	542.33	Dry
D2U-06	590.38	11/4/2005	9:48 AM	46.95	543.43	
E6-06	577.99	11/4/2005	10:57 AM	6.05	571.94	
F2M-06	599.06	11/4/2005	10:16 AM	28.7	570.36	
F4M-06	602.05	11/4/2005	11:05 AM	49.3	552.75	
F6-06	587.84	11/4/2005	9:59 AM	14.9	572.94	
G1M-06	616.75	11/4/2005	10:30 AM	43.91	572.84	
G6-06	608.11	11/4/2005	9:35 AM	28.1	580.01	
H2M-06	621.42	11/4/2005	10:51 AM	51.06	570.36	
H5-06	617.17	11/4/2005	9:14 AM	28.7	588.47	
I1-06	621.08	11/4/2005	9:30 AM	68.43	552.65	
J2M-06	608.94	11/4/2005	9:54 AM	57.1	551.84	
J5M-06	606.22	11/4/2005	10:12 AM	63.53	542.69	
J6-06	608.93	11/4/2005	9:45 AM	54.13	554.8	
PMW-1U-06	597.92	11/4/2005	10:26 AM	53.57	544.35	
ABP-1-07	576.98	11/4/2005	10:00 AM			Destroyed in car lot
ABP-7-07	575.67	11/4/2005	11:15 AM	41.14	534.53	
AFW-1M-07	571.41	11/4/2005	10:50 AM	38.9	532.51	Dry
AFW-2M-07	593.44	11/4/2005	11:04 AM	66.9	526.54	
AGW-1M-07	592.91	11/4/2005	10:14 AM	42.8	550.11	
B2M-07	589.52	11/4/2005	10:27 AM	47.8	541.72	
C3-07	585.62	11/4/2005	10:33 AM	49.24	536.38	
D1M-07	594.15	11/4/2005	9:42 AM	61.1	533.05	
D2M-07	590.77	11/4/2005	9:54 AM	67.7	523.07	
E6-07	577.91	11/4/2005	10:58 AM	23.34	554.57	
F2M-07	598.91	11/4/2005	10:20 AM	77.5	521.41	
F4M-07	601.91	11/4/2005	11:07 AM	75.38	526.53	
F6-07	587.68	11/4/2005	10:00 AM	17.47	570.21	
G1M-07	616.68	11/4/2005	10:31 AM	53.36	563.32	
G6-07	608.11	11/4/2005	9:37 AM	35.55	572.56	
H5-07	617.05	11/4/2005	9:15 AM	60.2	556.85	
I1-07	620.97	11/4/2005	9:31 AM	67.05	553.92	
J5M-07	606.07	11/4/2005	10:13 AM	55.34	550.73	
J6-07	608.85	11/4/2005	9:46 AM	58.88	549.97	
PMW-1M-07	598.5	11/4/2005	10:23 AM	69.96	528.54	
ABP-1-09	576.73	11/4/2005	10:00 AM			Destroyed in car lot
ABP-7-09	575.67	11/4/2005	11:15 AM	41.9	533.77	
AFW-1M-09	571.12	11/4/2005	10:51 AM	46.2	524.92	
AFW-2M-09	593.32	11/4/2005	11:05 AM	71.63	521.69	

TABLE 2.2

HYDRAULIC MONITORING
NAPL PLUME CONTAINMENT SYSTEM
FOURTH QUARTER 2005
HYDE PARK LANDFILL

WELL NAME	TOP OF CASING	DATE	TIME	DEPTH TO GROUNDWATER	ELEVATION	COMMENTS
AGW-1M-09	592.75	11/4/2005	10:15 AM	42.4	550.35	
B2M-09	589.34	11/4/2005	10:27 AM	68.67	520.67	
C3-09	585.54	11/4/2005	10:34 AM	49.65	535.89	
D1M-09	594.02	11/4/2005	9:41 AM	68.9	525.12	
D2M-09	590.66	11/4/2005	9:55 AM	69.81	520.85	
E6-09	577.82	11/4/2005	10:59 AM	22.6	555.22	
F2M-09	598.71	11/4/2005	10:22 AM	75	523.71	
F4M-09	601.79	11/4/2005	11:08 AM	75	526.79	
F6-09	587.53	11/4/2005	10:02 AM	5.95	581.58	
G1M-09	616.58	11/4/2005	10:33 AM	58.72	557.86	
G6-09	608.11	11/4/2005	9:38 AM	32.32	575.79	
H2M-09	621.32	11/4/2005	10:52 AM	72.12	549.2	
H5-09	616.93	11/4/2005	9:15 AM	66.03	550.9	
I1-09	620.86	11/4/2005	9:33 AM	58.69	562.17	
J2M-09	608.77	11/4/2005	9:55 AM	58.18	550.59	
J5M-09	605.82	11/4/2005	10:14 AM	55.75	550.07	
J6-09	608.76	11/4/2005	9:47 AM	57.92	550.84	
PMW-1M-09	598.34	11/4/2005	10:24 AM	78.21	520.13	
AFW-1L-11	572.1	11/4/2005	10:47 AM	64.26	507.84	
AFW-2L-11	593.43	11/4/2005	11:00 AM	97.85	495.58	
AGW-1L-11	592.71	11/4/2005	10:12 AM	26.9	565.81	
B2L-11	589.65	11/4/2005	10:22 AM	88.2	501.45	
D1L-11	593.8	11/4/2005	9:38 AM	89.1	504.7	
D2L-11	590.21	11/4/2005	9:57 AM	66.3	523.91	Dry
E6-11	577.72	11/4/2005	11:00 AM	46.85	530.87	
F2L-11	598.94	11/4/2005	10:24 AM	49.96	548.98	
F4L-11	602.22	11/4/2005	11:10 AM	40.38	561.84	
F6-11	587.4	11/4/2005	10:03 AM	63.23	524.17	
G1L-11	616.84	11/4/2005	10:35 AM	51.07	565.77	
G6-11	608.11	11/4/2005	9:40 AM	39.06	569.05	
H2L-11	620.73	11/4/2005	10:55 AM	61.34	559.39	
H5-11	616.81	11/4/2005	9:16 AM	63	553.81	
I1-11	620.71	11/4/2005	9:35 AM	76.17	544.54	
J5L-11	607.2	11/4/2005	10:15 AM	58.02	549.18	
J6-11	608.68	11/4/2005	9:48 AM	44.31	564.37	
PMW-1L-11	598.84	11/4/2005	10:21 AM	90.47	508.37	

TABLE 2.3

NAPL PRESENCE CHECKS
NAPL PLUME CONTAINMENT SYSTEM
FOURTH QUARTER 2005
HYDE PARK RRT PROGRAM

Well I.D.	*November 2005*	*Well I.D.*	*November 2005*
A1U	NO	GH1U	NO
A2U	NO	H1L	NO
B1L	NO	H1M	NO
B1M	NO	H1U	NO
B1U	NO	H2L	NO
BC3L	NO	H2M	NO
BC3M	NO	H3L	NO
BC3U	NO	H3U	YES
C1L	NO	J1M	NO
C1M	NO	J1U	NO
C1U	NO	J2M	NO
CD1L	NO	J3L	NO
CD1M	NO	J3U	YES
CD1U	YES	J4L	NO
CD2U	NO	J5U	NO
CD3U	NO	OMW-1	NO
D1L	NO	OMW-10R	NO
D1M	NO	OMW-11	NO
D2M	NO	OMW-11R	NO
D3U	NO	OMW-12R	NO
D4L	NO	OMW-13R	NO
D4U	NO	OMW14R	NO
D5L	NO	OMW-15	NO
E3M	NO	OMW-16R	NO
E3U	NO	OMW-2	NO
E4L	NO	OMW-3	NO
E4U	YES	OMW-4R	NO
E5U	NO	OMW-5	NO
F1M	NO	OMW-5R	NO
F4L	NO	OMW-6	NO
F4M	NO	OMW-7	NO
F4U	NO	OMW-8R	NO
F5UR	NO	OMW-8R2	NO
G1L	NO	OMW-9	NO
G1M	NO	PMW-1L	YES
G3L	NO	PMW-3M	YES
G3M	NO	PW-2L	YES
G3U	NO	PW-3UM	YES
G4U	NO	PW-6UMR	NO

Notes:
NAPL Non-aqueous phase liquid
NO NAPL not present
YES NAPL present

TABLE 3.1

ANALYTICAL RESULTS SUMMARY
ONE-TIME AFW/APW SAMPLING EVENT
HYDE PARK LANDFILL
NIAGARA FALLS, NEW YORK

Location:			AFW-1-06		AFW-1-11		AFW-2-04		AFW-2-05		AFW-3M		AFW-3U		APW-1		APW-2		COMPOSITE	COMPOSITE		FLUX	
Volume Collected (L):			0.018		0.027		0.609		0.106		1.183		6.915		0.08		0.062			9			
Parameters	Units	Screening Level																		CALCULATED ANALYTICAL	Action Levels	(using 60 GPD) g/year	lbs/day
Volatile Organic Compounds																							
Benzene	µg/L	5	5.00 U	0	5.00 U	0	5.00 U	0	5.00 U	0	5.00 U	0	5.00 U	0	5.00 U	0	5.00 U	0	5.00 U	0.00		0.00	
Chloroform (Trichloromethane)	µg/L	80	5.00 U	0	5.00 U	0	5.00 U	0	5.00 U	0	5.00 U	0	5.00 U	0	5.00 U	0	5.00 U	0	5.00 U	0.00	1.7 lbs/day	0.00	0.00E+00
Semi-Volatile Organic Compounds																							
2,4,5-Trichlorophenol	µg/L	3700	-	0	24.3 U	0	24.3 UJ	0	23.6 U	0	23.8 U	0	23.8 U	0	23.8 U	0	23.6 U	0	23.8 U	0.00		0.00	
2,4-Dichlorophenol	µg/L	110	-	0	9.71 U	0	9.35 UJ	0	9.43 U	0	9.52 U	0	9.52 U	0	9.52 U	0	9.43 U	0	9.52 U	0.00		0.00	
2-Chlorophenol	µg/L	30	-	0	9.71 U	0	9.35 UJ	0	9.43 U	0	9.52 U	0	9.52 U	0	9.52 U	0	9.43 U	0	9.52 U	0.00		0.00	
Phenol	µg/L	11000	-	0	9.71 U	0	9.35 UJ	0	9.43 U	0	9.52 U	0	9.52 U	0	9.52 U	0	9.43 U	0	9.52 U	0.00		0.00	
PCBs																							
Pentachlorobiphenyl	µg/L		0.1 U	0	0.1 U	0	0.1 U	0	0.1 U	0	0.1 U	0	0.1 U	0	0.1 U	0	0.1 U	0	0.1 U	0.00	combined	0.00	0.00E+00
Tetrachlorobiphenyl	µg/L		0.1 U	0	0.1 U	0	0.1 U	0	0.1 U	0	0.1 U	0	0.1 U	0	0.1 U	0	0.1 U	0	0.1 U	0.00	0.005	0.00	0.00E+00
Trichlorobiphenyl	µg/L		0.05 U	0	0.05 U	0	0.05 U	0	0.05 U	0	0.05 U	0	0.05 U	0	0.05 U	0	0.05 U	0	0.05 U	0.00	lbs/day	0.00	0.00E+00
Pesticides																							
alpha-BHC	µg/L	0.037	15.4 U	0	9.43 U	0	9.43 UJ	0	9.52 U	0	9.62 U	0	9.52 U	0	9.52 U	0	9.62 U	0	9.52 UJ	0.00		1.28E+00	
beta-BHC	µg/L	0.037	15.4 U	0	9.43 U	0	9.43 UJ	0	9.52 U	0	9.62 U	0	9.52 U	0	9.52 U	0	9.62 U	0	9.52 UJ	0.00		1.28E+00	
delta-BHC	µg/L	0.037	15.4 U	0	9.43 U	0	9.43 UJ	0	9.52 U	0	9.62 U	0	9.52 U	0	9.52 U	0	9.62 U	0	9.52 UJ	0.00		1.28E+00	
gamma-BHC (Lindane)	µg/L	0.037	15.4 U	0	9.43 U	0	9.43 UJ	0	9.52 U	0	9.62 U	0	9.52 U	0	9.52 U	0	9.62 U	0	9.52 UJ	0.00		1.28E+00	
Mirex	µg/L	7.3	15.4 U	0	9.43 U	0	9.43 UJ	0	9.52 U	0	9.62 U	0	9.52 U	0	9.52 U	0	9.62 U	0	9.52 UJ	0.00	0.005 lbs/day	1.28E+00	7.71E-06
Dioxin Furans																							
2,3,4,8-Tetrachlorodibenzo-p-dioxin	pg/L	10	9.6 U	0	4.7 J	4.7	3.0 U	0	2.1 U	0	7.4 J	7.4	2.4 U	0	2.7 U	0	2.1 U	0	2 U	0.99	0.5 g/year	8.18E-08	

Notes:
- J Estimated.
- U Non-detect as associated value.
- UJ Non-detect above sample quantitation limit.

Flux (g/year) = Flow (gal/day) x 3.785 (L/gal) x Conc (pg/L) x 10-12 (g/pg) x 365 (day/year).

TABLE 4.1

HYDRAULIC GRADIENT SUMMARY
OVERBURDEN BARRIER COLLECTION SYSTEM
FOURTH QUARTER 2005
HYDE PARK RRT PROGRAM

Well Pair	October 2005			November 2005			December 2005		
	Inner Elevation (feet AMSL)	Outer Elevation (feet AMSL)	Hydraulic Gradients(1)	Inner Elevation (feet AMSL)	Outer Elevation (feet AMSL)	Hydraulic Gradients(1)	Inner Elevation (feet AMSL)	Outer Elevation (feet AMSL)	Hydraulic Gradients(1)
OMW-10R-OMW-9	586.99	589.77	-2.78	587.69	589.87	-2.18	587.49	589.67	-2.18
OMW-11R-OMW-12R	592.57	591.35	1.22	592.77	591.85	0.92	592.57	591.15	1.42
OMW-13R-OMW-14R	594.04	590.12	3.92	594.24	590.32	3.92	594.14	589.62	4.52
OMW-15-OMW-16R	602.64	603.23	-0.59	602.74	603.33	-0.59	602.44	603.13	-0.69
OMW-1-OMW-2	598.97	602.39	-3.42	600.67	604.09	-3.42	600.47	603.99	-3.52
OMW-3-OMW-4R	589.67	588.93	0.74	590.17	589.73	0.44	590.27	589.33	0.94
OMW-5R-OMW-6	582.45	586.07	-3.62	583.35	586.27	-2.92	583.15	586.17	-3.02
OMW-8R2-OMW-7	587.11	585.09	2.02	587.41	585.19	2.22	587.31	584.89	2.42

Notes:

(1) Negative number indicates an inward/downward gradient measured in feet.
N/A Not applicable.
AMSL Above Mean Sea Level.

TABLE 4.2

NAPL PRESENCE MONITORING
OVERBURDEN BARRIER COLLECTION SYSTEM
FOURTH QUARTER 2005
HYDE PARK RRT PROGRAM

Well I.D.	*November 2005*
OMW1	NO
OMW2	NO
OMW3	NO
OMW4	-
OMW4R	NO
OMW5	-
OMW5R	NO
OMW6	NO
OMW7	NO
OMW8	-
OMW8R	NO
OMW8R2	-
OMW9	NO
OMW10	-
OMW10R	NO
OMW11	-
OMW11R	NO
OMW12	-
OMW12R	NO
OMW13	-
OMW13R	NO
OMW14	-
OMW14R	NO
OMW15	NO
OMW16	-
OMW16R	NO

Notes:
- Not available
NO NAPL not present

TABLE 4.3

HYDRAULIC MONITORING
COMMUNITY MONITORING PROGRAM
FOURTH QUARTER 2005
HYDE PARK LANDFILL

Well Name	*Top of Casing*	*Date*	*Time*	*Depth to Groundwater*	*Elevation*	*Comments*
CMW-1OB	576.12	11/4/2005	10:08 AM	5.57	570.55	
CMW-1SH	576.68	11/4/2005	10:09 AM	12.65	564.03	
CMW-2OB	590.05	11/4/2005	10:44 AM	1.23	588.82	
CMW-2SH	589.73	11/4/2005	10:43 AM	24.91	564.82	
CMW-3OB	582.79	11/4/2005	10:06 AM	8.32	574.47	
CMW-3SH	582.74	11/4/2005	10:02 AM	32.02	550.72	
CMW-4OB	574.85	11/4/2005	10:04 AM	3.89	570.96	
CMW-4SH	574.97	11/4/2005	10:01 AM	13	561.97	
CMW-5OB	584.13	11/4/2005	10:38 AM	0.23	583.9	
CMW-5SH	584.13	11/4/2005	10:40 AM	8.52	575.61	
CMW-6OB	572.55	11/4/2005	10:43 AM	2.67	569.88	
CMW-6SH	572.68	11/4/2005	10:45 AM	10.28	562.4	
CMW-7OB	611.38	11/4/2005	9:44 AM	4.95	606.43	
CMW-7SH	611.16	11/4/2005	9:46 AM	12.28	598.88	
CMW-8OB	616.78	11/4/2005	9:25 AM	3.2	613.58	
CMW-8SH	617.01	11/4/2005	9:24 AM	8.3	608.71	
CMW-9OB	572.41	11/4/2005	10:46 AM	2.43	569.98	
CMW-9SH	572.59	11/4/2005	10:47 AM	12.28	560.31	
CMW-11OB	573.51	11/4/2005	10:51 AM	2.73	570.78	
CMW-11SH	573.86	11/4/2005	10:52 AM	8.36	565.5	
CMW-12OB	595.26	11/4/2005	11:22 AM	22.2	573.06	
CMW-12SH	597.65	11/4/2005	11:24 AM	27.52	570.13	

TABLE 4.4

HYDRAULIC GRADIENT SUMMARY
COMMUNITY MONITORING PROGRAM
FOURTH QUARTER 2005
HYDE PARK RRT PROGRAM

Well Pair	November 2005		
	Inner Elevation (feet AMSL)	Outer Elevation (feet AMSL)	Hydraulic Gradients(1)
CMW-1OB-CMW-1SH	564.03	570.55	-6.52
CMW-2OB-CMW-2SH	564.82	588.82	-24.00
CMW-3OB-CMW-3SH	550.72	574.47	-23.75
CMW-4OB-CMW-4SH	561.97	570.96	-8.99
CMW-5OB-CMW-5SH	575.61	583.90	-8.29
CMW-6OB-CMW-6SH	562.40	569.88	-7.48
CMW-7OB-CMW-7SH	598.88	606.43	-7.55
CMW-8OB-CMW-8SH	608.71	N/A	N/A
CMW-9OB-CMW-9SH	560.31	569.98	-9.67
CMW-11OB-CMW-11SH	565.50	570.78	-5.28

Notes:

(1) Negative number indicates an inward/downward gradient measured in feet.
N/A Not applicable. One or both wells dry.
AMSL Above Mean Sea Level.

TABLE 5.1

DAILY EFFLUENT MONITORING DATA
LEACHATE TREATMENT SYSTEM
FOURTH QUARTER 2005
HYDE PARK RRT PROGRAM

Date	Operating Hours	TOC* - mg/L		PHENOL** - mg/L					Effluent		
		C.B. Feed	3rd Instg.	C.B. Feed	1st Instg.	2nd Instg.	3rd Instg.	4th Instg.	pH	Gallons	Comments
10/01/05		-	-	-	-	-	-	-	-	-	-
10/02/05		-	-	-	-	-	-	-	-	-	-
10/03/05		-	3.4	-	-	0.074	0.033	-	6.99	-	-
10/04/05		-	-	-	-	0.091	-	-	7.01	-	-
10/05/05		-	-	-	-	0.10	-	-	7.02	-	-
10/06/05		-	-	-	-	0.064	-	-	6.99	-	-
10/07/05		-	-	-	-	0.064	-	-	7.03	-	-
10/08/05		-	-	-	-	-	-	-	-	-	-
10/09/05		-	-	-	-	-	-	-	-	-	-
10/10/05		-	4.3	-	-	0.0070 J	0.0060 J	-	7.05	-	-
10/11/05		-	-	-	-	0.011	-	-	7.16	-	-
10/12/05		-	-	-	-	0.010 U	-	-	7.13	-	-
10/13/05		-	-	-	-	0.010 U	-	-	7.08	-	-
10/14/05		-	-	-	-	0.0090 J	-	-	7.05	-	-
10/15/05		-	-	-	-	-	-	-	-	-	-
10/16/05		-	-	-	-	-	-	-	-	-	-
10/17/05		-	3.8	-	-	0.070	0.042	-	6.99	-	-
10/18/05		-	-	-	-	0.11	-	-	7.02	-	-
10/19/05		-	-	-	-	0.11	-	-	6.99	-	-
10/20/05		-	-	-	-	0.13	-	-	7	-	-
10/21/05		-	-	-	-	0.11	-	-	6.97	-	-
10/22/05		-	-	-	-	-	-	-	-	-	-
10/23/05		-	-	-	-	-	-	-	-	-	-
10/24/05		-	4.5	-	-	0.13	0.084	-	6.8	-	-
10/25/05		-	-	-	-	0.12	-	-	7.11	-	-
10/26/05		-	-	-	-	0.15	-	-	7.06	-	-
10/27/05		-	-	-	-	0.15	-	-	7.02	-	-
10/28/05		-	-	-	-	0.16	-	-	6.99	-	-
10/29/05		-	-	-	-	-	-	-	-	-	-
10/30/05		-	-	-	-	-	-	-	-	-	-
10/31/05		-	3.9	-	-	0.20	0.078	-	6.8	-	-

TABLE 5.1

DAILY EFFLUENT MONITORING DATA
LEACHATE TREATMENT SYSTEM
FOURTH QUARTER 2005
HYDE PARK RRT PROGRAM

Date	Operating Hours	TOC* - mg/L		PHENOL** - mg/L					Effluent		
		C.B. Feed	3rd Instg.	C.B. Feed	1st Instg.	2nd Instg.	3rd Instg.	4th Instg.	pH	Gallons	Comments
11/01/05		-	-	-	-	0.13	-	-	-	-	-
11/02/05		-	-	-	-	0.14	-	-	-	-	-
11/03/05		-	-	-	-	0.13	-	-	-	-	-
11/04/05		-	-	-	-	0.13	-	-	-	-	-
11/05/05		-	-	-	-	-	-	-	-	-	-
11/06/05		-	-	-	-	-	-	-	-	-	-
11/07/05		-	4.3	-	-	0.16	0.071	-	-	-	-
11/08/05		-	-	-	-	0.19	-	-	-	-	-
11/09/05		-	-	-	-	0.19	-	-	-	-	-
11/10/05		-	-	-	-	0.15	-	-	7	-	-
11/11/05		-	-	-	-	0.18	-	-	7.04	-	-
11/12/05		-	-	-	-	-	-	-	-	-	-
11/13/05		-	-	-	-	-	-	-	-	-	-
11/14/05		-	5.2	-	-	0.17	0.25	-	6.97	-	-
11/15/05		-	-	-	-	0.15	-	-	7.03	-	-
11/16/05		-	-	-	-	0.13	-	-	7.01	-	-
11/17/05		-	-	-	-	0.13	-	-	7	-	-
11/18/05		-	-	-	-	0.12	-	-	7	-	-
11/19/05		-	-	-	-	-	-	-	-	-	-
11/20/05		-	-	-	-	-	-	-	-	-	-
11/21/05		-	4.6	-	-	0.16 J	0.091 J	-	6.92	-	-
11/22/05		-	-	-	-	0.13 J	-	-	7.09	-	-
11/23/05		-	-	-	-	0.15 J	-	-	7.1	-	-
11/24/05		-	-	-	-	-	-	-	-	-	-
11/25/05		-	-	-	-	-	-	-	-	-	-
11/26/05		-	-	-	-	-	-	-	-	-	-
11/27/05		-	-	-	-	-	-	-	6.92	-	-
11/28/05		-	4.3	-	-	0.29	0.052	-	6.9	-	-
11/29/05		-	-	-	-	0.28	-	-	7.1	-	-
11/30/05		-	-	-	-	0.31	-	-	7.12	-	-

TABLE 5.1

DAILY EFFLUENT MONITORING DATA
LEACHATE TREATMENT SYSTEM
FOURTH QUARTER 2005
HYDE PARK RRT PROGRAM

		TOC* - mg/L		PHENOL** - mg/L					Effluent		
Date	Operating Hours	C.B. Feed	3rd Instg.	C.B. Feed	1st Instg.	2nd Instg.	3rd Instg.	4th Instg.	pH	Gallons	Comments
12/01/05		-	-	-	-	0.30	-	-	-	-	-
12/02/05		-	-	-	-	0.18	-	-	7	-	-
12/03/05		-	-	-	-	-	-	-	-	-	-
12/04/05		-	-	-	-	-	-	-	-	-	-
12/05/05		-	5.1	-	-	0.36 J	0.071 J	-	-	-	-
12/06/05		-	-	-	-	0.26 J	-	-	-	-	-
12/07/05		-	-	-	-	0.40 J	-	-	-	-	-
12/08/05		-	-	-	-	0.44 J	-	-	-	-	-
12/09/05		-	-	-	-	0.40 J	-	-	7.07	-	-
12/10/05		-	-	-	-	-	-	-	-	-	-
12/11/05		-	-	-	-	-	-	-	-	-	-
12/12/05		-	6.8	-	-	0.38	0.061	-	7.09	-	-
12/13/05		-	-	-	-	0.51	-	-	7.03	-	-
12/14/05		-	-	-	-	0.47	-	-	6.98	-	-
12/15/05		-	-	-	-	0.37	-	-	7	-	-
12/16/05		-	-	-	-	0.50	-	-	7.08	-	-
12/17/05		-	-	-	-	-	-	-	-	-	-
12/18/05		-	-	-	-	-	-	-	-	-	-
12/19/05		-	9.8	-	-	0.53	0.083	-	7	-	-
12/20/05		-	-	-	-	1.2	-	-	6.99	-	-
12/21/05		-	-	-	-	1.2	-	-	6.98	-	-
12/22/05		-	-	-	-	1.3	-	-	7.01	-	-
12/23/05		-	-	-	-	-	-	-	-	-	-
12/24/05		-	-	-	-	-	-	-	-	-	-
12/25/05		-	-	-	-	-	-	-	7	-	-
12/26/05		-	5.5	-	-	1.1	0.19	-	7	-	-
12/27/05		-	-	-	-	1.1	-	-	7	-	-
12/28/05		-	-	-	-	1.0	-	-	6.9	-	-
12/29/05		-	-	-	-	0.82	-	-	6.91	-	-
12/30/05		-	-	-	-	0.71	-	-	7.02	-	-
12/31/05		-	-	-	-	-	-	-	-	-	-

Notes:

(1) TOC Treatment Level
(2) Phenol Treatment Level
NA Not Available
TOC Total Organic Carbon

TABLE 5.2

ANALYTICAL RESULTS SUMMARY
WEEKLY EFFLUENT COMPOSITE SAMPLES - LEACHATE TREATMENT SYSTEM
FOURTH QUARTER 2005
HYDE PARK RRT PROGRAM

Parameter	*Units*	*Treatment Level*	*10/07/05*	*10/14/05*	*10/21/05*	*10/28/05*	*10/31/05*	*11/4/05*	*11/11/05*	*11/18/05*
2-Chlorotoluene	µg/L	10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
3-Chlorotoluene	µg/L	10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Chlorotoluene	µg/L	10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
m-Monochlorobenzotrifluoride	µg/L	10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
o-Monochlorobenzotrifluoride	µg/L	10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
p-Monochlorobenzotrifluoride	µg/L	10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	µg/L	10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Parameter	*Units*	*Treatment Level*	*11/23/05*	*11/30/05*	*12/2/05*	*12/9/05*	*12/16/05*	*12/22/05*	*12/30/05*
2-Chlorotoluene	µg/L	10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
3-Chlorotoluene	µg/L	10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Chlorotoluene	µg/L	10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
m-Monochlorobenzotrifluoride	µg/L	10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
o-Monochlorobenzotrifluoride	µg/L	10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
p-Monochlorobenzotrifluoride	µg/L	10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	µg/L	10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Notes:
- Not available/not applicable.
J Associated value is estimated.
U Non-detect at associated value.

TABLE 5.3

ANALYTICAL RESULTS SUMMARY
MONTHLY EFFLUENT COMPOSITE SAMPLES - LEACHATE TREATMENT SYSTEM
FIRST QUARTER 2005
HYDE PARK RRT PROGRAM

Parameter	*Units*	*Treatment Level*	*October 2005*	*November 2005*	December 2005
1,2,3,4-Tetrachlorobenzene	µg/L	10	9.5 U	9.4 U	9.5 U
1,2,3-Trichlorobenzene	µg/L	10	-	-	-
1,2,4,5-Tetrachlorobenzene	µg/L	10	9.5 U	9.4 U	9.5 U
1,2,4-Trichlorobenzene	µg/L	10	-	-	-
1,3,5-Trichlorobenzene	µg/L	10	-	-	-
2,4,5-Trichlorophenol	µg/L	10	9.5 U	9.4 U	9.5 U
Hexachlorobenzene	µg/L	10	9.5 U	9.4 U	9.5 U
Hexachlorobutadiene	µg/L	10	9.5 U	9.4 U	9.5 U
Hexachlorocyclopentadiene	µg/L	10	9.5 U	9.4 U	9.5 U
Octachlorocyclopentene	µg/L	10	9.5 U	9.4 U	9.5 U
Pesticides					
alpha-BHC	µg/L	10	0.047 U	0.048 U	0.017 J
beta-BHC	µg/L	10	0.047 U	0.048 U	0.048 U
delta-BHC	µg/L	10	0.047 U	0.048 U	0.048 U
gamma-BHC (Lindane)	µg/L	10	0.047 U	0.048 U	0.048 U

Notes:

- \- Not available/not applicable.
- J Associated value is estimated.
- U Non-detect at associated value.