PERFORMANCE EVALUATION
INTERIM GAS EXTRACTION SYSTEM
Highway FF/NN Landfill
Ripon, Wisconsin
WDNR License # 467, BRRTS # 02-20-000915

Prepared for:

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CERTIFICATIONS

"I, Kevin F. Lincicum, hereby certify that I am a hydrogeologist as that term is defined in s. NR 712.03 (1), Wis. Adm. Code, and that, to the best of my knowledge, all of the information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code."

_____ _____

Kevin F. Lincicum Date
Project Hydrogeologist

"I, Daniel L. Morgan, hereby certify that I am a registered professional engineer in the State of Wisconsin, registered in accordance with the requirements of ch. A-E 4, Wis. Adm. Code; that this document has been prepared in accordance with the Rules of Professional Conduct in ch. A-E 8, Wis. Adm. Code; and that, to the best of my knowledge, all information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code."

_____ _____

Daniel L. Morgan, P.E. Date
Associate, Senior Engineer

"I, Michael R. Noel, hereby certify that I am a scientist as that term is defined in s. NR 712.03 (3), Wis. Adm. Code, and that, to the best of my knowledge, all of the information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code."

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Michael R. Noel, P.G. Date
Vice President, Principal Hydrogeologist

1. Executive Summary

This report presents a performance evaluation of the interim active gas extraction system operating at the FF/NN Landfill located in Ripon, Wisconsin. Conversion of the passive landfill gas control system into an active gas control system is being considered as a remedial alternative for the landfill to prevent migration of methane gas outside the waste limits and to remove the source of vinyl chloride impacts to groundwater.

The interim active gas extraction system was installed and started up at the site in March 2006 using temporary above ground piping to connect the existing gas vents and leachate head wells to a blower. In January, 2007 the piping was buried to prevent condensate freezing so that the system could operate through the winter. Changes in the buried piping design were required to improve system reliability following observance of cold weather effects that resulted in the system freezing up and being down during much of April and May, 2007. These changes were completed by the end of May, 2007 and the system is back up and running.

The results of an on-going landfill gas and groundwater monitoring program over the past year indicate that the system is performing well and achieving desired affects. Specifically, the following improvements are noted in the evaluation of the monitoring data:

- System operation has reduced the landfill methane gas concentrations outside the limits of fill to below the LEL,
- Methane concentrations measured within the landfill have been reduced from an average of approximately 52% methane in 2006 down to 11.4% in June 2007,
- Vinyl chloride concentrations within the landfill gas have been reduced in nearly all gas extraction vents and leachate wells, and
- Vinyl chloride concentrations in groundwater have shown decreasing or stable trends in nearly all groundwater monitoring wells.

Based on the results of this performance evaluation we recommend that the interim gas extraction system be selected as the final remedy for source control for the FF/NN Landfill (Alternative C1 of the Focused Feasibility Study modified to include the leachate head wells as part of the gas extraction system). If the WDNR feels additional monitoring is needed before a final remedy can be selected, the FF/NN Landfill PRP Group agrees to continue operating under interim status and extend the performance evaluation of the interim system for an additional year.

2. Introduction

The FF/NN Landfill occupies approximately 7.3 acres in the northwest corner of Fond du Lac County in the Town of Ripon (Town), Wisconsin (SE ¼ of the SE ¼ of Section 7, T16N, R17E; Figure 1). As a component of the 1995 Record of Decision (ROD) for the site, a composite cap (clay and HDPE plastic membrane) was constructed on the landfill in 1996, and a passive landfill gas system was constructed beneath the cap at that time.

In 2001, vinyl chloride was detected in private drinking water supply wells located in the sandstone aquifer and down gradient of the FF/NN Landfill. The PRP group cooperated fully with the Wisconsin Department of Natural Resources (WDNR) in responding to the vinyl chloride detections by extending the municipal water supply to affected homeowners and conducting additional groundwater investigations.

The WDNR requested that gas probes be installed outside the limits of waste to observe any off-site migration of landfill gas, and in 2004, 11 gas probes were installed. Four initial gas probes (GP-1, GP-2, GP-3 and GP-4) were installed approximately 50 feet from the perimeter of the landfill wastes. Seven additional gas probes (GP-5, GP-6, GP-7, GP-8, GP-10, GP-11 and GP-12) were constructed approximately 150 feet away from the waste. Methane measurements at the probes and monitoring wells showed concentrations that exceed 25% of its lower explosive limit (LEL) at several locations outside the limits of the landfill. In addition, analysis of landfill gas samples indicated that vinyl chloride was present in several landfill gas samples, which may serve as the source of vinyl chloride detected in groundwater at the site.

As a result of the vinyl chloride detections in groundwater, the WDNR requested that the PRP group evaluate alternatives to address the groundwater plume that was found since the ROD was issued. A Focused Feasibility Study (FFS) was submitted to the WDNR in October 2005 with its primary objective to develop and evaluate remedial action alternatives that are capable of mitigating unacceptable environmental risks from impacted groundwater. The institutional control of municipal water supply for the potentially affected area was selected as an interim measure and has been implemented by connecting impacted residents to a municipal water supply.

As part of the FFS, conversion of the passive landfill gas control system into an active gas control system was considered as a remedial alternative to prevent migration of methane gas outside the waste limits and to remove the source of vinyl chloride impacts to groundwater. To evaluate this source control alternative, an active gas extraction pilot test was conducted in May, 2005 at the landfill. The pilot test demonstrated that conversion of the passive gas control system into an active gas extraction system was feasible and effective. Based upon the results of the pilot test the FF/NN Landfill PRP Group implemented an Interim Action of installing an active gas removal system. The existing passive gas collection system in the landfill was utilized as well as existing leachate head wells. The design for this remedial system was submitted to the WDNR for review and approval in August, 2005 and was conditionally approved in October, 2005.

In March 2006 the interim active gas extraction system was installed and started at the site using temporary above ground piping to connect the existing gas vents and leachate head wells to a blower. In January 2007 the piping was buried to prevent condensate freezing so that the system could operate through the winter. The active gas extraction system's ability to reduce off-site landfill gas migration and to reduce vinyl chloride levels in groundwater under the landfill has been evaluated through an on-going gas and groundwater monitoring program. The results of that evaluation over the past year are presented in this report.

3. System Description

The following section describes the initial active gas extraction system layout and subsequent modifications. As-built drawings of the interim gas extraction system are included in Appendix A.

3.1. Initial Above-Ground Layout

The design for the interim active gas extraction system was submitted to the WDNR for review and approval in August, 2005 and was conditionally approved in October, 2005. The interim active gas extraction system was installed in March 2006 and consisted of connecting passive gas vents and leachate head wells to a trailer-mounted blower system via temporary above-ground piping.

3.1.1. Trailer-Mounted Blower System

The trailer-mounted blower system is located at the northeast corner of the landfill (Figure 2) where the ground elevation is lower to allow for condensate drainage. The system includes a Roots Universal RAI-J 33 positive displacement pump powered by a single-phase 240-volt 5 HP Baldor motor. The blower pulls a vacuum of up to 14 inches Hg with a flow rate of up to 170 cfm. The blower inlet piping is equipped with a pressure gauge, pressure relief valve, make-up air valve and sampling port. The blower discharges through a Stoddard D-33 Chamber-Silencer and is exhausted to atmosphere through the roof of the trailer. Enclosed within the trailer is a 300-gallon air/liquid separator with an automatic high-level shut-off. The tank discharge line is equipped with a ¾ HP Myers pump. The system is equipped with an EOS Research, Ltd. ProControl Series 2^{plus} microprocessor based control/ telemonitoring system so that operation and monitoring of critical parameters can be performed remotely. All wiring and motors are explosion-proof and system controls are located on the outside of the trailer in a weather tight unit.

3.1.2. Temporary Above-Ground Piping

The passive gas venting system consists of 4-inch diameter slotted HDPE piping within one-foot deep stone-filled trenches beneath the composite cap. A total of 3,000 lineal feet of horizontal piping is laid out across the landfill in a grid pattern (four east-west segments and three north-south segments) that is interconnected where the piping runs intersect. Twelve vertical gas vents extend from the horizontal piping (6-7 feet deep) to the landfill surface. During passive gas extraction individual wind turbines were placed on each vent. To connect the passive collection system to the blower, the wind turbines were removed and temporary above-ground black corrugated HDPE pipe was installed. The above-ground piping was connected to vents GV-1, GV-4, GV-6, GV-7, GV-9 and GV-12. The vents not connected to the blower (GV-2, GV-3, GV-5, GV-8, GV-10 and GV-11) were fitted with air tight caps.

Gas is also extracted from three vertical leachate head wells constructed of 4-inch diameter PVC pipe with 10 feet (LC-2) to 20 feet (LC-1 and LC-3) of screen. Because of the much greater length of the horizontal piping compared to the leachate head wells, most of the gas flow comes from the horizontal system. The valves at each of the leachate head wells are expected to remain fully open as the amount of gas extracted from these is limited. In order to increase the flow from the leachate head wells the flow from the vents can be reduced by using flow control valves. A flow control valve and sampling port are installed on each vent/well connected to the system. The sample ports are fitted with "quick-connect" couplings to attach monitoring equipment.

The above-ground piping is installed in three legs and connected to a manifold to the blower inlet. Leg 1 is connected to LC-1, GV-4 and GV-12 along the north end of the landfill. Leg 2 is connected to LC-2, GV-6 and GV-7 in the center of the landfill. Leg 3 is connected to LC-3, GV-1 and GV-9 at the south end of the landfill.

3.2. System Winterization

The initial above-ground layout was intended to operate until freezing of condensate in the above-ground piping became a problem. To allow the system to continue operation through the winter plans for burying the gas conveyance piping were prepared and submitted to the WDNR in November 2006 with an addendum in December 2006 based on WDNR comments. WDNR approved the plans on December 26, 2006.

3.2.1. Buried Piping

The 3-inch black corrugated HDPE above-ground piping was replaced with 3-inch Schedule 40 PVC piping and buried up to two feet below grade. The depth of burial was limited by the cap construction which included a sand drainage layer above the composite cap (LDPE geosynthetic membrane and twp feet of recompacted clay). The piping follows the surface of the landfill cap which has a 4-5% slope to the east. All of the piping that is upstream of the piping manifold occurs within the limits of waste and therefore did not require double wall containment. Piping between the manifold and the condensate tank is double-walled.

3.2.2. Condensate Tank

At the base of the slope and upstream of the blower, a 120-gallon double-walled polyethylene condensate tank was installed to knock-out and collect condensate.

3.3. Additional Modifications

Changes in the buried piping design were required to improve system reliability following observance of cold weather effects on operation. Water accumulating in the buried piping manifold during vacuum blower-off periods froze and caused high vacuum in system components during blower operation. High vacuum in addition to earth and hydraulic pressure and a non-adjustable pressure relief valve caused the condensate tank

to buckle. An addendum to the piping design was prepared and submitted to WDNR in April 2007 and system modifications were made in May 2007.

3.3.1. Condensate Tank Replacement

A concrete secondary containment vault was installed at the condensate tank location. The concrete vault removes hydraulic and earth pressure forces on the primary condensate tank. The concrete vault will allow easy inspection to determine if the primary condensate tank has leaked. A new 110-gallon primary condensate tank was installed within the secondary concrete containment vault. The new tank has an integral stiffening ring at mid depth which greatly increases the tank sidewall resistance to internal buckling during periods of high vacuum.

3.3.2. Adjustable Vacuum Relief Valve

A new adjustable vacuum relief valve replaced the fixed vacuum relief valve inside the vacuum blower trailer to regulate the maximum system vacuum during operation. The set point for vacuum relief (1 - 5 inches Hg) is based on the minimum system vacuum required to adequately pull methane from the nine vacuum extraction points across the landfill.

3.3.3. Insulation and Heat Tracing

Insulation was added at the well heads and inside the piping manifold vault to stabilize extraction gas temperature during vacuum blower operation. Low temperature heat tracing was also added at three locations to prevent condensate from freezing in piping. The heat tracing is only energized during winter months.

4. System Operation

The active gas extraction system start-up occurred on March 22, 2006. The system operational cycle was set at 18 hours on and 12 hours off for the first eleven months of operation (through mid-February 2007). Chart 26 presents a graphical summary of the system's operating time since start-up. Most of the flow came from the shallow gas vents averaging approximately 30 cubic feet per minute (cfm) from each vent with an average of about 5 cfm coming from each leachate head wells.

In order to maintain continued gas extraction while at the same time trying to minimize oxygen being pulled in to the landfill, the gas extraction rate was decreased beginning in mid-February 2007 to keep the oxygen level in the extraction wells below 5%. While adjusting the valve opening at each gas well was preferable to reducing the number of operational hours of the blower, both adjustments were necessary in order to achieve the desired level of oxygen in all of the extraction wells and vents. At that time the system on/off cycle was set at 12-hours on/12-hours off and flow from the vents was reduced to 5 cfm each. The system operated intermittently through March, 2007 due to ice blockage in the piping manifold.

As described in Section 3.3 condensate freezing in the lines caused operational problems and damage to the condensate tank. As a result the system did not operate during April and May, 2007 while system modifications and repairs were made. The system modifications will allow continued operation of the gas extraction system during colder winter months.

The system was restarted on May 25, 2007 after repairs and improvements were completed. For the restart, the system was run on a 6 hours on and 18 hours off cycle for a few days and subsequently on a 12 hours on and 12 hours off cycle. The flow valves for the shallow vents were adjusted to produce an average flow of approximately 5 cfm per vent. The decrease in flow from the shallow vent system resulted in an increase in flow in the leachate head wells to an average of approximately 65 cfm per well. In mid-June the system operation was reduced to a daily cycle of 6 hours on and 18 hours off using the remote PLC controls due to decreasing methane concentrations and increasing oxygen levels in some of the shallow gas vents. On June 20, 2007 the valves on gas vents GV-1 and GV-7 were closed due to oxygen levels being consistently above 5%.

5. Gas Monitoring Results

Gas monitoring is performed at least monthly and usually more frequently at the vents and wells that are part of the gas extraction system (GV-1, GV-4,GV-6, GV-7, GV-9, GV-12, LC-1, LC-2 and LC-3) and at the gas probes (GP-1, GP-2, GP-3, GP-4, GP-5, GP-6, GP-7, GP-8, GP-10, GP-11 and GP-12) and selected monitoring wells (MW-101, MW-102, MW-103, MW-104) outside the waste around the perimeter of the landfill. The gas is sampled using a portable gas detection meter to record percentages of oxygen, carbon dioxide and methane at each location. Periodic vacuum and flow measurements are also collected from the gas extraction points. On a quarterly basis gas samples are collected from the nine gas extraction points and submitted for laboratory analysis of VOCs. Barometric pressure is obtained from the Barlow Park weather station in Ripon, WI located approximately two miles southeast of the site.

5.1. Gas Extraction System Monitoring

Gas extraction system monitoring is performed on gas vents GV-1, GV-4, GV-6, GV-7, GV-9 and GV-12 and leachate head wells LC-1, LC-2 and LC-3. Results of gas monitoring field parameters are provided in Table 1 and are plotted in Charts 1-9. Barometric pressure is provided in Table 2 and Chart 25. VOC analytical results are provided in Table 3.

The following table below provides a summary of percent methane measurements at the start-up of the system, the subsequent average for the past year plus since start-up, the rebound that occurred as a result of the system being down for two months for repairs and a recent measurement after restarting the system.

% Methane in Extraction Vents/Wells				
Extraction Point	Initial Peak (March, 2006)	Subsequent 2006 Average	Downtime Rebound (May, 2007)	Recent (June 19, 2007)
GV-1	48	9	29	1.4
GV-4	54	13	39	5.0
GV-6	54	17	36	13
GV-7	44	11	35	8.0
GV-9	56	11	27	10
GV-12	36	8	20	1.1
LC-1	56	13	43	10.5
LC-2	62	36	46	39.5
LC-3	62	18	30	14.5
AVG	52	15	34	11.4

The measurements indicate an average methane concentration of approximately 52% at system start-up which dropped to 15% during the past year. While the system was down in April-May, 2007 methane concentrations rebounded to approximately 34% but were

quickly reduced to below the year-long average within the first couple of weeks of system restart and most recently dropped further to an average of 11.4% as of June 19, 2007.

A methane/air mixture becomes explosive when 5 percent (LEL) to 15 percent (UEL) methane is present with at least a 12 percent oxygen concentration[1]. If an ignition source is available, then an explosion could occur. To maintain conditions that minimize the potential for a landfill fire it is desirable to maintain oxygen at a level below 5 percent, well below the 12 percent required for ignition. As can be seen in the following table the year long average oxygen level for the extracted gas was 5.6 percent. Measurements during the recent start-up show average oxygen levels at 3.4 percent, well below the 5 percent goal. To maintain the low oxygen level, flow from the shallow vents has been reduced with the flow control valves and the system is operating on a 6 hours on and 18 hours off cycle, 12 hours per day shorter than the on-time maintained for the previous year.

% Oxygen in Extraction Vents/Wells				
Extraction Point	Initial	Subsequent Average	Downtime Rebound	Recent (6/19/07)
GV-1	1.4	7	0.8	8.5
GV-4	0.9	4	0.2	0.8
GV-6	0.9	4	0.6	0.7
GV-7	1.3	6	0.5	6.7
GV-9	0.9	5	0.4	2.8
GV-12	2.1	7	0.2	4.8
LC-1	0.7	7	2.0	2.2
LC-2	1.0	5	1.5	1.2
LC-3	0.5	5	3.2	3.0
AVG	1.1	5.6	1.0	3.4

Samples of the landfill gas were collected quarterly from each of the extraction vents and wells and submitted for analysis of VOCs. The results for all the VOCs are summarized on Table 3. The vinyl chloride results are the most important since one of the objectives of the gas extraction is to remove vinyl chloride that is contributing to groundwater impacts. The vinyl chloride results are shown in the following table below. The results indicate that the concentration of vinyl chloride in the landfill gas was initially highest in the gas vents and low to nondetectable in the deeper leachate head wells. Within the gas vents the concentrations of vinyl chloride were initially highest in the southern part of the landfill (GV-1 and GV-9) and decreased toward the north end of the landfill (GV-4 and GV-12). During operation of the gas extraction system, the concentration of vinyl chloride decreased in the gas vents over the past year. GV-12 had a slight increase in the May, 2007 sampling event. In the leachate head wells the concentration of vinyl chloride also decreased at LC-2 and remained nondetectable at LC-1. At LC-3 however, the

[1] Kissell, Fred N., Handbook for Methane Control in Mining, NIOSH Information Circular 9486, 2006

concentration of vinyl chloride in the landfill gas has apparently increased over the past year.

Landfill Gas Vinyl Chloride Concentrations (ppbv)				
Extraction Point	7/28/06	11/2/06	2/23/07	5/30/07
GV-1	10500	987	0	530
GV-4	332	31	0	92
GV-6	3590	85	0	150
GV-7	7200	922	58	350
GV-9	11200	787	449	1500
GV-12	66	55	0	210
LC-1	0	0	0	0
LC-2	166	0	0	2.4
LC-3	0	1600	11900	172000

It appears that at most of the gas extraction vent and well locations the vinyl chloride within the landfill was evacuated and then had a slight rebound while the system was off during April and May, 2007. At LC-3, the increase in vinyl chloride over time suggests that the leachate well was not at a location of vinyl chloride gas accumulation, but as gas from the leachate well was being extracted, vinyl chloride was being drawn down into the well resulting in the increase over time. The large increase in vinyl chloride observed at LC-3 in the May 2007 sampling event is also likely due to the increase in flow in the leachate wells[2] as a result of decreasing the flow in the shallow gas vents.

5.2. Perimeter Landfill Gas Monitoring

Gas monitoring outside the limits of waste is performed at gas probes GP-1, GP-2, GP-3, GP-4, GP-5, GP-6, GP-7, GP-8, GP-10, GP-11 and GP-12 and at groundwater monitoring wells MW-101, MW-102, MW-103 and MW-104. Results of gas monitoring field parameters are provided in Table 1 and are plotted in Charts 10-24. At start-up, three of theses monitoring points (GP-1, GP-2 and MW-104) contained methane concentrations above the LEL (5%). Methane concentrations at these points dropped below the LEL within three weeks of system operation and, except for a few intermittent measurements, methane concentrations in all the perimeter wells have been well below the LEL.

After the restart of the system in May 2007, methane concentrations at GP-1 located at the northeast corner of the landfill increased to above the LEL during the first week of June, but has subsequently decreased to concentrations well below the LEL.

[2] Due to increasing oxygen levels in the shallow gas vents, the gas flow in the shallow vents was reduced from an average of approximately 30 cfm per vent down to approximately 5 cfm per vent. Resultant gas flow in the leachate wells increased from an average of approximately 5 cfm per well up to approximately 65 cfm per well.

6. Groundwater Monitoring Results

There are 27 groundwater monitoring wells at the site, some of which have been sampled since 1993. The wells are grouped into four hydrostratigraphic layers (1-4). The current monitoring plan includes eleven wells that are sampled quarterly, ten wells that are sampled semi-annually and six wells that are sampled annually. The results of the VOC analyses are summarized on Table 4 and time trend plots of trichloroethene (TCE), 1,2-dichloroethene (DCE), and vinyl chloride (VC) for each well are presented in Charts 27-53. Figures 4-7 present the VOC (TCE, DCE, VC) plumes for Layers 1-4, respectively.

6.1. Layer 1

Layer 1 monitoring wells (MW-101, MW-102, MW-103, MW-104, MW-106, MW-107, MW-108, MW-111 and MW-112) are completed at or near the water table surface within the unconsolidated deposits with the bottom of well screen occurring between an elevation of 812-822 feet above mean sea level (amsl). The Layer 1 charts show that VOC concentrations have been decreasing over the years and continued to do so during operation of the gas extraction system. At MW-104, vinyl chloride declined to nondetectable levels and at MW-103 and MW-112 vinyl chloride concentrations decreased since system start-up in March 2006. The current Layer 1 plume is shown in Figure 4.

6.2. Layer 2

Layer 2 monitoring wells (P-101, P-102, P-103, P-104, P-106, P-107, P-108 and P-111) are completed within the unconsolidated deposits with the bottom of well screen occurring between an elevation of 774-792 feet above mean sea level (amsl). The Layer 2 charts show that VOC concentrations have generally been decreasing over the years and continued to do so during operation of the gas extraction system. At P-103 the concentration of vinyl chloride decreased since system start-up. At P-107 the vinyl chloride concentration remained about the same. The current Layer 2 plume is shown in Figure 5.

6.3. Layer 3

Layer 3 monitoring wells (P-103D, P-111D, MW-3B, P-113B, P-114, P-115 and P-116) are completed within the sandstone bedrock (except P-111D) with the bottom of well screen occurring between an elevation of 634-704 feet above mean sea level (amsl). The Layer 3 charts show decreases in the vinyl chloride concentrations for wells P-103D and P-111D since system start-up. Vinyl chloride concentrations at P-114 and P-115 are slightly lower than they were before system start-up. The current Layer 2 plume is shown in Figure 5.

6.4. Layer 4

Layer 4 monitoring wells (MW-3A, P-107D and P-113A) are completed within the sandstone or granite bedrock with the bottom of well screen occurring between an elevation of 507-570 feet above mean sea level (amsl). Well P-107D is the only Layer 4 well with detectable VOCs. The vinyl chloride concentration in this well has fluctuated in the past but decreased in concentration over the past year. Well MW-3A is downgradient of P-107D and has consistently shown no detectable VOCs.

7. Performance Evaluation

The results of the on-going landfill gas and groundwater monitoring program over the past year indicate that the system is performing well and effective in controlling methane and vinyl chloride gas migration and in groundwater remediation. Specifically, the following improvements are noted in the evaluation of the monitoring data:

- System operation has reduced the landfill methane gas concentrations outside the limits of fill to below the LEL,
- Methane concentrations measured within the landfill have been reduced from an average of approximately 52% methane in 2006 down to 11.4% in June 2007,
- Vinyl chloride concentrations within the landfill gas have been reduced in nearly all gas extraction vents and leachate wells, and
- Vinyl chloride concentrations in groundwater have shown decreasing or stable trends in nearly all groundwater monitoring wells.

Going forward the operation of the system is being balanced to provide continued control of methane gas migration and removal of vinyl chloride while at the same time trying to maintain oxygen levels below 5%. In order to maintain low oxygen levels, two gas vents have been closed, the gas flow from the gas vent piping network has been reduced and the system operation has been reduced to 6 hours a day. Attempts to run the system for longer periods of time would require all the shallow vents to be totally closed to prevent increasing oxygen levels, but this would result in less control on gas migration. The reduction in flow from the gas vents results in greater gas flow from the leachate wells which currently contain higher concentrations of methane and vinyl chloride (LC-3).

It is believed that the modifications made to the system to winterize it should minimize condensate freezing in the lines and allow the system to operate through the winter months. The system operation will be checked more frequently during next winter to identify any problems early and ensure proper performance.

Based on the results of this performance evaluation we recommend that the interim gas extraction system be selected as the final remedy for source control for the FF/NN Landfill (Alternative C1 of the Focused Feasibility Study modified to include the leachate head wells as part of the gas extraction system). If the WDNR feels additional monitoring is needed before a final remedy can be selected, the FF/NN Landfill PRP Group agrees to continue operating under interim status and extend the performance evaluation of the interim system for an additional year.

TABLES

	Time	Date	CH_4	CO_2	O_2	N	Velocity	Extraction	Comments
			(%)	(%)	(%)	(%)	feet/min	CFM*	
Extraction Points			variable	variable	<5	<40			target percentages
GV-1	11:33	3/20/06	10.2	8.1	14.9	66.8			pre-startup
	10:08	3/22/06	17.2	11.7	14.8	56.3			
	11:33	3/22/06	10.2	8.1	14.9	66.8			
	15:38	3/22/06	48.6	29.2	1.4	20.8			
	8:39	3/23/06	43.2	26.9	1.0	28.9			
	16:40	3/23/06	41.1	21.9	2.4	34.6			
	15:00	3/24/06	11.5	8.6	13.4	66.5			
	14:50	3/28/06	8.7	7.4	13.4	70.5			
	19:02	3/30/06	21.1	19.6	2.4	56.9	8	1	
	13:20	4/5/06	23.0	17.0	9.8	50.2			
	13:15	4/6/06	8.0	8.2	13.3	70.5			
	13:30	4/11/06	10.2	13.4	6.7	69.7			
	10:51	4/14/06	12.1	16.6	2.3	69.0	0	0	
	15:32	4/14/06	22.8	24.9	1.0	51.3	430	34	
	10:15	4/17/06	19.6	24.6	5.0	50.8			
	19:36	4/27/06	11.3	16.8	1.9	70.0	315	25	
	13:22	5/4/06	0.4	0.1	2.5	97.0			
	10:30	5/22/06	5.9	19.0	3.0	72.1			
	14:32	6/2/06	6.6	19.5	3.4	70.5			
	8:35	6/9/06	7.9	17.8	6.4	67.9			
	12:04	6/14/06	7.1	10.8	15.4	66.7			
	10:57	6/22/06	6.3	19.5	5.6	68.6			
	11:31	7/5/06	5.3	20.0	5.9	68.8			
	10:45	7/10/06	4.7	18.8	5.2	71.3			
	10:11	7/17/06	5.7	19.8	5.7	68.8			
	14:11	7/28/06	5.8	19.7	5.3	69.2			
	10:04	8/8/06	4.6	18.2	6.4	70.8			
	9:16	8/16/06	2.4	1.3	7.1	89.2			
	8:33	8/21/06	4.3	18.0	7.5	70.2			
	2:18	8/28/06	3.4	18.2	8.1	70.3			
	11:31	9/13/06	8.1	0.0	8.9	83.0			
	11:29	9/25/06	0.3	0.6	4.9	94.2			
	8:29	10/10/06	4.0	11.6	13.0	71.4			
	8:35	10/23/06	0.7	0.1	20.4	78.8			
	14:16	11/2/06	4.9	13.8	8.6	72.8			
	15:04	11/14/06	0.3	0.0	20.1	79.7			
	11:31	11/27/06	0.2	0.0	20.2	79.7			
	13:19	12/26/06	4.9	14.0	7.3	73.8			
	12:58	1/27/07	3.3	12.6	7.4	76.7			
	9:28	2/15/07	0.3	5.6	14.2	80.0			
	11:45	2/24/07	0.6	5.4	15.1	78.9			
	9:38	3/1/07	7.5	18.6	0.9	73.0			
	10:07	3/1/07	6.5	18.0	1.7	73.8	60	5	
	11:11	3/1/07	7.0	18.0	2.1	72.9			
	12:20	3/1/07	6.5	18.4	2.2	72.9			
	13:40	3/1/07	5.5	17.8	3.2	73.5	80	6	
	13:42	3/1/07	6.0	17.4	3.8	72.8	100	8	
	14:36	3/1/07	5.5	16.4	4.2	73.9	20	2	
	7:45	3/5/07	0.3	3.2	16.6	79.9			adjust blower time, 12 on, 12 off
	7:45	3/24/07	1.4	11.2	8.0	79.5			
	16:32	3/24/07	1.1	10.4	9.0	79.5			
	16:45	3/26/07	0.5	8.6	10.7	80.2			
	7:05	3/27/07	0.4	8.0	11.8	79.9			
	16:50	3/28/07	0.6	8.8	11.7	78.9			
	7:35	3/29/07	0.3	9.0	10.6	80.1			
	16:38	3/29/07	0.4	8.6	11.2	79.8			
	7:35	3/30/07	8.0	17.8	1.6	72.6			blower off
	10:42	5/30/07	29.5	25.0	0.8	44.7	110	9	restart and run 24 hrs
	13:50	5/30/07	23.5	23.6	1.2	51.7			
	10:05	5/31/07	8.5	17.4	2.3	71.8			reduce to 12 on 12 off
	16:05	6/1/07	5.5	15.8	3.0	75.7			
	15:10	6/2/07	4.8	15.0	3.2	77.1			
	15:40	6/3/07	4.0	14.6	3.6	77.8			
	13:50	6/4/07	3.0	14.0	4.7	78.3			reduce to 6 on 18 off
	14:23	6/7/07	7.0	16.8	2.2	74.0			
	16:05	6/12/07	0.9	11.2	9.6	78.3	112	9	
	13:45	6/14/07	1.5	12.0	8.3	78.3	59	5	
	13:45	6/19/07	1.4	12.2	8.5	78.0	96	8	

	Time	Date	CH_4	CO_2	O_2	N	Velocity	Extraction	Comments
			(%)	(%)	(%)	(%)	feet/min	CFM*	
GV-4	11:23	3/20/06	15.6	15.9	9.1	59.4			pre-startup
	10:04	3/22/06	45.0	26.7	2.7	25.6			
	15:30	3/22/06	54.0	32.9	0.9	12.2			
	8:33	3/23/06	50.6	32.3	0.9	16.2			
	16:32	3/23/06	42.4	26.0	0.8	30.8			
	14:56	3/24/06	30.0	15.7	16.0	38.3			
	14:20	3/28/06	10.5	9.9	8.9	70.7			
	19:25	3/30/06	27.4	25.4	1.6	45.6	270	21	
	13:15	4/5/06	16.0	16.9	8.2	58.9			
	12:45	4/6/06	14.2	15.1	8.8	61.9			
	13:05	4/11/06	11.7	12.9	11.5	63.9			
	10:47	4/14/06	22.7	23.6	1.6	52.1	330	26	
	15:24	4/14/06	15.5	30.4	2.5	51.6	435	34	
	9:55	4/17/06	10.0	15.5	7.6	66.9			
	19:25	4/27/06	8.1	15.2	3.7	73.0	400	31	
	13:07	5/4/06	7.4	15.3	5.3	72.0			
	10:15	5/22/06	6.8	16.4	5.8	71.0			
	14:45	6/2/06	14.1	31.6	5.1	49.2			
	8:18	6/9/06	10.1	0.6	8.0	81.3			
	12:32	6/14/06	10.4	21.1	7.7	60.8			
	11:30	6/22/06	0.6	0.4	19.9	79.1			
	12:04	7/5/06	12.7	8.8	5.1	73.4			
	11:28	7/10/06	6.3	24.5	2.5	66.7			
	10:48	7/17/06	5.7	21.0	5.4	67.9			
	13:58	7/28/06	8.0	25.3	2.8	63.9			
	9:44	8/8/06	6.2	23.0	4.0	66.8			
	9:03	8/16/06	6.1	23.2	4.0	66.7			
	8:17	8/21/06	7.0	0.5	4.6	87.9			
	2:06	8/28/06	7.4	25.9	3.9	62.8			
	11:20	9/13/06	8.1	0.1	3.3	88.5			
	11:17	9/25/06	10.1	0.3	1.3	88.3			
	8:17	10/10/06	7.4	25.4	3.4	63.8			
	8:17	10/23/06	7.8	24.0	6.3	61.9			
	13:45	11/2/06	6.0	20.4	4.2	69.4			
	14:51	11/14/06	8.0	16.6	6.4	69.0			
	11:25	11/27/06	4.0	14.8	6.3	75.0			
	12:50	12/26/06	4.4	18.8	3.1	73.7			
	13:42	1/27/07	9.0	20.4	2.7	67.9			
	9:26	2/15/07	0.5	14.4	3.8	81.3			
	11:18	2/24/07	3.2	14.8	6.7	75.3			
	9:32	3/1/07	16.5	22.2	0.2	61.1			
	9:50	3/1/07	16.5	22.6	0.8	60.1	60	5	
	11:05	3/1/07	12.0	19.8	1.2	67.0			
	12:13	3/1/07	12.0	19.2	1.2	67.6			
	13:15	3/1/07	10.5	19.0	1.2	69.3	90	7	
	13:17	3/1/07	10.5	19.2	1.0	69.3	120	9	
	14:25	3/1/07	9.5	1.2	17.6	71.7	20	2	
	8:15	3/5/07	6.0	16.8	3.2	74.0			adjust blower time, 12 on, 12 off
	8:15	3/24/07	9.5	21.8	1.0	67.7			
	17:00	3/24/07	7.0	20.8	1.3	70.9			
	17:14	3/26/07	2.6	19.2	2.1	76.1			
	7:33	3/27/07	1.7	18.8	2.8	76.7			
	16:24	3/28/07	2.5	19.2	1.9	76.4			
	8:08	3/29/07	2.9	19.2	1.5	76.4			
	17:04	3/29/07	3.3	19.2	1.7	75.9			
	8:08	3/30/07	8.5	20.6	0.2	70.7			blower off
	10:54	5/30/07	39.5	27.4	0.2	32.9	130	10	restart and run 24 hrs
	13:34	5/30/07	37.5	26.8	0.2	35.5			
	10:35	5/31/07	16.5	23.8	0.2	59.5			reduce to 12 on 12 off
	16:36	6/1/07	12.5	22.5	0.4	64.6			
	15:33	6/2/07	11.0	22.4	0.4	66.2			
	16:13	6/3/07	9.5	21.8	0.3	68.4			
	14:15	6/4/07	6.5	21.6	0.4	71.5			reduce to 6 on 18 off
	14:59	6/7/07	9.5	22.2	0.1	68.2			
	17:25	6/12/07	4.4	20.8	1.0	73.8	47	4	
	14:40	6/14/07	4.3	20.6	0.5	74.7	35	3	
	14:50	6/19/07	5.0	21.0	0.8	73.2	73	6	

	Time	Date	CH_4	CO_2	O_2	N	Velocity	Extraction	Comments
			(%)	(%)	(%)	(%)	feet/min	CFM*	
GV-6	11:19	3/20/06	0.4	0.2	20.9	78.5			pre-startup
	10:00	3/22/06	45.9	26.6	2.6	24.9			
	15:49	3/22/06	54.2	31.6	0.9	13.3			
	8:47	3/23/06	51.5	29.5	1.3	17.7			
	16:50	3/23/06	45.0	25.4	3.8	25.8			
	15:30	3/24/06	24.0	13.9	15.0	47.1			
	14:30	3/28/06	13.2	10.0	12.9	63.9			
	19:00	3/30/06	34.4	24.9	2.9	37.8	295	23	
	13:25	4/5/06	22.9	18.7	8.2	50.2			
	12:55	4/6/06	21.9	17.4	7.9	52.8			
	13:10	4/11/06	23.8	20.2	5.9	50.1			
	10:56	4/14/06	26.9	23.4	2.3	47.4	305	24	
	15:53	4/14/06	21.3	28.5	5.4	44.8	225	13	
	10:00	4/17/06	31.3	34.0	3.0	31.7			
	19:55	4/27/06	15.6	19.8	4.0	60.6	215	17	
	13:15	5/4/06	0.0	0.0	2.4	97.6			
	10:19	5/22/06	16.2	24.6	1.3	57.9			
	8:23	6/9/06	24.4	32.8	6.2	36.6			
	12:37	6/14/06	22.8	29.3	5.6	42.3			
	10:46	6/22/06	12.1	23.0	5.4	59.5			
	12:07	7/5/06	13.7	24.7	4.9	56.7			
	11:33	7/10/06	12.6	26.2	4.0	57.2			
	10:54	7/17/06	12.7	25.6	3.9	57.8			
	14:04	7/28/06	4.8	24.5	4.4	66.3			
	9:53	8/8/06	14.8	29.1	2.3	53.8			
	9:06	8/16/06	14.8	27.1	4.1	54.0			
	8:22	8/21/06	12.7	8.6	3.8	74.9			
	14:10	8/28/06	16.6	25.7	5.0	52.7			
	11:24	9/13/06	8.2	1.4	5.3	85.1			
	11:20	9/25/06	8.1	0.8	1.8	89.3			
	8:20	10/10/06	18.1	30.1	3.2	48.6			
	8:21	10/23/06	12.8	18.1	4.6	64.5			
	14:05	11/2/06	10.0	22.4	1.3	66.3			
	14:56	11/14/06	19.0	21.8	4.5	54.7			
	11:27	11/27/06	9.0	14.6	8.4	68.0			
	13:00	12/26/06	15.5	22.8	1.5	60.2			
	14:02	1/27/07	13.5	20.8	1.7	64.0			
	9:32	2/15/07	0.6	11.4	8.0	80.1			
	11:24	2/24/07	2.6	12.0	9.6	75.9			
	9:41	3/1/07	23.0	24.0	0.2	52.8			
	10:15	3/1/07	13.5	17.8	3.6	65.1	40	3	
	10:17	3/1/07	12.0	19.2	1.3	67.5			
	11:13	3/1/07	9.0	17.4	2.5	71.1			
	12:22	3/1/07	7.5	16.6	3.0	72.9			
	13:53	3/1/07	6.5	15.6	4.3	73.6	80	6	
	14:00	3/1/07	7.0	15.5	4.2	73.3	120	9	
	14:40	3/1/07	6.0	14.4	5.2	74.4	20	2	
	8:00	3/5/07	6.0	14.4	6.4	73.2			adjust blower time, 12 on, 12 off
	8:05	3/24/07	11.5	20.0	2.8	65.7			
	16:50	3/24/07	12.0	19.4	2.8	65.8			
	17:05	3/26/07	9.5	18.4	3.2	68.9			
	7:25	3/27/07	7.0	17.6	4.1	71.3			
	16:31	3/28/07	11.0	20.0	1.8	67.2			
	7:59	3/29/07	8.5	19.8	1.4	70.3			
	16:55	3/29/07	12.0	20.0	1.3	66.7			
	7:59	3/30/07	9.0	20.8	0.3	69.9			blower off
	10:45	5/30/07	31.0	22.6	0.7	45.7	80	6	restart and run 24 hrs
	13:40	5/30/07	36.5	26.2	0.6	36.7			
	10:25	5/31/07	21.5	22.8	1.5	54.2			reduce to 12 on 12 off
	16:28	6/1/07	20.5	22.0	1.1	56.4			
	15:25	6/2/07	20.0	21.8	1.1	57.1			
	16:05	6/3/07	20.5	22.4	0.5	56.6			
	14:08	6/4/07	16.5	22.0	0.8	60.7			reduce to 6 on 18 off
	15:04	6/7/07	19.0	22.6	0.4	58.0			
	17:35	6/12/07	14.0	21.6	1.7	62.7	147	11	
	15:00	6/14/07	14.0	21.8	0.6	63.6	122	10	
	14:30	6/19/07	13.0	22.8	0.7	63.5	71	6	

	Time	Date	CH_4	CO_2	O_2	N	Velocity	Extraction	Comments
			(%)	(%)	(%)	(%)	feet/min	CFM*	
GV-7	11:17	3/20/06	9.3	6.8	15.8	68.1			pre-startup
	9:58	3/22/06	44.0	24.8	1.3	29.9			
	15:46	3/22/06	11.1	24.5	1.3	63.1			
	8:44	3/23/06	36.7	25.0	1.6	36.7			
	14:40	3/24/06	8.2	6.8	15.3	69.7			
	14:40	3/28/06	8.5	8.3	12.7	70.5			
	19:13	3/30/06	19.8	18.8	3.2	58.2	311	24	
	13:30	4/5/06	11.5	12.5	9.8	66.2			
	13:00	4/6/06	8.1	8.5	12.5	70.9			
	13:15	4/11/06	13.9	16.6	4.8	64.7			
	10:55	4/14/06	13.9	17.1	2.3	66.7	340	27	
	15:39	4/14/06	28.6	29.2	3.5	38.7	280	22	
	10:05	4/17/06	13.1	18.3	7.9	60.7			
	19:45	4/27/06	8.7	13.6	5.4	72.3	226	18	
	13:17	5/4/06	0.0	0.0	6.3	93.7			
	10:23	5/22/06	6.7	15.1	7.0	71.2			
	8:26	6/9/06	9.8	24.8	9.1	56.3			
	12:40	6/14/06	8.2	13.5	8.7	69.6			
	10:48	6/22/06	5.6	15.4	7.8	71.2			
	12:14	7/5/06	5.2	17.1	7.4	70.3			
	11:35	7/10/06	0.0	0.0	5.6	94.4			
	11:00	7/17/06	4.6	16.4	7.0	72.0			
	14:07	7/28/06	6.2	16.7	6.7	70.4			
	9:59	8/8/06	4.9	15.6	7.9	71.6			
	9:08	8/16/06	5.6	15.1	8.3	71.0			
	8:25	8/21/06	1.6	4.2	9.3	84.9			
	2:12	8/28/06	5.2	14.8	8.8	71.2			
	11:25	9/13/06	4.6	13.3	9.9	72.2			
	11:23	9/25/06	6.8	0.5	5.1	87.6			
	8:22	10/10/06	5.2	13.8	11.3	69.7			
	8:24	10/23/06	2.4	3.0	16.0	78.6			
	14:10	11/2/06	6.5	13.0	9.4	71.1			
	14:59	11/14/06	2.6	8.6	11.5	77.3			
	11:30	11/27/06	2.7	8.6	11.7	77.1			
	13:05	12/26/06	9.0	16.0	6.0	69.0			
	14:12	1/27/07	8.0	4.8	5.4	81.8			
	9:33	2/15/07	0.9	15.0	3.3	80.8			
	11:30	2/24/07	sampling port clogged with ice						
	9:43	3/1/07	30.5	27.2	0.3	42.0			
	10:20	3/1/07	18.5	23.4	0.7	57.4	60	5	
	11:17	3/1/07	20.5	24.2	0.4	54.9			
	12:24	3/1/07	17.0	23.0	0.4	59.6			
	14:04	3/1/07	17.5	23.0	0.8	58.7	130	10	
	14:42	3/1/07	16.0	22.0	1.5	60.5	20	2	
	7:55	3/5/07	4.9	17.4	2.6	75.1			adjust blower time, 12 on, 12 off
	7:55	3/24/07	7.0	12.2	6.6	74.2			
	16:37	3/24/07	6.5	12.0	6.7	74.8			
	16:56	3/26/07	5.0	11.4	7.4	76.2			
	7:14	3/27/07	4.1	10.4	8.9	76.6			
	16:38	3/28/07	4.6	11.6	8.0	75.8			
	7:45	3/29/07	4.2	12.6	6.3	77.0			
	16:47	3/29/07	4.9	12.4	6.8	76.0			
	7:40	3/30/07	4.0	14.2	4.5	77.4			blower off
	10:50	5/30/07	35.5	26.2	0.5	37.8	70	5	restart and run 24 hrs
	13:42	5/30/07	28.5	21.4	1.4	48.7			
	10:15	5/31/07	16.5	17.4	2.7	63.4			reduce to 12 on 12 off
	16:15	6/1/07	15.0	17.0	2.7	65.3			
	15:17	6/2/07	14.0	16.8	3.0	66.2			
	15:48	6/3/07	13.5	16.6	3.1	66.8			
	13:54	6/4/07	11.5	15.6	4.0	68.9			reduce to 6 on 18 off
	14:32	6/7/07	15.0	18.0	2.1	64.9			
	16:25	6/12/07	8.0	14.2	6.2	71.6	41	3	
	14:05	6/14/07	9.5	15.0	5.6	69.9	47	4	
	13:45	6/19/07	8.0	14.2	6.7	71.1	126	10	

	Time	Date	CH_4	CO_2	O_2	N	Velocity	Extraction	Comments
			(%)	(%)	(%)	(%)	feet/min	CFM*	
GV-9	11:13	3/20/06	16.8	14.0	9.7	59.5			pre-startup
	9:56	3/22/06	42.7	27.8	0.8	28.7			
	15:42	3/22/06	47.8	30.5	1.3	20.4			
	8:42	3/23/06	49.0	31.4	1.0	18.6			
	16:43	3/23/06	56.4	36.6	0.9	6.1			
	16:48	3/23/06	38.0	28.3	1.7	32.0			
	15:10	3/24/06	11.2	9.3	14.0	65.5			
	15:00	3/28/06	8.8	8.9	12.8	69.5			
	19:05	3/30/06	25.8	26.3	1.5	46.4	236	18	
	13:40	4/5/06	14.1	17.7	7.8	60.4			
	13:20	4/6/06	11.0	13.7	10.0	65.3			
	13:25	4/11/06	8.9	11.8	11.2	68.1			
	10:53	4/14/06	15.7	20.6	1.4	62.3	270	21	
	15:36	4/14/06	12.8	19.0	2.9	65.3	390	30	
	10:20	4/17/06	11.2	15.7	11.6	61.5			
	19:40	4/27/06	9.6	16.8	3.7	69.9	311	24	
	13:24	5/4/06	0.0	0.1	3.7	96.2			
	10:33	5/22/06	6.3	17.9	4.4	71.4			
	8:38	6/9/06	5.2	15.6	7.0	72.2			
	13:00	6/14/06	12.4	31.0	6.1	50.5			
	11:01	6/22/06	5.1	18.4	5.9	70.6			
	11:35	7/5/06	5.8	20.5	4.8	68.9			
	10:48	7/10/06	0.9	22.4	2.8	73.9			
	10:14	7/17/06	6.0	20.6	5.6	67.8			
	14:12	7/28/06	7.0	20.7	4.4	67.9			
	10:06	8/8/06	5.4	19.6	5.3	69.7			
	9:25	8/16/06	9.8	6.4	6.0	77.8			
	8:35	8/21/06	0.4	0.8	6.9	91.9			
	2:20	8/28/06	5.6	18.8	7.2	68.4			
	11:34	9/13/06	0.6	1.4	6.9	91.1			
	11:31	9/25/06	7.0	0.7	6.4	85.9			
	8:30	10/10/06	5.9	18.2	7.4	68.5			
	8:39	10/23/06	6.8	19.2	7.0	67.0			
	14:18	11/2/06	4.6	14.6	7.2	73.7			
	15:13	11/14/06	4.2	14.0	7.4	74.5			
	11:35	11/27/06	3.2	14.0	7.4	75.4			
	13:25	12/26/06	7.5	17.4	4.5	70.6			
	13:05	1/27/07	6.5	14.8	6.8	71.9			
	9:30	2/15/07	0.4	15.8	4.0	79.8			
	11:50	2/24/07	7.0	12.2	8.6	72.2			
	9:36	3/1/07	18.0	22.0	0.3	59.7			
	10:03	3/1/07	11.5	18.2	2.1	68.2	60	5	
	11:09	3/1/07	6.0	14.5	4.9	74.6			
	11:24	3/1/07	5.5	14.4	5.3	74.8			
	12:18	3/1/07	5.0	13.8	5.4	75.8			
	13:25	3/1/07	2.6	12.6	6.7	78.1	70	5	
	13:35	3/1/07	2.2	6.8	12.6	78.5	20	2	
	14:34	3/1/07	0.7	10.6	7.9	80.9			
	7:40	3/5/07	0.2	0.0	20.1	79.8			adjust blower time, 12 on, 12 off
	8:25	3/24/07	7.0	15.6	5.4	72.0			
	17:15	3/24/07	7.0	15.8	4.9	72.3			
	17:35	3/26/07	5.5	15.6	4.8	74.1			
	7:45	3/27/07	4.9	14.8	5.6	74.8			
	17:05	3/28/07	5.5	16.0	5.0	73.5			
	8:22	3/29/07	4.9	15.8	4.6	74.7			
	17:25	3/29/07	5.5	16.0	4.7	73.8			
	8:20	3/30/07	1.2	15.2	4.0	79.7			blower off
	10:27	5/30/07	27.5	24.8	0.4	47.3	110	9	restart and run 24 hrs
	13:48	5/30/07	23.5	24.0	0.4	52.1			
	10:00	5/31/07	17.5	20.8	1.2	60.5			reduce to 12 on 12 off
	16:20	6/1/07	17.0	20.8	1.0	61.2			
	15:45	6/2/07	16.0	20.8	0.9	62.3			
	15:55	6/3/07	16.0	20.4	1.1	62.5			
	13:58	6/4/07	14.5	19.8	1.5	64.2			reduce to 6 on 18 off
	14:37	6/7/07	15.0	24.0	0.6	60.4			
	16:35	6/12/07	11.5	19.2	2.6	66.7	148	12	
	14:14	6/14/07	11.0	19.0	2.5	67.5	33	3	
	14:05	6/19/07	10.0	19.0	2.8	68.2	138	11	

	Time	Date	CH_4	CO_2	O_2	N	Velocity	Extraction	Comments
			(%)	(%)	(%)	(%)	feet/min	CFM*	
GV-12	11:05	3/20/06	11.5	17.7	5.4	65.4			pre-startup
	9:50	3/22/06	36.0	26.8	2.1	35.1			
	10:16	3/22/06	34.8	24.3	1.9	39.0			
	15:28	3/22/06	34.4	26.0	0.8	38.8			
	8:25	3/23/06	32.9	31.0	2.1	34.0			
	16:30	3/23/06	24.1	20.2	2.7	53.0			
	14:20	3/24/06	4.7	4.8	17.1	73.4			
	14:10	3/28/06	4.4	5.5	9.9	80.2			
	19:28	3/30/06	13.1	16.7	5.8	64.4	630	49	
	13:10	4/5/06	6.7	9.4	12.4	71.5			
	12:40	4/6/06	6.8	9.0	12.3	71.9			
	13:00	4/11/06	5.4	8.3	13.0	73.3			
	10:42	4/14/06	11.3	17.8	3.6	67.3	720	56	
	15:19	4/14/06	4.5	10.7	9.2	75.6	378	30	
	9:50	4/17/06	2.1	6.1	14.5	77.3			
	19:16	4/27/06	3.7	9.2	9.6	77.5			
	13:04	5/4/06	3.8	9.8	10.4	76.0			
	10:12	5/22/06	3.0	10.8	10.2	76.0			
	8:15	6/9/06	3.9	11.9	11.5	72.7			
	12:29	6/14/06	5.9	14.2	10.5	69.4			
	10:36	6/22/06	4.3	13.2	9.7	72.8			
	12:01	7/5/06	3.4	13.0	10.5	73.1			
	11:25	7/10/06	5.3	20.0	4.1	70.6			
	10:45	7/17/06	3.4	14.4	8.7	73.5			
	13:55	7/28/06	4.5	18.1	6.5	70.9			
	9:40	8/8/06	4.1	17.2	6.7	72.0			
	9:35	8/16/06	0.7	2.8	17.5	79.0			
	8:14	8/21/06	0.1	0.2	6.5	93.2			
	2:05	8/28/06	5.3	18.7	6.7	69.3			
	11:16	9/13/06	0.6	1.7	7.4	90.3			
	11:15	9/25/06	12.6	27.8	2.1	57.5			
	8:15	10/10/06	5.3	18.7	16.6	59.4			
	8:15	10/23/06	4.7	18.7	9.0	67.6			
	14:44	11/2/06	0.3	4.2	16.0	79.5			
	13:48	11/14/06	5.0	16.2	4.8	74.0			
	11:22	11/27/06	3.5	14.2	6.4	76.0			
	12:45	12/26/06	3.9	13.2	7.6	75.4			
	13:23	1/27/07	18.0	6.8	14.7	60.5			
	9:25	2/15/07	0.3	0.6	19.5	79.7			
	9:37	2/15/07	0.3	1.2	18.8	79.7			
	11:05	2/24/07	0.4	1.2	19.3	79.1			
	9:34	3/1/07	20.0	23.6	0.4	56.0			
	9:56	3/1/07	19.0	23.4	0.2	57.4	60	5	
	11:07	3/1/07	17.0	22.6	0.3	60.1			
	12:16	3/1/07	14.5	21.4	0.2	63.9			
	13:19	3/1/07	13.5	21.8	0.2	64.5	80	6	
	13:20	3/1/07	15.0	22.6	0.3	62.1	120	9	
	14:27	3/1/07	12.5	20.8	0.5	66.2	20	2	
	8:20	3/5/07	6.0	18.2	2.1	73.7			adjust blower time, 12 on, 12 off
	8:15	3/24/07	1.1	14.2	7.9	76.9			
	17:05	3/24/07	0.8	14.2	7.6	77.4			
	17:20	3/26/07	0.2	11.4	9.3	79.1			
	7:36	3/27/07	0.2	9.8	10.8	79.2			
	17:45	3/28/07	0.5	12.0	7.7	79.8			
	8:15	3/29/07	0.4	13.2	4.2	82.2			
	17:10	3/29/07	0.4	12.6	6.3	80.7			
	8:15	3/30/07	9.0	20.6	0.3	70.1			blower off
	11:07	5/30/07	20.0	24.8	0.2	55.0	110	9	restart and run 24 hrs
	13:32	5/30/07	13.0	24.0	0.4	62.6			
	10:40	5/31/07	3.1	17.4	5.4	74.1			reduce to 12 on 12 off
	16:40	6/1/07	2.5	17.2	3.6	76.7			
	15:37	6/2/07	2.3	17.2	3.4	77.1			
	16:15	6/3/07	1.9	16.8	2.8	78.5			
	14:20	6/4/07	1.5	16.6	3.3	78.7			reduce to 6 on 18 off
	14:53	6/7/07	3.9	18.2	2.2	75.8			
	17:08	6/12/07	0.3	13.8	5.6	80.3	38	3	
	14:30	6/14/07	0.8	15.4	1.9	81.9	87	7	
	14:20	6/19/07	1.1	15.6	4.8	78.5	91	7	

	Time	Date	CH_4	CO_2	O_2	N	Velocity	Extraction	Comments
			(%)	(%)	(%)	(%)	feet/min	CFM*	
LC-1	11:31	3/20/06	61.5	37.7	0.7	0.1			pre-startup
	10:02	3/22/06	43.6	26.3	6.4	23.7			
	15:32	3/22/06	56.0	33.3	3.8	6.9			
	8:29	3/23/06	50.1	29.5	4.3	16.1			
	16:35	3/23/06	44.2	24.6	4.9	26.3			
	15:40	3/24/06	18.8	11.8	15.9	53.5			
	14:25	3/28/06	7.0	8.7	10.8	73.5			
	18:58	3/30/06	15.8	21.0	6.9	56.3	4	0	
	13:50	4/5/06	11.2	17.1	9.8	61.9			
	12:50	4/6/06	6.2	9.0	13.9	70.9			
	13:10	4/11/06	9.6	16.7	8.6	65.1			
	10:45	4/14/06	11.2	17.9	7.2	63.7	2	0	
	15:26	4/14/06	12.2	24.1	4.0	59.7	30	2	
	9:58	4/17/06	16.7	30.2	5.3	47.8			
	19:12	4/27/06	7.8	17.5	2.9	71.8	35	3	
	13:12	5/4/06	6.1	18.7	2.0	73.2			
	10:17	5/22/06	5.8	21.6	1.3	71.3			
	12:20	6/2/06	18.0	22.7	0.6	58.7	41	3	
	8:20	6/9/06	1.1	0.2	20.4	78.3			
	12:34	6/14/06	3.9	0.6	20.2	75.3			
	10:41	6/22/06	3.3	7.6	13.8	75.3			
	12:06	7/5/06	3.7	12.5	10.1	73.7			
	11:31	7/10/06	3.5	10.9	11.8	73.8			
	10:49	7/17/06	3.9	10.7	11.8	73.6			
	14:00	7/28/06	5.0	12.0	10.2	72.8			
	9:46	8/8/06	2.7	9.5	12.9	74.9			
	7:20	8/16/06	2.4	6.6	14.5	76.5			
	7:12	8/21/06	0.1	0.2	15.1	84.6			
	14:07	8/28/06	2.1	12.5	12.4	73.0			
	11:21	9/13/06	0.6	0.6	13.3	85.5			
	11:19	9/25/06	0.0	0.0	16.2	83.8			
	8:18	10/10/06	2.7	8.4	14.8	74.1			
	8:19	10/23/06	2.0	1.5	12.8	83.7			
	14:00	11/2/06	3.8	21.6	1.7	72.9			
	14:54	11/14/06	7.5	23.0	0.7	68.8			
	11:26	11/27/06	5.5	23.0	0.4	71.1			
	12:57	12/26/06	5.0	23.6	0.3	71.1			
	13:57	1/27/07	9.5	22.8	0.3	67.4			
	11:20	2/24/07	6.5	23.0	0.8	69.7			
	11:20	3/1/07	17.5	23.2	1.8	57.5			
	12:28	3/1/07	16.5	23.2	1.8	58.5	40	3	
	14:30	3/1/07	15.5	22.8	1.6	60.1			
	8:10	3/5/07	sampling port clogged with ice						adjust blower time, 12 on, 12 off
	8:10	3/24/07	15.5	23.0	1.8	59.7			
	16:55	3/24/07	14.0	22.2	2.2	61.6			
	17:10	3/26/07	11.0	21.6	2.2	65.2			
	7:28	3/27/07	10.0	22.4	1.7	65.9			
	16:27	3/28/07	11.0	22.8	1.5	64.7			
	8:04	3/29/07	11.5	23.0	1.5	64.0			
	17:00	3/29/07	11.0	22.8	1.5	64.7			
	8:04	3/30/07	13.0	24.0	1.0	62.0			blower off
	11:34	5/30/07	43.0	28.0	2.0	27.0	250	12	restart and run 24 hrs
	13:35	5/30/07	40.0	26.2	2.6	31.2			
	10:30	5/31/07	0.1	0.0	20.7	79.2			reduce to 12 on 12 off
	16:32	6/1/07	0.1	0.0	20.7	79.2			
	15:30	6/2/07	20.0	22.8	1.7	55.5			
	16:09	6/3/07	18.0	22.2	1.9	57.9			
	14:12	6/4/07	16.5	21.8	2.2	59.5			reduce to 6 on 18 off
	15:10	6/7/07	17.0	21.6	2.3	59.1			
	17:16	6/12/07	10.5	21.0	2.1	66.4	978	48	
	14:49	6/14/07	11.0	20.8	2.2	66.0	1224	60	
	14:40	6/19/07	10.5	21.0	2.2	66.3	1071	53	

	Time	Date	CH_4	CO_2	O_2	N	Velocity	Extraction	Comments
			(%)	(%)	(%)	(%)	feet/min	CFM*	
LC-2	11:09	3/20/06	61.9	36.8	1.0	0.3			pre-startup
	9:52	3/22/06	50.2	28.3	4.9	16.6			
	15:51	3/22/06	49.9	35.2	7.4	7.5			
	8:52	3/23/06	45.2	27.1	6.8	20.9			
	16:52	3/23/06	54.3	32.5	3.5	9.7			
	15:20	3/24/06	25.5	14.8	15.3	44.4			
	15:10	3/28/06	18.7	12.0	13.5	55.8			
	19:09	3/30/06	52.6	28.7	3.7	15.0	20	2	
	13:45	4/5/06	35.5	20.5	8.2	35.8			
	13:25	4/6/06	33.4	21.0	9.1	36.5			
	13:35	4/11/06	33.4	21.7	9.9	35.0			
	10:57	4/14/06	58.5	39.5	2.0	0.0	10	1	
	15:56	4/14/06	33.6	20.0	7.9	38.5	10	1	
	10:20	4/17/06	30.0	20.0	4.3	45.7			
	19:59	4/27/06	51.7	26.8	4.2	17.3	14	1	
	13:28	5/4/06	43.6	24.8	4.2	27.4			
	12:00	5/22/06	48.8	28.9	4.3	18.0			
	8:41	6/9/06	34.2	20.0	10.5	35.3			
	13:05	6/14/06	30.1	20.2	8.3	41.4			
	11:05	6/22/06	45.1	35.4	5.1	14.4			
	12:09	7/5/06	44.4	44.5	5.8	5.3			
	10:50	7/10/06	0.1	0.2	5.4	94.3			
	10:15	7/17/06	42.7	32.7	5.8	18.8			
	14:15	7/28/06	43.6	33.4	4.7	18.3			
	9:51	8/8/06	45.4	36.2	4.1	14.3			
	9:30	8/16/06	31.2	24.6	8.6	35.6			
	8:38	8/21/06	2.4	10.2	3.7	83.7			
	14:22	8/28/06	20.0	36.2	4.2	39.6			
	11:36	9/13/06	28.2	37.0	4.0	30.8			
	11:34	9/25/06	2.4	0.8	5.9	90.9			
	8:32	10/10/06	49.8	41.7	5.1	3.4			
	8:42	10/23/06	37.8	29.5	7.6	25.1			
	14:20	11/2/06	42.5	28.4	3.6	25.5			
	15:16	11/14/06	39.5	28.2	3.5	28.8			
	11:40	11/27/06	48.5	33.2	0.3	18.0			
	13:30	12/26/06	44.0	29.4	2.6	24.0			
	14:10	1/27/07	44.5	27.6	3.1	24.8			
	11:28	2/24/07	9.0	0.2	20.5	70.3			
	11:02	3/1/07	37.2	28.2	1.5	33.1			
	12:26	3/1/07	36.0	29.0	1.5	33.5	150	12	
	14:45	3/1/07	33.0	27.6	2.1	37.3			
	8:05	3/5/07	1.1	1.0	19.7	78.3			adjust blower time, 12 on, 12 off
	8:00	3/24/07	36.0	28.4	1.2	34.4			
	16:45	3/24/07	36.0	28.0	1.0	35.0			
	17:00	3/26/07	33.5	27.4	0.9	38.2			
	7:19	3/27/07	33.5	27.4	1.0	38.1			
	16:35	3/28/07	36.0	28.2	0.9	34.9			
	7:50	3/29/07	36.5	28.6	0.8	34.1			
	16:52	3/29/07	35.5	28.2	0.7	35.6			
	7:56	3/30/07	11.5	11.0	11.5	66.0			blower off
	11:45	5/30/07	44.5	27.4	1.9	26.2	310	15	restart and run 24 hrs
	13:45	5/30/07	46.0	28.2	1.5	24.3			
	10:20	5/31/07	40.0	26.0	1.3	32.7			reduce to 12 on 12 off
	16:25	6/1/07	40.5	25.4	1.4	32.7			
	15:20	6/2/07	40.5	25.4	1.2	32.9			
	16:00	6/3/07	39.5	25.2	1.4	33.9			
	14:04	6/4/07	39.5	25.2	1.5	33.8			reduce to 6 on 18 off
	14:43	6/7/07	39.5	25.0	1.4	34.1			
	16:46	6/12/07	40.5	25.6	1.2	32.7	1552	76	
	14:20	6/14/07	40.5	25.4	1.2	32.9	1035	51	
	13:55	6/19/07	39.5	25.8	1.2	33.5	854	42	

	Time	Date	CH_4	CO_2	O_2	N	Velocity	Extraction	Comments
			(%)	(%)	(%)	(%)	feet/min	CFM*	
LC-3	11:31	3/20/06	62.3	36.3	0.5	0.9			pre-startup
	10:06	3/22/06	55.9	33.2	3.5	7.4			
	8:37	3/23/06	53.5	30.5	3.4	12.6			
	16:30	3/23/06	59.9	30.5	2.0	7.6			
	14:30	3/24/06	8.6	6.7	17.0	67.7			
	14:45	3/28/06	21.1	14.8	12.0	52.1			
	19:21	3/30/06	51.2	30.4	1.6	16.8	73	6	
	13:35	4/5/06	30.7	22.2	6.6	40.5			
	13:05	4/6/06	19.0	14.9	11.9	54.2			
	13:20	4/11/06	36.9	26.6	3.5	33.0			
	10:49	4/14/06	38.2	27.8	1.0	33.0	20	2	
	15:30	4/14/06	37.7	28.8	1.2	32.3	30	2	
	10:10	4/17/06	10.5	0.6	0.8	88.1			
	19:38	4/27/06	27.6	23.6	0.5	48.3	37	3	
	13:20	5/4/06	0.0	0.0	8.8	91.2			
	10:25	5/22/06	9.6	15.7	8.9	65.8			
	14:41	6/2/06	0.6	0.1	20.4	78.9			
	8:29	6/9/06	22.5	31.2	4.0	42.3			
	12:42	6/14/06	20.5	15.6	3.2	60.7			
	10:51	6/22/06	13.1	28.7	3.5	54.7			
	12:23	7/5/06	13.0	29.6	1.9	55.5			
	11:38	7/10/06	0.0	0.0	1.7	98.3			
	10:17	7/17/06	11.9	28.3	1.8	58.0			
	14:09	7/28/06	16.3	28.7	1.5	53.5			
	10:02	8/8/06	11.4	28.8	1.5	58.3			
	9:10	8/16/06	11.9	28.4	1.4	58.3			
	8:27	8/21/06	2.4	5.8	1.8	90.0			
	14:14	8/28/06	12.1	10.2	1.4	76.3			
	11:26	9/13/06	6.8	11.8	1.7	79.7			
	11:25	9/25/06	10.1	0.4	1.9	87.6			
	8:25	10/10/06	10.8	29.6	2.7	56.9			
	8:26	10/23/06	10.9	29.4	3.9	55.8			
	14:12	11/2/06	9.5	23.4	0.4	66.7			
	15:09	11/14/06	2.5	0.0	20.0	77.5			
	12:00	11/27/06	0.3	1.2	18.9	79.7			
	13:10	12/26/06	13.5	21.2	3.3	62.0			
	14:20	1/27/07	13.0	21.4	1.9	63.7			
	11:40	2/24/07	4.3	0.2	19.7	75.9			
	11:22	3/1/07	12.0	19.6	4.1	64.3			
	12:30	3/1/07	11.5	19.2	4.2	65.1	290	23	
	14:32	3/1/07	11.5	18.8	4.1	65.6			
	7:50	3/5/07	0.3	0.0	20.3	79.5			adjust blower time, 12 on, 12 off
	7:50	3/24/07	15.0	19.2	4.1	61.7			
	16:34	3/24/07	14.5	19.2	4.0	62.3			
	16:48	3/26/07	12.5	18.6	3.6	65.3			
	7:09	3/27/07	12.0	19.2	3.5	65.3			
	16:45	3/28/07	13.0	19.8	3.6	63.6			
	7:40	3/29/07	12.0	19.2	3.7	65.1			
	16:43	3/29/07	12.0	19.2	3.8	65.0			
	7:45	3/30/07	7.0	12.6	8.0	72.4			blower off
	11:30	5/30/07	29.0	22.8	3.0	45.2	1400	109	restart and run 24 hrs
	13:52	5/30/07	30.5	22.8	3.2	43.5			
	10:10	5/31/07	23.5	21.2	2.9	52.4			reduce to 12 on 12 off
	16:10	6/1/07	21.5	20.8	2.8	54.9			
	15:13	6/2/07	20.0	19.4	3.6	57.0			
	15:44	6/3/07	19.0	20.2	2.8	58.0			
	13:45	6/4/07	18.0	19.8	3.0	59.2			reduce to 6 on 18 off
	14:27	6/7/07	23.0	22.2	2.8	52.0			
	16:15	6/12/07	14.0	19.4	3.1	63.5	866	68	
	13:58	6/14/07	14.5	19.2	3.1	63.2	1265	99	
	13:35	6/19/07	14.5	19.6	3.0	62.9	1044	82	

	Time	Date	CH_4	CO_2	O_2	N	Velocity	Extraction	Comments
			(%)	(%)	(%)	(%)	feet/min	CFM*	
Monitoring Points									
GP-1	11:03	3/20/06	**18.8**	8.1	0.4	72.7			pre-startup
	15:25	3/22/06	**17.9**	8.0	0.4	73.7			
	14:10	3/23/06	**21.4**	11.5	0.2	66.9			
	14:00	3/30/06	0.8	2.4	15.0	81.8			
	13:45	4/6/06	0.6	1.5	16.8	81.1			
	13:40	4/11/06	1.2	0.8	19.3	78.7			
	11:33	4/14/06	0.0	1.9	14.7	83.4			
	10:28	4/17/06	3.8	4.8	16.8	74.6			
	7:15	4/28/06	2.5	3.2	18.1	76.2			
	13:30	5/4/06	0.0	3.4	13.9	82.7			
	10:45	5/22/06	0.1	1.2	19.3	79.4			
	12:23	6/2/06	0.1	3.5	12.1	84.3			
	8:02	6/9/06	2.6	2.0	19.8	75.6			
	12:49	6/14/06	1.1	3.9	15.4	79.6			
	11:10	6/22/06	0.7	1.0	18.1	80.2			
	11:47	7/5/06	0.6	2.4	14.9	82.1			
	11:15	7/10/06	0.7	4.5	14.1	80.7			
	10:35	7/17/06	0.8	2.9	15.8	80.5			
	13:42	7/28/06	2.0	1.7	12.2	84.1			
	10:19	8/8/06	4.4	8.5	12.9	74.2			
	8:20	8/16/06	1.4	3.6	15.5	79.5			
	8:05	8/21/06	0.5	0.6	13.0	85.9			
	13:52	8/28/06	3.4	7.6	11.2	77.8			
	11:09	9/13/06	4.6	0.1	12.5	82.8			
	10:28	9/25/06	0.0	0.0	10.7	89.3			
	8:05	10/10/06	0.7	2.3	17.6	79.4			
	8:07	10/23/06	0.7	2.7	19.0	77.6			
	14:35	11/2/06	0.3	2.6	17.6	79.5			
	13:35	11/14/06	0.2	2.6	15.9	81.3			
	11:08	11/27/06	0.2	0.4	19.3	80.2			
	12:20	12/26/06	0.1	3.6	12.3	84.1			
	13:13	1/27/07	0.5	2.8	14.6	82.2			
	10:50	2/24/07	0.4	0.0	20.4	79.3			
	17:29	3/28/07	0.3	2.4	14.6	82.8			
	10:25	5/1/07	0.2	2.2	12.6	85.1			
	10:27	5/1/07	0.1	1.2	16.1	82.6			
	12:00	5/30/07	2.0	7.2	7.1	83.7			
	16:35	6/6/07	11.0	10.6	0.8	77.6			
	14:48	6/7/07	6.0	7.6	5.7	80.7			
	16:59	6/12/07	1.1	6.0	9.4	83.5			
	14:25	6/14/07	7.0	10.4	2.1	80.5			
	14:15	6/19/07	3.5	6.6	9.7	80.3			

	Time	Date	CH_4	CO_2	O_2	N	Velocity	Extraction	Comments
			(%)	(%)	(%)	(%)	feet/min	CFM*	
GP-2	9:00	3/22/06	**29.5**	27.8	0.5	42.2			pre-startup
	14:40	3/23/06	**29.1**	24.5	0.8	45.6			
	14:20	3/30/06	**11.5**	13.1	10.7	64.7			
	14:05	4/6/06	**10.3**	12.6	10.2	66.9			
	14:15	4/11/06	**5.4**	5.7	15.3	73.6			
	11:56	4/14/06	**6.8**	12.1	8.7	72.4			
	11:00	4/17/06	0.0	0.0	20.7	79.3			
	9:55	4/28/06	0.0	0.1	20.7	79.2			
	14:15	5/4/06	1.5	18.9	3.0	76.6			
	11:15	5/22/06	0.0	0.0	20.5	79.5			
	12:49	6/2/06	1.0	0.1	19.7	79.2			
	9:00	6/9/06	1.9	0.5	20.4	77.2			
	13:20	6/14/06	4.8	1.0	20.1	74.1			
	10:00	6/22/06	0.6	0.2	20.4	78.8			
	12:34	7/5/06	0.7	1.5	19.9	77.9			
	11:48	7/10/06	0.7	0.8	19.6	78.9			
	11:15	7/17/06	0.7	1.2	18.8	79.3			
	13:05	7/28/06	0.5	0.7	19.1	79.7			
	10:50	8/8/06	0.6	0.2	19.6	79.6			
	7:53	8/16/06	0.1	0.0	19.9	80.0			
	7:40	8/21/06	0.5	0.1	20.4	79.0			
	13:40	8/28/06	0.0	0.0	20.2	79.8			
	10:50	9/13/06	0.1	0.1	20.2	79.6			
	10:10	9/25/06	0.6	9.5	13.7	76.2			
	7:45	10/10/06	0.7	1.8	19.8	77.7			
	7:46	10/23/06	0.7	3.9	18.0	77.4			
	13:24	11/2/06	0.5	0.3	17.6	81.6			
	12:38	11/14/06	0.1	5.2	15.7	79.1			
	10:51	11/27/06	0.1	0.6	20.0	79.3			
	13:55	12/26/06	0.3	6.2	14.5	79.1			
	12:25	1/27/07	0.3	1.6	19.1	79.1			
	12:15	2/24/07	0.3	3.6	16.5	79.7			
	16:05	3/28/07	0.2	2.4	18.0	79.5			
	11:07	5/1/07	0.0	3.8	15.2	81.0			
	12:17	5/30/07	0.0	1.2	18.5	80.3			
	13:20	6/19/07	0.1	7.6	11.5	80.9			

	Time	Date	CH_4	CO_2	O_2	N	Velocity	Extraction	Comments
			(%)	(%)	(%)	(%)	feet/min	CFM*	
GP-3	7:49	3/22/06	1.4	1.9	19.9	76.8			pre-startup
	12:57	3/23/06	0.6	1.2	19.3	78.9			
	15:20	3/23/06	2.2	4.5	16.4	76.9			
	14:35	3/30/06	2.1	7.6	11.5	78.8			
	14:30	4/6/06	1.6	11.8	7.2	79.4			
	14:40	4/11/06	0.4	4.0	15.6	80.0			
	12:11	4/14/06	0.0	1.5	18.1	80.4			
	11:20	4/17/06	1.4	0.2	20.7	77.7			
	10:50	4/28/06	0.4	0.1	20.7	78.8			
	15:00	5/4/06	0.0	0.0	20.4	79.6			
	11:38	5/22/06	0.2	0.0	2.5	97.3			
	13:18	6/2/06	0.2	0.0	20.2	79.6			
	9:09	6/9/06	0.8	0.1	20.5	78.6			
	13:45	6/14/06	1.1	0.1	20.4	78.4			
	11:25	6/22/06	0.7	0.0	20.1	79.2			
	11:19	7/5/06	0.6	0.0	20.0	79.4			
	10:37	7/10/06	0.6	0.0	19.6	79.8			
	0:57	7/17/06	0.1	0.0	19.0	80.9			
	12:25	7/28/06	0.6	0.0	19.7	79.7			
	11:32	8/8/06	0.6	0.0	19.6	79.8			
	7:35	8/16/06	0.5	0.0	20.0	79.5			
	7:24	8/21/06	0.0	0.0	20.3	79.7			
	13:26	8/28/06	0.1	0.0	19.9	80.0			
	10:31	9/13/06	0.0	0.3	20.3	79.4			
	9:56	9/25/06	0.6	3.0	17.6	78.8			
	7:20	10/10/06	0.5	0.9	19.8	78.8			
	7:36	10/23/06	0.1	0.0	20.6	79.3			
	13:10	11/2/06	0.5	0.4	20.8	78.3			
	13:00	11/14/06	0.1	4.2	16.1	79.6			
	10:39	11/27/06	0.1	0.4	19.4	80.2			
	13:58	12/26/06	0.3	0.2	20.0	79.6			
	12:00	1/27/07	0.1	0.0	19.6	80.4			
	12:30	2/24/07	0.3	4.6	14.7	80.4			
	15:32	3/28/07	0.1	0.0	19.9	80.0			
	10:57	5/1/07	0.1	2.6	16.5	80.8			
	12:33	5/30/07	0.0	0.4	18.9	80.7			
	13:30	6/19/07	0.0	0.0	20.9	79.1			

	Time	Date	CH_4	CO_2	O_2	N	Velocity	Extraction	Comments
			(%)	(%)	(%)	(%)	feet/min	CFM*	
GP-4	9:11	3/22/06	0.0	1.4	20.4	78.2			pre-startup
	15:35	3/23/06	0.0	0.8	19.8	79.4			
	15:40	3/30/06	0.5	0.8	21.8	76.9			
	14:40	4/6/06	0.8	1.3	18.9	79.0			
	14:35	4/11/06	0.2	0.9	19.2	79.7			
	12:18	4/14/06	0.0	1.3	18.1	80.6			
	11:35	4/17/06	1.3	0.8	20.4	77.5			
	10:40	4/28/06	0.0	0.5	20.2	79.3			
	15:10	5/4/06	1.3	0.6	13.2	84.9			
	11:50	5/22/06	0.1	0.2	20.4	79.3			
	13:10	6/2/06	0.2	0.8	19.1	79.9			
	9:12	6/9/06	3.4	1.2	20.2	75.2			
	14:00	6/14/06	0.0	0.0	19.9	80.1			
	10:39	6/22/06	**6.0**	18.8	6.4	68.8			
	11:26	7/5/06	0.6	0.6	20.0	78.8			
	10:43	7/10/06	0.4	3.8	19.9	75.9			
	10:08	7/17/06	0.9	0.6	19.6	78.9			
	12:34	7/28/06	0.6	0.4	19.6	79.4			
	9:21	8/8/06	0.6	0.3	19.7	79.4			
	7:42	8/16/06	0.5	0.7	19.9	78.9			
	7:28	8/21/06	0.4	0.5	20.0	79.1			
	13:31	8/28/06	0.5	0.5	20.1	78.9			
	10:35	9/13/06	0.7	0.6	20.2	78.5			
	9:59	9/25/06	0.1	0.2	19.1	80.6			
	7:24	10/10/06	0.6	0.5	20.3	78.6			
	7:40	10/23/06	0.4	0.0	20.4	79.2			
	13:17	11/2/06	0.5	0.2	21.0	78.3			
	13:11	11/14/06	0.2	1.4	19.0	79.5			
	10:42	11/27/06	0.1	0.6	19.7	79.7			
	14:04	12/26/06	0.3	0.8	19.6	79.4			
	12:09	1/27/07	0.1	0.4	19.6	79.9			
	12:38	2/24/07	0.4	1.0	19.4	79.3			
	15:40	3/28/07	0.1	0.2	19.8	79.9			
	10:50	5/1/07	0.0	1.2	18.2	80.6			
	12:37	5/30/07	0.0	1.8	17.5	80.7			
	13:40	6/19/07	0.0	0.8	20.0	79.2			

	Time	Date	CH_4	CO_2	O_2	N	Velocity	Extraction	Comments
			(%)	(%)	(%)	(%)	feet/min	CFM*	
GP-5	9:13	3/22/06	0.0	4.4	17.6	78.0			pre-startup
	14:15	3/23/06	0.0	4.2	17.6	78.2			
	14:05	3/30/06	1.2	2.5	18.8	77.5			
	13:40	4/6/06	1.1	3.0	17.9	78.0			
	13:45	4/11/06	0.7	2.7	17.5	79.1			
	12:50	4/14/06	0.1	3.5	15.4	81.0			
	10:30	4/17/06	0.0	3.6	16.2	80.2			
	10:35	4/28/06	2.2	7.0	13.0	77.8			
	10:40	5/22/06	1.5	8.5	11.2	78.8			
	12:25	6/2/06	0.1	7.2	9.4	83.3			
	8:45	6/9/06	0.1	0.3	10.5	89.1			
	12:18	6/14/06	0.1	0.0	9.1	90.8			
	11:18	6/22/06	0.7	10.7	10.5	78.1			
	11:51	7/5/06	0.6	11.9	11.1	76.4			
	11:17	7/10/06	0.7	12.0	10.1	77.2			
	10:22	7/17/06	0.8	11.9	11.1	76.2			
	8:24	7/28/06	0.6	10.1	11.5	77.8			
	10:16	8/8/06	0.6	11.8	10.1	77.5			
	8:35	8/16/06	0.8	10.0	10.5	78.7			
	8:02	8/21/06	0.5	0.8	10.9	87.8			
	13:54	8/28/06	0.6	11.3	13.3	74.8			
	11:07	9/13/06	0.1	0.0	13.4	86.5			
	10:26	9/25/06	0.0	0.0	13.4	86.6			
	8:52	10/10/06	0.7	8.9	14.4	76.0			
	8:00	10/23/06	0.3	1.4	15.5	82.8			
	14:37	11/2/06	0.3	7.2	14.0	78.5			
	13:25	11/14/06	0.2	6.0	14.9	78.9			
	11:10	11/27/06	0.2	5.2	15.7	79.0			
	12:35	12/26/06	0.1	4.8	15.7	79.5			
	13:09	1/27/07	0.4	5.4	15.8	78.4			
	10:55	2/24/07	0.4	4.2	17.3	78.2			
	17:30	3/28/07	0.3	3.4	16.6	79.8			
	10:22	5/1/07	0.1	3.4	14.0	82.5			
	12:40	5/30/07	0.0	6.4	9.9	83.7			
	16:25	6/19/07	0.0	7.4	12.1	80.5			

	Time	Date	CH_4	CO_2	O_2	N	Velocity	Extraction	Comments
			(%)	(%)	(%)	(%)	feet/min	CFM*	
GP-6	7:45	3/22/06	0.0	6.1	13.9	80.0			pre-startup
	15:55	3/23/06	0.0	4.9	16.3	78.8			
	15:15	3/30/06	0.0	1.7	18.3	80.0			
	14:25	4/6/06	0.0	2.8	16.9	80.3			
	14:30	4/11/06	0.7	2.8	17.3	79.2			
	12:04	4/14/06	0.0	3.8	14.6	81.6			
	11:15	4/17/06	**10.4**	2.3	17.6	69.7			
	10:30	4/28/06	0.0	2.5	18.3	79.2			
	14:30	5/4/06	0.0	2.7	17.9	79.4			
	11:30	5/22/06	3.8	3.9	18.1	74.2			
	13:04	6/2/06	0.2	2.4	17.2	80.2			
	9:25	6/9/06	0.1	0.8	17.7	81.4			
	14:10	6/14/06	1.3	3.3	16.8	78.6			
	9:50	6/22/06	0.5	3.1	17.3	79.1			
	11:13	7/5/06	0.5	3.6	17.1	78.8			
	10:34	7/10/06	0.6	3.9	16.7	78.8			
	9:58	7/17/06	0.1	0.6	16.8	82.5			
	12:10	7/28/06	0.6	3.6	16.5	79.3			
	9:05	8/8/06	0.6	3.5	17.0	78.9			
	7:29	8/16/06	0.1	0.0	17.2	82.7			
	7:18	8/21/06	0.5	3.6	18.1	77.8			
	13:21	8/28/06	0.0	0.0	18.1	81.9			
	10:20	9/13/06	0.6	1.0	19.1	79.3			
	11:05	9/25/06	0.7	2.6	18.5	78.2			
	7:30	10/10/06	0.8	2.3	19.7	77.2			
	7:34	10/23/06	0.9	2.4	14.4	82.3			
	13:05	11/2/06	2.4	0.8	19.7	77.1			
	13:14	11/14/06	0.2	3.0	17.9	78.9			
	10:35	11/27/06	0.1	0.6	19.6	79.8			
	14:20	12/26/06	0.3	3.0	18.0	78.7			
	13:45	1/27/07	0.2	3.4	17.0	79.5			
	12:45	2/24/07	0.4	3.0	18.1	78.5			
	16:00	3/28/07	0.2	2.4	18.0	79.5			
	10:45	5/1/07	0.1	3.0	16.4	80.5			
	12:23	5/30/07	0.0	3.2	15.8	81.0			
	16:15	6/19/07	0.0	2.4	17.8	79.8			

	Time	Date	CH_4	CO_2	O_2	N	Velocity	Extraction	Comments
			(%)	(%)	(%)	(%)	feet/min	CFM*	
GP-7	7:40	3/22/06	1.0	7.0	13.0	79.0			pre-startup
	15:50	3/23/06	0.1	5.0	14.7	80.2			
	15:00	3/30/06	**7.1**	4.6	18.2	70.1			
	14:20	4/6/06	0.1	2.3	17.0	80.6			
	14:25	4/11/06	0.2	3.2	16.3	80.3			
	12:07	4/14/06	0.1	5.2	11.8	82.9			
	10:15	4/17/06	**10.5**	1.3	18.5	69.7			
	10:25	4/28/06	0.0	1.7	19.2	79.1			
	14:25	5/4/06	1.2	2.2	18.8	77.8			
	11:22	5/22/06	0.0	1.0	19.5	79.5			
	13:00	6/2/06	0.2	1.6	18.5	79.7			
	9:20	6/9/06	3.7	2.4	20.0	73.9			
	14:05	6/14/06	3.1	2.5	19.2	75.2			
	9:45	6/22/06	0.5	1.7	19.1	78.7			
	11:10	7/5/06	0.5	1.5	19.3	78.7			
	10:30	7/10/06	0.0	0.0	18.6	81.4			
	9:55	7/17/06	0.1	0.0	18.5	81.4			
	12:05	7/28/06	0.0	3.7	18.5	77.8			
	9:00	8/8/06	0.6	1.3	19.0	79.1			
	7:25	8/16/06	0.5	1.5	19.2	78.8			
	7:16	8/21/06	0.5	1.4	19.8	78.3			
	13:19	8/28/06	0.4	1.2	19.5	78.9			
	10:19	9/13/06	0.6	1.3	19.9	78.2			
	11:03	9/25/06	1.8	2.2	17.7	78.3			
	7:28	10/10/06	0.7	1.4	19.5	78.4			
	7:32	10/23/06	3.0	2.8	19.0	75.2			
	13:00	11/2/06	0.5	1.6	19.8	78.1			
	13:18	11/14/06	0.2	3.2	17.2	79.4			
	10:30	11/27/06	0.0	1.2	19.0	79.8			
	14:15	12/26/06	0.3	2.6	18.0	79.1			
	13:40	1/27/07	0.1	3.4	16.7	79.9			
	12:40	2/24/07	0.4	3.2	17.2	79.2			
	15:55	3/28/07	0.1	1.2	18.9	79.8			
	10:43	5/1/07	0.1	3.6	15.1	81.2			
	12:26	5/30/07	0.0	3.6	15.6	80.8			
	16:20	6/19/07	0.0	2.6	17.5	79.9			

	Time	Date	CH_4	CO_2	O_2	N	Velocity	Extraction	Comments
			(%)	(%)	(%)	(%)	feet/min	CFM*	
GP-8	9:03	3/22/06	0.0	2.4	18.6	79.0			pre-startup
	14:50	3/23/06	0.0	1.9	18.6	79.5			
	14:55	3/30/06	3.0	7.2	14.8	75.0			
	14:10	4/6/06	0.0	7.0	10.9	82.1			
	14:20	4/11/06	0.0	4.8	13.6	81.6			
	12:25	4/14/06	0.0	5.4	12.2	82.4			
	11:10	4/17/06	0.0	0.1	20.7	79.2			
	10:00	4/28/06	0.0	0.2	20.4	79.4			
	14:20	5/4/06	0.0	0.2	19.3	80.5			
	11:18	5/22/06	0.6	0.1	20.4	78.9			
	12:55	6/2/06	0.2	0.7	19.3	79.8			
	9:03	6/9/06	2.4	0.6	20.3	76.7			
	13:37	6/14/06	4.0	1.6	19.6	74.8			
	9:55	6/22/06	0.5	0.5	19.8	79.2			
	12:27	7/5/06	1.6	0.9	19.6	77.9			
	11:45	7/10/06	0.7	1.2	19.2	78.9			
	11:10	7/17/06	0.6	2.3	17.7	79.4			
	12:45	7/28/06	0.6	0.8	19.0	79.6			
	10:58	8/8/06	**17.8**	1.3	19.1	61.8			
	7:47	8/16/06	0.1	0.2	19.5	80.2			
	7:33	8/21/06	0.8	1.3	19.6	78.3			
	13:35	8/28/06	0.0	0.0	19.1	80.9			
	10:47	9/13/06	0.0	0.0	20.1	79.9			
	10:06	9/25/06	0.0	0.0	17.5	82.5			
	7:26	10/10/06	0.1	0.0	19.3	80.6			
	7:44	10/23/06	0.7	1.4	19.6	78.3			
	13:20	11/2/06	3.7	0.3	20.5	75.5			
	13:04	11/14/06	0.1	4.2	15.1	80.6			
	10:45	11/27/06	0.1	0.6	19.4	79.9			
	14:09	12/26/06	0.3	0.8	19.2	79.7			
	12:15	1/27/07	0.2	0.0	19.7	80.1			
	12:20	2/24/07	0.3	5.2	12.8	81.8			
	15:47	3/28/07	0.1	0.6	19.6	79.7			
	11:00	5/1/07	0.0	8.5	7.6	83.9			
	12:20	5/30/07	0.0	3.4	15.2	81.4			
	13:25	6/19/07	0.0	0.6	20.2	79.2			

	Time	Date	CH_4	CO_2	O_2	N	Velocity	Extraction	Comments
			(%)	(%)	(%)	(%)	feet/min	CFM*	
GP-10	8:58	3/22/06	0.0	4.5	15.4	80.1			pre-startup
	14:42	3/23/06	0.0	4.3	15.5	80.2			
	14:50	3/30/06	0.0	1.6	18.7	79.7			
	14:15	4/6/06	0.0	2.3	17.1	80.6			
	13:55	4/11/06	0.0	1.5	18.3	80.2			
	11:54	4/14/06	0.0	1.9	17.4	80.7			
	10:50	4/17/06	0.0	3.0	16.5	80.5			
	9:50	4/28/06	0.0	3.6	15.0	81.4			
	14:00	5/4/06	0.0	3.4	15.4	81.2			
	11:04	5/22/06	0.0	1.3	19.0	79.7			
	12:45	6/2/06	0.1	1.8	17.6	80.5			
	8:55	6/9/06	0.7	0.9	19.6	78.8			
	13:15	6/14/06	0.0	0.0	17.7	82.3			
	10:05	6/22/06	0.6	0.8	19.9	78.7			
	12:38	7/5/06	0.6	5.3	14.9	79.2			
	11:50	7/10/06	0.6	5.5	14.6	79.3			
	11:19	7/17/06	0.6	1.4	19.4	78.6			
	13:09	7/28/06	0.6	1.0	19.2	79.2			
	11:11	8/8/06	0.6	4.7	14.7	80.0			
	7:58	8/16/06	0.1	0.2	16.4	83.3			
	7:44	8/21/06	0.4	3.5	17.3	78.8			
	13:42	8/28/06	0.0	0.0	17.7	82.3			
	10:53	9/13/06	0.6	2.4	18.6	78.4			
	10:12	9/25/06	0.7	5.5	16.0	77.8			
	7:48	10/10/06	0.7	5.3	19.2	74.8			
	7:48	10/23/06	0.6	5.0	17.5	76.9			
	13:31	11/2/06	0.6	4.3	17.3	77.8			
	12:35	11/14/06	0.1	4.2	16.3	79.5			
	10:55	11/27/06	0.1	4.0	16.8	79.1			
	13:50	12/26/06	0.3	4.2	16.7	78.9			
	12:35	1/27/07	0.3	4.0	17.2	78.5			
	12:10	2/24/07	sampling port clogged with ice						
	16:10	3/28/07	0.2	3.2	17.5	79.2			
	11:10	5/1/07	0.0	3.8	15.7	80.5			
	12:15	5/30/07	0.0	3.4	16.0	80.6			
	13:15	6/19/07	0.1	1.8	18.7	79.5			

	Time	Date	CH_4	CO_2	O_2	N	Velocity	Extraction	Comments
			(%)	(%)	(%)	(%)	feet/min	CFM*	
GP-11	9:09	3/22/06	0.0	3.5	17.6	78.9			pre-startup
	14:27	3/23/06	0.0	3.4	17.6	79.0			
	14:40	3/30/06	0.0	0.8	19.7	79.5			
	13:55	4/6/06	0.0	1.7	18.0	80.3			
	14:00	4/11/06	0.0	0.7	19.8	79.5			
	11:43	4/14/06	0.0	0.5	18.9	80.6			
	10:55	4/17/06	0.3	0.1	20.4	79.2			
	7:30	4/28/06	0.0	0.7	20.2	79.1			
	14:05	5/4/06	0.0	0.0	19.9	80.1			
	11:07	5/22/06	2.6	0.3	20.4	76.7			
	12:34	6/2/06	1.0	0.1	20.4	78.5			
	9:45	6/9/06	4.9	0.6	20.2	74.3			
	13:23	6/14/06	0.8	0.3	20.0	78.9			
	10:10	6/22/06	0.6	0.0	20.4	79.0			
	12:41	7/5/06	0.5	1.4	18.5	79.6			
	11:55	7/10/06	0.6	2.5	18.6	78.3			
	11:21	7/17/06	0.5	1.5	18.1	79.9			
	13:15	7/28/06	0.1	0.2	18.2	81.5			
	10:36	8/8/06	0.6	2.2	17.8	79.4			
	8:01	8/16/06	0.1	0.0	17.9	82.0			
	7:46	8/21/06	0.5	2.4	19.0	78.1			
	13:45	8/28/06	0.6	2.6	18.6	78.2			
	10:55	9/13/06	0.1	2.7	19.2	78.0			
	10:14	9/25/06	0.7	2.1	19.0	78.2			
	8:00	10/10/06	0.7	2.0	18.5	78.8			
	7:52	10/23/06	0.7	1.0	20.6	77.7			
	13:34	11/2/06	0.6	1.5	19.8	78.1			
	12:44	11/14/06	0.1	2.0	18.4	79.6			
	10:58	11/27/06	0.1	1.0	19.6	79.3			
	13:40	12/26/06	0.3	2.0	18.4	79.4			
	12:41	1/27/07	0.4	2.6	18.2	78.9			
	11:10	2/24/07	0.4	2.6	18.1	78.9			
	16:14	3/28/07	0.2	2.6	17.8	79.5			
	11:15	5/1/07	0.0	3.4	15.9	80.7			
	12:06	5/30/07	0.0	3.0	16.8	80.2			
	13:05	6/19/07	0.1	2.8	18.3	78.8			

	Time	Date	CH_4	CO_2	O_2	N	Velocity	Extraction	Comments
			(%)	(%)	(%)	(%)	feet/min	CFM*	
GP-12	9:06	3/22/06	0.0	5.7	13.0	81.3			pre-startup
	14:22	3/23/06	0.0	5.5	13.2	81.3			
	14:20	3/30/06	0.0	2.6	17.7	79.7			
	13:50	4/6/06	0.2	2.1	17.3	80.4			
	13:50	4/11/06	0.0	2.5	17.1	80.4			
	11:40	4/14/06	0.0	2.5	15.5	82.0			
	10:45	4/17/06	1.4	3.7	18.4	76.5			
	12:20	4/28/06	0.0	2.4	18.0	79.6			
	13:54	5/4/06	0.0	0.0	17.3	82.7			
	11:00	5/22/06	1.4	2.7	17.5	78.4			
	12:28	6/2/06	0.1	1.8	17.4	80.7			
	8:50	6/9/06	0.9	2.1	19.2	77.8			
	13:10	6/14/06	0.1	0.0	17.5	82.4			
	10:20	6/22/06	0.5	2.2	18.2	79.1			
	11:57	7/5/06	0.6	2.2	18.2	79.0			
	11:22	7/10/06	0.6	2.7	18.2	78.5			
	10:39	7/17/06	0.7	2.6	17.5	79.2			
	13:28	7/28/06	0.6	1.5	18.2	79.7			
	11:22	8/8/06	0.6	2.6	17.5	79.3			
	8:58	8/16/06	4.1	18.6	10.0	67.3			
	8:44	8/21/06	0.6	3.2	18.5	77.7			
	14:26	8/28/06	0.0	0.0	19.4	80.6			
	11:42	9/13/06	0.1	0.9	17.9	81.1			
	11:40	9/25/06	0.8	3.4	16.8	79.0			
	8:47	10/10/06	0.7	3.8	17.6	77.9			
	8:50	10/23/06	0.7	4.1	16.4	78.8			
	14:55	11/2/06	3.9	14.0	7.7	74.5			
	15:30	11/14/06	0.3	3.6	16.7	79.5			
	11:05	11/27/06	0.2	2.4	18.0	79.5			
	13:35	12/26/06	0.3	3.8	15.7	80.3			
	13:18	1/27/07	0.4	3.8	15.7	80.1			
	12:00	2/24/07	0.2	3.2	16.6	80.0			
	17:40	3/28/07	0.2	3.4	16.4	80.0			
	10:30	5/1/07	0.1	2.6	16.1	81.3			
	12:02	5/30/07	0.0	2.8	16.0	81.2			
	16:30	6/19/07	0.0	2.8	18.1	79.1			

	Time	Date	CH_4	CO_2	O_2	N	Velocity	Extraction	Comments
			(%)	(%)	(%)	(%)	feet/min	CFM*	
MW-101	9:24	3/23/06	2.9	18.1	0.8	78.2			pre-startup
	14:25	3/30/06	1.0	8.0	10.9	80.1			
	14:00	4/6/06	0.8	0.2	20.0	79.0			
	14:05	4/11/06	0.0	0.0	20.3	79.7			
	11:50	4/14/06	0.0	1.8	17.9	80.3			
	10:58	4/17/06	2.0	0.3	20.5	77.2			
	7:35	4/28/06	0.0	0.0	20.7	79.3			
	14:10	5/4/06	0.0	0.0	20.2	79.8			
	11:10	5/22/06	0.0	0.0	20.5	79.5			
	12:38	6/2/06	0.2	0.0	20.4	79.4			
	9:50	6/9/06	1.1	0.2	20.5	78.2			
	13:48	6/14/06	4.1	0.3	20.4	75.2			
	10:15	6/22/06	0.0	0.0	20.4	79.6			
	12:46	7/5/06	0.6	20.0	20.0	59.4			
	12:00	7/10/06	0.6	0.0	20.0	79.4			
	11:30	7/17/06	0.0	0.0	19.8	80.2			
	13:20	7/28/06	0.6	0.0	19.3	80.1			
	10:41	8/8/06	0.8	0.0	19.8	79.4			
	8:05	8/16/06	0.1	0.0	19.6	80.3			
	7:52	8/21/06	0.9	0.1	20.4	78.6			
	13:47	8/28/06	0.6	0.1	20.2	79.1			
	10:57	9/13/06	0.6	0.2	19.8	79.4			
	10:16	9/25/06	0.6	0.2	20.2	79.0			
	8:03	10/10/06	0.7	0.2	20.5	78.6			
	7:55	10/23/06	0.9	0.7	19.8	78.6			
	15:00	11/2/06	0.3	0.0	20.8	78.9			
	12:48	11/14/06	0.1	0.4	19.4	80.1			
	11:00	11/27/06	0.1	0.2	20.0	79.7			
	13:45	12/26/06	0.3	0.0	19.3	80.5			
	12:45	1/27/07	0.4	0.6	20.0	79.1			
	11:14	2/24/07	0.5	0.6	20.1	78.9			
	16:18	3/28/07	0.2	0.2	20.1	79.5			
	11:19	5/1/07	0.0	0.2	18.8	81.0			
	12:08	5/30/07	0.0	0.2	18.9	80.9			
	13:10	6/19/07	0.1	0.0	20.9	79.1			

	Time	Date	CH_4	CO_2	O_2	N	Velocity	Extraction	Comments
			(%)	(%)	(%)	(%)	feet/min	CFM*	
MW-102	14:20	3/23/06	0.0	0.7	20.5	78.8			pre-startup
	14:15	3/30/06	1.0	0.5	20.6	77.9			
	13:35	4/6/06	1.0	0.6	20.3	78.1			
	13:43	4/11/06	0.5	0.3	19.7	79.5			
	11:50	4/14/06	0.0	0.3	18.6	81.1			
	10:34	4/17/06	0.8	0.7	20.1	78.4			
	14:00	4/28/06	0.0	0.0	20.7	79.3			
	13:35	5/4/06	0.0	0.2	20.5	79.3			
	10:42	5/22/06	0.2	0.1	2.4	97.3			
	8:48	6/9/06	0.0	0.0	19.8	80.2			
	12:20	6/14/06	0.1	0.0	19.5	80.4			
	11:20	6/22/06	0.7	0.1	19.9	79.3			
	11:53	7/5/06	0.6	0.0	20.0	79.4			
	11:19	7/10/06	0.6	4.7	15.1	79.6			
	10:20	7/17/06	0.9	0.8	19.0	79.3			
	12:40	7/28/06	0.6	0.6	18.6	80.2			
	10:13	8/8/06	0.6	1.2	18.5	79.7			
	8:42	8/16/06	0.1	0.0	17.7	82.2			
	8:00	8/21/06	0.1	0.0	18.5	81.4			
	13:55	8/28/06	0.6	1.8	18.8	78.8			
	11:05	9/13/06	0.1	0.0	19.5	80.4			
	10:25	9/25/06	0.1	0.0	19.2	80.7			
	8:44	10/10/06	0.7	1.0	19.6	78.7			
	8:05	10/23/06	0.8	0.4	19.6	79.2			
	14:42	11/2/06	0.3	0.0	20.8	78.9			
	13:30	11/14/06	0.2	0.2	20.0	79.6			
	11:12	11/27/06	0.2	0.0	20.2	79.7			
	12:39	12/26/06	0.1	0.0	20.0	79.9			
	13:10	1/27/07	0.4	0.2	20.2	79.2			
	11:00	2/24/07	0.4	0.2	20.6	78.9			
	17:35	3/28/07	0.2	0.2	20.0	79.6			
	10:24	5/1/07	0.0	1.4	17.0	81.6			
	11:57	5/30/07	0.0	1.4	16.7	81.9			
	16:00	6/19/07	0.0	0.0	20.6	79.4			

	Time	Date	CH_4	CO_2	O_2	N	Velocity	Extraction	Comments
			(%)	(%)	(%)	(%)	feet/min	CFM*	
MW-103	7:49	3/23/06	0.0	0.2	21.8	78.0			pre-startup
	15:30	3/30/06	0.0	1.9	18.2	79.9			
	14:35	4/6/06	0.4	8.0	9.4	82.2			
	14:40	4/11/06	0.0	6.4	10.8	82.8			
	12:15	4/14/06	0.0	3.2	15.6	81.2			
	11:30	4/17/06	0.0	0.0	20.7	79.3			
	10:45	4/28/06	0.0	0.0	20.5	79.5			
	15:05	5/4/06	0.4	0.0	13.5	86.1			
	11:42	5/22/06	0.2	0.0	20.6	79.2			
	13:14	6/2/06	0.2	0.0	20.1	79.7			
	9:10	6/9/06	1.1	0.1	20.5	78.3			
	13:30	6/14/06	0.6	0.3	20.4	78.7			
	11:28	6/22/06	0.7	0.0	20.2	79.1			
	11:27	7/5/06	0.6	0.0	20.4	79.0			
	10:40	7/10/06	0.0	0.0	19.9	80.1			
	10:06	7/17/06	0.8	0.4	19.4	79.4			
	12:30	7/28/06	0.6	0.0	19.9	79.5			
	9:17	8/8/06	0.6	0.0	19.9	79.5			
	7:34	8/16/06	0.1	0.0	19.9	80.0			
	7:25	8/21/06	0.5	0.0	20.1	79.4			
	13:29	8/28/06	0.1	0.0	20.3	79.6			
	10:34	9/13/06	0.0	0.0	20.4	79.6			
	9:57	9/25/06	0.0	0.1	19.3	80.6			
	7:22	10/10/06	0.5	0.2	20.4	78.9			
	7:38	10/23/06	0.6	0.0	20.8	78.6			
	13:14	11/2/06	0.0	0.3	21.0	78.7			
	13:08	11/14/06	0.2	9.2	11.2	79.5			
	10:40	11/27/06	0.1	0.0	20.1	79.9			
	14:00	12/26/06	0.3	0.2	20.1	79.5			
	12:05	1/27/07	0.1	0.0	19.8	80.2			
	12:34	2/24/07	0.4	4.2	16.3	79.2			
	15:35	3/28/07	0.1	0.0	20.0	79.9			
	10:52	5/1/07	0.1	0.8	18.7	80.4			
	12:40	5/30/07	0.0	0.4	18.9	80.7			
	13:35	6/19/07	0.0	0.0	20.9	79.1			

	Time	Date	CH_4	CO_2	O_2	N	Velocity	Extraction	Comments
			(%)	(%)	(%)	(%)	feet/min	CFM*	
MW-104	9:29	3/23/06	**12.8**	18.5	0.8	67.9			pre-startup
	15:45	3/30/06	0.0	0.0	20.7	79.3			
	13:10	4/6/06	**6.8**	8.9	10.5	73.8			
	14:50	4/11/06	4.1	7.1	9.2	79.6			
	11:40	4/17/06	2.0	0.3	21.0	76.7			
	14:10	4/28/06	0.0	0.0	20.7	79.3			
	15:40	5/4/06	0.0	0.0	8.1	91.9			
	10:27	5/22/06	0.0	0.1	19.9	80.0			
	8:32	6/9/06	0.0	0.0	19.6	80.4			
	12:45	6/14/06	3.2	0.8	18.8	77.2			
	10:54	6/22/06	0.8	0.1	19.7	79.4			
	12:19	7/5/06	0.6	0.0	20.0	79.4			
	11:40	7/10/06	0.7	0.6	19.8	78.9			
	11:05	7/17/06	0.1	0.0	19.6	80.3			
	12:38	7/28/06	0.6	0.0	19.8	79.6			
	9:49	8/8/06	0.6	0.0	20.0	79.4			
	9:14	8/16/06	0.7	0.2	19.4	79.7			
	8:30	8/21/06	0.1	0.3	18.1	81.5			
	14:16	8/28/06	0.0	0.0	17.6	82.4			
	11:29	9/13/06	0.7	0.2	16.8	82.3			
	11:27	9/25/06	0.0	0.2	19.5	80.3			
	8:27	10/10/06	0.7	13.1	4.3	81.9			
	8:30	10/23/06	0.7	0.3	16.7	82.3			
	14:14	11/2/06	0.3	0.0	20.6	79.1			
	15:06	11/14/06	0.2	0.6	19.4	79.8			
	12:04	11/27/06	0.2	3.0	17.6	79.2			
	13:15	12/26/06	0.2	0.0	20.0	79.9			
	14:16	1/27/07	0.1	0.0	19.4	80.5			
	11:35	2/24/07	0.5	12.8	5.6	81.1			
	16:55	3/28/07	0.2	0.2	20.0	79.6			
	11:45	5/1/07	0.0	0.0	18.9	81.1			
	11:48	5/30/07	0.0	0.0	19.0	81.0			
	15:30	6/19/07	0.0	0.0	20.9	79.1			

Table 2. Barometric Pressure Readings

Date	Pressure (in)		Date	Pressure (in)		Date	Pressure (in)		Date	Pressure (in)	
	high	low		high	low		high	low		high	low
3/1/06	29.85	29.67	4/1/06	30.02	29.64	5/1/06	29.91	29.85	6/1/06	30.11	29.93
3/2/06	30.14	29.61	4/2/06	29.99	29.4	5/2/06	29.85	29.82	6/2/06	29.99	29.91
3/3/06	30.35	30.11	4/3/06	29.93	29.4	5/3/06	29.85	29.76	6/3/06	29.99	29.91
3/4/06	30.41	30.29	4/4/06	29.93	29.82	5/4/06	29.88	29.82	6/4/06	29.99	29.91
3/5/06	30.32	29.99	4/5/06	29.96	29.79	5/5/06	29.93	29.85	6/5/06	29.99	29.82
3/6/06	30.26	29.93	4/6/06	29.79	29.49	5/6/06	30.02	29.85	6/6/06	29.85	29.7
3/7/06	30.26	29.76	4/7/06	29.96	29.43	5/7/06	29.91	29.79	6/7/06	29.91	29.7
3/8/06	29.76	29.26	4/8/06	30.17	29.96	5/8/06	29.82	29.7	6/8/06	29.99	29.88
3/9/06	29.28	29.2	4/9/06	30.17	29.99	5/9/06	29.7	29.58	6/9/06	30.05	29.96
3/10/06	29.85	29.23	4/10/06	30.02	29.85	5/10/06	29.61	29.52	6/10/06	29.99	29.91
3/11/06	29.85	29.67	4/11/06	29.88	29.67	5/11/06	29.52	29.26	6/11/06	29.99	29.88
3/12/06	29.96	29.55	4/12/06	29.93	29.58	5/12/06	29.46	29.23	6/12/06	30.14	29.99
3/13/06	29.58	29.08	4/13/06	29.96	29.55	5/13/06	29.7	29.46	6/13/06	30.11	29.96
3/14/06	29.99	29.58	4/14/06	29.61	29.46	5/14/06	29.93	29.67	6/14/06	30.05	29.96
3/15/06	30.17	29.99	4/15/06	29.73	29.58	5/15/06	29.93	29.85	6/15/06	30.05	29.91
3/16/06	30.23	29.99	4/16/06	29.73	29.58	5/16/06	29.85	29.67	6/16/06	29.91	29.79
3/17/06	30.38	30.23	4/17/06	29.93	29.73	5/17/06	29.67	29.46	6/17/06	29.85	29.67
3/18/06	30.38	30.23	4/18/06	29.96	29.82	5/18/06	29.64	29.52	6/18/06	29.76	29.67
3/19/06	30.32	30.17	4/19/06	29.85	29.76	5/19/06	29.76	29.61	6/19/06	29.91	29.73
3/20/06	30.26	30.08	4/20/06	29.82	29.73	5/20/06	29.79	29.64	6/20/06	30.02	29.82
3/21/06	30.17	30.02	4/21/06	29.79	29.76	5/21/06	29.99	29.79	6/21/06	29.82	29.7
3/22/06	30.17	30.02	4/22/06	29.79	29.73	5/22/06	30.17	29.99	6/22/06	30.14	29.82
3/23/06	30.17	30.08	4/23/06	29.88	29.73	5/23/06	30.11	29.93	6/23/06	30.07	29.99
3/24/06	30.11	30.02	4/24/06	29.99	29.73	5/24/06	29.91	29.52	6/24/06	30.07	29.93
3/25/06	30.17	30.05	4/25/06	30.11	29.99	5/25/06	29.52	29.37	6/25/06	30.07	29.91
3/26/06	30.23	30.11	4/26/06	30.02	29.79	5/26/06	29.7	29.46	6/26/06	29.98	29.83
3/27/06	30.17	29.99	4/27/06	30.08	29.82	5/27/06	29.82	29.73	6/27/06	30.07	29.77
3/28/06	30.14	29.99	4/28/06	30.17	30.08	5/28/06	29.88	29.73	6/28/06	29.98	29.83
3/29/06	30.2	29.99	4/29/06	30.17	29.96	5/29/06	29.99	29.88	6/29/06	30.04	29.93
3/30/06	30.02	29.55	4/30/06	29.96	29.82	5/30/06	30.02	29.91	6/30/06	29.95	29.9
3/31/06	29.64	29.37				5/31/06	30.11	29.96			

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Table 2. Barometric Pressure Readings

Date	Pressure (in)		Date	Pressure (in)		Date	Pressure (in)		Date	Pressure (in)	
	high	low		high	low		high	low		high	low
7/1/06	29.83	29.59	8/1/06	29.68	29.59	9/1/06	30.13	30.04	10/1/06	29.92	29.73
7/2/06	29.9	29.59	8/2/06	29.7	29.54	9/2/06	30.09	30	10/2/06	29.82	29.69
7/3/06	29.85	29.72	8/3/06	29.85	29.69	9/3/06	30.03	29.93	10/3/06	29.92	29.71
7/4/06	29.98	29.76	8/4/06	29.97	29.85	9/4/06	30.04	29.94	10/4/06	30.22	29.71
7/5/06	30.04	29.59	8/5/06	29.98	29.85	9/5/06	29.99	29.86	10/5/06	30.31	30.22
7/6/06	30.15	30.03	8/6/06	29.91	29.78	9/6/06	29.95	29.87	10/6/06	30.38	30.22
7/7/06	30.17	30.04	8/7/06	30.08	29.86	9/7/06	29.89	29.75	10/7/06	30.23	30
7/8/06	30.05	29.78	8/8/06	30.14	30	9/8/06	29.93	29.74	10/8/06	30.01	29.9
7/9/06	29.79	29.64	8/9/06	30	29.75	9/9/06	30.09	29.93	10/9/06	30.18	30.01
7/10/06	29.89	29.78	8/10/06	29.88	29.75	9/10/06	30.14	30.07	10/10/06	30.15	29.57
7/11/06	29.84	29.79	8/11/06	29.97	29.86	9/11/06	30.11	29.93	10/11/06	29.57	29.21
7/12/06	29.87	29.8	8/12/06	29.99	29.88	9/12/06	29.93	29.8	10/12/06	29.49	29.38
7/13/06	29.86	29.73	8/13/06	29.92	29.68	9/13/06	29.82	29.77	10/13/06	29.52	29.3
7/14/06	29.78	29.68	8/14/06	29.78	29.64	9/14/06	29.94	29.82	10/14/06	29.86	29.52
7/15/06	29.91	29.78	8/15/06	29.97	29.78	9/15/06	30.01	29.9	10/15/06	29.92	29.8
7/16/06	29.86	29.71	8/16/06	30.06	29.97	9/16/06	29.91	29.6	10/16/06	29.8	29.51
7/17/06	29.82	29.61	8/17/06	30.01	29.93	9/17/06	29.62	29.44	10/17/06	29.55	29.34
7/18/06	29.98	29.82	8/18/06	29.94	29.84	9/18/06	29.57	29.49	10/18/06	29.76	29.56
7/19/06	30	29.74	8/19/06	29.93	29.78	9/19/06	29.86	29.56	10/19/06	29.81	29.72
7/20/06	29.89	29.75	8/20/06	30.02	29.92	9/20/06	29.95	29.85	10/20/06	29.72	29.63
7/21/06	29.97	29.88	8/21/06	30	29.9	9/21/06	29.89	29.74	10/21/06	29.83	29.71
7/22/06	29.89	29.78	8/22/06	30.02	29.92	9/22/06	29.75	29.37	10/22/06	29.89	29.72
7/23/06	29.87	29.73	8/23/06	29.95	29.76	9/23/06	29.48	29.41	10/23/06	29.98	29.85
7/24/06	30.17	29.55	8/24/06	29.78	29.69	9/24/06	29.8	29.42	10/24/06	30.09	29.98
7/25/06	29.7	29.58	8/25/06	29.76	29.55	9/25/06	29.87	29.71	10/25/06	30.12	30.03
7/26/06	29.6	29.54	8/26/06	29.81	29.7	9/26/06	29.88	29.51	10/26/06	30.05	29.92
7/27/06	29.7	29.59	8/27/06	29.9	29.81	9/27/06	29.74	29.39	10/27/06	29.92	29.5
7/28/06	29.77	29.7	8/28/06	29.87	29.76	9/28/06	29.85	29.74	10/28/06	29.56	29.48
7/29/06	29.85	29.72	8/29/06	29.89	29.75	9/29/06	29.81	29.53	10/29/06	29.74	29.55
7/30/06	29.78	29.62	8/30/06	30.01	29.89	9/30/06	29.73	29.51	10/30/06	29.62	29.34
7/31/06	29.63	29.56	8/31/06	30.09	30				10/31/06	29.99	29.39

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Table 2. Barometric Pressure Readings

Date	Pressure (in)		Date	Pressure (in)		Date	Pressure (in)		Date	Pressure (in)	
	high	low		high	low		high	low		high	low
11/1/06	30.04	29.96	12/1/06	30.02	29.62	1/1/07	30.17	29.32	2/1/07	29.63	29.57
11/2/06	30.23	30.01	12/2/06	30.29	30.02	1/2/07	30.2	29.9	2/2/07	29.7	29.58
11/3/06	30.31	30.22	12/3/06	30.35	30.28	1/3/07	29.9	29.64	2/3/07	30.08	29.59
11/4/06	30.22	30.06	12/4/06	30.3	29.93	1/4/07	29.64	29.34	2/4/07	30.38	30.05
11/5/06	30.11	30.01	12/5/06	30.21	29.67	1/5/07	29.62	29.36	2/5/07	30.49	30.37
11/6/06	30.03	29.85	12/6/06	30.19	29.65	1/6/07	29.97	29.62	2/6/07	30.37	30.07
11/7/06	29.84	29.56	12/7/06	30.51	30.2	1/7/07	29.97	29.54	2/7/07	30.2	30.1
11/8/06	29.56	29.28	12/8/06	30.47	30.07	1/8/07	29.71	29.53	2/8/07	30.22	30.08
11/9/06	29.87	29.29	12/9/06	30.07	29.84	1/9/07	30.15	29.71	2/9/07	30.26	30.1
11/10/06	29.96	29.85	12/10/06	30.01	29.87	1/10/07	30.22	29.78	2/10/07	30.21	30.05
11/11/06	30.19	29.95	12/11/06	30.12	30	1/11/07	29.78	29.65	2/11/07	30.09	29.99
11/12/06	30.02	29.95	12/12/06	29.97	29.62	1/12/07	30.27	29.78	2/12/07	30.28	30.08
11/13/06	29.95	29.78	12/13/06	29.8	29.67	1/13/07	30.38	30.2	2/13/07	30.3	30.21
11/14/06	29.88	29.7	12/14/06	29.66	29.28	1/14/07	30.27	30.04	2/14/07	30.28	30.18
11/15/06	29.82	29.76	12/15/06	29.84	29.34	1/15/07	30.22	29.94	2/15/07	30.22	30
11/16/06	29.75	29.64	12/16/06	29.82	29.56	1/16/07	30.55	30.22	2/16/07	29.99	29.6
11/17/06	29.92	29.68	12/17/06	30.07	29.77	1/17/07	30.52	30.15	2/17/07	29.9	29.64
11/18/06	30.13	29.92	12/18/06	30.32	30.07	1/18/07	30.15	29.83	2/18/07	30.08	29.87
11/19/06	30.24	30.13	12/19/06	30.33	30.17	1/19/07	30.23	29.93	2/19/07	29.87	29.32
11/20/06	30.28	30.13	12/20/06	30.17	30.06	1/20/07	30.34	30.16	2/20/07	29.64	29.49
11/21/06	30.17	30.05	12/21/06	30.12	29.83	1/21/07	30.15	29.86	2/21/07	29.67	29.52
11/22/06	30.13	30.04	12/22/06	29.83	29.41	1/22/07	29.94	29.73	2/22/07	30.24	29.52
11/23/06	30.14	30.03	12/23/06	29.96	29.55	1/23/07	29.91	29.67	2/23/07	30.36	30.2
11/24/06	30.03	29.84	12/24/06	30.05	29.93	1/24/07	30.1	29.9	2/24/07	30.2	29.63
11/25/06	29.94	29.88	12/25/06	29.92	29.78	1/25/07	30.24	29.95	2/25/07	29.62	29.31
11/26/06	30	29.92	12/26/06	29.83	29.77	1/26/07	29.95	29.35	2/26/07	29.72	29.36
11/27/06	30.03	29.92	12/27/06	29.91	29.78	1/27/07	29.8	29.53	2/27/07	29.99	29.72
11/28/06	29.94	29.63	12/28/06	30.29	29.91	1/28/07	29.96	29.79	2/28/07	30.01	29.71
11/29/06	29.99	29.63	12/29/06	30.38	30.27	1/29/07	29.93	29.72			
11/30/06	30.13	29.95	12/30/06	30.35	30.09	1/30/07	30.05	29.81			
			12/31/06	30.09	29.3	1/31/07	30.02	29.64			

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Table 2. Barometric Pressure Readings

Date	Pressure (in)		Date	Pressure (in)		Date	Pressure (in)		Date	Pressure (in)	
	high	low		high	low		high	low		high	low
3/1/07	29.71	28.84	4/1/07	29.55	29.31	5/1/07	29.85	29.64	6/1/07	29.83	29.66
3/2/07	29.26	28.75	4/2/07	29.87	29.55	5/2/07	30.06	29.83	6/2/07	29.67	29.52
3/3/07	29.94	29.27	4/3/07	29.81	29.54	5/3/07	30.13	30	6/3/07	29.51	29.33
3/4/07	29.97	29.83	4/4/07	30.02	29.58	5/4/07	30.05	29.9	6/4/07	29.49	29.3
3/5/07	30.51	29.88	4/5/07	30.09	30.01	5/5/07	30.18	29.91	6/5/07	29.69	29.49
3/6/07	30.53	30.2	4/6/07	30.04	29.87	5/6/07	30.26	30.08	6/6/07	29.71	29.39
3/7/07	30.31	30.17	4/7/07	29.93	29.85	5/7/07	30.09	29.81	6/7/07	29.39	29.19
3/8/07	30.21	29.96	4/8/07	29.98	29.92	5/8/07	29.92	29.8	6/8/07	29.9	29.28
3/9/07	29.96	29.72	4/9/07	29.95	29.89	5/9/07	29.82	29.73	6/9/07	29.98	29.83
3/10/07	30.22	29.76	4/10/07	29.95	29.8	5/10/07	29.79	29.69	6/10/07	29.89	29.84
3/11/07	30.32	30.08	4/11/07	29.82	29.4	5/11/07	30.03	29.73	6/11/07	29.99	29.87
3/12/07	30.08	29.76	4/12/07	29.89	29.39	5/12/07	30.18	30.03	6/12/07	30.08	29.99
3/13/07	29.76	29.55	4/13/07	30.06	29.89	5/13/07	30.2	29.88	6/13/07	30.04	29.89
3/14/07	29.97	29.61	4/14/07	29.98	29.79	5/14/07	29.89	29.55	6/14/07	29.94	29.85
3/15/07	30.3	30.05	4/15/07	29.92	29.78	5/15/07	29.8	29.56	6/15/07	29.91	29.8
3/16/07	30.27	30.2	4/16/07	30.01	29.83	5/16/07	30.06	29.81	6/16/07	29.82	29.8
3/17/07	30.2	30.08	4/17/07	29.91	29.75	5/17/07	30.22	30.06	6/17/07	29.89	29.67
3/18/07	30.17	29.78	4/18/07	29.93	29.85	5/18/07	30.16	29.92	6/18/07	29.71	29.5
3/19/07	30.2	29.66	4/19/07	30.06	29.92	5/19/07	29.92	29.79	6/19/07	29.94	29.55
3/20/07	30.48	30.17	4/20/07	30.16	30.03	5/20/07	30.02	29.89			
3/21/07	30.18	29.55	4/21/07	30.07	29.78	5/21/07	29.98	29.83			
3/22/07	29.96	29.49	4/22/07	29.81	29.52	5/22/07	29.9	29.8			
3/23/07	29.95	29.9	4/23/07	29.9	29.45	5/23/07	29.9	29.8			
3/24/07	30.12	29.91	4/24/07	30	29.9	5/24/07	30.01	29.78			
3/25/07	30.09	29.65	4/25/07	29.92	29.83	5/25/07	30.18	30.01			
3/26/07	29.78	29.06	4/26/07	29.83	29.57	5/26/07	30.07	29.76			
3/27/07	30.12	29.77	4/27/07	29.7	29.57	5/27/07	29.95	29.75			
3/28/07	30.25	30.09	4/28/07	29.83	29.68	5/28/07	30.05	29.95			
3/29/07	30.3	30.2	4/29/07	29.83	29.59	5/29/07	29.97	29.85			
3/30/07	30.23	30.03	4/30/07	29.95	29.71	5/30/07	29.92	29.8			
3/31/07	30.04	29.48				5/31/07	29.82	29.77			

Brandon Weather Station March 2006 - June 2006
Ripon Weather Stattion July 2006 - June 2007

Table 3. Landfill Gas Analytical Results

Sampling Point ID	Date	Benzene	Chlorobenzene	Chloroethane	Chloromethane	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Dichlorotetrafluoroethane	Ethylbenzene	Methylene Chloride	1,1,2,2-Tetrachloroethane	Styrene	Tetrachloroethene	Total Hydrocarbons as gas	Toluene	1,1,1-Trichloroethane	Trichloroethene	Tirchlorofluoromethane	1,1,2-Trichlorofluoromethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl Chloride	Total Xylenes
GP-1	9/29/04	31.2		208.0				2,980.0																					
	1/28/05				0.6																1.8								
GP-2	9/29/04	61.1	58.1	70.6	73.0			347.0				343.0	22.5	220.0					23.1				72.8					410.0	
	1/28/05							270.0				470.0		190.0						4,600									
GP-3	9/29/04	102.0		689.0				909.0			110.0	6,660.0	229.0	131.0									205.0					25,400.0	
	1/28/05			450.0				590.0				4,500.0								4,800								12,600.0	
	6/2/06											464.0			105.0					10,900	708.0							72.9	85.8
	11/2/06			5.9								28.7			19.0					1,360	122.0								50.1
	5/30/07	1.3	3.0				2.4	2.0				7.1			9.0				0.9	2,800	7.4		1.0			1.9	3.1		25.0
LC-1	9/29/04			9.1				70.8						9.5															
	1/28/05							553.0				1,080.0		178						10,400								130.0	
Pilot Test																													
GV-1 & GV-3	05/10/05											630.0								11,700	2,200.0							1,100.0	400.0
GV-2 & GV-4 & LC-3	05/11/05											2,200.0			320.0					11,400	2,500.0							2,900.0	890.0
O&M																													
Leg 1	6/2/06	76.4	102.0	26.6				42.8				14.5			469.0					56,600	259.0		17.7			91.4	76.3	116.0	972.0
Leg 2	6/2/06	61.4	101.0									213.0			372.0					42,600	10,600.0					21.3	40.1		787.1
Leg 3	6/2/06	136.0	27.2	121.0		15.9		26.5	22.6			18,100.0	45.9		333.0	27.1				20,500	5,980.0		108.0					17,700.0	873.0

Values in ppbv (parts per billion by volume)
Analyzed using EPA Method TO-14A
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Table 3. Landfill Gas Analytical Results

Sampling Point ID	Date	Benzene	Chlorobenzene	Chloroethane	Chloromethane	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Dichlorotetrafluoroethane	Ethylbenzene	Methylene Chloride	1,1,2,2-Tetrachloroethane	Styrene	Tetrachloroethene	Total Hydrocarbons as gas	Toluene	1,1,1-Trichloroethane	Trichloroethene	Tirchlorofluoromethane	1,1,2-Trichlorofluoromethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl Chloride	Total Xylenes
GV-1	7/28/06	117.0	21.8					83.6	40.9			3,660.0			65.1	28				12,000	434.0		94.5					10500.0	146.2
	11/2/06	70.6	22.5	49.6				343				1,360.0	20.8	34.5	71.4	18.9				11,400	699.0		69.2	13.8				987.0	205.7
	2/23/07	0.7													0.8					56	7.0				0.69				4.0
	5/30/07	54.0		220				2300			450	300.0		220	68.0				16	15,200	59.0							530.0	166.0
GV-4	7/28/06	90.3	66.3	97.5				3,300.0	15.5			16.2		843	264.0					16,700	107.0			105				332.0	521.8
	11/2/06	46.9	59.8					401.0						51.6	237.0					15,800	337.0			65.5		18.1	17.5	30.9	531.4
	2/23/07			15				273.0	36.1	5.2				37.5	3.1		4			2,110	9.5	62.3		25					6.5
	5/30/07			180				190.0						93						5,100								92.0	
GV-6	7/28/06	172.0	117.0	373				1,070.0	42.6			19.0		281	323.0					27,500	107.0	27.9		38				3,590.0	649.5
	11/2/06	50.2	50.4	73.5				166.0	35.8					70.4	246.0					29,300	155.0					45	33.7	84.9	666.0
	2/23/07							111.0	24.4					44.3			7.4			2,780	7.0	33.5		17.6					
	5/30/07	32.0		190				160.0	21			19.0		120	73.0					17,400	56.0							150.0	151.0
GV-7	7/28/06	72.3	46.9			14.9		949.0				825.0			255.0	20				18,000	103.0		18.1					7,200.0	637.0
	11/2/06	30.3	14.3	34.2				201.0				188.0		46.3	60.1					8,910	201.0							922.0	166.0
	2/23/07	14.8	6.5	58.6				409.0	19			11.3		64.7	9.3		12.2			6,700	7.9	210		13.4				57.7	6.5
	5/30/07	84.0	65.0	190				990.0	21			81.0		510	210.0					31,100	96.0						16	350.0	446.0
GV-9	7/28/06	69.4	23.7					400.0				81.6			53.0					9,850	69.8			21				11,200.0	92.5
	11/2/06							93.2				28.4		19.3														787.0	
	2/23/07	9.5						157.0				407.0		31.9	14.0	8.1	17.4			5,770	32.9		11.1	10.9				449.0	26.9
	5/30/07	56.0		190				1,100.0				440.0		270	44.0					26,900	110.0							1,500.0	127.0
GV-12	7/28/06	31.0	45.7	77.4				433.0	45.7			249.0		36.1	151.0					13,400	196.0	42.5	26.4	86				65.8	333.8
	11/2/06	16.0		47.3				182.0	22.2					23.3	35.0					5,080	274.0			72.3				54.6	72.5
	2/23/07		0.7				2.1		7.7	0.91				5.1	2.1		1.7		5.9	1,400	5.7	10.5	1.3	75.7		1.7	1.1		8.2
	5/30/07	41.0		340				120.0	23			17.0		130	95.0					16,100	47.0			44				210.0	177.0
LC-1	7/28/06	117.0						71.6						168	149.0					23,600	118.0								563.0
	11/2/06	92.6	16.4	54.3				62.4	27.7			1010		30.5	636.0				22.1	35,400	3,010.0		46.9			38.1	29.8		1,954.0
	2/23/07	48.0						129.0						14.6	64.2		21			13,300	40.8								175.2
	5/30/07	160.0		270				180.0	24						380.0	500				34,800	270.0					57	43		1,140.0
LC-2	7/28/06	447.0	404.0	265				1,060.0				3,850.0	48.7	408	2,790.0	88.6			81	98,200	8,920.0		238			191	143	166.0	13,006.0
	11/2/06	221.0	96.9	216				1,130.0						263	378.0					47,000	43.2					79.4	56		8,532.0
	2/23/07	186.0	182.0	148			36.2	309.0						176	449.0		194			73,800	83.7					173	157		7,088.5
	5/30/07	1.2		4.4				7.7				1.8		7.4	1.2					290	3.3							2.4	2.7
LC-3	7/28/06											516.0									1,070.0								1,340.0
	11/2/06	1,110.0	95.4				33.4	740.0	98.5		254	5,840.0	228	115	526.0	1430		22.6	209	122,000	5,030.0		912	184		158	85.1	1600	3,310.0
	2/23/07	434.0						2,810.0	81.6		166	43,400.0		231	185.0	1440	21.1		63.2	219,000	10,000.0		573 J	1210				11900	632.0
	5/30/07	610.0	110				71	5,200.0	64		460	137,000.0		260	18,400.0	2700			260	560,000	146,000.0		3200	270		260	150	172000	47,400.0

Values in ppbv (parts per billion by volume)
Analyzed using EPA Method TO-14A
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Table 2. Groundwater VOC Analytical Results for Monitoring Wells
FF/NN Landfill, Ripon, WI

		Parameters																														
Sampling Point	Collection Date	Acetone[1]	Benzene	Bromomethane	2-Butanone (MEK)	sec-Butylbenzene	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,4-dichlorobenzene	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-dichloroethane	1,1-Dichloroethene	cis-1,2-dichloroethene	trans-1,2-Dichloroethene	1,2-dichloropropane	Ethylbenzene	Isopropylbenzene	Methylene chloride	MTBE	Tetrachloroethene	Tetrahydrofuran	Toluene	1,2,4-Trichlorobenzene	Trichloroethene	Trichlorofluoromethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl Chloride	Total Xylenes
WDNR NR140	PAL	200	0.5	1	90	NE	NE	80	0.6	0.3	15	200	85	0.5	0.7	7	20	0.5	140	NE	0.5	12	0.5	10	200	14	0.5	NE	96		0.02	1000
	ES	1000	5	10	460	NE	NE	400	6	3	75	1000	850	5	7	70	100	5	700	NE	5	60	5	50	1000	70	5	NE	480		0.2	10000
MW-3A	04/04/02	NR			NA																											
	05/22/02	NR			NA																											
	08/20/02	NR																														
	12/05/02	NR																														
	04/22/03																															
	10/22/03																															
	05/11/04																															
	10/14/04																															
	01/27/05																															
	04/26/05																															
	08/02/05																															
	10/26/05																															
	01/31/06																															
	04/24/06																															
	07/27/06									0.35 Q																						
	10/31/06																															
	01/31/07																															
	5/1/07																															
MW-3B	04/04/02	NR			NA																				0.38						**0.31**	
	05/22/02	NR			NA																			NA								
	08/20/02	NR																						NA								
	12/05/02	NR																														
	4/22/03																															
	10/22/03																															
	05/11/04																														**0.2 Q**	
	07/22/04																															
	10/14/04																															
	1/27/05																															
	4/26/05																															
	8/2/05																														**0.30 Q**	
	10/26/05																														**0.39 Q**	
	01/31/06																															
	4/24/06																															
	7/27/06									0.45 Q																						
	10/31/06																															
	1/31/07																															
	5/01/07																															

Table 2. Groundwater VOC Analytical Results for Monitoring Wells
FF/NN Landfill, Ripon, WI

		Parameters																														
Sampling Point	Collection Date	Acetone[1]	Benzene	Bromomethane	2-Butanone (MEK)	sec-Butylbenzene	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,4-dichlorobenzene	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-dichloroethane	1,1-Dichloroethene	cis-1,2-dichloroethene	trans-1,2-Dichloroethene	1,2-dichloropropane	Ethylbenzene	Isopropylbenzene	Methylene chloride	MTBE	Tetrachloroethene	Tetrahydrofuran	Toluene	1,2,4-Trichlorobenzene	Trichloroethene	Trichlorofluoromethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl Chloride	Total Xylenes
WDNR NR140	PAL	200	0.5	1	90	NE	NE	80	0.6	0.3	15	200	85	0.5	0.7	7	20	0.5	140	NE	0.5	12	0.5	10	200	14	0.5	NE	96		0.02	1000
	ES	1000	5	10	460	NE	NE	400	6	3	75	1000	850	5	7	70	100	5	700	NE	5	60	5	50	1000	70	5	NE	480		0.2	10000
MW-101	10/1/93	NR																					0.7 J									
	04/1/94	NR																					0.6J									
	05/01/96	NR																					0.6J									
	10/01/96	NR								0.89 J													0.72 J									
	05/01/97	NR																														
	10/01/97	NR																					0.7									
	04/98*	NR																														
	10/01/98	NR																														
	04/01/99	NR																														
	10/01/99	NR																					0.7									
	05/01/00	NR																					0.32									
	10/01/00	NR																					0.38									
	05/01/02	NR																					0.28									
	10/11/01	NR																														
	02/05/02	NR			NA							0.19											0.32	NA			0.16					
	05/21/02 *		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	8/19/02 *		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/5/02 *		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4/21/03 *		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	10/23/03																															
	4/28/04																															
	10/13/04	11																														
	4/27/05																															
	4/28/06	18																														
	11/1/2006*		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2/1/07																															
	5/1/07	2.4																														
P-101	10/01/93	NR																														
	04/01/94	NR																							0.5J							
	020/5/02	NR			NA																			NA								
	05/22/02	NR			NA																			NA								
	10/13/04																															
	4/27/05																															
	10/25/05																															
	4/28/06																															
	11/1/06																															
	5/1/07																															

Table 2. Groundwater VOC Analytical Results for Monitoring Wells
FF/NN Landfill, Ripon, WI

		Parameters																														
Sampling Point	Collection Date	Acetone[1]	Benzene	Bromomethane	2-Butanone (MEK)	sec-Butylbenzene	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,4-dichlorobenzene	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-dichloroethane	1,1-Dichloroethene	cis-1,2-dichloroethene	trans-1,2-Dichloroethene	1,2-dichloropropane	Ethylbenzene	Isopropylbenzene	Methylene chloride	MTBE	Tetrachloroethene	Tetrahydrofuran	Toluene	1,2,4-Trichlorobenzene	Trichloroethene	Trichlorofluoromethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl Chloride	Total Xylenes
WDNR NR140	PAL	200	0.5	1	90	NE	NE	80	0.6	0.3	15	200	85	0.5	0.7	7	20	0.5	140	NE	0.5	12	0.5	10	200	14	0.5	NE	96		0.02	1000
	ES	1000	5	10	460	NE	NE	400	6	3	75	1000	850	5	7	70	100	5	700	NE	5	60	5	50	1000	70	5	NE	480		0.2	10000
MW-102	10/26/93	NR																														
	04/11/94	NR																							3							
	05/08/96	NR																							0.4J							
	10/30/96	NR								0.99 J													0.30 J									
	05/12/97	NR																														
	10/26/97	NR																														
	04/13/98	NR														0.46																
	10/11/01	NR																														
	05/21/02 *	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	08/19/02 *	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/05/02 *	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	07/23/04																															
	10/14/04																															
	4/27/05																															
	10/25/05																															
	4/25/06																															
	11/1/06																															
	5/2/07																															
P-102	10/26/93	NR																														
	04/11/94	NR																														
	10/11/01	NR																														
	05/21/02	NR			NA																			NA						**0.33Q**	
	08/20/02	NR																						NA						**0.62**	
	12/04/02	NR																												**0.68**		
	04/21/03																				0.48 Q&									**0.83**		
	10/22/03																													**0.96**		
	04/27/04																													**2.1**		
	10/14/04									0.5 Q																				**0.32**		
	1/27/05																															
	4/27/05																															
	8/3/05																															
	8/3/2005 dup																															
	10/25/05																															
	2/1/06																															
	4/27/06																															
	4/27/2006 dup																															
	7/27/06									0.66 Q																						
	11/1/06																															
	2/15/07																															
	5/2/07																															

Table 2. Groundwater VOC Analytical Results for Monitoring Wells
FF/NN Landfill, Ripon, WI

		Parameters																														
Sampling Point	Collection Date	Acetone[1]	Benzene	Bromomethane	2-Butanone (MEK)	sec-Butylbenzene	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,4-dichlorobenzene	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-dichloroethane	1,1-Dichloroethene	cis-1,2-dichloroethene	trans-1,2-Dichloroethene	1,2-dichloropropane	Ethylbenzene	Isopropylbenzene	Methylene chloride	MTBE	Tetrachloroethene	Tetrahydrofuran	Toluene	1,2,4-Trichlorobenzene	Trichloroethene	Trichlorofluoromethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl Chloride	Total Xylenes
WDNR NR140	PAL	200	0.5	1	90	NE	NE	80	0.6	0.3	15	200	85	0.5	0.7	7	20	0.5	140	NE	0.5	12	0.5	10	200	14	0.5	NE	96		0.02	1000
	ES	1000	5	10	460	NE	NE	400	6	3	75	1000	850	5	7	70	100	5	700	NE	5	60	5	50	1000	70	5	NE	480		0.2	10000
MW-103[2]	10/27/93	NR														**410**														**75**	
	04/11/94	NR														**1100**														**440**	
	04/01/94 Dup	NR														**970**														**410**	
	05/01/96	NR					7J									**740**	9J										**10J**				**170**	
	05/01/96 Dup	NR					8J			**9 J**						**840**	10J										**11J**				**180**	
	10/01/96	NR	3.3				8.1 J	1.9		1.1	0.76 J		0.99 J		0.30 J	**520 E**	5	1.9									4.7				**98 E**	
	05/01/97	NR	4.3				8.5	2.7			0.98		1.2	0.52	0.75	**790**	4.7	1.6				0.27					**5.6**				**230**	
	10/01/97	NR	4.2				7.9	2.4			1.4		0.89	0.38		**550J**	5.2	1.5				0.38		3.1			**6.6**				**220J**	
	04/98*	NR																														
	10/01/98	NR	2				5.7									**260**	3.3										**5.8**				**45**	
	04/01/99	NR	1.4				4.7									**150**	2.4										3.9				**47**	
	10/01/99	NR					5.2									**170**	2.6										2.4				**48**	
	05/01/00	NR	1.8				6.5									**170**	3.4										4.1				**60**	
	10/01/00	NR	1.6				6.9	3.1			0.84		0.33			**130**	4.5	0.75									**6.6**				**78**	
	05/01/01	NR	1.2				5.7	1.5			0.92					**94**	3.4	0.54			2.6L			1.1			4.5				**46**	
	10/11/01	NR	1.1		80		2.6	0.62			0.54					25	2.7				6.4L				0.8						**15**	
	2/4/02	NR	1.8		NA		6.4	1.1			0.81		0.36			**71**	5.5	0.53			0.28		0.13	NA	0.72		3.1				**40**	
	5/21/2002*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	8/19/02 *	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/05/02 *	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	04/21/03 *	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	10/21/03		0.8				1.3									58	1.9										1.7				**21**	
	04/28/04		0.61 Q		26		0.53 Q									16											1.9				**6.7**	
	10/13/04	56	1.4				1.7			0.52						12	2.5								0.89		0.78				**7.9**	
	4/26/05		1.2				2.8									1.9	3.0								0.71						**1.8**	
	4/25/06	31			8.0 Q		0.62 Q									5.2											0.48 Q				**1.8**	
	10/31/2006*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2/1/07				6.1Q											10											0.82Q				**0.34**	
	5/2/07						1.7									14											1.7				**0.75**	

Table 2. Groundwater VOC Analytical Results for Monitoring Wells
FF/NN Landfill, Ripon, WI

		Parameters																														
Sampling Point	Collection Date	Acetone[1]	Benzene	Bromomethane	2-Butanone (MEK)	sec-Butylbenzene	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,4-dichlorobenzene	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-dichloroethane	1,1-Dichloroethene	cis-1,2-dichloroethene	trans-1,2-Dichloroethene	1,2-dichloropropane	Ethylbenzene	Isopropylbenzene	Methylene chloride	MTBE	Tetrachloroethene	Tetrahydrofuran	Toluene	1,2,4-Trichlorobenzene	Trichloroethene	Trichlorofluoromethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl Chloride	Total Xylenes
WDNR NR140	PAL	200	0.5	1	90	NE	NE	80	0.6	0.3	15	200	85	0.5	0.7	7	20	0.5	140	NE	0.5	12	0.5	10	200	14	0.5	NE	96		0.02	1000
	ES	1000	5	10	460	NE	NE	400	6	3	75	1000	850	5	7	70	100	5	700	NE	5	60	5	50	1000	70	5	NE	480		0.2	10000
P-103	10/27/93	NR																														
	04/12/94	NR																														
	05/9/96	NR														0.1J									0.1J						0.1J	
	10/31/96	NR								0.84 J																						
	05/13/97	NR																														
	10/27/97	NR																														
	04/13/98	NR																														
	2/4/02	NR			NA																			NA								
	05/21/02	NR			NA											[0.54]								NA								
	10/13/04									0.52 Q																					**1.7**	
	1/26/05																															
	1/26/2005 dup																															
	4/26/05																														**2.4**	
	8/3/05																														**3.2**	
	10/26/05																														**3.2**	
	02/01/06																														**3.6**	
	4/25/06																														**2.9**	
	7/28/06									0.49 Q																					**1.6**	
	11/1/06																														**1.4**	
	2/1/07																														**1.5**	
	5/2/07																														**1.6**	
P-103D	02/4/04				NA																0.55Q			NA							**1.1**	
	05/11/04																														**1.5**	
	05/11/04 dup																														**1.5**	
	07/23/04																														**1.3**	
	07/23/04 dup																														**1.5**	
	10/13/04									0.43 Q						0.86 Q																
	04/26/05															0.84 Q															**3.0**	
	10/26/05															0.98 Q															**2.7**	
	10/26/2005 dup															0.95 Q															**2.8**	
	4/25/06																														**2.6**	
	11/1/06																														**1.9**	
	5/2/07																														**1.4**	

Table 2. Groundwater VOC Analytical Results for Monitoring Wells
FF/NN Landfill, Ripon, WI

		Parameters																														
Sampling Point	Collection Date	Acetone[1]	Benzene	Bromomethane	2-Butanone (MEK)	sec-Butylbenzene	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,4-dichlorobenzene	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-dichloroethane	1,1-Dichloroethene	cis-1,2-dichloroethene	trans-1,2-Dichloroethene	1,2-dichloropropane	Ethylbenzene	Isopropylbenzene	Methylene chloride	MTBE	Tetrachloroethene	Tetrahydrofuran	Toluene	1,2,4-Trichlorobenzene	Trichloroethene	Trichlorofluoromethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl Chloride	Total Xylenes
WDNR NR140	PAL	200	0.5	1	90	NE	NE	80	0.6	0.3	15	200	85	0.5	0.7	7	20	0.5	140	NE	0.5	12	0.5	10	200	14	0.5	NE	96		0.02	1000
	ES	1000	5	10	460	NE	NE	400	6	3	75	1000	850	5	7	70	100	5	700	NE	5	60	5	50	1000	70	5	NE	480		0.2	10000
MW-104	10/27/93	NR	2				2				2					1 JB									31							
	4/19/94	NR	1				1				1					10											0.8J				**6.0**	
	05/9/96	NR	**6**				5	1		0.3 J			0.2 J			6	0.3 J		0.1J						0.2 J		0.5J				**10**	
	10/30/96	NR	0.64 J				1.1	0.34 J		0.46 J						3.6	0.22 J		0.80 J								0.31 J				**4.3**	0.77 J
	05/12/97	NR	4.8				4.5	1.5			0.91					1.1						0.32									**4.5**	
	10/27/97	NR	0.63				1.3				0.85					7.3															**18**	
	04/13/98	NR	1.2													**74**	0.67								0.46		3.5				**17**	
	10/13/98	NR	1.7								0.76					3.3															**15**	4.1
	04/07/99	NR	3.2				1.4									6.6											0.71				**6.1**	
	10/27/99	NR	3.5				5.4				0.92					4.5															**2.8**	
	05/2/00	NR	3				5.7				1.5					0.7									0.13						**1.1**	
	10/30/00	NR	2				6.2				1.6					2.6									0.12		0.33				**29**	
	05/1/01	NR	2.5				5.6				2	0.47				7				0.26	0.51L			0.81	0.13		0.66				**8.6**	
	10/11/01	NR	3.1				9.5				2.3				0.85	2					0.39L				0.1				0.14		**2.2**	
	02/5/02	NR	2.7		NA	0.16	8				2	0.19				5.1				0.23				NA	0.17		0.73				**13**	
	05/21/02*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	08/19/02 *	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/05/02 *	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4/21/2003 *	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	04/22/03		1.8		6.9Q		3.1									4.6															**6.5**	
	10/23/03	3.2	4				7.8				1.8					3.3															**8.6**	
	04/28/04		2.4				6				2.2 Q					6.4															**8.7**	
	10/13/04		2.5				6.5				2.2 Q					10															**20**	
	4/27/05		1.7				5.4				2.1 Q																				**0.64**	
	10/25/05		1.4				6.9				2.5 Q					3.9															**13**	
	4/25/06		1.4		4.6 Q		4.9				2.2 Q					1.0 Q															**1.1**	
	11/2/06		1.2 Q				4.8				1.7 Q																					
	11/2/2006 dup		1.3 Q				5																									
	5/2/07		0.8Q				4				2.0Q																					

Table 2. Groundwater VOC Analytical Results for Monitoring Wells
FF/NN Landfill, Ripon, WI

		Parameters																														
Sampling Point	Collection Date	Acetone[1]	Benzene	Bromomethane	2-Butanone (MEK)	sec-Butylbenzene	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,4-dichlorobenzene	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-dichloroethane	1,1-Dichloroethene	cis-1,2-dichloroethene	trans-1,2-Dichloroethene	1,2-dichloropropane	Ethylbenzene	Isopropylbenzene	Methylene chloride	MTBE	Tetrachloroethene	Tetrahydrofuran	Toluene	1,2,4-Trichlorobenzene	Trichloroethene	Trichlorofluoromethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl Chloride	Total Xylenes
WDNR NR140	PAL	200	0.5	1	90	NE	NE	80	0.6	0.3	15	200	85	0.5	0.7	7	20	0.5	140	NE	0.5	12	0.5	10	200	14	0.5	NE	96		0.02	1000
	ES	1000	5	10	460	NE	NE	400	6	3	75	1000	850	5	7	70	100	5	700	NE	5	60	5	50	1000	70	5	NE	480		0.2	10000
P-104	10/27/94	NR																														
	04/19/94	NR																														
	05/09/96	NR																														
	10/30/96	NR								0.20 J																						
	05/12/97	NR																														
	10/27/97	NR																														
	04/13/98	NR																														
	10/11/01	NR																			0.52L											
	02/5/02	NR	0.18		NA					0.85														NA								
	5/21/02	NR			NA																			NA								
	08/20/02	NR																						NA								
	10/13/04									0.45 Q																						
	10/13/04 Dup																															
	8/3/05																															
	8/3/05 Dup																															
	7/28/06																															
MW-106	10/1/93	NR																														
	04/01/94	NR																							11							
	02/04/02	NR			NA																			NA	0.25							
	05/21/02 *	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	08/19/02 *	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	120/5/02 *	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	04/21/03 *	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	07/23/04																															
	4/27/05																															
	4/27/05 Dup																															
	7/28/06*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	10/31/2006*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2/15/07																															

Table 2. Groundwater VOC Analytical Results for Monitoring Wells
FF/NN Landfill, Ripon, WI

		Parameters																														
Sampling Point	Collection Date	Acetone[1]	Benzene	Bromomethane	2-Butanone (MEK)	sec-Butylbenzene	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,4-dichlorobenzene	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-dichloroethane	1,1-Dichloroethene	cis-1,2-dichloroethene	trans-1,2-Dichloroethene	1,2-dichloropropane	Ethylbenzene	Isopropylbenzene	Methylene chloride	MTBE	Tetrachloroethene	Tetrahydrofuran	Toluene	1,2,4-Trichlorobenzene	Trichloroethene	Trichlorofluoromethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl Chloride	Total Xylenes
WDNR NR140	PAL	200	0.5	1	90	NE	NE	80	0.6	0.3	15	200	85	0.5	0.7	7	20	0.5	140	NE	0.5	12	0.5	10	200	14	0.5	NE	96		0.02	1000
	ES	1000	5	10	460	NE	NE	400	6	3	75	1000	850	5	7	70	100	5	700	NE	5	60	5	50	1000	70	5	NE	480		0.2	10000
P-106	10/01/93	NR																									0.6J					
	04/01/94	NR																									0.8J					
	05/01/96	NR														0.2 J											0.8J					
	10/01/96	NR								0.62J																	0.22 J					
	05/01/97	NR																									0.65					
	10/01/97	NR																									0.67					
	04/01/98	NR																									0.61					
	10/01/98	NR																									0.71					
	04/01/99	NR																									0.58					
	10/1/99	NR																									0.61					
	05/01/00	NR																									0.56					
	10/01/00	NR																									0.6					
	05/01/01	NR																									0.56					
	10/11/01	NR																									0.39					
	2/5/02	NR			NA																			NA			0.6					
	02/05/02 Dup	NR			NA																			NA			0.6					
	05/22/02	NR			NA																			NA			0.49					
	05/22/02Dup	NR			NA																			NA			0.47 Q					
	08/20/02	NR																						NA			0.43 Q					
	12/4/02	NR																									0.53					
	04/22/03																										0.55 Q					
	10/21/03																										0.56					
	10/21/03 Dup																															
	4/27/04																															
	10/13/04									0.9																	0.84 Q					
	4/27/05																															
	10/25/05																															
	4/28/06																															
	11/1/06																															
	5/1/07																															

Table 2. Groundwater VOC Analytical Results for Monitoring Wells
FF/NN Landfill, Ripon, WI

		Parameters																														
Sampling Point	Collection Date	Acetone[1]	Benzene	Bromomethane	2-Butanone (MEK)	sec-Butylbenzene	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,4-dichlorobenzene	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-dichloroethane	1,1-Dichloroethene	cis-1,2-dichloroethene	trans-1,2-Dichloroethene	1,2-dichloropropane	Ethylbenzene	Isopropylbenzene	Methylene chloride	MTBE	Tetrachloroethene	Tetrahydrofuran	Toluene	1,2,4-Trichlorobenzene	Trichloroethene	Trichlorofluoromethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl Chloride	Total Xylenes
WDNR NR140	PAL	200	0.5	1	90	NE	NE	80	0.6	0.3	15	200	85	0.5	0.7	7	20	0.5	140	NE	0.5	12	0.5	10	200	14	0.5	NE	96		0.02	1000
	ES	1000	5	10	460	NE	NE	400	6	3	75	1000	850	5	7	70	100	5	700	NE	5	60	5	50	1000	70	5	NE	480		0.2	10000
MW-107	10/27/93	NR																									2					
	4/12/94	NR																									2					
	5/9/96	NR																									2					
	10/21/96	NR								0.80 J																	2.2					
	5/13/97	NR										0.9															2.6					
	10/27/97	NR										0.7															2					
	4/14/98	NR																									2.1					
	10/13/98*	NR																									NA					
	4/6/99	NR																									1.8					
	10/27/99	NR																									1.1					
	5/2/00	NR																									1.6					
	10/31/00	NR																									1.2					
	5/31/01	NR										0.47									0.57L						1.8					
	10/11/01	NR																									0.87					
	2/4/02	NR			NA							0.35												NA			1.4					
	05/21/2002*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	8/19/2002 *	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/5/2002 *	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4/21/03																				0.52 Q						1.2					
	10/21/03																										2.2					
	4/27/04																										1.9					
	10/13/04									0.63 Q																	0.65 Q					
	4/27/05																										1.1					
	10/27/05																										0.79 Q					
	4/25/06																				0.49 Q						0.55 Q					
	10/31/06																															
	5/1/07																										0.86					

Table 2. Groundwater VOC Analytical Results for Monitoring Wells
FF/NN Landfill, Ripon, WI

		Parameters																														
Sampling Point	Collection Date	Acetone[1]	Benzene	Bromomethane	2-Butanone (MEK)	sec-Butylbenzene	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,4-dichlorobenzene	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-dichloroethane	1,1-Dichloroethene	cis-1,2-dichloroethene	trans-1,2-Dichloroethene	1,2-dichloropropane	Ethylbenzene	Isopropylbenzene	Methylene chloride	MTBE	Tetrachloroethene	Tetrahydrofuran	Toluene	1,2,4-Trichlorobenzene	Trichloroethene	Trichlorofluoromethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl Chloride	Total Xylenes
WDNR NR140	PAL	200	0.5	1	90	NE	NE	80	0.6	0.3	15	200	85	0.5	0.7	7	20	0.5	140	NE	0.5	12	0.5	10	200	14	0.5	NE	96		0.02	1000
	ES	1000	5	10	460	NE	NE	400	6	3	75	1000	850	5	7	70	100	5	700	NE	5	60	5	50	1000	70	5	NE	480		0.2	10000
P-107	10/27/93	NR														4															**6**	
	4/12/94	NR														2									0.7J						**3**	
	4/12/94 Dup	NR														2									0.7J						**3**	
	5/9/96	NR	0.1 J					0.2 J								2									0.1 J		0.1 J				**2**	
	10/23/96	NR						0.19		0.79 J						1.9															**2.3**	
	10/23/96 Dup	NR						0.21		0.49 J						2.1															**2.7**	
	5/14/97	NR														1.3															**2**	
	5/14/97 Dup	NR														1.1															**1.7**	
	10/27/97	NR														2.2															**2.6**	
	10/27/97 DUP	NR														1.8															**2.3**	
	4/14/98	NR														2.3															**2.2**	
	4/14/98 Dup	NR														2.3															**2.4**	
	10/14/98	NR														2.1										0.2					**1.5**	
	10/14/98 DUP	NR														2.4															**1.7**	
	4/6/99	NR														1.5															**0.58**	
	10/27/99	NR														1.8																
	10/27/99 Dup	NR														1.8																
	5/2/00	NR														1.5															**1.2**	
	5/02/00 Dup	NR														1.6															**1.2**	
	10/31/00	NR														1.4																
	10/31/00 Dup	NR														1.4																
	5/9/01	NR														0.96					0.52L			0.72			1.8				**0.85**	
	5/9/2001 Dup	NR														0.97					0.49L			0.79							**0.86**	
	10/11/01	NR														1.6															**1.7**	
	10/11/01 Dup	NR														1.5															**1.7**	
	2/4/02	NR			NA											1.6								NA							**1.2**	
	5/21/02	NR			NA											1.8								NA							**1.5**	
	5/21/02 Dup	NR			NA											1.7								NA							**1.4**	
	8/20/02	NR														0.84								NA							**0.54Q**	
	12/4/02	NR														1.3															**1**	
	4/21/03															1.5 Q															**1**	
	04/21/2003															1.3 Q																
	10/21/03															1.3															**0.93**	
	4/27/04															0.96 Q															**0.61**	
	10/13/04															0.89 Q															**0.64**	
	10/13/04 Dup															1.1 Q																
	4/27/05																															
	10/27/05																															
	4/25/06																														**0.79**	
	10/31/06																														**0.33Q**	
	5/1/07																														**0.76**	

Table 2. Groundwater VOC Analytical Results for Monitoring Wells
FF/NN Landfill, Ripon, WI

		Parameters																														
Sampling Point	Collection Date	Acetone[1]	Benzene	Bromomethane	2-Butanone (MEK)	sec-Butylbenzene	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,4-dichlorobenzene	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-dichloroethane	1,1-Dichloroethene	cis-1,2-dichloroethene	trans-1,2-Dichloroethene	1,2-dichloropropane	Ethylbenzene	Isopropylbenzene	Methylene chloride	MTBE	Tetrachloroethene	Tetrahydrofuran	Toluene	1,2,4-Trichlorobenzene	Trichloroethene	Trichlorofluoromethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl Chloride	Total Xylenes
WDNR NR140	PAL	200	0.5	1	90	NE	NE	80	0.6	0.3	15	200	85	0.5	0.7	7	20	0.5	140	NE	0.5	12	0.5	10	200	14	0.5	NE	96		0.02	1000
	ES	1000	5	10	460	NE	NE	400	6	3	75	1000	850	5	7	70	100	5	700	NE	5	60	5	50	1000	70	5	NE	480		0.2	10000
P-107D	10/27/93	NR														2B															**6**	
	4/13/94	NR																														
	5/9/96	NR	0.1J							0.3J						0.2J									0.3J						**0.6J**	
	10/23/96	NR								0.44 J																					**3.9**	
	5/14/97	NR														0.49															**2.4**	
	10/27/97	NR														1.7															**5.1**	
	4/14/98	NR														1															**4.1**	
	10/14/98	NR																													**2.2**	
	4/6/99	NR														0.34															**0.87**	
	10/27/99	NR																													**1.7**	
	5/2/00	NR																													**1.3**	
	10/31/00	NR														0.64																
	01/05/2001	NR		0.33												1.5					0.44L			0.72B							**5.6**	
	10/11/01	NR														2.2															**10**	
	2/4/02	NR			NA											1.2								NA			0.17				**3.9**	
	02/04/02 Dup	NR														1.2															**3.9**	
	5/21/02	NR			NA											1.1								NA							**3.3**	
	8/20/02	NR														1.1								NA							**3.1**	
	12/4/02	NR														0.75															**0.81**	
	4/21/03															1.3 Q															**3.3**	
	10/21/03															0.97															**3.5**	
	4/27/04															1.5 Q															**4.2**	
	10/13/04							1.2 Q		0.93						2.0 Q															**5.9**	
	4/27/05															1.3 Q															**3.1**	
	4/27/05 Dup							1.9 Q								2.5															**6.2**	
	10/27/05							1.2 Q								2.0 Q															**4.3**	
	4/25/06							2.3 Q								3.1					0.68 L										**7.7**	
	10/31/06							2.0 Q								2.1 Q															**4.3**	
	5/1/07							1.6Q								2.5Q															**6.2**	
	5/1/2007 Dup							1.6Q								2.9															**6.7**	

Table 2. Groundwater VOC Analytical Results for Monitoring Wells
FF/NN Landfill, Ripon, WI

		Parameters																														
Sampling Point	Collection Date	Acetone[1]	Benzene	Bromomethane	2-Butanone (MEK)	sec-Butylbenzene	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,4-dichlorobenzene	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-dichloroethane	1,1-Dichloroethene	cis-1,2-dichloroethene	trans-1,2-Dichloroethene	1,2-dichloropropane	Ethylbenzene	Isopropylbenzene	Methylene chloride	MTBE	Tetrachloroethene	Tetrahydrofuran	Toluene	1,2,4-Trichlorobenzene	Trichloroethene	Trichlorofluoromethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl Chloride	Total Xylenes
WDNR NR140	PAL	200	0.5	1	90	NE	NE	80	0.6	0.3	15	200	85	0.5	0.7	7	20	0.5	140	NE	0.5	12	0.5	10	200	14	0.5	NE	96		0.02	1000
	ES	1000	5	10	460	NE	NE	400	6	3	75	1000	850	5	7	70	100	5	700	NE	5	60	5	50	1000	70	5	NE	480		0.2	10000
MW-108	10/18/93	NR																							11							
	4/13/94	NR																							2							
	5/8/96	NR														0.2 J									0.2 J							
	10/23/96	NR								0.85 J																						
	5/12/97	NR																														
	10/27/97	NR																														
	4/14/98	NR																														
	10/11/01	NR																			0.34L											
	05/21/2002*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	8/19/2002 *	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/5/02	NR																														
	10/14/04															1.2 Q											1.3 Q				**0.67**	
	4/27/05															1.0											0.7				**0.3**	
	8/3/05																										0.70 Q					
	10/25/05																															
	02/01/06																															
	4/28/06																															
	7/27/06									0.36 Q																						
	11/2/06																															
	2/1/07																															
	5/2/07																															
P-108	10/25/93	NR																														
	10/25/93 Dup	NR																														
	4/13/94	NR																														
	4/13/94 Dup	NR																														
	10/11/01	NR																			0.32L											
	2/5/02	NR			NA																			NA								
	5/21/02	NR			NA																			NA								
	10/14/04									0.45 Q																						
	1/28/05																															
	10/25/05																															
	7/27/06									0.75 Q																						
MW-111	4/19/94	NR																														
	10/11/01	NR																			0.30L											
	05/21/2002*	NR	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	8/19/02	NR																						NA								
	12/5/02	NR																														
	10/13/04																															
	10/26/05																															
	4/24/06																															

Table 2. Groundwater VOC Analytical Results for Monitoring Wells
FF/NN Landfill, Ripon, WI

		Parameters																														
Sampling Point	Collection Date	Acetone[1]	Benzene	Bromomethane	2-Butanone (MEK)	sec-Butylbenzene	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,4-dichlorobenzene	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-dichloroethane	1,1-Dichloroethene	cis-1,2-dichloroethene	trans-1,2-Dichloroethene	1,2-dichloropropane	Ethylbenzene	Isopropylbenzene	Methylene chloride	MTBE	Tetrachloroethene	Tetrahydrofuran	Toluene	1,2,4-Trichlorobenzene	Trichloroethene	Trichlorofluoromethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl Chloride	Total Xylenes
WDNR NR140	PAL	200	0.5	1	90	NE	NE	80	0.6	0.3	15	200	85	0.5	0.7	7	20	0.5	140	NE	0.5	12	0.5	10	200	14	0.5	NE	96		0.02	1000
	ES	1000	5	10	460	NE	NE	400	6	3	75	1000	850	5	7	70	100	5	700	NE	5	60	5	50	1000	70	5	NE	480		0.2	10000
P-111	4/19/94	NR																							2							
	10/11/01	NR																														
	2/5/02	NR			NA																			NA							
	5/22/02	NR			NA																			NA							
	8/19/02	NR																						NA							
	08/19/02 Dup	NR																						NA							
	12/5/02	NR																														
	12/05/02 Dup	NR																														
	4/22/03																															
	10/22/03																															
	4/28/04																															
	8/3/05																															
	7/27/06																															
P-111D	4/4/02	NR														0.6									0.3						**13**	
	5/22/02	NR			NA											0.59 Q								NA							**15**	
	8/19/02	NR														0.37 Q								NA							**12**	
	12/5/02	NR														0.42 Q															**11**	
	4/23/03																														**12**	
	10/23/03																														**9.1**	
	5/11/04							1.4																							**15**	
	07/23/04																														**14**	
	10/13/04							1.9 Q																	1.6 Q						**11**	
	1/27/05																														**8.8**	
	4/26/05							3.7								0.87 Q															**13**	
	4/26/05 Dup							3.5																							**13**	
	8/3/05									2.9 Q						0.96 Q															**10**	
	10/26/05							3.1 Q								1.1 Q															**10**	
	10/26/2005 dup							2.7 Q								0.93 Q															**10**	
	02/01/06							4.2								0.89 Q															**11**	
	4/24/06							2.8 Q								1.3 Q															**11**	
	7/27/06									0.30 Q						1.2 Q															**10**	
	10/31/06							1.4 Q								1.3 Q															**8.5**	
	1/31/07							3.0Q								1.4Q															**8.2**	
	5/1/07							3.1Q								1.3Q															**8.2**	

Table 2. Groundwater VOC Analytical Results for Monitoring Wells
FF/NN Landfill, Ripon, WI

		Parameters																														
Sampling Point	Collection Date	Acetone[1]	Benzene	Bromomethane	2-Butanone (MEK)	sec-Butylbenzene	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,4-dichlorobenzene	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-dichloroethane	1,1-Dichloroethene	cis-1,2-dichloroethene	trans-1,2-Dichloroethene	1,2-dichloropropane	Ethylbenzene	Isopropylbenzene	Methylene chloride	MTBE	Tetrachloroethene	Tetrahydrofuran	Toluene	1,2,4-Trichlorobenzene	Trichloroethene	Trichlorofluoromethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl Chloride	Total Xylenes
WDNR NR140	PAL	200	0.5	1	90	NE	NE	80	0.6	0.3	15	200	85	0.5	0.7	7	20	0.5	140	NE	0.5	12	0.5	10	200	14	0.5	NE	96		0.02	1000
	ES	1000	5	10	460	NE	NE	400	6	3	75	1000	850	5	7	70	100	5	700	NE	5	60	5	50	1000	70	5	NE	480		0.2	10000
MW-112	11/27/96	NR	0.6J					2 J								59	1 J										3J				**15**	
	11/27/96 Dup	NR	0.7J					2 J								58	1 J										4J				**16**	
	5/12/97	NR	0.59				0.27									5.4															**2.2**	
	10/26/97	NR	0.5				0.29									1.3																
	4/13/98	NR	0.69					1.4								57	1.3										1.9				**12**	
	10/13/98	NR	0.76													**80**											1.2				**25**	
	4/6/99	NR	0.72					1.4								40	0.56										1.7				**7.9**	
	10/27/99	NR														7.6											1					
	5/2/00	NR	0.46													3.4											0.39					
	10/30/00	NR					0.37									5.6											0.37					
	5/9/01	NR	0.42				0.42									3.5															**0.98**	
	10/11/01	NR	0.36				0.39	0.53								27											0.83				**3.7**	
	2/4/02	NR	0.23		NA		0.48									0.49								NA								
	05/21/2002*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	8/19/2002 *	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/4/02															**150**											2.7 Q				**56**	
	4/22/03		1.2 Q					7.4 &								**220**	4.5 Q										**5.9**				**45**	
	10/22/03	2.5	0.88					5.9								60	1.4										1.6				**51**	
	4/28/04		0.53 Q				0.45 Q	4								18											1.1 Q				**9.9**	
	4/28/04 dup	6.5	0.61 Q				0.48 Q	4.7								22											1.1 Q				**9.3**	
	07/23/2004	110	1.1					23								**140**	2.6	0.58					1				**7.4**				**31**	
	10/13/04		1.0 Q				0.42	14								**110**	2.4 Q										2.9				**25**	
	10/13/04 Dup		0.87 Q					15		0.56 Q						**94**	2.1 Q						0.60 Q				2.9				**29**	
	1/26/05		0.76 Q					20								**85**	2.3 Q														**27**	
	4/26/05		0.6 Q					13								64	1.2 Q										1.8				**17**	
	8/3/05						0.48 Q									4.6															**1.5**	
	10/25/05															2.5 Q															**1.4**	
	02/01/06		0.41 Q				0.45 Q	3.2 Q								11											0.76 Q				**4.9**	
	4/25/06						0.48 Q	0.97 Q								5.4															**2.8**	
	7/27/06						0.43 Q			0.24 Q						2.9															**1.7**	
	7/27/2006 dup									0.52 Q																					**1.5**	
	11/2/06															2.3 Q															**1.7**	
	2/1/07						0.46Q	1.4Q								3.8															**2.5**	
	5/2/07						0.53Q	1.3Q								6.1															**2.6**	
P-113A	9/12/02	NR							0.37Q																1.0Q							
	12/3/02	NR																														
	4/23/03																								2.2							
	10/22/03																															
	5/11/04																															
	8/2/05																															
	7/27/06									0.84																						

Table 2. Groundwater VOC Analytical Results for Monitoring Wells
FF/NN Landfill, Ripon, WI

		Parameters																														
Sampling Point	Collection Date	Acetone[1]	Benzene	Bromomethane	2-Butanone (MEK)	sec-Butylbenzene	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,4-dichlorobenzene	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-dichloroethane	1,1-Dichloroethene	cis-1,2-dichloroethene	trans-1,2-Dichloroethene	1,2-dichloropropane	Ethylbenzene	Isopropylbenzene	Methylene chloride	MTBE	Tetrachloroethene	Tetrahydrofuran	Toluene	1,2,4-Trichlorobenzene	Trichloroethene	Trichlorofluoromethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl Chloride	Total Xylenes
WDNR NR140	PAL	200	0.5	1	90	NE	NE	80	0.6	0.3	15	200	85	0.5	0.7	7	20	0.5	140	NE	0.5	12	0.5	10	200	14	0.5	NE	96		0.02	1000
	ES	1000	5	10	460	NE	NE	400	6	3	75	1000	850	5	7	70	100	5	700	NE	5	60	5	50	1000	70	5	NE	480		0.2	10000
P-113B	09/11/2002 [3]	NR							1										0.41Q						6.6						2.6
	12/3/02	NR																														
	4/23/03																															
	7/30/03																															
	10/22/03																															
	2/4/04																															
	5/11/04																															
	07/22/04																															
	10/14/04									0.49 Q																						
	1/27/05																															
	4/27/05																															
	8/2/05																															
	10/26/05									0.42 Q																						
	02/01/06																															
	4/24/06																															
	7/27/06									0.49 Q																						
	10/31/06																															
	1/31/07																															
	5/1/07																															
P-114 (former Ehster well)	11/19/01	NR														0.93															**7**	
	2/5/02	NR														0.85															**5.5**	
	5/22/02	NR														1.2															**6.2**	
	8/21/02	NR														0.93															**5.4**	
	12/3/02	NR														1.3									0.40Q						**6.3**	
	4/23/03																														**3.3**	
	10/23/03															1.2															**8.6**	
	10/23/03 Dup															1.4															**9.2**	
	5/11/04															1.5 Q															**10**	
	07/22/04															1.4 Q															**7.9**	
	10/13/04									0.39 Q						1.7 Q															**10**	
	1/27/05																														**3.5**	
	4/26/05																														**3.0**	
	8/2/05															1.1 Q															**6.1**	
	10/26/05									0.84						1.3 Q															**6.6**	
	10/26/2005 dup									0.49						1.4 Q															**6.9**	
	01/31/06															1.3 Q															**8.4**	
	4/24/06															1.3 Q															**7.6**	
	4/24/2006 dup															1.3 Q															**7.9**	
	7/27/06									0.48 Q						1.6 Q															**8.9**	
	7/27/2006 dup									0.38 Q						1.6 Q															**8.7**	
	11/2/06															2.7 Q															**13**	
	11/02/2006 dup															2.7 Q															**13**	

Table 2. Groundwater VOC Analytical Results for Monitoring Wells
FF/NN Landfill, Ripon, WI

		Parameters																														
Sampling Point	Collection Date	Acetone[1]	Benzene	Bromomethane	2-Butanone (MEK)	sec-Butylbenzene	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,4-dichlorobenzene	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-dichloroethane	1,1-Dichloroethene	cis-1,2-dichloroethene	trans-1,2-Dichloroethene	1,2-dichloropropane	Ethylbenzene	Isopropylbenzene	Methylene chloride	MTBE	Tetrachloroethene	Tetrahydrofuran	Toluene	1,2,4-Trichlorobenzene	Trichloroethene	Trichlorofluoromethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl Chloride	Total Xylenes
WDNR NR140	PAL	200	0.5	1	90	NE	NE	80	0.6	0.3	15	200	85	0.5	0.7	7	20	0.5	140	NE	0.5	12	0.5	10	200	14	0.5	NE	96		0.02	1000
	ES	1000	5	10	460	NE	NE	400	6	3	75	1000	850	5	7	70	100	5	700	NE	5	60	5	50	1000	70	5	NE	480		0.2	10000
	2/1/07															1.2Q					0.46Q										**7.5**	
	2/1/2007 dup															1.4Q															**8.5**	
	5/1/07															1.1Q															**7.4**	
	5/1/2007 dup															1.2Q															**7.8**	

Table 2. Groundwater VOC Analytical Results for Monitoring Wells
FF/NN Landfill, Ripon, WI

		Parameters																														
Sampling Point	Collection Date	Acetone[1]	Benzene	Bromomethane	2-Butanone (MEK)	sec-Butylbenzene	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,4-dichlorobenzene	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-dichloroethane	1,1-Dichloroethene	cis-1,2-dichloroethene	trans-1,2-Dichloroethene	1,2-dichloropropane	Ethylbenzene	Isopropylbenzene	Methylene chloride	MTBE	Tetrachloroethene	Tetrahydrofuran	Toluene	1,2,4-Trichlorobenzene	Trichloroethene	Trichlorofluoromethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl Chloride	Total Xylenes
WDNR NR140	PAL	200	0.5	1	90	NE	NE	80	0.6	0.3	15	200	85	0.5	0.7	7	20	0.5	140	NE	0.5	12	0.5	10	200	14	0.5	NE	96		0.02	1000
	ES	1000	5	10	460	NE	NE	400	6	3	75	1000	850	5	7	70	100	5	700	NE	5	60	5	50	1000	70	5	NE	480		0.2	10000
P-115 (former Wiese well)	10/9/01	NR																														
	10/09/01 Dup	NR																														
	11/19/01	NR																														
	2/5/02	NR																														
	5/22/02	NR																														
	8/19/02	NR								0.20Q																						
	12/3/02	NR																														
	4/22/03																															
	7/30/03																															
	10/22/03																															
	2/4/04																															
	4/27/04																															
	10/14/04																														**0.33 Q**	
	1/27/05																															
	4/26/05																															
	8/2/05																														**0.34 Q**	
	10/26/05									0.24 Q																					**0.33 Q**	
	01/31/06																															
	4/24/06																														**0.62**	
	7/27/06																														**0.44 Q**	
	10/31/06																														**0.39Q**	
	2/1/07																														**0.50Q**	
	5/1/07																														**0.54Q**	

Table 2. Groundwater VOC Analytical Results for Monitoring Wells
FF/NN Landfill, Ripon, WI

		Parameters																														
Sampling Point	Collection Date	Acetone[1]	Benzene	Bromomethane	2-Butanone (MEK)	sec-Butylbenzene	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,4-dichlorobenzene	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-dichloroethane	1,1-Dichloroethene	cis-1,2-dichloroethene	trans-1,2-Dichloroethene	1,2-dichloropropane	Ethylbenzene	Isopropylbenzene	Methylene chloride	MTBE	Tetrachloroethene	Tetrahydrofuran	Toluene	1,2,4-Trichlorobenzene	Trichloroethene	Trichlorofluoromethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl Chloride	Total Xylenes
WDNR NR140	PAL	200	0.5	1	90	NE	NE	80	0.6	0.3	15	200	85	0.5	0.7	7	20	0.5	140	NE	0.5	12	0.5	10	200	14	0.5	NE	96		0.02	1000
	ES	1000	5	10	460	NE	NE	400	6	3	75	1000	850	5	7	70	100	5	700	NE	5	60	5	50	1000	70	5	NE	480		0.2	10000
P-116 (former Hadel well)	10/9/01	NR																														
	11/19/2001 [4]	NR																														
	2/5/02	NR																														
	5/22/02	NR																														
	8/19/02	NR																														
	08/19/02 Dup	NR																														
	12/3/02	NR																														
	12/03/02 Dup	NR																														
	4/22/03																															
	7/30/03																															
	10/22/03																															
	2/4/04																															
	5/11/04																															
	07/22/04																															
	10/14/04																															
	1/27/05																															
	4/26/05																															
	8/2/05																															
	10/26/05																															
	01/31/06																															
	01/31/06 Dup																															
	4/24/06																															
	7/27/06									0.35 Q																						
	10/31/06																															
	2/1/07																															
	5/1/07																															

Results in µg/L

B = analyte found in method blank as well as sample
E = exceeds calibration range
J = estimated value
L = Lab Artifact
Q = Detected between LOD and LOQ
& = Laboratory control spike recovery not within control limits
NE = None Established
NA= Not Analyzed; no sample collected for analysis
NR = Value not reported by lab or not recorded during initial evaluation by GeoTrans

PAL = Preventive Action Limit
ES = Enforcement Standard
Underline indicates exceeds NR 140 PAL
Bolding indicates exceeds NR 140 ES
Blank = Sample Collected but No VOCs detected
Historical data for abandoned wells MW-105, P-105, P-109 and MW-110 can be found in reports prior to October 204

* Not sampled due to insufficient water for sample collection

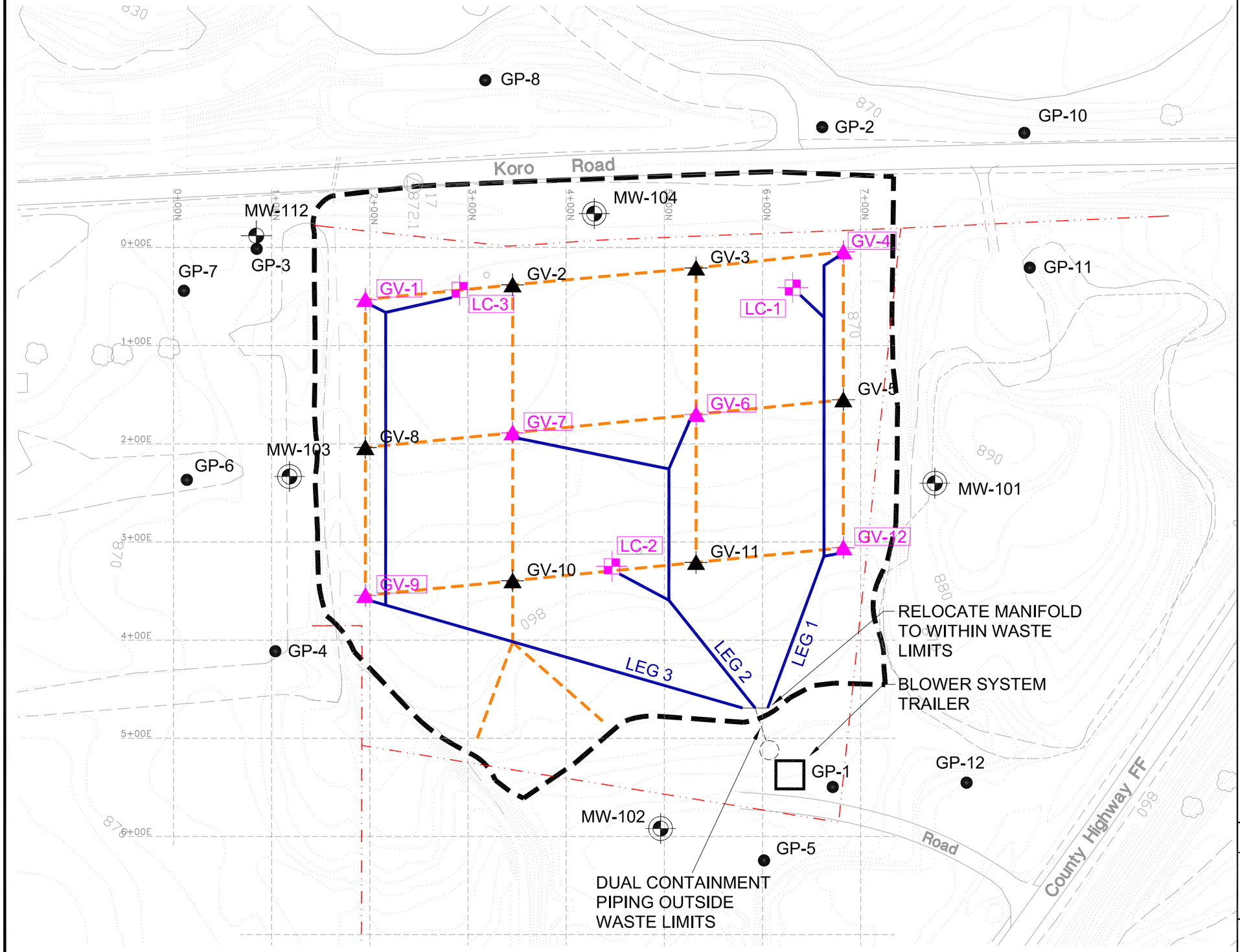
[1] The reporting of acetone on an 8260B VOC scan varies with labs. Enchem, which began analyzing samples in April 2003, does report acetone. Acetone has appeared in several wells beginning in October 2003.

[2] MW-103 had low concentrations of isopropyl ether detected in October 1997 and February 2002. Acetone at 27 ppb was detected in April 2004. Carbon disulfide at 2.2Q ppb was detected in January 2007

[3] this sample had detections of bromodichloromethane at 0.59 ppb and dibromochloromethane at 0.35 ppb,

[4] this sample in P-116 had 0.18 ppb of 1,1,1-trichloroethane

FIGURES



EXPLANATION

- MW-104 — MONITOR WELL LOCATION, DESIGNATION
- LC-2 — LEACHATE HEAD WELL LOCATION, DESIGNATION
- PROPERTY LINE
- OUTLINE OF CLOSED LANDFILL
- GP-1 — GAS PROBE LOCATION AND DESIGNATION
- GV-9 — GAS VENT LOCATION AND DESIGNATION
- BURIED PASSIVE GAS COLLECTION SYSTEM PIPING
- 3-INCH CORRUGATED HDPE ABOVE-GROUND PIPING
- GV-1 — ACTIVE LANDFILL GAS EXTRACTION POINT

NOTES:

1. CONTOURS ON LANDFILL DO NOT REFLECT CURRENT TOPOGRAPHY.
2. NEW 3" BURIED PVC PIPING ROUTE TO MATCH EXISTING CORRUGATED ABOVE-GROUND PIPING AND FOLLOW NATURAL SLOPE DOWNWARDS TO EQUIPMENT TRAILER TO DRAIN PROPERLY.

N

SCALE

0 200

Feet

FF/NN LANDFILL
RIPON, WISCONSIN

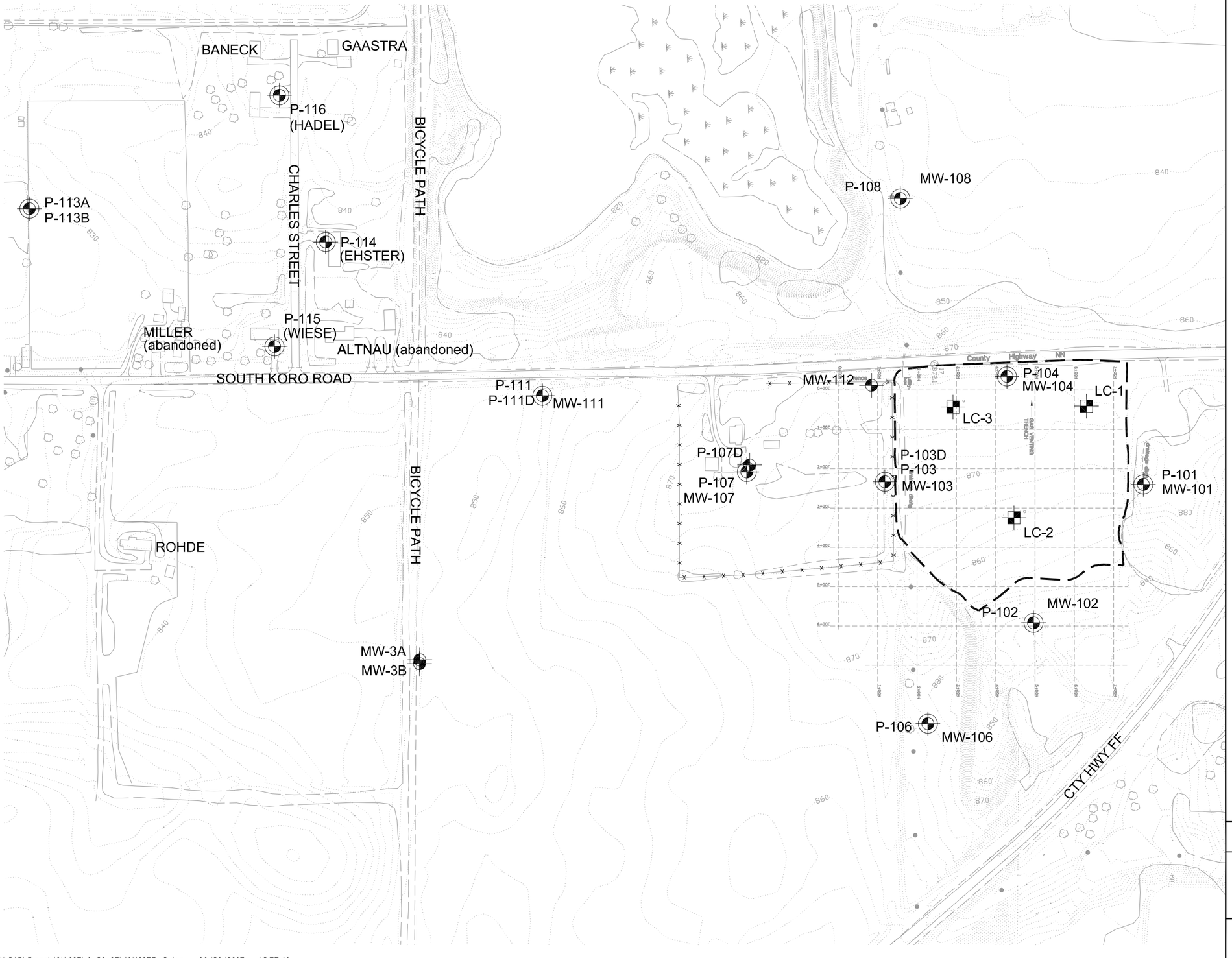
GAS EXTRACTION SYSTEM LAYOUT AND GAS MONITORING LOCATIONS

DATE:	12/21/06
DESIGNED:	DLM
CHECKED:	DLM
APPROVED:	DLM
DRAWN:	HJW
PROJ.:	1011.005

GeoTrans, Inc. A TETRA TECH COMPANY

Figure 2

S:\CAD\Ripon\1011.005\6-20-07\1011005Fig2.dwg 06/20/2007 11:47:05



EXPLANATION

- P-104 / MW-104 — MONITOR WELL, PIEZOMETER LOCATION, DESIGNATION
- LC-2 — LEACHATE HEAD WELL LOCATION, DESIGNATION
- OUTLINE OF CLOSED LANDFILL

N

SCALE

0 500

Feet

BASEMAP FROM FOND DU LAC COUNTY PLANNING DIVISION, SPRING 2000.

FF/NN LANDFILL
RIPON, WISCONSIN

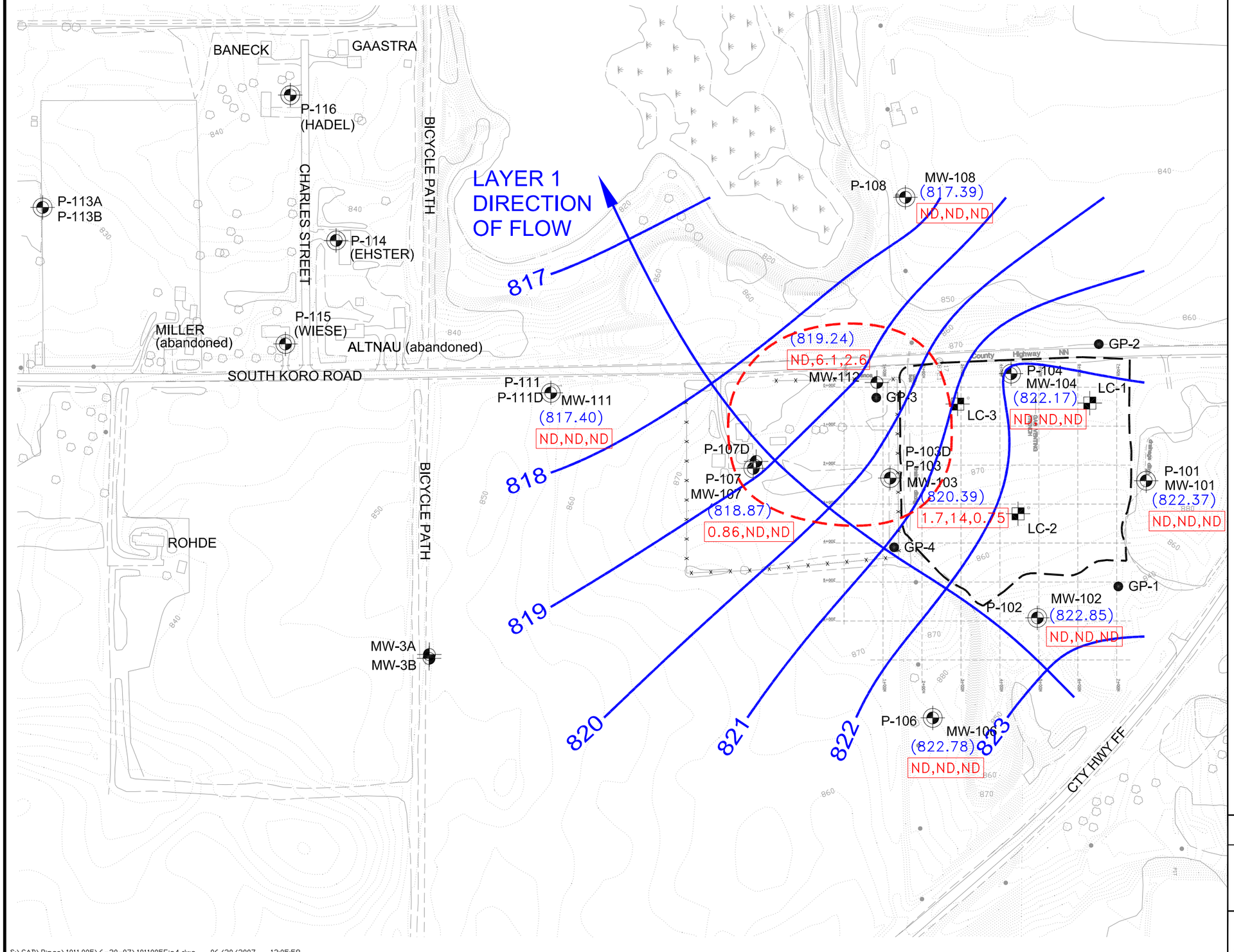
GROUNDWATER
MONITORING
WELL LOCATIONS

DATE:	6/20/07
DESIGNED:	MRN
CHECKED:	MRN
APPROVED:	MRN
DRAWN:	HJW
PROJ.:	1011.005

GeoTrans, Inc. A TETRA TECH COMPANY

Figure 3

S:\CAD\Ripon\1011.005\6-20-07\1011005Fig3.dwg 06/20/2007 12:55:40



EXPLANATION

P-104 / MW-104	MONITOR WELL, PIEZOMETER LOCATION, DESIGNATION
LC-2	LEACHATE HEAD WELL LOCATION, DESIGNATION
	OUTLINE OF CLOSED LANDFILL
GP-1	GAS PROBE LOCATION AND DESIGNATION
(822.37)	GROUNDWATER ELEVATION
1.7,14,0.75	TCE, DCE, VC (ug/L)
	EXTENT OF GROUNDWATER IMPACTS
ND	NOT DETECTED

N

SCALE

0 500

Feet

BASEMAP FROM FOND DU LAC COUNTY PLANNING DIVISION, SPRING 2000.

FF/NN LANDFILL
RIPON, WISCONSIN

GROUNDWATER ELEVATIONS AND VOC CONCENTRATIONS
LAYER 1 WELLS - APRIL 2007

DATE:	6/20/07
DESIGNED:	MRN
CHECKED:	MRN
APPROVED:	MRN
DRAWN:	HJW
PROJ.:	1011.005

GeoTrans, Inc. A TETRA TECH COMPANY

Figure 4

S:\CAD\Ripon\1011.005\6-20-07\1011005Fig4.dwg 06/20/2007 13:05:58

BANECK
GAASTRA
P-116
(HADEL)
CHARLES STREET
BICYCLE PATH
P-113A
P-113B
P-114
(EHSTER)
P-115
(WIESE)
MILLER
(abandoned)
ALTNAU (abandoned)
SOUTH KORO ROAD
(816.92)
ND,ND,ND
P-111
P-111D
MW-111
LAYER 2
DIRECTION
OF FLOW
817
818
819
820
821
822
P-108
(820.14)
ND,ND,ND
MW-108
MW-112
GP-3
LC-3
P-104
MW-104
LC-1
(822.29)
ND,ND,ND
GP-2
(822.32)
ND,ND,ND
P-101
MW-101
P-107D
P-103D
P-103
MW-103
(822.31)
ND,ND,1.6
LC-2
(818.88)
ND,ND,0.76
P-107
MW-107
GP-4
GP-1
P-102
(822.90)
ND,ND,ND
MW-102
ROHDE
MW-3A
MW-3B
P-106
(822.71)
ND,ND,ND
MW-106
CTY HWY FF

EXPLANATION

- P-104 / MW-104 — MONITOR WELL, PIEZOMETER LOCATION, DESIGNATION
- LC-2 — LEACHATE HEAD WELL LOCATION, DESIGNATION
- OUTLINE OF CLOSED LANDFILL
- GP-1 — GAS PROBE LOCATION AND DESIGNATION
- (822.32) — GROUNDWATER ELEVATION
- ND,ND,1.6 — TCE, DCE, VC (ug/L)
- EXTENT OF GROUNDWATER IMPACTS
- ND — NOT DETECTED

N

SCALE
0 500
Feet

BASEMAP FROM FOND DU LAC COUNTY PLANNING DIVISION, SPRING 2000.

FF/NN LANDFILL
RIPON, WISCONSIN

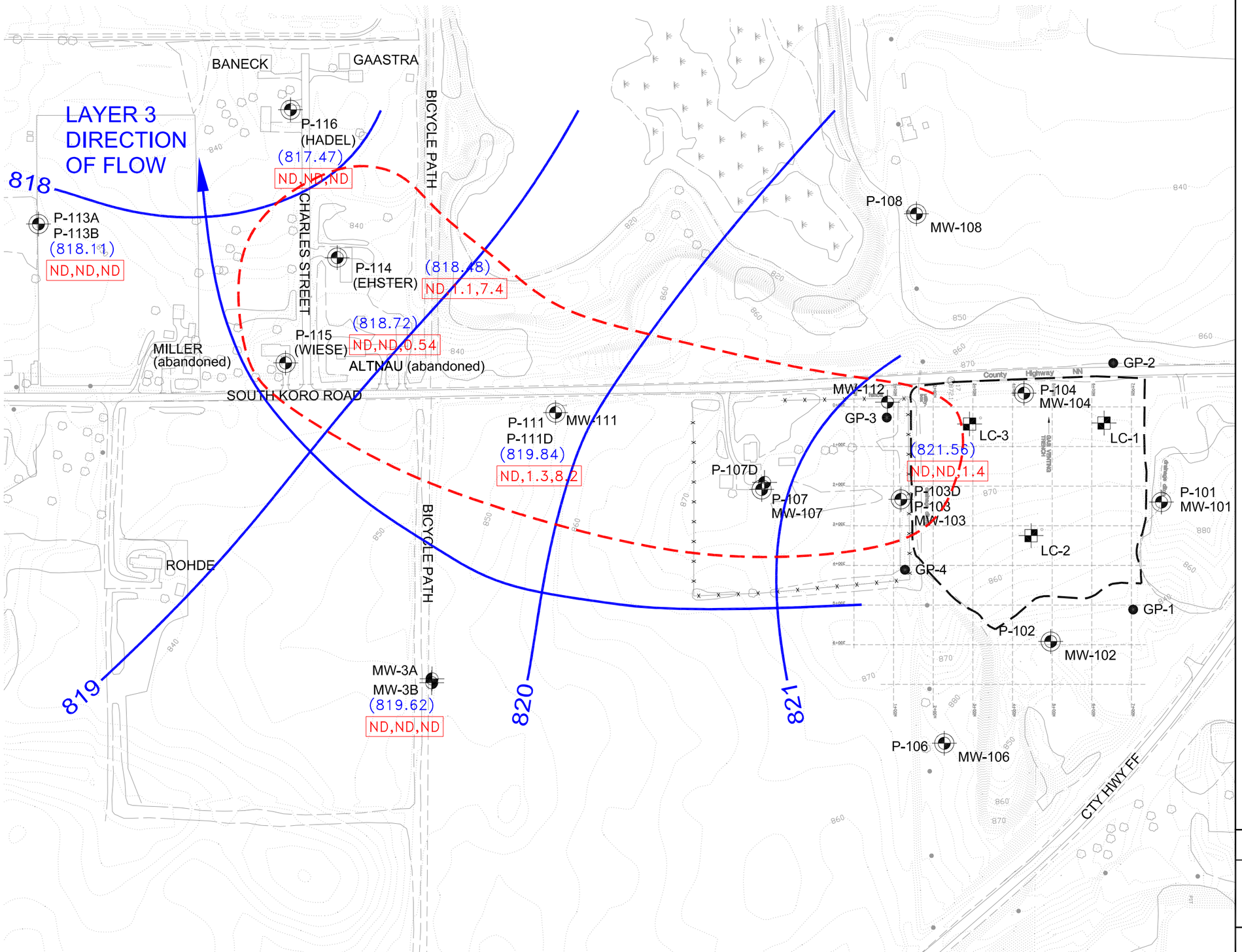
GROUNDWATER ELEVATIONS AND
VOC CONCENTRATIONS
LAYER 2 WELLS - APRIL 2007

DATE:	6/20/07
DESIGNED:	MRN
CHECKED:	MRN
APPROVED:	MRN
DRAWN:	HJW
PROJ.:	1011.005

GeoTrans, Inc. A TETRA TECH COMPANY

Figure 5

S:\CAD\Ripon\1011.005\6-20-07\1011005Fig5.dwg 06/20/2007 13:06:25



EXPLANATION

P-104 / MW-104	MONITOR WELL, PIEZOMETER LOCATION, DESIGNATION
LC-2	LEACHATE HEAD WELL LOCATION, DESIGNATION
— — —	OUTLINE OF CLOSED LANDFILL
GP-1	GAS PROBE LOCATION AND DESIGNATION
(821.56)	GROUNDWATER ELEVATION
ND,ND,1.4	TCE, DCE, VC (ug/L)
— — —	EXTENT OF GROUNDWATER IMPACTS
ND	NOT DETECTED

N

SCALE

0 500

Feet

BASEMAP FROM FOND DU LAC COUNTY PLANNING DIVISION, SPRING 2000.

FF/NN LANDFILL
RIPON, WISCONSIN

GROUNDWATER ELEVATIONS AND
VOC CONCENTRATIONS
LAYER 3 WELLS - APRIL 2007

DATE:	6/20/07
DESIGNED:	MRN
CHECKED:	MRN
APPROVED:	MRN
DRAWN:	HJW
PROJ.:	1011.005

GeoTrans, Inc. A TETRA TECH COMPANY

Figure 6

S:\CAD\Ripon\1011.005\6-20-07\1011005Fig6.dwg 06/20/2007 13:07:40

BANECK
GAASTRA
P-116
(HADEL)
BICYCLE PATH
CHARLES STREET
(817.78)
ND,ND,ND
P-113A
P-113B
P-114
(EHSTER)
P-115
(WIESE)
MILLER
(abandoned)
ALTNAU (abandoned)
SOUTH KORO ROAD
P-111
P-111D
MW-111
P-108
MW-108
MW-112
GP-3
(818.27)
ND,2.5,6.2
P-107D
P-107
MW-107
P-103D
P-103
MW-103
LC-3
LC-2
GP-4
P-104
MW-104
LC-1
P-101
MW-101
GP-2
GP-1
P-102
MW-102
P-106
MW-106
CTY HWY FF
ROHDE
BICYCLE PATH
LAYER 4
DIRECTION
OF FLOW
(817.68)
ND,ND,ND
MW-3A
MW-3B
818.2
818.1
818.0
817.9
817.8
817.7

EXPLANATION

P-104 / MW-104	MONITOR WELL, PIEZOMETER LOCATION, DESIGNATION
LC-2	LEACHATE HEAD WELL LOCATION, DESIGNATION
	OUTLINE OF CLOSED LANDFILL
GP-1	GAS PROBE LOCATION AND DESIGNATION
(818.27)	GROUNDWATER ELEVATION
ND,2.5,6.2	TCE, DCE, VC (ug/L)
	EXTENT OF GROUNDWATER IMPACTS
ND	NOT DETECTED

N

SCALE
0 500
Feet

BASEMAP FROM FOND DU LAC COUNTY PLANNING DIVISION, SPRING 2000.

FF/NN LANDFILL
RIPON, WISCONSIN

GROUNDWATER ELEVATIONS AND
VOC CONCENTRATIONS
LAYER 4 WELLS - APRIL 2007

DATE:	6/20/07
DESIGNED:	MRN
CHECKED:	MRN
APPROVED:	MRN
DRAWN:	HJW
PROJ.:	1011.005

GeoTrans, Inc. A TETRA TECH COMPANY

Figure 7

S:\CAD\Ripon\1011.005\6-20-07\1011005Fig7.dwg 06/20/2007 13:10:33

CHARTS

Chart 1: GV-1 Gas Concentrations

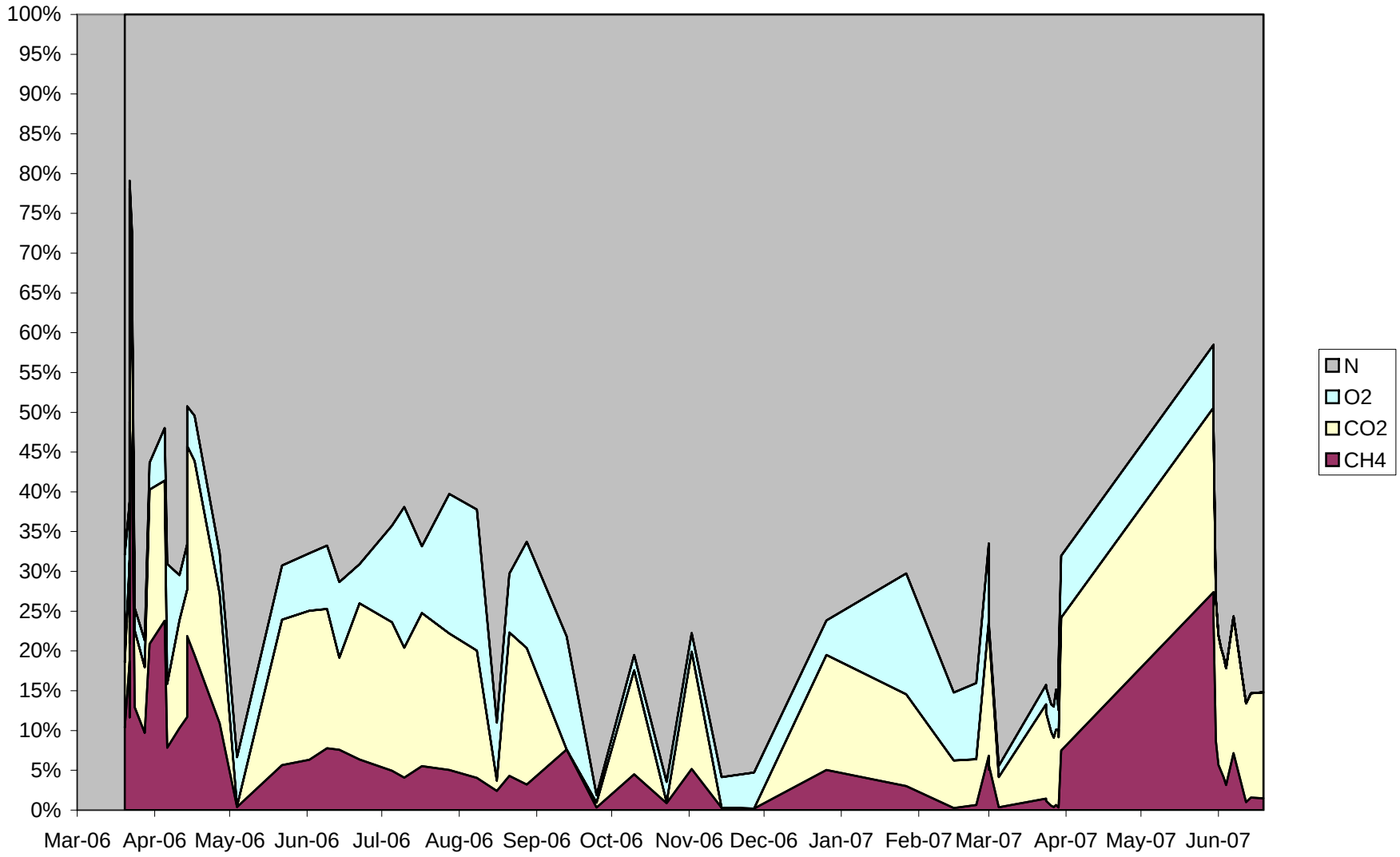


Chart 2: GV-4 Gas Concentrations

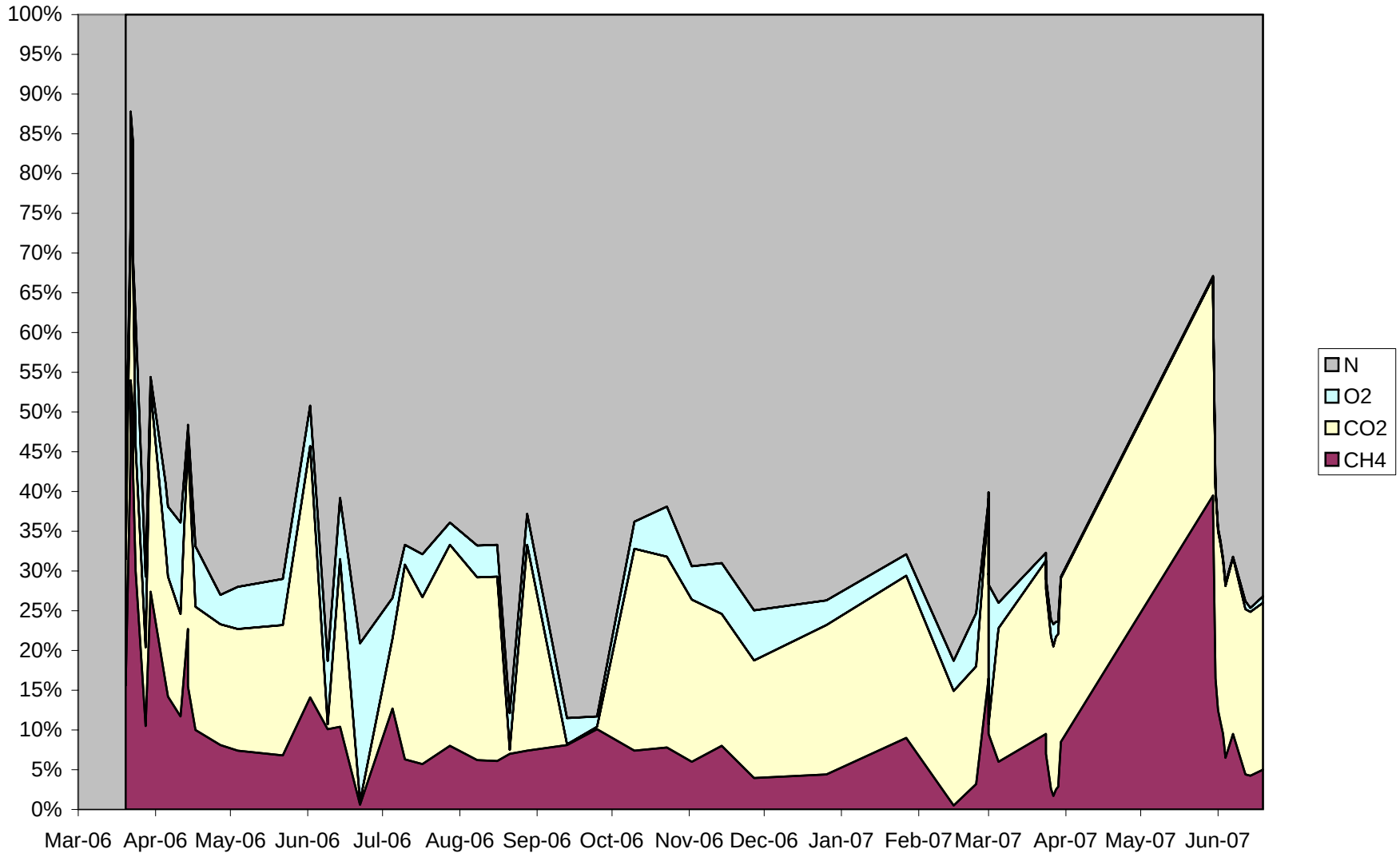


Chart 3: GV-6 Gas Concentrations

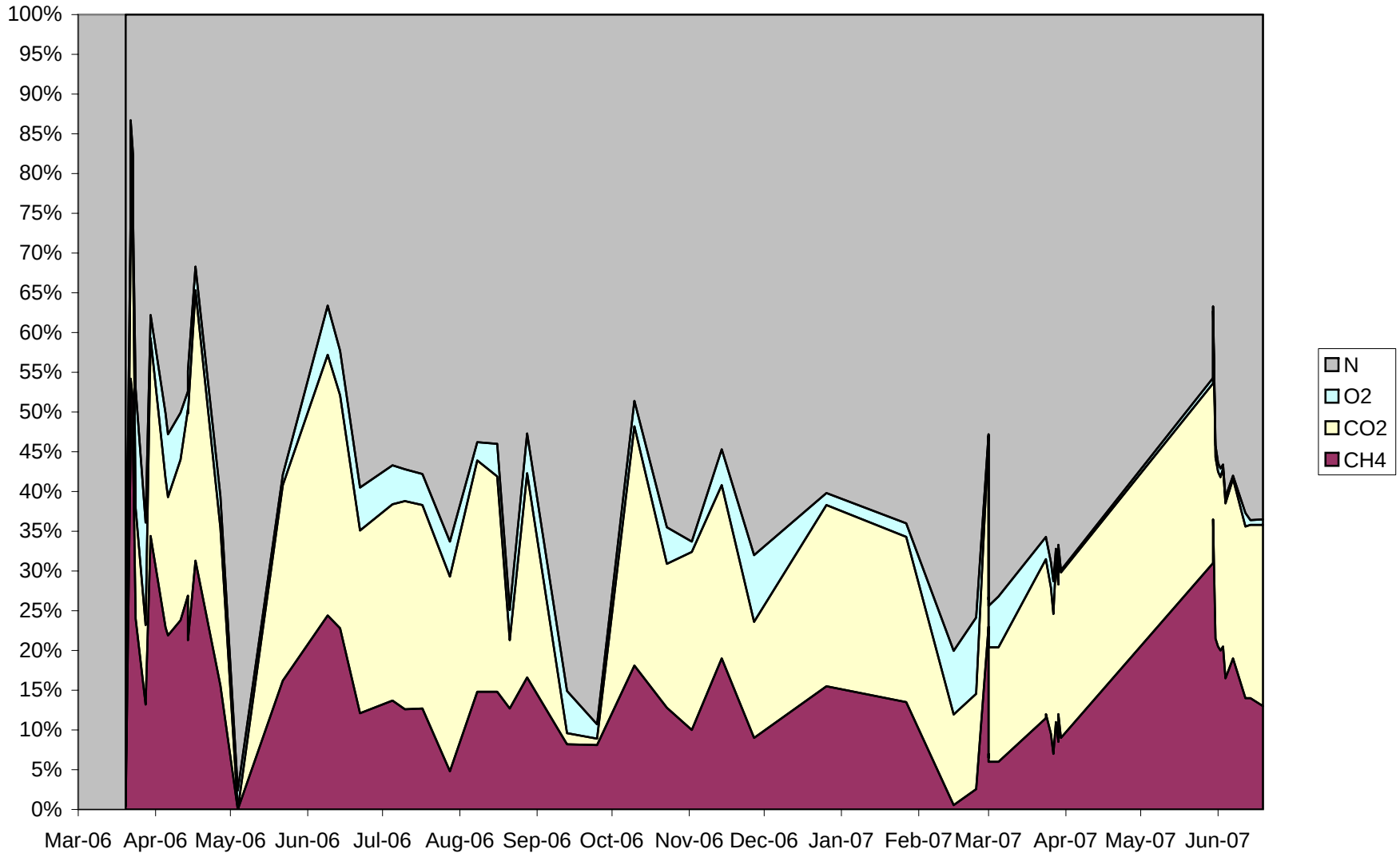


Chart 4: GV-7 Gas Concentrations

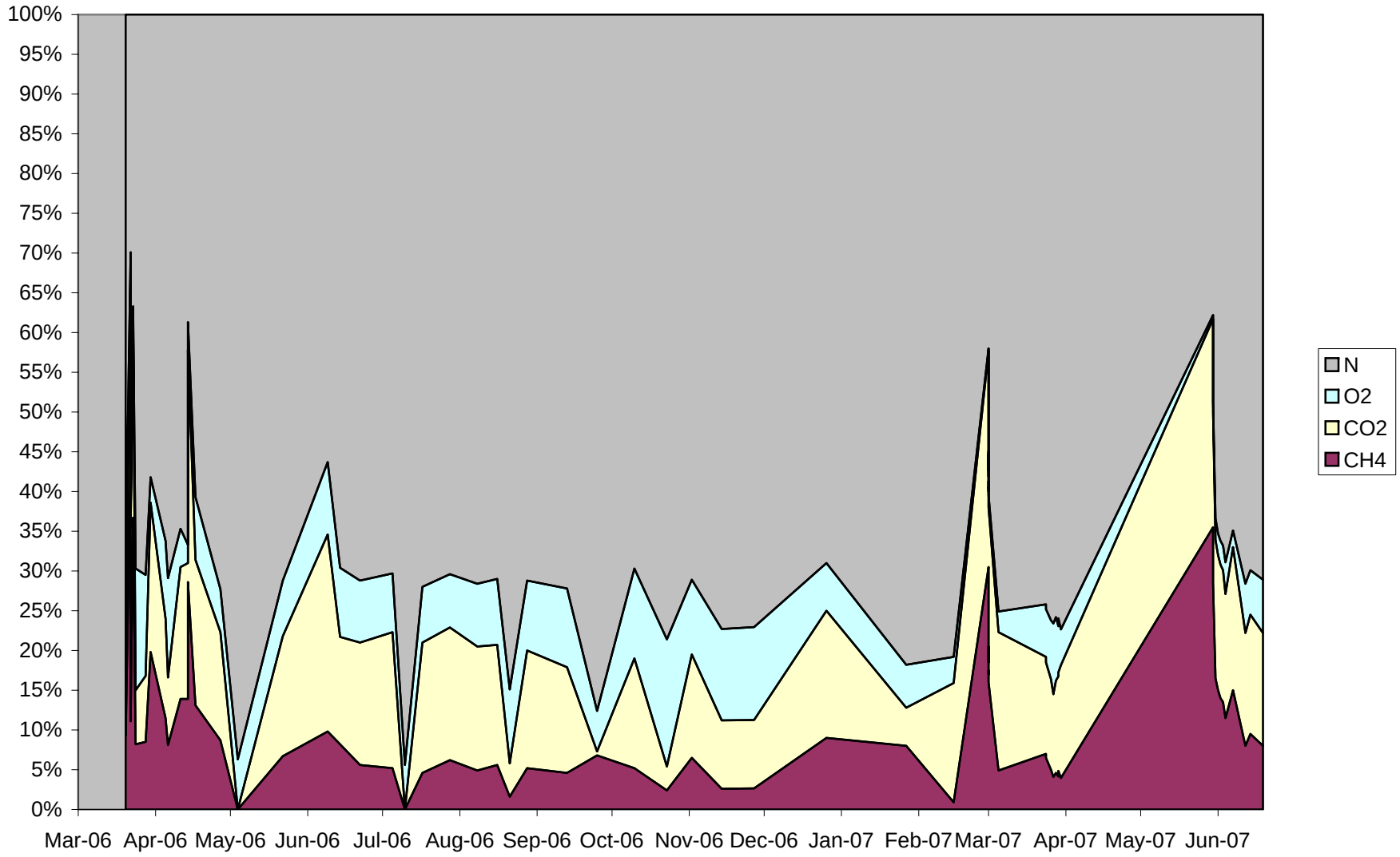


Chart 5: GV-9 Gas Concentrations

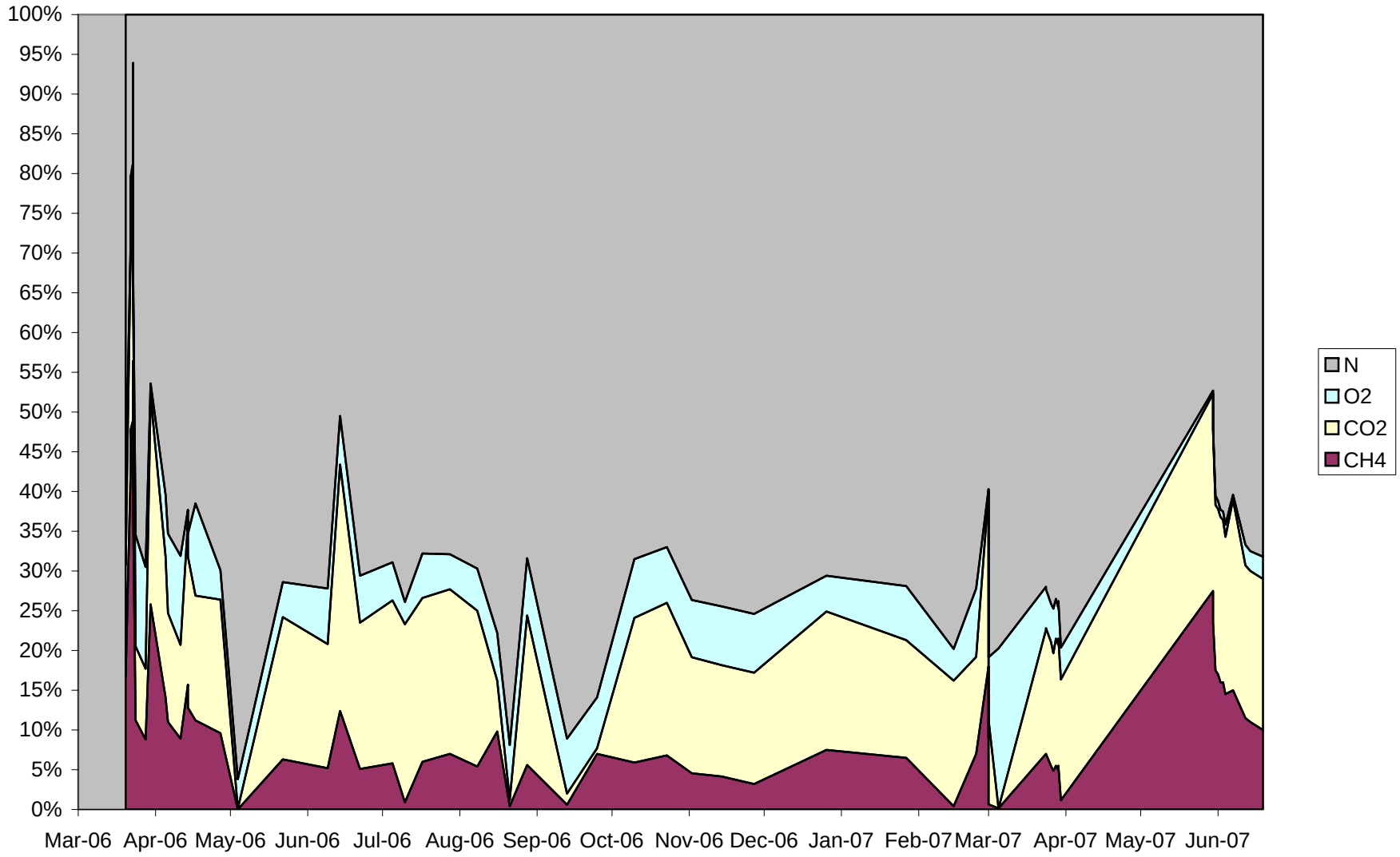


Chart 6: GV-12 Gas Concentrations

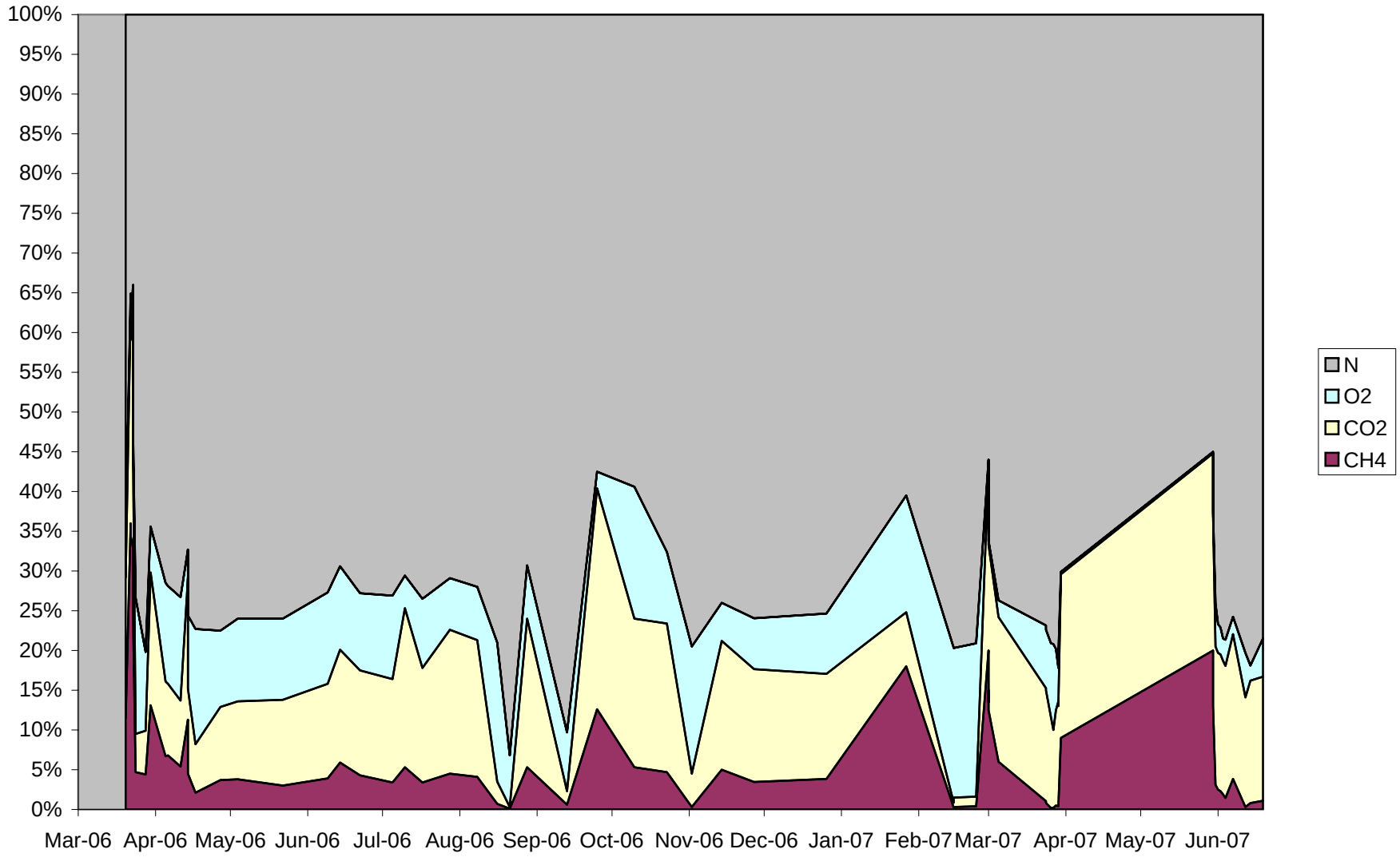


Chart 7: LC-1 Gas Concentrations

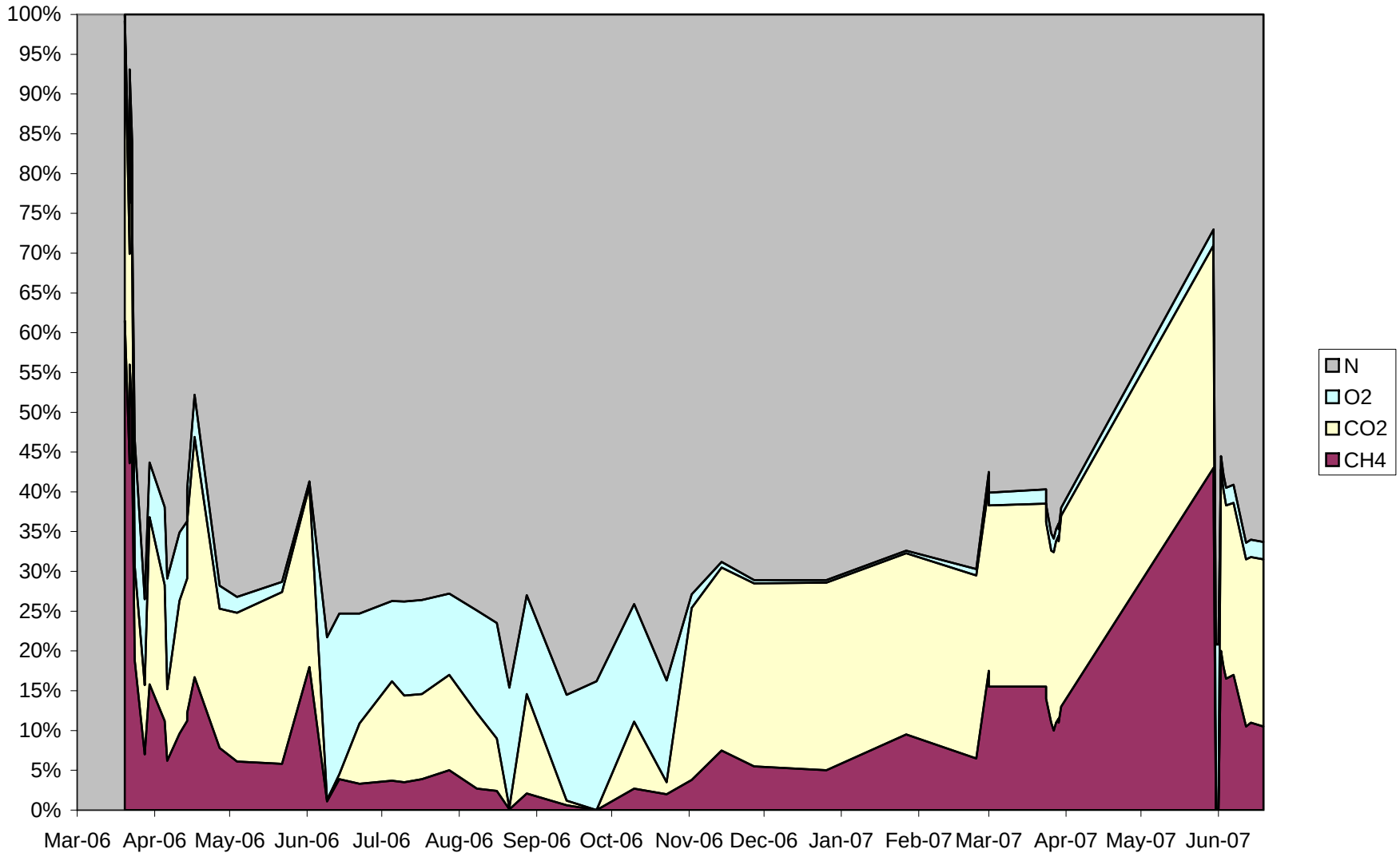


Chart 8: LC-2 Gas Concentrations

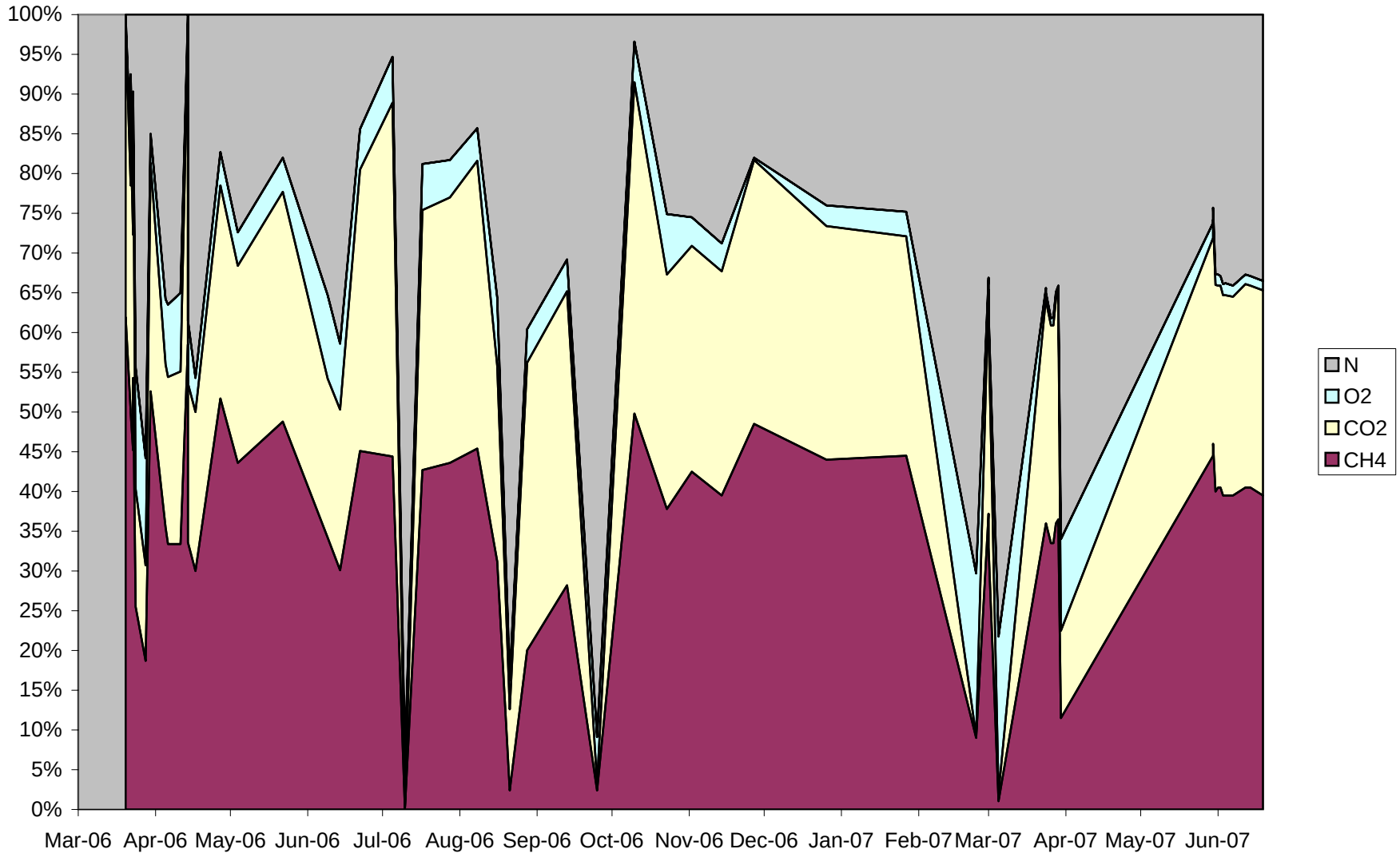


Chart 9: LC-3 Gas Concentrations

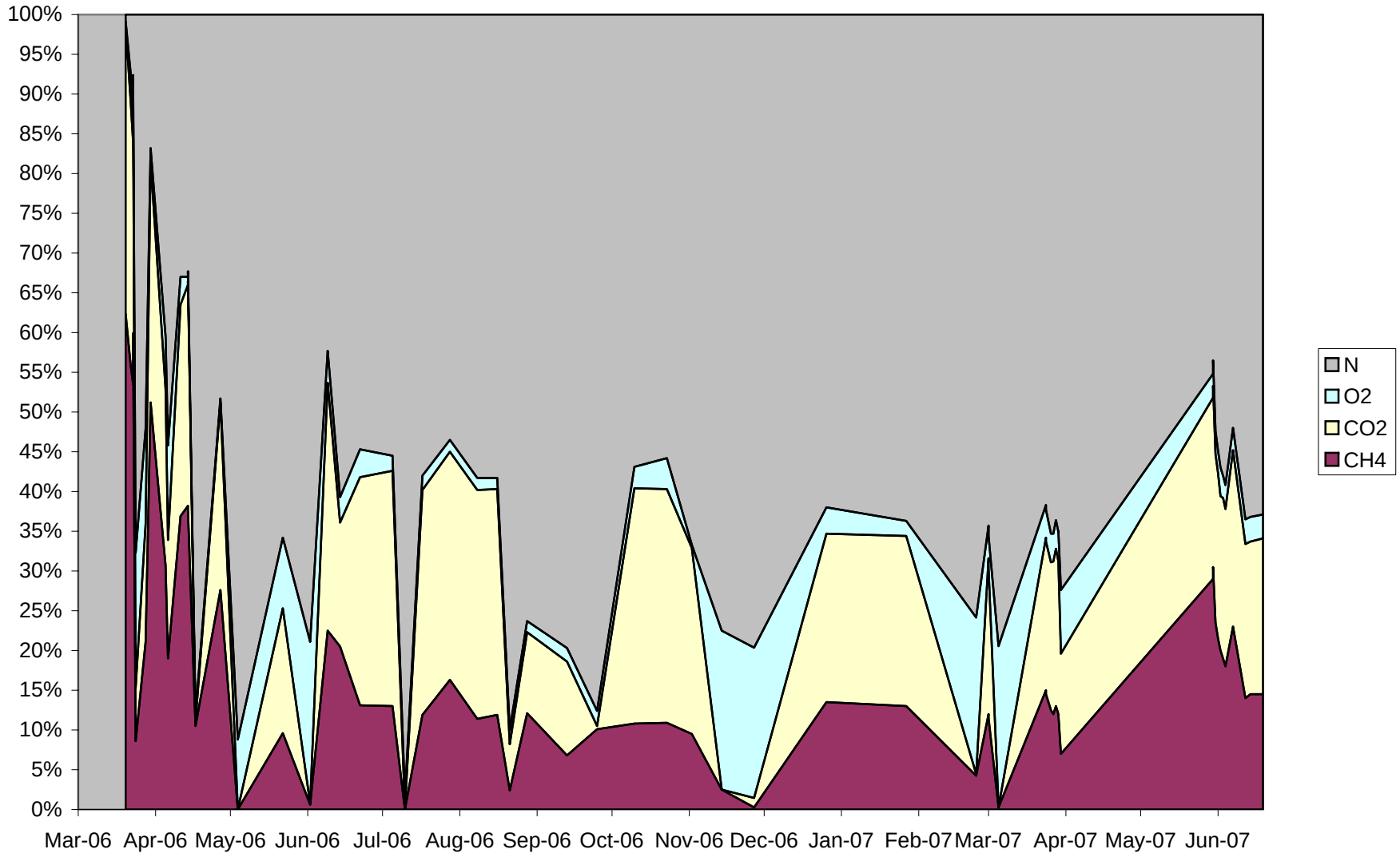


Chart 10: GP-1 Gas Concentrations

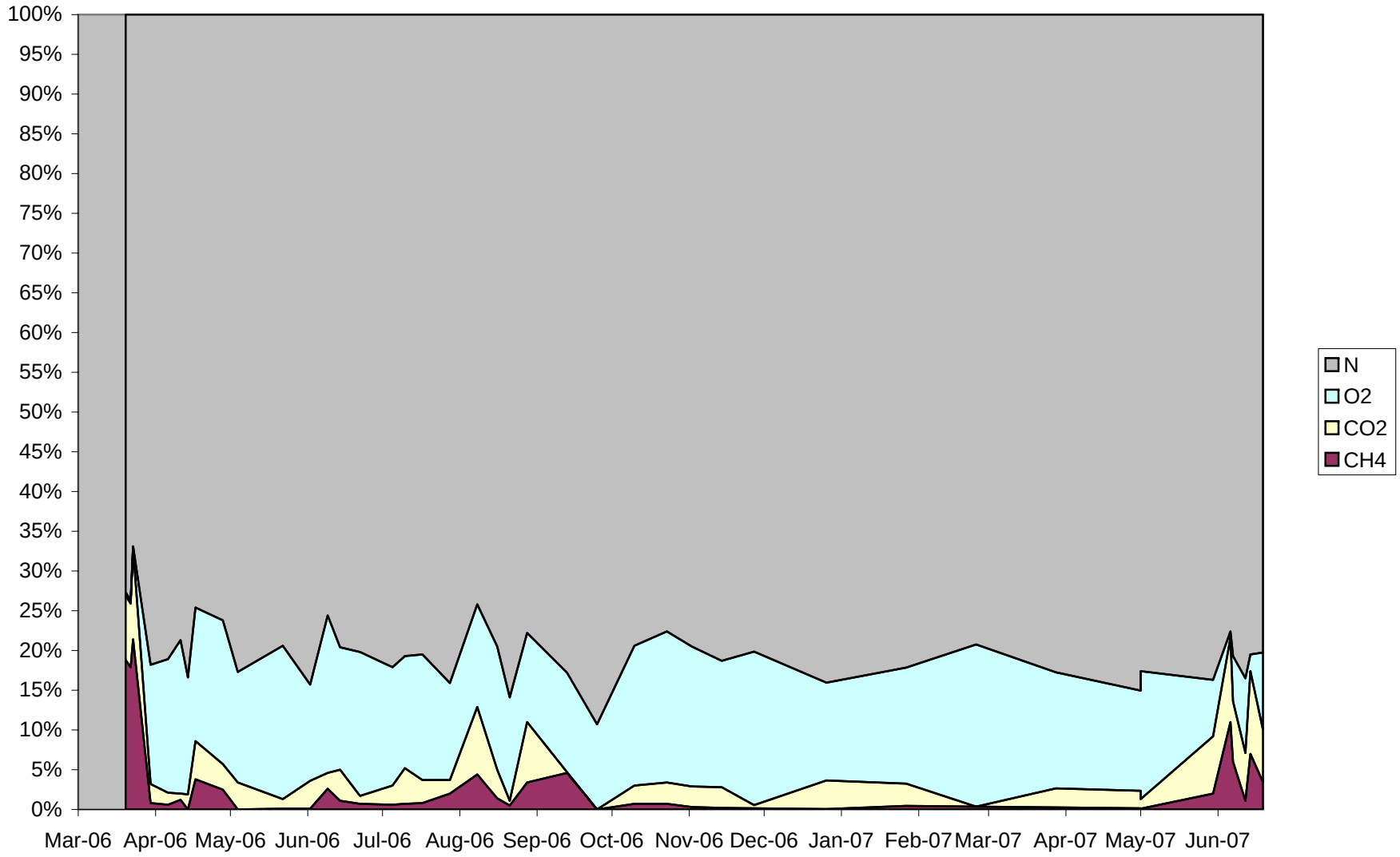


Chart 11: GP-2 Gas Concentrations

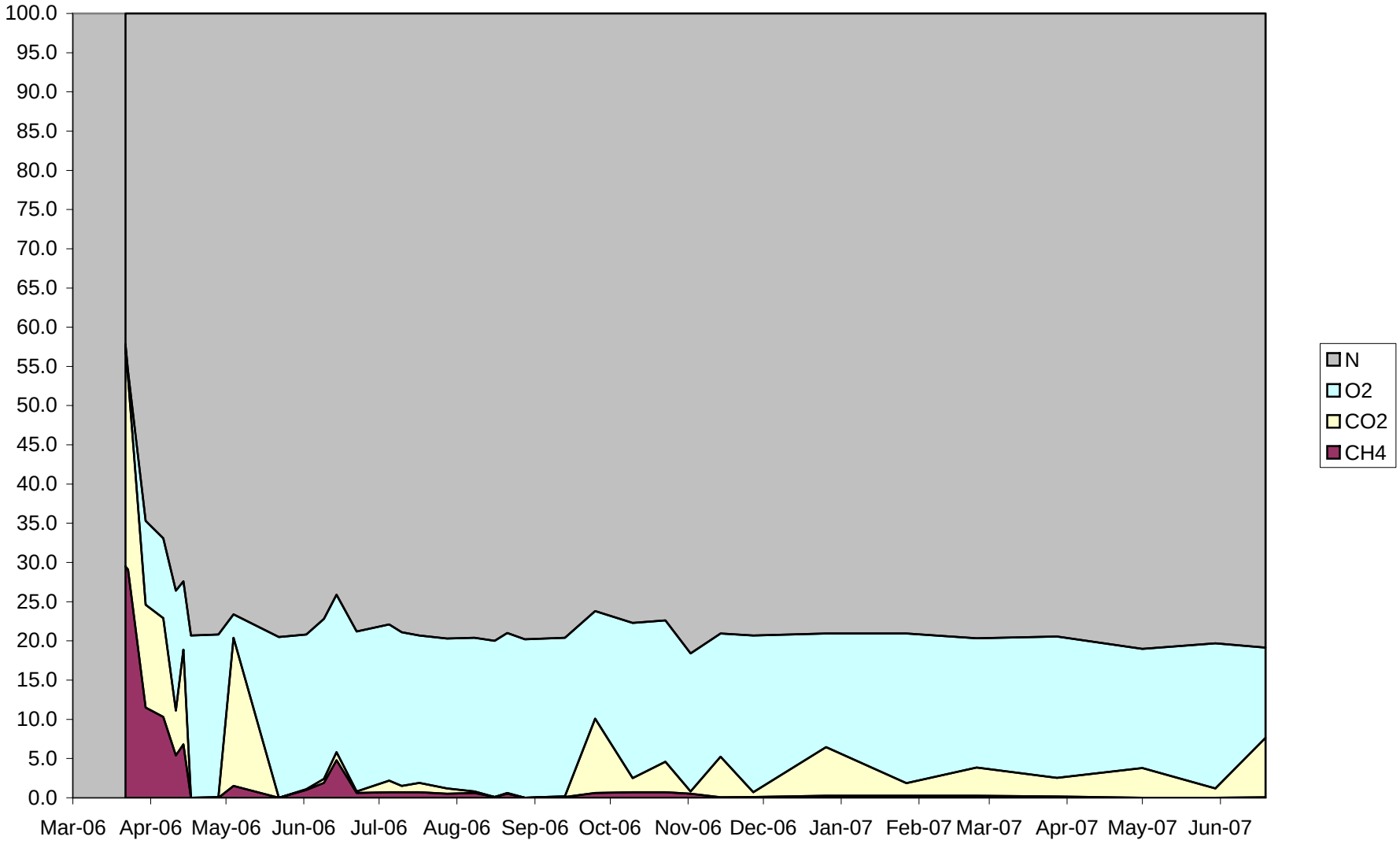


Chart 12: GP-3 Gas Concentrations

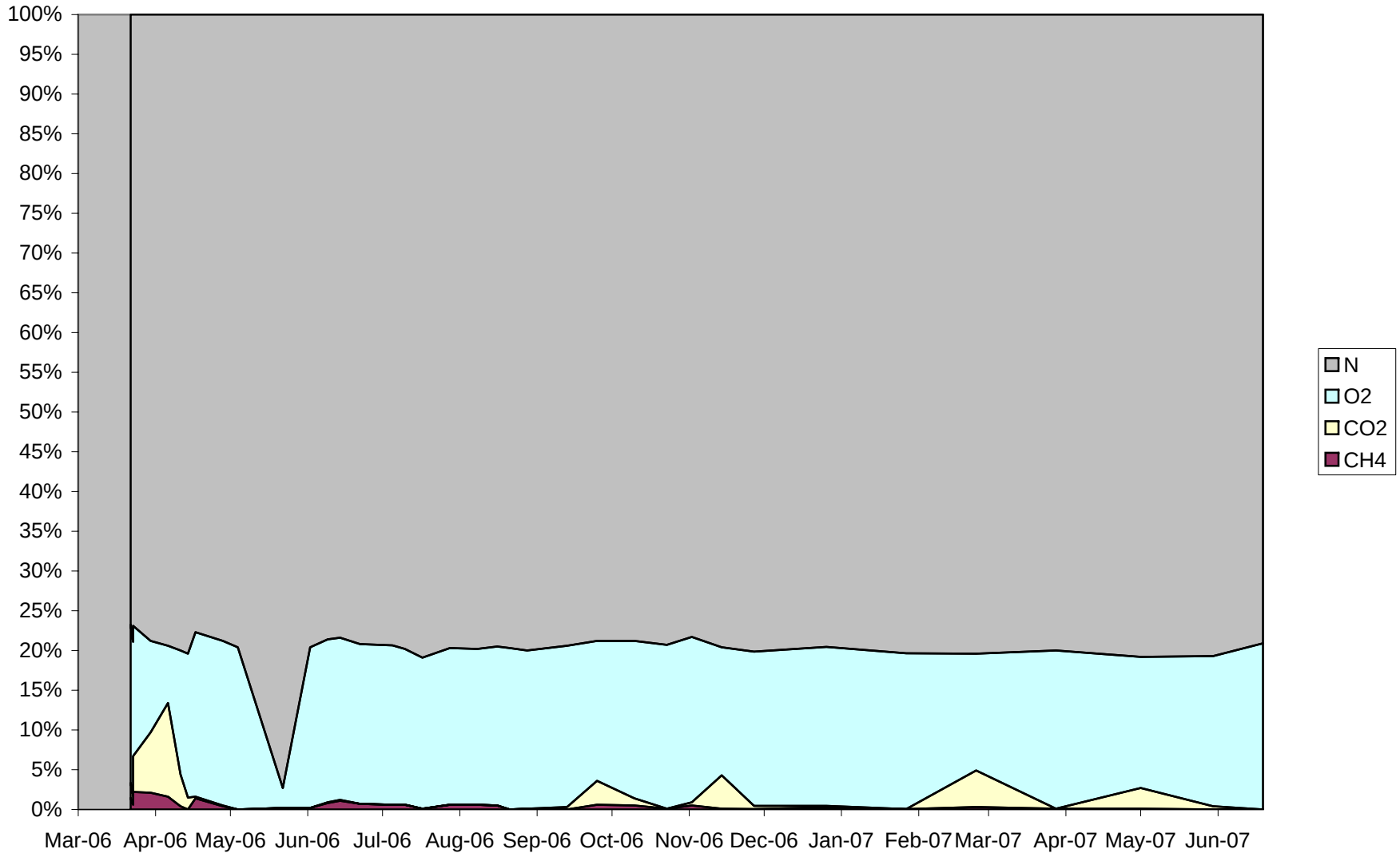


Chart 13: GP-4 Gas Concentrations

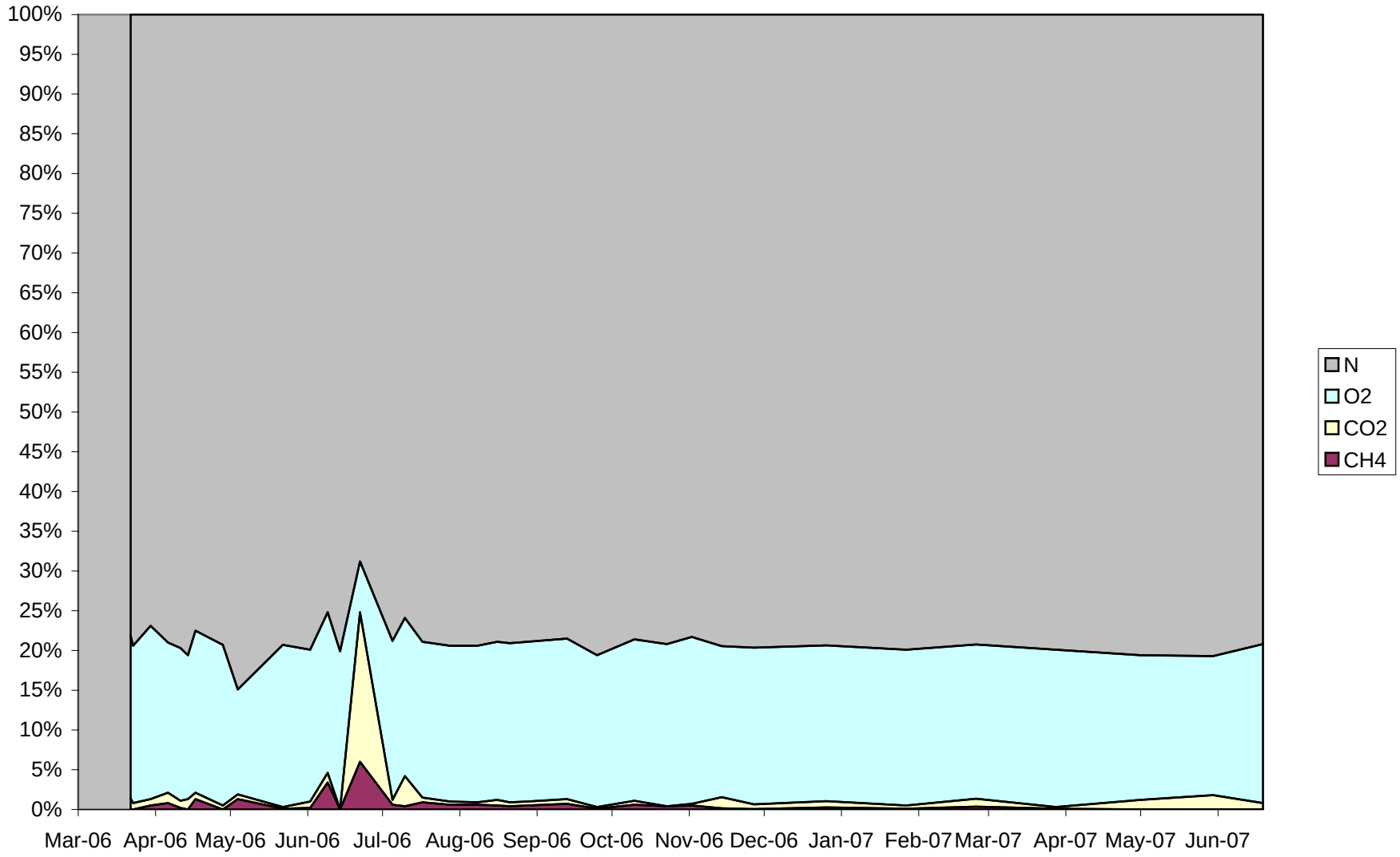


Chart 14: GP-5 Gas Concentrations

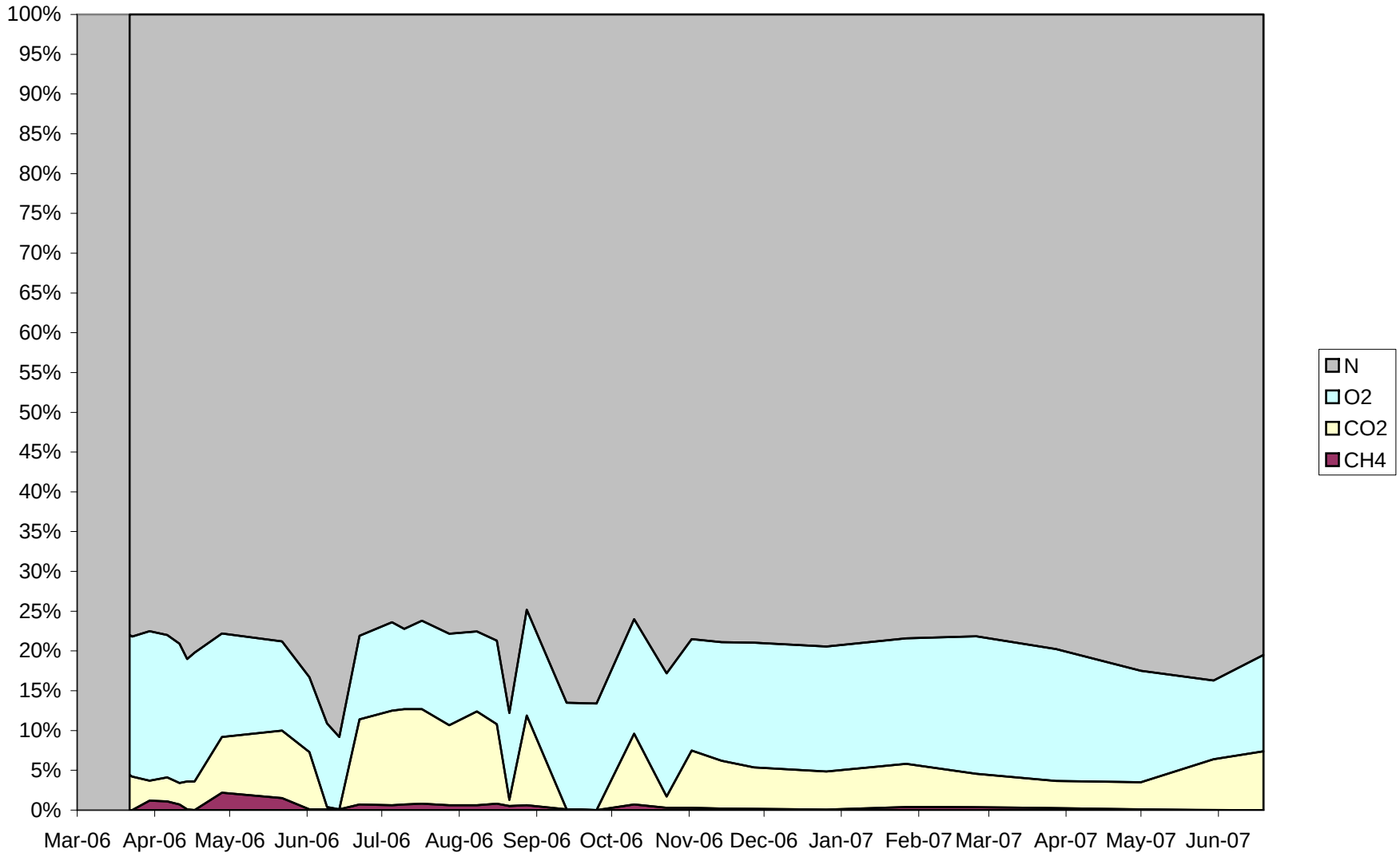


Chart 15: GP-6 Gas Concentrations

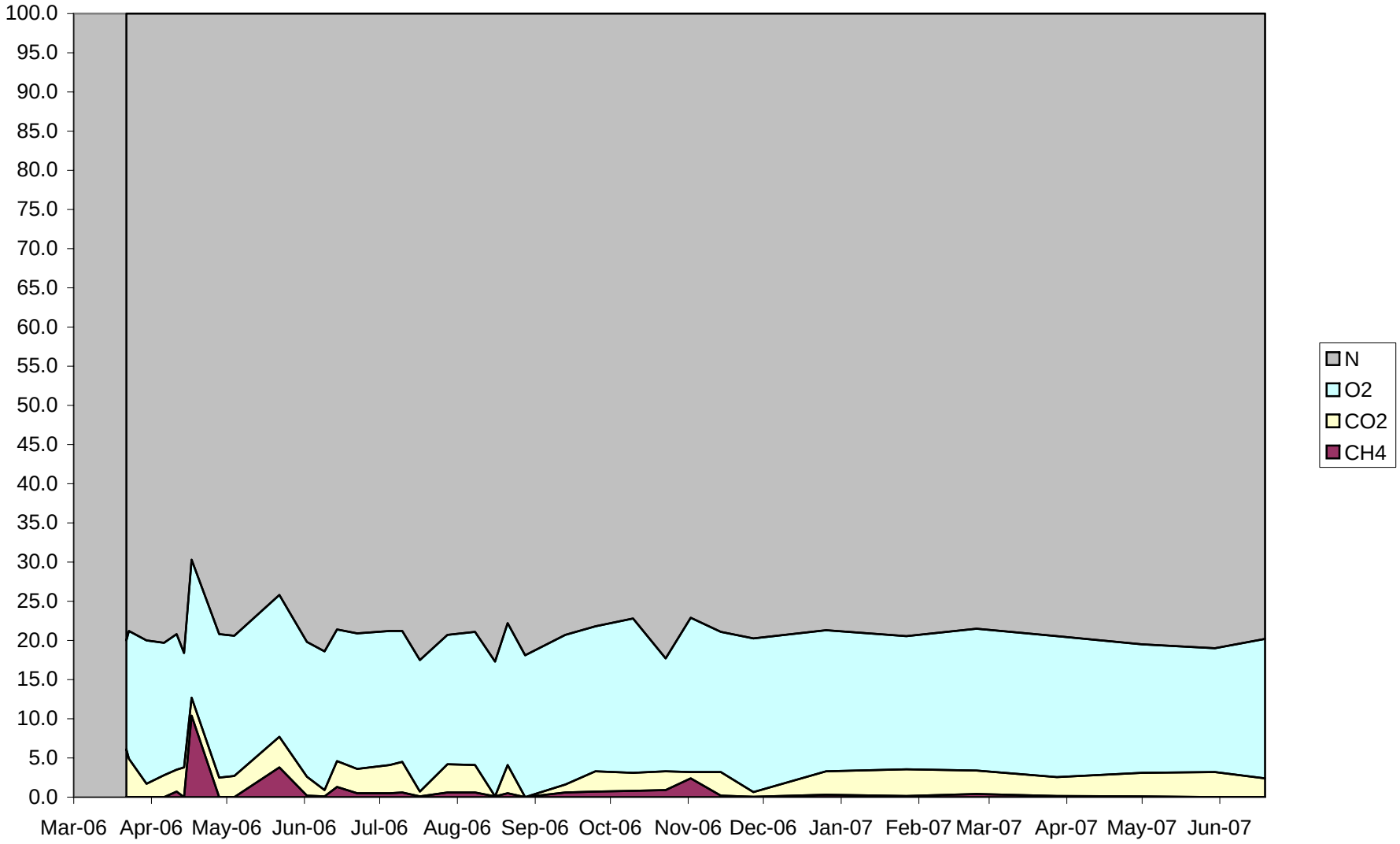


Chart 16: GP-7 Gas Concentrations

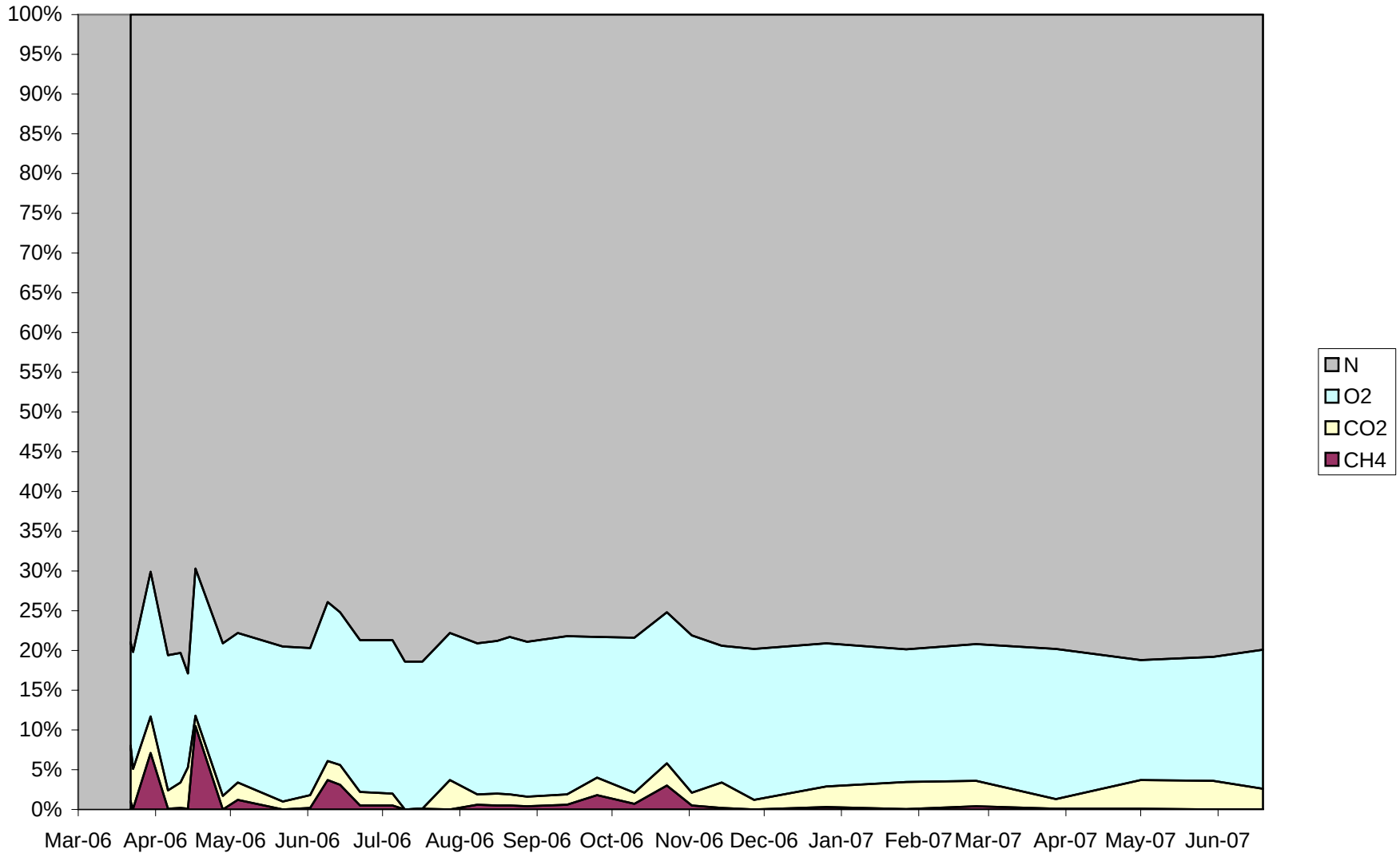


Chart 17: GP-8 Gas Concentrations

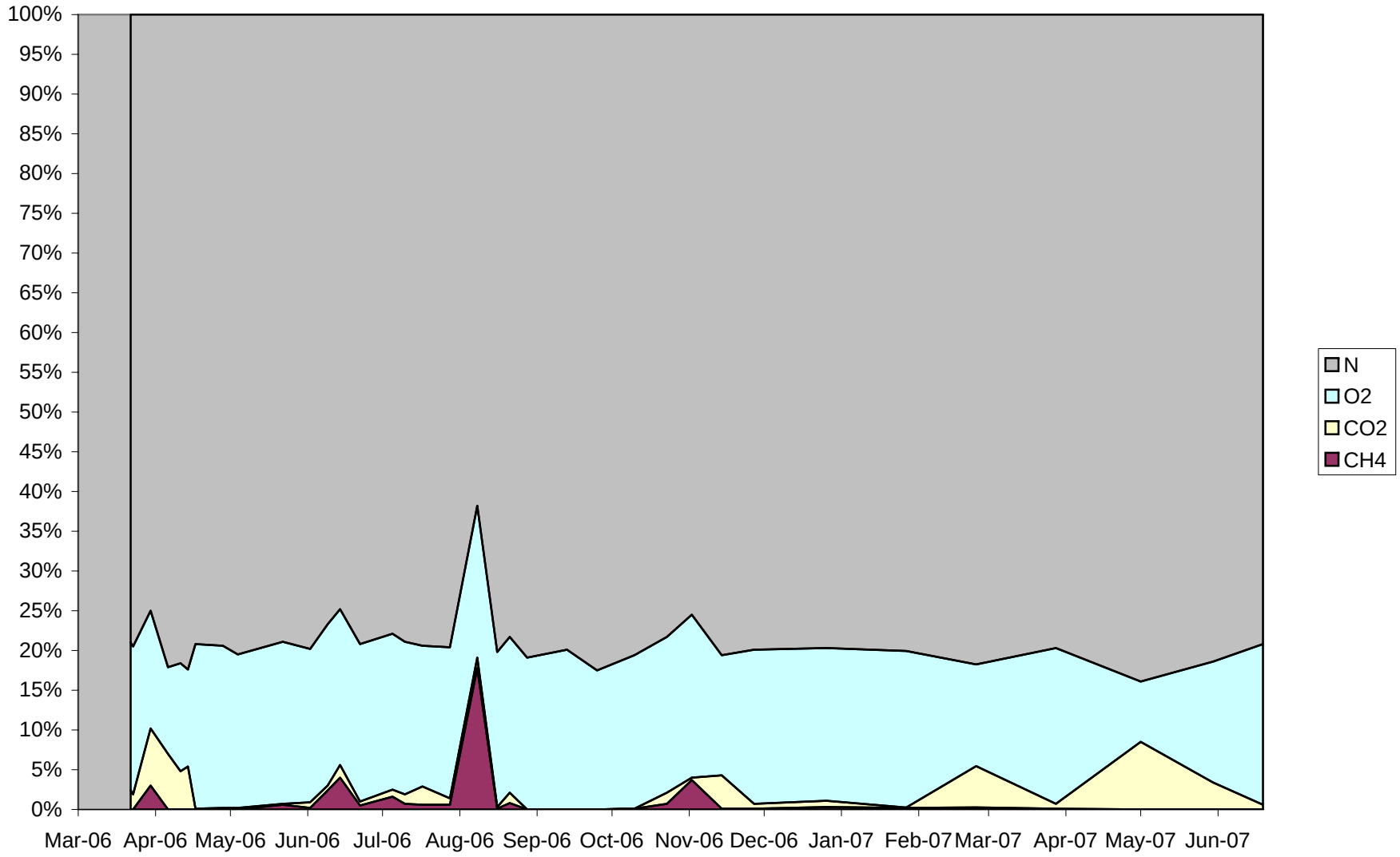


Chart 18: GP-10 Gas Concentrations

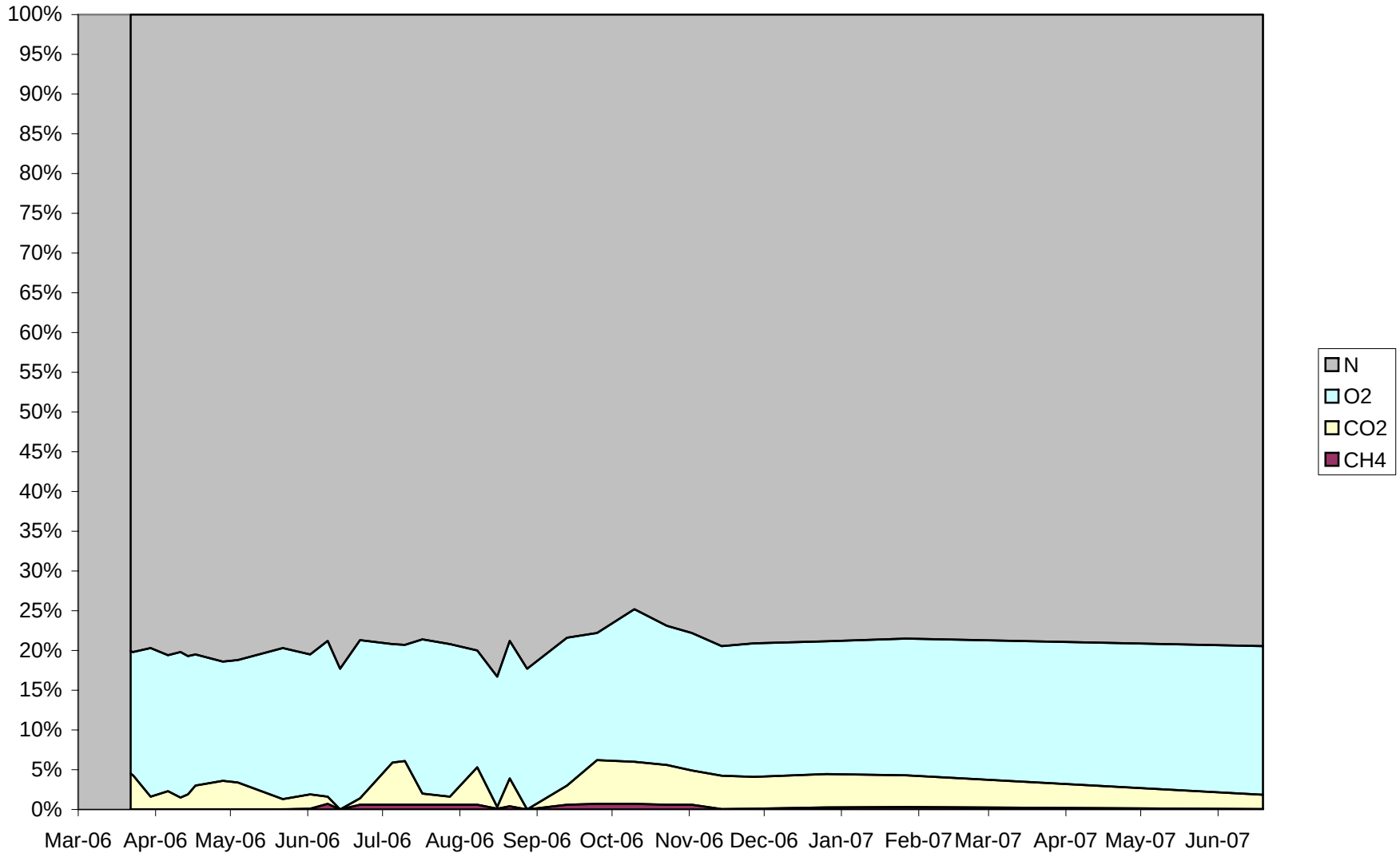


Chart 19: GP-11 Gas Concentrations

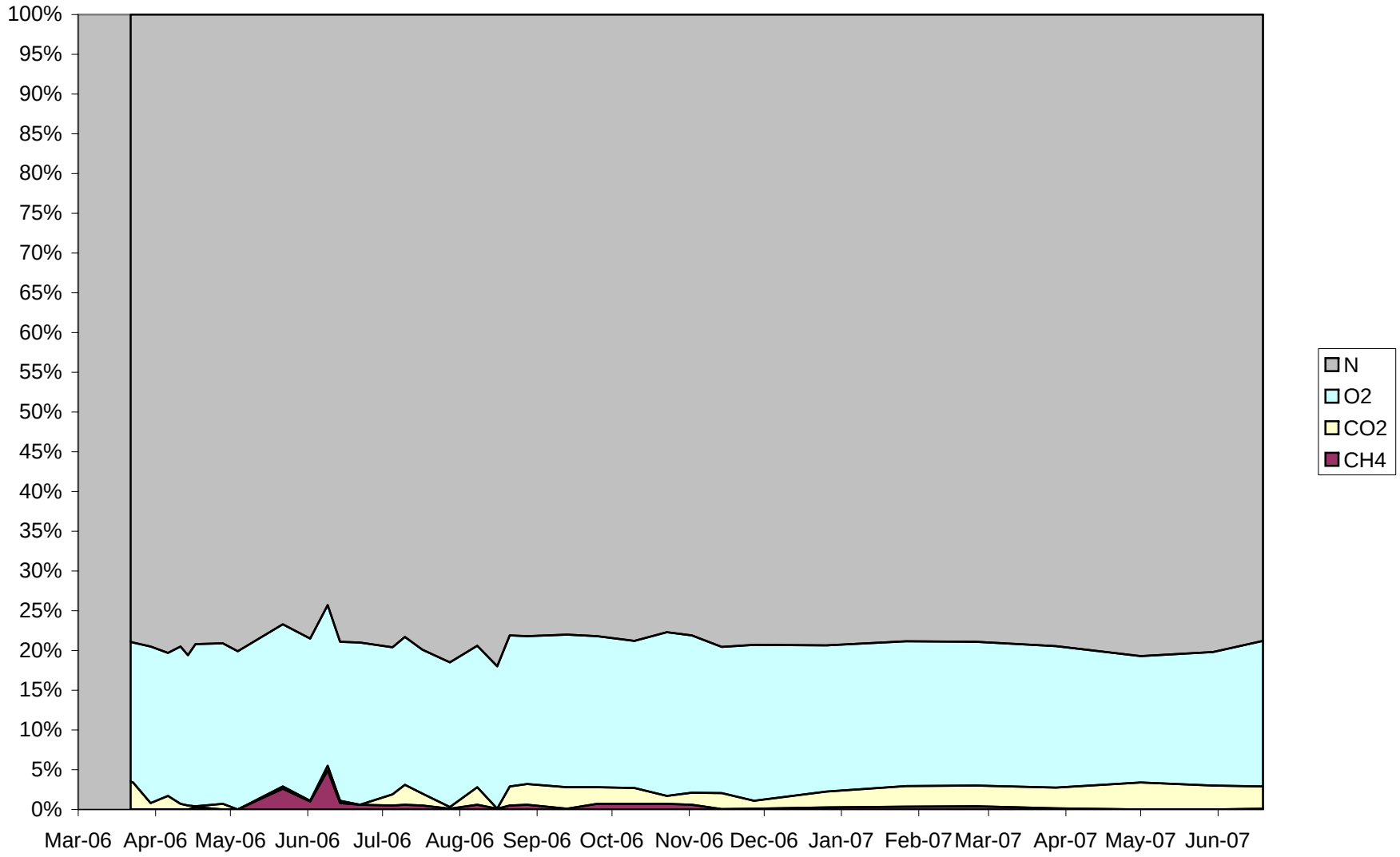


Chart 20: GP-12 Gas Concentrations

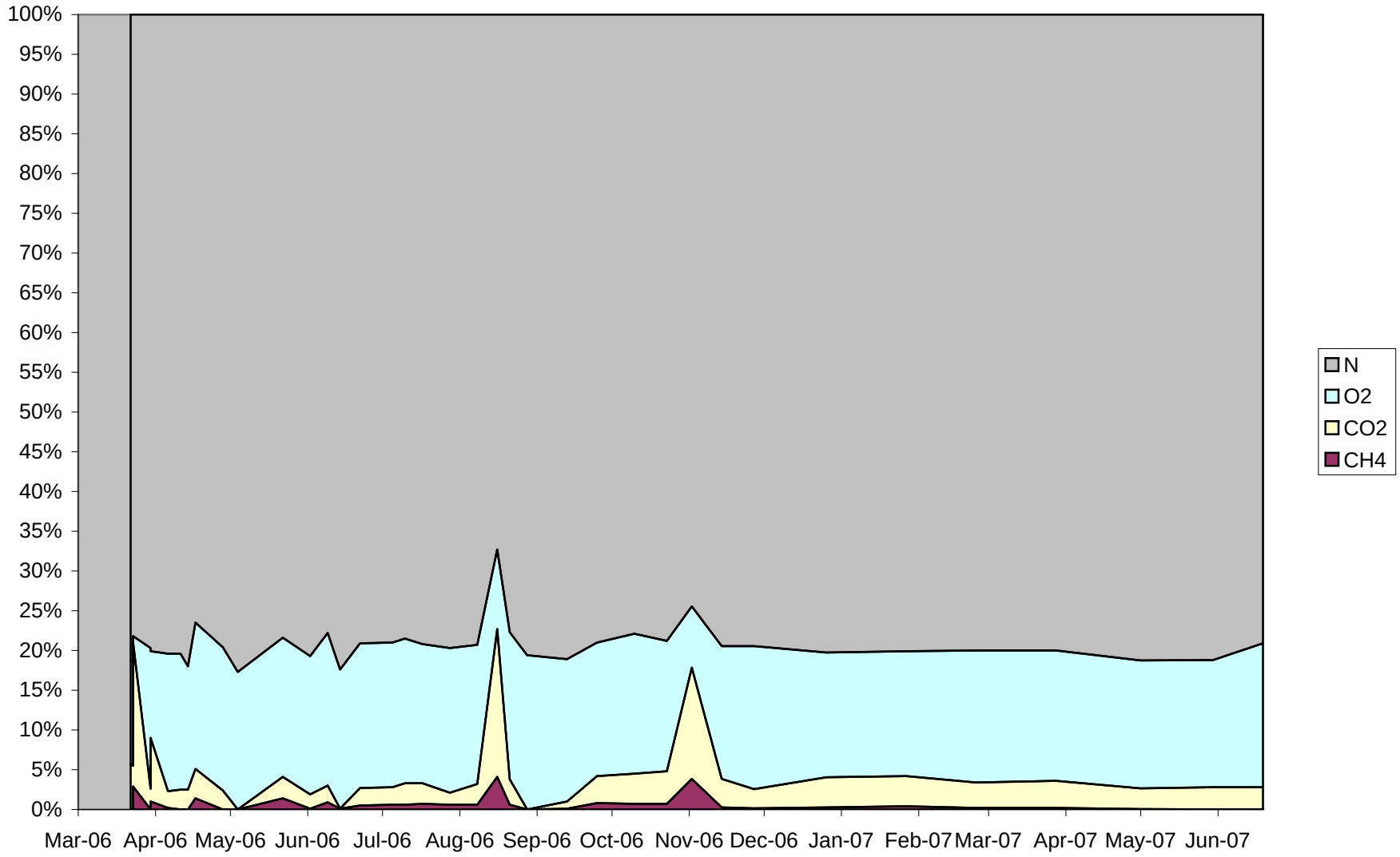


Chart 21: MW-101 Gas Concentrations

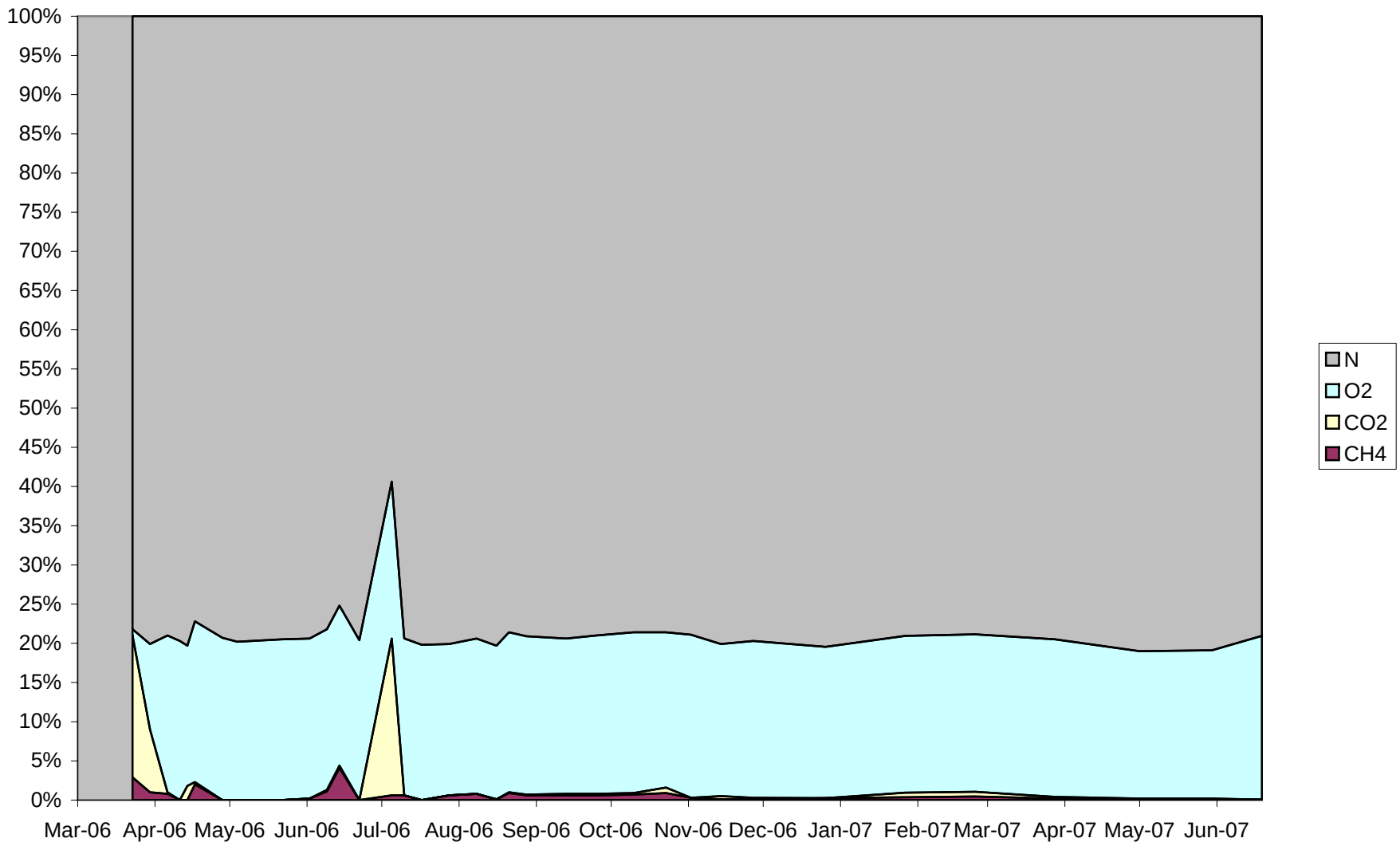


Chart 22: MW-102 Gas Concentrations

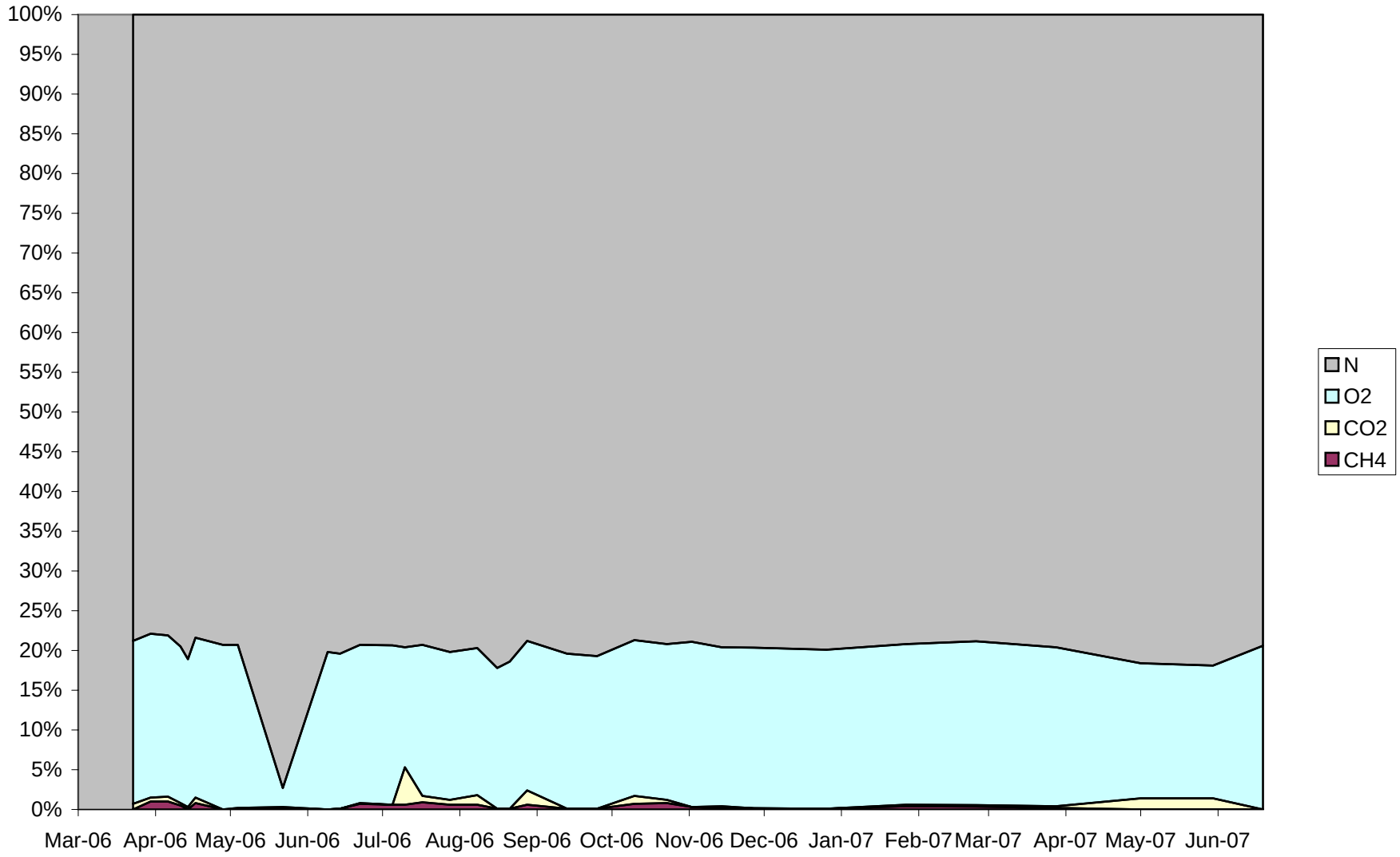


Chart 23: MW-103 Gas Concentrations

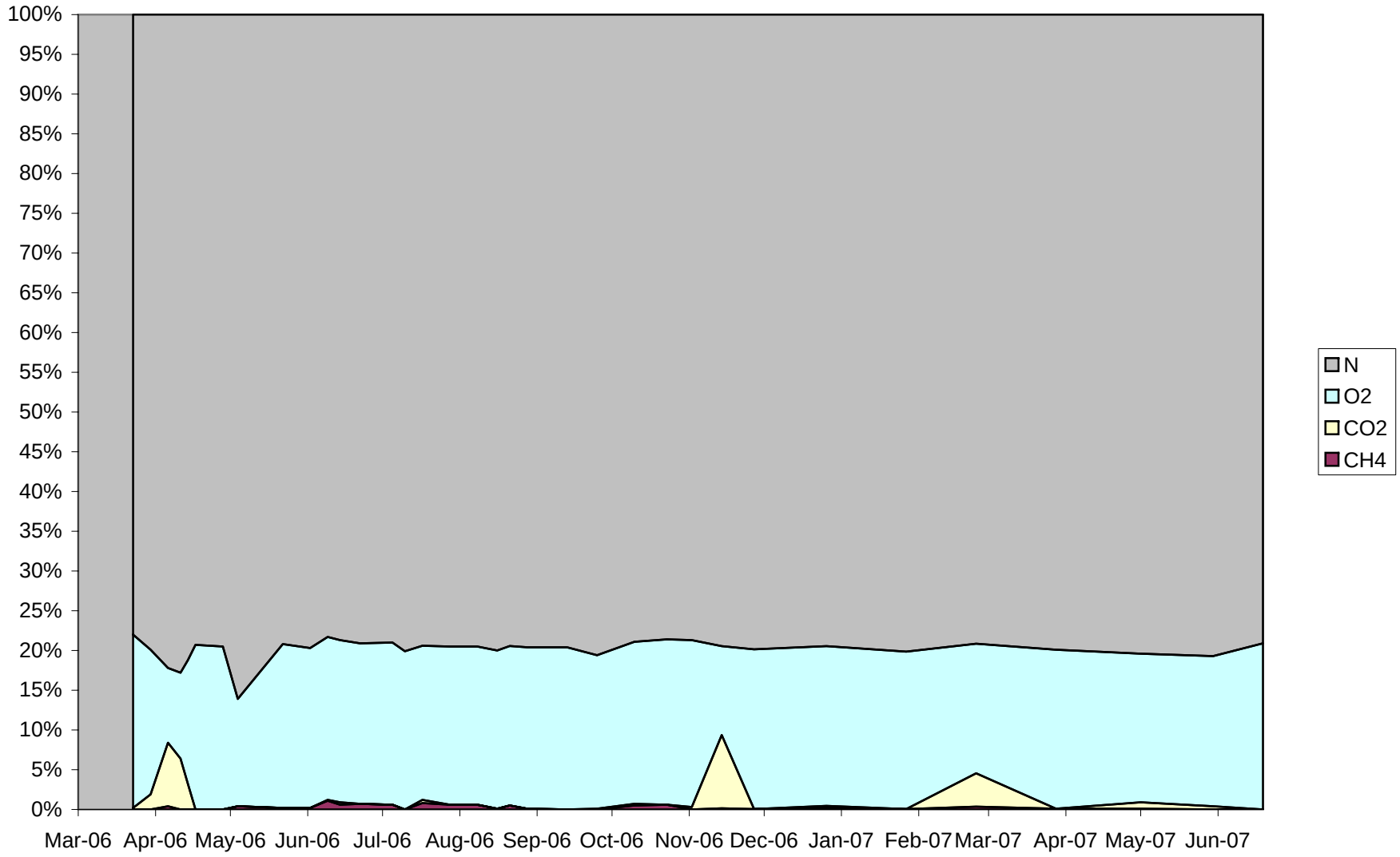


Chart 24: MW-104 Gas Concentrations

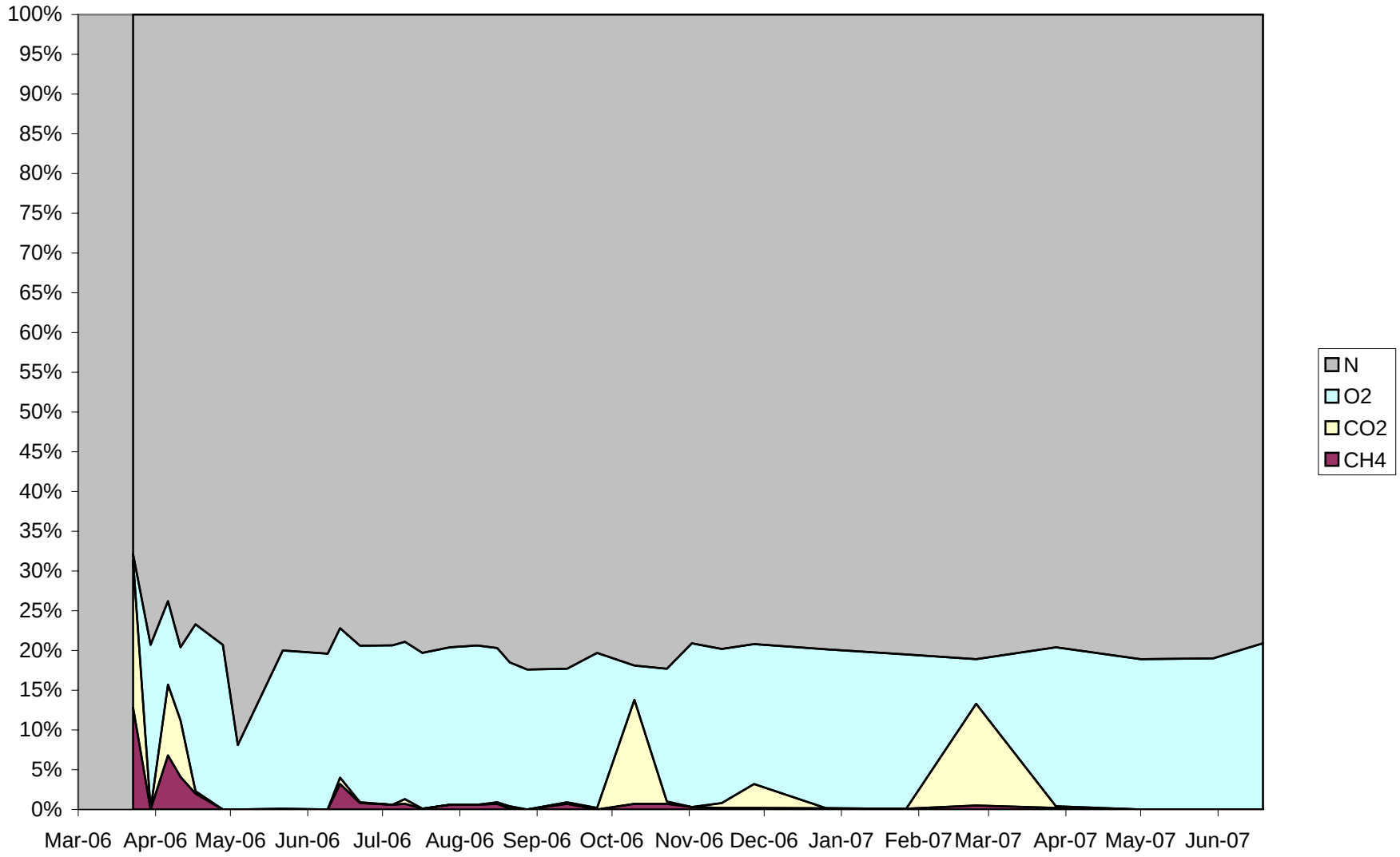


Chart 25: Barometric Pressure
Brandon & Ripon Weather Stations

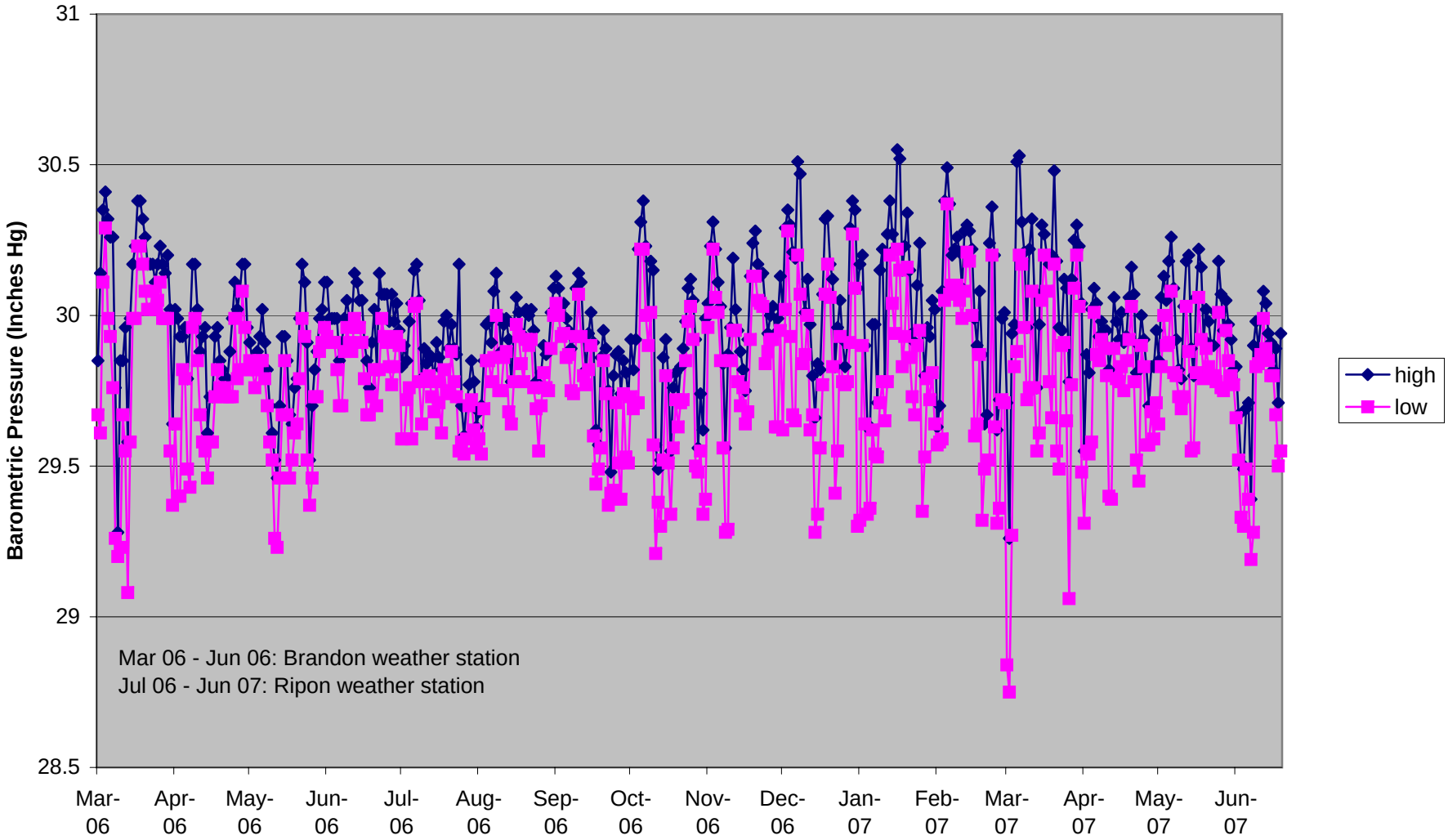


Chart 26: Gas Extraction System Operation

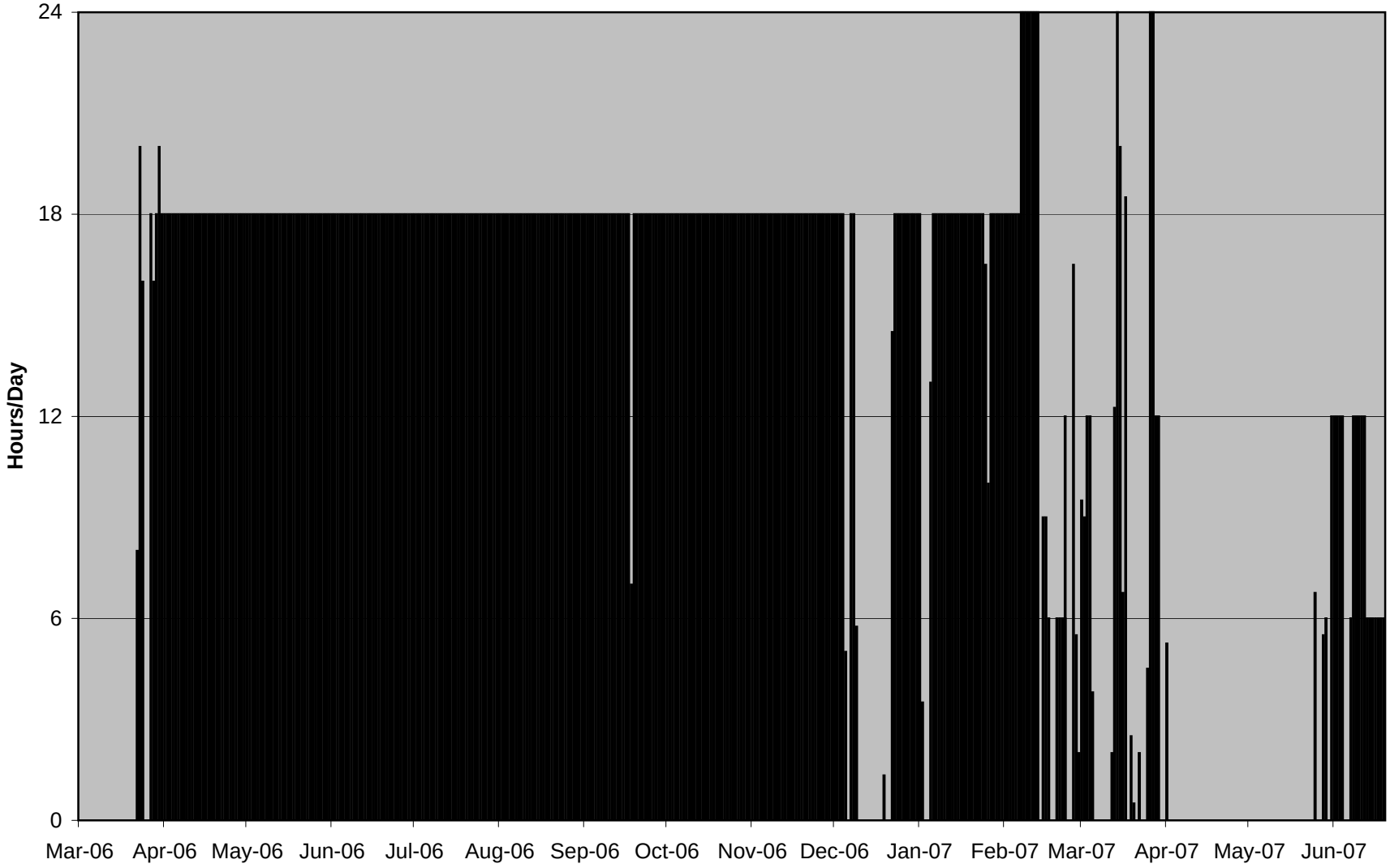


Chart 27: MW-101
Layer 1 Well

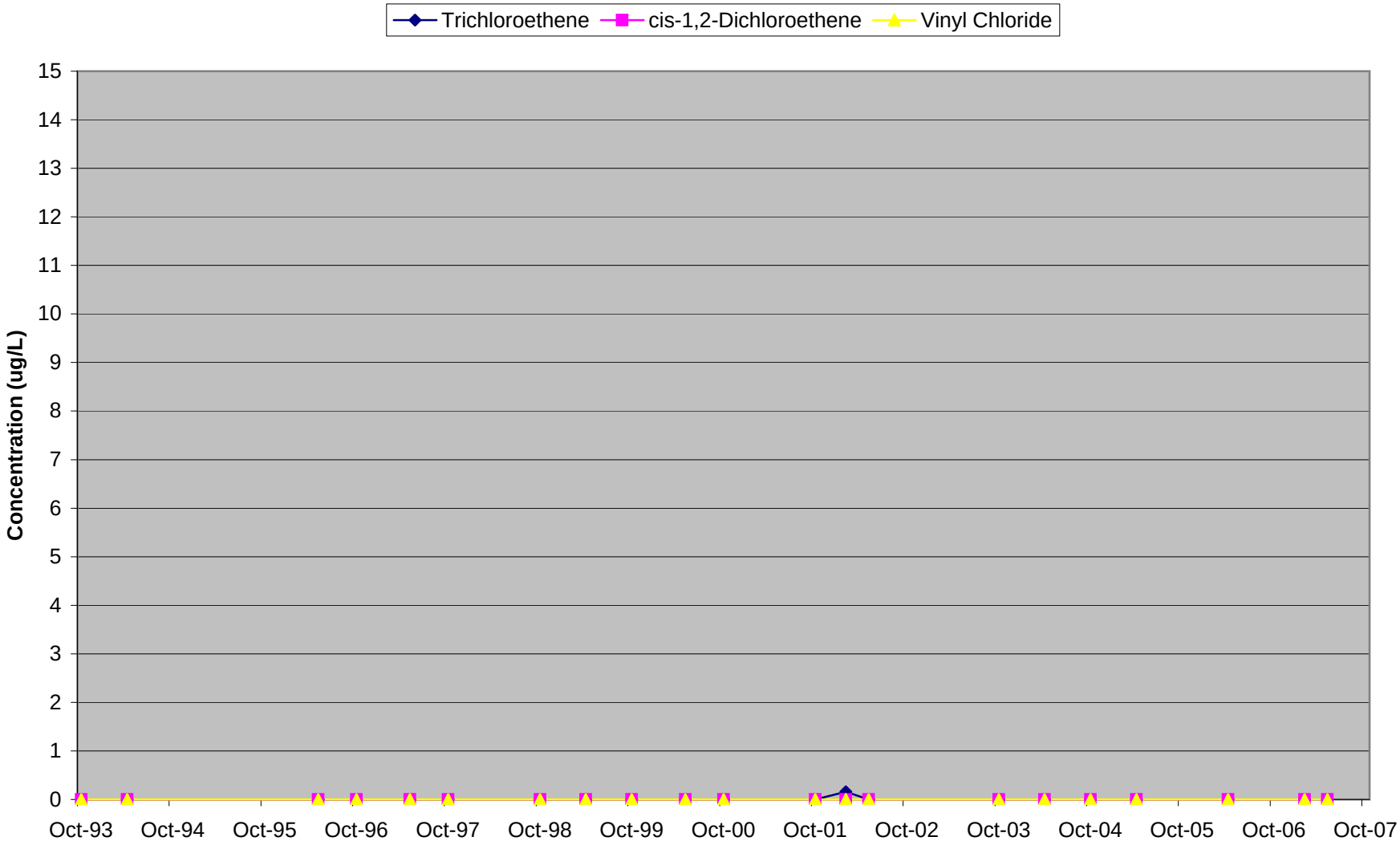


Chart 28: MW-102
Layer 1 Well

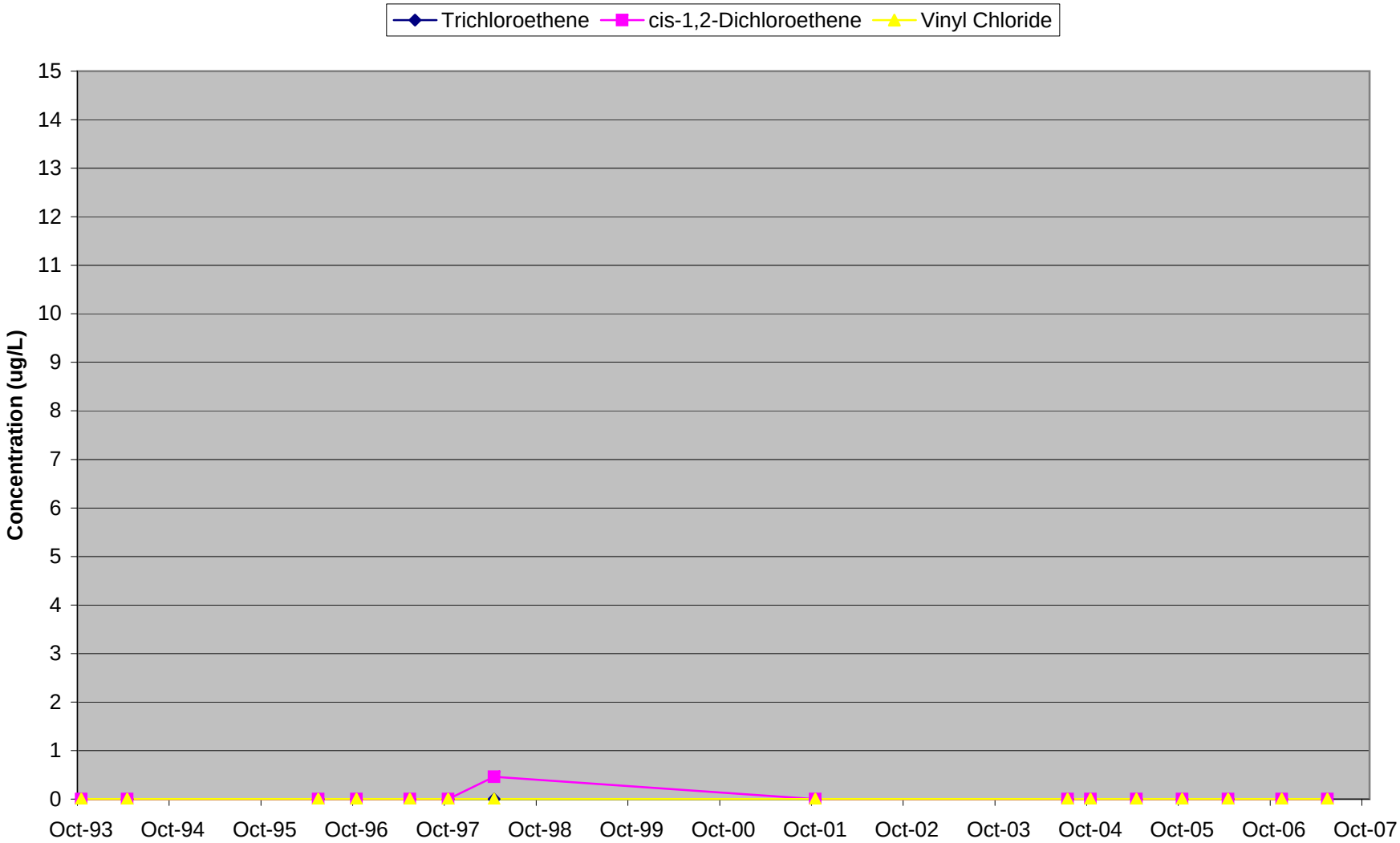


Chart 29: MW-103
Layer 1 Well

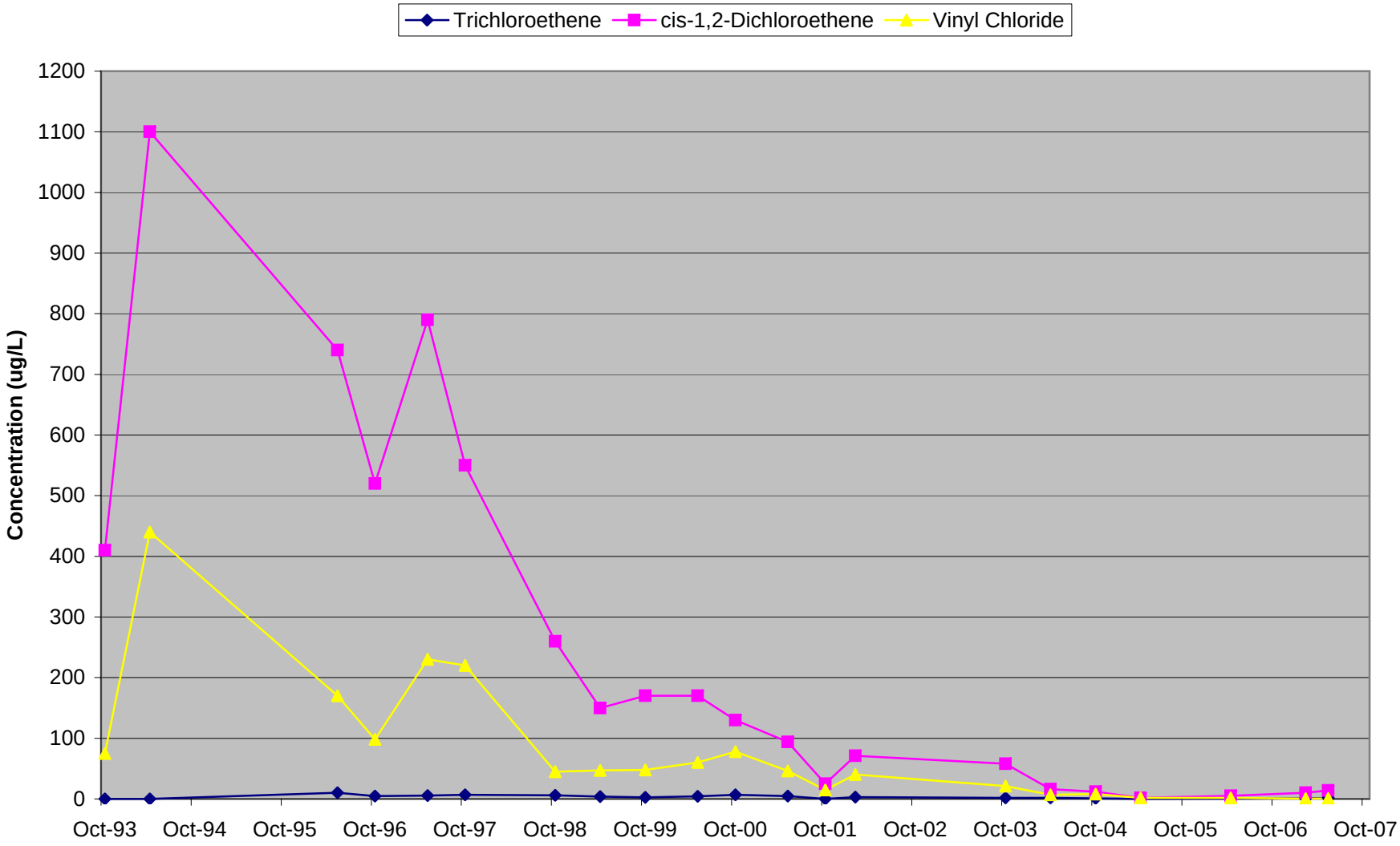


Chart 30: MW-104
Layer 1 Well

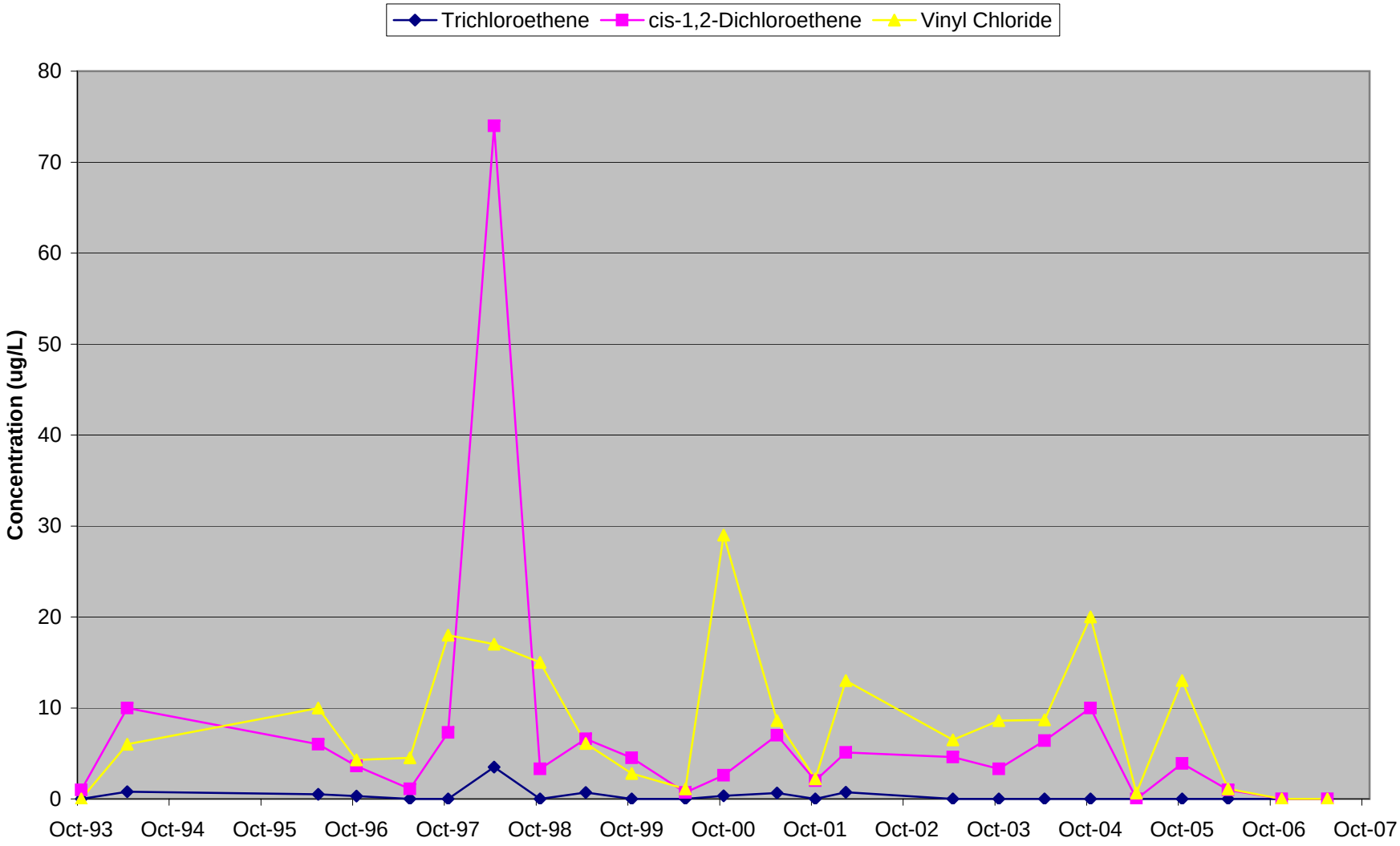


Chart 31: MW-106
Layer 1 Well

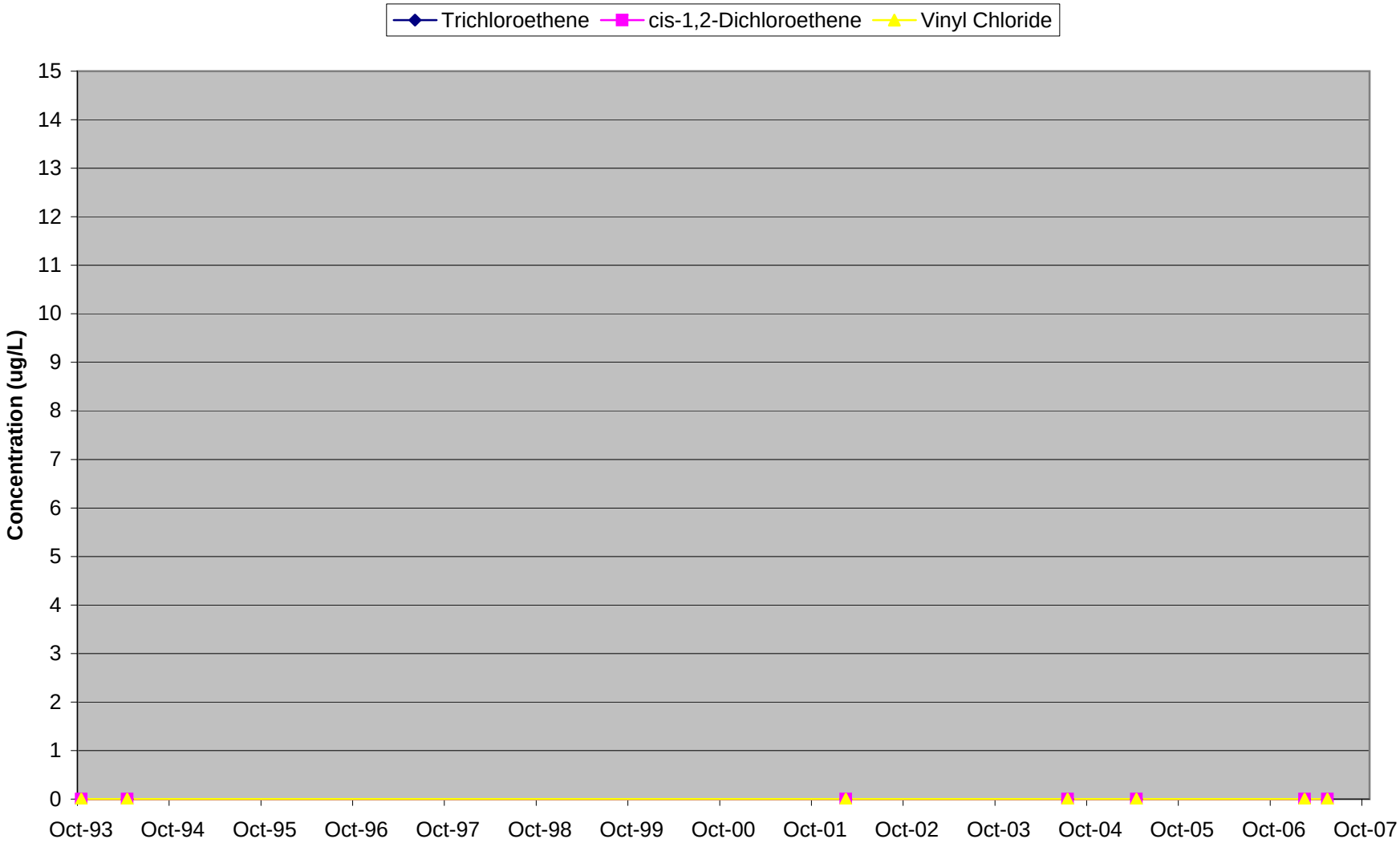


Chart 32: MW-107
Layer 1 Well

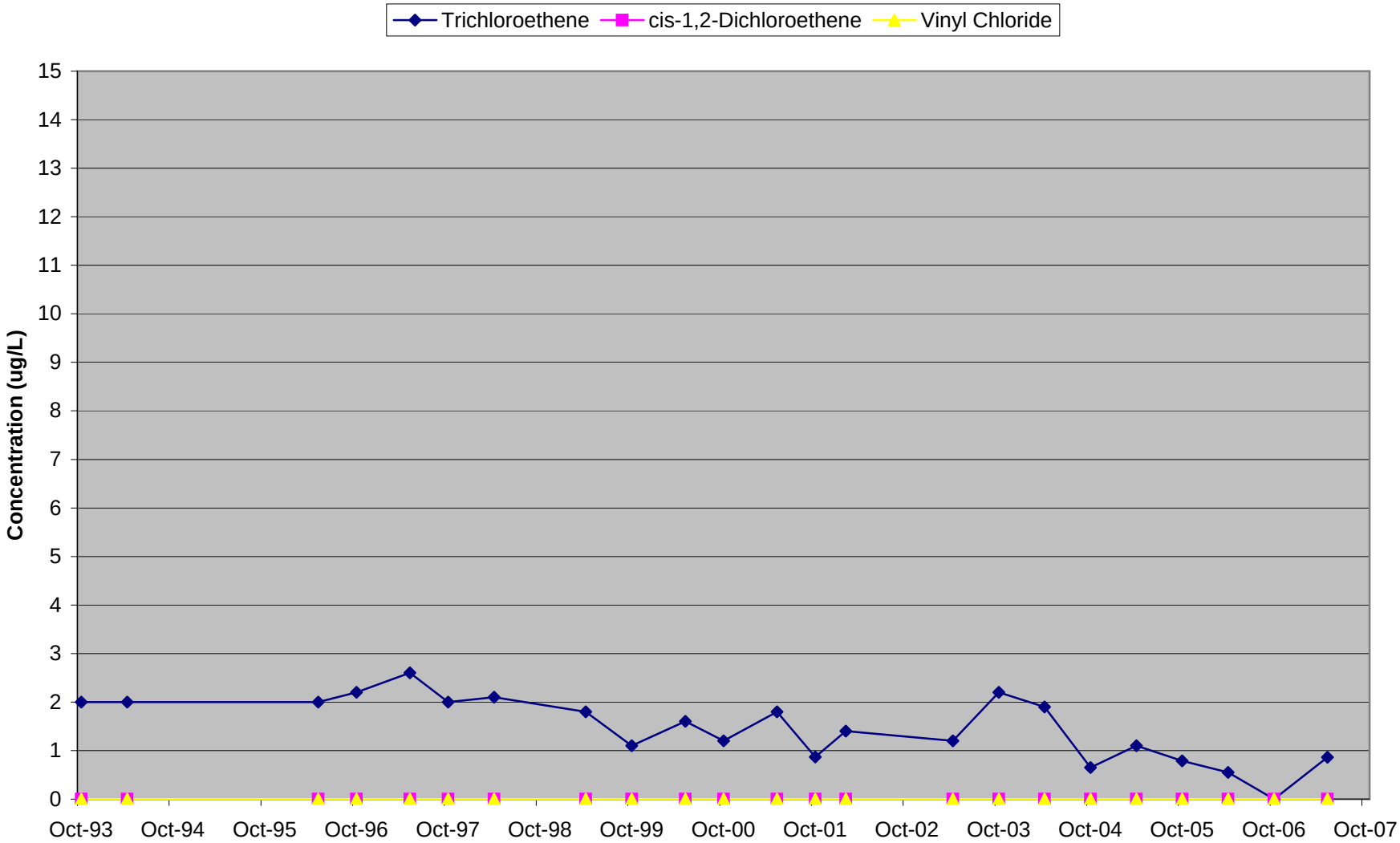


Chart 33: MW-108
Layer 1 Well

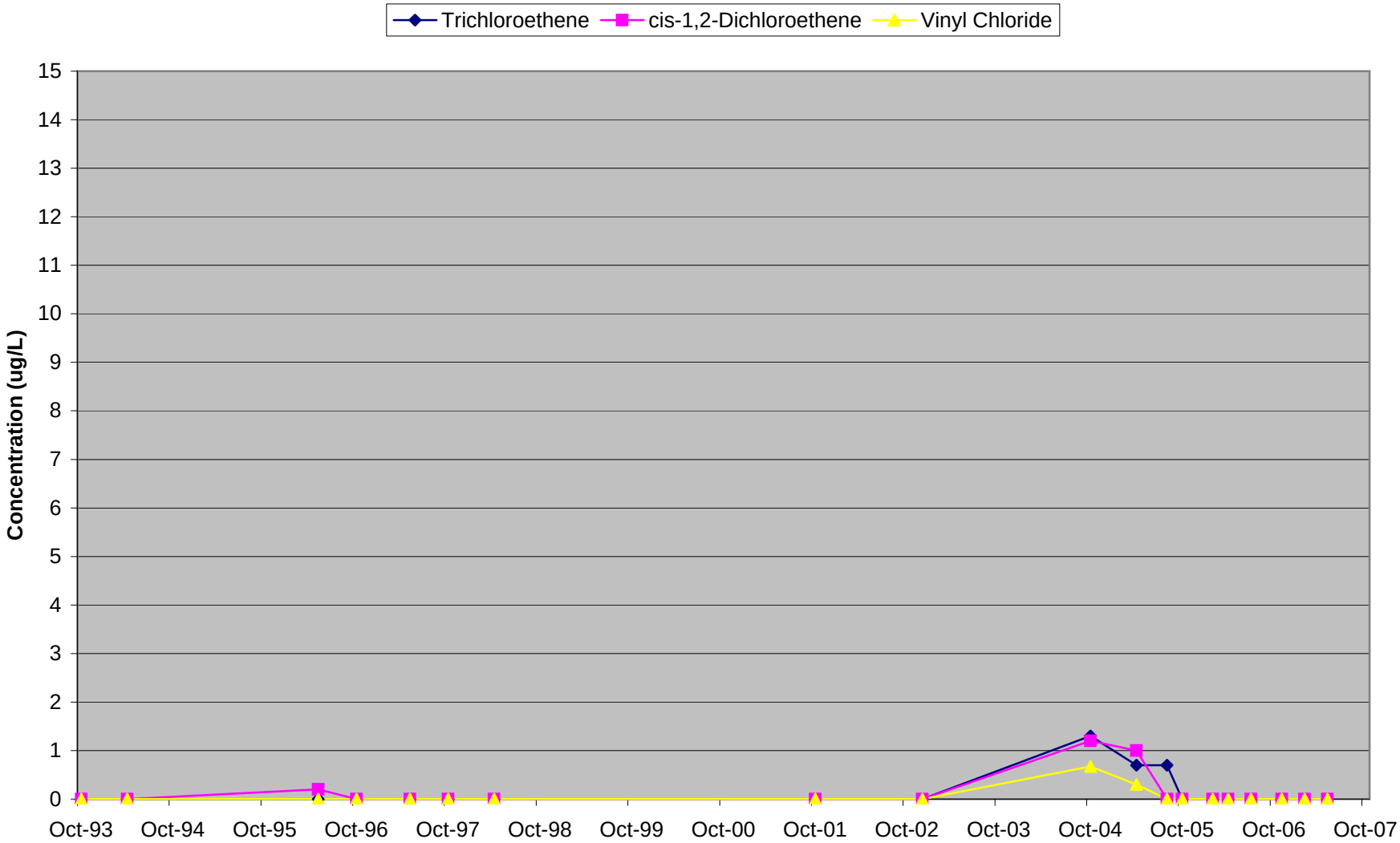


Chart 34: MW-111
Layer 1 Well

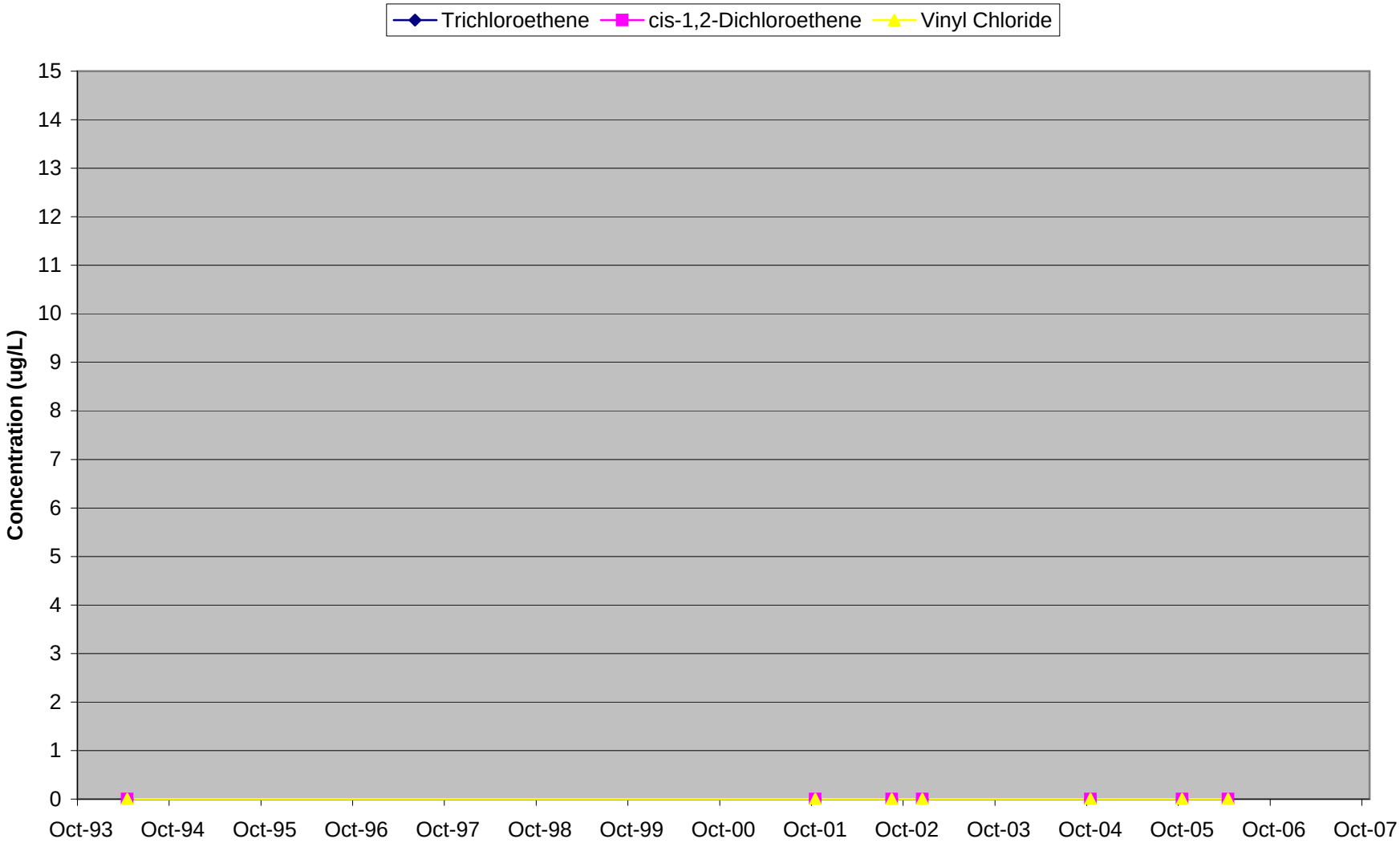


Chart 35: MW-112
Layer 1 Well

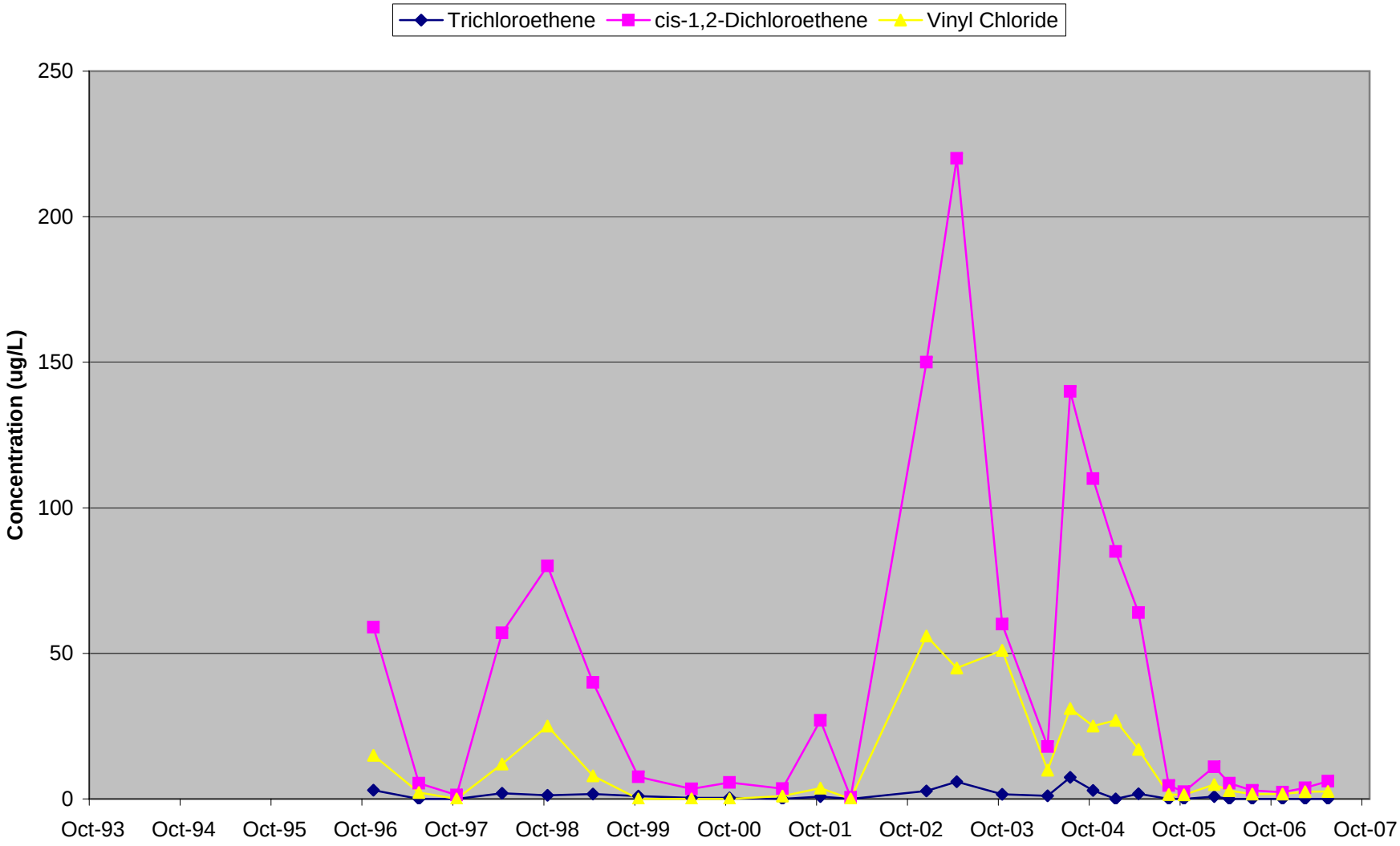


Chart 36: P-101
Layer 2 Well

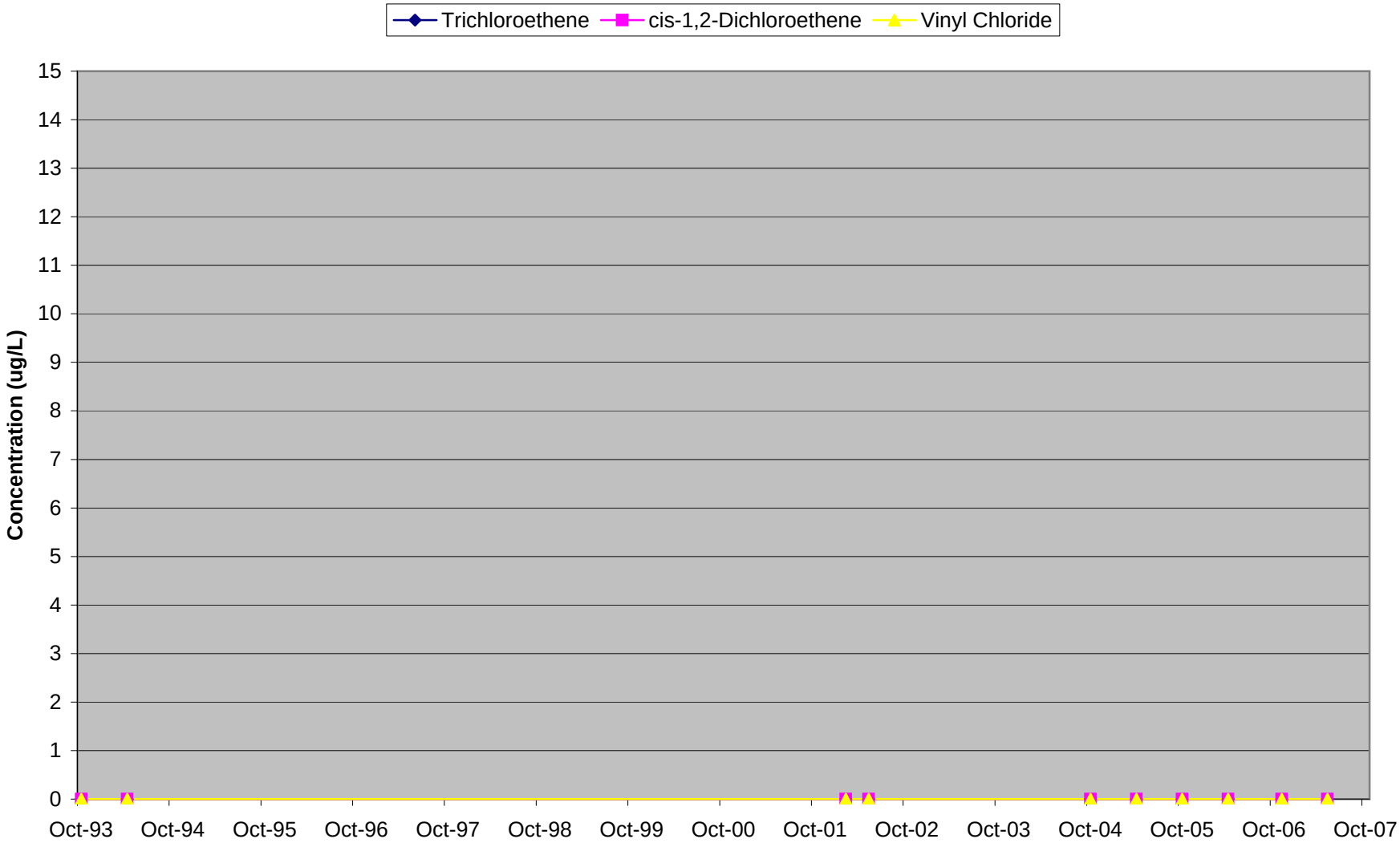


Chart 37: P-102
Layer 2 Well

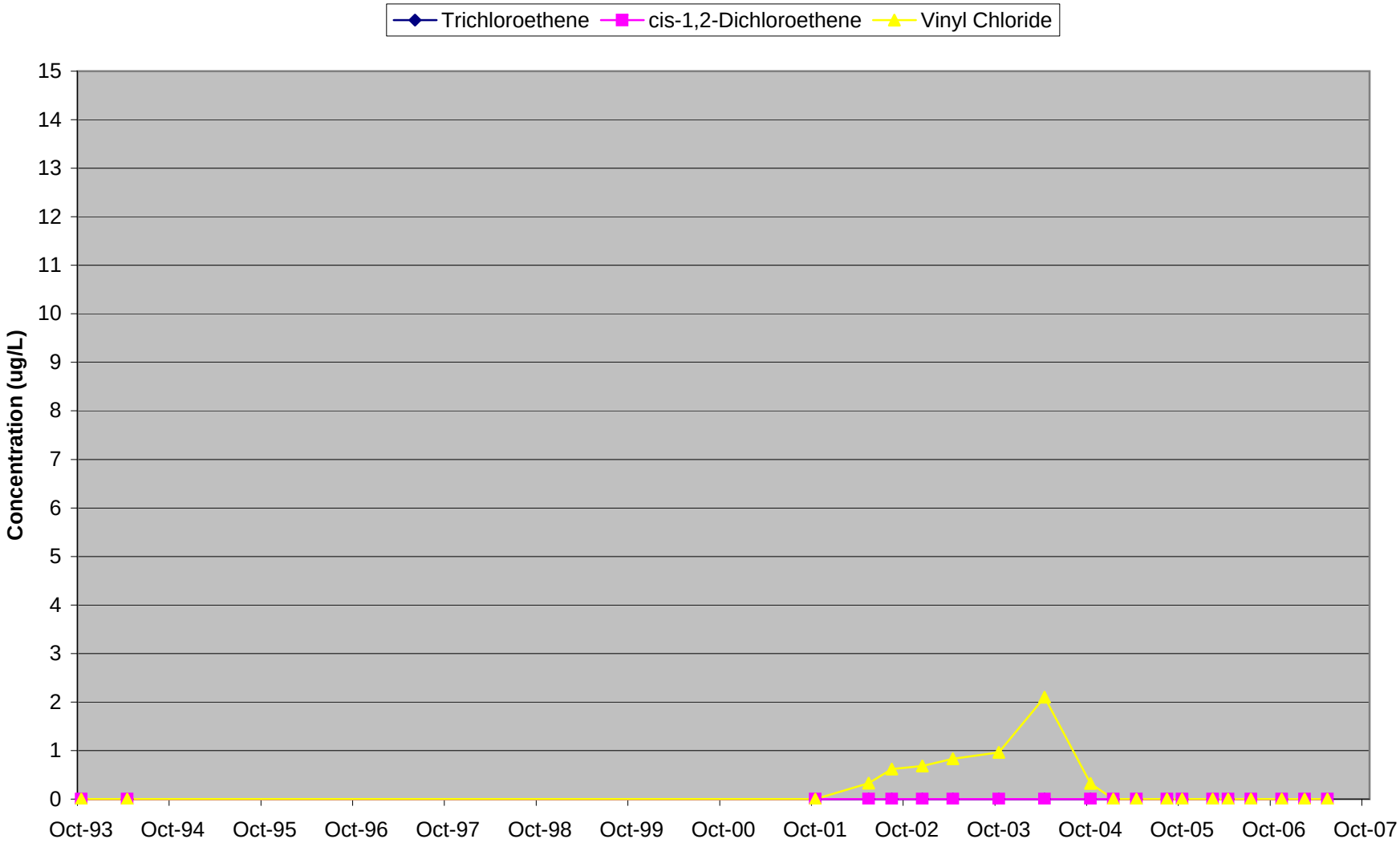


Chart 38: P-103
Layer 2 Well

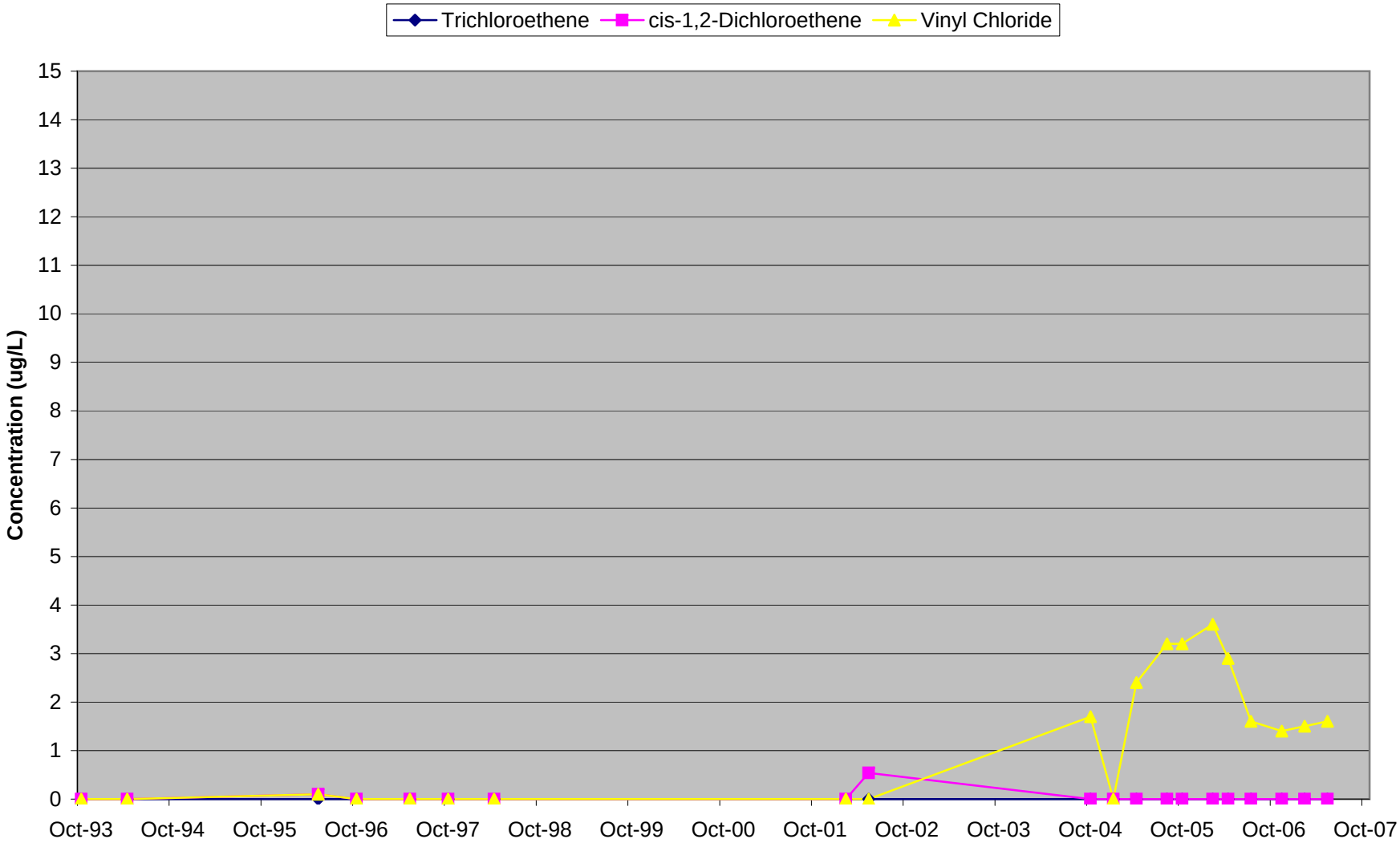


Chart 39: P-104
Layer 2 Well

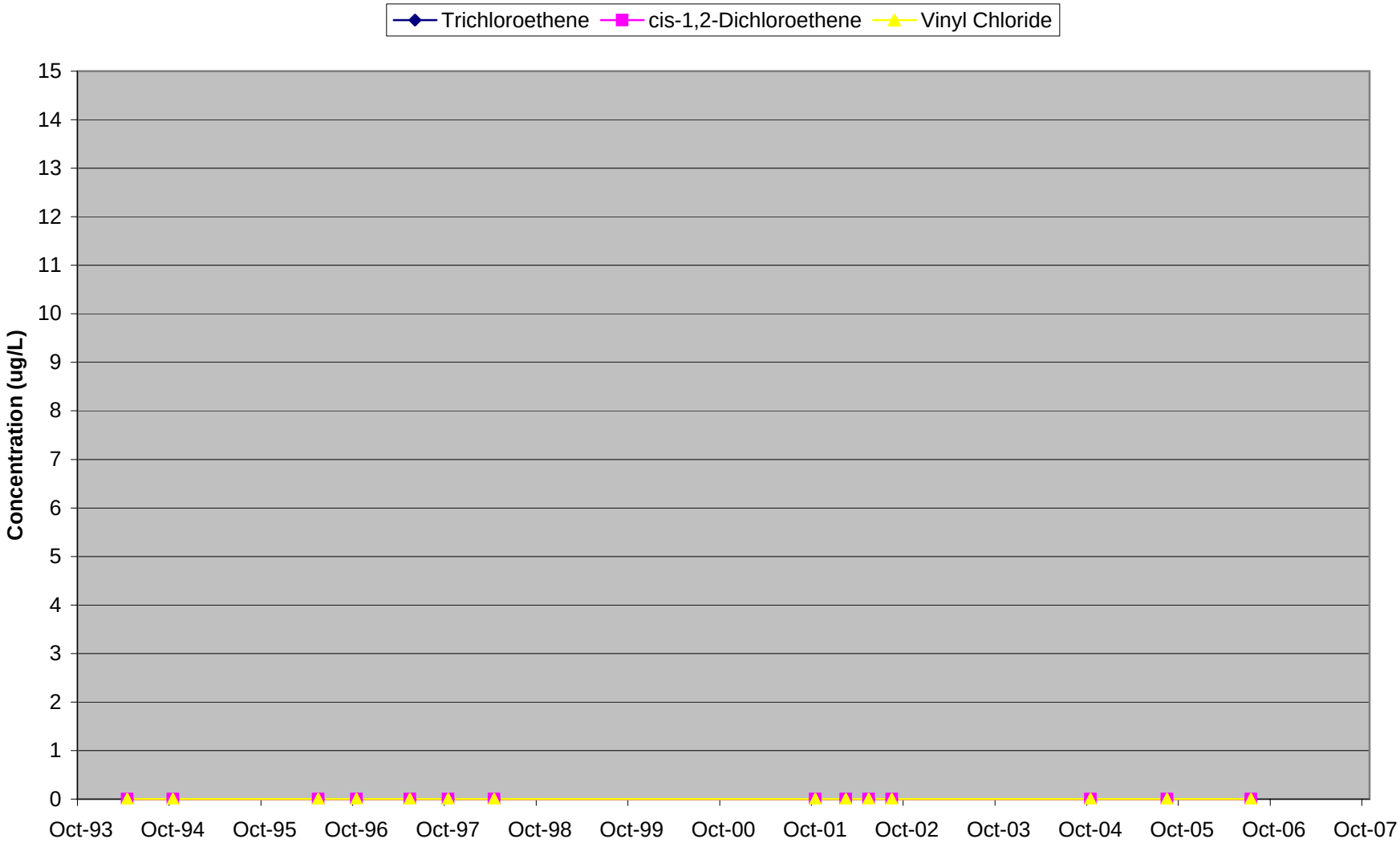


Chart 40: P-106
Layer 2 Well

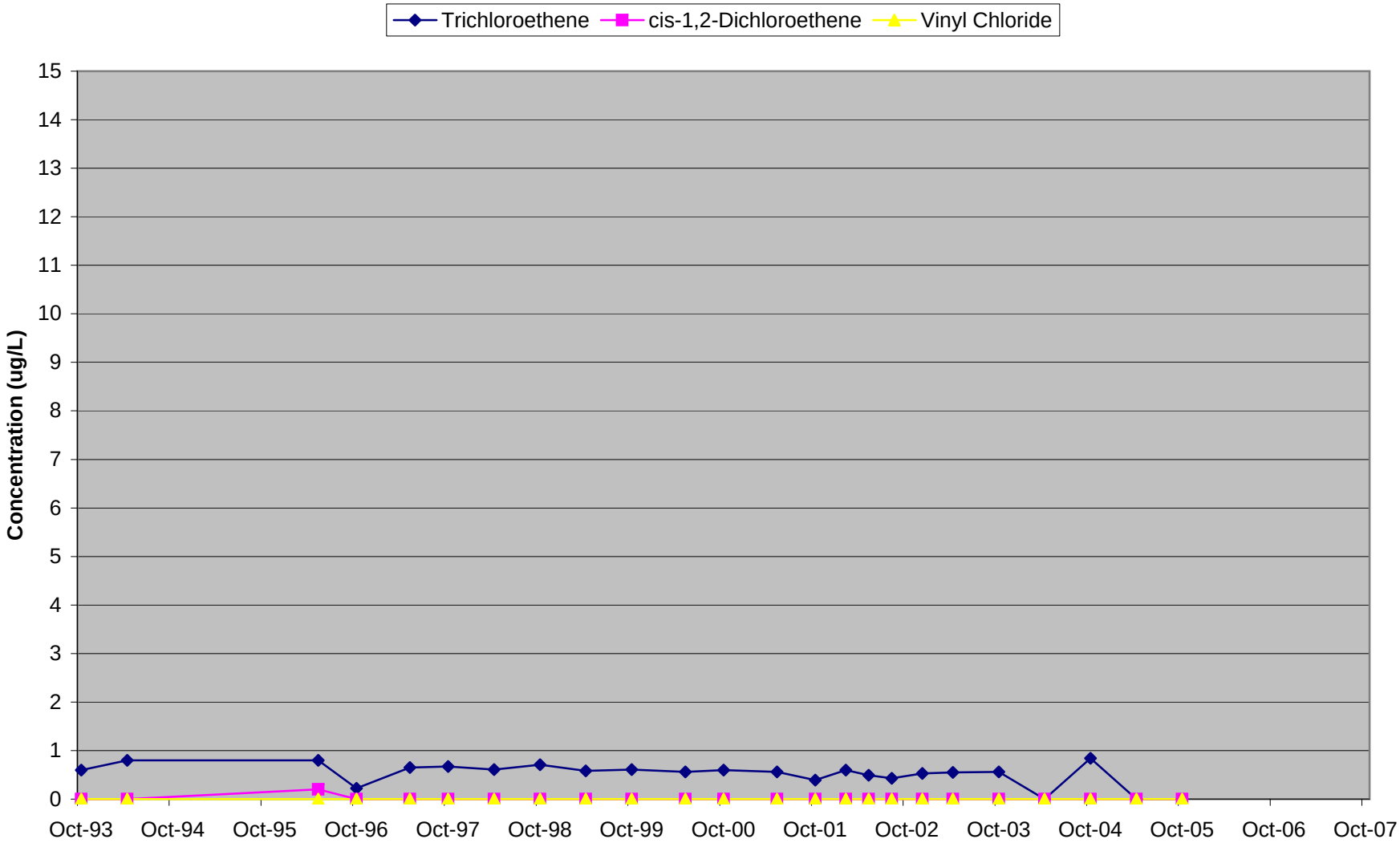


Chart 41: P-107
Layer 2 Well

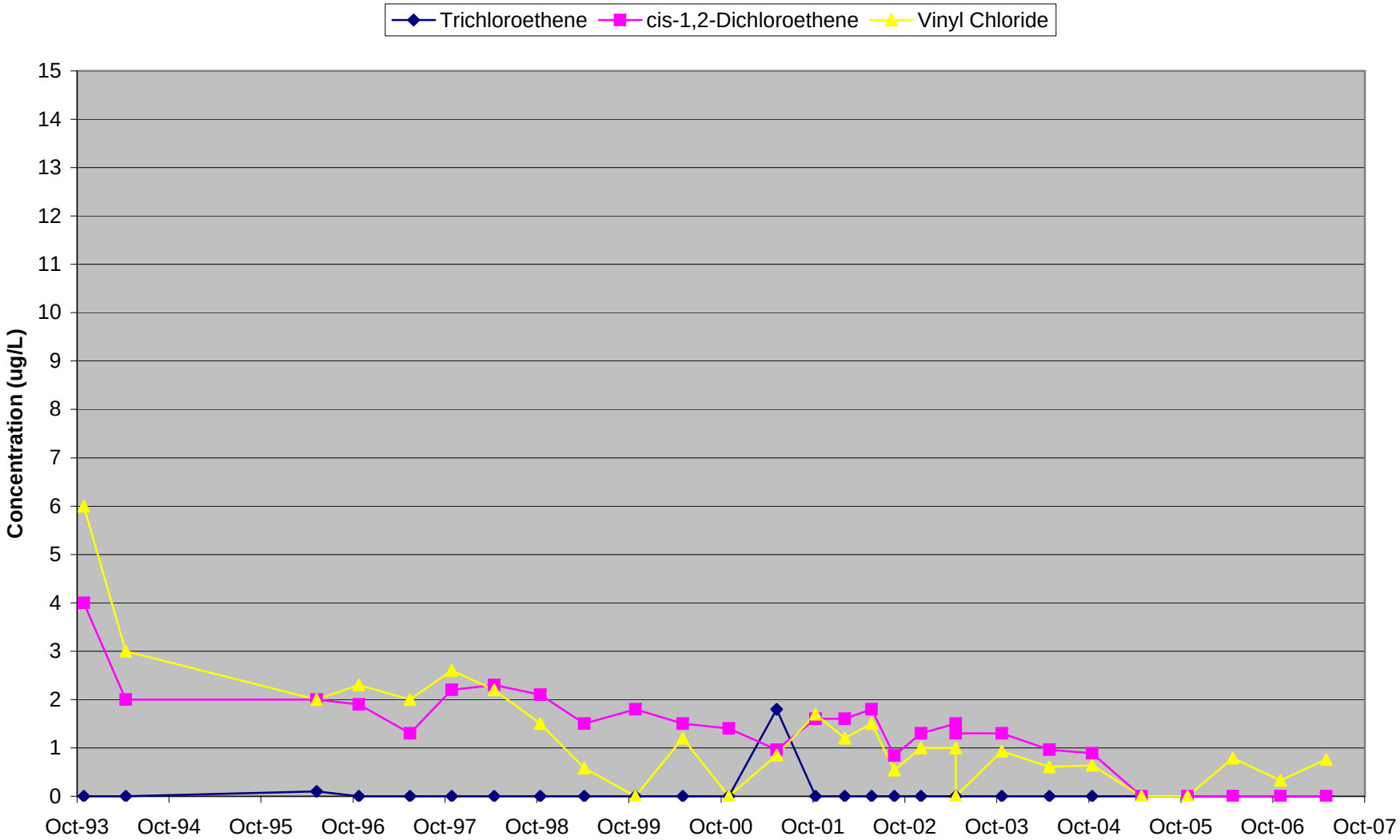


Chart 42: P-108
Layer 2 Well

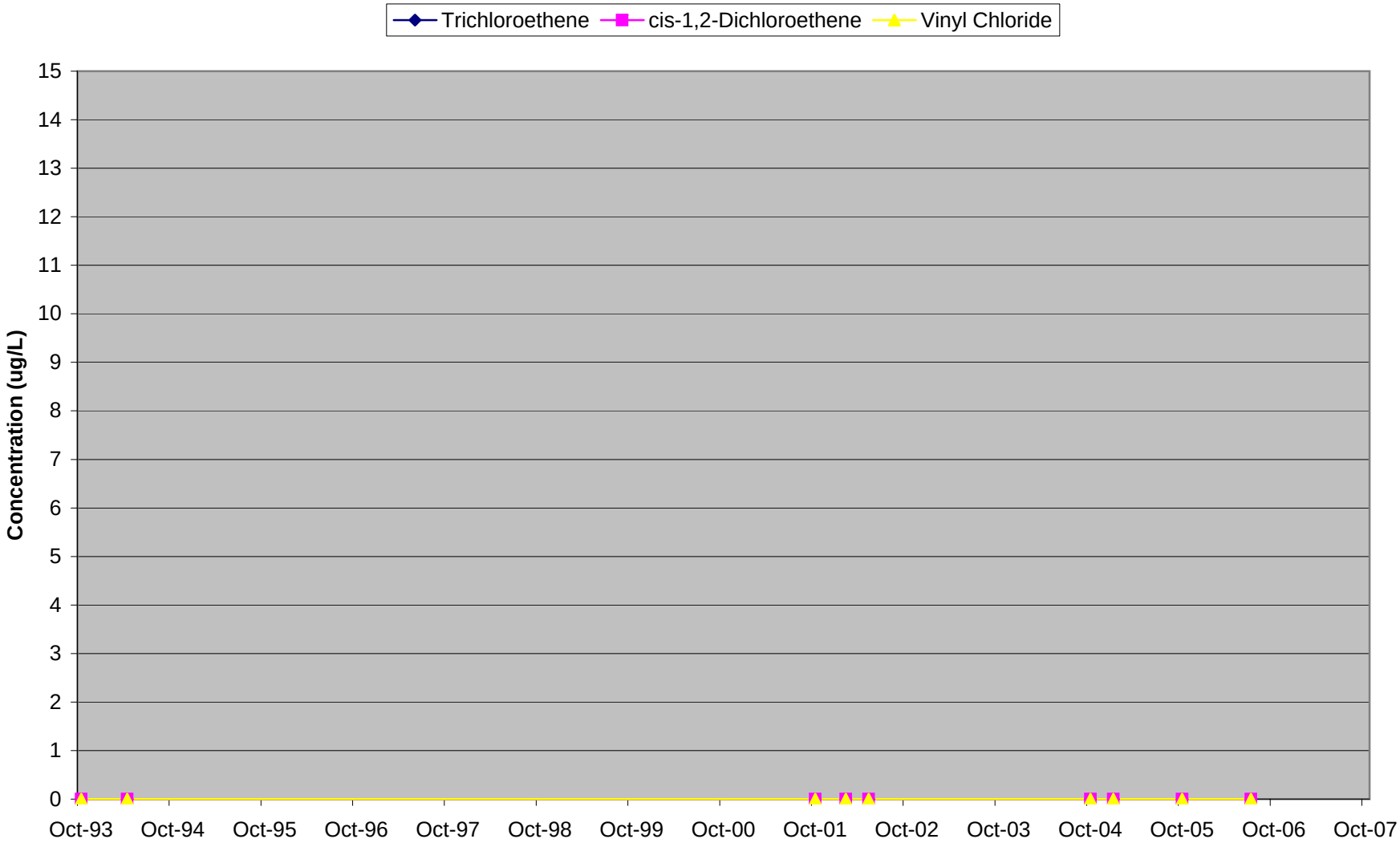


Chart 43: P-111
Layer 2 Well

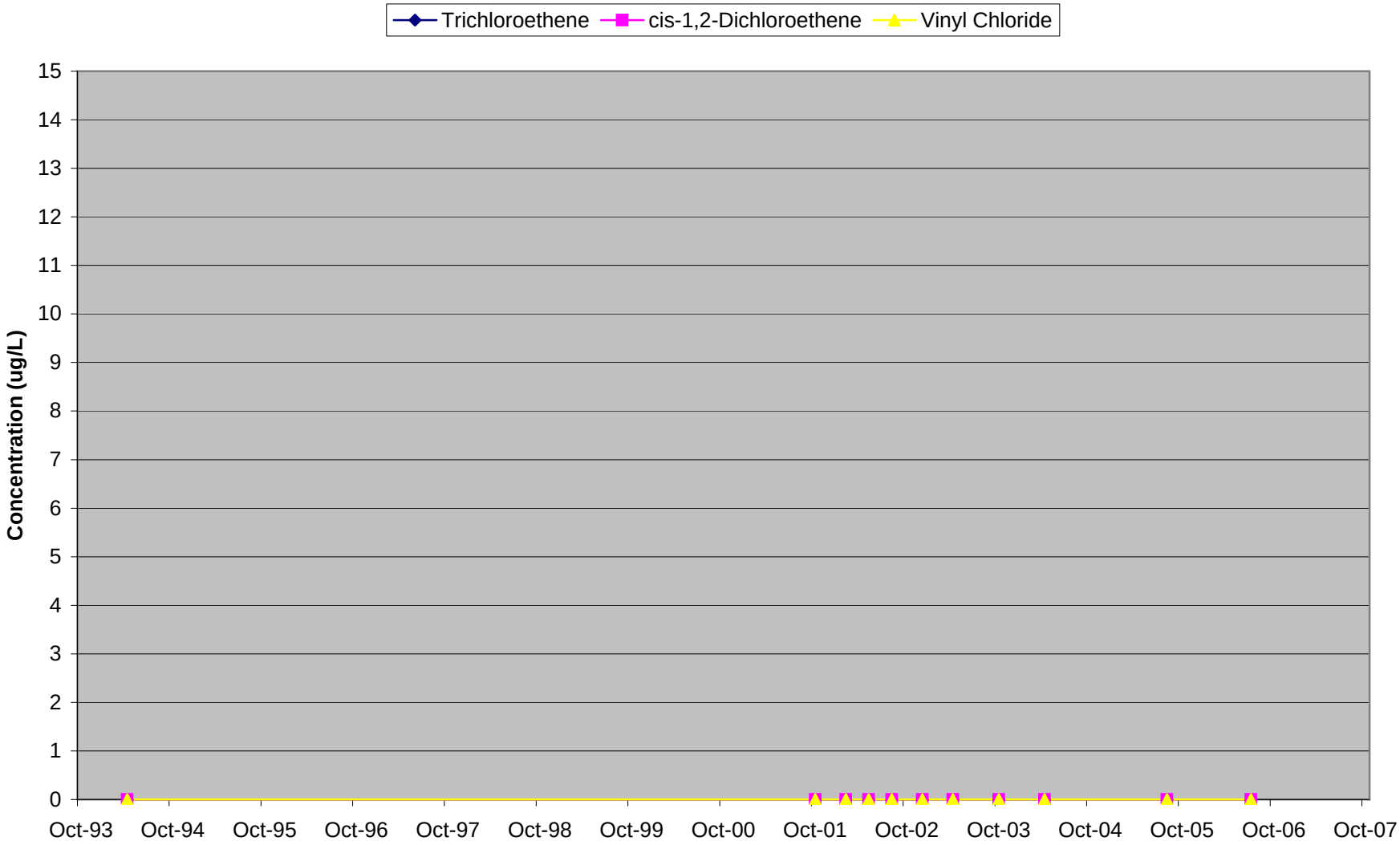


Chart 44: P-103D
Layer 3 Well

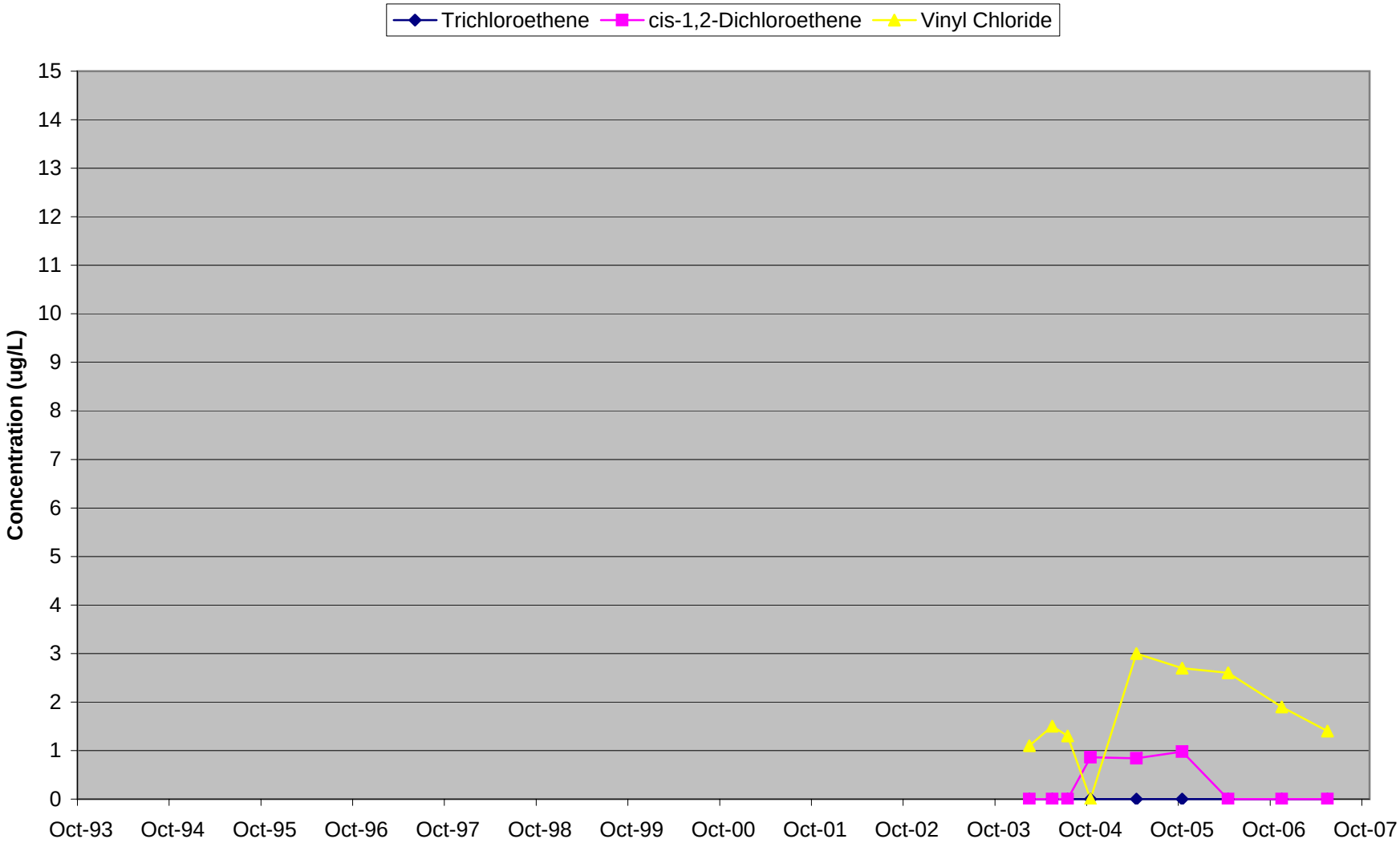


Chart 45: P-111D
Layer 3 Well

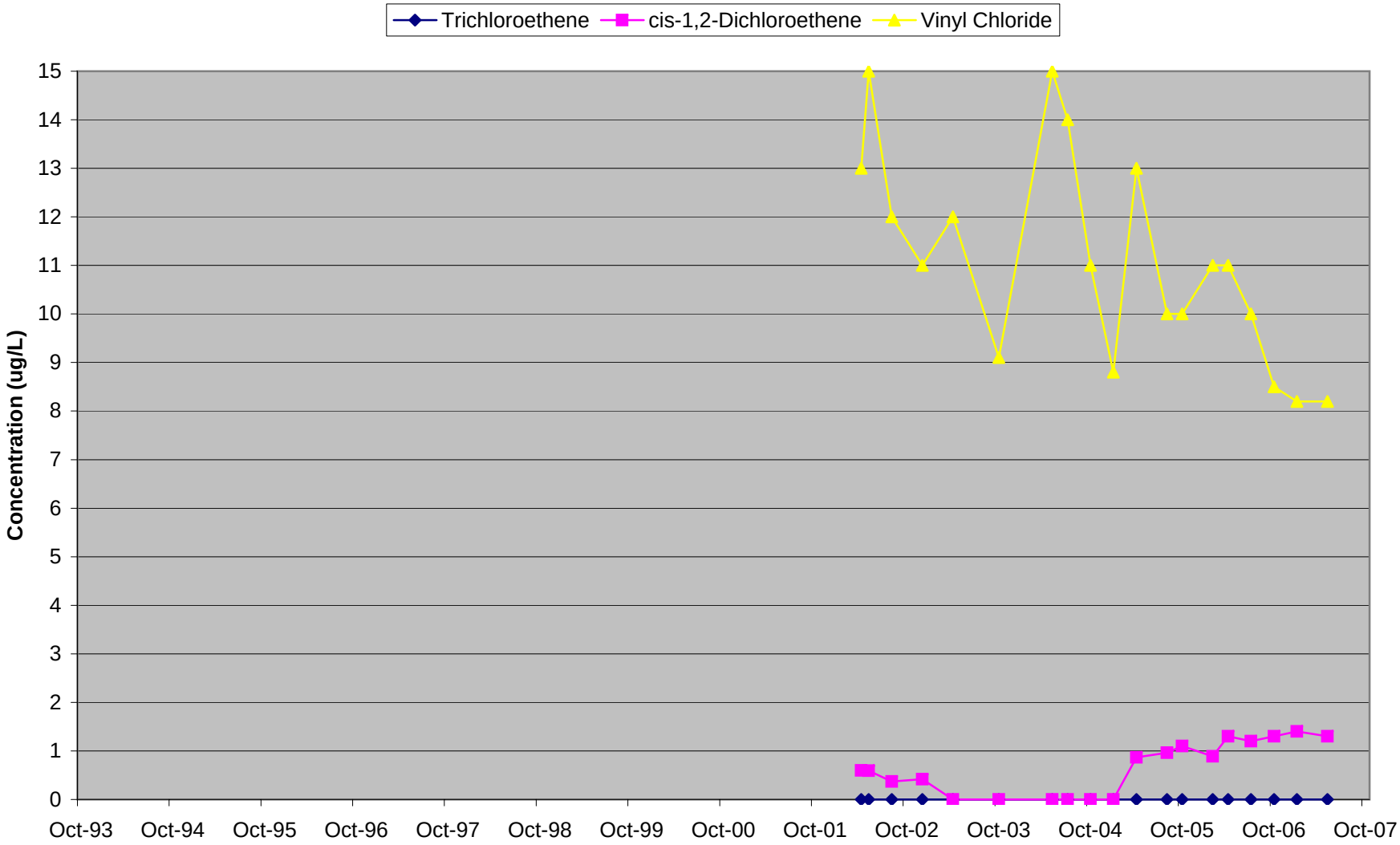


Chart 46: MW-3B
Layer 3 Well

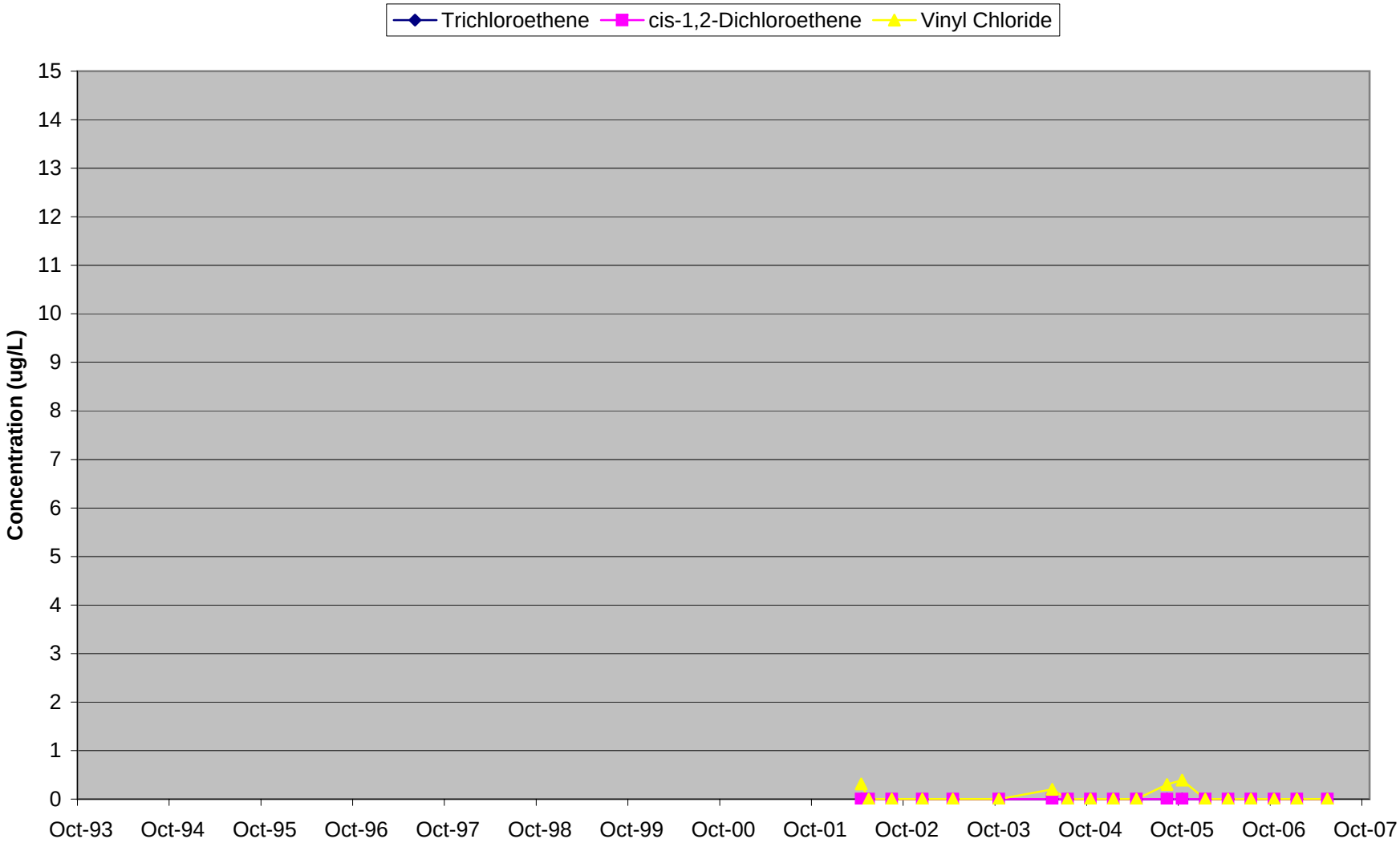


Chart 47: P-113B
Layer 3 Well

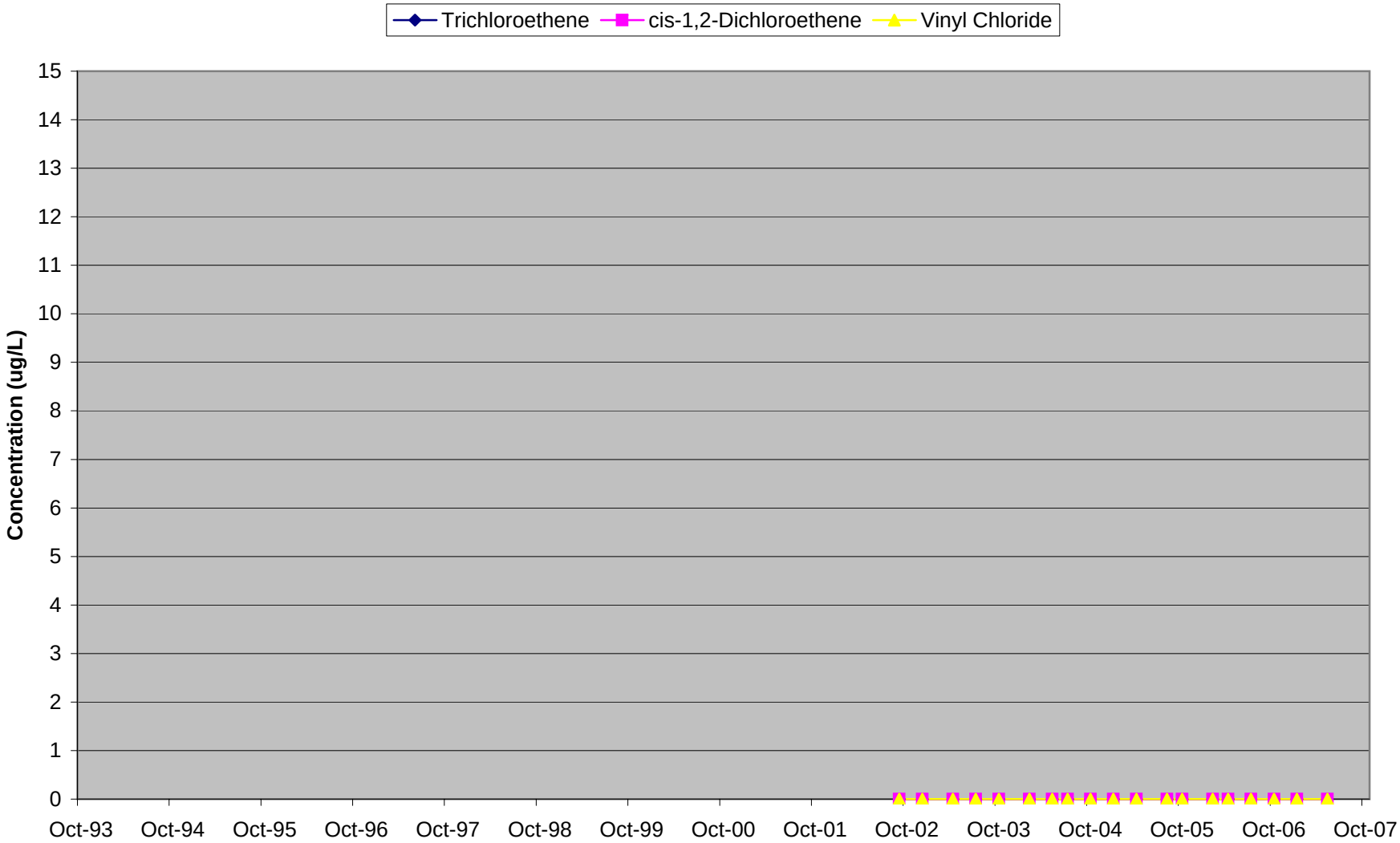


Chart 48: P-114
Layer 3 Well

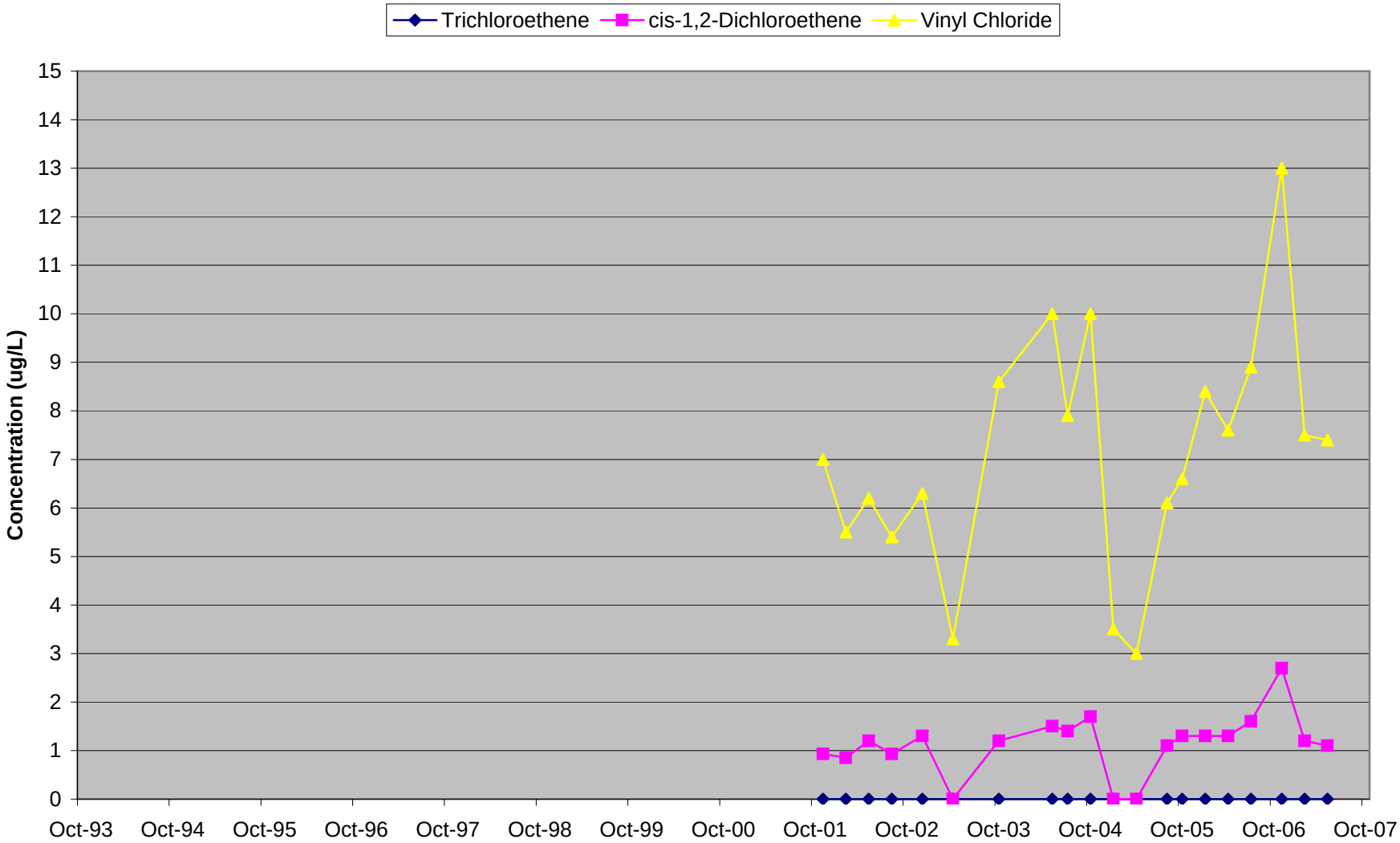


Chart 49: P-115
Layer 3 Well

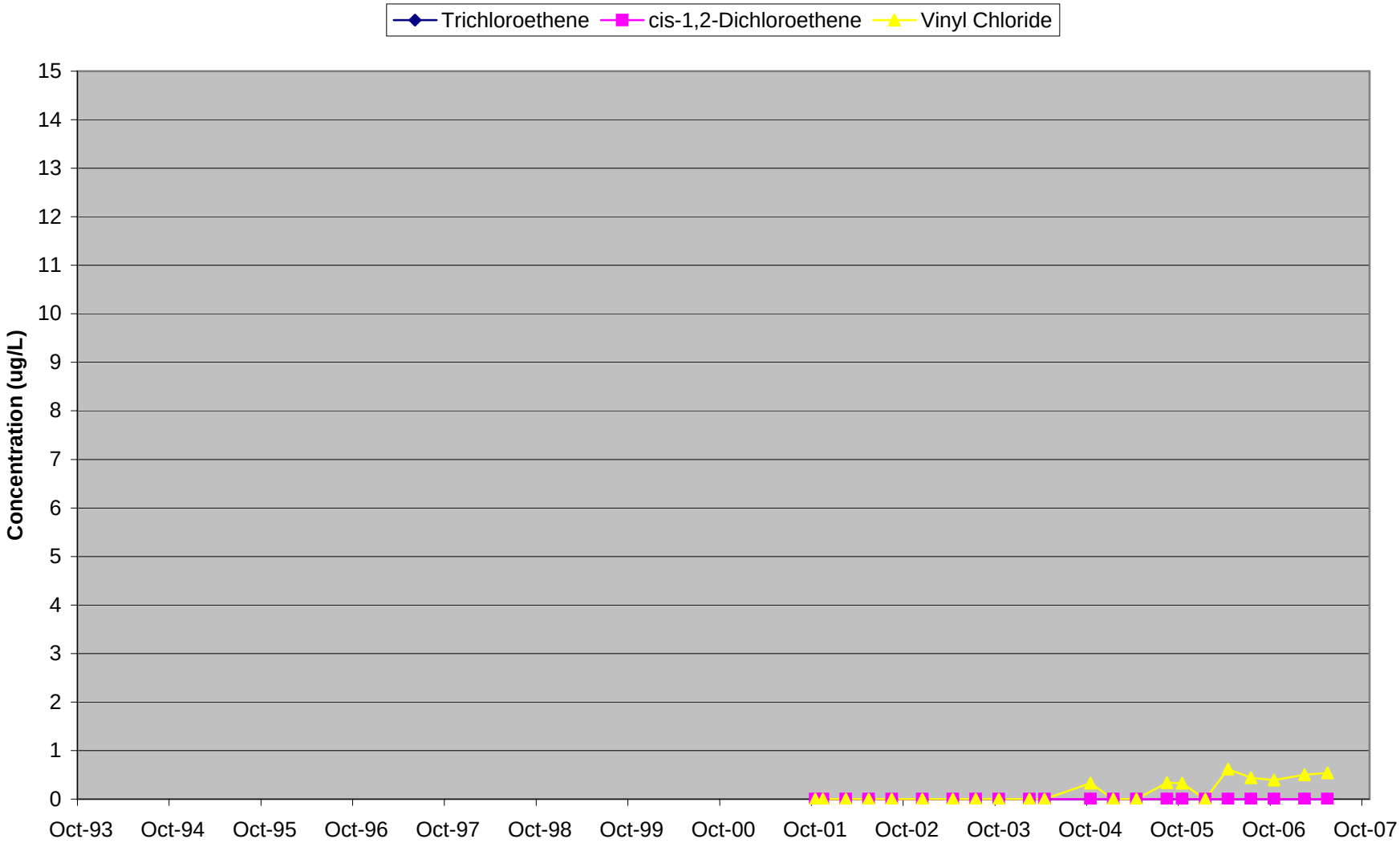


Chart 50: P-116
Layer 3 Well

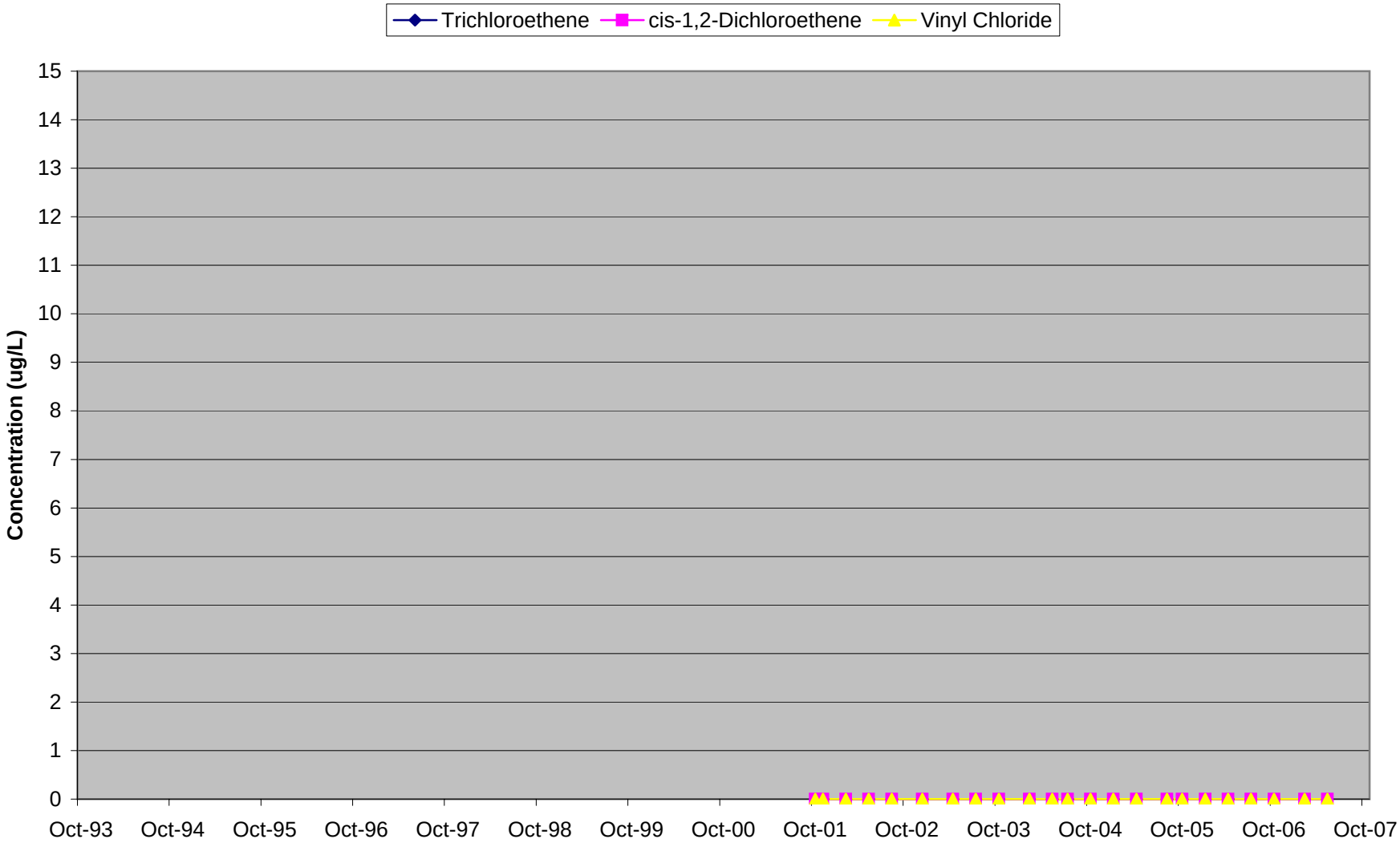


Chart 51: MW-3A
Layer 4 Well

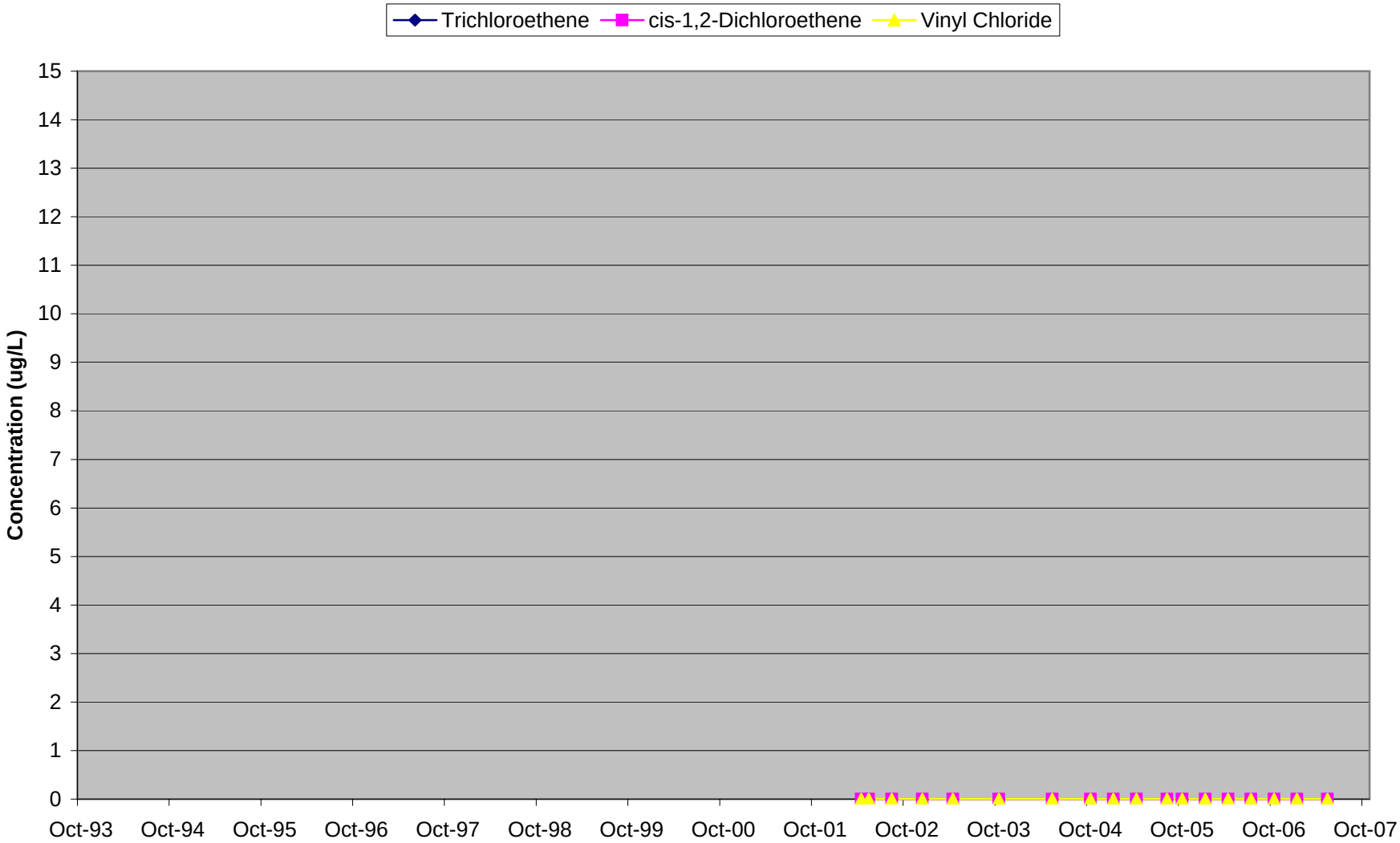


Chart 52: P-107D
Layer 4 Well

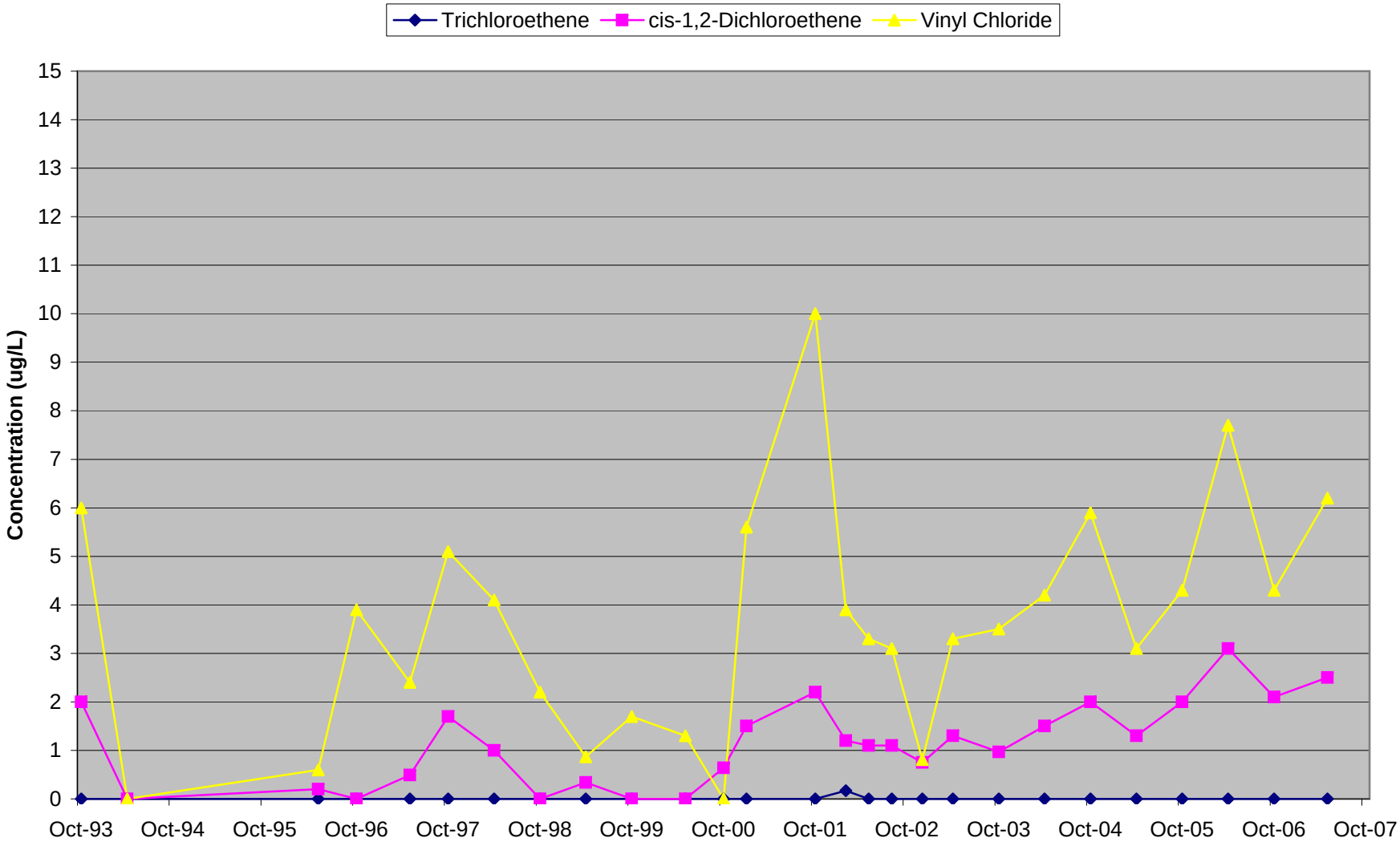
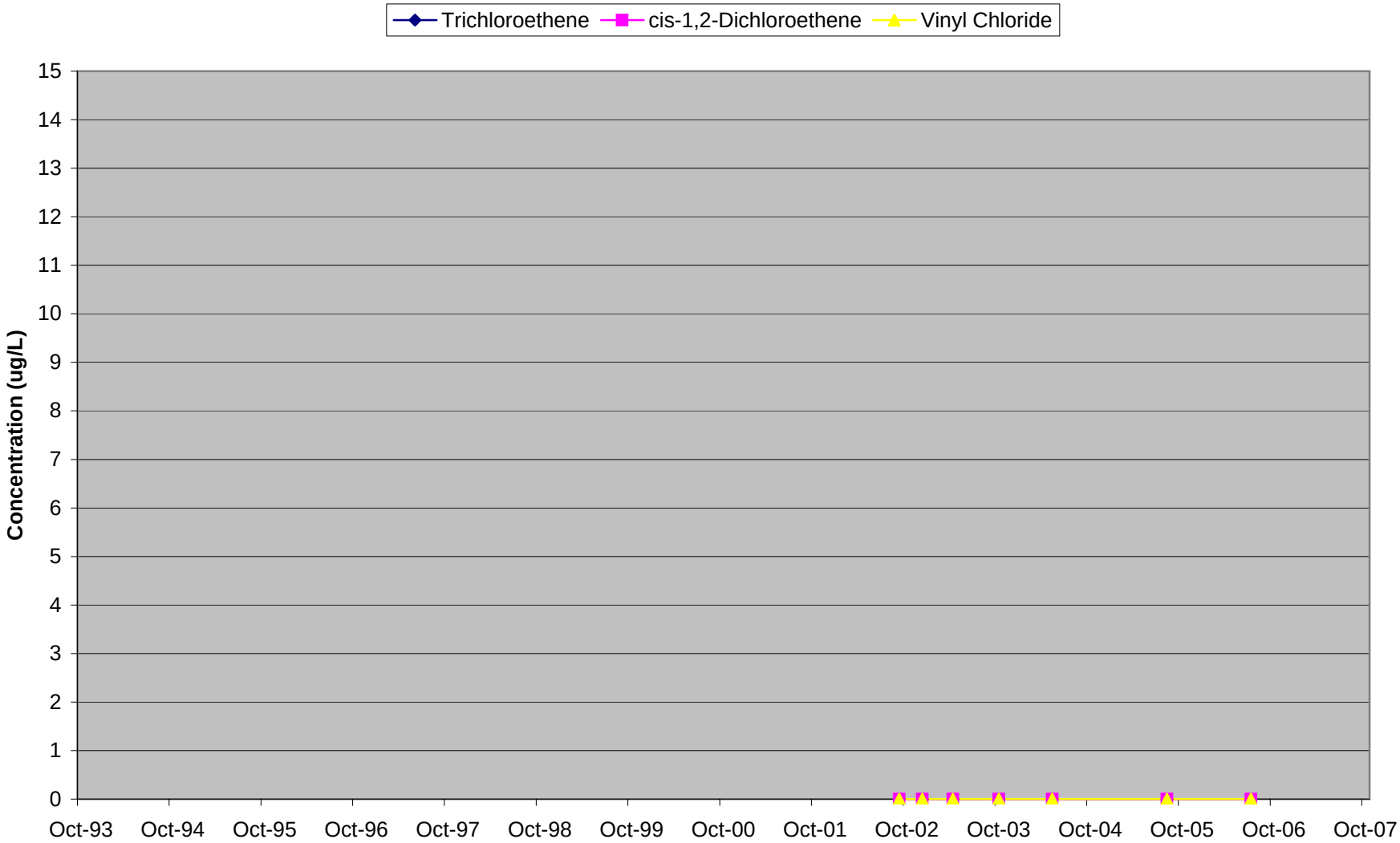


Chart 53: P-113A
Layer 4 Well



APPENDIX